Plan Review Branch

Public Space Regulation Division

Maintenance of Traffic Traffic Control Plan Inspection Criteria (20th Edition, March 2023)

Purpose and Intent

This document was prepared to provide users of approved Traffic Control Plans (TCPs) with a set criteria that the field implementation of their TCPs will be evaluated against. DDOT will periodically inspect work zones to ensure compliance, verify that safety measures are in place, and ascertain that the measures conform to the approved Maintenance of Traffic/Traffic Control Plan (MOT/TCP) and criteria listed below:

Applicability of the Manual

ALL TRAFFIC CONTROL SHALL CONFORM TO PART VI OF THE 2009 EDITION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), D.C. TEMPORARY TRAFFIC CONTROL MANUAL. GUIDELINES AND STANDARDS – 2006 EDITION, DDOT DESIGN AND ENGINEERING MANUAL – DC DEPARTMENT OF TRANSPORTATION, IPMD. Adhere to DDOT Standard Specification for Highways and Structures [Gold Book] 2013. Reference section 104.02 Maintenance of Traffic, 603. Guardrails and guardrail Terminals (603.01 – 603.09), 610 Traffic Barriers (610.01 – 610.03), 612. Traffic Control (612.01 – 612.21), 616.Traffic Signing (616.01 – 616.08), 617. Impact Attenuators (617.01 – 617.03), 207. Trench Excavation and Backfill (207.01 – 207.07), and 215. Excavations and Restorations /Utility Lines/ (215.01 – 215.09)

Training

The contractor shall make certain that the person(s) responsible for the implementation of the TCP has successfully
completed training in temporary traffic control and his or her name and qualifications shall be submitted before
work begins. The accepted certifying organizations are the American Traffic Safety Services Association (ATSSA),
Maryland Department of Transportation (MDOT), Virginia Department of Transportation (VDOT), or equivalent.



OSHA Requirements

- 3. All field personnel shall wear safety vests, hard hats and other required personal protection equipment required by the Occupation Safety and Health Administration (OSHA).
- 4. "WORKER SAFETY APPAREL ALL WORKERS EXPOSED TO THE RISK OF MOVING ROADWAY TRAFFIC OR CONSTRUCTION EQUIPMENT SHOULD WEAR HIGH-VISIBILITY SAFETY APPAREL MEETING THE REQIREMENTS OF ISEA "American National Standard for High-Visibility Safety Apparel" (see Section 1A.11), or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure." MUTCD Section 6D.03.

Traffic Control Devices

- 5. All traffic control devices should comply with National Cooperative Highway Research Program (NCHRP) 350 crash testing standards or the American Association of State Highway and Transportation Officials (AASHTO) manual for assessing hardware (MASH) criteria, and should have markings of compliance on the standards.
- 6. The 36" reflective cones are required for Maintenance of Traffic (MOT). Traffic cones are used for daytime work only. Also, 36" minimum reflective drums shall be used for tapers on the freeway system or when indicated by DDOT. All traffic safety drums used for the MOT shall be of a low density material. Ballast shall not be placed on top of drum.
- 7. Advanced warning signs for conventional road shall be 36" x 36" black/orange, high performance, wide angle, retro-reflective sheeting. Roll-up signs are approved. However, sign sheeting shall be fluorescent orange and solid, not mesh. Use the following dimensions for signs: 48" x 48" only for free way or expressway. Advanced warning signs for local-residential streets shall not be less than 30" x 30". (The larger signs may be used wherever necessary for greater legibility or emphasis.)
- 8. Signs should be properly maintained for cleanliness, visibility, stability, and correct positioning. Sign positioning at the work site may be minimally adjusted by DDOT's Public Space Inspectors based on site conditions. Signs that have lost significant legibility should be promptly replaced.
- 9. Work zone traffic control signs and sign supports should not become obstacles for all roadway users: pedestrians, bicyclists, and vehicles.
- 10. Sign supports should be located to accommodate pedestrians and bicyclists in areas designated for their use. A minimum lateral width of <u>5 feet</u> should be maintained for pedestrian pathways.
- 11. Contractors shall use and adjust spring-loaded sign stands, dual spring wind resistant sign stands, construction sign stands without springs, or portable wooden sign supports so motorists can see and read the signs. The sign stands should comply with NCHRP 350 crash testing standards and should have markings of compliance on the stands.



- Neither portable nor permanent sign supports should be located on sidewalks pedestrian access roads (PAR), bicycle facilities, or areas designated for pedestrian or bicycle traffic.
- 12. Portable wooden sign supports, consistent with the design on their standard sheet, do not need to be certified as being crash tested in accordance with NCHRP 350. The supports are typically sandbagged. (ref. <u>National Work Zone Safety Information Clearinghouse</u>. States: New York; New Jersey. As a city environment, New York uses all kinds of temporary sign supports).
- 13. Use wood members with a maximum 16 square inch cross section for base construction and 8 square inch cross section for uprights and braces. The axle, frame, support assembly and other structural members should not exceed the dimensions of the portable sign support assembly. A single sandbag weighing 50 lbs. is the standard ballast device for wood sign support. For full ballast, use a minimum of two sandbags per portable sign support.
- 14. All temporary signs shall be placed in appropriate places, be adequate for existing street conditions, including sign dimensions, and be stable and firmly installed (the small size of warning signs may be used wherever necessary for providing adequate and safe access for pedestrians within public space).
- 15. The temporary signs and markings placed adjacent to the work zone shall be consistent and visible at all times. The full view of advanced work zone warning signs shall be provided. Signs shall be clear of obstruction on approach to work zone.
- 16. No homemade construction, regulatory, or guide signs shall be allowed.
- 17. Damaged, dirty, or defaced devices, including signs, channelizers, and traffic control equipment are not approved and shall not be used.
- 18. All traffic control devices not in use shall be removed from the public space or as directed by DDOT. When approved by DDOT, all regulatory signs must be covered securely to avoid misinformation or miscommunication.
- 19. Sign spacing shall be adjusted to avoid conflict with existing permanent signage and pavement markings.
- 20. If any temporary prohibiting regulatory signs are proposed by contractor, such as "No Right Turn," "No Left Turn," whether the symbolic or text message, the contractor shall be responsible to provide advance coordination with the Operations Administration (OA) to ensure that adequate traffic movements are provided in the vicinity of construction site.
- 21. The contractor is required to coordinate proposed work zone signage to adjacent construction work zone project to avoid confusing messages, and signage duplication.
- 22. The contractor shall coordinate his MOT/TCP with other contractors, and utility companies working in the same general location to maintain continuity of traffic flow and minimize congestion.
- 23. The utility companies shall be responsible for the creation of a traffic control plan for the installation of utilities and coordinating its installations with DDOT/Public Space Regulation Division, and the general contractor's MOT/TCP.



- 24. The minimum height, measured vertically from the bottom of the sign to the sidewalk, located in business, commercial, or residential areas where parking or pedestrian movements are likely to occur, of signs installed above sidewalks shall be seven feet.
- 25. For signs to be used in work zones, all of the above requirements must be met to the satisfaction of the DDOT traffic engineer.

Flashing Arrow Panel

26. Proposed locations are to be verified for visibility and sight distance. Arrow panel should be delineated with retroreflective temporary traffic control devices, or when within the clear zone shielded with a barrier or crash cushion.
When an arrow panel is not being used, it should be removed; if not removed, it should be shielded; or if the
previous two options are not feasible, it should be delineated with retro-reflective temporary traffic control
devices. Flashing arrow panels may be deemed necessary on other roadways.

Flagging

- 27. Contractor shall provide flagging operations for conditions deemed necessary by himself/herself or by DDOT. All flaggers must be certified and have their certification cards in their possession when flagging. They shall be equipped with safety vests, hard hats, hand signaling devices, and electronic devices for communication.
- 28. All flagging operations shall use a "stop"/"slow" paddle of 24 inches in diameter mounted on a 6 ft. pole with 6-inch series "C" letters.
- 29. The contractor shall be responsible for flagging operations to control pedestrian traffic in a safe manner when construction vehicles are entering or exiting the construction site. If the Safe Accommodations for pedestrians or bicyclists must be closed intermittently during off-peak hours due to conflicts with construction activities or construction vehicles, the MOT/TCP shall require the following conditions:
 - a) Flaggers should be posted at each end of the closed pedestrian or bicycle route for the entire duration the intermittent closure is in place;
 - b) The safe and reasonable flow of pedestrian and bicycle traffic be maintained in preference to construction activities and the flow of construction vehicles.

Lane Closure

30. Contractors shall not close more than one lane of traffic in one direction unless otherwise approved.

Street Closure

When a street closure has been approved by DDOT as a part of traffic control plan, the contractor must obtain detour and meet regularly with affected Advisory Neighborhood Commissions and businesses, and maintain regular contact



with emergency services: Metropolitan Police Department, Department of Public Works, Fire and Emergency Medical Services Department, Homeland Security and Emergency Management Agency, schools officials, and DDOT's Transit Delivery Division to determine if there are impacts to their operations.

If street closure is a reasonable option then it is usually necessary to maintain access to properties fronting the work zone, and contractor should take following actions: obtain DDOT approval to use local streets as detours; meet with residents community, businesses; contact emergency services (MPD, FEMS and HSEMA), school officials, and DDOT's Transit Delivery Division to determine if there are impacts to their operations.

- 31. Type III barricades shall be used for road closures. Adequate road closure and detour signage shall be installed to give motorist guidance. Detour direction signs must be accompanied by message signs that indicate detour street name. Do not use abbreviations on message signs.
- 32. The contractor is required to notify fire and police departments of approved road and alley closures. Permits with their approval must be on site with all other permits.

Excavation

All excavation operations shall comply with District Department of Transportation Standards Specifications for Highways and Structures [gold book] 2013, sections: 207, 606, and 612.

The contractor shall furnish, place and maintain all supports and shoring required for the sides

Of the excavation, to prevent damage to the work site or adjacent property. The size of the
excavation shall be limited to the amount of work that can be properly placed and backfilled in

A single day. All open excavations shall be properly barricaded to protect vehicles and
pedestrians.

- 33. All excavation operations shall comply with District Department of Transportation Standard Specifications for Highways and Structures sections 207, 606, and 612.
- 34. Trenches shall be backfilled or steel-plated. Steel plates shall have asphaltic concrete berm on all edges (hot mix asphalt or high performance cold mix). All dirt, dust and debris shall be removed from street. The street shall be in drivable condition at all times.
- 35. Steel protection plates shall be used by contractor to protect open excavated areas. All open trenches or holes in the public space which are not backfilled and compacted by the end of each work day shall be plated.
- 36. The steel plate shall extend no less than 18 inches beyond the edge of the trench on all sides. Steel plates shall be attached to the roadway by a minimum of 6 spikes; 4 spikes predrilled into the corners of the plates and 1 spike predrilled into each side parallel to the trench. Spikes shall be drilled a minimum of 3 inches into the hard pavement.



- 37. A non-skid surface treatment shall be applied to the entire surface area of the steel plate in cases where the plate is within designated bicycle path or a plate is placed at an intersection or within 75 feet of a traffic signal or stop sigh/ stop line.
- 38. Contractors shall install "steel plate ahead" signs whenever plates have been installed.
- 39. All leading ends of the temporary concrete barriers exposed to on-coming traffic shall be protected with portable impact quad guard traffic attenuator. All attenuators shall have object markers.

Temporary Pavement Marking

40. Temporary reflective pavement tape of the approved type shall be used to designate traffic lanes. The colors of temporary pavement markings shall follow the same standard as permanent markings. All markers shall be white, except for the left edge of the effective roadway, which shall be yellow.

Time of Work

Per DDOT Standard Specification for Highways and Structures [gold book] 2013 - on **arterial streets** no public travel lane may be obstructed during the hours of 5:30 **am – 9:30 am** and 3:30 **pm – 7:00 pm, Monday thru Friday** except holidays. Saturday work and after-hours work must be approved in advance. (Reference section 104.02 maintenance of traffic.)

- 41. Daytime work hours are between **9:30 am-3: 30 pm** or as approved. (Don't perform work during peak traffic volumes <<when possible>>.)
- 42. Nighttime work hours are between **7:30 pm- 4: 30 am** or as approved. (Don't perform work during peak traffic volumes <<when possible>>.)
- 43. Any construction in residential and or hotel zones requires a daytime work hours permit unless otherwise approved by DDOT.

Parking

- 44. Parking is to be prohibited in the work area. Parking is to be restricted 72 hours in advance unless there is an emergency.
- 45. Any work that requires temporary no-parking restrictions for a Contractor to perform their work shall reimburse the District of Columbia all lost revenue for all spaces occupied if the no parking zone affects parking meters during the life of the work (DDOT/TOA telephone number is (202-671-2020)
- 45. It shall be the contractor's responsibility to record meter numbers affected by their work and report those meters occupied to parking services.



Handicapped Accommodations

- 46. All contractors shall maintain pedestrian crosswalks and walkways whether paved or unpaved unless otherwise indicated on the plans and approved by DDOT. Temporary wheelchair ramps shall also be installed and maintained by the contractor or as deemed necessary by DDOT. **Compliance to the American Disabilities Act (ADA) is required.** Contractors involved in work on sidewalks and ramps, be it new construction or renovation, need to have the appropriate signage present offering safe and compliant alternative routes for the disabled and pedestrian traffic.
- 47. MOT/TCP must be ADA compliant. Contractors shall install temporary ADA curb ramp for work zone projects within the right of way to provide access for wheelchair users, strollers, etc. Pedestrian access route (PAR) is the continuous and unobstructed walkway within the R.O.W. (public space)
- 48. Pedestrian access route (PAR) must be free of obstructions and surface hazards, such as construction equipment, construction materials, debris, mud, holes, puddles, and loose gravel at all times.
- 49. If the temporary traffic control zone (TTC) affects the movement of pedestrians, adequate pedestrian access and walkways shall be provided. If the TTC zone affects an accessible and detectable pedestrian facility, the accessibility, and detectability shall be maintained along the alternate pedestrian route.

Material and Equipment

Material and equipment, authorized for storage in the public space, shall be secured and delineated to eliminate danger to pedestrians, bicyclists, and motorists during work and non-work hours.

- 50. A contractor with vehicles and equipment in public space requires a permit. Any contractor who wishes to leave equipment overnight in public space are subject to reimbursing the city for the space being occupied, and must have a permit allowing overnight storage on city streets or in city space. All items permitted to be stored overnight on city streets or in city space must be secured and must give consideration to public safety. In the event of an emergency, the city reserves the right to remove all items that are permitted by any means necessary. Emergency contact information should be provided to DDOT with 24-hour access in the event such an emergency occurs.
- 51. All construction vehicles operating in and around the work zone shall operate strobe or revolving lights at all times. These lights should be mounted in such a manner that they are visible 360 degrees.
- 52. Contractor shall maintain access to all driveways, garages, alleys and loading docks at all times, as well as access to all businesses.
- 53. Contractor shall not block fire hydrant, bus stop, residential (RPP) parking spaces, parking meters (without payment), and utility structures.



Changeable Message Signs

54. Portable changeable message signs (PCMS) may be required to give the motoring public advance notification of road conditions, roadwork, and/or events. Arrow boards may also be required in work zones to aid in lane closures and, where work requires, truck mounted attenuator (TMA) can be required as work dictates.

Safe Accommodation for Pedestrians and Bicyclists

A public R.O.W. occupancy permit that authorized blockage of a sidewalk, bicycle lane, or other public bicycle path shall require the permittee to provide a Safe Accommodation for pedestrians and bicyclists. The blockage of a sidewalk, bicycle lane, or other bicycle path shall be treated in the same manner as the closure of a lane of motor vehicle traffic by applying similar temporary traffic control practices as would be applied to the closure of a lane of motor vehicle traffic for each permit issued. The design and placement of temporary TCPs signs, devices and roadway pavement markings shall be in compliance with the most recent edition of MUTCD. The term "Safe Accommodation" means a safe and convenient route for pedestrians, bicyclists, and motorists (for all road users) that ensures an accommodation through or around a work zone that is equal to the accommodation that was provided to pedestrians and bicyclists before the blockage of the sidewalk, bicycle lane, protected bicycle lane, or other public bicycle path such as cycle track, contraflow bike lane and shared travel lane.

- 55. Contractor shall consider pedestrians and bicyclists safety accommodation very seriously including the following:
 - a) Routing priority; provided that closing a sidewalk and routing pedestrians to the sidewalk on the opposite side of the street shall only be approved as a last resort for the duration of time needed to assure pedestrian safety in the absence of other practicable routing options; here contractor's decision must be based also on multifunctional analysis of different variables such as: functional classification of road under construction, functional classification of side streets, and adjacent streets to the construction, street geometry and R.O.W., traffic and parking operations, bike lane presents, bus routes, duration of construction, work zone actual location and coordination with other ongoing construction projects within vicinity of actual work zone, the length of block, far-side and near-side signalized intersections presents, etc.



The Matrix for Safe Accommodations of Pedestrians

Table 1.

MOT/TCP For Sidewalk Closure	FUNCTIONAL CLASSIFICATION OF STREETS IN THE DISTRICT OF COLUMBIA & DURATION OF SIDEWALK CLOSURE			
	Local Street	Collector	Minor Arterial	Principal
Detour Pedestrians to the other side of street.	≤ 7 Days	≤ 5 Days	≤1 Day	≤ 6 hours
Incorporate sidewalks, and crosswalks. Show detour for pedestrian traffic and provide appropriate pedestrians signage such as "Sidewalk Closed, Arrow, Use Other Side," "Sidewalk Closed," "Sidewalk Closed," "Cross Here" etc.	Full Closure of the Sidewalk for no longer a week (7 days), including after hours and on Sundays	Full Closure of the Sidewalk for no longer 5 days, including after hours and on Sundays	Full Closure of the Sidewalk for no longer 1 day, including after hours and on Sundays	Full Closure of the Sidewalk between 9:30AM -3:30PM Monday - Friday
Provide a pedestrian walkway on the same side of the Street. Next to work side. Contractor must reconfigure roadway to include removing parking on opposite side of work to accommodate pedestrians. The pedestrian access road must be surrounded by water filled plastic barriers (Jersey Barrier)	> 7 Days	> 5 Days	>1 Day	> 6 hours
	Full Closure of the Sidewalk for longer a week (7 days) where no walkway is provided, including after hours and on Sundays	Full Closure of the Sidewalk for longer 5 days where no walkway is provided, including after hours and on Sundays	Full Closure of the Sidewalk for longer 1 day where no walkway is provided, including after hours and on Sundays	Full Closure of the Sidewalk between 9:30AM -3:30PM Monday - Friday
All Others	The "Last Resort" analysis must be based on multifunctional analysis of different variables which will help determinate a safe and efficient MOT/TCP. The "Last Resort" analysis must be provided individually for each MOT/TCP project			

b) Contractor must consider sidewalk closure as a reasonable option only for some specific phases of construction including the following:



- 1. Demolition / Raze of Building / Structure Phase of Construction;
- 2. Facade Demolition;
- 3. Reconstruction or rehabilitation of sidewalk;
- 4. Mobile Crane Operation within R.O.W.;
- 5. Utility Work, or other active work within sidewalk zone including emergency, and excavation.
- c) According to Safe Accommodation for Pedestrians and Bicyclists (**24 DCMR § 3315**), the MOT/TCP designer-developer is required to prioritize the Safe Accommodation for bicyclists including the following:
 - 1. Closing a parking lane and keeping the adjacent bicycle lane open;
 - Shifting the bicycle lane to a location on the same roadway to bypass the work zone, and if
 necessary, shifting and narrowing the adjacent motor vehicle traffic lanes; provided the adjacent
 motor vehicle travel lanes shall be maintained at no less than ten feet (10ft.) wide;
 - 3. Closing the adjacent motor vehicle travel lane to provide space for bicycle lane; provided that a minimum of one (1) motor vehicle travel lane shall remain in the same direction of travel;
 - 4. Merging the bicycle lane and the adjacent travel lane into a shared travel lane adjacent to the work zone, installing sharrow lane pavement markings in the shared travel lane and installing work zone signage directing bicyclists to merge into the shared travel lane; provided the shared travel lane shall be maintained at no less than 13(ft.) wide; and
 - 5. As a last resort, detouring bicyclists onto an adjacent roadway, in which case the detour route shall replicate, as closely as practicable, the level of safety found on the bicycle route being blocked.
 - 6. Signage shall adequately warn bicyclists and motorists alike of any lane shift or shared lane conditions. Signage intended only for bicyclists shall display the word "BICYCLES", or the bicycle symbol and clearly mark the alternate temporary route.
- d) Bicycle lanes, parking lanes, and travel lanes must be free of obstructions and surface hazards, such as construction equipment, construction materials, debris, holes, mud, loose gravel, milled surfaces and uneven pavement at all times.



Pedestrian Control and Protection Walkways

The Safe Accommodation for pedestrians shall meet or exceed the current DDOT Standards. In accordance with the MUTCD- 2009 Edition, MOT/TCPs shall replicate the existing pedestrian pathway as normal as practical and that the pedestrian walkway shall not be severed or moved from non-construction activities such as parking for vehicles or the storage of materials or equipment. The MOT/TCP shall provide a pedestrian pathway consistent with the phase of construction work as outlined in the District Guideline and Standards for Maintenance of Traffic: Work Zone manual, 2006 Edition and Pedestrian Safety and Work Zone Standards / Covered and Open Walkways document.

- 57. All temporary Traffic Control Plans shall be designed in accordance with the most recent ADA regulations and the requirements of actual work zone standards.
- 57. The control of road users motorists, bicyclists, pedestrians, including persons with disabilities in accordance with the American with Disabilities Act (ADA), and workers through a temporary traffic control zone shall be an essential part of highway construction, utility work, maintenance operations, and the management of traffic incidents.
- 58. Contractors shall install covered walkways at locations that DDOT deems necessary. Contractor may also be required to develop protected pedestrian paths around the work area that may place pedestrian traffic in the roadway temporarily. In this situation concrete barriers or water filled barriers with steel ribbing will be required for DDOT approval.

Work Zone Speed Limits

Temporary work zone speed limits more than 10MPH below the posted speed should be avoided unless absolutely necessary for the safety of the traveling public of work force.

- 59. When required by DDOT, the contractor may be required to lower the posted speed limit in the work zone during the life of the project. All changes to regulatory signs will be indicated to the public with the addition of two orange work zone flags, and when required by DDOT, a type B light may be necessary.
- 60. "End Construction" and "Road Work Ahead" signs will be required at the ends of the work zone; this includes any streets affected that will lead into or out of the work area.

Law Enforcement

- 61. Contractor shall have, at all times, copies of their TCPs & permit on site and available for the inspector's review. Unless otherwise authorized by DDOT, any project / contactor failing to have approved permits and TCP(s) on site, or any contractor failing to follow the approved plan and TCP, will be subject to fines and possible immediate suspension of work.
- 62. Contractors failing to use approved devices required or requested by DDOT will be subject to possible fines or immediate suspension of work.



- 63. The contractor shall responsible for establishing a queuing area that will satisfy DDOT/PSRD safety and efficiency requirements. Construction vehicle queuing is not allowed in any public street and alley.
- 64. Contractor may be required to hire police for parking and work zone enforcement.
- 65. Any kind of structural damage, property damage, which occurs due to the construction activity on public space and/or private property it will be the responsibility of the contractor permit holder which caused the damage.
- 66. Any person who posts an unauthorized sign or removes an authorized sign is subject to a fine of \$100.00 or more per day for each day that any unauthorized sign that remains installed or removed during its authorized posting plus DDOT's costs for removing the unlawful sign reissuing an authorized sign.
- 67. The contractor shall provide, erect, maintain and remove all barricades, warning signs, delineators, and flaggers in accordance with the MUTCD 2009, DDOT standard specification for highways and structures, section 612 traffic control, and current mot/TCP inspection criteria document. Failure by the contractor to open traffic lanes when required and to maintain designated lanes open to traffic shall be subject to \$1,000.00 fine per hour/per occurrence.

Nighttime Work

Please be advised, that the TCP and MOT for daytime are not applicable for nighttime work.

Roadway occupancy should be scheduled during off-peak hours and, if necessary night work should be considered

- 68. The contractor shall have, at all times, copies of their MOT/TCP drawings for nighttime work, and permit on site, and available for the inspector's review.
- 70. The contractor shall follow the construction, maintenance and the utility operations guidelines for nighttime work within the public space. (See MOT/TCP Inspection Criteria document. 20th Edition, PSRD; Traffic Control Handbook for Mobile Operations at Night, Guidelines for Construction, Maintenance and Utility Operations, recent edition; DDOT Work Zone Manual, MUTCD --2009; etc.)
- 71. The contractor shall include the specific scope of work, equipment, type of operations, lighting, traffic devices that have the proper reflectivity or lighting during after-hour activities, and the worker safety apparel: Type -3 garments or vests per American National Standards institute (ANSI/ISEA (International Safety Equipment Association (ANCI).
- 72. During nighttime hours, the work site shall be made safe for traffic. Warning shall be provided, by installing electronically illuminated traffic control devices such as flashing arrow panels and warning lights. These devices should be used in conjunction with other traffic control devices, and their flashing sequence and light intensity shall meet the requirements cited in the MUTCD. All traffic control devices must be reflectorized during nighttime hours.
- 73. Retro-reflective vehicle markings should supplement warning light systems and ideally should be visible on all sides of the construction vehicle to make its perimeter visible in darkness



- 74. At night, flagger stations shall be illuminated, except in emergencies. The MUTCD recommends Performance Class 3 apparel for nighttime flagging even though illumination of the flagging station is required for nighttime work.
- 75. Frequent nighttime inspections are to be made to ensure that the traffic devices have the proper reflectivity or lighting so they are visible and meaningful to the traveling public.
- 76. The contractor shall obtain a Department of Buildings (DOB) noise permit for residential, weekend and night-time work for operation in private properties.
- 77. Noise pollution as well as vibrations can be a concern to neighboring residential community when conducting work at night or during daytime. The contractor shall provide several noise and vibration mitigation strategies that can be used to bring the noise level and vibration intensity down. Vibrations that exceed 0.12 inches per second will likely generate complains by residents.
- 78. Contractors failing to mitigate noise and vibration strategies to bring the noise level (down by 10 decibels). And Vibration-intensity down requested by DDOT will be subject to possible fines or immediate suspension of work.
- 79. Contractors failing to use approved and appropriate devices which can cause, noise and vibration, and other disturbances neighboring community required or requested by DDOT will be subject to possible fines or immediate suspension of work.

MOT/TCP during Nighttime Hours in Residential Areas

To support our residential communities and our citizens desire to enjoy and have peace in their residence, DDOT strongly discourages planning work or activities in evening / after-hours, consisting of 7:00 PM — 7:00 AM

80. Any work or activities during these hours must be emergent in nature, requiring an emergency work request (EWR). All request that does not meet the emergent standard will require additional justification and review to approval. It is strongly encouraged that planned work and activities in public space conform the standard business hours for use of public space, which is 7 a.m. through 7 p.m. Thank you for your continued support of a vibrant public space that is safe, convenient, and efficient.

MOT/TCP During Nighttime Hours in Commercial Areas

- 81. The two basic advantages of working at night in a commercial zone of the city are: a) reduced traffic congestions and delays associated with daytime operations and b) reduced involvement with local businesses and public activities. As the result of the foregoing, we are able to accomplish two things:
 - 1) Offer an applicant an expanded work zone (extending the work zone activities within right of way in both lateral and longitudinal directions) without compromising the safety and
 - 2) Ultimately increase the efficiency of the project by decreasing the time of construction activities. Another advantage of the nighttime work is the ease of the setup and removal of



traffic control devices, such as water filled tritons (or PCC) barriers, barricades, variable message signs (VMS), etc.

Illumination and Lighting Devices

Illumination and lighting devices may be used to supplement traffic control during hours of darkness. Lighting devices should be provided in WORK ZONE based on engineering judgment. For types of warning lights commonly used in temporary traffic control zones for construction projects are the following:

- Type A Low-Intensity Flashing warning lights are used during nighttime hours. They are used to warn pedestrians, bicyclists, and motorists of hazardous situations.
- Type B High-Intensity Flashing warning lights are used during both daylight and nighttime hours. They shall not be used for delineation. They are normally mounted on the advance warning signs or on high level warning devices, and they are designed to operate 24 hours per day.
- Type C Steady-Burn warning lights are used during nighttime hours to delineate the edge of traveled way. They shall be used on all barricades and channelizing devices for guiding traffic, forming tapers (delineating merging tapers, shifting tapers,), and delineating center lines, lane lines, etc.
- Type D 360-degree warning lights are similar to Type C but provide 360-degree visibility.

Work Coordination

- 82. The contractor shall coordinate his maintenance of traffic work with other contractors and utility companies working in the same general location to minimize work zone location conflicts, to maintain continuity of traffic flow and minimize congestion.
- 83. The contractor shall give 72 hours prior notice to DDOT when making a change in traffic flow patterns.
- 84. The contractor shall coordinate his maintenance of traffic work with DDOT/ TOA/Signal Division for signal timing modifications before beginning work at any signalized intersection.
- 85. The contractor shall coordinate his maintenance of traffic work with DDOT/ TOA / Signal Division, and safety team for the placement of temporary stop signs before beginning work at any signalized intersection.
- 86. Contractor shall notify appropriate ANC chairperson and residents and/or merchants in writing; of planned work/TCP three weeks prior to starting date. The contractor will be required to furnish DDOT with all letters and responses in writing concerning their project. This does not apply to cranes that are used for duration of 1-2 days.



Tree Protection

- 87. The contractor shall provide protection for existing trees within the project limits during construction. Work shall include protection by fencing of all trees. Tree protection fencing shall consist of 6-foot tall chain link fence material. Fencing shall protect an area no smaller than 9 ft. X 4 ft. (Gold Book, ref. Section 608.07)
- 88. All tree and root protection measures and excavation operations shall comply with the 2013 DDOT Standard Specifications for Highways and Structures (Gold Book ref. Section 207.03, 608.07 and 608.08)

The goal is a Vision Zero-safe work zone. Thank you for your cooperation.

For more information, please contact Levon Petrosian at <u>levon.petrosian@dc.gov</u> with the Plan Review Branch in the Public Space Regulation Division at the District Department of Transportation.

The yellow highlights in this document are the most updated regulations as of March 2023.

DDOT/PSRD/PLAN REVIEW BRANCH

Levon Petrosian, Ph.D. Serving with Integrity and Excellence

d.

