

Legend

- XXX' = Turn Bay Storage Length, ft
- (XXX') = Intersection Spacing, Centerline-to-Centerline, ft
- = Traffic Signal
- = Lane Geometry
- = Stop Sign
- = Railroad
- = Private Driveway
- = Channelized Turn Lane
- = Lane Drop
- = Lane Addition

Existing Transportation System

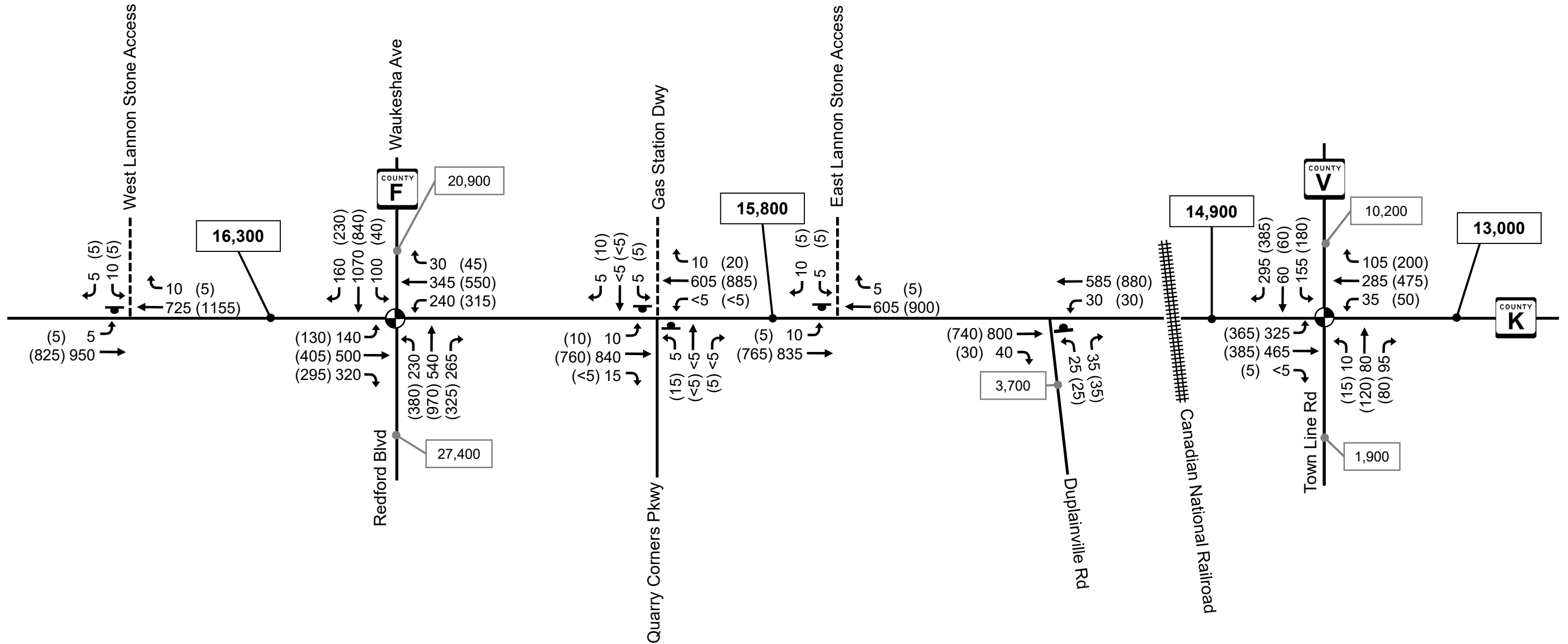
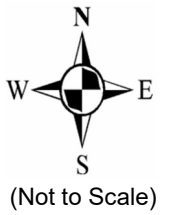


Severity codes:
 K = Fatality
 A = Incapacitating
 B = Non-incapacitating
 C = Possible incapacitation
 PDO = Property Damage Only

Legend Note: One PDO crash involved a suicide at the County K railroad crossing (8/18/2020). Wisconsin crash data reporting does not include suicides in roadway fatalities.

XX = Intersection Crash Total **XX** = Midblock Crash Total

**Study Area Crash Summary
 2020 – 2024 Crash Data**



- Note:
- Forecast Year 2055 AADT volumes were calculated by applying 7% factor to SEWRPC AWDT volumes.
 - The Year 2055 No Build volumes are applicable to the existing geometry (without capacity expansion)

Legend

XX = Weekday Morning Peak Hour Volume (7:15AM – 8:15AM)
 (XX) = Weekday Evening Peak Hour Volume (4:15PM – 5:15PM)
 XXX = No Build Forecast Year 2055 Average Annual Daily Traffic Volume
 T = Stop Sign ● = Traffic Signal ##### = Railroad --- = Private Driveway

**Year 2055 No Build
Traffic Volumes**

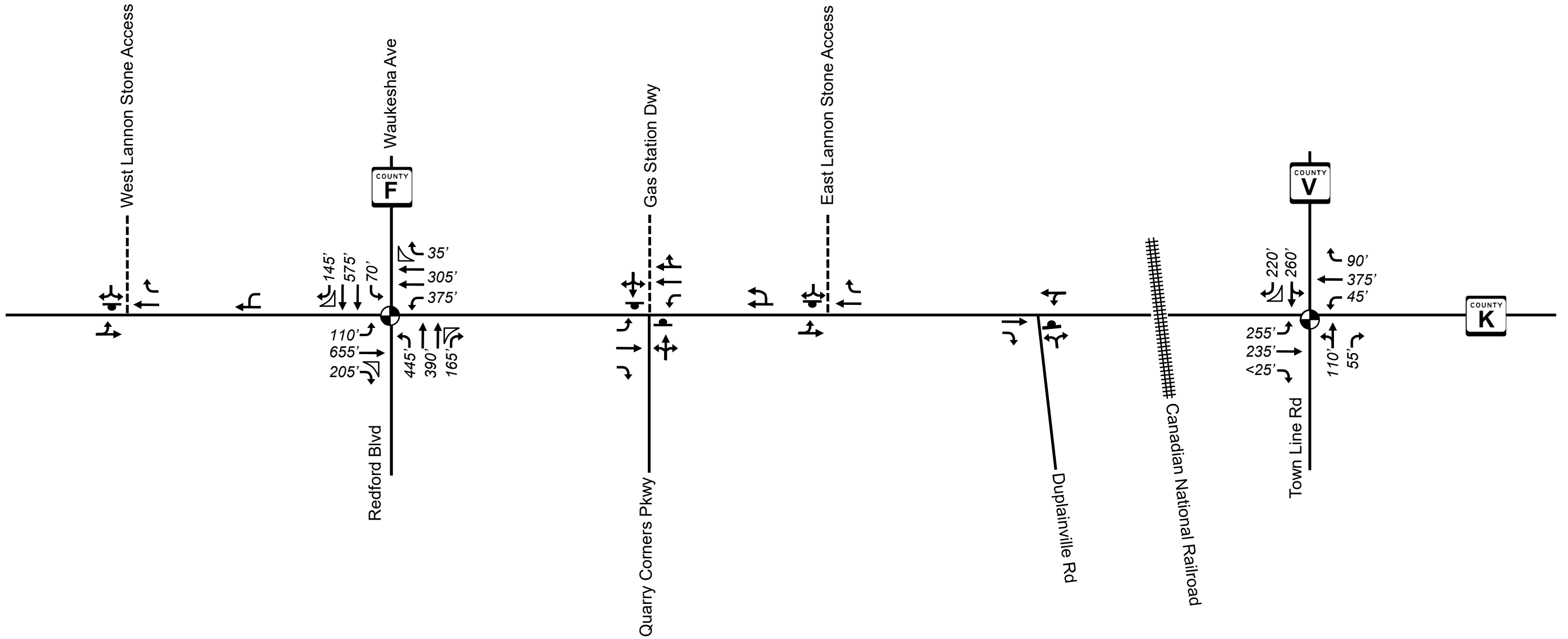
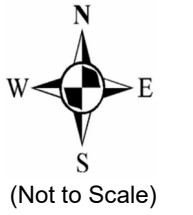
Exhibit
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Intersection	Traffic Control	Peak Hour	Parameter	Level of Service (LOS) per Movement by Approach												Overall Intersection LOS
				Eastbound			Westbound			Northbound			Southbound			
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
Lisbon Rd (County K) with Waukesha Ave / Redford Blvd (County F)	Traffic Signal	AM	LOS	C	F	D	F	C	C	F	C	C	C	E	C	E
			Delay, sec/veh	25.2	128.8	36.2	120.2	32.4	28.0	122.1	26.3	24.7	22.3	60.6	26.0	
			Queue, ft	110	655	205	335	200	30	320	215	145	70	575	95	
		PM	LOS	C	F	D	F	D	C	E	C	C	C	E	C	D
			Delay, sec/veh	27.7	109.5	40.5	90.4	36.4	28.1	76.5	29.0	22.9	28.0	56.5	33.3	
			Queue, ft	105	520	195	375	305	35	445	390	165	35	440	145	
Lisbon Rd (County K) with Town Line Rd (County V)	Traffic Signal	AM	LOS	B	A	A	B	C	B	B	B	B	C	C	C	B
			Delay, sec/veh	13.5	9.1	5.6	16.2	22.8	16.4	18.4	18.4	18.1	21.1	21.1	20.9	
			Queue, ft	150	235	<25	40	225	60	75	75	55	220	220	160	
		PM	LOS	C	A	A	B	C	B	C	C	C	C	C	C	C
			Delay, sec/veh	20.8	7.5	5.5	15.2	25.3	15.9	22.3	22.3	21.2	25.2	25.2	27.6	
			Queue, ft	255	155	<25	45	375	90	110	110	50	260	260	220	

- Notes:
- County K study did not include operational analysis at private driveways or the minor intersections with Quarry Corners Parkway and Duplainville Road.
 - The No Build condition represents existing geometry and traffic control.

**Year 2055 No Build
Peak Hour Traffic Operations**

Exhibit
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Notes:

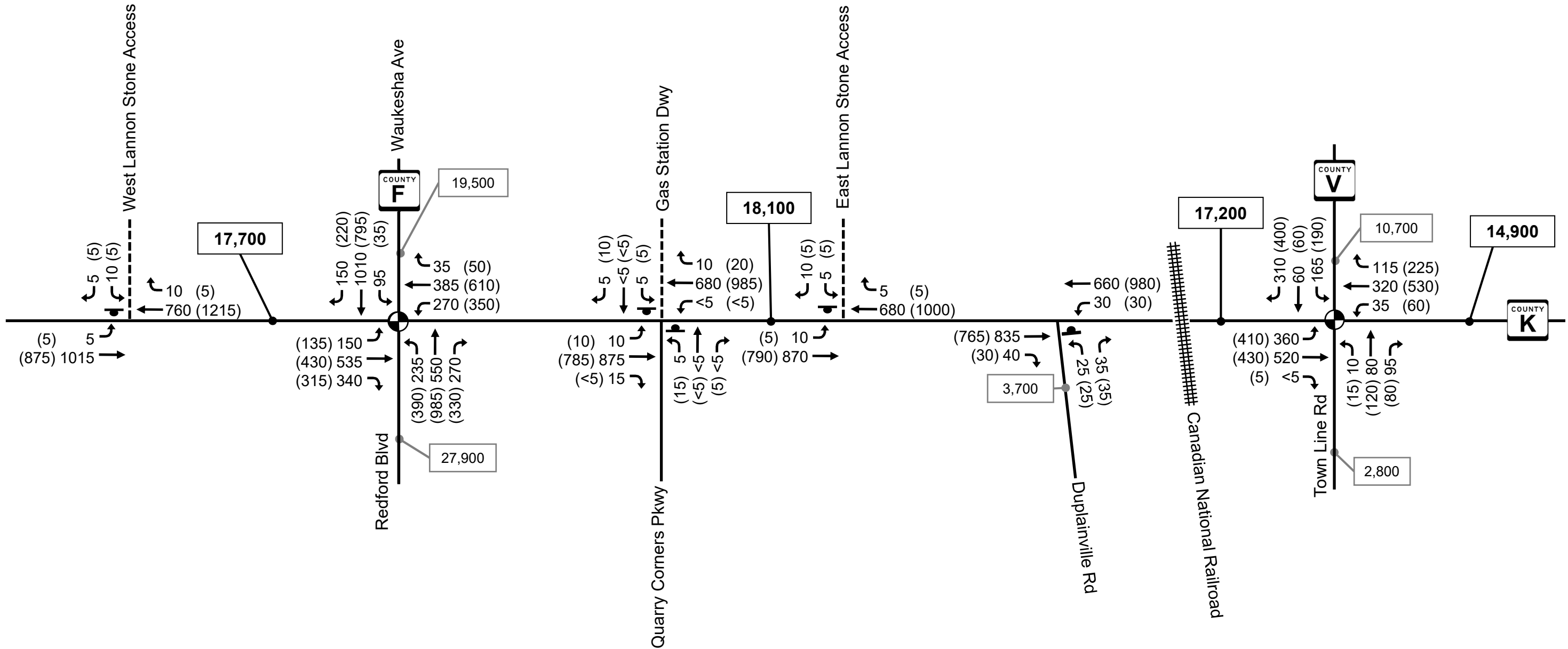
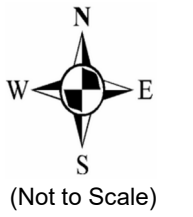
1. County K study did not include operational analysis at private driveways or the minor intersections with Quarry Corners Parkway and Duplainville Road.
2. The No Build condition represents existing geometry and traffic control

Legend

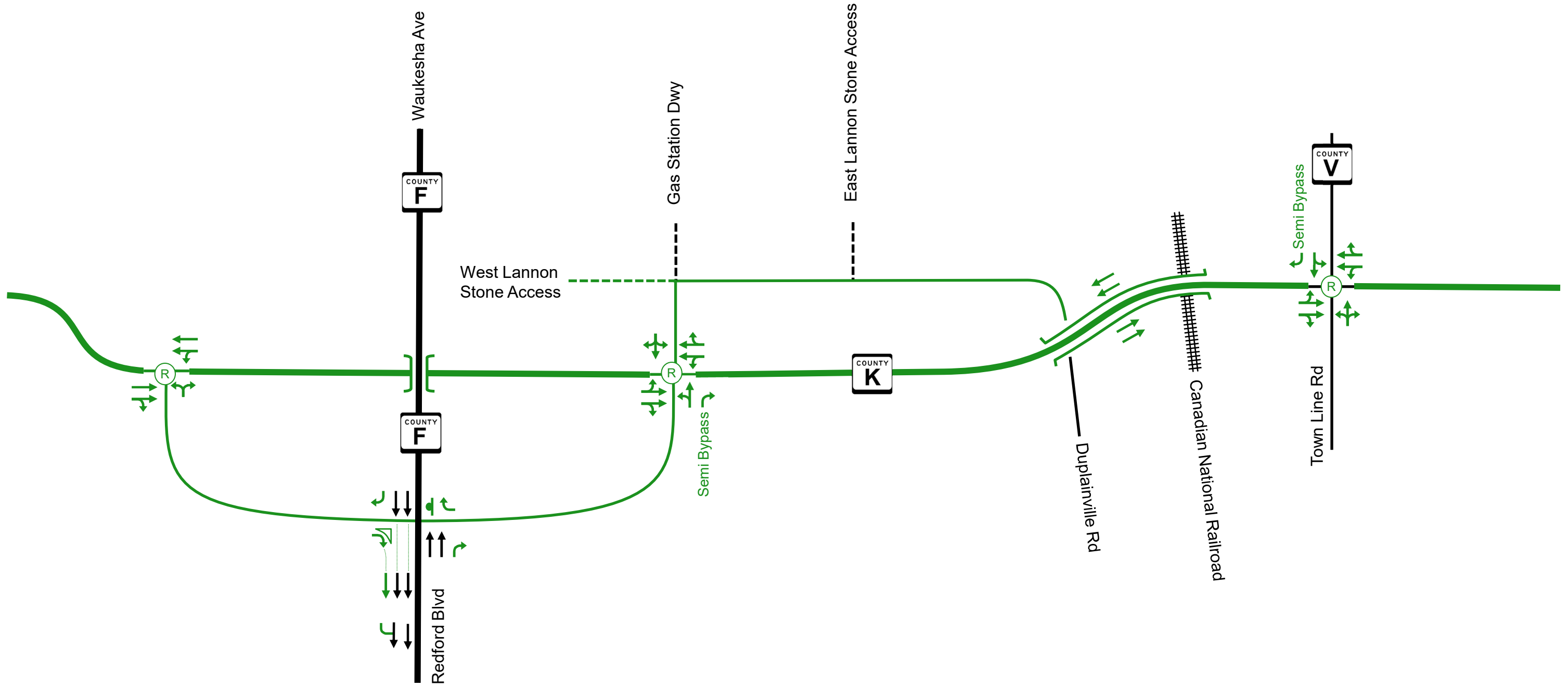
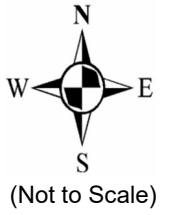
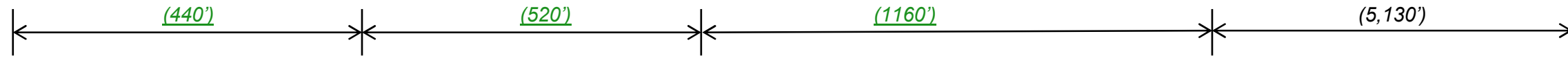
- = Traffic Signal
- = Lane Geometry
- = Stop Sign
- = Railroad
- = Lane Drop
- = Private Driveway
- = Channelized Turn Lane
- = Lane Addition

**Year 2055 No Build
Maximum Queue Lengths**

Exhibit
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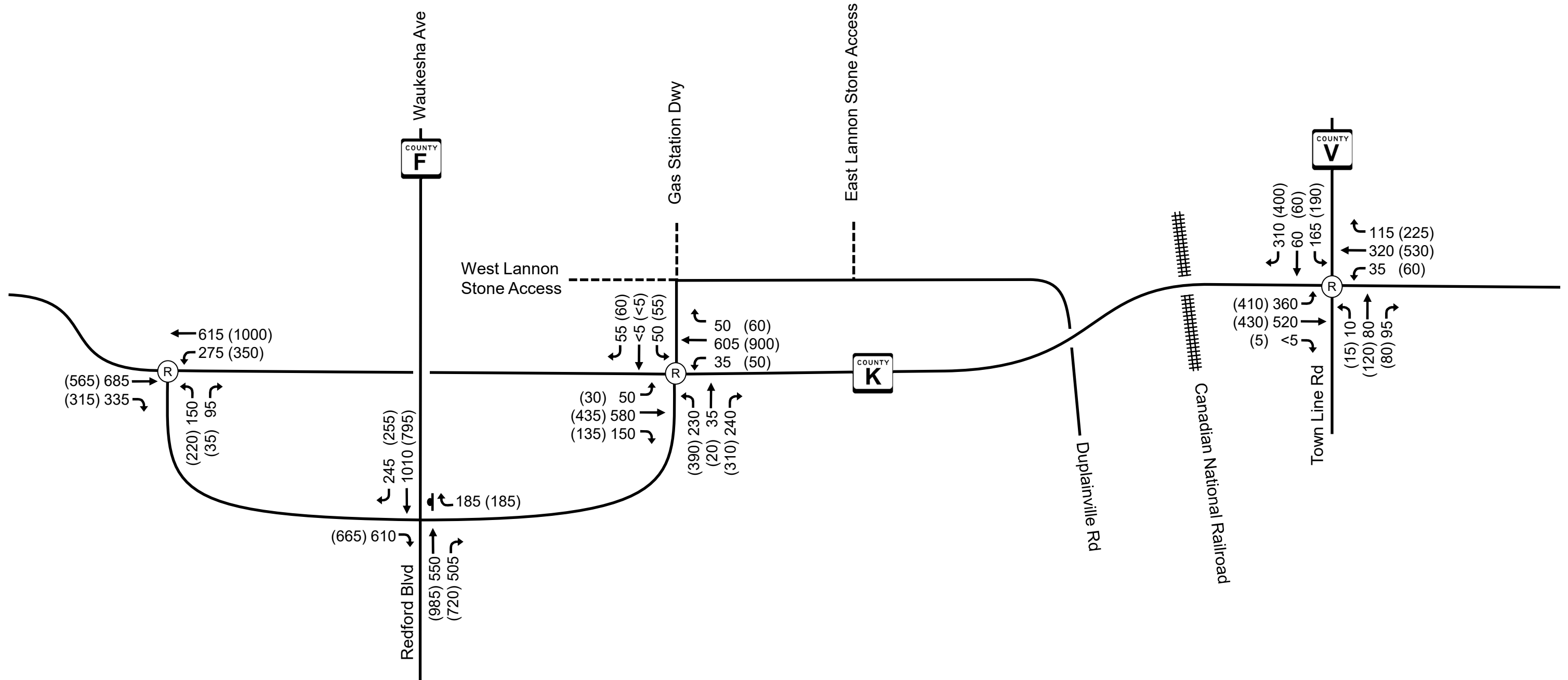
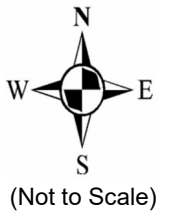
Legend	XX = Weekday Morning Peak Hour Volume (7:15AM – 8:15AM) (XX) = Weekday Evening Peak Hour Volume (4:15PM – 5:15PM)	XXX = Expansion Forecast Year 2055 Average Annual Daily Traffic Volume ■ = Stop Sign ⊕ = Traffic Signal ##### = Railroad --- = Private Driveway	Year 2055 Expansion Traffic Volumes	Exhibit 6
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Legend

- ← = Lane Geometry
- = Proposed Lane Geometry
- ##### = Railroad
- ⊙(R) = Proposed Roundabout
- ⊙(S) = Proposed Stop Sign
- ↘ = Proposed Channelized Turn Lane
- ↘ = Proposed Lane Drop
- = Proposed Median
- = Existing Raised Median
- = Proposed Roadway
- (XXX') = Existing Intersection Spacing
- (XXX') = Proposed Intersection Spacing
-] [= Proposed Bridge Structure

Two Jug Handle Alternative Transportation System



Legend

- XX = Weekday Morning Peak Hour Volume (7:15AM – 8:15AM)
- (XX) = Weekday Evening Peak Hour Volume (4:15PM – 5:15PM)
- ##### = Railroad
- (R) = Roundabout
- ▲ = Stop Sign

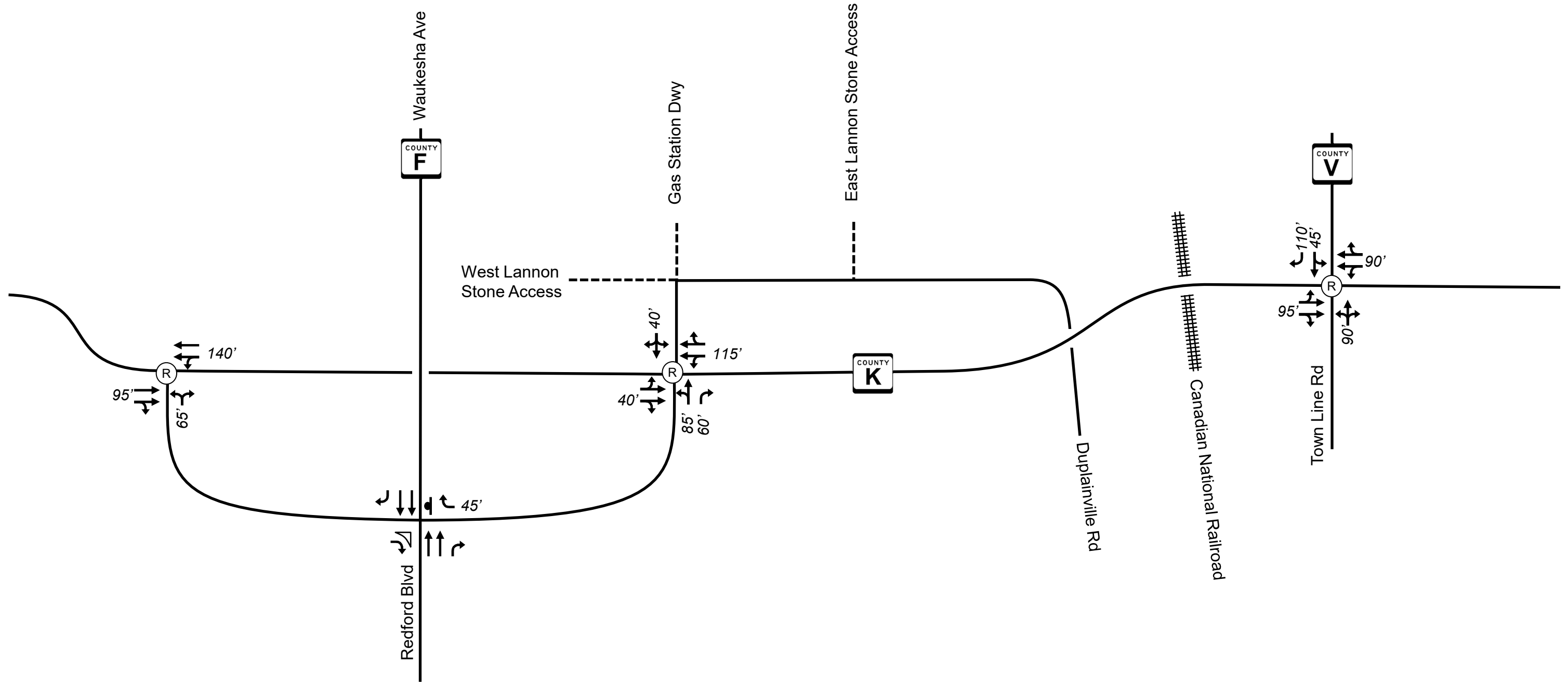
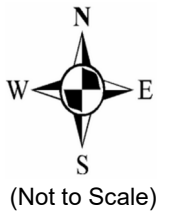
**Year 2055 Expansion Volumes
Reassigned for Two Jug Handle Alternative**

Intersection	Traffic Control	Peak Hour	Parameter	Level of Service (LOS) per Movement by Approach												Overall Intersection LOS	
				Eastbound			Westbound			Northbound			Southbound				
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
Lisbon Rd (County K) with Redford Blvd (County F) Southbound Quadrant Road	Roundabout	AM	LOS	--	B	B	A	A	--	B	--	B	--	--	--	B	
			Delay, sec/veh	--	10.9	10.9	9.1	9.1	--	13.6	--	13.6	--	--	--		
			Queue, ft	--	95	95	75	75	--	65	--	65	--	--	--		
		PM	LOS	--	A	A	B	B	--	A	--	A	--	--	--		B
			Delay, sec/veh	--	9.3	9.3	12.9	12.9	--	9.2	--	9.2	--	--	--		
			Queue, ft	--	65	65	140	140	--	40	--	40	--	--	--		
Lisbon Rd (County K) with Redford Blvd (County F) Northbound Quadrant Road	Roundabout	AM	LOS	A	A	A	A	A	A	B	B	B	B	B	B	A	
			Delay, sec/veh	5.8	6.2	6.2	8.9	9.8	9.8	14.5	14.5	13.2	11.8	11.8	11.8		
			Queue, ft	35	40	40	55	70	70	75	75	60	25	25	25		
		PM	LOS	A	A	A	B	B	B	B	B	B	C	C	C	B	
			Delay, sec/veh	5.0	5.2	5.2	11.9	13.9	13.9	12.7	12.7	10.3	19.3	19.3	19.3		
			Queue, ft	25	25	25	90	115	115	85	85	55	40	40	40		
Lisbon Rd (County K) with Town Line Rd (County V)	Roundabout	AM	LOS	A	B	B	A	A	A	D	D	D	A	A	B	B	
			Delay, sec/veh	9.9	10.7	10.7	8.8	8.9	8.9	25.5	25.5	25.5	8.2	8.2	10.5		
			Queue, ft	75	95	95	40	45	45	90	90	90	35	35	65		
		PM	LOS	A	A	A	B	B	B	C	C	C	B	B	C	B	
			Delay, sec/veh	8.4	8.9	8.9	12.1	12.5	12.5	18.9	18.9	18.9	10.4	10.4	16.0		
			Queue, ft	55	65	65	80	90	90	75	75	75	45	45	110		
Redford Blvd (County F) with Lisbon Rd (County K) Quadrant Roads	Two-Way Stop Control	AM	LOS	--	--	(A)	--	--	B	--	(A)	(A)	--	(A)	(A)	N/A	
			Delay, sec/veh	--	--	0.0	--	--	12.7	--	0.0	0.0	--	0.0	0.0		
			Queue, ft	--	--	0	--	--	30	--	0	0	--	0	0		
		PM	LOS	--	--	(A)	--	--	C	--	(A)	(A)	--	(A)	(A)	N/A	
			Delay, sec/veh	--	--	0.0	--	--	16.3	--	0.0	0.0	--	0.0	0.0		
			Queue, ft	--	--	0	--	--	45	--	0	0	--	0	0		

Notes:

- -- Indicates movement is not available or allowed.
- (A) Indicates free-flow movement
- HCM methodology does not identify an overall intersection level of service for one-way stop controlled intersections

Note: County K study did not include operational analysis at private driveways or the minor intersections with Quarry Corners Parkway and Duplainville Road.



Legend

- (R) = Roundabout
- ##### = Railroad
- ▬ = Proposed Stop Sign
- XXX' = Maximum Queue Lengths, ft (95th Percentile)
- = Lane Geometry
- ↘ = Proposed Channelized Turn Lane

**Year 2055 Two Jug Handle Alternative
Maximum Queue Lengths**

Exhibit
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