

## Traffic Control Standards

1. All traffic control applications and devices are to be pursuant to the Manual on Uniform Traffic Control Devices (MUTCD), current edition.
2. All traffic control signs are to be $36^{\prime \prime} \times 36^{\prime \prime}$ with orange background and black lettering ( 30 " $\times 30$ " okay on streets classified as "Local").
3. A minimum of three traffic control signs is required in all directions on residential streets adjacent to, or around the corner from, the job site. A minimum of four traffic control signs is required in all directions on arterial streets and state routes adjacent to, or around the corner from, the job site. The City of Puyallup reserves the right to require additional signage depending on the scope of work and the location of the project.
4. In all instances, cones must be orange in color, 28 inches tall, and have two (2) retroreflective bands.
5. Distance between signs is per MUTCD Table 6C-1.
6. The City of Puyallup reserves the right to adjust approved traffic control plans as needed during the project.

## Typical Elements for Traffic Control Plan Submittals

The following is a list of typical elements that should be included in traffic control plans submitted for review. Incorporating these elements into the plan will help reduce delay in the review process and reduce the need for possible re-submittal of the plans.

Traffic Control Plans should contain the following information:

- A clear and accurate plan view representation of the streets and the intersection where the temporary traffic control plan will be implemented. Should include the following:

1. Street names
2. Lame configurations
3. Existing channelization devices (include pavement markings such as crosswalks)
4. Traffic signals

- Clearly indicate the active work area and the proposed temporary channelization device set up.
- Include a legend indicating symbols used to represent various traffic control device elements.
- Clearly indicate the temporary signing to be used. Label sign by appropriate signs code as per MUTCD, and include size and color of signs (Size and color can be referenced in the general notes shown on the plan.). Using both a sign image and sign code will help clarify the appropriate sign intended.
- Clearly indicate sign spacing on plan, may reference a sign spacing chart on shown on plan.
- Include channelization device spacing chart.
- Label all transition / taper lengths. Show lengths or reference lengths to a table included on plan.
- Label buffer lengths on plan. Indicate length or reference lengths to a table included on plan.
- As per RCW 47.36.200, include special warning signs for motorcycles (W21-1701 "Motorcycles Use Extreme Caution") if any of the following conditions exist at the work zone:

1. Grooved Pavement
2. Abrupt land edge
3. Steel Plates
4. Loosed material (such as gravel or dirt) on roadway

- Indicate approved work hours. Typical work hours are 9 am to 3 pm unless otherwise approved.
- Include in general notes that a minimum of $11^{\prime}$ lanes will be maintained.


## APPROVED

MINIMUM LANE CLOSURE TAPER LENGTH $=\mathrm{L}$ (feet)

| $\underset{\substack{\text { LINE } \\ \text { (feet) }}}{\text { LANE }}$ | Posted Speed (mph) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| 10 | 105 | 150 | 205 | 70 | 450 | 500 | 550 | - | - | - |
| 11 | 115 | 165 | 225 | 295 | 495 | 550 | 605 | 660 | - | - |
| 12 | 125 | 180 | 245 | 320 | 540 | 600 | 660 | 720 | 780 | 840 |

MINIMUM SHOULDER TAPER LENGTH = L/3 (feet)

| SHOULDERMDTH (feet) | Posted Speed (mph) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| $8{ }^{\prime}$ | 40 | 40 | 60 | 90 | 120 | 130 | 150 | 160 | 170 | 190 |
| 10' | 40 | 60 | 90 | 90 | 150 | 170 | 190 | 200 | 220 | 240 |


| SIGN SPACING $=\mathrm{X}$ (1) |  |  |
| :---: | :---: | :---: |
| FREEWAYS \& EXPRESSWAY | $55 / 70 \mathrm{MPH}$ | $\begin{aligned} & 1500 \pm \text { (OR } \\ & \text { AS PER MUTCD) } \end{aligned}$ |
| RAL HIGHWAYS | $60 / 65$ MPH | $80{ }^{\prime}$ |
| RURAL ROADS | $45 / 55 \mathrm{MPH}$ | 500 |
| RURAL ROADS \& URBAN ARTERIALS | $35 / 40 \mathrm{MPH}$ | 350 |
| Ral Roads \& URBAN ARTERIALS | $25 / 30 \mathrm{MPH}$ | 200 |
| RESIDENTAL \& BUSINESS DISTREICTS |  |  |
| ban STREETS | 25 MPH OR | $\pm$ (2) |
| (1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS AND DRIVEWAYS (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS. |  |  |



|  | BUFFER DATA |  |  |  |  |  | PRFUP20210127 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LONGITUDINAL BUFFER SPACE $=B$ |  |  |  |  |  |  |  |  |  |  |
| SPEED (MPH) | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| LENGTH (feet) | 155 | 200 | 250 | 305 | 360 | 425 | 495 | 570 | 645 | 730 |

## BUFFER VEHICLE ROLL AHEAD DISTANCE = R

| TRANSPORTABLE ATTENUATOR <br> MINIMUM HOST VEHICLE WEIGHT 15,000 LBS. THE MAXIMUM WEIGHT SHAL <br> be in accordance wit the manuracturers recommendation. | $\begin{gathered} 30 \text { FEET MIN. } \\ 100 \text { FOOT MAX. } \end{gathered}$ |
| :---: | :---: |
| PROTECTVE VEHICLE <br> may be A work vehicle strategically located to sheld THE WORK AREA. | NO SPECIFIED DISTANCE REQUIRED |


| CLOSURE ALLOWED: |
| :---: |
| Monday - Friday |
| 9AM - 3PM |

Call communications center at
253-287-4456 on day of closure.
The permit and traffic control plan shall be posted at the job site and available to inspectors at all times.
can be modified at the full discretion of

Work shall immediately cease in the work zone or a pedestrian spotter scort pedestrians
around the work are


LEGEND
TEMPORARY SIGN LOCATION
TRAFFIC SAFETY DRUM SEQUENTIAL ARROW SIGN

## 

PCMS PORTABLE CHANGEABLE MESSAGE SIGN
-Traffic control devices shall be 28 inch retro-reflective cones -Taper length equals width of offset times speed limit squared divided by 60 . -Sign spacing shall be 100 feet when speed limit is 30 mph or less.
Sign spacing shall be 350 feet when speed limit is greater than 30 mph .
Distance between cones equals speed limit in unit-feet.

- Travel lane width must be a minimum of 11 feet at all times.
-All flaggers and spotters shall remain in radio contact at all time


## SINGLE-LANE CLOSURE FOR MULTI-LANE ROADWAYS

| FILE NAME | Ss5sssssDEESIGNFILENAME5s5s5s |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TIME | STIMES |  |  |  |  | FED.AID PROJ.NO. |
| DATE | Ssssbatesss |  |  |  | 10 WASH |  |
| pLOTTEDBY | sSUSERNAMESS |  |  |  |  |  |
| ENTERED BY |  |  |  |  |  |  |
| CHECKED BY |  |  |  |  |  | Locanowno. |
| PROJ. ENGR. |  |  |  |  |  |  |
| REGIONAL ADM. |  | REVSION | DATE | BY |  |  |

1. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS. 2. EXTENDING DEVICE TAPER AT L3 ACROSS SHOULDER IS RECOMMENDED. 3. Devices shall not encroach into the adjacent lan
2. USE TRANSVERSE DEVICES IN CLOSED LANE EVERY 1000'. RECOMMENDED).
3. DEVICE SPACING FOR THE DOWNSTREAM TAPER SHOULD BE 20 :
4. ALL SIGNS ARE BLACK on orange.

REVSION

| DAE |
| :---: |

## APPROVED

| SIGN SPACING $=$ X (1) |  |  |
| :---: | :---: | :---: |
| RURAL ROADS | $45 / 55 \mathrm{MPH}$ | 500 * |
| RURAL ROADS \& URBAN ARTERIALS | $35 / 40 \mathrm{MPH}$ | $350^{\prime} \pm$ |
| RURAL ROADS \& URBAN ARTERIALS RESIDENTAL \& BUSINESS DISTREICTS | $25 / 30 \mathrm{MPH}$ | $200 \pm \pm$ (2) |
| URBAN STREETS | 25 MPH OR LESS | $100^{\prime} \pm$ (2) |
| (1) ALL SPACING MAY BE ADJUSTED T RAMPS AT-GRADE INTERSECTIONS RAMPS, AT-GRADE MAY ERE REDUCED (2) THIS SPACING MY ROADWAY CONDITIONS | COMMODATE INT RIVEWAYS AN AREAS TO FIT |  |



(2) THIS SPACING MAY BE

ROADWAY CONDITIONS. | RURAL ROADS \& URBAN ARTERRALS | $35 / 40$ MPH | $350^{\prime} \pm$ |
| :--- | :--- | :--- |
| RURAL RAADS \& URBAN ARTERILLS | $25 / 30$ MPH | $200^{\prime} \pm(2)$ |
| RESIDENTAL \& BUSINESS DISTREICTS |  |  |
| URANSTETS |  |  | ban STREETS REDUCED IN URBAN AREAS TO FIT

NIGHT WORK REQUIRED. CLOSURE ALLOWED Sunday - Thursday
9PM - 5AM Call communications center at 253-287-4456 on night of closure. Request an inspection through the
CityView portal a minimum of 48 hours in ald

The applicant shall notify all residents and businesses within 300 feet of the ork area 48 hours in advance of tart date by distributing informational door hangers, displaying work on message boards, or on signs posted visibly along the right-of-way. The permit and traffic control plans hall be posted at the job site and

RIGHT LANE CLOSURE WITH SHIFT - 5 LANE ROADWAY

|  | BUFFER DATA |  |  |  |  |  | PRFUP20210127 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LONGITUDINAL BUFFER SPACE $=B$ |  |  |  |  |  |  |  |  |  |  |
| SPEED (MPH) | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| LENGTH (feet) | 155 | 200 | 250 | 305 | 360 | 425 |  |  |  |  |

## BUFFER VEHICLE ROLL AHEAD DISTANCE $=$ R

## transportable atienuator <br> 

PROTECTIVE VEHICLE
MAY BE A WORR VEHICLE STRATEGICALLY LOCATED TO SHELD
THE WORK AREA.
30 FEET MIN. 30 FEET MIN.
TO
SOT MAX 00 FOOT MAX.

O SPECIIIED
DISTANCE
DISTANCE
REQURED
-Traffic control devices shall be 28 inch retro-reflective cones.
-Taper length equals width of offset times speed limit squared divided by 60 . Sign spacing shall be 100 feet when speed limit is 30 mph or less. -Sign spacing shall be 350 feet when speed limit is greater than 30 mph . Distance between cones equals speed limit in unit-feet. -Travel lane width must be a minimum of $I I$ feet at all times.
-All flaggers and spotters shall remain in radio contact at all times.

Call Jason Little, City Little, City
at 253-244-0387 prior to starting any work.
 IELD LOCATE INADVANCE


ELD LOCATE IN ADVANGE

> NOTTES: 1. PROTECTIVE VEHICLE RECOMMENDED - MAY BE A WORK VEHICLE 2. RECOMMEND EXTENDING DEVICE TAPER (L3) ACROSS SHOULDER 3. SEE SPECIAL PROVISIONS FOR WORK HOUR RESTRICTIONS.
4. FOR POSTED SPEED LIMITS OF 30 MPH OR LESS, USE SIGN W1-3
IN LEU OF SIGN W1-4.
5. ALL SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.

PCMS PORTABLE CHANGEABLE MESSAGE SIGN
NOT TO SCALE

| ORARY SIGN LOCATION (5' MOUNTING HEIGHT) NOT TO SCALE |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FILE NAME S:IDesign R P\& SI4-Standardsid2-Plan Sheet Library110-Work zone plans (WZ)\|TC-1-211TC-101TC-10.dgn |  |  |  |  |  |  |  |  |  | Washington State Department of Transportation |  |  |
| TIME DATE | 8:38:08 AM 10/8/2010 | \| |  |  |  | FED.AID PROJ.NO. |  |  |  |  |  | TC10 |
| PLOTTEDBY | Cyforal |  |  |  | 10 WASH |  |  |  |  |  |  |  |
| DESIGNED BY ENTERED BY |  |  |  |  |  |  |  |  |  |  |  | suter |
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| PRoJ. ENGR REGIONAL ADM. |  | REVISION | DATE | BY |  |  | $\mathrm{x}^{\text {DaxE }}$ |  | AE |  | TRAFFIC CONTROL PLAN | shers |

## APPROVED



## TRANSPORTABLE ATTENUATOR <br> MNIMUM HOST VEHICLE WEIGT 15.000 LBS. THE MAXMUMM WEIGHT SHALL BE IN ACCORDANCE WTH THE EANUFACTURERS RECOMMENDATON.

| PROTECTIVE VEHICLE <br> MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD <br> THE WORK AREA. | NO SPECIIED |
| :--- | :---: |

Work shall immediately cease in the work zone
for a pedestrian spotter, available at all times, to escort pedestrians
around the work area.


## BUFFER DATA

| LONGITUDINAL BUFFER SPACE = B |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPEED (MPH) | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 |
| LENGTH (feet) | 155 | 200 | 250 | 305 | 360 | 425 | - | - | - | - |

# City of Puyallup Minimum Requirements for Night Traffic Control TE-007 

## Location:

Contractor:

Date:
Time:

- Road must be opened by 5:00 AM
- Contractor shall call Comm Center to advise at (253) 841-5431 prior to work start
- Work site shall have adequate lighting. Tapers shall be done with reflective drums with flashing lights at the start and end of each line of channeling drums and steady burning lights to outline open roadway
- Personnel in work zone are required to wear clothing with retroreflective material that meets the criteria established by American National Standard (ANSI) 107-1999, MUTCD Section 6
- Flashing Arrows are required on roads such as River Road, Valley Ave and E. Main.
- Approved Traffic Control Plans shall be followed as a minimum at all times
- If field conditions require additional lights, cones, or signage, the Contractor shall improve the Traffic Control Plan as needed
- If approved Traffic Control Plans necessitate the use of police officer assistance, Puyallup Police shall be utilized. Contact Tame Ferrin at 253-841-5436 or via email at Tame@puyallupwa.gov to coordinate. Twenty-four hours advanced notice is required for coordination/scheduling purposes.

Contractor Signature:
Date: $\qquad$

