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CONSTRUCTION MEMORANDUM NO. 25-10

DESIGN MEMORANDUM NO. 07-25

TRAFFIC OPERATIONS MEMORANDUM NO. 01-25

MAINTENANCE MEMORANDUM

TO: Chief District Engineers
Design Engineers
Traffic Engineers
TEBMs for Project Delivery and Preservation
Section Engineers
Planning Engineers
Active Consultants

FROM: Matt Simpson, P.E., Director *MPS*
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DATE: December 31, 2025

SUBJECT: Update to KYTC Policy on the Selection and Use of Positive Protection Devices in Work Zones

The Kentucky Transportation Cabinet (KYTC) has revised its policy governing the selection and use of positive protection devices in work zones. This update aligns KYTC policy with the Federal Highway Administration's recent revisions to **23 CFR Part 630, Subpart K – Temporary Traffic Control Devices**, specifically **§630.1108, Work Zone Safety Management Measures and Strategies (a) Positive Protection Devices**.

This revision updates and supersedes **HD-206.3.4, “Positive Protection and Separation Devices,”** in the *Highway Design Guidance Manual* and is incorporated as an appendix to the *KYTC Policy and Procedures for the Safety and Mobility of Traffic Through Work Zones*.

The updated policy is effective for all projects included in the **June 2026 and future lettings**. The policy should also be applied to projects scheduled prior to the June 2026 letting, provided any required changes can be implemented without impacting the project schedule.

A key change includes a new requirement for the use of positive protection devices in work zones with **high anticipated operating speeds** where workers have **no means of escape** should an errant vehicle intrude into the workspace (e.g., tunnels, bridges, and similar constrained locations), unless an engineering study determines that positive protection is not warranted. When positive protection is not used in these situations, the decision along with any mitigation measures must be documented in an engineering study and included in the project file.

The policy further states that positive protection devices shall be considered in other situations where workers may be at increased risk from motorized traffic and where such devices provide the greatest potential safety benefit for both workers and road users. Guidance and a list of factors to be considered in this decision-making process are included in the policy.

Questions regarding the updated policy should be directed to the appropriate Division Director.

Attachments

KYTC Policy on Selection and Use of Positive Protection Devices in Work Zones

Policy on Selection and Use of Positive Protection Devices in Work Zones

Positive protection devices are defined as devices that contain and/or redirect vehicles. Separation devices, while used to provide space between traffic and workers, typically do not have redirecting capabilities. Regardless of type, both shall meet the crashworthiness evaluation criteria contained in AASHTO's *Manual for Assessing Safety Hardware (MASH)*, 2016.

Specification details and typical placement practices for available devices are found in the *Manual on Uniform Traffic Control Devices (MUTCD)*, Standard Drawings, Standard Specifications for Road and Bridge Construction, and AASHTO's *Roadside Design Guide*. Positive protection devices in highway work zones are intended to reduce worker exposure to vehicular traffic and to enhance road user safety.

Positive protection devices are required in work zones where the work zone speed limit is 45 mph or greater and workers have no available escape path should an errant vehicle intrude into the workspace (e.g., tunnels, bridges, or other constrained locations), unless an engineering study determines otherwise. An escape path is a clearly identifiable, unobstructed route that allows a worker in a temporary traffic control zone to rapidly move to a safe location. The escape path shall be clear and open, with no physical barriers or significant drop-offs that would prevent movement to safety; conditions such as guardrail, retaining walls, bridge abutments, or long, steep slopes eliminate an escape path. For nighttime operations, escape paths shall be illuminated.

An engineering study is defined as the analysis and evaluation of available pertinent information, combined with the application of accepted engineering principles, provisions, and practices, for the purpose of determining the appropriate choice and application of positive protection devices, exposure-control measures, or other traffic control strategies to safely manage the work zone. The engineering study shall be documented and placed in the project file.

Positive protection devices shall be considered in other situations where workers may be at increased risk from traffic, and where such devices offer the greatest potential safety benefit for workers and road users. Examples include:

- Long-duration work zones (two weeks or more at the same location) resulting in substantial worker exposure.
- Projects with a work zone speed limit of 45 mph or greater, especially when combined with high traffic volumes.
- Work operations close to active travel lanes.
- Roadside hazards, such as drop-offs or unfinished bridge decks, that remain in place overnight or longer.

Guidance from the *MUTCD*, AASHTO's *Roadside Design Guide*, and lessons learned from similar projects should be used to determine whether positive protection devices are warranted and what types are appropriate. When positive protection devices are not feasible, other exposure control measures shall be considered and documented by the project team in accordance with the Highway Design Manual Section HD-206.3.5, *Exposure Control Measures*.

Determination of strategies and devices shall be project specific. Measures and strategies are not mutually exclusive and should be considered in combination based on characteristics such as:

- Project scope and duration
- Work zone speed limit
- Anticipated traffic volume
- Vehicle mix
- Type of work (as related to worker exposure and crash risks)
- Distance between traffic and workers, and extent of worker exposure
- Availability of escape paths for workers
- Time of day (e.g., night work)
- Work area restrictions and impacts on worker exposure
- Consequences for workers and road users from roadway departure
- Potential hazards posed by the devices themselves during installation, presence, and removal
- Geometric features that may increase crash risks (e.g., limited sight distance, curves)
- Access needs to and from the workspace
- Roadway classification
- Impacts on project cost and duration.