Chapter 6
Construction and Maintenance Signs

Application of Standards

Many of the warning signs shown in Part VI of the Manual as construction signs have also been shown in Part II of the Manual. For any sign in Part II, which was modified for use in Oregon, its counterpart in Part VI shall be likewise modified.

Flagger Signs (MUTCD 6F.31)

The BE PREPARED TO STOP sign (W3-4) may be used to warn of stopped traffic caused by a traffic control signal or in advance of a section of roadway that regularly experiences traffic congestion within a work zone. The W3-4 shall be placed in advance of the Flagger Ahead sign (W20-7, W20-7a, CW23-2,) when used.

Uneven Lanes Sign (W8-11) (MUTCD 6F.45)

The UNEVEN LANES sign (W8-11) shall not to be used on the State Highway System. The ABRUPT EDGE sign (CW21-7) should be used during operations that create a difference in elevation between adjacent lanes that are open to travel.

Reverse Curve Signs (W1-4 Series) (MUTCD 6F.48)

The Reverse Curve (2 lanes) sign (W1-4bR) and the Reverse Curve (3 lanes) sign (W1-4cR) should be used to warn and guide traffic through a lane shift where the lanes of traffic are maintained.

Detour Signs (M4-8, 9 & 10) (MUTCD 6F.49)

Black on orange W1 series signs, with the detour marker (M4-8) as a rider may be used in place of Detour Arrow signs to mark the beginning of a detour if an engineering study determines that W1 signs would more accurately depict the actual detour alignment. W1 signs should be considered when the detour makes a minor or gradual deviation from the normal roadway. ‘ROAD CLOSED’ signs, as shown in the MUTCD, may not be appropriate under these circumstances.

Work Duration (MUTCD 6G.02)

Portable sign supports may be used for work that occupies a location for up to 72 consecutive hours. Longer duration may be allowed by an approved Traffic Control Plan (TCP) that is project specific.
General

(MUTCD 6I.01)

Warning and guide signs used for temporary traffic control (TTC) traffic incident management situations may have a black legend and border on a fluorescent pink background.

Roll-Up Signs

Roll-up signs may be used for any sign type in accordance with the ODOT Sign Policy & Guidelines, Oregon Standard Specifications for Construction, ODOT Qualified Products List, and the MUTCD, unless otherwise stated. Roll-up signs may be used when signs are needed at a single location for no more than 48 consecutive hours. Roll-up signs should be removed from the road at the end of each work shift when the condition is no longer in effect. When roll-up signs are used with a single lane of traffic, one sign mounted on the right side of traffic is sufficient. When roll-up signs are used with two or more lanes going in the same direction, roll-up signs should be used on both the left and right sides of traffic. Roll-up signs should not be mounted to vehicles.

Business Access Signs In Construction Projects

Business accesses severed, relocated or adversely affected during construction may have temporary blue/white motorist services signs installed to better delineate the access.

Use the following guidance to determine the design and placement for temporary “BUSINESS ACCESS” (CG20-11) signing:

1. Project site should be investigated to determine the number and location of accesses, proximity of business frontages to the roadway, and the presence of existing business signing. Project development teams should discuss the strategy used for determining the need and placement of the signs based on the guidance below.

2. If a single business access is affected, a “BUSINESS ACCESS” sign may be used. A directional arrow rider may be added to indicate the direction to the business depending on the severity of the impact to the access.

3. If several businesses and accesses are affected over an extended section of roadway, consider the following signing strategies:

   a. An individual access to a single business may be signed with a single “BUSINESS ACCESS” sign. A rider may be installed below the “BUSINESS ACCESS” sign and shall include a maximum of three of the following generic business descriptions: “GAS”, “FOOD”, and/or “LODGING”. Under special circumstances, where the above descriptions may not apply, other generic descriptions may be used – e.g. “POST OFFICE”, “GROCERIES”, “THEATRE”, “SHOPPING MALL”, etc.
b. An individual access to multiple businesses may be signed with a single sign reading “BUSINESS ACCESS”. A rider with a maximum of three generic business descriptions may be added – See item 3a above.

c. For multiple accesses along sections of roadway for more than ¼ mile, where accesses are less than 100 feet apart (e.g. dense urban or suburban arterials), consider the following strategy:

• Install a modified CG20-11 sign reading “BUSINESS ACCESSES” at the first access point.

• Delineate all affected access radii with blue plastic tubular markers.

• Install “BUSINESS ACCESSES” reminder signs on 650 foot intervals through affected areas.

4. Riders shall use 4-inch, type B 2000 or C 2000 font.

5. Limit generic business descriptions to a maximum of two words (e.g. “POST OFFICE”).

6. NO specific business names (e.g. “Chevron”, “Burger King”, Fred Meyer”, “Woodburn Factory Stores”, “Washington Square”, etc.) shall be used on “BUSINESS ACCESS” signs or riders.

7. Place the “BUSINESS ACCESS” sign on a single-post temporary sign support at the access point. Existing posts or supports may be used, but must be approved by the respective agency or owner.

8. Use blue plastic tubular markers with blue reflective bands to delineate the radii for all affected business accesses. See the ODOT Unique Special Provision “U00220/00225 Business Access”.

9. Remove the signs as soon as the permanent access is restored.
The ROAD WORK NEXT XX MILES sign should be erected in advance of any temporary traffic control zone of more than 2 miles in length. The distance shall be stated to the nearest whole mile.

G20-1 sign from the MUTCD may be used on low speed roads or off the state highway system.
The END ROAD WORK sign should be erected approximately 500 feet beyond the end of the work area.

G20-2 sign from the MUTCD may be used on low speed roads or off the state highway system.
The END DETOUR sign should be used to inform motorists that the detour has ended.

M4-8a sign from the MUTCD may be used on low speed roads or off the state highway system.
The DETOUR with vertical arrow sign may be used to guide the motorist through the detour. It is expected that this sign would only be used where extra guidance is required.
The Project Identification sign shall be used to identify ODOT construction projects that meet any one of the following criteria:

- Project is on a freeway
- Project duration is longer than one year
- Engineer's estimate is $5 million or more
- Other high-profile projects as determined by ODOT Region

Additional funding partners may be added with a revised sign design.
The **erosion concerns** sign may be used on any construction project to provide a phone number to pedestrians so they can voice their concerns.

---

**Sign Background:** Fluorescent Orange, Non-reflective Sheeting  
**Sign Legend:** Black, Non-reflective Sheeting
The BUSINESS ACCESS sign may be used to inform the motorist where the business access is located during the construction work.

See page 6-2 and 6-3 for criteria and placement details.
The INTERMITTENT ROAD WORK NEXT XX MILES may be used to inform drivers of the nature of the work zone.

The distance shall be stated to the nearest whole mile.
The Pedestrian Event Route sign may be used for route marking of a permitted pedestrian event as defined in OAR 734-056-0010 thru 734-056-0050.

Each event will have its own unique letter/number designation, maximum 3 letters/numbers, for example:

CO = Cycle Oregon
CCC = Cascade Cycling Classic

Signs shall be created by using attached word files, modifying the unique letter/number designations as appropriate. Print signs on 11x17 paper (or better) and laminate.

Signs may be installed a minimum of 2' below any traffic control device or on a separate path.

Remove all signs as directed by the road authority after event concludes.
**Sign Background:** Orange, Non-reflective Sheeting  
Black, Non-reflective Sheeting (Oval)  
Orange, Non-reflective Sheeting (Letters, Arrow, and State)  
Black, Non-reflective Sheeting (Bike Symbol)

**Sign Legend:** 

The Bicycle Event Route sign may be used for route marking of a permitted bicycle event as defined in OAR 734-056-0010 thru 734-056-0050.

Each event will have its own unique letter/number designation, maximum 3 letters/numbers, for example:

CO= Cycle Oregon  
CCC = Cascade Cycling Classic

Signs shall be created by using attached word files, modifying the unique letter/number designations as appropriate. Print signs on 11x17 paper (or better) and laminate.

Signs may be installed a minimum of 2' below any traffic control device or on a separate path.

Remove all signs as directed by the road authority after event concludes.

OREGON DEPARTMENT OF TRANSPORTATION  
Approved By: S.T.E. Date: 12/2009 Updated: 05/2010
The STOP roll-up sign may be used for short term emergency or hazard situations only. Background sheeting may be either non-reflective black or retroreflective silver-white. Black background sheeting is preferred to accent the border of the STOP symbol. The sheeting material for the STOP roll-up sign should be an approved sheeting material from the ODOT Qualified Products List, Section 00225.27. The STOP roll-up sign shall not be used for a time exceeding 72 consecutive hours. The STOP roll-up sign shall not be used on construction projects.

Orange Sign Flag Boards may accompany the STOP roll-up sign in order to draw special attention to it.
Instead of flaggers, the WAIT FOR PILOT CAR sign may be posted on side roads or accesses intersecting state highways when pilot cars are being used to control traffic on the mainline through the work zone, provided:

- Access or side road traffic is being stopped for no more than 20 minutes (per Section 00220 of the Oregon Standard Specifications for Construction, and Chapter 3 of the Oregon Temporary Traffic Control Handbook).
- Access or side road is a dead-end facility or has no immediate alternate access, has an ADT of 100 vehicles per day or less, and does not access public service facilities (e.g. parks, rest stops, waysides, ranger stations, landfills, utility hubs, treatment plants, etc.)

For private residential driveways see sign CR4-20a.

Intersections or accesses using the WAIT FOR PILOT CAR sign should be checked regularly to ensure safe and effective traffic operations.

For a facility with an ADT greater than 100, but not exceeding 400, the sign may be used only if closely monitored and frequently checked for traffic compliance, operation and safety. If operational issues are observed at these or any other location using the WAIT FOR PILOT CAR sign, the sign should be replaced by flagging or other traffic control measures as quickly as practical.

OREGON DEPARTMENT OF TRANSPORTATION

Approved By: S.T.E. Date: 04/2011 Updated: 01/2014
The 1’ x 1’ WAIT FOR PILOT CAR sign may be used during ODOT maintenance operations where flaggers and pilot cars are controlling traffic. (E.g. chip seals, paving, etc.).

Place the signs in private residential driveways only. Sign must face private residences only and not be visible to public traffic. Do not install the sign in driveways that have apartments or condominiums or in business accesses.

Sign may be fabricated using fiberboard or other lightweight substrate material. The sign may be installed into the top of a conical or tubular marker by cutting the bottom of the sign, as shown, to provide a snug fit into the top of the device.

Public notification (e.g. door hangers, fliers) may accompany the installation of the signs.
The Bicycles KEEP LEFT (RIGHT) sign (CR4-22a, CR4-22b) is used at the beginning of a section of temporary bicycle pathway within a construction work zone. The sign is intended to direct bicycle traffic into the temporary bicycle pathway and out of the active work area. The sign may be repeated at regular intervals throughout a longer work zone as a reminder to bicycle traffic.

See the ODOT Traffic Control Plans Design Manual for additional details.
The 1' x 1'-3" Pedestrian WAIT FOR FLAGGER sign is used in conjunction with flagging operations where pedestrians must cross live traffic lanes to access a temporary pedestrian access route (TPAR).

The sign is also used where "Pedestrian Flaggers" are used to guide/escort pedestrians across a TPAR that bisects an active work space.

Sign must be placed at each Flagger station facing incoming pedestrian traffic.

Sign shall be fabricated using retroreflective sheeting on aluminum, plywood, or lightweight substrate material (e.g. fiberboard, foam board). The sign may be installed into the top of a conical or tubular marker by cutting the bottom of the sign, as shown, to provide a snug fit into the top of the device.

Sign Background: White, Standard Retroreflective Sheeting
Sign Legend: Black, Non-reflective Sheeting

Border = 0.625"
Inset = 0.375"
Radius = 1.5"

* Optional. Cutouts used for installation into open top of cone or tubular marker.
The 1' x 1'-6" Pedestrian WAIT FOR ASSISTANCE sign is used where pedestrians must access a temporary pedestrian accessible route (TPAR) within an active work space and where construction staff are used to guide/escort pedestrians through the TPAR.

Sign must be placed at the starting point at each end of the TPAR facing incoming pedestrian traffic.

Sign shall be fabricated using retroreflective sheeting on aluminum, plywood, or lightweight substrate material (e.g. fiberboard, foam board). The sign may be installed into the top of a conical or tubular marker by cutting the bottom of the sign, as shown, to provide a snug fit into the top of the device.
The Bicycles ON ROADWAY symbol sign may be used to warn motorists of the presence of bicycles in the traffic lane. The sign should be used when construction work, maintenance operations or other roadway activity prevents bicycles from using the shoulder or bike lane.
The Bicycles CROSSING ROADWAY sign may be used at, and in advance of, crossing locations within the limits of a permitted bicycle event as defined in OAR 734-056-0010 thru 734-056-0050.
The Pedestrians ON ROADWAY may be used to inform motorists that pedestrians may be present in the roadway within the limits of a permitted pedestrian event as defined in OAR 734-056-0010 thru 734-056-0050.
The Pedestrians CROSSING ROADWAY sign may be used at, and in advance of, crossing locations within the limits of a permitted pedestrian event as defined in OAR 734-056-0010 thru 734-056-0050.
The SIDEWALK OPEN sign shall be posted as advance notification to pedestrians when intermittent work may temporarily block the pedestrian pathway for short durations not exceeding 5 minutes in duration each. Dates shown on the sign should be a combination of alpha and numeric characters (e.g. APR 22). If the work spans two different years, lettering may be converted to a MM/DD/YY format and the time span rewritten as: MM/DD/YY - MM/DD/YY. For example: 10/31/17 - 2/5/18.
The SIDEWALK CLOSED, Full Time sign shall be posted as advance notification to pedestrians when a sidewalk or pedestrian pathway is to be closed, full time, for a given period of time indicated on the sign. Dates shown on the sign should be a combination of alpha and numeric characters (e.g. APR 22). If the closure spans two different years, lettering may be converted to a MM/DD/YY format and the time span rewritten as: MM/DD/YY - MM/DD/YY. For example: 10/31/17 - 2/5/18.
The SIDEWALK CLOSED, Daily sign shall be posted as advance notification to pedestrians when a sidewalk or pedestrian pathway is to be closed on a daily basis where the route is reopened to pedestrian traffic at the end of each work shift, or on weekends, or on other specific days of the week. Days shown on the sign should be abbreviated. "AM" and "PM" should be adjusted to reflect daytime or nighttime work.
The WRECK AHEAD sign is intended for temporary use by road authorities, emergency vehicle, and certified tow vehicle operators to meet the signing requirements of ORS 822.220. The signs shall be removed when the hazard no longer exists.

Existing WRECK AHEAD signs with orange retroreflective background may be used until damaged or worn out.
The EVENT AHEAD sign shall be used to warn of pedestrian activity as per OAR 734-058-0010 thru 734-058-0080.

The EVENT AHEAD sign may be used to warn of a special event as per OAR 734-056-0010 thru 734-056-0050.
The Bicycle EVENT AHEAD sign may be used in advance of entry points of a permitted bicycle event as defined in OAR 734-056-0010 thru 734-056-0050.

The EVENT AHEAD (CW15-15) sign may be used instead of sign CW15-15a. The BICYCLE RACE AHEAD (OBW16-2) sign may be used instead of CW15-15a until January 2015 provided the sign meets American Traffic Safety Services Association (ATSSA) acceptable standard as outlined in ATSSA's "Quality Guidelines for Temporary Traffic Control".
The Pedestrian EVENT AHEAD sign may be used in advance of entry points of a permitted pedestrian event as defined in OAR 734-056-0010 thru 734-056-0050.

The EVENT AHEAD (CW15-15) sign may be used instead of sign CW15-15b.
The BICYCLE RACE IN PROGRESS sign shall be displayed on the bicycle race escort vehicles if required by the race permit. See special events permits OAR 734-056-0010 thru 734-056-0050.

The standard size sign should be used on state highways.

A lightweight sign substrate may be used.

OREGON DEPARTMENT OF TRANSPORTATION

Approved By: O.T.C.  Date: 01/1992  Updated: 07/2014
The "BICYCLE RIDE IN PROGRESS" sign shall be displayed on the bicycle ride escort vehicles if required by the ride permit. See special event permits OAR 734-056-0010 thru 734-056-0050.

The standard size sign should be used on state highways.

A lightweight sign substrate may be used.
The ROAD WORK (LOOSE GRAVEL) XX MPH roll-up sign may be used to advise motorists of the safe speed through a construction area. The sign shall be used only at the direction of the Project Manager/Resident Engineer of the contracting agency and shall not be used to indicate any speed other than an advisory speed. Care should be taken in determining the advisory speed so as to obtain a safe and yet reasonable speed through the construction area.

The ROAD WORK (LOOSE GRAVEL) XX MPH roll-up sign shall be erected only in conjunction with and immediately following a ROAD WORK AHEAD sign (W20-1) and at intervals through the construction area as needed. These signs are intended to be made to accommodate removable XX MPH plaques, as appropriate.

OREGON DEPARTMENT OF TRANSPORTATION
Approved By: S.T.E. Date: 05/2006 Updated: 07/2014
The LEFT TWO LANES CLOSED AHEAD sign shall be used in work zones in advance of locations where the left two adjacent lanes of a multi-lane roadway are closed.
The Flagger NEXT MILE sign may be used to warn motorists of a flagger ahead for work zones that move along the road intermittently and involve frequent short work durations. Only use this sign when the work can move through a one mile segment in three hours or less.

The Flagger NEXT MILE sign shall not be used for work zones that exceed one mile in length.

When the flagger is more than 1000 feet from the Flagger NEXT MILE sign, intermittent cones shall be placed on the shoulder. Cones should be placed at intervals as indicated on the diagram in the Oregon Temporary Traffic Control Handbook (Diagram 325).
The 24-HOUR FLAGGING AHEAD sign may be used for special emphasis when round-the-clock flagging operations are in place. This sign shall be removed when the condition no longer exists.
The ABRUPT EDGE sign is intended for use in construction areas where the roadway is being repaved and paving operations are incomplete resulting in an abrupt pavement edge. The ABRUPT EDGE sign may also be used in construction areas where there is an area being excavated close to the traveled lanes. When used, it may be supplemented with an appropriate rider (CW21-8a, CW21-8b or CW21-8c).
CW21-8A, CW21-8B, & CW21-8C

**Sign Background:** Fluorescent Orange, Standard Retroreflective Sheeting

**Sign Legend:** Black, Non-reflective Sheeting

**Abrupt Edge Riders:** LEFT (CW21-8a), CENTER (CW21-8b), RIGHT (CW21-8c)

These riders are to be used to further identify the location of the abrupt pavement edge in relation to the lane of travel.
The ABRUPT EDGE roll-up sign may be used in lieu of Sign CW21-7 and CW21-8 in construction areas where incomplete paving operations result in an abrupt edge. This sign is intended to be made to accommodate removable LEFT, CENTER or RIGHT "Plaques", as appropriate.
The BRIDGE WORK AHEAD sign shall be used to warn motorists of bridge construction operations on or adjacent to the roadway when such construction is confined to the bridge itself. When bridge construction is part of a continuous road construction zone, the use of this sign is optional. When used in conjunction with other signs, it would be placed in advance of such signs.

The SIGNAL WORK AHEAD sign may be used in addition to all other required advance warning signs to inform motorists that work is being performed on the traffic signal at the upcoming intersection, school crossing, etc.
The Horizontal Clearance sign may be used to warn motorists of road width reductions less than 19 feet between positive barriers on either side of the road (e.g. face of concrete barrier to face of concrete barrier, face of guardrail to face of guardrail). The actual width shall be shown to the nearest 1 foot, not exceeding the actual clearance.

**SIGN POLICY AND GUIDELINES FOR THE STATE HIGHWAY SYSTEM**

Approved By: S.T.E.  Date: 03/1994  Updated: 07/2014

Oregon Department of Transportation

September 2018
The Flagger Ahead symbol sign may be used as an alternate to the Flagger Ahead symbol sign W20-7a shown in the MUTCD. For ODOT highway construction contracts (maintenance, utility, and permit work) do not use the W20-7a sign.

The Flagger Ahead symbol sign shall also be used to warn motorists of an Automated Flagger Assistance Device (AFAD) when used in a work zone.
The PASSING LANE CLOSED AHEAD sign should be used to warn the motorist of this condition.

* Reduce spacing 30%
The TRUCKS ENTERING HIGHWAY XXXX FT. sign should be used to warn the motorist of trucks entering the highway at places other than a normal intersection.

<table>
<thead>
<tr>
<th>Sign Background:</th>
<th>Fluorescent Orange, Standard Retroreflective Sheeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign Legend:</td>
<td>Black, Non-reflective Sheeting</td>
</tr>
</tbody>
</table>

OREGON DEPARTMENT OF TRANSPORTATION

Approved By: O.T.C.  Date: 06/1990  Updated: 07/2014
The TRUCKS LEAVING HIGHWAY XXXX FT. sign should be used to warn the motorist of trucks leaving the highway at places other than a normal intersection.
The LEFT TURN LANE CLOSED AHEAD sign may be used to warn traffic that they cannot use the Left Turn Lane Ahead. This sign should be used as the advance warning for the LEFT TURN LANE CLOSED sign when spacing allows.
The LEFT TURN LANE CLOSED sign should be used where construction activities require the closing of the Left Turn Lane. The LEFT TURN LANE CLOSED AHEAD sign (CW23-12) should be used as an advance warning to allow the driver to think of alternate routes prior to reaching the LEFT TURN LANE CLOSED sign.
The CONSTRUCTION VEHICLE DO NOT FOLLOW sign may be used on the back of a construction vehicle to discourage motorists from following it out of the travel lane into a work area. A typical application: on asphalt trucks participating in paving operations.

The CONSTRUCTION VEHICLE/DO NOT FOLLOW sign shall be mounted on a rigid substrate.