#### Town of Vienna Citizen's Guide to Improving Neighborhood Street Safety

#### DRAFT

#### January 14, 2019

#### I. Introduction

The Town of Vienna seeks to be a safe, vibrant, and environmentally conscious community with small town character, strong single-family neighborhoods, and distinguished businesses and services (Town of Vienna Comprehensive Plan 2015). Residents play an integral role in how the Town evolves, through participating in forums like Town commissions and committees, attending Town Hall and Town Council meetings, and through direct feedback and petitions. This guide aims to help residents draw on those characteristics and strengths to improve living quality and safety for motorists, pedestrians and bicyclists.

It is important to note that traffic calming measures and traffic control measures are not the same. Traffic calming is defined by the

#### Acronyms

DPW: Department of Public Works DPZ: Department of Planning and Zoning VPD: Vienna Police Department TSC: Vienna Transportation Safety Commission FHWA: Federal Highway Administration ITE: Institute of Traffic Engineers MUTCD: Manual on Uniform Traffic Control Devices

Institute of Traffic Engineers (ITE) as "the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users." Improving neighborhood street safety will involve effective traffic calming measures and smart sidewalk development. The primary purpose of traffic calming is to support the livability and vitality of residential and commercial areas through improvements in non-motorist safety, mobility, and comfort. These objectives are typically achieved by reducing vehicle speeds or volumes on a single street or a street network.

#### **Report a Maintenance Concern**

Contact DPW at 703-255-6380 to report the problem. (Examples: *Pothole, trip hazard, crack in sidewalk, repair to existing road striping, concern with existing traffic signal or signage*). DPW will assess and act accordingly. (Federal Highway Administration ePrimer 2017).

Traffic calming measures consist of horizontal, vertical, lane narrowing, roadside, and other features that use self-enforcing physical or psycho-perception means to produce desired effects (Federal Highway Administration ePrimer 2017). Lowering vehicle speeds reduce the likelihood of fatal injury where there is potential for conflict between a pedestrian and a motor vehicle. The slower the speed of the motor vehicle, the greater the chances are for survival for the pedestrian. (Federal Highway Administration ePrimer 2017).

Traffic control devices are signs, signals, pavement markings, and other devices that are outlined by the *Manual of Uniform Traffic Control Devices* (MUTCD). Traffic control devices are placed in set locations to guide and regulate traffic movement, control vehicle speeds, and warn of potentially hazardous conditions. Another purpose of traffic control is to assign right-of-way between motorists and among various modes of travel.

Community awareness and education, along with enforcement, are also key to improving neighborhood street safety. Town of Vienna describes its goals associated with these elements in the Town of Vienna's *Pedestrian Master Plan*.

The *Citizen's Guide to Traffic Calming* was first prepared by the TSC in January 2002 and then revised in April 2011. Town of Vienna's *Citizen's Guide to Improving Neighborhood Street, Pedestrian, and Bicycle Safety* replaces the April 2011 document. It seeks to provide citizens with the following:

- 1) Information to help mitigate the impact of traffic in neighborhoods and create a pedestrian and bicycle friendly environment.
- 2) Process for requesting traffic calming measures, traffic control devices, sidewalks and crosswalks.
- 3) Clarity about the petition process and a user friendly "quick look" flow chart to show appropriate steps for achieving improved neighborhood street safety.

Achieving appropriate safety measures requires fostering collaborative working relationships among Town residents, Town staff, neighborhood and school organizations, and Town appointed commissions and committees. Residents should keep in mind that any desired action is subject to approval by Town of Vienna officials and budgetary constraints.

# II. Understand Criteria (This should broadened beyond traffic calming to include all three petition items (traffic control, traffic calming and sidewalks)

Traffic calming measures will be evaluated according to the following criteria:

#### A. Street segment considerations.

A "street segment" is the portion of residential street for which traffic calming and pedestrian safety measures are sought. 1) Traffic calming measures generally are limited to streets classified as collector or local. See the appendix for a map of street designation. Streets that are designated emergency routes might not be suitable for some traffic calming devices. Traffic calming devices are limited to streets with a maximum of one travel lane in each direction. The grade of the street is also taken into consideration since certain traffic calming devices

may not be suitable on hilly streets with a steep grade. Certain traffic calming

devices also may not be suitable if curves or other obstacles would create unsafe conditions for motorists driving at normal speed under average conditions.

2) Speed limits and traffic volumes are a consideration as well. Posted speed limit may not exceed 25 miles per hour. Minimum street volume for physical traffic calming devices is 500 vehicles per day. Priority is given to streets that exceed 2,000 vehicles on an average weekday. Priority is also to streets where 15 percent or more of traffic exceeds posted speed limit by five or more miles per hour. Physical traffic calming measures will be considered when the 85<sup>th</sup> percentile speeds average 31 miles per hour. (See insert for more information).



#### **B.** Vicinity Considerations

Streets that are access routes for schools and community facilities will be considered priorities. Streets that are primary routes for fire and rescue equipment are not suitable for certain traffic calming devices. Streets that are bus routes and truck routes may not be suitable for traffic calming measures unless acceptable alternative routes are identified.

#### **C. Engineering Considerations**

Traffic calming devices should not be placed closer than 200 feet from any stop sign, yield sign, or traffic signal. Devices should be at least 300 feet apart. Also, any traffic calming device shall not adversely affect street drainage.

#### **D.** Other Considerations

- 1) Pedestrian and bicycle safety are a top priority and any traffic-calming measure must not impede the safety of pedestrians or bicyclists.
- 2) If any traffic calming measure diverts more than 5 percent of volume to another collector or local street, that street will also be considered for traffic calming measures.

#### III. Petition Process to Address Neighborhood Street Safety

Every situation is unique. That is why it is so important for DPW to understand the problem and concerns so the Town can properly address them. Citizens have the opportunity to identify and communicate street safety concerns with the Town, but they are not expected to determine the solution. Town staff includes experts who will evaluate the issues of concern to recommend the best path forward. The process allows both citizens and Town staff to share information and collaborate regarding street safety concerns.

Department of Public Works Phone: 703-255-6380 Email: dpw@viennava.gov

Transportation Safety Commission Phone staff representative: 703-255-6382 Email: <u>%20tsc@viennava.gov</u>

#### **Petition Timeline to Expect**

- Initiating petitions for traffic control measures, traffic calming measures, or new sidewalks, and requesting a hearing before the Transportation Commission could take about three months. The timing of a hearing depends on the TSC agenda. The TSC meets monthly, excluding December.
- Analyzing requests and conducting any related studies (speed studies are conducted during the school year) plus TSC action can take an additional two months.
- Reviewing TSC determination by Town Council and implementation of any traffic calming or traffic control measures that are approved can take six months depending on potential funding sources and related projects. Implementation of approved sidewalk requests vary and depend on funding and related projects. Some approved sidewalk requests take much longer to fulfill due to related infrastructure work, i.e. moving water and electrical utility lines.

#### Step 1 – Identify street safety concern and contact DPW.

Residents should work with neighbors, civic associations, business and school groups to identify traffic and safety problems. Once issues have been identified and discussed (*see insert below for questions to consider*) residents should inform DPW staff of their street safety concern(s).



#### Step 2 – DPW evaluates petition eligibility.

DPW will examine the issues raised to determine whether a petition is needed. Some safety issues can be addressed without a petition and some will not be eligible for either a petition or work order. In general, sidewalk, traffic calming, and crosswalk requests require a petition.



#### Step 3 – DPW determines whether concern is eligible for petition or work order.

DPW, in consultation with concerned residents, will determine how best to address the situation.

#### Step 3A - Concern is not eligible for petition or work order.

While DPW will thoughtfully consider how it can address areas of concern to improve street safety, there are some factors that would prevent the concern from being eligible for a petition of work order.

# **Step 3B** – **Concern does not require a petition and can be resolved by DPW** with a Work Order.

DPW will analyze the concerns per MUTCD and industry standards. Depending on the issue, it may consider factors such as pedestrian generators, traffic counts, roadway design (width and sight distance), existing and future projects, and other relevant information. After it reviews this information and it determines street safety measures are warranted, DPW will place a work order to have request prioritized and completed pending funding and crew/contractor availability. Once this is done, a work order will be implemented and later evaluated for effectiveness. (Note I'm adding language in yellow and eliminating this as a separate step on flow chart)

#### Step 3C – Concern requires citizen petition and presentation to TSC.

- 1) Residents will submit completed petition identifying concern(s) (use template in Appendix). A valid petition must have the following requirements:
  - Be signed by one member of 75 percent of the households and businesses on the street segment where the traffic calming measure is requested.
  - Note that by signing the petition, residents agree to have the safety measure (e.g., traffic calming measure, sidewalk, crosswalk, or other device or measure) in front of their property.
  - Be signed by one member of 50 percent of the households or businesses in cul-de-sacs or on dead-end streets that are accessed by way of the street segment in the petition.
  - Include a map of the area. Maps can be found on the Vienna web site, but a Google Map image is acceptable.
  - Declare that a notice of petition has been given to residents in the impacted area.
- 2) DPW will determine whether petition is complete and notify applicant of any deficiencies.
- Town will schedule petition for discussion at next available TSC meeting. Petitions will be scheduled in the order they are received.
- 4) Public notification of TSC meeting agenda.

#### **Step 4 – DPW conducts engineering review and analysis.**

- 1) Petition is presented to TSC. Each citizen has a 3 minute time limit to present issues of concern.
- 2) TSC may direct DPW and VPD to collect data on existing conditions and conduct an engineering study to determine safety concern(s) and recommendations to improve safety. This will include traffic counts over a one week period. If a sidewalk is being considered, DPW will complete the sidewalks rating system. Review of the following information will occur:

#### **Street Segment Data**

- Street classification
- Traffic volumes
- Traffic speeds
- Posted speed limits
- Physical street segment data
- Accident data
- Bike route information
- School bus and student walking/biking information

#### **Vicinity Data**

- Nearby community facilities and schools
- Emergency vehicle and snow emergency routes
- Bus routes
- Truck routes
- Impact on alternate routes that drivers may take if trafficcalming measures are installed

#### (NOTE: Review boxes for improvement)

#### Step 5– DPW makes recommendation for TSC consideration.

- 1) DPW will present findings at the next available TSC meeting.
- 2) Public notification of TSC meeting agenda will be posted.

#### Step 6 – TSC recommends motion to Town Council if warranted and approved.

If a street safety measure is warranted then TSC may make a motion to recommend the measure(s) to Town Council. If the motion is approved (requires majority vote), then DPW will develop a cost estimate, schedule, and funding source to present with motion at a future Town Council meeting.

#### **Step 7** – **Town Council considers motion for approval.**

DPW presents motion to Town Council at a regularly scheduled Town Council meeting. Interested parties will be notified of the meeting in advance. If motion does not pass then the process ends. If motion passes, then DPW coordinates construction and implementation of recommended street safety measures based on funding and crew/contractor availability.

#### **Step 8 – DPW implements and evaluates new street safety measure(s).**

DPW will maintain and evaluate safety measure(s) as necessary. If DPW finds that a measure (e.g., traffic calming device) creates a hazardous situation, DPW may modify or remove the device. Residents wishing to have a traffic calming device removed or modified need to follow the same petition process as installing it.

The TSC will evaluate the street safety measure by gathering and evaluating the following information:

- 1) Comparisons of speed and traffic volumes before and after installation of street safety measures.
- 2) Review of archives as to reasons and circumstances that promoted the street safety measures.
- 3) Correspondence and surveys of citizens affected by the street safety measures and input from Town personnel and departments.

#### IV. New Sidewalk Request Information

As stated in the *Town of Vienna Comprehensive Plan* and the *Pedestrian Master Plan*, the Town desires to promote walking and bicycling for recreation and transportation. The Town is pursuing policies that will help fill gaps in the sidewalk network and expand on the 81 miles of walkways that already exist.

The goal is to provide safe and accessible sidewalks on both sides of every street in the Town. Sidewalk projects are prioritized so that available funds are paired with projects that provide the most benefit to as many citizens as possible in the shortest time frame.

If residents desire to fill in a gap on an existing walkway, then a petition is not needed and residents should contact the DPW to discuss the issue.

Walking is a fundamental form of transportation. Sidewalks, paths, trails, and street crossings are a significant component of the transportation network. For more information on the Town of Vienna's policies on the construction of sidewalks and filling the gaps in the pedestrian network please see the *Town of Vienna Comprehensive Plan* (See reference page for details).

Sidewalk prioritization is based on a weighted rating system. The sidewalk rating system is maintained by DPW and allows for discretion-based flexibility to incorporate the professional judgment of staff. It is based on the following eight elements: (See details in Appendix)

- 1) Safety
- 2) Sidewalk classification
- 3) Feasibility
- 4) Suitability analysis (i.e., proximity to Town infrastructure and commerce)
- 5) Road category
- 6) Vehicle volume
- 7) Proximity to metro stations
- 8) Proximity to transit stops

Sidewalk projects are prioritized so that available funds are paired with projects that provide the most benefit to the community. Many projects are partially funded with state and federal grants. As stated earlier in this document, residents are encouraged to work with neighbors and community organizations such as the local school's PTA to help identify safety issues and sidewalk needs and to help secure funding through the Safe Routes to School program.

Please note that significant sidewalk projects can take years depending on the existing infrastructure such as water pipes, storm drainage, and electrical wires.

#### V. Traffic Control Information

The Town of Vienna adheres to the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD), a Federal Highway Administration (FHWA) guide used by federal, state, and local agencies to ensure that traffic control devices - signs, signals, markings, or other devices used to regulate, warn, or guide traffic - are designed, installed, and applied consistently across the United States.

The placement of stop signs may be considered where there is a combination of excessive speed, restricted view and a serious accident record involving turning traffic. Two-way stops may be implemented where safety considerations may justify stopping traffic to permit left-hand turns at heavily traveled intersections. All-way stop signs generally should be limited to streets having a 3:1 ratio of traffic volume from the main street to the minor street and a total minimum volume of 1,000 vehicles per day entering the intersection from all directions.

All-way stop intersections should be spaced no closer than 1,200 feet apart.

Note, petitions for all-way stop signs should include all properties on both intersecting streets. This includes all properties from the intersection in question to the nearest through-street in all directions.

### A Note About Stop Signs

Stop signs are a traffic safety measure and are not appropriate for traffic calming. A number of studies have shown that unwarranted stop signs actually increase speeds on residential streets as motorists proceed through without stopping in an attempt to make up time lost at stop signs they perceive as unnecessary. Safety for pedestrians, especially for small children, is decreased due to their expectation that vehicles will stop as required when in reality drivers may fail to stop at signs they perceive as unnecessary. (Virginia Department of Transportation 2017)

#### VI. Traffic Calming Information

Choosing the right measure to correctly address the problem is very important. Details on available traffic calming measures can be found in the Guide Appendix. Road conditions and sighting conditions as well as traffic volume and speeds must be taken in consideration. Keep in mind that roads designated as emergency routes may not be suitable for traffic calming devices. See the Vienna street inventory and classification map in the appendix and check the *Vienna Comprehensive Plan* for more details on street classification.

## Traffic calming measures used by the Town include, but may not be limited to the following:

- Education and Police enforcement
  - Speed humps, bumps and tables (no emergency routes)
- Traffic Circles
- Signage
- Median strips
- Chicanes
- Lane narrowing striping (visually narrows road and discourage passing on residential streets)
- Radar speed Indicators
- Raised crosswalks
- Bike lanes

#### VII. Crosswalk Information

The Town has been installing crosswalks where the need has been identified. These crosswalks generally are being placed at intersections that are controlled by either stop signs or traffic lights. Crosswalks placed in uncontrolled locations have been the subject of much debate and are considered by some to be unsafe because they provide a false sense of security to pedestrians in an area where drivers might not be expecting them to cross (Federal Highway Administration 2005).

## VIII. Appendices -PLACEHOLDER

## Sidewalk Rating System

CATEGORY	DESCRIPTION	
SAFETY	SAFETY WILL CONSIDER ITEMS INCLUDING SIGHT DISTANCE, LACK OF REFUGE AREAS OR OTHER UNSAFE CONDITION, AGE IN PLACE, SPECIAL NEEDS	
SIDEWALK CLASSIFICATION	DETERMINE WHETHER AND HOW MUCH EXISTING SIDEWALK EXISTS	
FEASIBILITY	FEASIBILITY CAN RANGE FROM POTENTIAL CONSTRUCTION ISSUES, OFF SITE IMPACTS, AND ENVIRONMENTAL IMPACTS. 0 POINTS FOR LESS FEASIBLE AND 20 POINTS FOR VERY FEASIBLE.	
GIS HEAT MAP (SUITABILITY ANALYSIS)	GIS HEAT MAP SHOWING WEIGHTED CHURCHES, W&OD TRAIL, ACTIVE PARKS, PASSIVE PARKS, COMMERCIAL / RETAIL, OFFICE SPACE, SCHOOLS, GOVERNMENT FACILITIES, AND POPULATION DENSITY.	
ROAD CATEGORY	ROAD CATEGORIES	
VEHICLE VOLUMES	VEHICLE VOLUMES BASED ON DATA OR ENGINEERING ESTIMATES	
METRO STATION	DISTANCE FROM VIENNA OR GREENSBORO METRO STATION	
TRANSIT STOP	PUBLIC TRANSPORTATION STOP STATIONS	

Note: We need to put the sidewalk rating spreadsheet here. (Can't find it on the website) It was referenced but not included in the PMP. Also can place at this point a generic sample of a sidewalk project under the rating system.

Sample Petition (below. Need to correct formatting with written document.

## References

Federal Highway Administration ePrimer <u>https://safety.fhwa.dot.gov/speedmgt/ePrimer\_modules/module2.cfm#mod21</u>

Town of Vienna Comprehensive Plan https://www.viennava.gov/DocumentCenter/View/3124)

Manual of Uniform Traffic Control Devices (MUTCD) (https://mutcd.fhwa.dot.gov/kno 2009r1r2.htm).

Town of Vienna Pedestrian Master Plan https://www.viennava.gov/DocumentCenter/View/2636

Citizen's Guide to Traffic Calming https://www.viennava.gov/DocumentCenter/Home/View/712

TRAFFIC CALMING GUIDE FOR NEIGHBORHOOD STREETS http://www.virginiadot.org/programs/resources/Traffic-Calming-Guide-For-Neighborhood-Streets.pdf SAMPLE MAP



### PETITION TEMPLATE

We, the residents of \_\_\_\_\_\_ (name of affected street(s)), as signified by our signatures below, hereby request the evaluation of the concerns identified in this request.

It is the opinion of the residents there should be improvement to

(identification of crosswalk, sidewalk or traffic calming concern, identifying perceived dangers to pedestrians, bicyclists and property) along this section of roadway. This concern arises (identification of time of day and/or

direction of traffic when problem occurs, if appropriate).

As such, we would like to ask the Vienna Transportation Safety Commission and the Vienna Town Council to evaluate the concerns identified in this request and consider appropriate action. We hereby acknowledge our willingness to have any sidewalk, crosswalk or traffic calming measure the Vienna Town Council deems appropriate located on our street and, if appropriate, in front of our property.

We understand this request will be evaluated and any modifications will be assessed based on availability of funding or grants as well as the guidelines set forth in the "Town of Vienna's Citizen's Guide to Improving Neighborhood Street, Pedestrian and Bicycle Safety" and the Pedestrian Master Plan.

SIGNATURE	PRINTED NAME	ADDRESS

PETITION, Page \_\_\_\_\_

We, the residents of \_\_\_\_\_\_ (name of affected street(s)), as signified by our signatures below, hereby request the evaluation of the concerns identified in this request.

SIGNATURE	PRINTED NAME	ADDRESS

#### Emergency Route Map (note:

I was unable to find a stand-alone emergency route map on the Town of Vienna map page. I did find this map as part of a pdf document <u>https://www.viennava.gov/documentcenter/view/710</u> I do not have PDF editing equipment so I had to manipulate the image using a screen shot. Using a screen shot image makes things a bit wonky when trying to work around the image. Perhaps DPW could put this map on its map page so we can work with it more easily and use the URL to direct document users to the map page.



MAP NOTE – Would like to place Vienna street classification map here – need some kind of conversion from PDF to Word friendly medium.

1. Advantages and disadvantages of various traffic calming devices

#### **Traffic Calming Strategies**

(This is a place holder with info coming from 2008 study. Photos and more details on pros and cons to come. Also need to know any additions or if any of these strategies are not employed by the Town. Can take pictures of devices in use in Town.) Could replace this place holder with information from VDOT's Traffic Calming Guide for Neighborhoods. Anyone have a program to convert PDF to Word?

#### **SPEED MITIGATIONS**

#### **Vertical Deflection Devices**

- Speed Humps (road humps, or undulations):
  - Speed humps are rounded raised areas placed across the roadway. They are generally 10 to 14 feet long (in the direction of travel), making them distinct from the shorter "speed bumps" found in many parking lots, and are 3 to 4 inches high. The profile of a speed hump can be circular, parabolic, or sinusoidal. They are often tapered as they reach the curb on each end to allow unimpeded drainage. Speed humps are good for locations where very low speeds are desired and reasonable, and noise and fumes are not a major concern.
- Speed Tables (trapezoidal humps, speed platforms):
  - Speed tables are flat-topped speed humps often constructed with brick or other textured materials on the flat section. Speed tables are typically long enough for the entire wheelbase of a passenger car to rest on the flat section. Their long flat fields give speed tables higher design speeds than speed humps. The brick or other textured materials improve the appearance of speed tables, draw attention to them, and may enhance safety and speed-reduction.
- Raised Intersections (raised junctions, intersection humps, plateaus): Raised intersections are flat raised areas covering an entire intersection, with ramps on all approaches and often with brick or other textured materials on the flat section. They usually rise to the level of the sidewalk, or slightly below to provide a "lip" that is detectable by the visually impaired. By modifying the level of the intersection, the crosswalks are more readily perceived by motorists to be

"pedestrian territory". Raised intersections are good for intersections with substantial pedestrian activity, and areas where other traffic calming measures would be unacceptable because they take away scarce parking spaces.

- Raised Crosswalks (raised crossing, sidewalk extensions):
  - Raised crosswalks are Speed Tables outfitted with crosswalk markings and signage to channelize pedestrian crossings, providing pedestrians with a level street crossing. Also, by raising the level of the crossing, pedestrians are more visible to approaching motorists. Raised crosswalks are good for locations where pedestrian crossings occur at haphazard locations and vehicle speeds are excessive.
- Textured Pavements (cobblestone, brick pavement, stamped pavement): Textured and colored pavement includes the use of stamped pavement or alternate paving materials to create an uneven surface for vehicles to traverse. They may be used to emphasize either an entire intersection or a pedestrian crossing. They are sometimes used along entire street blocks. Textured pavements are good for "main street" areas where there is substantial pedestrian activity and noise is not a major concern.

#### **Horizontal Deflection Devices**

- Traffic Circles (rotaries, intersection islands):
  - Traffic circles are raised islands, placed in intersections, around which traffic circulates. They are good for calming intersections, especially within neighborhoods, where large vehicle traffic is not a major concern but speeds, volumes, and safety are problems.
- Roundabouts (traffic circles, rotaries, intersection islands): Traffic circles are raised islands, placed in intersections, around which traffic circulates. They are good for calming intersections, especially within neighborhoods, where large vehicle traffic is not a major concern but speeds, volumes, and safety are problems.
- Chicanes (deviations, serpentines, reversing curves, twists):
  - Chicanes are curb extensions that alternate from one side of the street to the other, forming S-shaped curves. Chicanes can also be created by alternating on street parking, either diagonal or parallel, between one side of the street and the other. Each parking bay can be created either by restriping the roadway or by installing raised, landscaping islands at the ends of each parking bay. Good for locations where speeds are a problem but noise associated with speed humps and related measures would be unacceptable.
- Realigned Intersections (modified intersections):

Realigned intersections are changes in alignment that convert T-intersections with straight approaches into curving streets that meet at right angles. A former "straight-through" movement along the top of the T becomes a turning movement. While not commonly used, they are one of the few traffic calming measures for T-intersections, because the straight top of the T makes deflection difficult to achieve, as needed for traffic circles. They are good for T-intersections.

#### Horizontal Narrowing (note need to add bike lanes as used on Courthouse Rd.)

• Neckdowns (nubs, bulb outs, knuckles, intersection narrowings, corner bulges, safe crosses):

Neckdowns are curb extensions at intersections that reduce the roadway width from curb to curb. They "pedestrianize" intersections by shortening crossing distances for pedestrians and drawing attention to pedestrians via raised peninsulas. They also tighten the curb radii at the corners, reducing the speeds of turning vehicles. They are good for intersections with substantial pedestrian activity and areas where vertical traffic calming measures would be unacceptable because of noise considerations.

• Center Island Narrowings (midblock medians, median slowdowns, median chokers):

A center island narrowing is a raised island located along the centerline of a street that narrows the travel lanes at that location. Center island narrowings are often landscaped to provide a visual amenity. Placed at the entrance to a neighborhood, and often combined with textured pavement, they are often called "gateway islands." Fitted with a gap to allow pedestrians to walks through at a crosswalk, they are often called "pedestrian refuges." Center Island Narrowings are good for entrances to residential areas and wide streets where pedestrians need to cross.

• Chokers (pinch points, midblock narrowings, midblock yield points, constrictions):

Chokers are curb extensions at midblock locations that narrow a street by widening the sidewalk or planting strip. If marked as crosswalks, they are also known as safe crosses. Two-lane chokers leave the street cross section with two lanes that are narrower than the normal cross section. One-lane chokers narrow the width to allow travel in only one direction at a time, operating similarly to one-lane bridges. They are good for areas with substantial speed problems and no on-street parking shortage.

#### Useful information for sidewalk, crosswalk repairs and street safety issues

(Note: This is still a work in progress)

Is this still needed now that we have details in flow chart?

- 1. Requests for service, such as sidewalk/concrete repair, fresh paint on existing road markings/crosswalks, crossing signal issues can be reported to DPW at <a href="https://www.viennava.gov/index.aspx?NID=1272">https://www.viennava.gov/index.aspx?NID=1272</a>
- 2. Street light problems should be reported to Dominion Energy. A form is available at <u>https://www.dominionenergy.com/outage-center/streetlight-outages/outdoor-lighting-email-form</u>