Chicanes and serpentine design

Definition
An S-shaped curve in the vehicle driving path, created by offset curb extensions or by curving alignment (horizontal deflection), in an otherwise straight segment of roadway. Also called deviations, serpentines, reversing curve, twists, and staggerings.

Objective
To slow motor vehicle traffic, reduce cut-through traffic, and increase drivers’ attention to and awareness of the surroundings. Usually installed on low-volume residential streets.

Advantage
- Speed reduction.
- Can dissuade cut-through traffic.
- Heheightens driver awareness and attention.
- Provide opportunity for aesthetic enhancements (landscaping, signage, furnishings, etc.).
- Can be created with on-street parking (parallel or diagonal).

Challenge
- Can be relatively costly to install.
- May require the elimination of some on-street parking.
- Can be difficult for drivers to see/understand at nighttime, which can be a safety problem.
- May cause snow removal and street cleaning difficulties.
- Must be designed so as to prevent high-speed weaving.

Resources
- ITE Traffic Calming Measures — Chicane
  http://www.ite.org/traffic/chicane.asp
- PedSafe — Chicane
  http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=33
- Fehr & Peers Trafficcalming.org — Chicanes
  http://trafficcalming.org/measures/chicanes/
- Project for Public Places — Traffic Calming 101 — Chicanes
  http://www.pps.org/reference/livememtraffic/#CHICANES
- Mid-Block Speed Control: Chicanes and Speed Humps
  http://www.seattle.gov/transportation/docs/ITBreafin.pdf
- Traffic calming - an assessment of selected on-road chicane schemes
  http://www.trl.co.uk/online_store/reports_publications/trl_reports/cat_traffic_engineering/report_traffic_calming_-_an_assessment_of_selected_on-road_chicane_schemes.htm

Images (clockwise from main image):
- Example of a chicane and serpentine design
  Source: Dylan Passmore, Flickr.
- Additional examples:
  Sources: Dan Burden, pedbikeimages.org; Richard Drdul, Flickr; Richard Drdul, Flickr; Dan Burden; Dan Burden, pedbikeimages.org.