

TABLE NY1-A BARRIER VEHICLE USE REQUIREMENTS (LONG TERM, INTERMEDIATE TERM & SHORT TERM STATIONARY CLOSURES)					
CLOSURE TYPE	EXPOSURE CONDITION <sup>1</sup>	USE REQUIREMENTS <sup>4, 5</sup>			
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)		
			w45 MPH	35-40 MPH	130 MPH
LANE CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED <sup>3</sup>	REQUIRED <sup>3</sup>	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>
	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED <sup>3</sup>	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>	OPTIONAL <sup>2</sup>
SHOULDER CLOSURE	WORKERS ON FOOT OR IN VEHICLES EXPOSED TO TRAFFIC	REQUIRED <sup>3</sup>	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>	OPTIONAL <sup>2</sup>
	NON-TRAVERSABLE HAZARD (IE. EQUIPMENT, MATERIALS, EXCAVATION) ONLY NO WORKERS EXPOSED	REQUIRED <sup>3</sup>	OPTIONAL <sup>2</sup>	OPTIONAL <sup>2</sup>	OPTIONAL <sup>2</sup>

- THE EXPOSURE CONDITIONS DESCRIBED IN TABLE NY1-A ASSUMES THERE IS NO POSITIVE PROTECTION (TEMPORARY TRAFFIC BARRIER) PRESENT, WHERE WORKERS OR HAZARDS ARE PROTECTED BY A TEMPORARY TRAFFIC BARRIER, BARRIER VEHICLES ARE NOT REQUIRED.
- WHERE THE REQUIREMENT IS "OPTIONAL", EITHER A BARRIER VEHICLE OR THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
- REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE BARRIER VEHICLE FOR EACH OPERATION WITHIN A CLOSED LANE AND/OR CLOSED SHOULDER OR GREATER IN WIDTH. IF THE WORK SPACE MOVES WITHIN THE STATIONARY CLOSURE, THE BARRIER VEHICLE SHALL BE REPOSITIONED ACCORDINGLY. BARRIER VEHICLES PROTECTING NON-TRAVERSABLE HAZARDS SHALL REMAIN IN PLACE DURING BOTH WORKING AND NON-WORKING HOURS UNTIL THE HAZARD NO LONGER EXISTS. EXCEPTIONS TO THESE REQUIREMENTS MAY BE MADE, AS APPROVED BY THE ENGINEER, WHERE BARRIER VEHICLE PLACEMENT WOULD BE INEFFECTIVE OR WOULD INTERFERE WITH THE SAFE OPERATION OF TRAFFIC.
- BARRIER VEHICLES ARE NOT REQUIRED FOR MILLING AND/OR PAVING OPERATIONS, BUT THE STANDARD LONGITUDINAL BUFFER SPACE (TABLE 6C-2) SHALL BE PROVIDED.
- BARRIER VEHICLES ARE NOT REQUIRED FOR FLAGGING OPERATIONS.

TABLE NY1-B SHADOW VEHICLE USE REQUIREMENTS (MOBILE CLOSURES <sup>1</sup> )					
CLOSURE TYPE	EXPOSURE CONDITION	USE REQUIREMENTS			
		FREEWAY	NON-FREEWAY (PRECONSTRUCTION POSTED SPEED LIMIT)		
			w45 MPH	35-40 MPH	130 MPH
LANE CLOSURE	WHEN ANY WORKERS, VEHICLES, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED <sup>2,4</sup>	REQUIRED <sup>2,4</sup>	REQUIRED <sup>2,4</sup>	REQUIRED <sup>3,4</sup>
SHOULDER CLOSURE	WHEN ANY WORKERS, VEHICLES, OR OTHER HAZARD IS EXPOSED TO TRAFFIC	REQUIRED <sup>2,4</sup>	REQUIRED <sup>2,4</sup>	REQUIRED <sup>3,4</sup>	REQUIRED <sup>3,4</sup>

- A MOBILE CLOSURE SHALL BE USED FOR ANY WORK ACTIVITY THAT MOVES CONTINUOUSLY OR INTERMITTENTLY ALONG THE TRAVELED WAY OR SHOULDER SLOWER THAN THE PREVAILING SPEED OF TRAFFIC. CHANNELIZING DEVICES ARE NOT USED FOR MOBILE CLOSURES.
- SHADOW VEHICLES SHALL BE EQUIPPED WITH AN APPROVED REAR MOUNTED ATTENUATOR (TRUCK-MOUNTED OR TRAILER MOUNTED) FOR THE FOLLOWING MOBILE CLOSURES: LANE CLOSURES ON FREEWAYS; LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 35 MPH OR MORE; SHOULDER CLOSURES ON FREEWAYS; AND SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE.
- FOR MOBILE LANE CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION POSTED SPEED LIMIT OF 30 MPH OR LESS AND MOBILE SHOULDER CLOSURES ON NON-FREEWAY ROADWAYS HAVING A PRE-CONSTRUCTION SPEED LIMIT OF 40 MPH OR LESS, SHADOW VEHICLES ARE NOT REQUIRED TO BE EQUIPPED WITH A REAR MOUNTED ATTENUATOR.
- A SHADOW VEHICLE IS USED TO PROTECT EXPOSED WORKERS (ON FOOT OR IN A VEHICLE) AND SHALL BE REQUIRED FOR ALL MOBILE CLOSURES. SHADOW VEHICLE REQUIREMENTS SHALL INCLUDE PROVIDING A SEPARATE SHADOW VEHICLE FOR EACH OPERATION WITHIN A CLOSED LANE AND/OR CLOSED SHOULDER OR GREATER IN WIDTH. ADDITIONAL SHADOW VEHICLES MAY BE REQUIRED TO PROMOTE THE SAFE OPERATION OF TRAFFIC AND THE INCREASED PROTECTION OF EXPOSED WORKERS, AS DIRECTED BY THE ENGINEER.
- ALL REQUIREMENTS OF THIS DRAWING SHALL BE INCLUDED IN BID ITEM FOR 619-0101 - BASIC WORK ZONE TRAFFIC CONTROL (DAILY OPERATIONS)

TABLE NY2-A PLACEMENT DISTANCE FOR BARRIER VEHICLES				
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	PLACEMENT DISTANCE (FT)			
	BARRIER VEHICLES			
	18000 LBS.		24000 LBS.	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
> 55				
45 - 55				
< 45				

AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619:  
**BARRIER VEHICLE:** VEHICLE USED FOR STATIONARY SHOULDER CLOSURES, LANE CLOSURES AND OTHER STATIONARY WORK ZONES.  
 MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE NY2-B PLACEMENT DISTANCE FOR SHADOW VEHICLES				
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	PLACEMENT DISTANCE (FT)			
	SHADOW VEHICLES			
	18000 LBS.		24000 LBS.	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
> 55				
45 - 55				
< 45				

AS DEFINED IN NYSDOT STANDARD SPECIFICATION 619:  
**SHADOW VEHICLE:** VEHICLE USED FOR MOBILE OR SHORT DURATION WORK OPERATIONS.  
 MINIMUM DISTANCE SHOWN REFLECTS THE ACTUAL ROLL AHEAD DISTANCE FROM MANUFACTURER.

TABLE NY6H-3 ADVANCE WARNING SIGN SPACING					
ROAD TYPE	DISTANCE BETWEEN SIGNS			SIGN LEGEND	
	A (FT)	B (FT)	C (FT)	XX	YY
URBAN (130 MPH*)					
URBAN (35-40 MPH*)					
URBAN (w45 MPH*)					
RURAL					
EXPRESSWAY/FREEWAY					

\* PRECONSTRUCTION POSTED SPEED LIMIT

**URBAN:** ANY AREA EXHIBITING AT LEAST TWO OF THE FOLLOWING CHARACTERISTICS: SIDEWALKS; BICYCLE USAGE; CURBING; CLOSED DRAINAGE SYSTEMS; DRIVEWAY DENSITIES GREATER THAN 24 DRIVEWAYS PER MILE; MINOR COMMERCIAL DRIVEWAY DENSITIES OF 10 DRIVEWAYS PER MILE OR GREATER; MAJOR COMMERCIAL DRIVEWAYS; NUMEROUS RIGHT-OF-WAY CONSTRAINTS; HIGH DENSITY OF CROSS STREETS; OPERATING SPEEDS OF 45 MPH OR LESS.

**RURAL:** ANY AREA EXHIBITING NO MORE THAN ONE OF ABOVE CHARACTERISTICS.

**EXPRESSWAY:** DIVIDED HIGHWAYS FOR THROUGH TRAFFIC WITH FULL OR PARTIAL CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS AT MAJOR CROSSROADS.

**FREEWAY/INTERSTATE:** LOCAL OR INTERREGIONAL HIGH-SPEED, DIVIDED, HIGH-VOLUME FACILITIES WITH FULL OR PARTIAL CONTROL OF ACCESS.

THRUWAY WORK DURATION DEFINITIONS	
<b>LONG-TERM STATIONARY</b>	IS WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS.
<b>INTERMEDIATE-TERM STATIONARY</b>	IS WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.
<b>SHORT-TERM STATIONARY</b>	IS DAYTIME WORK THAT OCCUPIES A LOCATION WITHIN A SINGLE DAYLIGHT PERIOD.
<b>SHORT DURATION</b>	IS WORK THAT OCCUPIES A LOCATION UP TO 2 HOURS
<b>MOBILE</b>	IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

TABLE 619-4 FLARE RATES FOR POSITIVE BARRIER					
TYPE OF POSITIVE BARRIER	POSTED SPEED LIMIT				
	30 MPH	40 MPH	50 MPH	55 MPH	65 MPH
TEMPORARY CONCRETE BARRIER					
BOX BEAM OR HEAVY POST CORRUGATED BEAM					

TABLE 6C-2 LONGITUDINAL BUFFER SPACE	
PRECONSTRUCTION POSTED SPEED LIMIT (MPH)	DISTANCE
25	
30	
35	
40	
45	
50	
55	
60	
65	

TABLE 6C-3 TAPER LENGTH CRITERIA FOR WORK ZONES	
TYPE OF TAPER	TAPER LENGTH (L)
MERGING TAPER	
SHIFTING TAPER	
SHOULDER TAPER	
ONE-LANE, TWO-WAY TRAFFIC TAPER	
DOWNSTREAM TAPER	

TABLE 6H-4 FORMULAS FOR DETERMINING TAPER LENGTHS										
SPEED LIMIT (S) (MPH)	TAPER LENGTH (L) (FEET)									
40 MPH OR LESS										
45 MPH OR MORE										

L = TAPER LENGTH (FEET)  
 W = WIDTH OF OFFSET (FEET)  
 S = PRE-CONSTRUCTION POSTED SPEED LIMIT (MPH)

STANDARD TAPER LENGTHS										
LATERAL SHIFT OF TRAFFIC FLOW PATH	WORK ZONE PRE-CONSTRUCTION POSTED SPEED LIMIT									
	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	
4 FT										
5 FT										
6 FT										
7 FT										
8 FT										
9 FT										
10 FT										
11 FT										
12 FT										

WORK ZONE TRAFFIC CONTROL LEGEND	
SYMBOL	DESCRIPTION
	ARROW PANEL
	ARROW PANEL, CAUTION MODE
	ARROW PANEL SUPPORT OR TRAILER
	CHANGEABLE MESSAGE SIGN (PVMS)
	CHANNELIZING DEVICE
	CRASH CUSHION/TEMPORARY IMPACT ATTENUATOR
	DIRECTION OF TEMPORARY TRAFFIC DETOUR
	DIRECTION OF TRAFFIC
	FLAGGER
	FLAG TREE
	LUMINAIRE
	PAVEMENT MARKINGS THAT SHALL BE REMOVED FOR A LONG TERM PROJECT
	SIGN, TEMPORARY
	TEMPORARY BARRIER
	TEMPORARY BARRIER WITH WARNING LIGHTS
	TRAFFIC OR PEDESTRIAN SIGNAL
	TYPE III BARRICADE
	WARNING LIGHTS
	WORK SPACE
	WORK VEHICLE
	WORK VEHICLE W/ TRUCK MOUNTED ATTENUATOR

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY  
 DEPARTMENT OF ENGINEERING  
 200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT  
 TITLE OF PROJECT LINE 1  
 TITLE OF PROJECT LINE 2

LOCATION OF PROJECT  
 LOCATION OF PROJECT LINE 1  
 LOCATION OF PROJECT LINE 2

TITLE OF DRAWING  
 WORK ZONE  
 TRAFFIC CONTROL  
 TABLES AND LEGEND



CONTRACT NUMBER:  
 TA  
 DATE:  
 3/12  
 DRAWING NUMBER:  
 TL