

Appendix 25-1:

Sight Distance Diagram and AASHTO Tables

AASHTO Sight Distance

Scenario 1: Stopping Sight Distance on Level Roadways

Table 3-1. Stopping Sight Distance on Level Roadways

U.S. Customary					Metric				
Design Speed (mph)	Brake Reaction Distance (ft)	Braking Distance on Level (ft)	Stopping Sight Distance		Design Speed (km/h)	Brake Reaction Distance (m)	Braking Distance on Level (m)	Stopping Sight Distance	
			Calculated (ft)	Design (ft)				Calculated (m)	Design (m)
15	55.1	21.6	76.7	80	20	13.9	4.6	18.5	20
20	73.5	38.4	111.9	115	30	20.9	10.3	31.2	35
25	91.9	60.0	151.9	155	40	27.8	18.4	46.2	50
30	110.3	86.4	196.7	200	50	34.8	28.7	63.5	65
35	128.6	117.6	246.2	250	60	41.7	41.3	83.0	85
40	147.0	153.6	300.6	305	70	48.7	56.2	104.9	105
45	165.4	194.4	359.8	360	80	55.6	73.4	129.0	130
50	183.8	240.0	423.8	425	90	62.6	92.9	155.5	160
55	202.1	290.3	492.4	495	100	69.5	114.7	184.2	185
60	220.5	345.5	566.0	570	110	76.5	138.8	215.3	220
65	238.9	405.5	644.4	645	120	83.4	165.2	248.6	250
70	257.3	470.3	727.6	730	130	90.4	193.8	284.2	285
75	275.6	539.9	815.5	820	140	97.3	224.8	322.1	325
80	294.0	614.3	908.3	910					
85	313.5	693.5	1007.0	1010					

Note: Brake reaction distance predicated on a time of 2.5 s; deceleration rate of 11.2 ft/s² [3.4 m/s²] used to determine calculated sight distance.

Scenario 2: Stopping Sight Distance on Grades

Table 3-2. Stopping Sight Distance on Grades

U.S. Customary							Metric						
Design Speed (mph)	Stopping Sight Distance (ft)						Design Speed (km/h)	Stopping Sight Distance (m)					
	Downgrades			Upgrades				Downgrades			Upgrades		
	3%	6%	9%	3%	6%	9%		3%	6%	9%	3%	6%	9%
15	80	82	85	75	74	73	20	20	20	20	19	18	18
20	116	120	126	109	107	104	30	32	35	35	31	30	29
25	158	165	173	147	143	140	40	50	50	53	45	44	43
30	205	215	227	200	184	179	50	66	70	74	61	59	58
35	257	271	287	237	229	222	60	87	92	97	80	77	75
40	315	333	354	289	278	269	70	110	116	124	100	97	93
45	378	400	427	344	331	320	80	136	144	154	123	118	114
50	446	474	507	405	388	375	90	164	174	187	148	141	136
55	520	553	593	469	450	433	100	194	207	223	174	167	160
60	598	638	686	538	515	495	110	227	243	262	203	194	186
65	682	728	785	612	584	561	120	263	281	304	234	223	214
70	771	825	891	690	658	631	130	302	323	350	267	254	243
75	866	927	1003	772	736	704	140	341	367	398	302	287	274
80	965	1035	1121	859	817	782							
85	1070	1149	1246	949	902	862							

Scenario 3: Intersection Sight Distance – Left Turn from Stop

Table 9-7. Design Intersection Sight Distance—Case B1, Left Turn from Stop

U.S. Customary				Metric			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars		Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)			Calculated (m)	Design (m)
15	80	165.4	170	20	20	41.7	45
20	115	220.5	225	30	35	62.6	65
25	155	275.6	280	40	50	83.4	85
30	200	330.8	335	50	65	104.3	105
35	250	385.9	390	60	85	125.1	130
40	305	441.0	445	70	105	146.0	150
45	360	496.1	500	80	130	166.8	170
50	425	551.3	555	90	160	187.7	190
55	495	606.4	610	100	185	208.5	210
60	570	661.5	665	110	220	229.4	230
65	645	716.6	720	120	250	250.2	255
70	730	771.8	775	130	285	271.1	275
75	820	826.9	830				
80	910	882.0	885				

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Scenario 4: Intersection Sight Distance – Right Turn from Stop

Table 9-9. Design Intersection Sight Distance—Case B2, Right Turn from Stop

U.S. Customary				Metric			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars		Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)			Calculated (m)	Design (m)
15	80	143.3	145	20	20	36.1	40
20	115	191.1	195	30	35	54.2	55
25	155	238.9	240	40	50	72.3	75
30	200	286.7	290	50	65	90.4	95
35	250	334.4	335	60	85	108.4	110
40	305	382.2	385	70	105	126.5	130
45	360	430.0	430	80	130	144.6	145
50	425	477.8	480	90	160	162.6	165
55	495	525.5	530	100	185	180.7	185
60	570	573.3	575	110	220	198.8	200
65	645	621.1	625	120	250	216.8	220
70	730	668.9	670	130	285	234.9	235
75	820	716.6	720				
80	910	764.4	765				

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane roadway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Scenario 5: Intersection Sight Distance – Left Turn from Major Road

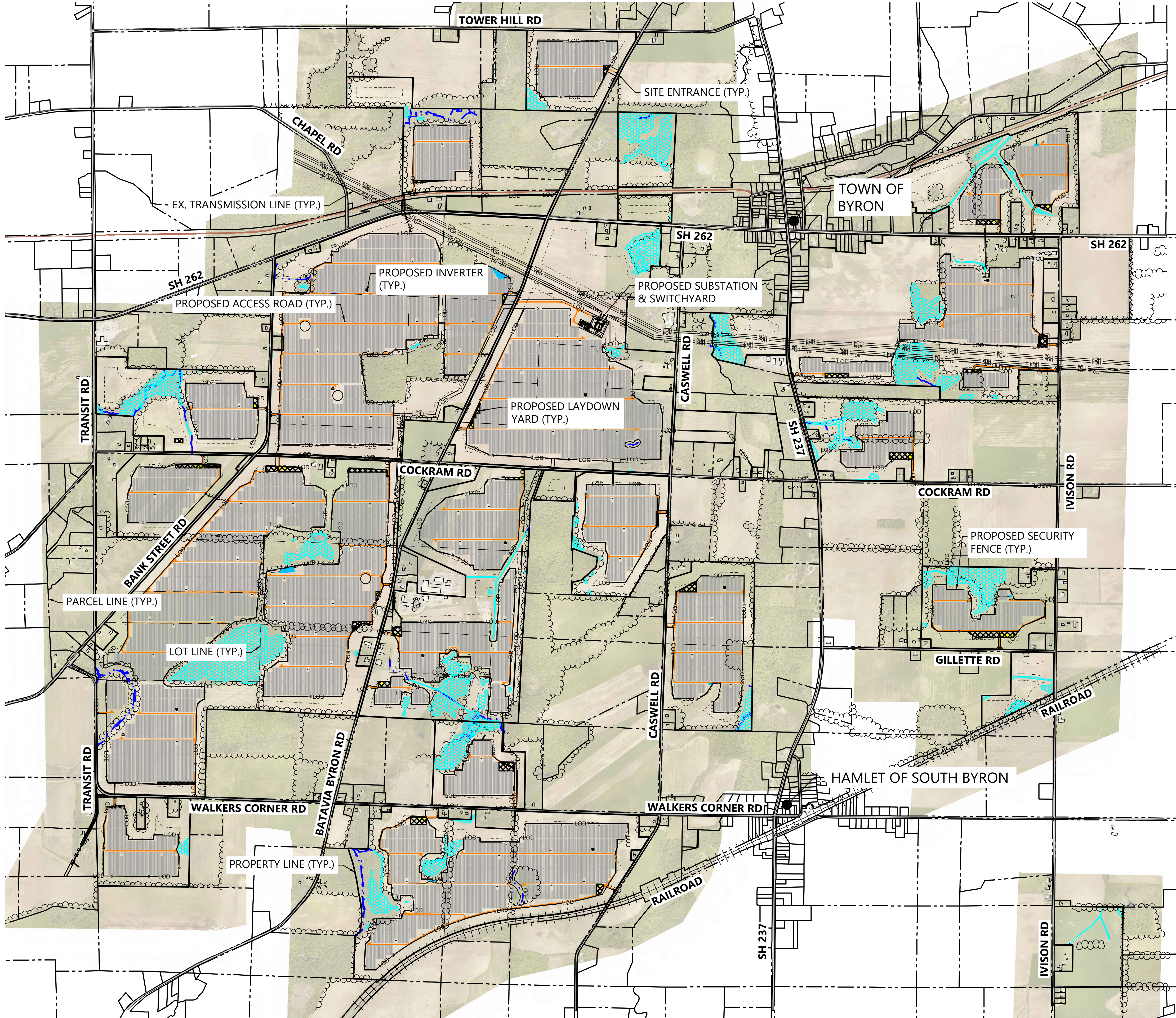
Table 9-17. Intersection Sight Distance—Case F, Left Turn from the Major Road

U.S. Customary			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance	
		Passenger Cars	
		Calculated (ft)	Design (ft)
15	80	121.3	125
20	115	161.7	165
25	155	202.1	205
30	200	242.6	245
35	250	283.0	285
40	305	323.4	325
45	360	363.8	365
50	425	404.3	405
55	495	444.7	445
60	570	485.1	490
65	645	525.5	530
70	730	566.0	570
75	820	606.4	610
80	910	646.8	650

Metric			
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance	
		Passenger Cars	
		Calculated (m)	Design (m)
20	20	30.6	35
30	35	45.9	50
40	50	61.2	65
50	65	76.5	80
60	85	91.7	95
70	105	107.0	110
80	130	122.3	125
90	160	137.6	140
100	185	152.9	155
110	220	168.2	170
120	250	183.5	185
130	285	198.8	200

Note: Intersection sight distance shown is for a passenger car making a left turn from an undivided roadway. For other conditions and design vehicles, the time gap should be adjusted and the sight distance recalculated.

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LEGEND:

- PROPERTY LINE
- PARCEL LINE
- LOT LINE
- EX. PAVED ROAD
- EX. GRAVEL ROAD
- POH
- OIL
- EX. STRUCTURE
- EX. WETLAND
- EX. STREAM
- PROPOSED FILTRATION BASIN
- PROPOSED SOLAR ARRAY
- PROPOSED ACCESS ROAD
- PROPOSED SECURITY FENCE
- PROPOSED ELECTRICAL EQUIPMENT
- EX. RAILROAD
- EX. TREELINE
- PROPOSED BUILDABLE AREA
- LIMIT OF DISTURBANCE
- PROPOSED LAYDOWN YARD
- PROPOSED PARKING AREA

Westwood

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Fax (952) 937-5822 Minnetonka, MN 55343
Toll Free (888) 937-5150 westwoodps.com
Westwood Development Consultants, LLC

PREPARED FOR:

NEXTERA ENERGY

700 Universe Boulevard
Juno Beach, FL 33408

REVISIONS:

#	DATE	COMMENT
A	06/12/20	Issued for Review
B	09/03/20	Issued for Review

Excelsior Energy Center

Town of Byron, New York

Overall Site Plan

NOT FOR CONSTRUCTION

DATE: 09/03/2020

SHEET: C.200

Site Entrance A (Approximately 900 feet South of Intersection of Tower Hill Road and Byron Rd)



Looking North



Looking South

Site Entrance B (Approximately 1,160 feet East of Intersection of Chapel Rd and SH 262)



Looking West



Looking East

Site Entrance C (Approximately 1,270 feet North of Intersection of Swamp Rd and SH 262)



Looking East



Looking West

Site Entrance D (Approximately 1,650 feet Southwest of Intersection of Cole Road and Swamp Road)



Looking East



Looking West

Site Entrance E1 (Approximately 670 feet South of Intersection of Batavia Byron Rd and Byron Elba Rd)



Looking North



Looking South

Site Entrance E2 (Approximately 830 feet South of Intersection of Batavia Byron Rd and Byron Elba Rd)



Looking North



Looking South

Site Entrance F (Approximately 2,120 feet East of Intersection of Swamp Road and Townline Road)



Looking East



Looking West

Site Entrance G (Approximately 1,840 feet East of Intersection of Transit Road and Cockram Rd)



Looking East



Looking West

Site Entrance H1 (Approximately 1,100 feet North of Intersection of Bank State Road and Cockram Road)



Looking North



Looking South

Site Entrance H2 (Approximately 1,000 feet North of Intersection of Bank State Road and Cockram Road)



Looking North



Looking South

Site Entrance I (Approximately 1,670 feet East of Intersection of Batavia Byron Road and Cockram Rd)



Looking East



Looking West

Site Entrance J (Approximately 2,200 feet North of Byron Holley Road and Cockram Road)



Looking North



Looking South

Site Entrance K (Approximately 1,800 feet East of Byron Holley Road and Cockram Road)



Looking East



Looking West

Site Entrance L1 (Approximately 2,070 feet South of Intersection of Townline Rd and Ivison Rd)



Looking North



Looking South

Site Entrance L2 (Approximately 2,560 feet South of Intersection of Townline Rd and Ivison Rd)



Looking North



Looking South

Site Entrance M (Approximately 780 feet South of Intersection of Cockram Road and Caswell Road)



Looking North



Looking South

Site Entrance N (Approximately 3,300 feet South of Batavia Byron Rd and Cockram Rd)



Looking North



Looking South

Site Entrance O (Approximately 4,300 feet South of Batavia Byron Rd and Cockram Rd)



Looking North



Looking South

Site Entrance P (Approximately 3,000 feet South of Intersection of Cockram Road and Caswell Road)



Looking North



Looking South

Site Entrance Q (Approximately 880 feet West of Intersection of Ivison Road and Gillette Rd)



Looking East



Looking West

Site Entrance R (Approximately 1,940 feet East of Intersection of Starowitz Road and Walkers Corner Rd)



Looking East



Looking West

Site Entrance S (Approximately 2,000 feet East of Intersection of Batavia Byron Rd & Walkers Corner Rd)



Looking East



Looking West

Site Entrance T (Approximately 1,700 feet South of Intersection of Walkers Corner Rd and Caswell Rd)



Looking North

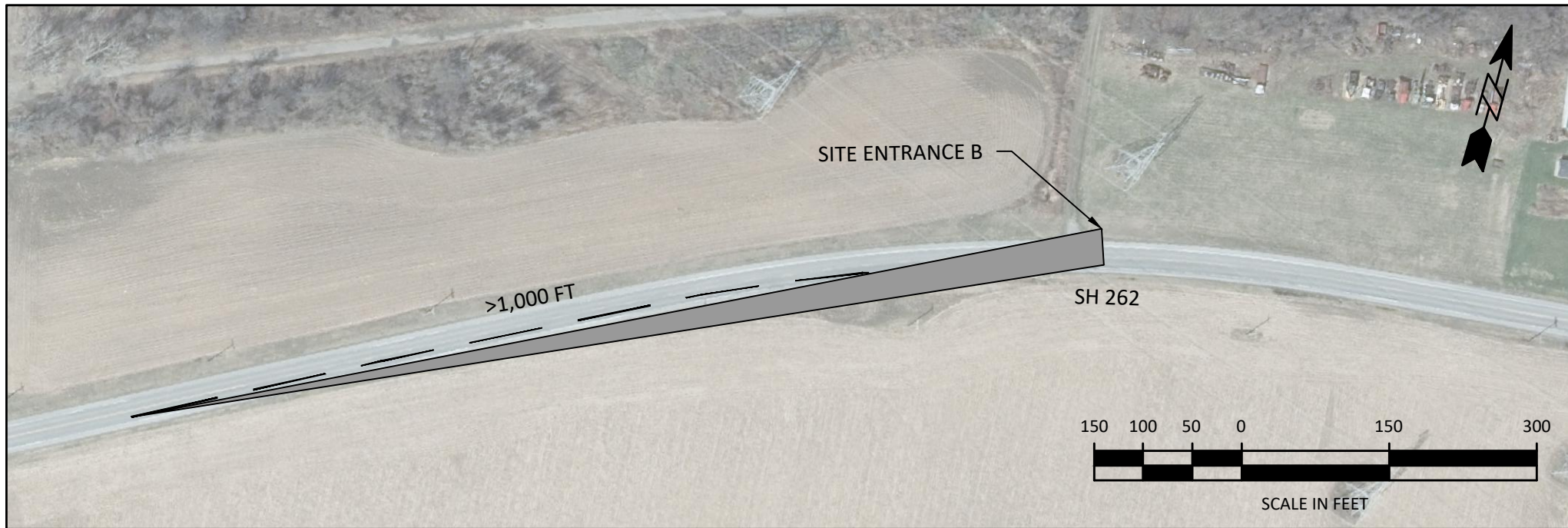


Looking South

SIGHT DISTANCE DIAGRAM - A



SIGHT DISTANCE DIAGRAM - B



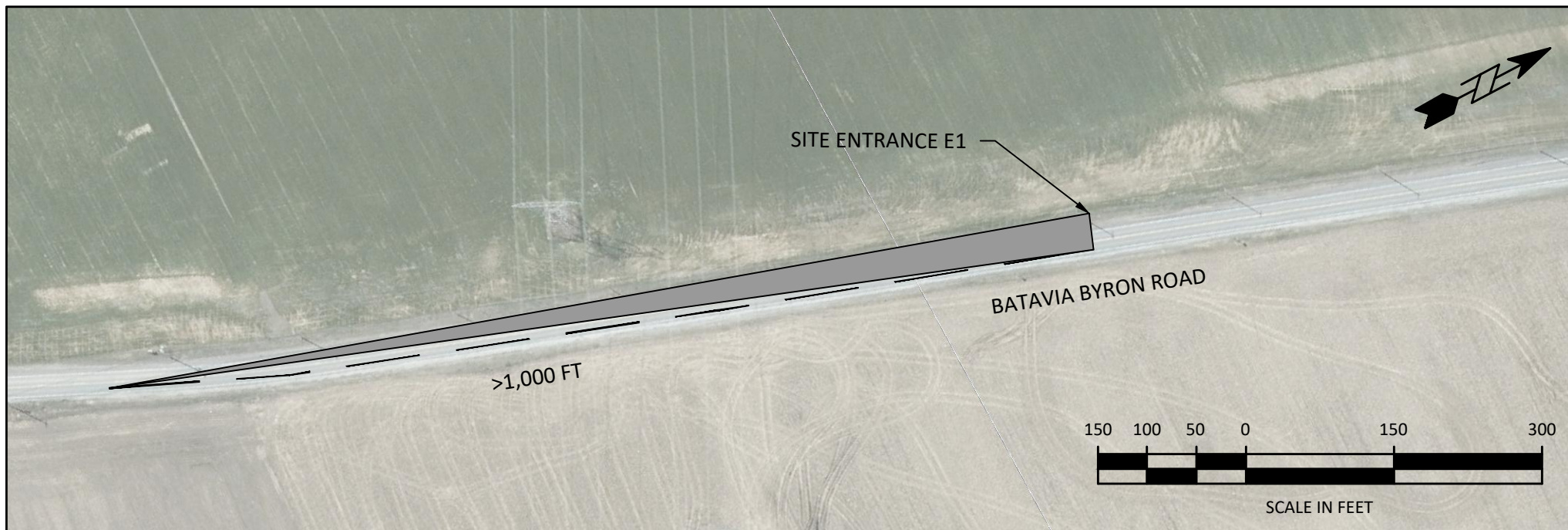
SIGHT DISTANCE DIAGRAM - C



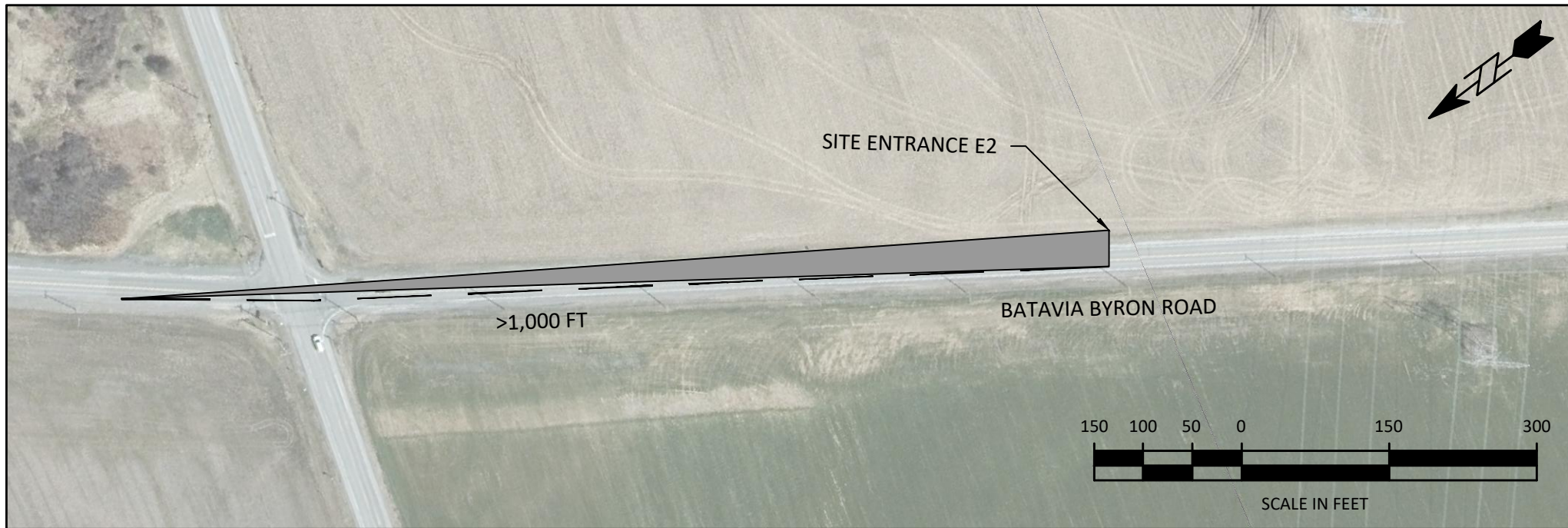
SIGHT DISTANCE DIAGRAM - D



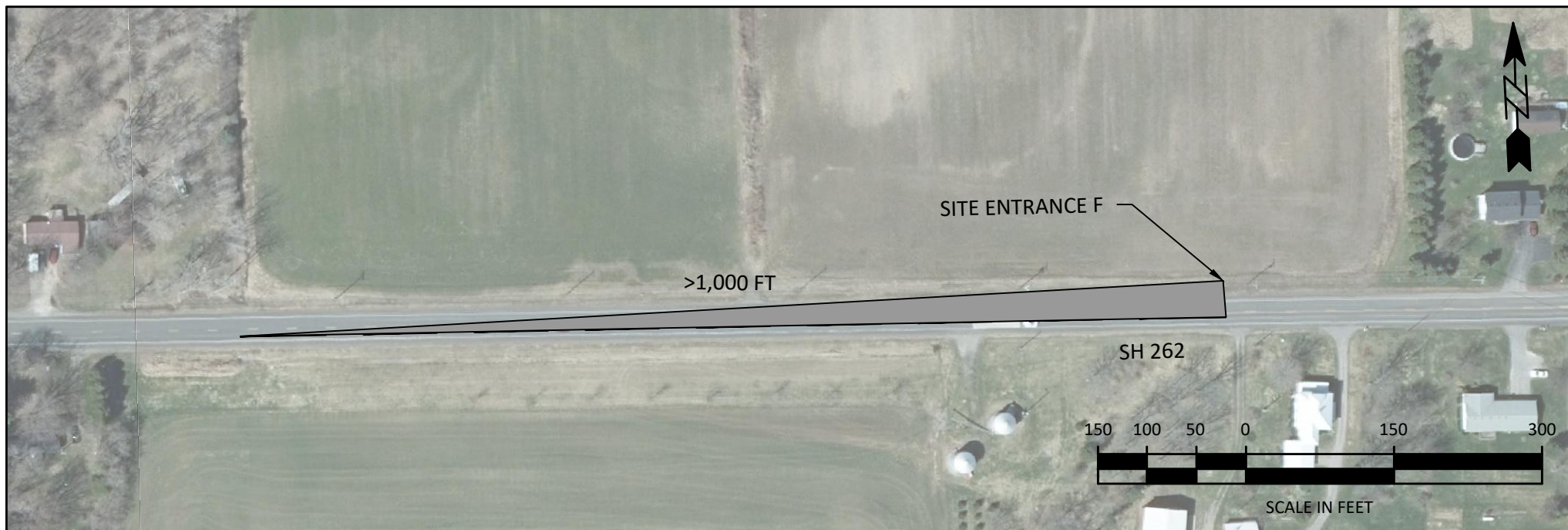
SIGHT DISTANCE DIAGRAM - E1



SIGHT DISTANCE DIAGRAM - E2



SIGHT DISTANCE DIAGRAM - F



SIGHT DISTANCE DIAGRAM - G



SIGHT DISTANCE DIAGRAM - H1



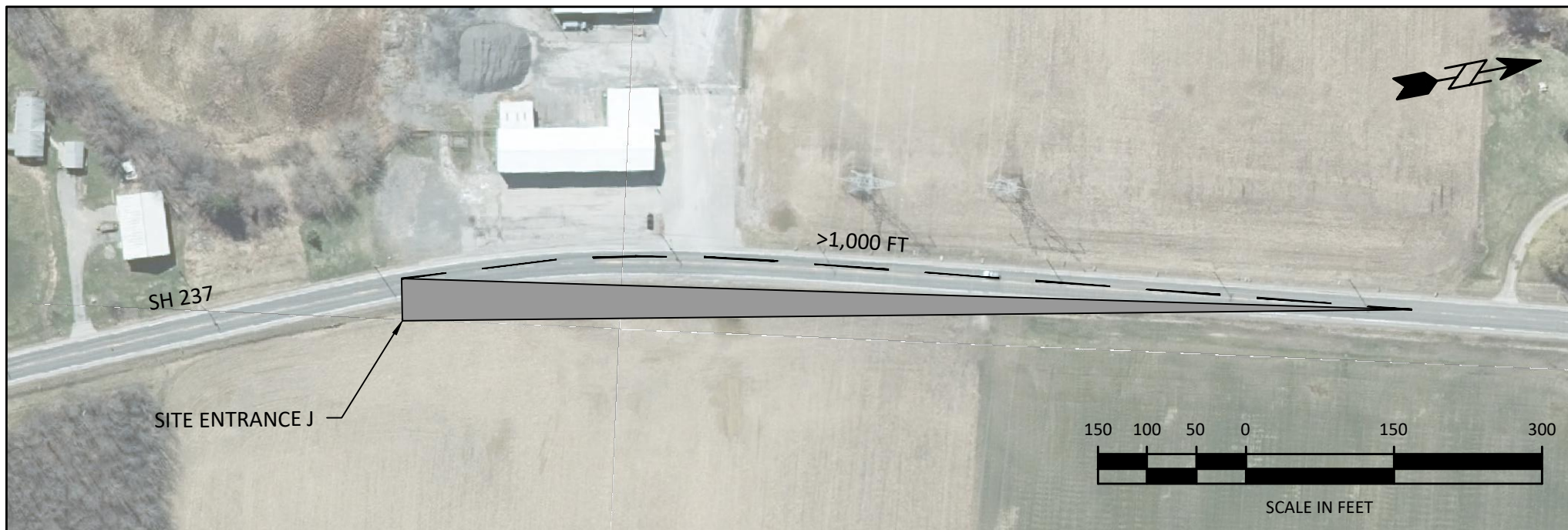
SIGHT DISTANCE DIAGRAM - H2



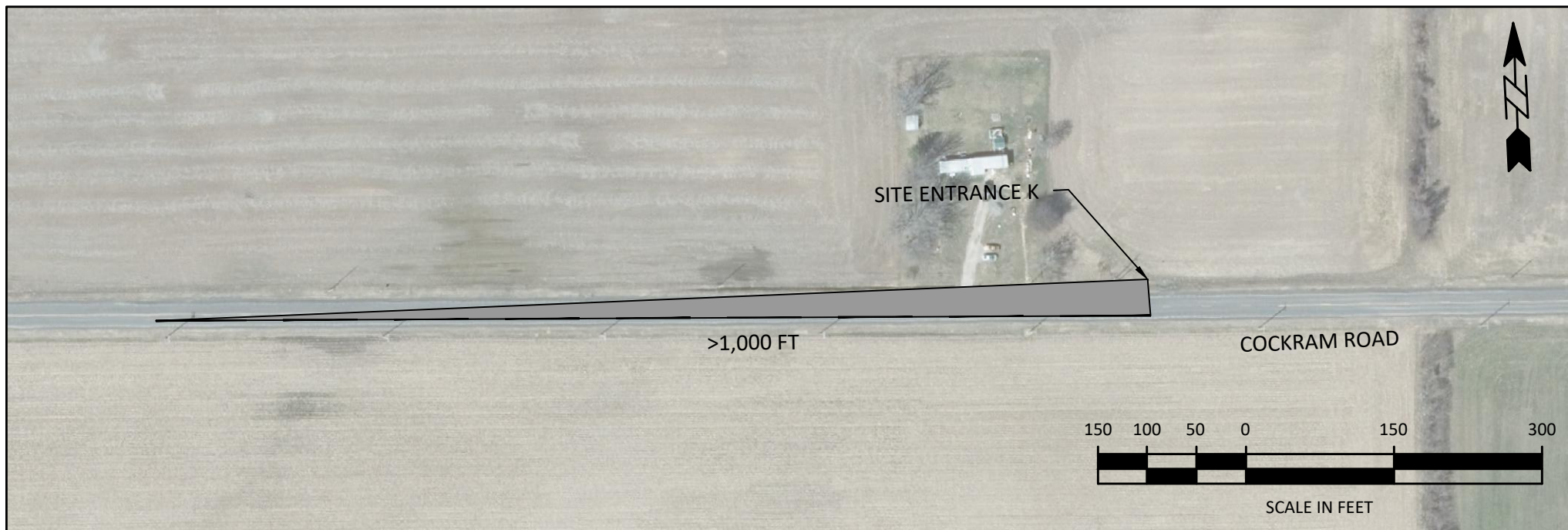
SIGHT DISTANCE DIAGRAM - I



SIGHT DISTANCE DIAGRAM - J



SIGHT DISTANCE DIAGRAM - K



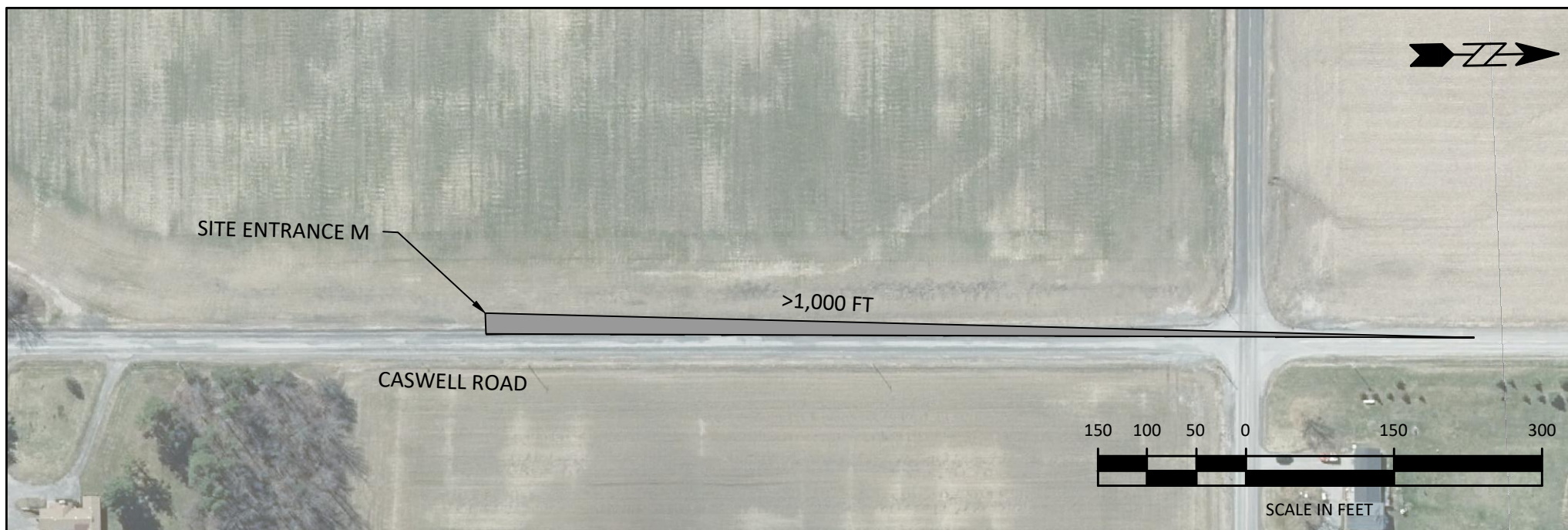
SIGHT DISTANCE DIAGRAM - L1



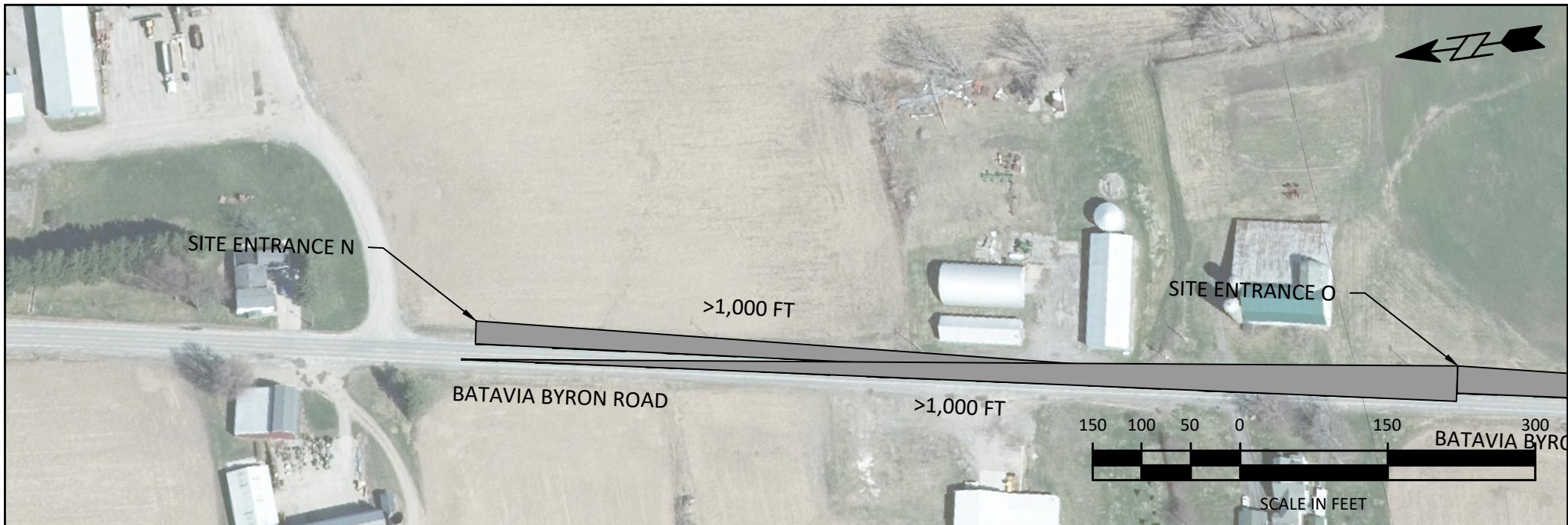
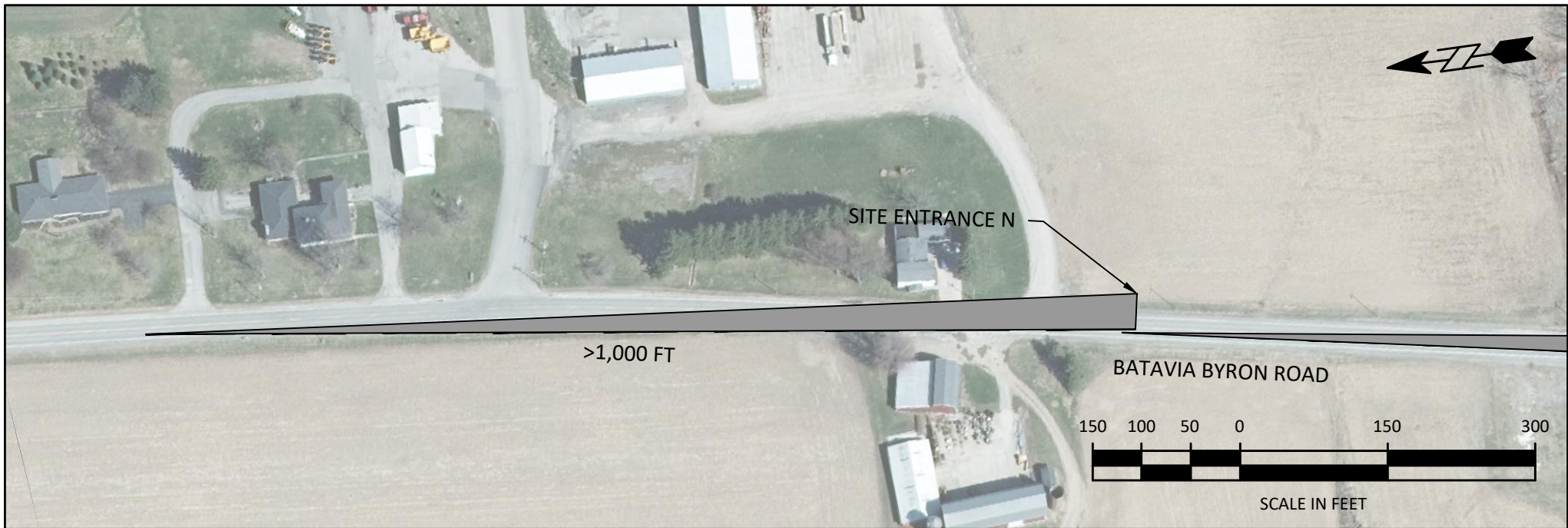
SIGHT DISTANCE DIAGRAM - L2



SIGHT DISTANCE DIAGRAM - M



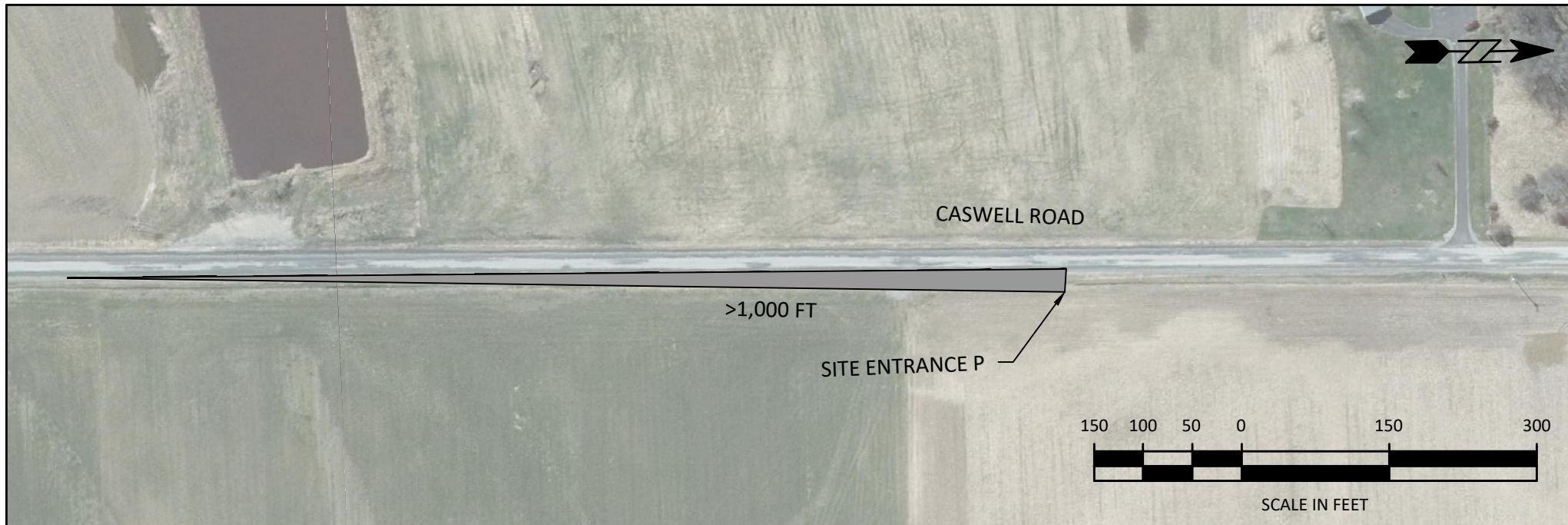
SIGHT DISTANCE DIAGRAM - N



SIGHT DISTANCE DIAGRAM - O



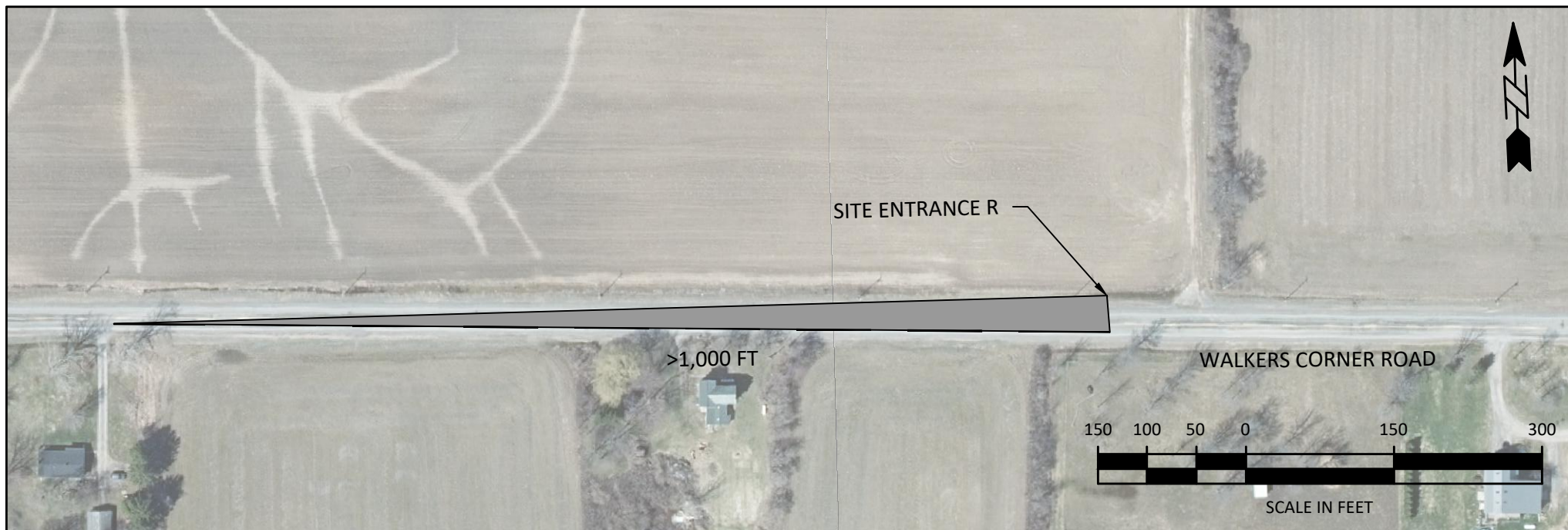
SIGHT DISTANCE DIAGRAM - P



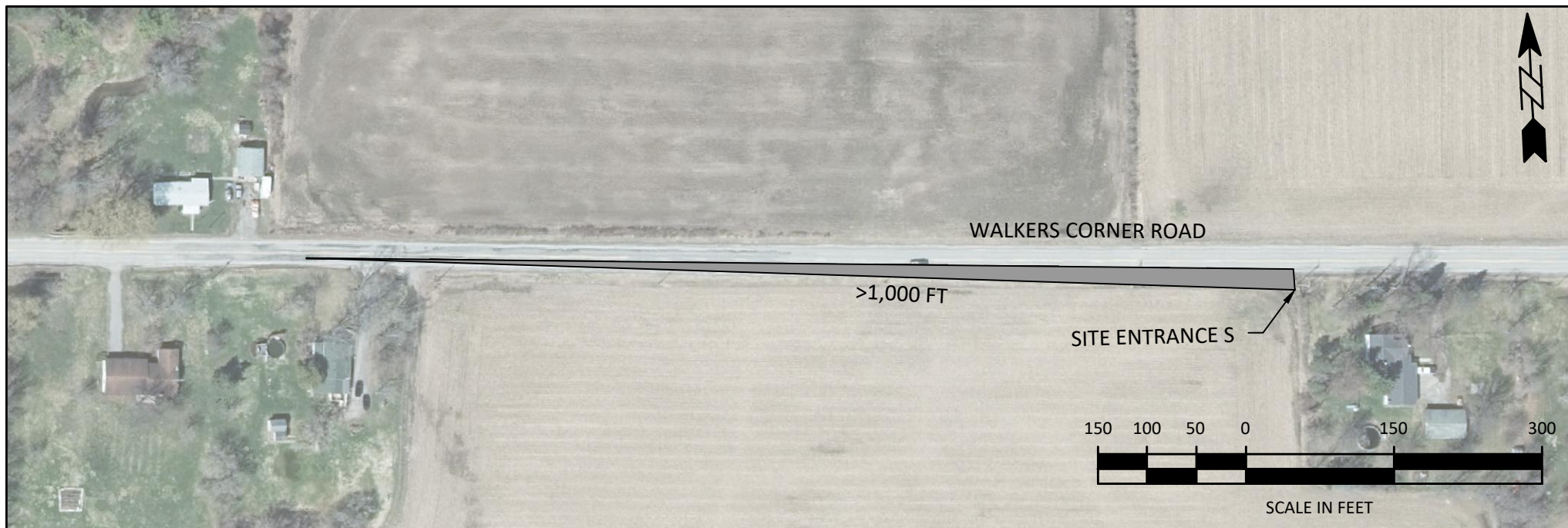
SIGHT DISTANCE DIAGRAM - Q



SIGHT DISTANCE DIAGRAM - R



SIGHT DISTANCE DIAGRAM - S



SIGHT DISTANCE DIAGRAM - T

