



TXDOT TRAFFIC SIGNAL PREEMPTION INSPECTION FORM

Form 2625
(Rev. 09/23)

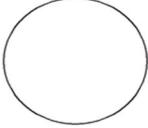
<i>Section 1 – General Information</i>					
Reason for Inspection: New Location Annual Inspection System Changes After Incident Other:					
Safety Briefing:	List of Attendees:	Original Design Data Available? Yes No			
Date of Inspection:	Time:	Inspector Certification ID:			
TXDOT District:		TXDOT Traffic Signal ID#:			
Traffic Signal Owner:		Traffic Signal Maintained by:			
Operating Railroad:		Commuter or Amtrak Route? Yes No			
DOT#:	Railroad Subdivision:	Railroad Milepost:			
Other DOT# assigned on adjacent track:		N/A			
Crossing Street Name:		Parallel Street Name:			
City:		State:		County:	
Any roadway geometry changes since last inspection? Yes No					
a. If yes, review impact on existing preemption design calculations. <u>Contact TXDOT Austin TRF/District Railroad Coordinator/Railroad.</u>					
Posted Roadway Speed: mph					
ENS phone number posted at railroad crossing? Yes No					
a. Call ENS phone number to confirm Railroad Dispatching and identify crossing location:					
Remarks:					

<i>Section 2 – Traffic Signal Data</i>							
1. Traffic signal cabinet type:							
a.	Changed since last inspection?	Yes	No	N/A	Previous Type:		
2. Traffic signal controller - Type:							
a.	Changed since last inspection?	Yes	No	N/A	Previous Type:	Model:	
					Manufacturer:	Model:	
3. Traffic signal controller firmware:							
a.	Changed since last inspection?	Yes	No	N/A	Previous Version:		
4. Traffic signal design plans in cabinet? Yes No							
a.	If yes, date on plans:			b. If no, follow up with Agency to locate plans			
5. Traffic signal timing data in cabinet? Yes No							
a.	If yes, date on data:			b. If no, follow up with Agency to locate data			
6. Preemption warning sticker present in cabinet? Yes No Remarks:							
Preemption railroad interconnect sticker present in police access door?					Yes	No	
a.	If yes, verify information on label is correct			b. If no, notify District Railroad Coordinator to install			
7. Does traffic controller have existing backup power supply? Yes No If yes, type - BBU Generator Other:							
8. Interconnection method - Relay Panel Solid State Isolator Card Other:							
9. Interconnection voltage - 120 Vac 24 Vac 12 Vdc 24 Vdc Other:							
10. Interconnection circuits:		Designed:	N/A:	Designed configuration:	Connected:		Connected configuration:
					Yes	No	
Advance (Vehicle) Preemption							
Advance Pedestrian Preemption							
Gate Down							
Crossing Active							
Traffic Signal Health							

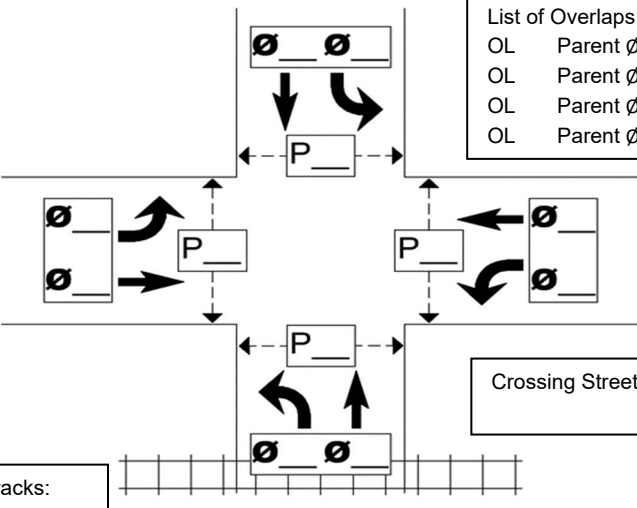
Comments:

Section 3 – Traffic Signal Timing/Phasing

11. Phasing Diagram under Normal Operations: (Additional diagrams available in Appendix – Additional Intersection Diagrams or provide sketch)



NORTH



List of Overlaps:

OL Parent \emptyset :

OL Parent \emptyset :

OL Parent \emptyset :

OL Parent \emptyset :

Parallel Street Name:

Crossing Street Name:

Notes:

Number of Tracks:

12. Controller response time to preempt (sec):

13. Worst-case conflicting vehicle phase number(s): 14. Worst-case conflicting pedestrian phase number(s):

Track clearance, dwell, and exit settings Designed: Programmed:

15. Track clearance –

	Clearance phase number(s):		
	Clearance plan number:		

a. Preempt Trap resolution: Gate Down Circuit APT+15 Simultaneous Preemption Other:

16. Preemption dwell –

	Dwell operation:		
	Dwell plan number:		
If limited-service operation –	Dwell phase number(s):		
If flash – red/yellow operation –	Red flash phase number(s):		
	Yellow flash phase number(s):		

17. Preemption exit –

	Exit phase number(s):		
	Exit plan number:		

Remarks:

18. Yellow Trap: During normal operation resolution: Remarks:

 During preemption operation resolution: Remarks:

19. Is railroad preemption highest priority in the traffic signal controller? Yes No If no, explain:

Preemption settings		Preempt 1	Preempt 2	Preempt 3	Preempt 4	Preempt 5	Preempt 6
20. Preemption plan purpose:	Designed:						
	Programmed:						

D = Designed | P = Programmed

Value in seconds											
D	P	D	P	D	P	D	P	D	P	D	P

21. Preempt delay time											
22. Minimum green time during right-of-way transfer											
23. Other green time during right-of-way transfer											
24. Yellow change time											
25. Red clearance time											
26. Minimum walk time during right-of-way transfer											
27. Pedestrian clearance time during right-of-way transfer											
28. Track clearance green time											
29. Track clearance green extension time after gate down											
30. Preempt duration time											
31. Minimum dwell time											
32. Maximum preemption timer (min)											

<u>Section 4 – Railroad Data</u>				
33. Railroad equipment – Predictor Model:				
a. Change since last inspection? Yes No N/A Previous Predictor Model:				
Preemption Programming				
34. Type of Preemption: Simultaneous Preemption Advance (Vehicle) Preemption Advance Pedestrian Preemption				
35. Track # 1 – Main	Railroad Design Speed (mph):			Remarks
	Designed	Programmed	N/A	
a. Warning time				
b. Advance preempt timer				
c. Preempt warning time (Vehicle)				
d. Pedestrian preempt warning time				
e. Approach (feet)				
f. Approach field measured (feet) [If applicable]:				
36. Track # 2 – Main Siding Industry/Spur N/A Remarks:	Railroad Design Speed (mph):			Remarks
	Designed	Programmed	N/A	
a. Warning time				
b. Advance preempt timer				
c. Preempt warning time (Vehicle)				
d. Pedestrian preempt warning time				
e. Approach (feet)				
f. Approach field measured (feet) [if applicable]:				
37. Are there more than 2 tracks programmed at the grade crossing? Yes No a. If yes, include additional track data in <u>Appendix</u>				
38. Do railroad switching moves take place at or within the approaches for this grade crossing?				Yes No
39. Is the grade crossing controlled through a DAX (Downstream Adjacent Xing), or remote location?				Yes No a. If yes, include DAX information in <u>Appendix</u>

<u>Section 5 – Traffic Signal/Active Warning Preemption Testing</u>				
40. Method used for advance (vehicle) testing: Test switch Open relay Train activation Other:				
41. Method used for advance pedestrian testing: N/A Test switch Open relay Train activation Other:				
42. Method used for crossing active testing: N/A Test switch Open relay Train activation Other:				
43. Preemption test during worst-case vehicle phase(s) – Operating as designed? Remarks:				
Yes No N/A	a. Field measured Right-of-Way Transfer Time (RWTT) (seconds):			
44. Preemption test during best-case vehicle phase – Operating as designed? Remarks:				
Yes No N/A	a. Field measured RWTT (seconds):			
45. Preemption test during worst-case pedestrian phase – Operating as designed? Remarks:				
Yes No N/A	a. Field measured RWTT (seconds):			
46. Track clearance reservice/second train - Operating as designed? Remarks:				
Yes No N/A				
47. Advance pedestrian preemption test - Operating as designed? Remarks:				
Yes No N/A				
48. Crossing active circuit test - Operating as designed? Remarks:				
Yes No N/A	a. Field measured RWTT (seconds):			
49. Gate down circuit test - Operating as designed? Remarks:				
Yes No N/A				
50. Supervised circuit test - Operating as designed? Remarks:				
Yes No N/A				
51. Traffic signal health test - Operating as designed? Remarks:				
Yes No N/A				
52. Backup power supply test - Operating as designed? Remarks:				
Yes No N/A				
53. Blank out sign(s) test - Operating as designed? Remarks:				
Yes No N/A				

List of Attendees

Name:	Company:	Email:	Phone #:

Options list

Section 2 – Traffic Signal Data

- Box
1. **Traffic signal cabinet type:** TS-1; TS-2 Type 1; TS2 Type 2; 332; ACT/ITS; Other (Describe)
 2. **Traffic signal controller:**
Type: 170; 2070; NEMA; Other (Describe)
Manufacturer: Econolite; Intelight; McCain; Siemens; Trafficware; Other (Describe)
Model: 170E; 2070; ASC/2; ASC/3; ATX; Cobalt; EPAC 300; M50; M60; ATC; Other (Describe)
 10. **Designed and Connected configurations:** Blank (if N/A selected); No supervision, single break; No supervision, double break; Supervision, single break; Supervision, double break

Section 3 – Traffic Signal Timing/Phasing

16. **Preemption dwell – Designed and Programmed:** Limited Service; Full Service; Flash – all red; Flash – red/yellow; Other (Describe)
18. **Yellow Trap Resolution – Normal operation and Preemption operation:** All-red before track clearance green; Flashing yellow arrow; Split phase; No yellow trap; Yellow trap still present
20. **Preemption plan purpose – all preempt plans, both designed and programmed:** (1) Preemption interconnect failure; (2) Advance (Vehicle) preemption - Track clearance only; (3) Simultaneous preemption – Track clearance only; (4) Advance (Vehicle) preemption – Track clearance and dwell; (5) Simultaneous preemption – Track Clearance and dwell; (6) Dwell/Limited Service; (7) Second track clearance; (8) Advance (Pedestrian) preemption; N/A

Section 4 – Railroad Data

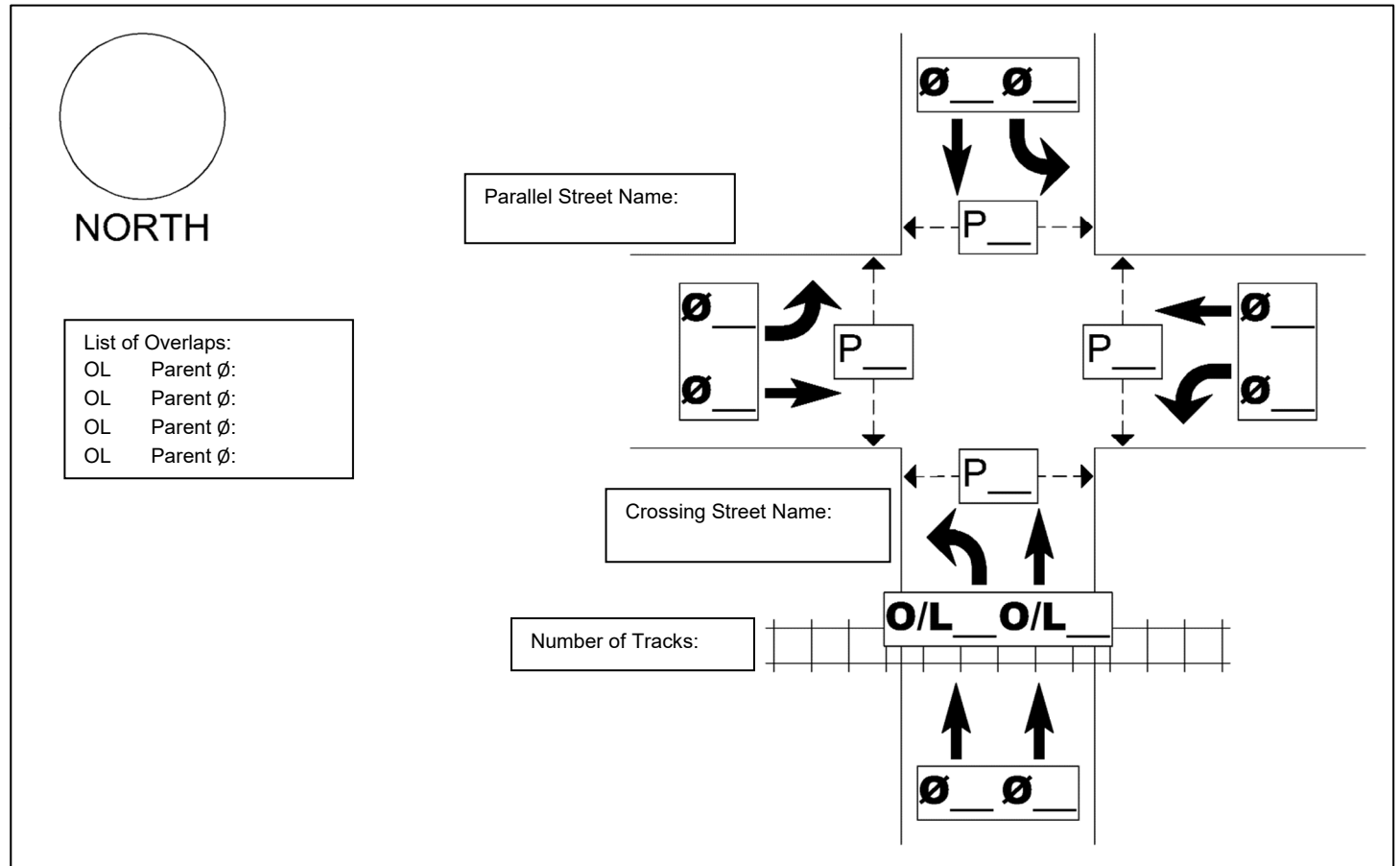
33. **Railroad equipment** – Predictor Model: Ex – GCP3000, GCP4000, GCP5000, HXP2, HXP3, HXP3R, HXP3R2, PMD-2, PMD-3, PMD-4, XP4

Appendix – Pre-signal Data

54. Describe location of the pre-signal relation to the railroad tracks:	Upstream	Downstream	Remarks:
55. Do motorists routinely stop at pre-signal stop line?	Yes	No	Remarks:
56. Are right turns on red restricted across the railroad tracks?	Yes	No	Remarks:
57. Are the downstream signal indications visible at the pre-signal stop line?	Yes	No	Remarks:
58. Are the pre-signal indications ball or thru arrow indications only?	Yes	No	Remarks:
59. Is the pre-signal progressively timed with the downstream signals?	Yes	No	
a. Designed Clearance Time		b. Programmed Clearance Time	
60. Is a "Stop Here on Red", R10-6 sign installed adjacent to the pre-signal stop line?	Yes	No	Remarks:
61. Is the stop line for the pre-signal located at least 40 feet from the indications?	Yes	No	If no, what is the measurement:
62. Do the pre-signal indications change to and remain red during preemption?	Yes	No	Remarks:

Pre-signal Comments:

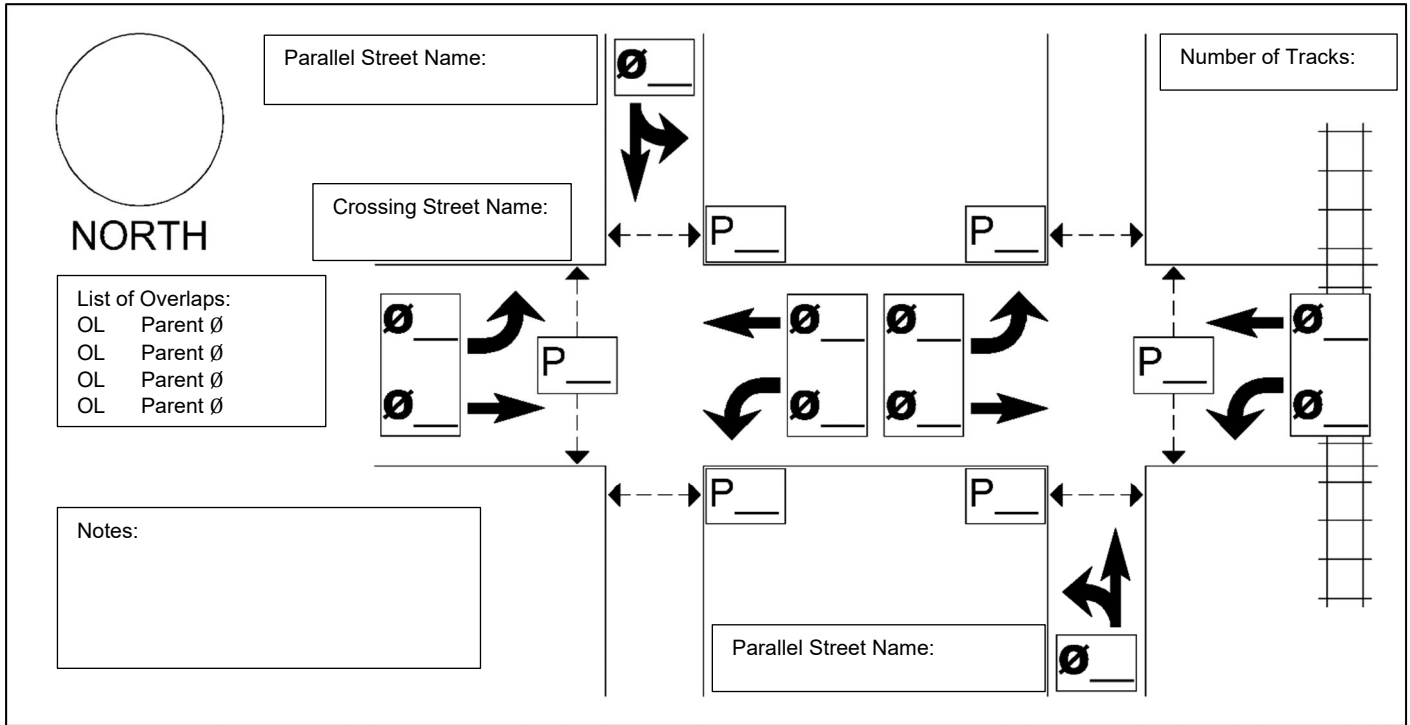
Traffic Signal Phasing with Pre-signal



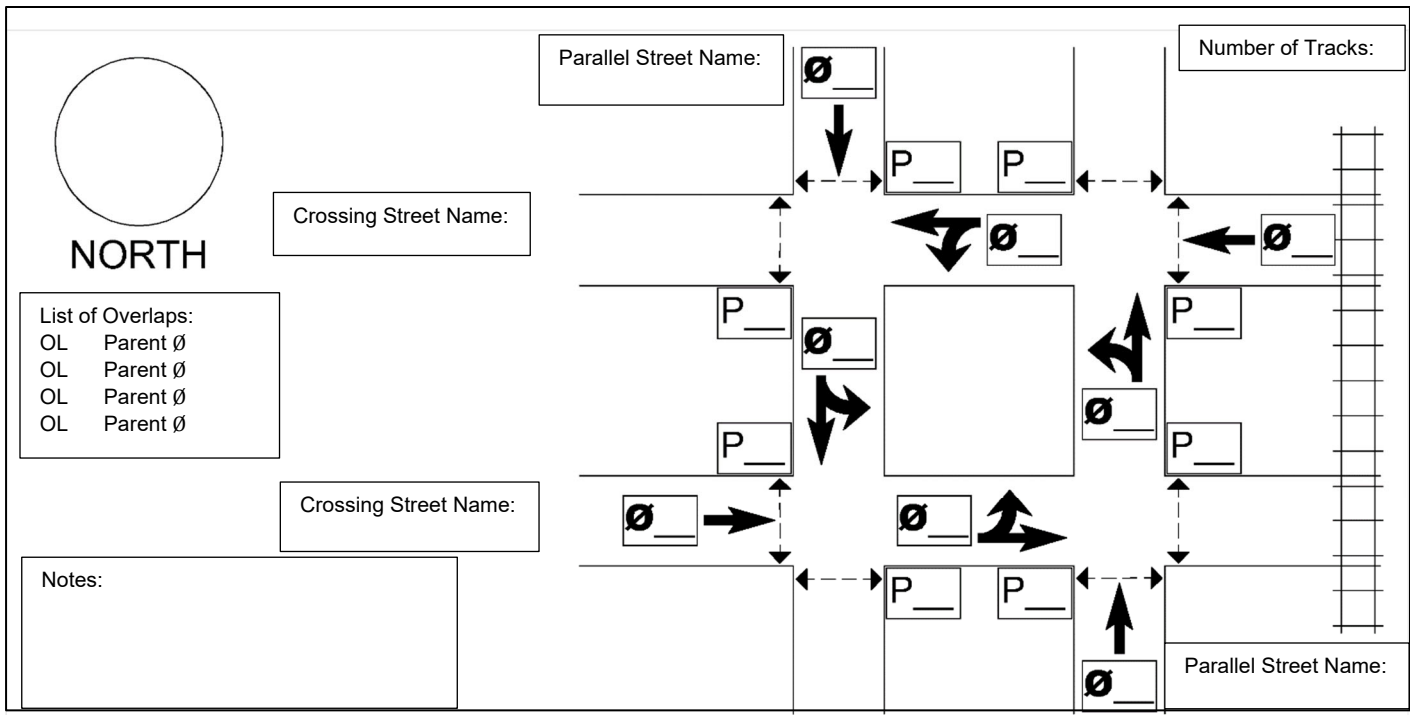
Notes:

Appendix – Additional Intersection Diagrams

Texas Diamond

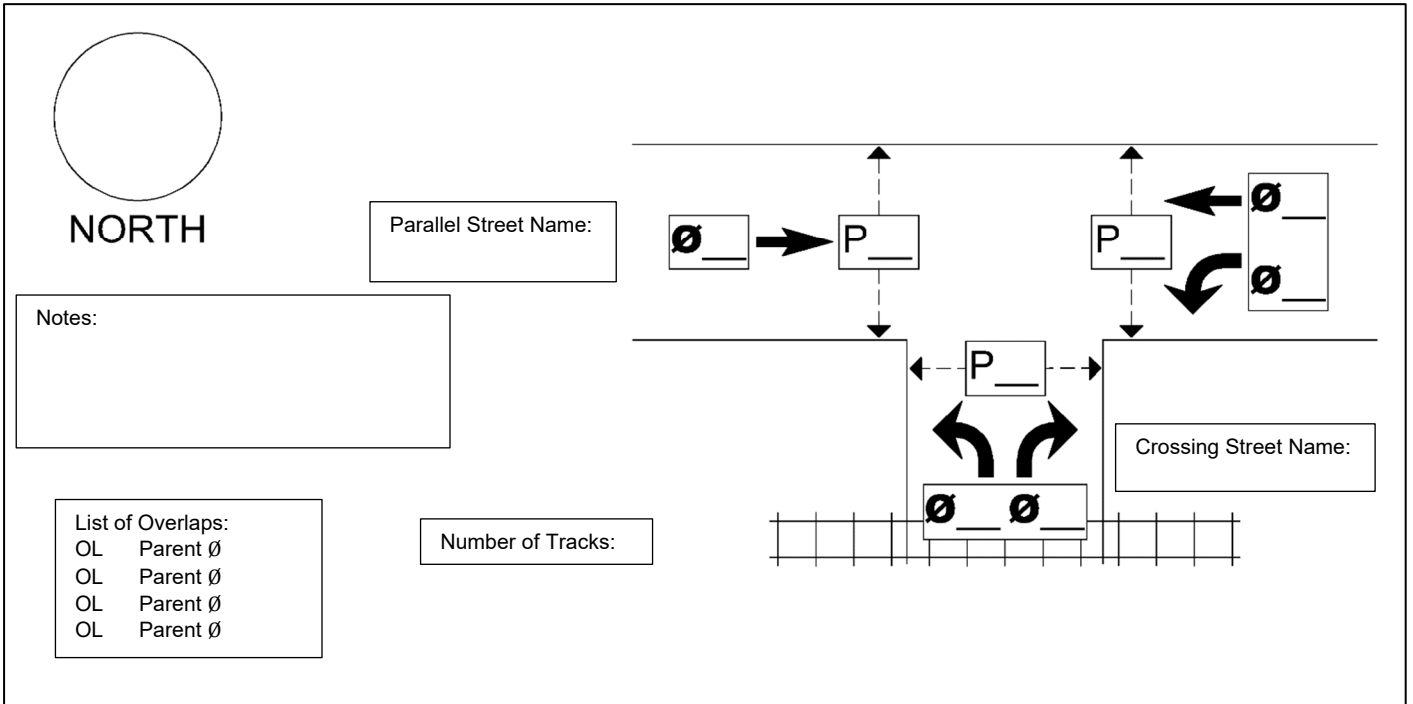


Box Diamond

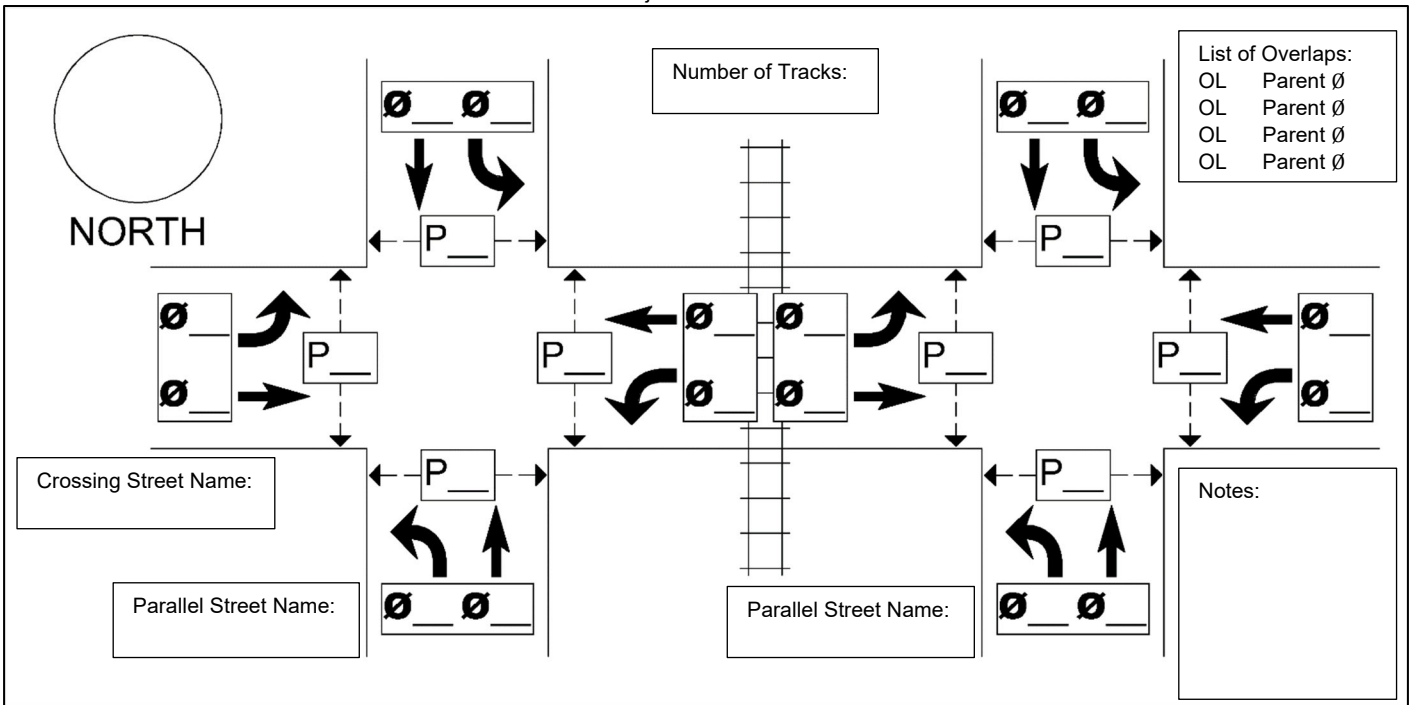


Appendix – Additional Intersection Diagrams

T-Intersection



Adjacent Intersections



Appendix – Intersection Sketch Area

A large, empty rectangular box with a thin black border, occupying the majority of the page. It is intended for a hand-drawn sketch of an intersection.

<u>Appendix – Additional Tracks</u>							
Track #: ___	Main	Siding	Industry/Spur	Railroad Design Speed (mph):			Remarks
				Designed	Programmed	N/A	
a.	Warning time						
b.	Advance preempt timer						
c.	Preempt warning time (Vehicle)						
d.	Pedestrian preempt warning time						
e.	Approach (feet)						
f.	Approach field measured (feet) [If applicable]:						
Track #: ___	Main	Siding	Industry/Spur	Railroad Design Speed (mph):			Remarks
				Designed	Programmed	N/A	
a.	Warning time						
b.	Advance preempt timer						
c.	Preempt warning time (Vehicle)						
d.	Pedestrian preempt warning time						
e.	Approach (feet)						
f.	Approach field measured (feet) [If applicable]:						
Track #: ___	Main	Siding	Industry/Spur	Railroad Design Speed (mph):			Remarks
				Designed	Programmed	N/A	
a.	Warning time						
b.	Advance preempt timer						
c.	Preempt warning time (Vehicle)						
d.	Pedestrian preempt warning time						
e.	Approach (feet)						
f.	Approach field measured (feet) [If applicable]:						
Track #: ___	Main	Siding	Industry/Spur	Railroad Design Speed (mph):			Remarks
				Designed	Programmed	N/A	
a.	Warning time						
b.	Advance preempt timer						
c.	Preempt warning time (Vehicle)						
d.	Pedestrian preempt warning time						
e.	Approach (feet)						
f.	Approach field measured (feet) [If applicable]:						
Track #: ___	Main	Siding	Industry/Spur	Railroad Design Speed (mph):			Remarks
				Designed	Programmed	N/A	
a.	Warning time						
b.	Advance preempt timer						
c.	Preempt warning time (Vehicle)						
d.	Pedestrian preempt warning time						
e.	Approach (feet)						
f.	Approach field measured (feet) [If applicable]:						

<i>Appendix – DAX (Downstream Adjacent Xing) Locations</i>					
Crossing DOT#:		Milepost:	Roadway Name (IF applicable):		
Track #:	DAX Identifier:	Designed	Programmed	N/A	Remarks
a.	Warning time				
b.	DAX warning time				
c.	Offset distance (feet)				
d.	Approach (feet)				
e.	Approach field measured (feet) [if applicable]:				
Crossing DOT#:		Milepost:	Roadway Name (IF applicable):		
Track #:	DAX Identifier:	Designed	Programmed	N/A	Remarks
a.	Warning time				
b.	DAX warning time				
c.	Offset distance (feet)				
d.	Approach (feet)				
e.	Approach field measured (feet) [if applicable]:				
Crossing DOT#:		Milepost:	Roadway Name (IF applicable):		
Track #:	DAX Identifier:	Designed	Programmed	N/A	Remarks
a.	Warning time				
b.	DAX warning time				
c.	Offset distance (feet)				
d.	Approach (feet)				
e.	Approach field measured (feet) [if applicable]:				
Crossing DOT#:		Milepost:	Roadway Name (IF applicable):		
Track #:	DAX Identifier:	Designed	Programmed	N/A	Remarks
a.	Warning time				
b.	DAX warning time				
c.	Offset distance (feet)				
d.	Approach (feet)				
e.	Approach field measured (feet) [if applicable]:				
Crossing DOT#:		Milepost:	Roadway Name (IF applicable):		
Track #:	DAX Identifier:	Designed	Programmed	N/A	Remarks
a.	Warning time				
b.	DAX warning time				
c.	Offset distance (feet)				
d.	Approach (feet)				
e.	Approach field measured (feet) [if applicable]:				
Crossing DOT#:		Milepost:	Roadway Name (IF applicable):		
Track #:	DAX Identifier:	Designed	Programmed	N/A	Remarks
a.	Warning time				
b.	DAX warning time				
c.	Offset distance (feet)				
d.	Approach (feet)				
e.	Approach field measured (feet) [if applicable]:				