

SIGN SPACING = X (1)			
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-	
RURAL ROADS & URBAN ARTERIALS	25-30 MPH	200' +/- (2)	
RESIDENTIAL & BUSINESS DISTRICTS			
URBAN STREETS	25 MPH OR LESS	100' +/- (2)	
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP AT-GRADE INTERSECTIONS AND DRIVEWAYS.			
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.			
ALL SIGNS ARE 36" X 36" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED			

SHOULDER CLOSURE TAPER LENGTH = L/3						
SHOULDER WIDTH (feet)	SPEED (MPH)	20	25	30	35	40
6	L/3 (feet)	40	40	40	60	60
10		40	40	60	90	90
FOR SHOULDERS LESS THAN 6', USE 3 DEVICES MINIMUM						

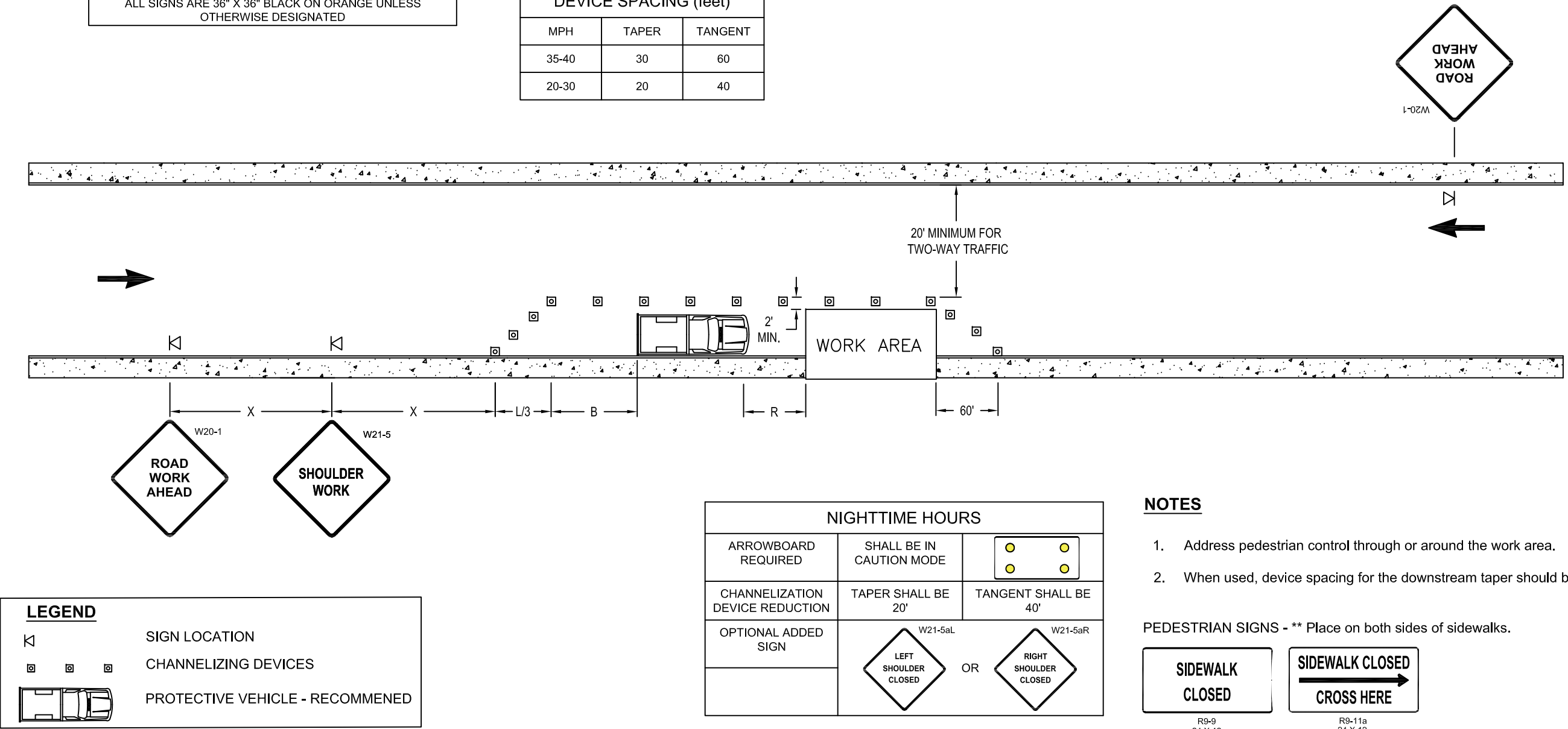
MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	20	25	30	35	40
LENGTH (feet)	115	155	200	250	305

PROTECTIVE VEHICLE
ROLL AHEAD DISTANCE = R

NO SPECIFIED DISTANCE REQUIRED.
STRATEGICALLY POSITION WORK
VEHICLE TO PROTECT WORK CREW.

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
9,900 TO 22,000 lbs	100'-0"
22,001+ lbs	74'-0"



TYPICAL SHOULDER CLOSURE LOW SPEED (40 MPH OR LESS) NO PAVEMENT MARKINGS

PUBLIC WORKS ENGINEERING

APPR BY: JTW	DATE: 2/18/2025
DRAWN BY: HEZ	DWG: COR-TCP1
CAD FILE: TCP.dwg (SHLDR-NM)	

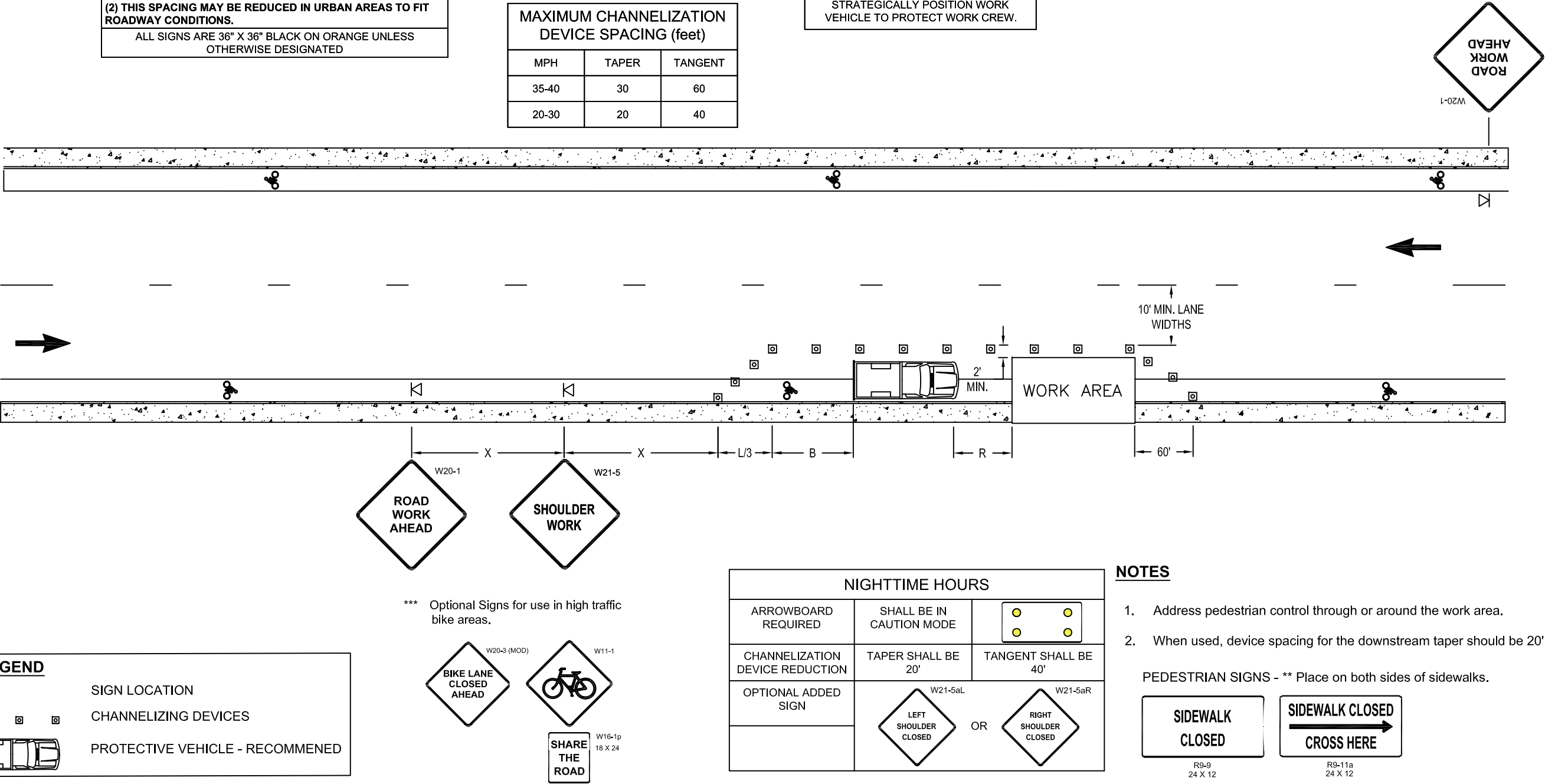
SIGN SPACING = X (1)			
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-	
RURAL ROADS & URBAN ARTERIALS	25-30 MPH	200' +/- (2)	
RESIDENTIAL & BUSINESS DISTRICTS			
URBAN STREETS	25 MPH OR LESS	100' +/- (2)	
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMODATE INTERCHANGE RAMPS AT-GRADE INTERSECTIONS AND DRIVEWAYS.			
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.			
ALL SIGNS ARE 36" X 36" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED			

SHOULDER CLOSURE TAPER LENGTH = L/3						
SHOULDER WIDTH (feet)	SPEED (MPH)	20	25	30	35	40
6	L/3 (feet)	40	40	40	60	60
10		40	40	60	90	90
FOR SHOULDERS LESS THAN 6', USE 3 DEVICES MINIMUM						

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	20	25	30	35	40
LENGTH (feet)	115	155	200	250	305
PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R					
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.					

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
9,900 TO 22,000 lbs	100'-0"
22,001+ lbs	74'-0"



TYPICAL SHOULDER CLOSURE LOW SPEED (40 MPH OR LESS) CENTERLINE MARKINGS WITH BIKE LANE

PUBLIC WORKS ENGINEERING

APPR BY: JTW	DATE: 2/18/2025
DRAWN BY: HEZ	DWG: COR-TCP2
CAD FILE: TCP.dwg (SHLDR-CLWBL)	

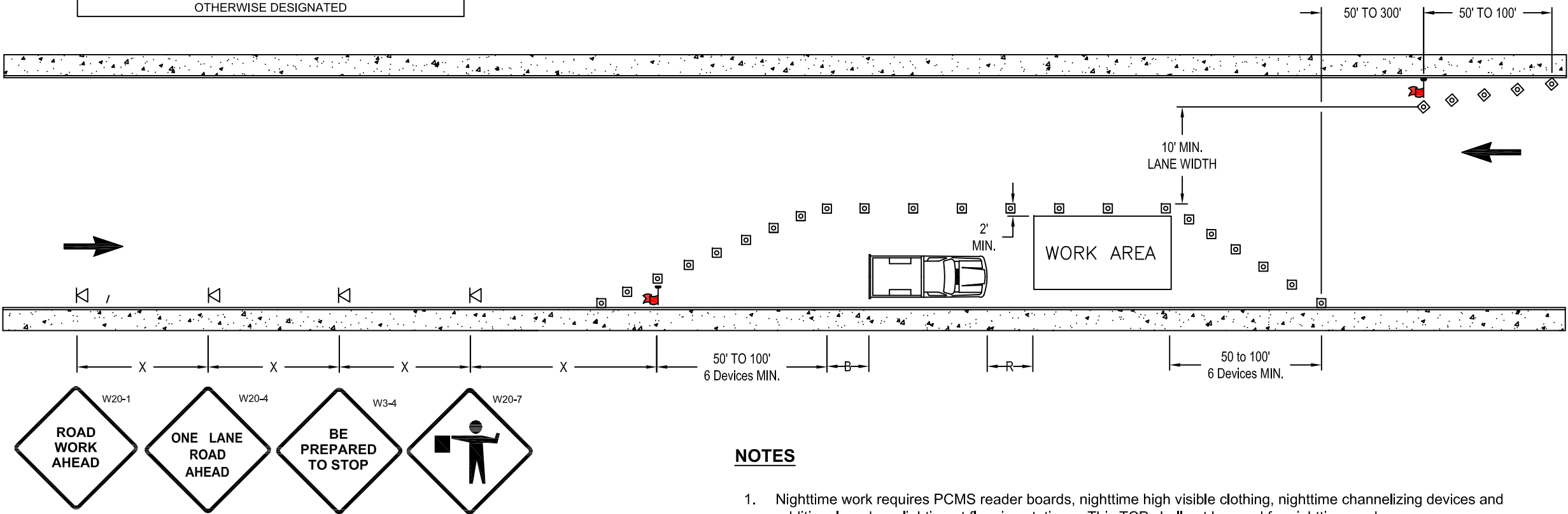
SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS AT-GRADE INTERSECTIONS AND DRIVEWAYS. (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		
ALL SIGNS ARE 36" X 36" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	20	25	30	35	40
LENGTH (feet)	115	155	200	250	305

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.





STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
9,900 TO 22,000 lbs	100'-0"
22,001+ lbs	74'-0"



NOTES

1. Nighttime work requires PCMS reader boards, nighttime high visible clothing, nighttime channelizing devices and additional roadway lighting at flagging stations. This TCP shall not be used for nighttime work.
2. Recommend extending channelizing device taper across shoulder. Channelizing devices at flaggers stations recommended.
3. Protective Vehicle recommended and may be a work vehicle strategically located to shield the work area. Work vehicle should have any of the following; high intensity rotating, flashing, oscillating or strobe lights. At the very minimum, vehicle shall have working hazard warning signals.
4. For low-volume roadways (less than 400 AADT) with short-duration work zones (less than 60 minutes) on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger positioned to visible from both directions may be used.
5. Extend the buffer space to locate the flagger station in advance of a curve, if necessary.
6. Flaggers shall provide control and direction for pedestrians.
7. Sign sequence shall be provided for both directions of travel on the roadway.
8. Business and residential access shall be maintained throughout the work zone.

LEGEND



FLAGGING STATION
SIGN LOCATION
CHANNELIZING DEVICES
PROTECTIVE VEHICLE - RECOMMENED



TYPICAL LANE CLOSURE
LOW SPEED (40 MPH OR LESS)
NO PAVEMENT MARKINGS

PUBLIC WORKS ENGINEERING	
APPR BY: JTW	DATE: 2/18/2025
DRAWN BY: HEZ	DWG: COR-TCP3
CAD FILE: TCP.dwg (FLAGGER-NM)	

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B					
SPEED (MPH)	20	25	30	35	40
LENGTH (feet)	115	155	200	250	305

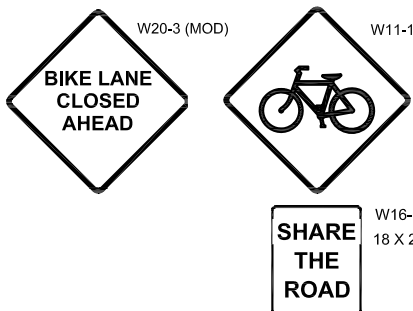
PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R	
HOST VEHICLE WEIGHT	R
9,900 TO 22,000 lbs	100'-0"
22,001+ lbs	74'-0"



1. Nighttime work requires PCMS reader boards, nighttime high visible clothing, nighttime channelizing devices and additional roadway lighting at flagging stations. This TCP shall not be used for nighttime work.
2. Recommend extending channelizing device taper across shoulder. Channelizing devices at flaggers stations recommended.
3. Protective Vehicle recommended and may be a work vehicle strategically located to shield the work area. Work vehicle should have any of the following; high intensity rotating, flashing, oscillating or strobe lights. At the very minimum, vehicle shall have working hazard warning signals.
4. For low-volume roadways (less than 400 AADT) with short-duration work zones (less than 60 minutes) on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger positioned to visible from both directions may be used.
5. Extend the buffer space to locate the flagger station in advance of a curve, if necessary.
6. Flaggers shall provide control and direction for pedestrians.
7. Sign sequence shall be provided for both directions of travel on the roadway.
8. Business and residential access shall be maintained throughout the work zone.

*** Optional Signs for use in high traffic bike areas.



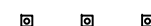
LEGEND



FLAGGING STATION



SIGN LOCATION



CHANNELIZING DEVICES



PROTECTIVE VEHICLE - RECOMMENDED



TYPICAL LANE CLOSURE
LOW SPEED (40 MPH OR LESS)
CENTERLINE MARKINGS WITH BIKE LANE

PUBLIC WORKS ENGINEERING

APPR BY: JTW

DATE: 2/18/2025

DRAWN BY: HEZ

DWG: COR-TCP4

CAD FILE: TCP.dwg (FLAGGER-BL)

SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP AT-GRADE INTERSECTIONS AND DRIVEWAYS. (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		
ALL SIGNS ARE 36" X 36" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
35-45	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B							
SPEED (MPH)	20	25	30	35	40	45	50
LENGTH (feet)	115	155	200	250	305	360	425

MINIMUM LANE CLOSURE TAPER LENGTH = L							
LANE WIDTH (feet)	SPEED (MPH)	20	25	30	35	40	45
12	L (feet)	80	140	180	270	330	540

SHOULDER CLOSURE TAPER LENGTH = L/3							
SHOULDER WIDTH (feet)	SPEED (MPH)	20	25	30	35	40	45
6	L/3 (feet)	40	40	40	60	60	90
10	L/3 (feet)	40	40	60	90	90	150

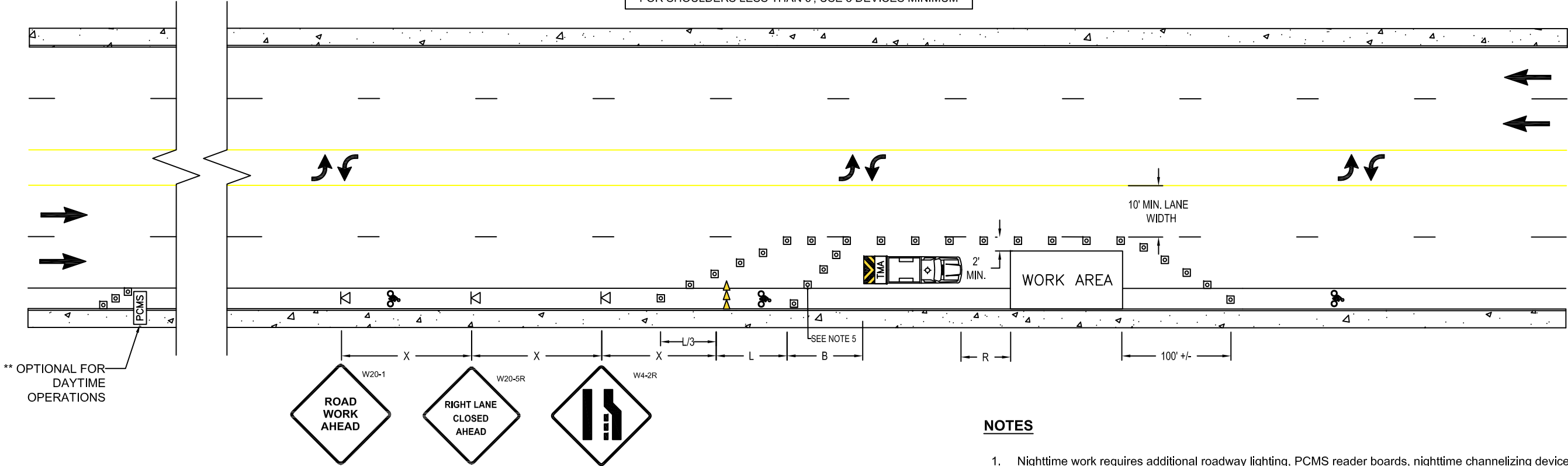
FOR SHOULDERS LESS THAN 6', USE 3 DEVICES MINIMUM

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs		HOST VEHICLE WEIGHT 22,001+ lbs	
UP TO 40 MPH	45-55 MPH	UP TO 40 MPH	45-55 MPH
100'	123'	74'-0"	100'-0"

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R	
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.	

PCMS	
1	2
LEFT LANE CLOSED	XX MILES AHEAD
2.0 SEC	2.0 SEC

FIELD LOCATE XX MILES +/- IN
ADVANCE OF LANE CLOSURE TAPER



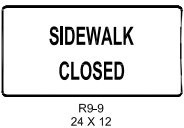
** OPTIONAL FOR
DAYTIME
OPERATIONS

LEGEND	
	ARROW BOARD
	PORTABLE CHANGEABLE MESSAGE SIGN RECOMMENDED
	SIGN LOCATION
	CHANNELIZING DEVICES
	TMA

*** Optional Signs for use in high traffic
bike areas.



PEDESTRIAN SIGNS - ** Place on both sides of sidewalks.



NOTES

1. Nighttime work requires additional roadway lighting, PCMS reader boards, nighttime channelizing devices. This TCP shall not be used for nighttime work.
2. A TMA is required for roadways 45 mph or higher. For roadways 40 mph or less, if a TMA is not available a Protective Vehicle shall be strategically located to shield the work area. Work vehicle shall have one following; high intensity rotating, flashing, oscillating or strobe lights.
3. Traffic safety drums, tall channelization devices, or 36-inch cones are required for all lane closure tapers on roadways 45 mph or higher. (Half spacing required for tall channelization devices and 36-inch cones)
4. Devices should not encroach into adjacent lanes.
5. Use transverse devices in closed lane every 1000' when the work operation allows.
6. Downstream taper device spacing should be 20' when a taper is used.
7. Address pedestrian control through or around the work area.



TYPICAL RIGHT LANE CLOSURE FOR MULTI-LANE ROADWAYS

PUBLIC WORKS ENGINEERING

APPR BY: JTW

DATE: 2/18/2025

DRAWN BY: HEZ

DWG: COR-TCP5

CAD FILE: TCP.dwg (LANE CLOSURE-RL)

SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25-30 MPH	200' +/- (2)
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP AT-GRADE INTERSECTIONS AND DRIVEWAYS. (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		
ALL SIGNS ARE 36" X 36" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
35-45	30	60
20-30	20	40

PCMS	
1	2
LEFT LANE CLOSED	NO LEFT TURNING
2.0 SEC	2.0 SEC

FIELD LOCATE XX MILES +/- IN
ADVANCE OF LANE CLOSURE TAPER

LONGITUDINAL BUFFER SPACE = B							
SPEED (MPH)	20	25	30	35	40	45	50
LENGTH (feet)	115	155	200	250	305	360	425

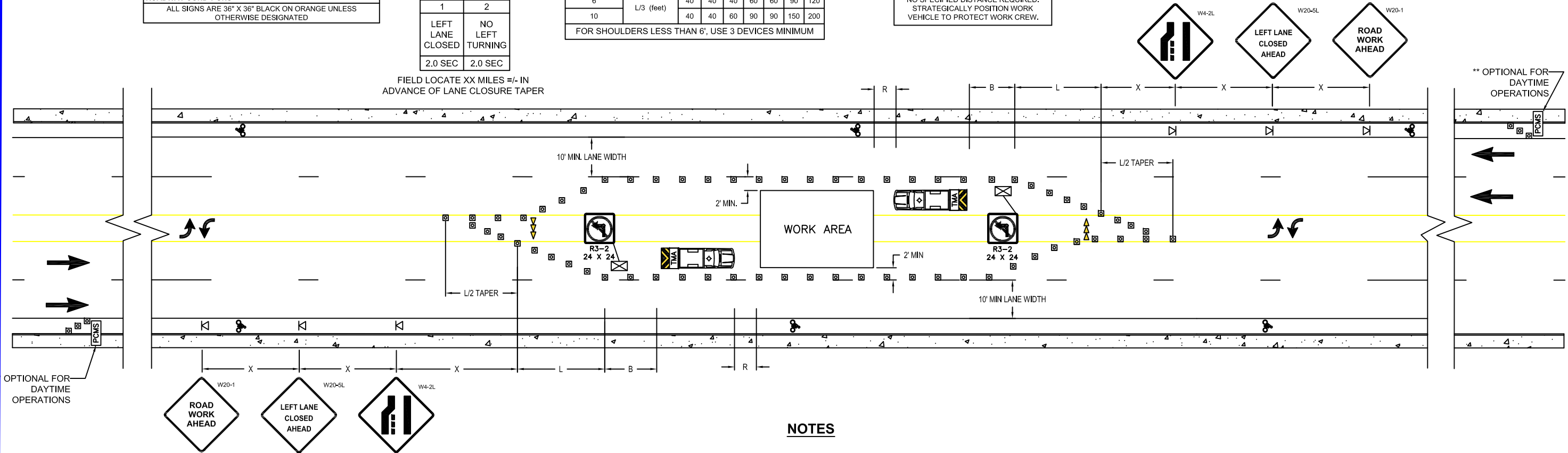
MINIMUM LANE CLOSURE TAPER LENGTH = L							
LANE WIDTH (feet)	SPEED (MPH)	20	25	30	35	40	45 50
12	L (feet)	80	140	180	270	330	540 600

SHOULDER CLOSURE TAPER LENGTH = L/3							
SHOULDER WIDTH (feet)	SPEED (MPH)	20	25	30	35	40	45 50
6	L/3 (feet)	40	40	40	60	60	90 120
10		40	40	60	90	90	150 200

FOR SHOULDERS LESS THAN 6', USE 3 DEVICES MINIMUM

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs		HOST VEHICLE WEIGHT 22,001+ lbs	
UP TO 40 MPH	45-55 MPH	UP TO 40 MPH	45-55 MPH
100'	123'	74'-0"	100'-0"

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R	
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.	



NOTES

1. Nighttime work requires additional roadway lighting, PCMS reader boards, nighttime channelizing devices. This TCP shall not be used for nighttime work.
2. A TMA is required for roadways 45 mph or higher. For roadways 40 mph or less, if a TMA is not available a Protective Vehicle shall be strategically located to shield the work area. Work vehicle shall have one following; high intensity rotating, flashing, oscillating or strobe lights.
3. Traffic safety drums, tall channelization devices, or 36-inch cones are required for all lane closure tapers on roadways 45 mph or higher. (Half spacing required for tall channelization devices and 36-inch cones)
4. Devices should not encroach into adjacent lanes.



TYPICAL LEFT LANE AND CENTER
TURN LANE CLOSURE
FOR MULTI-LANE ROADWAYS

PUBLIC WORKS ENGINEERING

APPR BY: JTW	DATE: 2/18/2025
DRAWN BY: HEZ	DWG: COR-TCP6
CAD FILE: TCP.dwg (LANE CLOSURE-LCL)	

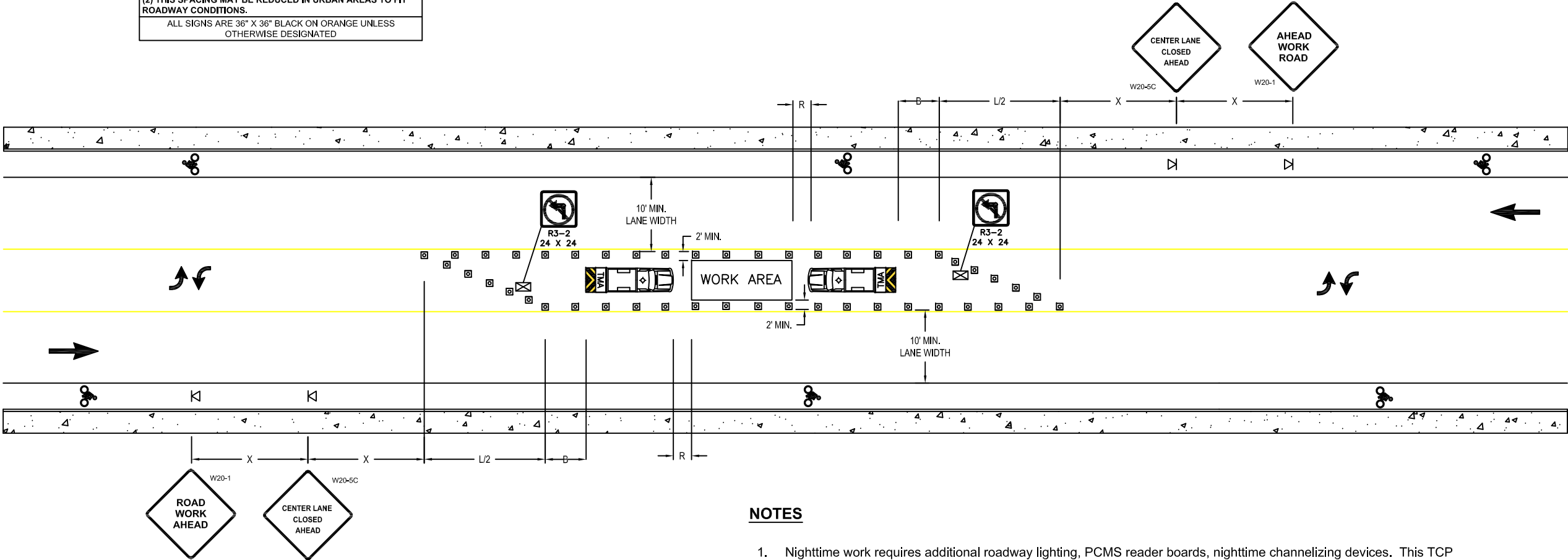
SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS	25-30 MPH	200' +/- (2)
RESIDENTIAL & BUSINESS DISTRICTS		
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP AT-GRADE INTERSECTIONS AND DRIVEWAYS.		
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		
ALL SIGNS ARE 36" X 36" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
35-45	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B								
SPEED (MPH)	20	25	30	35	40	45	50	
LENGTH (feet)	115	155	200	250	305	360	425	
MINIMUM LANE CLOSURE TAPER LENGTH = L								
LANE WIDTH (feet)	SPEED (MPH)	20	25	30	35	40	45	50
11	L (feet)	75	115	165	225	295	495	550
12	L (feet)	80	140	180	270	330	540	600

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs		HOST VEHICLE WEIGHT 22,001+ lbs	
UP TO 40 MPH	45-55 MPH	UP TO 40 MPH	45-55 MPH
100'	123'	74'-0"	100'-0"

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.



NOTES

- Nighttime work requires additional roadway lighting, PCMS reader boards, nighttime channelizing devices. This TCP shall not be used for nighttime work.
- A TMA is required for roadways 45 mph or higher. For roadways 40 mph or less, if a TMA is not available a Protective Vehicle shall be strategically located to shield the work area. Work vehicle shall have one following; high intensity rotating, flashing, oscillating or strobe lights.

LEGEND	
	SIGN LOCATION - 5' MOUNTING HEIGHT RECOMMENDED
	SIGN LOCATION
	CHANNELIZING DEVICES
	TMA



TYPICAL TWO-WAY LEFT TURN LANE CLOSURE

PUBLIC WORKS ENGINEERING

APPR BY: JTW	DATE: 2/18/2025
DRAWN BY: HEZ	DWG: COR-TCP7
CAD FILE: TCP.dwg (LANE CLOSURE-TWLTL)	

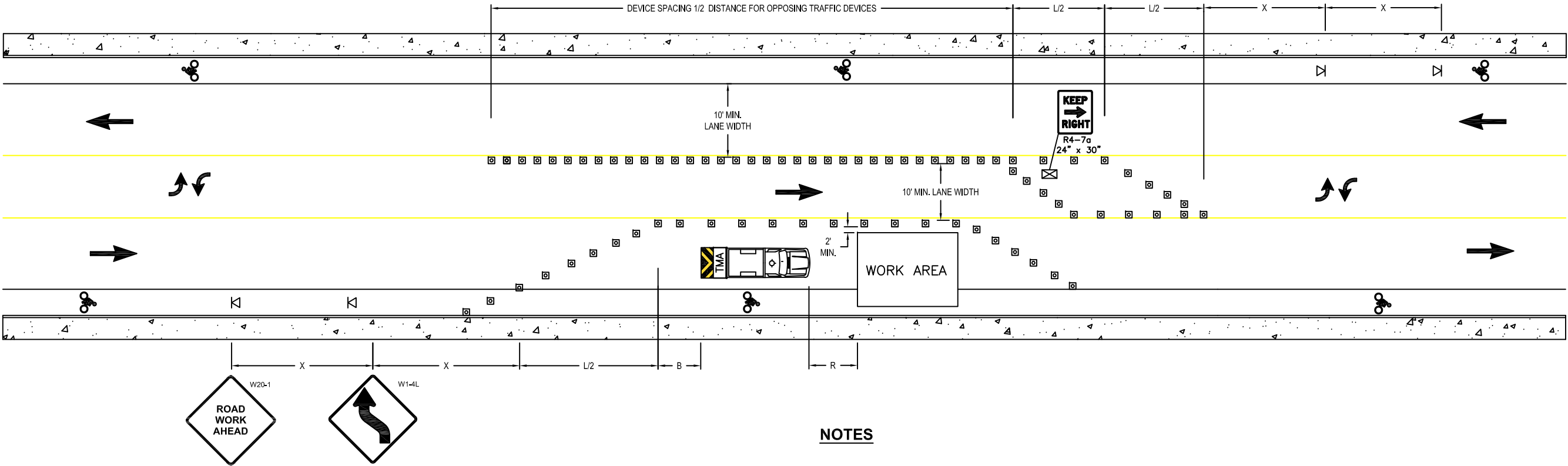
SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	45-55 MPH	500' +/-
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS	25-30 MPH	200' +/- (2)
RESIDENTIAL & BUSINESS DISTRICTS		
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMODATE INTERCHANGE RAMP AT-GRADE INTERSECTIONS AND DRIVEWAYS.		
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		
ALL SIGNS ARE 36" X 36" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
50-75	40	80
35-45	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE = B								
SPEED (MPH)	20	25	30	35	40	45	50	
LENGTH (feet)	115	155	200	250	305	360	425	
MINIMUM LANE CLOSURE TAPER LENGTH = L								
LANE WIDTH (feet)	SPEED (MPH)	20	25	30	35	40	45	50
11	L (feet)	75	115	165	225	295	495	550
12	L (feet)	80	140	180	270	330	540	600

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE = R			
HOST VEHICLE WEIGHT 9,900 TO 22,000 lbs		HOST VEHICLE WEIGHT 22,001+ lbs	
UP TO 40 MPH	45-55 MPH	UP TO 40 MPH	45-55 MPH
100'	123'	74'-0"	100'-0"

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.



NOTES

- Nighttime work requires additional roadway lighting, PCMS reader boards, nighttime channelizing devices. This TCP shall not be used for nighttime work.
- A TMA is required for roadways 45 mph or higher. For roadways 40 mph or less, if a TMA is not available a Protective Vehicle shall be strategically located to shield the work area. Work vehicle shall have one following; high intensity rotating, flashing, oscillating or strobe lights.
- For long term projects, conflicting pavement markings no longer applicable must be removed or obliterated as soon as practicable. Temporary markings shall be used as necessary and signs shall be post mounted.
- Extend device taper across shoulder if applicable.
- Address pedestrian control through or around the work area.

LEGEND	
	SIGN LOCATION - 5' MOUNTING HEIGHT RECOMMENDED
	SIGN LOCATION
	CHANNELIZING DEVICES
	TMA

*** Optional Signs for use in high traffic bike areas.	
	W20-3 (MOD)
	W16-1p
	18 X 24

PEDESTRIAN SIGNS - ** Place on both sides of sidewalks.	
	R9-9
	24 X 12
	R9-11a
	24 X 12



TYPICAL LANE SHIFT WITH TWO-WAY LEFT TURN LANE

PUBLIC WORKS ENGINEERING

APPR BY: JTW	DATE: 2/18/2025
DRAWN BY: HEZ	DWG: COR-TCP8
CAD FILE: TCP.dwg (LANE CLOSURE-LS TWLTL)	