

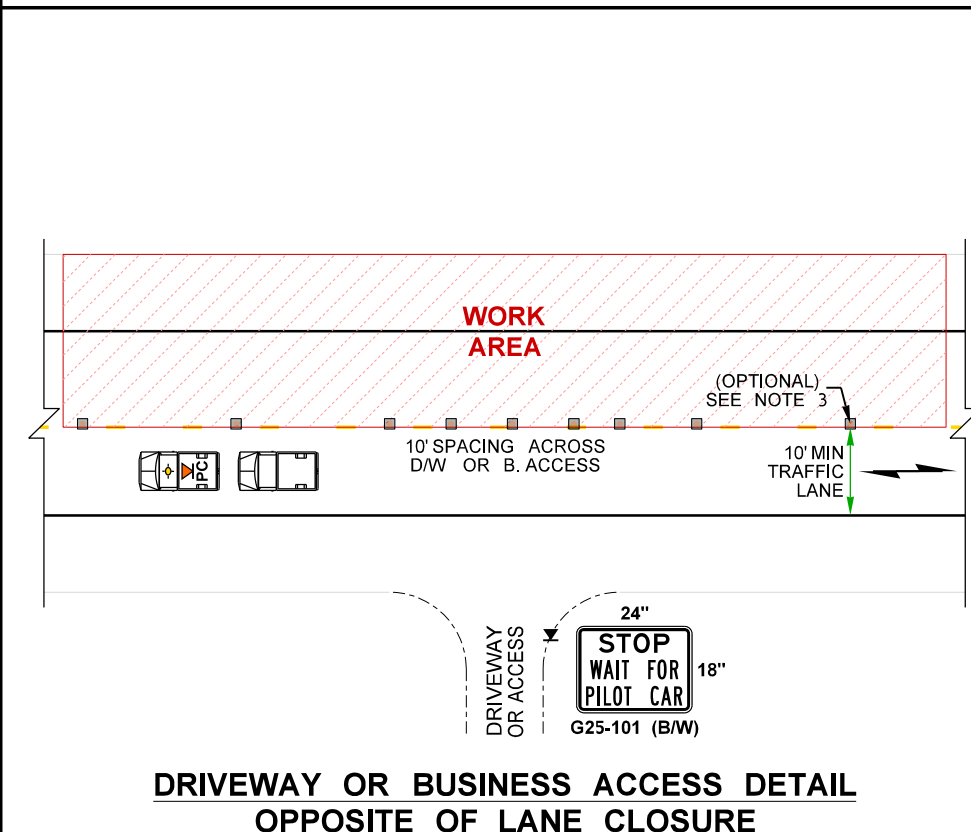
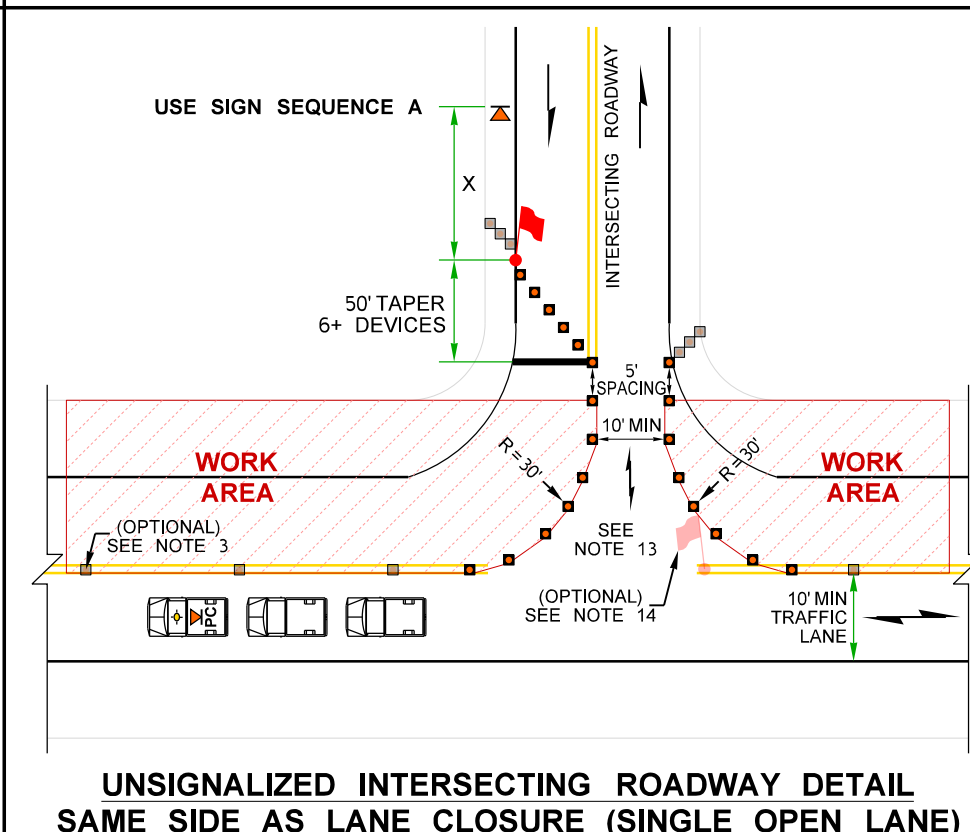
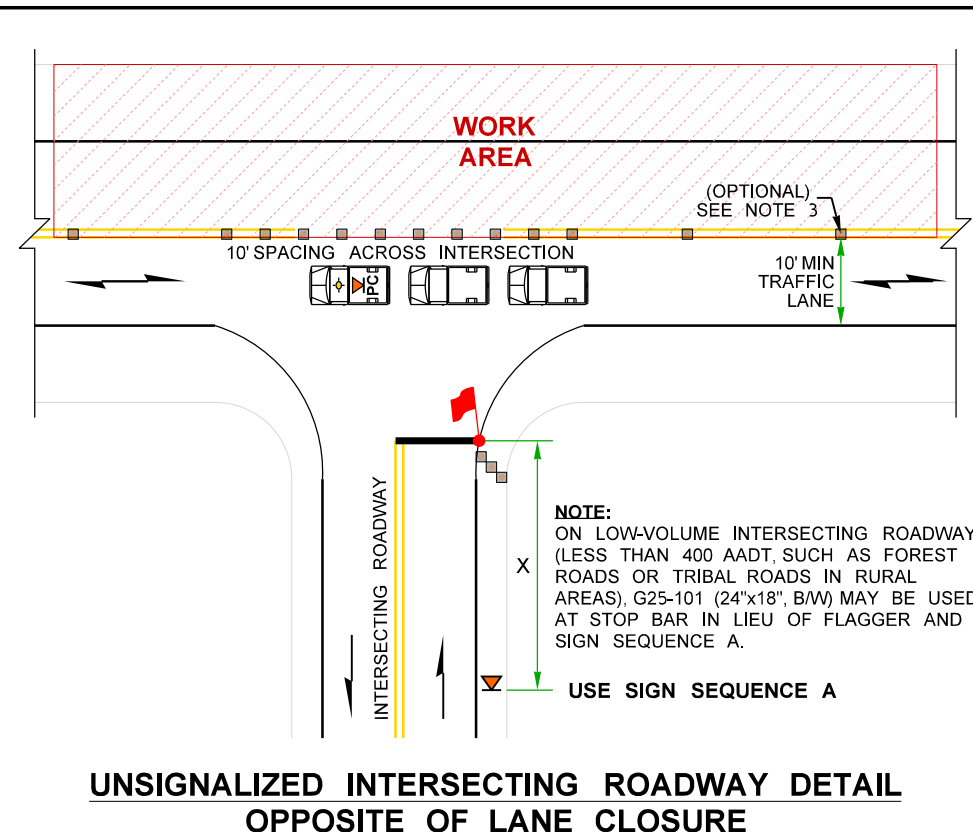
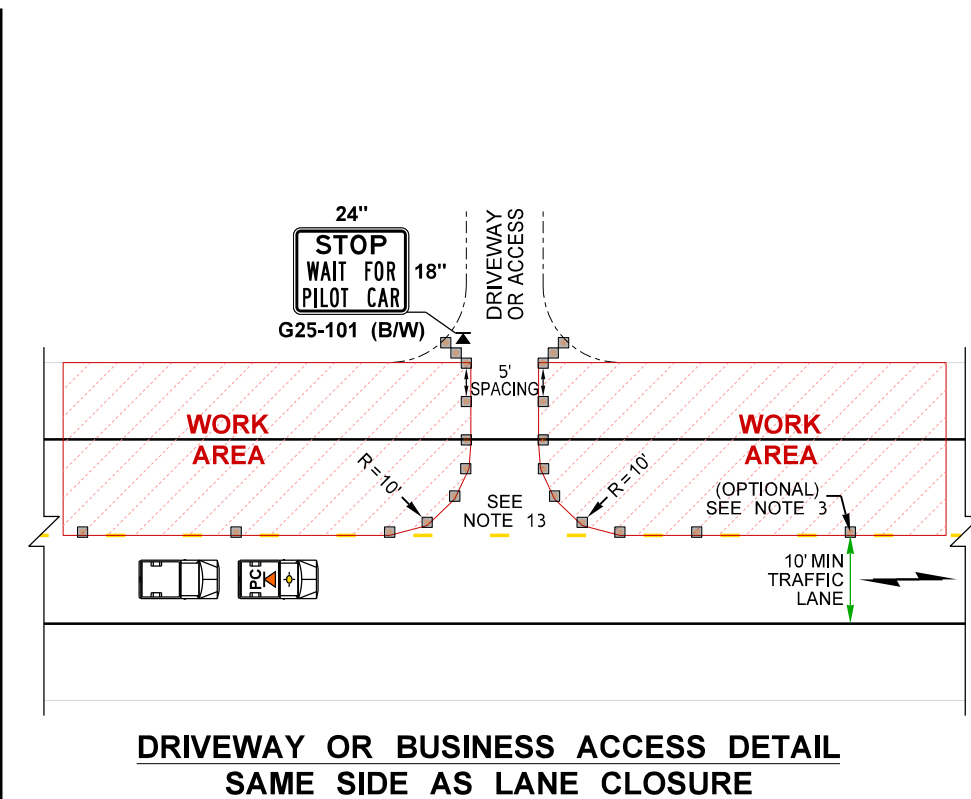
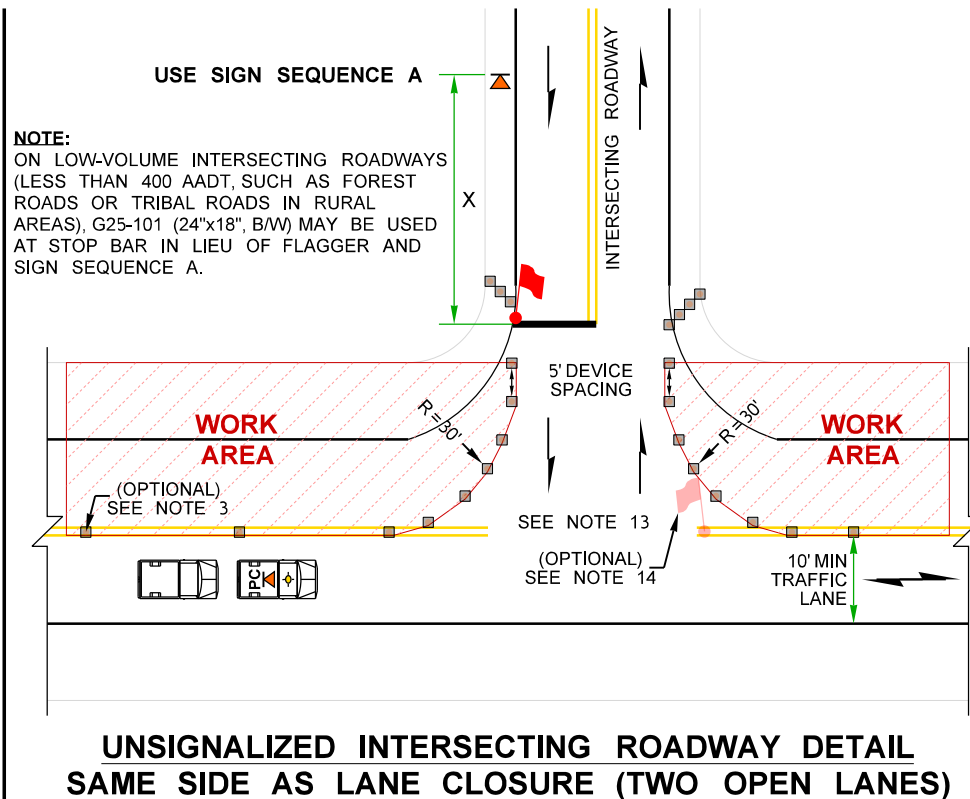
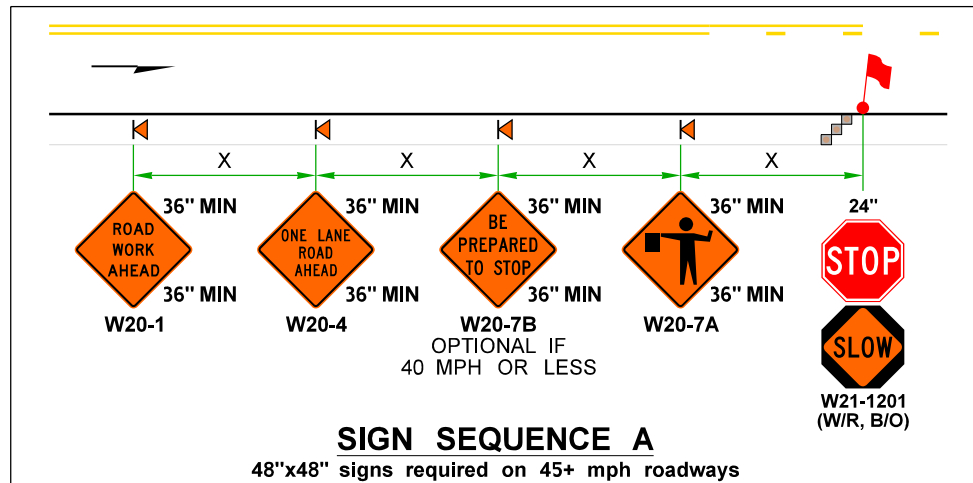


**NOTES:**

12. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC333, SHEET 1.

13. WORK MAY BRIEFLY OCCUR WITHIN LANE CLOSURE ACROSS INTERSECTING ROADWAY APPROACHES, BUSINESS ACCESSES, OR DRIVEWAYS. **MAY HOLD APPROACH OR ACCESS TRAFFIC FOR 5 MINUTES OR LESS** (ENGINEER MAY ACCEPT HOLDS UP TO 10 MINUTES) WHILE RESTRICTING TURNS FROM MAINLINE. CHANNELIZATION DEVICES DELINEATING APPROACH OR ACCESS MAY BE REMOVED OR RELOCATED AS NEEDED.

14. SINGLE FLAGGER (WITH RED FLAG/RED GLOW CONE FLASHLIGHT) MAY BE ADDED TO THE INTERSECTING ROADWAY APPROACH TO HELP GUIDE ALTERNATING & TURNING TRAFFIC.



**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: AFAD-CONTROLLED SHARED BIKE-VEHICLE LANE STRATEGY (45+ MPH HIGHWAYS)**  
NOT TO SCALE

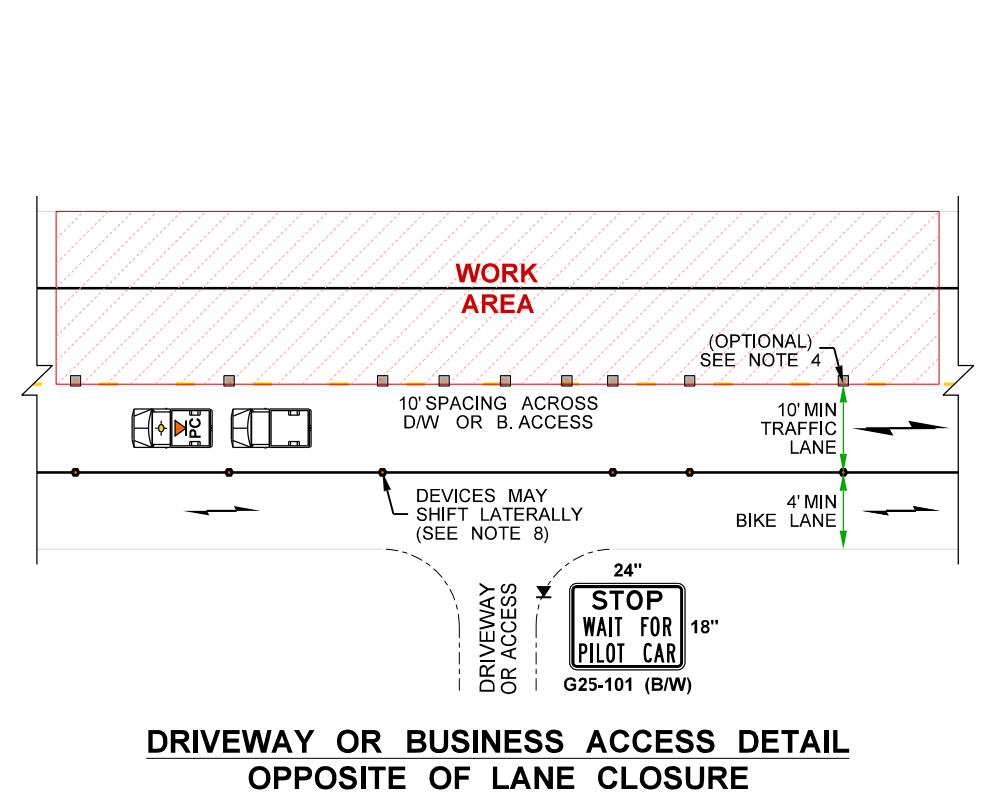
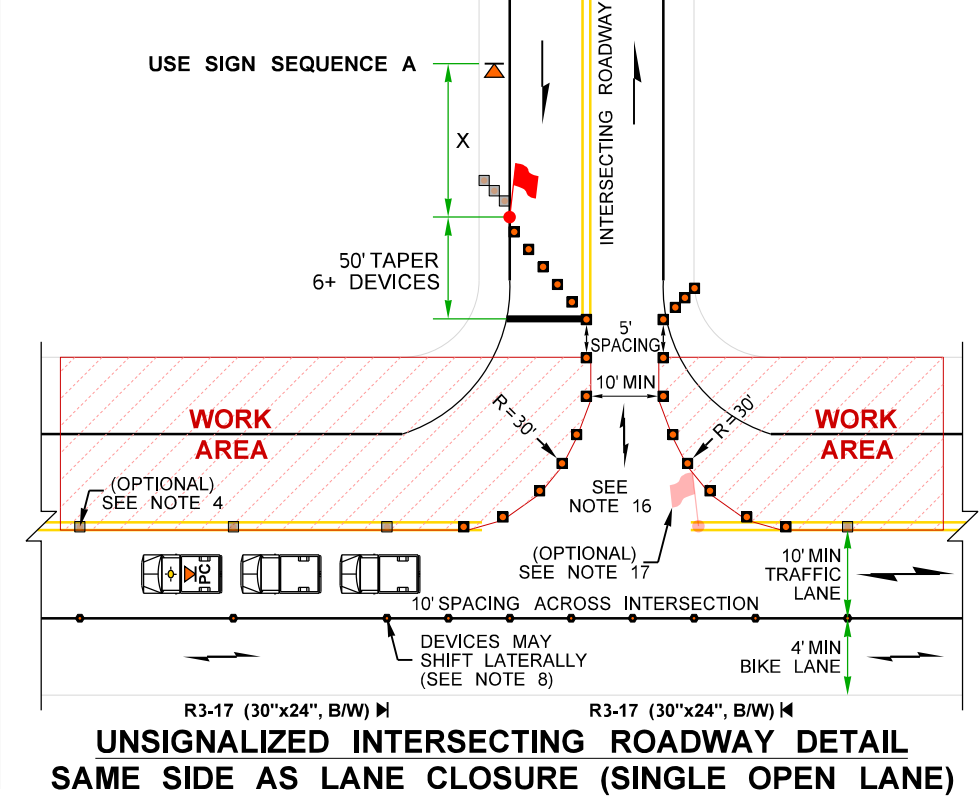
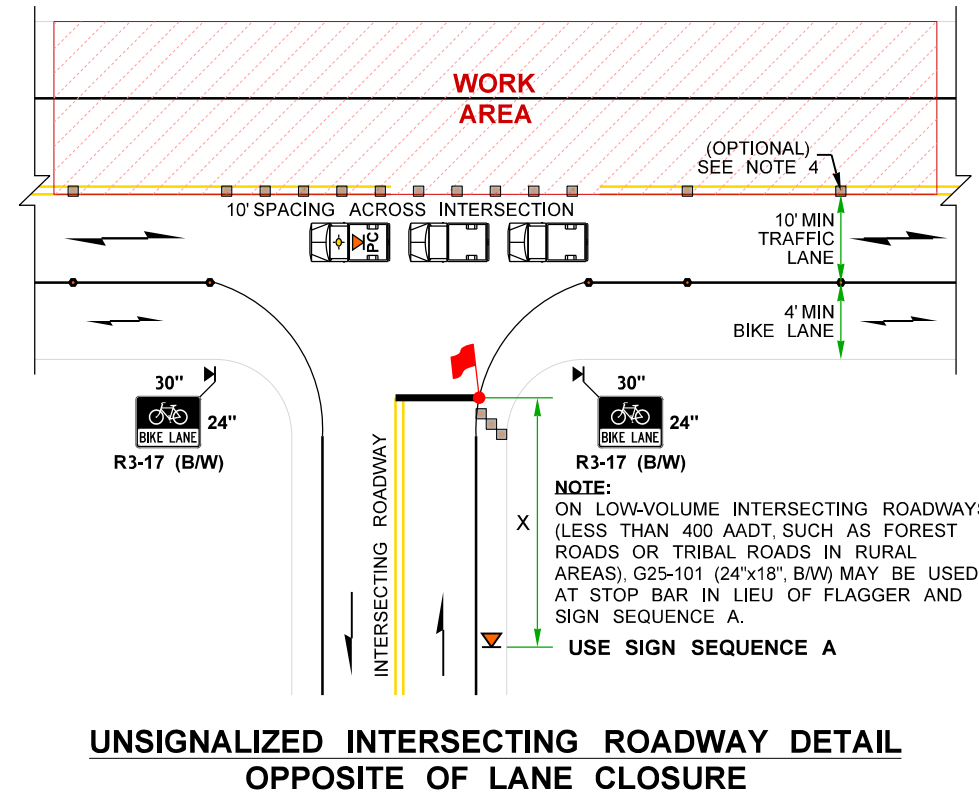
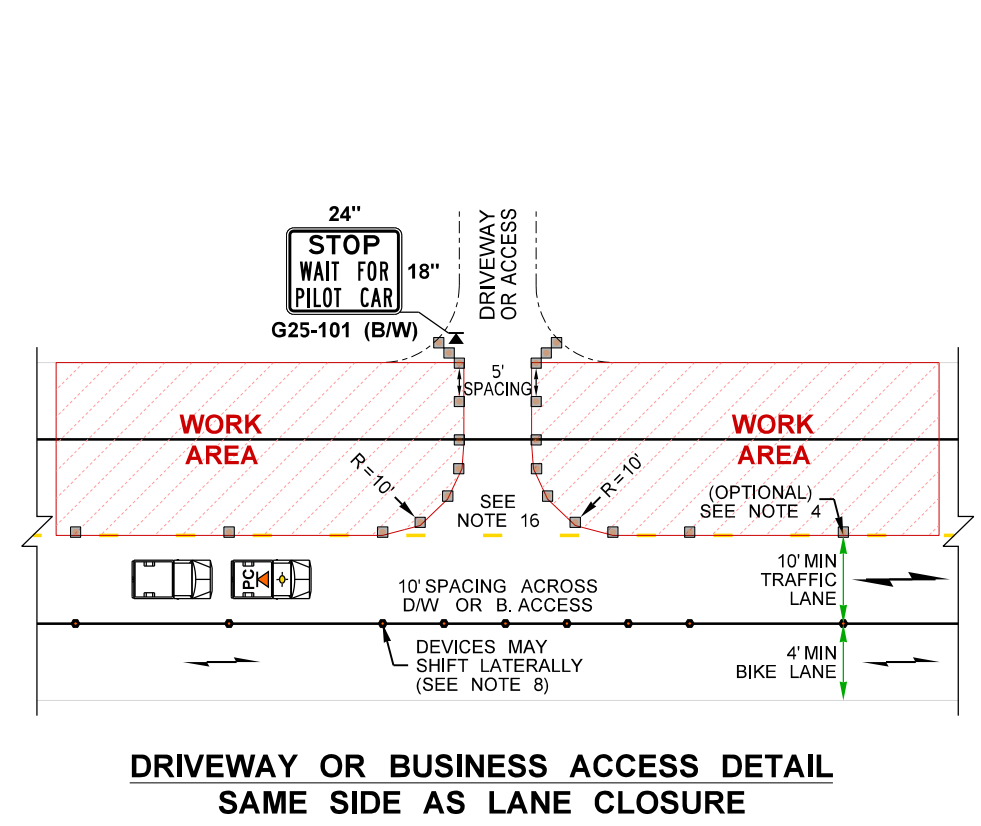
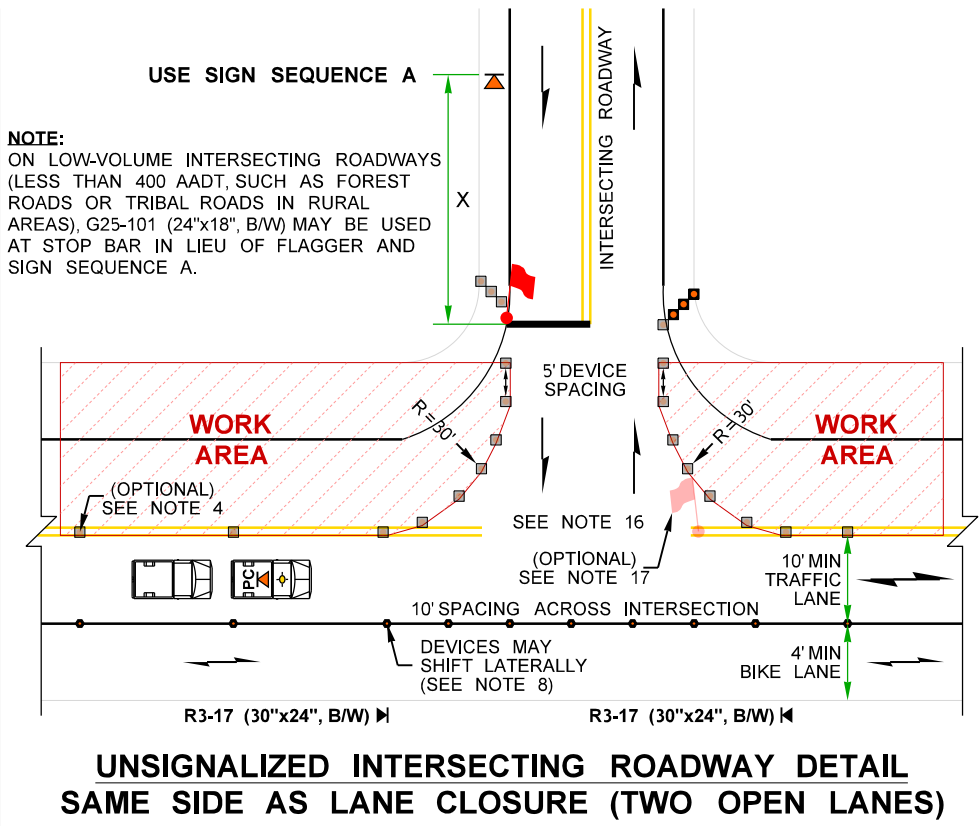
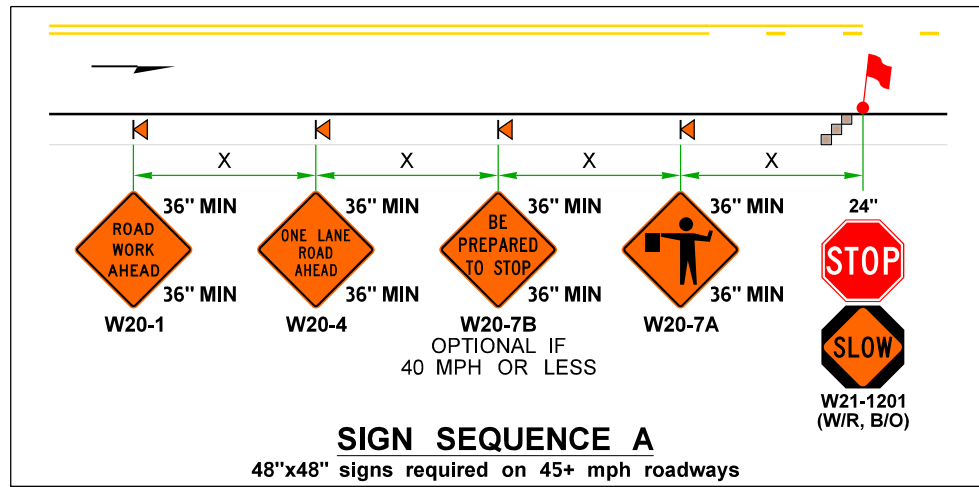
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DATE	4/2/2024			JOB NUMBER			SHEET 2 OF 4 SHEETS
PLOTTED BY	LintzF			CONTRACT NO.	LOCATION NO.		TYPICAL TRAFFIC CONTROL PLANS
DESIGNED BY							
ENTERED BY							
CHECKED BY							
PROJ. ENGR.							
REGIONAL ADM.	REVISION	DATE	BY				





**NOTES:**

- 15. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC333, SHEET 3.
- 16. WORK MAY BRIEFLY OCCUR WITHIN LANE CLOSURE ACROSS INTERSECTING ROADWAY APPROACHES, BUSINESS ACCESSES, OR DRIVEWAYS. **MAY HOLD APPROACH OR ACCESS TRAFFIC FOR 5 MINUTES OR LESS** (ENGINEER MAY ACCEPT HOLDS UP TO 10 MINUTES) WHILE RESTRICTING TURNS FROM MAINLINE. CHANNELIZATION DEVICES DELINEATING APPROACH OR ACCESS MAY BE REMOVED OR RELOCATED AS NEEDED.
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**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: AFAD-CONTROLLED SEPARATED BICYCLE LANE STRATEGY (45+ MPH HIGHWAYS)**  
NOT TO SCALE

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ENTERED BY						OF
CHECKED BY						4
PROJ. ENGR.						SHEETS
REGIONAL ADM.		REVISION	DATE	BY		TYPICAL TRAFFIC CONTROL PLANS

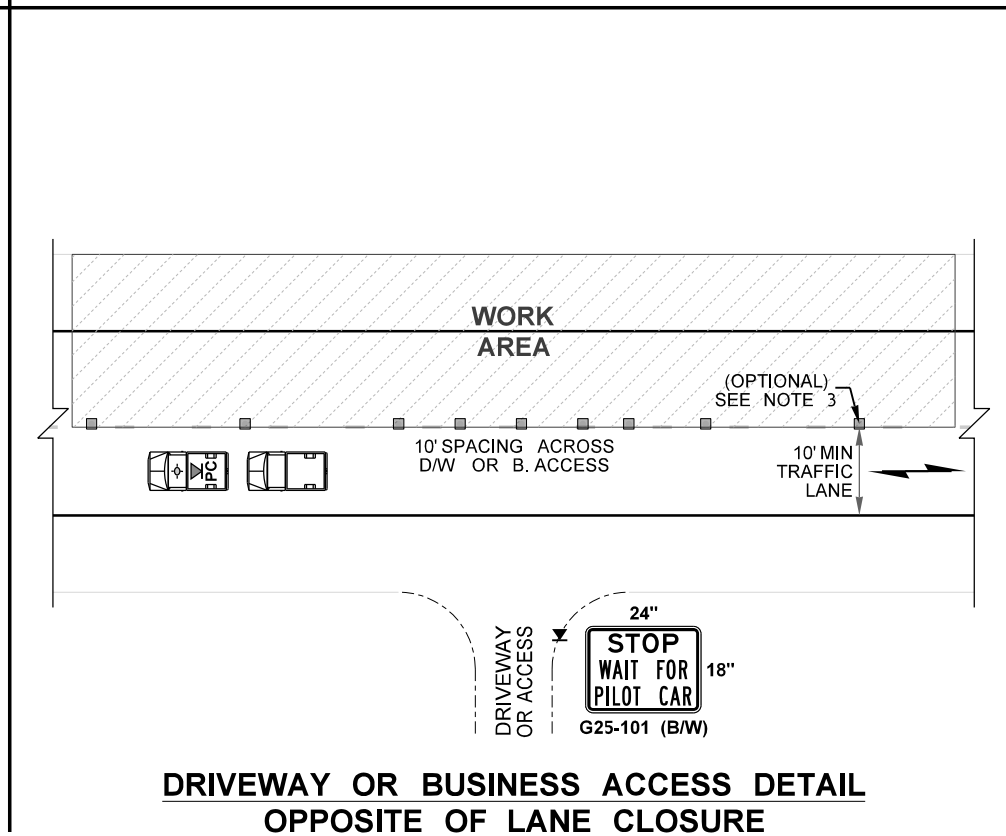
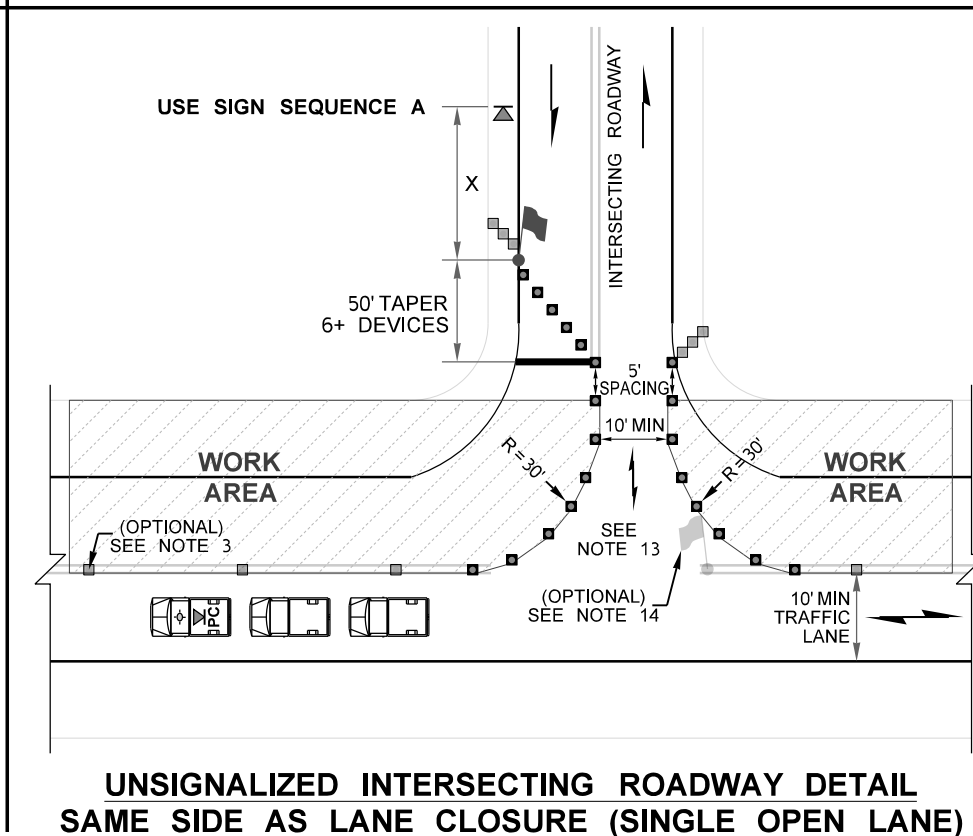
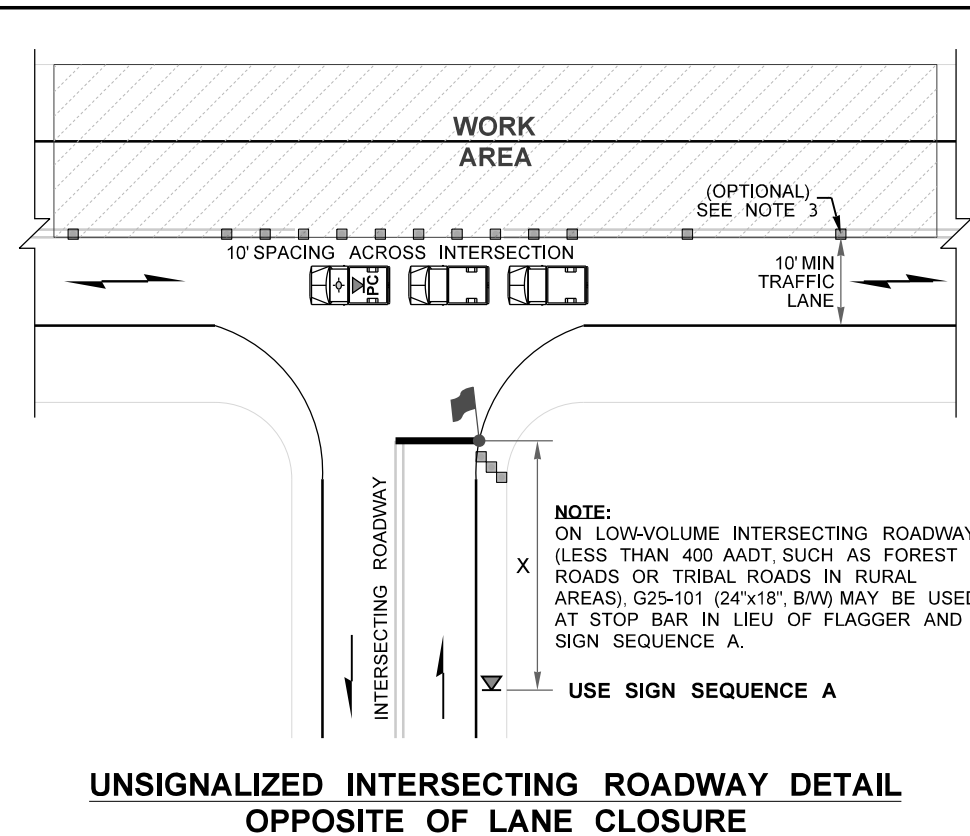
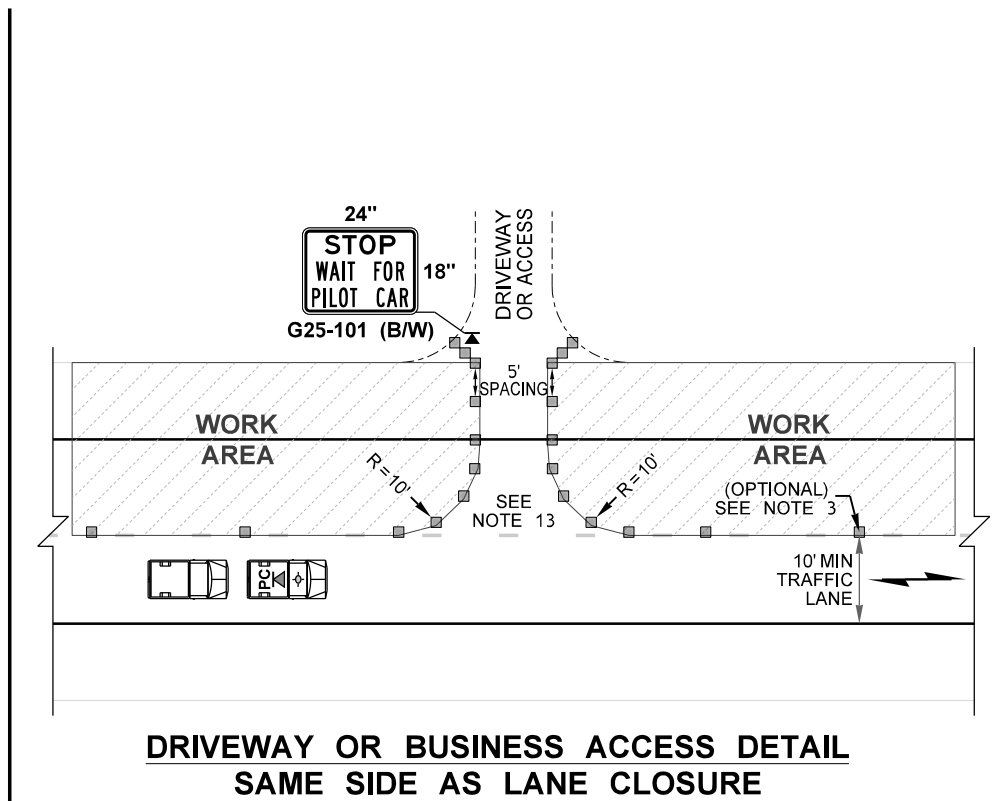
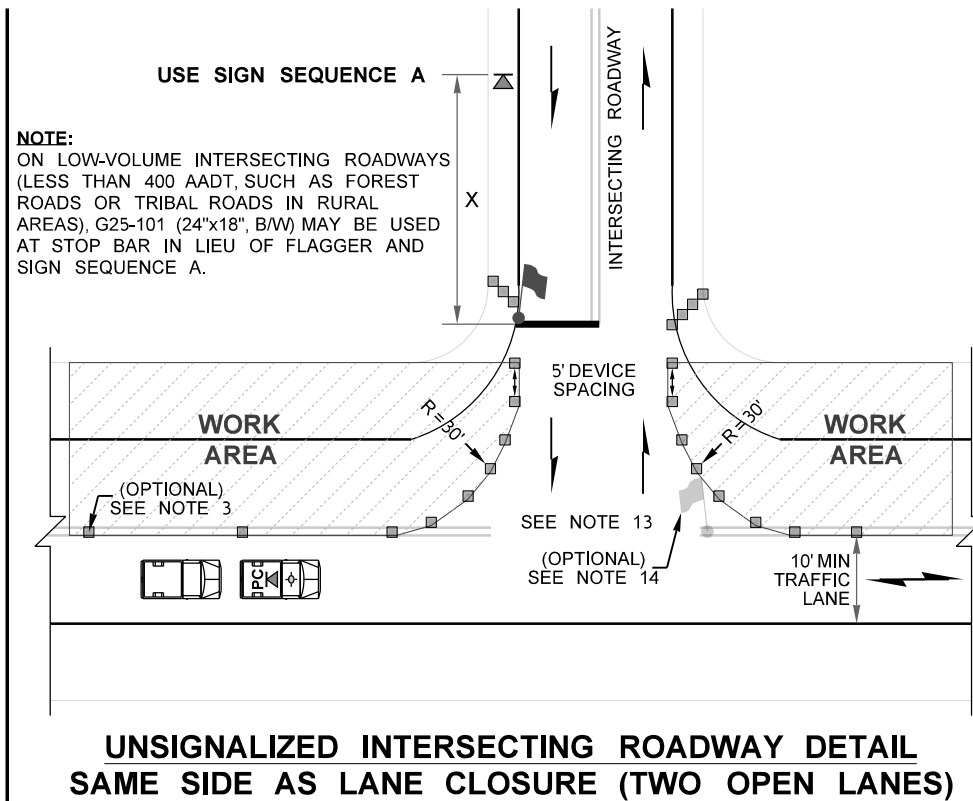
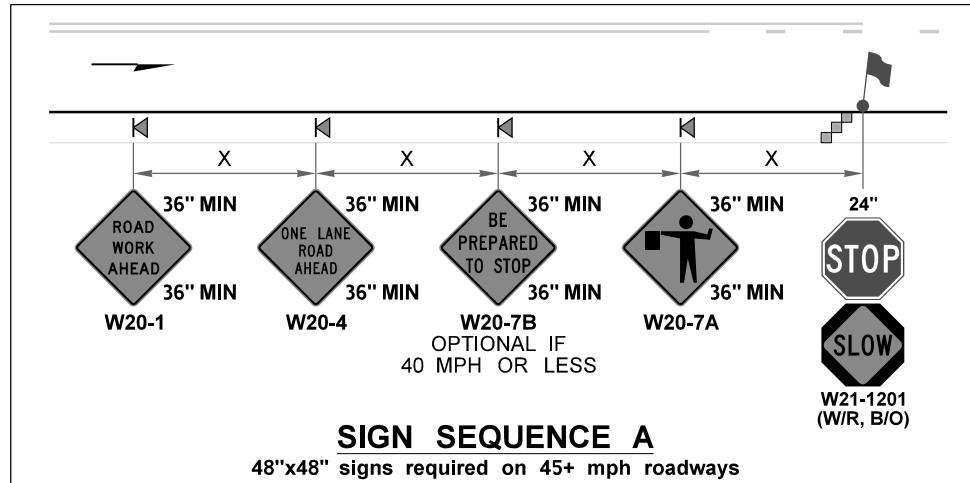


**NOTES:**

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**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: AFAD-CONTROLLED SHARED BIKE-VEHICLE LANE STRATEGY (45+ MPH HIGHWAYS)**  
NOT TO SCALE

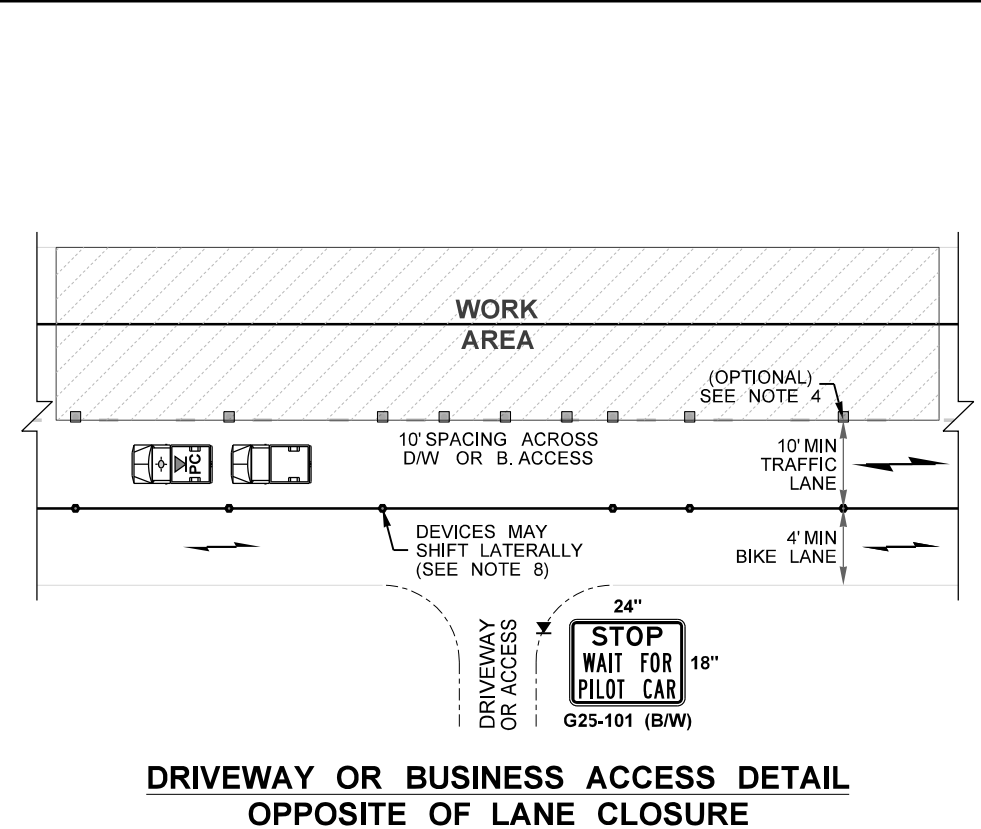
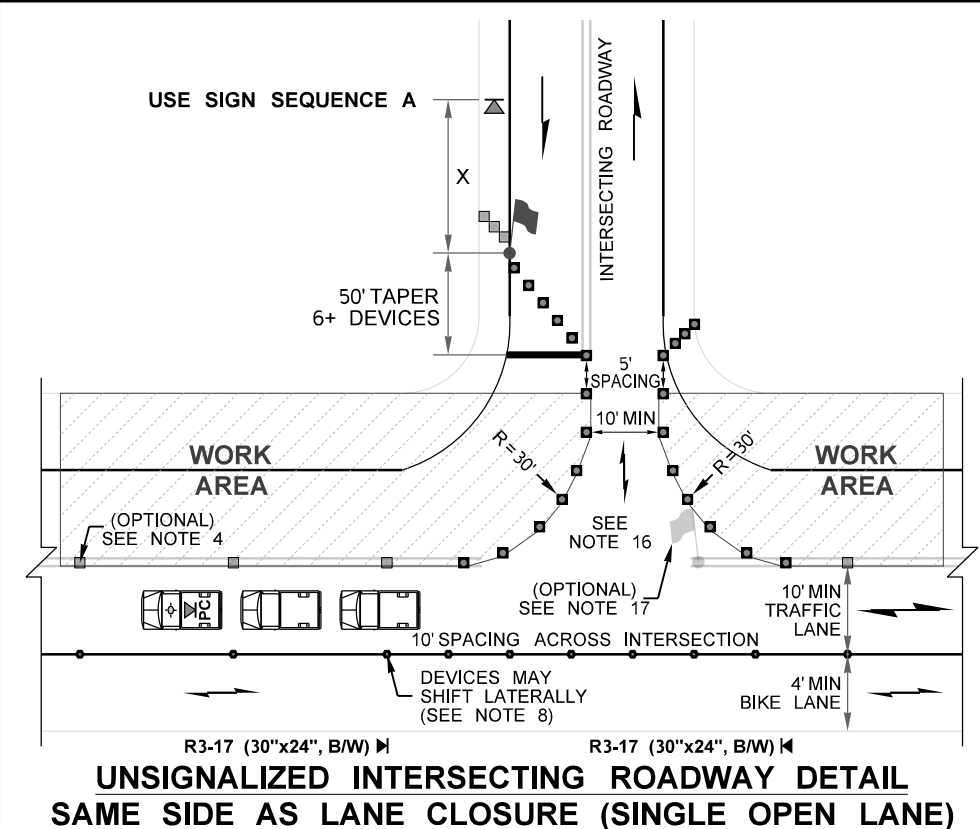
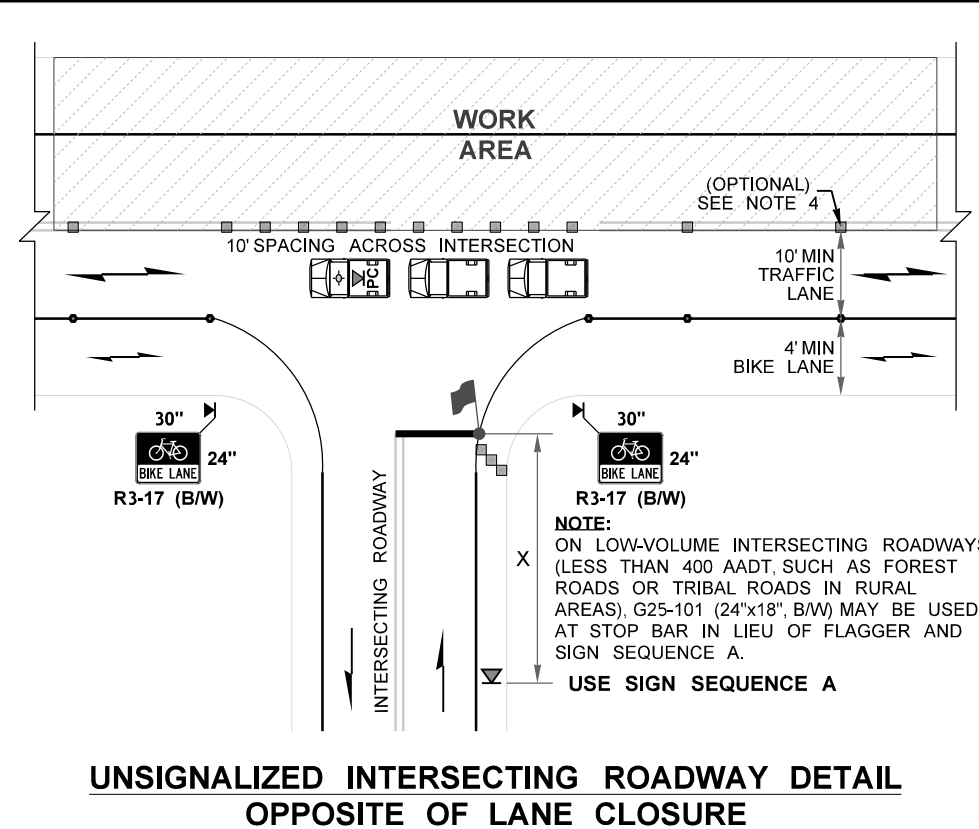
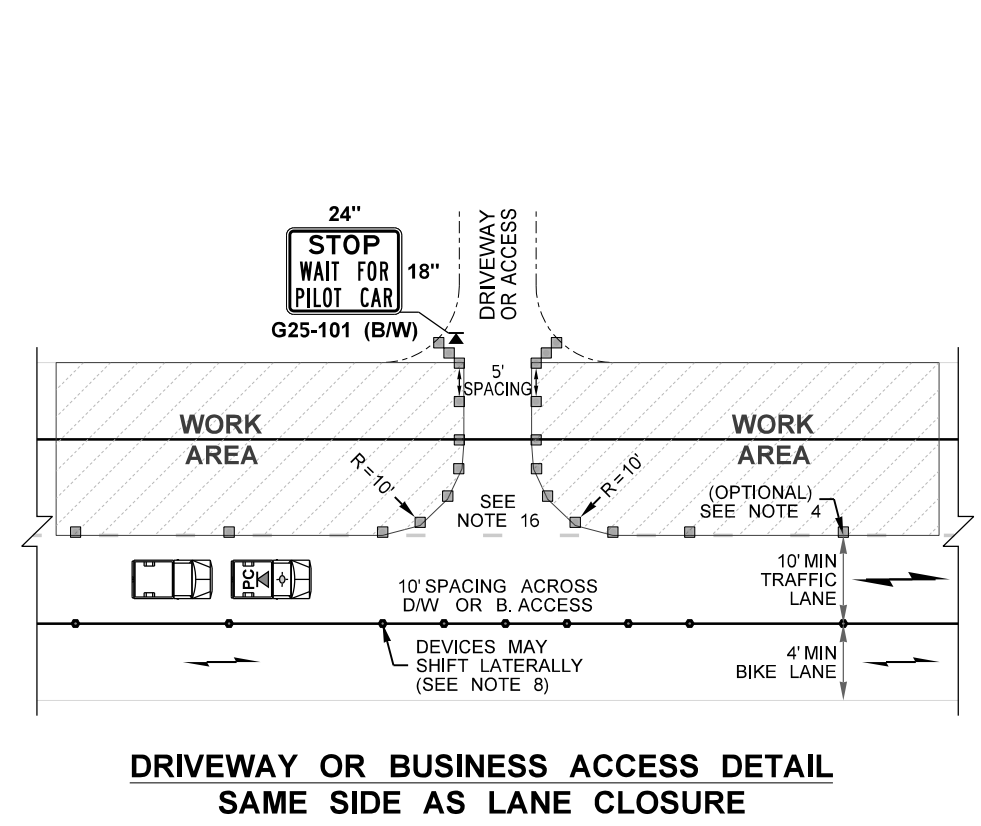
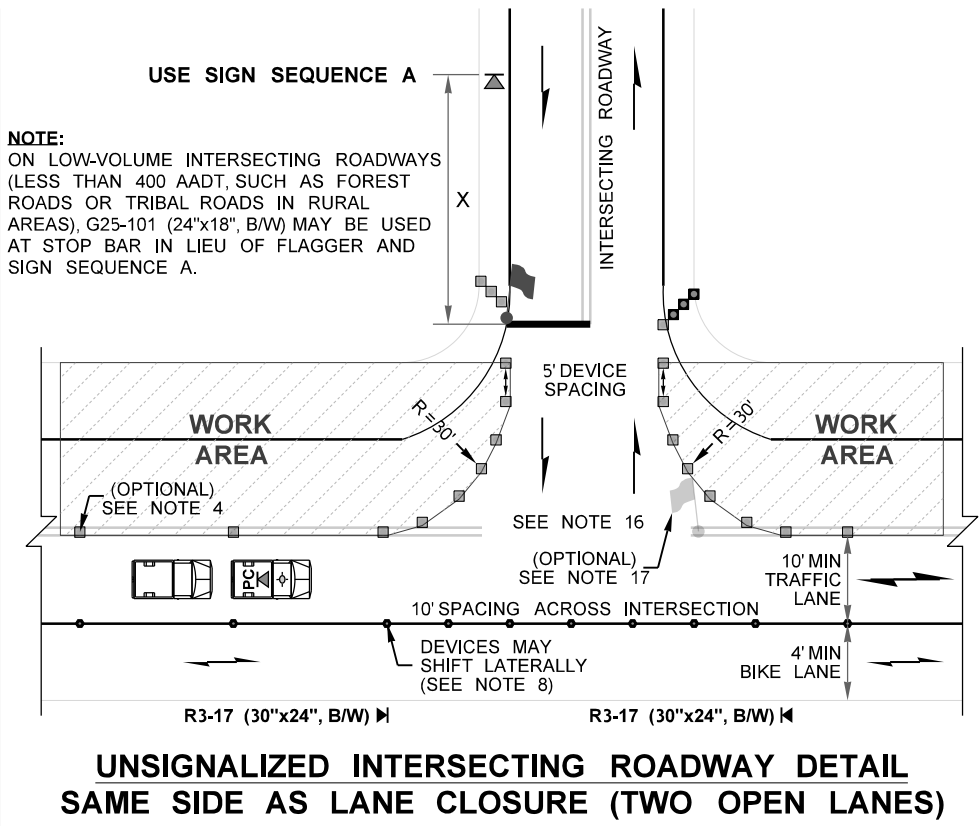
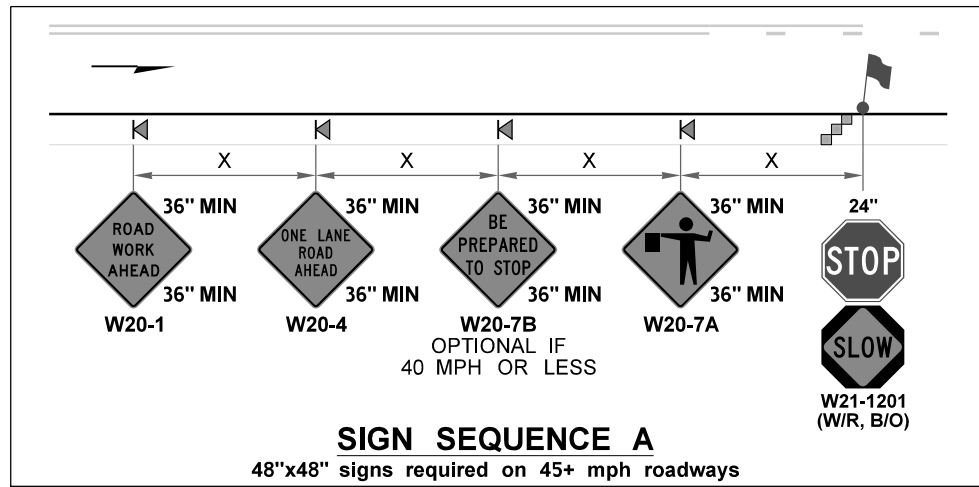
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DATE	4/2/2024						TC333
PLOTTED BY	LintzF			JOB NUMBER			SHEET
DESIGNED BY				CONTRACT NO.	LOCATION NO.		2
ENTERED BY							OF
CHECKED BY							4
PROJ. ENGR.							SHEETS
REGIONAL ADM.	REVISION	DATE	BY				TYPICAL TRAFFIC CONTROL PLANS





**NOTES:**

- 15. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC333, SHEET 3.
- 16. WORK MAY BRIEFLY OCCUR WITHIN LANE CLOSURE ACROSS INTERSECTING ROADWAY APPROACHES, BUSINESS ACCESSES, OR DRIVEWAYS. **MAY HOLD APPROACH OR ACCESS TRAFFIC FOR 5 MINUTES OR LESS** (ENGINEER MAY ACCEPT HOLDS UP TO 10 MINUTES) WHILE RESTRICTING TURNS FROM MAINLINE. CHANNELIZATION DEVICES DELINEATING APPROACH OR ACCESS MAY BE REMOVED OR RELOCATED AS NEEDED.
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**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: AFAD-CONTROLLED SEPARATED BICYCLE LANE STRATEGY (45+ MPH HIGHWAYS)**  
NOT TO SCALE

FILE NAME	C:\Users\LintzF\OneDrive - Washington State Department of Transportation\Desktop\Work Zone TCPs\333Hwy45+AltTrafficAFAD\PilotCarOp.dgn				REGION NO.	STATE	FED.AID PROJ.NO.	Plot 4
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DESIGNED BY								4
ENTERED BY								OF
CHECKED BY								4
PROJ. ENGR.								SHEETS
REGIONAL ADM.	REVISION	DATE	BY		P.E. STAMP BOX	DATE		TYPICAL TRAFFIC CONTROL PLANS





**WORK ZONE MICROSTATION CELLS: Updated work zone cells incorporated (April 2024).**

WSDOT CAE automatically updates cell libraries on WSDOT and on-site consultant staff computers (no action needed); however, external users or off-site consultants must manually install them. For additional information e-mail HQCAEHelpDesk@wsdot.wa.gov.

Division 4 in WSDOT Plans Preparation Manual, Section 400.06(29), provides updated work zone cell library policy and information for PS&Es. See <https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/manuals/plans-preparation-manual>

**TYPICAL TCP USAGE EXPLANATION:**

**Plot 1:** Pilot Car Operation for AFAD-controlled 1-lane, 2-way alternating traffic on the mainline for 45+ mph 2-lane highways with a shared bicycle-vehicle lane.

**Plot 2:** Details for intersecting roadways and driveway/business access for Plot 1.

**Plot 3:** Pilot Car Operation for AFAD-controlled 1-lane, 2-way alternating traffic on the mainline for 45+ mph 2-lane highways with a separated bicycle lane. Separated bike lanes maximize vehicle capacity (minimizing queue & delays) especially when high bicycle volumes are expected and mainline flaggers are 1500'+ apart.

**Plot 4:** Details for intersecting roadways and driveway/business access for Plot 3.

Note: For temporary rumble strip versions of these plans, see Typical TC334.

**Other Alternating Traffic TCPs (45+ mph):** See Typical Traffic Control Plan Library (<https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/plan-sheet-library/work-zone-typical-traffic-control-plans-tcp>)

- \* TC320s for flagger-controlled alternating traffic plans
  - \* TC330s for other variations of AFAD-controlled alternating traffic plans
  - \* TC340s for temporary signal-controlled alternating traffic plans
  - \* TC350s for traffic holds
- If not published yet, they will be added in the future.

**Other Alternating Traffic TCPs (40 mph or less):** See Typical Traffic Control Plan Library (<https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/plan-sheet-library/work-zone-typical-traffic-control-plans-tcp>)

- \* TC420s for flagger-controlled alternating traffic
  - \* TC430s for AFAD-controlled alternating traffic
  - \* TC440s for temporary signal-controlled alternating traffic plans
  - \* TC450s for traffic holds
- If not published yet, they will be added in the future.

**DESIGNER NOTES:**

- A. Contact Region Transportation Operations to determine which Typical TCP(s) to utilize, as there are several variations available (or soon will be).
- B. These typical traffic control plans may be modified for site specific situations and/or WSDOT Region Transportation Operations standard practices. **Typical TCPs are not "Standard Plans".**
- C. **Do not use intermittent (old: "variable") regulatory work zone speed limit reductions for flagging or AFAD operations.** Instead, maintain the existing speed limit (or continuous regulatory work zone speed limit reduction, if applicable). See WSDOT Traffic Manual Section 5-18 and Executive Order E1060 regulatory speed limit reductions & advisory speed approval policy for work zones thru Region Transportation Operations.
- D. See MUTCD Table 6F-1 for additional temporary sign size information. Work zone signs are usually smaller than those used permanently.
- E. WAC 468-95-300 modifies MUTCD Table 6-1 "Recommended Advance Warning Sign Minimum Spacing". Sign spacing may be adjusted for field conditions based on engineering judgement. The Sign Spacing table is acceptable to use in Typical TCPs; however, site-specific traffic control plans should include actual sign spacing values (with Å) that have been verified in the field, on SR view, or via Google Maps.
- F. When positioned behind channelizing devices, temporary signs should be mounted at 5' minimum.
- G. The work zone design speed is typically the posted speed limit (or the work zone speed limit when in effect). For split speed limits (SPEED LIMIT 65 TRUCKS 60), use the higher 65 mph for work zone design. For this Typical TCP, the work zone design speed is based on the existing posted speed limit for sign spacing, channelizing device spacing, buffer, and roll ahead distances.
- H. "Flagger tapers" are always 50'-100' per closed lane with 6 devices minimum (10'-20' spacing on the taper), regardless of the posted speed limit or lane width per MUTCD 6C.08, Paragraph 15. Never use "L" for these tapers.
- I. Channelization devices types may be modified (vertical panel channelizing devices prohibited). 28" reflective traffic cones are recommended on AFAD-controlled alternating traffic (especially for access delineation to maintain visibility for turning motorists). 36" reflective traffic cones, 42" tall channelizing devices, or traffic safety drums may be used. Warning lights on channelizing devices is being phased out in Washington. Contact Region Transportation Operations for information regarding their standard practices.
- J. Maximum channelizing device spacing table for tangents is based on WAC 468-95-301 and may ALWAYS be reduced.
- K. Sequential arrow boards are prohibited at flagger tapers per WSDOT standard practice and per MUTCD Guidance TA-10.
- L. Per MUTCD Section 6C.06, longitudinal buffer spaces are optional. Using longitudinal buffer spaces listed in MUTCD Table 6C-2 is recommended as best practice when feasible, but may be adjusted based on engineering judgement. The Longitudinal Buffer Space table is acceptable in Typical TCPs; however, site-specific traffic control plans should include actual buffer distances that have been verified in the field, on SR view, or via Google Maps.
- M. The lateral buffer (transverse distance between open travel lanes and work area) is optional. No lateral buffer has been provided in these Typical TCPs due to the low speeds of alternating traffic. Actual work area limits may be modified.
- N. WSDOT best practice is to place a protective vehicle (PV) in the closed lane in advance of the work area for AFAD-controlled alternating traffic, but provide a full longitudinal buffer space to provide errant vehicles an opportunity to stop at the posted speed limit on 45+ mph roadways before impacting the PV. If the longitudinal buffer distance must be reduced or eliminated on 45+ mph roadways with AFAD-controlled alternating traffic, then upgrade the PV to a transportable attenuator (TA). Additional PVs (or TAs) may be added prior to multiple work crews within a work area. Contact Region Transportation Operations for their standard practice.
- O. Placing channelizing devices transversely (at 45° and 5-foot spacing) is an optional strategy to stop move errant drivers traveling within the closed lane(s) but is not shown in the Typical TCP.
- P. The downstream taper of 50'-100' is required on 1-lane, 2-way traffic configurations.
- Q. Duration of traffic holds for driveways, business accesses, and/or roadway approaches is listed as 5 minutes (1 minute on high volume highways) in this Typical Traffic Control Plan, but may be adjusted. Contact Region Transportation Operations for additional guidance.
- R. When utilizing AFADs in Contracts, include the three Section 1-10 General Special Provisions for Specification, Measurement, and Payment. <https://wsdot.wa.gov/publications/fulltext/projectdev/gspspdf/egsp1.pdf>
  - \* 1-10.1(1).OPT1.GR1 (AFAD Materials GSP)
  - \* 1-10.3(3).OPT1.GR1 (AFAD Specifications GSP)
  - \* 1-10.4(2).OPT2.GR1 (AFAD Measurement GSP)
  - \* 1-10.5(2).OPT1.GR1 (AFAD Payment GSP)

**PILOT CAR OPERATION FOR ALTERNATING 1-LANE, 2-WAY TRAFFIC: AFAD-CONTROLLED (45+ MPH HIGHWAYS)**

<b>INFORMATIONAL USE ONLY</b>  DO NOT INCLUDE THIS SHEET IN CONTRACT PS&Es or TCP SUBMITTALS.	Plot 5
	<b>TC333</b>
<b>DESIGNER GUIDANCE</b>	