

Index D520-030 Raised Crosswalks

Design Criteria

FDOT Design Manual (FDM); Flexible Pavement Design Manual (FPDM); FDOT Traffic Engineering Manual (TEM); FHWA Traffic Calming ePrimer; MUTCD.

Design Assumptions and Limitations

The use of this index is limited to mid-block crossing locations on two-lane, two-way facilities with a Target Speed of 30 mph or less and a post-construction posted speed of 30 mph or less. This Index is not intended for use at intersections.

The raised crosswalk portion should use the same type of friction course (FC) mix (FC-9.5 or FC-12.5) that is called for in the pavement design for the entire project. This will avoid holding the contractor to providing two different asphalt mixes for the FC on a single project.

The friction course (FC) thickness on the raised crosswalk is a minimum of 1.5" (may use FC-9.5 or FC-12.5 to achieve this) for constructability and durability purposes. The top layer of asphalt on the crosswalk ramp cannot taper to 0" because very thin asphalt will deteriorate.

For new construction or reconstruction, use the Type D curb option only. The Raised Crosswalk (RC) Channel Gutter option may be used on other projects.

Usage Criteria

Use raised crosswalks in conjunction with other Speed Management Strategies per **FDM 202**.

The slope of the ramps must be 1:12. The minimum width of the table must be 12 feet, but no less than the width of the crosswalk.

Use the R1-6a or R1-6c in-street pedestrian crossing signs in addition to the requirements of **TEM 3.8**.

To accommodate roadway runoff in new construction or reconstruction, construct a curb inlet upstream of the raised crosswalk.

To accommodate roadway runoff in all other projects, in order of preference:

1. Locate the raised crosswalk to accommodate the use of existing drainage facilities.
2. Construct a curb inlet upstream of the raised crosswalk.
3. Utilize the raised crosswalk with RC channel gutter. Verify the spread upstream of the channel gutter does not overtop the curb.

Note that raised crosswalks placed at a high point in roadway profile do not require roadway runoff accommodations.

Plan Content Requirements

Insert the entire Developmental Standard Plans Index, received from the Central Office monitor, into the appropriate component plan set in accordance with [FDM 302](#).

Show raised crosswalk in the plan view. Call out **Developmental Standard Plan, Index D520-030** and specify either “Type D Curb” or “RC Channel Gutter”. Show signing and pavement markings in the Signing and Pavement Marking component.

There are numerous milling and paving scenarios that could exist for the construction of raised crosswalks. Therefore, it is necessary to include the milling and paving details of the crosswalks in the contract plans set on the Typical Section Details sheet.

Illustrations of example scenarios are shown in the ‘Examples’ section below.

Payment

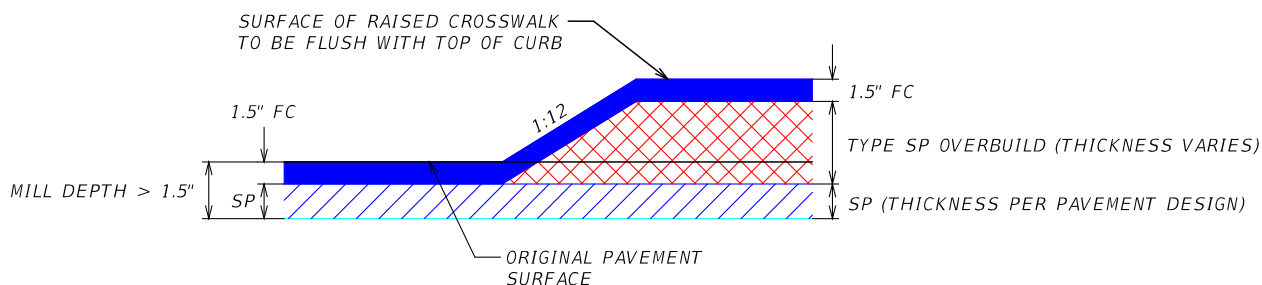
Item number	Item Description	Unit Measure
920-520-A	RC Channel Gutter	LF
711-11-130	Vertical Deflection Marking	EA
711-11-140	Vertical Deflection Advance Warning Marking	EA

See the [BOE](#) and [Specifications 334, 337, Dev520RC, and Dev711RC](#) for additional information on payment, pay item use and compensation. Payment for asphalt must be included with the mainline quantities or quantified separately.

Examples

The following are illustrations of example scenarios. This is not meant to be an all-inclusive list of possible scenarios:

Example 1: Project pavement design Friction Course (FC) thickness = 1.5” & milling depth > 1.5”:

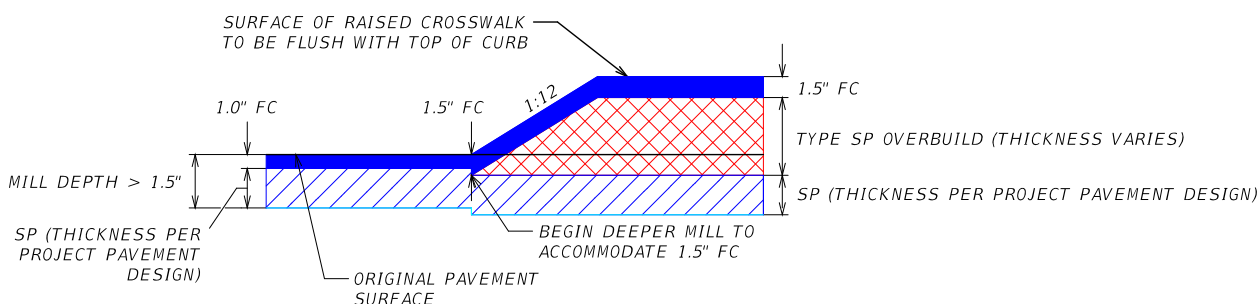


Note: If the project pavement design calls for FC > 1.5”, the raised crosswalk can match the thickness of the pavement design. The only stipulation is that the FC on the raised crosswalk not be less than 1.5”.

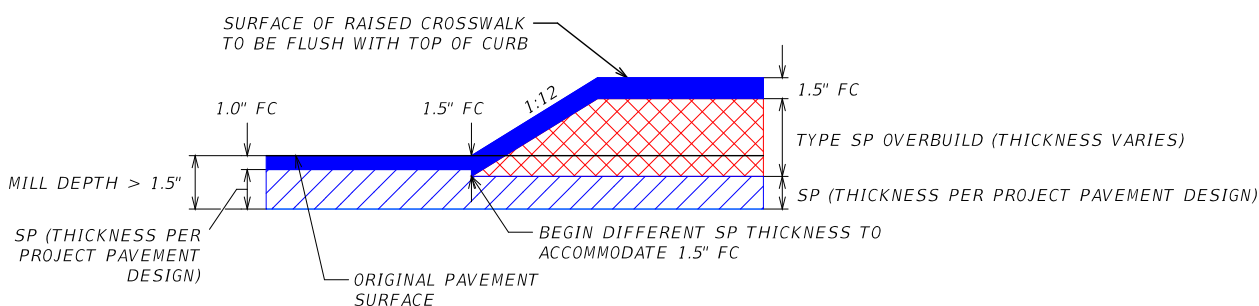
Example 2: Project pavement design FC thickness < 1.5" & milling depth > 1.5":

(note: this can be accomplished in more than one way; 2 options shown for the purpose of this example)

Option A: use a deeper milling depth beneath the raised crosswalk:



Option B: use a different thickness of SP beneath the raised crosswalk:



Example 3: Raised crosswalk only retrofit (no other milling/resurfacing limits):

