Summary Report

Sidewalk Route(s) through The Town of Meridian Hills

Submitted to Town Council January 13, 2020

Accepted by Town Council June 10, 2020



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01

December 3, 2019 Presentation





Goals

- The goal of the committee was to meet as neighbors to discuss and recommend a <u>safe route for a sidewalk</u> or sidewalks through the Town. The route(s) should provide access to as many residents as possible and connect the major points of interest to the Town. The sidewalk increases the safety of the residents of the Town.
- The committee acknowledges that the Town of Meridian Hills does not control all the right of way to build the sidewalk on any of the routes that are being explored and that individual landowners will need to grant permission for the Town to build on their property and the design should minimize the impact on all land owners on the chosen route.





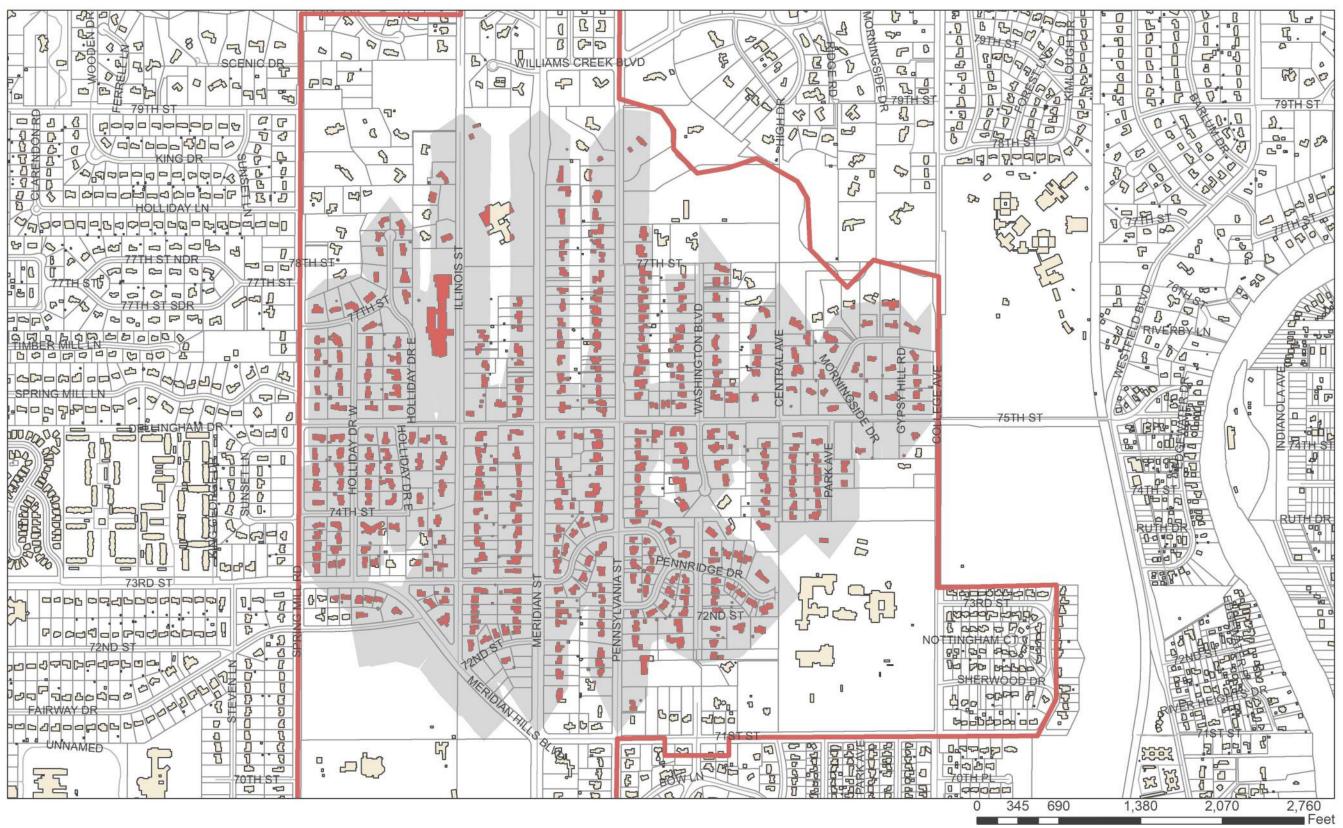


- 1 75th Street (Phase One)
- 2 Pennsylvania Street (Future Phase)
- 3 Illinois Street (Future Phase)

The Town of Meridian Hills Streetscape Improvement - Indianapolis, Indiana



75th Street Walking Distances







Design Parameters

- Safety is of the utmost importance in the design. Adult bikes and scooters will not be allowed on the sidewalk.
- The Town will maintain the sidewalk and be responsible for snow removal.
- Preservation and/or replacement of landscaping trees will be incorporated into the design to offset any vegetation lost in construction.
- The Town should allow front yard fencing or setback options for areas where the sidewalk crosses a lawn.
- Drainage of the area affected by the sidewalk will be addressed in the technical design phase and be improved to the extent possible.

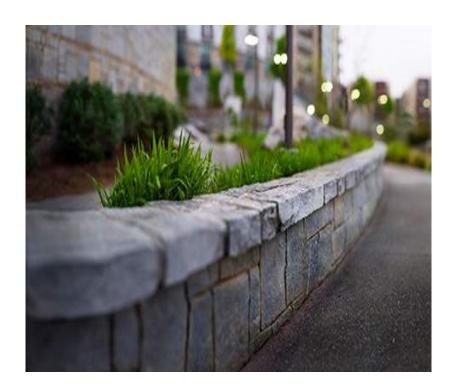




Design Parameters

- The design should be of a high standard befitting of Meridian Hills.
- The retaining walls should be stone or masonry that reflect a pedestrian scale and support the character of the Town.



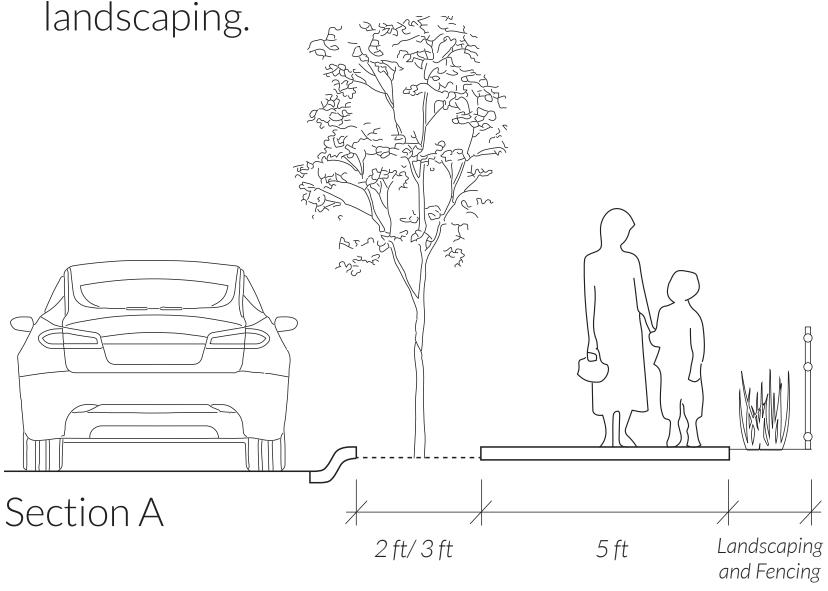




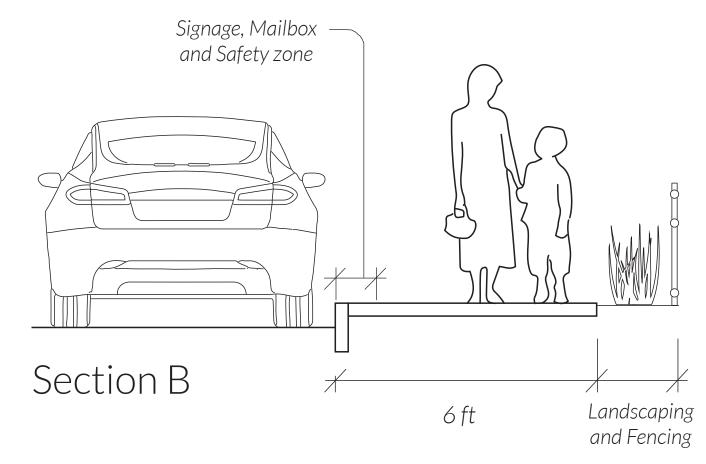


Design Parameters

 Section A: Sidewalks will be 5 feet wide with 2-3 feet for grading, drainage, and



 Section B: Sidewalks will be 6 feet wide to allow for two-way traffic and encroachments of mailboxes, sign pole, etc.







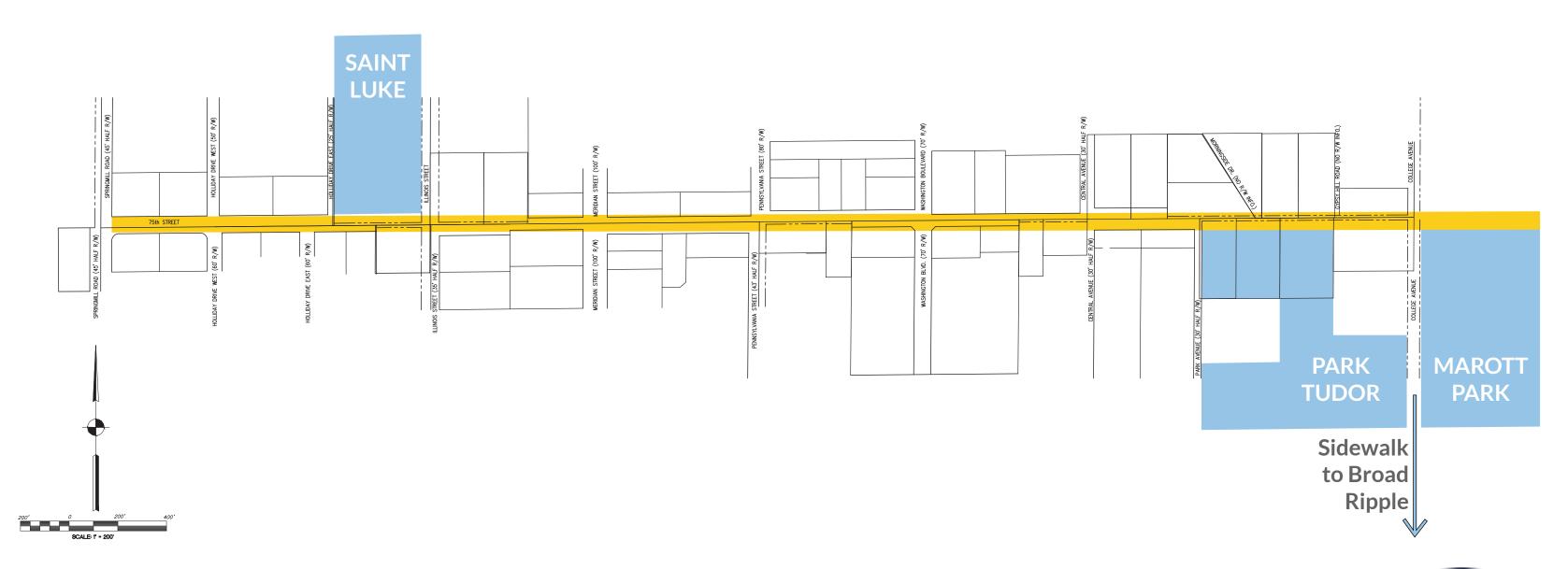
Traffic Calming

- The Town should explore ways to slow the traffic of 75th street as it pursues the development of the sidewalk
- These options could include road designs incorporating cross walks, lane size restrictions, cross walk bubbles, speed enforcement, and stop signs





Institutions in the Town



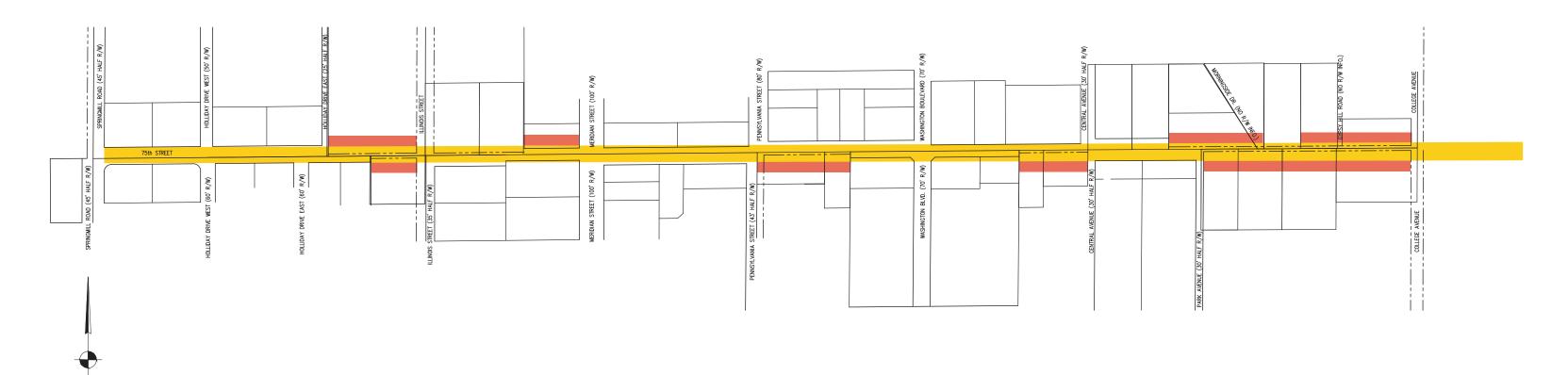
The Town of Meridian Hills Streetscape Improvement - Indianapolis, Indiana



ROW Needs

North: 6 Properties

South: 9 Properties

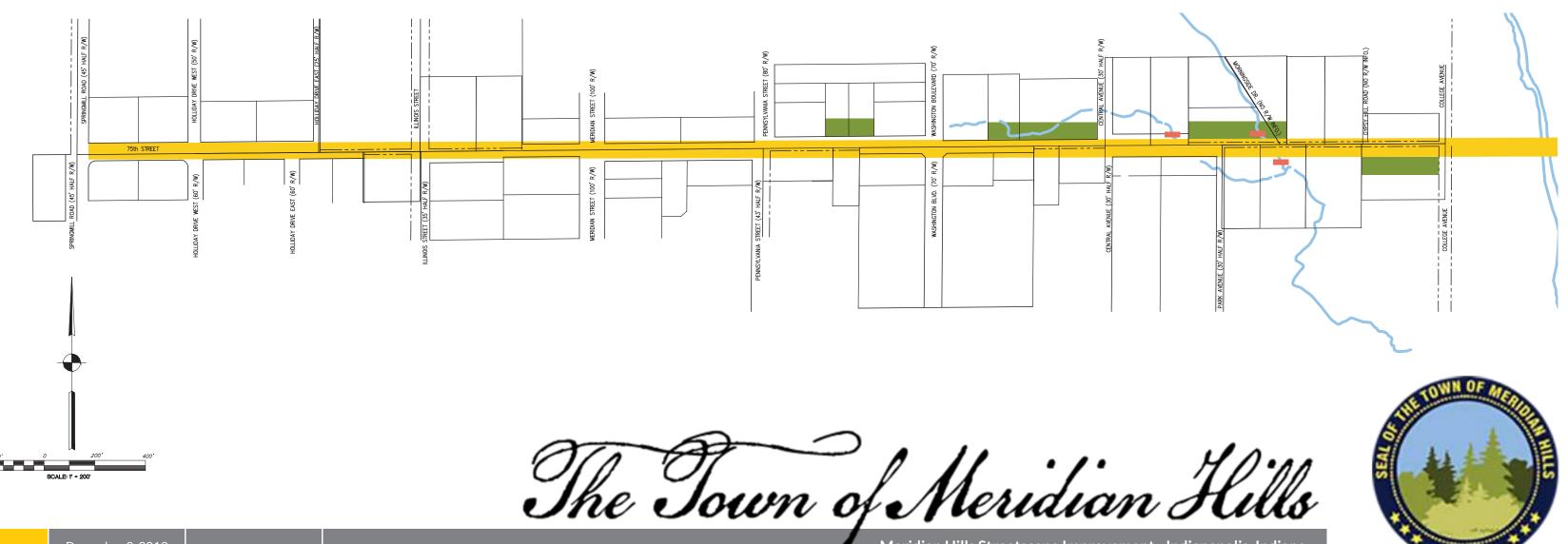






Flora, Water and Bridges

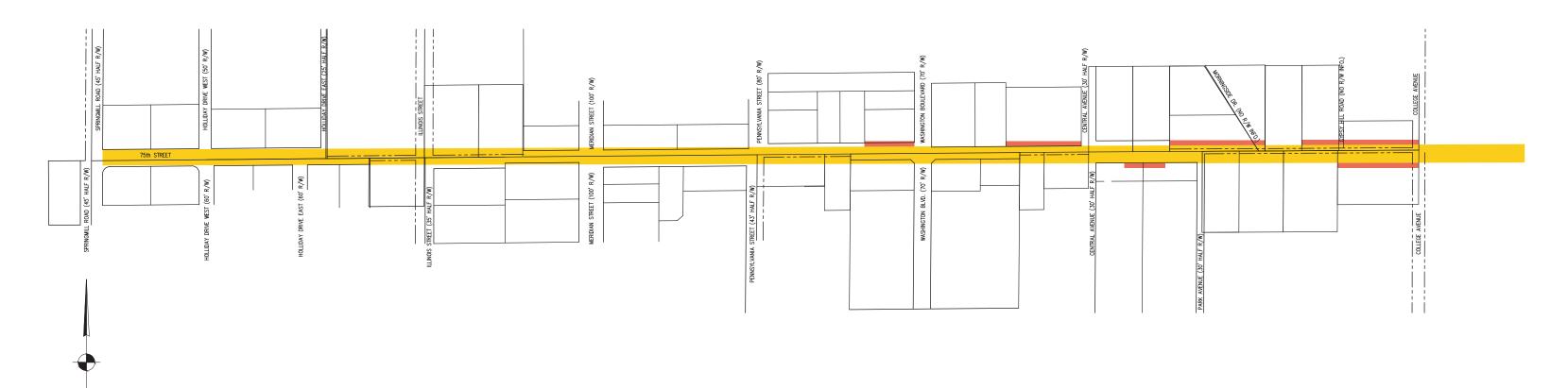
- North: 6 Properties with Significant Flora
 - 2 Bridges
- South: 1 Property with Significant Flora
 - 1 Bridge



Retaining Walls

North: 6 Properties

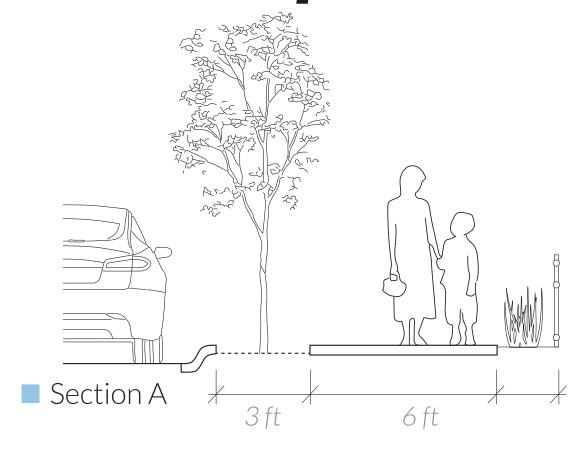
South: 3 Properties

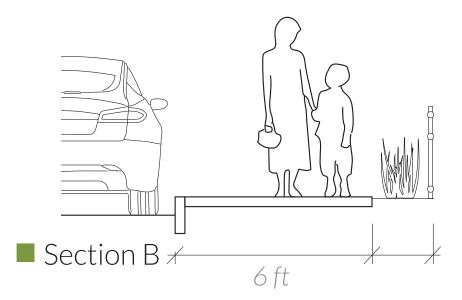






Proposed Route - West 75th Street







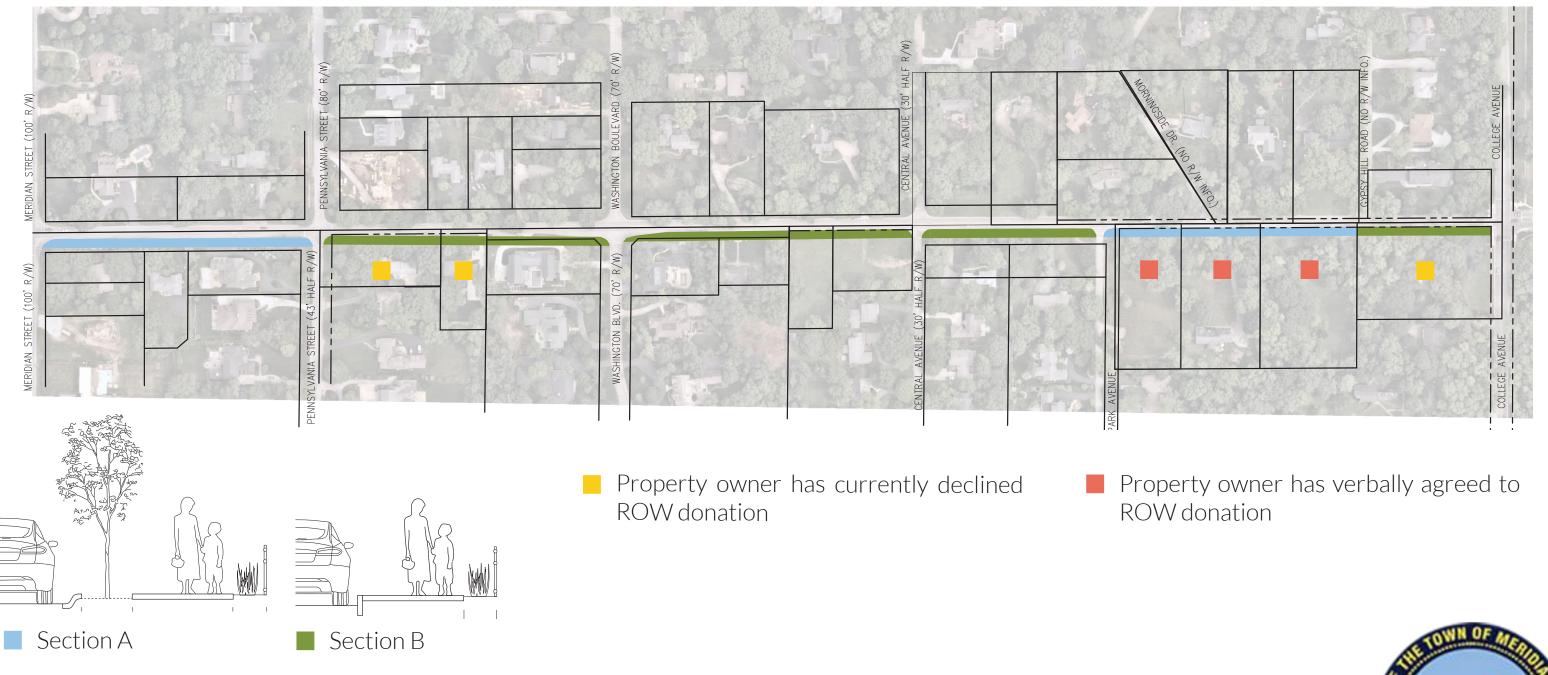
Property owner has currently declined ROW donation

Property owner has verbally agreed to **ROW** donation





Proposed Route - East 75th Street





Next Steps

- 1 Finalize the report and submit to Town.
- (2) The committee chairs should continue working with the finance committee to understand funding options for further technical study or construction.
- 3 Further explore the detailed design options for the western portion of the sidewalk.
- With the detailed design options, the committee chairs would meet with all home owners on the route to learn more about concerns that they may have.
- 5 Continue to look for options to complete the eastern part of the sidewalk.



02

Design Committee Documents



Design Committee Documents

Document #1- Agenda for first meeting and purpose

RE: May 8, 2019 Design Subcommittee Agenda

Agenda for Pathway Design process, The Town of Meridian Hills

A. Welcome

a. Co-chair introductions

The goals of the committee will be as follows. (additional goals can be added) In the form of a recommendation to the Town Council this committee will:

- 1. Define the best location in the town for the pathway and then meet with the most affected home owners to solicit their support (or not) and understand their concerns.
- 2. Define a good, better, best design with a cost estimate and impact statement at the end of Concept and Design development.

B. Over all process

Four meetings as a larger committee

- First meeting- Exploration (see notes below).
 Subcommittee would meet work thru options and report on location options and design options.
- 2. Report back to full committee on findings and discussion.

Sub-committee to meet with residents (on site) in small groups to gather options and concerns.

- 3. Report back to full committee on resident meeting and options.
 - Sub-committee to write final report and issue to full committee.
- 4. Full committee to meet to finalize report.

At the end of this committee we will ask for volunteers to be on the subcommittee. Would like to have 5 people.

Voting if needed will be by those who are at the meeting but dissenting notes can be added to the report.

C. May 8th meeting Exploration, Goals and process

Table discussions questions:

D. Subcommittee sigh up

Subcommittee meeting date TBD

- E. Next meeting Date
- F. Other items to be discussed.
- G. Adjourn

Document #2- Minutes/results from first meeting

RE: Design Committee

Sent: June 2, 2019 (6:07 PM)

Please find attached [see below] the summary of the responses to Greg's questions at our first meeting. Our next meeting has been changed to **July 30.**

Please check your calendars. **If you will not be able to attend, let me know ASAP.** At this meeting, we will establish the number for a quorum and the percentage needed to pass a vote. We need a robust turnout to make sure we set valid parameters for this. If a lot of members have a conflict with that date, we will need to reschedule it.

Please feel free to contact me if you have any questions. Those who signed up for the <u>subcommittee</u> are scheduled to meet on <u>June 6 and 13</u>.

Thanks,

Tom

Meridian Hills Sidewalk Design Committee (Meeting #1) May 8, 2019 6:30 pm St. Luke

Responses to these bold questions/prompts are listed from the greatest to least number of comments

1. Reasons for building a sidewalk

a. Connectivity (5)

Overall connectivity

Connect all neighborhoods and neighbors – social reasons

Connectivity for churches, schools, parks, amenities

Monon, St. Luke, Park Tudor, Marat Park, Holliday Park, Meridian Hills CC

- b. Safety (3)
- c. Walkability (3)

Exercise/health/walking

d. Potential increase in property values generally for Meridian Hills

2. Reasons <u>not</u> to build a sidewalk

a. Safety/Liability (5)

Safety hazard at/from driveways

Dangerous intersections, i.e. Meridian Street and College Avenue

Liabilities/lawsuits/injuries

Fear it may potentially lead to increased crime for homes on/near route

b. Negative impact on property (4)

Adversely alter the character of a neighborhood – trees/landscape

Loss of privacy

Potential negative impact on involved residential and property values

Overall fear of negative impact on property

c. Maintenance costs (3)

Cost of maintenance/upkeep/repair/replace

d. Drainage Issues (3)

Flooding/drainage/water issues

3. Users

a. The users should be:

Walkers/joggers/families/ dogs

b. The sidewalk should not allow:

Bicycles/Scooters/Skateboards/Motorized vehicles

4. Goals

- a. Safely connect to neighbors and amenities in the community and surrounding areas
- b. Improve connectivity/desirability (5)

Improve desirability and character of the town

College intersection (and Meridian) is dangerous-safe sidewalk might help

Connect students to St. Luke

Park Tudor-possible way to connect to College

- c. Master Plan (2)
- d. Health and fitness (2)
 Improve health and increase walking option
- e. Standard of Design (2) High quality design
- f. Miscellaneous (2)
 Sustainability/Resident and Residence support

Design subcommittee sign-up was conducted. First meeting on June 6. Next Design Committee meeting is on July 30.

Document #3- Notice

RE: Design Subcommittee

Sent: July 2, 2019 (10:28 AM)

Hello all,

The design subcommittee did a walk-through on 75th Street on June 13 (Christine Ricks, John Taylor, Gusty Raikos, Bill Taylor, Jane van der Meulen, Greg, and I were able to attend). Options and issues were discussed. Morel work is needed. Review of potential routes on Illinois and Pennsylvania also need to be completed. Summer schedules are creating some logistical challenges.

We are going to postpone and reschedule the meeting set for July 30. if you have any questions or concerns, please feel free to contact Greg Jacoby or me. We hope you are enjoying summer, now that it has arrived. Thanks,

Tom

Document #4- Results of walk-through

RE: 75th Street walk x Sent: August 14, 2019 (6:25 AM)

Once again, thanks to all of you who were able to make it on the walk of 75th Street.

Greg and I had calendar conflicts throughout July. We met last night. Greg had reviewed his notes from the walk and laid out a preliminary plan regarding a potential sidewalk 75th Street.

Since you were involved in the walk and this will be discussed at our next Design Committee meeting, I wanted to share these thoughts.

Based on St. Luke, and the length of retaining walls needed, the current consideration would be to have a sidewalk on the north side of 75th Street (west of Meridian) and on the south side of 75th Street (east of Meridian). We will meet with the town engineer to review right-of-way issues, etc. We also briefly discussed issues such as size of sidewalk, location against or next to the street, curbing, etc.

If you have any questions, comments, or concerns, please let Greg or me know.

Thanks,

Tom

Document #5- Notice/Agenda for second meeting

RE: Reminder on RSVP for meeting this Thursday

Sent: August 19, 2019 (9:07AM)

Hi. A Reminder.

We need to establish the number for a quorum and the number to pass a vote (simple majority or more) at this meeting. That is why it is important to know if you will be there. I believe Greg wants to take something to the Town Council on Sept 9.

The next meeting is scheduled for:

Thursday, August 22nd 6:30-7:30 p.m.

St. Luke Catholic Church conference room on the west side (same as last meetings).

PLEASE RSVP TO ME WITH YOUR PLAN ON ATTENDING (WILL ATTEND, NOT ABLE TO ATTEND, NO LONGER INTERESTED IN COMMITTEE). PLEASE LET ME KNOW BY NOON TUESDAY 8/20/19.

Items to be discussed/reviewed:

- Decision on east-west route (71st vs 75th)
- · Discussion of second phases (e.g., Pennsylvania St., Illinois St.)
- · Review of the subcommittee walk on 75th Street
- · Discussion of possible route, considerations, and process to evaluate its feasibility
- Next steps

A follow-up meeting on Tuesday September 3rd (6:30 p.m. at St. Luke) is being planned. **This meeting would be to take final votes on the committee recommendations.** *We need to know quorum and vote margin to pass a vote.*

PLEASE LET ME ALSO KNOW YOUR AVAILABILITY TO ATTEND THE SECOND MEETING ON SEPTEMBER 3RD.

The next Town Council meeting is scheduled for September 9.

Thanks,

Tom

Document #6- Notice/summary to subcommittee

RE: SEPT 3 MEETING

Sent: August 26, 2019 (3:22PM)

The design subcommittee will meet at St. Luke Catholic School on Tuesday (Sept.3) from 6:30-7:30 p.m.

There will be a vote to approve/not approve the proposed course for the sidewalk. The current course being considered:

1. On the north side of 75th Street from Spring Mill Road to Illinois Street. There is a four-way stop at this intersection.

- 2. The sidewalk would then go on the south side of 75th Street from Illinois Street to North College Avenue.
- 3. A route along 71st Street does not appear to be a feasible option for the Town of Meridian Hills.

If this proposed route is approved, the next step would be to see if there are any insurmountable right-of-way issues. Following that, the proposed layout of the 5-6 foot sidewalk would be demarcated on each property and reviewed with each homeowner. More technical considerations (drainage, bridges, etc) would follow. We would like to thank everyone who attended the last meeting to discuss the proposals. Any questions/concerns/suggestions about this current route will be discussed and put to a vote on Sept. 3. Greg will report to the Town Council on Sept. 9.

Debbie and I will be returning from a west coast wedding on the evening of Sept. 3 and will not be back in time to attend the meeting. I would like to personally thank everyone for their time, effort, and consideration.

Those in attendance at the August 22 meeting were: John Taylor, Colleen Field, Jeen Jager, Susan Prenatt, Butch Walker, Gusty Raikos, Larry Price, Idella Simmons, David Isaacs, Debbie Leipzig, Rashid Khairi, Antone Najem, Jacob Gough, Greg Jacoby, and Tom Leipzig.

Once again, thank you. Tom

Document #7-Draft report with conclusions, for subcommittee review (see Attachment 3)

Document #8-Results of subcommittee vote

Greg relayed the following meeting information to me. Those in attendance were: Butch Walker, Colleen Field, Larry Sablosky, Gusty Raikos, Larry Price, Janet Taylor, Kathy Finley, Idella Simmons, Jeen Jager, Chris Ricks, Bill Taylor, Abbe Hohmnan, and Greg Jacoby. Tom and Debbie Leipzig were away. The vote to approve further investigation of the proposed route was: 8 yes, 1 with conditions, 3 abstain, 1 no.

03

September 2019 Recommendations



Meridian Hills Sidewalk Committee findings:

1. GOAL; The goal of the committee was to meet as neighbors to discuss and recommend a safe route for a sidewalk through the Town. The route should provide the access to as many residents as possible and connect the major points of interest to the Town. The committee acknowledges that the Town of Meridian Hills does not control all the right of way to build the sidewalk on any of the routes that are being explored and that individual landowners will need to grant permission for the Town to build on their property.

2. PROCESS

- a. The first meeting was held to establish the goals of the committee and process.
- b. The second meeting reviewed options and where the committee wanted to focus the discussion.
 - i. Outcomes from that meeting.
 - The committee would like to see an over plan for pedestrian connectivity in the town. The east/west routes that were discussed were 75th and 71st streets. The north/south routes were Pennsylvania and Illinois
 - 2. Traffic calming, traffic speed and stop signs should be part of the recommendations.
 - 3. The sidewalk should not allow use by adults on bikes.
 - 4. The Town should be responsible for maintenance and snow removal.
 - 5. The Town should consider mitigation along the sidewalk to allow landowners to create separation and privacy along the route.
 - 6. Quality of construction is very important, and recommendation will be part of the report.
- c. A small sub-group walked the entire route and reported their thoughts in the third meeting. Notes from that meeting are:
 - 1. More investigation into the 71st street option was held with the City of Indianapolis and they confirmed that the Town of Meridian Hills does not have any control of the right of way of or any control on 71st street. If the Town wishes to see a sidewalk on 71st street, they will need to petition the City of Indianapolis. It was agreed that the Town should make this request, but its installation could be in the distant future if ever.
 - 2. After review with the City of Indianapolis and the INDOT standards it was agree that we should plan for a sidewalk that is 6 feet wide if it is next to the curb and 5 to 6 feet wide if it can be off the curb with a 2' (two) to 3" (three) foot planting area to allow for vegetation, mailboxes etc. The sidewalk should adjust alignment and size to miss trees and poles.

- 3. The options on 75th street both north and south route were reviewed.
 - a. NORTH
 - i. The north route would require 6 landowners to grant a right of way to the Town, one of them being St. Luke and would require approximately 20 percent more retaining wall than a southern route. The access over Meridian street would need to move to the north side of the intersection. The northern route would be with in 25 feet or less of three residents' homes and require a double cross walk at College and 75th.

b. SOUTH

i. A southern route if combined with a partial northern route would connect to all the points of interest, St. Luke, Park Tudor, the Monon Pathway and the sidewalk to Broad Ripple and the Redline. Right of way would need to be granted by 8 landowners however 4 the lots are owned by St. Luke and Park Tudor who we feel would grant the request. The route could use the 4 way stop at Illinois to cross 75th street on the west side, this would align with the existing St. Luke sidewalk on Illinois street. The existing cross walk signals on Meridian street could increase their timing for pedestrians. Two of the landowners on the southside are on the committee and one has stated they would grant the right of way. This would reduce the number of right of ways that need to be granted to four. Coordination the with the City of Indianapolis for the land currently being used as the excel/decal lane at Washington street and routs around the utility poles will be required for this route.

4.Process

a. The above route and explanation were reviewed at the third meeting and gained consensus by the majority of those attending. The fourth meeting held on September 3 will review the same route and see if we can continue to have consensus. If that is the case, then a Tom Leipzig and Greg Jacoby will be contacted each of the landowners that would need to grant right of way and review the design options with them to see if we gain their input and support and report back to the committee.

04

Meeting Attendance





| Design SubCommittee #1 | 6-Jun | 22-Aug | 3-Sep | (75th St. Walk) |
|---------------------------------------|-------|--------|-------|-----------------|
| David Bussard | | | | |
| Colleen Field | Χ | X | X | |
| Jacob Gough | | X | | |
| Abbe Hohmann | X | | X | |
| Greg Jacoby | Χ | X | Χ | Χ |
| | | | | |
| Jeen Jager | Χ | X | X | |
| Rashid Khairi | X | | | |
| Debbie Leipzig | X | X | away | |
| Tom Leipzig | X | X | away | X |
| Cathleen Litz | | | | |
| | | | | |
| Antone Najem | away | X | | |
| Susan Prenatt | | X | | |
| Larry Price | X | X | X | 1421 |
| Gusty Raikos | X | X | X- | X |
| Christina Ricks | X | | X | X |
| | | W. | | X |
| John Taylor | away | X | | ۸ |
| Liz McCarter | X | | | |
| David Ricks | away | | . v | |
| Janet Taylor | X | | × | |
| Bill Taylor | X | | ^ | |
| Kathu Finlay | X | | Х | |
| Kathy Finley Jane van der Meulen | X | | Α. | Χ |
| | X | | | 5.72 |
| Thomas van der Meulen | ٨ | Х | X | |
| R.C. "Butch" Walker Idella Simmons | | X | X | |
| idella Simmons | | ^ | X | |
| David Isaacs | | X | | |
| Larry Sablosky | | | X | |
| Larry Sabiosky | | | | |
| Matheau Luers | | | | |
| David Ricks | | | | |
| Dustin Arnheim | | | | |
| Jahni Laupus | | | | |
| Kevin McKinney | | | | |
| Meghan Goodling | | | | |
| Travis Bonnel | | | | |
| | | | | |

05

Correspondence



To the Meridian Hills Town Council,

Thank you for giving me the opportunity to express my opinion about the proposed sidewalk on the south side of 75th Street (between Meridian and College). My husband and I live at 7499 N.

Pennsylvania (on the SE corner of 75th and Pennsylvania) and have lived there for over 30 years. As a bit of history, I joined with those living on the north side of 75th when a trail was proposed to be placed on that side of the street. I also opposed a roundabout on the corner of 75th and Pennsylvania and the installation of a third or "suicide" lane on 75th Street. I opposed these projects for 5 major reasons: 1) the de-valuation of property on 75th Street (resulting in the ultimate devaluation of adjacent property); 2) the destruction of the basic and innate character and beauty of Meridian Hills; 3) the creation of even more drainage problems within the community; 4) the fact that these projects were not part of larger, well-thought out improvement plan for the community but instead represented a "one-and-done" way to spend money that had become available; and 5) these projects did not arise from a real need of all residents but only the ideas of a few. With this project, my same concerns remain. Likewise, the same "problems" remain – lack of proper drainage, an increasing number of burglaries (including my home), and increasing traffic.

I would like to address each one of these concerns separately:

1. **Devaluation of Property**.

As you may know, my house in on the market. In the process of selling my house, no potential buyer has said that they would buy the house if there were a sidewalk in the front lawn. Conversely, when we recently disclosed that a sidewalk is being discussed, no one said that a sidewalk is exactly what it would take to buy our house. Our real estate agent remains unconvinced that it will add value to the property and only hopes it does not devalue it too much.

I think a sidewalk will not help the value of property on 75th Street. If there is one thing that has been consistently said about my property is how busy 75th Street is and how little privacy they would have on that street. Putting in a sidewalk will now make it possible for those just walking through the neighborhood to see into my house, as well as those "bad actors" who can "size up" the potential to burglarize the house. Plus, I think the sidewalk will cause further drainage problems which will also cause a decrease in property value. And this is not just a problem unique to me.

2. The Destruction of the Nature, Inherent Beauty, and Unique Character of Meridian Hills.

The beautiful trees and "isolation" of the neighborhood has long been a characteristic that makes Meridian Hills a "hidden treasure" in Indianapolis. Although a sidewalk will not result in

the destruction of as many trees as a trail, it will result in removing some of the trees and landscaping (I think you will find this out when landscape engineers and architects actually put forth the actual plan for the sidewalk). Perhaps it would have been nice if early town planners had laid out the town with the idea that in the future, sidewalks could be installed. But they didn't, and unfortunately, without destruction of the natural beauty and privacy of the area, a sidewalk is not feasible given the terrain and the proximity of houses to 75th Street.

3. **Drainage Issues**.

Building a sidewalk will increase drainage problems. I already spent tens of thousands of dollars on drainage issues and mold problems that this issue has caused. Putting in a sidewalk will only further exacerbate these issues. There is no way that the sidewalk can be placed next to the curb on my property given the slope of the land. That means it will have to be placed where water tends to accumulate and will not allow the water to drain. This is not my problem alone. There are drainage problems immediately to the east of me and across the street from me. There are even more drainage problems at the new house being built on 75th Street. And I know that there are drainage issues on 75th Street west of Meridian. Over and over again, the town of Meridian Hills has noted that this is the homeowner's problem. To me, knowing that drainage is a problem, why is the town creating more problems?

4. The Sidewalk is Not Part of a Larger Plan for Walkability or Improvements.

I realize that the issue of walkability has come up and there has been some lip service paid to connectivity among all Meridian Hills residents. However, I have seen no plan that connects everyone in Meridian Hills. I realize that many people walk Pennsylvania Street (as do I), and has been relatively safe to walk in the street. However, in recent years, it has become so busy on Pennsylvania that I would argue that a sidewalk is needed there, too. And if you want to improve the walkability in Meridian Hills, it seems that you might figure out how to include those residents living on Springmill and Meridian. Or do you not consider them to be residents of Meridian Hills? Have they been complaining about not being able to walk down 75th (when they can't even get to it)? Or perhaps they, unlike some newer residents, bought their homes in the neighborhood knowing what the limitations were and accepted them. It seems to me that a plan for walkability should include more than a sidewalk on 75th Street. It should also include costs for upkeep of the sidewalk. The town council says they will keep it up, but it doesn't even have enough money for extra security and keeping the street cleaned or fixing potholes or the curbs. I imagine that just like the drainage issue, upkeep of the sidewalk will eventually fall to the homeowner when the town council realizes it didn't clearly think through the costs of upkeep and maintenance. I also think that there are still feasibility issues to building a sidewalk

on 75th given the hill by College and unfortunately, I think it will be far more costly to build a quality sidewalk.

To me, this is a "sidewalk to nowhere" that will encourage people to cross a busy and dangerous street (Meridian) without any solutions to improve that intersection. It also does not connect all parts of Meridian Hills and does not offer any plan for future funding for that connectivity.

5. The Project is Not Backed Up with Data Indicating Its Need or Total Costs.

As mentioned before, it seems this project is the brainchild of a few residents who are only concerned for their needs. They basically purchased a home in a neighborhood without sidewalks and decided that they could change the neighborhood. As my husband and I look for our next home, there are certainly features of the neighborhood for which we are looking. I'm assuming now, we should just buy a house we like (ignoring the neighborhood) and then complain loudly enough so the neighborhood changes to meet our needs.

What I would like to know is whether the sidewalk on the south side of 75th is what everyone on 75th Street wants. After all, it is the residents living on 75th who have nowhere to walk (unless they are on a corner). As far as I can tell, the residents on the north side of 75th were blindsided last year when a trail was proposed for their side of the street. I think that the sidewalk idea was proposed by those on the north side of 75th (as well as those on the south) as a compromise to the very intrusive trail. Likewise, I think the northsiders felt that this would finally appease the town council since we were told that other residents felt walkability and safety for walkers were a high priority. When the sidewalk committee decided to put this on the south side, then the northsiders felt relieved because it was no longer in their front yard (which by the way, is not very neighborly since I supported them). However, just to be clear, I think the idea of a sidewalk was a compromise to the more odious trail that was proposed, and there was no groundswell of support for a sidewalk or trail that originally came from the residents of 75th Street.

I feel that there is no data to support the decision to put a sidewalk just on 75th Street, and in fact that this is just the idea of a few vocal voices of those who have recently moved into the neighborhood. I find it interesting that these newcomers (who knew what the neighborhood was like when they bought into it) can give away my property and de-value it.

I would like to see the data on exactly how many residents have said that this is the number one issue that Meridian Hills needs to address. How many residents know that if this sidewalk is put in that there is no plan and probably no funding to connect all the residents of Meridian Hills? What is the exact cost of this sidewalk? If those that believe that this will improve our property, then I would like to see what data they have to back this up?

In conclusion, I am not against improvements in the Town of Meridian Hills. I would most definitely support improved drainage, improved security, and burying the power lines. I found that the street

signage and new lights to be a nice improvement to the neighborhood. However, I think that these improvements should benefit all and not just a few and should not adversely affect some of its long-time residents. They should also be well thought out, be well constructed and respect the inherent beauty of the neighborhood, and be able to be sustained and kept up without causing the Meridian Hills taxpayer more expense.

One final word – as I noted, my husband and I are moving from Meridian Hills because we will both be retired by next June. I was beginning to feel sentimental about leaving the neighborhood. However, I must congratulate you on making this decision easy. Although we have a lot of good neighbors, I now am glad I'm leaving Meridian Hills because it seems that it has become a place where the minority rules, there is no concern for financially hurting another neighbor, and the mindset of it's okay as long as it is "not in my backyard" prevails. For us, it's "not a good day in the neighborhood."

Sincerely,

Kathy and Jeff Finley

7499 N. Pennsylvania St.

Indianapolis, IN 46240

317-374-8777

Tom and Greg,

Chris and i want to thank you for organizing and shepherding the Design Committee process. It is clear that the many voices were heard and a reasonable consensus formed to advance the engineering and design work on the proposed 75th street route.

At the end of the meeting Greg asked for letters of support or non support which could be included in the package for the council meeting. Chris and I *strongly* support the advancement of this project and would like that known to the council. We see the construction of a safe pedestrian route through the center of our town as an overdue measure to dramatically improve pedestrian safety, including and especial for children walking to school at St. Lukes or Park Tudor. Its only a matter of time before a significant injury occurs on 75th street, we need ensure that doesn't happen. Of course in addition we have a chance to improve the attractiveness of our town via linkage within and outside of the town and therefore livability and property values overall. To achieve the improvement several dozen families will need to give up some privacy and accommodate the path and landscape changes, and we owe them our best efforts to ensure a very attractive and high quality design. It is for this reason we fully support funding the step of a professional engineering assessment.

Thanks again for your leadership

Dave and Chris Ricks 7550 Washington Blvd. cdjkmricks@icloud.com

(dated 11/27/19)

GUSTIN J. RAIKOS

RAIKOS & RAIKOS

ATTORNEYS AT LAW

7466 N. College Avenue Indianapolis, Indiana 46240 (317) 251 7646

Gustin J. Raikos Attorney # 5871-49 John D. Raikos (1950 - 2006)

November 26, 2019

Mr. Greg Jacoby, AIA, Committee Co-Chair Mr. Thomas Leipzig, Neurosurgeon, Committee Co-Chair MEMBERS of 75th STREET DESIGN COMMITTEE Meridian Hills, Indiana

Dear Greg, Tom, and Fellow Members of 75th Street Design Committee:

We have lived in our home on the Southwest corner of 75th and College Avenue over a period of four decades since the early 80's.

That we are only the 4th set of occupants in its 110 years of existence is further testament to the marvelous live-ability of our home and town of Meridian Hills.

Across from Marott Park, the Blind School, and Williams Creek, we enjoy a true oasis of heavily wooded, rolling hills, and creeks, teeming with huge owls, hawks, eagles, woodpeckers and songbirds that included a covey of wild quail, along with deer, foxes, coyotes, snakes, butterflies, native wild flowers and hardwoods, many in our own yard in excess of 70 feet tall - a true retreat and step back from time, all in the midst of a major U.S. Metropolitan area, a mere 7 miles from the downtown Central Business District.

An ideal place for our four children to have been raised and forever call home.

This committee arose as a result of the loud hue and cry against adverse affects of a considered pathway by many town residents who also delight in the refuge of beautiful trees, "isolation" and neighborhood characteristics that make Meridian Hills a "hidden treasure". We were tasked with the duty of assessing the feasability, design, and location of a potential sidewalk, as well as its tie ins to a master plan of connectivity for the entire town. Integral to such task was our full consideration of the reasons for/ against, to include matters of safety, liability, hazards at/from driveways, dangers at intersections, impact upon properties and character of the neighborhood, crime, privacy, drainage, flooding, costs, maintenance, and upkeep; all consistent with the stated goals to safely connect neighbors and amenities, improve desirability and character of the town, high quality Standard of Design, sustain-ability, and resident support.

75th STREET DESIGN COMMITTEE

November 26, 2019 Page 2

Emerging from numerous committee meetings, review of plats, ADA regs, walking inspections, consideration of owner input, utility lines, ROW and drainage obstacles, is the recurring reality - 75th Street evolved from a dirt lane to a narrow access route and as such, major improvements were (and have been) permitted in very close proximity on both the North and South sides, as it has never been deemed the thoroughfare status as 71st Street carries.

Accordingly, many residents on both sides of the street and other parts of town have legitmately decried that widening this hilly stretch between two dead ends for a sidewalk to invite additional usage will only adversely alter the nature and character of 75th as well as our town, while failing to fulfill the stated primary coterminous goals of its tie ins to a master plan of connectivity for the entire town, and to enhance safety, reduce dangerous intersections, hazards at/from driveways, and to not further burden the town on issues of privacy, drainage, and costs.

We concur with these concerns expressed by many others.¹

On a specific, less global level, such proposed walk, if now switched to the south side, will also immensely, materially, adversely, directly impact our use and enjoyment of our home and property and introduces a myriad host of additional problems, as follows:

- 1. The town engineer in his original feasibility study recognized the daunting challenges and obstacles for our parcel #47 with his note that:
 - "parcel is extremely difficult.
 - Increased amount of R/W needed for preferred design criteria.
 - Excessive amount of retaining walls and railing will be necessary.
 - Large amount of tree clearing will be necessary.
 - Potential conflict with IPL facilities."
 - a. **Extremely difficult**. These same 'extreme' difficulties remain, ameliorated only slightly by the reduced width from the 8 10 foot pathway to the proposed current 6 foot sidewalk, inasmuch as at least 6-10 feet of additional access/ ROW are still needed to construct the retaining wall on account of the hill's extreme vertical elevation.
 - b. <u>Increased amount of R/W needed for preferred design criteria</u>. Current ROW is stated as 10 feet, which will necessitate increased amount on account of elevation issues, along with ADA and INDOT regulations and criteria.
 - c. Excessive amount of retaining walls and railing. Moving this excessive/ enormous amount of dirt to build adequate retaining walls, together with the sheer steepness, will adversely impact both the character and our use and enjoyment of our property, at an enormous, if not needless, expense to Meridian Hills.

75th STREET DESIGN COMMITTEE

November 26, 2019 Page 3

- d. <u>Large amount of tree clearing</u>. Disrupting to such depths and cementing over roots near the trunk of the mature Walnut, Poplar, Locust, Maple, Hackberry and Norway Spruce and other trees, will also likely result in their deaths and further loss of privacy.
- e. <u>Conflict with IPL facilities</u>. Overhead electrical wires span the length of our property supported by two large telephone poles with guy wires, one at the edge of the right-of-way and the other appx three feet back. Both directly obstruct the now proposed route, necessitating relocation, removal or rerouting the walk. Members of the town council have expressed objections to the considerable problems with IPL dealings, in addition to the immense costs, uncertainties and difficulties. Relocation compounds the adverse impacts to our parcel.
- 2. **Disruption of Access**. The now proposed sidewalk will compel rerouting of our driveway.
 - a. Once again, the high vertical elevation coupled with the steep pitch of our current driveway and stringent ADA limitations on slope, dictate relocating the entrance and rebuilding the driveway at a peculiar and inconvenient angle and pitch.
 - b. To do so, will result in further tree clearing of several mature maple, locust, mulberry, and other trees, together with a stone pillar original to the property, as well as require massive fill to bring the recessed area to grade, along with aggregate and asphalt.
 - c. Such relocation also adversely impacts our use and enjoyment and further impairs additional improvements and developments
- 3. <u>Damages from taking.</u> The proposed sidewalk requiring from 6 to 10+ feet in width for the entire length of our property results in a direct taking totaling thousands of square feet.
 - a. Such taking will result in substantial direct loss as well as adversely impact our use and enjoyment of the property as we have for many years.
 - b. Such taking will damage the character of the property with the loss of numerous trees, the retaining wall, impaired access, and loss of privacy.
- 4. <u>Damage to residue.</u> In addition to loss from the direct taking of the property, real estate professionals advise that significant damage will also inure to the residue (the property remaining and not directly taken) arising in many forms and affecting the current use and enjoyment of the property, planned improvements and other development.

75th STREET DESIGN COMMITTEE

November 26, 2019 Page 4

For the foregoing and other reasons we cannot endorse the proposed change of the sidewalk walkway from the North Side to the South Side.

In the absence of a comprehensive plan of connectivity and other items, the committee has not fulfilled its mission to be able to endorse a recommendation to the Town Council to adequately and properly exercise their authority and fiscal responsibilities.

Thank you for your attention and consideration.

Very truly yours,

Gustin J. Raikos Family

Guenri

GJR/r

^{1.} To include those with respect to the proposed sidewalk submitted in writing by long time residents Kathy and Jeff Finley,

----Original Message----

From: Kathryn Densborn < kdensborn@gmail.com > Sent: Saturday, December 28, 2019 10:27 AM

To: Greg Jacoby <gjacoby@bdmd.com>
Subject: 75th Street sidewalk

Dear Greg,

I've been meaning to write to you on this topic for some time to express my support for this project. Not only will it benefit me personally, as I am a regular walker, but most importantly, it will benefit the entire Town of Meridian Hills.

Sidewalks are great connectors for a community. I realized that when we moved to Meridian Hills in 1986 from the Butler Tarkington neighborhood where sidewalks were the norm. Sidewalks allow you to to enjoy the neighborhood and your neighbors without impeding the flow of automobile traffic, and without constantly being alert for a driver who may be distracted by technology.

This project will more easily connect both east and west residents to Marrot Park and the Monon trail, both important assets of the area, without having to get in their cars. Currently, I would not attempt to visit either location without using my car to get there. 75th Street is too busy and not wide enough to safely accommodate pedestrian traffic.

I know this is an expensive undertaking and there are those who oppose this project. I trust the Council to hear them out and address their concerns, if at all possible. I also know from personal experience on neighborhood boards and associations, that those who support efforts such as these often do not take the time to vocalize their support. At the end of the day, i trust the Council to weigh the pros and the cons of this project and to do what is best for the Town.

Please share this email with your fellow councilors. I will encourage others to express their thoughts to the Council as I have done. Thank you for your service.

Best regards,

Kathryn Densborn 7649 Washington Blvd. 317-319-2042

Sent from my iPhone

06 Appendix





CHAPTER 800 Neighborhood Traffic Calming

800.01 Purpose The purpose of this document is to set forth the recommended practices in planning, designing and constructing neighborhood traffic calming devices throughout the City of Indianapolis, Indiana. Likewise, it is important to establish the following definition of traffic calming (this definition was derived by the subcommittee on Traffic Calming of the Institute of Transportation Engineers in 1997):

"Traffic Calming is 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."

The primary objective of traffic calming is to create safer roads and a better quality of life for the neighborhoods that we live in. The strategic objectives are:

To improve driver behavior, concentration, and awareness,

To reduce speed

To reduce cut-through traffic

To improve safety for pedestrians, bicycles, and vehicles, and

To enhance the quality of life, and improve aesthetics

These recommended practices provide the consistency needed in reviewing these requests. The practices identified herein have been obtained from various references on traffic calming including the following: "Guidelines for the Design and Application of Speed Humps", prepared by ITE Technical Council Speed Humps Task Force; "Traffic Calming in Practice", prepared by County Surveyors Society, Department of Transport, Association of Metropolitan District Engineers, Association of London Borough Engineers and Surveyors, Association of Chief Technical Officers; "Traffic Calming", American Planning Association, Planning Advisory Service Report Number 456; "The Traffic Safety Toolbox, a Primer on Traffic Safety", Institute of Transportation Engineers, "Traffic Calming Primer", Pat Noyes and Associates, and "Canadian Guide to Neighborhood Traffic Calming", Transportation Association of Canada.

The following is a brief outline of the elements contained in the process for investigating the need for neighborhood traffic calming. Also included in this document is a list of alternative traffic calming measure which describes the measure, and the conditions and circumstances for their use. This document will also be incorporated in the City of Indianapolis Street Standards for new subdivisions.

800.02 Planning Appropriate neighborhood traffic control devices should only be installed to address documented safety or traffic concerns supported by traffic engineering studies. These studies will include an examination of the full array of potential improvement actions beginning with a recommendation to law officials for better enforcement of existing controls. The City's Traffic Engineering staff will use the following procedures in order to determine the need for traffic calming for each neighborhood request. Data will be collected and analyzed by the City staff, and the data will be compared with established criteria to determine if the location is eligible for consideration, and findings and conclusions will be documented in a formal report.

Citizen Support
Traffic Advisory Committee
Street Classification
Traffic Volumes
Traffic Speeds
Geometric Data
Accident History
Public Safety Agencies Input
Alternative Traffic Calming Measures
Implementation Plan

Final Report Approval Evaluation Plan

1. Citizen Support

Before any neighborhood traffic calming devices can be installed, **75 percent of the residents directly affected by the installation of the device should be in support of the action**. If the neighborhood has an association, they too should support the request. After the investigation is complete, all potentially affected residents will be invited to information meetings, and will have an opportunity to provide input. Alternative methods of traffic calming should be discussed. Citizens decide whether or not to continue the process.

2. Traffic Advisory Committee

A traffic advisory committee that includes neighborhood representatives and City staff should be established to effectively involve the community. The role of this committee is to assist in the development of the plan, and to monitor the plan after it has been implemented.

3. Street Classification

Typically, streets classified as "local" or "local collector" shall be considered for neighborhood traffic control device applications. In general, the streets eligible for consideration will provide direct access to abutting lands, connect to higher classification streets, offer the lowest level of mobility, contain few, if any, bus routes and will deliberately discourage service to through traffic movement. In addition, the streets in consideration should be residential in nature. "Arterial" streets are eligible candidates for certain types of traffic calming, i.e. curb extensions, roundabouts, turn restrictions, and pedestrian refuge islands. Speed humps are limited to local or local collector streets.

4. Traffic Volumes

Neighborhood traffic calming devices should typically be installed on **streets** with less than 2,000 vehicles per day. Special studies and justification may show that neighborhood traffic calming devices are warranted for streets with traffic volumes outside of this range.

5. Traffic Speeds

Neighborhood traffic calming devices should generally be installed on streets where the **85**th percentile speed is **35** mph or greater.

6. Geometric Data

Neighborhood traffic calming devices should normally be used on streets with no more than two travel lanes, or where the overall pavement is no more than 40 feet. In addition, the pavement should have good surface and drainage qualities.

7. Accident History

Prior to the installation of any neighborhood traffic-calming device, a study must be completed, using solid engineering judgment that the installation of the device will not result in a situation that is less safe than the original condition. **Three-year accident history** should be reviewed to assist in identifying problems.

8. Public Safety Agency Input

Public Safety agencies will be contacted to determine if services for emergency vehicles will be affected by the proposed changes.

9. Alternative Traffic Calming Measures

The following is a list of alternative measures that should be considered and discussed with the petitioners. A description of these alternatives, which describes the measures, and conditions and circumstances for their use, begins on page 8-5.

Stop Signs
Turn Restrictions
One-Way Streets
Arterial Street Improvements/Signal Progression
Rumble Strips or Change in Roadway Surface
Speed Humps
Pedestrian Refuge Islands
Street Narrowing/Curb Extension
Curb Radius Reduction
Chicanes
Traffic Circles/Roundabouts
Diverters
Street Closures

10. Implementation Plan

Once the neighborhood traffic calming measures have been selected, cost estimates will be prepared. The selected alternatives will be constructed based on priority as funding allows and is subject to work crew schedules and appropriate weather conditions.

11. Final Report Approval

Before the final report can be approved, a neighborhood meeting will be required to review the results of the study and to consider alternative traffic calming measures for the neighborhood. The affected residents must support the proposed plan before final approval by the director of the Department of Public Works.

12. Evaluation Report

An evaluation of the project effectiveness will be conducted within one year after implementation. At a minimum, speeds, accidents, and traffic volumes will be reviewed.

13. Summary

The three principal elements in determining the need to implement traffic calming in a neighborhood are Citizen Support (75 percent of residents directly affected), Speed (85th percentile speed is 35 mph or greater), and Daily Traffic Volumes that clearly show that vehicles are using the local street as a cut through. The petition is the key element, however, if the traffic study shows that public safety, and also shows that the neighborhood is threatened by excessive speed and/or cut through traffic, it may be in the best interest of the City to accept a petition with less than 75 percent support. A typical example would be failure of certain residents to respond to repeated requests from neighborhood leaders to vote for or against the proposed traffic-calming device. However, those residents responding in favor of the change should represent 75 percent of the total responding.

In summary, traffic calming aims to give you the best of both worlds – mobility and a better quality of life. Clearly traffic calming is not a narrow concept. It involves vehicles, neighborhood support, classification of streets, and education of residents. It is a planning approach that is aimed

at improving the quality of life. It involves a whole new attitude and outlook.

800.03 Description of Alternatives

There are two types of traffic calming techniques, passive controls and active controls. **Passive** controls are primarily traffic signs, i.e., stop signs, turn restrictions, one-way streets. **Active** controls change driver behavior and are therefore self-enforcing, i.e., speed humps, rumble strips, median barriers, diverters, slow point or chokers, street closures, traffic circles, chicanes, and street narrowing. Examples of these "active" traffic-calming techniques are shown in Figures 801.01 through 801.17. The following describes each alternative, and describes the conditions and circumstances for their use.

Stop Signs

Stop signs will decrease the speed at the intersections, which are the locations where most accidents occur. This type of device has a positive effect on the neighborhood. This device will require periodic enforcement or the stop signs will loose their effectiveness, since motorists tend to disregard them.

2. Turn Restrictions

No right turn or no left turn signs can be installed to prevent turning movements onto neighborhood streets. This will eliminate cut through traffic in a neighborhood, particularly in the peak periods. A negative aspect will be the inconvenience to the residents, and, to be effective, enforcement may be required.

3. One-way Streets

One-way streets can be used to make it difficult for vehicles to cut through neighborhoods. Violations are typically low, but residents may be inconvenienced.

4. Arterial Street Improvement and Signal Progression

Many times vehicles are cutting through neighborhoods because arterial streets are over capacity or traffic signals are not synchronized. Widening streets to add left turn lanes or additional through lanes or installing a signal system will improve vehicle safety and efficiency, and may reduce cut through traffic in neighborhoods.

5. Rumble Strips or Change in Roadway Surface

Rumble Strips across the street in the form of pavement markings can reduce speeds in advance of a crosswalk or stop sign. Changes in road surface, or rough pavement, can also be effective in reducing speeds. Both of these methods may increase noise levels that may not be acceptable to the neighborhood. However, if locations are properly selected, noise will not be a factor.

6. Speed Humps

Speed Humps (Figure 801.02) are a raised hump in the roadway with a parabolic top, extending across the road at right angles to the direction of traffic flow. Speed humps are 3 (3") inches high and 12 (12') feet wide, and they reduce speeds to approximately 20 mph, and decrease cut through traffic. If speed humps are placed on streets that regularly have buses and emergency vehicles, a flat top design can be used. These humps are 22 (22') feet wide. **Crosswalk humps and intersection humps are also possible.**

7. Pedestrian Refuge Island

Pedestrian refuge islands (Figures 801.03 and 801.04) in the middle of the street provides a safe haven for pedestrians to cross the street. If placed at an intersection, the island will function as a diverter to restrict through traffic. This device will reduce vehicle speeds. May require some parking removal and may inconvenience some residents. The median can be aesthetically pleasing.

8. Street Narrowing or Curb Extension

Street narrowing or curb extensions (Figure 801.05) at a critical intersection will reduce the crossing distance for pedestrians and makes pedestrian crossing point more visible to the motorist. This device will also reduce speeds since the motorist visual sight line is obstructed. Provides space for landscaping. Prevents vehicles from passing other vehicles that are turning. May require some parking removal.

Traffic Circles

Traffic Circles (Figure 801.06) are raised landscaped islands placed in an intersection, and their primary purpose is to reduce vehicle speeds and accidents, and they discourage cut through traffic in neighborhoods. May require some parking removal, and be restrictive to large vehicles if not properly designed.

10. Diverters

Diverters (Figures 801.07, 801.08, and 801.09) can be either diagonal or partial. A diagonal diverter is a barrier placed diagonal across an intersection. Its primary purpose is to reduce speed and cut through traffic. Landscaping is necessary to create new sight lines. A partial diverter is a barrier island at an intersection in which one direction of the street is blocked. May be an inconvenience to residents.

11. Street Closures

Street closures (Figure 801.10) are full closures of streets to eliminate cut through traffic. A cul-de-sac is required to provide a turn-a-round. May inconvenience some residents and may reduce accessibility for emergency vehicles.

12. Curb Radius Reduction

Curb radius reduction (Figure 801.11) at intersection is intended to slow turning vehicles and reduce pedestrian crossing path. The radius should accommodate a passenger vehicle. Usually a 10 to 20 foot radius will be required. Primary application is for local streets.

13. Chicanes

Chicanes (Figures 801.12 and 801.13) are a form of curb extension built at a 45-degree angle that alternate from one side of the street to the other. They will effectively reduce speed and decrease traffic volumes in the neighborhood.

14. Summary

Each traffic calming alternative has appropriate applications and uses. Each addresses the various objectives of traffic calming more or less effectively than others. Although the application of each device varies by conditions the following is a general list of traffic calming devices by objective.

| Traffic Calming Devices by Objective | | | | |
|--------------------------------------|----------------------------|------------------|--------------------|--|
| Reduce speed | Reduce Cut-Through Traffic | Improve Safety | Improve Aesthetics | |
| Traffic Circles | Diverters | Radius Reduction | Curb Extensions | |
| Curb Extensions | Street Closures | Raised Sidewalks | Median Barrier | |
| Median Barrier | Turn Restrictions | Median Barriers | Chicanes | |
| Radius Reduction | One-Way Streets | Enforcement | Traffic Circles | |
| Speed Humps | Partial Closures | | Radius Reduction | |
| Diverters | Speed humps | | Diverters | |
| Chicanes | Median Barriers | | Street Closure | |
| Rumble Strips | Traffic Circles | | | |

FIGURE 1 BENEFITS/DISBENEFITS FOR TRAFFIC CALMING ALTERNATIVES

Traffic Calming Devices (Active Controls):

| Traine Cairing Devices (Active Controls). | | | | |
|---|---------------------|--------------------|----------------------|-----------------------------|
| BENEFITS | | | | |
| Calming Alternative | Volume Reduction | Speed Reduction | Noise & Pollution | Safety |
| Traffic Circle | Possible | Minor | No Change | No Docum. Problems |
| Curb Extension | Unlikely | Minor | No Change | Improved for Pedestrians |
| Median Barrier | Yes | On Curves | Decrease | Improved |
| Street Closure | Yes | Likely | Decrease | Shifts Accidents |
| Diverters | Yes | Likely | Decrease | Shifts Accidents |
| Speed Humps | Possible | Likely | No Change | No Docum. Problems |
| Rumble Strips | Possible | Possible | Increase | Possible Improvement |
| Radius Reduction | Possible | Likely | No Change | Improved |
| Chicanes | Possible` | Likely | No Change | Improved |

| | DISBENEFITS | | | | | |
|-----------------------|-------------------------|----------------------|-------------------------|--------------|--|--|
| Access Restriction | | Emergency Vehicle | Maintenance Problems | Levels of | | |
| | | | | Violation | | |
| | None | Some Constraint | Vandalism | Low | | |
| | None | No Problems | None | N/A | | |
| | Right Turn Only | Minor Constraint | None | Low | | |
| | Total | Some Constraint | Vandalism | Low | | |
| | Left/Right Turn Only | Some Constraint | Vandalism | Low | | |
| | None | Some Constraint | Street Cleaning | N/A | | |
| | None | No Problems | Street Cleaning | N/A | | |
| | | Minor Constraint | None | Low | | |
| | None | Minor Constraint | None | Low | | |

Traffic Control Devices (Passive Controls):

| Traine Control Devices (1 assive Controls). | | | | | |
|---|-----------|-----------|-----------|----------|--|
| BENEFITS | | | | | |
| Calming | Volume | Speed | Noise & | Safety | |
| Alternative | Reduction | Reduction | Pollution | | |
| Stop Signs | Possible | Minor | No | Improved | |
| | | | Change | | |
| Improved | Possible | Minor | No | Unclear | |
| Arterial | | | Change | | |
| Capacity | | | | | |
| One-Way | Yes | None | Decrease | Unclear | |
| Streets | | | | | |
| | | | | | |
| Turn | Yes | Likely | Decrease | Improved | |
| Restrictions | | | | | |

| | DISBENEFITS | | | | |
|-------------|-------------|-------------|-----------|--|--|
| Access | Emergency | Maintenance | Level of | | |
| Restriction | Vehicle | Problems | Violation | | |
| None | No | Vandalism | Moderate | | |
| | Problems | | | | |
| None | No | None | N/A | | |
| | Problems | | | | |
| | | | | | |
| Restricted | Restricted | No | Low | | |
| One | One | Problems | | | |
| Direction | Direction | | | | |
| No | No | No | Moderate | | |
| Turn(s) | Problems | Problems | | | |

800.04 Speed Hump – Design and Construction Guidelines

1. Purpose

The purpose of this recommended practice is to provide guidelines for the design of speed humps. They consist of raised pavement constructed or placed in, on, and across or partly across a roadway. For the purpose of this recommended practice, speed humps are defined as a roadway geometric design feature whose primary purpose is to reduce the speed of vehicles traveling along the roadway, and decrease the number of cut through traffic.

2. Design

- A. <u>Dimensions and Cross Sections</u> The parabolic speed hump as shown in Figure 801.01 should be used. The 3 (3") inch hump can be expected to cause speeds of from 20 to 25 mph at the hump, with a 4 (4") inch hump creating crossing speeds of 15 to 20 mph. Humps should not exceed 4 (4") inch in height, and a 3 (3") inch height is generally considered more acceptable. The flat top design 22 (22') feet has the same approach dimensions of 6 (6') feet with 10 (10') feet in the middle. These humps are used on streets that may have buses and emergency vehicles.
- B. <u>Spacing and Location</u> Current practice indicates that speed humps within a series are normally placed from 200 (200') feet to 750 (750') feet apart (Figure 801.02).
- C. <u>Traffic Signs</u> The warning sign used for speed humps is the standard MUTCD (Manual on Uniform Traffic Control Devices) W8-1 "Bump" warning sign (Figure 801.02). The sign is installed in advance of the hump and at the hump. Advance warning signs should be located based on MUTCD and should be located based on MUTCD Table II-1, "A Guide for Advance Warning Sign Placement Distance". Advisory speed plates are also required.

In certain instances it may be justified to install special attention flags or flashing lights to speed hump warning signs. These devices are sometimes used in the initial installation period or in locations where unusual combinations or roadway or vehicle operating conditions present special conditions that warrant additional warning devices.

- Markings Special markings on the hump should be installed in conformance with MUTCD guidelines, and as shown in Figure 801.02.
- E. <u>Installation Angle</u> Speed humps should be installed at a right angle to the centerline tangent of the roadway.

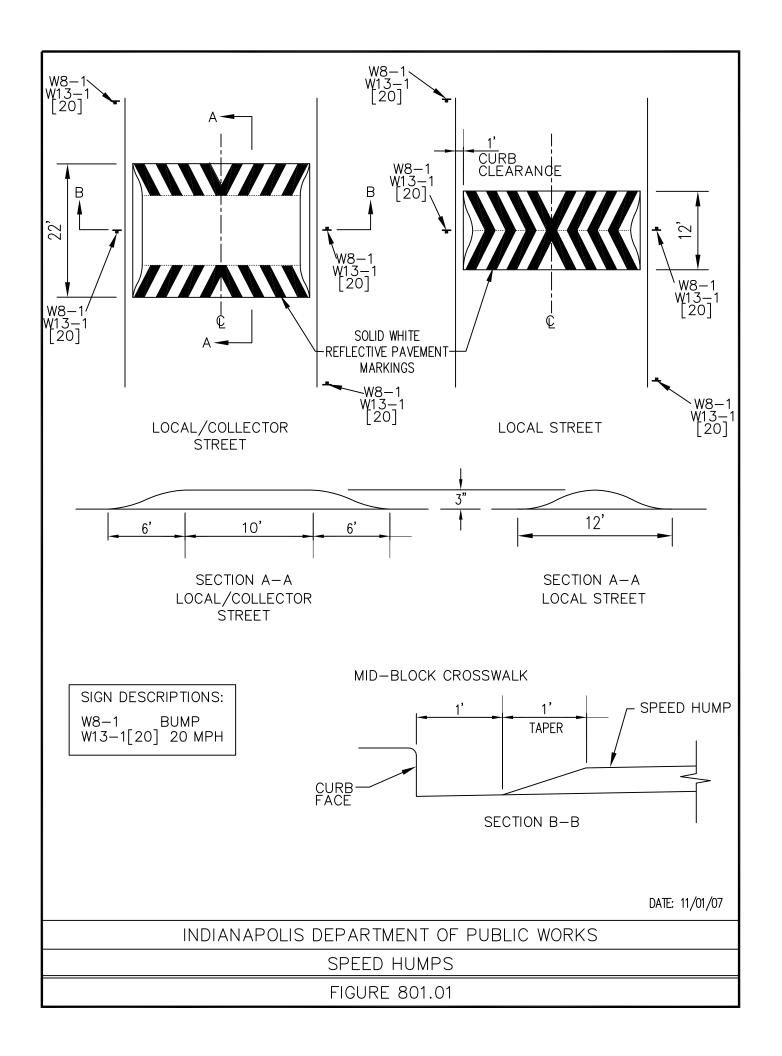
- F. <u>Drainage and Utilities</u> Speed humps should be installed with appropriate provisions made for roadway drainage and utility access, or at the crest of a vertical curve. Humps should generally not be located over or contain maintenance access holes, or be located adjacent to fire hydrants.
 - Ideally, a hump should be installed at a location immediately on the downside of an existing drain inlet. If this is not feasible, the construction of a bypass drain or other treatment to route water around the hump should be considered.
- G. <u>Coordination with Street Geometry</u> A thorough on-site analysis of roadway geometrics should be performed to ensure that speed humps would not be introduced at a crucial point in the roadway system, e.g., a severe combination of horizontal, vertical curvature and/or street gradient. Speed humps should normally be considered only for use on streets with grades of 8 percent or less approaching the hump.
- H. <u>Coordination with Traffic Operations</u> Speed humps should not be installed within 250 (250') feet of a traffic signal or within an intersection or driveway. This suggestion is not intended to apply to use of a raised intersection as a valid traffic management technique.
- Location Elements If possible, speed humps should be installed at a street light to improve night time visibility. Likewise, if possible, speed humps should be installed near property lines for aesthetic reasons.

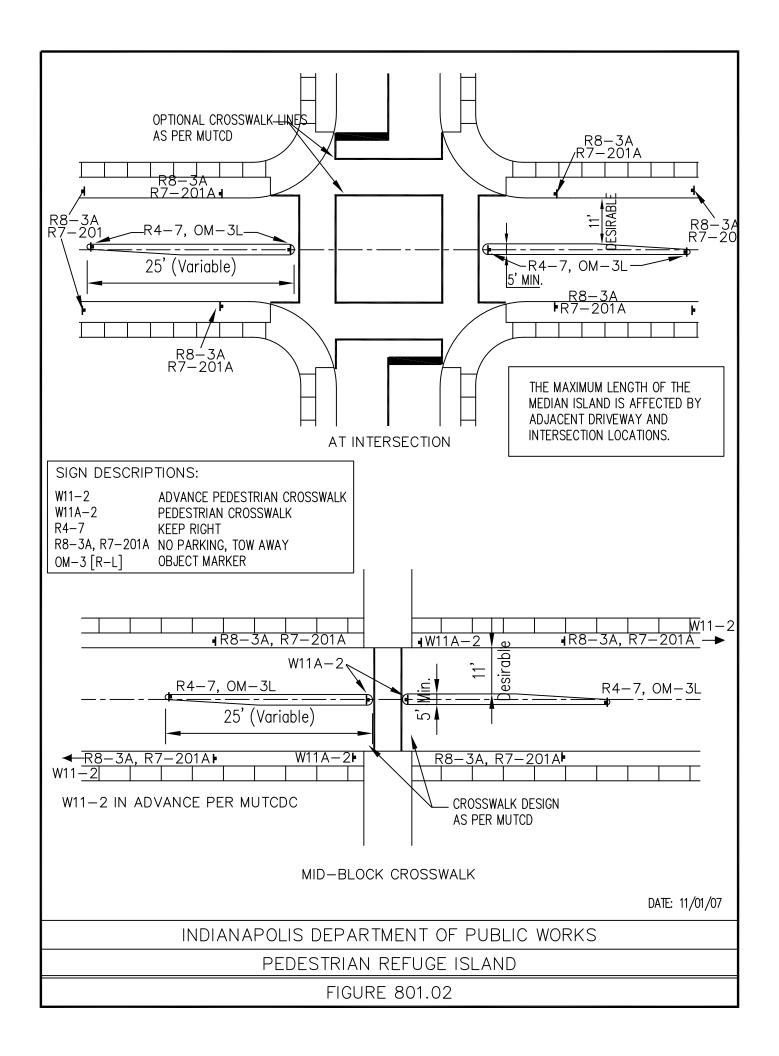
3. Construction

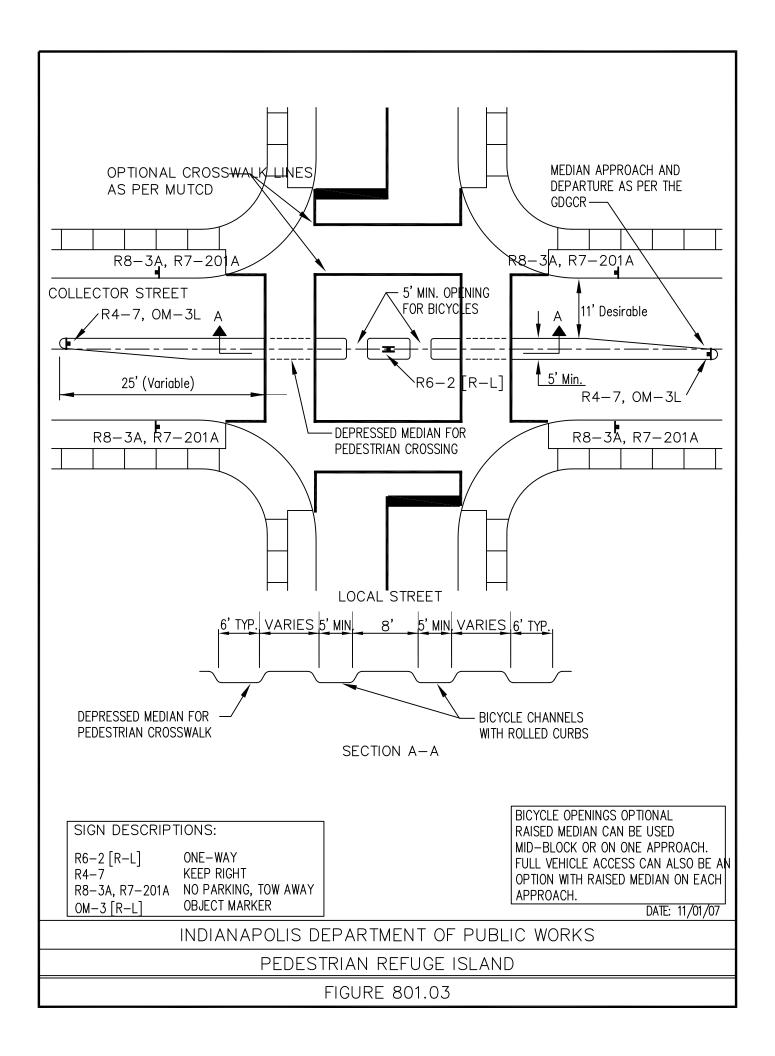
The construction of the speed hump can be asphalt, pre-cast concrete sections, concrete, or brick/concrete pavers. Experience has shown that the use of soft material will result in deformation as the top of the hump is pushed in the direction of the traffic stream. This will vary per location depending on the daily traffic volume and vehicle types.

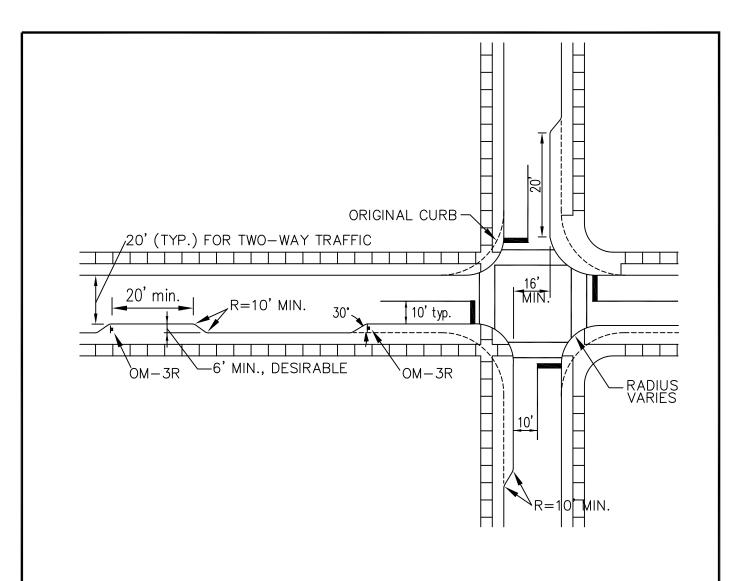
SECTION 801 NEIGHBORHOOD TRAFFIC CALMING STANDARD FIGURES

| 8 | 301.01 | Speed Humps |
|---|--------|----------------------------------|
| 8 | 301.02 | Pedestrian Refuge Island |
| 8 | 301.03 | Pedestrian Refuge Island |
| 8 | 301.04 | Curb Extension |
| 8 | 301.05 | Traffic Circle |
| 8 | 301.06 | Diagonal Diverter |
| 8 | 301.07 | Partial Diverter (Exit Only) |
| 8 | 301.08 | Partial Diverter (Entrance Only) |
| 8 | 301.09 | Street Closure (Cul-De-Sac) |
| 8 | 301.10 | Curb Radius Reduction |
| 8 | 301.11 | Chicane |
| 8 | 301.12 | On-Street Parking (Chicane) |
| | | |









Sign Descriptions:

OM-3R OBJECT MARKER RIGHT

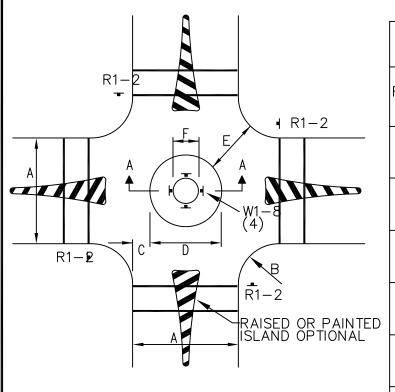
- INTERSECTION RADII SHOULD ACCOMODATE DESIGN VEHICLES APPLICABLE TO STREET.
- MID-BLOCK CURB EXTENSIONS COULD BE COMBINED WITH CROSSWALKS WHERE POSSIBLE.
- LENGTH OF CURB EXTENSIONS MUST RECOGNIZE SITE CONDITIONS, E.G., DRIVEWAY LOCATIONS.
- VERTICAL DELINEATION OTHER THAN OBJECT MARKERS (OM-3R) MAY BE MORE APPROPRIATE. POSSIBLE ALTERNATIVES INCLUDE BOLLARDS, LANDSCAPING, AND TYPE 2 OBJECT MARKERS.

DATE: 11/05/07

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CURB EXTENSION

FIGURE 801.04



| DIMENSION | CHART | FOR | VARYING |
|-----------|-------|------|---------|
| ROA | YAWDA | WIDT | HS |

| A ROADWAY WIDTH | B CURB RETURN RADIUS | C OFFSET DISTANCE | D CIRCLE DIAMETER | E MINIMUM OPENING WIDTH |
|-----------------------|-------------------------------|-------------------------|-------------------------|----------------------------------|
| 20' | 15 | 6 | 9 | 16 |
| | 20 | 5 | 10 | 18 |
| | 25 | 4 | 12 | 19 |
| 24' | 15 | 6 | 12 | 16 |
| | 20 | 5 | 14 | 18 |
| | 25 | 4 | 15 | 19 |
| 30' | 15 | 5 | 20 | 18 |
| | 20 | 4 | 22 | 19 |
| | 25 | 3 | 24 | 20 |
| 36' | 10 | 5 | 27 | 17 |
| | 15 | 4 | 28 | 19 |
| | 20 | 3 | 30 | 21 |
| 40' | 10 | 5 | 30 | 17 |
| | 15 | 4 | 31 | 19 |
| | 20 | 3 | 33 | 21 |

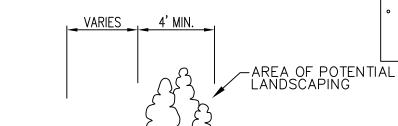
SIGN DESCRIPTIONS:

2" TO 3"

R1-2 YIELD W1-8 CHEVRON ALIGNMENT

LEGEND:

ROADWAY WIDTH CURB RETURN RADIUS (15' MIN.) OFFSET DISTANCE (5' MAX.) CIRCLE DIAMETER OPENING WIDTH (SEE TABLE ABOVE) RAISED ISLAND DIAMETER (4' MIN.)



SECTION A-A

- MINIMUM OPENING WIDTH TO BE PROVIDED TO ALL CROSSWALKS.
- A DEFLECTION TRIANGLE RAISED OR PAINTED ON THE PAVEMENT ON EACH APPROACH TO THE TRAFFIC CIRCLE MAY BE APPROPRIATE.



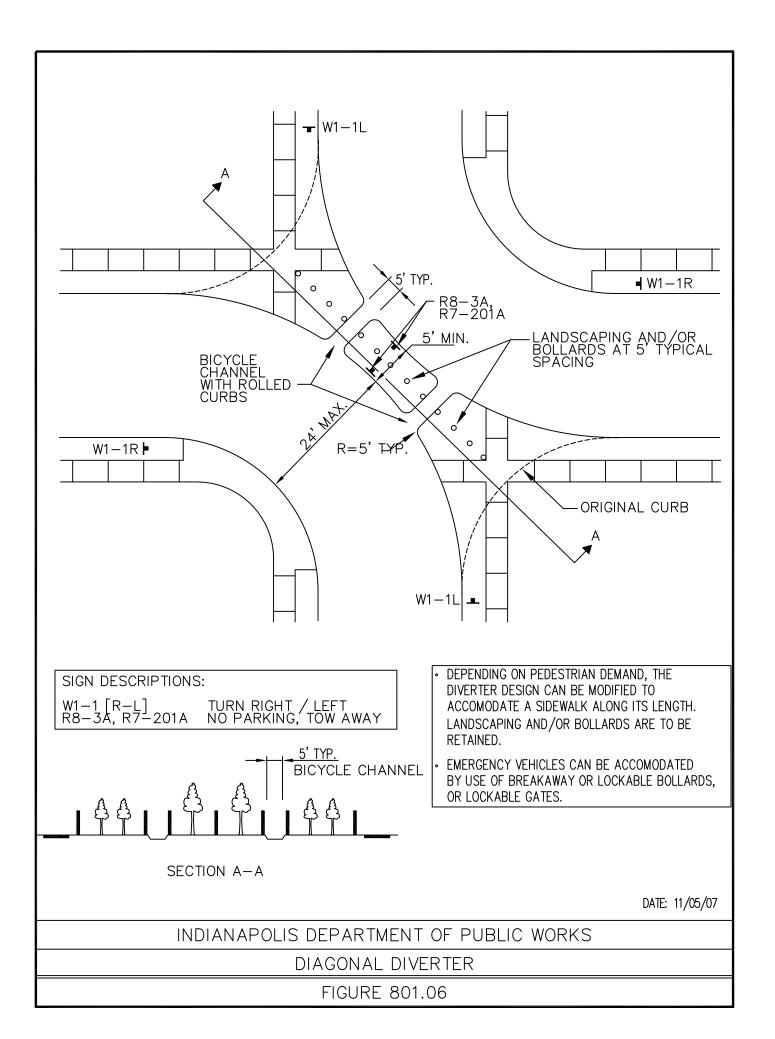
DATE: 11/05/07

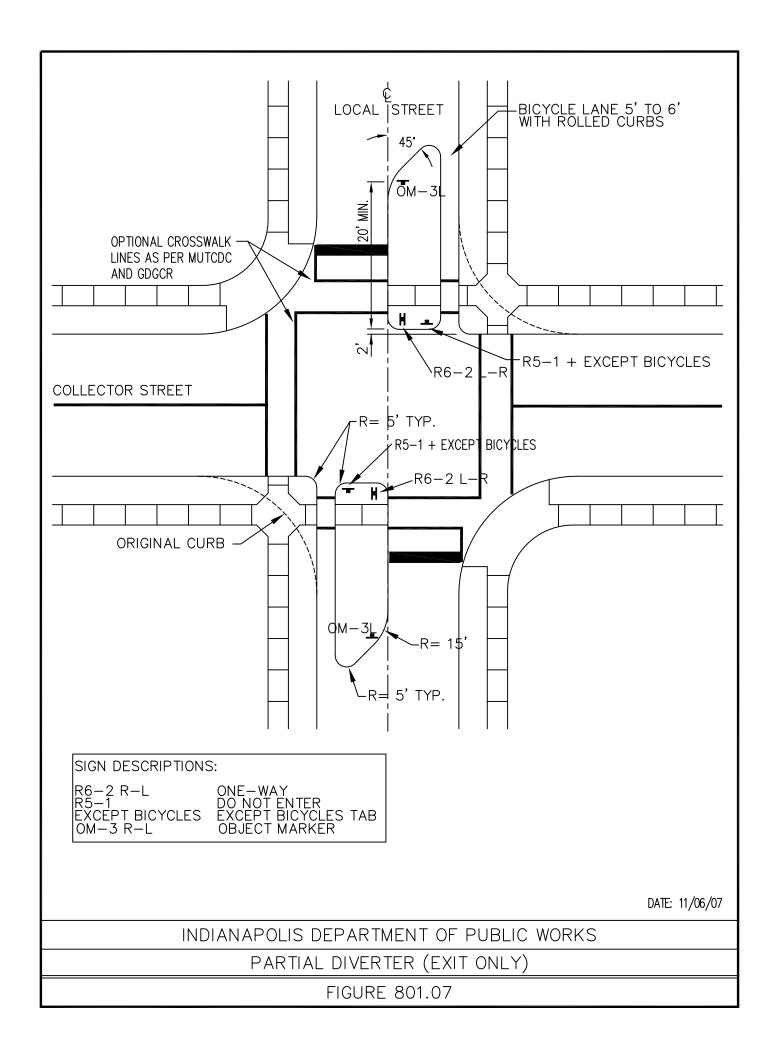
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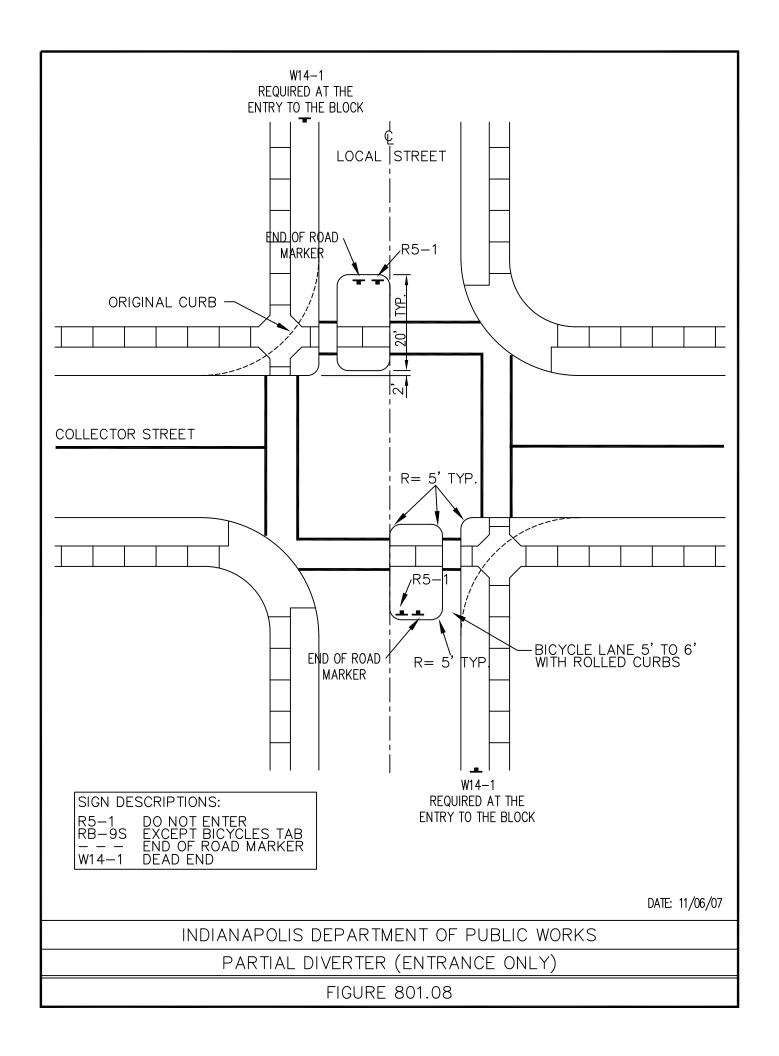
1% MIN. 10% MAX. SLOPE

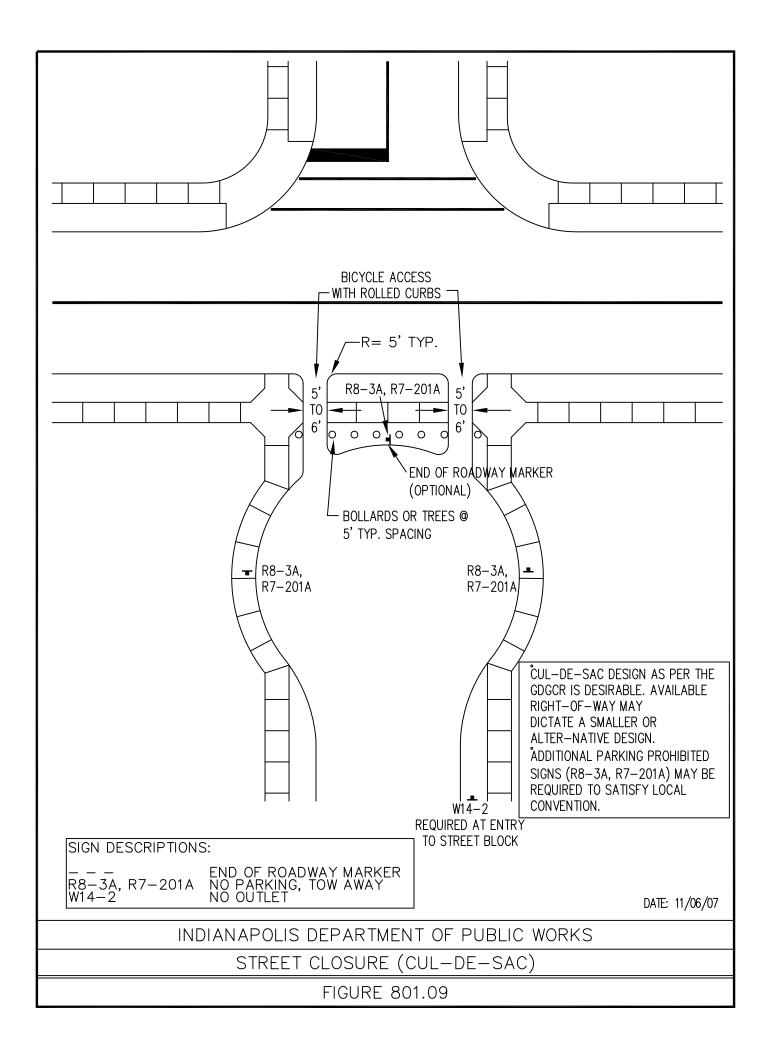
TRAFFIC CIRCLE

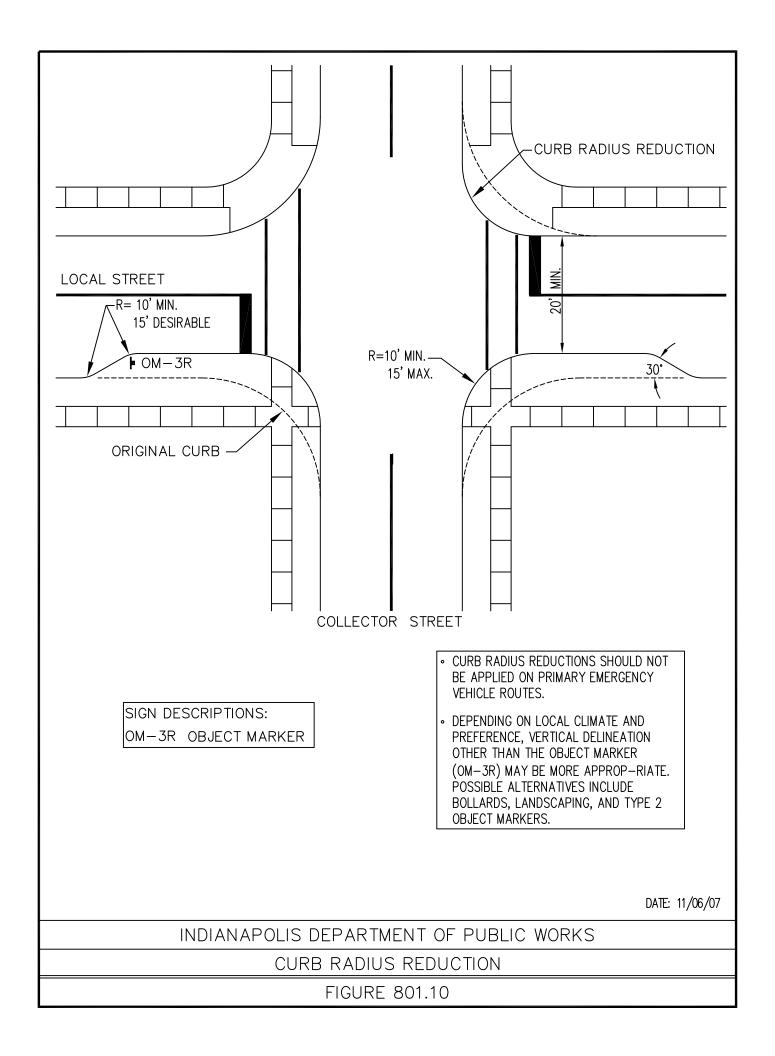
FIGURE 801.05

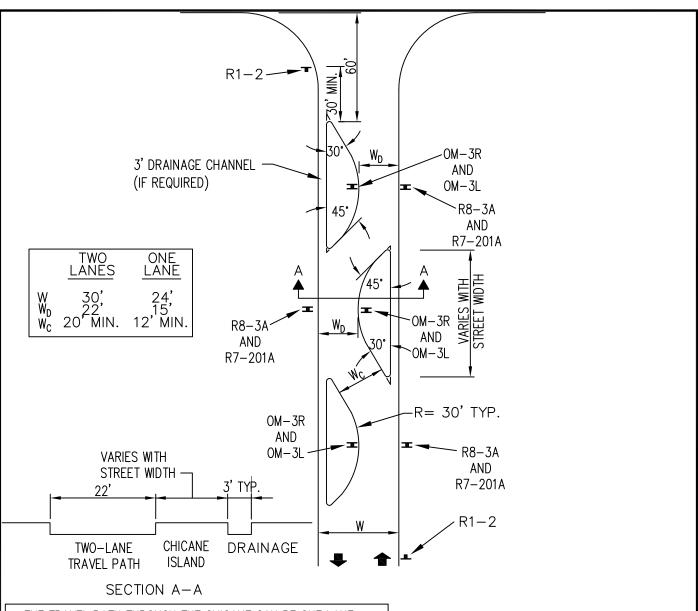












- THE TRAVEL PATH THROUGH THE CHICANE CAN BE ONE LANE OR TWO LANES AS NOTED.
- SPACING OF CHICANE SEGMENTS DEPENDENT ON SITE CONSIDERATIONS, E.G., DRIVEWAY LOCATIONS.
- ISLAND PLANTINGS SHOULD NOT OBSCURE DRIVER'S VIEW OF CHICANE TRAFFIC.
- ADDITIONAL R8-3A, R7-201 SIGNS MAY BE REQUIRED TO SATISFY LOCAL CONVENTION.
- BICYCLES ARE TO USE THE SAME PATH AS MOTOR VEHICLES, NOT THE DRAINAGE CHANNEL.
- DEPENDING ON LOCAL CLIMATE AND PREFERENCE, VERTICAL
 DELINEATION OTHER THAN OBJECT MARKERS (OM-3 [R,L]) MAY
 BE MORE APPROPRIATE. POSSIBLE ALTERNATIVES INCLUDE
 BOLLARDS, LANDSCAPING, AND TYPE 2 OBJECT MARKERS.

SIGN DESCRIPTIONS:

R1-2 YIELD

R8-3A R7-201A NO PARKING TOW AWAY

OM-3 [R-L] OBJECT MARKER

DATE: 11/06/07

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CHICANE

FIGURE 801.11

