

Demonstration Project Manual



Overview

Purpose

The goal of this Demonstration Project Manual is to allow you to plan and complete DIY street improvement projects that are proven countermeasures for improving safety at existing crossings.

Project Types

Using simple questionnaires, together with step-by-step instructions, this manual provides how-to information on selecting & installing **Pedestrian Islands** and **Curb Extensions**.

Caution

This manual is useful **only for existing crossings** that meet the specific criteria identified throughout. Finding and selecting locations that meet specified criteria is dependent upon questionnaire completion.

Step-by-step

This manual has been developed to be as user-friendly as possible. Be sure to **read all notes and follow each step as identified**. Doing so is critical to successful project selection and installation.

Installation Guides & Videos

Once the questionnaire and all steps have been completed, you will be provided with an Installation Guide & How-To Video, making for quick and easy project installation.

It is highly recommended that all project designs be reviewed by a licensed engineer prior to installation.

Project Types

Based on the results of the questionnaire, you will be directed to one of the following project types:

PI
Pedestrian Island



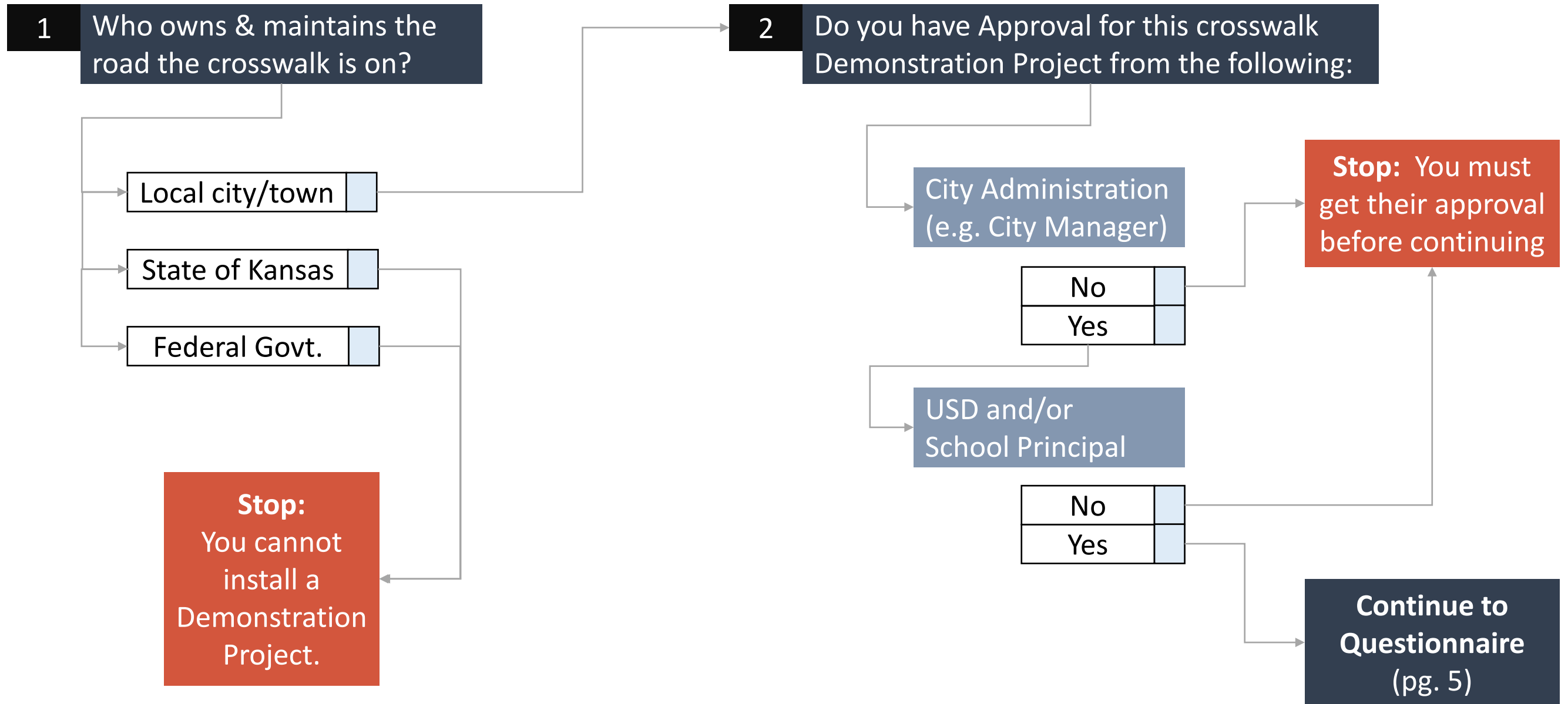
CE
Curb Extension



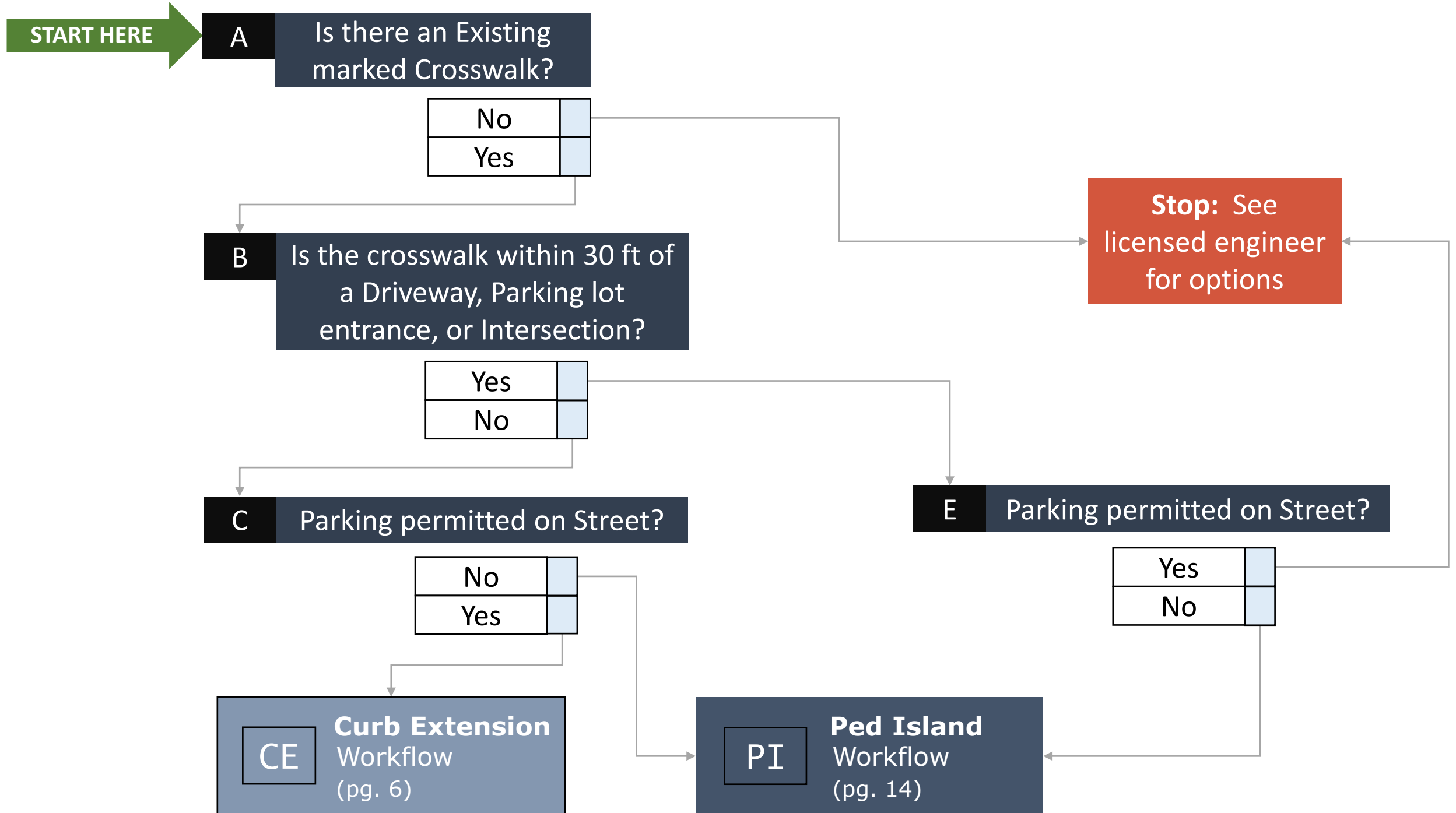
Delineator Posts:
Both project types use these to create pedestrian space and increased crossing visibility



Before you Start



Questionnaire





Curb Extension Workflow



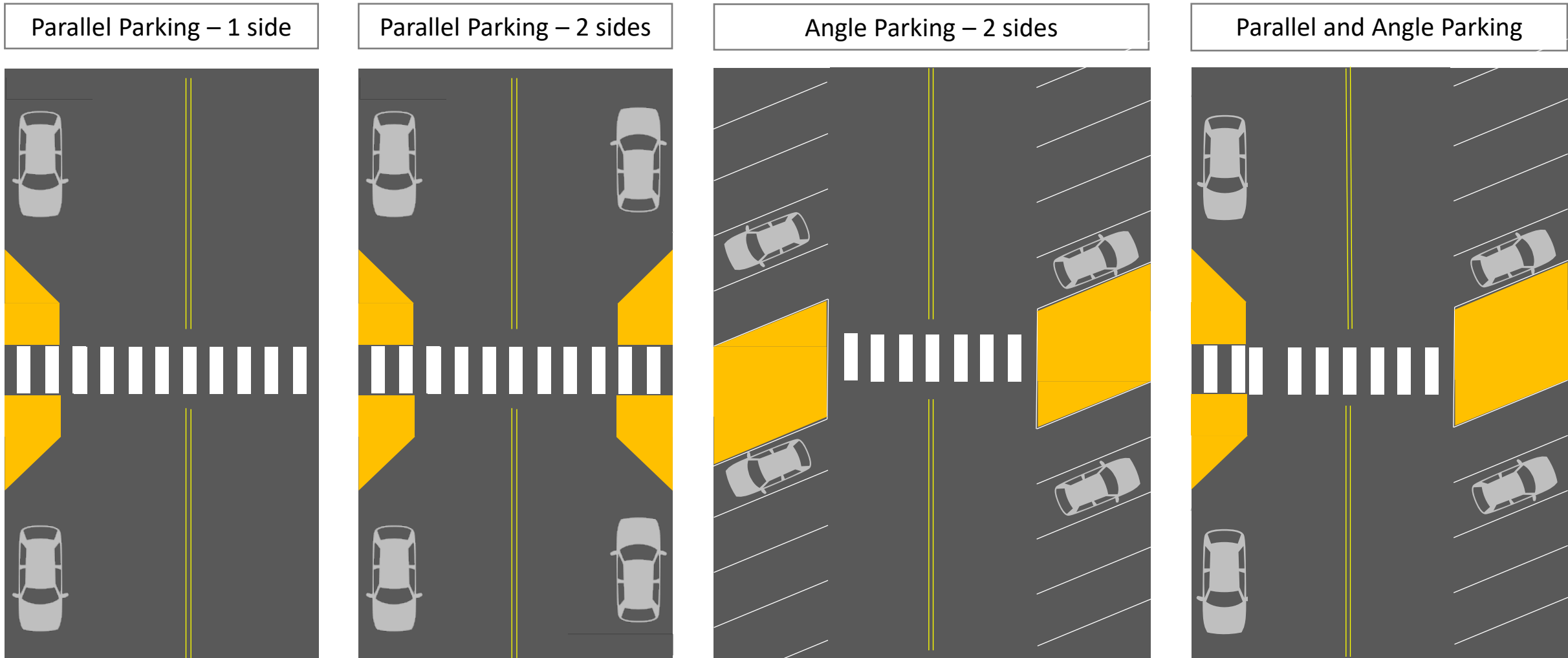
i The Federal Highway Administration (FHWA), through the Safe Transportation for Every Pedestrian (STEP) program, has endorsed **Curb Extensions** as an effective and proven countermeasure to increase crosswalk safety. This manual will allow you to analyze an existing crosswalk to determine if it is eligible to be upgraded with Curb Extensions. And, and if so, provide step-by-step instructions allowing you a quick and easy installation. NOTE: Many crossings will not be eligible.

Before beginning the steps below, make sure you've completed the **Questionnaire (pg. 1)** to determine eligibility.

Step	Step Name	Page #	Topic & contents
1	Basic Location Workflow	9	Can you install Curb Extension?
2	Parking Types	10-12	What size to install?
3	Installation Guides & Videos	13	Links to Templates & How-to Videos

i For streets with parking on both sides of the roadway, fully complete this workflow questionnaire for one side of the road. At the end of **Step 3**, you will be prompted to repeat this workflow questionnaire for the other side of the road.

Examples

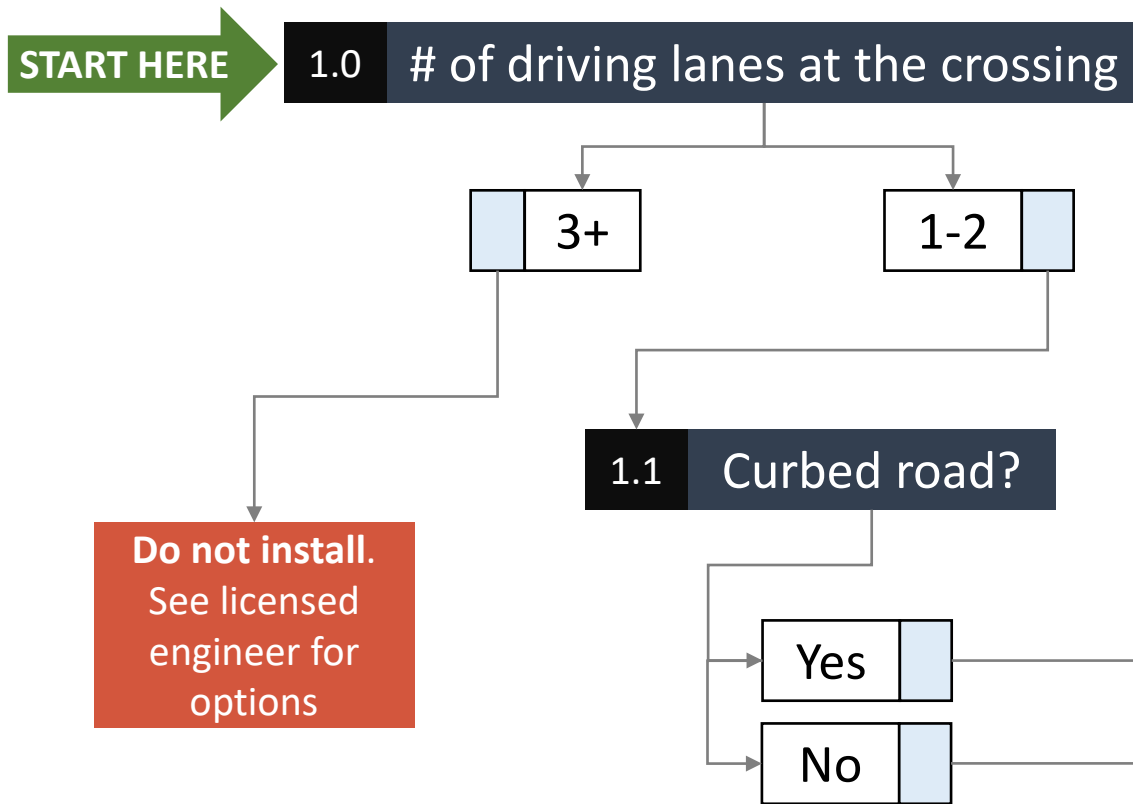


CE Step 1: Basic Location


i Answer each question by marking the appropriate answer box.

Continue by following the arrow to the next question/box. Be sure to mark all answer boxes to aide in double checking your work.

If an answer points you to the “Do Not Install” box, the worksheet is complete, and you should not proceed further.




1.1 Measure road width (feet): BOC to BOC
BOC = Back Of Curb



Road width (feet) =

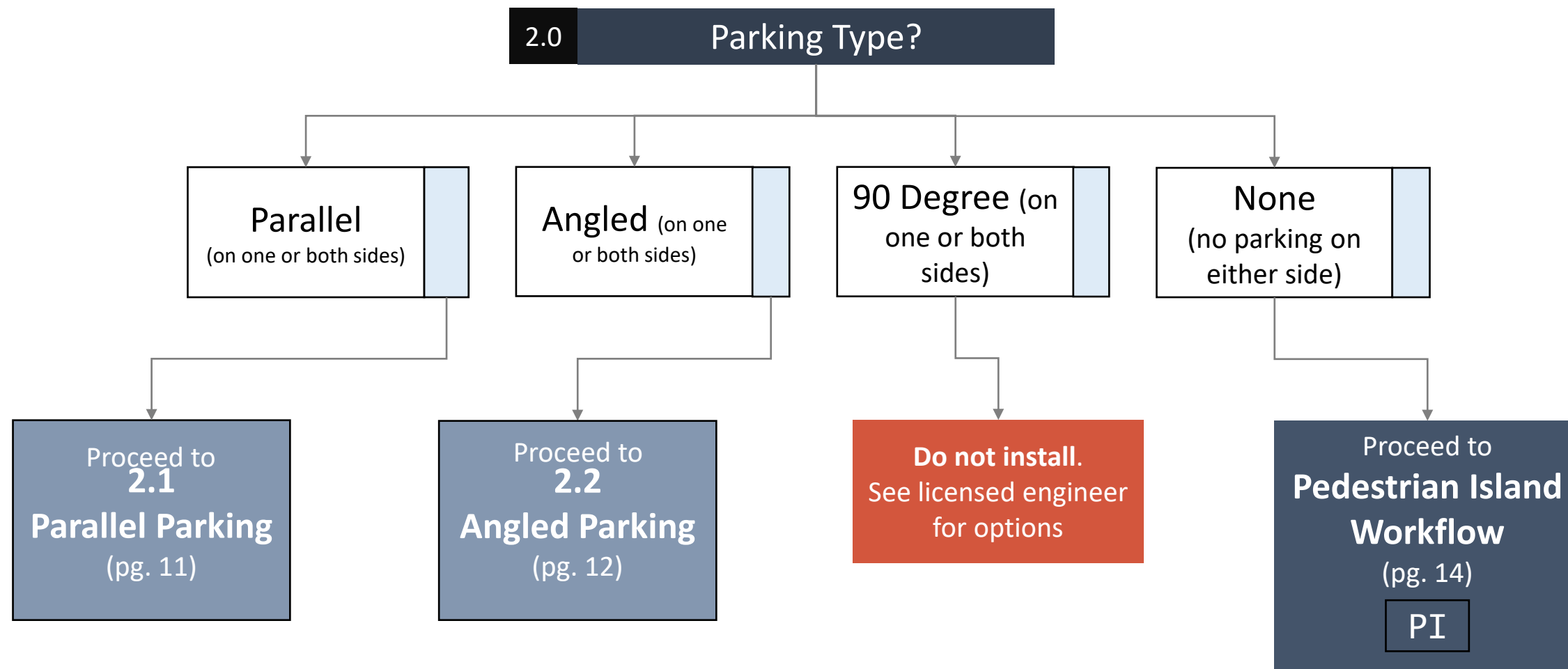
1.2 Measure road width (feet): No Curb
Edge of pavement to edge of pavement



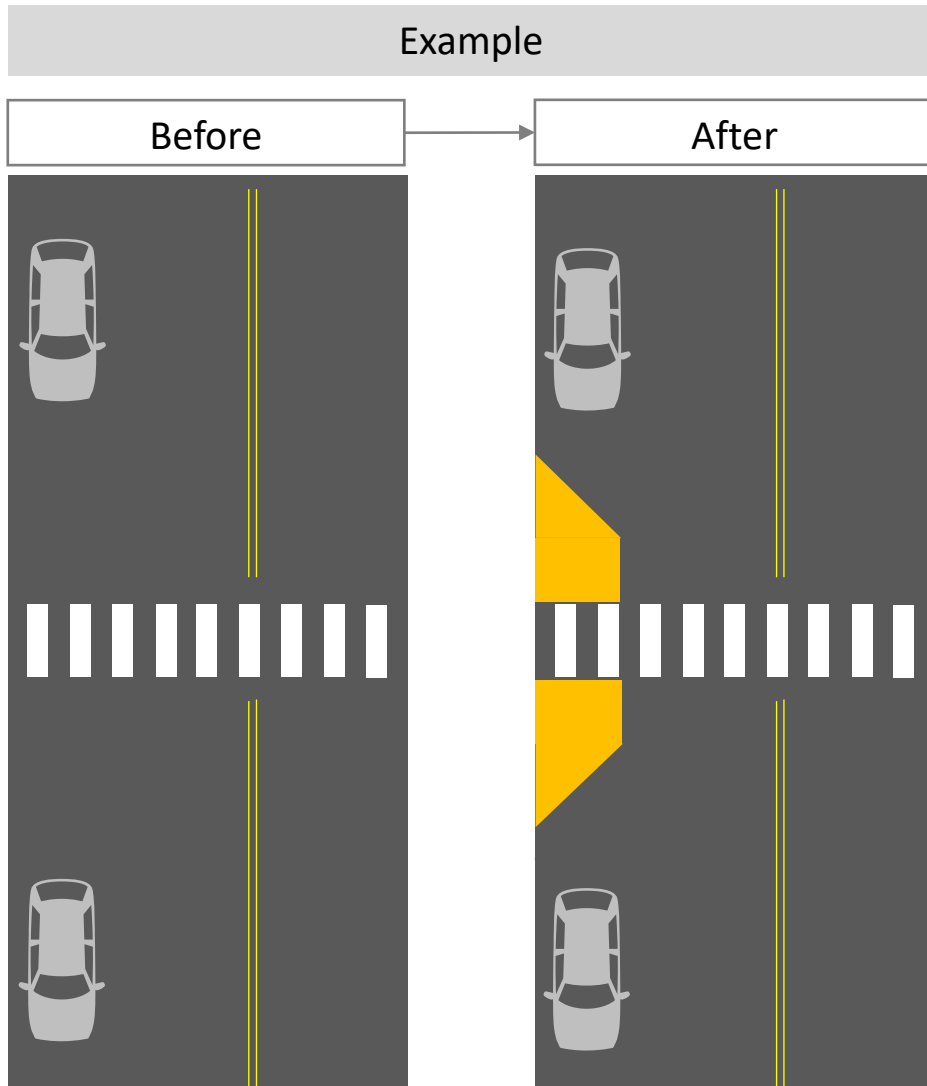
Road width (feet) =

Proceed to **Step 2** (pg. 10)

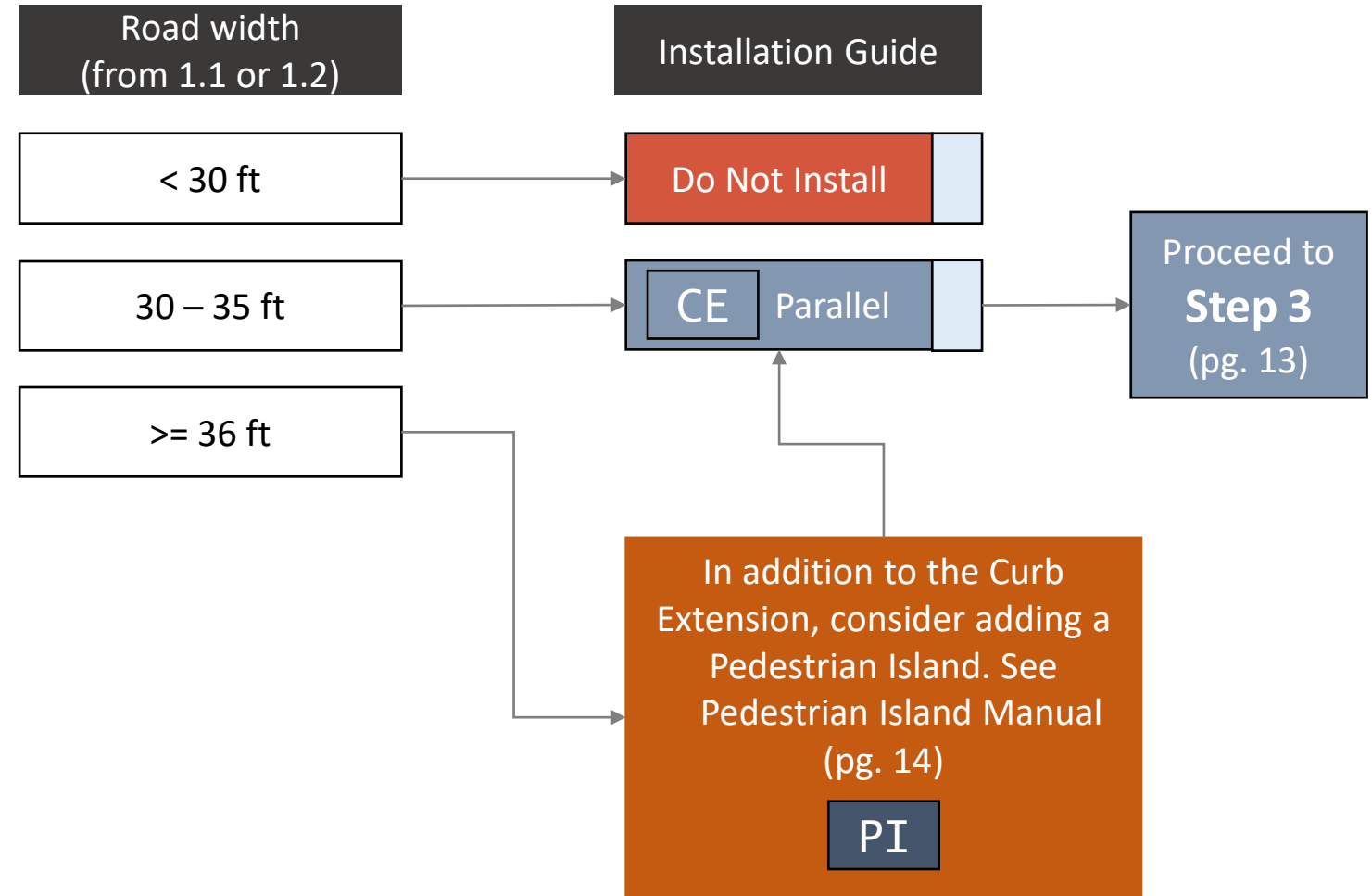
i For streets with parking on both sides of the roadway, fully complete this workflow questionnaire for the one side of the road. At the end of **Step 3**, you will be prompted to repeat this workflow questionnaire for the other side of the road.



i A standard parallel parking lane width is 7 feet. Therefore, all curb extension templates will have a width of 7 feet.



2.1 Template Selection –Parallel Parking

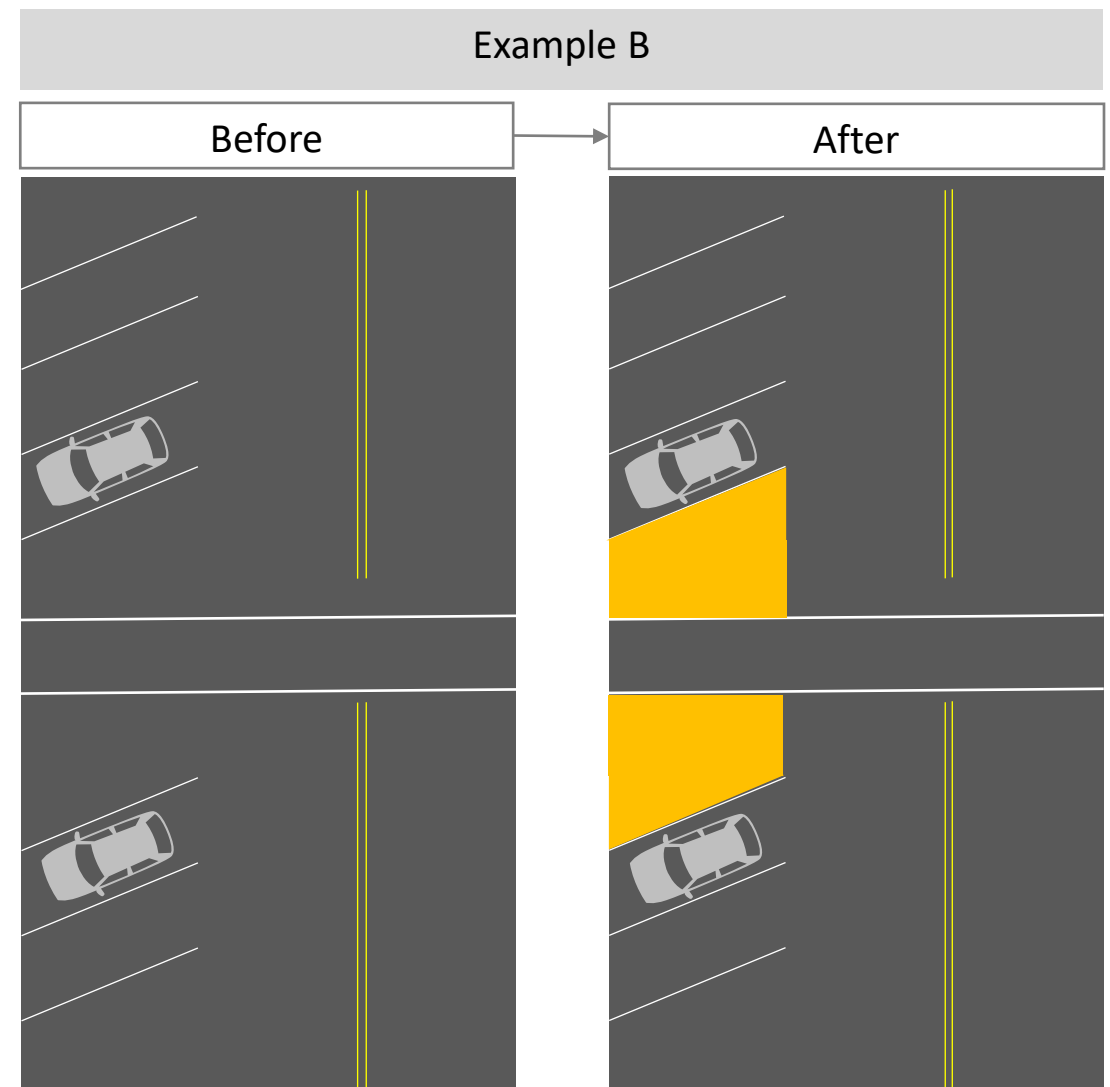
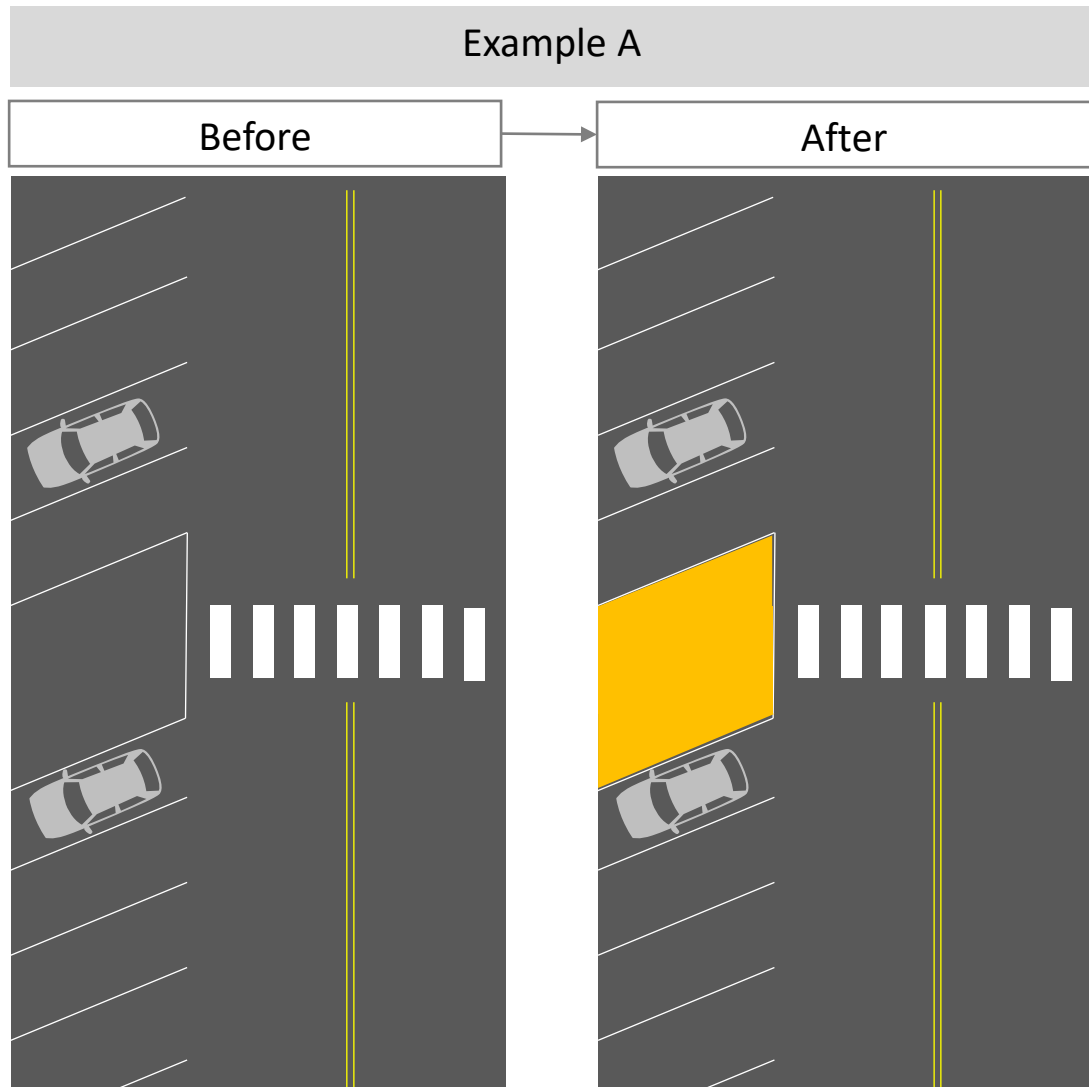


i The location for the Curb Extension likely already exists; it is the space between the curb and the edge of the angled parking spaces. However, by adding Flexible Delineators, the area becomes more visible, better defined, and safer for pedestrians.

See **Step 3**
(pg. 13)

CE Angled

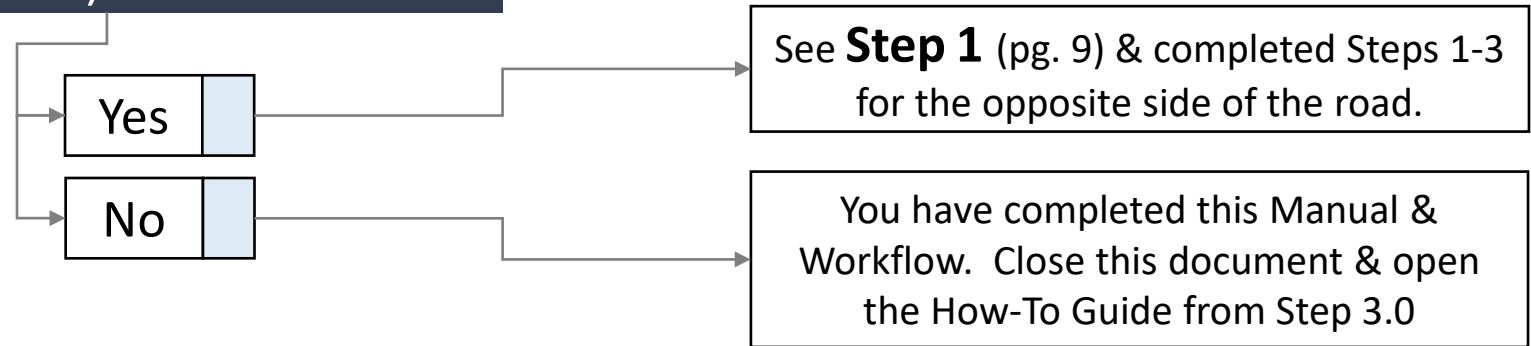
2.2 Angled Parking, Crossing, & Curb Extension examples



3.0 Open the correct link below to access the Installation Guide files and How-To Video.

Installation Guide	Link to Documents & How-to Video
<input type="checkbox"/> Parallel	www.FlintHillsMPO.org/ce-parallel
<input type="checkbox"/> Angled	www.FlintHillsMPO.org/ce-angled

3.1 Is there parking on the other side (both sides) of the road?





Pedestrian Island Workflow



i The Federal Highway Administration (FHWA), through the Safe Transportation for Every Pedestrian (STEP) program, has endorsed **Pedestrian Islands (Ped Islands)** as an effective and proven countermeasure to increase crosswalk safety. This manual will allow you to analyze an existing crosswalk to determine if it is eligible to be upgraded with a Ped Island. And, if so, provide step-by-step instructions allowing you a quick and easy installation. NOTE: Many crossings will not be eligible.

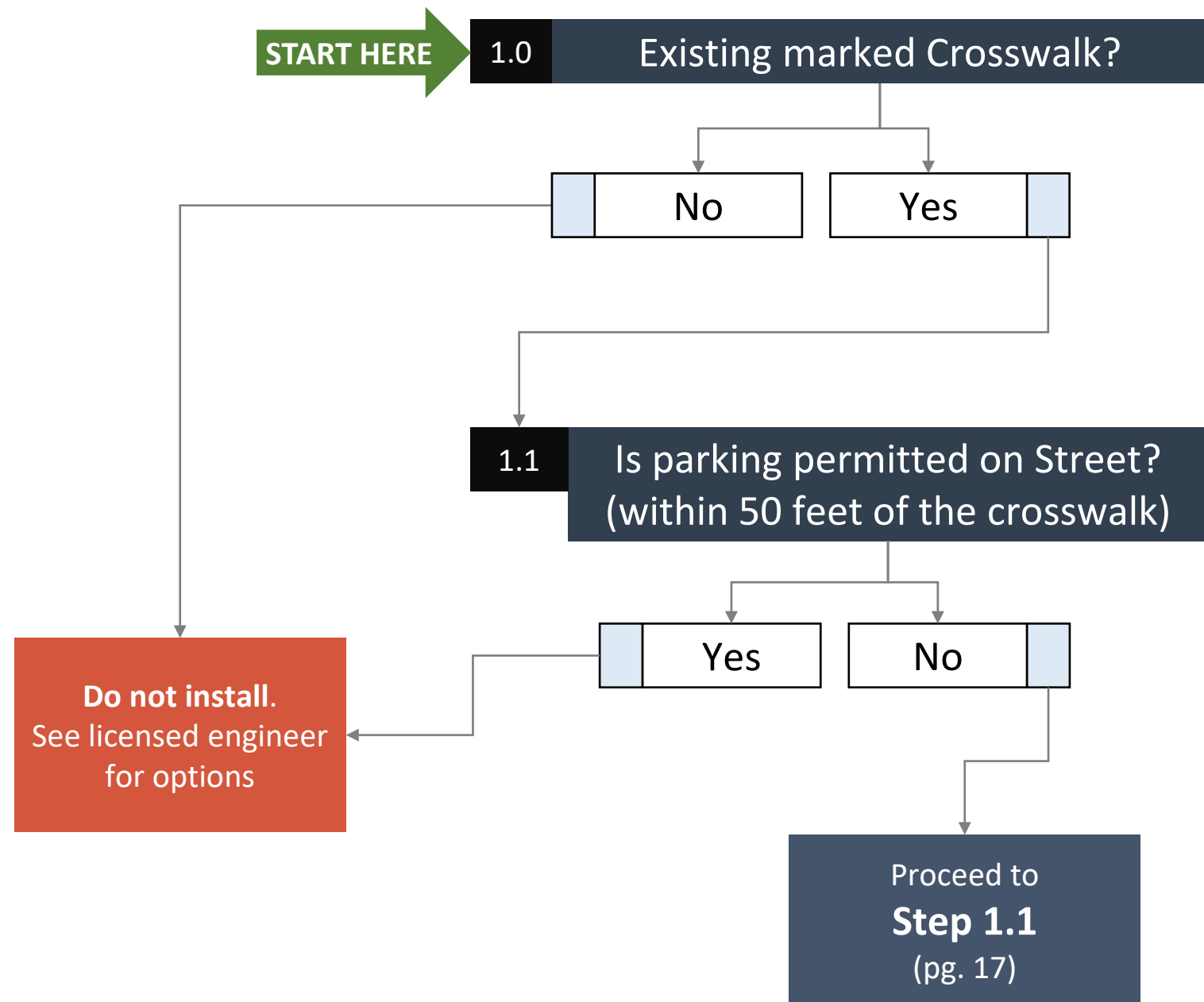
Before beginning the steps below, make sure you've completed **Questionnaire** in Part One to determine eligibility.

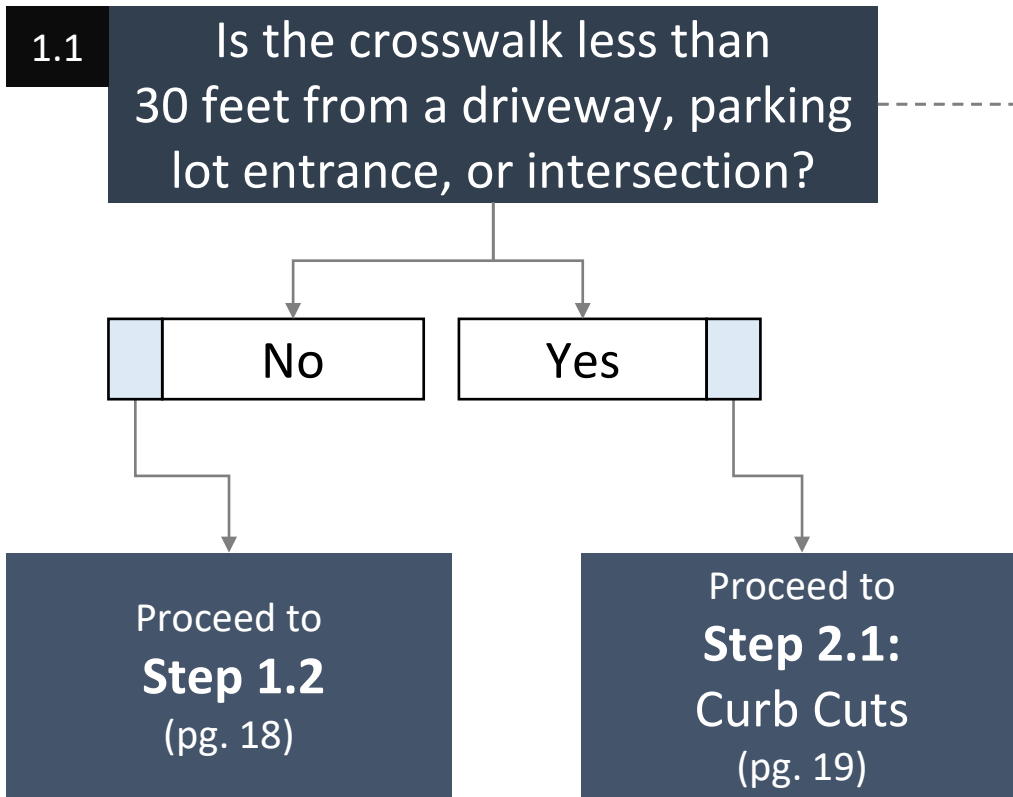
Step	Step Name	Page #	Topic & contents
1	Basic Location Workflow	16	Can you install a ped island?
2	Detailed Location Workflow	17-21	What size of ped island to install?
3	Layouts & options	22-23	Links to documents
4	Installation Guides & Videos	24-26	Links to documents

i Answer each question by marking the appropriate answer box.

Continue by following the arrow to the next question/box. Be sure to mark all answer boxes to aide in double checking your work.

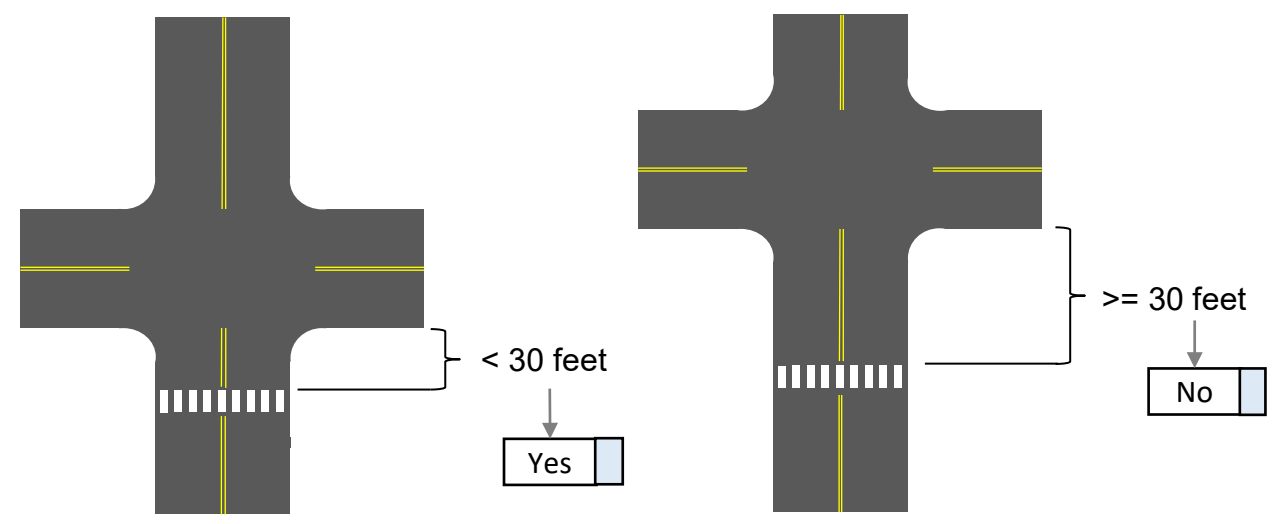
If an answer points you to the “**Do Not Install**” box, the worksheet is complete, and you should not proceed further.





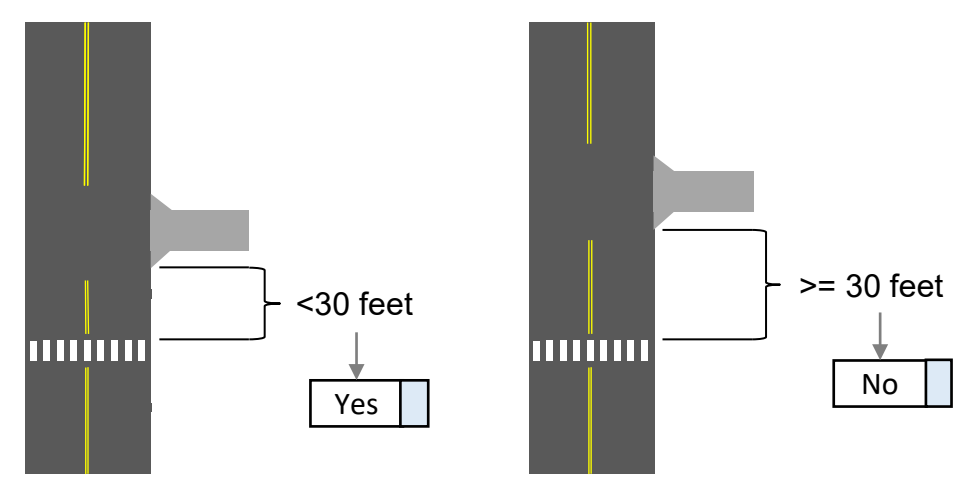
How to measure Intersection

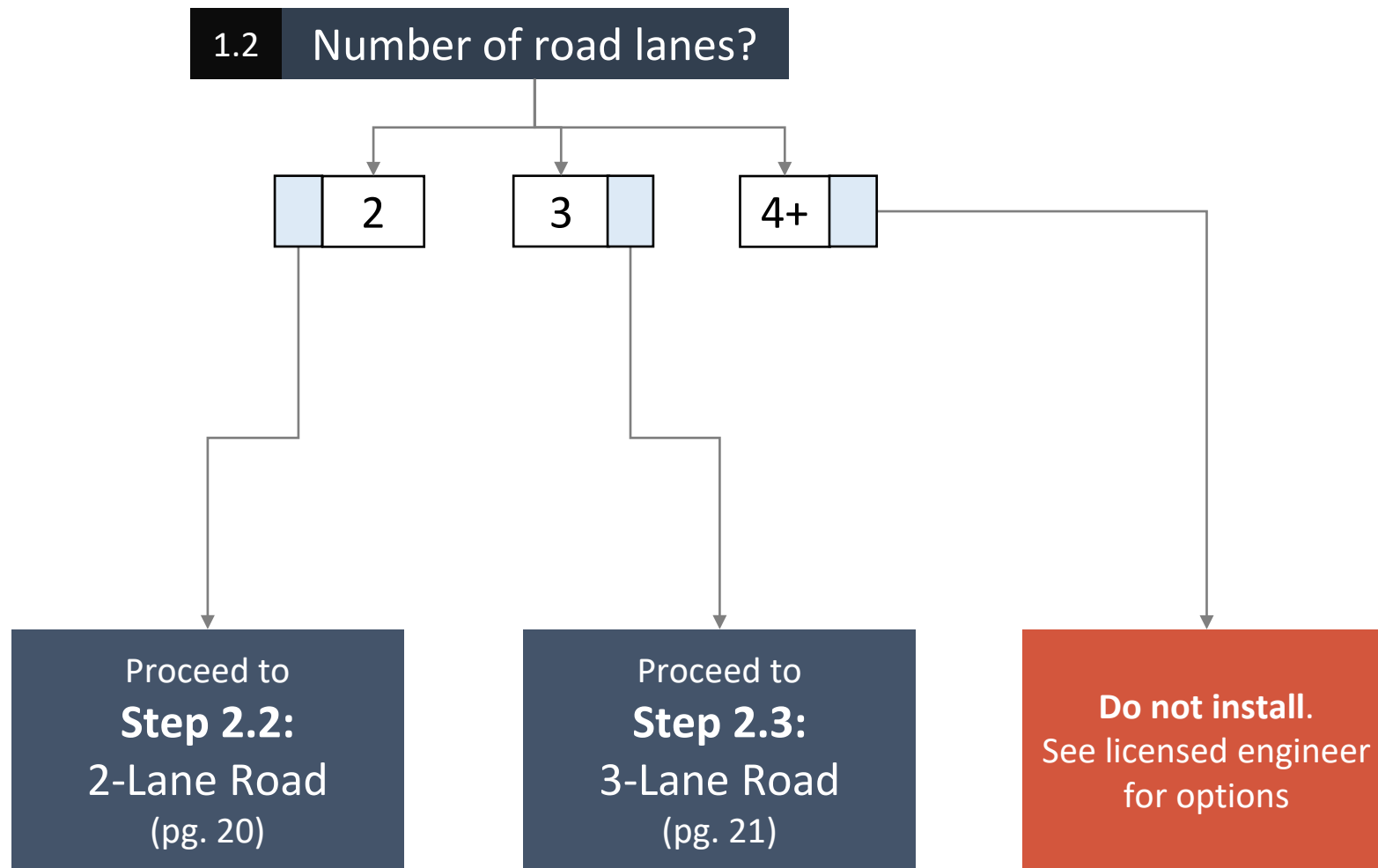
Measure from the crosswalk to the curb of the cross street.



How to measure Driveway or parking lot entrance

Measure from the crosswalk to the driveway or entrance.





Step 2.1: Curb Cuts

2.1a Is the crosswalk within 30 feet of:

- Roadway intersection
- Curb Cut: Parking lot entrance
- Curb Cut: Driveway

2.1b # of lanes at the crosswalk?
(including turn lanes)

- 2
- 3+

Do not install.
Consult licensed engineer for options.

2.1c Road width (feet):
BOC to BOC
BOC = Back Of Curb



Road width (feet):

Proceed to
Step 3.3 Curb Cuts
(pg. 23)

2.2a Curbed road?

Yes

No

2.2b Measure road width (feet): BOC to BOC

BOC = Back Of Curb



Road width (feet) =

2.2c Measure road width (feet): No Curb


Edge of pavement to edge of pavement



Road width (feet) =

Proceed to **Step 3.1**
2-Lane Road
Layouts
(pg. 22)

2.3a Turn Lane width



Turn Lane width (feet):

2.3b Installation Guide Selection

Turn Lane Width	Ped Island Size
10-12 ft	10 foot
12.1 – 14 ft	12 foot

Proceed to **Step 4.2:**
Turn Lane
Installation Guides & Videos
(pg. 25)

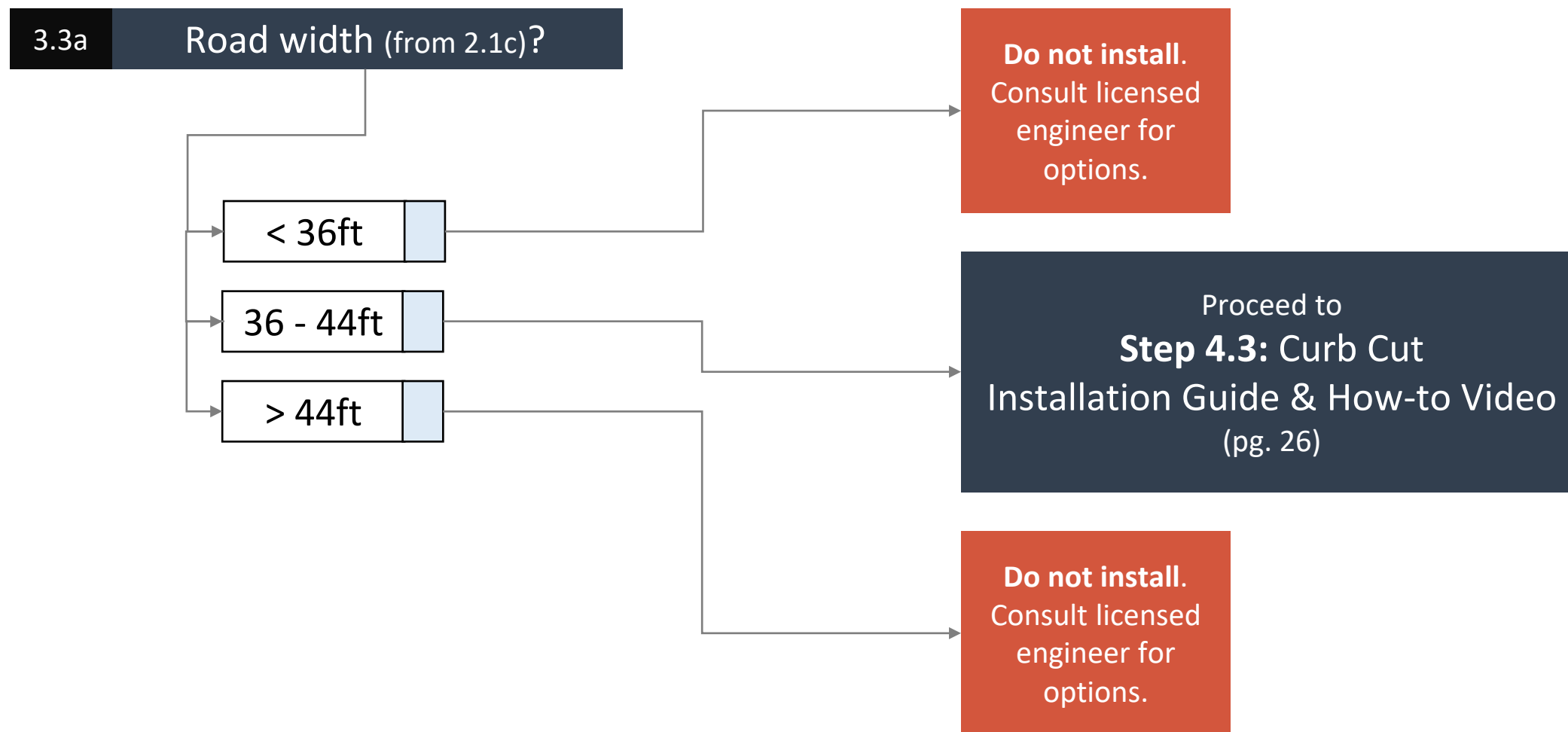
How To Use

A Using the road width from **2.2b** or **2.2c**, find the matching row in the **Road Width** column

B Select the associated **Ped Island Size**

3.1 Installation Guide Selection	
A Road Width	B Ped Island Size
< 31 ft	Do Not Install
31 - 32.9 ft	6 foot
33 - 34.9 ft	8 foot
35 - 37.9 ft	10 foot
38 - 41 ft	12 foot
> 41 ft	Do Not Install

Proceed to **Step 4.1:**
2-Lane
Installation Guides & Videos
(pg.24)






Open the following links to access the correct Installation Guide files and watch the How-To video in the link.

Ped Island Size (from 2.2b)	Installation Guide	Link to Documents & How-to Video
6 foot	PI: 6ft	www.FlintHillsMPO.org/pi-6ft
8 foot	PI: 8ft	www.FlintHillsMPO.org/pi-8ft
10 foot	PI: 10ft	www.FlintHillsMPO.org/pi-10ft
12 foot	PI: 12ft	www.FlintHillsMPO.org/pi-12ft



Open the following links to access the correct Installation Guide files and watch the How-To video in the link.

Ped Island Size	Installation Guide	Link to Documents & How-to Video
10 feet	PI: 10ft-TL	www.FlintHillsMPO.org/pi-10ft-tl
12 feet	PI: 12ft-TL	www.FlintHillsMPO.org/pi-12ft-tl

 Open the following links to access the correct Installation Guide files and watch the How-To video in the link.

Ped Island Size	Installation Guide	Link to Documents & How-to Video
6 foot	PI: 6ft-CC	www.FlintHillsMPO.org/pi-6ft-cc