

ENROLLED ORDINANCE 180-13

MODIFY SPEED ZONE ON CTH O FROM THE CENTERLINE OF CTH L TO 3520 FEET
NORTH OF THE CENTERLINE OF CTH HH

WHEREAS, Wisconsin Statutes §349.11 permits local authorities to modify speed restrictions within statutory guidelines; and

WHEREAS, in response to public inquiries, the Waukesha County Department of Public Works finds it appropriate, pursuant to Wisconsin Statutes §346.57(4)(h) and §349.11(1)(a) and (3)(c), to modify the speed limit to 45 mph in both directions of County Trunk Highway O from 900 feet north of the centerline of CTH L north to 3520 feet north of the centerline of CTH HH.


WHEREAS, in response to public inquiries, the Waukesha County Department of Public Works finds it appropriate, pursuant to Wisconsin Statutes §346.57(4)(h) and §349.11(1)(a) and (3)(c), to modify the speed limit to 35 mph in both directions of County Trunk Highway O from the centerline of CTH L to 900 Feet north of the centerline of CTH L.


THE COUNTY BOARD OF SUPERVISORS OF THE COUNTY OF WAUKESHA ORDAINS that the speed zone along both directions of County Trunk Highway O in the City of New Berlin and City of Muskego is modified to forty-five (45) miles per hour from 900 feet north of the centerline of CTH L north to 3520 feet north of the centerline of CTH HH and modified to be thirty-five (35) miles per hour from the centerline of CTH L to 900 Feet north of the centerline of CTH L.

BE IT FURTHER ORDAINED that this ordinance rescinds all previous speed restrictions for the above-described portion of the County trunk Highway System.

MODIFY SPEED ZONE ON CTH O FROM THE CENTERLINE OF CTH L TO 3520 FEET
NORTH OF THE CENTERLINE OF CTH HH

Presented by:
Public Works Committee


Keith Hammitt, Chair


James Batzko


Robert L. Kolb


Chris Mommaerts



Thomas J. Schellinger


Steve Styza


Terry Thjeme

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, was presented to the County Executive on:

Date: 06-27-2025


Margaret Wartman, County Clerk

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, is hereby:

Approved: X

Vetoed: _____

Date: 6/30/25


Paul Farrow, County Executive

Waukesha County DPW

Memorandum

To: Waukesha County Board
From: Waukesha County DPW

MODIFY SPEED ZONE ON CTH O FROM THE CENTERLINE OF CTH L TO 3520 FEET NORTH OF THE CENTERLINE OF CTH HH

The evaluation of the CTH O speed zone was initiated following safety concerns raised by the Muskego Police Department regarding the intersection of CTH O and CTH L. An engineering study determined the need for modifications to the speed zone on CTH O, extending from the centerline of CTH L to 3,520 feet north of the centerline of CTH HH. Two speed zone adjustments are proposed: a 35 MPH limit from the centerline of CTH L to 900 feet north, and a 45 MPH limit from 900 feet north of the centerline of CTH L to 3,520 feet north of the centerline of CTH HH. Since no prior ordinance existed for this location, the limits established in this document will serve as the official reference moving forward.

CTH O (Moorland Rd) falls in an outlying district per statute §346.57(1)(ar). Statute §346.57(4)(f) states fixed limits of 35 MPH for outlying district roads. Statute §349.11(1)(a) states local government has the authority to raise speed limits to 55 MPH or less or lower speed limits by 10 MPH or less.

The current speed limit on this roadway segment is 50 MPH. It is classified as a UA3 facility with a design Average Daily Traffic (ADT) volume ranging from 17,000 to 39,000 vehicles. The existing cross section includes 12-foot travel lanes and a 2-foot curb offset. Driving at this proximity to a vertical curb is dangerous at the 50 MPH posted speed, as it significantly reduces the lateral recovery space available to drivers. Providing additional offset serves as a preventative safety measure to reduce the risk of sideswipe collisions or curb impacts resulting from minor steering corrections or evasive maneuvers.

According to FDM Chapter 11-20, Attachment 1.5, the minimum required curb offset for a roadway of this classification is 4 feet. However, for roadways with a posted speed limit of 45 MPH, the minimum curb offset requirement is reduced to 1 foot. Therefore, the current 2-foot curb offset does not meet the minimum requirement for a 50 MPH speed limit, it would comply with design standards if the posted speed were reduced to 45 MPH.

515 W MOORLAND BLVD
WAUKESHA, WI 53188

In a 2025 speed study of the proposed 45 MPH zone (900 feet north of centerline of CTH L to 3,520 feet north of the centerline of CTH HH), three locations were evaluated. The average motorist speed was recorded at 44.5 MPH, with an 85th percentile speed of 50.4 MPH. This places the posted speed within 5 MPH of the proposed 45 MPH limit, aligning with the Traffic Engineering Operations and Safety Manual (TEOpS) Chapter 13-5-7, which recommends speed limits be within 5 MPH of the free-flow speed.

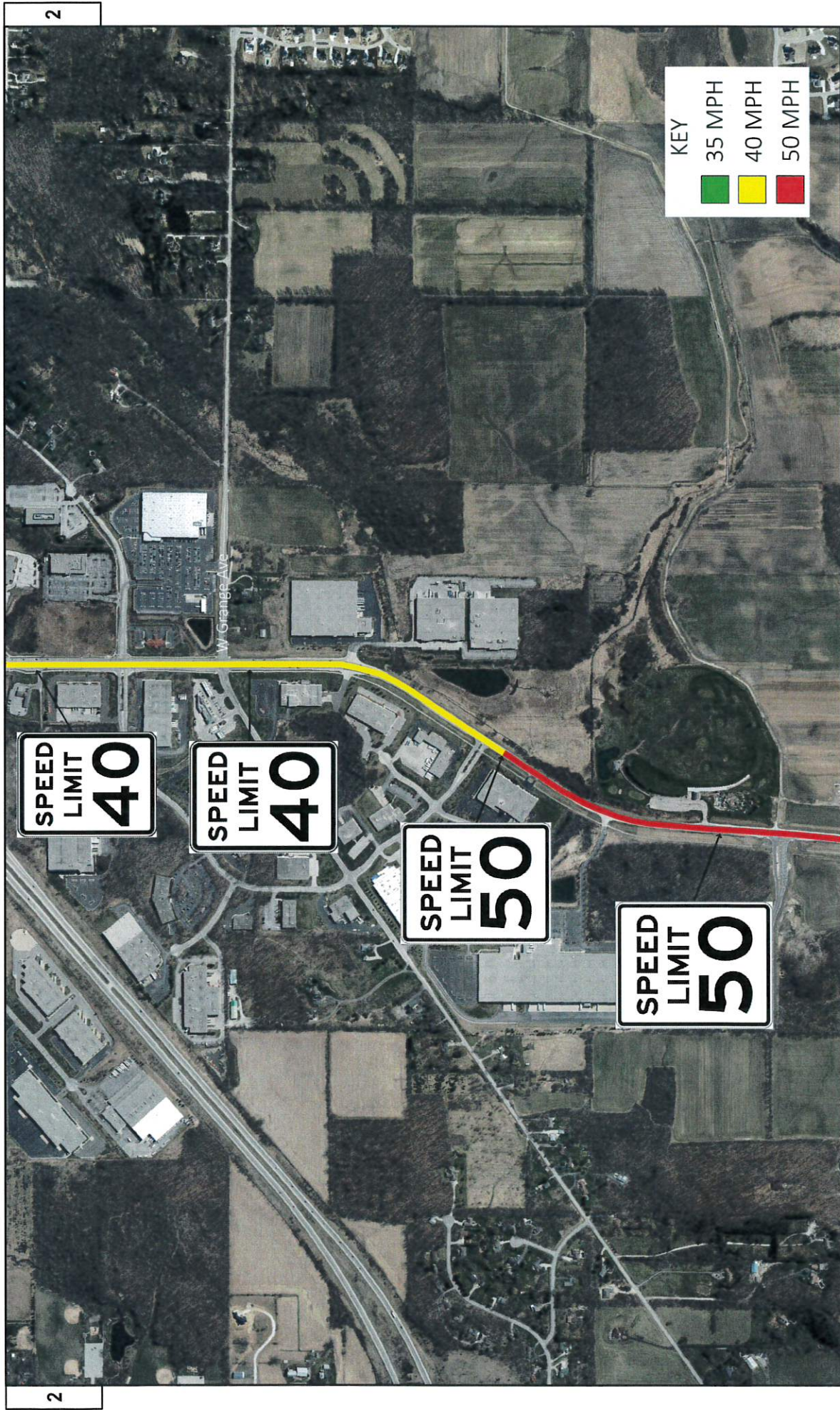
Waukesha County DPW is planning a road expansion on CTH O from CTH HH to Grange Avenue with anticipated construction in 2029. This project will have a similar cross section and hence will lower the posted speed of the roadway to 45 MPH posted speed for the reasons stated above. Lowering the speed limit to 45 MPH will help eliminate the need for acquiring additional right-of-way for a wider offset and will result in cost savings. This change will also provide a smoother and more consistent speed transition after project completion.

The proposed 35 MPH speed zone on CTH O extends from the centerline of CTH L to 900 feet north. Currently, this segment is posted at 50 MPH leading into the CTH O and CTH L intersection, before dropping to 35 MPH on the south leg, which is a local road. A five-year crash analysis revealed 47 crashes at this intersection resulting in a high crash rate of 1.3 crashes per million vehicles entering the intersection, warranting the need for improvements or countermeasures. Introducing a transitional 35 MPH speed zone approaching the intersection is a suitable countermeasure that may help reduce both the frequency and severity of crashes.

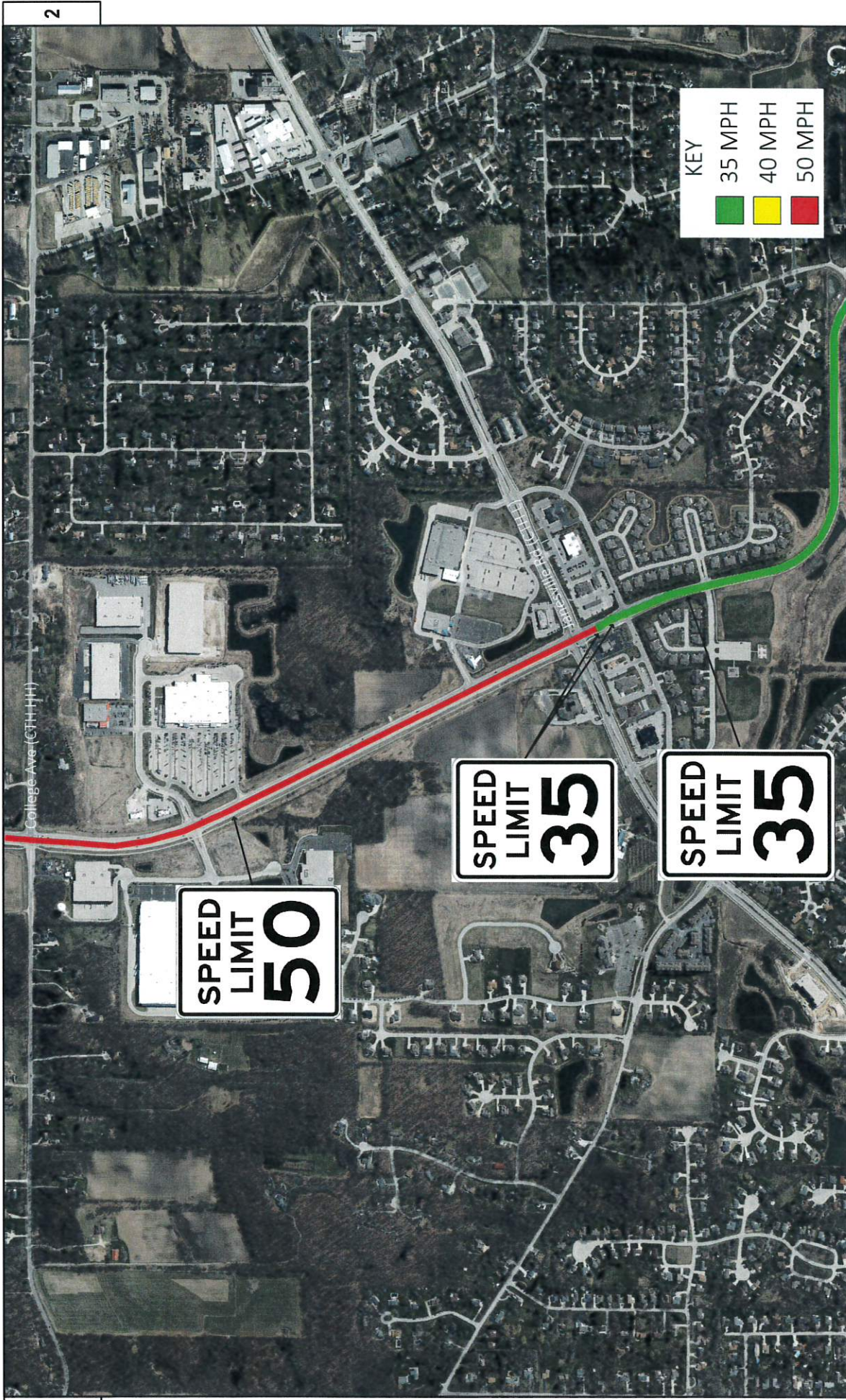
A 2024 speed study of the proposed 35 MPH zone recorded an average speed of 40.7 MPH and an 85th percentile speed of 45.8 MPH. Under normal circumstances, the 35 MPH speed limit would not be recommended according to TEOpS Chapter 13-5-7 because it is not within 5 MPH of the 85th percentile speed. However, as mentioned above, due to the high crash rate at the intersection, a proper countermeasure is needed, such as introducing a 35 MPH transitional speed zone ahead of the intersection. Since the 85th percentile speed exceeds the proposed limit, additional enforcement will be required. Implementing a 40 MPH zone is not feasible, as it does not meet the minimum speed zone length requirement specified in TEOpS Chapter 13-5-8.

In summary, a speed limit reduction is recommended for CTH O based on engineering analysis, roadway design standards, and safety considerations. From the centerline of CTH L to 900 feet north, the speed limit should be reduced from 50 MPH to 35 MPH due to a high crash rate near the intersection of CTH O and CTH L. From 900 feet north of the centerline of CTH L to 3,520 feet north of the centerline of CTH HH, the speed limit should be reduced from 50 MPH to 45 MPH. This change is necessary to meet the minimum curb offset requirements set by the FDM and to align with TEOpS standards for posted speed limits. Reducing the posted speed to 45 MPH on this segment will also provide a safer transition into the proposed 35 MPH speed zone.

CTH O Existing Speed Zones

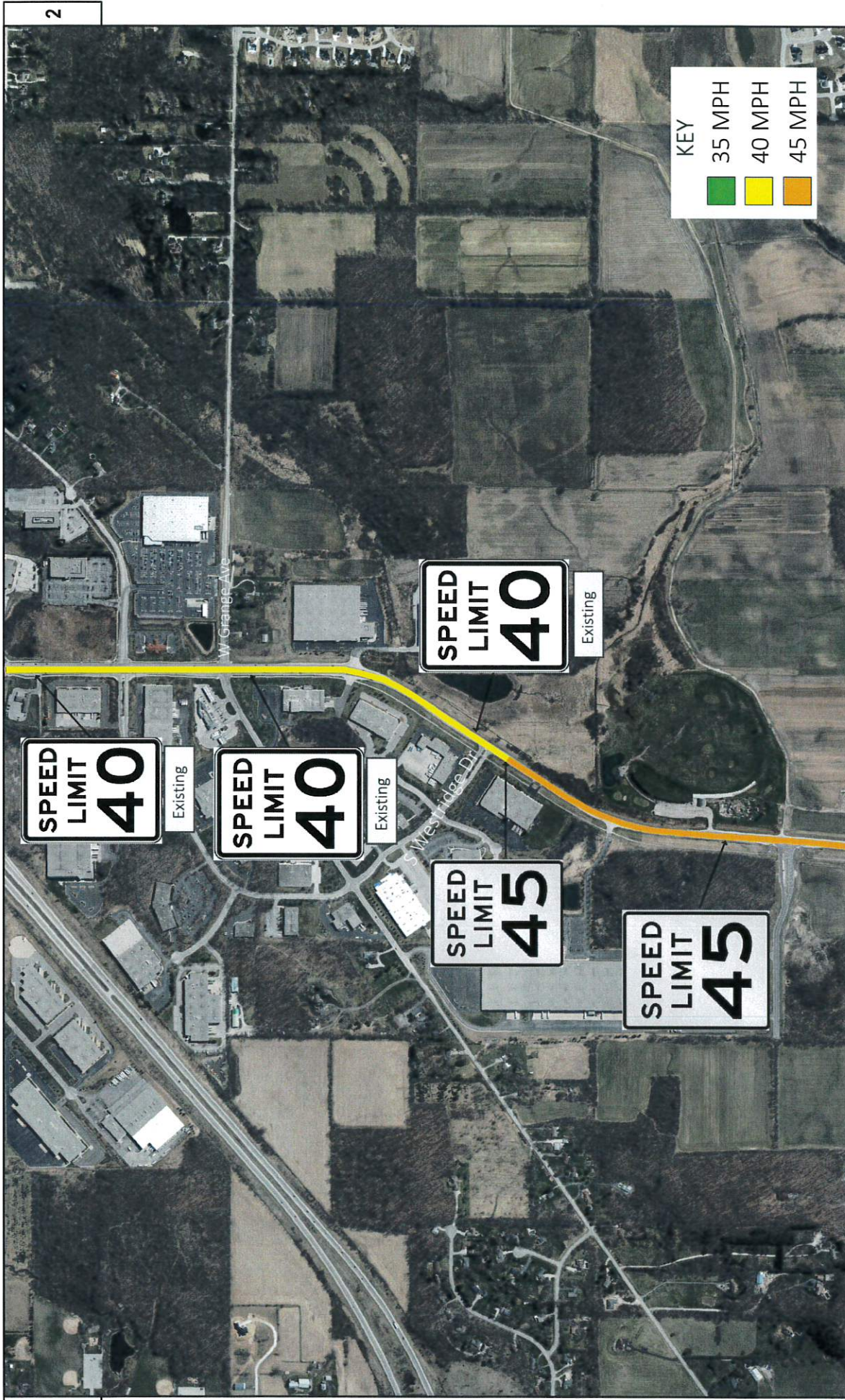


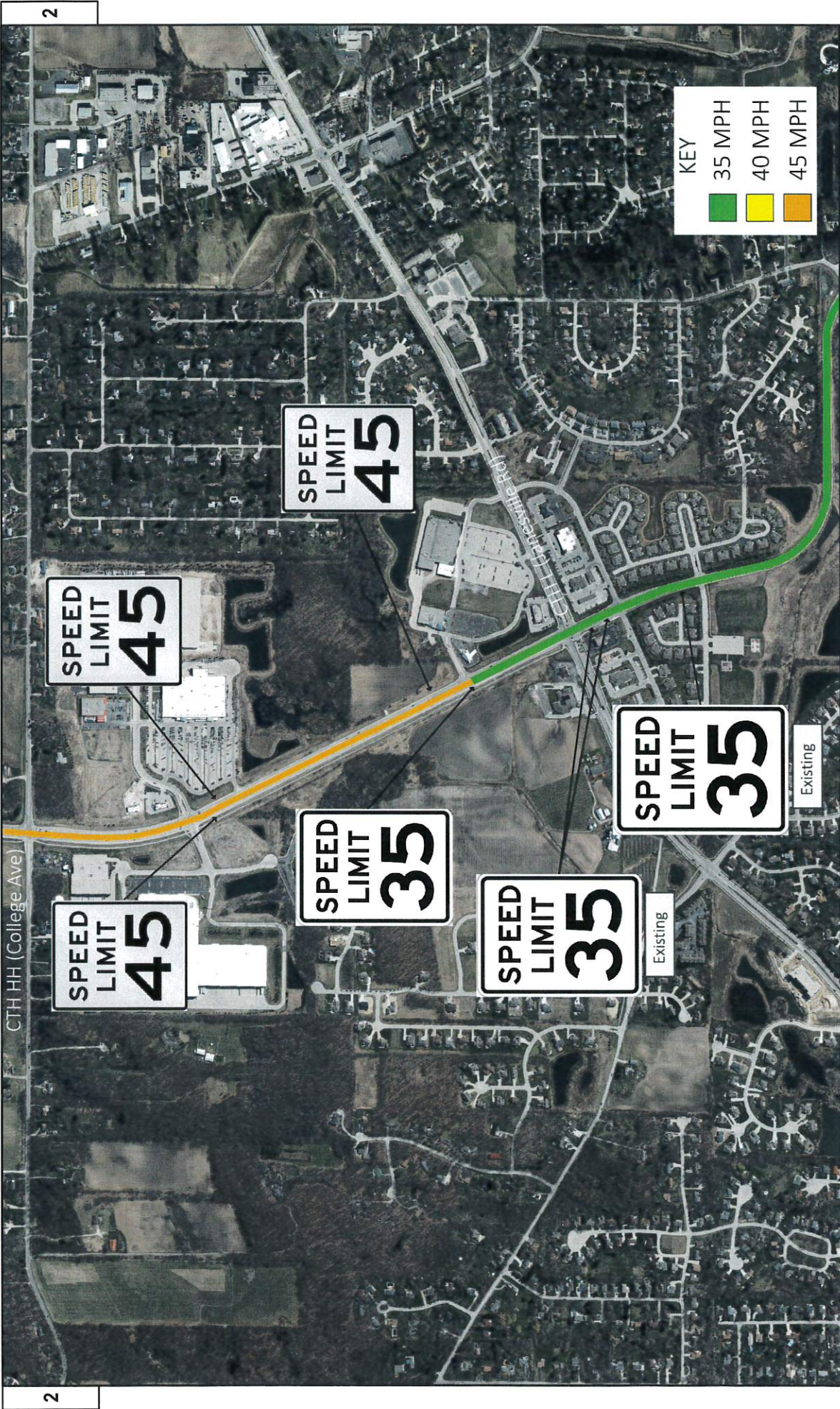
PROJECT NO: T2024-17	HWY: CTH O	COUNTY: Waukesha	Part 1	SHEET	E
FILE NAME: N:\POWERENGINEERING\TRAFFIC\3 - SPEED LIMITS & PARKING REGULATION\SPEED LIMIT CORRESPONDENCE\CTH O - CTH O INCH O SPEED SIGNAGE EXISTING.DWG	PLAT DATE: 2/14/2025 3:38 PM	PLAT BY: ETHAN JACOB	PLAT NAME:	PLAT SCALE: 1 IN=100 FT	WSDOT/CADDS SHEET 42
LAYOUT NAME: Part 1 IN 100 FT	Referred on: 06/02/25	File Number: 180-O-013	Referred to: PW	4	



PROJECT NO: T2024-17
FILE NAME: I:\P\W\B\GREEN\TRAFFIC\13 - SPEED LIMITS & PARKING REGULATION\UNIT CORRESPONDENCE\CTH 0 - CTH 111\CTH 0 SPEED SIGNS\EXISTING.DWG
COUNTY: Waukesha
HWY: CTH 0
PLOT DATE: 2/14/2025 3:59 PM
PLOT BY: ETHAN ANDER
PLOT NAME:
PLOT SCALE: 1 IN 100 FT
SHEET
E
Referred to: PW
5
Referred on: 06/02/25
File Number: 180-O-013

CTH O Proposed Speed Zones





Design Class ¹		Lane Widths By Posted Speed ²		No. of Lanes	Design ADT	Median Width ³	Shoulder (Curb Offset) Width Based on Posted Speed ⁴					Recommended Clear Zone or Lateral Clearance Based on Posted Speed Limit				
							45 mph (By Level of Development)					45 mph (By Level of Development)				
Collectors & Locals											45 mph (By Level of Development)				50-55 mph	Use rural clear zone. See FDM 11-15 Attachment 1.9 .
UCL1	0-400	2	11-12 (10)	11-12 (10)	2 (1.8)	2 (1.8)	2 (1)	2	5	Provide Rural Clear Zone. See FDM 11-15 Attachment Att. 1.9	Provide Rural Clear Zone until development occurs. See FDM 11-15 Attachment 1.9 & FDM 11-20-1	Provide lateral clearance per FDM 11-20 Table 1.5 .	Developed			
UCL2	400-1500	2	11-12	11-12	6 (5)	6 (1.8)	4-6 (1-1.8)	6	5-6	Consult with Local Unit of Government or	Coordinate sidewalk and terrace with the local unit of government or maintaining authority.	If sidewalk is not present, discuss construction of sidewalk and terrace with the local unit of government or maintaining authority.				
UCL3	1500-2000	2	11-12	12	6	6 (1.8)	4-6 (1-1.8)	6	5-6							
UCL4	2000-3500	2	12	12	6	6 (1.8)	4-6 (1-1.8)	6	5-6							
UCL5	3500-20,000	2	12	12	8	8 (1.8)	4-8 (1-1.8)	8	5-8							
	20,000-42,000	4	12	12	6L (4L) 10R	6L (1.8L) 10R (1.8L)	1.8-6L 4-10R	6L 10R	10	Maintaining Authority as to need for future sidewalk and terraces.						
Arterials																
UA1	Under 3500	2	12	12	6	6 (1.8)	4-6 (1-1.8)	6	5-6							
UA2	3500-17,000 ^A 3500-19,000 ^B	2	12	12	10 (8)	10 (1.8)	4-10 (1-1.8)	10 (8)	10							
UA3	17,000-39,000 ^A 19,000-42,000 ^B	4	12	12	6L (4L) 10R	6L (1.8L) 10R (1.8R)	1.8-6L (1L) 4-10R (1-1.8R)	6L (4L) 10R	10							
		6	12	12	10L and 10R	10L and 10R (1.8L & 1.8R)	1.8-10L 4-10R (1-1.8R)	10L & 10R	10							
See FDM 11-35-1.2.3 for bridge width criteria for urban roadways.																
Lateral Clearance is important to provide on all roadways																

Upper values are shown in **bold** and Lower values are shown in parentheses.
See page 2 of this attachment for superscript notes.

VOTE RESULTS

Consent Agenda

22 YES 0 NO 0 ABSTAIN 3 ABSENT

Passed With 16 Yes Votes Needed

D1 - Styza	AYE	D10 - Thieme	AYE	D19 - Enriquez	AYE
D2 - Euclide	AYE	D11 - Howard	AYE	D20 - Schellinger	AYE
D3 - Vacant	ABSENT	D12 - Wolff	AYE	D21 - Gaughan	AYE
D4 - Batzko	AYE	D13 - Leisemann	ABSENT	D22 - Szpara	AYE
D5 - Dondlinger	AYE	D14 - Mommaerts	AYE	D23 - Hammitt	M AYE
D6 - Walz	AYE	D15 - Kolb	AYE	D24 - Schroeder	AYE
D7 - LaFontain	AYE	D16 - Crowley	AYE	D25 - Johnson	S AYE
D8 - Koremenos	ABSENT	D17 - Meier	AYE		
D9 - Heinrich	AYE	D18 - Nelson	AYE		

3rd Meeting, 180th Year of the County Board of Supervisors - June 24 2025 07:09:28 PM
June 24, 2025

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2 NORTH OF THE CENTERLINE OF CTH HH
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