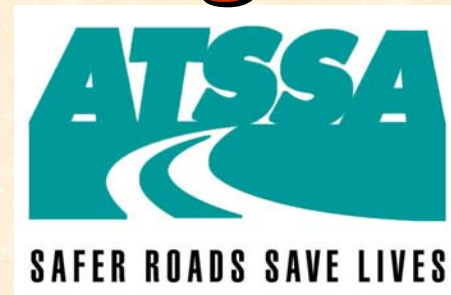


# ***Welcome!!***

---



## ***Traffic Control Technician Training Course***



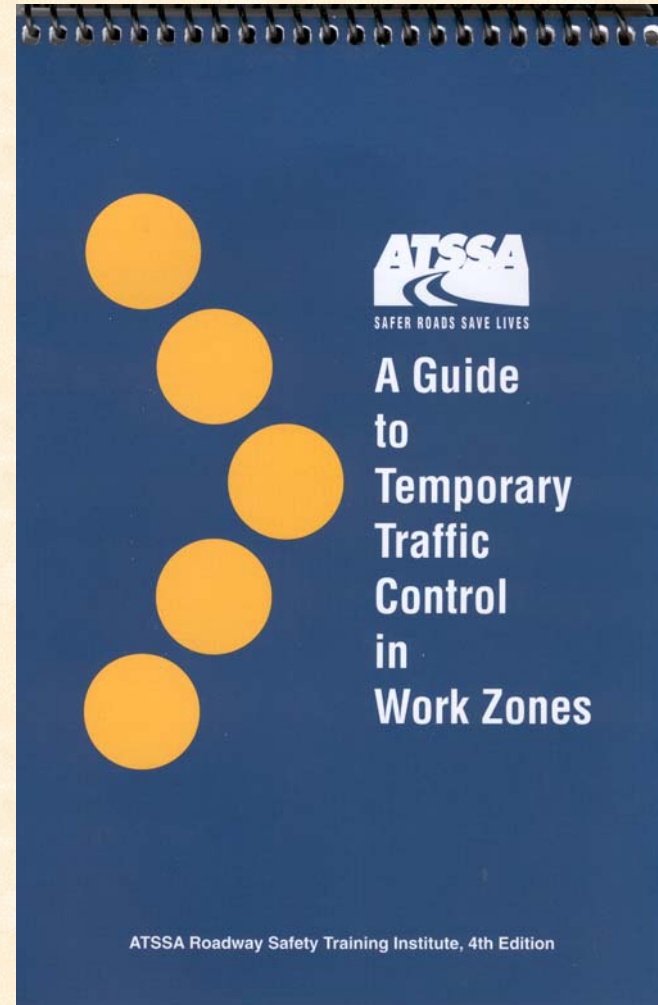
# *Course Objectives*

---

- ◆ After completing this course you should be able to:
  - ◆ **Apply** workable concepts, techniques and practices in the installation and maintenance of traffic control devices
  - ◆ Make the temporary traffic control areas **safer** for workers, motorists and pedestrians

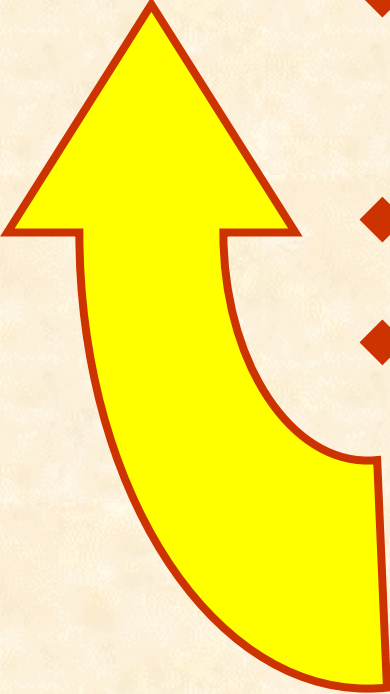
# ***Course Materials***

- ◆ ATSSA's ***"Guide to Temporary Traffic Control in Work Zones"***
- ◆ Pencil
- ◆ Tent name sign





# *Guide Contents*

- 
- ◆ Table of Contents (2-3)
  - ◆ Introduction (4)
  - ◆ Course Content
  - ◆ **Presentation slides will indicate *Guide* page number**

**Useful  
during  
the  
test!!**

# ***By passing this course..***

---



- ◆ You will meet one of the requirements for TCT certification
  - ◆ **4-year certification**
- ◆ You will have met one of the requirements to become a **Traffic Control Supervisor (TCS)**

# ***Course Schedule***

## **MORNING**

**Introduction to TTC**

**TTC Standards and Guidelines**

**Fundamental Principles of TTC**

**Component Parts of a TTC Zone**

**Traffic Control Devices**



# ***Traffic Control Devices to Discuss***

Signs

Arrow Panels

Channelizing Devices

Warning Lights

Pavement Markings

Additional  
Devices  
in the  
TCS  
course!

# ***Course Schedule (cont.)***

**LUNCH**

**AFTERNOON**

**Tapers**

**Installation and Removal  
Procedures**

**Flagging**

**Other Considerations**



# ***Course Schedule (cont.)***

## **CONCLUSION**

**Review Course Objectives**

**Course Evaluations**

**Exam**

**Adjourn no later than 5PM**

# *Exam*

- ◆ 40 True/False questions @ 2.5 points each = 100 pts
- ◆ Open book, open notes
- ◆ One hour time limit
- ◆ Passing score: **80%**
- ◆ Make-up test available

EXAM

# ***Traffic Control Technician***



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn



# *Module Objectives*

---

- ◆ Define Temporary Traffic Control (TTC)
- ◆ Quantify the traffic safety problem in the USA

# ***Why is Temporary Traffic Control Important?***





# *Traffic Control Technician*



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn



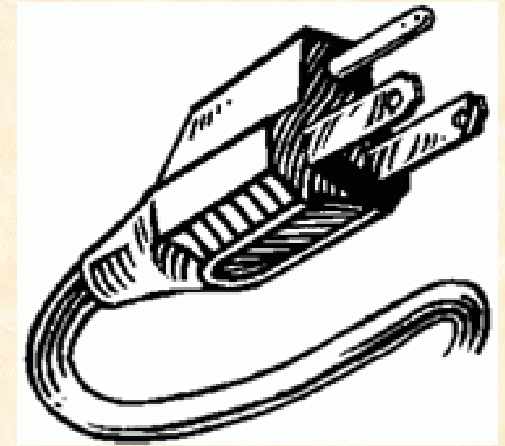
# *Module Objectives*

---

- ◆ Explain the importance of standards
- ◆ Discuss Federal and State standards and their relationship
- ◆ Define levels of compliance

# *Uniformity through standards promotes:*

- ◆ Recognition and understanding
- ◆ Consistent interpretation
- ◆ More rapid driver response
- ◆ Motorist respect
- ◆ Reduced traffic control cost



***Uniform treatment leads to uniform response!***

***Is This  
Standard  
or  
Uniform?***





# *Traffic Control Technician*



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn

# *Module Objectives*

---

- ◆ List the seven fundamental principles of TTC
- ◆ Describe their application

# *Proper Coverings?*





# *Traffic Control Technician*



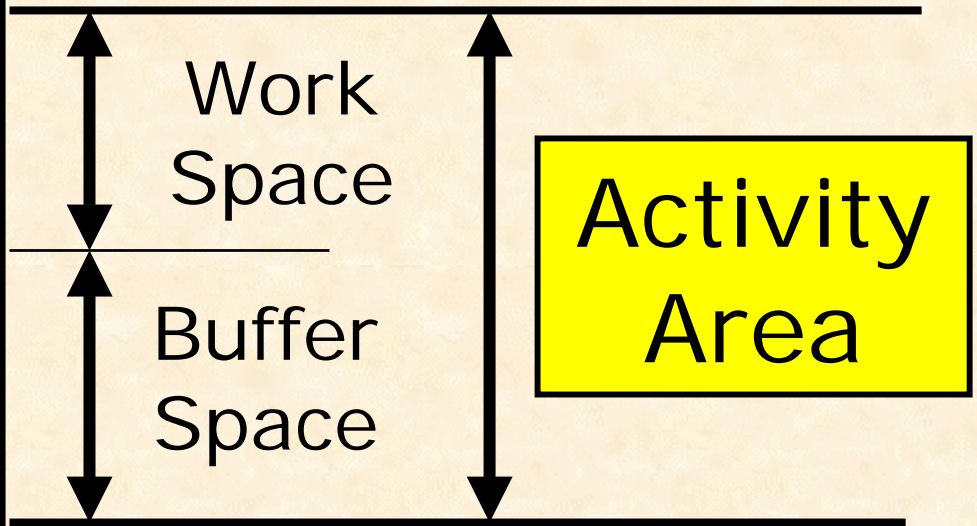
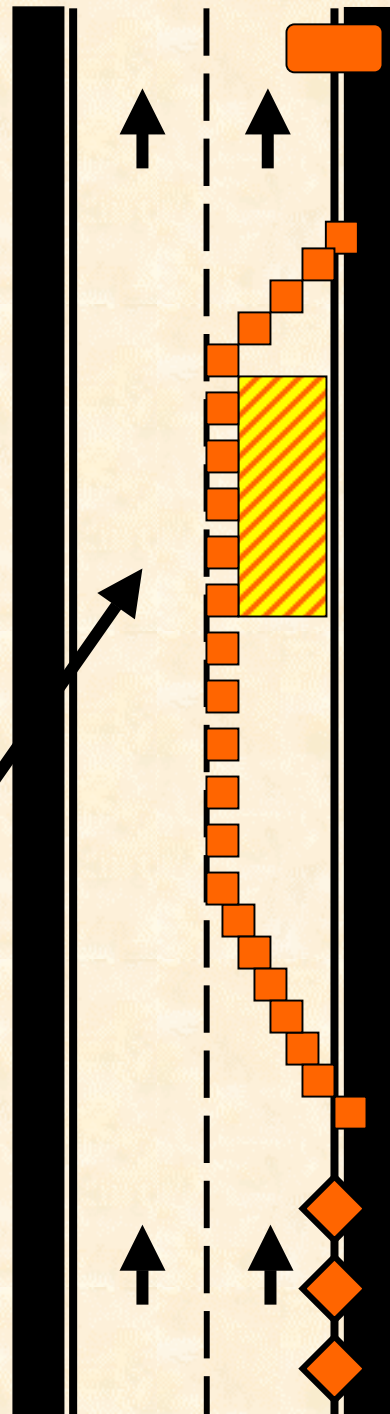
Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
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Devices	Exam
Tapers	Adjourn

# *Module Objectives*

---

- ◆ Define temporary traffic control zone
- ◆ Describe its five component parts
- ◆ Describe the requirements of each

Traffic  
Space





# *Stopping-Sight Distance as a Function of Speed*

Speed (mph)	L. Buffer (ft.)	Speed (mph)	L. Buffer (ft.)
20	115	50	425
25	155	55	495
30	200	60	570
35	250	65	645
40	305	70	730
45	360	75	820

*(Use for Longitudinal Buffer Spaces)*

# *Traffic Control Technician*



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn

# *Module Objectives*

---

- ◆ Define traffic control devices and their requirements
- ◆ Discuss signs, channelizing devices, arrow panels and pavement markings and their requirements



# ***Sign (Background) Color Code***

**Yellow: General Warning**

**Red: Stop or Prohibition**

**Blue: Motorist Services Guidance**

**Green: Direction**

**Brown: Recreational/Cultural Interest**

**Orange: Temporary**

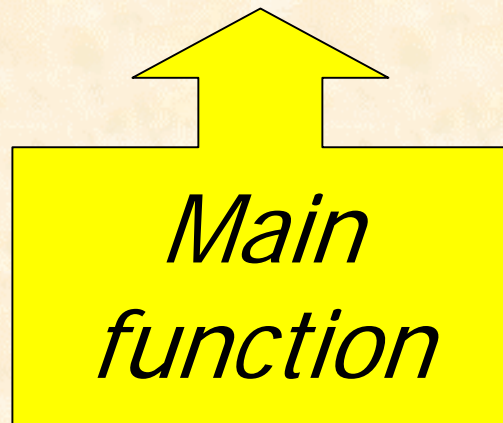
**Black/White: Regulatory**

**Fluorescent Yellow-Green: Ped/Bike**

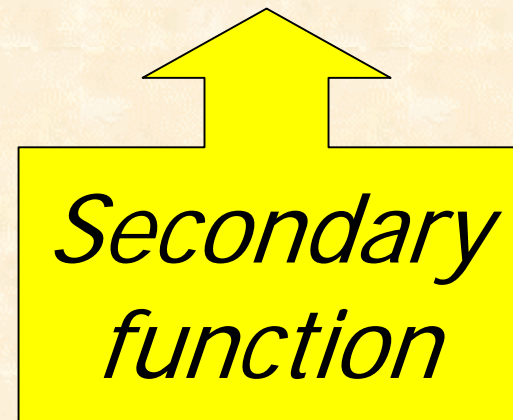
**Fluorescent Pink: Incident Management**

# *Functions of Channelizing Devices*

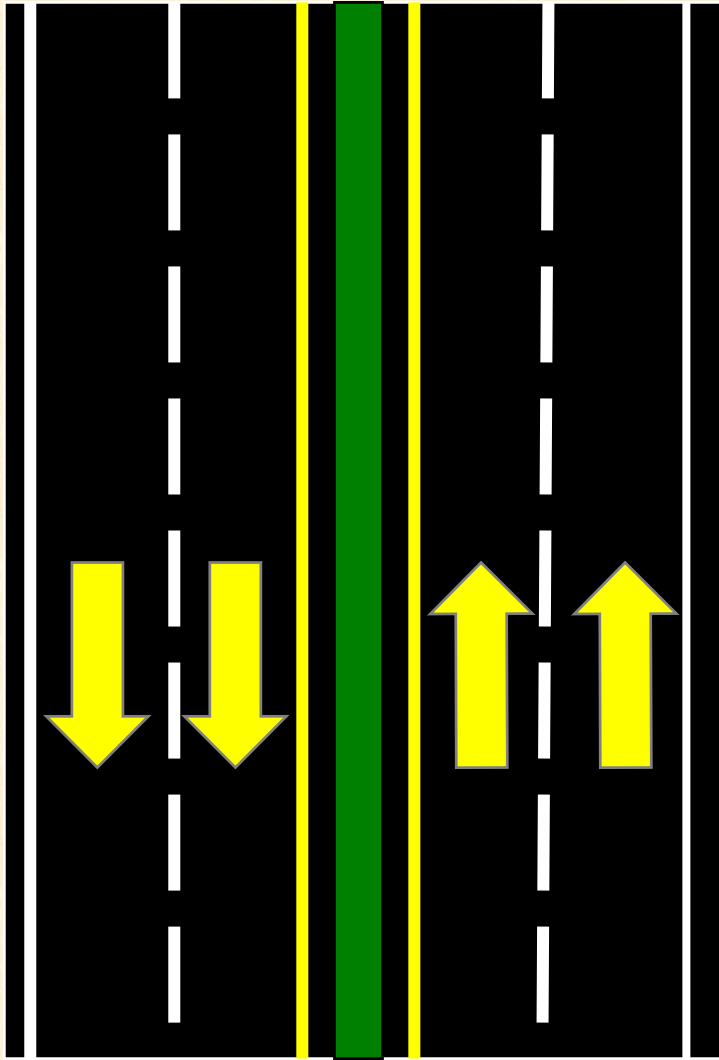
## CHANNELIZATION



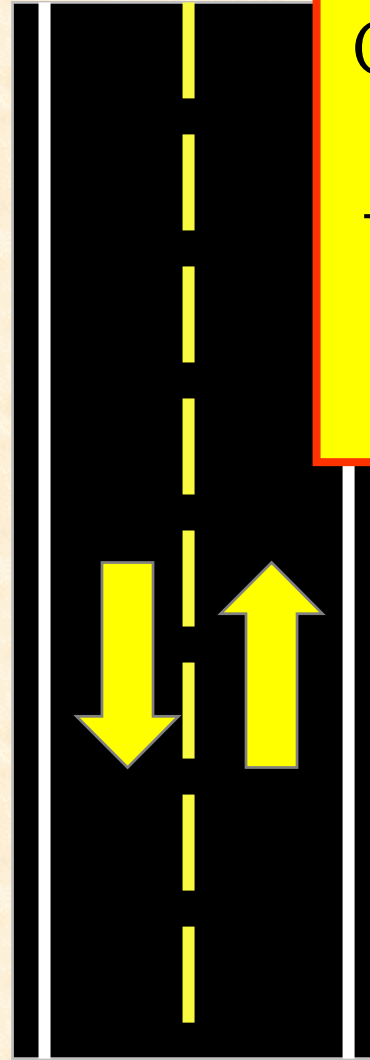
## PROTECTION



# ***Pavement Marking Colors***



Multilane divided



Two-lane road

Colors also  
apply to  
temporary  
pavement  
markings



# *Traffic Control Technician*



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn

# *Module Objectives*

---

- ◆ Define tapers
- ◆ Discuss the various types of tapers
- ◆ Discuss their lengths and how to determine them
- ◆ Review device spacing

# *The Letter "L"*

- ◆ Used to indicate the minimum length of a **MERGING** taper
- ◆ Other taper lengths are a fraction of L





**23**

SHOULDER  
TAPER

EXAMPLE:

S=55 mph

W= 12 ft

Shoulder taper:

= (1/3 L)

= 660/3

= 220' MIN.

MPH	9'	10'	11'	12'
25	95	105	115	125
30	135	150	165	180
35	185	205	225	245
40	240	270	295	330
45	405	450	495	540
50	450	500	550	600
55	540	600	660	660
60	540	600	660	720
65	585	650	715	780
70	630	700	770	840
75	675	750	825	900
80	720	800	880	960

***What about  
this one?***



# *Traffic Control Technician*



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn



# *Module Objectives*

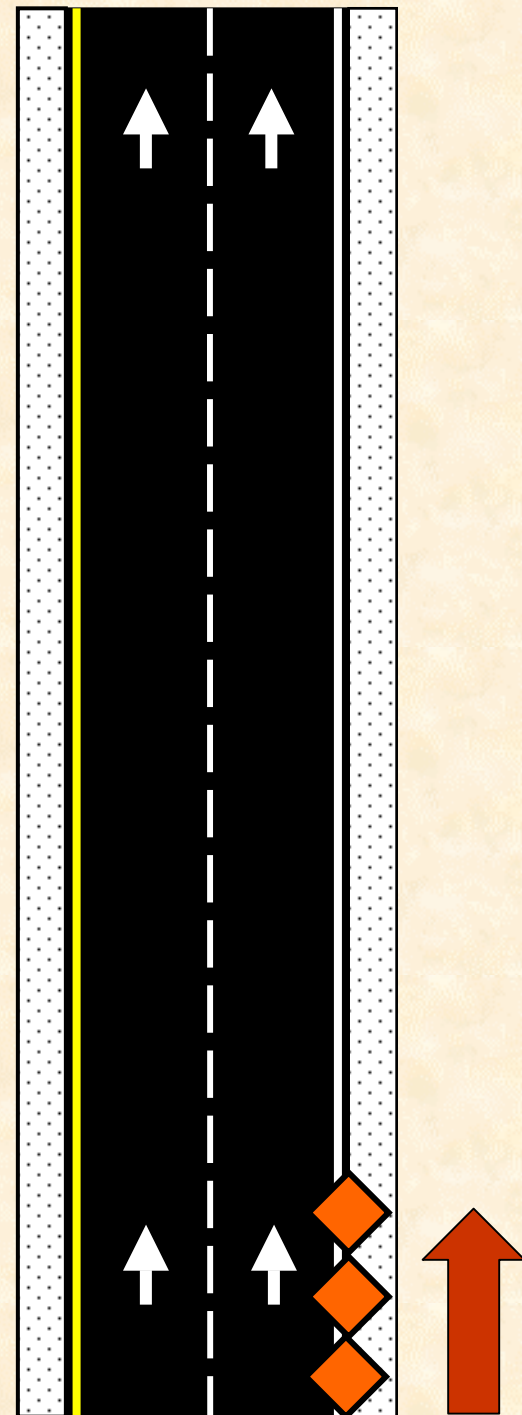
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- ◆ Discuss the importance of proper installation and removal procedures
- ◆ Discuss the sequence to install and remove devices

# Step 1

## Install **Advance Warning Signs**

to warn the motorist of  
activity on or near the road



# *Traffic Control Technician*



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn



# ***Module Objectives***

---

- ◆ Discuss flagging techniques and signals
- ◆ List flagging equipment
- ◆ Discuss proper flagger location

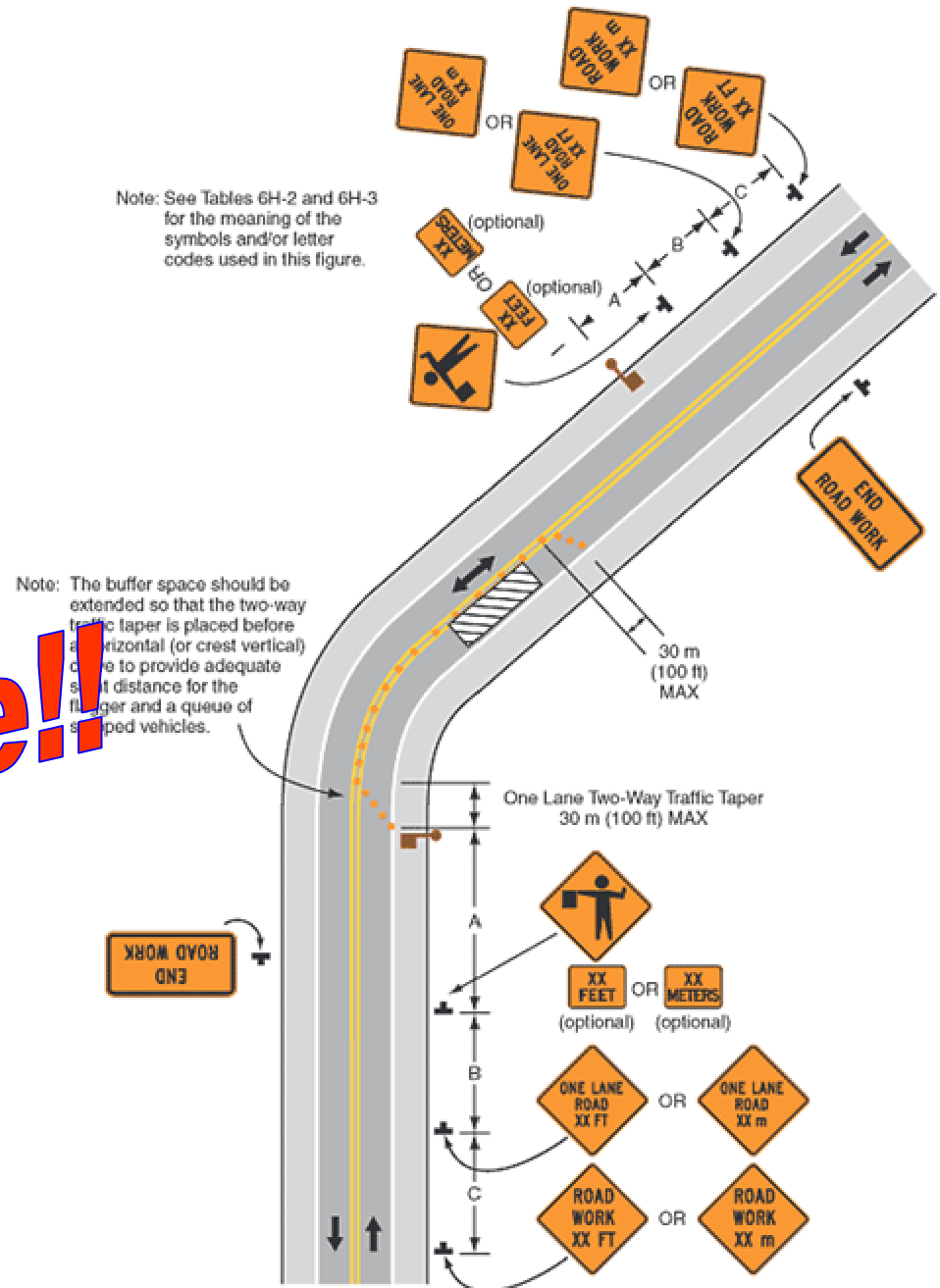
# 40

# TA-10

## Flagging Operation!

## Special case!!

Figure 6H-10. Lane Closure on Two-Lane Road Using Flaggers (TA-10)



# *Traffic Control Technician*



Introduction	Installation and removal
Standards	Flagging
Fundamental Principles	Other Considerations
Components	Closing
Devices	Exam
Tapers	Adjourn



# *Module Objectives*

---

- ◆ Discuss “other” considerations that may improve safety
- ◆ Discuss potential adjustments to a traffic control plan
- ◆ Discuss high-visibility safety apparel requirements

# *Other Considerations*

- ◆ “Non-typical” conditions that may require **adjustments** to the TTC zone





# *Class 3 Apparel*

- ◆ Recommended for nighttime flagging

ANSI 107-2004  
requires sleeves  
for Class 3 apparel



*2003 MUTCD published  
BEFORE ANSI 107-2004*



# *Traffic Control Technician*



Introduction	Installation and removal
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Tapers	Adjourn

# *Module Objectives*

---

- ◆ Discuss the “bottom line”
- ◆ Review the “Parking Lot”
- ◆ Review course objectives
- ◆ Complete course evaluation form
- ◆ Take exam
- ◆ Adjourn!

***We've come a long way!!***



***...but we have a long way to go!!***