



# MEMORANDUM

**TO:** District Engineers

**DATE:** January 31, 2011

**FROM:** Mark A. Marek, P.E.  
Director, Design Division

Russel W. Lenz, P.E.  
Director, Construction Division

**SUBJECT:** Tapered Edge Details for Hot Mix Pavements

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The FHWA "Every Day Counts" (EDC) initiative is designed to identify and deploy innovation aimed at shortening project delivery, enhancing the safety of our roadways, and protecting our environment. An important part of the EDC initiative to enhance safety is incorporating the use of a safety edge, or tapered edge, treatment on all pavements. The presence of a tapered edge will lessen the steering impact of a roadway departure. Once a vehicle leaves the paved surface, drivers may have difficulty returning to their lanes if they encounter a vertical edge drop-off, and installing a tapered edge offers a transition back to the roadway.

The attached standard plan sheet, TE (HMAC)-11, has been developed to implement this initiative and realize the corresponding safety benefits. The sub-grade width required for construction of the tapered edge will increase minimally as shown on the standard drawing. Preparation and finishing of front slopes adjacent to paving operations is also important. Removal of vegetation and reshaping the affected area must be addressed elsewhere in the plans. Please share this information with appropriate members of your staff and begin incorporating this standard in all future projects where applicable.

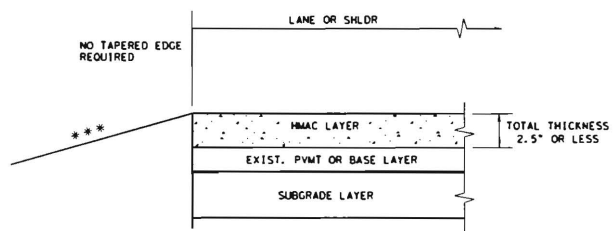
A standard sheet for use with concrete pavements is being developed and will be distributed at a later date.

Please contact either Rory Meza, P.E. in the Design Division at 512/416-2678, or Ken Barnett at 512/416-2456 in the construction Division if you have any questions.

Cc: David B. Casteel, P.E., Administration  
John A. Barton, P.E., Administration  
Toribio Garza Jr., P.E., Director, Maintenance Division  
Carol T. Rawson, P.E., Director, Traffic Operations Division  
Rory Meza, P.E., Design Division  
Ken L. Barnett, P.E., Construction Division

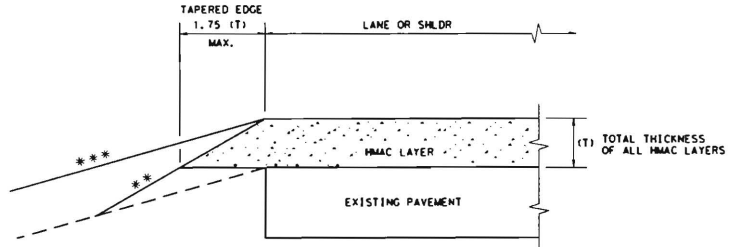
DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

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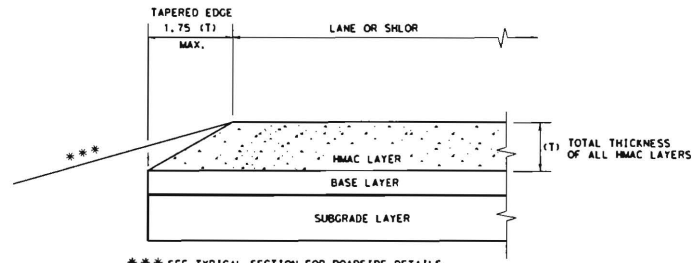
\*\*\* SEE TYPICAL SECTION FOR ROADSIDE DETAILS

**CONDITION - 1**  
THIN HMAC SURFACES OR HMAC OVERLAY  
WITH THICKNESS OF 2.5" OR LESS



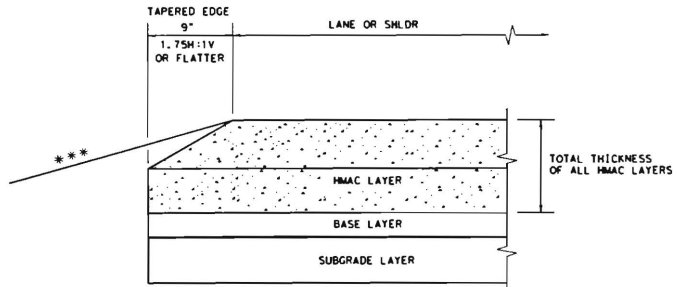
\*\* EXISTING FLEX BASE OR OTHER APPROVED MATERIAL TO BE GRADED TO PRODUCE A SMOOTH LEVEL SURFACE FOR PLACEMENT OF TAPERED EDGE. THIS WORK IS SUBSIDIARY TO THE VARIOUS BID ITEMS.  
\*\*\* SEE TYPICAL SECTION FOR ROADSIDE DETAILS

**CONDITION - 2**  
OVERLAY OF EXISTING PAVEMENT  
HMAC THICKNESS 2.5" TO 5"



\*\*\* SEE TYPICAL SECTION FOR ROADSIDE DETAILS

**CONDITION - 3**  
NEW OR RECONSTRUCTED PAVEMENT  
HMAC THICKNESS 2.5" TO 5"



\*\*\* SEE TYPICAL SECTION FOR ROADSIDE DETAILS

**CONDITION - 4**  
NEW OR RECONSTRUCTED PAVEMENT  
HMAC THICKNESS 5" OR GREATER

**GENERAL NOTES**

- UNLESS OTHERWISE SHOWN IN THE PLANS, A VERTICAL EDGE IS PERMISSIBLE FOR HMAC PLACED GREATER THAN 5" BELOW THE EDGE OF PAVEMENT AND FOR THICKNESS OF HMAC LESS THAN 2.5".
- FOR FURTHER INFORMATION REGARDING THE ROADSIDE AND PAVEMENT DETAILS, SEE TYPICAL SECTIONS.
- PAYMENT FOR TAPERED EDGE WILL BE IN ACCORDANCE WITH APPLICABLE ITEMS IN THE CONTRACT.
- THE SLOPE OF THE TAPERED EDGE SHALL BE 1.75H:1V OR FLATTER.
- THE TAPERED EDGE SHALL BE PRODUCED BY USE OF A SCREEN ATTACHMENT CAPABLE OF PRODUCING AN APPROVED SMOOTH COMPACTED SURFACE. ADDITIONAL COMPACTING EFFORT BEHIND THE SCREEN IS NOT REQUIRED.

(NOT TO SCALE)



**TAPERED EDGE DETAILS  
HMAC PAVEMENT**

**TE (HMAC) - 11**

FILE:	TEHMAC11.dgn	DN:	TxDOT	CHK:	RL	DN:	KB	CHK:	
©:	TxDOT	DATE:	JANUARY 2011	CONT:	SECT	JOB:		HIGHWAY:	
REVISIONS									
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