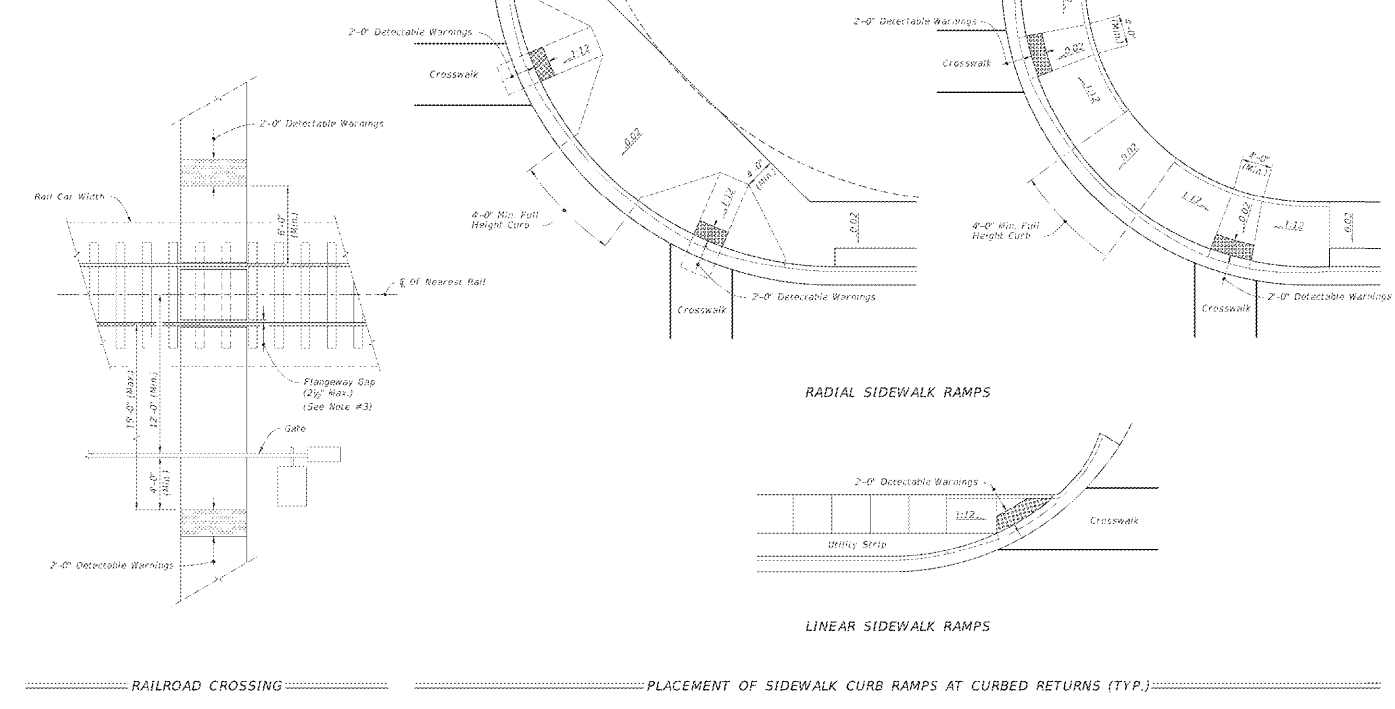


**NOTES:**

- Where crosswalk markings are used, ramps must fall within the crosswalk fields. A clear space of 48" minimum is required at the bottom of the ramp within a marked crosswalk. If crosswalk markings are not present, a clear space of 48" minimum is required at the bottom of the ramp outside of active travel lanes.
- Crosswalk widths and configurations vary; must conform to Index 17344 and 17346.
- Flangeway Gap may be up to 3" for Freight-only Railways.

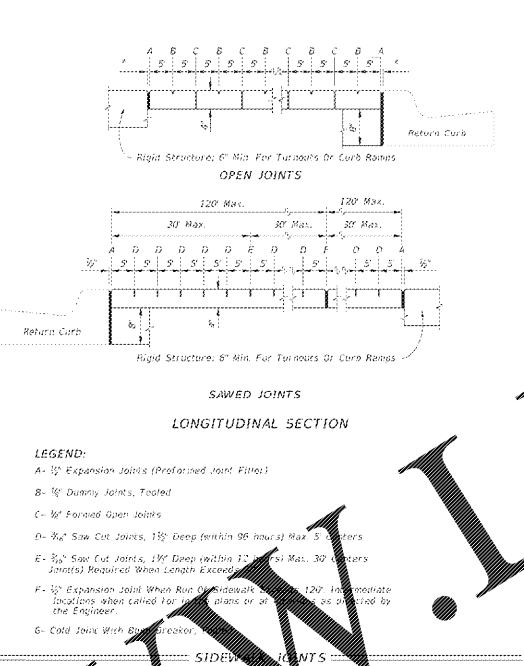


RAILROAD CROSSING AND CURB RAMPS AT CURBED RETURNS

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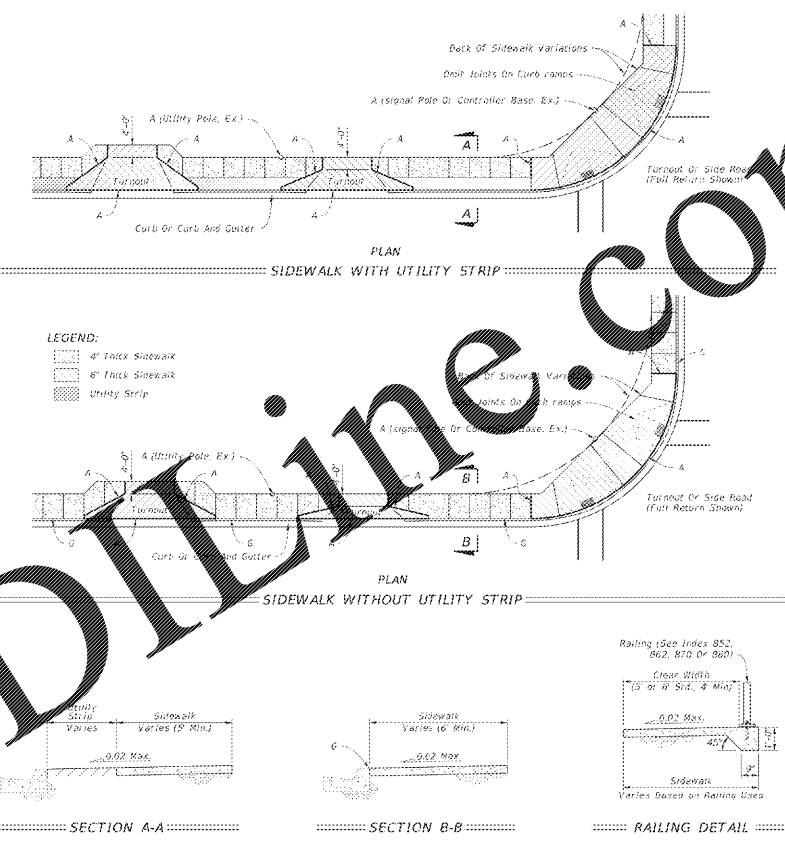
**GENERAL NOTES:**

- Construct sidewalks in accordance with Specification Section 522.
- Include detectable warnings on sidewalks curb ramps in accordance with Index 304.
- For TURNOUTS see Index 515.
- Reinforcing material can be any impermeable liquid or sheet membrane or preformed material having a thickness of not less than 6 mils nor more than 1/2".
- Construct sidewalks with Edge Beams through the limits of any surface mounted Pedestrian/Bicycle Railing or Pipe Guardrail shown in the plans. (See RAILING DETAIL)
- When roadways or driveways are newly constructed, reconstructed or altered, construct the cross slopes for crosswalks and discontinuous sidewalks as follows:  
A. Cross Slope = 0.02 for roadways or driveways controlled by "STOP" Sign or "YIELD" Sign.  
B. Cross Slope = 0.05 for roadways or driveways controlled by Traffic Signal.



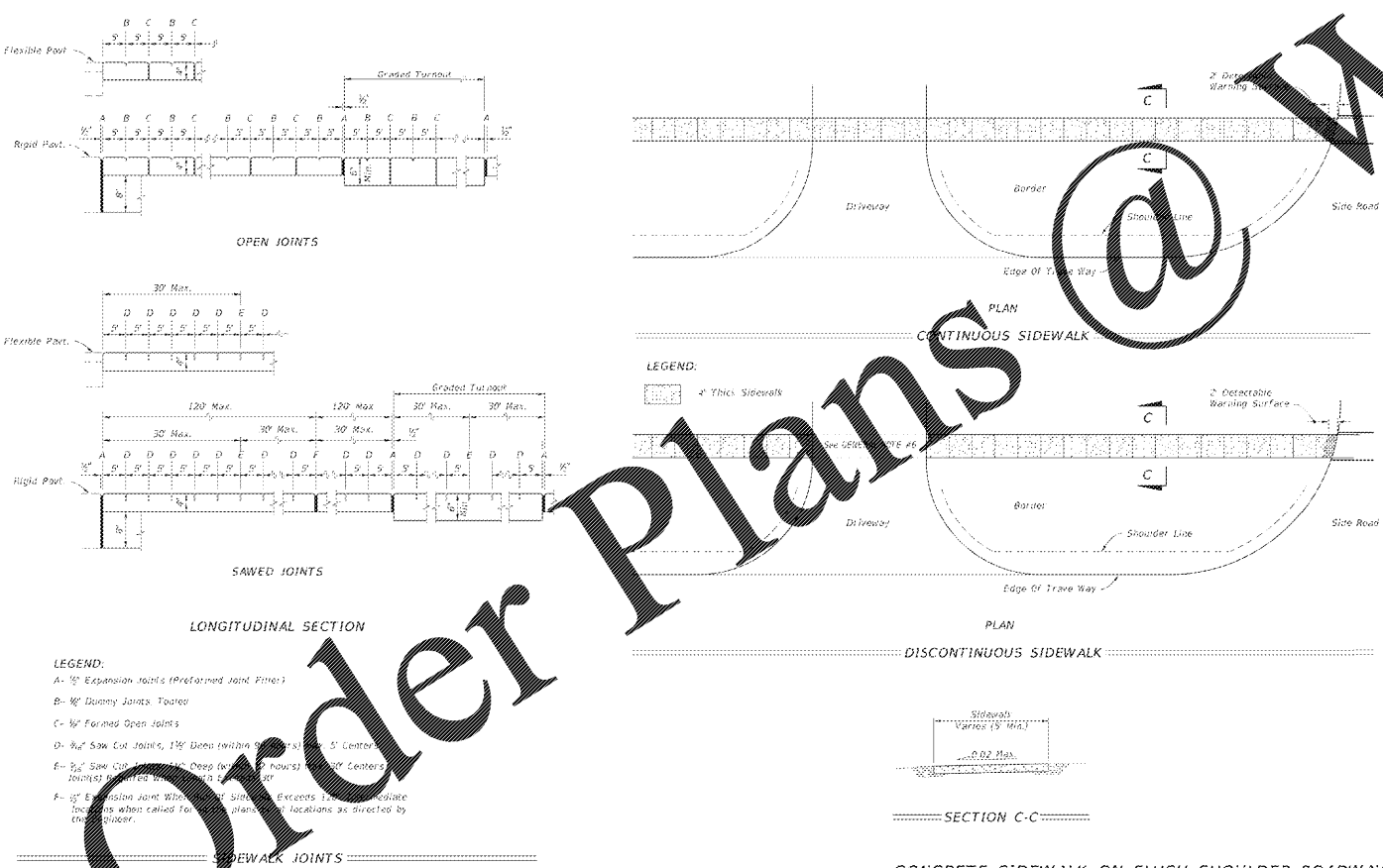
CONCRETE SIDEWALK

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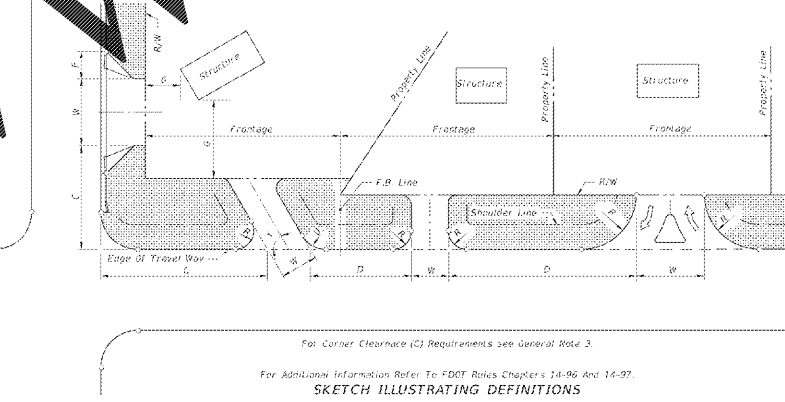
GENERAL NOTES AND CONCRETE SIDEWALK ON CURBED ROADWAYS

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CONCRETE SIDEWALK ON FLUSH SHOULDER ROADWAYS

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SKETCH ILLUSTRATING DEFINITIONS

ELEMENT DESCRIPTION	CURBED ROADWAYS			FLUSH SHOULDER ROADWAYS		
	1-20 Trips/Day or 1-5 Trips/Hour	21-600 Trips/Day or 6-40 Trips/Hour	601-4000 Trips/Day or 61-400 Trips/Hour	1-20 Trips/Day or 1-5 Trips/Hour	21-600 Trips/Day or 6-40 Trips/Hour	601-4000 Trips/Day or 61-400 Trips/Hour
CONNECTION WIDTH W	12' Min. 24' Max.	24' Min. 36' Max.	24' Min. 36' Max.	12' Min. 24' Max.	24' Min. 36' Max.	24' Min. 36' Max.
FLARE (Drop Curbs) F	10' Min. 10' Max.	N/A	N/A	N/A	N/A	N/A
RETURNS (Radius) R & U	N/A	25' Min. 50' Std. 75' Max.	25' Min. 50' Std. 75' Max.	15' Min. 25' Std. 30' Max.	25' Min. 50' Std. 75' Max.	25' Min. 50' Std. (or 3-Centered Curves)
ANGLE OF DRIVE Y	50°-90°	60°-90°	60°-90°	40°-90°	60°-90°	60°-90°
DIVISIONAL ISLAND (Paved Medians)	4'-22' Wide	4'-22' Wide	4'-22' Wide	4'-22' Wide	4'-22' Wide	4'-22' Wide
SEPARATOR G	12' Min. All categories. See Item A note No. 5.					

**NOT INTENDED FOR FULL INTERSECTION DESIGN SUMMARY OF GEOMETRIC REQUIREMENTS FOR DRIVEWAY TURNOUTS**

Side road intersection design, with possible auxiliary lanes and channelization, may be necessary. Intersection design, with possible auxiliary lanes and channelization should be considered for connections with more than 4000 trips/day.

2-Way refers to one "left" movement and one "right" movement (i.e., not exclusive left or right turn lanes on the connection).

When more than 2 lanes in the turnout connection are required, the 36' max. width may be increased to relieve interference between entering and exiting traffic which adversely affects traffic flow. These cases require documented site specific study and design.

Smart roads may be used in lieu of flares as approved by the Department.

**DESIGN NOTE:** 1-Way connections will be designed to effectively eliminate unpermitted movements.

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**GENERAL NOTES:**

- For definitions and descriptions of access connection "Categories" and access "Classifications" or highway agencies, and for other detailed information on access to the State Highway System, refer to FDOT Rule Chapter 14-96, "State Highway Connection Review Administrative Process" and Rule Chapter 14-97, "State Highway System Access Management Classification System and Standards".
- For this index the term "turnout" applies to that portion of driveways or side roads adjoining the main roadway. For this index the term "connection" encompasses a driveway or side road and their appurtenant islands, separators, transition curbs, auxiliary lanes, travelway flares, drainage pipes and structures, crosswalks, sidewalks, curb cut ramps, signs, pavement markings, required signalization, maintenance of traffic or other means of access to be from controlled access facilities. The turnout requirements set forth in this index do not provide concrete intersection design, construction or maintenance requirements.
- The location, positioning, orientation, spacing and number of connections and median openings shall be in accordance with FDOT Rule Chapter 14-97.
- On Department construction projects all drivers must allow the plans shall be responsible for their existing location in accordance with these standards, or, in accordance to specific issues issued during the construction project.
- Driveways shall have sufficient length and size for all vehicular queuing, starting, maneuvering, standing and parking to be carried out completely beyond the right of way line. Except for vehicles stopping to enter the highway, the turnout areas and drives within the right of way shall be used only for moving vehicles entering or leaving the highway.
- Connections with expected daily traffic over 4000 vpd shall be constructed as side-riding side roads. The design requirements of this index and that of the local government will be used to select appropriate connection widths, radii and intersection design, subject to the approval of the Department. For connections with expected daily traffic less than 4000 vpd, the Department will determine if a drop curb or radius returns are required in accordance with existing or planned connections. Where radius returns apply, the design requirements of this index and that of the local government will be used to select appropriate connection widths, radii and intersection design, subject to the approval of the Department.
- For connections that are intended to allow emergency vehicles or multi-lane vehicles or single unit vehicles exceeding 30' in length, returns with 50' radii shall be used, unless otherwise called for in the plans or otherwise stipulated by permit. Where large numbers of multi-lane vehicles with side 110' connections, the connection width and radii shall be increased and auxiliary lanes, tapered, transition flares, separators and/or islands constructed, as determined by the Department to be necessary for safe turning movements.
- Any connection requiring or having a specified median meeting with left hand storage and served directly by that median shall have radial returns.
- When a connection is intended to sign with a connection across the highway, the through lanes shall align directly with the corresponding through lanes.
- For new connections and for connections on all new construction and reconstruction projects, pavement markings and thicknesses shall meet the requirements applicable to other than specified for "Two-Way Roadway-Flared Turnouts", or, than described in "Index 515-1" for connections with radial returns and/or auxiliary lanes.
- The responsibility for the cost of construction or alteration to an access connection shall be in accordance with FDOT Rule Chapter 14-96.

**DESIGN NOTES:**

- Prior to the adoption of FDOT Rules Chapters 14-96 and 14-97, connections to the State Highway System were defined and identified by Classes. Connections have been redefined by Categories under Rule 14-96, and, the term "Class" has been applied to highway segments of the State Highway System as defined under Rule 14-97.

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CUSTOMER: BP STATION 3009 GULF TO BAY BLVD CLEARWATER, FLORIDA 34619

SITE ADDRESS: BP STATION 3009 GULF TO BAY BLVD CLEARWATER, FLORIDA 34619

ENGINEER OF RECORD: AEC Services, Inc. RON FAIR, P.E. License No. 9277, QB #0011445

1616 ALLISON WOODS LANE TAMPA, FL 33619 (813) 984-1204 (813) 984-2890 (f) www.aecservicesinc.com

JOB NO.	DWG NAME	CIVIL	XREF NAME	SCALE	DATE	DRAWN BY	CHECKED BY	APPROVAL
6016172								

ROW FDOT INDEXES

RW-5