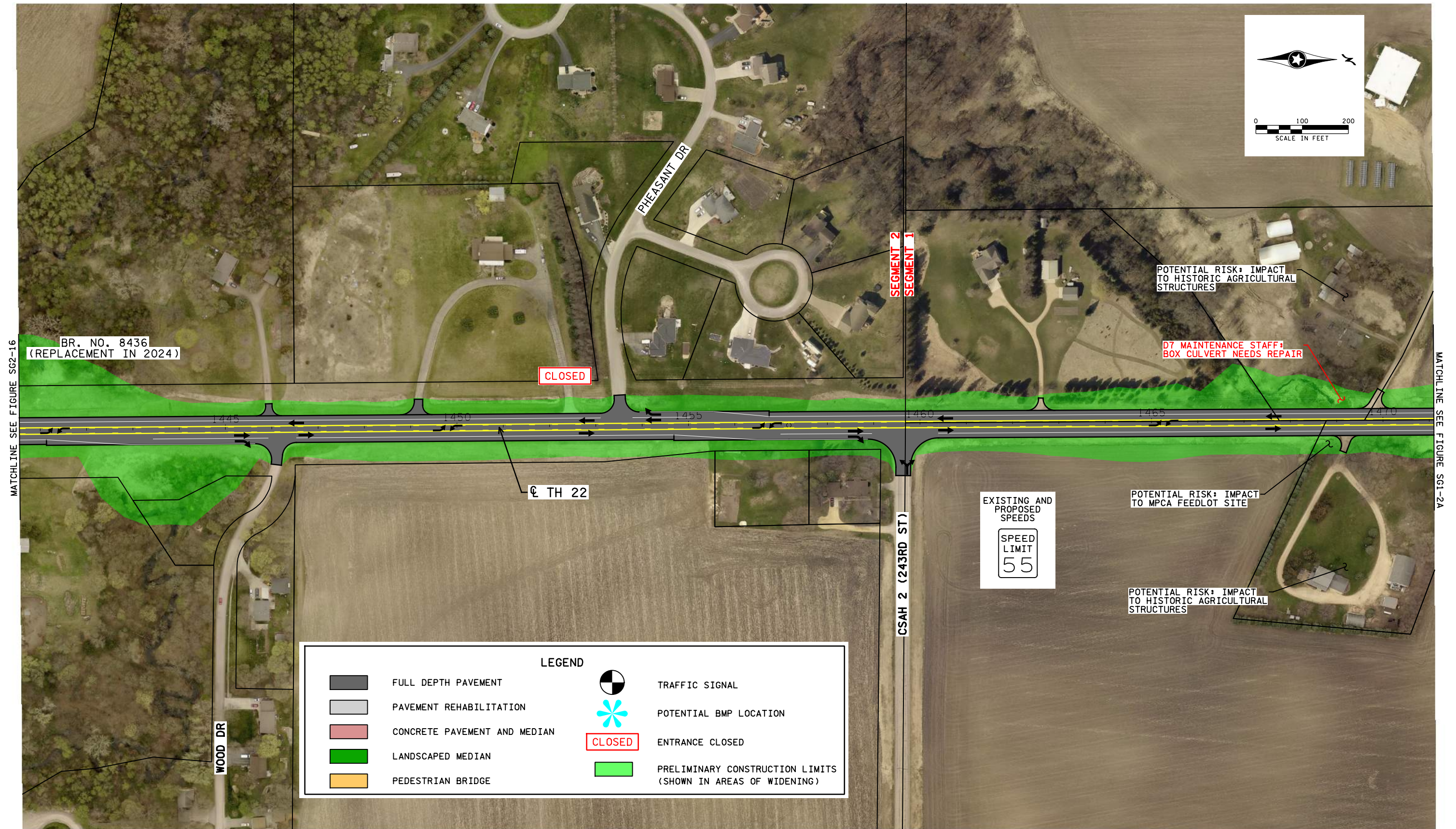
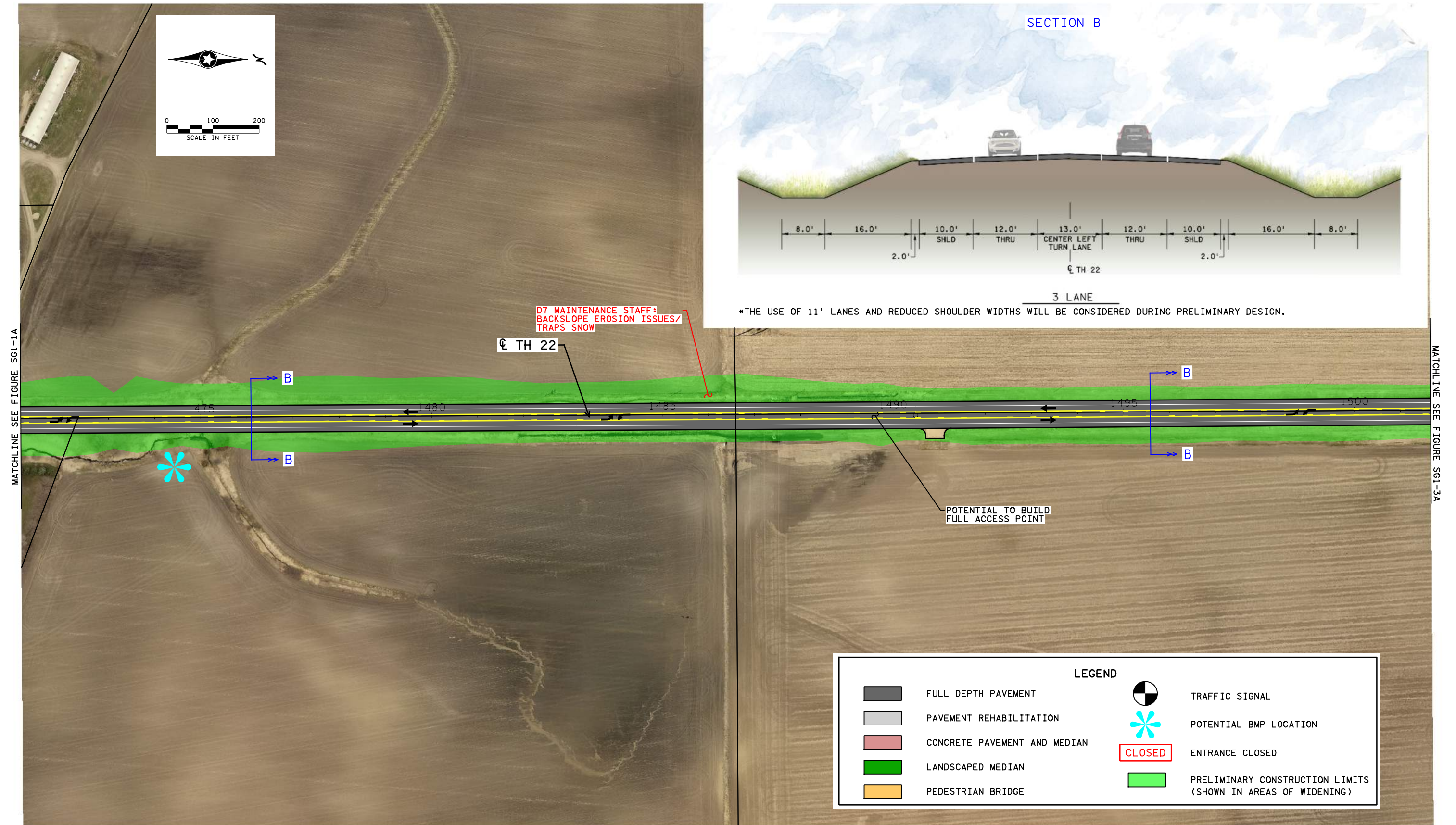
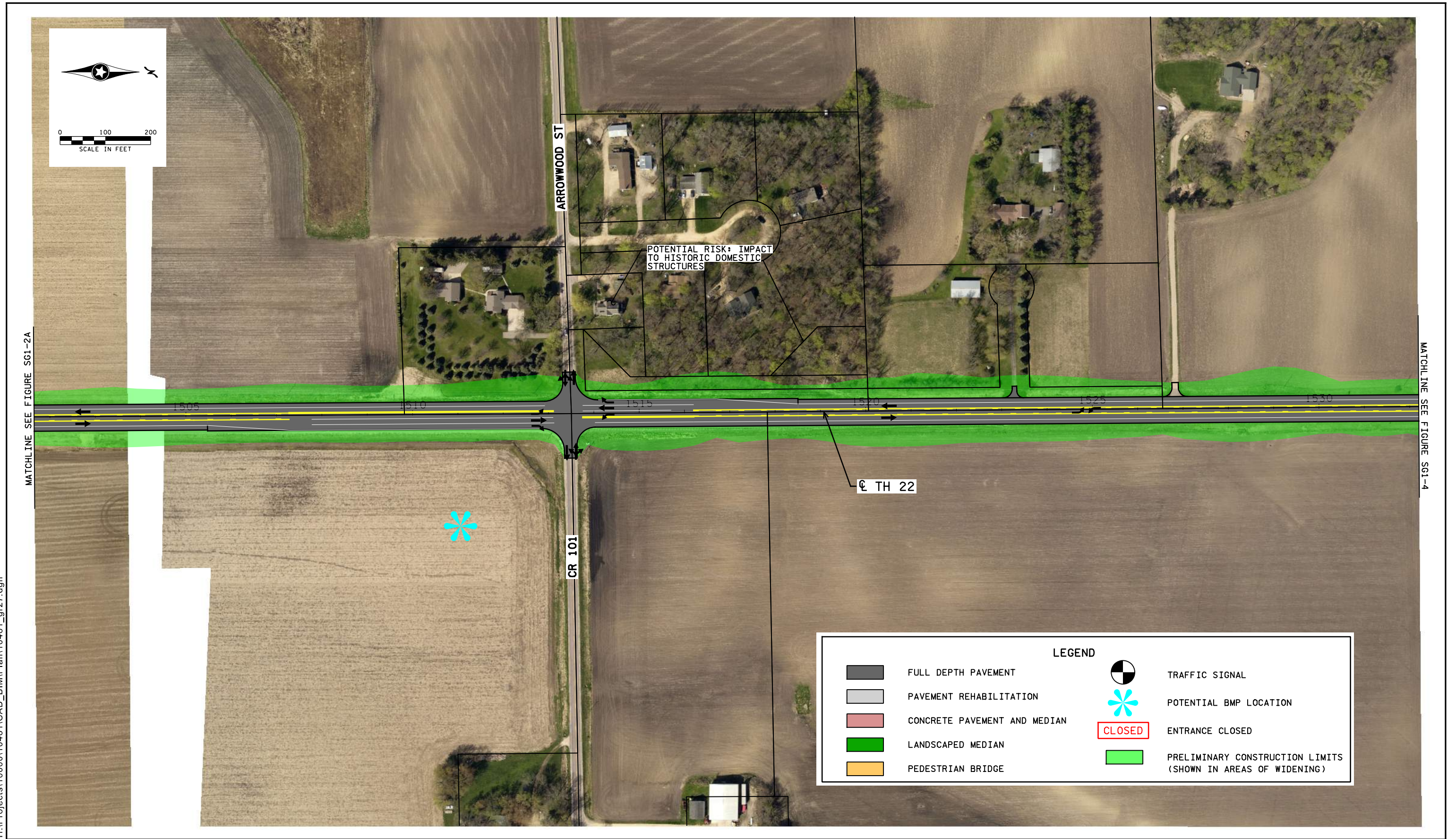


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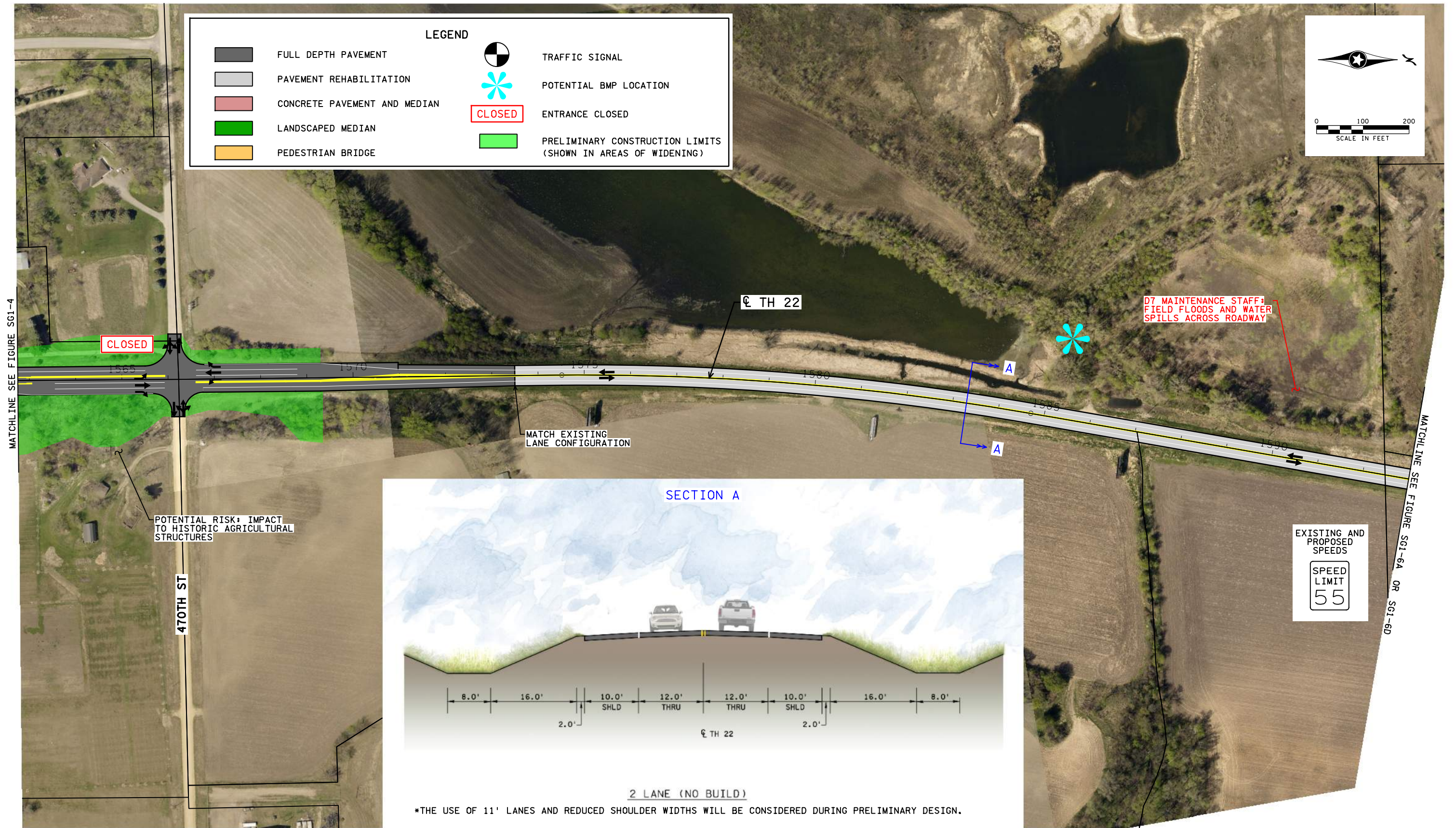




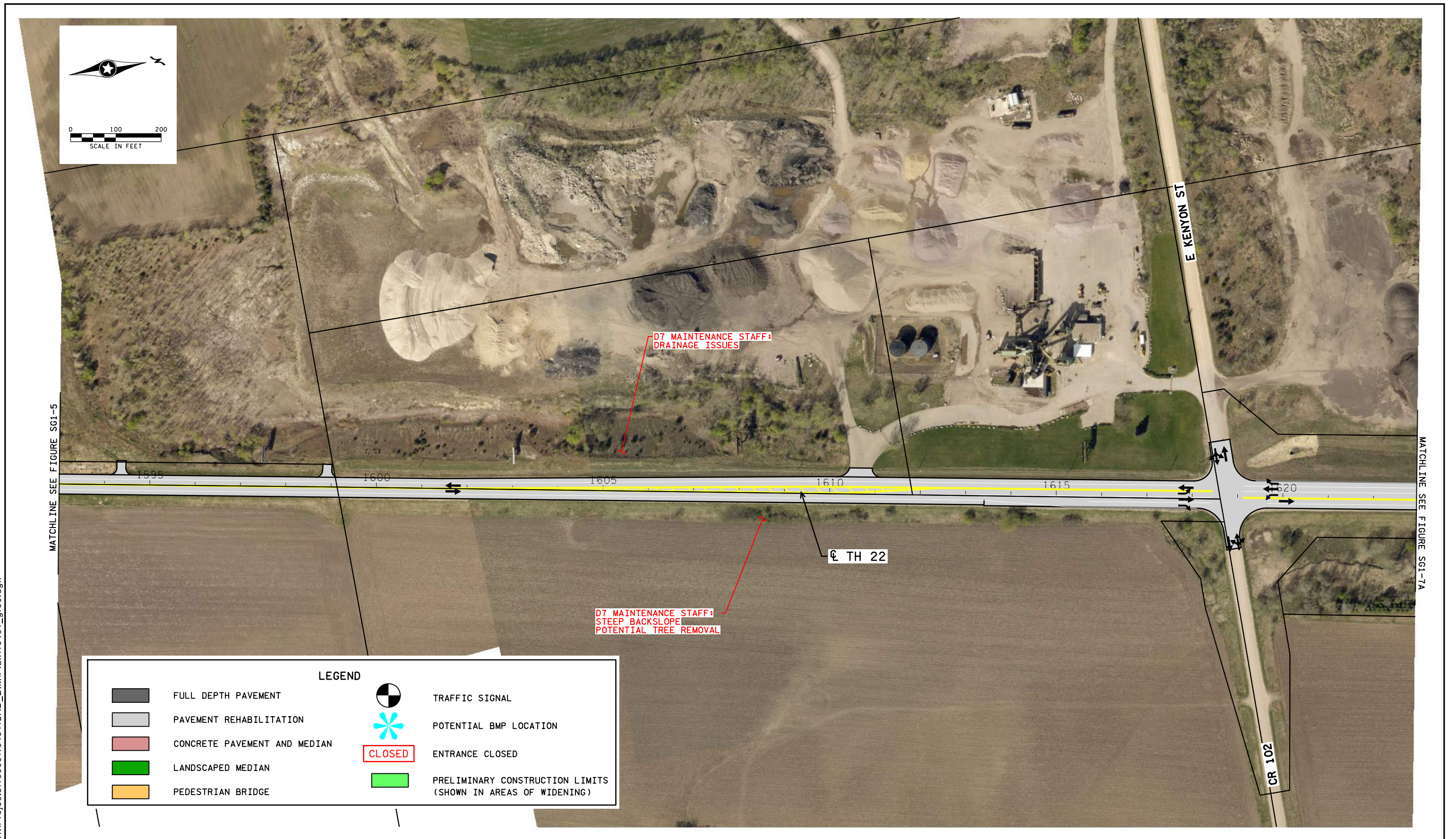
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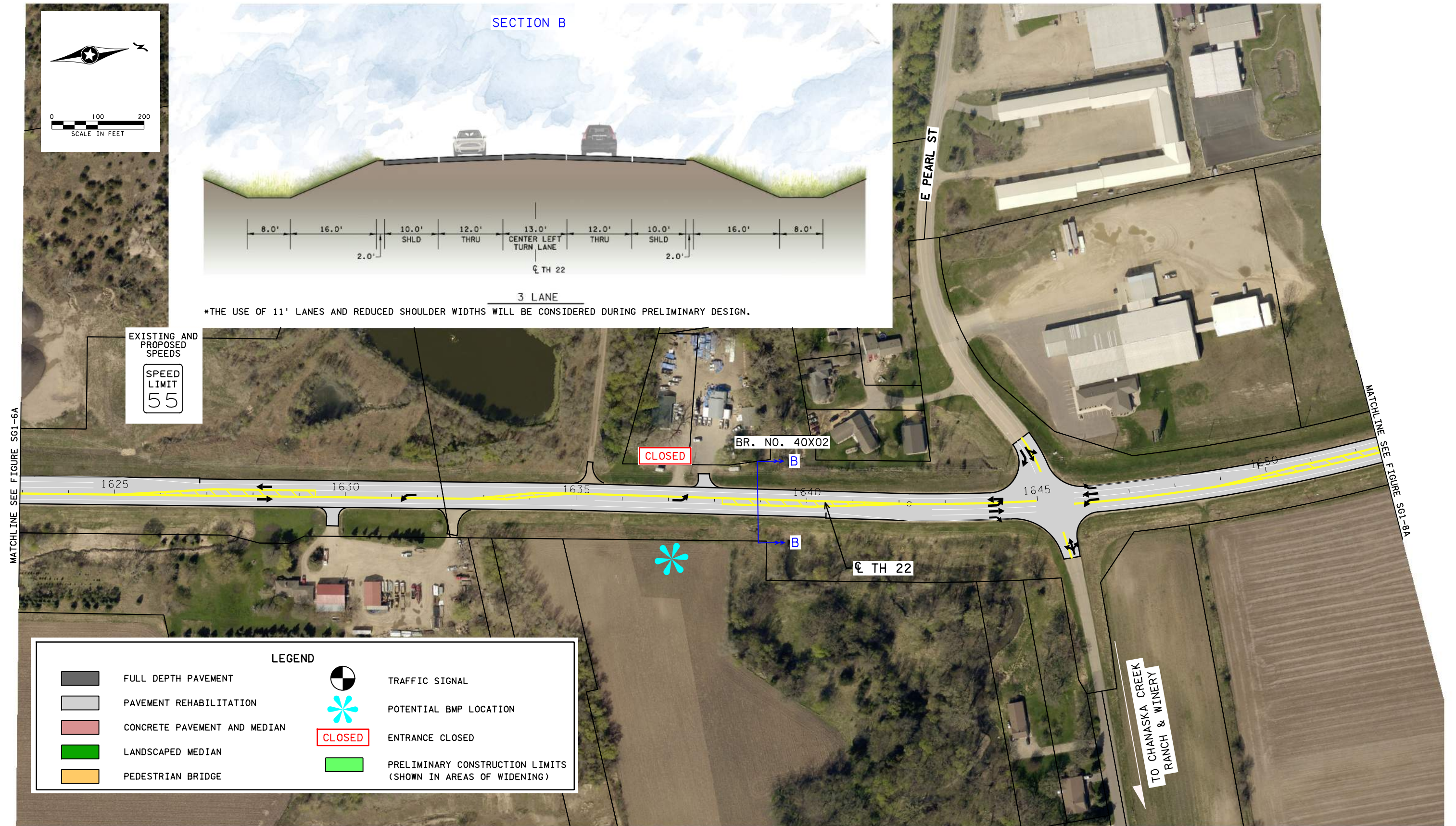
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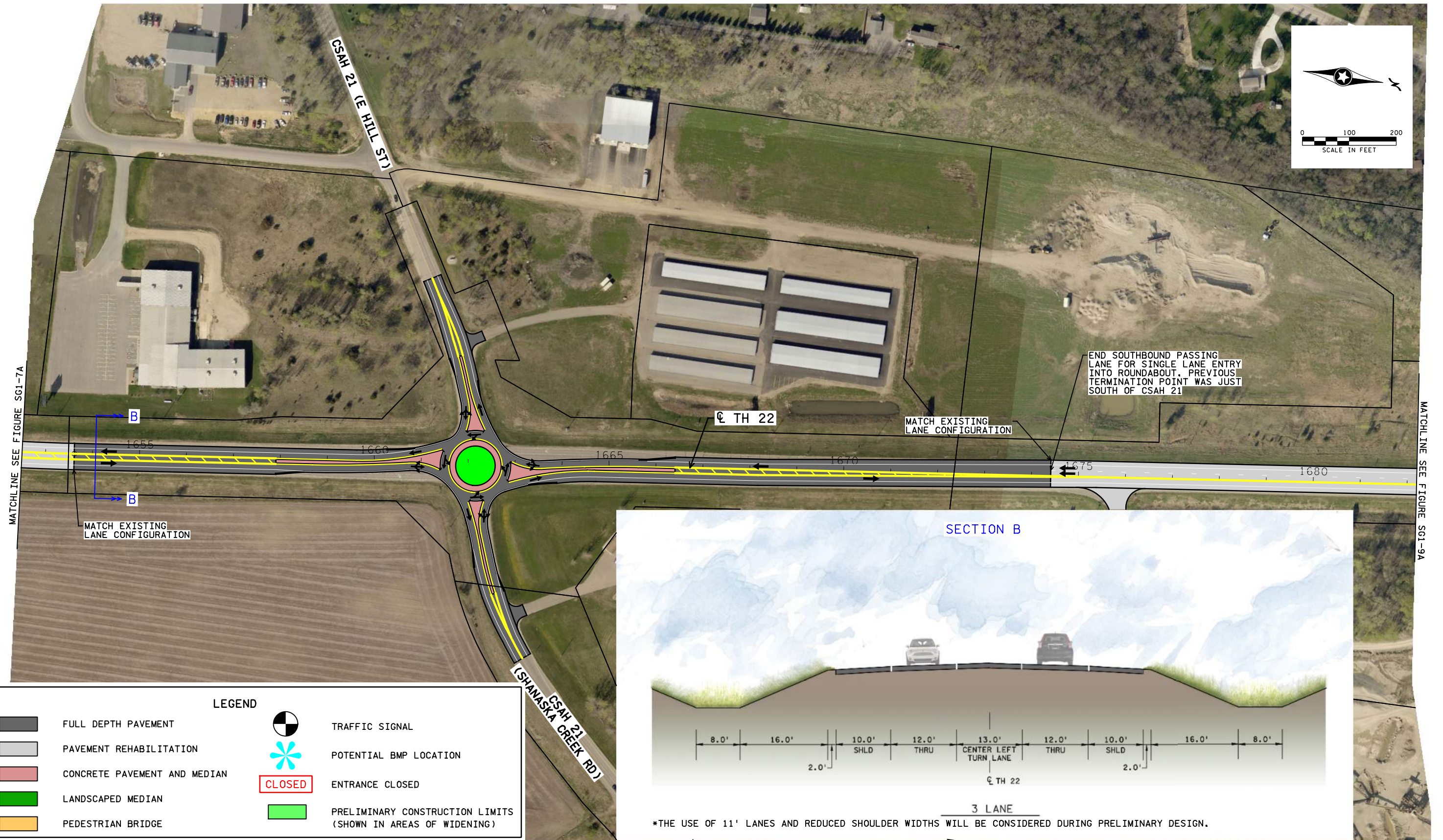
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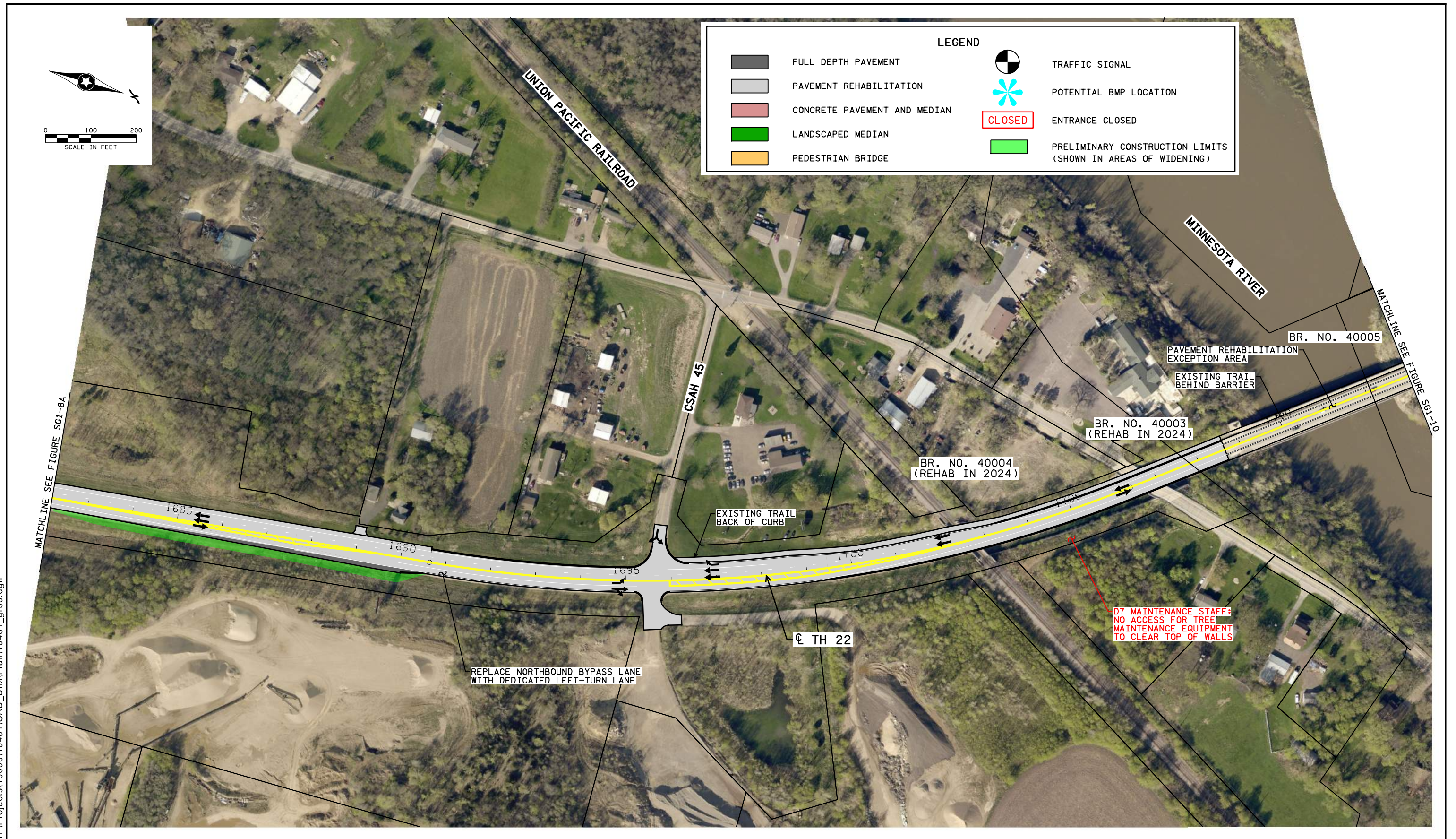
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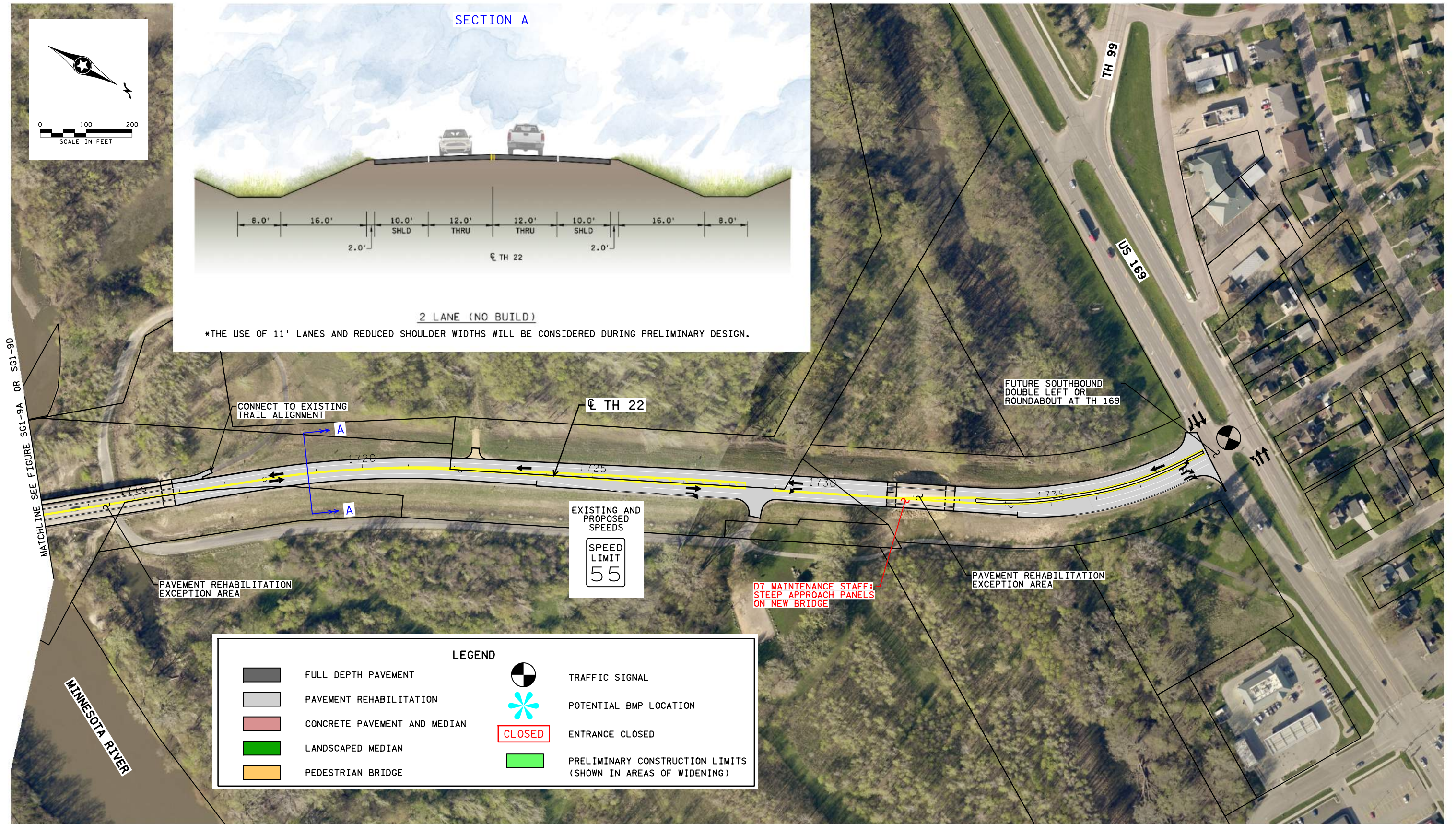
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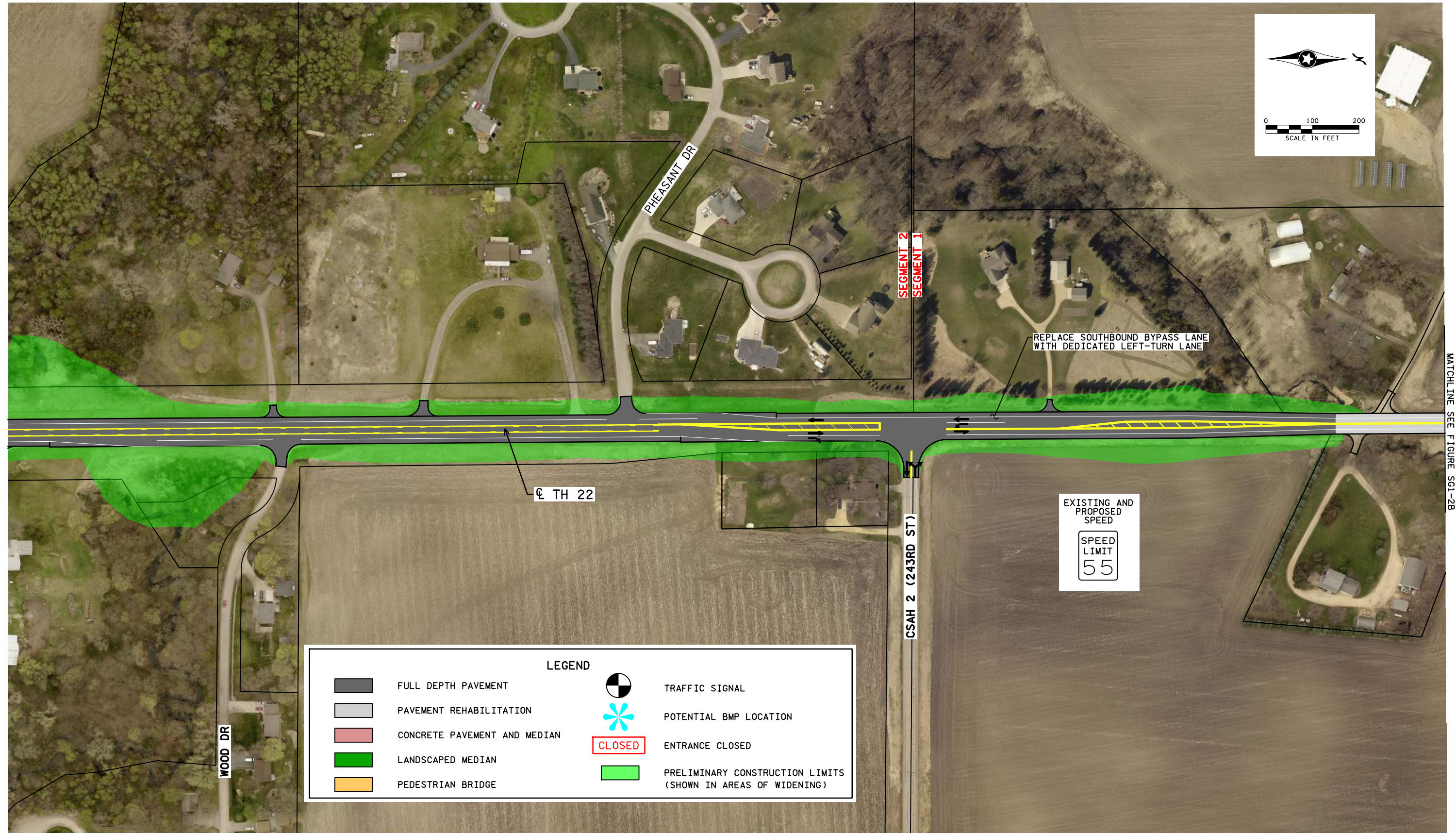
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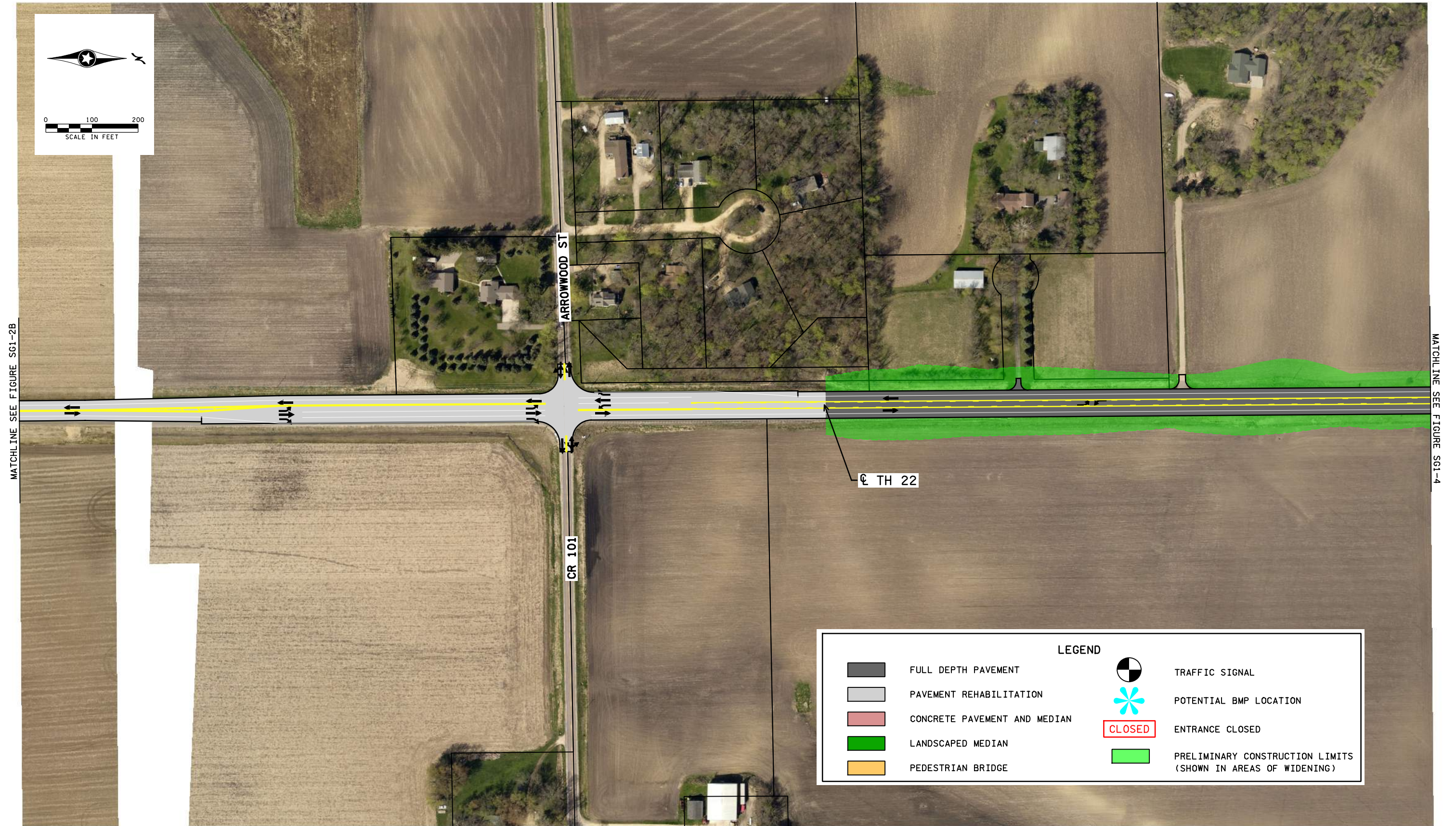
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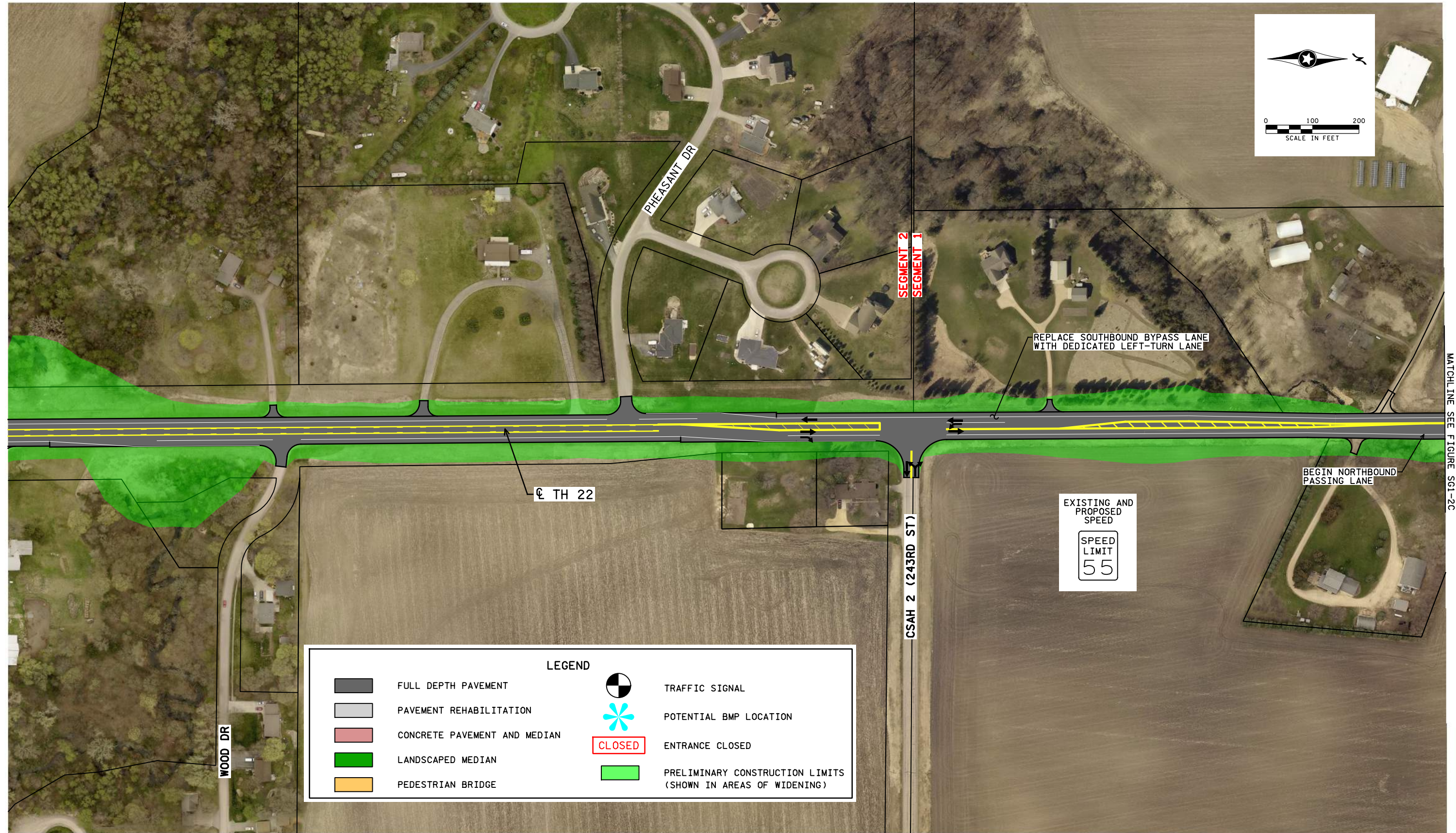
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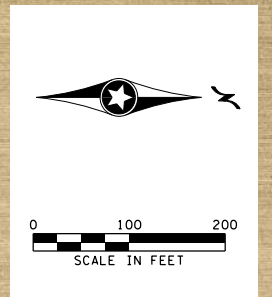
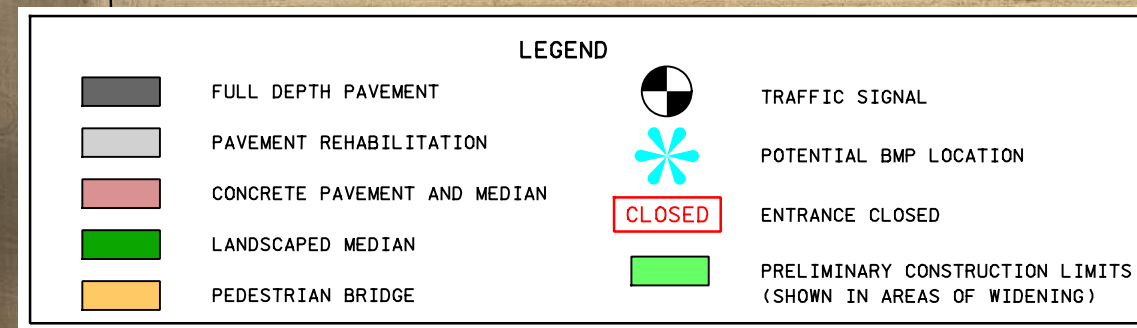
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MATCHLINE SEE FIGURE SG1-3C



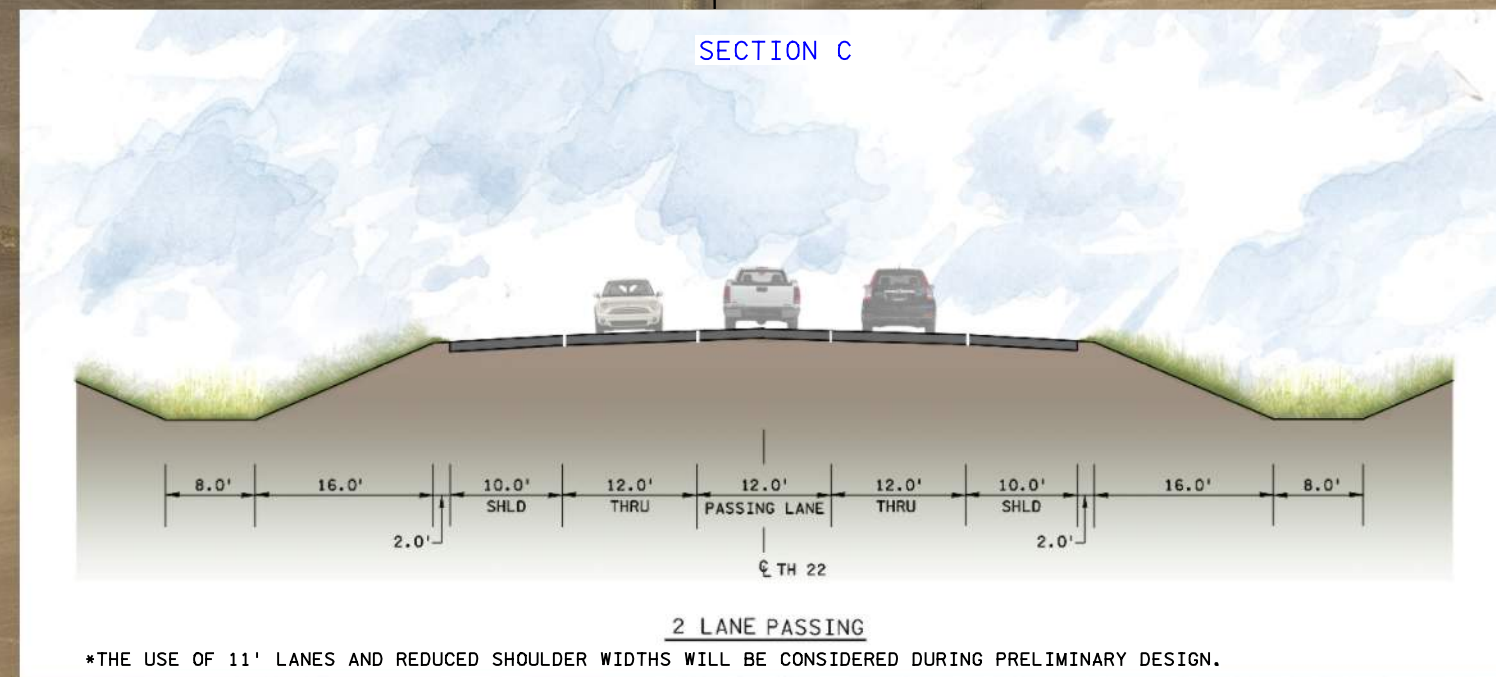
℄ TH 22

C

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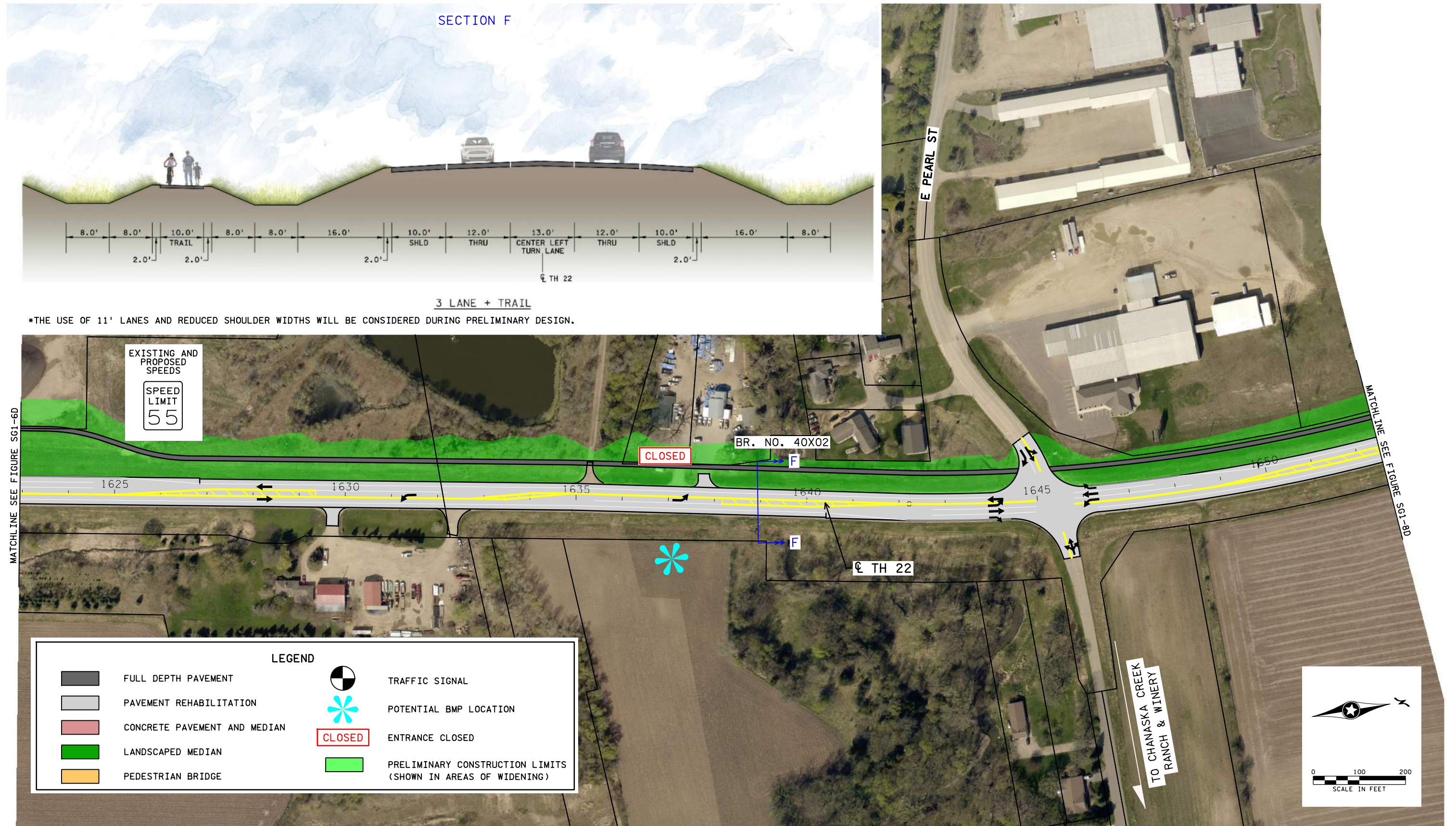
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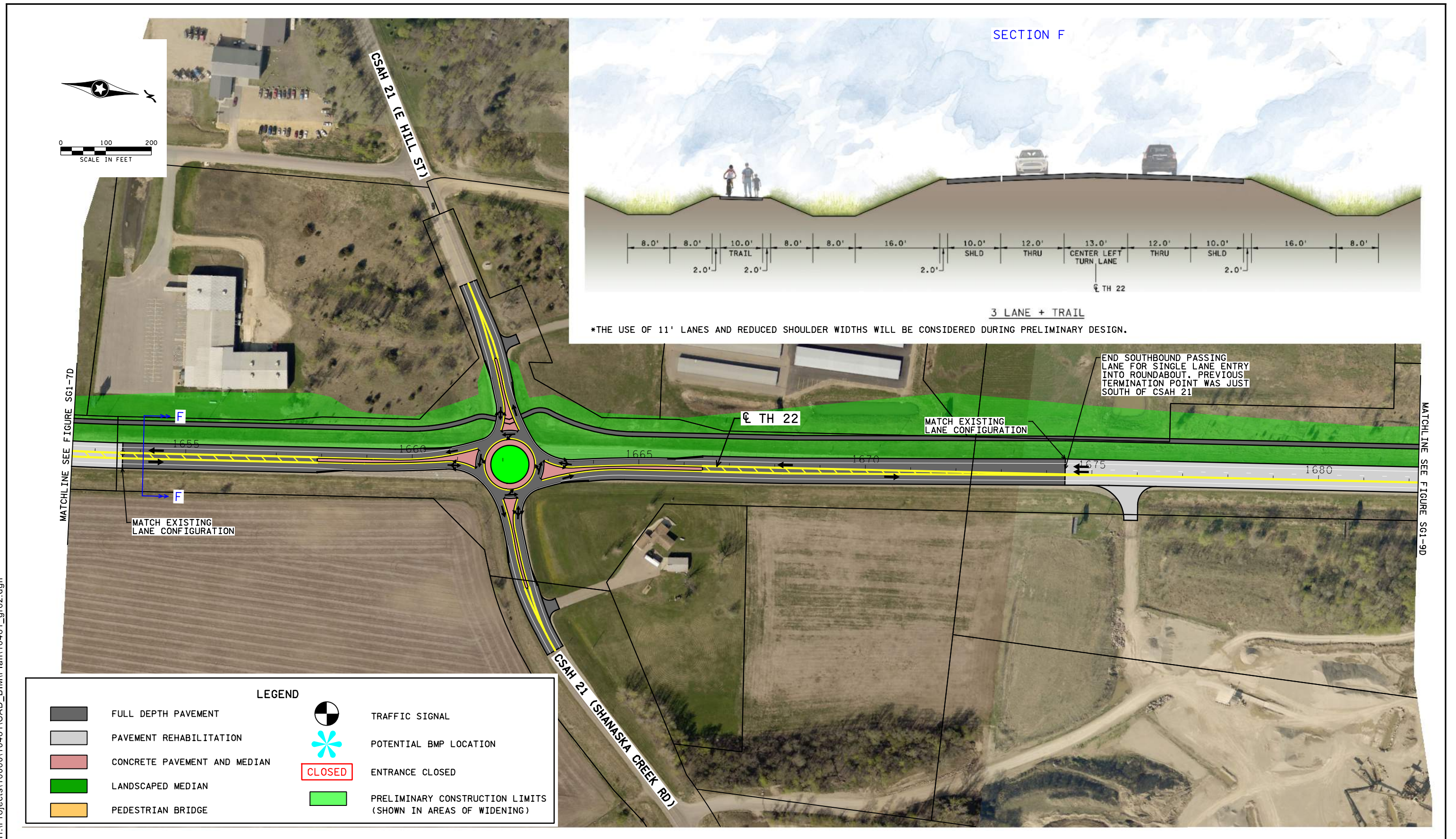


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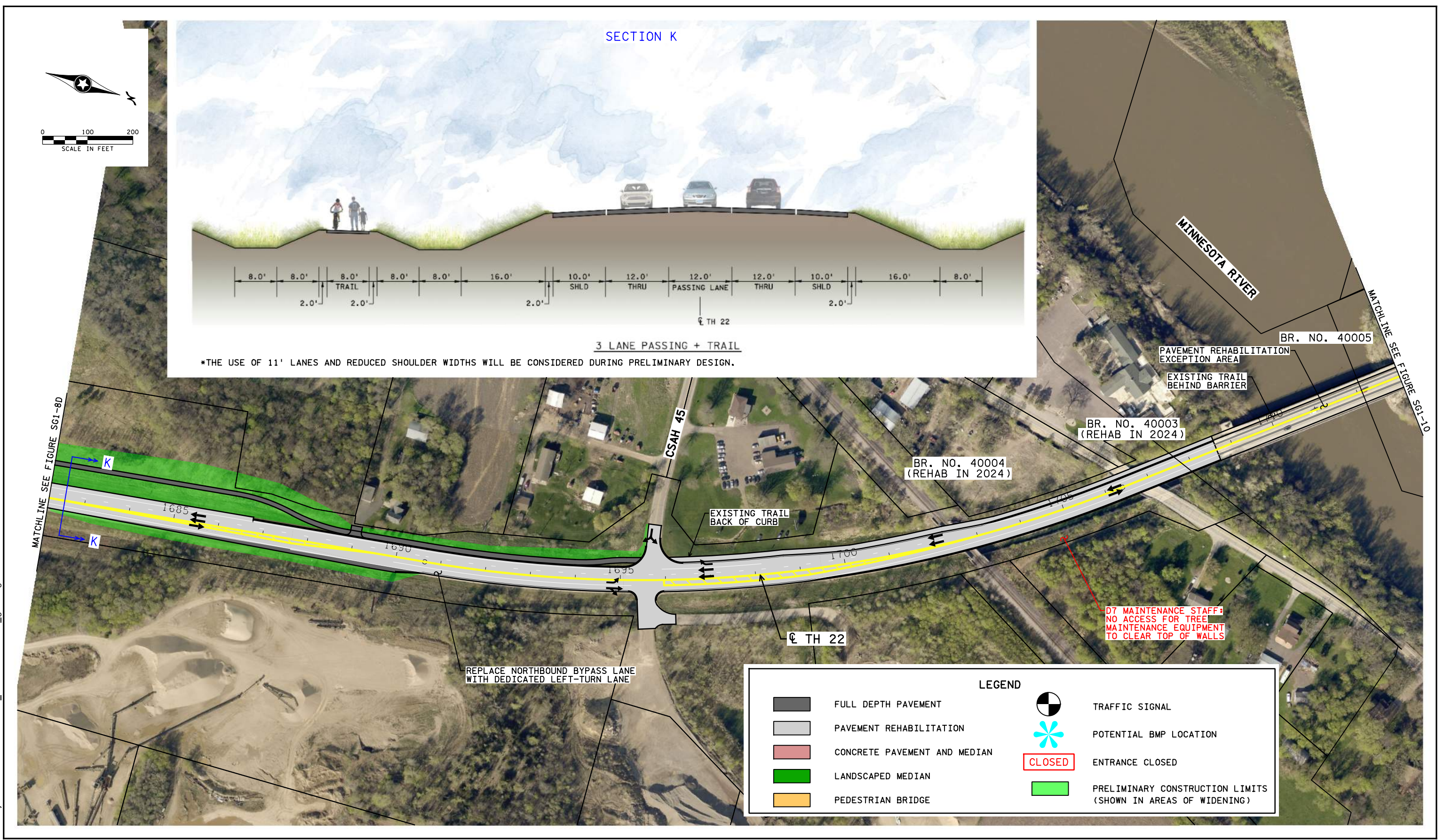




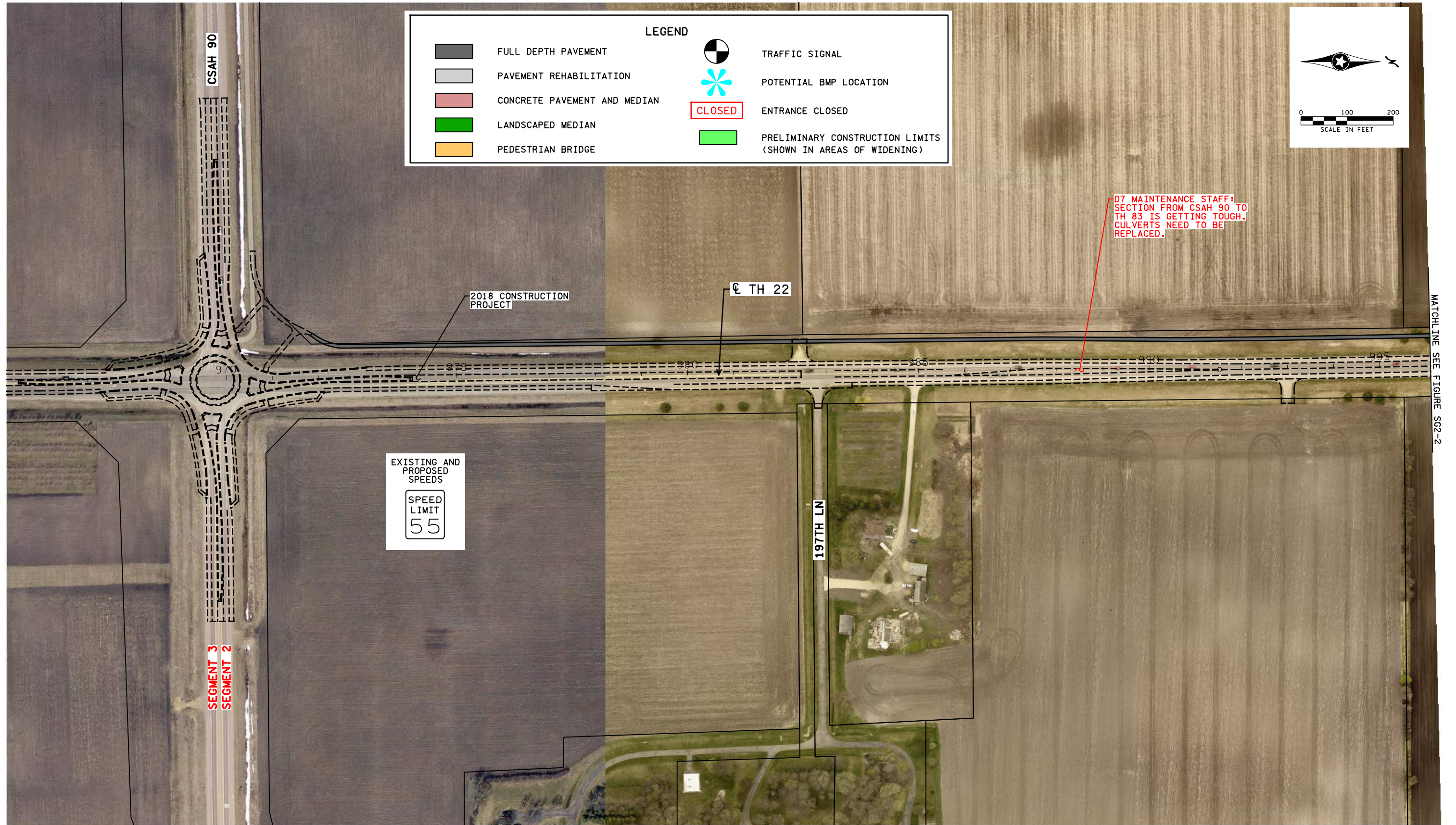
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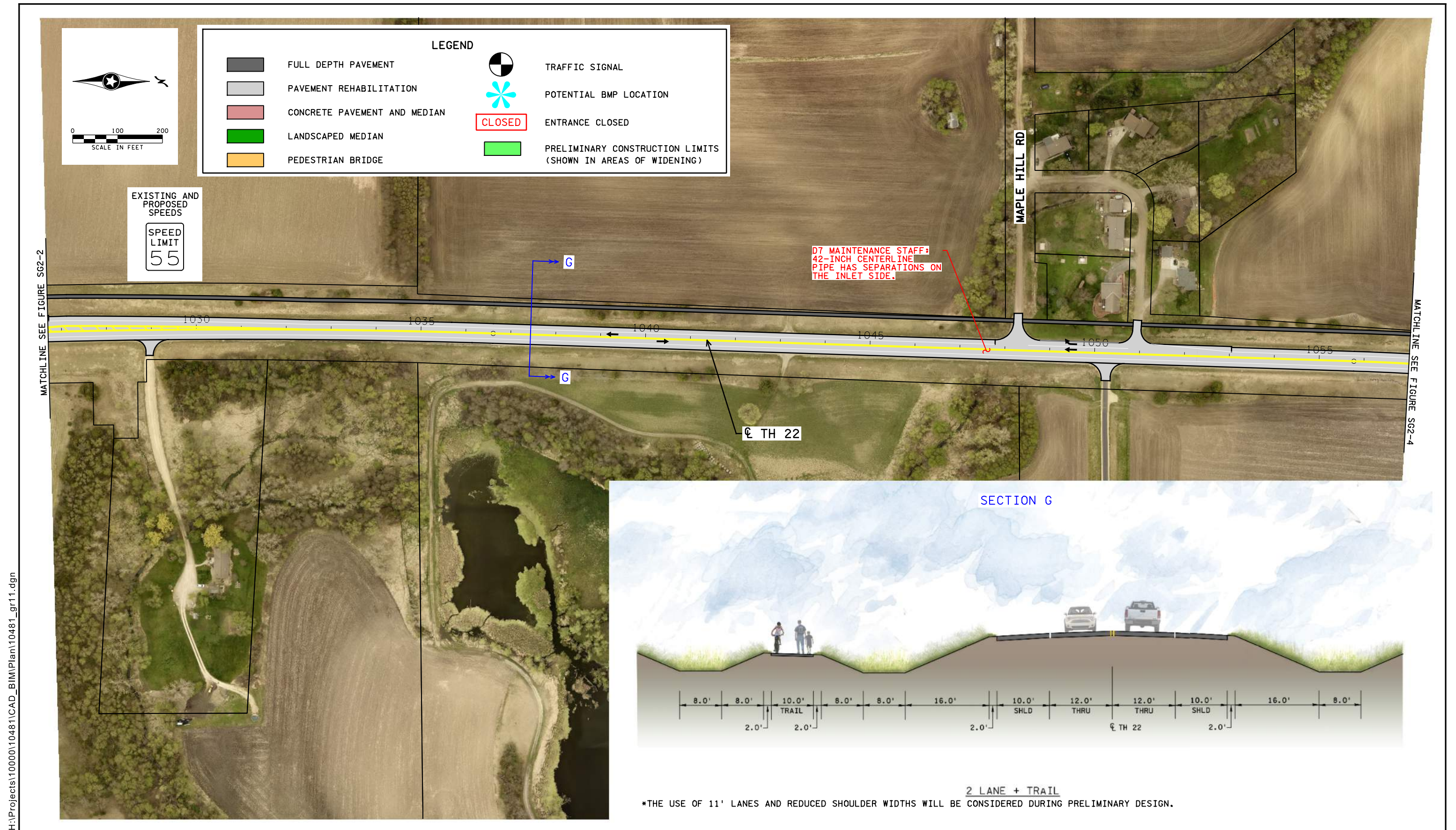


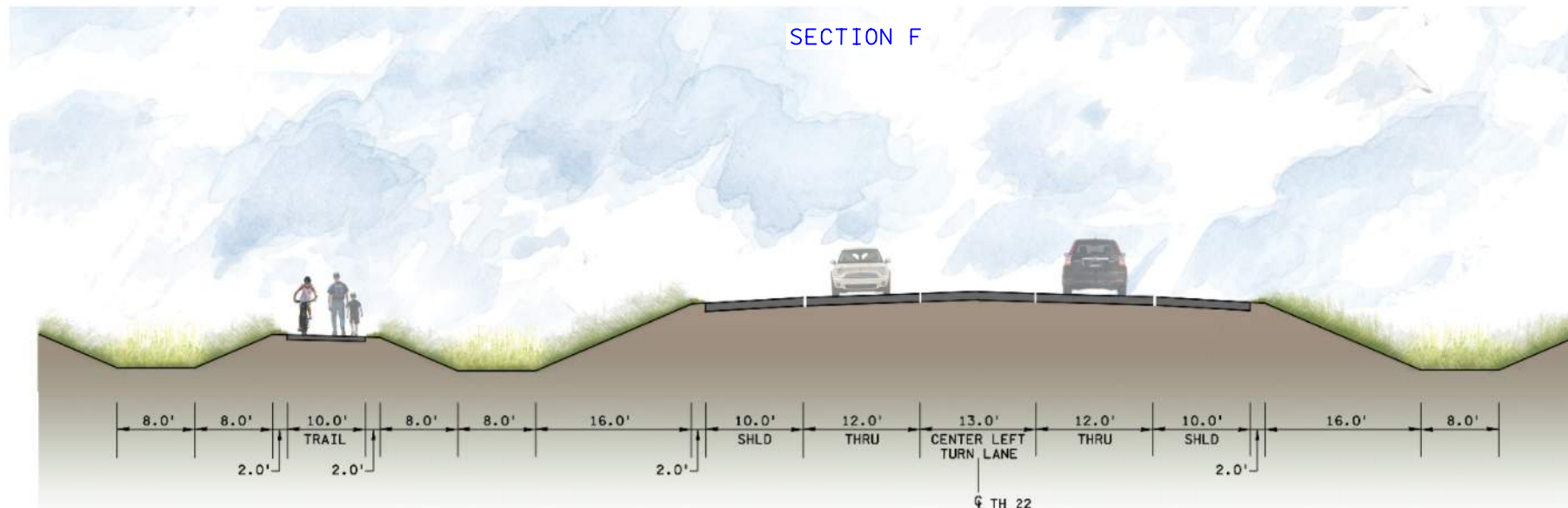
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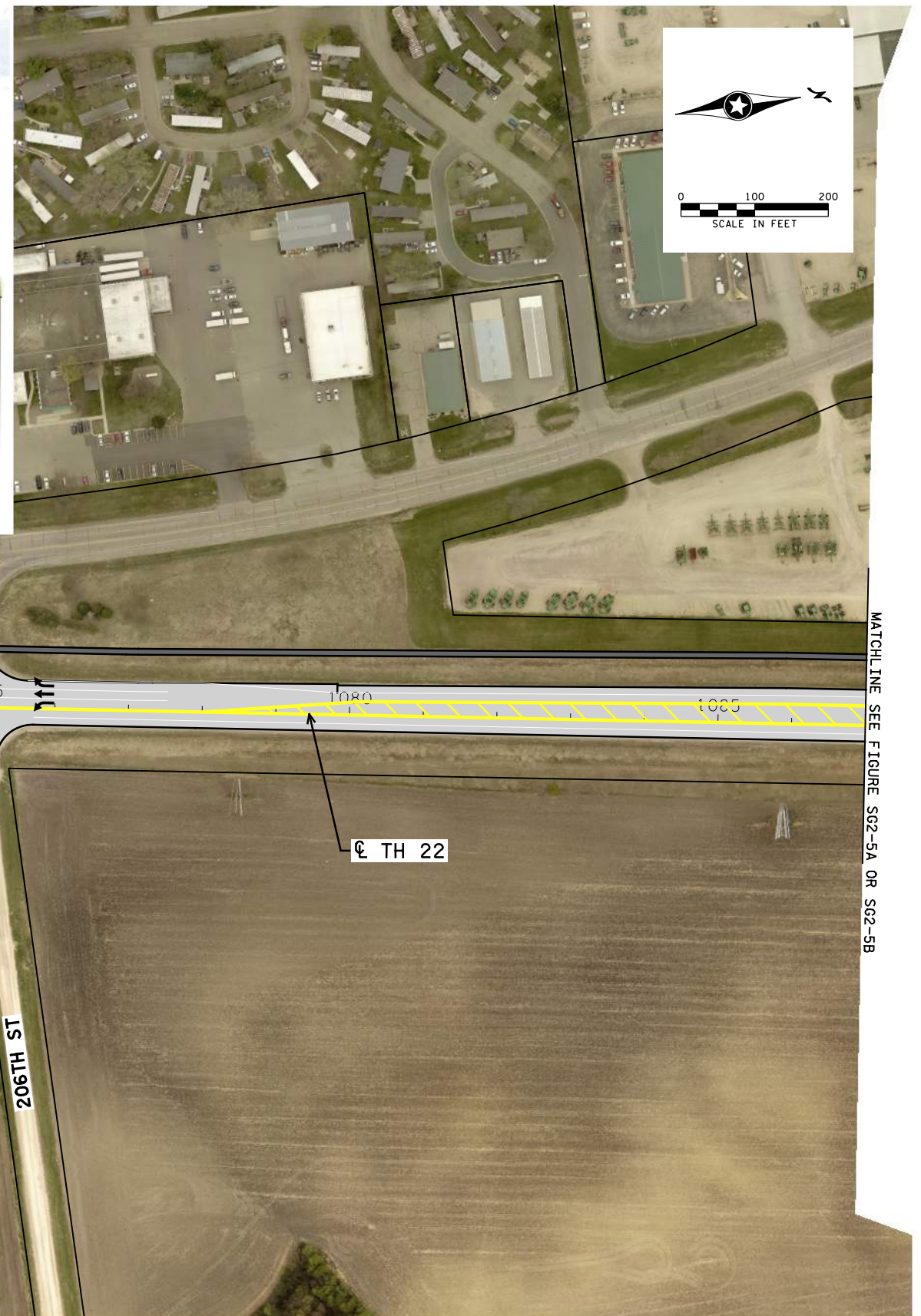






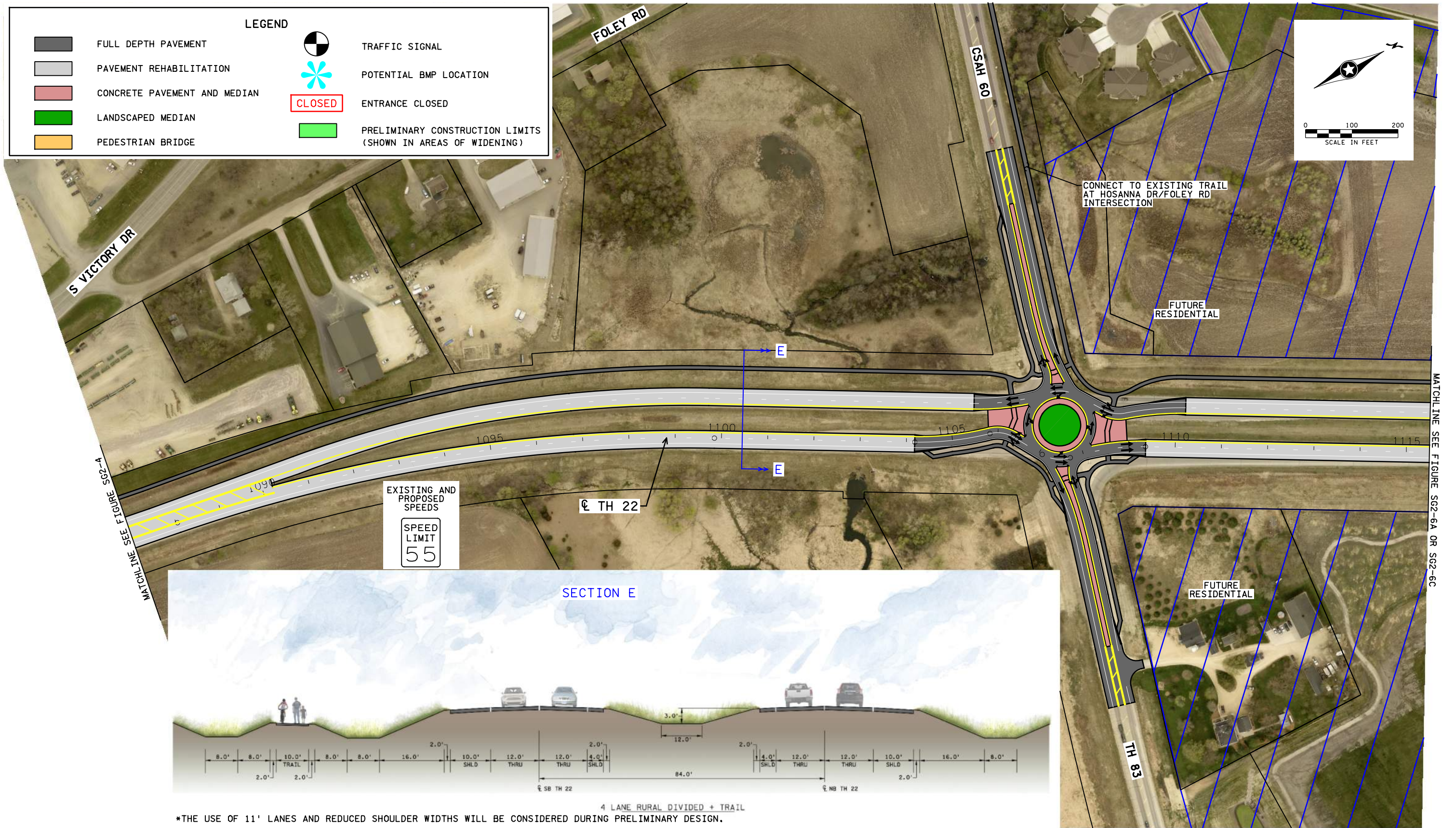
3 LANE + TRAIL

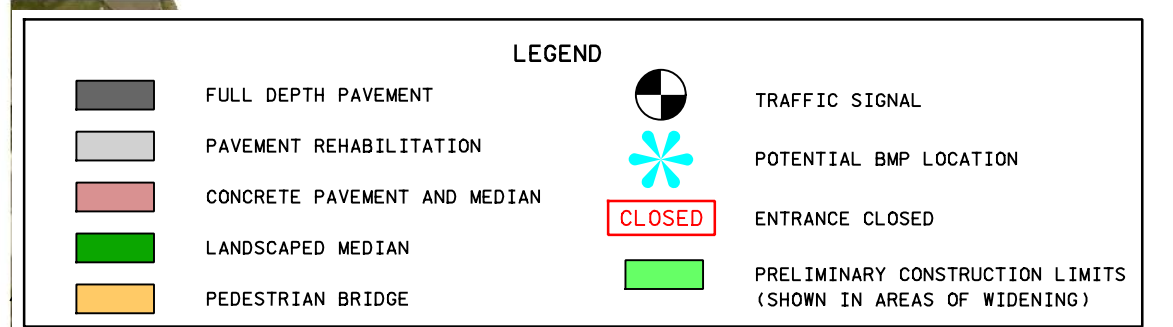
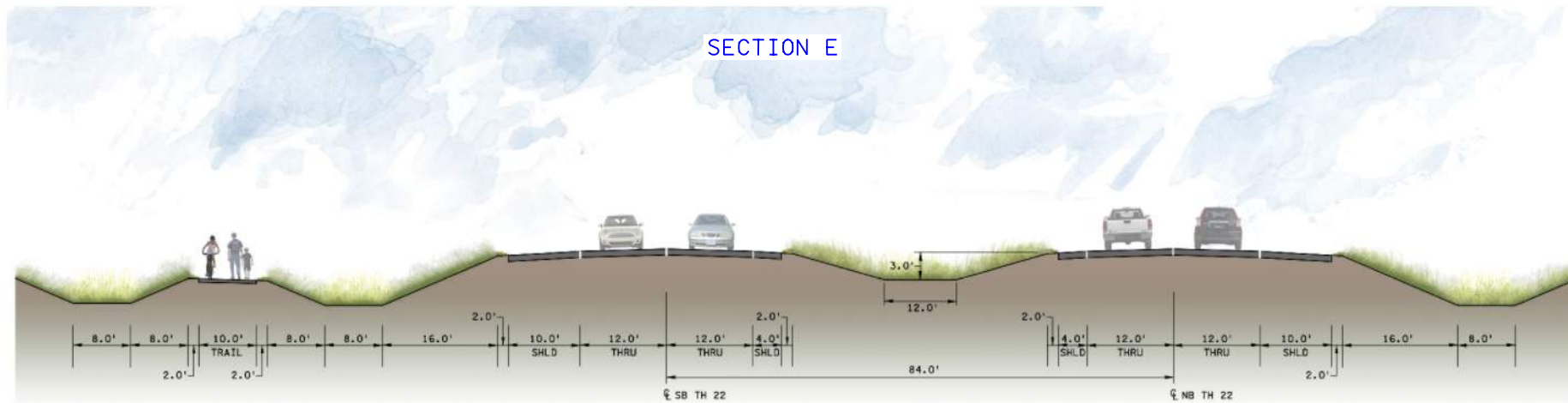
*THE USE OF 11' LANES AND REDUCED SHOULDER WIDTHS WILL BE CONSIDERED DURING PRELIMINARY DESIGN.



LEGEND	
	FULL DEPTH PAVEMENT
	PAVEMENT REHABILITATION
	CONCRETE PAVEMENT AND MEDIAN
	LANDSCAPED MEDIAN
	PEDESTRIAN BRIDGE
	TRAFFIC SIGNAL
	POTENTIAL BMP LOCATION
	ENTRANCE CLOSED
	PRELIMINARY CONSTRUCTION LIMITS (SHOWN IN AREAS OF WIDENING)

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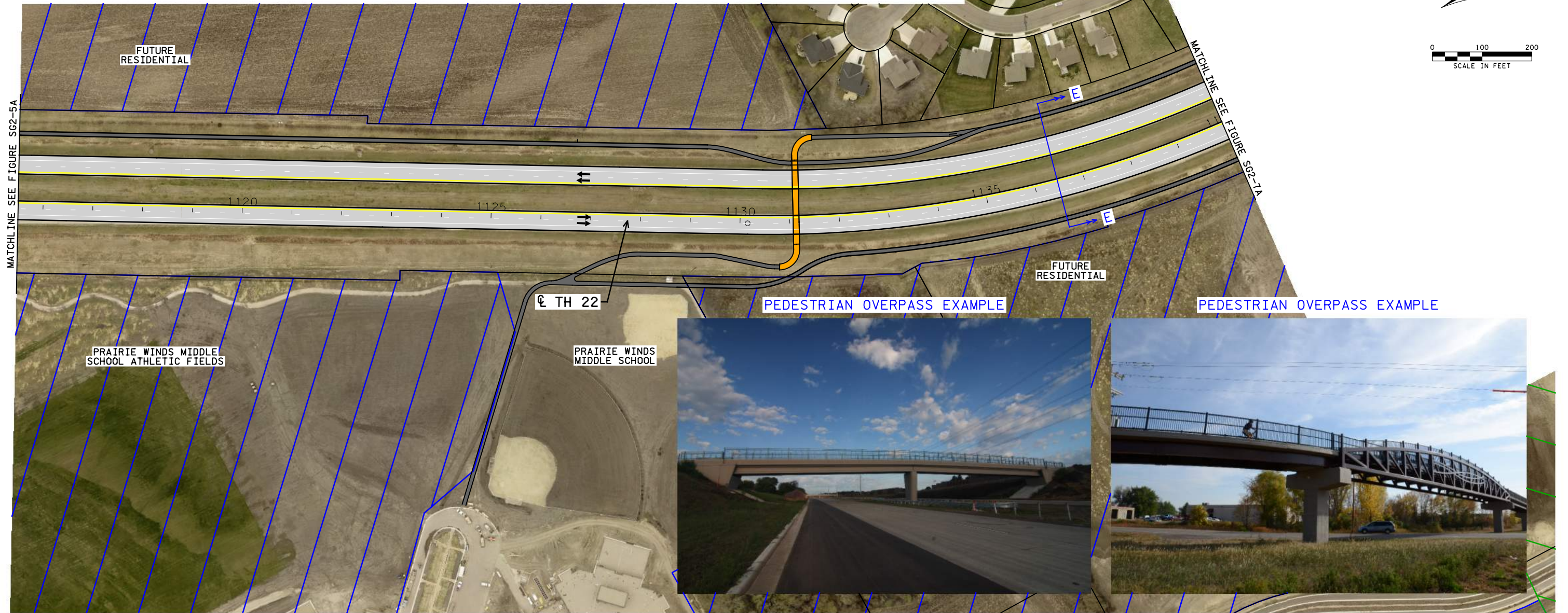




*CONSTRUCTION LIMITS ARE FOR ROADWAY IMPROVEMENTS ONLY AND DO NOT REFLECT PEDESTRIAN OVERPASSES

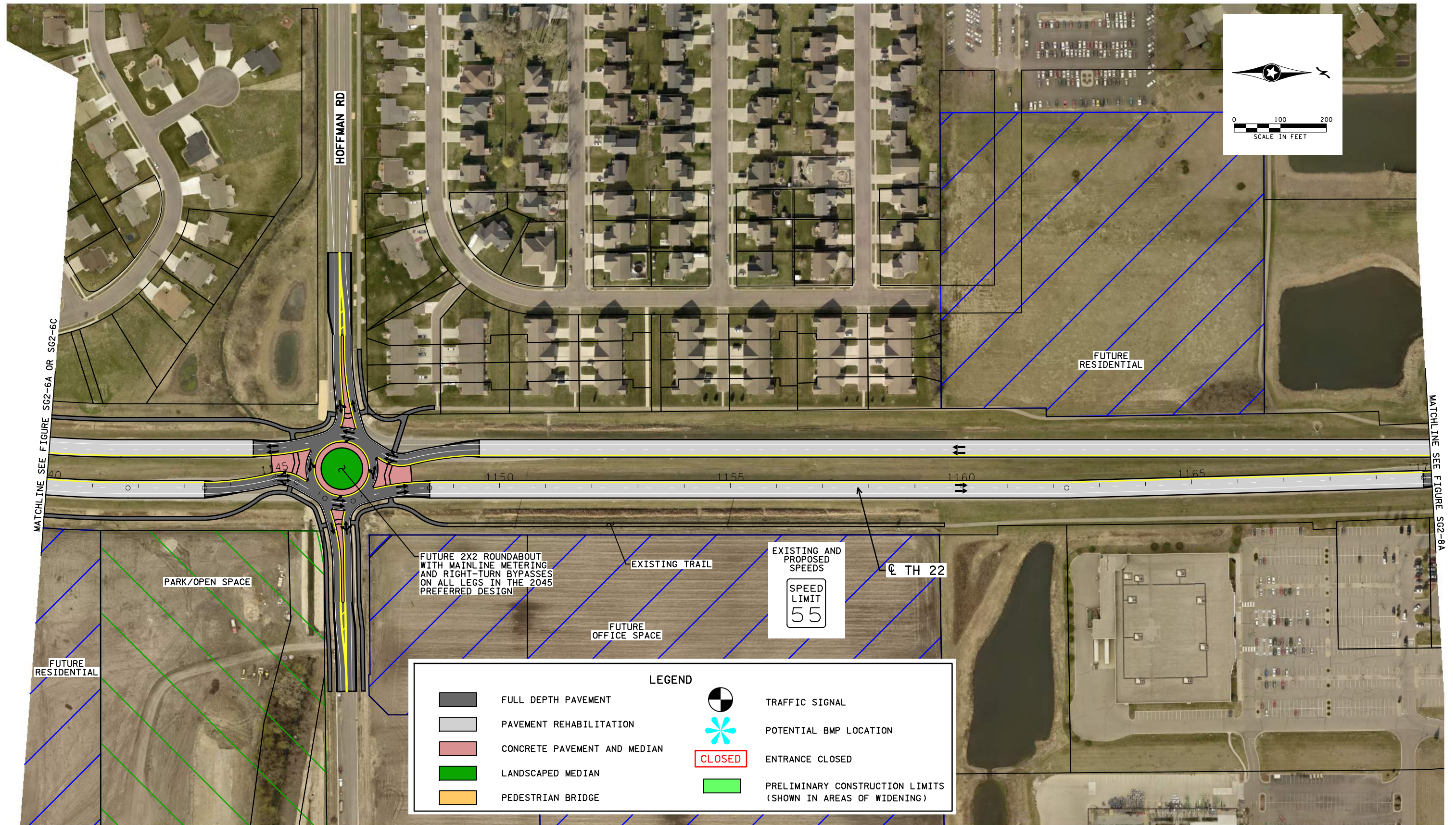


4 LANE RURAL DIVIDED + TRAIL
*THE USE OF 11' LANES AND REDUCED SHOULDER WIDTHS WILL BE CONSIDERED DURING PRELIMINARY DESIGN.



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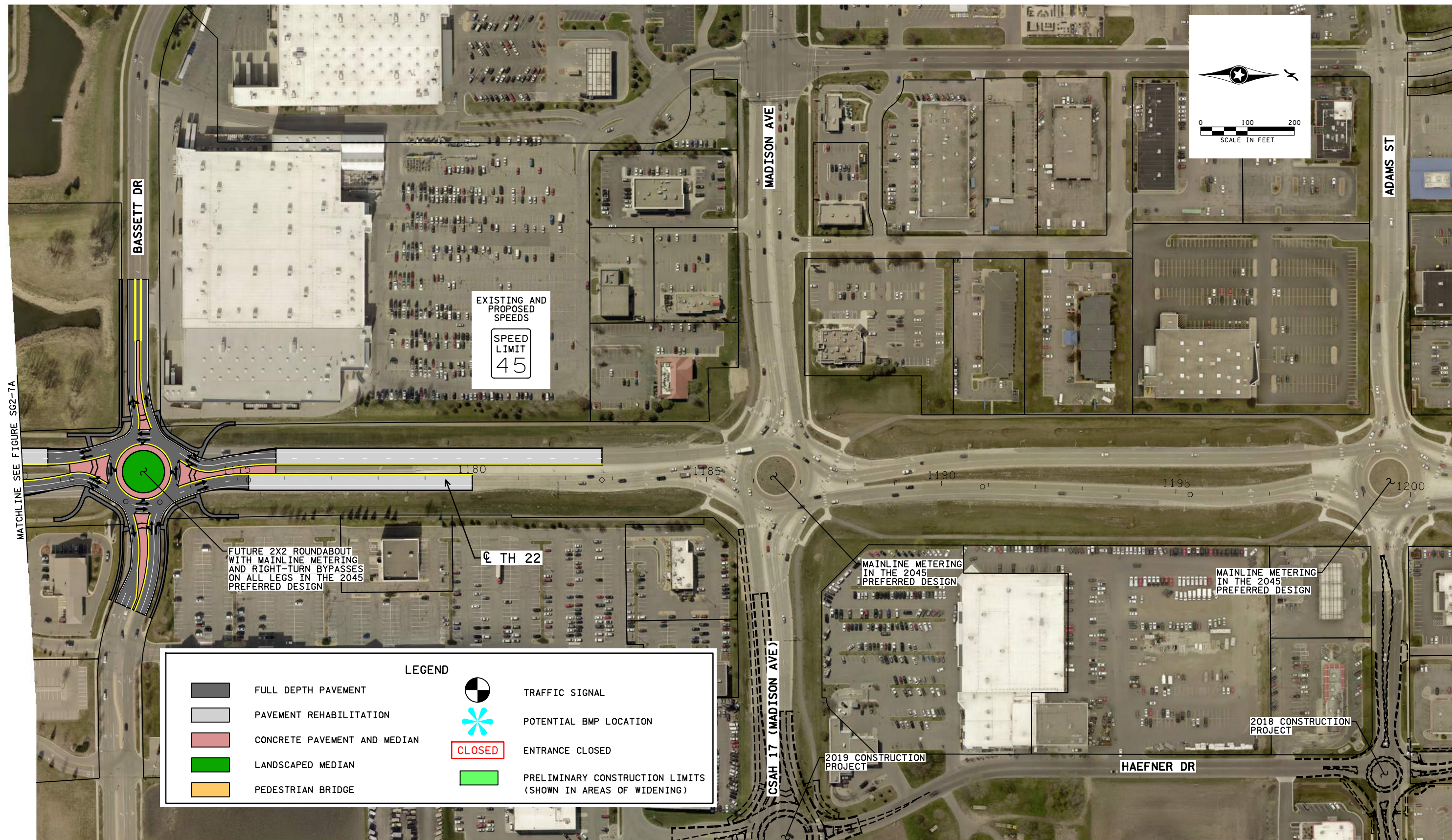
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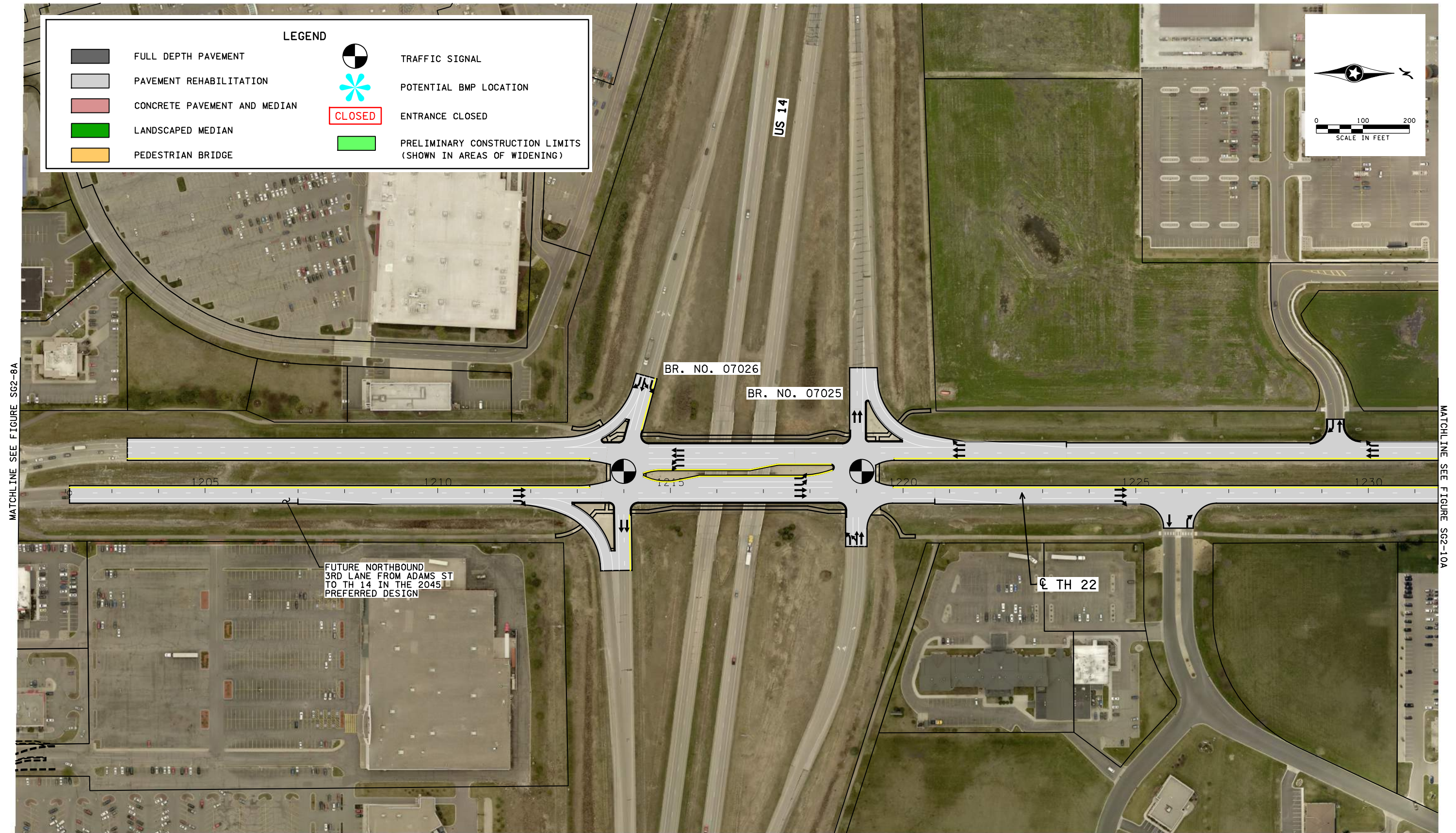
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MATCHLINE SEE FIGURE SG2-7A

MATCHLINE SEE FIGURE SG2-9A



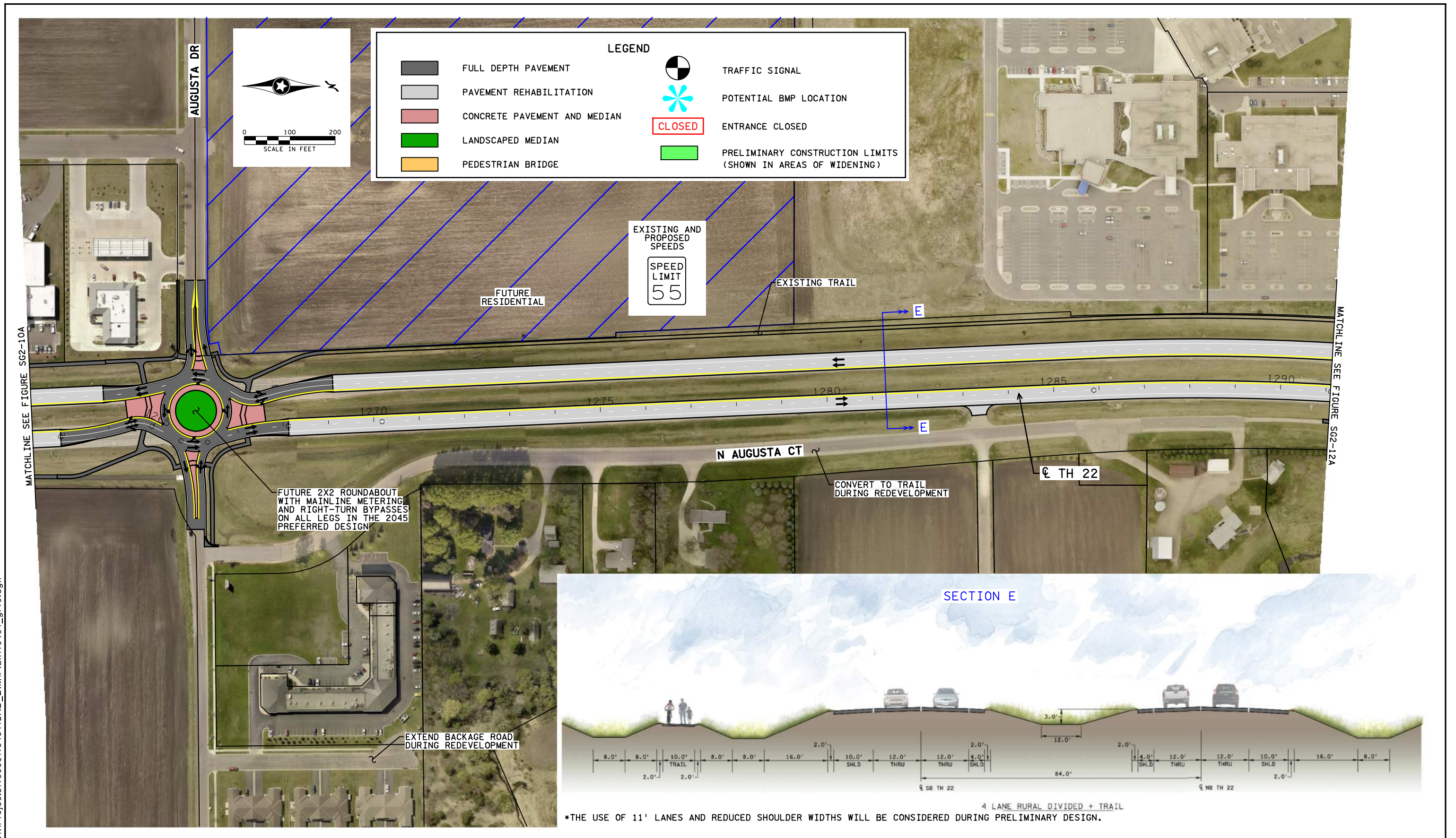
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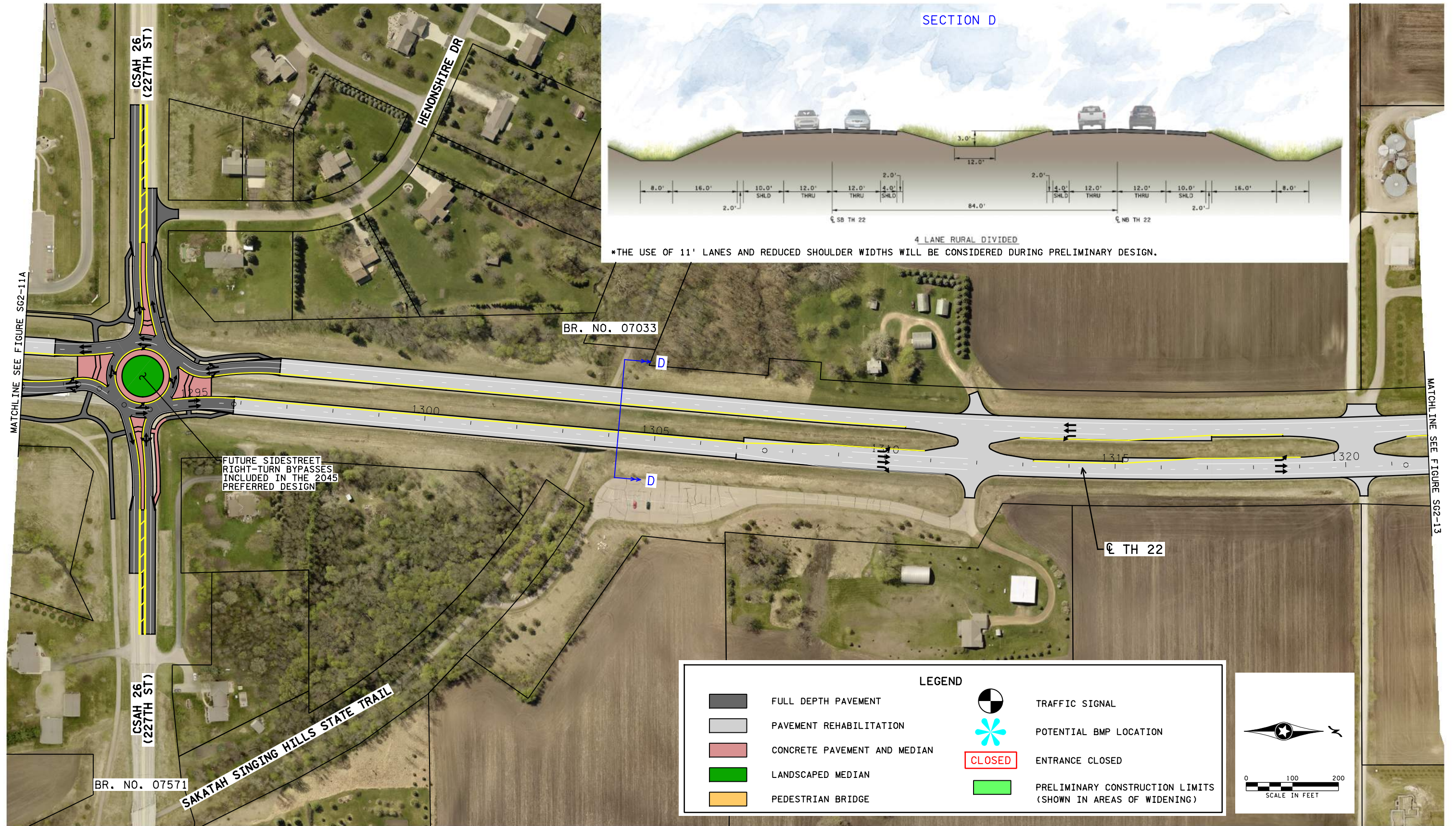
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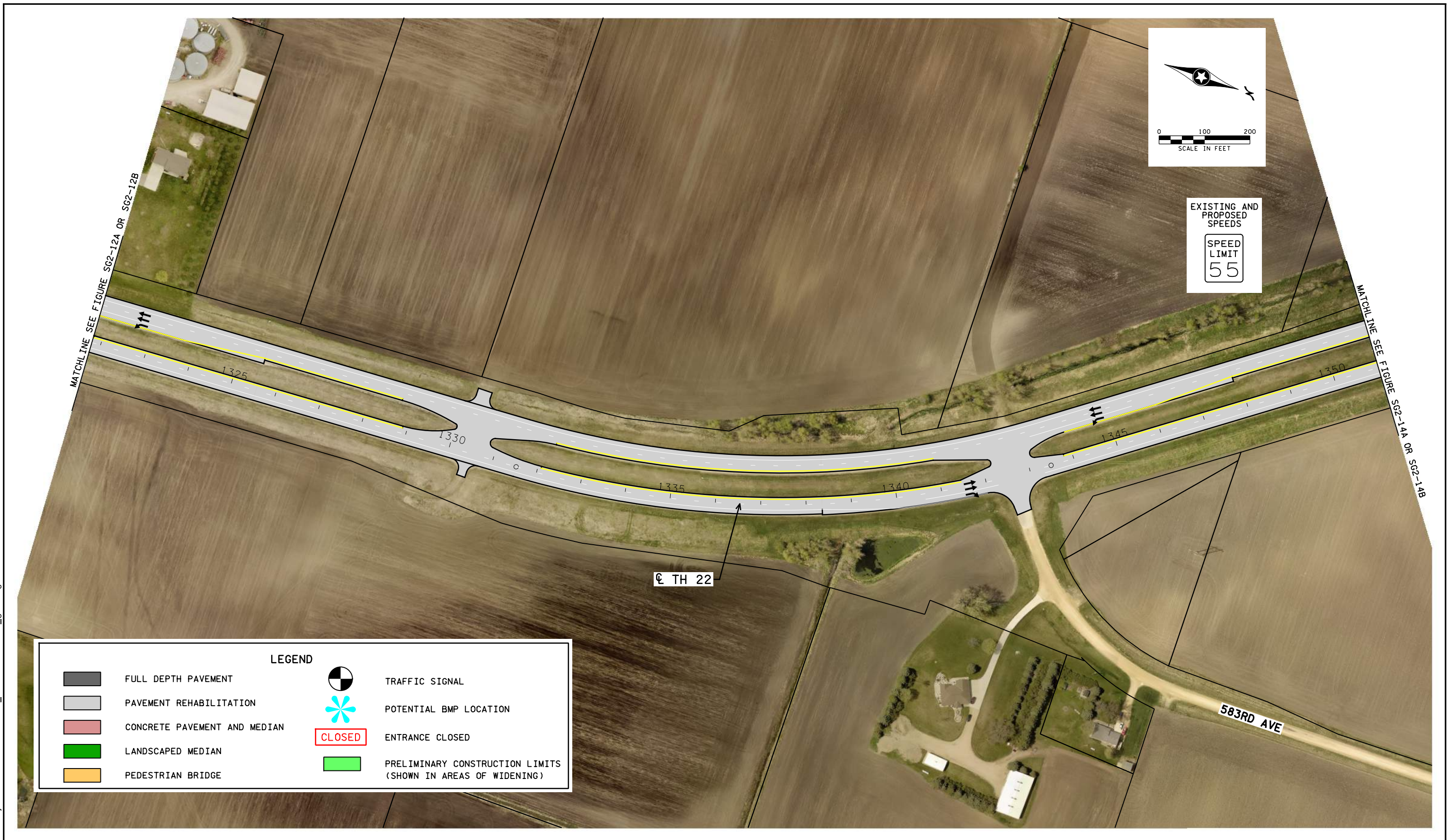
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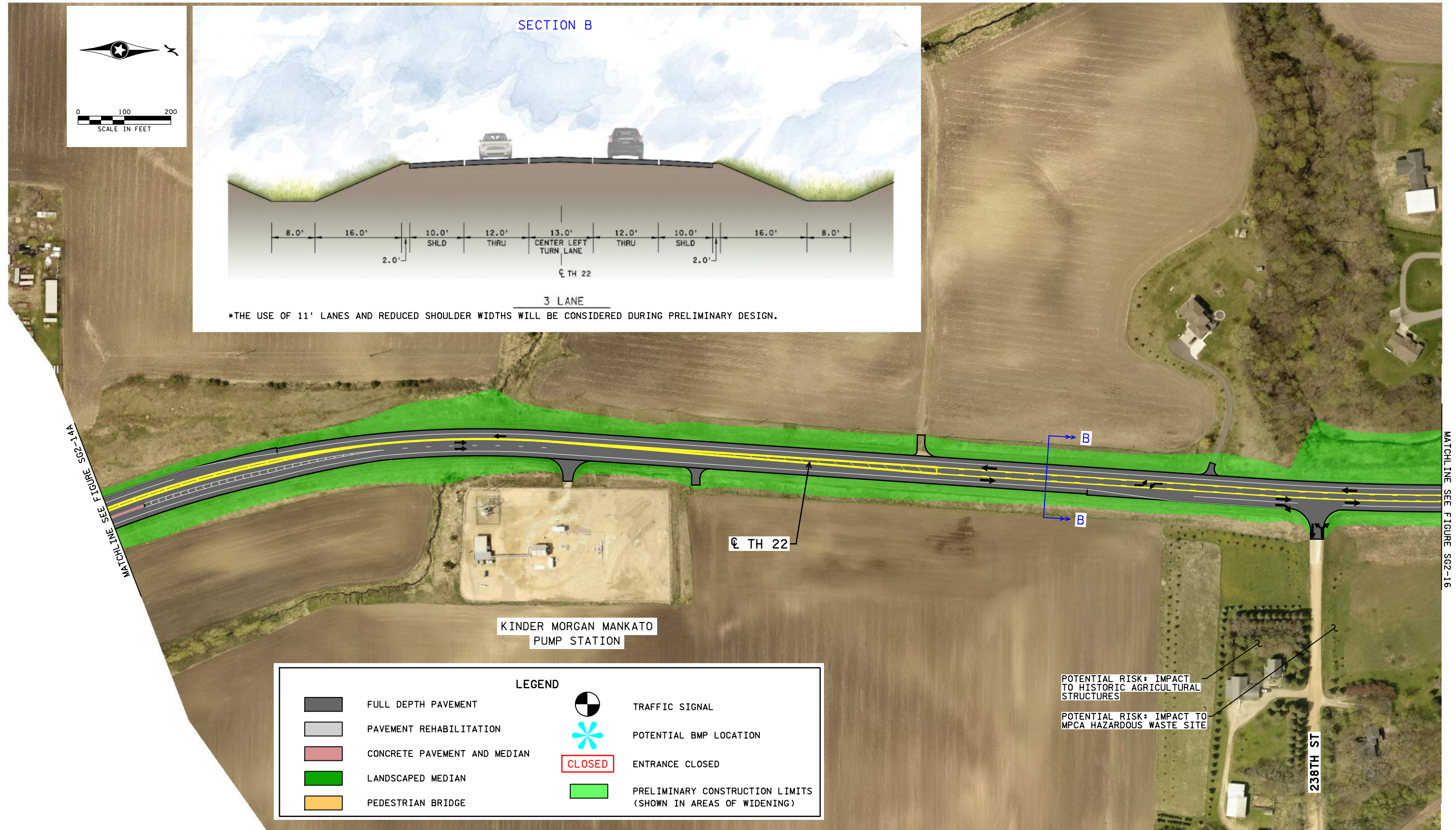
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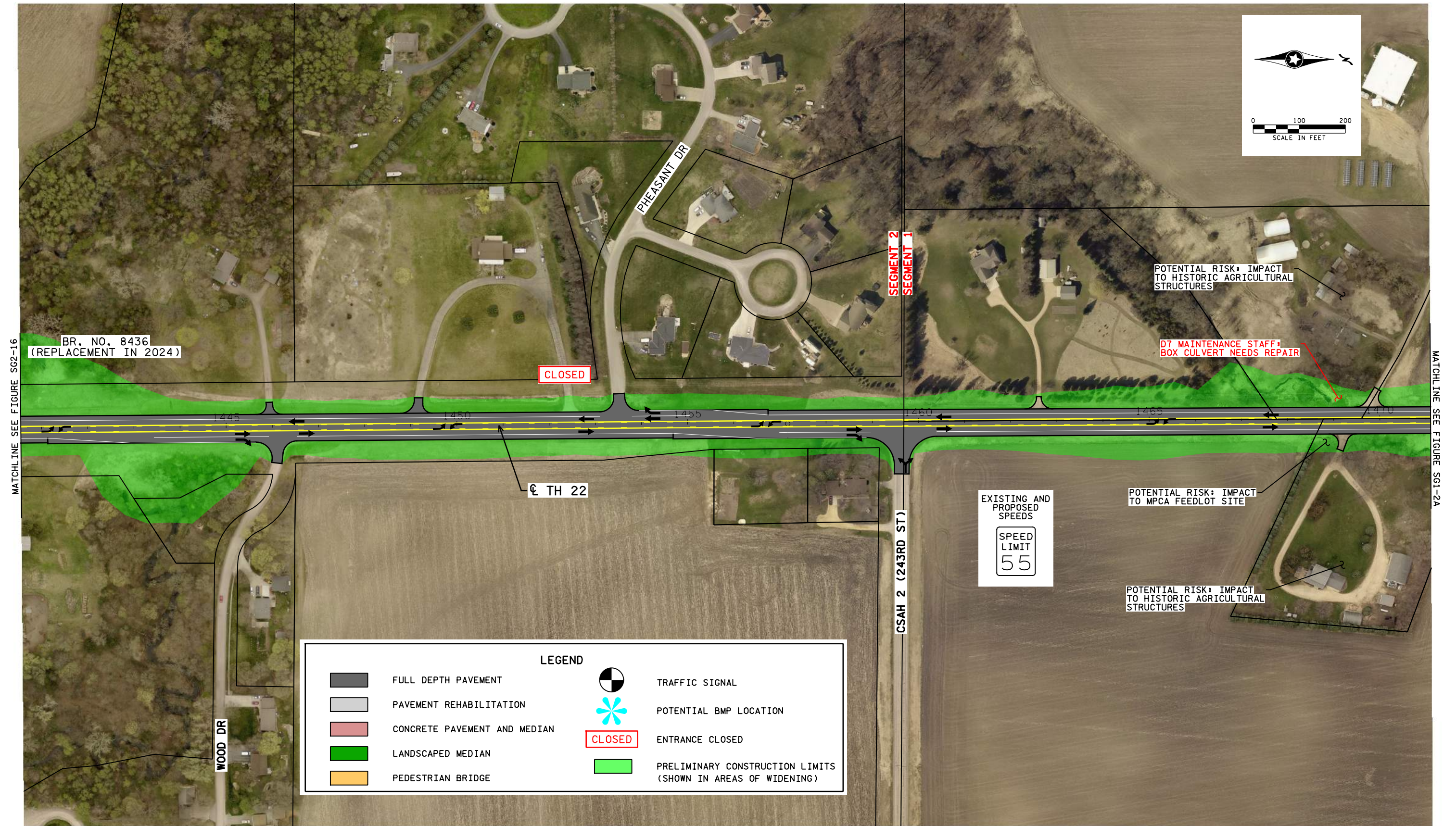
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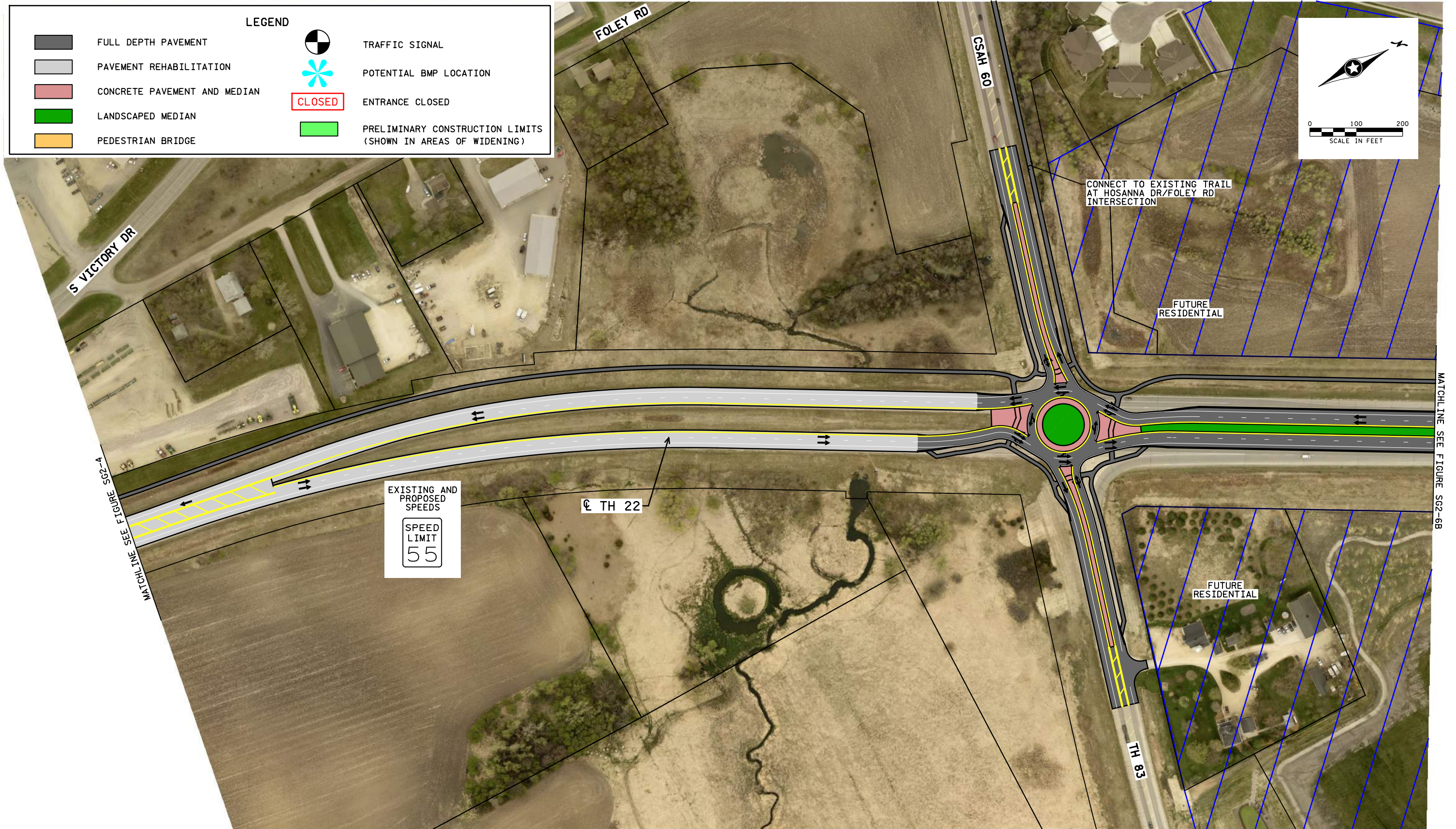
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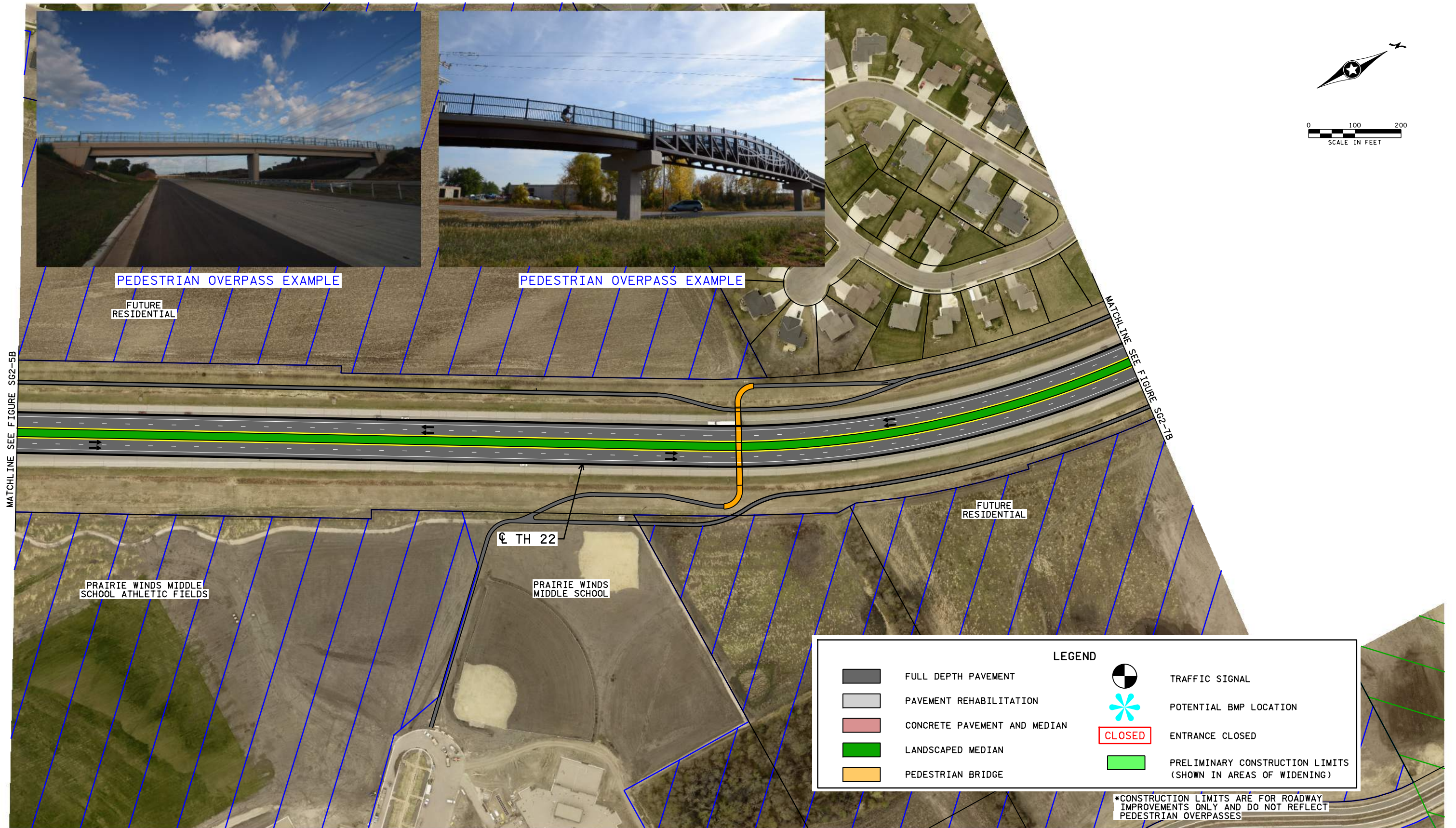
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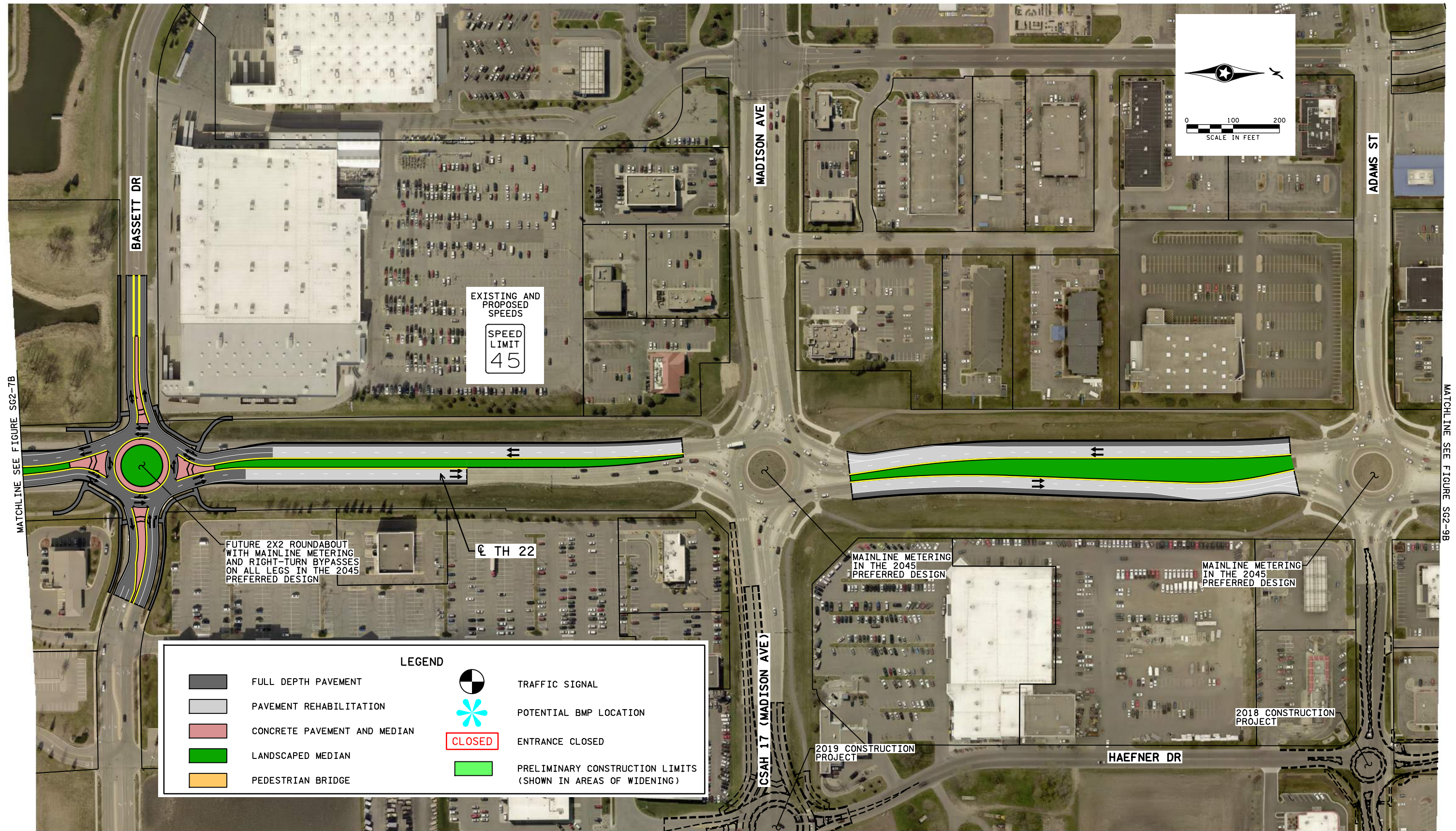


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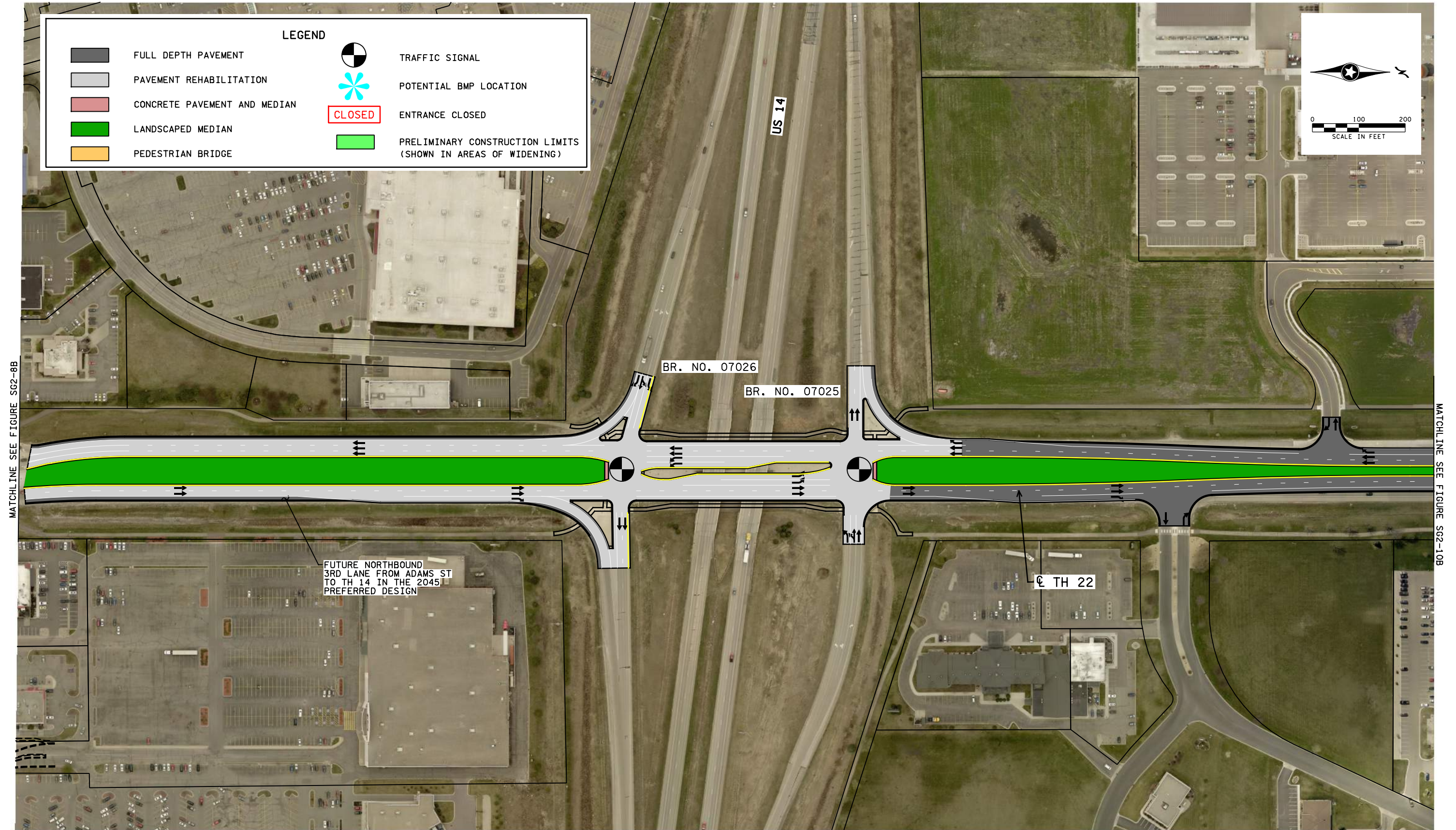


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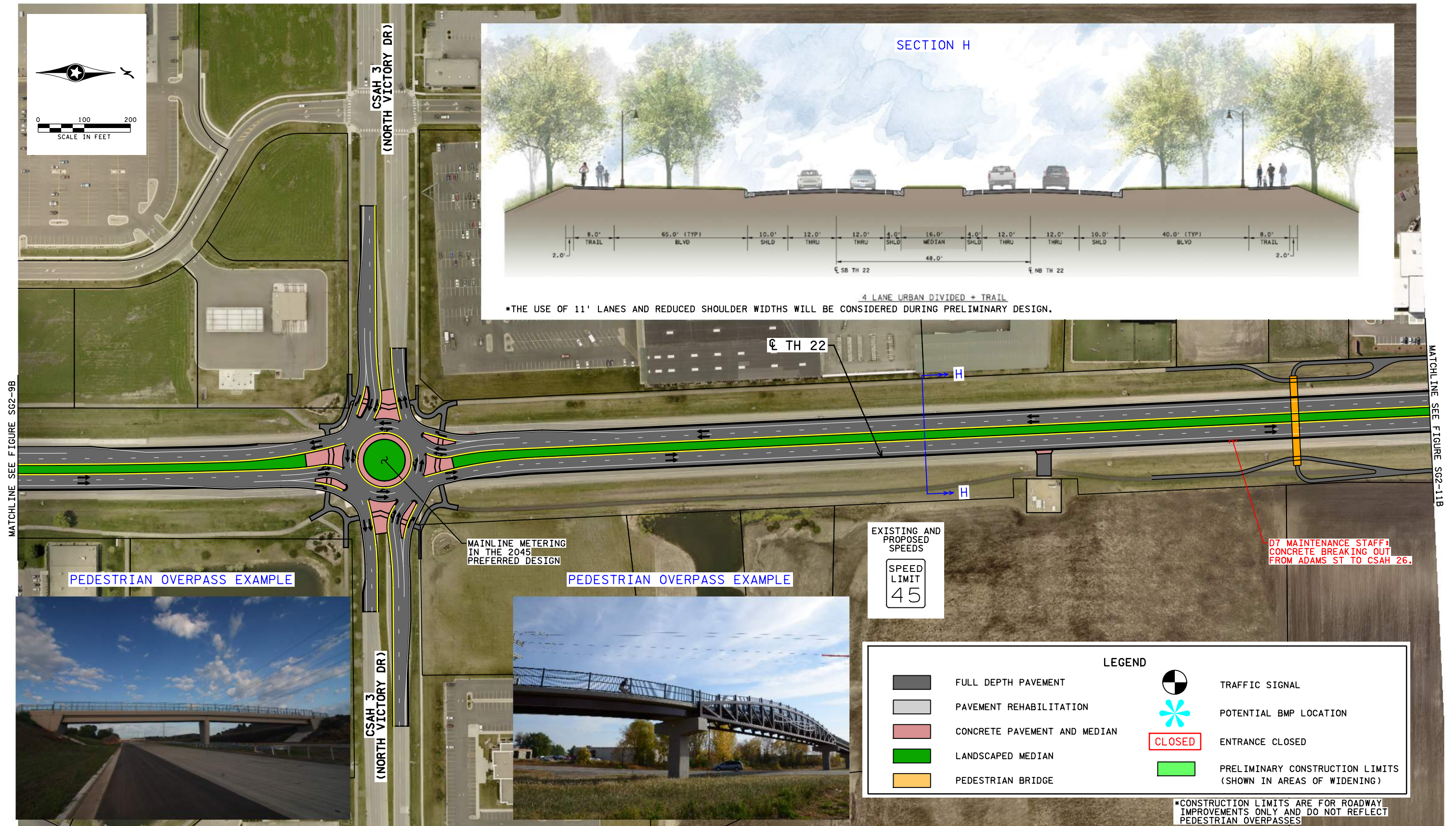




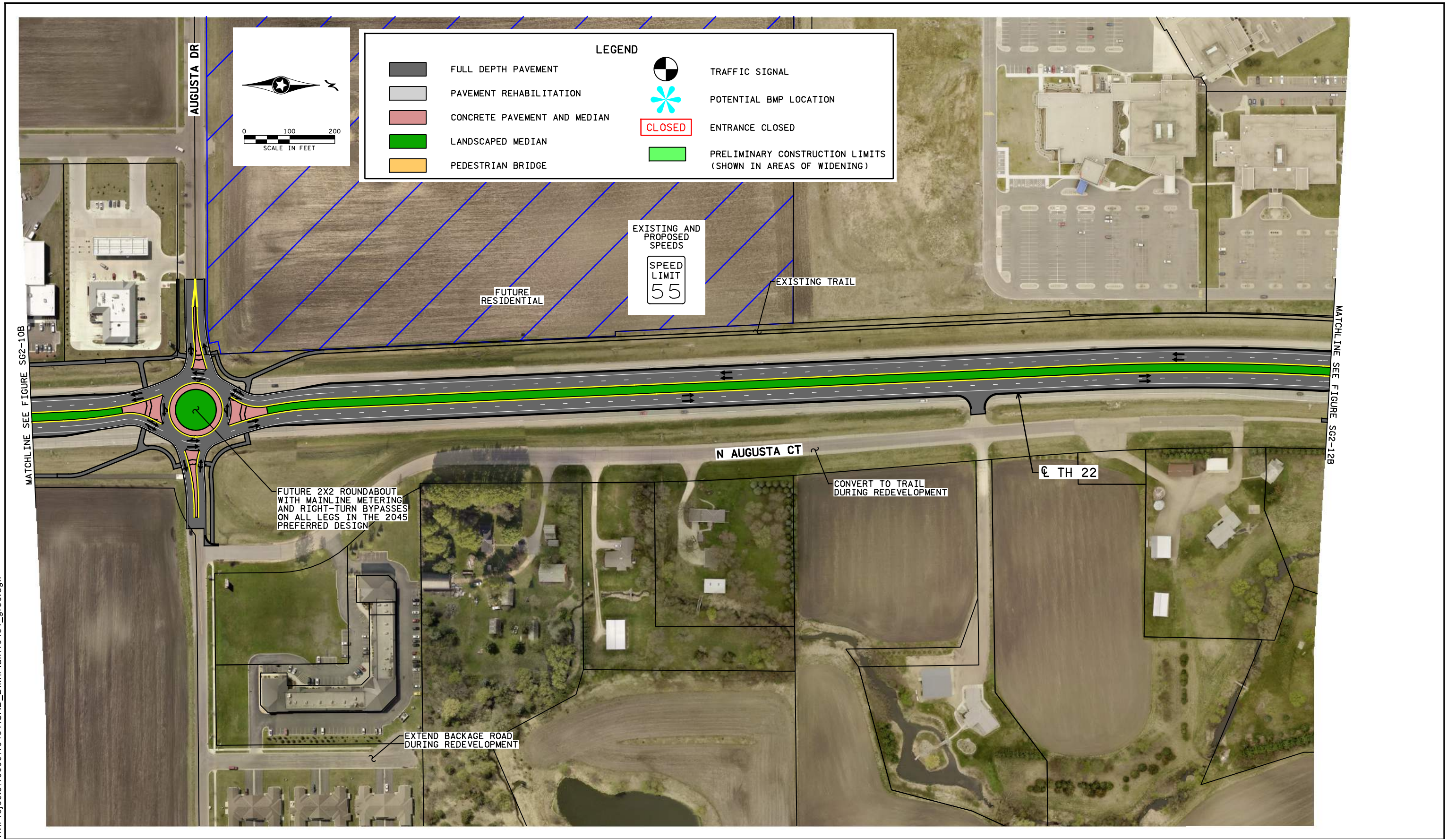
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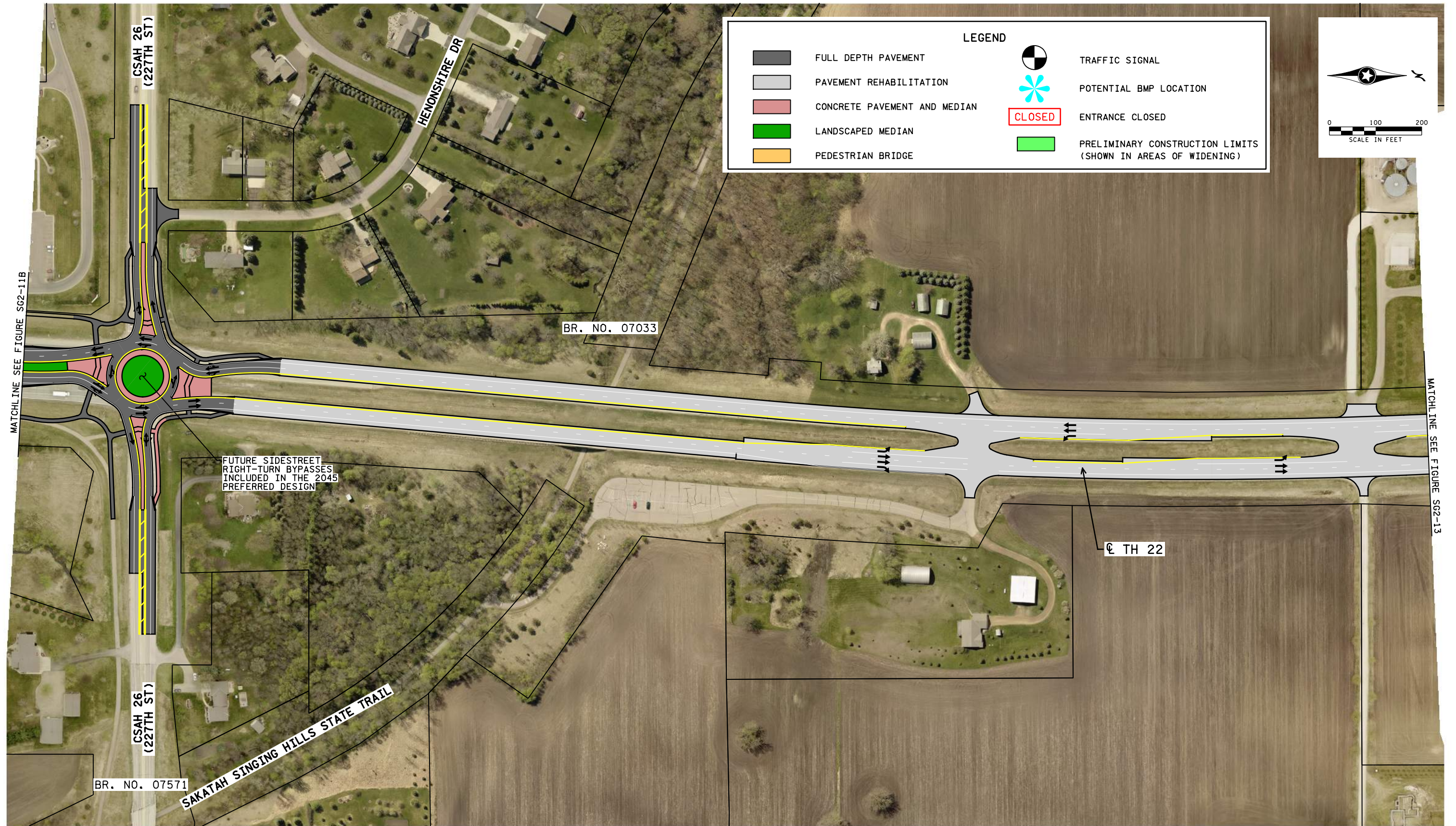
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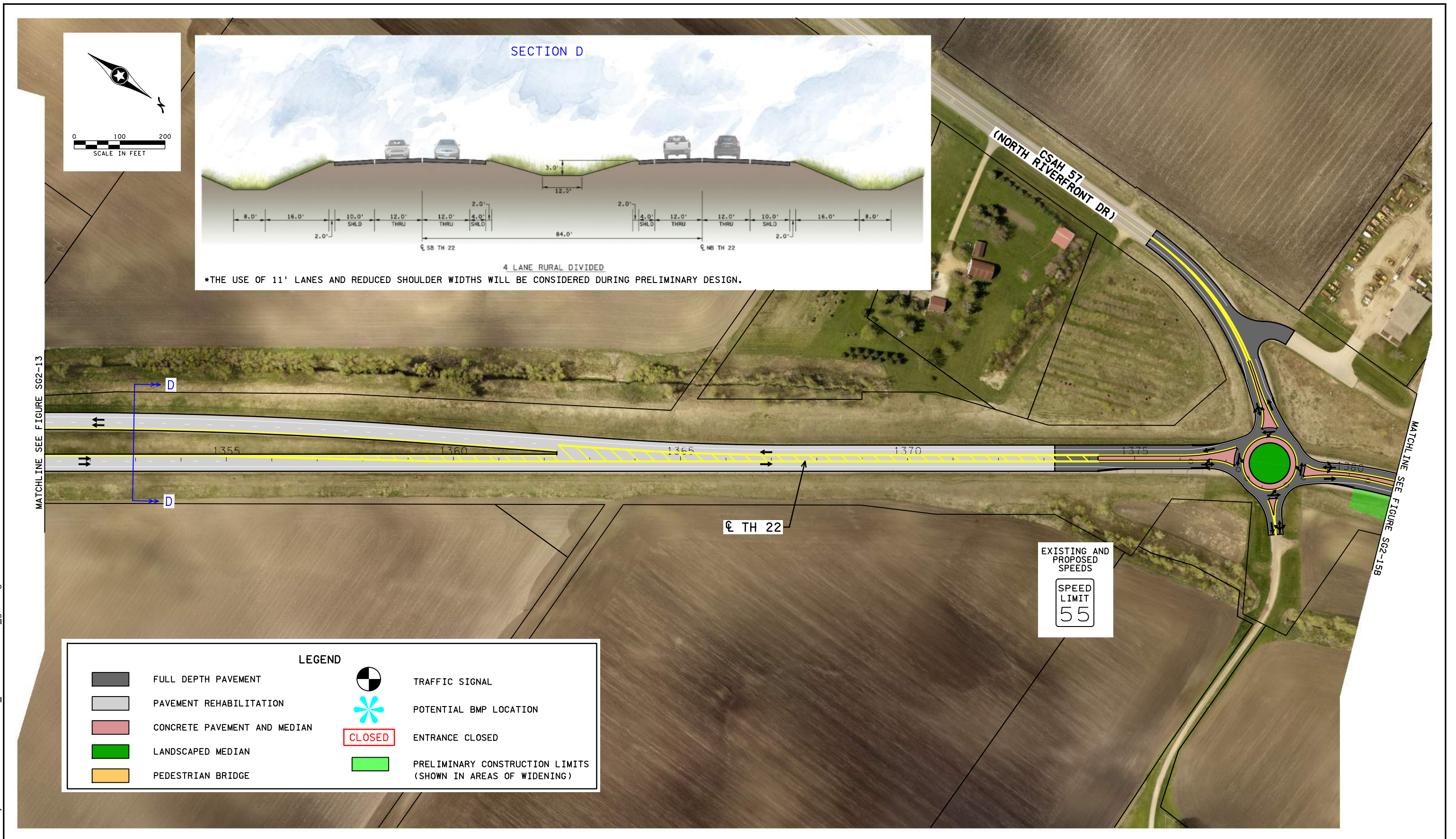
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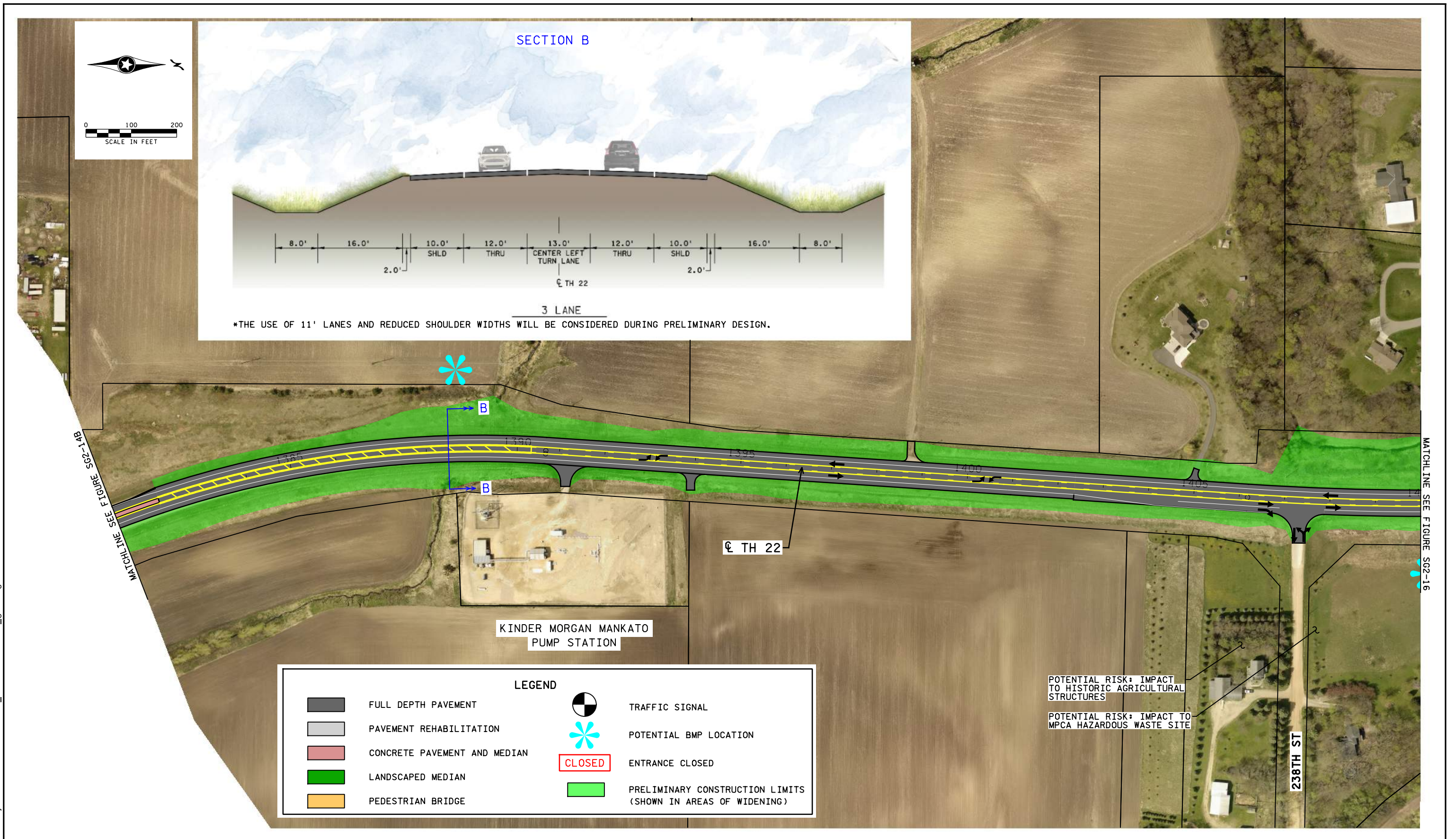
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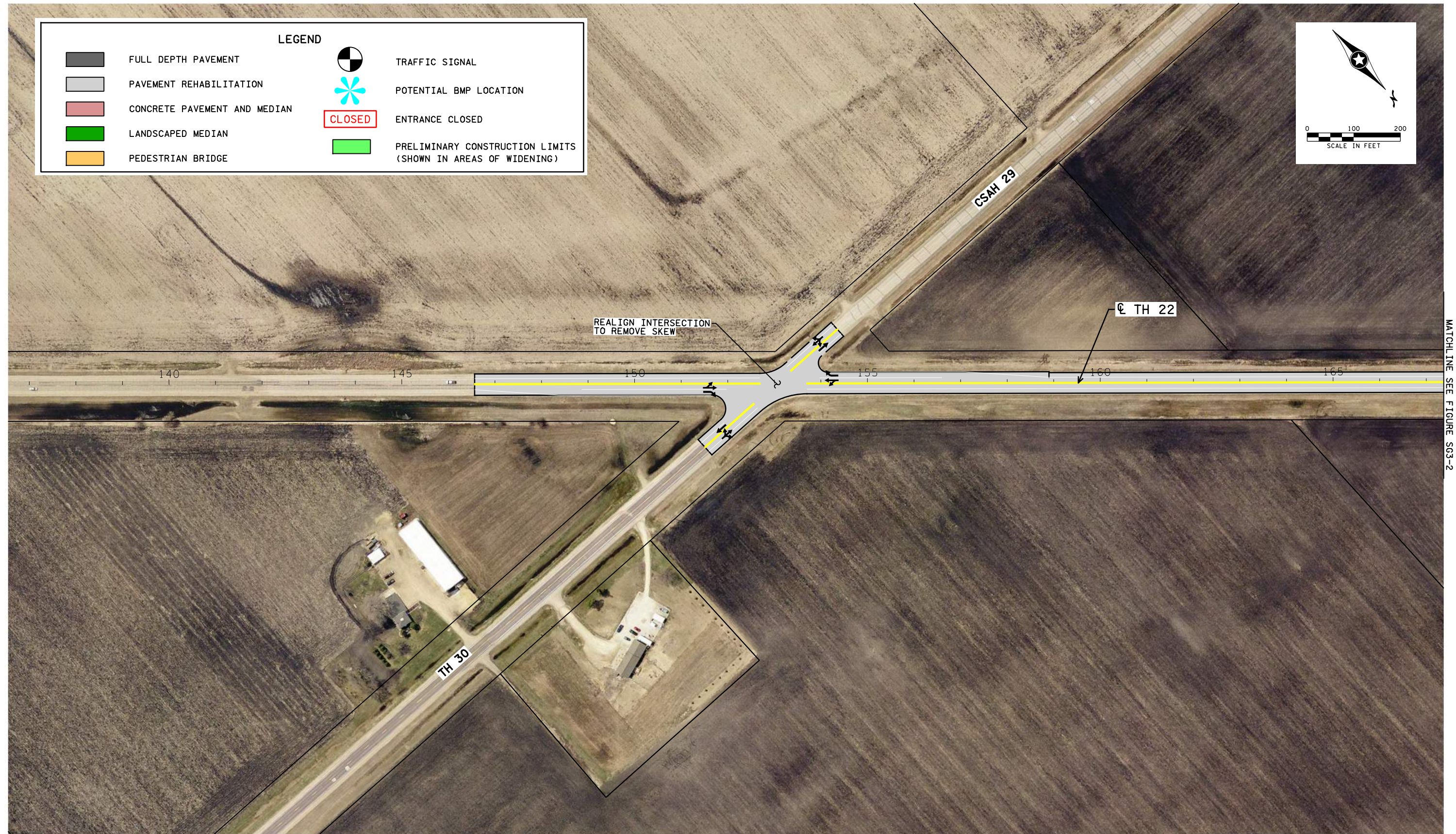
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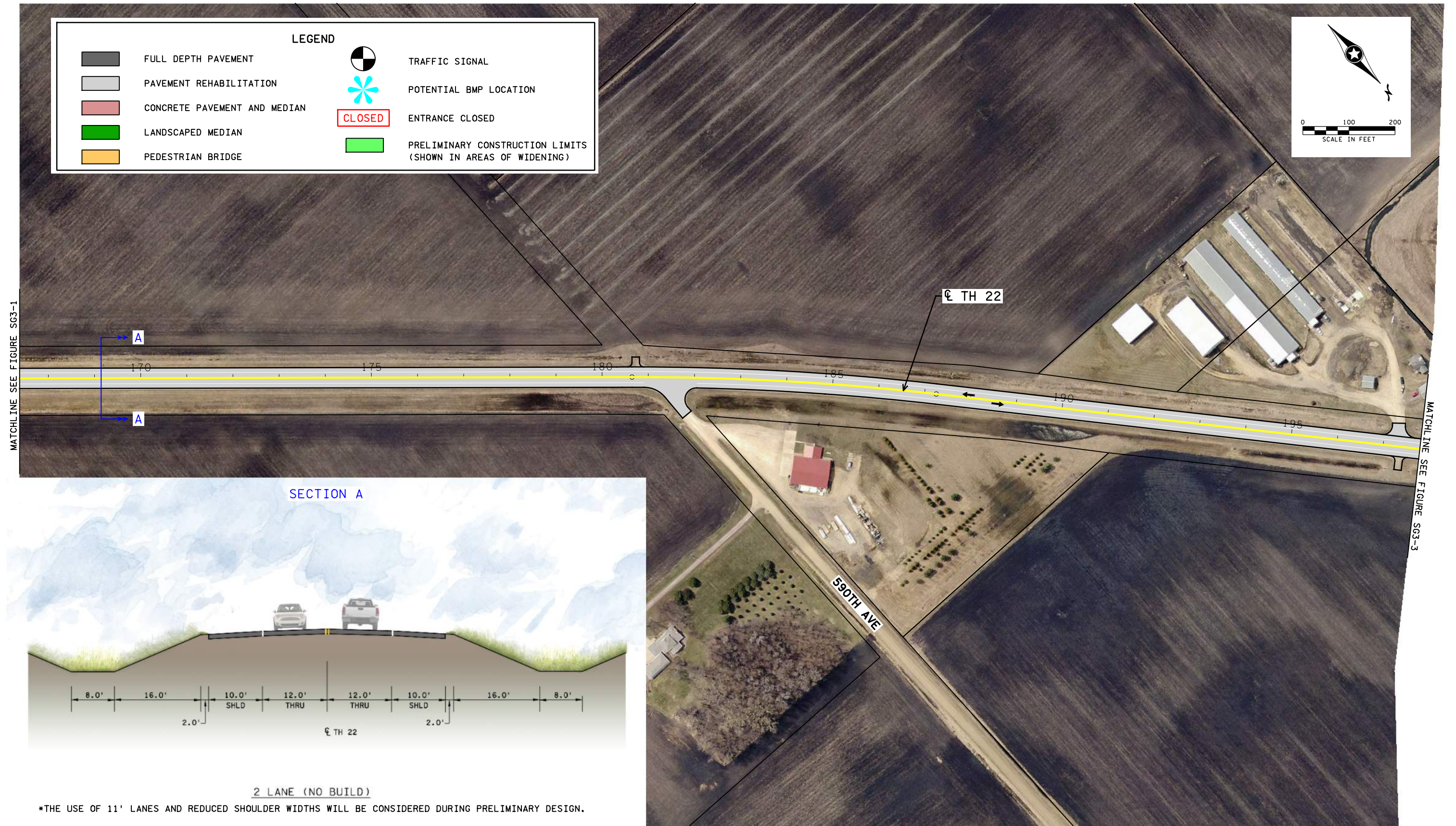
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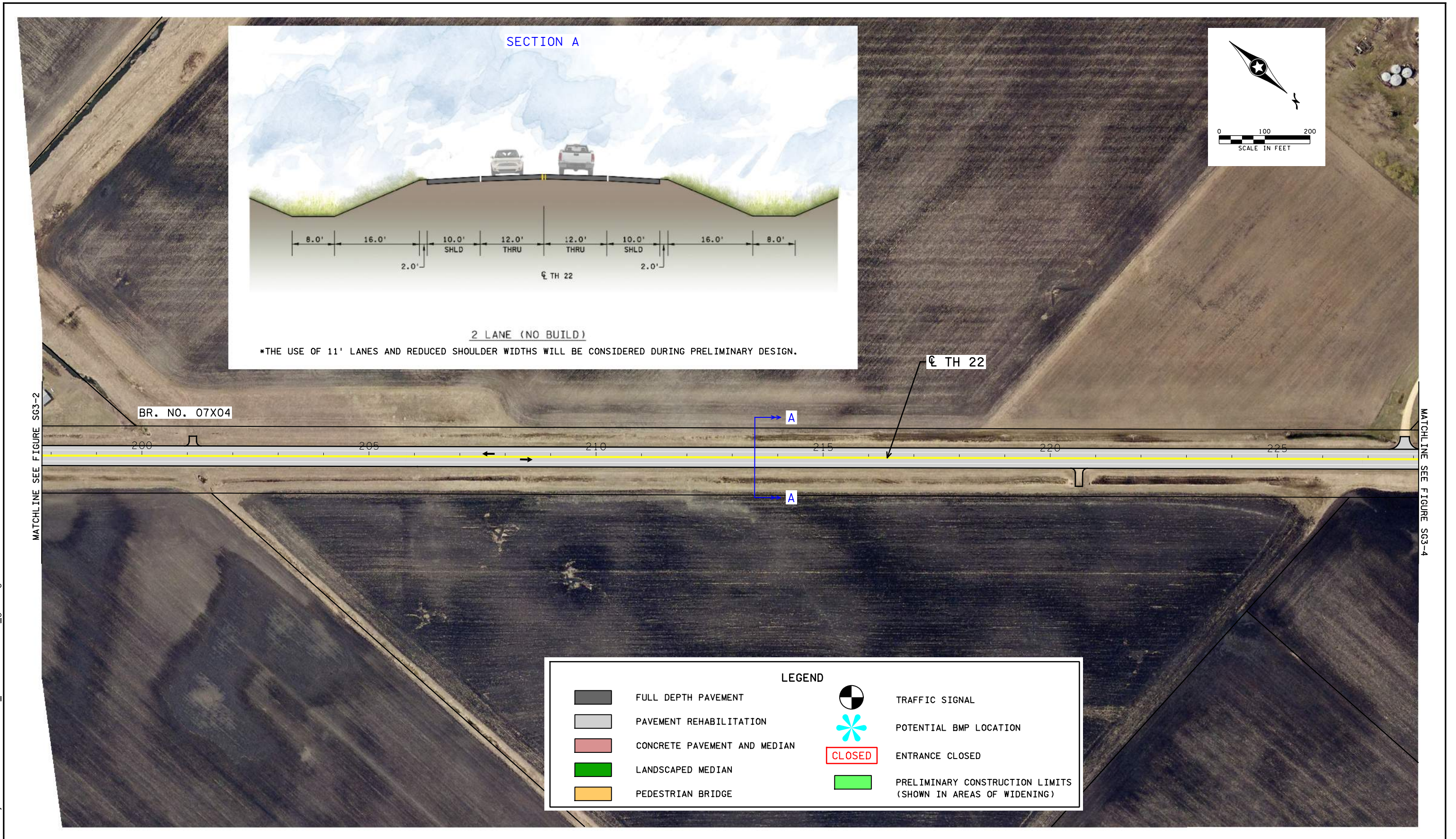
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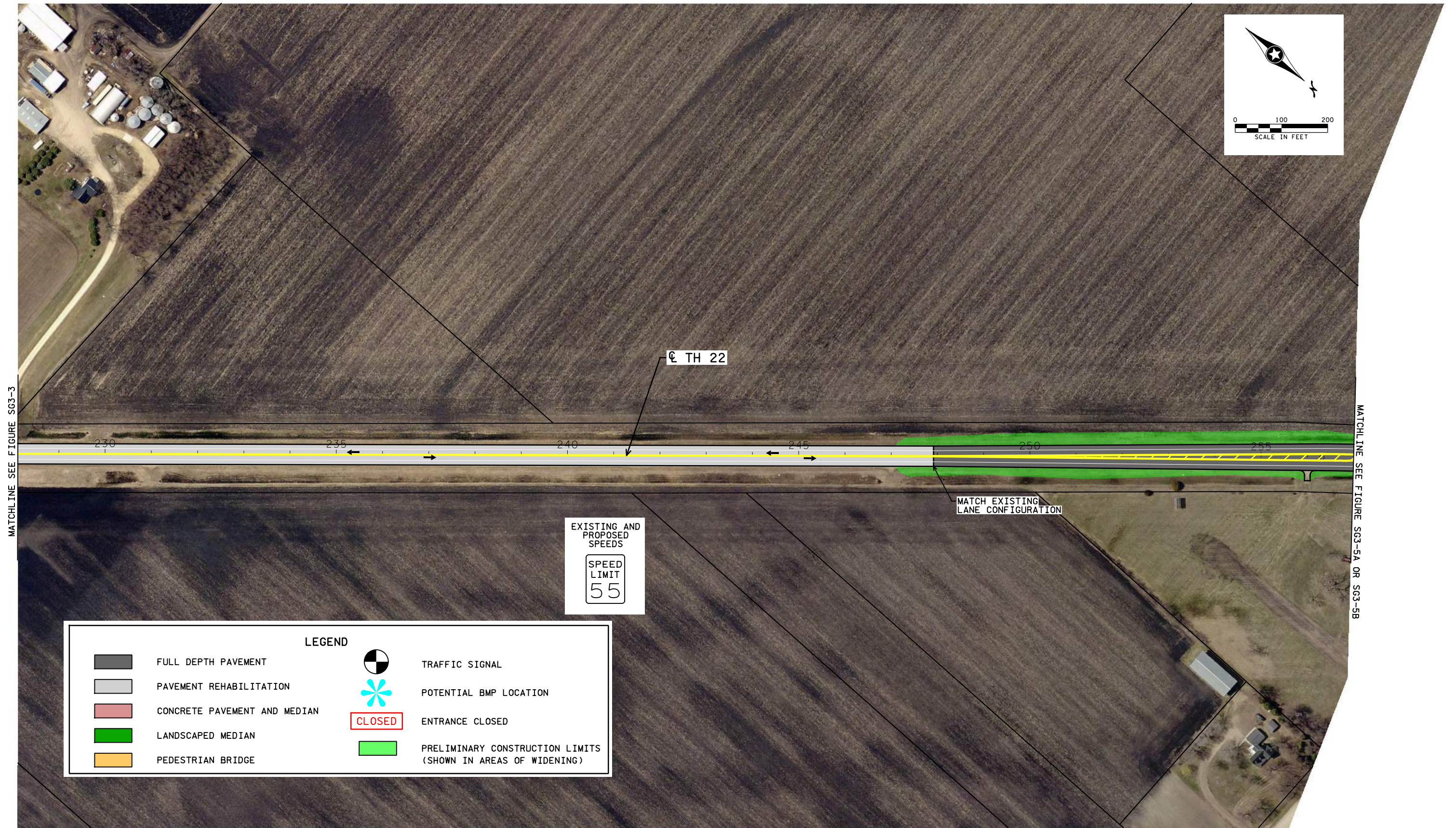
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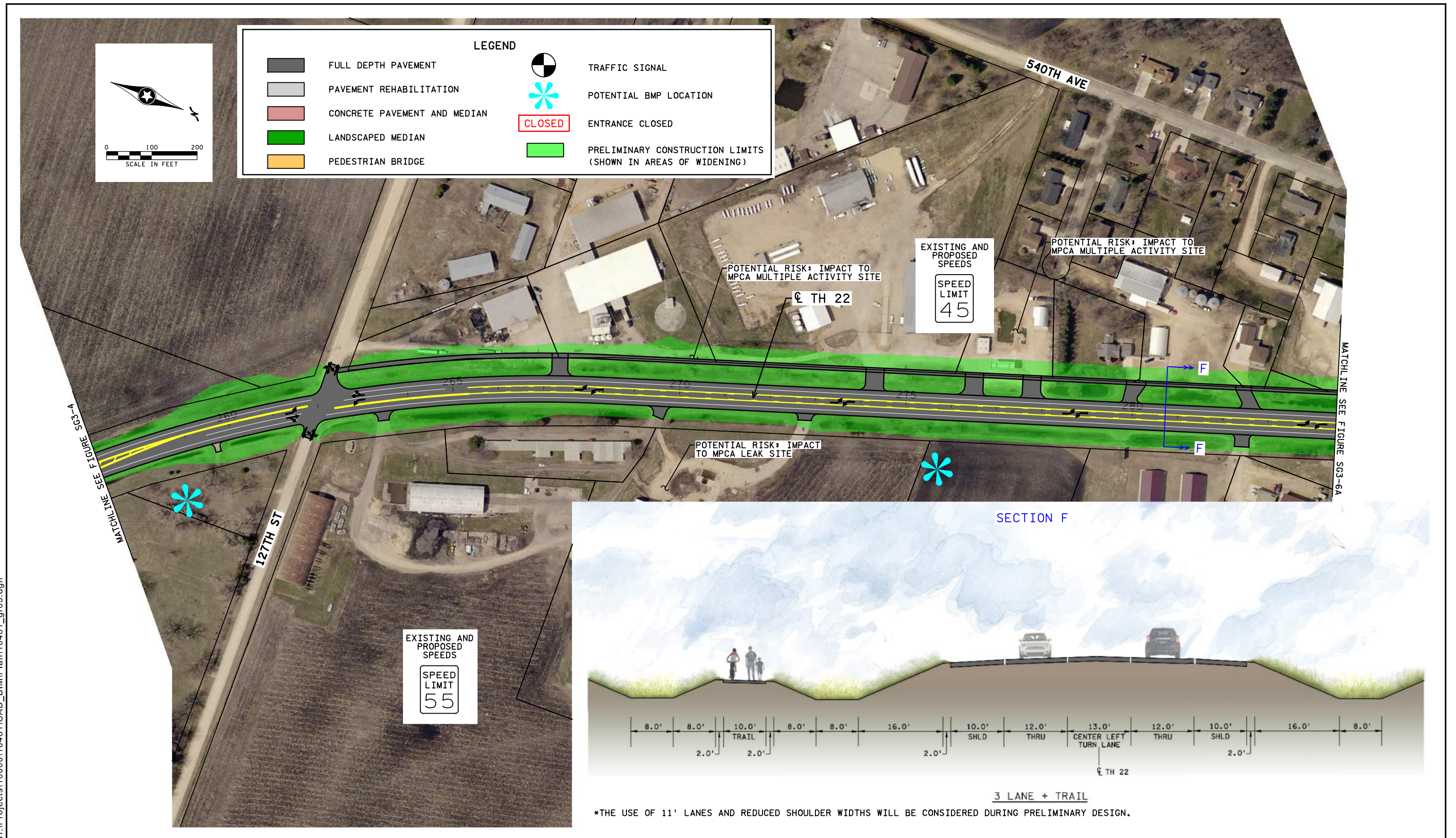
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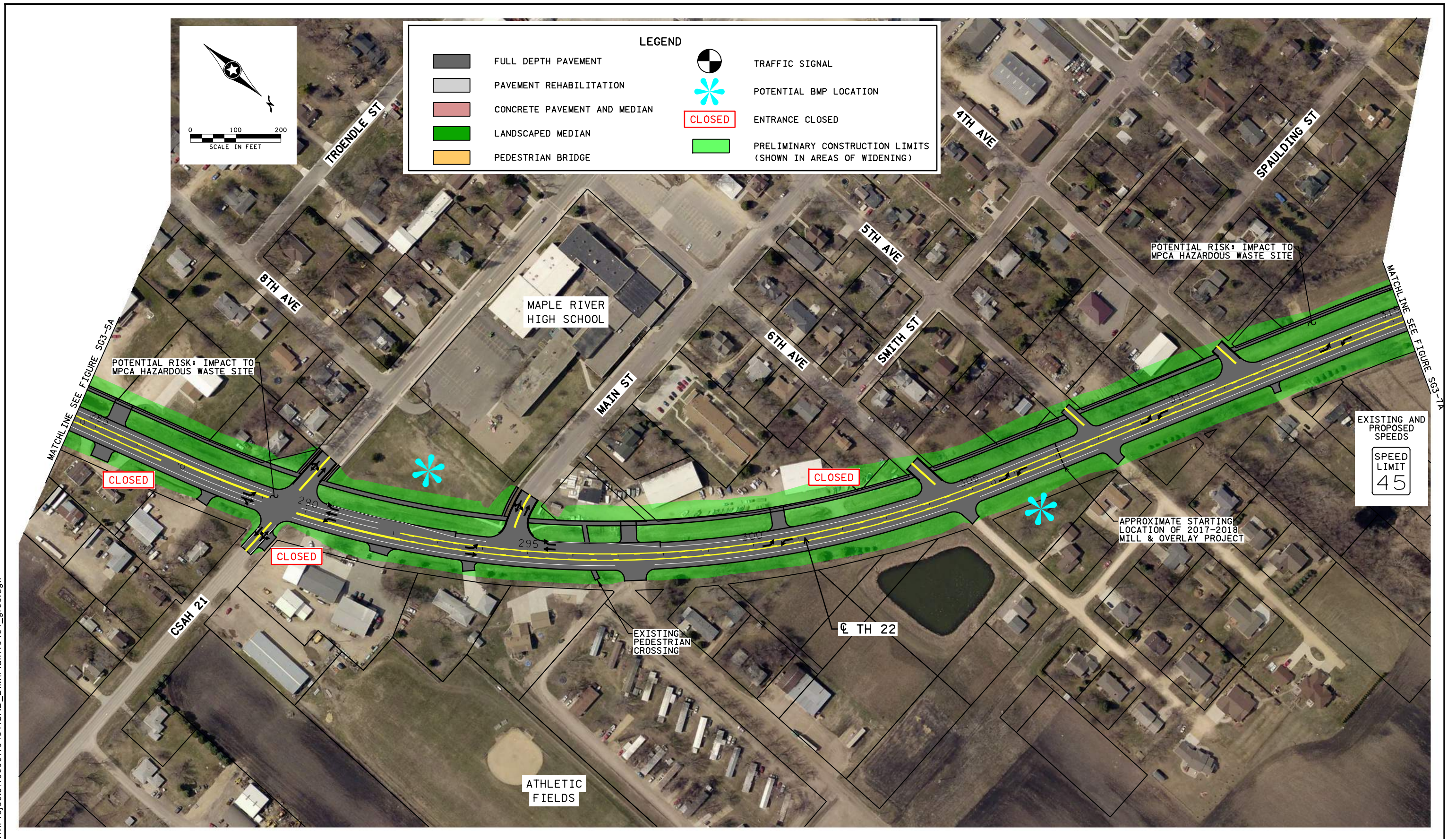
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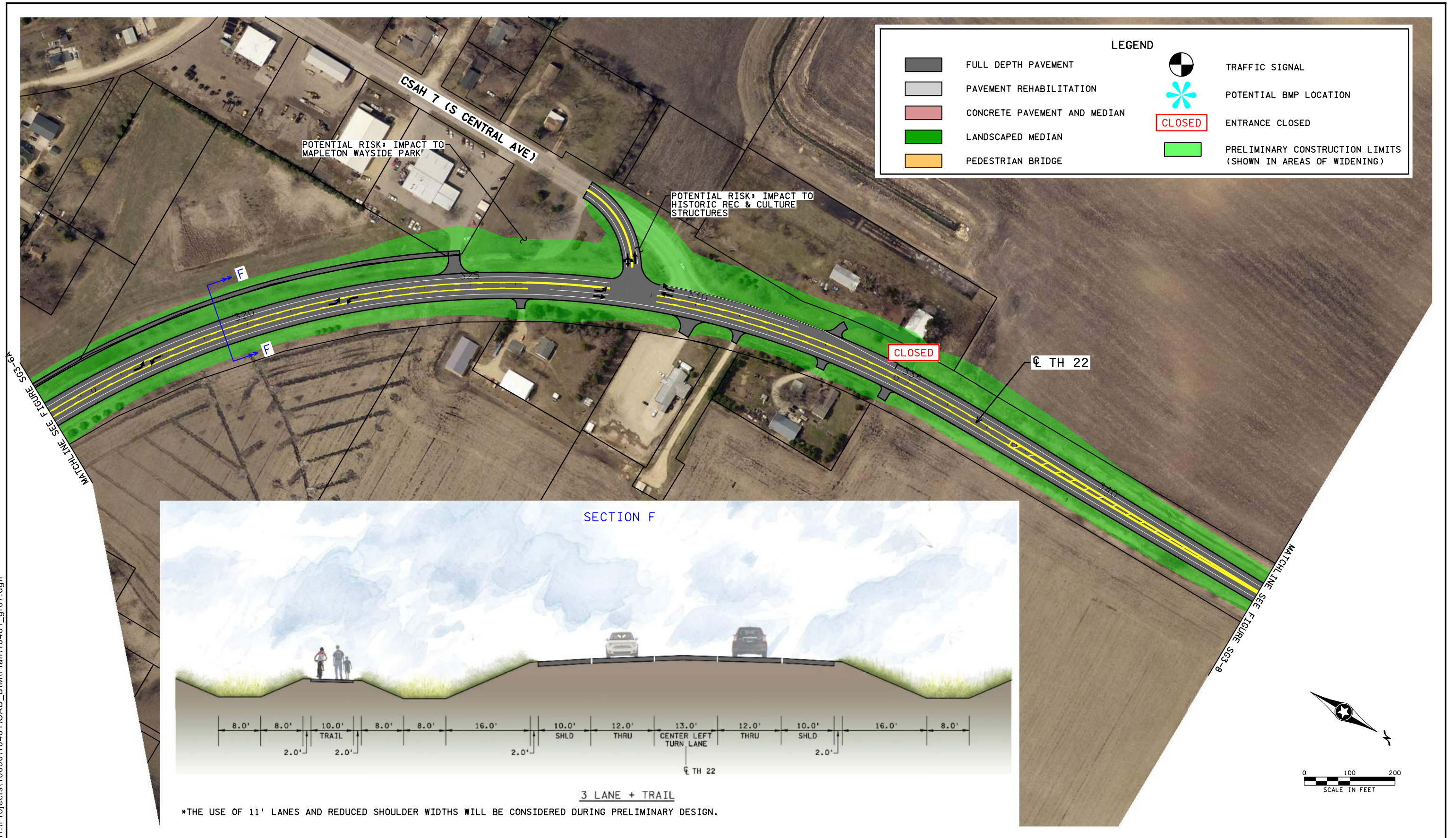
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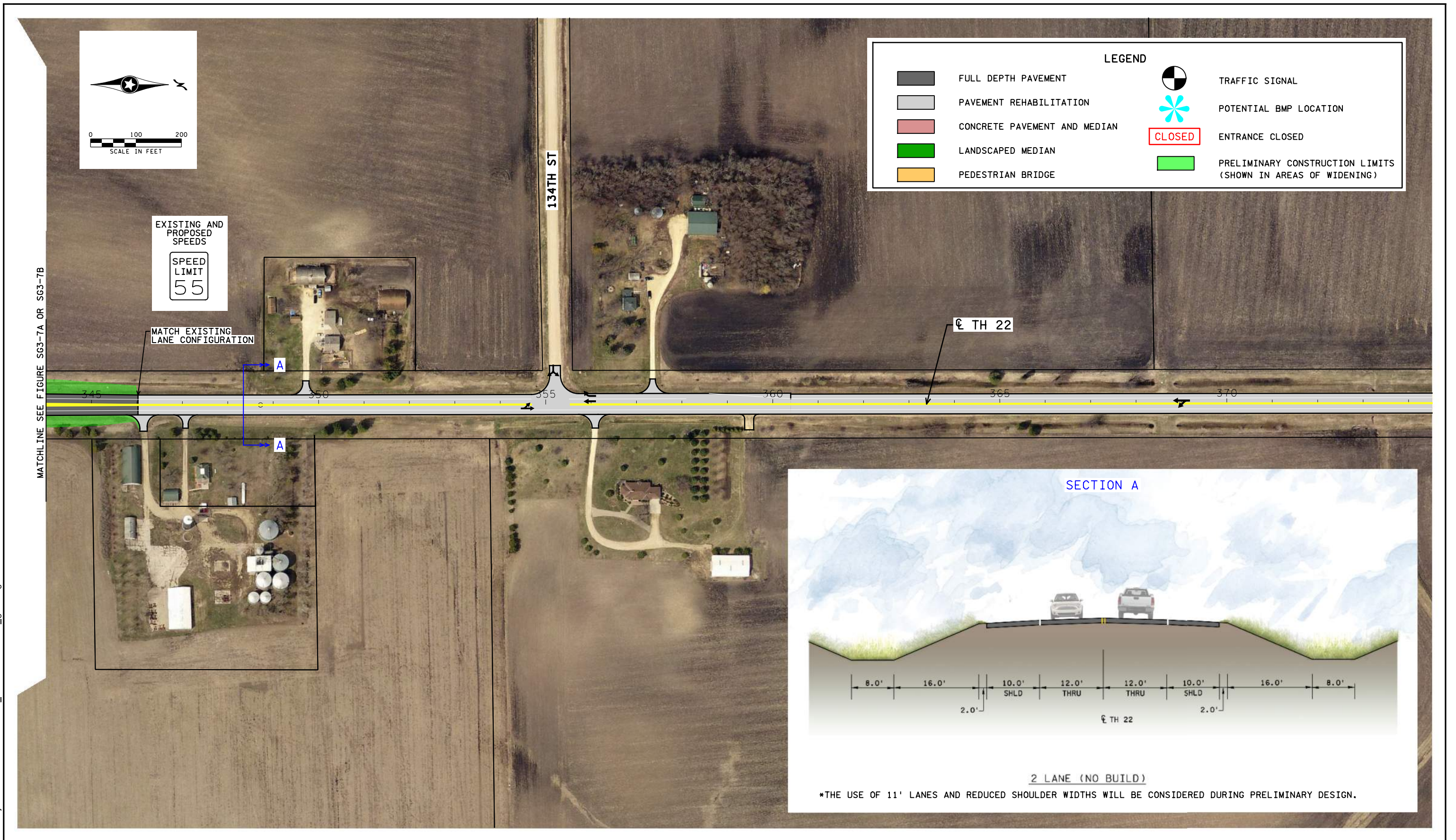
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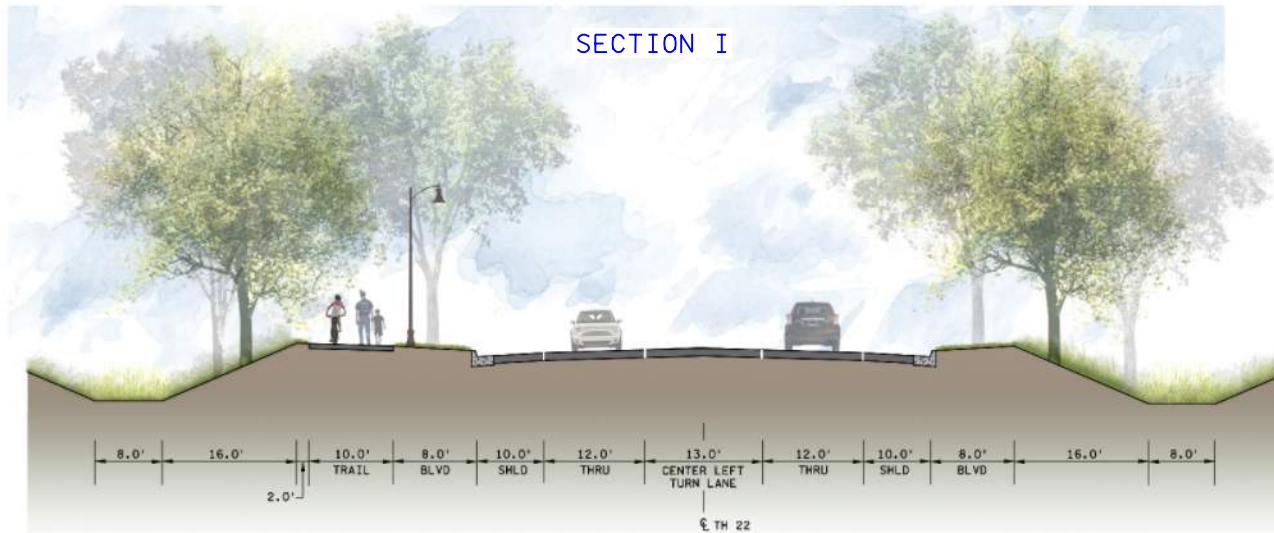


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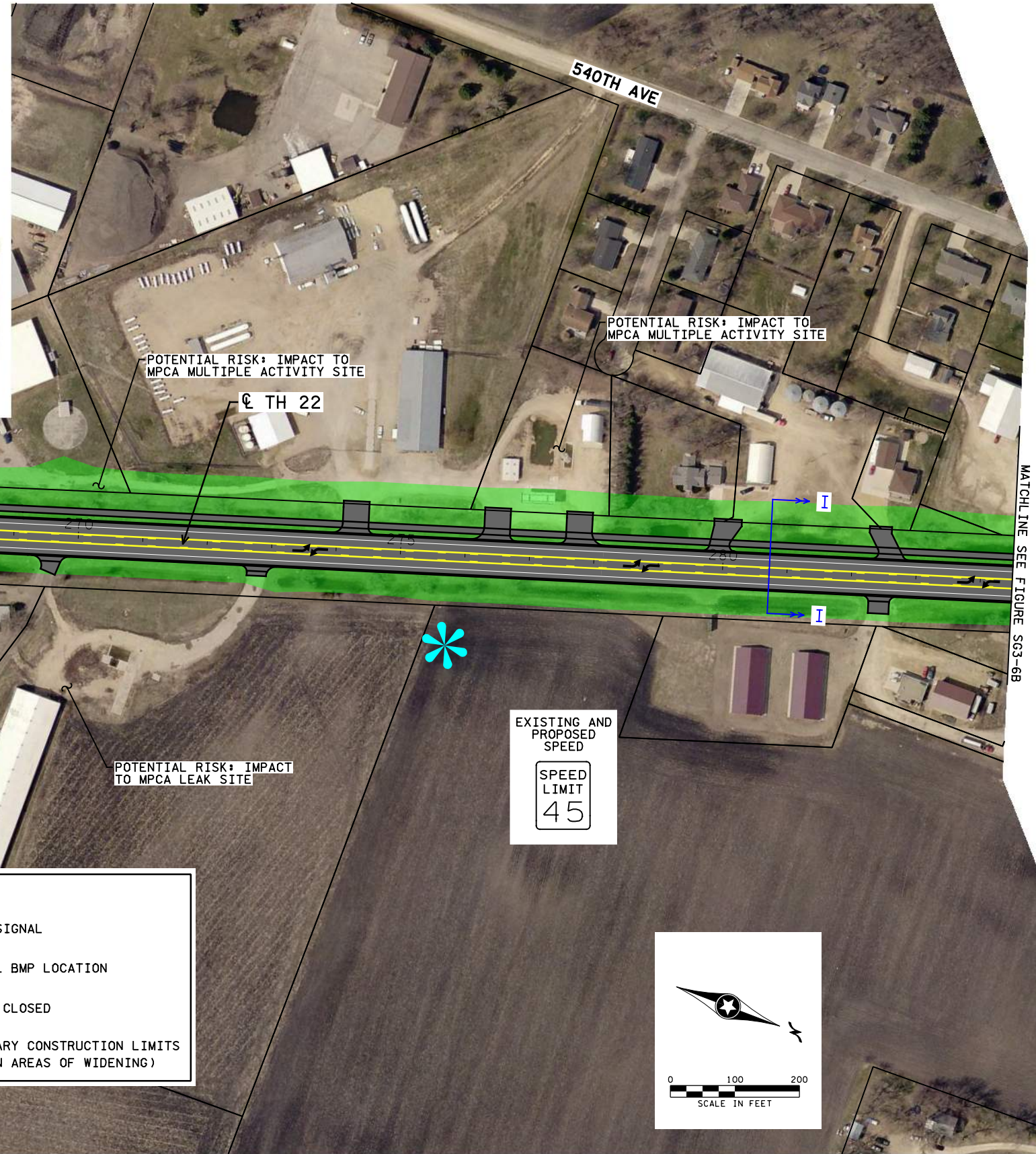


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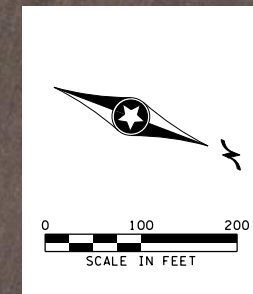




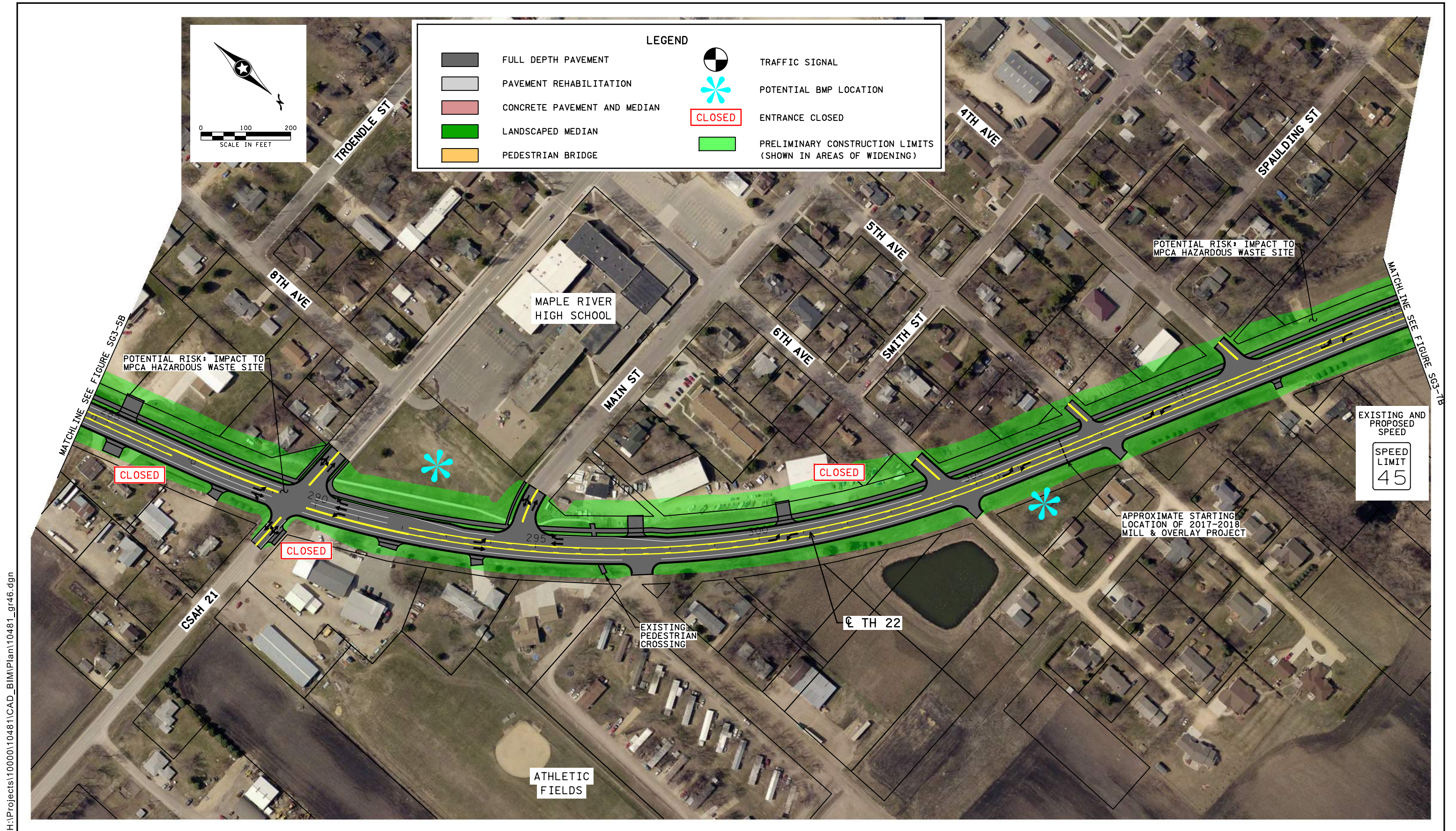
3 LANE URBANIZING
 *THE USE OF 11' LANES AND REDUCED SHOULDER WIDTHS WILL BE CONSIDERED DURING PRELIMINARY DESIGN.



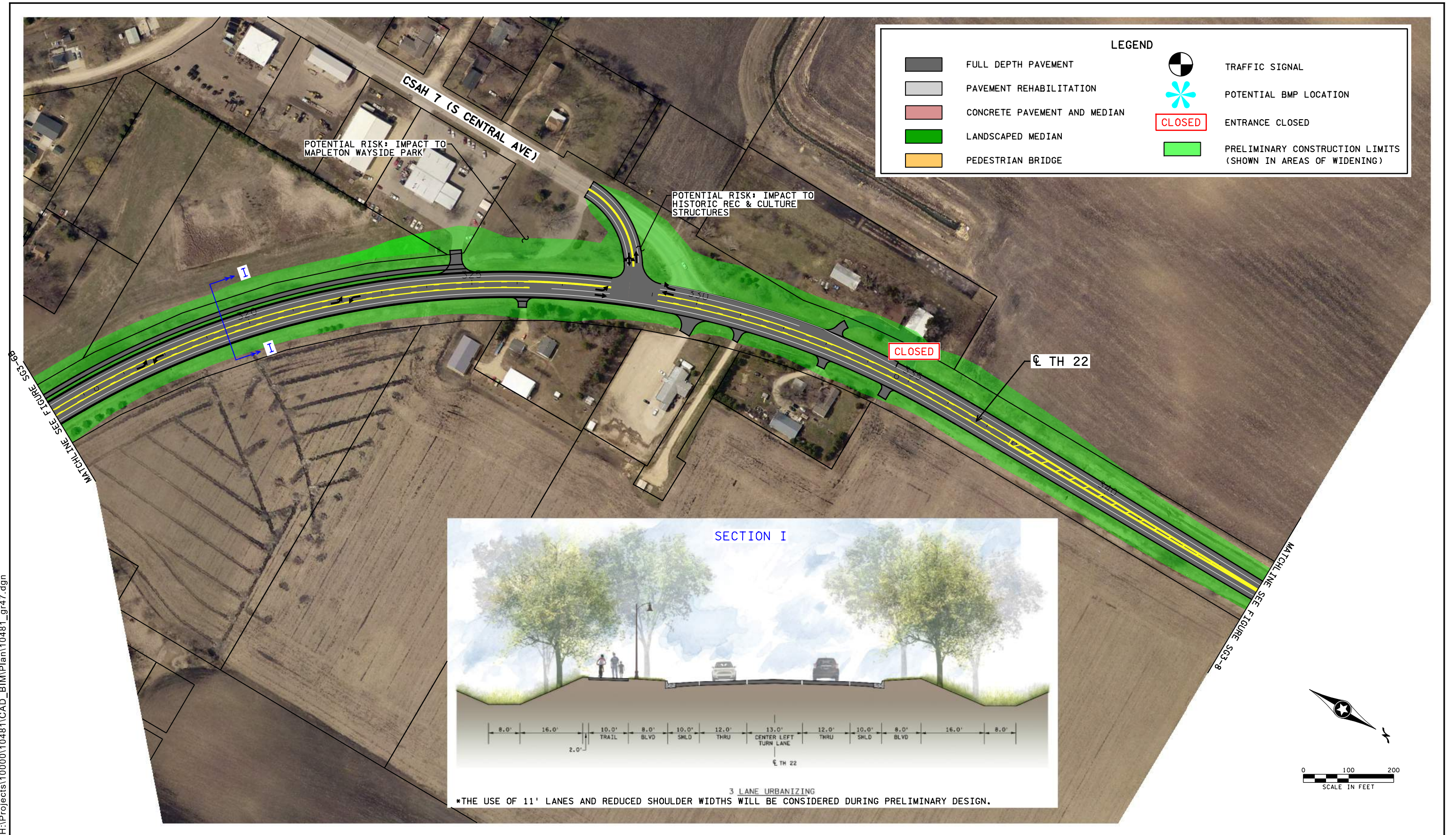
LEGEND			
	FULL DEPTH PAVEMENT		TRAFFIC SIGNAL
	PAVEMENT REHABILITATION		POTENTIAL BMP LOCATION
	CONCRETE PAVEMENT AND MEDIAN		ENTRANCE CLOSED
	LANDSCAPED MEDIAN		PRELIMINARY CONSTRUCTION LIMITS (SHOWN IN AREAS OF WIDENING)
	PEDESTRIAN BRIDGE		



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SCOPING ESTIMATE "PER MILE COSTS"

Concept Cost Estimate (based upon 2017 bid price information)
Prepared By: SRF Consulting Group, Inc., September, 2018

			2 Lane Rural Rehab		4 Lane Rural Rehab		2 Lane Rural Recon		3 Lane Rural Recon		3 Lane Urban		4 Lane Divided Rural		4 Lane Divided Urban	
			1.0 miles		1.0 miles		1.0 miles		1.0 miles		1.0 miles		1.0 miles		1.0 miles	
ITEM DESCRIPTION	UNIT	UNIT PRICE	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT	EST. QUANTITY	EST. AMOUNT
PAVING AND GRADING COSTS																
Grp 1a 2106 Excavation - common & subgrade	cu. vd.	\$6.00					46,800	\$280,800	55,000	\$330,000	34,700	\$208,200	100,200	\$601,200	66,100	\$396,600
Grp 1b 2106 Excavation - muck	cu. vd.	\$9.00														
Grp 1c 2106 Excavation - rock	cu. vd.	\$150.00														
Grp 2a 2106 Common Embankment (CV)	cu. vd.	\$4.00														
Grp 2b 2106 Granular Embankment - Muck Backfill (CV)	cu. vd.	\$10.00														
Grp 2c 2106 Select Granular - Structural Backfill (CV)	cu. vd.	\$16.00														
Grp 2d 2106 Granular Subgrade (CV)	cu. vd.	\$12.00					19,800	\$237,600	24,700	\$296,400	23,100	\$277,200	33,700	\$404,400	32,500	\$390,000
Grp 3a Mainline Pavement	sq. vd.	\$35.00					14,100	\$493,500	22,300	\$780,500	31,700	\$1,109,500	29,400	\$1,029,000	37,600	\$1,316,000
Grp 3b Mainline Shoulder Pavement	sq. vd.	\$25.00					11,800	\$295,000	11,800	\$295,000			15,300	\$382,500		
Grp 3c Mainline Pavement Rehab	sq. vd.	\$9.00	14,100	\$126,900	28,200	\$253,800										
Grp 3d Mainline Shoulder Pavement Rehab	sq. vd.	\$9.00	11,800	\$106,200	16,500	\$148,500										
Grp 3e County Road Pavement	sq. vd.	\$30.00														
Grp 3f County Road Shoulder Pavement	sq. vd.	\$20.00														
Grp 3g Local & Frontage Road Pavement	sq. vd.	\$20.00														
Grp 3h Driveway Pavement	sq. vd.	\$20.00														
Grp 4a Concrete Walk / Trail / Median	sq. vd.	\$45.00														
Grp 4b Bituminous Walk / Trail	sq. vd.	\$30.00														
Grp 4c ADA Pedestrian Curb Ramp	each	\$1500.00													11,800	\$354,000
Grp 5 Concrete Curb and Gutter	lin. ft.	\$15.00									10,600	\$159,000			21,200	\$318,000
Grp 6 Concrete Median Barrier (Permanent)	lin. ft.	\$60.00														
Grp 7 Pavement Edge Drains	lin. ft.	\$10.00					10,600	\$106,000	10,600	\$106,000	10,600	\$106,000	10,600	\$106,000	10,600	\$106,000
Grp 8a Removals - Pavement	sq. vd.	\$3.00					25,900	\$77,700	34,100	\$102,300	31,700	\$95,100	44,700	\$134,100	37,600	\$112,800
Grp 8b Removals - Pavement Rehab Milling	sq. vd.	\$2.00	25,900	\$51,800	44,700	\$89,400										
Grp 8c Removals - Drainage	lin. ft.	\$20														
SUBTOTAL PAVING AND GRADING COSTS:				\$284,900		\$491,700		\$1,490,600		\$1,910,200		\$1,955,000		\$2,657,200		\$2,993,400
DRAINAGE, UTILITIES AND EROSION CONTROL																
Dr 1 Local Utilities - Sanitary Sewers	lin. ft.															
Dr 2 Local Utilities - Watermains	lin. ft.															
Dr 3 Water Quality Ponds	i.s.															
Dr 4 Wetland Mitigation	i.s.															
Dr 5 Drainage - urban (delete italics text - 10% to 30)	20%										1.00	\$391,000			1.00	\$599,000
Dr 6 Drainage - rural	(3) mile	\$100,000					0.50	\$50,000	1.00	\$100,000			1.00	\$100,000		
Dr 7 Turf Establishment & Erosion Control	5%							\$75,000		\$96,000		\$98,000		\$133,000		\$150,000
Dr 8 Landscaping	2%											\$40,000		\$54,000		\$60,000
SUBTOTAL DRAINAGE, UTILITIES AND EROSION CONTROL								\$125,000		\$196,000		\$529,000		\$287,000		\$809,000
SIGNAL AND LIGHTING COSTS																
SGL 1 Signals (permanent)	each	\$250,000														
SGL 2 Signals (temporary)	each	\$80,000														
SGL 3 At Grade Intersection Lighting (permanent - non	each	\$25,000														
SGL 4 Mainline Lighting (permanent)	mile	\$300,000														
SGL 5 Mainline Lighting (temporary)	mile	\$100,000														
SGL 6 Interchange Lighting (permanent, standard)	each	\$60,000														
SGL 7 Interchange Lighting (permanent, high mast tow	tower	\$80,000														
SGL 8 Interchange Lighting (temporary)	each	\$40,000														
SUBTOTAL SIGNAL AND LIGHTING COSTS:																
SIGNING & STRIPING COSTS																
SGN 1 Mainline Signing (C&D)	mile	\$35,000							1.0	\$35,000	1.0	\$35,000	1.0	\$35,000	1.0	\$35,000
SGN 2 Mainline Striping	mile	\$10,000	1.0	\$10,000	2.0	\$20,000	1.0	\$10,000	1.0	\$10,000	1.0	\$10,000	1.0	\$10,000	1.0	\$10,000
SGN 3 Mainline Signing (A, OH, Br Mtd)	each	\$30,000														
SGN 4 Permanent ITS	mile	\$250,000														
SGN 5 Temporary ITS	mile	\$100,000														
SUBTOTAL SIGNING & STRIPING COSTS:				\$10,000		\$20,000		\$10,000		\$45,000		\$45,000		\$45,000		\$45,000
SUBTOTAL CONSTRUCTION COSTS:				\$294,900		\$511,700		\$1,625,600		\$2,151,200		\$2,529,000		\$2,989,200		\$3,847,400
MISCELLANEOUS COSTS																
M 1 Mobilization	5%			\$15,000		\$26,000		\$82,000		\$108,000		\$127,000		\$150,000		\$193,000
M 2 Non Quantified Minor Items (delete italics text -	10%			\$30,000		\$52,000		\$163,000		\$216,000		\$253,000		\$299,000		\$385,000
M 3 Anti Injng System	Lump Sum															
M 4 Roadway Weather Information System (RWIS)	Lump Sum															
M 5																
M 6																
M 7 Temporary Pavement & Drainage	5%							\$82,000						\$150,000		
M 8 Traffic Control	3%			\$9,000		\$16,000		\$49,000		\$65,000		\$76,000		\$90,000		\$116,000
SUBTOTAL MISCELLANEOUS COSTS:				\$54,000		\$94,000		\$376,000		\$389,000		\$456,000		\$689,000		\$694,000
ESTIMATED TOTAL CONSTRUCTION COSTS without Contingency:				\$348,900		\$605,700		\$2,001,600		\$2,540,200		\$2,985,000		\$3,678,200		\$4,541,400
1 Contingency or "risk" (delete italics text - 10% {	10%			\$35,000		\$61,000		\$201,000		\$255,000		\$299,000		\$368,000		\$455,000
ESTIMATED TOTAL CONSTRUCTION COSTS PLUS CONTINGENCY:				\$383,900		\$666,700		\$2,202,600		\$2,795,200		\$3,284,000		\$4,046,200		\$4,996,400
ESTIMATED TOTAL CONSTRUCTION COSTS ROUNDED TO NEAREST \$0.1 MILLION:				\$400,000		\$700,000		\$2,300,000		\$2,800,000		\$3,300,000		\$4,100,000		\$5,000,000
OTHER PROJECT COSTS:																
RAILROAD AGREEMENTS	Lump Sum	\$1														
UITIY AGREEMENTS	Lump Sum	\$1														
TURN BACK AGREEMENTS	Lump Sum	\$1														
PROJECT MITIGATION	Lump Sum	\$1														
R/W ACQUISITIONS	Lump Sum	\$1														
	Lump Sum															
DESIGN ENG. & CONSTRUCTION ADMIN.	Lump Sum	10%		\$100,000		\$100,000		\$300,000		\$300,000		\$400,000		\$500,000		\$500,000
SUBTOTAL OTHER PROJECT COSTS				\$100,000		\$100,000		\$300,000		\$300,000		\$400,000		\$500,000		\$500,000
TOTAL PROJECT COST				\$500,000		\$800,000		\$2,600,000		\$3,100,000		\$3,700,000		\$4,600,000		\$5,500,000

INFLATION COST (CURRENT YR. TO YR. OF OPENI	Years	3%														
TOTAL PROJECT COST (OPENING YEAR DOLLARS)				\$500,000		\$800,000		\$2,600,000		\$3,100,000		\$3,700,000		\$4,600,000		\$5,500,000

NOTE (1) Includes aggregate base class 5 and PASB or OGAB, as appropriate.
(2) Paved median areas only. Does not include pedestrian sidewalks.
(3) Does not include pavement edge drains, see separate item.
(4) Assumes 50' Piled Foundations & Mn/DOT Standard Plan Sheet designs.

Utility Aagreements based upon:
R/W Acquisitions based upon: