



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

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Michael R. Pence, Governor
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December 7, 2015

CONSTRUCTION MEMORANDUM

14-06

(REVISED)

TO: District Deputy Commissioners
District Construction Directors
District Area Engineers
District Traffic Engineers
District Technical Service Directors
Project Engineers/Supervisors
Field Engineers

FROM: Mark A. Miller, Director *meemil*
Division of Construction Management and District Support

SUBJECT: Use of Worksite Speed Limit Assembly Signs during Construction

This memorandum describes the procedures to be followed when using the Worksite Speed Limit Assembly signs during construction activities. Legally enforceable reduced speed limits may be imposed in worksites where it is considered necessary for the safe operation of our work crews or for the safety of the traveling public through the worksite. **These speed limits are not legally enforceable unless the conditions outlined in this memorandum are met.**

Indiana statute (IC 9-21-5-11) provides for the establishment of enforceable reduced speed limits in worksites. This allows the establishment of the worksite speed limits without the official processes normally associated with speed zone establishment. A worksite is defined as a location where maintenance or construction work is being done on a public highway.

WORKSITE SPEED LIMIT TYPES:

Worksite speed limits may be used either 1) to reduce the speed limit in the vicinity of the work while workers are present or 2) to reduce the speed limit on a continuous basis regardless of whether workers are present or not.

AUTHORIZATION:

Requests for the establishment of temporary work site speed limits will be sent to the District Construction Director (DCD) or an authorized designee if the DCD is not available. **The PE/S should not assume that authorization has been obtained for temporary work site speed limits prior to letting even if placement of temporary speed limit signs is indicated on the plans. Authorization should be verified through the AE or DCD. If prior authorization has not been obtained, the PE/S should initiate appropriate steps to obtain authorization.**

Prior to work site speed limits being put into effect, their use must be authorized by the DCD or designee. Such authorization shall consist of the attached form, **AUTHORIZATION FOR TEMPORARY WORK SITE**

SPEED LIMIT (a filled out examples are also attached), signed by an authorized position. This form must be signed prior to implementation of reduced work site speeds. This form can include all locations where temporary work site speed reductions are to be used for a particular time period (a separate form for each contract is recommended but not required). The rough locations and dates of use must also be included on the form. The original signed form should be sent to District Traffic Office, before the worksite speed limits are implemented, with a copy retained for the final construction record.

For temporary work site speed limits that are continuous (“24/7”), the DCD will authorize the general location and determine the appropriate worksite speed limit with concurrence from the District Technical Services Director (DTSD).

For temporary work site speed limits that are intermittent (“When Flashing”), the DCD will authorize the general location and determine the appropriate work site speed limit.

DETERMINING THE SPEED LIMIT:

The worksite speed limit established must be at least 10 mph below the permanent speed limit. Speed limit reductions greater than 15 mph should be based on site specific conditions such as unprotected workers/work equipment in close proximity to traffic or geometric features that are particularly challenging to the driver. The speed limit reductions that are greater than 15 mph must be done in two increments (steps) to allow motorists more time to reduce their speed.

The worksite speed limit will be set as follows unless otherwise determined by the DCD (intermittent type) or the DCD and the District Technical Services Division (continuous type).

Roadway Type	Normal Speed Limit	Worksite Speed Limit
Rural Interstate	65 – 70 mph	55 mph
Urban Interstate and High Speed Non-Interstate	55 – 60 mph	45 mph
	50 mph	40 mph

For highways with a normal posted speed of 45 mph or less the DCD will determine the appropriate worksite speed limit with input from the District Technical Services Division.

INTERMITTENT USE (“WHEN FLASHING”) TYPE

If the reduced speed limit is intended only while workers are present at the work site, the “WHEN FLASHING” plaque or message shall be included with the work site speed limit sign.

Setup and Location:

When used to reduce the speed limit while workers are present the Worksite Speed Zone is to be maintained in the area of work ONLY. For this use generally the worksite speed zone will begin at 1,500 ft ahead of the actual work and end 500 ft beyond the actual work area. If queuing is expected the intermittent work site speed limit should be established at least 1500 ft in advance of the end of queue rather than 1500 ft in advance of the work zone. If unexpected queuing occurs on a regular or repeated basis the work site speed limit should be relocated to at least 1500 ft in advance of the maximum queue and the change in location should be noted on the Temporary Work Site Speed Limit Activation Summary form.

All worksite speed limit sign assemblies shall be installed as shown on the Standard Drawings. Worksite speed limit signs shall be posted on both sides of the directional lanes on multi-lane divided roadways when multiple lanes are open to traffic traveling in the same direction. Where a single lane is open to traffic, or for multi-lane undivided roadways, worksite speed limit sign assemblies may be installed on only one side. For these

conditions, the speed limit sign assemblies should be installed on the right side of the roadway. However, the Engineer may choose to supplement with an additional sign on the left side to provide better visibility. The size of the worksite speed limit signs shall be appropriate for the type of roadway being maintained.

The maximum longitudinal spacing shall be two miles. Closer spacing may be directed by the PE/PS to adequately address conditions of a specific job (i.e. crossroads, ramps, etc.).

Wherever a permanent speed limit sign exists within the limits controlled by the intermittent worksite speed limit sign assemblies, additional worksite speed limit sign assemblies shall be placed next to any permanent sign, or the permanent speed limit signs shall be covered.

Advance Warning:

When the speed limit reduction is 15 mph or greater the worksite speed limit sign shall be preceded by an appropriate (Worksite Reduced Speed Ahead) (W3-5) sign assembly. **See attached EXAMPLE-1.**

Re-establishing the Normal Speed Limit:

If a permanent speed limit sign is not present within 500 ft of the end of the work zone, signing for the permanent speed shall be placed as shown in Standard Drawing 801-TCDV-12.

Record Keeping:

Record keeping will be done in the following manner to facilitate enforcement and successful prosecution of violations:

- For worksite speed limits that will be used only when workers are present at the site, the area, the date and time where each worksite speed limit is activated and deactivated, and the total number and location of signs in place will be recorded by the Contractor and furnished to the PE/PS on a weekly basis using the attached form, **TEMPORARY WORK SITE SPEED LIMIT ACTIVATION SUMMARY** (a filled out example is also attached). This weekly report shall be kept on file by the PE/S and submitted with the final construction record.

Per the terms of IC 9-21-4-7, a copy of these records may be requested for certification to a court that a valid worksite speed zone was in place on a given day, place, and time.

Attached are the worksite speed limit authorization form and a copy of the relevant statutes.

CONTINUOUS USE (24/7) TYPE

For INDOT Construction activities worksite speed limits are generally used to reduce the speed limits while workers are present at the work site. However, with the District Construction Director's approval and concurrence from the District Technical Services Director, work site speed limits may also be used to reduce the speed limit in the vicinity of the work site on a continuous basis. Continuous use worksite speed limit assemblies will not have the "WHEN FLASHING" plaque or message or the flashing strobe lights. No lights of any type will be placed on either sign in this type of assembly.

Setup and Location:

The installations will be under the direction of the INDOT PE/S or the Contractor's Certified Worksite Traffic Supervisor, and consistent with INDOT Standards and Specifications. The INDOT PE/S or the Contractor's Certified Worksite Traffic Supervisor will keep records as detailed. If queuing is expected the continuous work site speed Limit should be established at least 1500 ft in advance of the queue rather than 1500 ft in advance of the work zone as shown in the standards. If unexpected queuing occurs on a regular or repeated basis the worksite speed limit should be relocated to at least 1500 ft in advance of the maximum queue and the change in location should be noted on the Temporary Work Site Speed Limit Activation Summary form.

All worksite speed limit sign assemblies shall be installed as shown on the Standard Drawings. Worksite speed limit signs shall be posted on both sides of the directional lanes on multi-lane divided roadways when multiple lanes are open to traffic traveling in the same direction. Where a single lane is open to traffic, or for multi-lane undivided roadways, worksite speed limit sign assemblies may be installed on only one side. For these conditions, the speed limit sign assemblies should be installed on the right side of the roadway. However, the Engineer may choose to supplement with an additional sign on the left side to provide better visibility. The size of the worksite speed limit signs shall be appropriate for the type of roadway being maintained.

Wherever a permanent speed limit sign exists within the limits controlled by the continuous use worksite speed limit sign assemblies, additional worksite speed limit sign assemblies shall be placed next to any permanent sign and the permanent speed limit signs shall be covered.

Advance Warning:

When the speed limit reduction is 15 mph or greater the worksite speed limit sign setup shall be preceded by an appropriate (Worksite Reduced Speed Ahead) (W3-5) sign assembly. **See attached EXAMPLE-2.**

Re-establishing the Normal Speed Limit:

If a permanent speed limit sign is not present within 500 ft of the end of the work zone, signing for the permanent speed shall be placed as shown in Standard Drawing 801-TCDV-12.

Record Keeping:

Record keeping will be done in the following manner to facilitate enforcement and successful prosecution of violations:

- For worksite speed limits that will be used to reduce the speed limit in the vicinity of the site on a continuous basis, the area where each worksite speed limit was used and the total number and location of signs in place shall be recorded by the PE/S using the attached form, **TEMPORARY WORK SITE SPEED LIMIT ACTIVATION SUMMARY** (a filled out example is also attached), on the date of installation and again on the removal date. This report shall be kept on file by the PE/S and submitted with the final construction record.

Per the terms of IC 9-21-4-7, a copy of these records may be requested for certification to a court that a valid worksite speed zone was in place on a given day, place, and time.

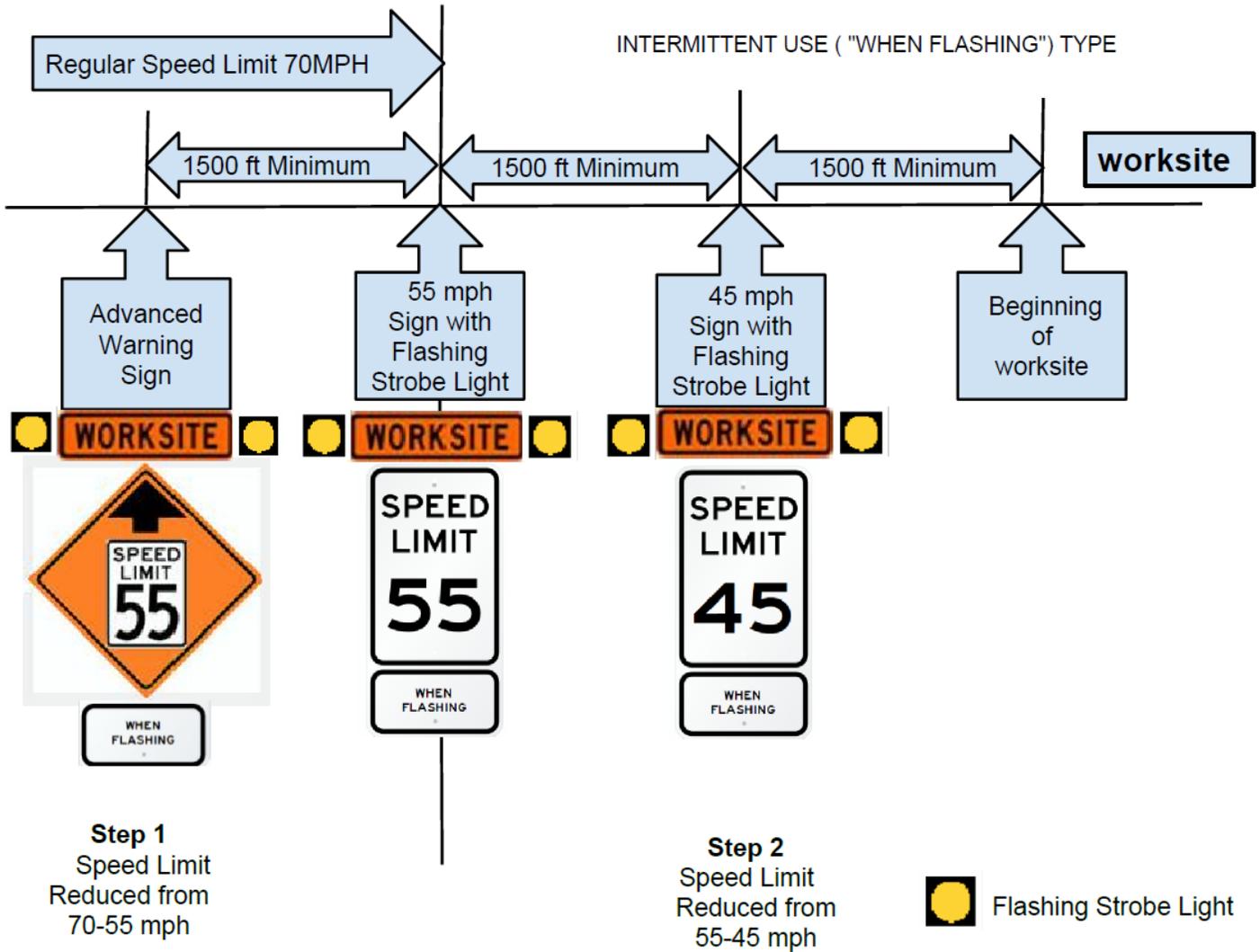
ATTACHMENTS:

Forms, examples of filled-in forms, and a copy of the relevant Indiana Codes.

Examples illustrating an interstate speed reduction from 70 mph to 45 mph. The speed limit is reduced incrementally in two steps. These illustrations can be modified for non-interstate and interstate roads with a speed limit lower than 70 mph, as long as the intermittent worksite speed limit involves a reduction greater than 15 mph.

EXAMPLE-1:

INTERMITTENT USE TYPE

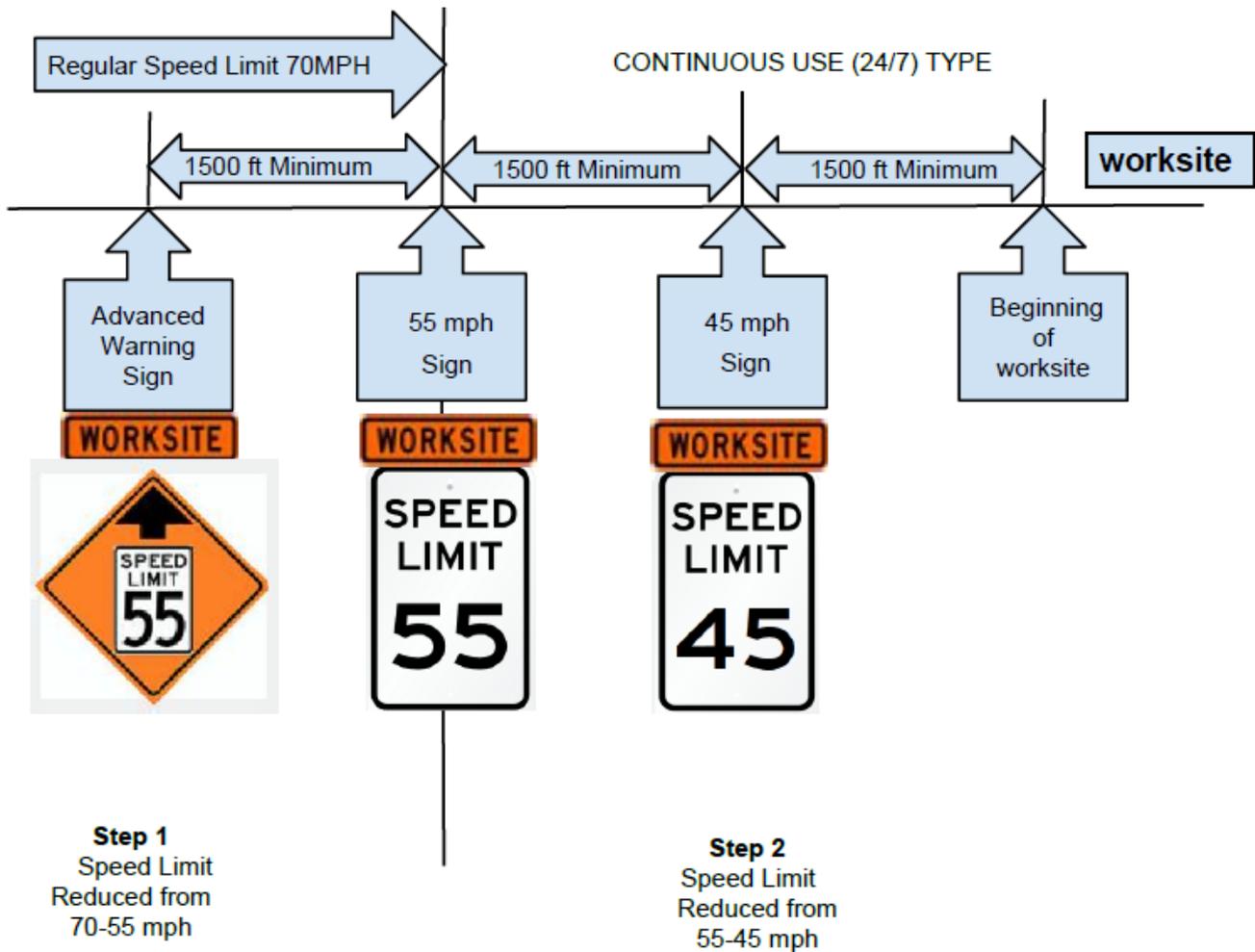


Two step speed reductions using intermittent use type signage are appropriate when workers are adjacent to open travel lanes or will otherwise be at increased risk from traffic but the roadway is not restricted or altered when workers are not present. Operations for which this strategy might be considered include, but are not limited to: bridge painting, or concrete patching where all lane restrictions (e.g. shifts, merges) are lifted when workers are not present; resurfacing; guardrail installation; panel sign installation; or other operations where the workers, work vehicles, or materials occupy a travel lane or shoulder only while work is being performed.

All strobes should be turned off when workers are not present.

EXAMPLE-2:

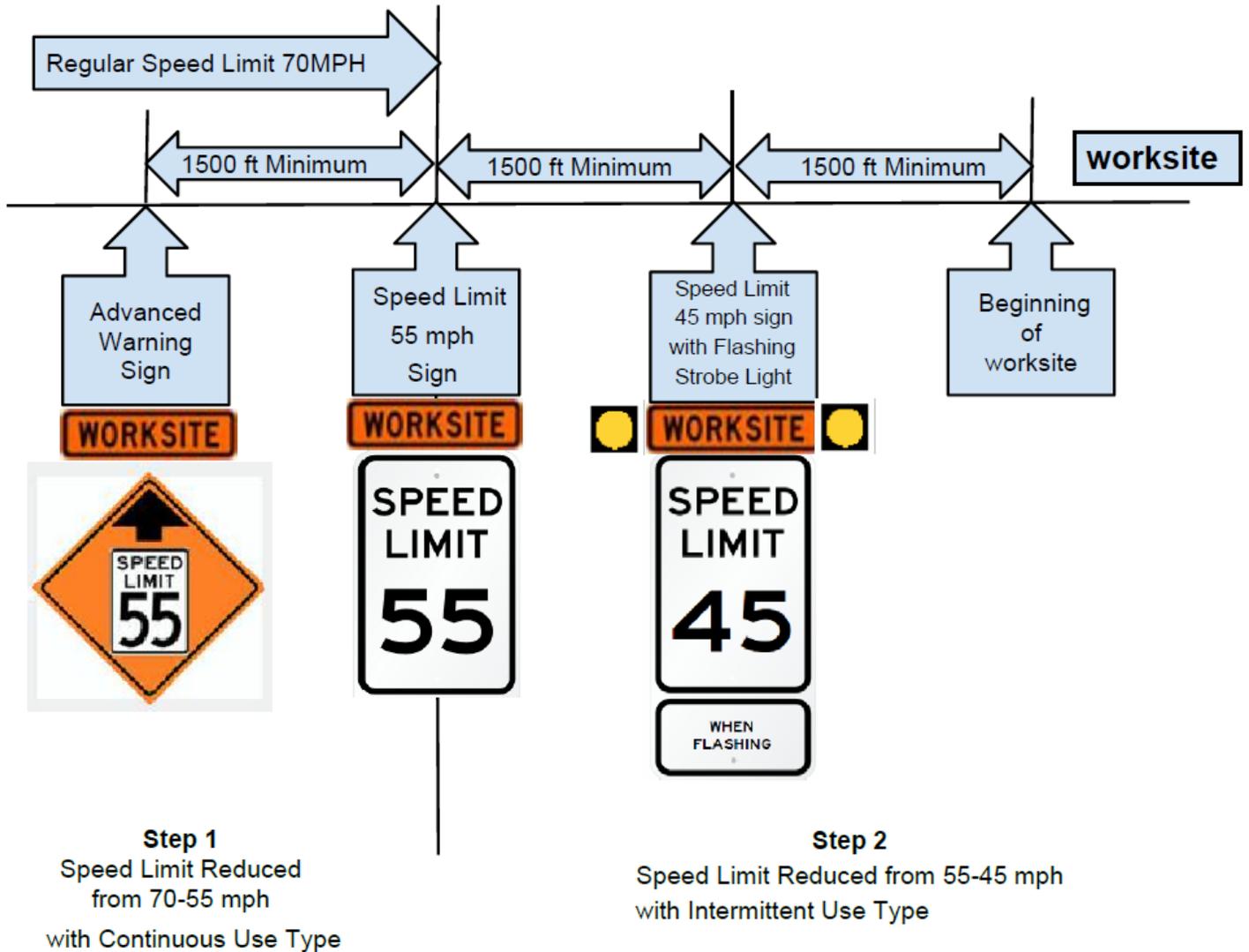
CONTINUOUS USE TYPE



Two step speed reductions using continuous use type signage are appropriate in the same circumstances that a temporary official action would be. It is used when roadway geometry and features present additional challenges to drivers necessitating speeds that are much lower than the permanent posted speed limit (whether workers are present or not). Conditions for which this strategy might be considered include but are not limited to: long term lane merges, narrow lanes, narrow or no shoulders, restricted sight distances, poor pavement condition, or when obstructions are located within the obstruction free zone (e.g. culvert headwalls, bridge piers, barrier wall ends).

EXAMPLE-3:

CONTINUOUS AND INTERMITTENT USE TYPES
IN COMBINATION



Two step speed reductions using a continuous use type signage for the first step and intermittent use type signage for the second are appropriate when:

- workers are adjacent to open travel lanes or will otherwise be at increased risk from traffic and
- roadway geometry and features present additional challenges to drivers necessitating some reduction in speed even when workers are not present.

Operations for which this strategy might be considered include but are not limited to long term work zones where the roadway is restricted/alterd throughout but work activity is limited to certain specific areas.

AUTHORIZATION FOR TEMPORARY WORK SITE SPEED LIMIT

EXAMPLE

This form is to be completed for all locations where temporary work site speed limits will be in use.

Temporary work site speed limits are hereby authorized for the contracts/jobs listed below:

Contract	Location		Begin Date	End Date	Speed Limit Type	DTSD Concurs	Permanent Speed Limit	Work Site Limit
	Road	County						
EXAMPLE: R-28214	I-70	Hendricks	Contract Duration		When Flashing	n/a	65	50
EXAMPLE: TM-28281	I-70	Marion	Contract Duration		24/7	<i>gg</i>	55	45
EXAMPLE: R-30100	US 41	Sullivan	03/01/2012	03/15/2012	When Flashing	n/a	60	50

Signed: _____ Date: _____

Title: DCD or designee _____

Original to be sent to District Traffic Office, with a copy to the project file

AUTHORIZATION FOR TEMPORARY WORK SITE SPEED LIMIT

This form is to be completed for all locations where temporary work site speed limits will be in use.

Temporary work site speed limits are hereby authorized for the contracts/jobs listed below:

Contract	Location		Begin Date	End Date	Speed Limit Type	DTSD Concurs	Permanent Speed Limit	Work Site Limit
	Road	County						

Signed: _____ Date: _____

Title: _____

Original to be sent to District Traffic Office, with a copy to the project file

AUTHORIZATION FOR TEMPORARY WORK SITE SPEED LIMIT

(For speed limit reduction **greater than 15 mph**)

EXAMPLE

This form is to be completed for locations where work site speed limits will be reduced greater than 15mph.

Temporary work site speed limits are hereby authorized for the contracts/jobs listed below:

Contract	Location		Begin Date	End Date	Speed Limit Type	DTSD Concurs	Permanent Speed Limit	First Step Limit	Work Site Limit
	Road	County							
EXAMPLE: R-28214	I-70	Hendricks	Contract Duration		When Flashing	n/a	70	55	45
EXAMPLE: R-30100	US 41	Sullivan	03/01/2012	03/15/2012	When Flashing	n/a	70	55	45

Signed: _____ Date: _____

Title: DCD or designee _____

Original to be sent to District Traffic Office, with a copy to the project file

AUTHORIZATION FOR TEMPORARY WORK SITE SPEED LIMIT

(For speed limit reduction greater than 15 mph)

This form is to be completed for locations where work site speed limits will be reduced greater than 15mph.

Temporary work site speed limits are hereby authorized for the contracts/jobs listed below:

Contract	Location		Begin Date	End Date	Speed Limit Type	DTSD Concurs	Permanent Speed Limit	First Step Limit	Work Site Limit
	Road	County							

Signed: _____ Date: _____

Title: DCD or designee _____

Original to be sent to District Traffic Office, with a copy to the project file

TEMPORARY WORK SITE SPEED LIMIT ACTIVATION SUMMARY
This form is to be used to record each period of temporary work site speed limits activation.

Contract: _____

Road: _____ County: _____

Speed Limit Type (*circle one*): When Flashing 24/7

No of Sign Locations: _____

Location No. 1: _____

Location No.2 (*if applicable*): _____

Location No. 3 (*if applicable*): _____

Location No. 4 (*if applicable*): _____

Temporary work site speed limits were activated for this work zone as listed below:

Location No.	Date	Activation Time	
		Start	End

Location No.	Date	Activation Time	
		Start	End

Signed: _____ Date: _____

Title: _____

Original to be sent to District Traffic Office, with a copy to the project file

Relevant Indiana Codes

IC 9-21-4-7

Designation or determination of the location of, necessity for, and extent of traffic control devices; order of department of transportation; violation; trial; certification of order; permits

Sec. 7. (a) Whenever, under this article, the Indiana department of transportation designates or determines the location of, necessity for, and extent of:

- (1) traffic control devices;
- (2) state speed limits, other than maximum limits;
- (3) speed limits on elevated structures;
- (4) no passing zones;
- (5) one-way roadways;
- (6) certain lanes for slow moving traffic;
- (7) course of turning movements at intersections;
- (8) dangerous railroad crossings requiring stops;
- (9) through highways and stop intersections;
- (10) angle parking; or
- (11) restrictions on the use of highways for certain periods or for certain vehicles, including low speed vehicles;

the designation or determination shall be by order of the commissioner of the Indiana department of transportation and shall, except for subdivision (1), be evidenced by official signs or markings under this article.

The commissioner of the Indiana department of transportation may designate an order adopted under this subsection as an emergency rule and adopt the order in the same manner as emergency rules are adopted under IC 4-22-2-37.1.

(b) At a trial of a person charged with a violation of the restrictions imposed by subsection (a) and in all civil actions, oral evidence of the location and content of the signs or markings is prima facie evidence of the adoption and application of the restriction by the Indiana department of transportation and the validity of the adoption and application of the restriction. The Indiana department of transportation shall, upon request by a party in an action at law, furnish, under the seal of the Indiana department of transportation, a certification of the order establishing the restriction in question. A certification under this subsection shall be accepted by any court as conclusive proof of the designation or determination by the commissioner of the Indiana department of transportation. Certified copies shall be furnished without cost to the parties to a court action involving the restriction upon request.

(c) Whenever, under this article, a permit or permission of the Indiana department of transportation is required, the permit must be in writing and under the seal of the Indiana department of transportation.

IC 9-21-5-11

Temporary maximum speed limits; worksite speed limits; penalties

Sec. 11. (a) Subject to subsection (b), the Indiana department of transportation, the Indiana finance authority, or a local authority may establish temporary maximum speed limits in their respective jurisdictions and in the vicinity of a worksite without conducting an engineering study and investigation required under this article. The establishing authority shall post signs notifying the traveling public of the temporary maximum speed limits established under this section.

(b) Worksite speed limits set under this section must be at least ten (10) miles per hour below the maximum established speed limit.

(c) A worksite speed limit set under this section may be enforced only if:

(1) Workers are present in the immediate vicinity of the worksite; or

(2) If workers are not present in the immediate vicinity of the worksite, the establishing authority determines that the safety of the traveling public requires enforcement of the worksite speed limit.

(d) Notwithstanding IC 34-28-5-4(b), a judgment for the infraction of violating a speed limit set under this section must be entered as follows:

(1) If the person has not previously committed the infraction of violating a speed limit set under this section, a judgment of at least three hundred dollars (\$300).

(2) If the person has committed one (1) infraction of violating a speed limit set under this section in the previous three (3) years, a judgment of at least five hundred dollars (\$500).

(3) If the person has committed two (2) or more infractions of violating a speed limit set under this section in the previous three (3) years, a judgment of one thousand dollars (\$1,000).

(e) Notwithstanding IC 34-28-5-5(c), the funds collected as judgments for the infraction of violating a speed limit set under this section shall be transferred to the Indiana department of transportation to pay the costs of hiring off duty police officers to perform the duties described in IC 8-23-2-15(b).

MAM/GGP/DHB/REG/TGN