



BOARD OF PUBLIC WORKS

Request for Approval of Traffic Control Device(s)

Board of Public Works Meeting Date: **March 24, 2026.**

Traffic Request Number: TR25-016

I hereby submit the following installation or change of traffic control devices for review:

<input checked="" type="checkbox"/> New Installation	<input type="checkbox"/> Removal	<input type="checkbox"/> Revision
<input checked="" type="checkbox"/> Stop Sign	<input type="checkbox"/> Stop Sign	<input type="checkbox"/> Stop Sign
<input type="checkbox"/> Yield Sign	<input type="checkbox"/> Yield Sign	<input type="checkbox"/> Yield Sign
<input type="checkbox"/> Speed Limit, ___ mph	<input type="checkbox"/> Speed Limit, ___ mph	<input type="checkbox"/> Speed Limit, ___ mph
<input type="checkbox"/> Other, List	<input type="checkbox"/> Other, List	<input type="checkbox"/> Other, List

Location(s): Ladbrooke Ln and York Road

This has been submitted:

- In response to request by a citizen/ neighbor/ passerby:
- In response to contracted reconstruction or improvements
- In response to developer-provided reconstruction or improvement
- In response to an internally-generated concern from

Remarks: The installation of a "Stop sign" on Ladbrooke Ln and York Road. This recommendation is specific to local road connecting to Minor arterial as referenced in the attached memo "Stop Control Application Overview for the City of South Bend, IN"

Submitted & Proposed by:

Recommend Approval/Denial:

Oluwanifemi Oluwatomini

Leslie Biek

Prepared by: Oluwanifemi Oluwatomini
Senior Engineer
Date: 3/9/2026

Leslie Biek, PE
Assistant City Engineer
Date: 3/12/2026

APPROVED DENIED

CITY OF SOUTH BEND, INDIANA
BOARD OF PUBLIC WORKS

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Candy Bermudez

Attest: Candy Bermudez, Acting Clerk

Date: March 24, 2026

Distribution:

Bureau of Traffic and Lighting

Installation of stop sign: York Rd and Ladbrooke Ln



Legend

Stop Sign
Condition



City of South Bend
Department of Public Works
Engineering Division

Oluwanifemi Oluwatomi
Senior Engineer
March, 05, 2026



T E C H N I C A L M E M O R A N D U M

DATE: April 20, 2020
TO: Alicia Czarnecki, City of South Bend
FROM: Ryan Huebschman, PE, PTOE, Patrick O'Connor, PE, PTOE, Geeta Kharche,
American Structurepoint, Inc.
RE: STOP Control Application Overview for the City of South Bend, IN

This memorandum details the *Indiana Manual on Uniform Traffic Control (IMUTCD)* guidelines on the installation of STOP control at uncontrolled intersections. American Structurepoint was tasked by the City of South Bend to review these guidelines to assist the City in their decision-making process for the installation of STOP control.

IMUTCD Guidelines for STOP Sign Application

A STOP sign is used to indicate that oncoming traffic is always required to come to a complete halt before entering an intersection. The IMUTCD outlines the criteria to consider when bringing an approach at an intersection to be under STOP control. These criteria are considered best practices and are not mandatory requirements for installation of a STOP sign. Deviation from these criteria may be allowed if supplemented by an engineering study.

Per Section 2B.04 of the IMUTCD, a STOP sign should be used at an intersection if one or more of the following conditions exist:

- A. *An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;*
- B. *A street entering a designated through highway or street; and/or*
- C. *An unsignalized intersection in a signalized area.*

Additionally, the section also provides guidance on the application of a STOP sign at an intersection of minor or local roads with more than three approaches, where one or more of the following conditions exist:

- A. *The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more than 2,000 units per day;*
- B. *The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or*
- C. *Crash records indicate that five or more crashes that involve the failure to yield the right-of-way at the intersection under the normal right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.*

Local Road connecting to other Local Roads

Most roadways forming the sample intersections reviewed in this memorandum are classified as local streets. This scenario considers neighborhood locations where the minor local roadway intersects with another local road that then itself intersects with another local road. These would be considered locations internal to neighborhoods that only carry local residential traffic.

Recommendations

Based upon a review of the sample study intersections and roadway characteristics, and consideration of traffic volumes where appropriate, the following recommendations were made. Examples of locations where these standards are met are provided for clarity.

Major Collector connecting to Minor Arterial and Other Principal Arterial – STOP CONTROL

Walnut Street in the Westside area of the City is classified as a major collector by the State. Walnut Street collects traffic from the surrounding residential areas before connecting to W Sample Street (classified as Other Principal Arterial) to its south and W Western Ave (classified as Minor Arterial) to its north. The intersection of Walnut Street & Poland Street in the area is currently uncontrolled. Poland Street is a local roadway providing access to single-family dwelling units. Given the heavy through traffic along Walnut Street, its functional classification as a major collector, and its connections to important arterials, the intersection of Poland Street & Walnut Street may be considered as an ideal site for STOP control application.

Local Road connecting to Minor Arterial and Other Principal Arterial – STOP CONTROL

Harris Street is a north-south roadway in the Westside area of the City and runs parallel to Walnut Street. The roadway connects W Sample Street and W Western Ave, which as mentioned previously, are important arterial corridors in the area. However, unlike Walnut Street which is classified as a major collector, Harris Street is a local roadway. Harris Street connects to several east-west local roadways, such as Fisher Street and Poland Street, which are primarily residential streets providing access to single-family dwelling units, and therefore serves as a collector street within the neighborhood. As such, traffic utilizing Fisher Street and Poland Street to enter their intersection with Harris Street would experience significantly higher through traffic volumes. Therefore, these intersections may also serve as potential sites for STOP control application.

Local Road connecting to Major Collector – UNCONTROLLED

This category considers an intersection of two local roadways, where at least one of these in-turn connect to roadways classified as an arterial (major or minor). In such instances, the major street at the intersection typically carries significantly higher through traffic volumes. For example, Jade Crossing Drive is a local road which ties into Brick Road (classified as major collector) to the north. The intersections along Jade Crossing Drive are all currently uncontrolled locations. All the roadways feeding into Jade Crossing Drive, such as Ashard Road and Cherry Pointe Drive are local residential roadways, serving between nine (9) and thirty single-family dwelling units. Jade Crossing Drive is not anticipated to carry heavy through traffic; therefore, these examples serve as locations where an UNCONTROLLED intersection is appropriate.

An additional caveat is that Brick Road is approximately 200 feet north of Ashard Drive and 500 feet north of Cherry Pointe Drive. A detailed safety assessment may be required at such locations to determine the applicability of STOP control on the side-streets due to turning vehicles from the minor roads and the close proximity to the major roadway, should sight distance or queuing become a concern.

Local Road connecting to other Local Roads – UNCONTROLLED

An additional example from the Jade Crossing neighborhood would be where a local road such as Onyx Way intersects with Cherry Pointe Drive, which are both classified as local roads, before connecting to Jade Crossing

Drive, which as previously noted is also a local road. These neighborhood roads that provide strictly residential access with no through traffic are locations that UNCONTROLLED intersections are appropriate.

Conclusion

The IMUTCD, which is the standard for traffic control in the State of Indiana, outlines guidance on the application of specific type of traffic control at intersections. The IMUTCD considers factors such as vehicle, bicycle, and pedestrian volumes at the intersection; the topography (dips and rises in the road level); intersection sight distance; and crash history at the subject intersection to make the decision on the installation of a STOP sign.

For locations such as uncontrolled intersections where STOP control may not always be required, decisions pertaining to installation of STOP control should be determined on a case-by-case basis. According to Federal Highway Administration's (FHWA) SA-05-11 "Road Safety Fundamentals", uncontrolled intersections may be safer than STOP-controlled intersections where the intersections carry low volumes. According to the publication, a driver is more likely to skip a STOP sign if they know there is low conflicting traffic on the roadway they are entering. The publication also states that drivers are typically more cautious when they believe other drivers do not have to stop.

In reviewing the guidelines presented in this memorandum, it was determined that that the volumes of the minor street do not have as much of an impact on the determination to provide STOP control as the volume of the major street. Therefore, the classifications of the major streets were deemed to be the determining factor of STOP sign applicability. As such, this document discusses four (4) broad categories of roadways forming intersections and applicability of STOP control at each such category. Certain intersections within the City that are currently uncontrolled were used as examples to discuss the applicability further. It is the intent of this document that these categories, with the help of the sample intersections, will aid the City of South Bend in their decision-making approach in the future to determine the applicability of STOP control at uncontrolled intersections.

The IMUTCD advises that a STOP sign should be installed in a manner which requires the minimum number of vehicles to stop, and hence should typically be installed on the minor street carrying the lower volume at an intersection. If two streets with relatively equal volumes form an intersection, physical characteristics such as topography and sight distance should be considered to decide which approach to bring under STOP control.

Sample Study Intersection Locations

The City of South Bend identified multiple intersections in four (4) neighborhoods for review of STOP sign applicability that represented various existing conditions throughout the City. These intersections all lie within residential communities, most of them providing access to single-family dwellings and some others acting as collector streets within the residential communities.

Based upon the IMUTCD, it was determined that the volumes of the minor street do not have as much of an impact on the determination to provide STOP control as the volume of the major street. Therefore, the classifications of the major streets were deemed to be the determining factor of STOP sign applicability. Once the classification of the major roadway was determined, the assumed crossing volumes were determined for the minor approach. Analyzing the minor street traffic volumes allows for a comparison of the major and minor street volumes and determines if STOP control may be justified from a volume standpoint. The Institute of Transportation Engineers (ITE) *Trip Generation Manual, 10th Edition*, was utilized to estimate the number of vehicles that would utilize any given approach on a typical weekday during the morning and afternoon peak hours. The sample study T-intersections where STOP signs are not currently installed provide access to single-family detached homes. As such, ITE Land Use Code 210 – Single-Family Detached Housing was utilized for trip generation.

The recommendations provided in the following section are based on the characteristics of the roadway and its surrounding area, the engineer's understanding of general travel patterns of similar areas, and engineering judgment. In most instances, the local street in the City is located in primarily residential areas, with low driving speeds. The local street may or may not have an outlet connecting to other roadways. In some cases, as detailed below, the characteristics of the major road connections at the next terminus away from the intersection with the local road are the driving force in the determination of the applicability of STOP control.

A review of the sample intersections indicated that the major street fell into the following categories:

Major Collector connecting to Minor Arterial and Other Principal Arterial

This category pertains to intersections where one of the roadways forming the intersection is classified as a collector, while the other is a local roadway, where the collector then connects to at least one major roadway (Arterial).

Local Road connecting to Minor Arterial and Other Principal Arterial

This category considers an intersection of two local roadways; however, at least one of these in-turn connect to roadways classified as an arterial (major or minor). In such instances, the major street at the intersection typically carries significantly high through traffic volumes.

Local Road connecting to Major Collector

Similar to the previous scenario, this scenario considers the intersection of two local roadways, where at least one further connects to a roadway classified as a collector. This applies to intersections in the City where, although a roadway does not carry significant through traffic, it connects to a roadway with much heavier traffic.