

2005 Edition

Additions by the City of Tucson to the Manual on Uniform Traffic Control Devices, for Temporary Traffic Control



**Department of
Transportation
Traffic Engineering**

Edition 05-1
Effective until December 31, 2008

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1. Introduction

Work Zone Traffic Control Management is an essential element in providing activities that benefit our community. Well-planned and executed projects provide the traffic control installation and maintenance that ensures safe travel for the public as well as a safe working place for the employees. Our street congestion continues to worsen due to the increasing traffic volumes. This congestion situation is greatly exacerbated whenever construction activities are underway restricting the roadway. This management program is intended to continue to facilitate the needed improvements for our growing community, public needs and desires while enhancing the planning, application and oversight of the traffic control work zone element.

This document is the City of Tucson's Additions to the Manual on Uniform Traffic Control Devices (MUTCD), as amended by the State of Arizona.

In the City of Tucson, the guidelines for work zone traffic control are the MUTCD as amended by the State of Arizona, the Additions by the City of Tucson, and any other special requirements as noted.

Proper traffic control techniques will be effectively utilized to:

- Help prevent accidents to all reasonable and prudent users of the public right-of-way.
- Prevent damage to private and public property including damage to construction projects and construction equipment, and most important - personal injury.
- Minimize the possibility of claims and litigation from work zone accidents.
- Reduce confusion to the drivers, bicycles, and pedestrians.
- Expedite traffic flow.
- Improve public relations.
- Insure conformity with national, state and city regulations for traffic control.

Roadway safety ultimately depends on the attentiveness and cautious behavior of roadway users. There are no devices that can provide absolute protection against the risk of harm that can be caused by the inattentive driver or pedestrian. The devices described in this chapter are intended to possibly reduce the potential for risk, although risk can never be eliminated so long as inattentiveness and unreasonable and imprudent behavior remain an ingrained feature of human behavior.

2. Applicability

Anyone who uses or occupies a City right-of-way, alley, shoulder, sidewalk or street for purposes other than travel and who may affect vehicle, bicycle or pedestrian traffic will comply with the MUTCD and the Additions by the City to the MUTCD.

3. Authority

No closure or barricading may be performed in the public right-of-way without permission and required permits from the City of Tucson. The Director of Transportation and designates have centralized authority for reviewing and prescribing proper traffic control and devices at work zones, and shall have final determination in case of a conflict regarding equipment required.

The Department of Transportation has the responsibility to provide reasonable public safety within the public right-of-way in the City limits. All traffic control plans shall be submitted to the Traffic Engineering Division for approval prior to starting any project in the public right-of-way. Upon approval of a traffic control plan by this division, a contractor, developer, and/or City department may set-up the traffic control devices.

The Traffic Engineering Division will periodically monitor the job sites to assure that all traffic control devices and set-ups are to standard.

4. Permitting and Plan Review Fees

Chapter 25 of the City code requires any firm or individual, to obtain a permit from the Traffic Engineering Division for any work or event that involves a closure or barricading for more than thirty (30) minutes on City streets, alleys, shoulders, and sidewalks. Any party barricading the public right-of-way must have the permit number or the permit and approved traffic control plan **in possession** before any barricading begins. On State routes within City Limits, the applicant must also obtain a permit from the Arizona Department of Transportation. Refer to page #14 for contact information.

Activity	Fee	Description
Traffic Control Permit	\$75	Authorization for temporary traffic control in the public right-of-way for up to thirty (30) consecutive days.
Traffic Control Plan Review	\$50	Review of Traffic Control Plans
Annual Permit (public utilities)	\$12,000 per year	Authorization for temporary traffic control citywide for short-term work by public utilities at multiple locations throughout the city

- **All fees are required prior to the approval of permit applications.**
- **Applicants must indicate the party responsible for fees owed on the permit application.**
- **All fees are doubled if requests for permits that require a traffic control plan are submitted late.**
- **Payment of all fees for longer than thirty (30) consecutive days may be made at the onset of the work or initial permit issuance.**
- **Projects with an estimated completion time beyond thirty (30) consecutive days shall be rounded to the next highest multiple of thirty (30) days for permitting purposes.**

5. Traffic Control Submittal Requirements

- **Application Process**

The applicant requesting a permit to use public property (street, alley or other) shall submit an official City of Tucson Traffic Control Permit Application. All official City of Tucson applications are available on the website listed below. Approval of a Traffic Control Plan by the Traffic Engineering Division may be required for temporary traffic control activities that last more than one (1) day or have a major impact to traffic.

- **Traffic Control Plan**

A traffic control shall be prepared by a properly certified designer and submitted to the Traffic Engineering Division a minimum of three (3) business days prior to any barricading is erected in the right-of-way of arterial and collector streets and for complete road closures involving local streets. If the work zone is in the **downtown or university area**, the application and plan shall be submitted four (4) business days before beginning work for the ParkWise/T.E.A.M. Division review.

The applicant is responsible for the accuracy of the plan. (Traffic control plans are only a concept and are subject to change.)

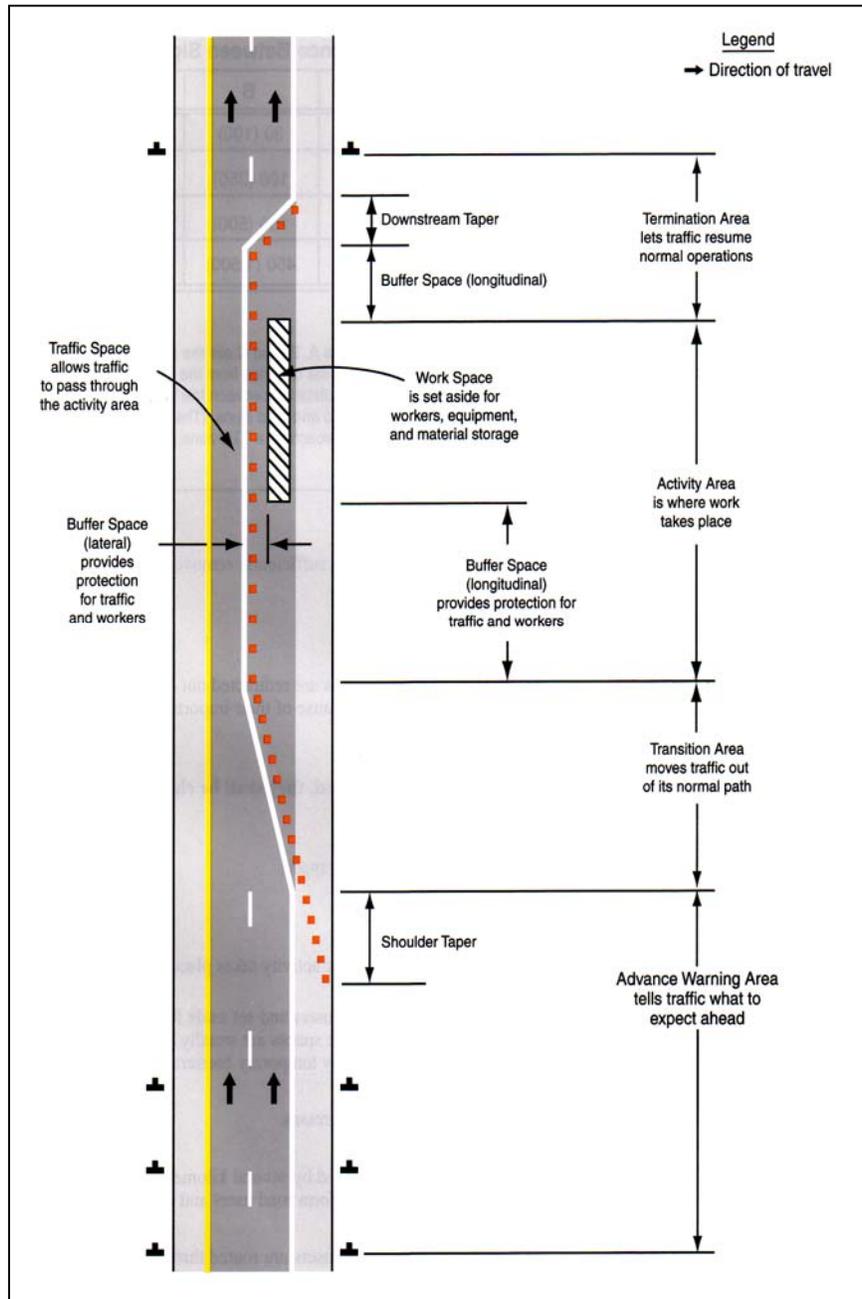
The traffic control plans shall be prepared by a person certified to prepare work-zone traffic control by ATTSA, IMSA or the City of Tucson.

The Traffic Control Plan shall include the following:

- A. The size of the work zone including all relevant dimensions.
- B. The location of the work area in relation to the cross streets, driveways, alleys, bike lanes or other major reference points. This shall include sidewalk, transit stops, hospitals and schools.
- C. All temporary traffic control devices (signs, channelizing devices, striping, others) required for work zones.
- D. Access to the existing parking facilities (garages, carports, parking stalls) affected by the proposed work zone.
- E. The posted speed limit and distance of tapers.

Refer to website for additional information:

<http://dot.ci.tucson.az.us/>



Refer to Section 6C.3 of MUTCD for additional information

Traffic Engineering must approve any revisions to traffic control plans. Traffic control plans are only a concept and are subject to change. For work that does not require an approved traffic control plan, it is strongly recommended to submit a copy of the MUTCD traffic control plan related to the set-up in the field. If an applicant determines that a change must be made to the planned traffic control, the applicant will submit an official City of Tucson Traffic Control Permit Addition Application along with the revised plan to Traffic Engineering within 24 hours of the change. The submittal will outline the reasons for the revision.

6. Applicant Responsibilities

The applicant, by signing the permit application, certifies that the proposed traffic control plan is in conformance with the latest edition of the MUTCD and all other permit requirements.

The applicant shall:

- Obtain a traffic control permit for all work or event in the public right-of-way.
- Submit a traffic control plan, if required.
- Provide written notification at least two business days in advance and coordinate with all affected organizations, including the following:
 - 1) City of Tucson Environmental Services Department (for alley closures)
 - 2) City of Tucson Communications Division (for notification to emergency service providers)
 - 3) School districts (when schools are affected)
 - 4) Public utilities (when applicable)
 - 5) City of Tucson Electric Shop (for traffic signal conflicts, 791-3191)
 - 6) Sun Tran (for any work with 100 feet of a signed bus stop)
 - 7) Businesses and residences (when construction activities limit access to private property)
 - 8) Arizona Department of Transportation (when ADOT right-of-way is impacted)
 - 9) University of Arizona (when conducting activities within the UA campus planning boundary)
- Schedule and expedite the work to cause the least inconvenience to the public. Construction or repair work will not be permitted at any arterial or collector streets during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.). Emergencies are exempted. (The City will consider the congestion levels of the street for permitting off-peak lane closures before 7:00 a.m. and after 4:00 p.m.). A traffic control permit may be approved for work during the peak hours if the work takes place in the off-peak direction.
- Conduct no work on holiday restricted streets between Thanksgiving and January 1, on major shopping routes. See Appendices.
- Conduct no work on designated streets during Gem and Mineral Show, Rodeo Parade and other civic events designated by the Director of Transportation.
- Maintain 24-hour access for emergency service providers to schools and medical facilities.
- Install and maintain required traffic control devices that meet guidelines contained in the National Cooperative Highway Research Project (NCHRP) 350.
- Provide properly trained flag-personnel, when required.
- Insure that all crews and anyone else working in or near the public right-of-way wears high visibility safety clothing.
- Provide adequate safeguards for workers and the general public.
- Provide adequate marking and lighting of construction vehicles.

- Service check the construction sites as required and/or as requested to insure that all devices are in place and operating at all times.
- Remove all traffic control devices immediately when they are no longer needed.
- Ensure those only experienced persons under the supervision of a certified technician sets up and removes traffic control on major streets.

7. Traffic Control Warning and Guidance Devices

The most effective system of warning and guidance is provided through the properly planned usage of traffic control devices that are uniformly placed and well maintained. All traffic control, warning and guidance devices will meet or exceed the minimum requirements in the Manual on Uniform Traffic Control Devices. These MUTCD requirements present the minimum requirements for enhanced public safety, such as requiring vertical panels, channelizing devices and arrow panels on major roadways. The barricade companies are required to maintain a 24-hour phone service and return phone calls within one (1) hour and respond within two (2) hours.

The City of Tucson is requiring all category 1 and category 2 traffic control devices in a work zone be crashworthy and to qualify as such according to the testing and acceptance guidelines of the NCHRP Report 350.

8. Sign Types

Traffic signs are classified into several functional groupings: **WARNING**, **GUIDE** and **REGULATORY**. All signs shall meet or exceed MUTCD standards.

The Traffic Engineering Division will approve the use of regulatory signs. All such signs will be provided, installed and maintained by the applicant or contractor.

Existing regulatory signs within or adjacent to the work area must be maintained by the applicant or contractor. If existing signs are not appropriate for the traffic conditions in the work area, the Traffic Engineering Division will be notified immediately to determine if the signs are to be covered, replaced or relocated.

Regulatory directional signs such as “No Left Turn” and “No U-Turn” signs will be posted twice.

The “\$250 Fine In Work Zone,” “City of Tucson at Work,” “Wet Concrete,” “Wet Paint” and “Slow Down My (Mommy-Daddy) Works Here” signs must be shown on a traffic control plan. See the Traffic Engineering Division for specifics.

9. Sign Placement

Advance warning signs shall be located on the right hand side of traffic lanes and bike lanes. On divided streets, supplemental advance warning signs may be placed on the raised median, but shall not be placed in a dual left turn lane that is exposed to live traffic.

All signs that will convey their message in darkness shall be retro-reflectorized, sand bagged and equipped with a Type A flasher. No barricade signs or supports shall bear any commercial advertising, or bear any company name, logo, etc on the face of sign or stand.

Advance warning signs may be equipped with Type B lights in high traffic volume work zones.

Signs shall be installed immediately before work is to start and removed immediately when they are no longer needed. Signs shall not be left overnight in any portion of the pedestrian, vehicular and bicycle traveling lanes. Exceptions to the overnight prohibition include signs associated with ongoing total road closures, partial road closures, travel lane closures, or closures due to an incident. Traffic control devices will be stored on the project site in a safe and secure area out of the way of all traffic and pedestrians or turned sideways from traffic.

The only sign that may be placed in the bike lane is the “Share the Road with Care – Bike Lane Ends”. See Appendix F for specifics on this sign.

10. Channelizing Devices

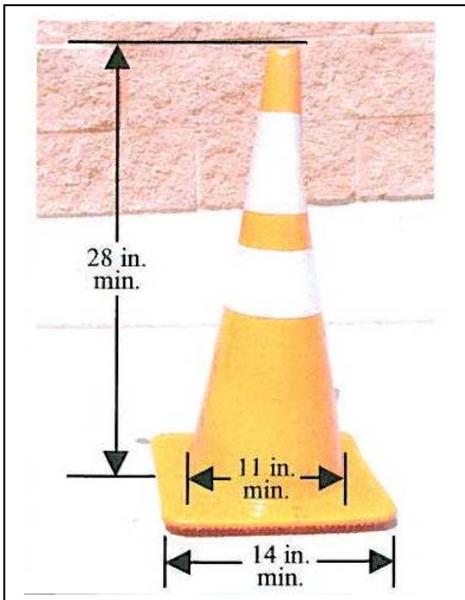
Channelizing Devices are markers that help drivers and bicyclists determine the location and alignment of the traffic lane or edge line. Type 2 barricades, vertical panels, cones and tubular markers are examples of channelizing devices.

By day, position, spacing, form, texture, size and color determine the effectiveness of the channelizing devices. By night, position and visibility determine its effectiveness. All channelizing devices used at night will be equipped with Type C lights and sandbagged.

Channelizing devices are used:

- To channel and divert traffic in advance of a work zone.
- To define the travel way through the work zones.
- To help define the curves and the edge of the roadway on detours and shoulder drops.
- To define a change in the position of the existing lanes around the work zones.

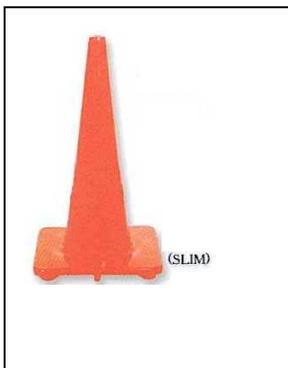
Only vertical panels or Type 2 barricades will be used for channelizing devices for night work on arterial and collector streets.



Reflectorized cones may be used for up to one hour for nighttime traffic-control operations. Under no circumstance shall a non-reflectorized cone be used as a channelizing device at night.

The following are requirements for cones used on collector or arterial roadways:

- Base of cone shall be a minimum of 14 inches.
- Wall of cone shall be a minimum of 11 inches.
- Height of cone shall be a minimum of 28 inches.



Slim cones that are less than 11 inches from wall to wall may be used during daylight hours only on streets that are posted 25 mph or less. However, slim cones are required to be 28 inches high and have a base of 14 inches.

11. Barricades

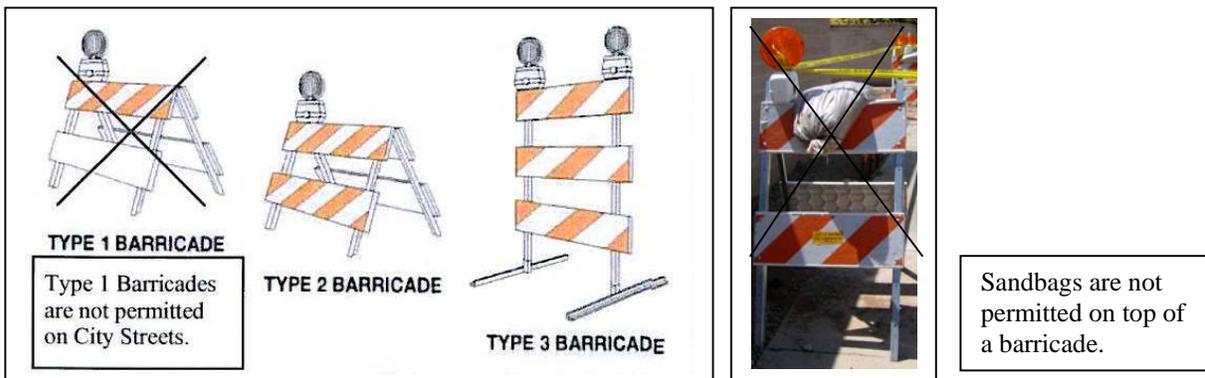
Barricades serve the following purposes:

- To alert the public to the fact that a particular area is closed to traffic.
- To prevent drivers, bicyclists and pedestrians from entering the work zone.
- To support warning lights and specific signs that are required.

Barricades will not be placed in a travel lane or bike lane without advance warning signs. When barricades are used to close a street, they should be placed so there is no gap large enough for a vehicle or bicycle to pass through, except when it's necessary to provide access for local traffic or emergency vehicles.

Markings for barricade rails will be alternate orange and white stripes sloping downward at an angle of 45 degrees in the direction traffic is to pass. The entire area of white and orange will be effectively retro-reflectORIZED for night. The use of fixed-leg barricades is prohibited. Minimum sheeting requirements for all barricade devices are the Standard Engineering Grade.

On **Type 2 barricades**, sandbags will be suspended with a piece of wood and cord or placed on the lower rung.



Metal or wooden post mounted in concrete filled buckets or on automobile wheels or rounded metal bases are prohibited.

Type 1 sawhorse barricades can be used only for controlling crowds on the sidewalk during civic events. **No barricade rail face shall be used for any commercial or company advertising.**

Debris, obstructions, dirt piles, machinery, roll-off containers and refuse in work zones pose potential hazards to vehicular and pedestrian traffic. All hazards shall be marked with Type 2 barricades equipped with Type A flashers. For lengthy obstructions and hazards, a plastic orange fence anchored to Type 2 barricades equipped with Type A flashers shall be used. Work zones shall be swept clean at the end of each day.

12. Truck-mounted Attenuator

The truck-mounted attenuator and the operation of it will meet MUTCD standards and NCHRP 350 Test Level 3 (62 mph).

A truck-mounted attenuator may be required by Traffic Engineering for mobile operation train (more than one vehicle) and short duration work (less than one hour) work zones operating on high volume streets where the posted speed limit is 45 miles per hour or greater or deemed as hazardous. Street sweepers are exempted. A truck-mounted attenuator may be required to follow paint stripers in certain situations.

13. Warning Lights Illumination

Barricade warning lights shall be used to indicate hazards and to delineate the safe path of travel.

Warning lights are portable, lens directed, enclosed and mounted at the minimum height of three (3) feet from road surface. Flashing yellow lights used for advance warning will be clearly distinguishable from primary channelizing devices and clearly seen above normal reflectorized units. All warning lights and the devices upon which they are mounted shall meet or exceed NCHRP 350 standards and MUTCD standards.

Type A Light

- Type A lights are low intensity flashing lights that are generally mounted on barricades or vertical panels.
- Type B lights are high intensity flashers generally mounted on top of signs. They are effective both day and night. LED signal units maybe used as a Type B light if the manufacturer certifies them for that purpose.
- Type C lights are steady-burning low wattage lights which are used at night for delineation. They are commonly mounted on channelizing devices.

A single flashing light shall be mounted on each barricade to indicate a hazard in or adjacent to the roadway.

Steady-burning lights shall be used on a series of barricades or other channelizing devices to outline the proper travel path.

Red lens Type A lights shall be affixed on portable stop signs (R1-1), do not enter (R5-1) signs and wrong way (R51A) signs.

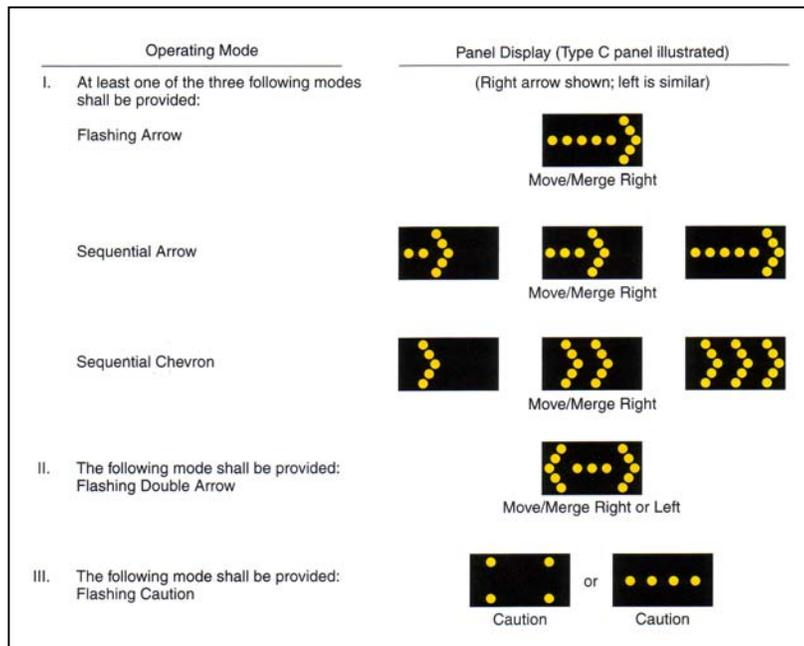
14. Arrow Panel and Portable Changeable Message Sign

An arrow panel is required for any lane closure on a multi-lane collector or arterial street. The arrow panel must meet MUTCD standards. Use of the arrow panels must comply with MUTCD standards.

When arrow panels are used to close multiple lanes, a separate arrow panel will be used for each closed lane.

The arrow panel shall not be used for any commercial or company advertising on the panel or the mounting and transportation equipment.

Traffic Engineering may permit a lane closure without an arrow panel on a collector street where a recent (within a two-year period) speed study indicates an 85th percentile speed of 25 mph or less.



Refer to Section 6F.56 of MUTCD for additional information

The Director of Transportation may require portable changeable message signs (PCMS) on high volume collector or arterial streets to notify vehicular traffic of the start of future road restrictions.

The PCMS will meet MUTCD standards including operation. The PCMS will not be located on a pedestrian pathway.

The PCMS shall not be used for any commercial or company advertising. on the panel or the mounting and transportation equipment.

Arrow sticks may be used on vehicles where space is limited and arrow panels are not feasible.

15. Flaggers

Flag-personnel are required:

- Where workers or equipment intermittently block a traffic lane, on a two-lane roadway or any other operation where equipment will obstruct the free flow of traffic.
- Where equipment will obstruct the free flow of traffic.
- Where the Traffic Engineering Division determines for safety reasons.

They will be stationed according to MUTCD standards to slow down or stop traffic before they enter the work area.

All pre-warning signs will be placed according to MUTCD standards and guides.

All Flaggers will wear the proper safety equipment. The proper equipment are a class II or class III safety vest (orange, strong yellow, or a fluorescent version of these colors), hard hat, safety glasses, steel toed shoes and an octagonal slow-stop paddle mounted on a five feet or greater staff.

A 24 by 24-inch **RED** flag will be used only in emergency situations with minimal traffic volume. **Replace the flag immediately when a stop/slow paddle becomes available.**

All flaggers shall be properly certified by an appropriate certifying agency. These include ATSSA, IMSA and the City of Tucson for City of Tucson personnel.

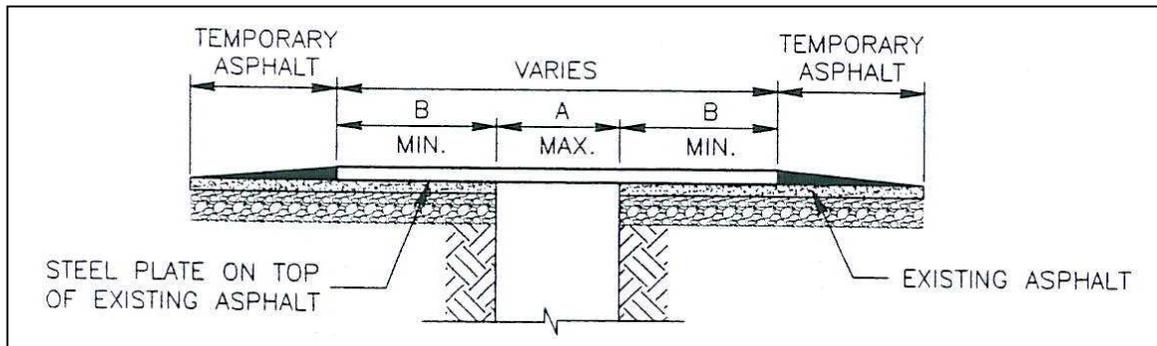


16. Excavation and Trenching

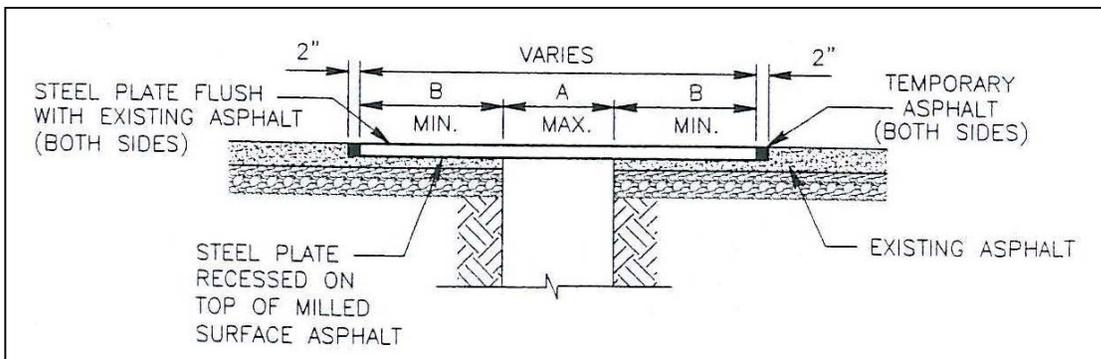
Any sidewalk, shoulder, alley, or street excavation that is not back filled at the end of the day shall be covered.

For excavations in the sidewalk or shoulder area, the excavation shall be covered with a plywood board anchored down with a dirt pile, and the excavation shall be surrounded with a barrier fence. For excavations in the sidewalk area **deeper than four feet**, a chain link fence is required for public safety. A sufficient number of Type 2 barricades equipped with Type A flashers shall be posted at excavations.

On roads posted 25 mph or less, street excavations shall be covered with a steel plate anchored with cold mix. A “bump” sign (W8-1) with a Type A flasher attached shall be posted.



On roads posted over 25mph, street excavations shall be covered with a steel plate, anchored by temporary asphalt that is flush with the existing asphalt.



For additional information on excavations contact the City of Tucson Engineering Division.

Open trenches shall be protected by Type 2 barricades equipped with Type A flashers. A barrier fence shall completely surround the trench, supported by Type 2 barricades. For trenches **deeper than four feet**, a chain link fence shall completely surround the trench.

Caution tape shall not be used to barricade or secure any unattended work zone including excavation or trench. It may be used only as a supplement to mark an orange plastic fence or chain link fence. In an emergency, caution tape maybe used as long as it is replaced as soon as possible with the appropriate fence (barrier or chain link).

17. Pavement Markings

Under certain circumstances, the use of pavement striping and raised pavement markers may be justified to supplement devices for channelization. On major construction projects where the traffic is diverted for extended periods, pavement striping and markers are required to assure positive delineation and minimize driver confusion.

A traffic lane will not be considered as satisfactorily open to traffic unless it is paved with hot mix or cold mix asphalt paving, as required by the City of Tucson Engineers, if surrounded by or adjacent to existing pavement. Where pavement did not previously exist or where the entire existing pavement was removed, a traffic lane will not be considered as satisfactorily open to traffic unless it is graded reasonably smooth and maintained dust free.

The Traffic Engineering Division will determine the need for and extent of striping removal and re-striping.

All permanent striping shall be coordinated with Traffic Engineering Division five working days in advance.

18. Additional Closures

Detours must comply with MUTCD standards and City standards and any other requirements set forth by the Director of Transportation. Avoid using residential streets as detour routes. Detours shall not go through private property.

When the shoulder is being utilized for construction activities, it shall be graded and watered to minimize dust clouds. If the length of the project exceeds 72 hours, paving of the shoulder may be required by Traffic Engineering.

Designated bike lanes that are closed because of construction require *a signed alternate lane, *a signed detour route (see section 9) or *a posted sign that alerts the motorist and bicyclist that the travel lane will be shared (see appendix F). Pedestrian paths are not alternate bike routes. The designated alternate route must be kept free of hazards and debris and approved by Traffic Engineering.

Pedestrian pathway closures must comply with the MUTCD standards, the City's standards, and any other special conditions specified by the Director of Transportation. Any pedestrian pathway within a work zone must have a minimum open width of three (3) feet. The pathway must be kept free of trip hazards and debris.

See appendix C, for Traffic Engineering's guidelines for installing temporary traffic control in pedestrian pathways.

Cranes are not permitted in the downtown area during the hours of 6 a.m.-6 p.m. Monday through Friday. Any work requiring a crane can occur from 6 p.m.-6 a.m. Monday through Friday or on the weekends.

When public roadways are closed, but workers are not present, signs are recommended indicating work in progress. "Wet Paint" signs are recommended for striping on public streets. "Wet Concrete" signs are recommended when raising utilities and manhole repairs. Both signs alert the public and alleviate confusion why workers may not be present.

19. Arterial and Collector Roadways

The following are arterial streets, by direction. Please refer to the city website for the City of Tucson Major Streets and Routes Plan.

Arterial Streets North and South Directions

Alvernon	Camino Seco	Campbell/Kino	Craycroft
Country Club	Euclid	Flowing Wells	Grande
Harrison	Houghton	Kolb	Melpomene
Midvale Park	Mission	Old Nogales	Oracle
Palo Verde	Pantano	Silverbell	Stone
Swan	Tanque Verde Lp	Wilmot	6th Avenue
1st Avenue	12th Avenue		

Tucson Blvd. (*between E. Irvington and Tucson International Airport*)

Arterial Streets East and West Directions

Ajo Way	Auto Mall	Benson Hwy	Broadway
Congress	El Camino Del Cerro		Escalante
Fort Lowell	Golf Links	Grant	Irvington
Miracle Mile	Old Vail	Prince	Rita Road
River	St. Marys	Speedway	Tanque Verde
Valencia	Wetmore	Wrightstown	5th / 6th Street
22nd Street	36th Street		

Drachman (between N. 6th Ave and N. Oracle)
29th Street (*between Alvernon and Craycroft*)

Review the following web-site for additional list of Arterial Roadways:

<http://dot.ci.tucson.az.us/>

The following are collector streets, by direction.

Collector Streets
North and South Directions

Columbus	Fairview	Granada	Greasewood
La Cholla	Main	Mountain	Old Spanish Trail
Prudence	Ridgeside	Romero	Rosemont
Tucson Blvd.			
Camino Seco (<i>between Golf Links and Irvington</i>)			
Park (<i>between Speedway and Fort Lowell</i>)			
6th Avenue (<i>between Irvington and Los Reales</i>)			

Collector Streets
East and West Directions

Bilby	Cushing	Drexel	Fairland Stavenue
Glenn	Limberlost	Pima	Poorman
Roger	San Juan Trail	Stella	Toole
University			
Alameda (<i>between Granada and Toole</i>)			
Elm (<i>between Campbell and Tucson Blvd</i>)			
Kenyon (<i>between Camino Seco and Pantano</i>)			
Silverlake (<i>between Wilmot and Craycroft</i>)			
29th Street (<i>between Wilmot and Craycroft</i>)			
36th Street (<i>between Mission to west end</i>)			

Review the following web-site for additional list of Collector Roadways:

<http://dot.ci.tucson.az.us/>

20. Civil Sanctions for Temporary Traffic Control Violations

The following is a list of civil sanctions for violations of the Temporary Work Zone and Traffic Management ordinance.

\$1500	Presenting an imminent risk of death or injury to the public within public right-of-way
\$1000	Restricting roadway without proper certification or without a barricading permit for more than thirty (30) minutes
\$1000	Restricting traffic during peak hours without permission from the Director of Transportation
\$1000	Failing to correct or cure violations with the time period stated in a warning notice
\$1000	Restricting traffic at signalized intersections without active work occurring within thirty (30) minutes of the restriction
\$500	Violating restriction limits or times and/or locations as contained in the barricading temporary use permit
\$250	Leaving advance warning signs facing traffic more than forty-five (45) minutes after the restriction has been removed
\$250	Leaving traffic control devices in the right-of-way for twenty-four (24) hours after temporary barricading permit expires
\$250	Failure to comply with the use of MUTCD and/or NCHRP 350 compliance devices

- **The civil sanctions provided above shall be tripled in the event that a valid permit has not been obtained for the work that constitutes the infraction.**

APPENDIX A – IMPORTANT AGENCY PHONE NUMBERS

Important Agency Phone Numbers

Arizona Department of Transportation-A.D.O.T ----- 620-5451

(To obtain permits for state routes)

City Communications -----791-4144

(Complete street closure and emergency service notification)

City of South Tucson-----792-2424

(To obtain permits for the City of South Tucson)

City of Tucson Environmental Services -----791-3171

(Alley closure notification)

Civic Events Office -----791-4058

(To obtain a Civic Event permit)

Computer Signal Section -----791-4259

(For any work within 400 feet or less of a signalized intersection)

Field Engineering -----791-4251

(To obtain a right-of-way and excavation permit)

ParkWise/T.E.A.M. -----791-5071

(Plan review and questions concerning the City core area)

Pima County Engineering-----740-2650

(To obtain permits for Pima County)

Streets and Traffic Maintenance ----- 791-3154

(Blue stake and location of city signs that are removed)

Sun Tran ----- 623-4301

(Notification required for any work within 100 feet of a signed bus stop)

Traffic Engineering -----791-4259

(To obtain a traffic closure permit)

Tucson Police Department -----791-4855

(To obtain off-duty traffic control)

University of Arizona -----621-3710

(To obtain permits for the University of Arizona streets)

APPENDIX B – HOLIDAY STREET RESTRICTIONS

**CITY OF TUCSON
DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING, 791-4259
ENGINEERING PERMITS, 791-5100**

**A NOTICE OF TEMPORARY RESTRICTION TO ALL APPLICANTS,
CONTRACTORS, UTILITIES, AND GOVERNMENT ORGANIZATIONS**

Due to the ever-increasing traffic volume on many of the City’s roads, it is necessary to restrict lane closures on certain roads during the holiday season. **These restrictions will be in place from Thanksgiving to one day after New Years.** Traffic Engineering may not issue a barricading permit for any project that occurs on any of the following roads. Traffic Engineering will grant an exception for documented emergency work or on-going construction work. *Exceptions will be evaluated on a case-by-case basis.*

- | | |
|--------------------------------|---|
| ➤ Ajo Way | Mission Rd to 6 th Avenue |
| ➤ Alvernon Way | 36 th Street to Fort Lowell Rd |
| ➤ Broadway Bl | I-10 Frontage Rd to Pantano Rd |
| ➤ Campbell Ave | 22 nd Street to River Rd |
| ➤ Craycroft Rd | Golf Links Rd to Rillito River Bridge |
| ➤ Golflinks Rd | Swan Rd to Kolb Rd |
| ➤ Grant Rd | I-10 Frontage Rd to Tanque Verde Rd |
| ➤ Kolb Rd | Golflinks Rd to Tanque Verde Rd |
| ➤ Oracle Rd | Drachman St to River Rd |
| ➤ Prince Rd | I-10 Frontage Rd to Tucson Blvd |
| ➤ Roger Rd | Flowing Wells Rd to N 1 st Ave |
| ➤ Speedway Bl | I-10 Frontage Rd to Kolb Rd |
| ➤ Swan Rd | Golf Links Rd to Rillito River Bridge |
| ➤ Tanque Verde Rd | Wilmot Rd to Pantano Rd |
| ➤ Valencia Rd | Country Club to Mission Rd |
| ➤ Wetmore Rd | Flowing Wells Rd to N 1 st Ave |
| ➤ Wetmore Rd | Oracle to Stone |
| ➤ Wilmot Rd | Golflinks Rd to Tanque Verde Rd |
| ➤ 1st Ave | Grant Rd to Rillito River Bridge |
| ➤ 6th Avenue | I-10 to Irvington |
| ➤ 22nd St | Kino Parkway to Prudence Rd |

*Please review website for any additional changes:
<http://dot.ci.tucson.az.us/>

APPENDIX C – PEDESTRIAN GUIDELINES

City of Tucson, Department of Transportation Guidelines for the Placement of Barricades at Work Zones for Pedestrians

Guidelines

It is the policy of Traffic Engineering that a safe and accessible path of travel is provided for all pedestrians, including those with disabilities, around and/or through construction sites.

It is recognized that there are various types of construction activities, including both short-term and long-term projects. Some barricading systems are more appropriate than others in providing a safe and appropriate pedestrian path.

When erecting barricades, the contractor shall be conscious of the needs of pedestrians with physical disabilities. Discretion is given to the contractor to provide protection for pedestrians consistent with all local, State, and Federal codes, including the Americans with Disabilities Act (ADA).

Placement of Barricades

The contractor shall erect and maintain for the duration of the work, proper barricades and temporary curb ramps complying with all City, State and Federal access regulations as necessary.

Additional information may be found in the Institute of Transportation Engineers (ITE) “Traffic Control Devices Handbook, 2001 section 13.6” (Accommodation of Pedestrians During Construction) for temporary fencing, barricades or other barriers.

The contractor shall require that no construction material be stored or placed on the path-of-travel. The contractor shall maintain the construction barriers in a sound, neat, and clean condition, and shall remove all graffiti to the satisfaction of Traffic Engineering. The contractor shall also clean daily public walkways adjoining the work zone of accumulated trash and debris.

The contractor’s construction operations shall not occupy public sidewalks except where the pedestrian protection is provided, following the requirements herein, and with the regulations of public authorities having jurisdiction. The contractor shall not obstruct free and convenient approach to any fire hydrant, sanitation containers or utility box.

The contractor shall remove barriers and enclosures upon the completion of the work.

Concrete float (temporary ramp) provides for a smooth transition from street to sidewalk for all pedestrians as well as those persons using a wheelchair. (Note: asphalt or other material that will remain in place and support the weight of a person in a wheelchair is acceptable as temporary ramping material.)

APPENDIX D – CITY CENTER BARRICADING POLICY

City of Tucson, Department of Transportation City Center Barricading Policy

Due to the development patterns, the high pedestrian volumes and the on-street parking programs in the City Center, somewhat more stringent barricading requirements are necessary. The ParkWise/TEAM Division reviews barricading requests within this area and may apply special conditions as a prerequisite of permit approval. **An additional 24 hours will be required for permit review /application within this area.**

Sidewalks:

The City Center has very high pedestrian volumes. Easy, convenient pedestrian movement and parking services are a priority for ParkWise/TEAM. Complete sidewalk closures during business hours and weekend evenings will not be permitted unless compelling evidence supports the need for such a closure. Engineered, covered sidewalks will be required for projects of reasonable duration with the potential overhead hazards. In some instances, when no other reasonable options are available, on-street parking may be eliminated (see Parking Lanes) in order to provide a safe pedestrian detour adjacent to a sidewalk construction area. In all cases, pedestrian access will be maintained to all businesses. Complete sidewalk closures may be permitted during non-peak pedestrian hours.

Peak Pedestrian hours:

Monday – Thursday	7:00 a.m. to 6:00 p.m.
Friday	7:00 a.m. to 12:00 a.m. (midnight)
Saturday	5:00 p.m. to 12:00 a.m. (midnight)

Parking Lanes:

Parking may be temporarily suspended for construction purposes. In many instances, advanced notice will be required to allow time to notify/relocate parking customers. Applicants will be required to pay the full fees equal to a 24-hour period for any impacted parking spaces. Saturdays will be charged the same fees as charged for the weekday parking. Parking may be suspended on Sundays and holidays free of charge. Parking spaces adjacent to other businesses not involved in the construction project may not be suspended for more than one calendar week per month unless written concurrence is obtained from the impacted business(es). Non fee spaces, such as loading zones, para-transit loading zones and bus stops, that are installed for use by multiple businesses will be charged a fee of \$20.00 per day excluding Sundays and holidays for temporary suspension of the zone. All fees must be paid in advance for the projected construction period to ParkWise/TEAM. ParkWise fees are subject to change. Call 791-5071 to determine the fees required by any closure.

Travel Lanes:

Travel lane barricading requirements within the City Center are the same as the requirements for the remainder of the City. Arrow boards are required for any lane closure on all arterial and most collector streets. Some examples are: Broadway Congress, Stone, 6th Ave, Speedway, Campbell and Euclid Avenue. Arrow boards are also required on all collector streets. Some examples are: 6th St, Alameda, Pennington, Toole, Church, Main Ave and Tucson Bl. Peak hour restrictions are also the same as for the remainder of the City.

Any lane closure that will affect parking or parking access will be required to secure the parking area as described above. Bicycle lanes should be maintained, if possible, on established bicycle routes. Complete street closures or multi-lane closures are discouraged during business hours and will be reviewed on a case-by-case basis.

Civic Events:

Civic events are common in the downtown area and are supported by the ParkWise/TEAM Division as a downtown revitalization tool. Civic event related street closures will be given priority, in most cases, over non-emergency construction. Contractors performing construction in the central business district may be required to suspend their activities during an approved civic event. In these instances, every effort will be made to notify the contractor well in advance of the need to suspend construction activity. For planning purposes, annual civic events that must be accommodated by non-emergency construction are listed here. This list is intended as a guideline only. One-time, or irregularly scheduled, civic events may be approved that do not appear on this list.

Event	Dates	Restriction Location
Downtown Saturday Night	3 rd Saturday, every month	Central Business District
Gem Show	Last week of January – the third week of February	I-10 Frontage Rd
Rodeo Parade	4 th Thursday of February	Irvington and Ajo Way
4 th Avenue Spring Street Fair	3 rd week of March – 1 st weekend of April	4 th Avenue
St. Patrick's Day Parade	March 17 th	Central Business District
Multiple Events	Entire month of April	Central Business District, 4 th Avenue, and University areas
All Soul's Procession	1 st Sunday in November	Central Business District
Veteran's Day Parade	November 11 th	Central Business District
Peak Shopping Season	Thanksgiving – New Years	Central Business District, 4 th Avenue, and University Main Gate
4 th Avenue Winter Street Fair	1 st or 2 nd weekend of December	4 th Avenue
Holiday Parade	1 st or 2 nd weekend of December	Central Business District

APPENDIX E - STANDARDS AND GUIDELINES FOR \$250-FINE SIGN

City of Tucson, Department of Transportation Standards and Guidelines for “\$250 Fine in Work Zone” Sign

The following guidelines shall be followed when placing the “\$250 Fine in Work Zone” sign.

- The sign shall be mounted on a NCHRP 350 compliant stand.
- The sign sheeting shall be standard engineering grade.
- The lettering shall be black on white background.
- A Type A warning light shall be mounted on the sign stand.
- Before the sign is placed, an approved traffic control plan shall be required showing the placement of the sign.
- The sign shall be placed after the W20-1 sign and at the end of the construction zone (for speed enforcement). The spacing of the signs shall be based on the suggested advance warning sign spacing found in the Part VI of the Manual on Uniform Traffic Control Devices (MUTCD).
- The sign shall be used only on arterial or collector streets, hazardous areas, or high volume roadways. It is not necessary that the posted speed limit be reduced when the sign is placed.
- Regulatory speed limit signs, whether posted or temporary, shall be clearly posted at an appropriate distance before the W20-1 sign in the work zone.

**Sign Measurement: 24” X 36”
Lettering: 5” high**



APPENDIX F – BIKE LANE SIGN

City of Tucson, Department of Transportation Standards and Guidelines for “Share The Road With Care” Sign

- The sign and supplemental plate shall be mounted on a NCHRP 350 compliant stand.
- The sign sheeting shall be standard engineering grade.
- The lettering shall be black on orange background.
- A Type A warning light shall be mounted on the sign stand.
- Before the sign is placed, an approved traffic control plan shall be required showing the placement of the sign.
- The sign and supplemental plate shall be clearly posted where the transition starts when closing a bike lane.

**“Share the Road With Care”
Sign Measurement: 36” X 36”
Lettering: 4.5” high**

**“Bike Lane Ends”
Sign Measurement: 18” X 24”
Lettering: 4” high**



APPENDIX G – OTHER CITY OF TUCSON SIGNS

City of Tucson, Department of Transportation Standards and Guidelines for “Slow Down My Mommy/Daddy Works Here” Sign

- The sign shall be mounted on a NCHRP 350 compliant stand.
- The sign sheeting shall be standard engineering grade.
- The lettering shall be black on orange background.
- A Type A warning light shall be mounted on the sign stand.
- Before the sign is placed, an approved traffic control plan shall be required showing the placement of the sign.
- The City of Tucson will distribute the signs to contractors for City projects. Contractors are responsible for returning the signs once the project is completed.

Sign Measurement: 24” X 36”
Lettering: 5” high

C.O.T. Seal 5”



Standards and Guidelines for “City of Tucson at Work” Sign

- The sign shall be mounted on a NCHRP 350 compliant stand.
- The sign sheeting shall be standard engineering grade.
- The lettering shall be black on orange background.
- A Type A warning light shall be mounted on the sign stand.
- Before the sign is placed, an approved traffic control plan shall be required showing the placement of the sign.
- The City of Tucson will distribute the signs to contractors for City projects. Contractors are responsible for returning the signs once the project is completed.

Sign Measurement: 36” X 36”

C.O.T. Seal 7.5”

Lettering: CITY OF - 4” high
Lettering: TUCSON – 6.5” high
Lettering: AT WORK – 4” high

