

City of Columbia - Sidewalk Closure Policy

I. Introduction

A basic requirement of work zone traffic control, is that the needs of pedestrians, including those with disabilities, must be addressed and in a manner compliant with the Americans with Disabilities Act (ADA). If a sidewalk is closed for construction, then a temporary alternate pedestrian access route (PAR) is required. See Public Rights of Way Accessibility Guidelines (PROWAG) sections R104.2 and R205 and Manual on Uniform Traffic Control Devices (MUTCD) sections 6D.01, 6D.02, 6G.05, 6F.63, 6F.68, and 6F.71 for additional guidance on the alternate PAR. The temporary alternate PAR may be a partial sidewalk closure (a barricaded alternate route through the construction area) or a full sidewalk closure (detoured route around the area), and the alternate PAR shall include basic accessibility features to ensure all pedestrians, including people with disabilities, can reach their destination safely. The purpose of this policy is to ensure sidewalk closures in the community are accessible to all pedestrians.

II. ADA Compliance for Sidewalk Closures

A. Sidewalk Closures by City

Any sidewalk closures where the construction being performed is by City staff shall be done in accordance with the ADA, in consideration of the standards and guidance in PROWAG and MUTCD.

B. Sidewalk Closures by Outside Organization

Any contractor or outside organization closing a sidewalk in the City shall do so in accordance with the ADA, in consideration of the standards and guidance in PROWAG and MUTCD. It is the responsibility of the contractor to ensure its traffic control plan, including barricades, signage, and other temporary traffic control measures, comply with all federal, state, and local laws, including the ADA. The City reserves its authority to monitor closures and suspend construction work on any closures which do not meet these requirements, as well as take any other enforcement action as provided by law.

C. Training

Additional training for design and installation of temporary alternate PAR for closure of sidewalks during construction can be found at the following link: [ADA pedestrian temporary access](#). This link provides a video developed by the West Virginia LTAP on ADA in temporary traffic control for building accessible and detectable work zones. City staff designing and inspecting the traffic control for temporary alternate PAR will review this video or similar training videos at least once per year and meet once per year to review compliance effort and ADA requirements.

III. City's Sidewalk Closure Permit Requirements

A. General

A right of way permit is needed any time work is performed within the public right of way or street/sidewalk easement. When working in the right of way requires the full closure or partial

closure of a sidewalk, the applicant will need to submit the application for Street/Sidewalk Closure and Restriction for Construction & Repairs and obtain a Right of Way Permit from the Community Development Department. A full sidewalk closure should be considered a last resort and the applicant needs to demonstrate why it is impractical to keep the sidewalk at least partially open.

B. Application

With the application for Street/Sidewalk Closure and Restriction for Construction & Repairs, an applicant shall submit a temporary traffic control plan (TCP) which includes temporary traffic control measures for pedestrians. The City may require the plan be prepared by a Professional Engineer licensed to practice in the State of Missouri. The plan must follow MUTCD guidelines and include an alternate pedestrian accessible route (PAR). The plan also needs to maintain pedestrian access to transit stops and to businesses.

In creating the plan, the applicant shall consider minimizing impacts to pedestrians during the design of the traffic control plan. Activities to minimize impacts include locating lay down areas, staging, operations, equipment, etc. on private property when possible; keeping enough width of sidewalk open such that it can be accessed by pedestrians with disabilities, phasing the construction activities to minimize any sidewalk closures; and covering walkways.

When a sidewalk closure is necessary, an alternate PAR shall be provided. If possible, a reasonably safe route that does not cross that street should be provided. When pedestrians are required to cross the street, detour signage shall provide ample warning to minimize backtracking by pedestrians. The route shall be clearly marked and the route shall be detectable by visually impaired pedestrians. Finally, pedestrians should not be put in conflict with construction activities and moving or stationary construction vehicles and equipment.

C. Review of Traffic Control Plans

As part of its permitting process, the City will review the Contractor's traffic control plan prior to approval of the permit. The review will consider the temporary traffic control measures proposed, the impact the proposed plan will have on pedestrians, particularly people with disabilities, and whether the construction should be a full sidewalk closure (detoured route around the construction zone) or a partial sidewalk closure (a barricaded/channelized route along the same side of the street as the construction area). **A full sidewalk closure should be considered a last resort and the applicant needs to demonstrate why it is impractical to keep the sidewalk partially open.** Each traffic control plan will be reviewed on a case-by-case basis. In determining whether a partial closure or a full closure is appropriate, the City will take into consideration the following:

1. Location of closure in consideration of number of pedestrians and significance of nearby destinations impacted;
2. Duration of the closure;
3. Nature of the construction work and pedestrian safety; and
4. Pedestrian impact and conflicts with nearby vehicle traffic.

The extent of traffic control requirements are greater for sidewalk closures in high-pedestrian areas and for longer sidewalk closure periods. The requirements are discussed in more detail in Section IV and are reflected in the compliance checklist. As previously stated, an alternate pedestrian accessible route on the same side of street as the construction work zone should be used whenever possible.

D. Enforcement

The Contractor will be required to have the temporary pedestrian traffic control structures and signs installed prior to starting work. The City inspector will make periodic inspections of the site to ensure that the structures and signs remain in compliance with the approved temporary traffic control plan. If the site is deemed non-compliant during an inspection, the City inspector will work with the Contractor to gain compliance. The Public Works director may revoke the permit to work in the right of way (issue a Stop Work Order) for any of the following reasons.

1. The Contractor does not maintain the temporary pedestrian traffic control during the work.
2. The Contractor does not comply with the temporary pedestrian traffic control plan that was approved for the permit.
3. The Contractor does not provide adequate protection for the safety of the public.
4. Any other reason authorized by law, code, policy, or rule.

For repeated issues of non-compliance by a Contractor, the City may pursue legal prosecution.

IV. Design Requirements for Sidewalk Closures

When a sidewalk closure is needed for construction activities, an alternate PAR shall be provided. This alternate PAR may be obtained by keeping part of the sidewalk open on the same side of the street, moving the route into the street, or detouring the route to the other side of the street.

A. Requirements: Intermittent sidewalk closures

A sidewalk may be closed intermittently (less than one day) because of short-term construction activities, deliveries, and movement of construction vehicles. For an intermittent sidewalk closure, a flagger or spotter shall be posted at each end of the closure for the entire duration of the sidewalk being closed. The flagger or spotter shall direct pedestrian traffic to the alternate route or stop work in the vicinity to allow the pedestrian to pass the work zone.

B. Requirements: Alternate PAR along the same side of street as construction work zone

When a sidewalk closure is needed and the alternate PAR is maintained along the same side of the street as the construction work zone, the route shall be stable, firm, and slip resistant. Pedestrians need to be separated from both construction activities and vehicular traffic. Detectable barricades are required when pedestrians are adjacent to construction activities or vehicular traffic (without a curb). The Contractor shall maintain the PAR in good condition and clear of obstructions.

Detectable barricades are required to separate pedestrians from the construction site and from vehicular traffic. A completely detectable route uses continuous detectable barricades to lead

pedestrians around the construction hazards. Detectable barricades have a continuous upper surface and a lower edge which can be detected by pedestrians with no or limited vision. Construction tape and/or traffic cones are not an acceptable method for directing pedestrians around the construction site.

An alternate PAR located along the same side of the street as the construction site shall meet the following requirements.

1. The PAR should not bring pedestrians in conflict with construction activities and moving or stationary construction vehicles and equipment.
2. Detectable barricades will need to be installed in the following situations: between the PAR and the construction site; between the PAR and vehicle traffic if the PAR is on the street; and around any pedestrian hazards such as protruding objects, large drop offs, etc.
3. The running slope of the PAR shall be less than or equal to the street running slope.
4. Cracks and vertical deflections shall be no greater than 1/4 -inch within the PAR. The contractor will need to mill or patch any vertical deflections or cracks greater than 1/4-inch.
5. Protruding obstructions under the 8-foot height may not extend more than 4 inches into the PAR.
6. The vertical clearance must be a minimum of 8 feet throughout the length of the PAR.
7. A continuous 5-foot width is needed throughout the length of the PAR. If constraints require less than a 5-foot width, there will need to be 5-foot x 5-foot passing spaces every 200 feet for wheelchair accessibility. At single locations (i.e. poles, utility cabinets, etc.) which are less than 2 feet long, the route may be 3 feet wide.
8. Any turns in the PAR will require a 5-foot x 5-foot landing with a maximum cross slope of 2% in each direction.
9. The PAR will need to be adequately lit at nighttime and will require temporary lighting if lights are removed or obstructed as part of the construction project.
10. Ramps will be required if the PAR crosses a curb or step. The ramps will need to be ADA compliant.
11. Protective overhead covering over the PAR may be needed to provide protection from falling objects from the work when the Contractor is working from overhead structures.

C. Requirements: Alternate PAR detoured across the street from construction work zone

When a sidewalk closure is needed for construction activities and the alternate PAR is provided as a detour to the other side of the street or to another street; detour signage and detectable barricades shall be installed to guide pedestrians through the detour. The detour signage shall provide ample warning in order to minimize backtracking by pedestrians. The detectable barricades shall be installed to keep pedestrians separated from the construction work zone.

An alternate PAR that is detoured to the other side of the street from the construction shall meet the following requirements.

1. The traffic control must be readily detectable by a person with limited vision.
2. The detour PAR shall be clearly marked and advanced warning signs mounted on detectable barricades are required for street crossings.

3. Detectable barricades shall be used to close the sidewalk completely at the work zone. Pedestrians shall not be led into direct conflicts with vehicles, equipment, or operations.
4. An intersection crossing for the detour shall include crosswalks and curb ramps that are ADA compliant. It is preferable to cross pedestrian at an intersection instead of mid-block.
5. A mid-block crossing for the detour shall provide temporary crosswalk markings, signage, and curb ramps that are ADA compliant. The crossing shall also include a rapid flashing beacon (RFB) with associated signage.
6. The RFB push buttons shall be ADA audible and accessible. A motion sensor to provide speech message is preferred to provide instruction to pedestrians with low or no vision. A push button that continuously emits a message or chirp is also acceptable.
7. If a temporary traffic signal is used in the project, the signal shall include a pedestrian crossing phase with a push button that provides audible information.

The Contractor shall maintain the temporary traffic control structures and signs by inspecting them daily, keeping them free of debris, and making sure signage has not been moved or fallen over.

IV. Signs and Detectable Barricades

A. Signs

The signs used to direct pedestrians to the alternate PAR should conform to the MUTCD standards (sections 6F.13 and 6F.14). Pedestrians should be appropriately directed with advanced signage showing them how to traverse the construction site or where to cross the road. The traffic control devices shall be crashworthy presenting a minimum threat to pedestrians, workers, and vehicles.

Typical sidewalk pedestrian crosswalk and sidewalk closure signage includes the following signs.

- **PEDESTRIAN CROSSWALK (R9-8):** Used to indicate the location of a temporary crosswalk.
- **SIDEWALK CLOSED (R9-9):** Place where sidewalk closure begins.
- **SIDEWALK CLOSED, USE OTHER SIDE (WITH ARROW) (R9-10):** Place at the beginning of the closed sidewalk guiding the pedestrian to use the sidewalk on the other side of the road.
- **SIDEWALK CLOSED AHEAD, CROSS HERE (WITH ARROW) (R9-11):** Place to indicate that sidewalk beyond the sign will be closed and to cross using the crosswalk at that specific location.
- **SIDEWALK CLOSED, CROSS HERE (WITH ARROW) (R9-11A):** Place to indicate that the sidewalk is closed at the sign and to cross using the crosswalk at that location.

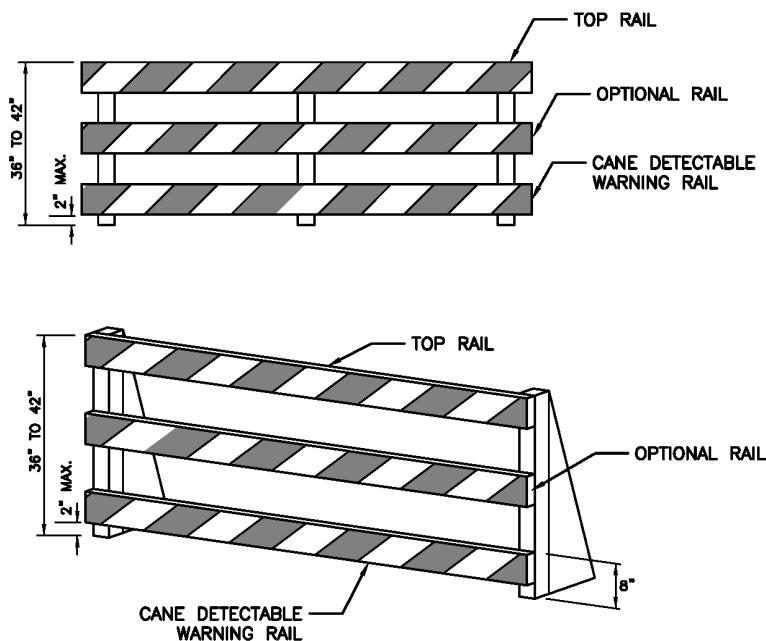
The signs are mounted on detectable barricades to communicate with pedestrians with visual disabilities. The “Sidewalk Closed Ahead” barricade should be placed so that it is visible to pedestrians and still maintain a minimum sidewalk width of 4 feet. The “Sidewalk Closed” barricades should extend the width of the sidewalk closure. Audible information may need to be provided when the detectable barricade for the PAR is not continuous or when the pedestrian

will be required to cross the road in advance of the sidewalk closure and would be required to backtrack if missed the crossing.

B. Detectable Barricades

The detectable barricades shall include the following features.

1. A top and a bottom rail are required. The bottom rail shall be cane detectable.
2. The bottom edge of the bottom rail shall be 2 inches from the ground. The top edge of the top rail shall be between 36 inches and 42 inches from the ground.
3. Bottom rail and top rail shall be parallel to each other.
4. The rails shall be highly visible with contrasting color from the barricade (colors yellow, orange, or white).
5. The rails shall extend the full width of the barricade.
6. The detectable barricades shall extend the width of the closed sidewalk and/or the entire length of the channelized route with no gaps.
7. The detectable barricades may be a stable/non-flexible prefabricated plastic barrier (examples: Stongwall Barricades, Safety Rail, ADA Wall), a chain linked fence with rails added, or a typical sidewalk barricade with the rails added.
8. The upstream barricades' leading end shall be appropriately flared or protected with crashworthy cushions.



NOTES:

1. RAILS SHALL BE HIGHLY VISIBLE, YELLOW, ORANGE, OR WHITE CONTRAST FROM THE REST OF THE BARRIER
2. RAILS SHALL EXTEND THE FULL WIDTH OF THE BARRICADE
3. THE BARRICADES SHALL EXTEND THE WIDTH OF THE SIDEWALK CLOSURE AND OR THE LENGTH OF THE ACCESSIBLE ROUTE WITH NO GAPS BETWEEN BARRICADES

TYPICAL DETECTABLE BARRICADE

N.T.S.

Figure 6H-28 of the MUTCD (p. 689) shows the typical signage layout for sidewalk closure with detoured crossing at intersections and for sidewalk closure with accessible route on the same side of road adjacent to the sidewalk closure.

Figure 6H-29 MUTCD (p. 691) shows the typical signage layout for a sidewalk closure with a temporary midblock crossing and an advanced crossing at an intersection.

Pedestrian Traffic Control Plan Checklist

Alternate Pedestrian Accessible Route (PAR) for Sidewalk Closures

This checklist may be used for the development of the alternate pedestrian access route (PAR) for the temporary traffic control plans for both partial and full sidewalk closures.

The checklist includes the minimum requirements for the plan. Additional traffic control measures may be required for areas with high pedestrian use and for longer duration closures. (See PROWAG R104.2 and R205, MUTCD 6D.01, 6D.02, 6G.05, 6F.63, 6F.68, and 6F.71 for additional guidance.)

General Obligations for the Temporary Traffic Control Plans

- ☐ Pedestrians shall not be led into direct conflicts with vehicles, equipment, or operations.
- ☐ Cross pedestrians at an intersection instead of mid-block, if possible.
- ☐ Clearly mark detour routes with advanced warning signs mounted on detectable barricades.

Alternate PAR with Protected Partially Open Sidewalk (Preferred)

- ☐ Continuous, clear pedestrian path along a channelized route:
 - minimum 5 feet width, 8 feet height
 - no protruding objects within clear path
 - no noticeable trip hazards or cracks (greater than 1/4-inch, determined on a case by case basis)
 - ADA compliant ramps if route crosses a curb or step
- ☐ Detectable barricades along the channelized route:
 - solid, continuous bottom rail 2 inches from ground
 - solid, continuous top rail between 36 and 42 inches from ground
 - color contrast between the rails and the barricade
- ☐ Closed, detectable barricades at the entrance to site across the width of the sidewalk except for the open, channelized pedestrian path.
- ☐ Protective overhead covering and adequate lighting for night-time, if needed.

Alternate PAR with Completely Closed Sidewalks and Pedestrian Detour

- ☐ Continuous barricades across the width of the closed sidewalk.
- ☐ Solid rails across the bottom and top of barricade:
 - solid, continuous bottom rail 2 inches from ground
 - solid, continuous top rail between 36 and 42 inches from ground
 - color contrast between the rails and the barricade
- ☐ Advanced notice signage shall not protrude from its base and not encroach on a 4-foot width pedestrian path.