

# **WORK ZONE TRAFFIC CONTROL GUIDELINES**

*Effective: December 1, 1999*

*Updated: September 28, 2005*

## **MESQUITE**

T E X A S

Real. Texas. Service.

### **TRAFFIC ENGINEERING DIVISION**



ORDINANCE NO. 3411

AN ORDINANCE OF THE CITY OF MESQUITE, TEXAS, AMENDING CHAPTER 9, SECTION 9-86 OF THE CODE OF THE CITY OF MESQUITE BY DELETING THE CURRENT SECTION 9-86 IN ITS ENTIRETY AND INSERTING A NEW SECTION 9-86 REFERRING TO THE ADOPTION OF A TRAFFIC CONTROL MANUAL; PROVIDING A REPEALER CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY NOT TO EXCEED FIVE HUNDRED (\$500.00) DOLLARS FOR EACH OFFENSE; AND DECLARING AN EMERGENCY.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESQUITE, TEXAS:

SECTION 1. That Chapter 9 of the Code of the City of Mesquite, Texas, is hereby amended by deleting Section 9-86 in its entirety and inserting a new Section 9-86 to read as follows, in all other respects said Code and Chapter to remain in full force and effect.

**ARTICLE III. TRAFFIC CONTROL DEVICES**

**Sec. 9-86. Adoption of traffic control manual; effect of adoption; penalty.**

(a) The 1980 Texas Manual on Uniform Traffic Control Devices is hereby adopted by the City as the official traffic control manual for the City together with any revisions and amendments thereto, including City-specified amendments contained in Work Zone Traffic Control Guidelines, December 1999, except where same shall be in conflict with the state law. Provided, however, that any traffic control device in use or placed in use by the City shall remain an official traffic control device until such time as same shall be changed to conform with said 1980 Manual.

(b) All traffic control devices placed or installed in accordance with such manual shall be official traffic control devices of the City. Any person who shall disobey or disregard the instructions or requirements of any such traffic control device shall be guilty of a misdemeanor and upon conviction shall be subject to a fine as specified in Section 1-6 of this Code.

SECTION 2. That all ordinances or portions thereof in conflict with the provisions of this ordinance, to the extent of such conflict, are hereby repealed. To the extent that such ordinances or portions thereof are not in conflict herewith, the same shall remain in full force and effect.

SECTION 3. That should any word, sentence, clause, paragraph or provision of this ordinance be held to be invalid or unconstitutional, the validity of the remaining provisions of this ordinance shall not be affected and shall remain in full force and effect.

SECTION 4. That any person, firm or corporation violating any of the provisions or terms of this ordinance shall be deemed to be guilty of a Class C Misdemeanor and upon conviction in the Municipal Court shall be punished by a fine not to exceed five hundred (\$500.00) dollars for each offense.

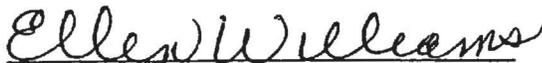
SECTION 5. That the present ordinances of the City of Mesquite are inadequate when referring to the adoption of a traffic control manual; creates an urgency and an emergency for the preservation of the public health, safety, and welfare and requires that this ordinance shall take effect immediately from and after its passage and publication of said ordinance, as the law in such cases provides.

DULY PASSED AND APPROVED by the City Council of the City of Mesquite, Texas, on the 16th day of January, 2001.

  
Mike Anderson  
Mayor

ATTEST:

APPROVED:

  
Ellen Williams  
City Secretary

  
B. J. Smith  
City Attorney

## FORWARD

These Work Zone Traffic Control Guidelines have been prepared based upon Part 6 of the 2003 Texas Manual on Uniform Traffic Control Devices (TMUTCD). The guidelines contained in this document are intended to set forth the minimum amount of signage, delineation, and markings necessary to keep the motoring public moving safely through temporary traffic control zone areas. These guidelines were prepared to cover the typical temporary traffic control zones that occur on City of Mesquite streets. They are not intended, nor do they, cover every conceivable scenario or situation that could arise in the field, such as when the temporary traffic control zone crosses driveways and/or median openings, or the handling of pedestrian traffic around a work area. For these scenarios, the guidelines contained in this document shall be modified, in compliance with the TMUTCD, after consultation with the appropriate City of Mesquite public works construction inspector.

In addition to these guidelines, the users of this document shall refer to Part 6 of the TMUTCD for reference and information regarding sign size (p. 6F-2), sign sheeting material (pp. 6F-1 through 6F-3), illumination requirements (pp. 6F-53 through 6F-56), and proper flagging equipment and procedures (pp. 6E-1 through 6E-6). These guidelines do not relieve anyone who works within City of Mesquite rights-of-way from following proper safety procedures not specifically spelled out in this document, such as the wearing high conspicuity vests any time they are in a temporary traffic control zone within City rights-of-way.

All temporary traffic control zones shall have at a minimum the appropriate advance warning signs installed before starting work within City of Mesquite rights-of-way. The definitions for the duration of work are located in Part 6 of the TMUTCD (pp. 6G-1 through 6G-4) and are summarized as follows:

- Long Term Stationary – work that occupies a location for more than three (3) days.
- Intermediate Term Stationary – work that occupies a location for more than one daylight period to up to three (3) days, or nighttime work in excess of one (1) hour.

- Short Term Stationary – daytime work that occupies a location from one (1) hour to twelve (12) hours.
- Short Duration – work that occupies a location for up to one (1) hour.
- Mobile – work that moves intermittently or continuously.

Questions on temporary traffic control can be directed to the City of Mesquite Traffic Engineering Division at (972) 216-6215.

## TABLE OF CONTENTS

Work Beyond the Shoulder.....	TC-1
Work Beyond the Back of Curb.....	TC-2
Work on Shoulders .....	TC-3
Shoulder Work with Minor Encroachment.....	TC-4
Work on Parkway with Minor Encroachment .....	TC-5
Road Closed with Off-site Detour .....	TC-6
Temporary Road Closure.....	TC-7
Work on Low Volume Roads .....	TC-8
Work in Center of Low-Volume Road .....	TC-9
Lane Closure on Minor Street.....	TC-10
Lane Closure on Low-Volume Two-Lane Road .....	TC-11
Lane Closure Near Side of Intersection .....	TC-12
Right Lane Closure Far Side of Intersection.....	TC-13
Left Lane Closure Far Side of Intersection.....	TC-14
Half Road Closure Far Side of Intersection.....	TC-15
Half Road Closure between Median Openings.....	TC-16
Interior Lane Closure on Multilane Street .....	TC-17
Lane Closure on 4-lane Divided Street.....	TC-18
Lane Closure on 6-lane Divided Street.....	TC-19
Double Lane Closure on 6-lane Divided Street .....	TC-20
APPENDIX	
TxDOT Standard Sheets .....	A-1

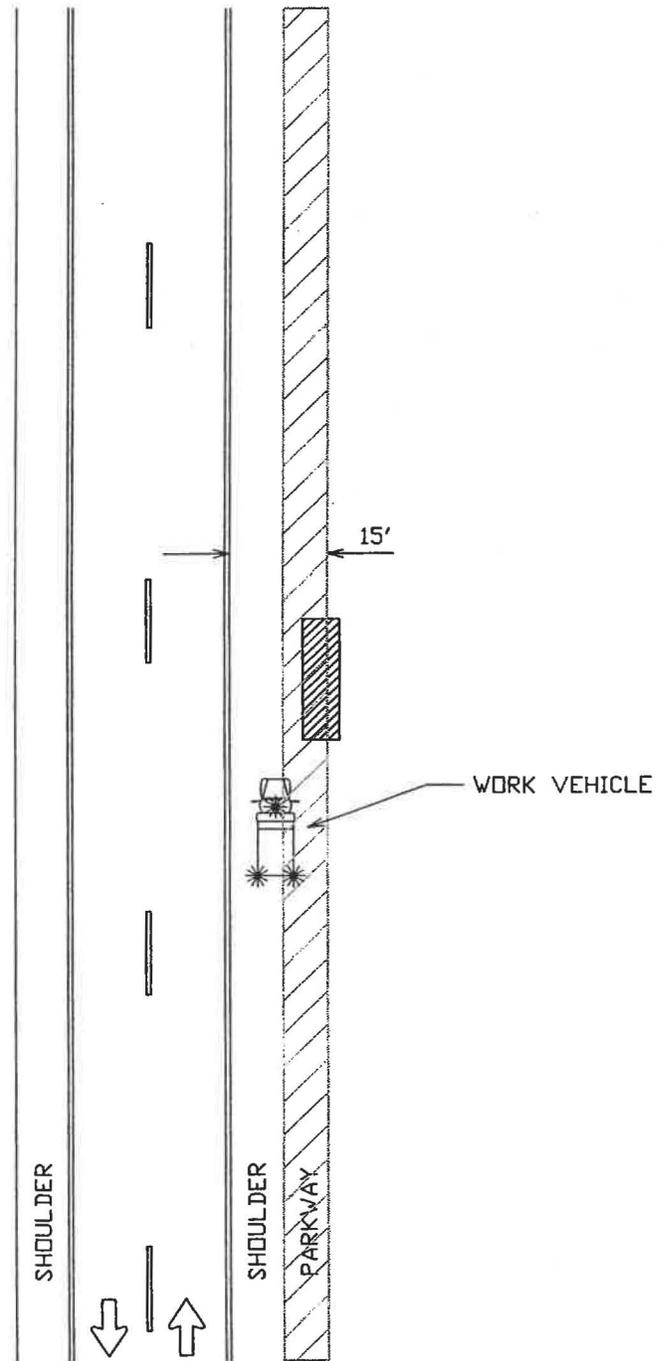
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**NOTES:**

1. DURING DAYLIGHT HOURS ONLY, FOR MOBILE, SHORT DURATION, OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY, A VEHICLE WITH ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS MAY BE USED IN LIEU OF WARNING SIGNS AND CHANNELIZING DEVICES FOR ALL WORK IN THE PARKWAY BEYOND THE SHOULDER ENCRDACHING INTO THE AREA BETWEEN THE SHOULDER EDGE AND A POINT 15- FEET FROM THE ROADWAY EDGE.

**LEGEND**

- Channelizing device
- ⇨ Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space
-  Work vehicle with activated rotating lights or strobe lights



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMHCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK BEYOND THE SHOULDER**

WORK OF LESS THAN ONE DAY DURATION

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

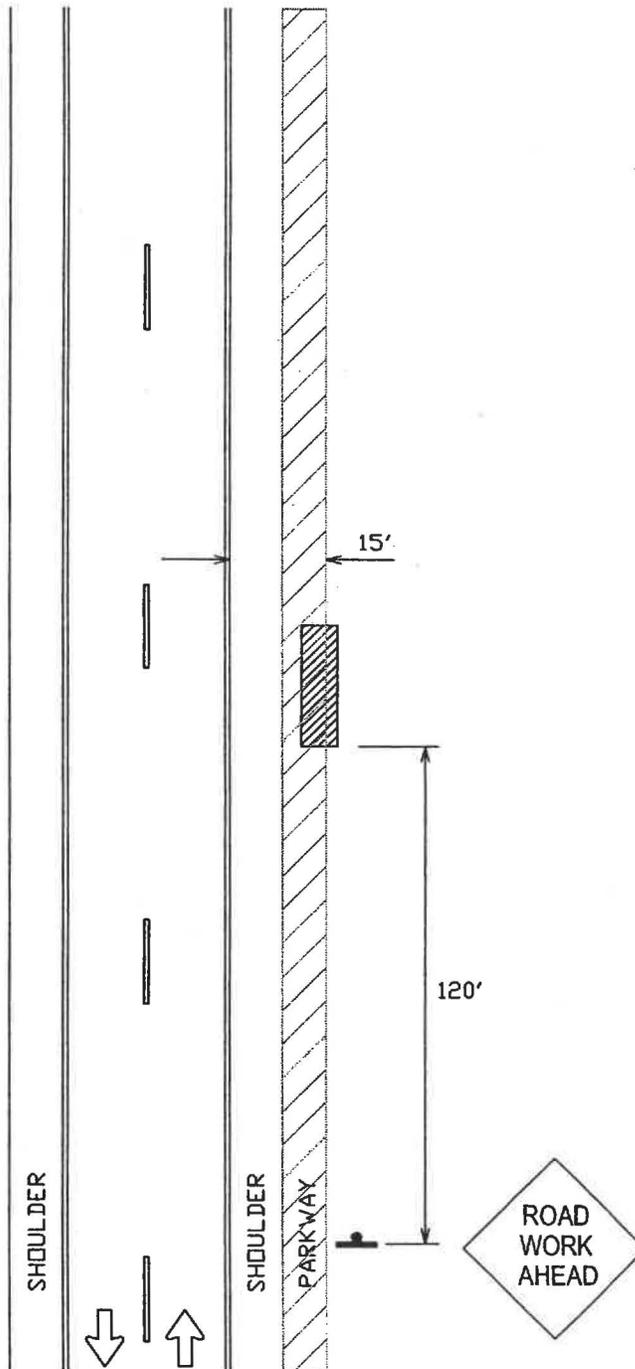
STD. DETAIL TC-1a

**NOTES:**

1. AN ADVANCE WARNING SIGN SHALL BE PROVIDED FOR ALL INTERMEDIATE AND LONG TERM WORK IN THE PARKWAY BEYOND THE SHOULDER ENCRDACHING INTO THE AREA BETWEEN THE SHOULDER EDGE AND A POINT 15-FEET FROM THE ROADWAY EDGE.
2. UNLESS WARNING IS PROVIDED BY A WORK VEHICLE WITH ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS, AN ADVANCE WARNING SIGN SHALL BE PROVIDED FOR ALL MOBILE, SHORT DURATION, OR SHORT TERM WORK IN THE PARKWAY BEYOND THE SHOULDER.

**LEGEND**

- Channelizing device
- ⇨ Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*

9-28-05

NOT TO SCALE

Source 2003 TMLHCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK BEYOND THE SHOULDER**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

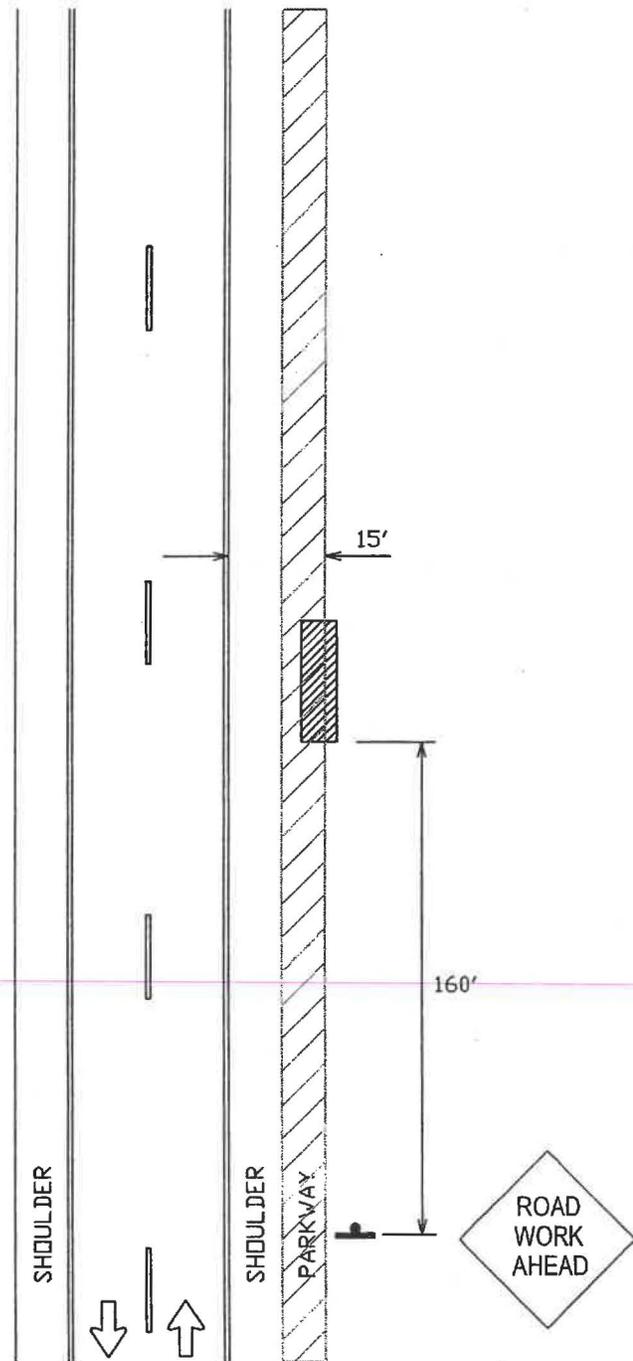
STD. DETAIL  
**TC-1b**  
(25 & 30 MPH)

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**LEGEND**

- Channellizing device
- ⇨ Direction of traffic
- ⊥ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*  
 9-28-05

NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
 WORK BEYOND THE SHOULDER

WORK ZONE TRAFFIC CONTROL GUIDELINES

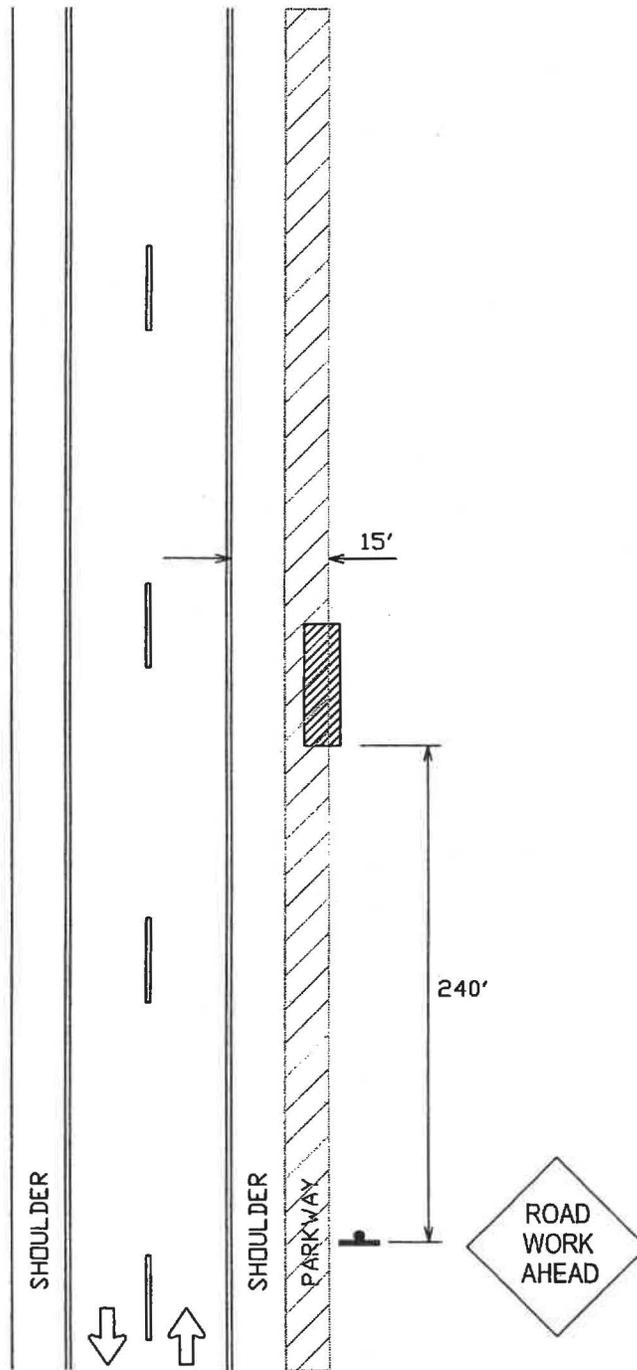
STD. DETAIL TC-1c (35 MPH)

**NOTES:**

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**LEGEND**

- Channelizing device
- Direction of traffic
- ⏏ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*  
 9-28-05

NOT TO SCALE

Source 2005 TMLHCD Part 6

CITY OF MESQUITE, TEXAS  
 WORK BEYOND THE SHOULDER

WORK ZONE TRAFFIC CONTROL GUIDELINES

STD. DETAIL  
 TC-1d  
 (40 MPH)

**NOTES:**

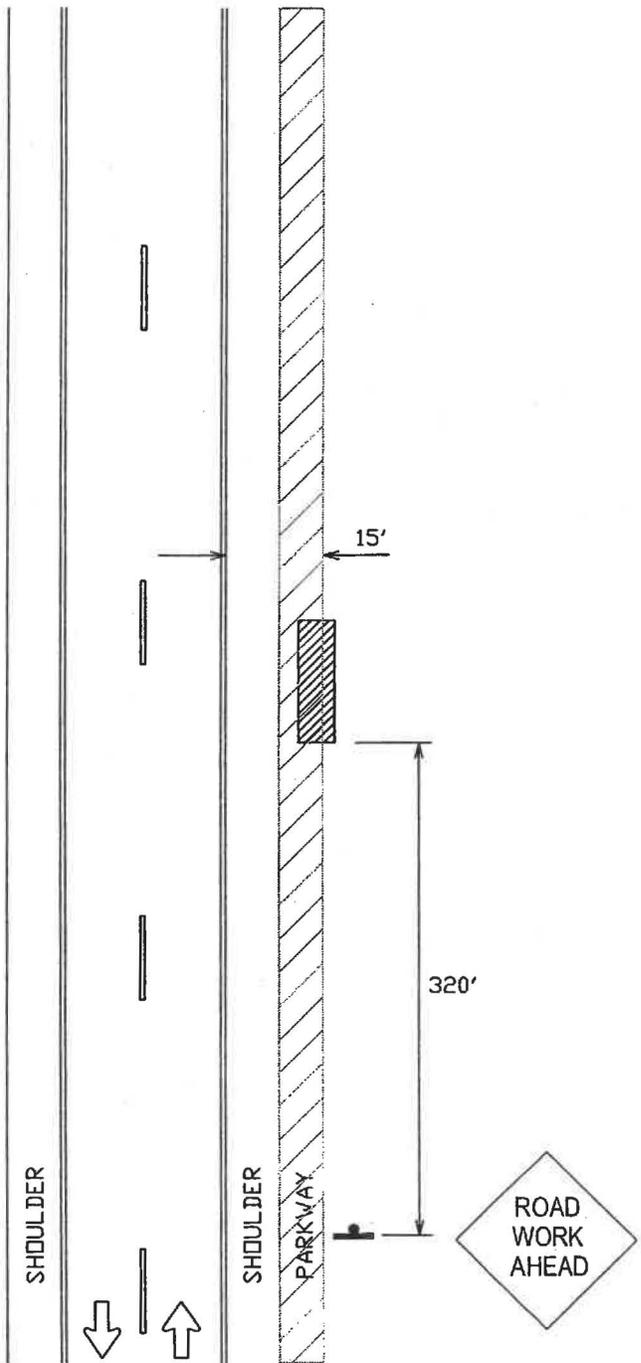
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**LEGEND**

- Channelizing device
- ➔ Direction of traffic
- ⏏ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05



NOT TO SCALE

Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK BEYOND THE SHOULDER**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

STD. DETAIL  
**TC-1e**  
(45 MPH)

**Planning a work zone?**

Take a few minutes and plan how you and your workers are going to get out of the way when a car or truck comes through your barricades.

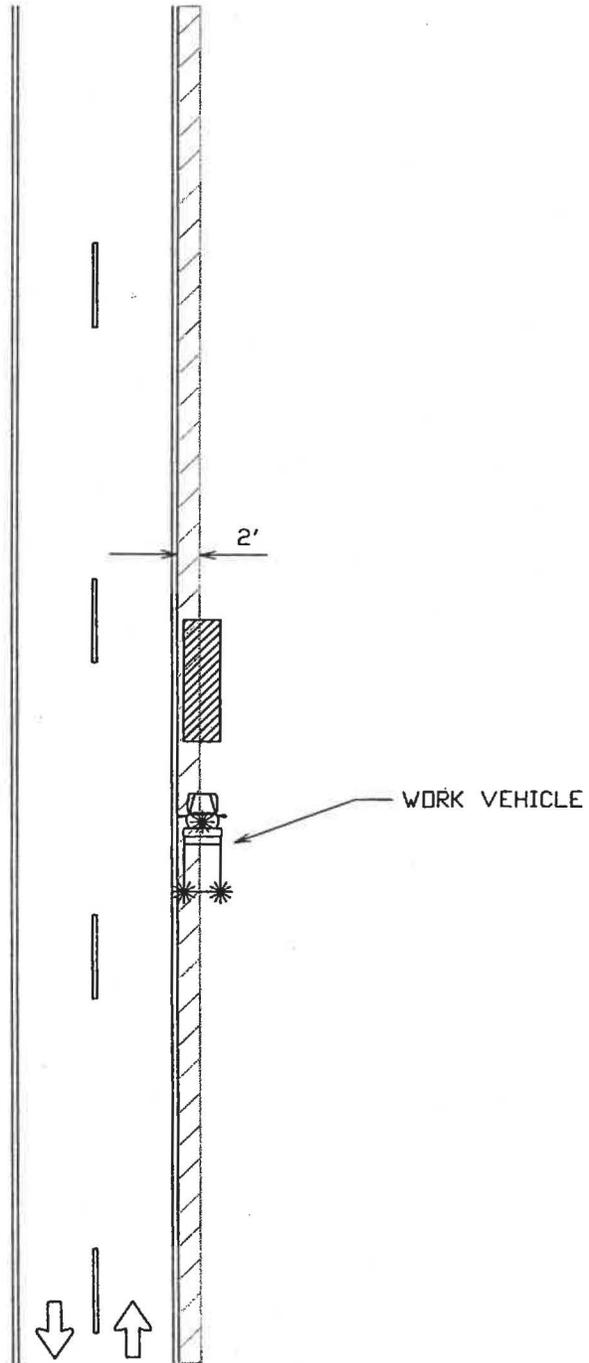
Which way out is the safest?

**NOTES:**

1. DURING DAYLIGHT HOURS ONLY, FOR MOBILE, SHORT DURATION, OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY, A VEHICLE WITH ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS MAY BE USED IN LIEU OF WARNING SIGNS AND CHANNELIZING DEVICES FOR ALL WORK IN THE PARKWAY ENCRDACHING INTO THE AREA BETWEEN THE BACK OF CURB AND A POINT TWO-FOET BACK OF THE CURB.

**LEGEND**

- Channelizing device
- ⇨ Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space
-  Work vehicle with activated rotating lights or strobe lights



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUCD Part 6

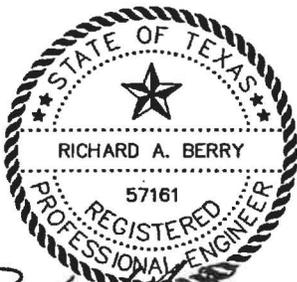
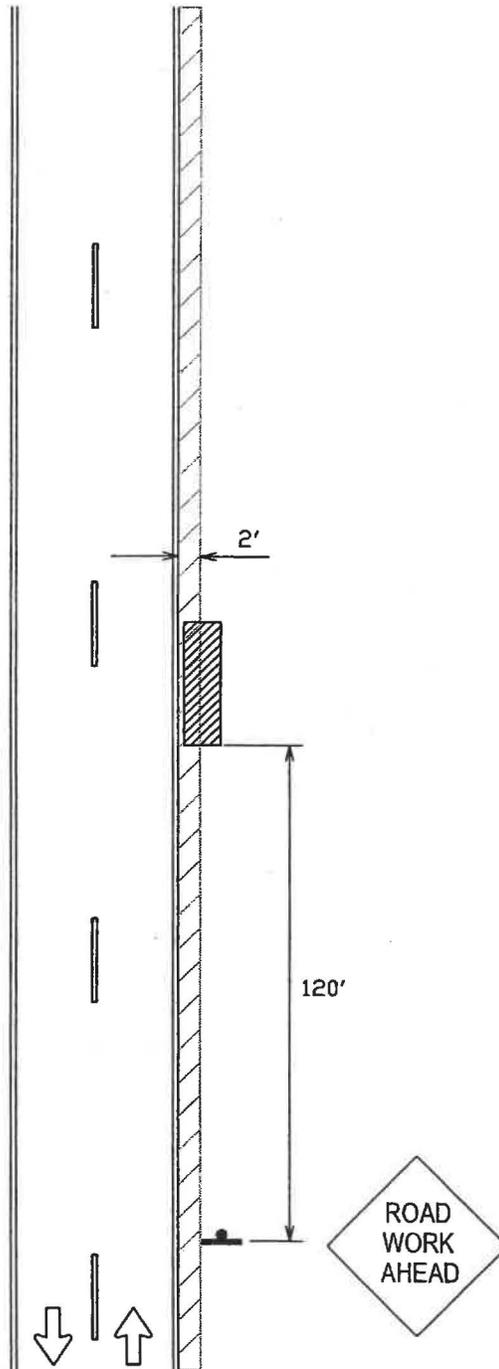
<p>CITY OF MESQUITE, TEXAS <b>WORK BEYOND THE BACK OF CURB</b> WORK OF LESS THAN ONE DAY DURATION</p>	<p><b>WORK ZONE TRAFFIC CONTROL GUIDELINES</b></p>	<p>STD. DETAIL TC-2a</p>
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NOTES:

1. AN ADVANCE WARNING SIGN SHALL BE PROVIDED FOR ALL INTERMEDIATE AND LONG TERM WORK IN THE PARKWAY ENCRDACHING INTO THE AREA BETWEEN THE BACK OF CURB AND A POINT TWO-FOOT BACK OF THE CURB.
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LEGEND

- Channelizing device
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- ⬇ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
WORK BEYOND THE  
BACK OF CURB

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

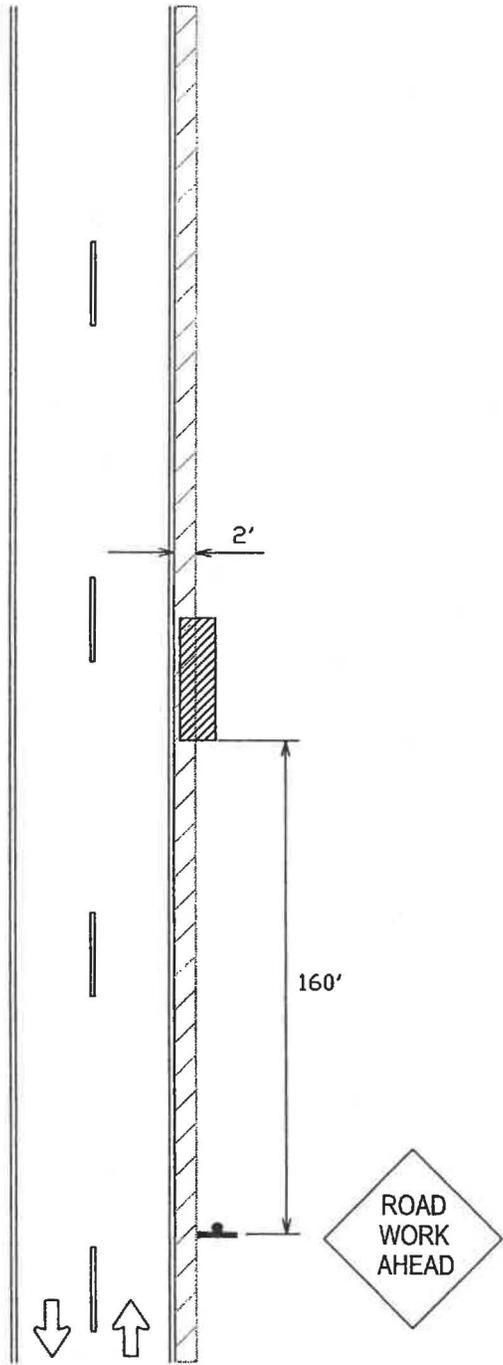
STD.  
DETAIL  
TC-2b  
(25 & 30 MPH)

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**LEGEND**

- Channelizing device
- ⇒ Direction of traffic
- ⊣ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*  
 9-28-05

NOT TO SCALE

Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
 WORK BEYOND THE  
 BACK OF CURB

WORK ZONE TRAFFIC  
 CONTROL GUIDELINES

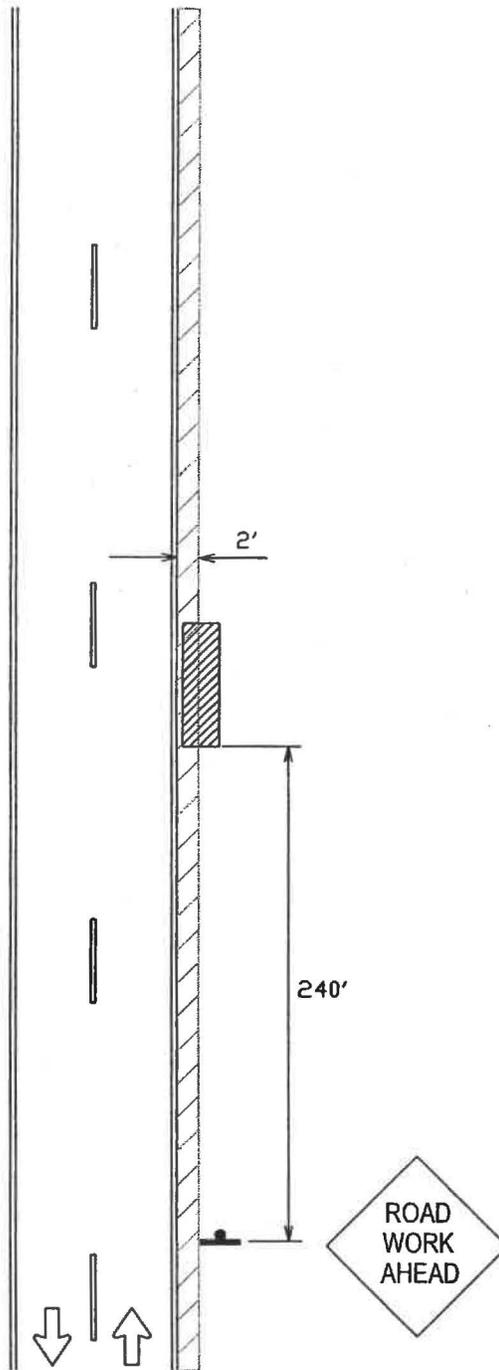
STD.  
 DETAIL  
 TC-2c  
 (35 MPH)

**NOTES:**

1. AN ADVANCE WARNING SIGN SHALL BE PROVIDED FOR ALL INTERMEDIATE AND LONG TERM WORK IN THE PARKWAY ENCRDACHING INTO THE AREA BETWEEN THE BACK OF CURB AND A POINT TWO-FOOT BACK OF THE CURB.
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**LEGEND**

- Channelizing device
- Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
WORK BEYOND THE  
BACK OF CURB

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

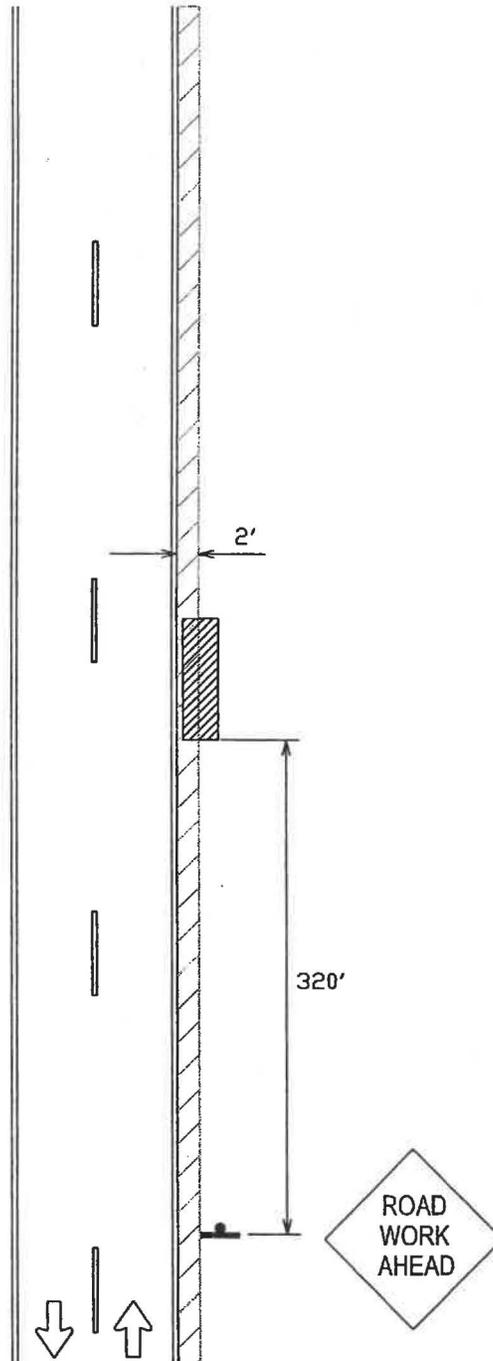
STD.  
DETAIL  
TC-2d  
(40 MPH)

**NOTES:**

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**LEGEND**

- Channelizing device
- ➔ Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space



*Richard A. Berry*

9-28-05

NOT TO SCALE

Source 2003 TMLICD Part 6

CITY OF MESQUITE, TEXAS  
**WORK BEYOND THE  
 BACK OF CURB**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

STD.  
 DETAIL  
**TC-2e**  
 (45 MPH)

Pulling a trailer to your work zone today?

Is it the right trailer for the job? Does it have the proper load rating? How about length?

Did you do a walk around inspection of it before hooking up?

Have you tested the lights? How about the Stop and turn indications? Are the tires in good condition and properly inflated? Do you know?

Is your load properly secured with ratchet straps or chain binders? Can it get loose and come off of the trailer?

You are using the safety chains, right? Did you remember to cross them in an "X" pattern under the trailer hitch?

Remember to make sure that the trailer hitch is really hitched! You don't want to be passed by your trailer while you're going down the road!

Remember that your trailer is NOT a passenger vehicle. Do not let anyone ride on your trailer for any reason!

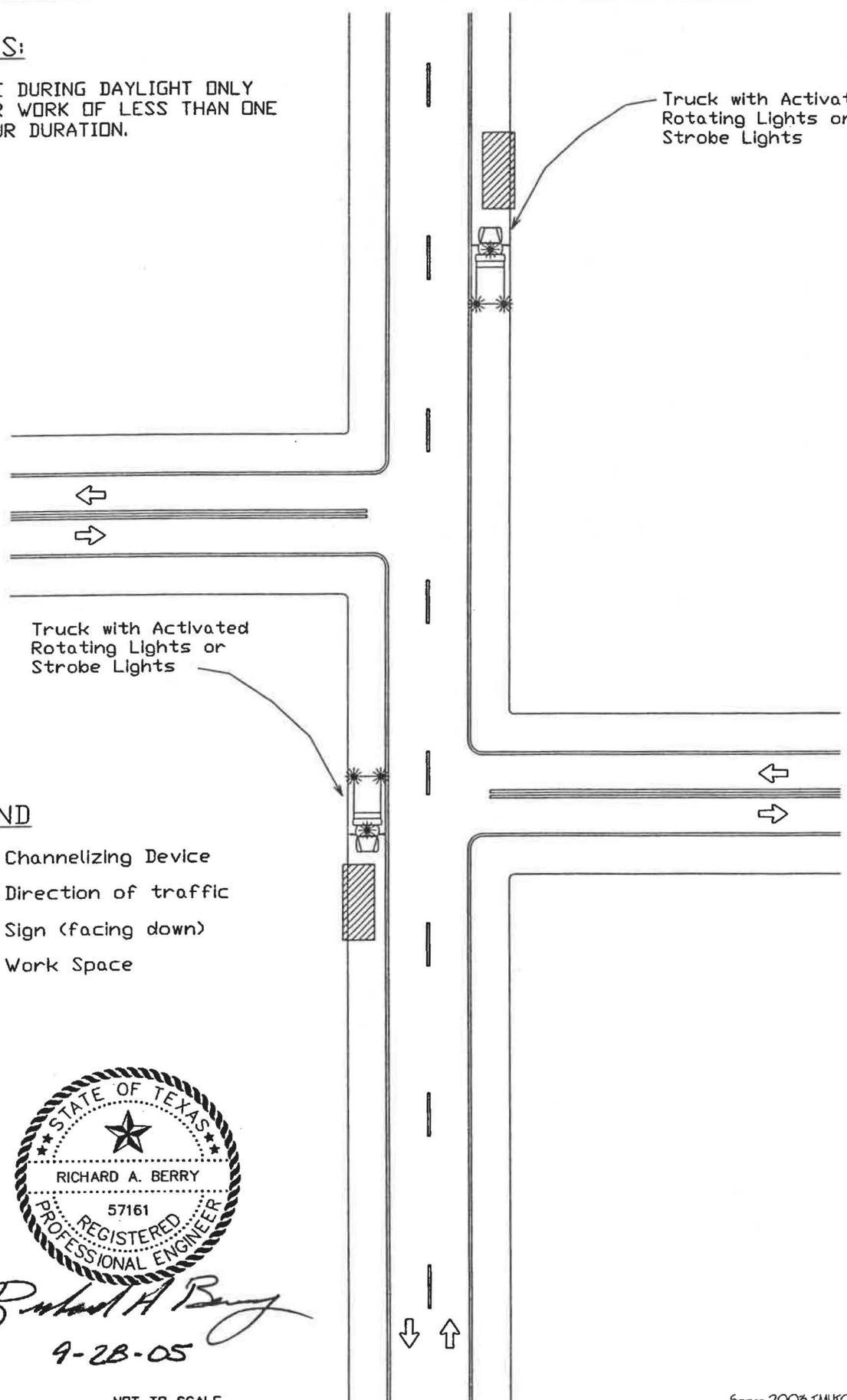
CITY OF MESQUITE, TEXAS

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BEEN LEFT BLANK!**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**NOTES:**

- 1. USE DURING DAYLIGHT ONLY FOR WORK OF LESS THAN ONE HOUR DURATION.



Truck with Activated Rotating Lights or Strobe Lights

Truck with Activated Rotating Lights or Strobe Lights

**LEGEND**

- Channelizing Device
- ➔ Direction of traffic
- ⏏ Sign (facing down)
- ▨ Work Space



*Richard A. Berry*  
9-28-05

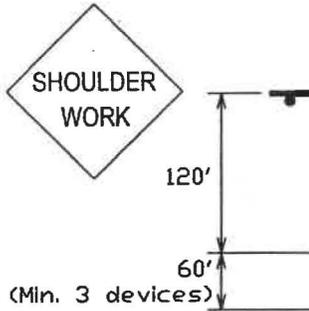
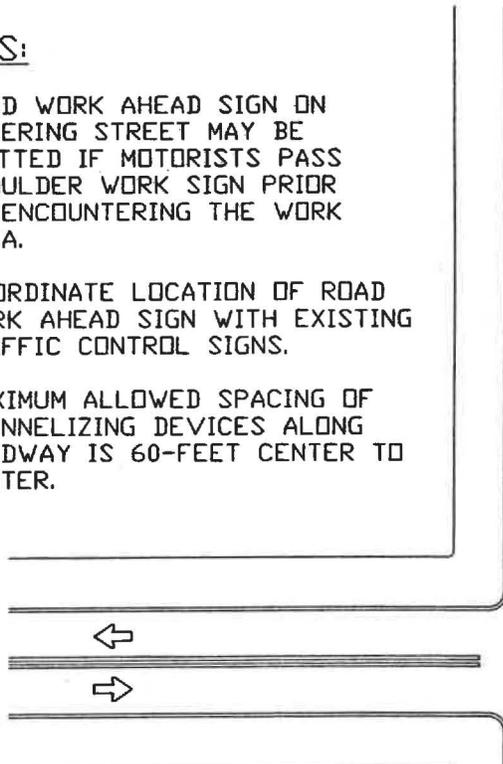
NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS <b>WORK ON SHOULDERS</b> WORK OF LESS THAN ONE HOUR DURATION	<b>WORK ZONE TRAFFIC CONTROL GUIDELINES</b>	STD. DETAIL TC-3a
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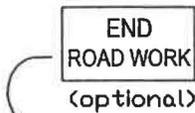
**NOTES:**

1. ROAD WORK AHEAD SIGN ON ENTERING STREET MAY BE OMITTED IF MOTORISTS PASS SHOULDER WORK SIGN PRIOR TO ENCOUNTERING THE WORK AREA.
2. COORDINATE LOCATION OF ROAD WORK AHEAD SIGN WITH EXISTING TRAFFIC CONTROL SIGNS.
3. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 60-FEET CENTER TO CENTER.



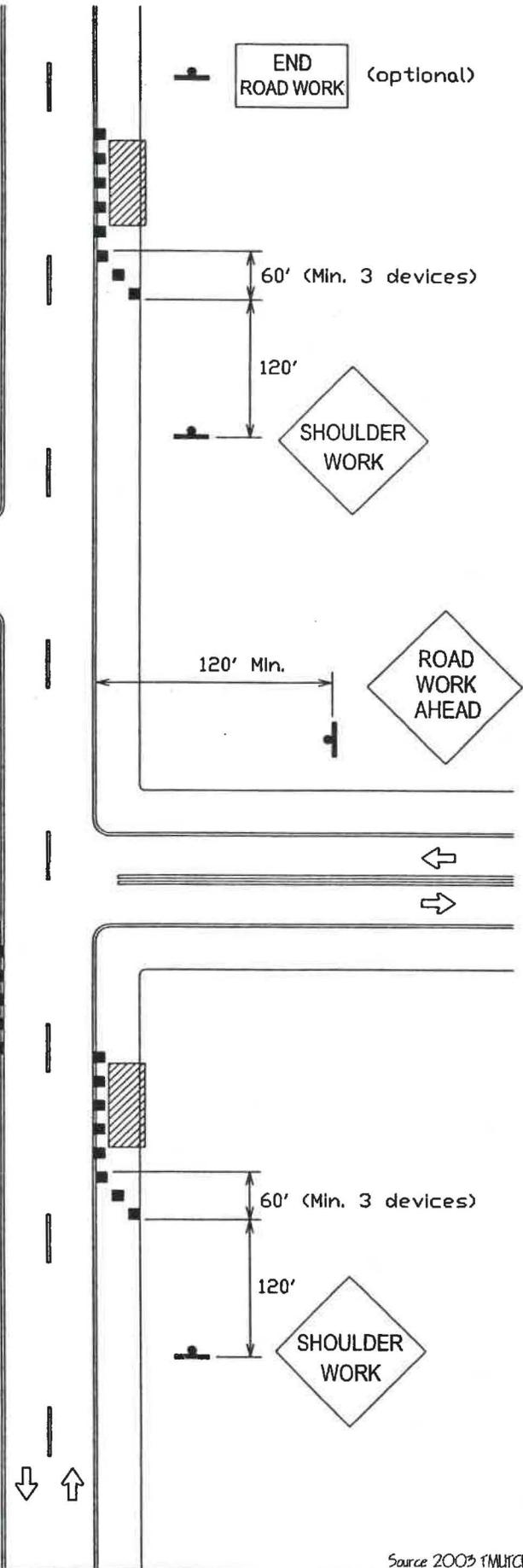
**LEGEND**

- Channelizing Device
- ➔ Direction of traffic
- ⏏ Sign (facing down)
- ▨ Work Space



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMUTCD Part 6

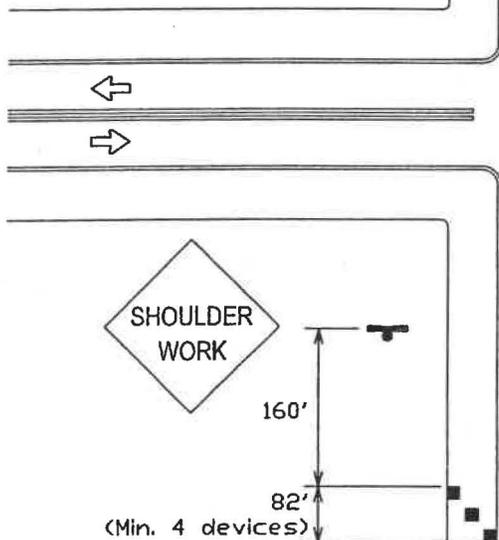
CITY OF MESQUITE, TEXAS  
**WORK ON SHOULDERS**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
**TC-3b**  
(25 & 30 MPH)

**NOTES:**

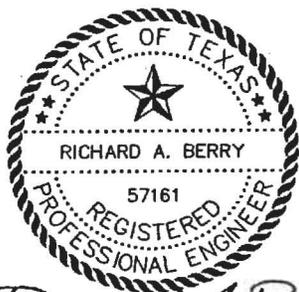
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3. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 70-FOOT CENTER TO CENTER.



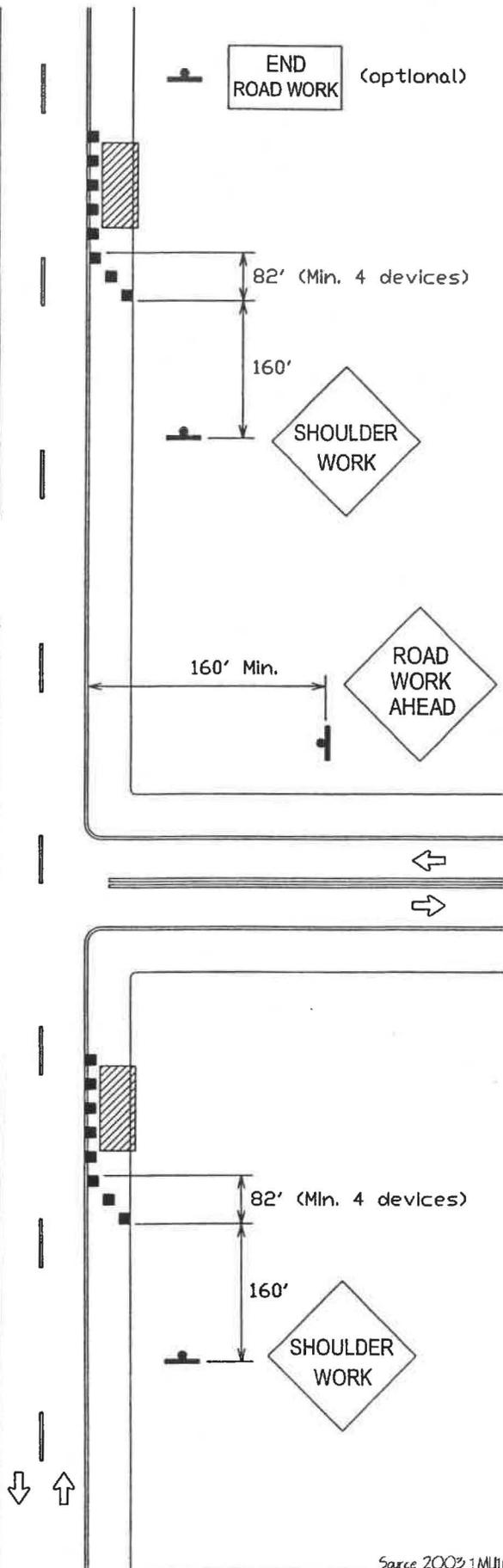
**LEGEND**

- Channelizing Device
- ➔ Direction of traffic
- ⊥ Sign (facing down)
- ▨ Work Space

END ROAD WORK (optional)



*Richard A. Berry*  
9-28-05  
NOT TO SCALE



CITY OF MESQUITE, TEXAS

**WORK ON SHOULDERS**

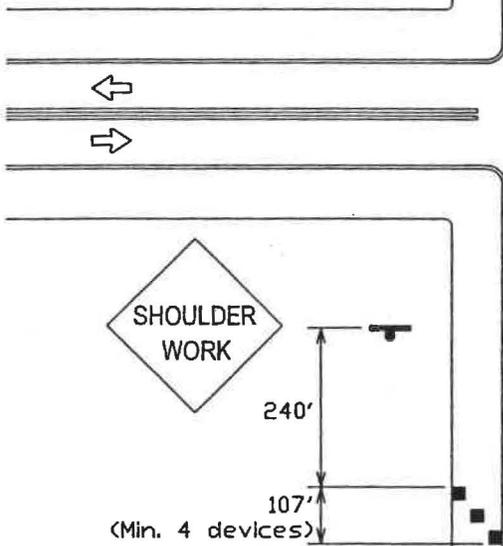
**WORK ZONE TRAFFIC CONTROL GUIDELINES**

Source 2003 IMLICD Part 6

STD.  
DETAIL  
TC-3c  
(35 MPH)

**NOTES:**

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2. COORDINATE LOCATION OF ROAD WORK AHEAD SIGN WITH EXISTING TRAFFIC CONTROL SIGNS.
3. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 80-FOOT CENTER TO CENTER.

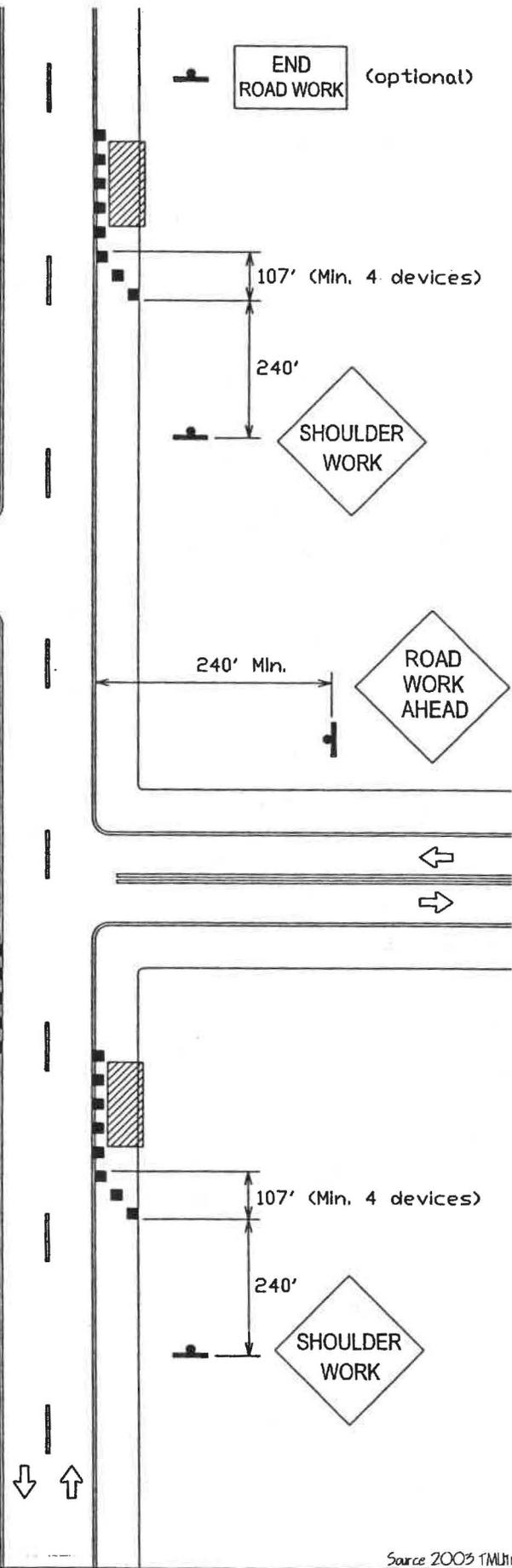


**LEGEND**

- Channelizing Device
- ➔ Direction of traffic
- ⏏ Sign (facing down)
- ▨ Work Space

END ROAD WORK (optional)

NOT TO SCALE



Source 2003 TMUICD Part 6

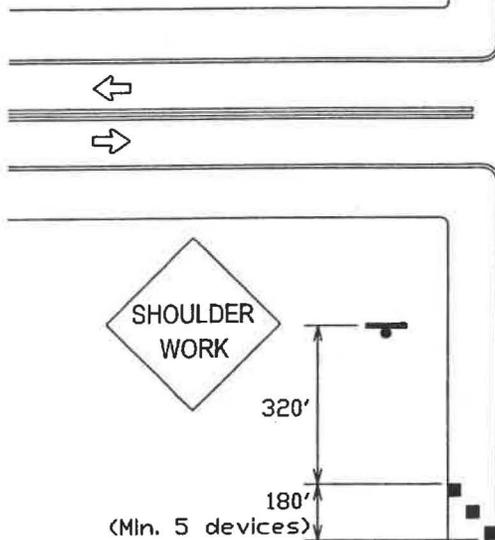
CITY OF MESQUITE, TEXAS  
**WORK ON SHOULDERS**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

**STD.  
 DETAIL  
 TC-3d  
 (40 MPH)**

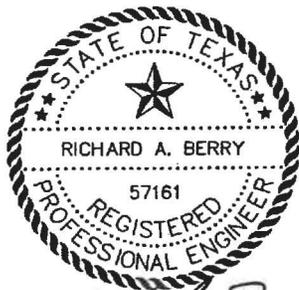
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3. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 90-FOOT CENTER TO CENTER.



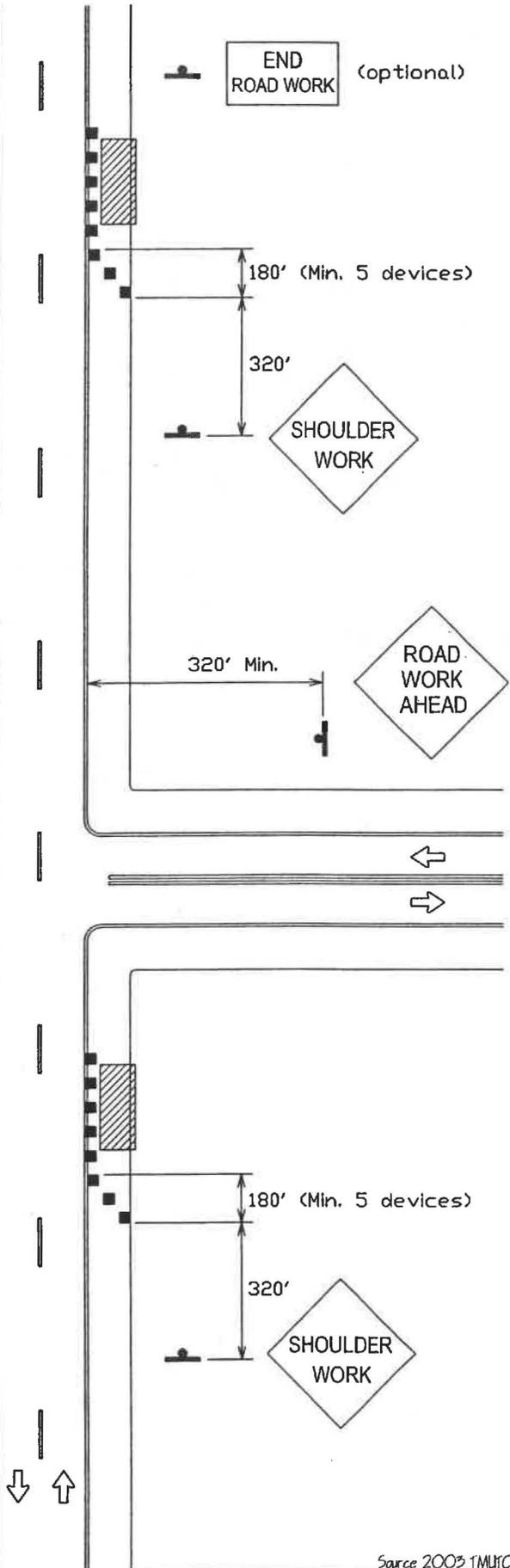
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- Channelizing Device
- ➔ Direction of traffic
- ⌄ Sign (facing down)
- ▨ Work Space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

END ROAD WORK (optional)



CITY OF MESQUITE, TEXAS

**WORK ON SHOULDERS**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

Source 2003 TMLUCD Part 6

STD. DETAIL  
**TC-3e**  
 (45 MPH)

Are you going to work in the right-of-way today?

Do you have all of your protective gear?

An approved highly reflective vest?

Approved hand protection?

Approved eye protection?

Approved hearing protection?

Approved foot protection?

Hard hat?

Have you inspected your tools today? Are they all in good working order and suitable to the work you are going to do?

CITY OF MESQUITE, TEXAS

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**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**



120'

Shoulder

Shoulder



(optional)

**NOTES:**

1. USE DURING DAYLIGHT ONLY.

**LEGEND**

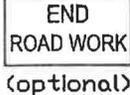
- Channelizing device
- ⇨ Direction of traffic
- ⊣ Sign (shown facing down)
- ▣ Truck mounted attenuator
- ▨ Work space
- ☒ Shadow vehicle

10 ft. Minimum

Truck with Activated Rotating Lights or Strobe Lights

Truck Mounted Attenuator (optional)

120'



(optional)

Shoulder

Shoulder



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMHCD Part 6

CITY OF MESQUITE, TEXAS  
**SHOULDER WORK WITH  
MINOR ENCROACHMENT**  
WORK OF LESS THAN ONE HOUR DURATION

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-4a**  
(25 & 30 MPH)



120'

Shoulder

Shoulder



NOTES:

1. USE DURING DAYLIGHT ONLY.
2. SHADOW TRUCK IS OPTIONAL WHEN A TAPER AND CHANNELIZING DEVICES ARE USED.
3. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 60-FOOT CENTER TO CENTER.

LEGEND

- Channelizing device
- ➔ Direction of traffic
- ⌞ Sign (shown facing down)
- ▣ Truck mounted attenuator
- ▨ Work space
- ☐ Shadow vehicle

9 ft. Minimum

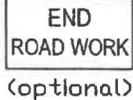
Shadow Truck (optional)

Truck Mounted Attenuator (optional)

85' Buffer Space (Min. 4 devices)

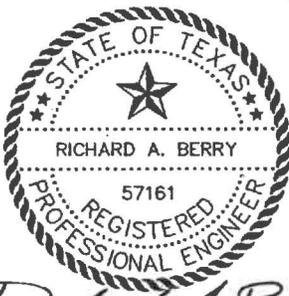
60' Taper (Min. 3 devices)

120'



Shoulder

Shoulder



Richard A. Berry  
9-28-05

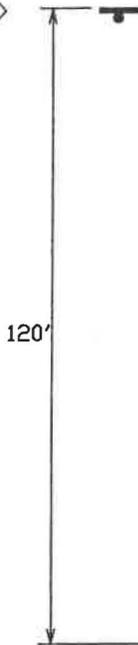
NOT TO SCALE

Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
SHOULDER WORK WITH  
MINOR ENCROACHMENT  
WORK OF LESS THAN ONE DAY DURATION

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-4b  
(25 & 30 MPH)



Shoulder

Shoulder



NOTES:

- 1. SHADOW TRUCK IS OPTIONAL WHEN A TAPER AND CHANNELIZING DEVICES ARE USED.
- 2. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 60-FOOT CENTER TO CENTER.

LEGEND

- Channelizing device
- ➔ Direction of traffic
- ⏏ Sign (shown facing down)
- ▣ Truck mounted attenuator
- ▨ Work space
- 🚚 Shadow vehicle

10 ft. Minimum

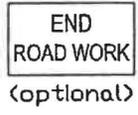
Shadow Truck (optional)

Truck Mounted Attenuator (optional)

85' Buffer Space (Min. 4 devices)

60' Taper (Min. 3 devices)

120'



Shoulder

Shoulder



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9-28-05

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Source 2003 TMUTCD Part 6

CITY OF MESQUITE, TEXAS  
SHOULDER WORK WITH  
MINOR ENCROACHMENT

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-4c  
(25 & 30 MPH)



160'

Shoulder

Shoulder



(optional)

### NOTES:

- 1. USE DURING DAYLIGHT ONLY.

### LEGEND

- Channelizing device
- ➔ Direction of traffic
- ⬇️ Sign (shown facing down)
- ▨ Truck mounted attenuator
- ▨ Work space
- ☐ Shadow vehicle

10 ft. Minimum

Truck with Activated Rotating Lights or Strobe Lights

Truck Mounted Attenuator (optional)

160'

END ROAD WORK (optional)

Shoulder

Shoulder

ROAD WORK AHEAD



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9-28-05

NOT TO SCALE

Source 2003 MUTCD Part 6

CITY OF MESQUITE, TEXAS  
**SHOULDER WORK WITH  
 MINOR ENCROACHMENT**  
 WORK OF LESS THAN ONE HOUR DURATION

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

**STD.  
 DETAIL  
 TC-4d**  
 (35 MPH)



160'

Shoulder

Shoulder



NOTES:

- 1. SHADOW TRUCK IS OPTIONAL WHEN A TAPER AND CHANNELIZING DEVICES ARE USED.
- 2. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 70-FOOT CENTER TO CENTER.

10 ft. Minimum

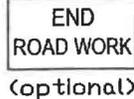
Shadow Truck (optional)

Truck Mounted Attenuator (optional)

120' Buffer (Min. 5 devices)

82' Taper (Min. 4 devices)

160'



Shoulder

Shoulder



LEGEND

- Channelizing device
- ➔ Direction of traffic
- ⏏ Sign (shown facing down)
- 🚚 Truck mounted attenuator
- ▨ Work space
- 🚚 Work vehicle



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9-28-05

NOT TO SCALE

Source 2003 TMURCD Part 6

CITY OF MESQUITE, TEXAS  
SHOULDER WORK WITH  
MINOR ENCROACHMENT

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-4e  
(35 MPH)



240'

Shoulder

Shoulder



### NOTES:

1. SHADOW TRUCK IS OPTIONAL WHEN A TAPER AND CHANNELIZING DEVICES ARE USED.
2. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 80-FOOT CENTER TO CENTER.

10 ft. Minimum

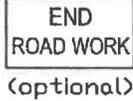
Shadow Truck (optional)

Truck Mounted Attenuator (optional)

170' Buffer (Min. 6 devices)

110' Taper (Min. 4 devices)

240'



Shoulder

Shoulder



### LEGEND

- Channelizing device
- ➔ Direction of traffic
- ⏏ Sign (shown facing down)
- ▣ Truck mounted attenuator
- ▨ Work space
- 🚚 Work vehicle



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9-28-05

NOT TO SCALE

Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
**SHOULDER WORK WITH  
MINOR ENCROACHMENT**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
TC-4f  
(40 MPH)



320'

Shoulder

Shoulder



NOTES:

- 1. SHADOW TRUCK IS OPTIONAL WHEN A TAPER AND CHANNELIZING DEVICES ARE USED.
- 2. MAXIMUM ALLOWED SPACING OF CHANNELIZING DEVICES ALONG ROADWAY IS 90-FOOT CENTER TO CENTER.

LEGEND

- Channelizing device
- ➔ Direction of traffic
- ⌄ Sign (shown facing down)
- ⊠ Truck mounted attenuator
- ▨ Work space
- 🚚 Work vehicle

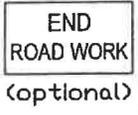
10 ft. Minimum

Shadow Truck (optional)  
Truck Mounted Attenuator (optional)

220' Buffer (Min. 6 devices)

180' Taper (Min. 5 devices)

320'



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMHCD Part 6

CITY OF MESQUITE, TEXAS  
SHOULDER WORK WITH  
MINOR ENCROACHMENT

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-4g  
(45 MPH)

Are you using a shadow vehicle to protect your work area?

Did you put it in "park" and use the parking brake?

Did you turn on its rotating lights or strobe lights?

Is there enough space between your workers and your shadow vehicle to keep it from striking you when it gets hit by that errant car or truck?



END ROAD WORK (optional)

NOTES:

- 1. USE DURING DAYLIGHT ONLY.
- 2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 30- FEET CENTER TO CENTER.
- 3. TAPER BASED ON A 3-FOOT ENCROACHMENT INTO THE LANE.

LEGEND

- Channelizing device
- ➔ Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space

120'

9 ft. Minimum

85' Buffer Space (Min. 4 devices)

15' Taper (Min. 2 devices)

120'

END ROAD WORK (optional)



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9-28-05

NOT TO SCALE

Source 2003 TMHICD Part 6

CITY OF MESQUITE, TEXAS  
WORK ON PARKWAY WITH  
MINOR ENCROACHMENT  
WORK OF LESS THAN ONE DAY DURATION

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-5a  
(25 & 30 MPH)



END ROAD WORK (optional)

NOTES:

- 1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 30-FOOT CENTER TO CENTER.
- 2. TAPER BASED ON A 2-FOOT ENCRDACHMENT INTO THE LANE.

LEGEND

- Channelizing device
- ⇨ Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space

10 ft. Minimum

85' Buffer Space (Min. 4 devices)

10' Taper (Min. 2 devices)

120'

END ROAD WORK (optional)



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9-28-05

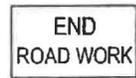
NOT TO SCALE

Source 2003 TMUTCD Part 6

CITY OF MESQUITE, TEXAS  
WORK ON PARKWAY WITH  
MINOR ENCRDACHMENT

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-5b  
(25 & 30 MPH)



(optional)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 35-FOOT CENTER TO CENTER.
2. TAPER BASED ON A 2-FOOT ENCROACHMENT INTO THE LANE.

**LEGEND**

- Channelizing device
- ⇨ Direction of traffic
- ⊥ Sign (shown facing down)
- ▨ Work space

10 ft. Minimum

120' Buffer Space (Min. 5 devices)

15' Taper (Min. 2 devices)

160'

END ROAD WORK (optional)



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9-28-05

NOT TO SCALE

Source 2003 TMHICD Part 6

CITY OF MESQUITE, TEXAS  
**WORK ON PARKWAY WITH  
MINOR ENCROACHMENT**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-5c  
(35 MPH)**



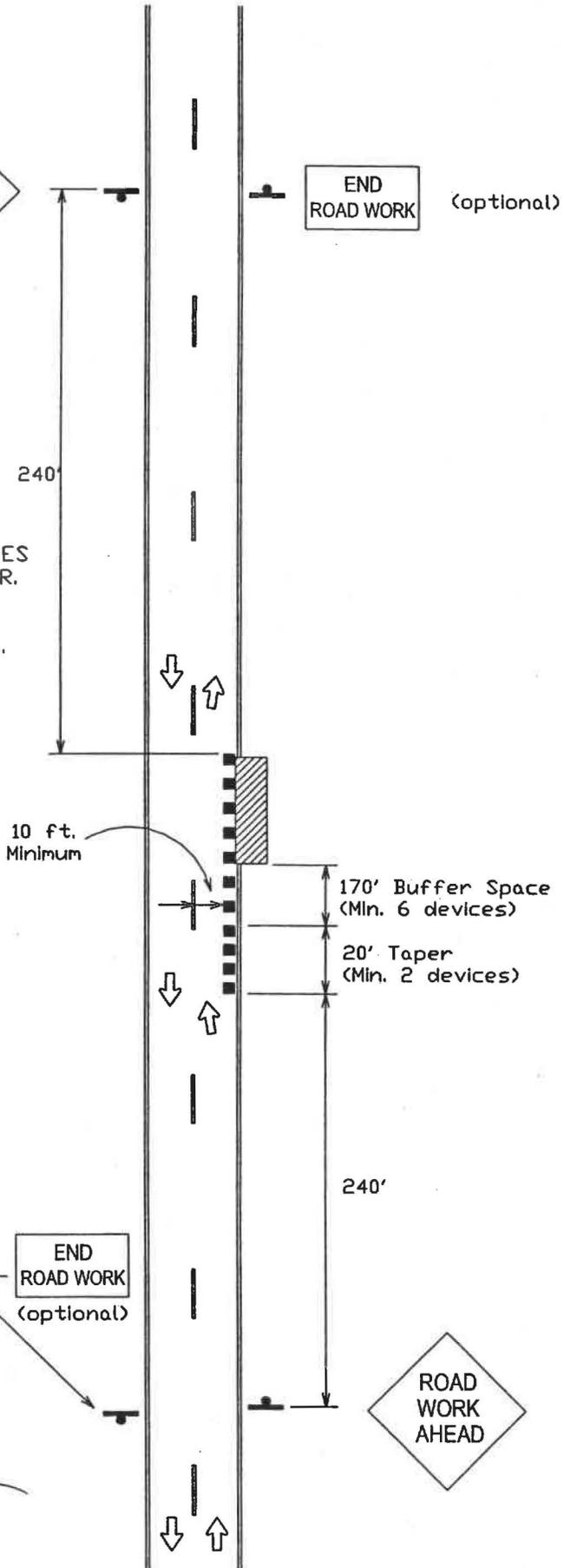
END ROAD WORK (optional)

NOTES:

- 1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 40-FOOT CENTER TO CENTER.
- 2. TAPER BASED ON A 2-FOOT ENCROACHMENT INTO THE LANE.

LEGEND

- Channelizing device
- ⇨ Direction of traffic
- ⊥ Sign (shown facing down)
- ▨ Work space



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9-28-05

NOT TO SCALE

Source 2003 TMHCP Part 6

CITY OF MESQUITE, TEXAS  
WORK ON PARKWAY WITH  
MINOR ENCROACHMENT

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-5d  
(40 MPH)



END ROAD WORK (optional)

NOTES:

- 1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 45-FOOT CENTER TO CENTER.
- 2. TAPER BASED ON A 2-FOOT ENCROACHMENT INTO THE LANE.

LEGEND

- Channelizing device
- ⇨ Direction of traffic
- ⬇ Sign (shown facing down)
- ▨ Work space

10 ft. Minimum

220' Buffer Space (Min. 6 devices)

30' Taper (Min. 2 devices)

320'

END ROAD WORK (optional)



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9-28-05

NOT TO SCALE

Source 2003 TMUTCD Part 6

CITY OF MESQUITE, TEXAS  
WORK ON PARKWAY WITH  
MINOR ENCROACHMENT

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-5e  
(45 MPH)

Working overhead today?

Think through your lift before you get in the bucket.

Is your truck suited to the work? Are all systems inspected and working? Is the boom long enough? Is the boom insulated?

How long is the work going to take?

Where are you going to park your truck to get the best approach to the work? LOOK UP! Are there any overhead lines in the way?

What type of lane closure do you need to use? Do you have all of the warning signs and barricades?

Can the knuckle of your boom swing out into a travel lane?

Will it? If it does, the boom may become a baseball bat for that tractor-semitrailer coming down the road, and you in the bucket will be the baseball being hit out of the bucket for a rather nasty homerun.

Are you using fall protection? What if you drop your tools?

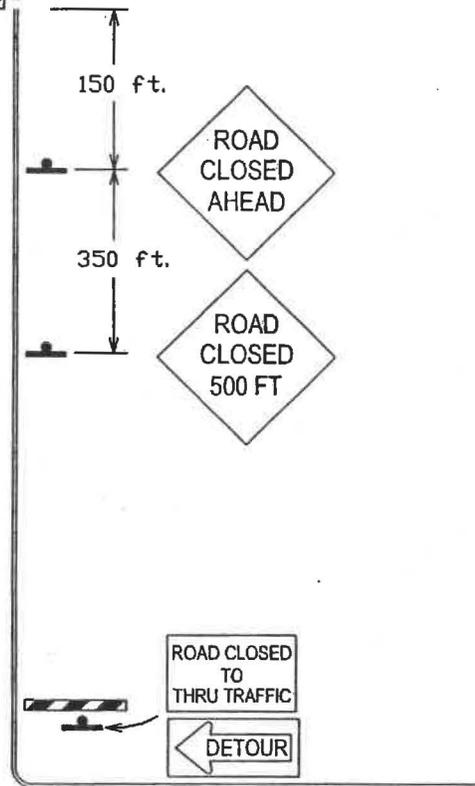
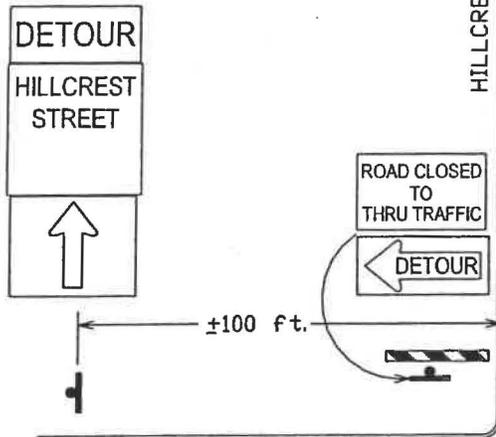
Do you have a ground man and does he know what to do?

CITY OF MESQUITE, TEXAS  
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WORK ZONE TRAFFIC  
CONTROL GUIDELINES

**NOTES:**

1. SIGNING SHOWN FOR ONE DIRECTION ONLY.
2. DETOUR SIGN LOCATIONS SHALL BE FIELD ADJUSTED TO INSURE THAT VIEWS OF REGULATORY AND WARNING SIGNS ARE NOT BLOCKED.



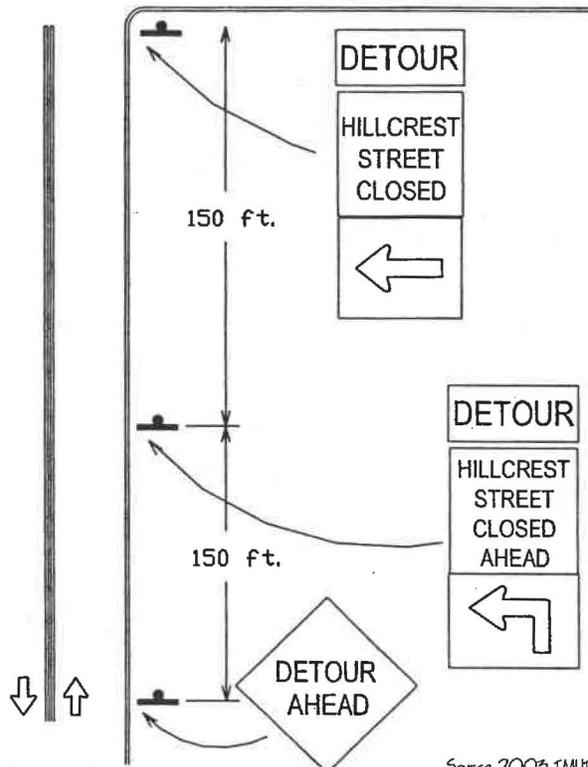
**LEGEND**

- ➔ Direction of traffic
- ⏏ Sign (facing down)
- ▬ Type III barricade
- ▨ Work space



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9-28-05 NOT TO SCALE

END  
DETOUR



CITY OF MESQUITE, TEXAS  
**ROAD CLOSED WITH  
OFF-SITE DETOUR**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
TC-6

Source 2003 TMLUCD Part 6

Did you know that a car traveling down a street at 30 mph will cover the length of a football field in under 7 seconds?

Did you know that most drivers in Mesquite drive faster than 30 mph?

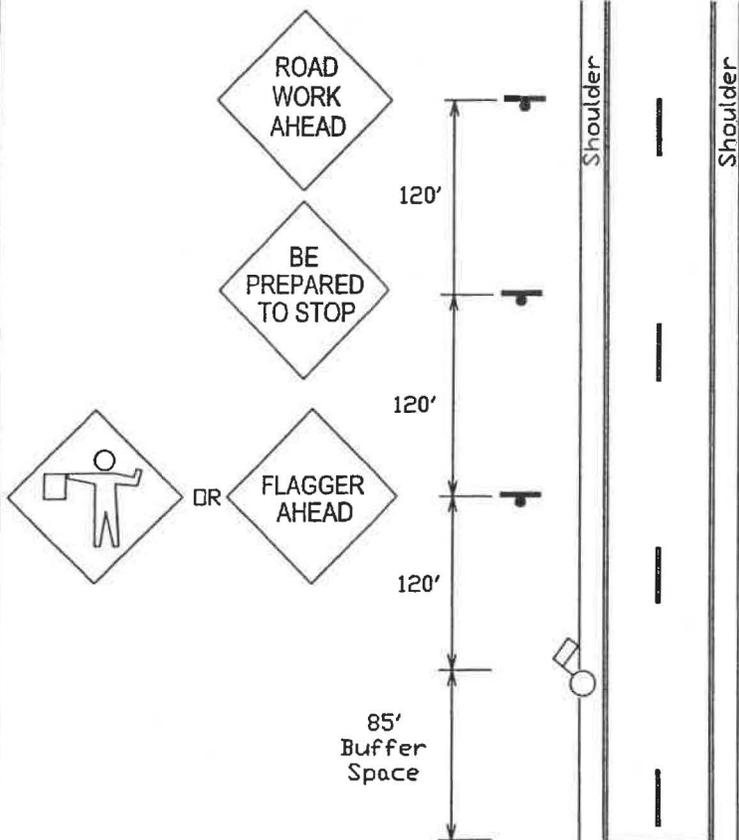
Did you know that it will probably take you at least 2 seconds to react to a car or truck coming your way?

When you need to move... you **NEED** to move! You don't have a lot of time. Be ready. Think through your actions ahead of time.

The outcome of the scientific experiment where a moving car and a man occupy the same space at the same time is never favorable to the man.

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**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**



**NOTES:**

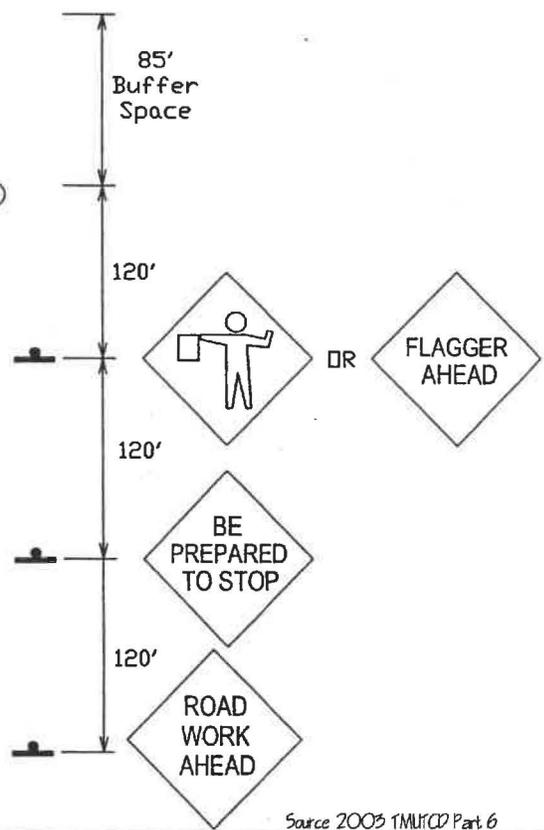
1. ROAD CLOSURE SHALL NOT EXCEED 20 MINUTES.
2. ROAD CLOSURES SHALL ONLY OCCUR DURING DAYLIGHT HOURS.
3. THIS TYPICAL APPLICATION MAY BE USED ON STREETS WITH CURB AND GUTTER IN LIEU OF SHOULDERS.

**LEGEND**

- Direction of traffic
- Flagger
- Sign (facing down)
- Work space



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9-28-05



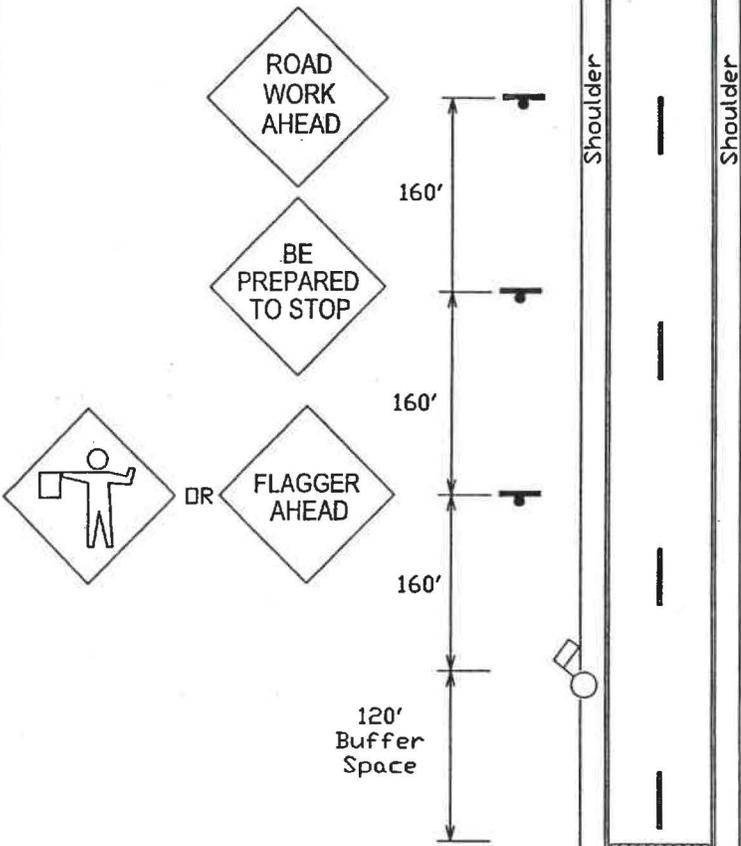
NOT TO SCALE

Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**TEMPORARY ROAD CLOSURE**  
DAYLIGHT ONLY  
20 MINUTES MAXIMUM CLOSURE

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL**  
**TC-7a**  
(25 & 30 MPH)



**NOTES:**

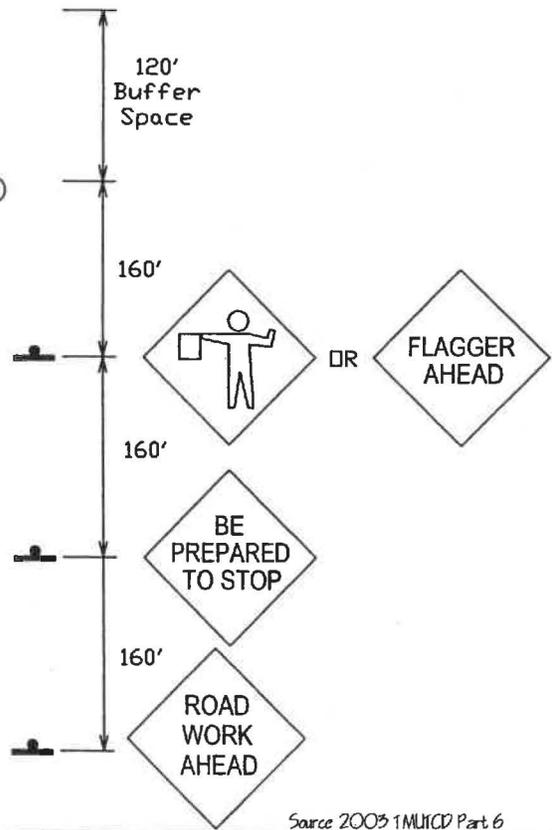
1. ROAD CLOSURE SHALL NOT EXCEED 20 MINUTES.
2. ROAD CLOSURES SHALL ONLY OCCUR DURING DAYLIGHT HOURS.
3. THIS TYPICAL APPLICATION MAY BE USED ON STREETS WITH CURB AND GUTTER IN LIEU OF SHOULDERS.

**LEGEND**

- Direction of traffic
- Flagger
- Sign (facing down)
- Work space



*Richard A. Berry*  
9-28-05



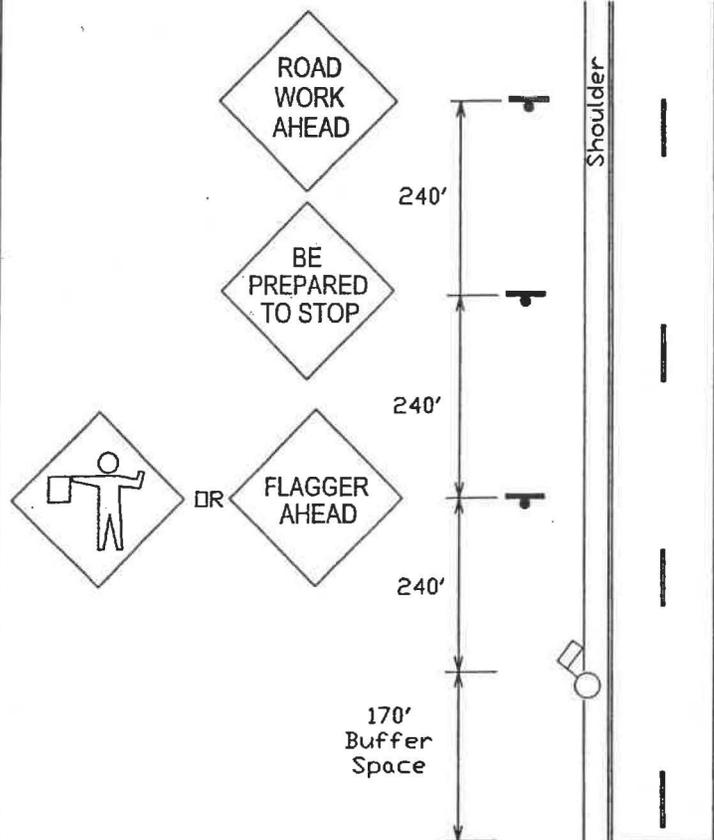
NOT TO SCALE

Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**TEMPORARY ROAD CLOSURE**  
DAYLIGHT ONLY  
20 MINUTES MAXIMUM CLOSURE

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL TC-7b**  
(35 MPH)



**LEGEND**

- Direction of traffic
- Flagger
- Sign (facing down)
- Work space

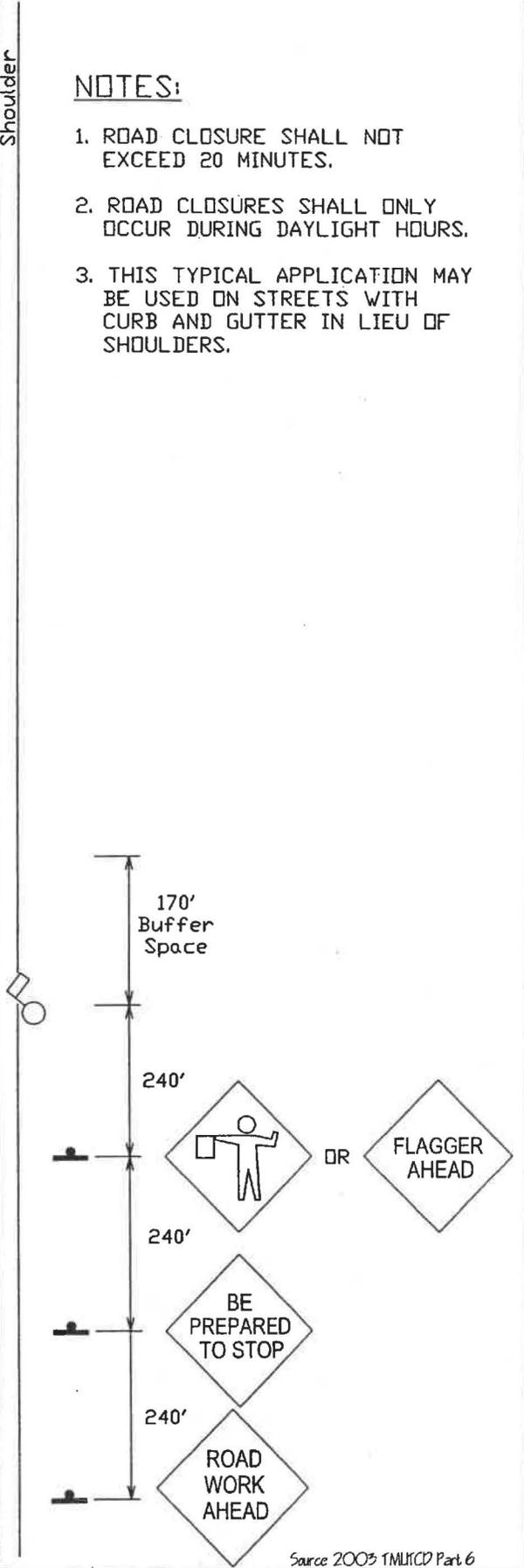


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9-28-05

NOT TO SCALE

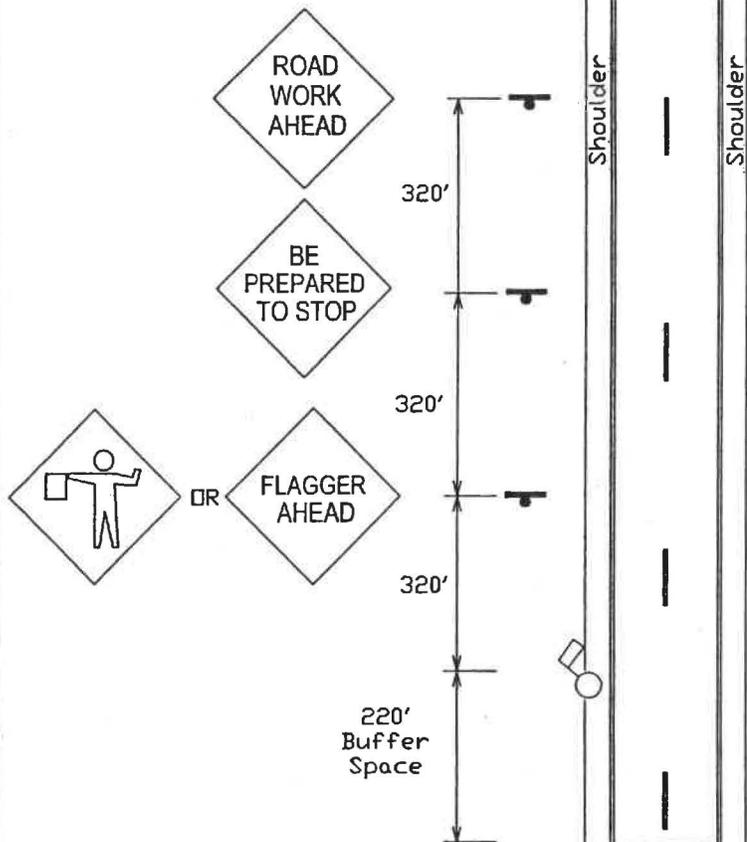
**NOTES:**

1. ROAD CLOSURE SHALL NOT EXCEED 20 MINUTES.
2. ROAD CLOSURES SHALL ONLY OCCUR DURING DAYLIGHT HOURS.
3. THIS TYPICAL APPLICATION MAY BE USED ON STREETS WITH CURB AND GUTTER IN LIEU OF SHOULDERS.



Source 2003 TMLICD Part 6

CITY OF MESQUITE, TEXAS <b>TEMPORARY ROAD CLOSURE</b> DAYLIGHT ONLY 20 MINUTES MAXIMUM CLOSURE	<b>WORK ZONE TRAFFIC CONTROL GUIDELINES</b>	<b>STD. DETAIL</b> <b>TC-7c</b> (40 MPH)
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**NOTES:**

1. ROAD CLOSURE SHALL NOT EXCEED 20 MINUTES.
2. ROAD CLOSURES SHALL ONLY OCCUR DURING DAYLIGHT HOURS.
3. THIS TYPICAL APPLICATION MAY BE USED ON STREETS WITH CURB AND GUTTER IN LIEU OF SHOULDERS.

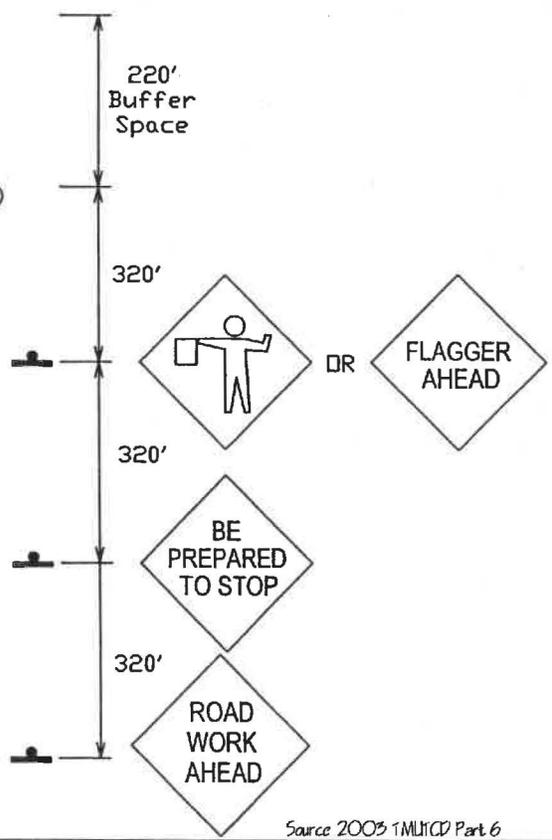
**LEGEND**

- Direction of traffic
- Flagger
- Sign (facing down)
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

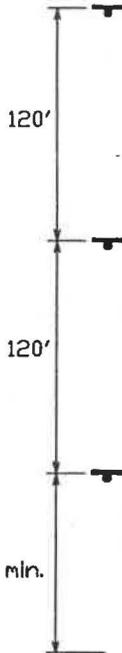


Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**TEMPORARY ROAD CLOSURE**  
DAYLIGHT ONLY  
20-MINUTES MAXIMUM CLOSURE

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

STD. DETAIL  
**TC-7d**  
(45 MPH)



**NOTES:**

1. FOR LOW VOLUME 26-FT. AND 30-FT. WIDE LOCAL RESIDENTIAL STREETS ONLY.
2. ONLY FOR DAYLIGHT HOURS AND FOR SHORT DURATION OR SHORT TERM OPERATIONS.
3. APPLICATION LIMITED TO 25 MPH AND 30 MPH SPEED LIMIT STREETS.
4. ROTATING LIGHTS AND/OR STROBE LIGHTS ON THE WORK VEHICLE SHALL BE ACTIVATED DURING OPERATIONS IN THE STREET.

**LEGEND**

- Channelizing device
- Direction of traffic
- ▬ Sign (shown facing down)
- ▨ Work space
- Work vehicle with activated rotating lights or strobe lights



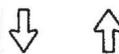
85' Buffer Space



120'



120'



*Richard A. Berry*

9-28-05

NOT TO SCALE

Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK ON LOW VOLUME ROADS**  
 WORK OF LESS THAN ONE DAY DURATION

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

STD. DETAIL  
**TC-8**  
 (25 & 30 MPH)

Done working in the street today?

**THEN WHY ARE YOU STANDING AROUND?**

**GET THE HECK OUT OF IT!**

And don't forget to remove any and all signs, barricades, and other devices that are not needed to guide drivers through your work area while you are gone.

Unneeded warning signs that are left in place cause drivers to disregard all warning signs - needed or not!

CITY OF MESQUITE, TEXAS

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BEEN LEFT BLANK!**

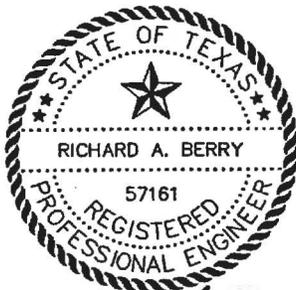
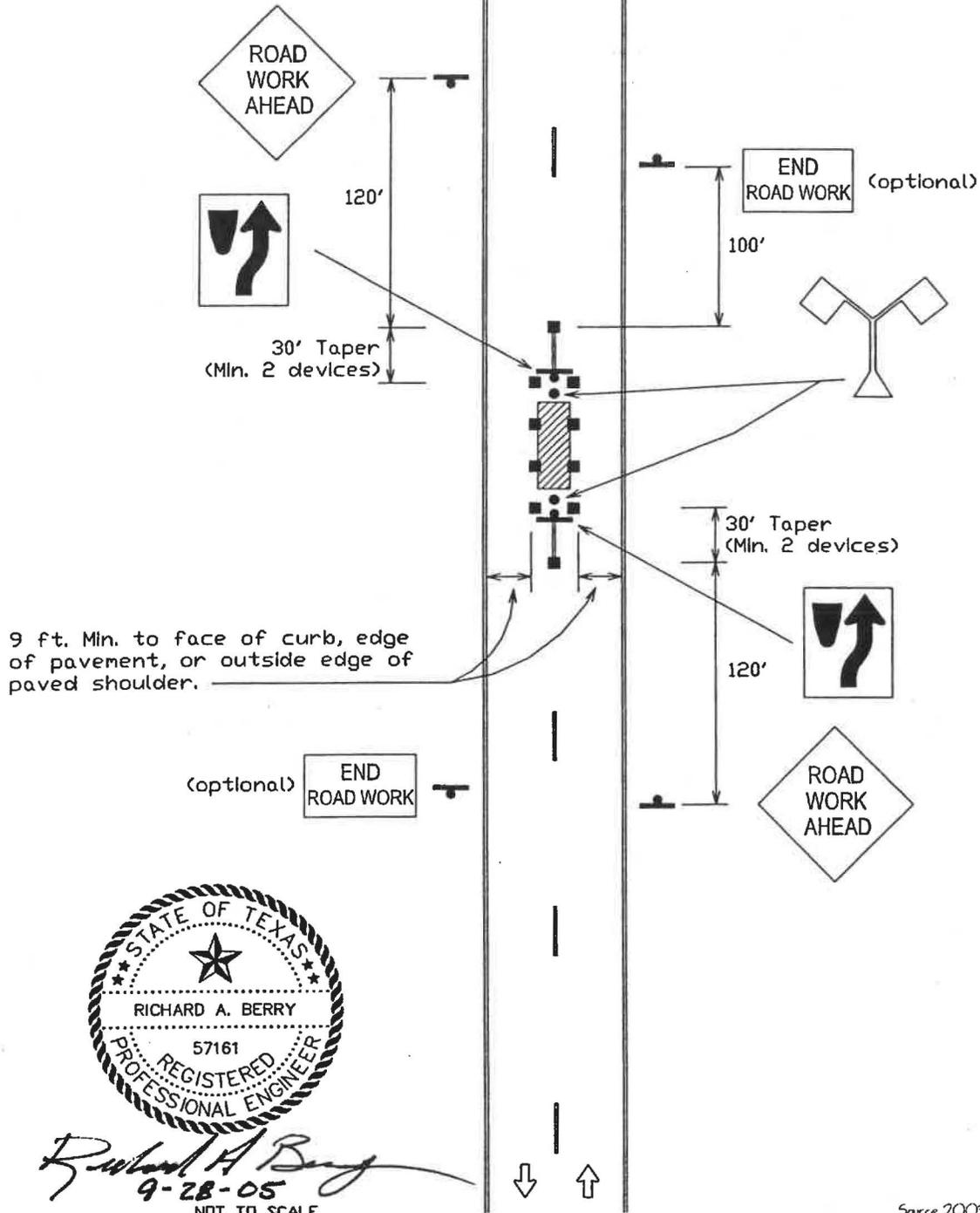
**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⊖ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 WORK OF LESS THAN ONE DAY DURATION  
 24-FT. AND 26-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

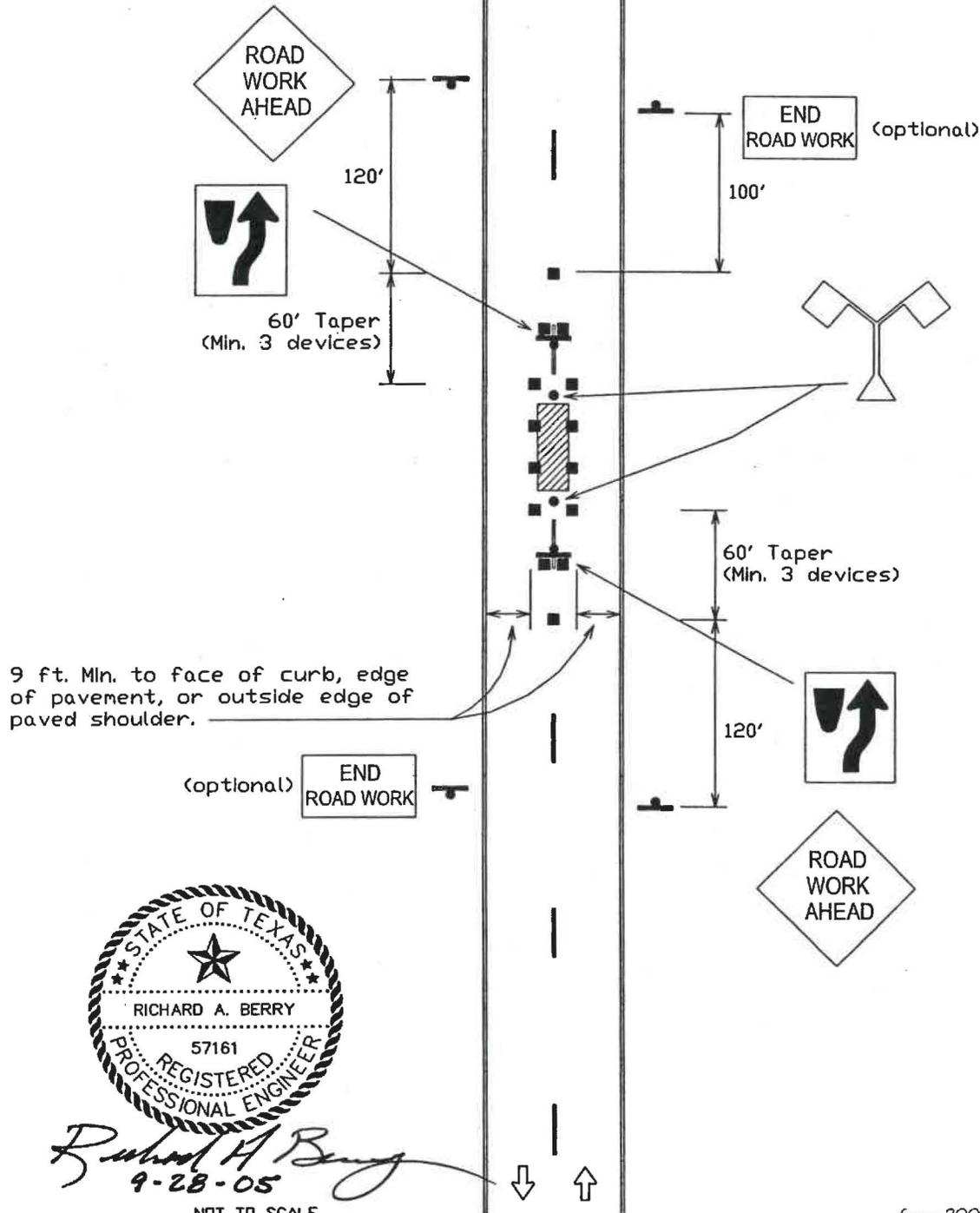
STD.  
 DETAIL  
**TC-9a**  
 (25 & 30 MPH)

**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 WORK OF LESS THAN ONE DAY DURATION  
 30-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

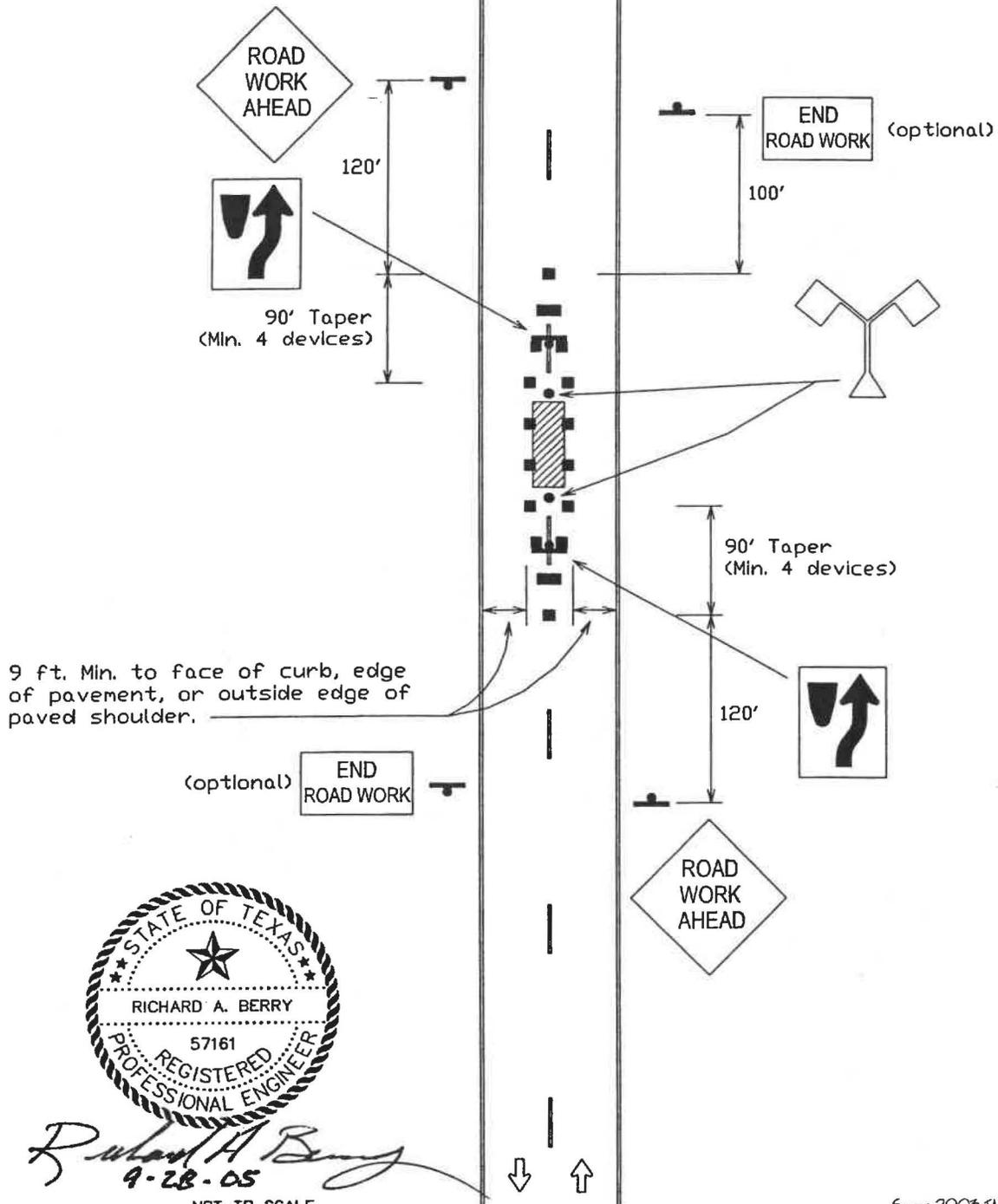
STD.  
 DETAIL  
**TC-9b**  
 (25 & 30 MPH)

**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



Source 2003 TMLUCD Part 6



*Richard A. Berry*  
9-28-05

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
WORK OF LESS THAN ONE DAY DURATION  
36-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
**TC-9c**  
(25 & 30 MPH)

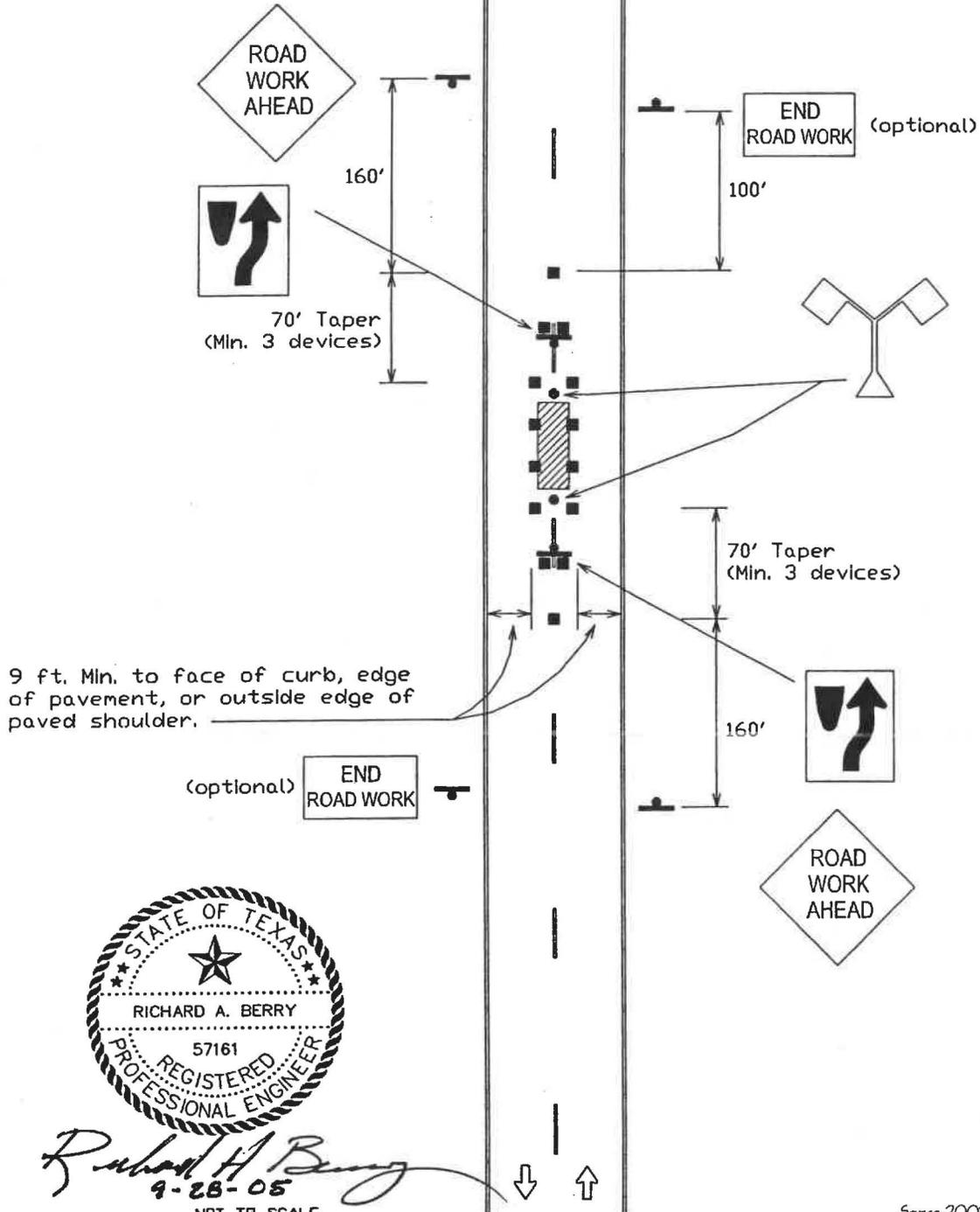


**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMUTCD Part 6

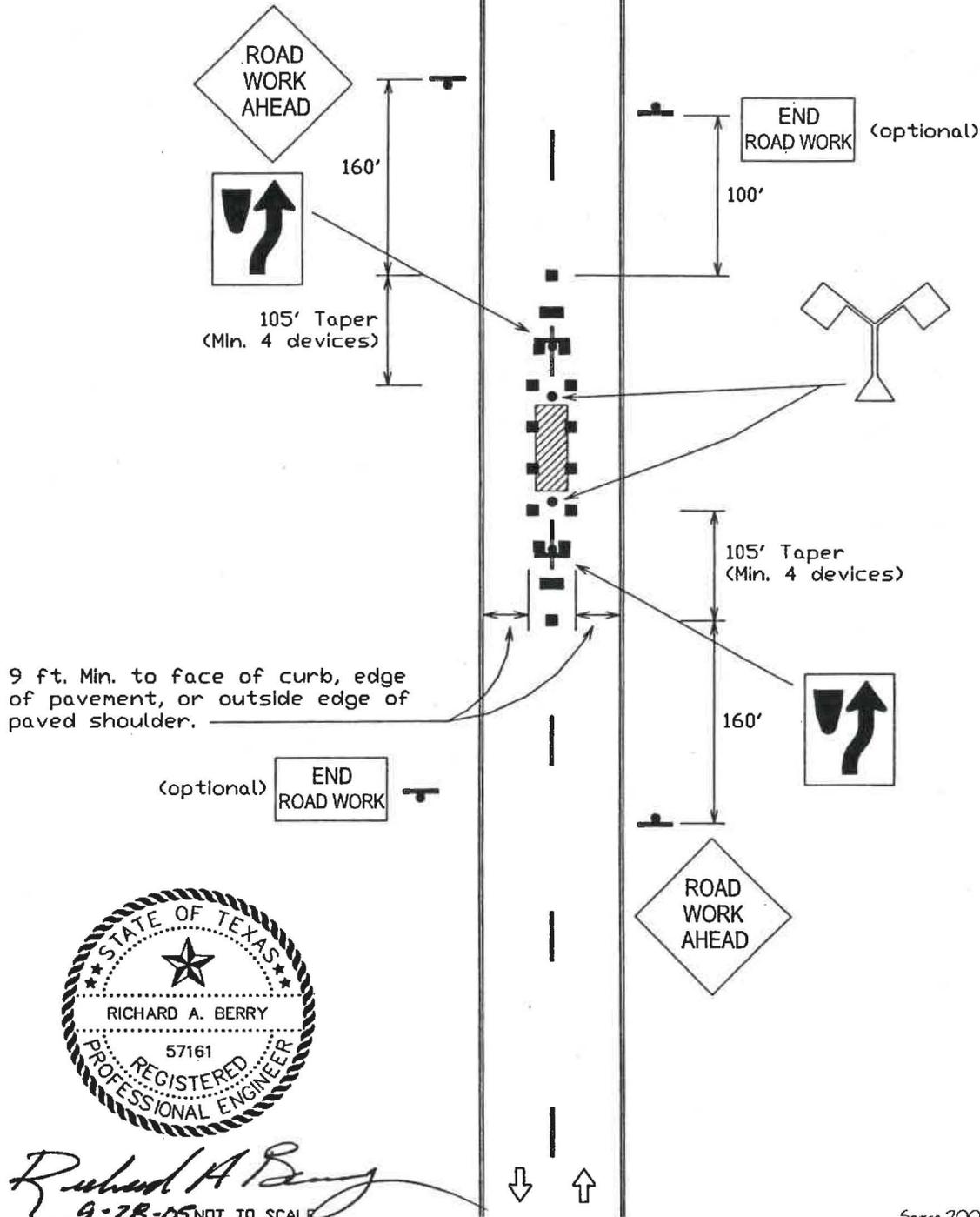
<p>CITY OF MESQUITE, TEXAS  <b>WORK IN CENTER OF LOW-VOLUME ROAD</b>                  WORK OF LESS THAN ONE DAY DURATION                  26-FT. AND 30-FT. STREETS</p>	<p><b>WORK ZONE TRAFFIC CONTROL GUIDELINES</b></p>	<p>STD. DETAIL  <b>TC-9e</b>                  (35 MPH)</p>
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**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⏏ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05 NOT TO SCALE

Source 2003 TMLTCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 WORK OF LESS THAN ONE DAY DURATION  
 36-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

**STD.  
 DETAIL  
 TC-9f**  
 (35 MPH)

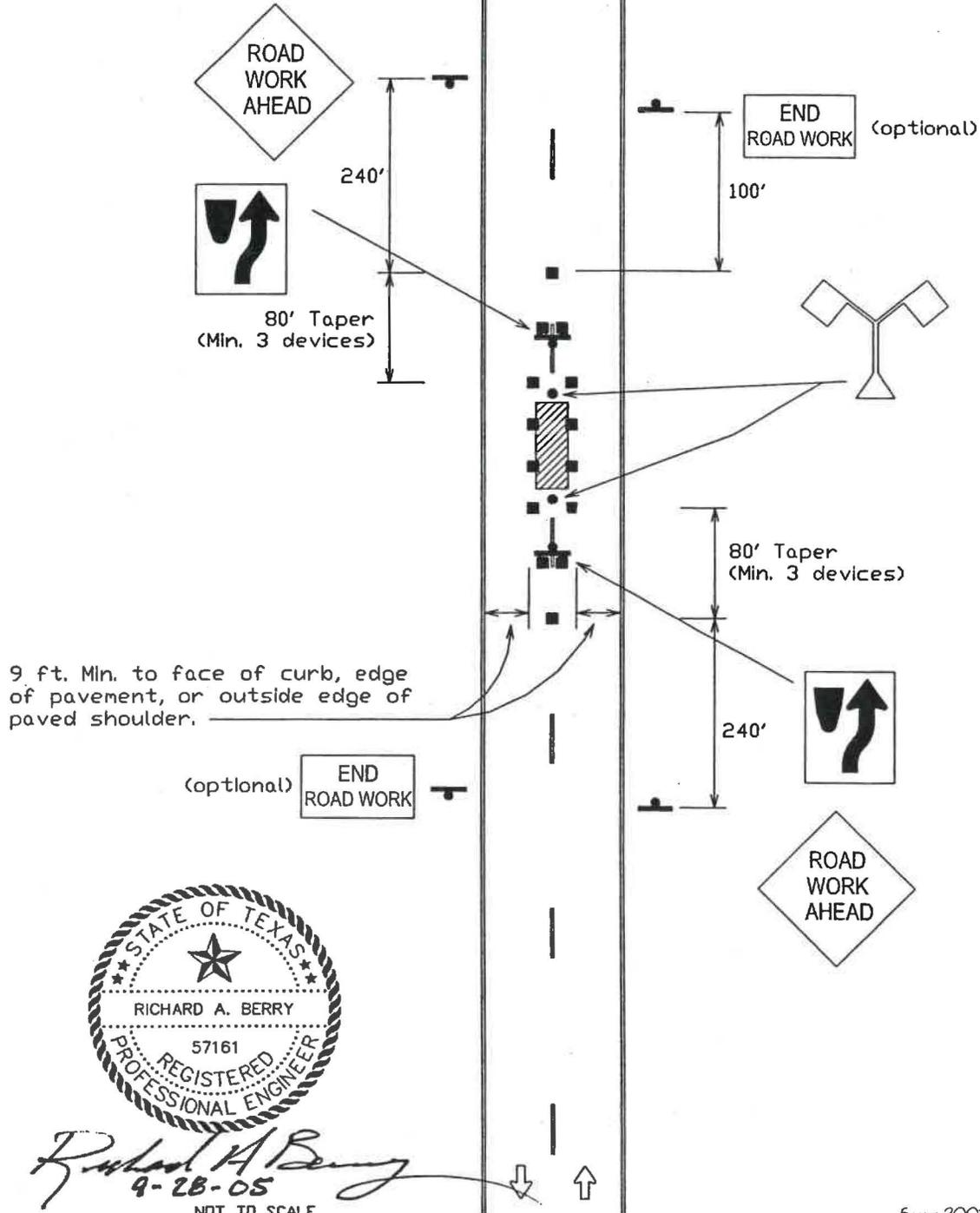


**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



*Richard A. Berry*  
9-28-05

Source 2003 TMLICD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
WORK OF LESS THAN ONE DAY DURATION  
26-FT. AND 30-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

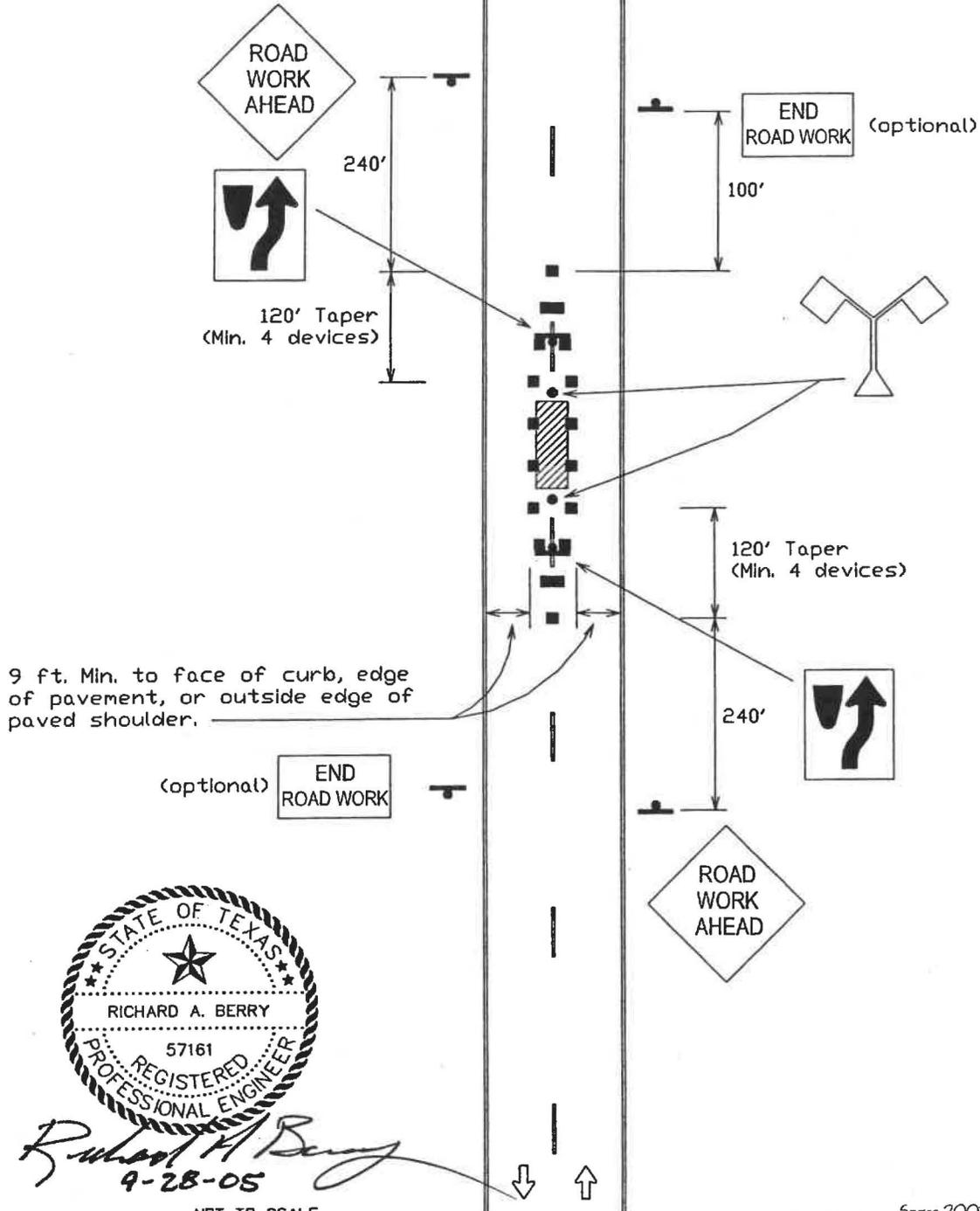
**STD.  
DETAIL  
TC-9h**  
(40 MPH)

**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⋈ High level warning device (Flag tree)
- ⊕ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMLTCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD.**  
WORK OF LESS THAN ONE DAY DURATION  
36-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
TC-9i  
(40 MPH)

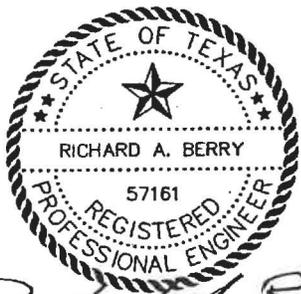
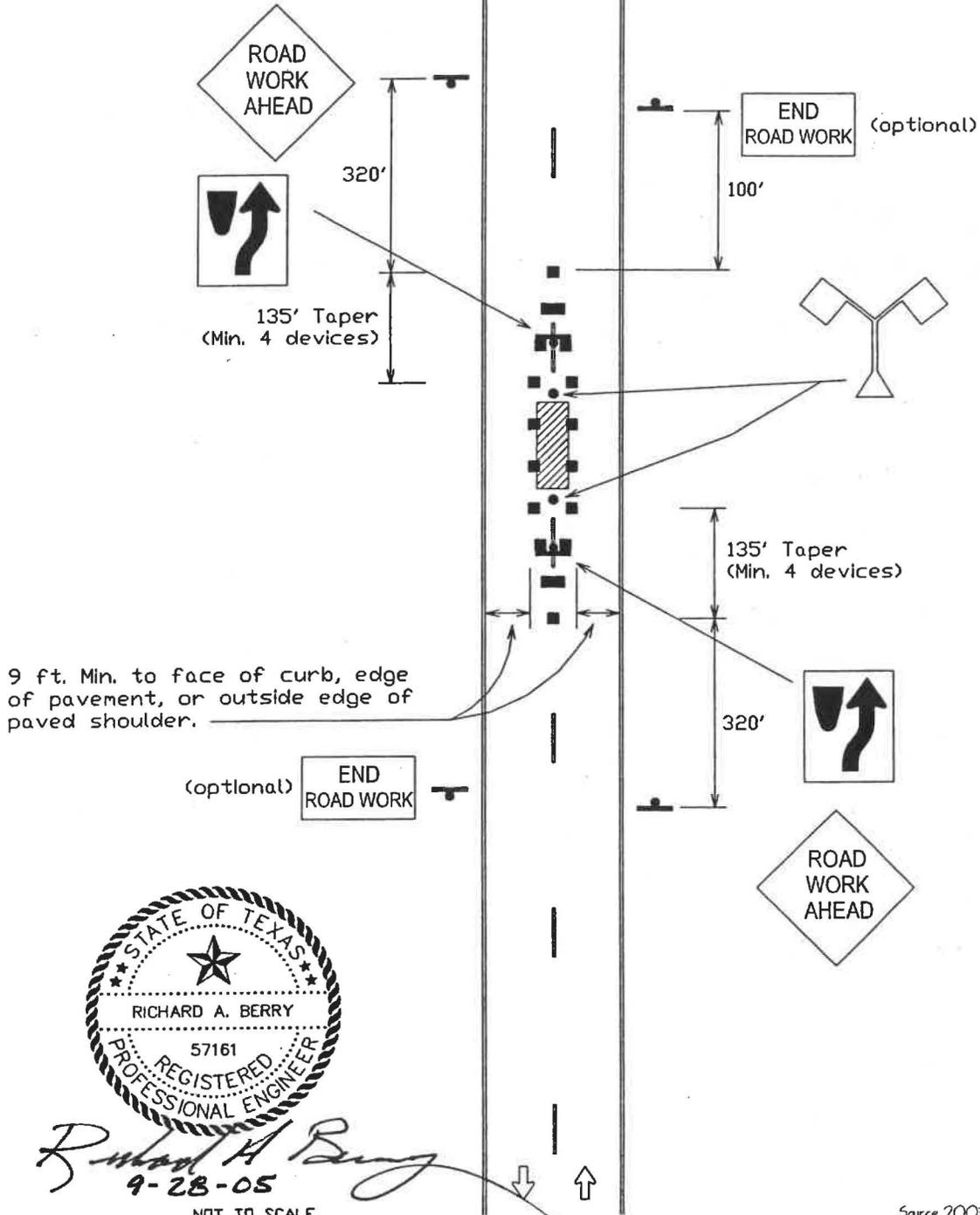


**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⋈ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
WORK OF LESS THAN ONE DAY DURATION  
30-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

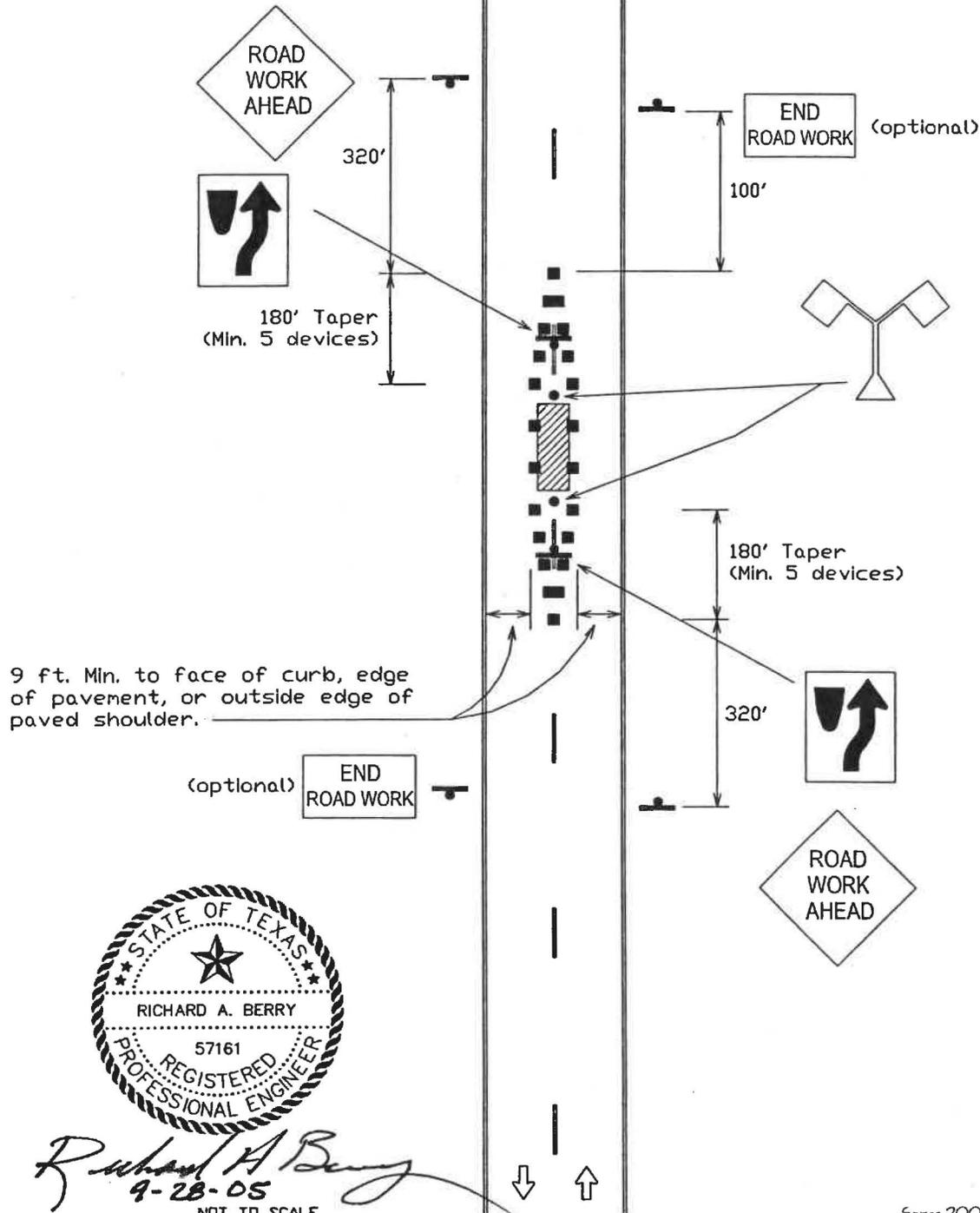
STD.  
DETAIL  
**TC-9k**  
(45 MPH)

**NOTES:**

1. USE DURING DAYLIGHT HOURS ONLY FOR SHORT DURATION OR SHORT TERM OPERATIONS OF LESS THAN ONE DAY DURATION.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



*Richard A. Berry*  
9-28-05  
NOT TO SCALE

Source 2003 TMLJCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
WORK OF LESS THAN ONE DAY DURATION  
36-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-9m**  
(45 MPH)

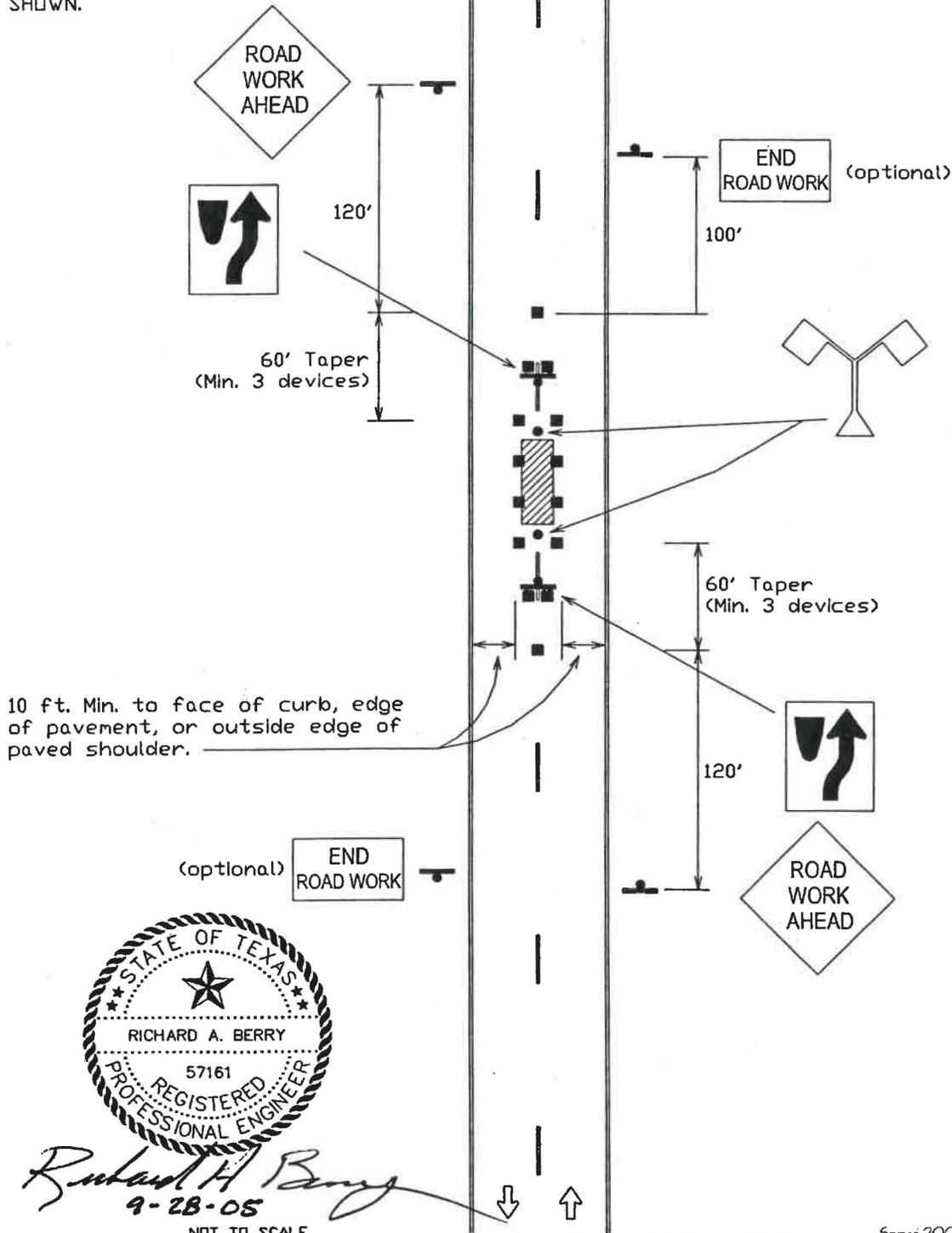


**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMLICD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
30-FT. AND 36-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

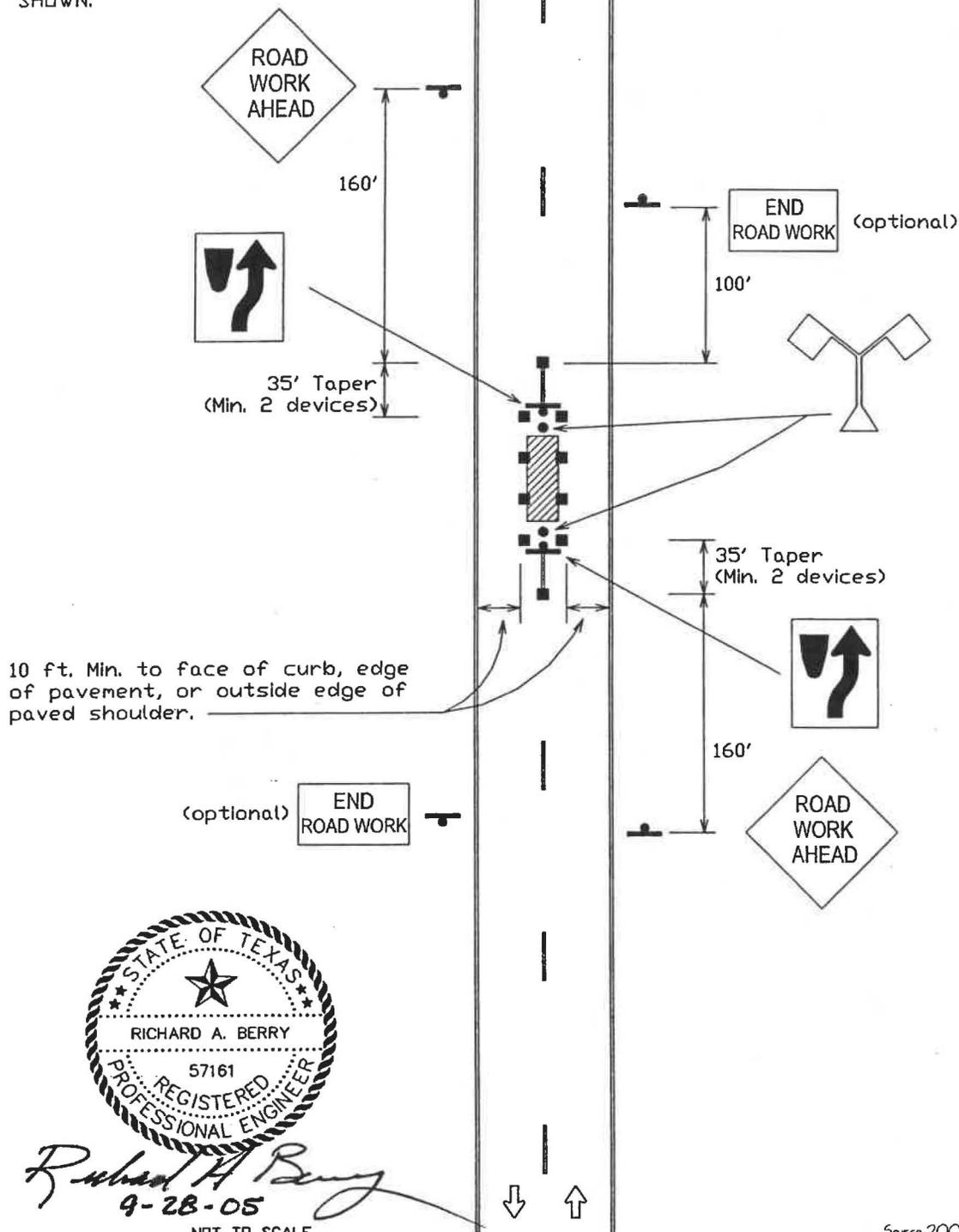
STD.  
DETAIL  
**TC-9o**  
(25 & 30 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
24-FT. AND 26-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

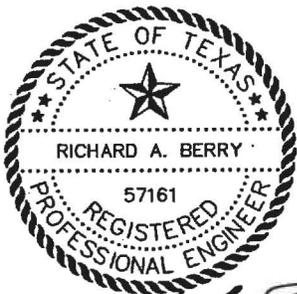
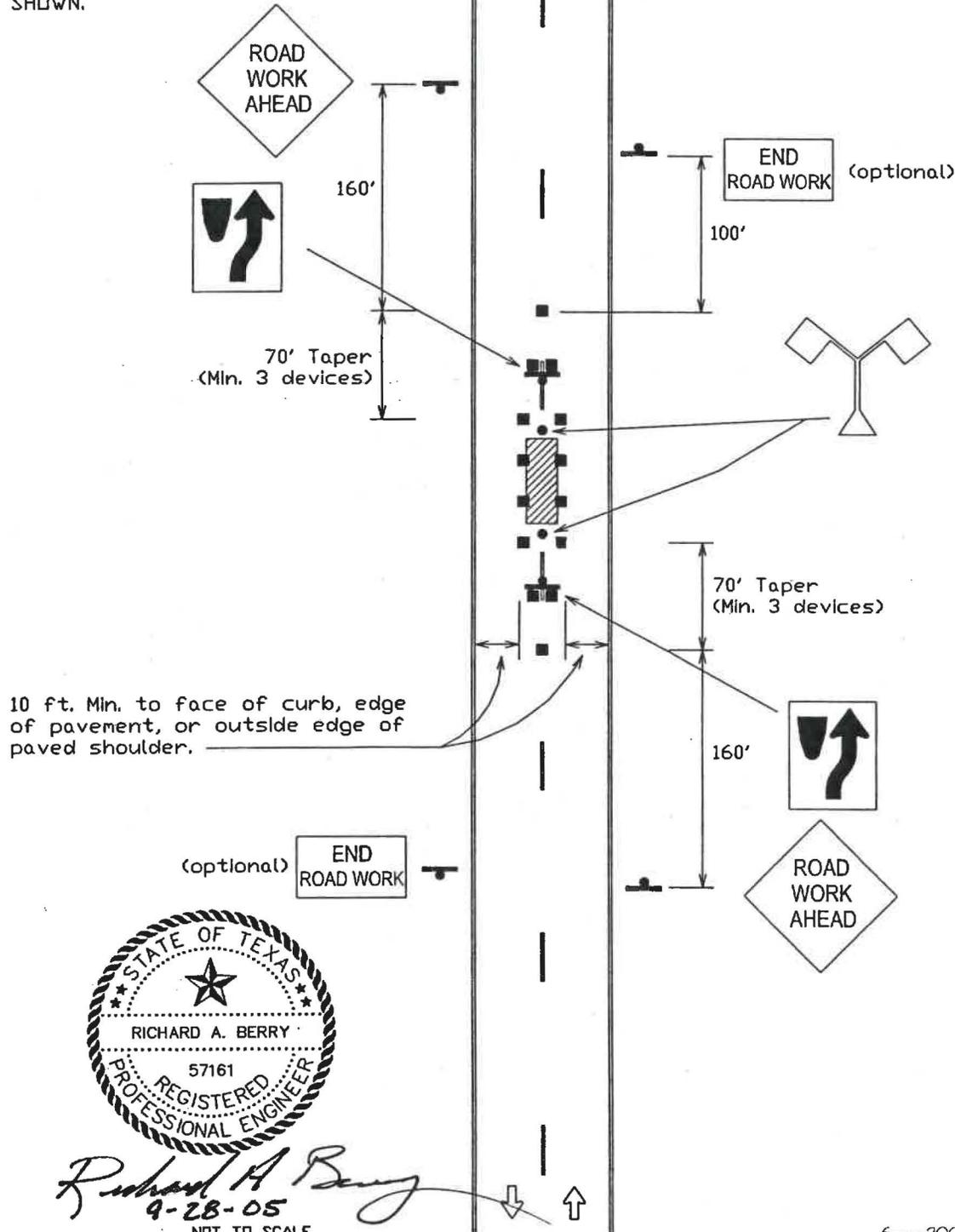
STD.  
DETAIL  
**TC-9p**  
(35 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TML/CD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 30-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

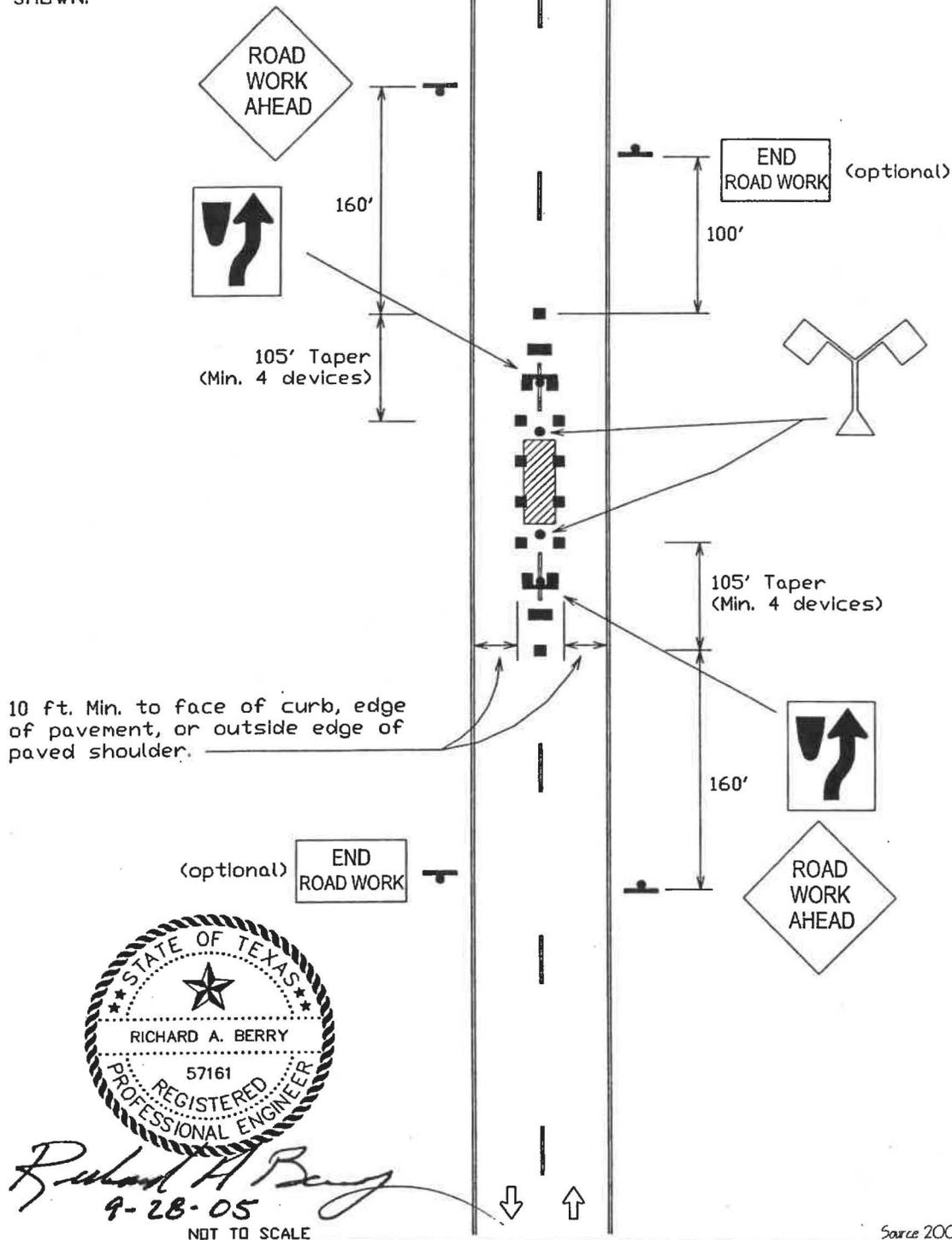
**STD.  
 DETAIL  
 TC-9q**  
 (35 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMHCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
36-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

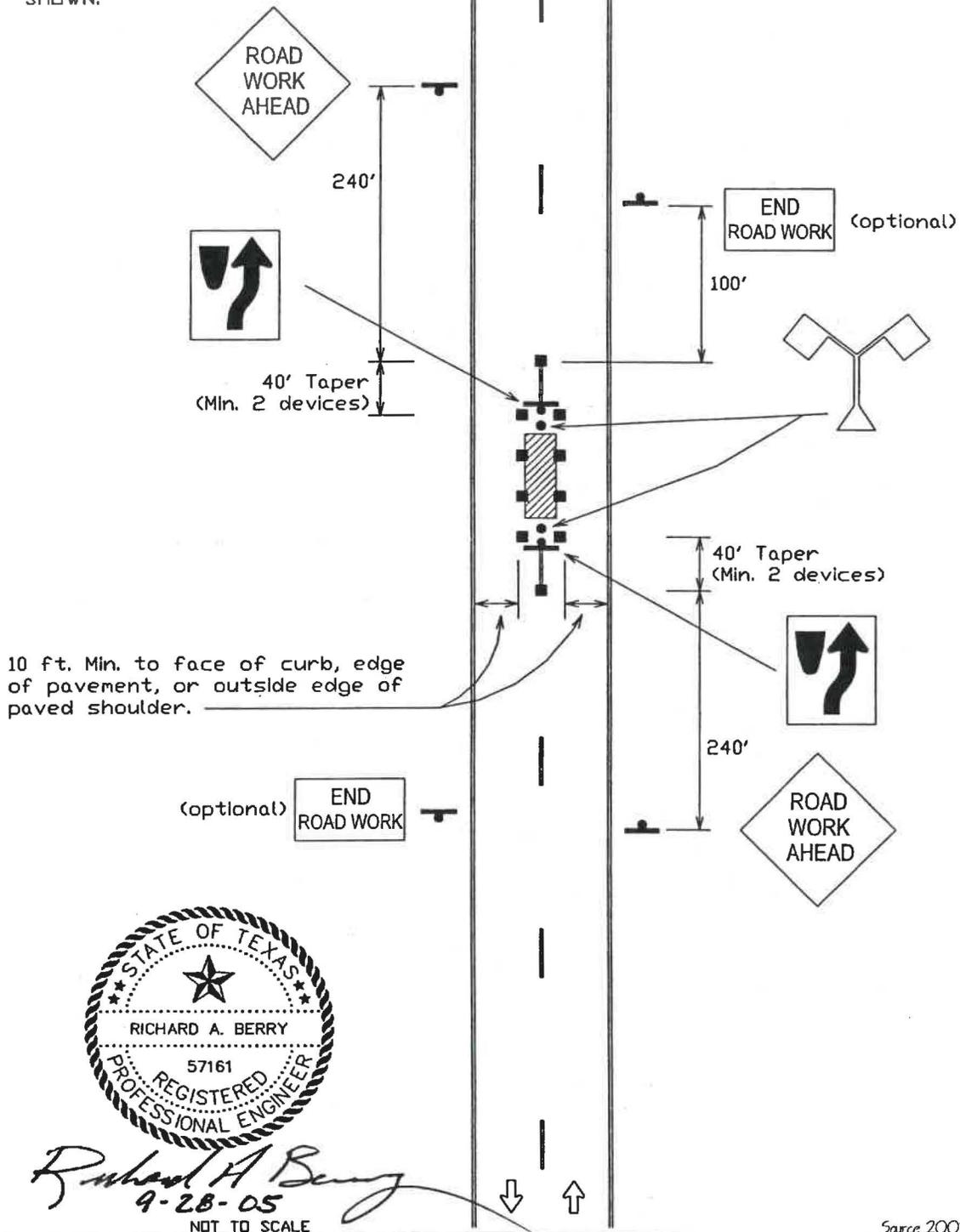
**STD.  
DETAIL  
TC-9r**  
(35 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FEET CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMJPCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 24-FT. AND 26-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

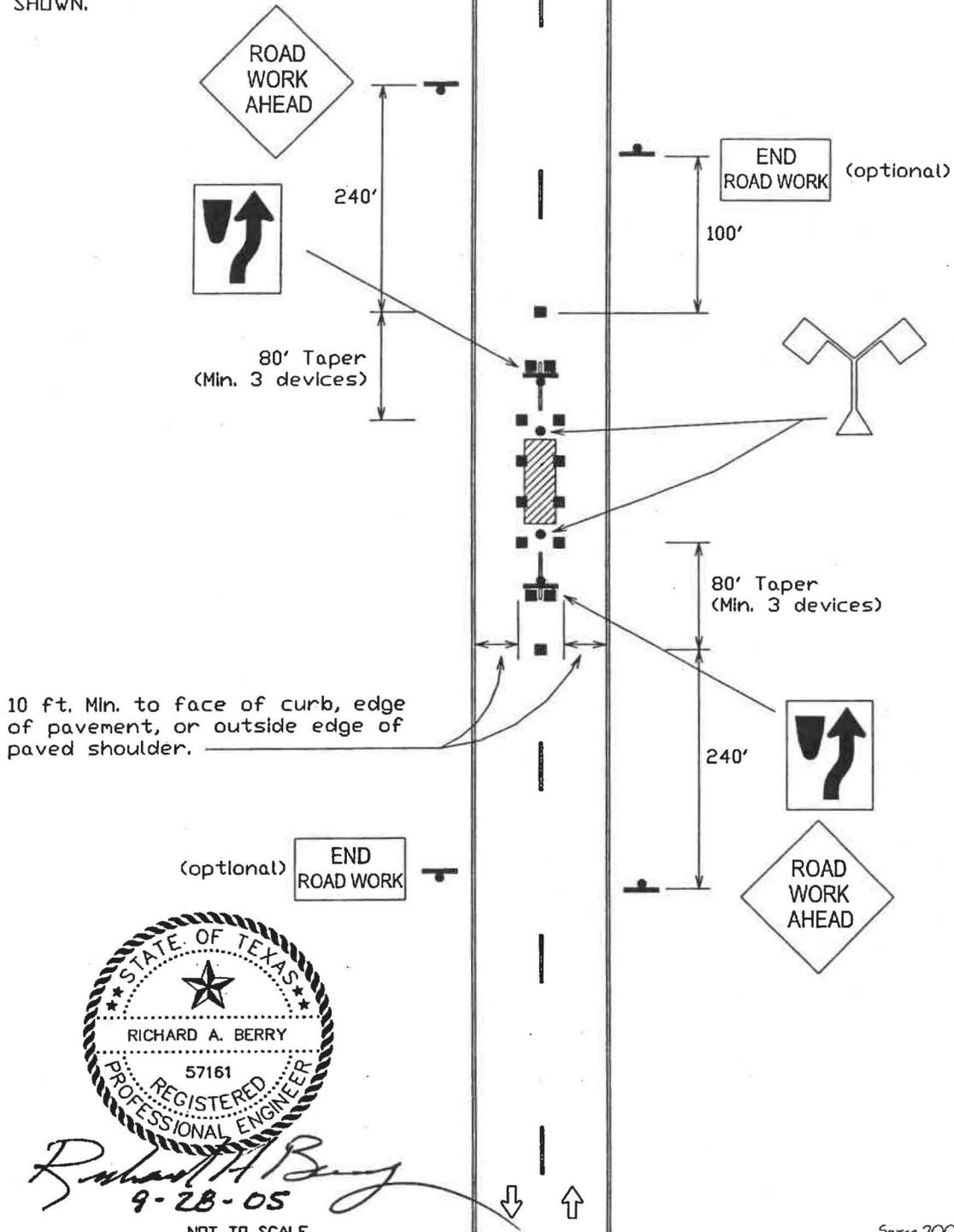
**STD.  
 DETAIL  
 TC-9s**  
 (40 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



*Richard A. Berry*  
9-28-05

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
LOW-VOLUME ROAD**  
30-FT. STREETS

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

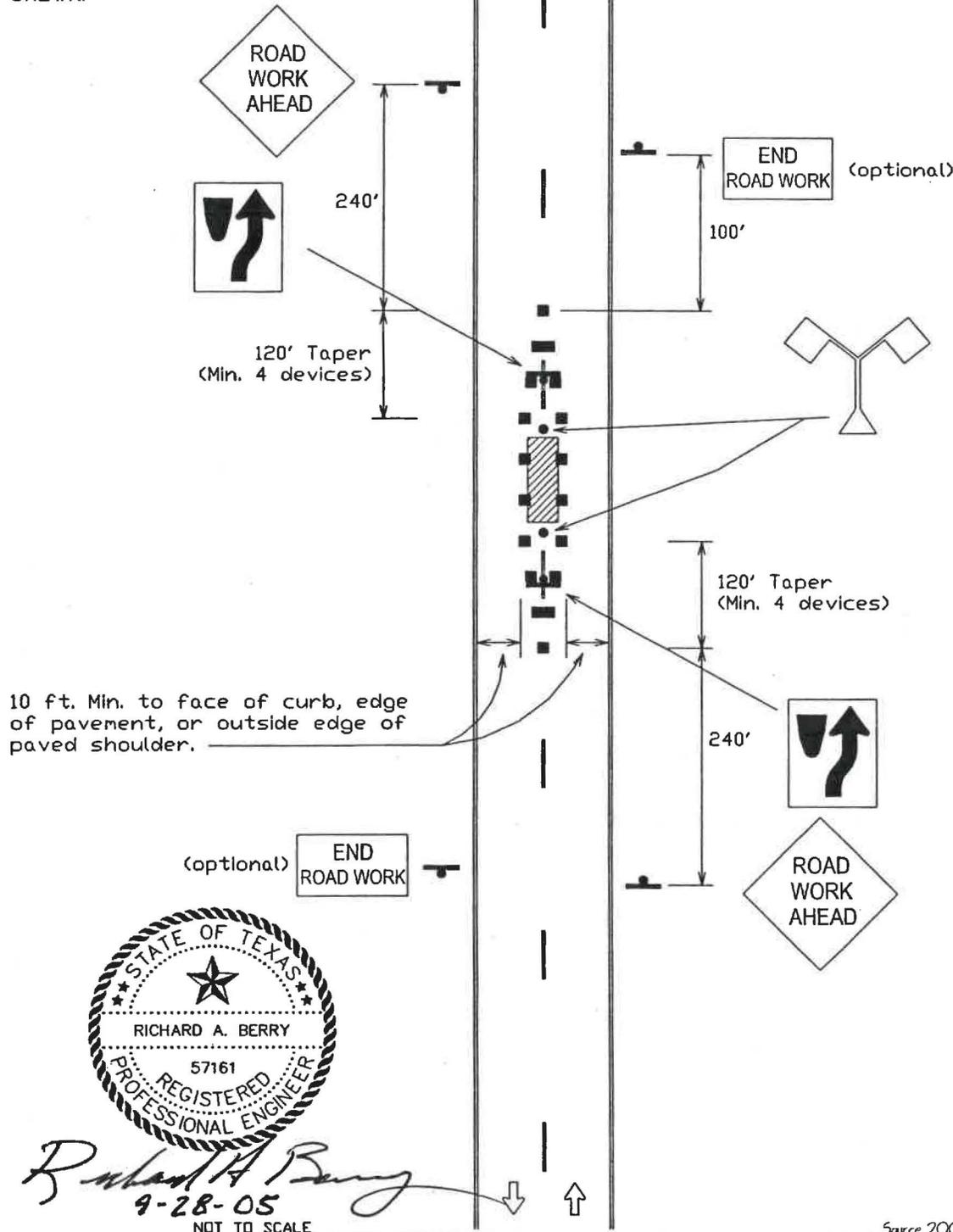
STD.  
DETAIL  
**TC-9t**  
(40 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMLTCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 36-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

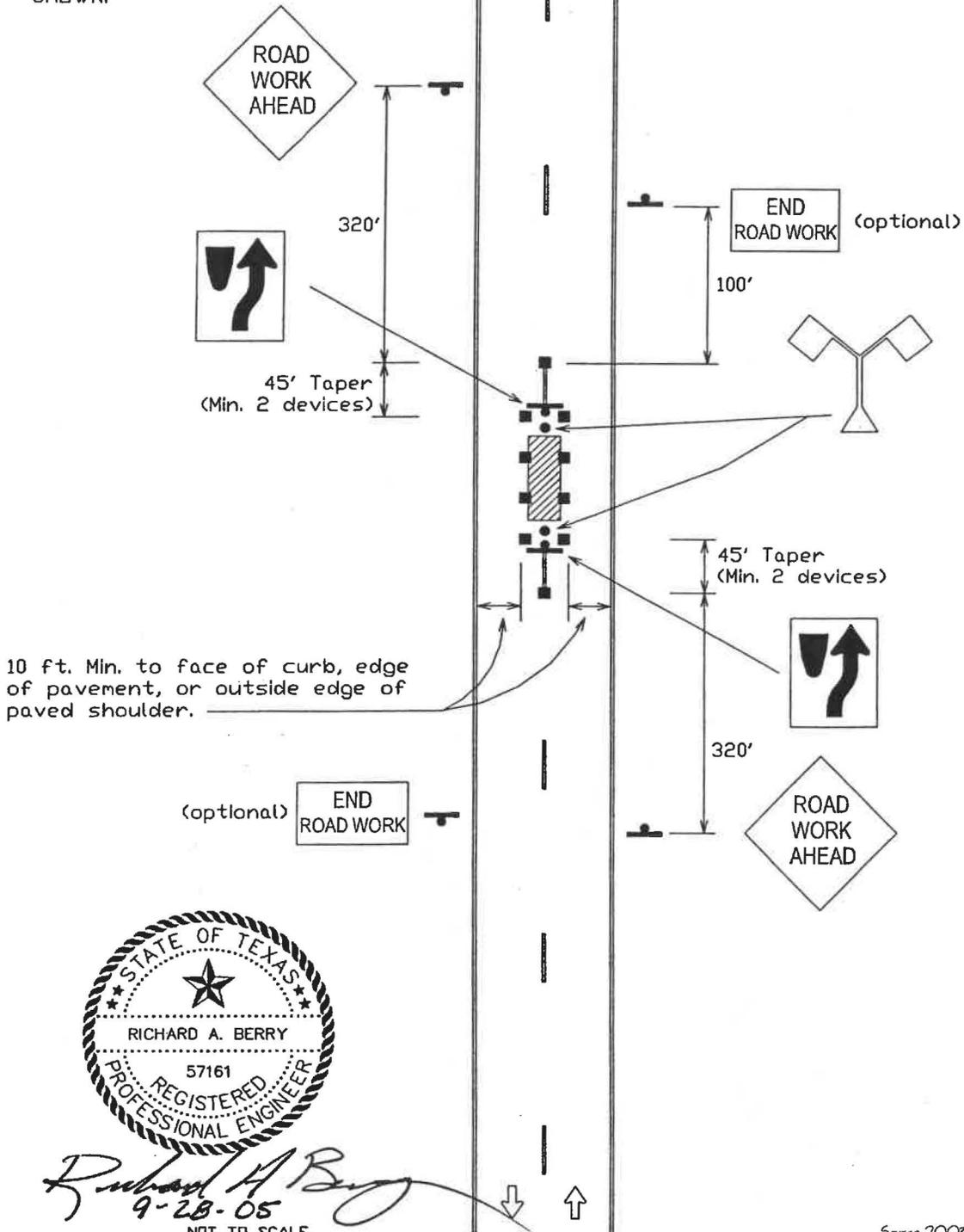
**STD.  
 DETAIL  
 TC-9u**  
 (40 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 24-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

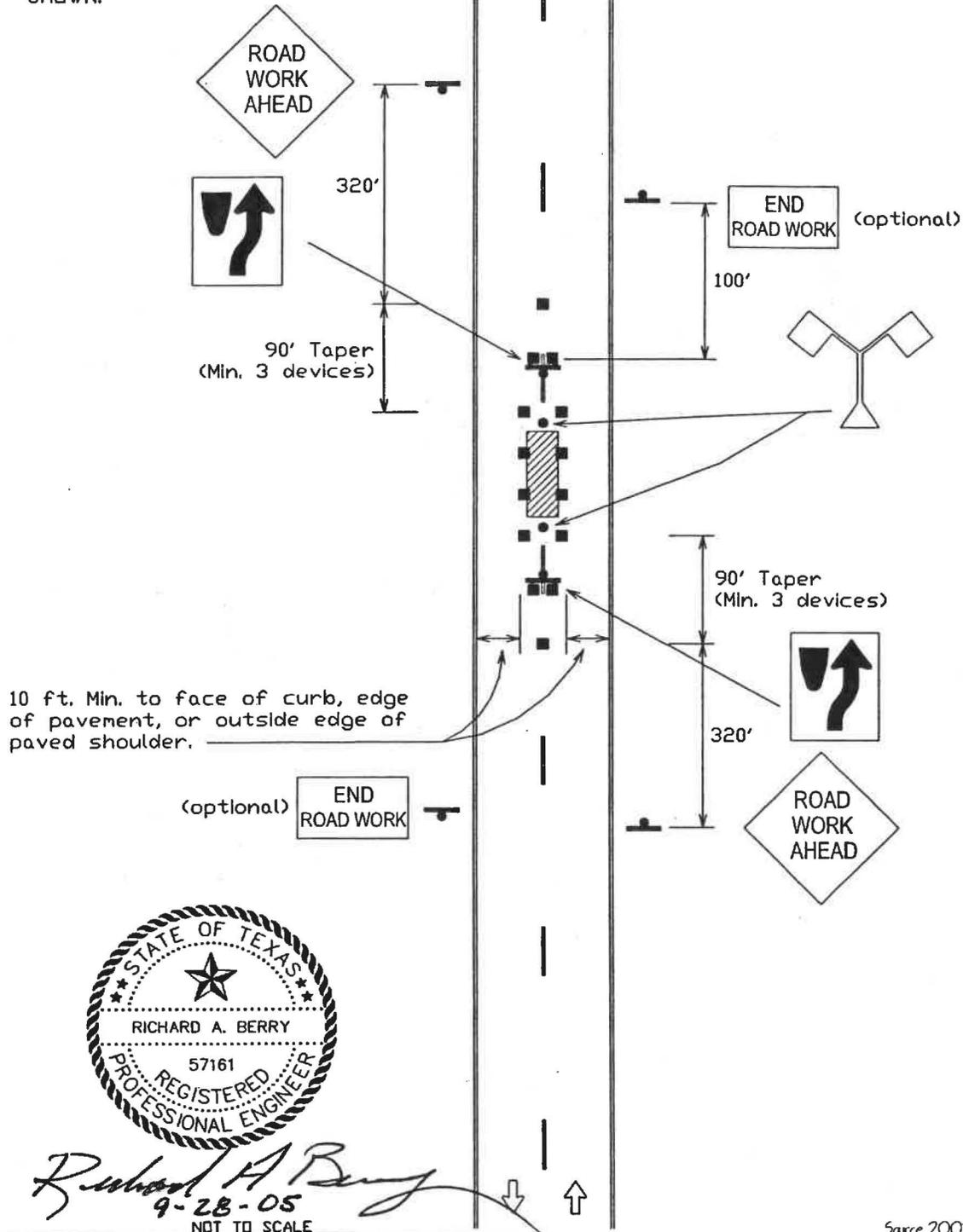
STD.  
 DETAIL  
**TC-9v**  
 (45 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMH1CD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 26-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

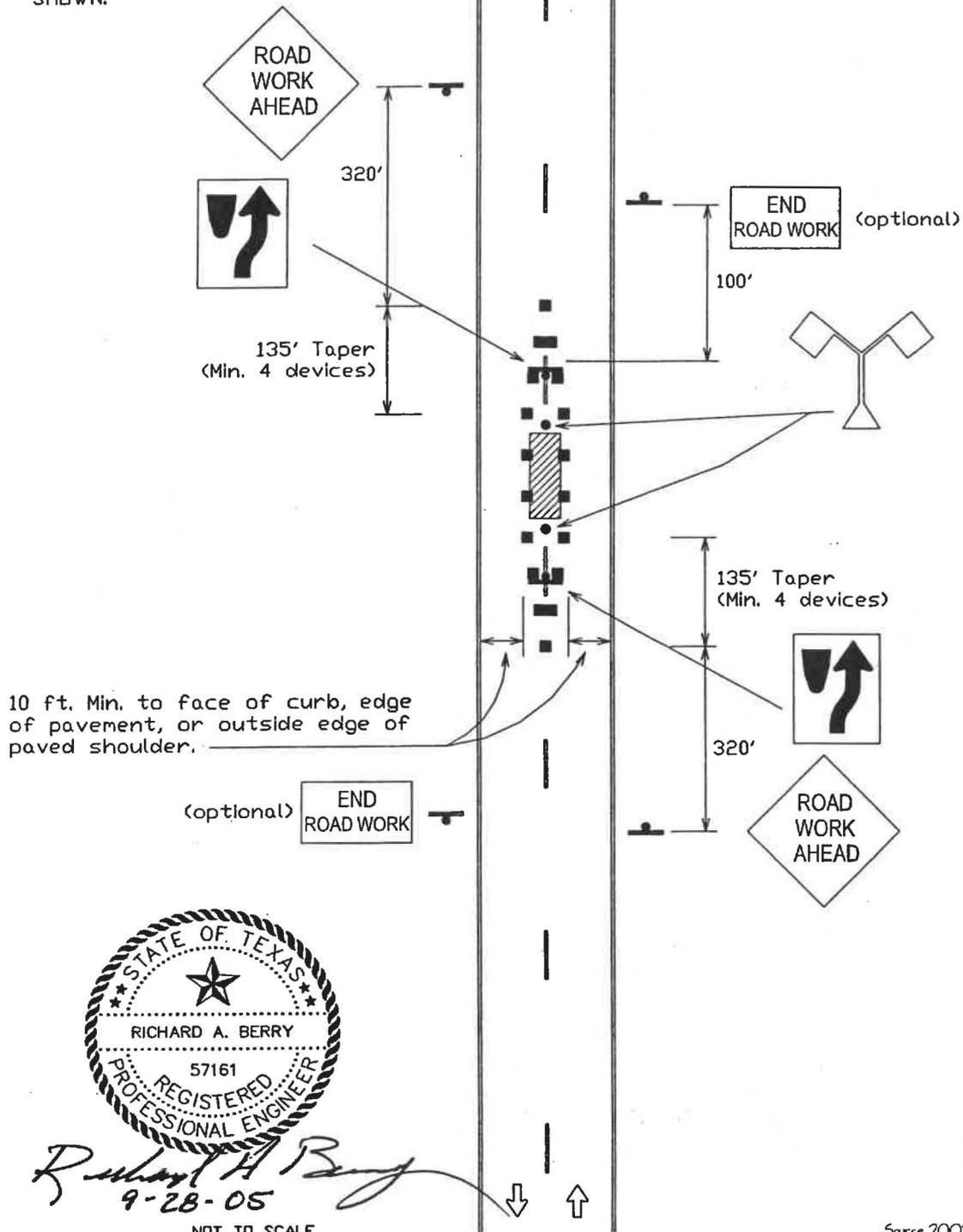
**STD.  
 DETAIL  
 TC-9w**  
 (45 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- ⚡ High level warning device (Flag tree)
- ⬇ Sign (facing down)
- ▨ Work space



*Richard A. Berry*  
9-28-05

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 30 FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

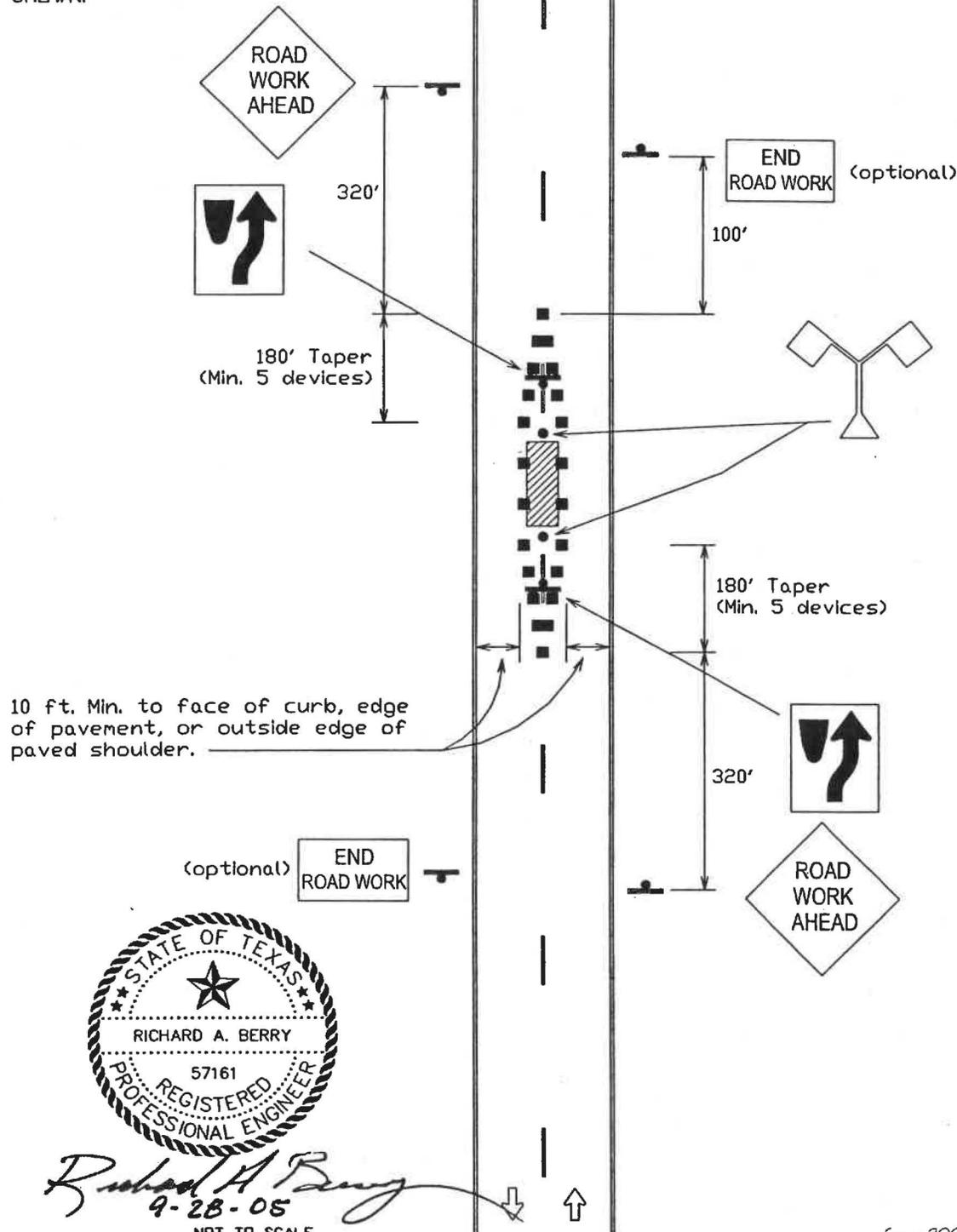
STD.  
 DETAIL  
**TC-9x**  
 (45 MPH)

**NOTES:**

1. WARNING LIGHTS MAY BE USED ON THE CHANNELIZING DEVICES IF THE CLOSURE CONTINUES OVERNIGHT.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of travel
- High level warning device (Flag tree)
- Sign (facing down)
- Work space



Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
**WORK IN CENTER OF  
 LOW-VOLUME ROAD**  
 36-FT. STREETS

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

**STD.  
 DETAIL  
 TC-9y**  
 (45 MPH)

**NOTES:**

1. FOR LOCAL AND COLLECTOR STREETS THAT ARE 36-FEET OR LESS IN WIDTH.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 30-FEET CENTER TO CENTER.

**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of Traffic
- ⊙ Flagger
- ⊥ Sign (facing down)
- ▨ Work space
- 🚚 Work vehicle



*Richard A. Berry*  
9-28-05

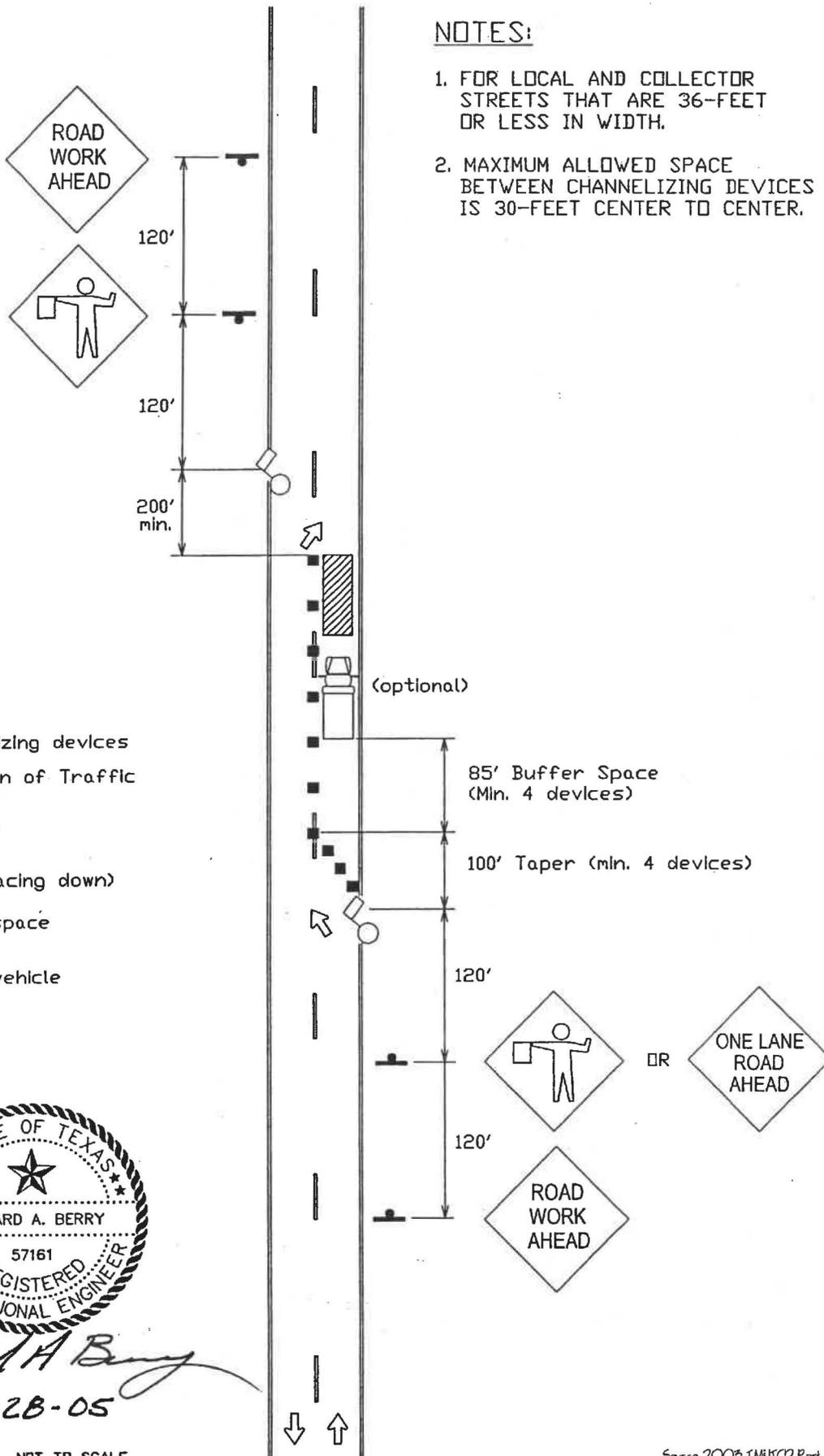
NOT TO SCALE

Source 2003 TMUTCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE ON  
MINOR STREET**

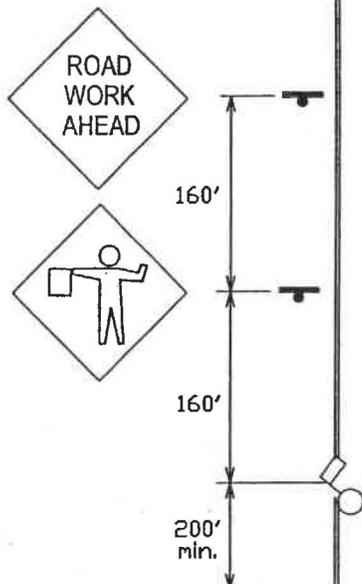
**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-10a  
(25 & 30 MPH)**



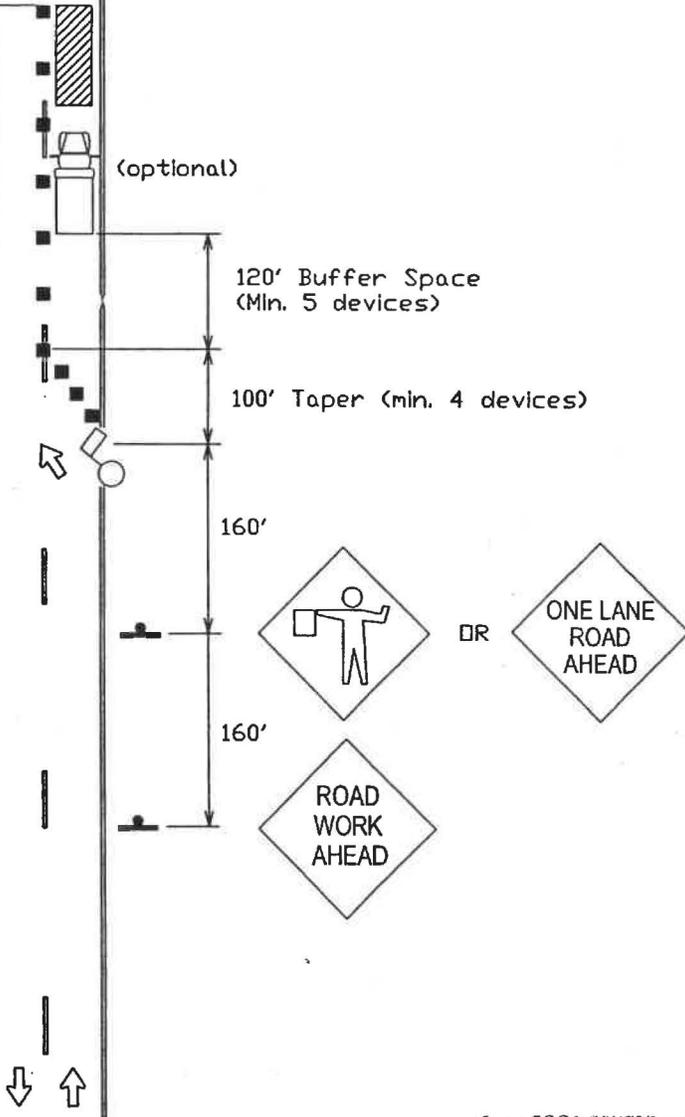
NOTES:

1. FOR LOCAL AND COLLECTOR STREETS THAT ARE 36-FEET OR LESS IN WIDTH.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 35-FEET CENTER TO CENTER.



LEGEND

- ■ ■ Channelizing devices
- ➔ Direction of Traffic
- ⊙ Flagger
- ⊥ Sign (facing down)
- ▨ Work space
- 🚚 Work vehicle



*Richard A. Berry*  
9-28-05

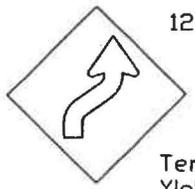
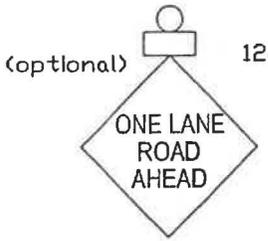
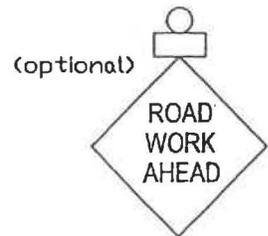
NOT TO SCALE

Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
LANE CLOSURE ON  
MINOR STREET

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-10b  
(35 MPH)



**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of Traffic
- ⏏ Sign (facing down)
- ▨ Work space
- ▬ Type III Barricade
- ⦿ Type B Flashing Warning Light

120'

120'

100' Taper  
(min. 4 devices)

85' Buffer Space  
(Min. 4 devices)

120'

85' Buffer Space  
(Min. 4 devices)

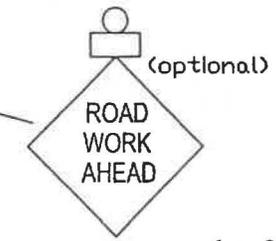
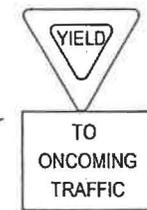
100' Taper  
(min. 4 devices)

15'

120'

120'

120'



**NOTES:**

1. FOR LOW VOLUME LOCAL AND COLLECTOR STREETS THAT ARE 36-FOOT OR LESS IN WIDTH.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 30-FOOT CENTER TO CENTER.



*Richard A. Berry*  
9-28-05

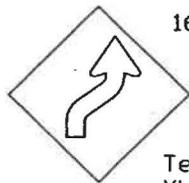
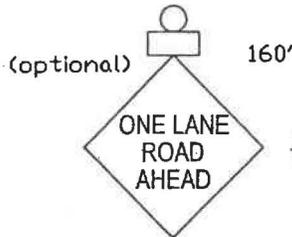
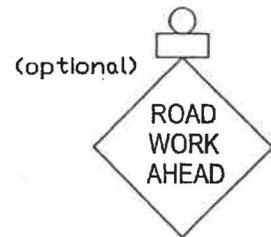
NOT TO SCALE

CITY OF MESQUITE, TEXAS  
LANE CLOSURE ON  
LOW-VOLUME TWO-LANE  
ROAD

Source 2003 TMUTCD Part 6

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-11a  
(25 & 30 MPH)



**LEGEND**

- ■ ■ Channelizing devices
- ➔ Direction of Traffic
- ⊥ Sign (facing down)
- ▨ Work space
- ▬ Type III Barricade
- ⊡ Type B Flashing Warning Light

160'

160'

100' Taper  
(min. 4 devices)

120' Buffer Space  
(Min. 5 devices)

160'

120' Buffer Space  
(Min. 5 devices)

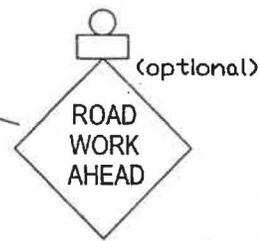
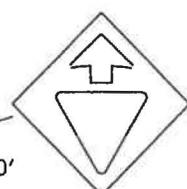
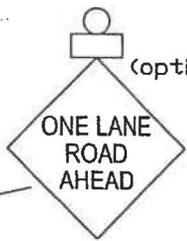
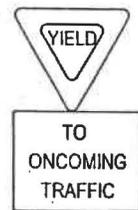
100' Taper  
(min. 4 devices)

15'

160'

160'

160'



**NOTES:**

1. FOR LOW VOLUME LOCAL AND COLLECTOR STREETS THAT ARE 36-FEET OR LESS IN WIDTH.
2. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 35-FEET CENTER TO CENTER.



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE ON  
LOW-VOLUME TWO-LANE  
ROAD**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

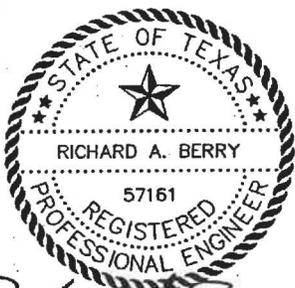
**STD.  
DETAIL  
TC-11b  
(35 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

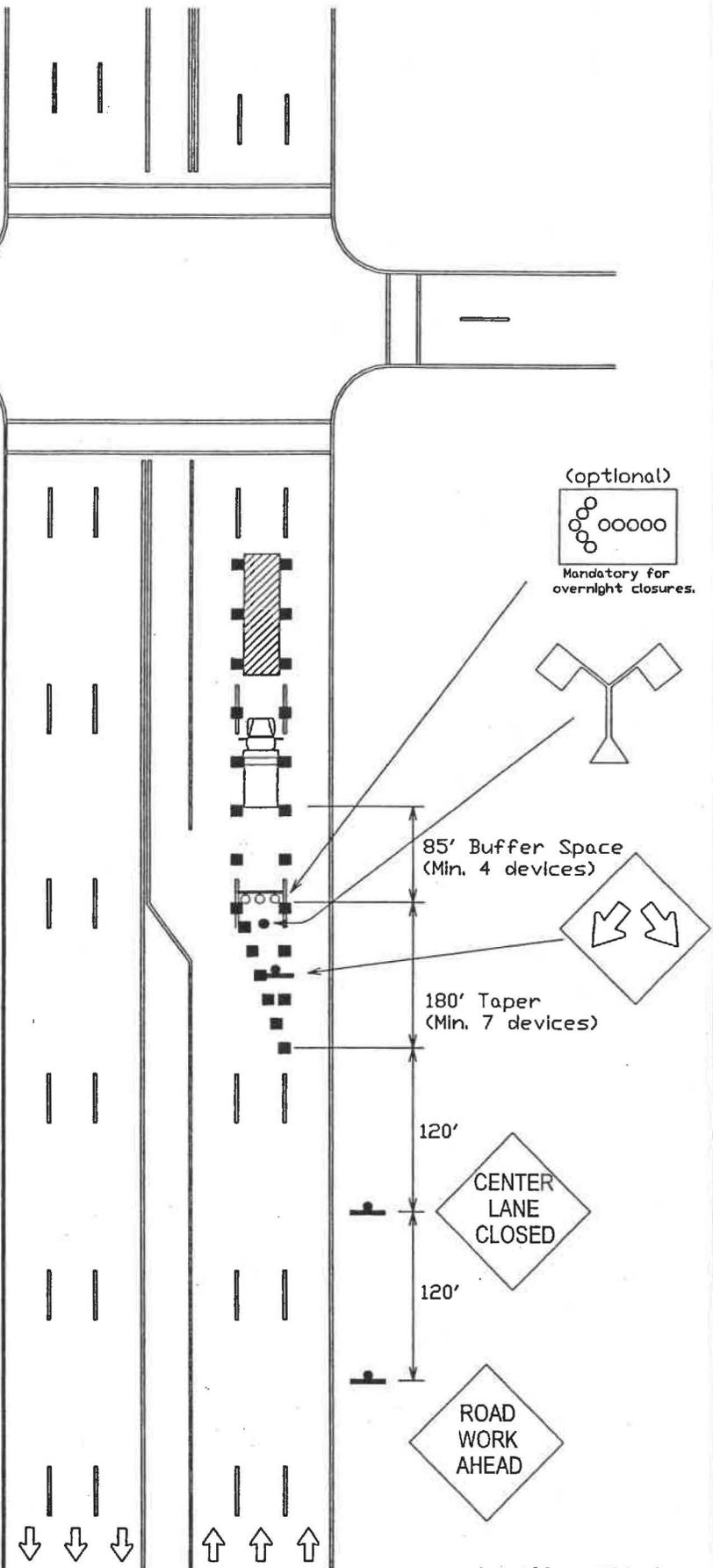
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

Source 2003 TMUTCD Part 6

STD.  
DETAIL  
**TC-12a**  
(30 MPH)

**NOTES:**

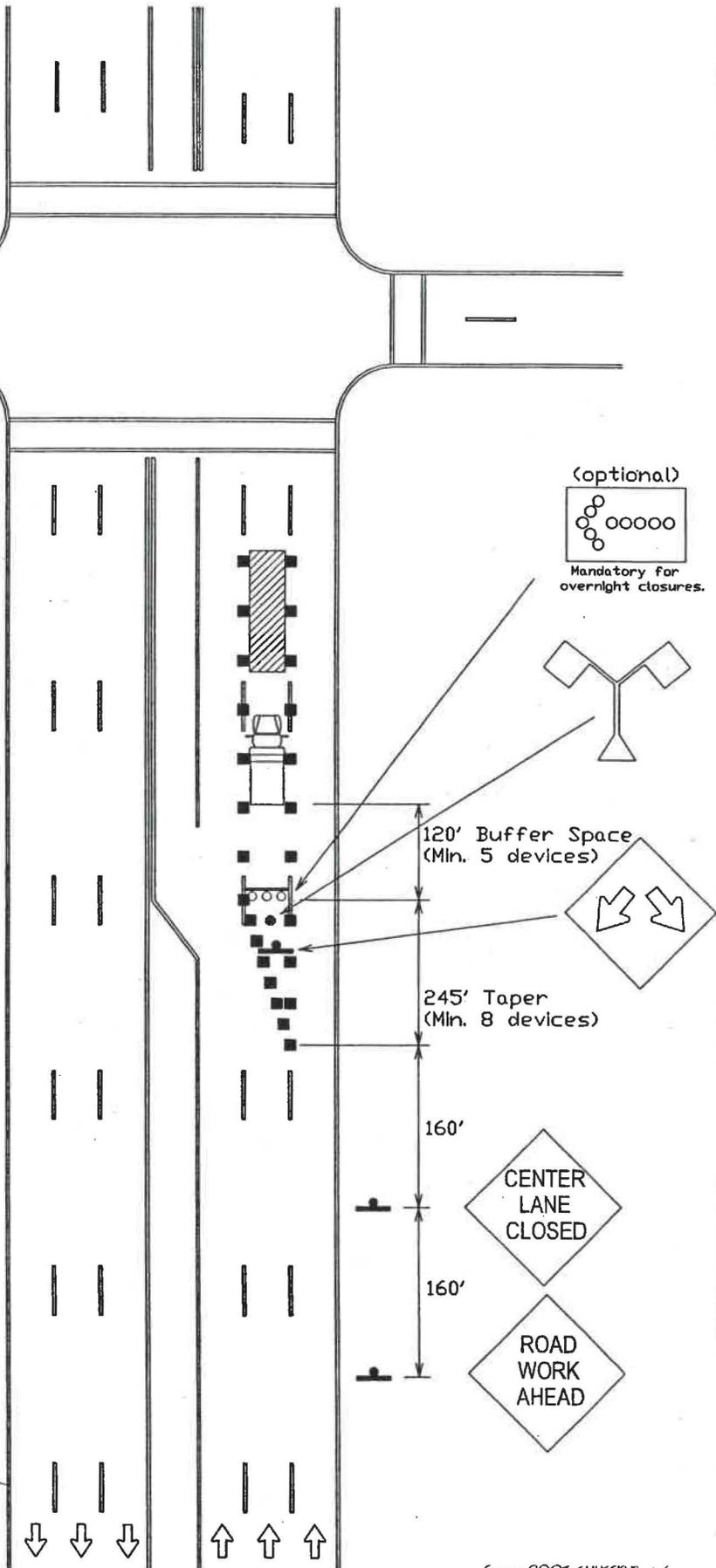
1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 MUTCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-12b  
(35 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

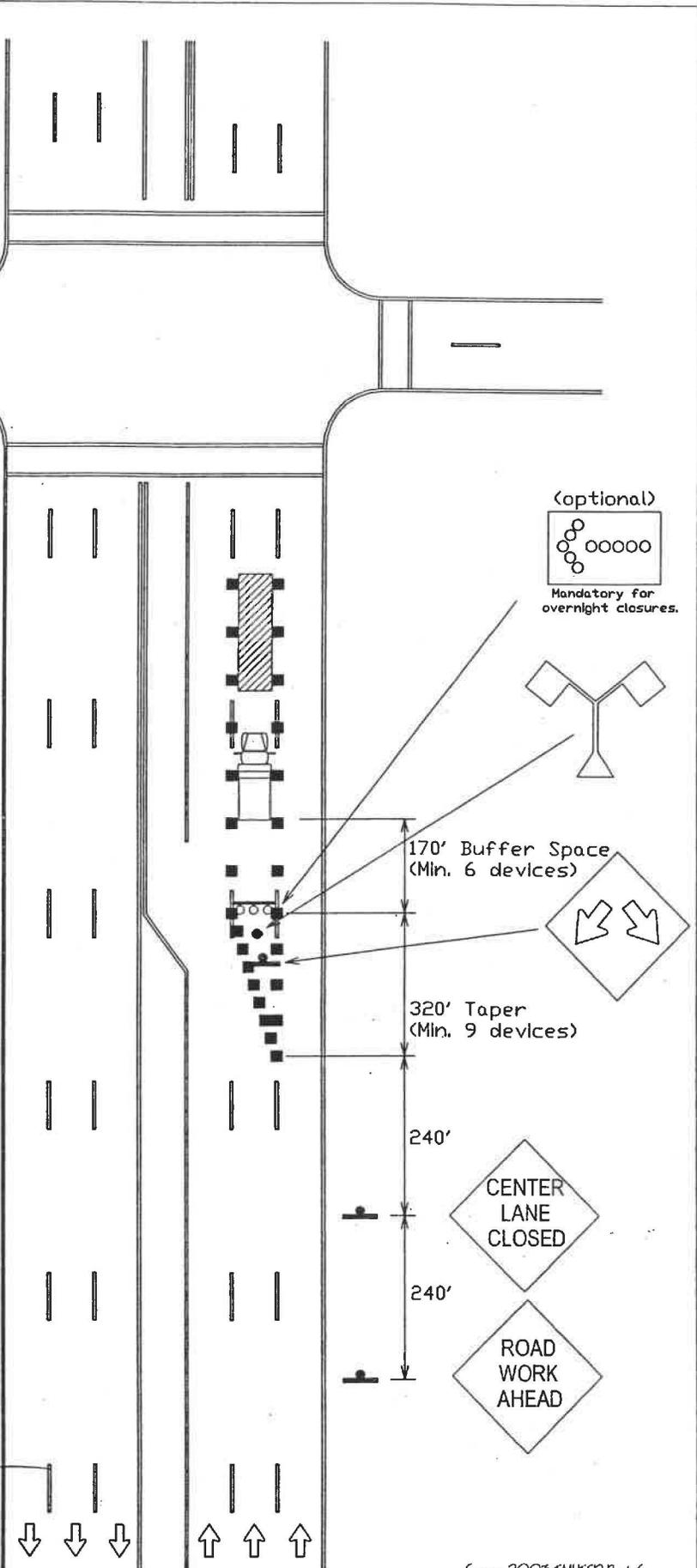
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
 9-28-05

NOT TO SCALE



Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
 LANE CLOSURE NEAR  
 SIDE OF INTERSECTION

WORK ZONE TRAFFIC  
 CONTROL GUIDELINES

STD.  
 DETAIL  
 TC-12c  
 (40 MPH)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

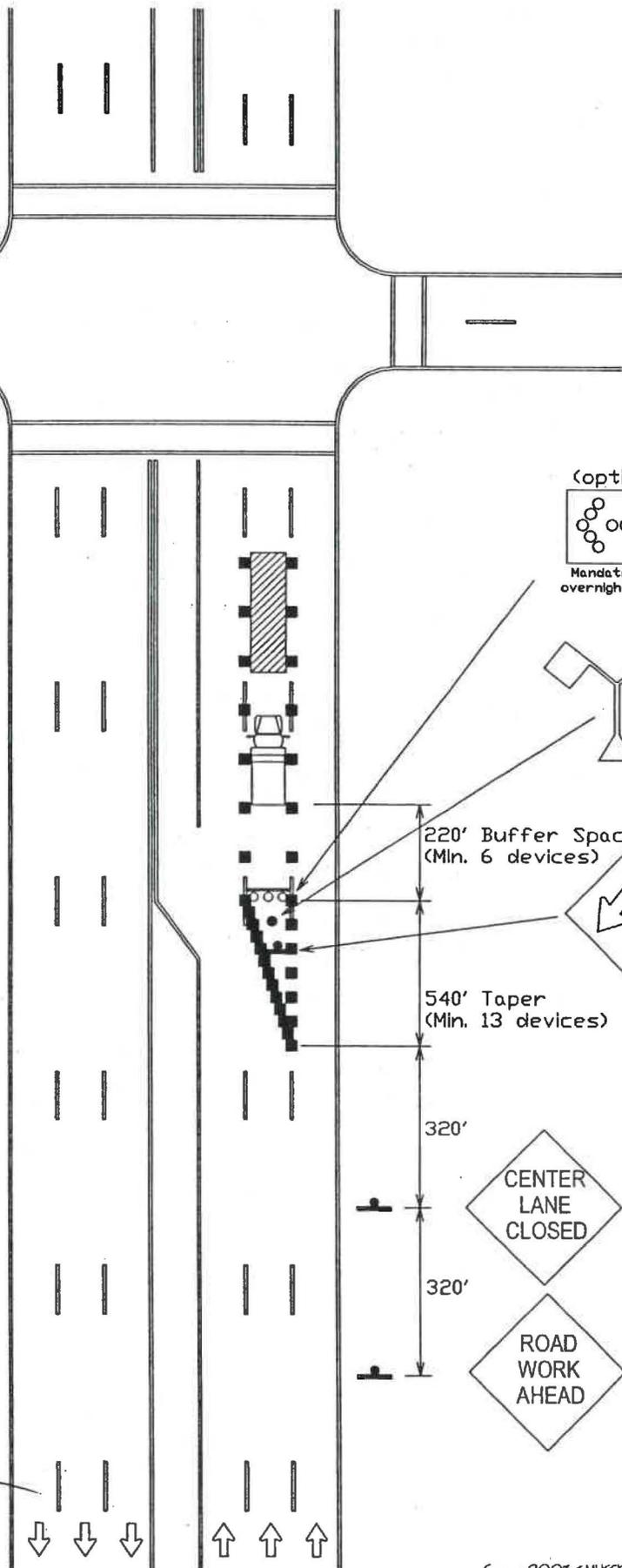
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

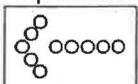
**STD.  
DETAIL  
TC-12d  
(45 MPH)**

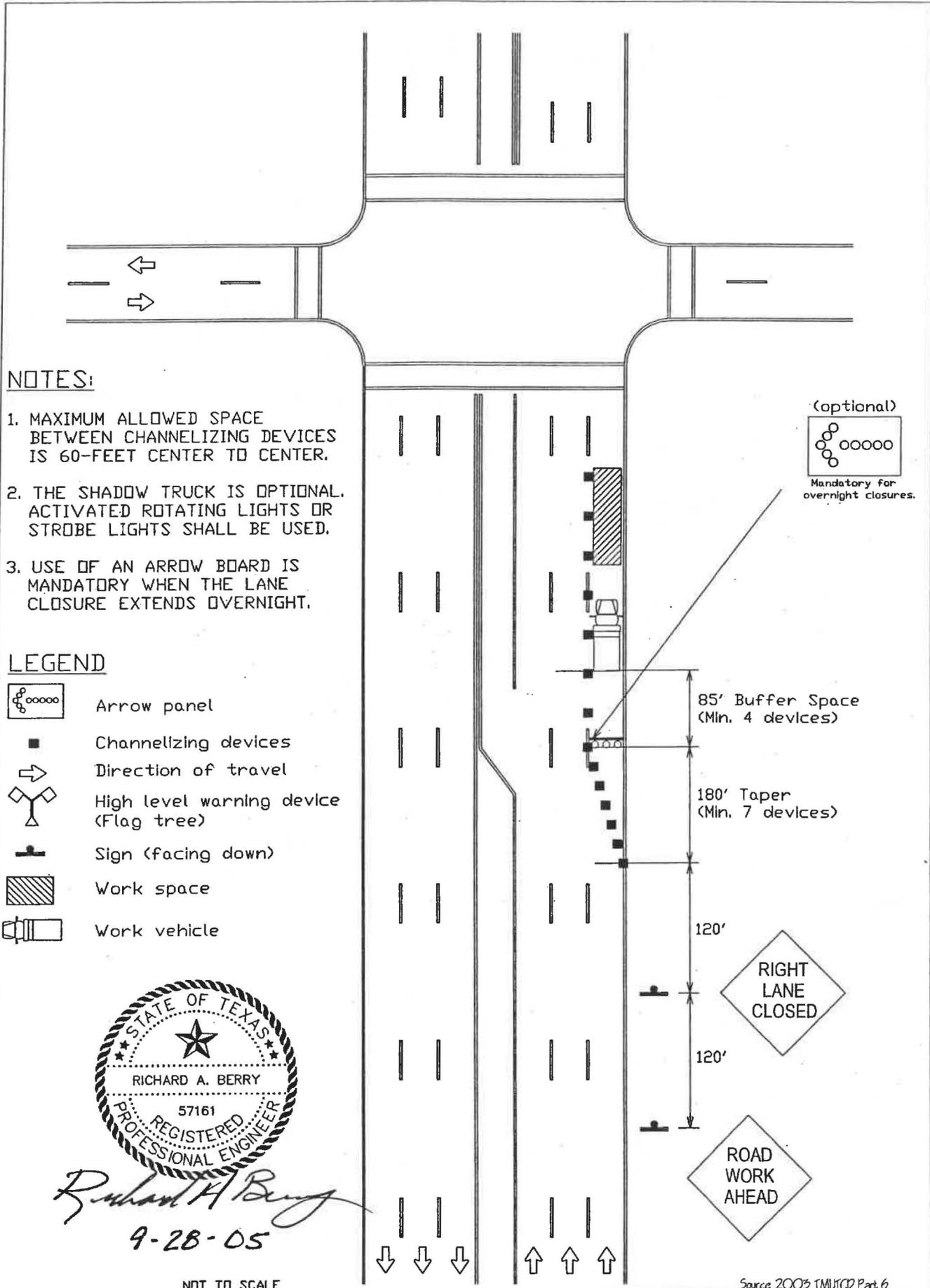
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle

(optional)  
  
 Mandatory for overnight closures.



*Richard A. Berry*  
 9-28-05

NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
 SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

STD.  
 DETAIL  
**TC-12e**  
 (30 MPH)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

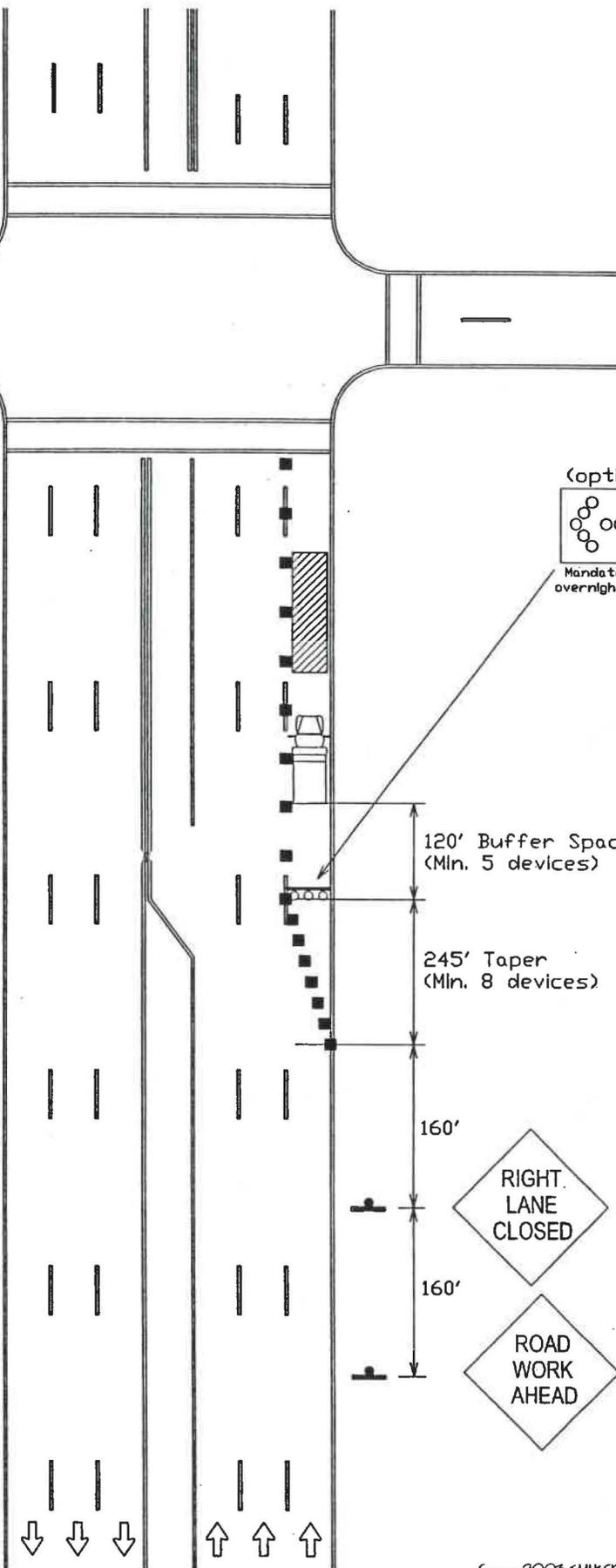
**LEGEND**

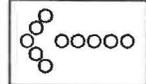
-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
 9-28-05

NOT TO SCALE



(optional)  
  
 Mandatory for overnight closures.

120' Buffer Space  
 (Min. 5 devices)

245' Taper  
 (Min. 8 devices)

160'

160'

RIGHT LANE CLOSED

ROAD WORK AHEAD

Source 2005 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
 SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

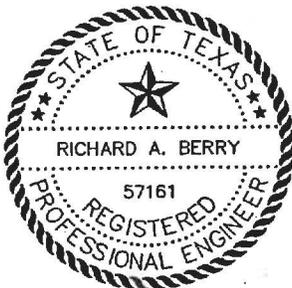
**STD.  
 DETAIL  
 TC-12f  
 (35 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

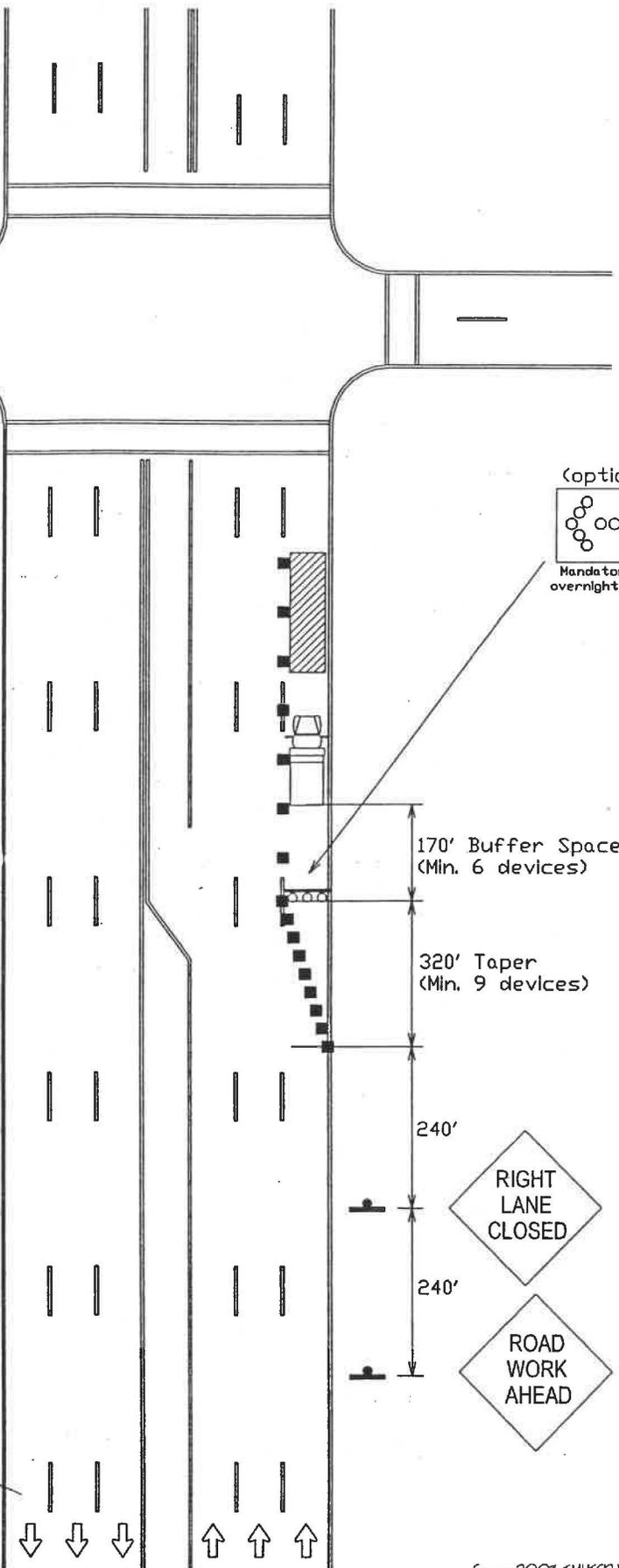
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-12g  
(40 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

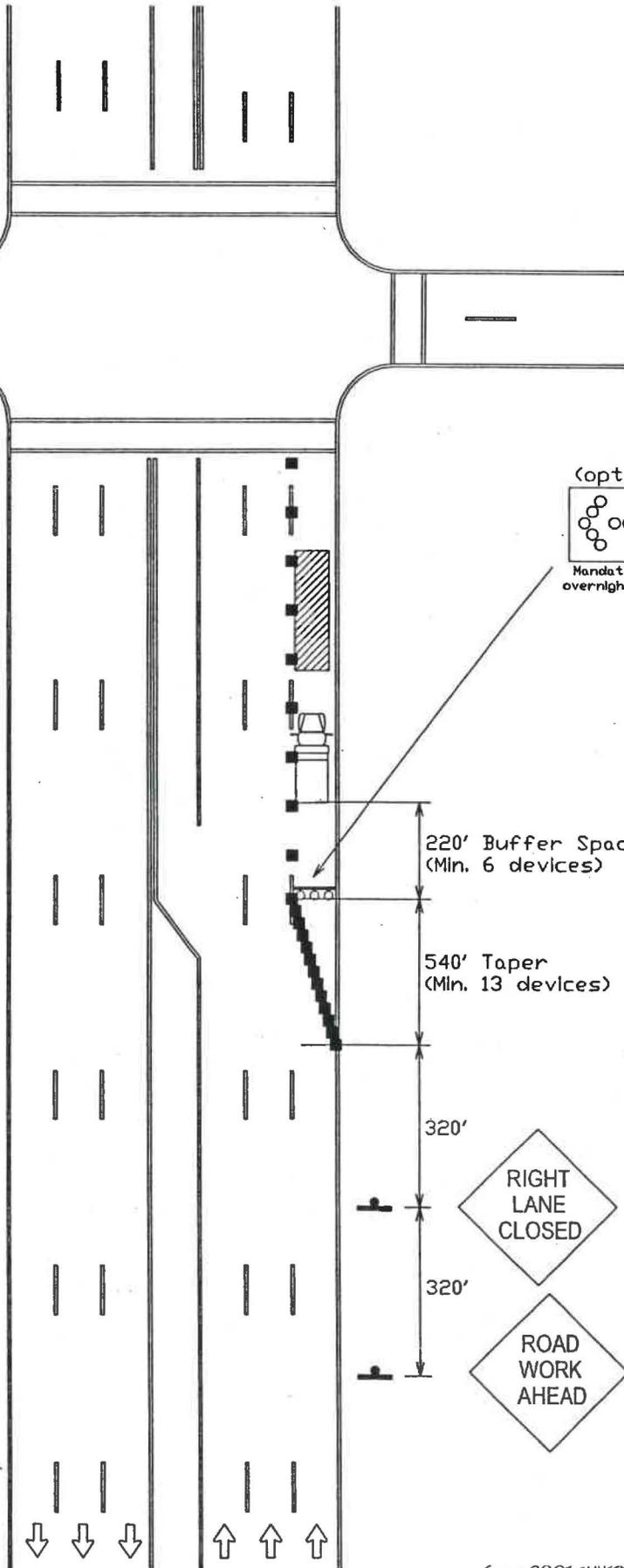
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle

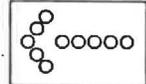


*Richard A. Berry*  
9-28-05

NOT TO SCALE



(optional)



Mandatory for overnight closures.

220' Buffer Space  
(Min. 6 devices)

540' Taper  
(Min. 13 devices)

320'

320'



Source 2003 TMURCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-12h  
(45 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
4. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

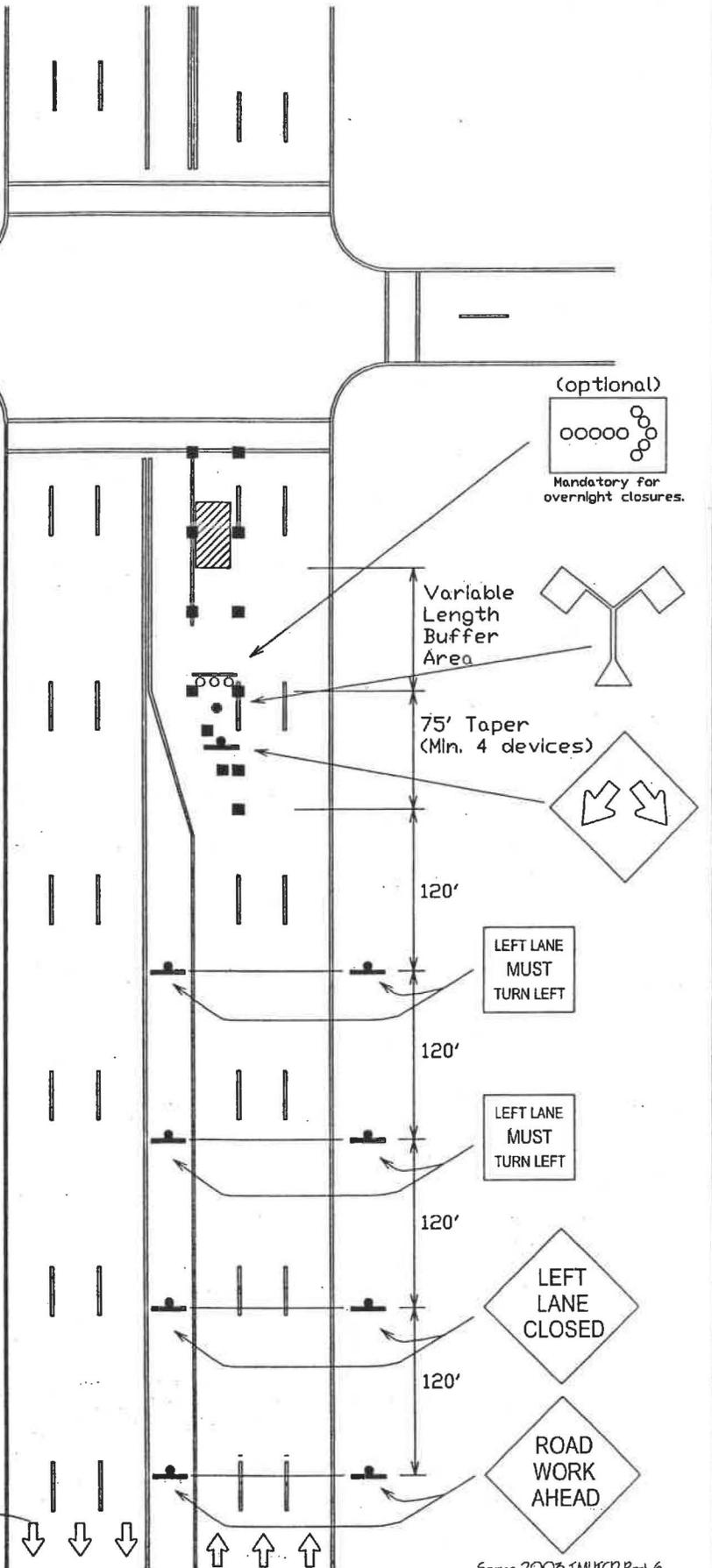
**LEGEND:**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMUTCD Part 6

CITY OF MESQUITE, TEXAS  
LANE CLOSURE NEAR  
SIDE OF INTERSECTION

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-12i  
(30 MPH)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
4. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

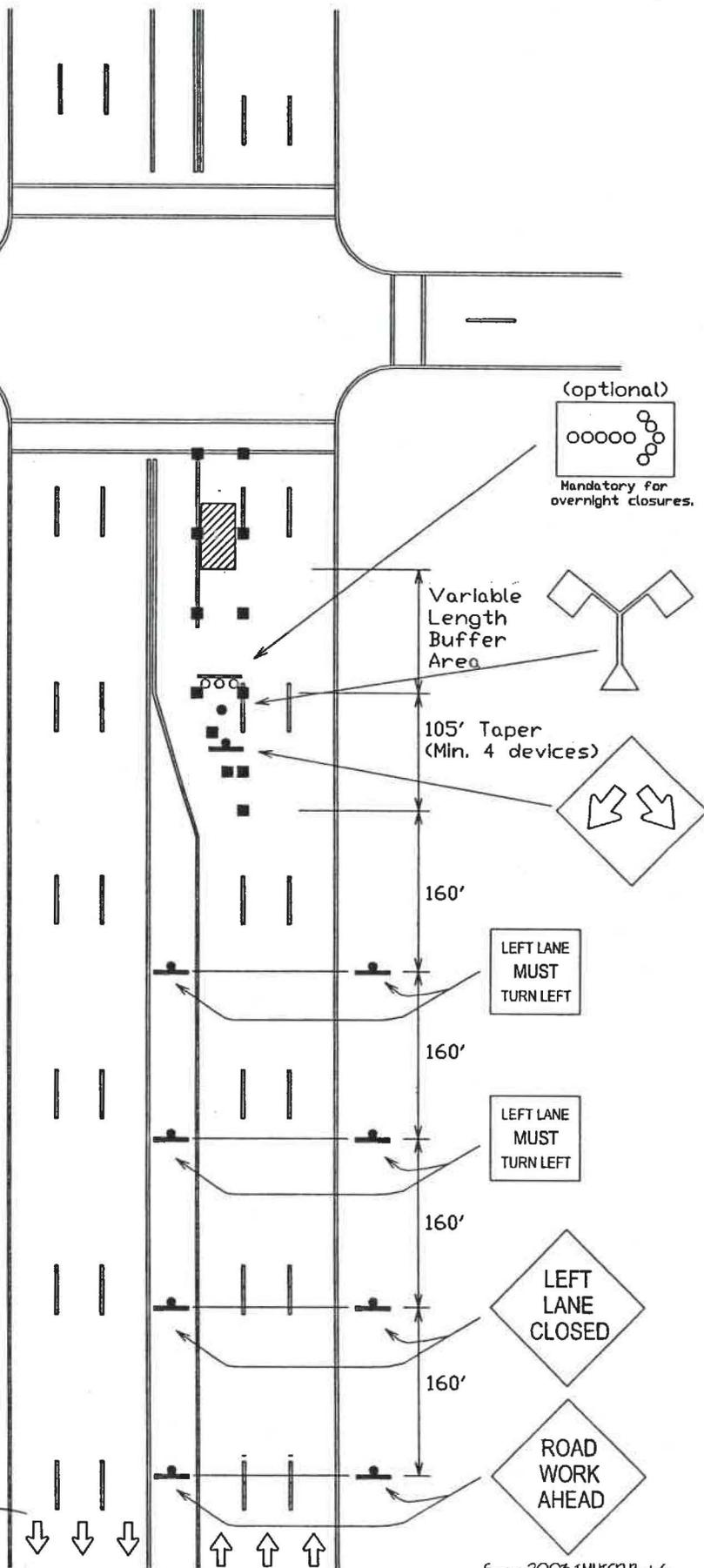
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-12j  
(35 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
4. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

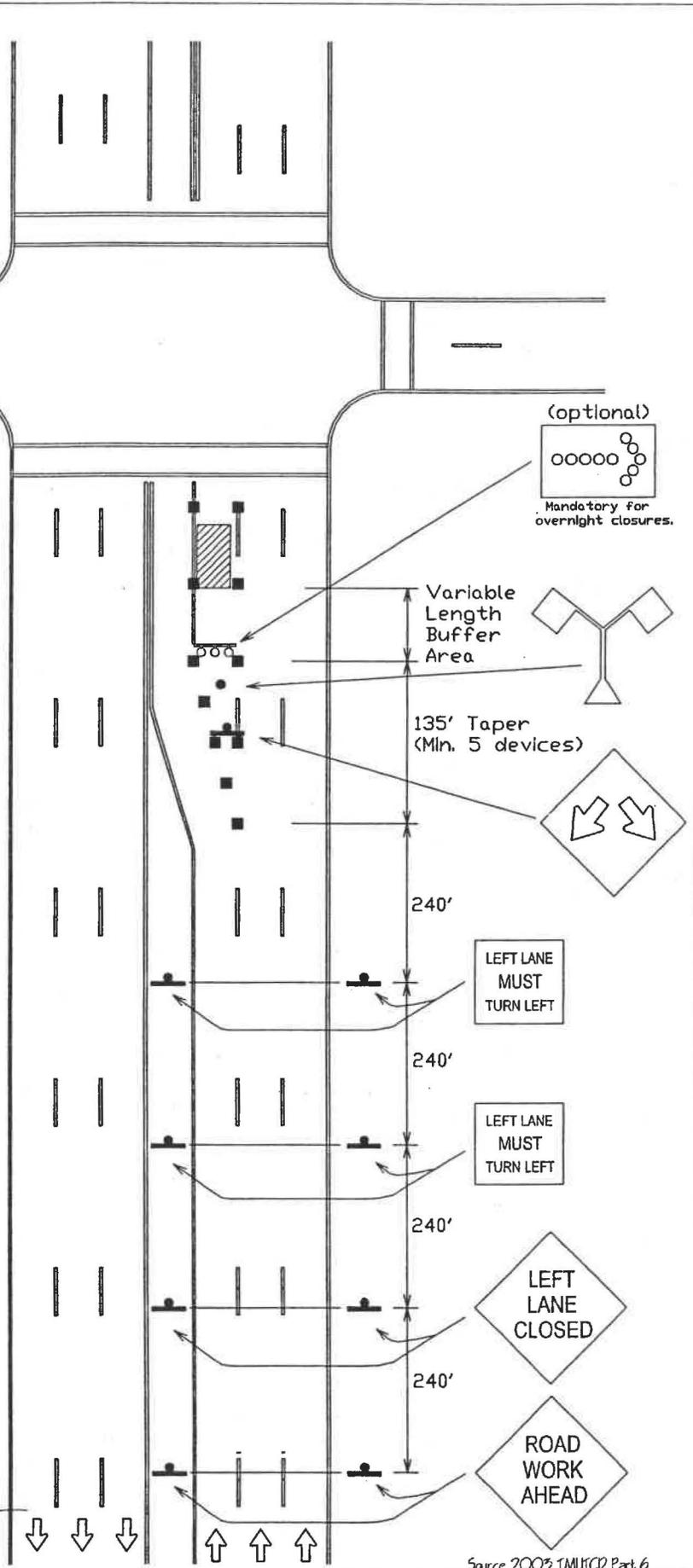
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

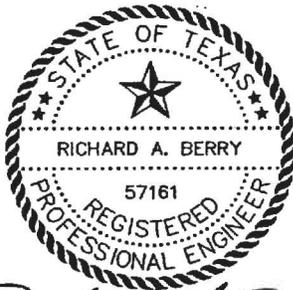
**STD.  
DETAIL  
TC-12k  
(40 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
4. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

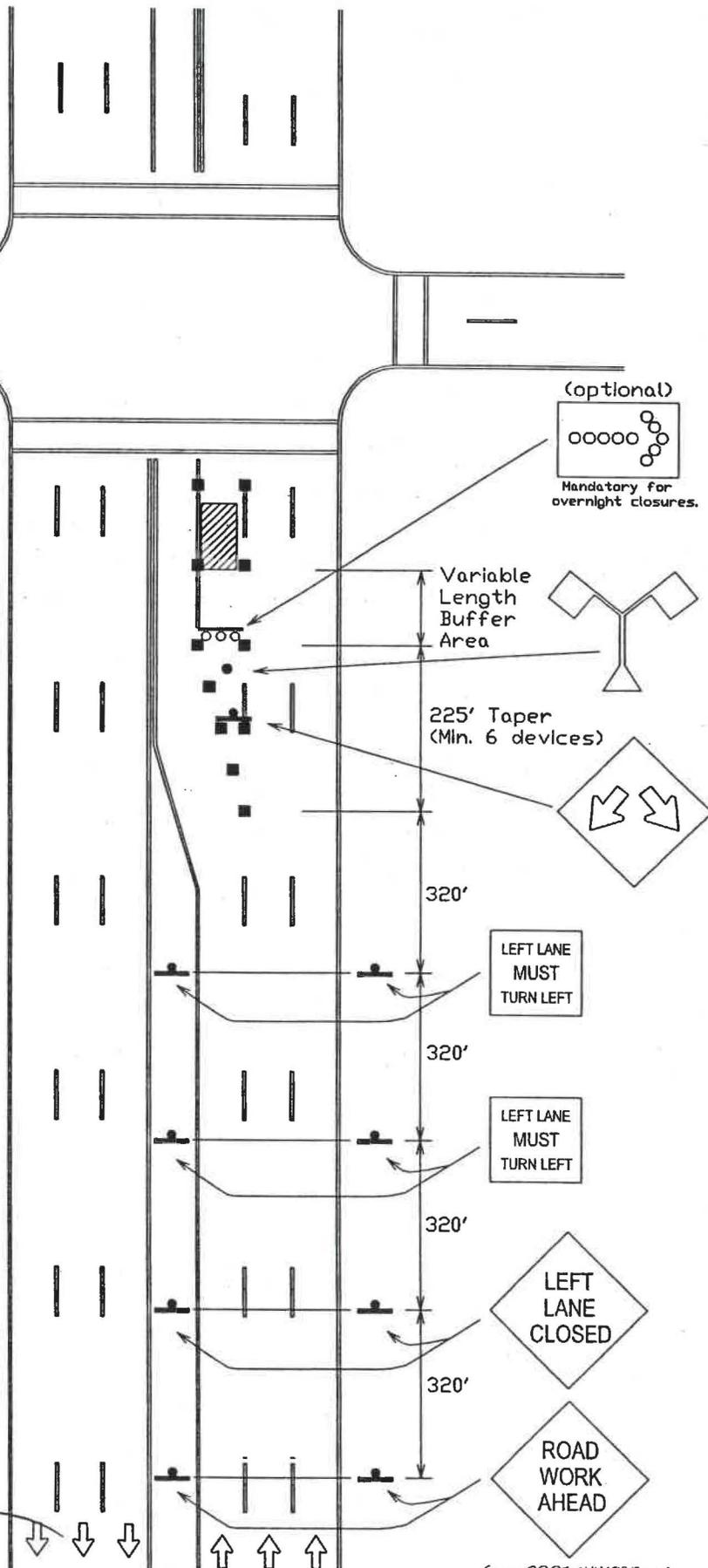
**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

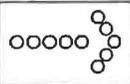
**STD.  
DETAIL  
TC-12m  
(45 MPH)**

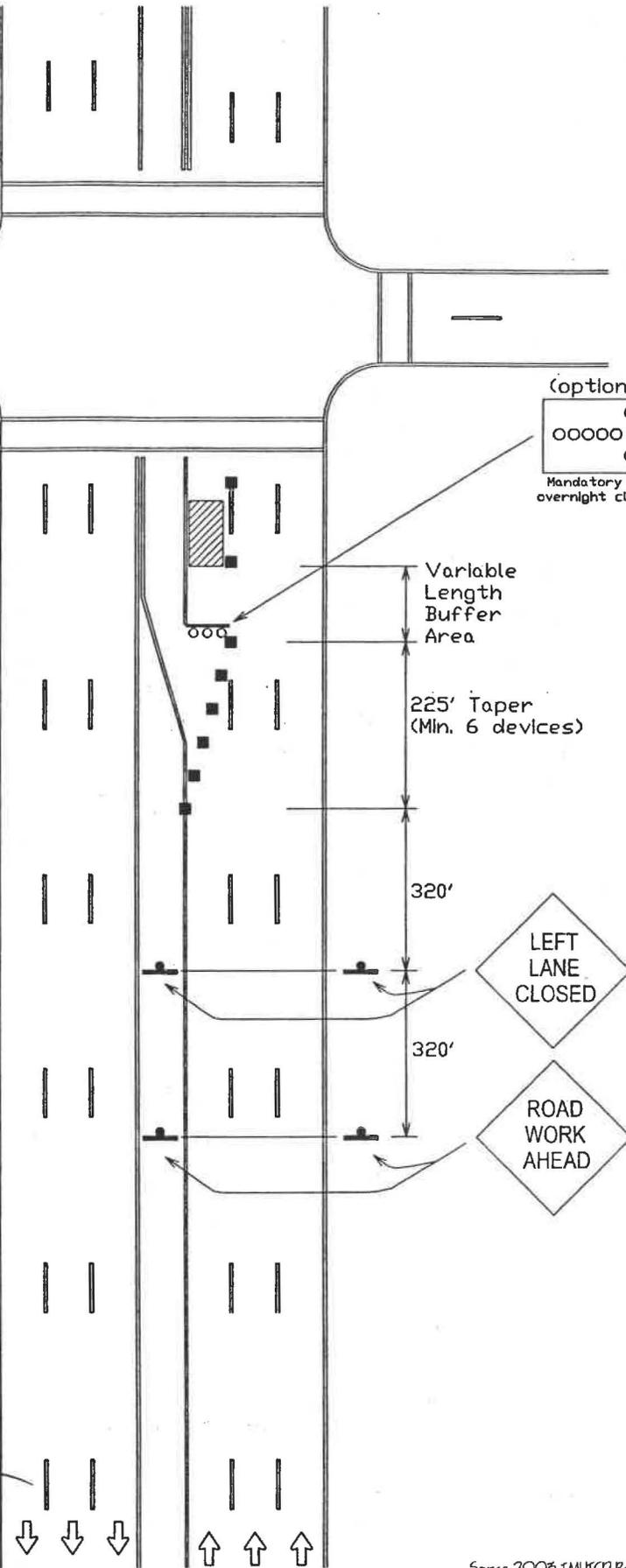
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. THE SHADOW TRUCK IS OPTIONAL. ACTIVATED ROTATING LIGHTS OR STROBE LIGHTS SHALL BE USED.
3. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

**LEGEND**

-  Arrow panel
-  Channelizing devices
-  Direction of travel
-  High level warning device (Flag tree)
-  Sign (facing down)
-  Work space
-  Work vehicle

(optional)  
  
 Mandatory for overnight closures.



*Richard A. Berry*  
 9-28-05

NOT TO SCALE

Source 2003 TMUTCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE NEAR  
 SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

**STD.  
 DETAIL  
 TC-12n  
 (45 MPH)**

What is your most important safety tool when working in the street?

**YOUR HEAD! Use it!**

Pay attention to your environment. Use your head, see with your eyes, hear with your ears. Stay alive!

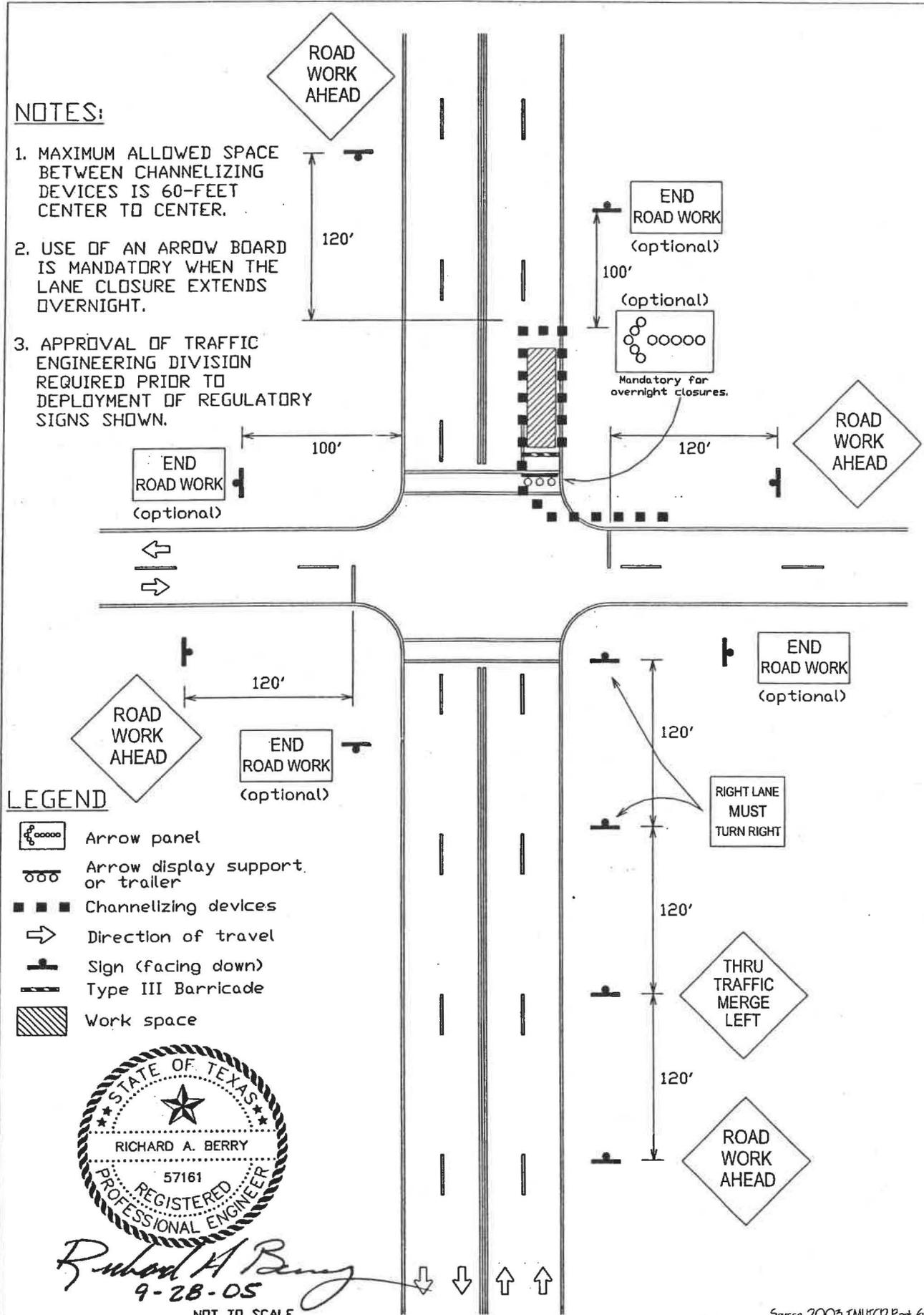
CITY OF MESQUITE, TEXAS

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BEEN LEFT BLANK!**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



Source 2003 TMLTCD Part 6

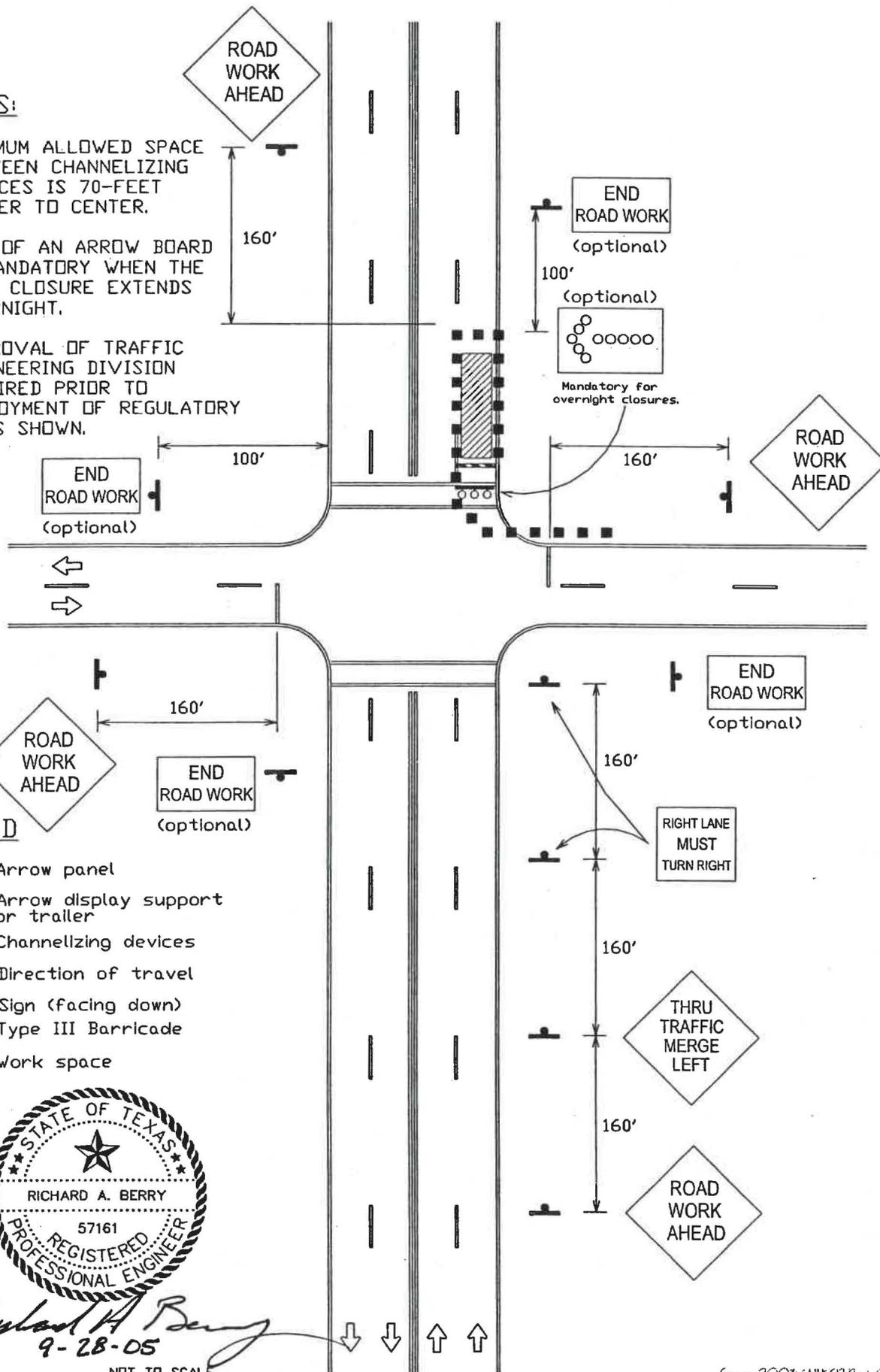
CITY OF MESQUITE, TEXAS  
**RIGHT LANE CLOSURE  
 FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

**STD.  
 DETAIL  
 TC-13a  
 (30 MPH)**

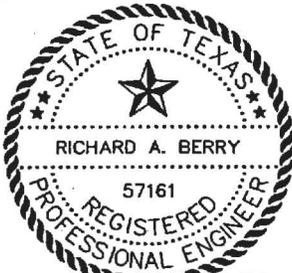
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 MTR CD Part 6

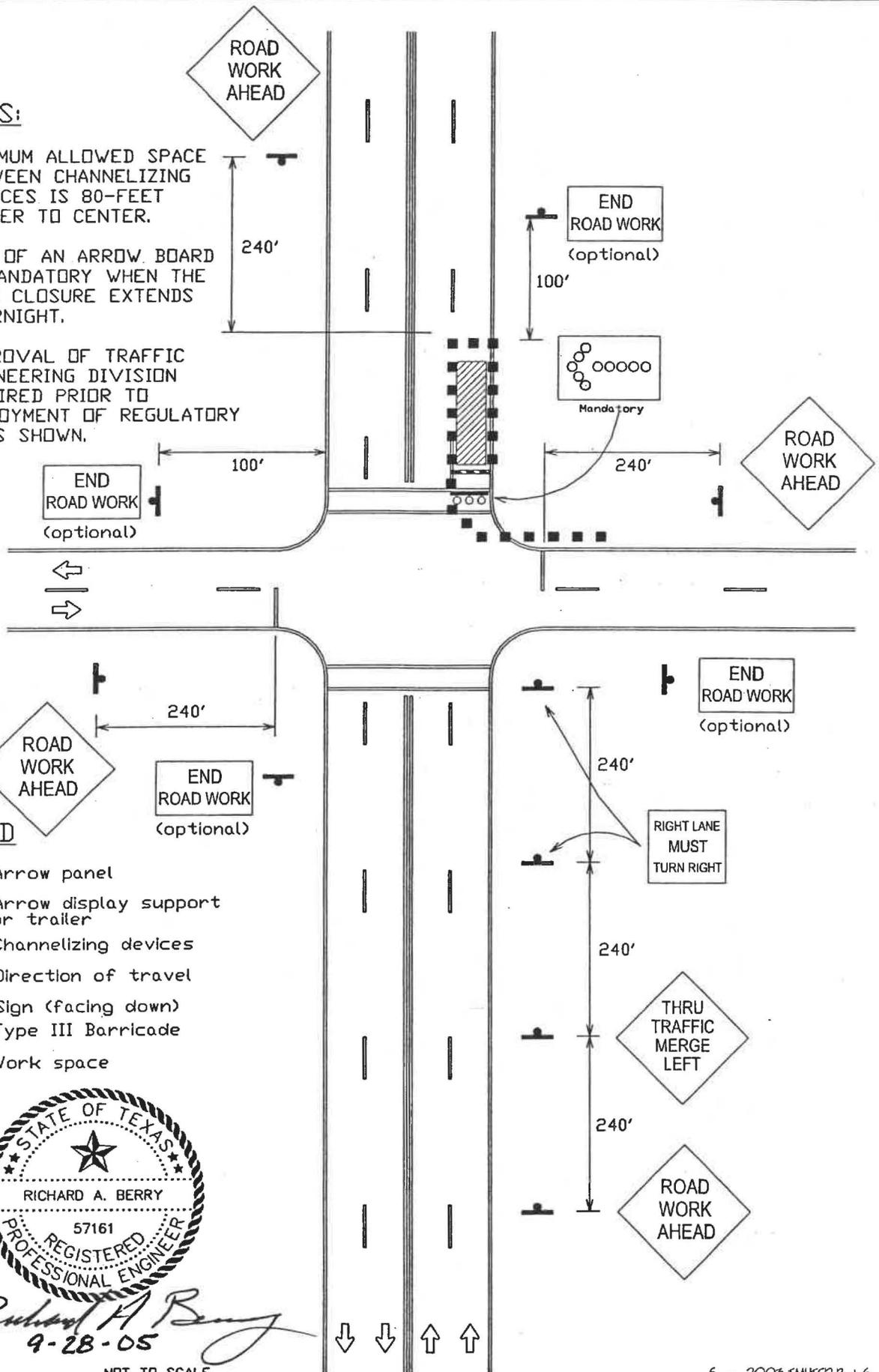
CITY OF MESQUITE, TEXAS  
**RIGHT LANE CLOSURE  
FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-13b  
(35 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMLTCD Part 6

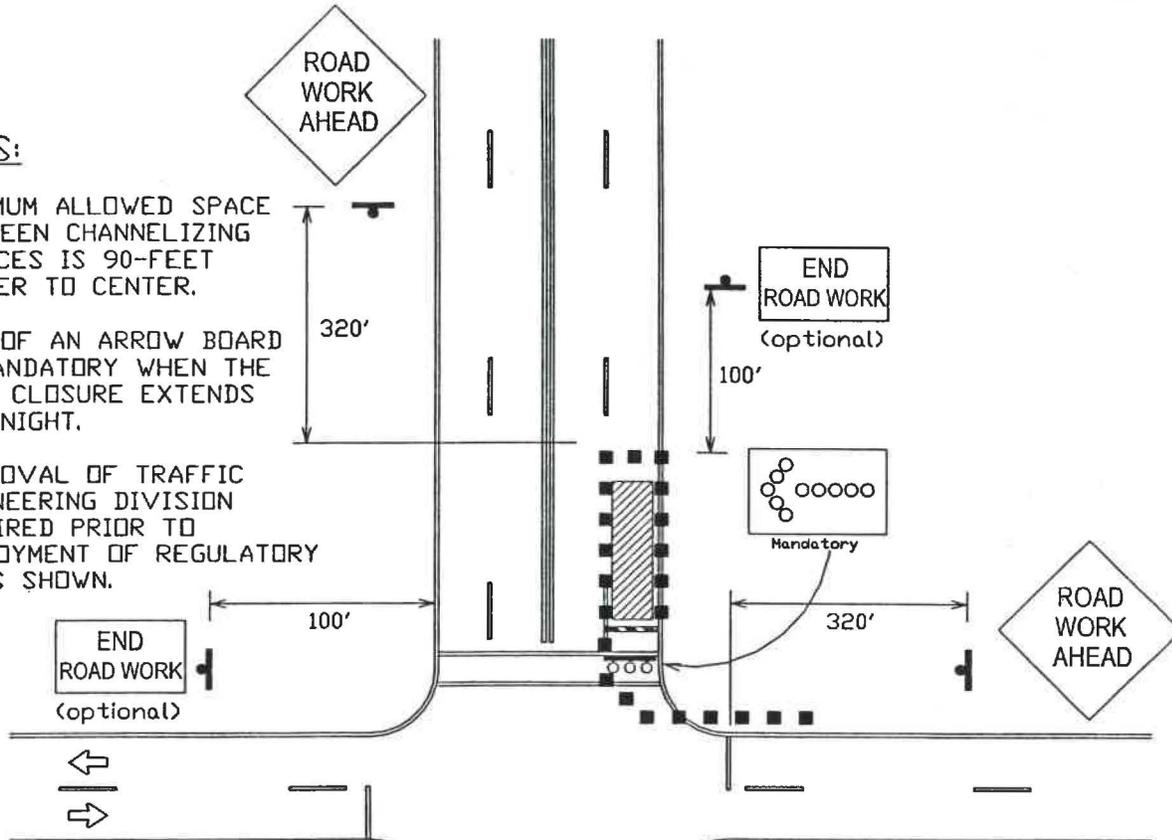
CITY OF MESQUITE, TEXAS  
**RIGHT LANE CLOSURE  
FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-13c  
(40 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

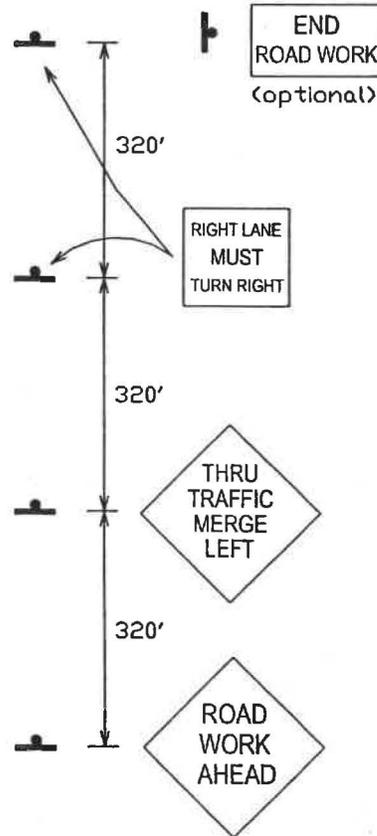


**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05



Source 2003 TMLTCD Part 6

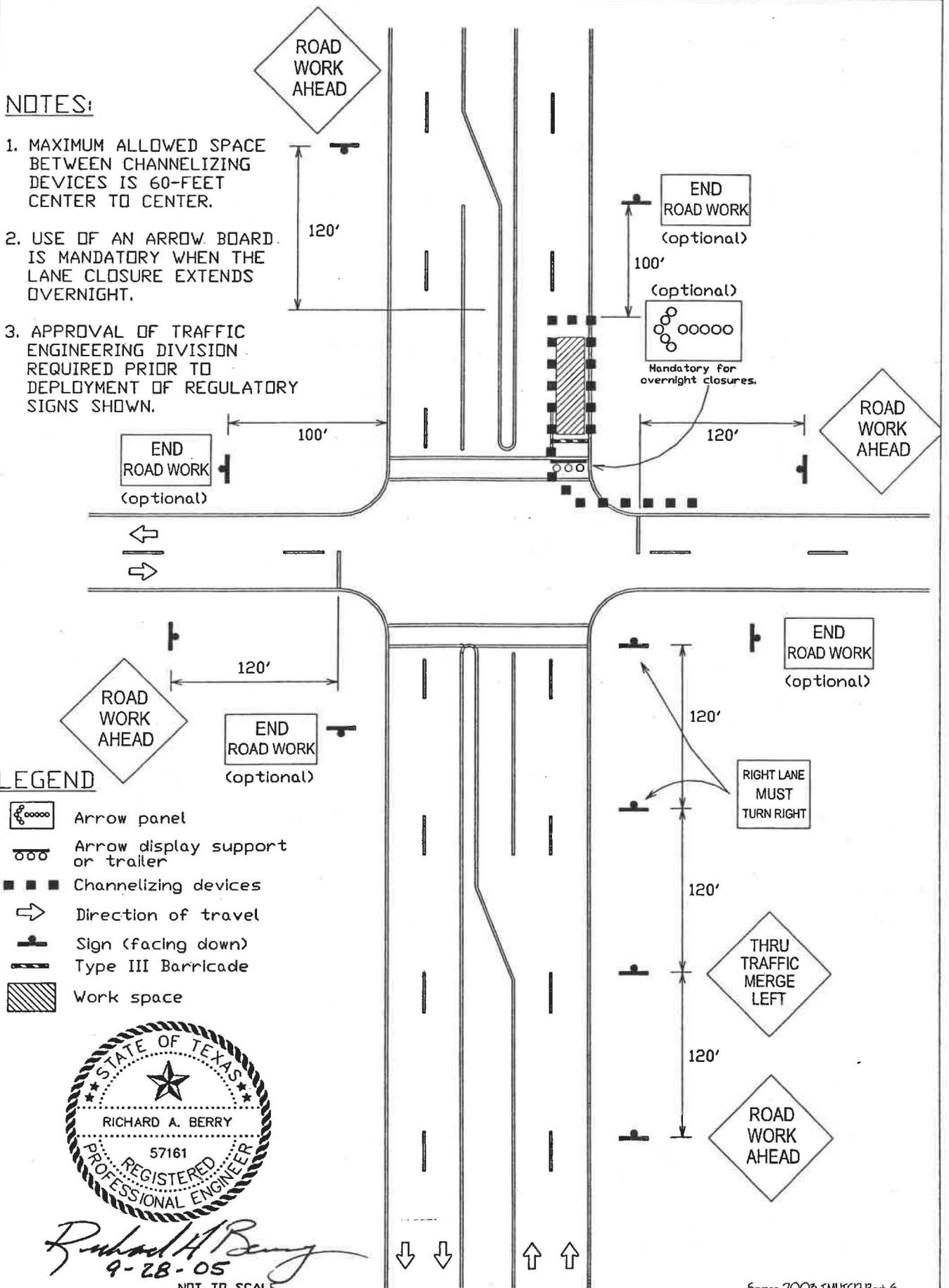
CITY OF MESQUITE, TEXAS  
**RIGHT LANE CLOSURE  
FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-13d  
(45 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMLTCD Part 6

CITY OF MESQUITE, TEXAS

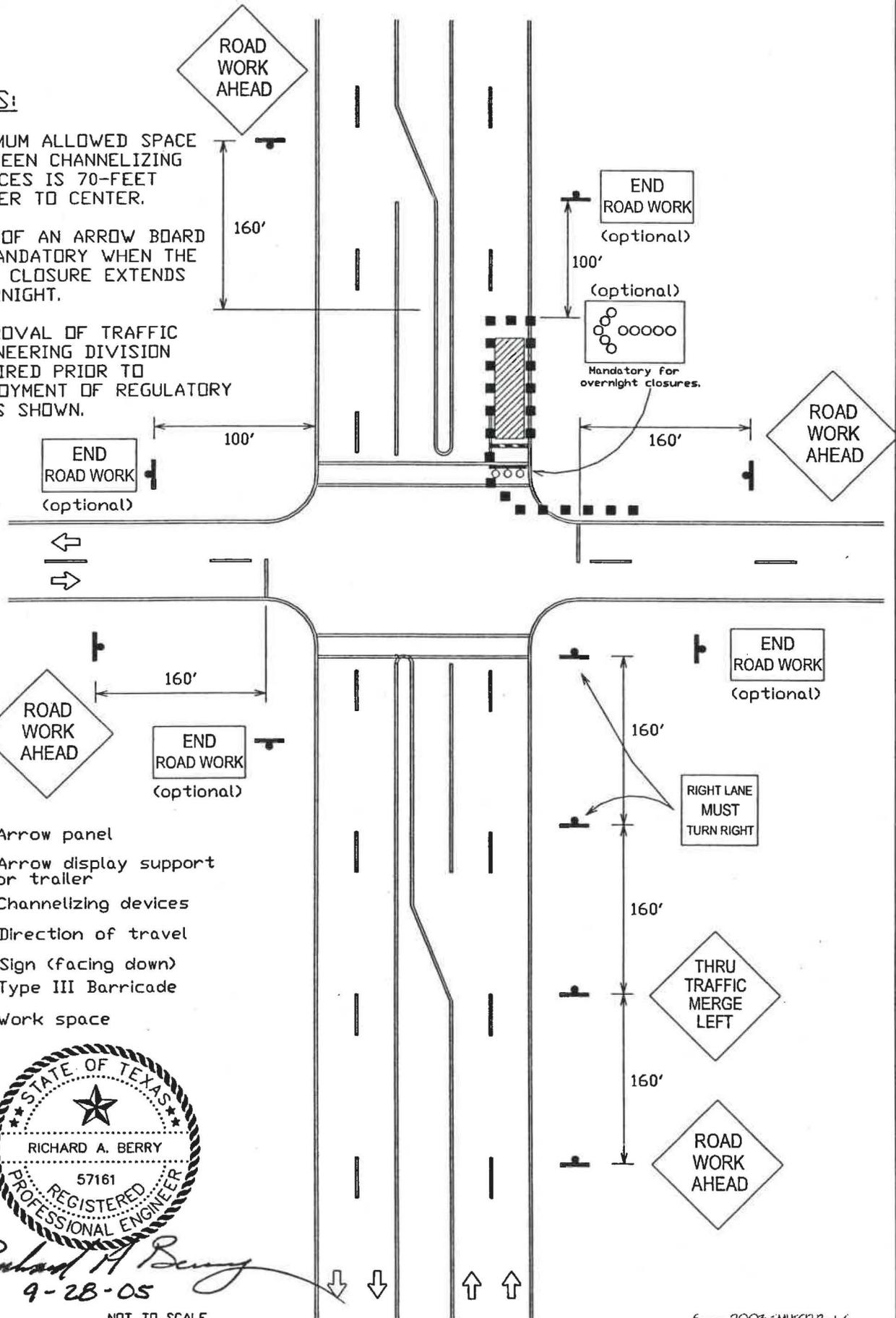
**RIGHT LANE CLOSURE  
 FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

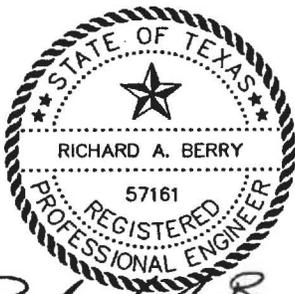
**STD.  
 DETAIL  
 TC-13e  
 (30 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUCD Part 6

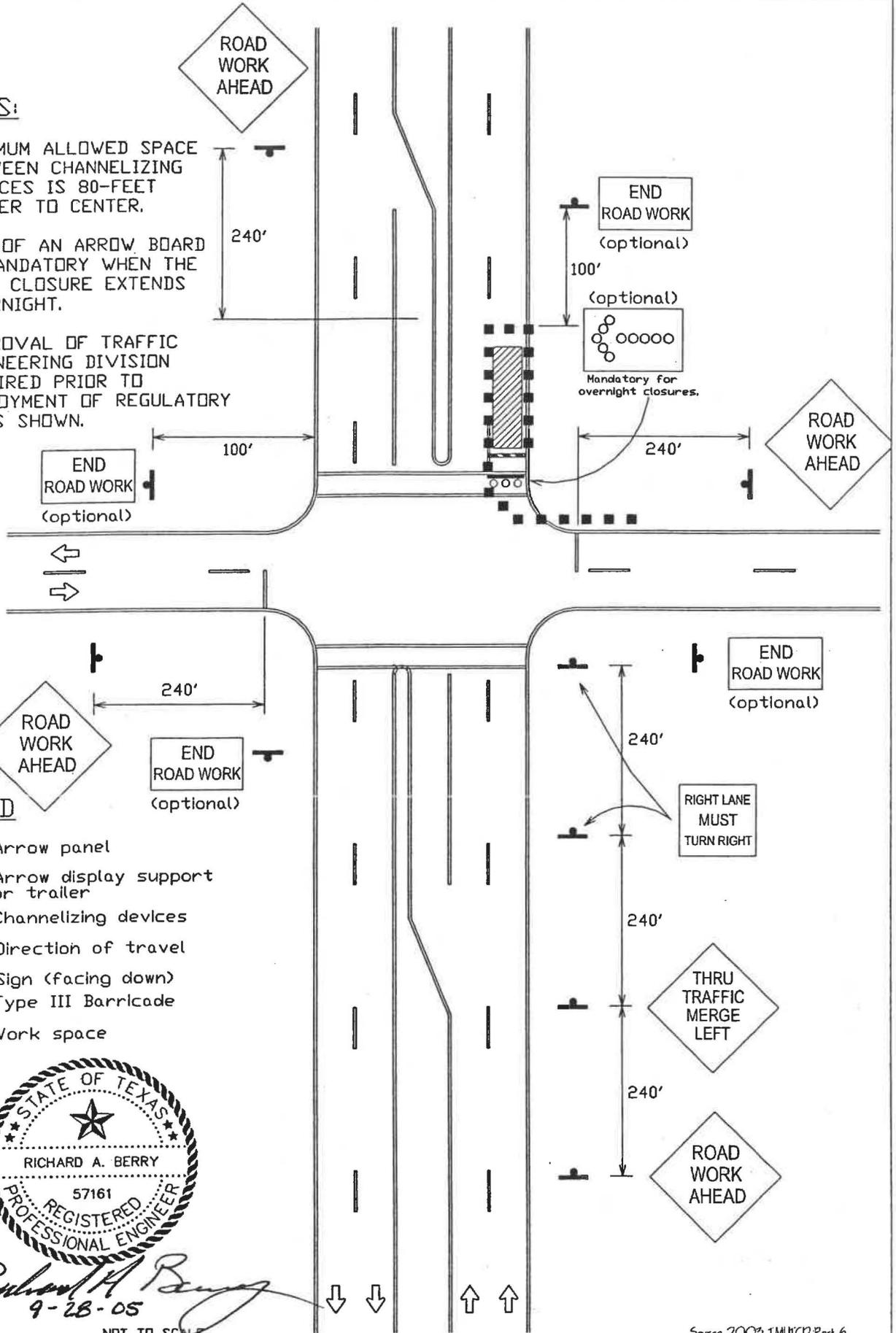
CITY OF MESQUITE, TEXAS  
**RIGHT LANE CLOSURE  
FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-13f  
(35 MPH)**

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUICD Part 6

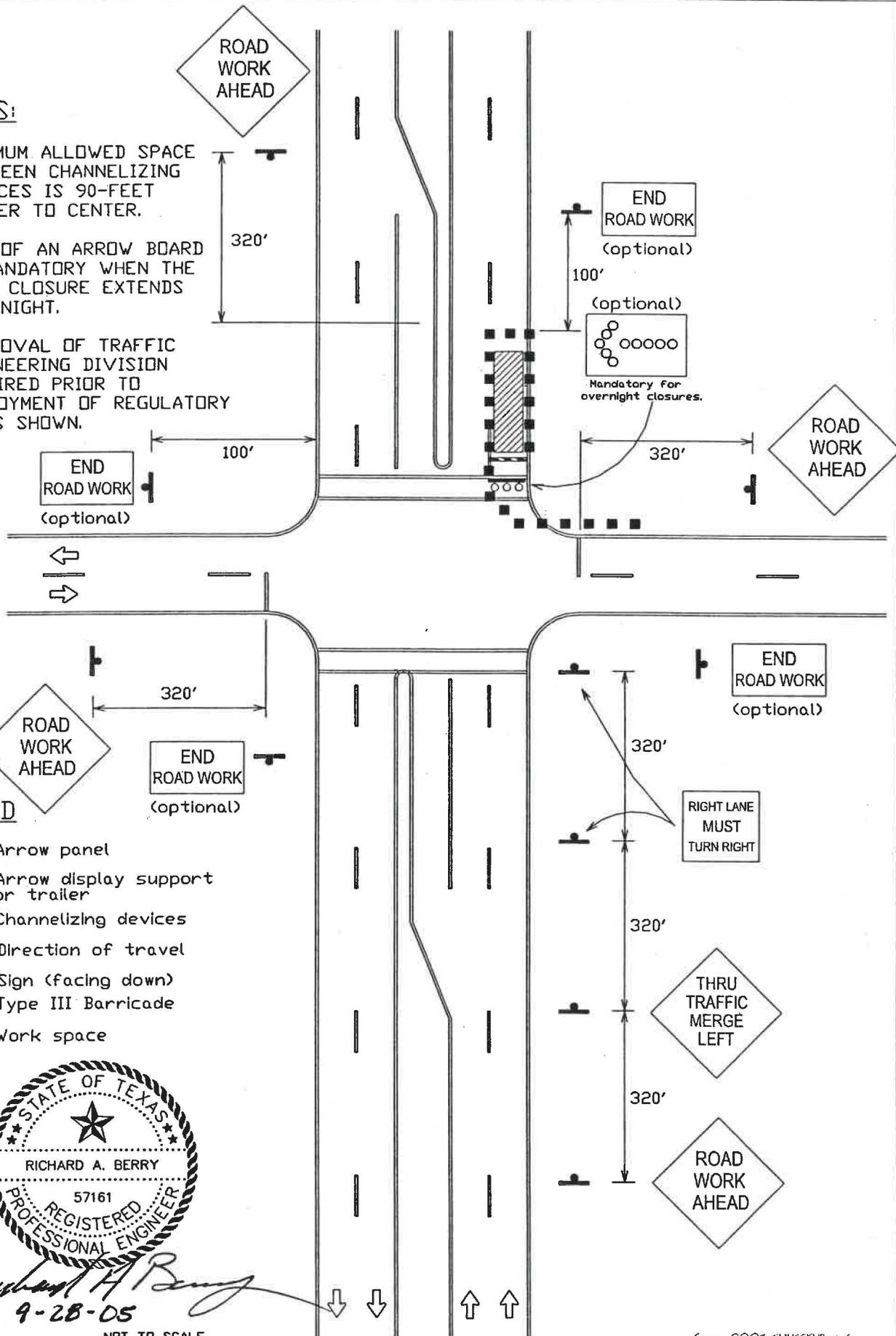
CITY OF MESQUITE, TEXAS  
**RIGHT LANE CLOSURE  
FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
**TC-13g**  
(40 MPH)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUTCD Part 6

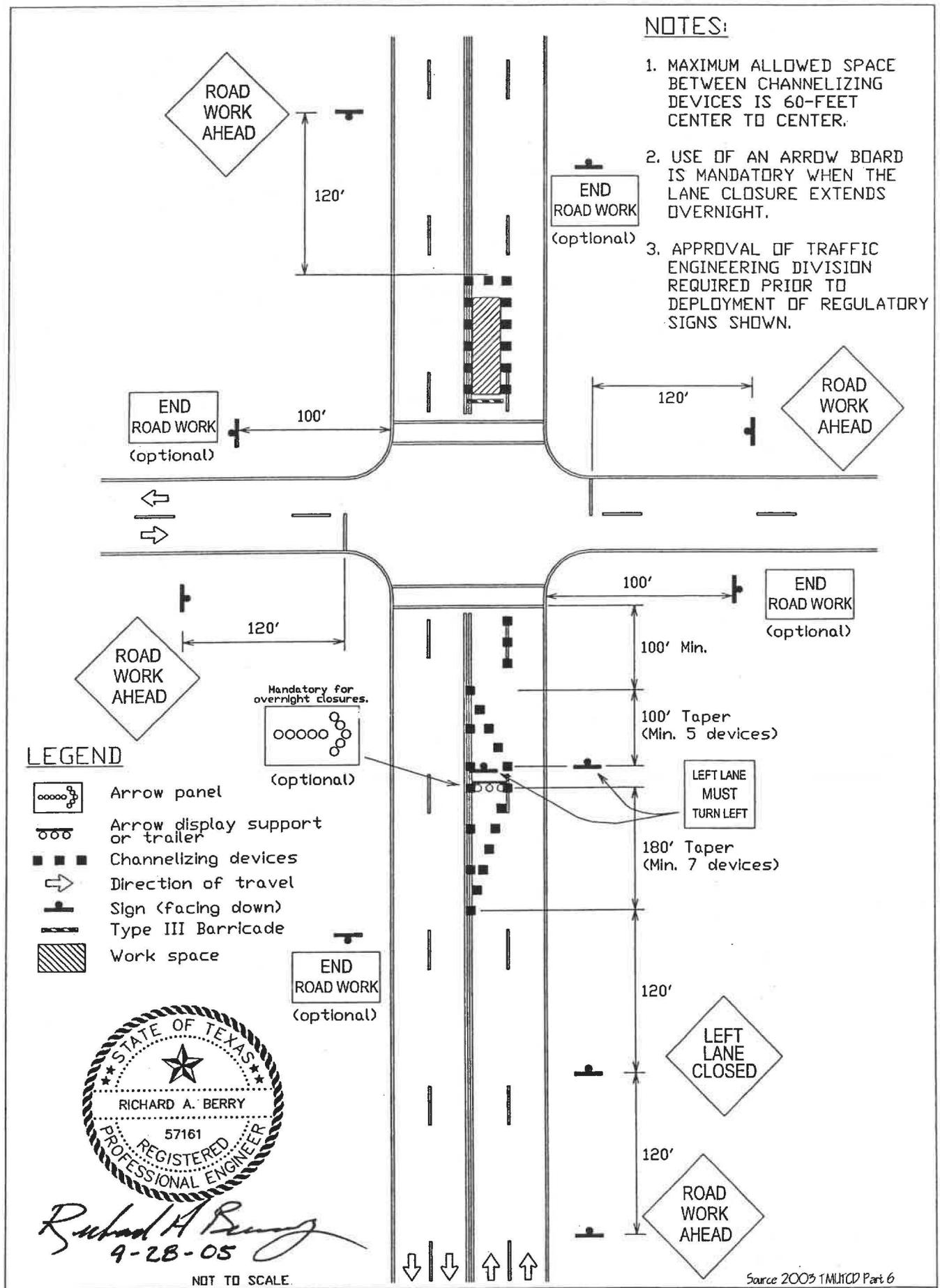
CITY OF MESQUITE, TEXAS  
**RIGHT LANE CLOSURE  
FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-13h  
(45 MPH)**

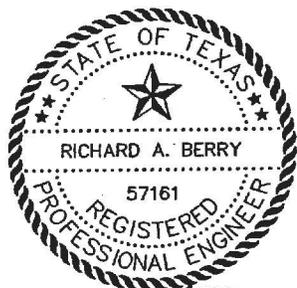
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE.

Source 2003 TMUTCD Part 6

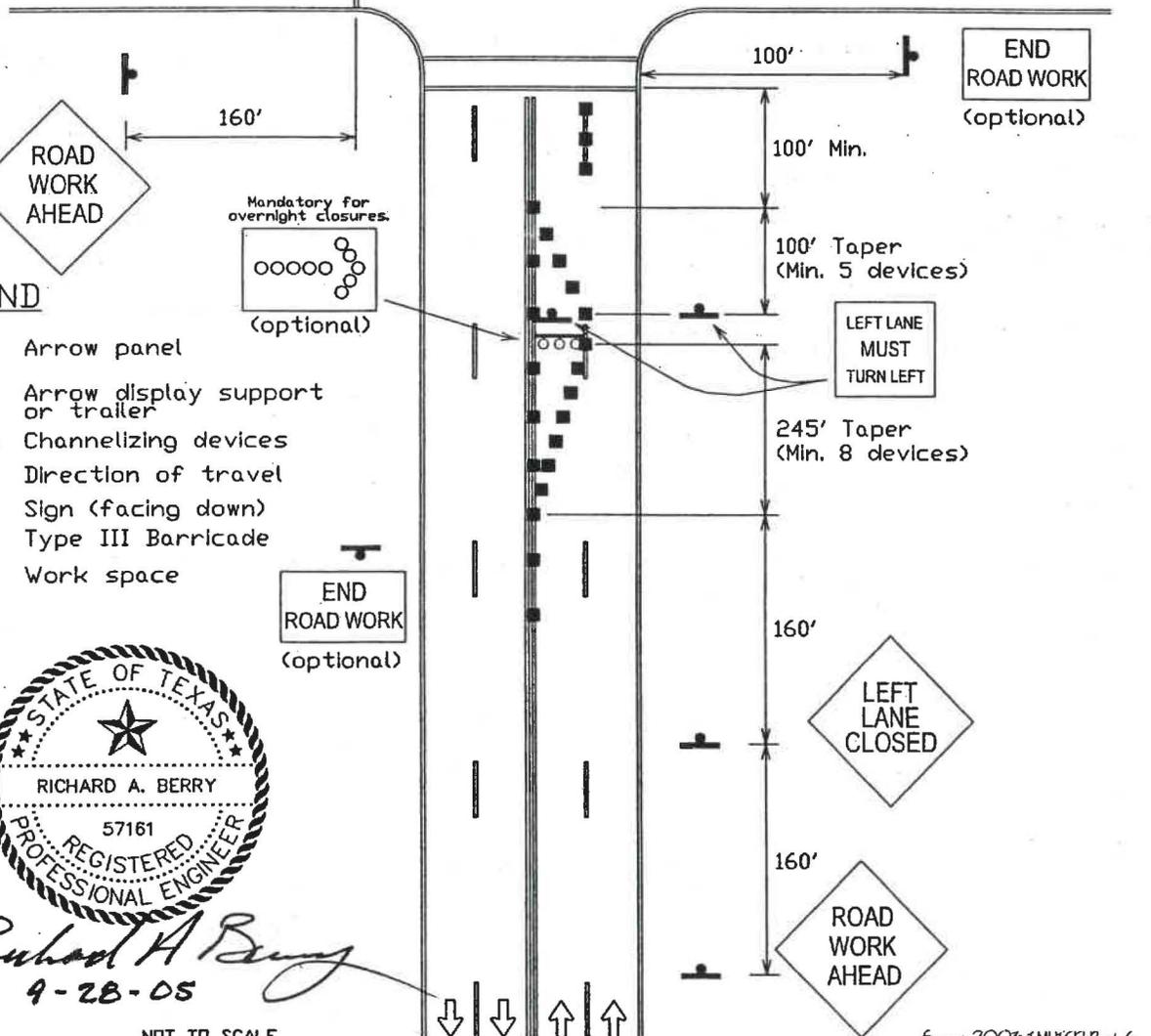
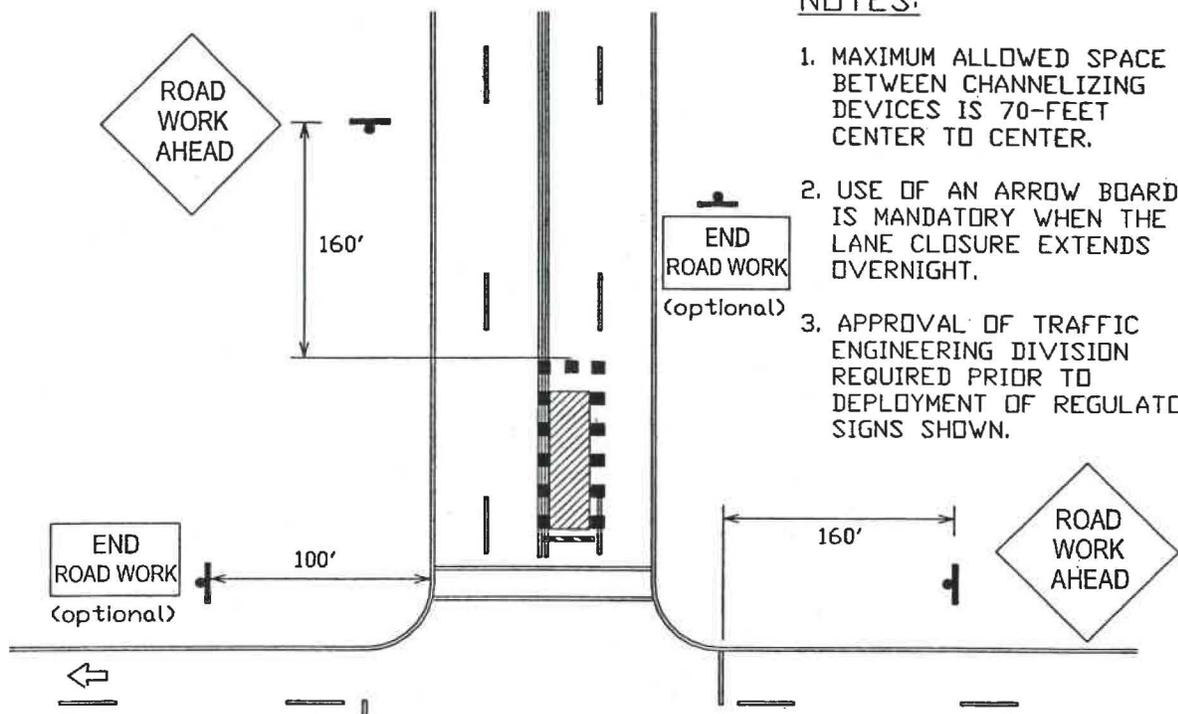
CITY OF MESQUITE, TEXAS  
**LEFT LANE CLOSURE FAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-14a**  
(30 MPH)

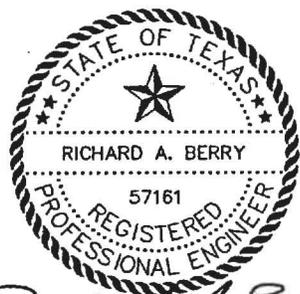
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUCD Part 6

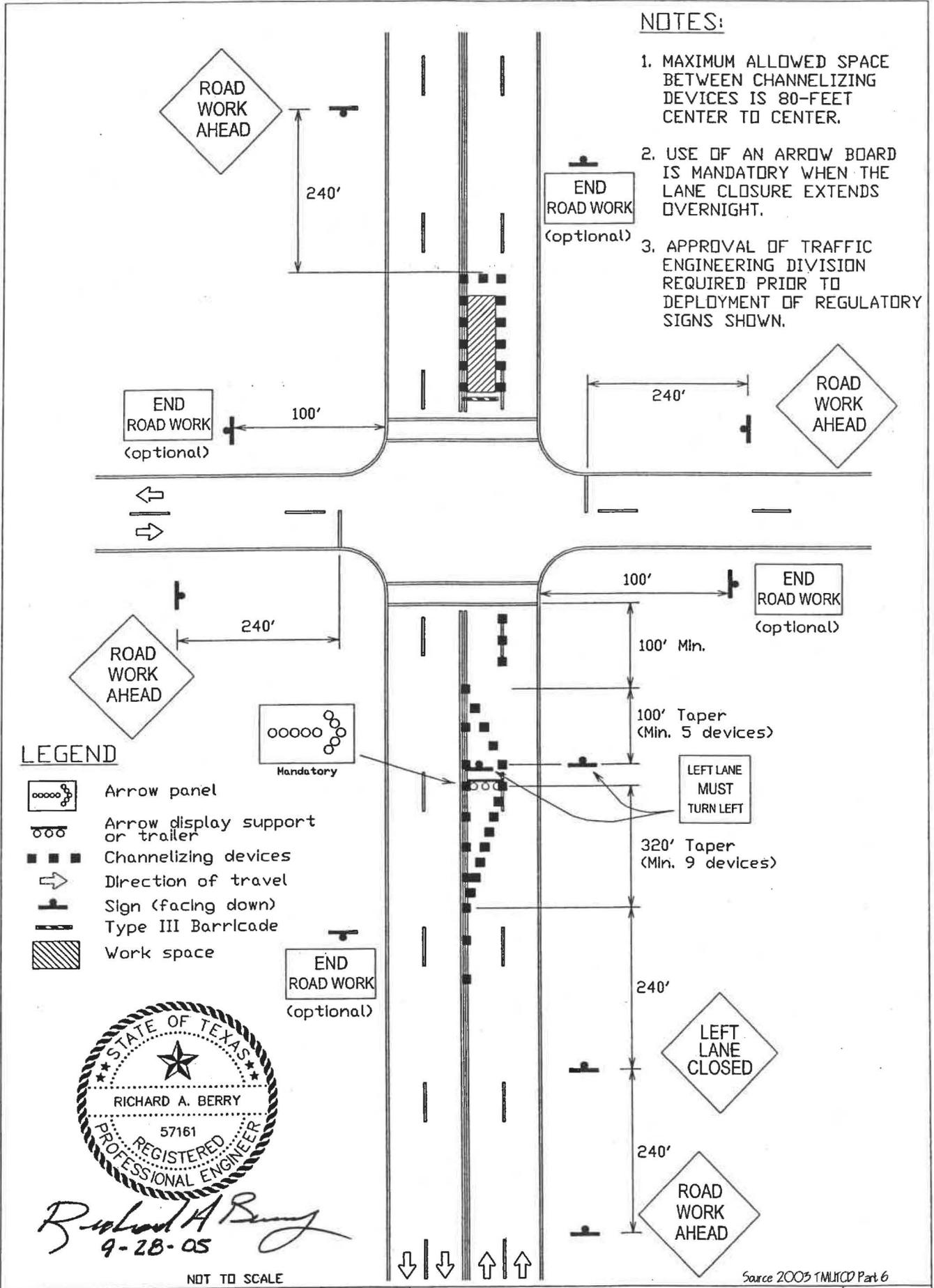
CITY OF MESQUITE, TEXAS  
**LEFT LANE CLOSURE FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL**  
**TC-14b**  
(35 MPH)

**NOTES:**

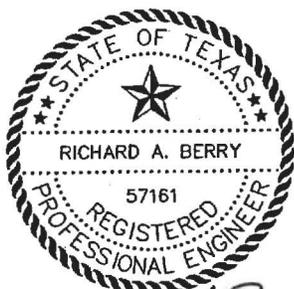
1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space

ooooo  
Mandatory



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUTCD Part 6

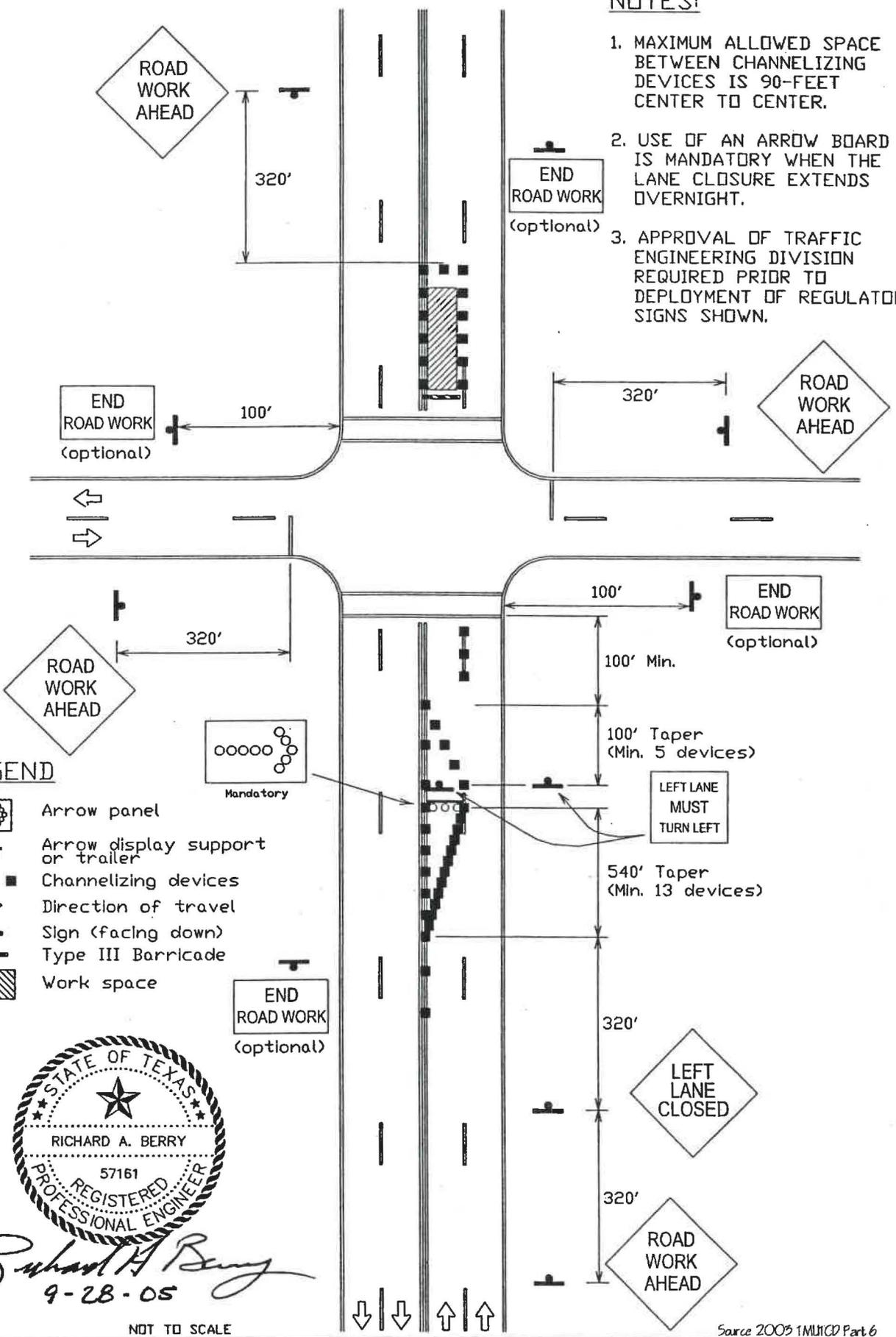
CITY OF MESQUITE, TEXAS  
**LEFT LANE CLOSURE FAR  
SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
**TC-14c**  
(40 MPH)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



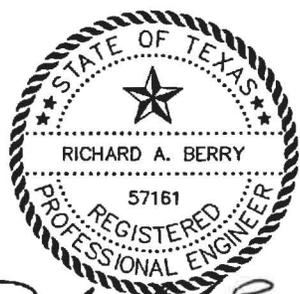
**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space

ooooo  
Mandatory

END ROAD WORK (optional)

LEFT LANE MUST TURN LEFT



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 TMUCD Part 6

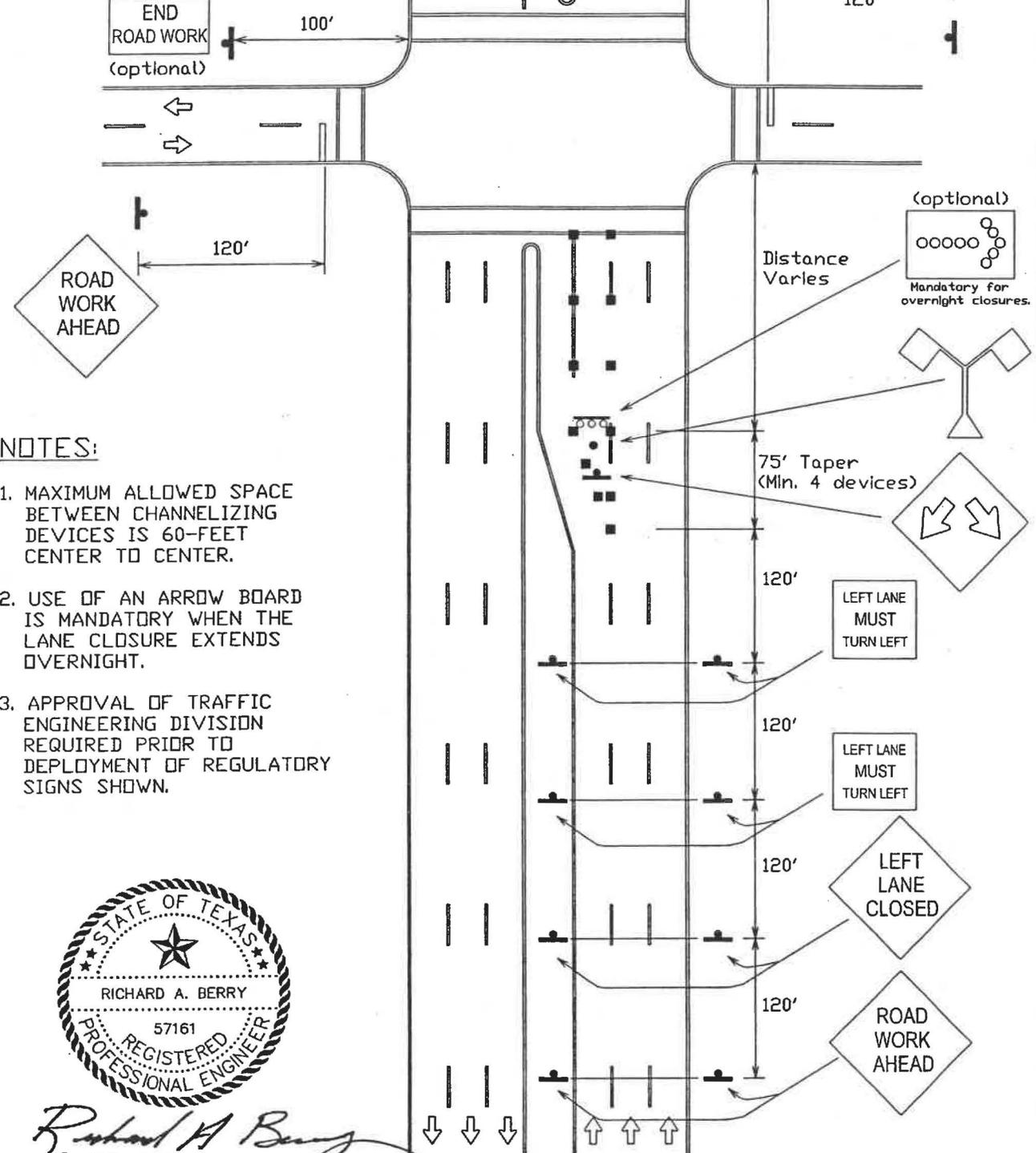
CITY OF MESQUITE, TEXAS  
**LEFT LANE CLOSURE FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

STD. DETAIL  
**TC-14d**  
(45 MPH)

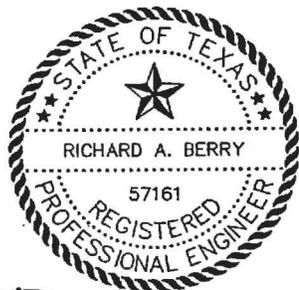
**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of travel
-  Sign (facing down)
-  Type III Barricade
-  Work space



**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

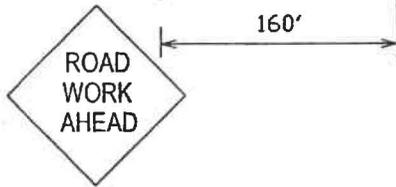
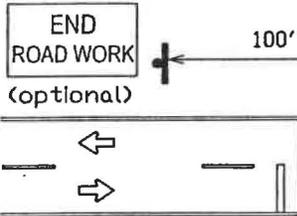


*Richard A. Berry*  
 9-28-05 NOT TO SCALE

Source 2003 TMUICD Part 6

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of travel
-  Sign (facing down)
-  Type III Barricade
-  Work space

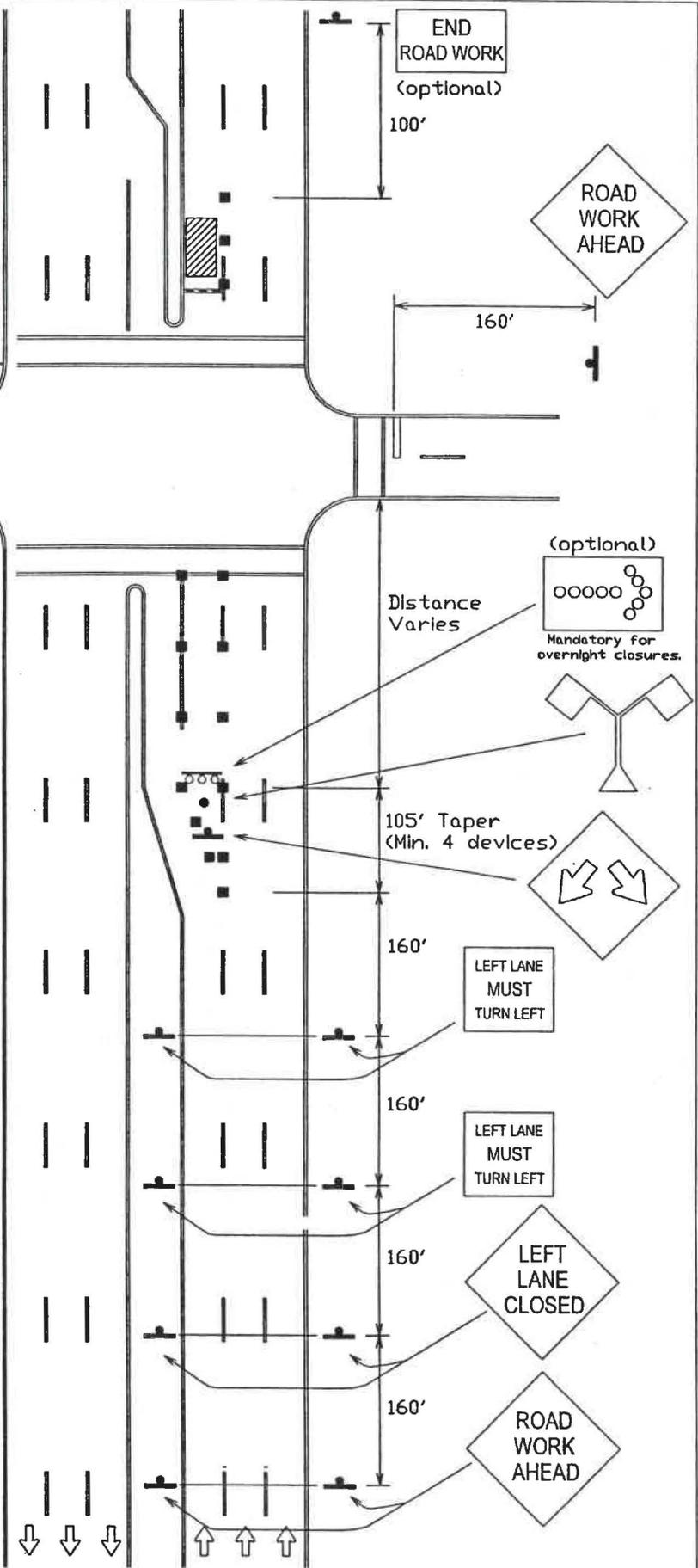


**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



*Richard A. Berry*  
9-28-05  
NOT TO SCALE



Source 2003 TMUTCD Part 6

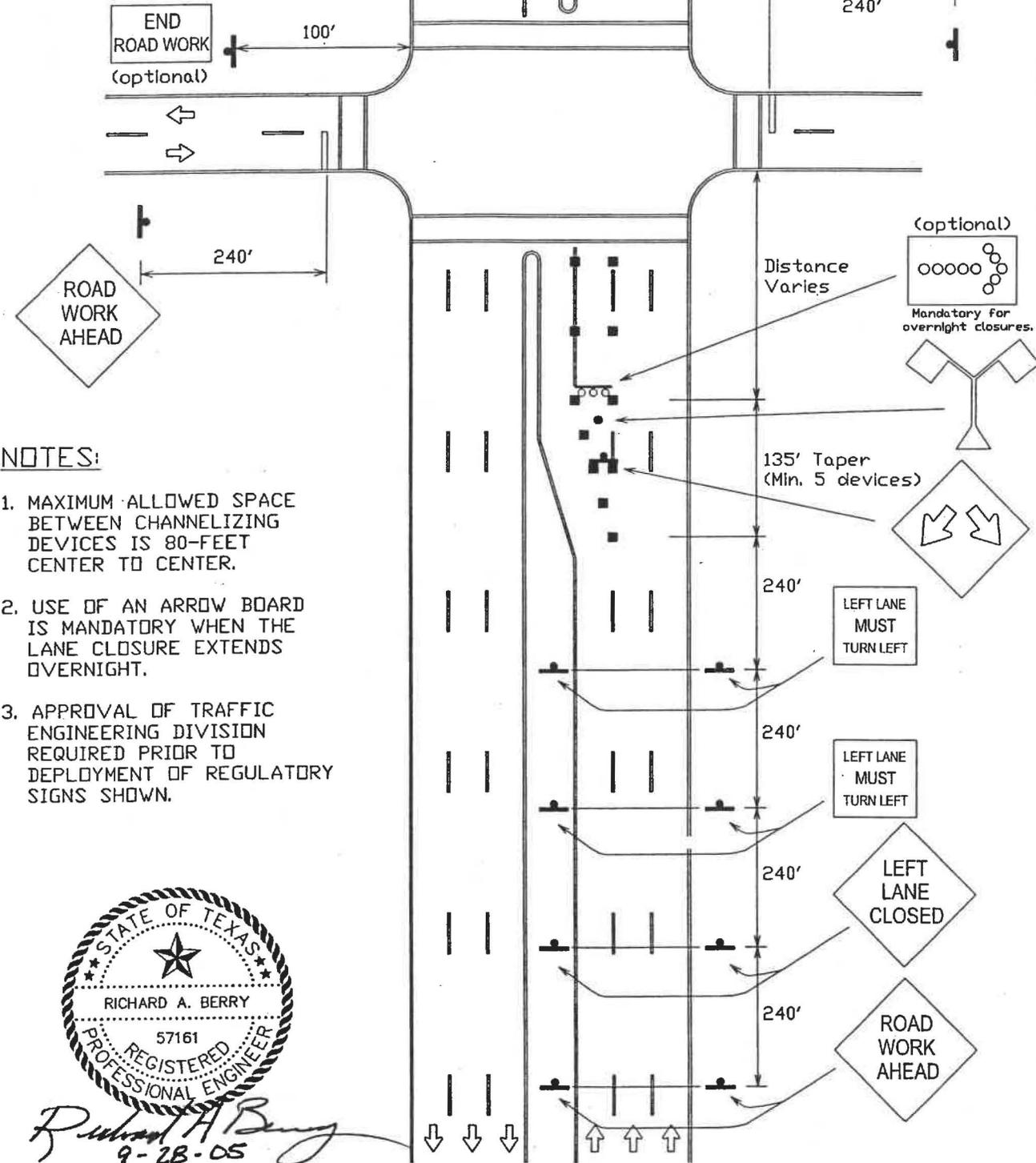
CITY OF MESQUITE, TEXAS  
**LEFT LANE CLOSURE FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL TC-14f**  
(35 MPH)

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of travel
-  Sign (facing down)
-  Type III Barricade
-  Work space



**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



*Richard A. Berry*  
9-28-05  
NOT TO SCALE

Source 2003 TMLUCD Part 6

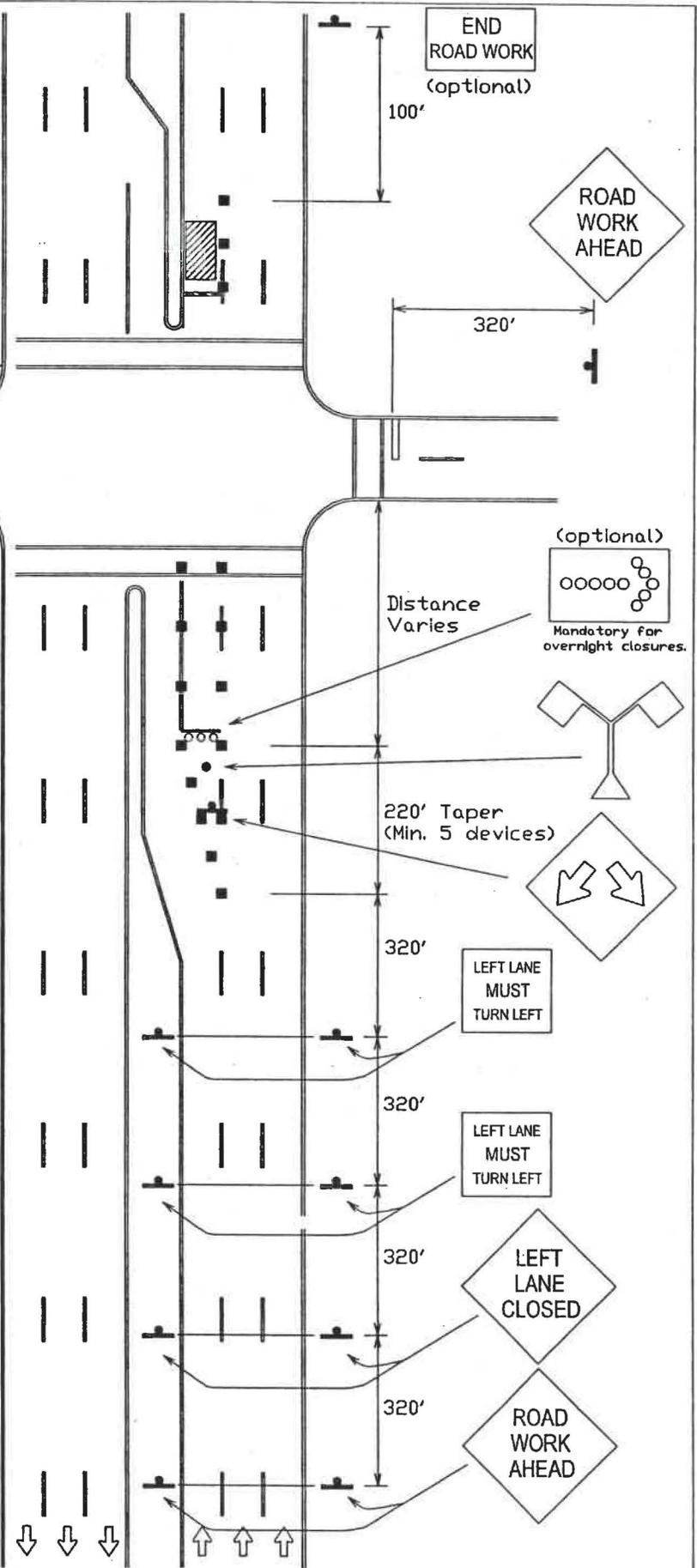
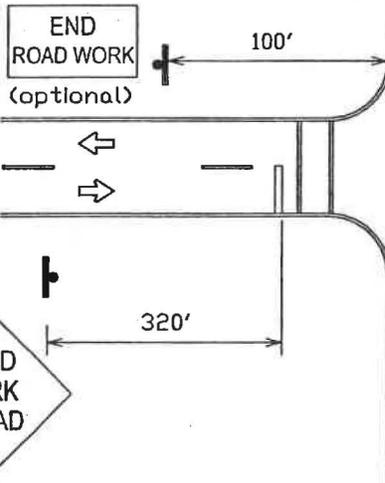
CITY OF MESQUITE, TEXAS  
**LEFT LANE CLOSURE FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

STD. DETAIL  
**TC-14g**  
(40 MPH)

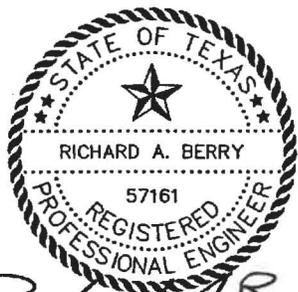
**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of travel
-  Sign (facing down)
-  Type III Barricade
-  Work space



**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.



*Richard A. Berry*  
9-28-05

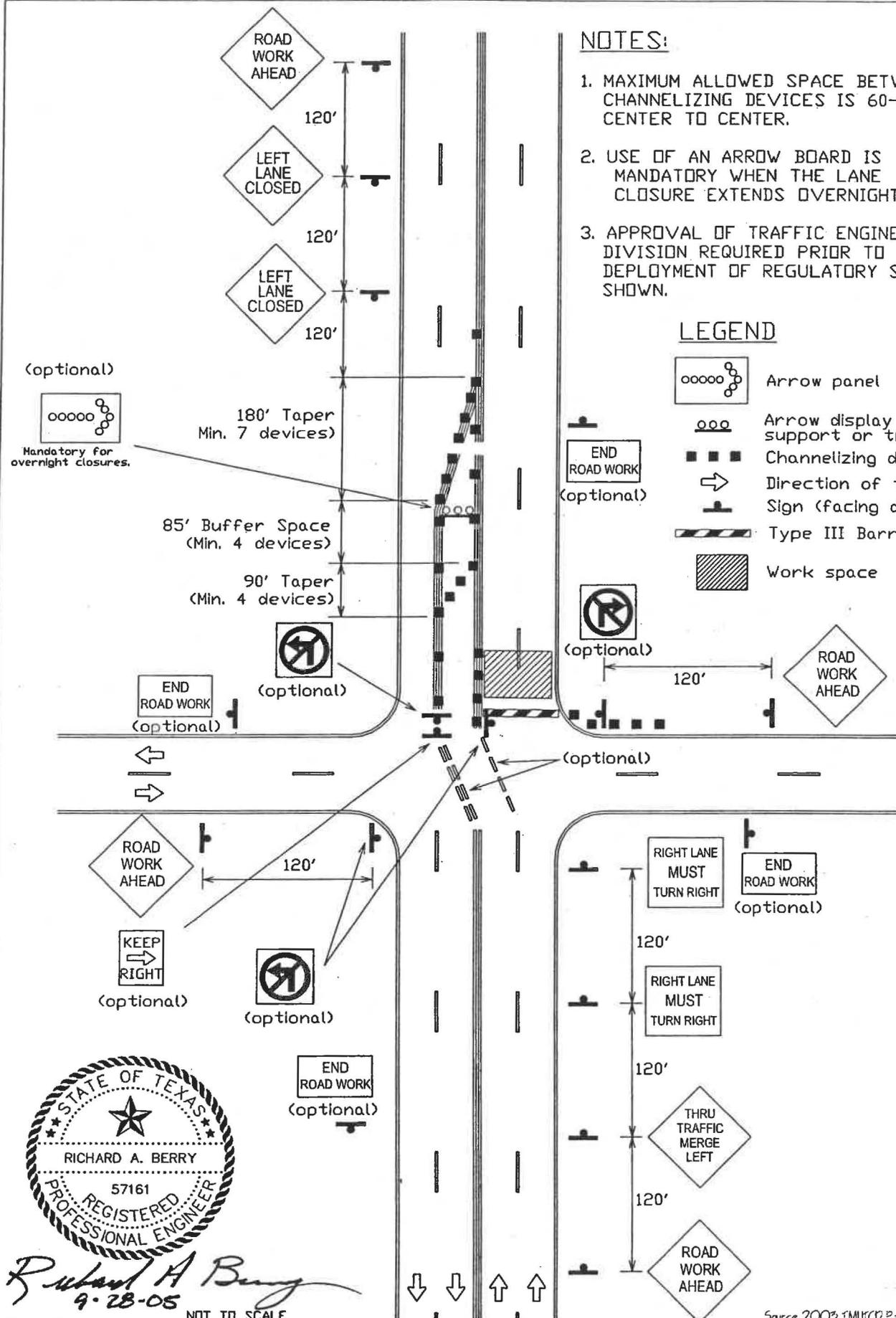
NOT TO SCALE

Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**LEFT LANE CLOSURE FAR SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL TC-14h**  
(45 MPH)



**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 FMURCD Part 6

CITY OF MESQUITE, TEXAS  
**HALF ROAD CLOSURE FAR SIDE OF INTERSECTION**

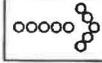
**WORK ZONE TRAFFIC CONTROL GUIDELINES**

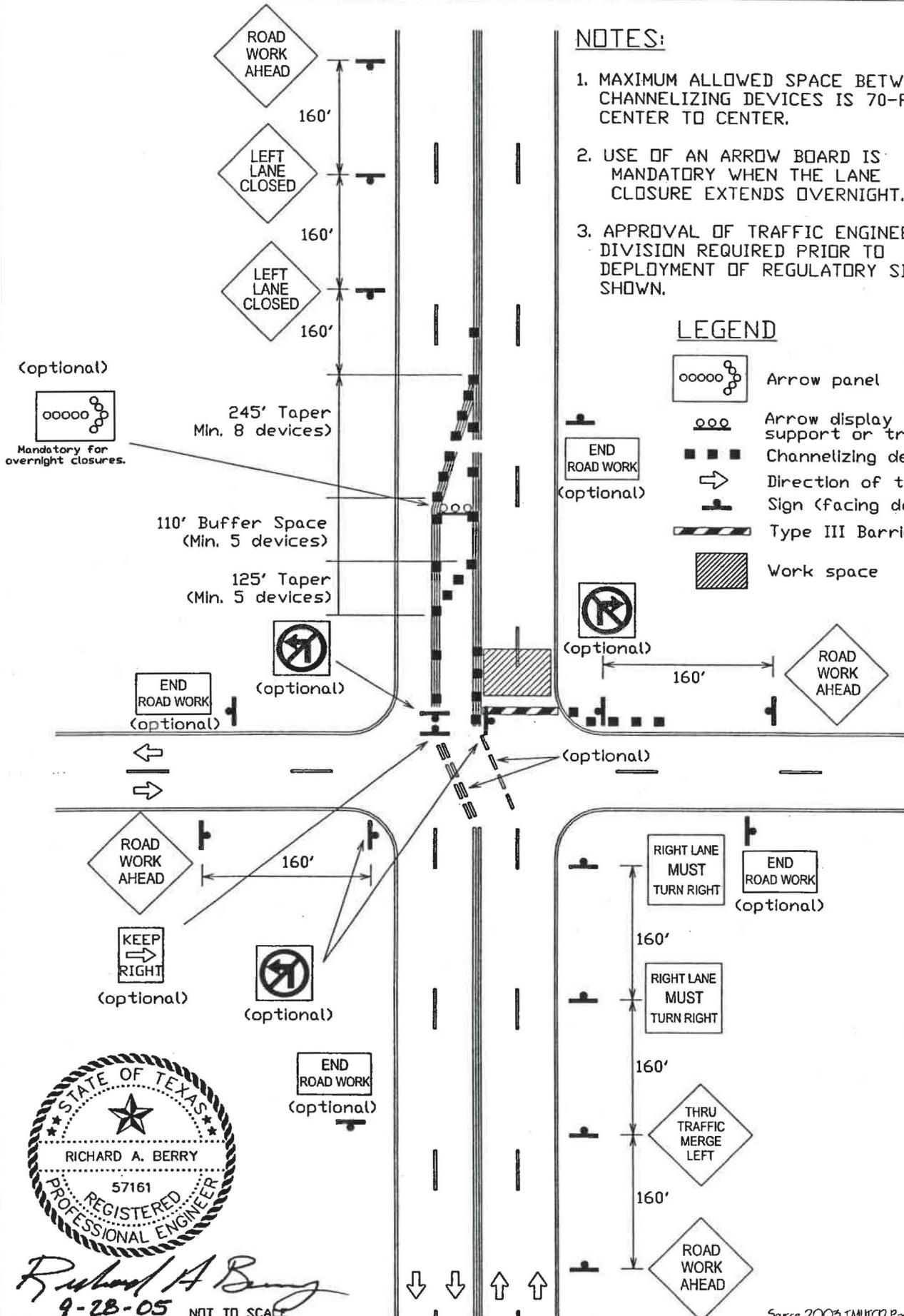
STD. DETAIL  
**TC-15a**  
 (30 MPH)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of travel
-  Sign (facing down)
-  Type III Barricade
-  Work space

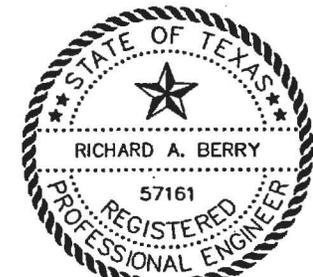


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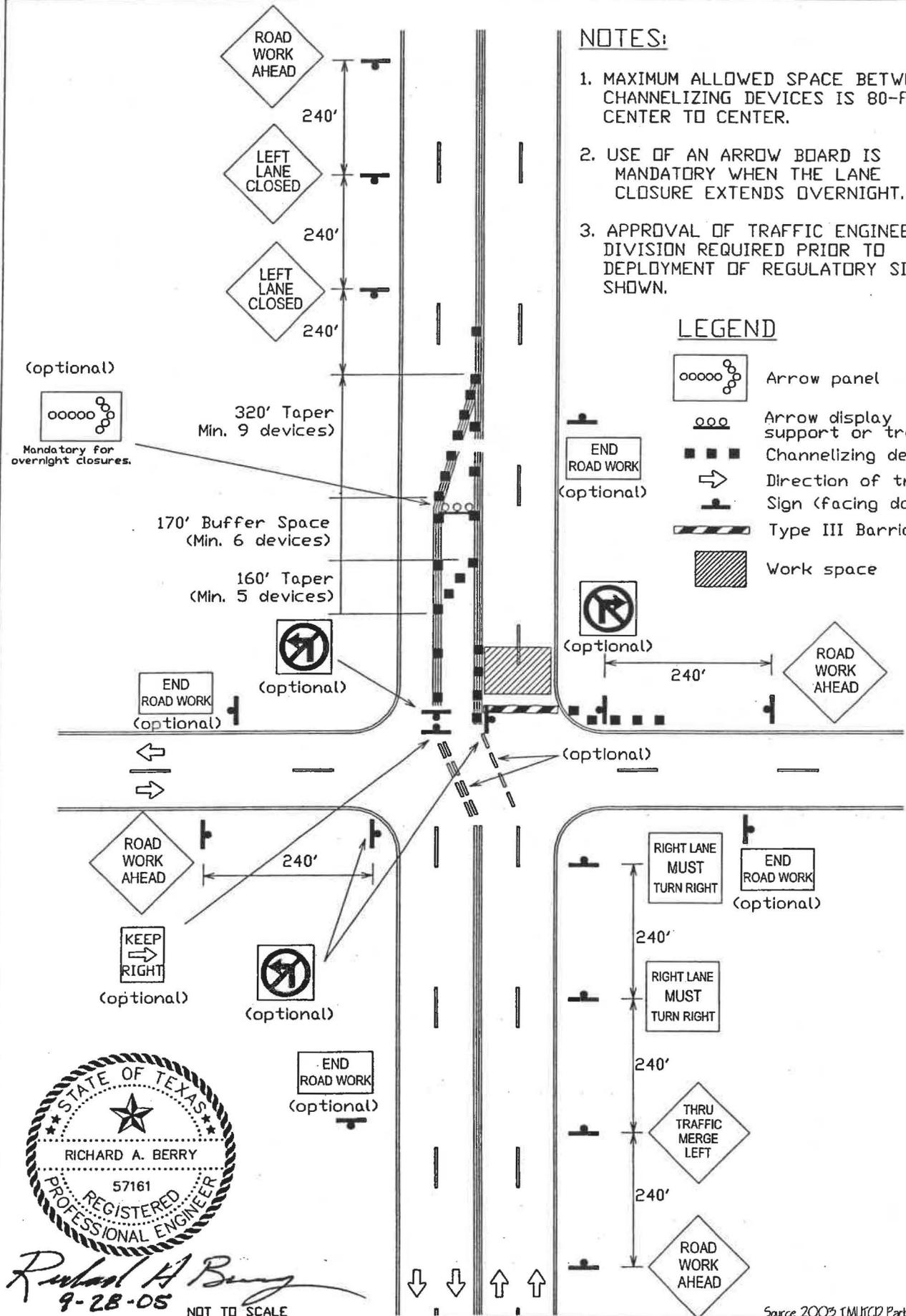
CITY OF MESQUITE, TEXAS  
**HALF ROAD CLOSURE FAR  
 SIDE OF INTERSECTION**

**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

**STD.  
 DETAIL  
 TC-15b  
 (35 MPH)**



*Richard A. Berry*  
 9-28-05 NOT TO SCALE



**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
 9-28-05  
 NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**HALF ROAD CLOSURE FAR  
 SIDE OF INTERSECTION**

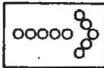
**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

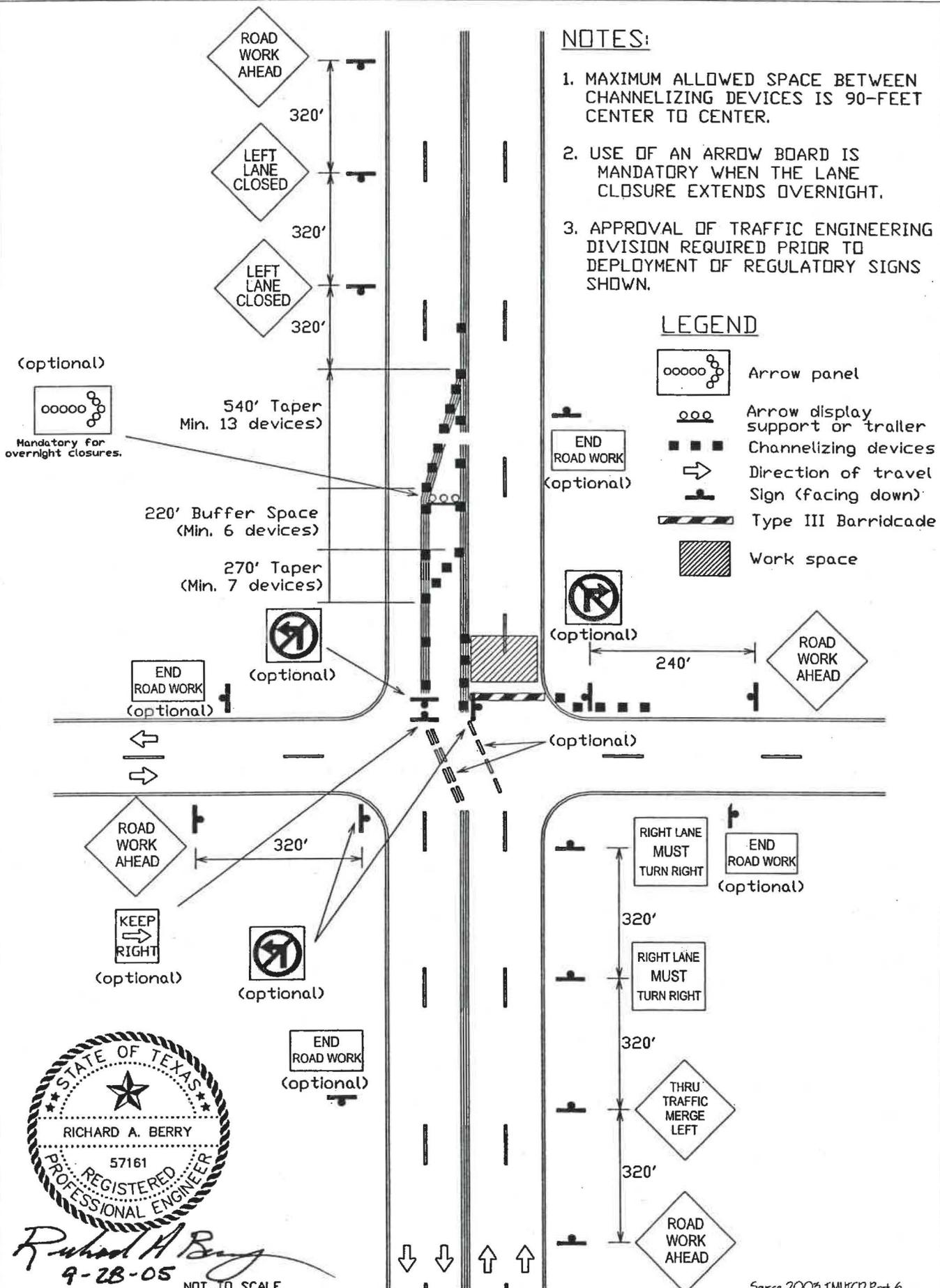
STD.  
 DETAIL  
**TC-15c**  
 (40 MPH)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. APPROVAL OF TRAFFIC ENGINEERING DIVISION REQUIRED PRIOR TO DEPLOYMENT OF REGULATORY SIGNS SHOWN.

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of travel sign (facing down)
-  Type III Barricade
-  Work space



*Richard A. Berry*  
9-28-05  
NOT TO SCALE

Source 2003 TMUICD Part 6

CITY OF MESQUITE, TEXAS  
**HALF ROAD CLOSURE FAR SIDE OF INTERSECTION**

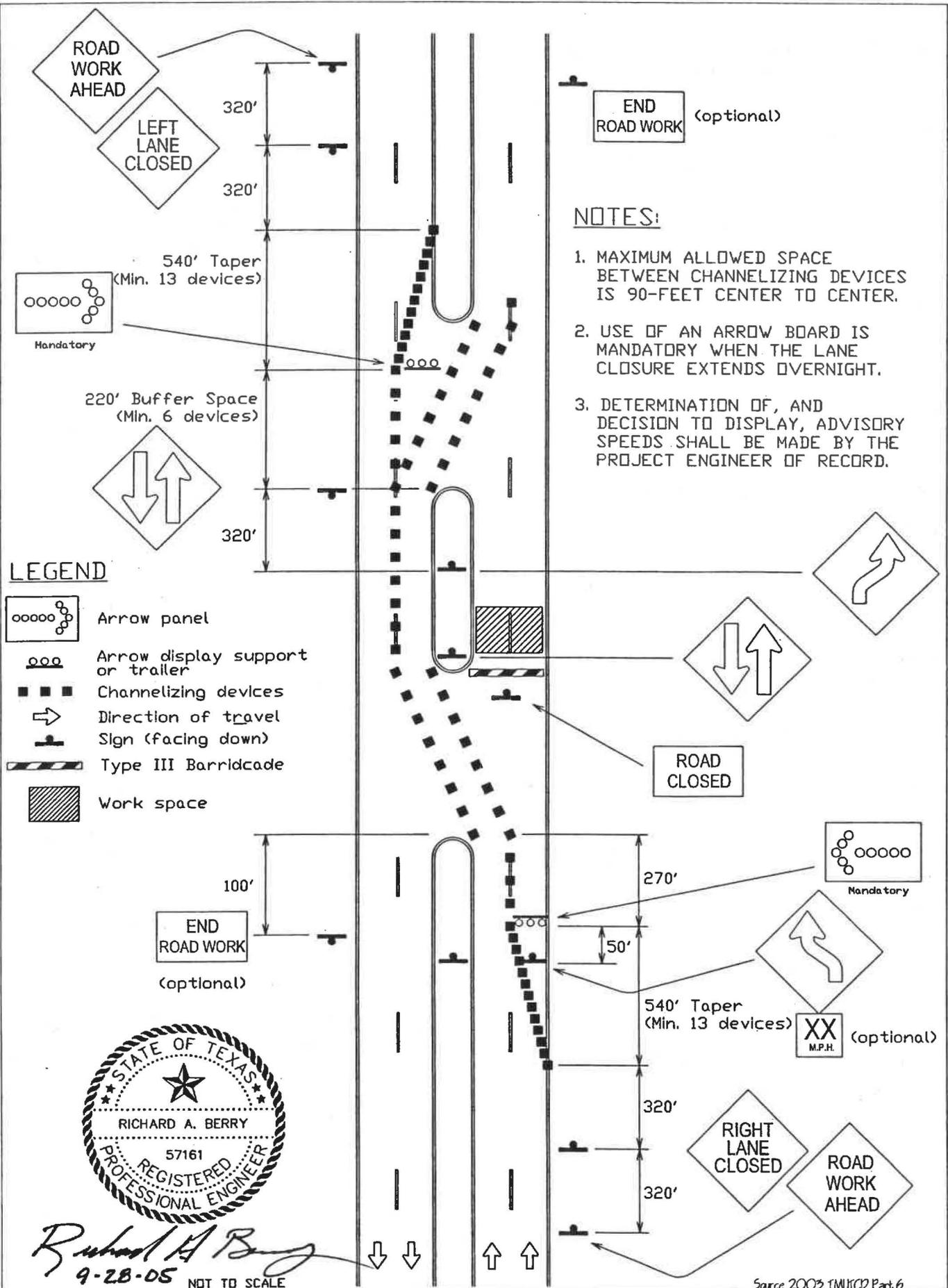
**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL TC-15d**  
(45 MPH)









**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. DETERMINATION OF, AND DECISION TO DISPLAY, ADVISORY SPEEDS SHALL BE MADE BY THE PROJECT ENGINEER OF RECORD.

**LEGEND**

- Arrow panel
- Arrow display support or trailer
- Channelizing devices
- Direction of travel
- Sign (facing down)
- Type III Barricade
- Work space



*Richard A. Berry*  
 9-28-05 NOT TO SCALE

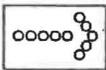
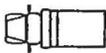
CITY OF MESQUITE, TEXAS  
**HALF ROAD CLOSURE  
 BETWEEN MEDIAN OPENINGS**

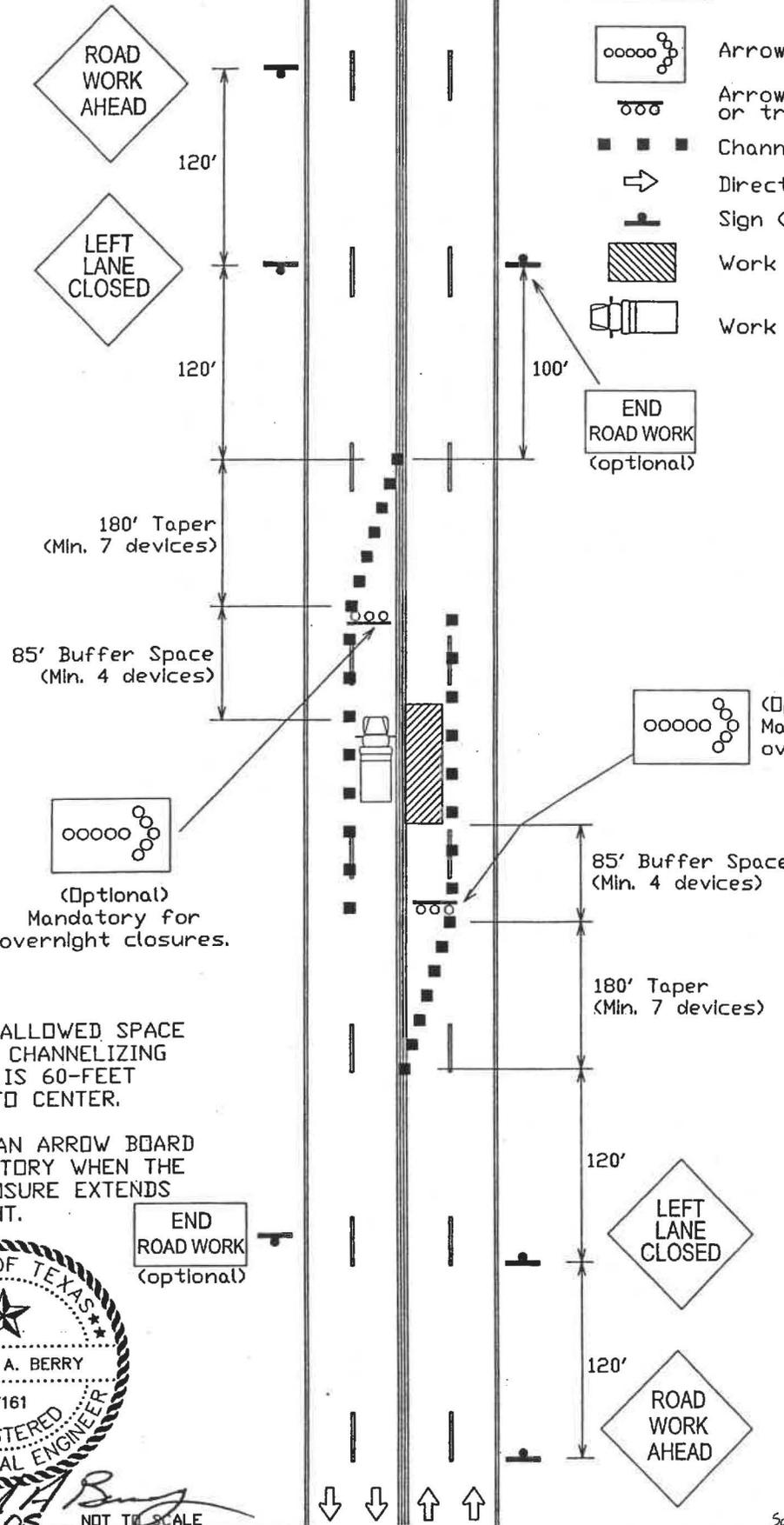
**WORK ZONE TRAFFIC  
 CONTROL GUIDELINES**

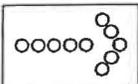
STD.  
 DETAIL  
**TC-16d**  
 (45 MPH)

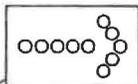
Source 2003 TMURCD Part 6

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

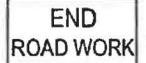


 (Optional) Mandatory for overnight closures.

 (Optional) Mandatory for overnight closures.

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

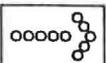
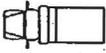
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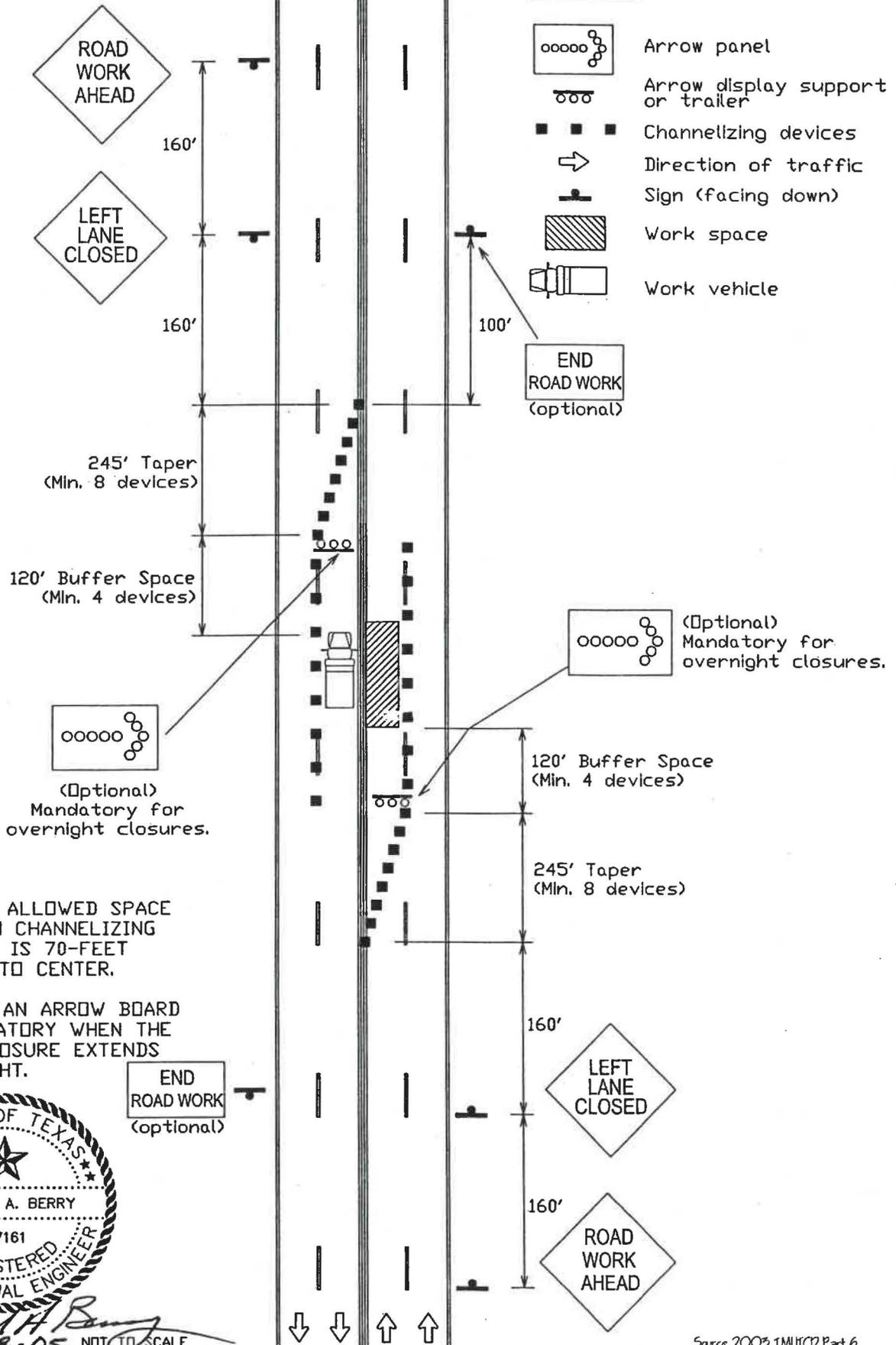


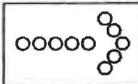
*Richard A. Berry*  
9-28-05 NOT TO SCALE

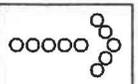
Source 2003 TMLUCD Part 6

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

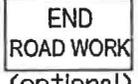


 (Optional) Mandatory for overnight closures.

 (Optional) Mandatory for overnight closures.

**NOTES:**

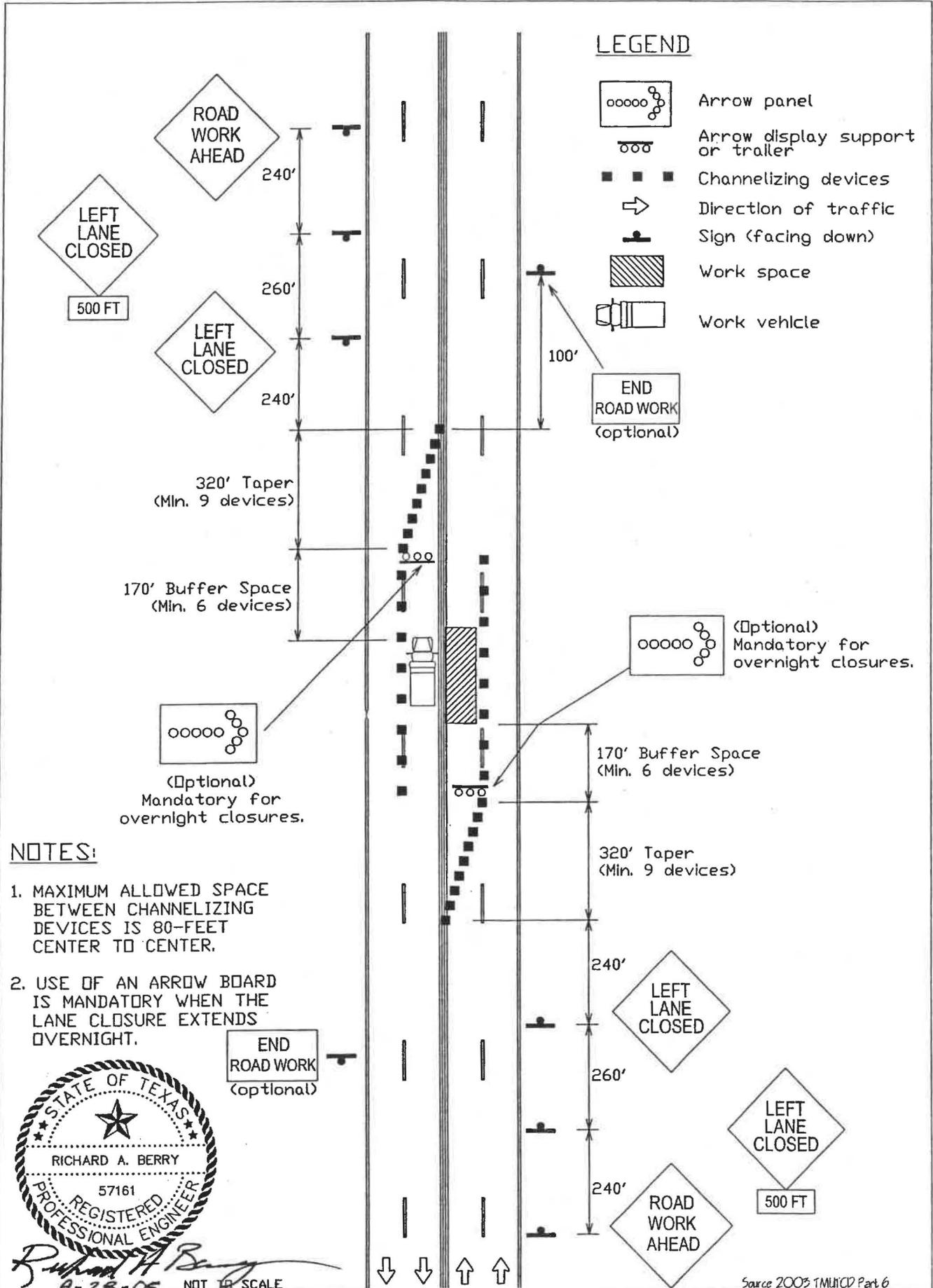
1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

 END ROAD WORK (optional)

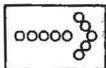


*Richard A. Berry*  
9-28-05 NOT TO SCALE

Source 2003 TMUTCD Part 6

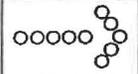


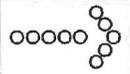
**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

320' Taper  
(Min. 9 devices)

170' Buffer Space  
(Min. 6 devices)

 (Optional)  
Mandatory for  
overnight closures.

 (Optional)  
Mandatory for  
overnight closures.

170' Buffer Space  
(Min. 6 devices)

320' Taper  
(Min. 9 devices)

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.



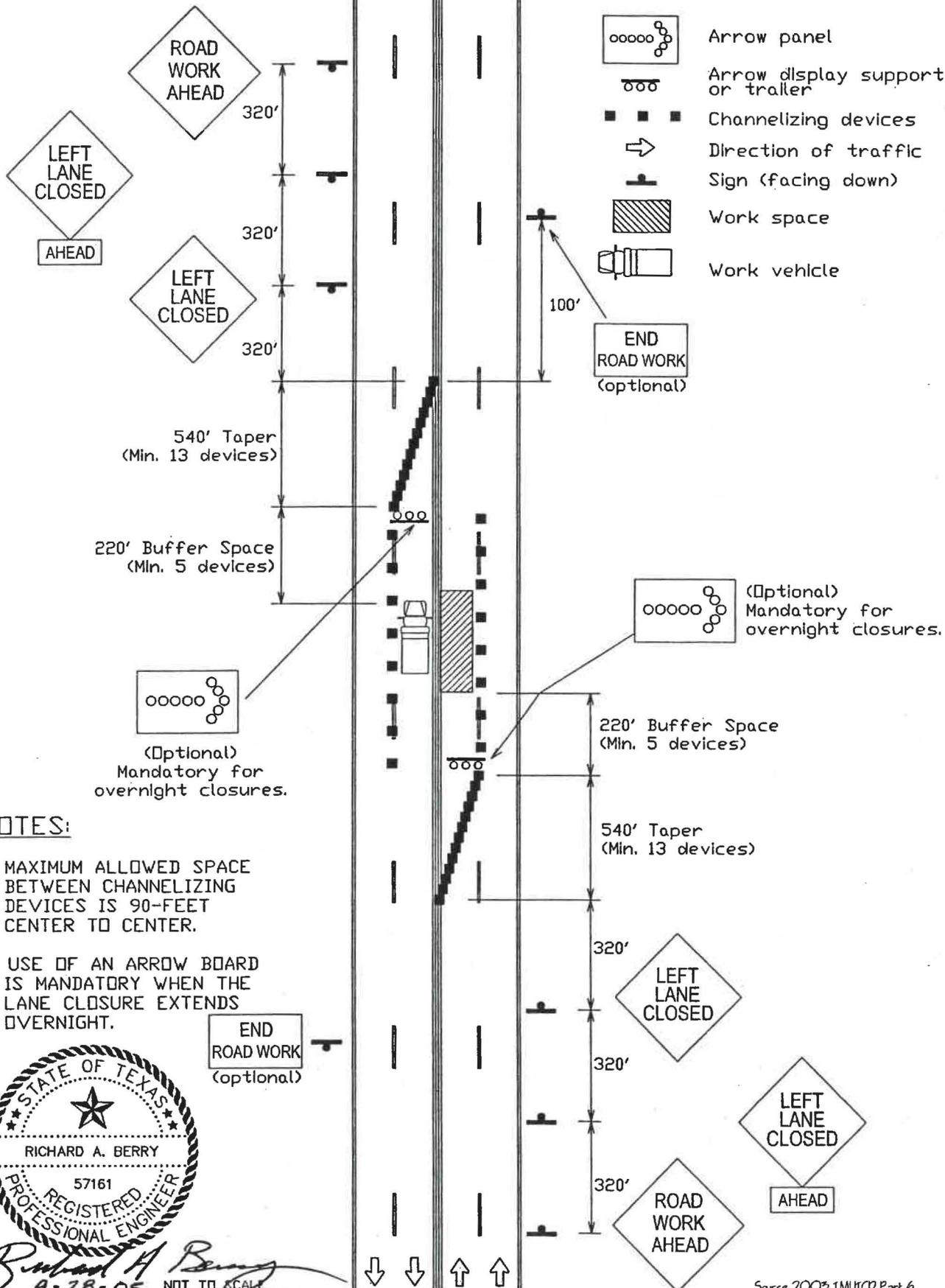
*Richard A. Berry*  
9-28-06 NOT TO SCALE

**END ROAD WORK**  
(optional)

Source 2005 TMUCD Part 6

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle



220' Buffer Space (Min. 5 devices)

540' Taper (Min. 13 devices)

540' Taper (Min. 13 devices)

220' Buffer Space (Min. 5 devices)

(Optional) Mandatory for overnight closures.

(Optional) Mandatory for overnight closures.

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

END ROAD WORK (optional)



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9-28-05 NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
**INTERIOR LANE CLOSURE ON MULTILANE STREET**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL TC-17d (45 MPH)**

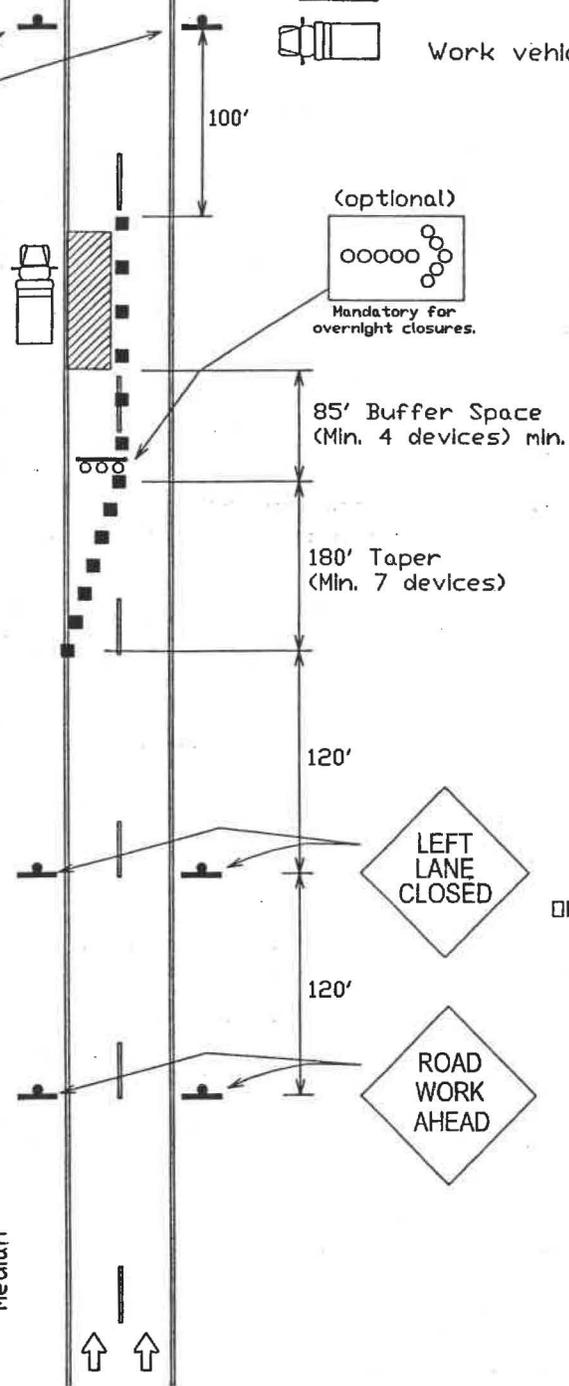
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK  
(optional)



(optional)

Mandatory for overnight closures.

85' Buffer Space  
(Min. 4 devices) min.

180' Taper  
(Min. 7 devices)

120'

LEFT LANE CLOSED

OR

ROAD WORK AHEAD

Median



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2003 FMUTCD Part 6

CITY OF MESQUITE, TEXAS  
LANE CLOSURE ON  
4-LANE DIVIDED ARTERIAL

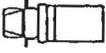
WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-18a  
(30 MPH)

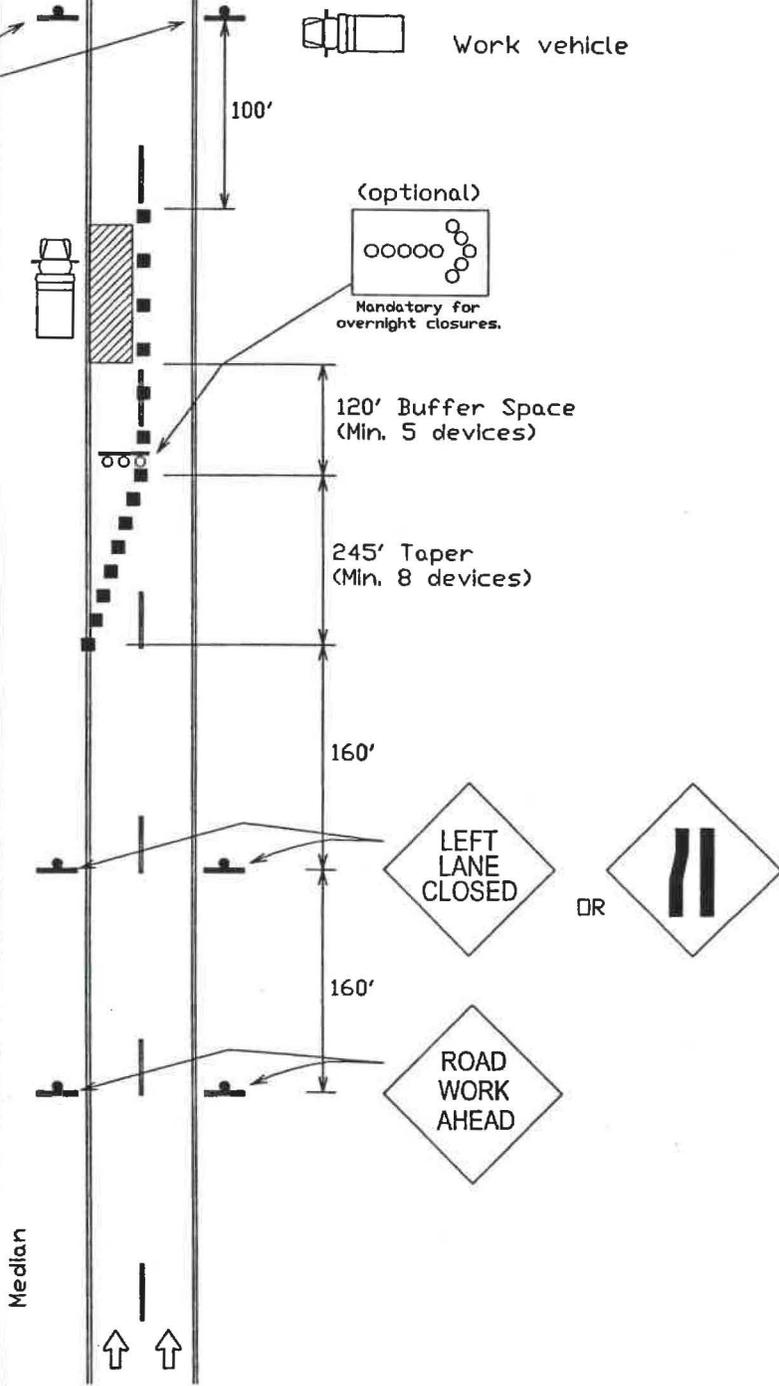
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK (optional)



*Richard A. Berry*  
9-28-05

NOT TO SCALE

Source 2005 TMUTCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE ON  
4-LANE DIVIDED ARTERIAL**

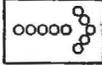
**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-18b  
(35 MPH)**

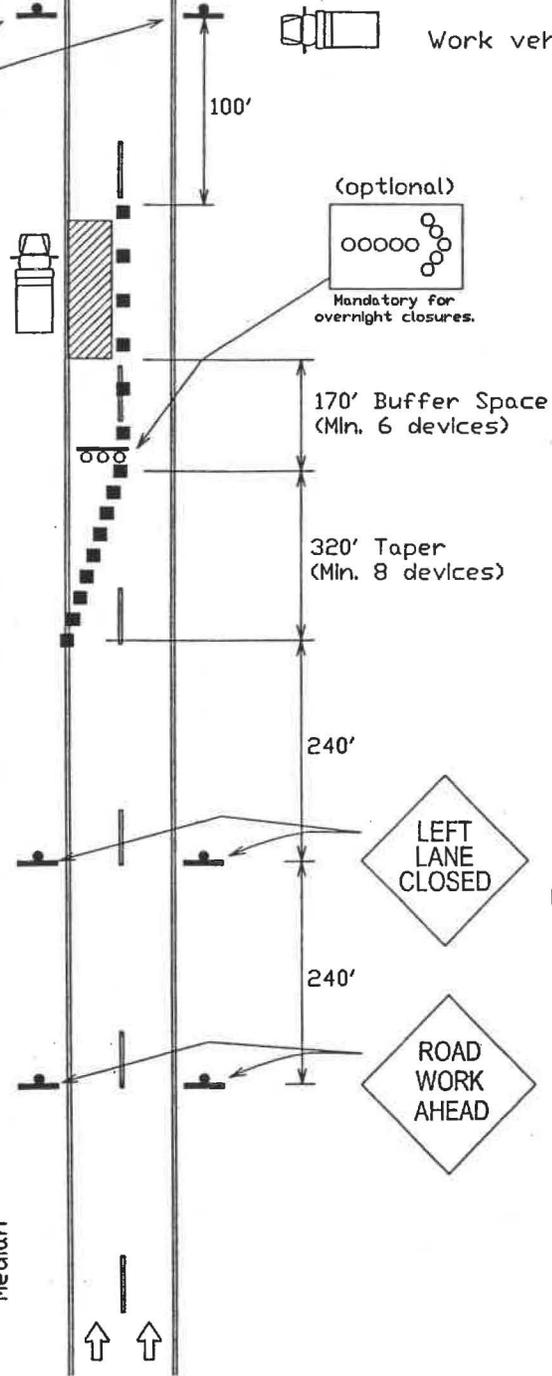
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK  
(optional)



STATE OF TEXAS  
 RICHARD A. BERRY  
 57161  
 REGISTERED PROFESSIONAL ENGINEER  
*Richard A. Berry*  
 9-28-05

NOT TO SCALE

Source 2003 TMLUCD Part 6

CITY OF MESQUITE, TEXAS  
 LANE CLOSURE ON  
 4-LANE DIVIDED ARTERIAL

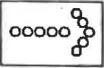
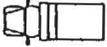
WORK ZONE TRAFFIC  
 CONTROL GUIDELINES

STD.  
 DETAIL  
 TC-18c  
 (40 MPH)

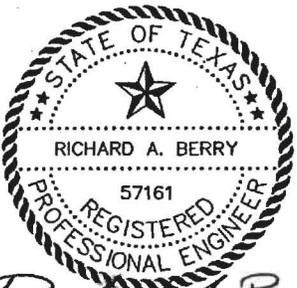
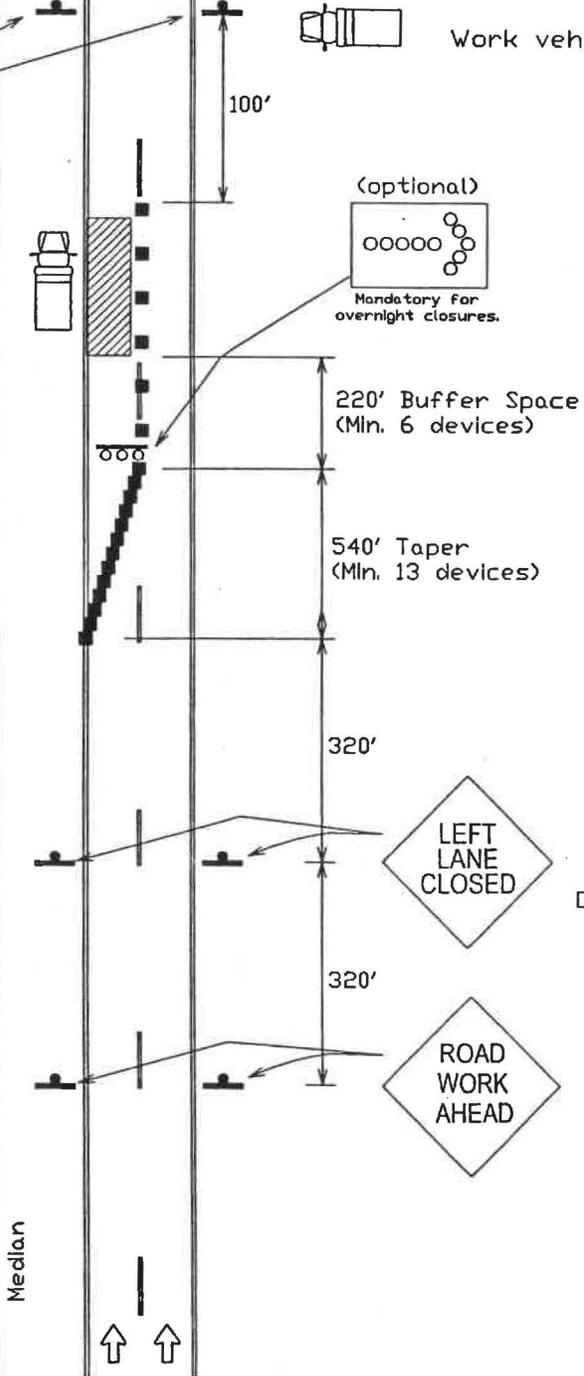
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK (optional)



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9-28-05

NOT TO SCALE

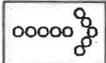
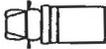
Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
LANE CLOSURE ON  
4-LANE DIVIDED ARTERIAL

WORK ZONE TRAFFIC  
CONTROL GUIDELINES

STD.  
DETAIL  
TC-18d  
(45 MPH)

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK (optional)

(optional)

Mandatory for overnight closures.

85' Buffer Space (Min. 4 devices) min.

180' Taper (Min. 7 devices)

120'

RIGHT LANE CLOSED

OR

ROAD WORK AHEAD

120'

Median

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.



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9-28-05

NOT TO SCALE

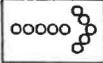
Source 2003 TMLTCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE ON  
6-LANE DIVIDED ARTERIAL**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-19a  
(30 MPH)**

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK (optional)

(optional) Arrow panel  
Mandatory for overnight closures.

120' Buffer Space (Min. 5 devices)

245' Taper (Min. 8 devices)

160'



160'



**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.



*Richard A. Berry*  
9-28-05

NOT TO SCALE

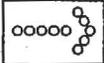
Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE ON 6-LANE DIVIDED ARTERIAL**

**WORK ZONE TRAFFIC CONTROL GUIDELINES**

**STD. DETAIL TC-19b**  
(35 MPH)

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK (optional)

(optional)

Mandatory for overnight closures.

170' Buffer Space (Min. 6 devices)

320' Taper (Min. 9 devices)

240'

RIGHT LANE CLOSED

OR

ROAD WORK AHEAD

240'

Median

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.



*Richard A. Berry*  
9-28-05

NOT TO SCALE

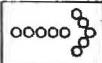
Source 2003 MCD Part 2

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE ON  
6-LANE DIVIDED ARTERIAL**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-19c  
(40 MPH)**

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

END ROAD WORK  
(optional)

(optional)

Mandatory for overnight closures.

220' Buffer Space  
(Min. 6 devices)

540' Taper  
(Min. 13 devices)

320'

RIGHT LANE CLOSED

OR

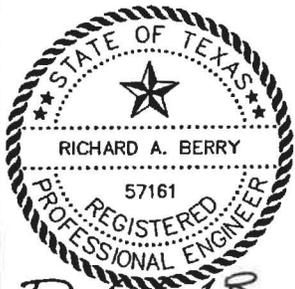
ROAD WORK AHEAD

320'

Median

**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90- FEET CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.



*Richard A. Berry*  
9-28-05

NOT TO SCALE

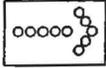
Source 2003 TMUCD Part 6

CITY OF MESQUITE, TEXAS  
**LANE CLOSURE ON  
6-LANE DIVIDED ARTERIAL**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-19d  
(45 MPH)**

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

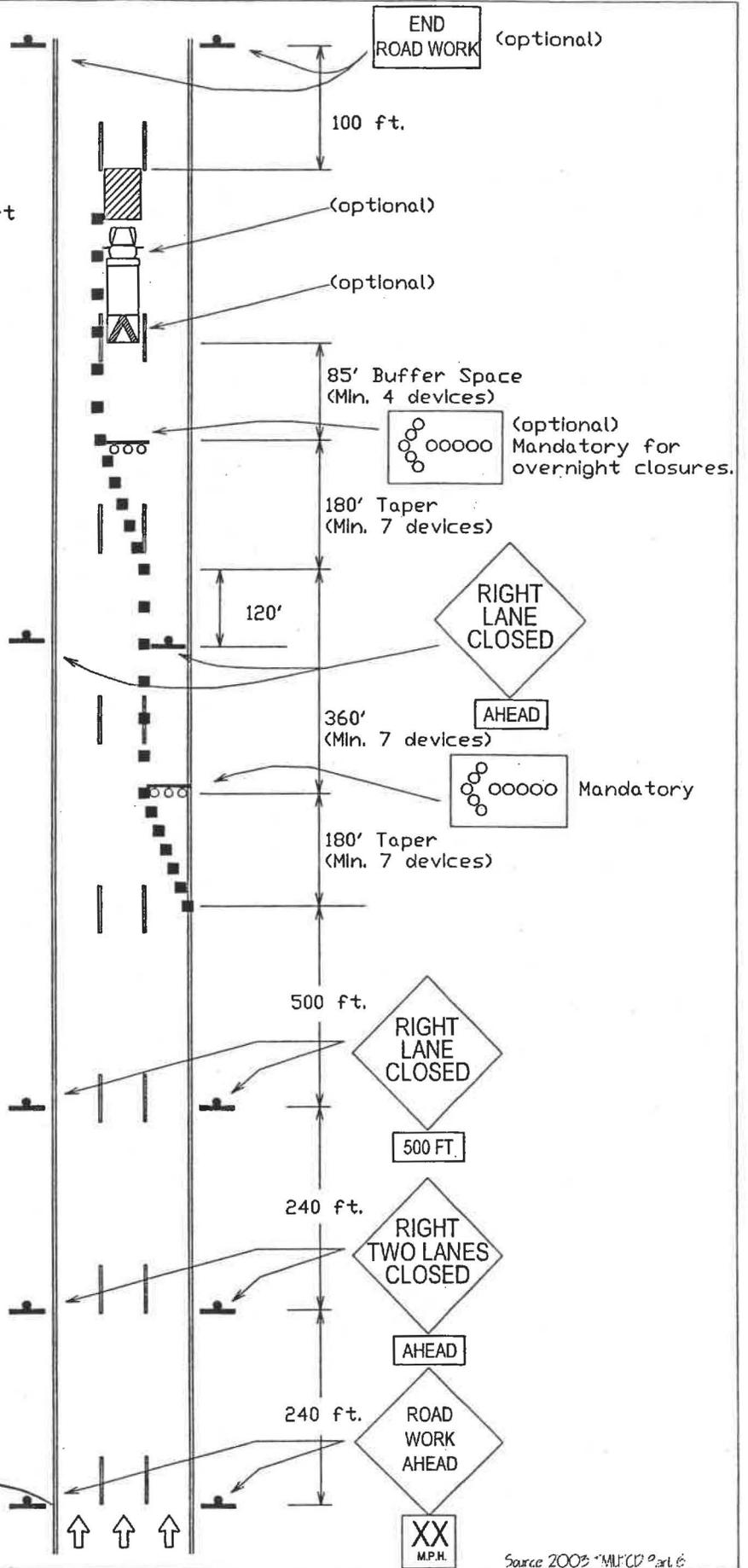
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 60-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. DETERMINATION OF, AND DECISION TO DISPLAY, ADVISORY SPEEDS SHALL BE MADE BY THE PROJECT ENGINEER OF RECORD.



*Richard A. Berry*  
9-28-05

NOT TO SCALE



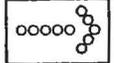
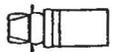
Source 2003 MUTC Part 6

CITY OF MESQUITE, TEXAS  
**DOUBLE LANE CLOSURE  
ON 6-LANE ARTERIAL**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

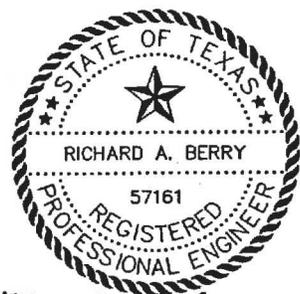
**STD.  
DETAIL  
TC-20a  
(30 MPH)**

# LEGEND

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

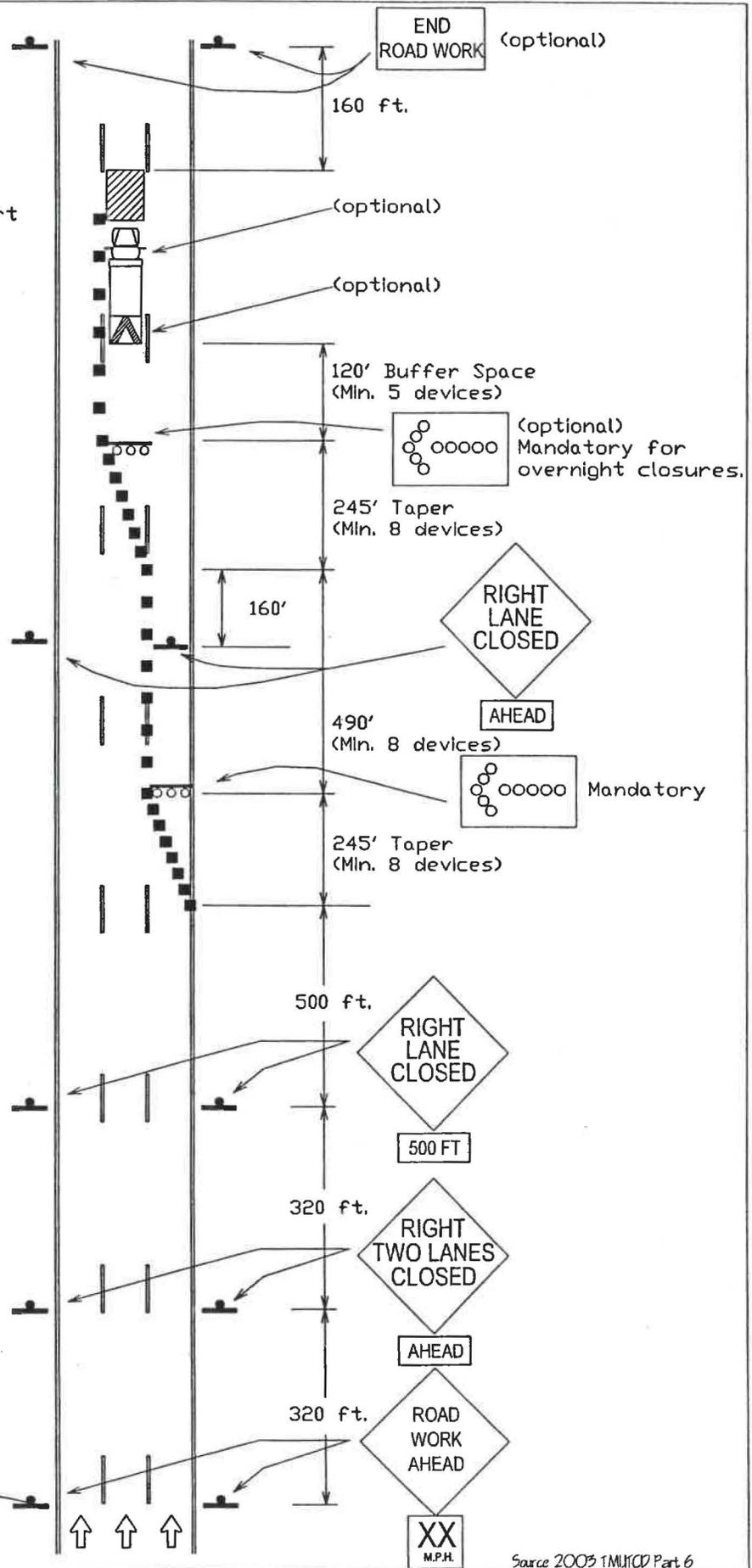
## NOTES:

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 70-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. DETERMINATION OF, AND DECISION TO DISPLAY, ADVISORY SPEEDS SHALL BE MADE BY THE PROJECT ENGINEER OF RECORD.



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMLICD Part 6

CITY OF MESQUITE, TEXAS  
**DOUBLE LANE CLOSURE  
ON 6-LANE ARTERIAL**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-20b  
(35 MPH)**

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

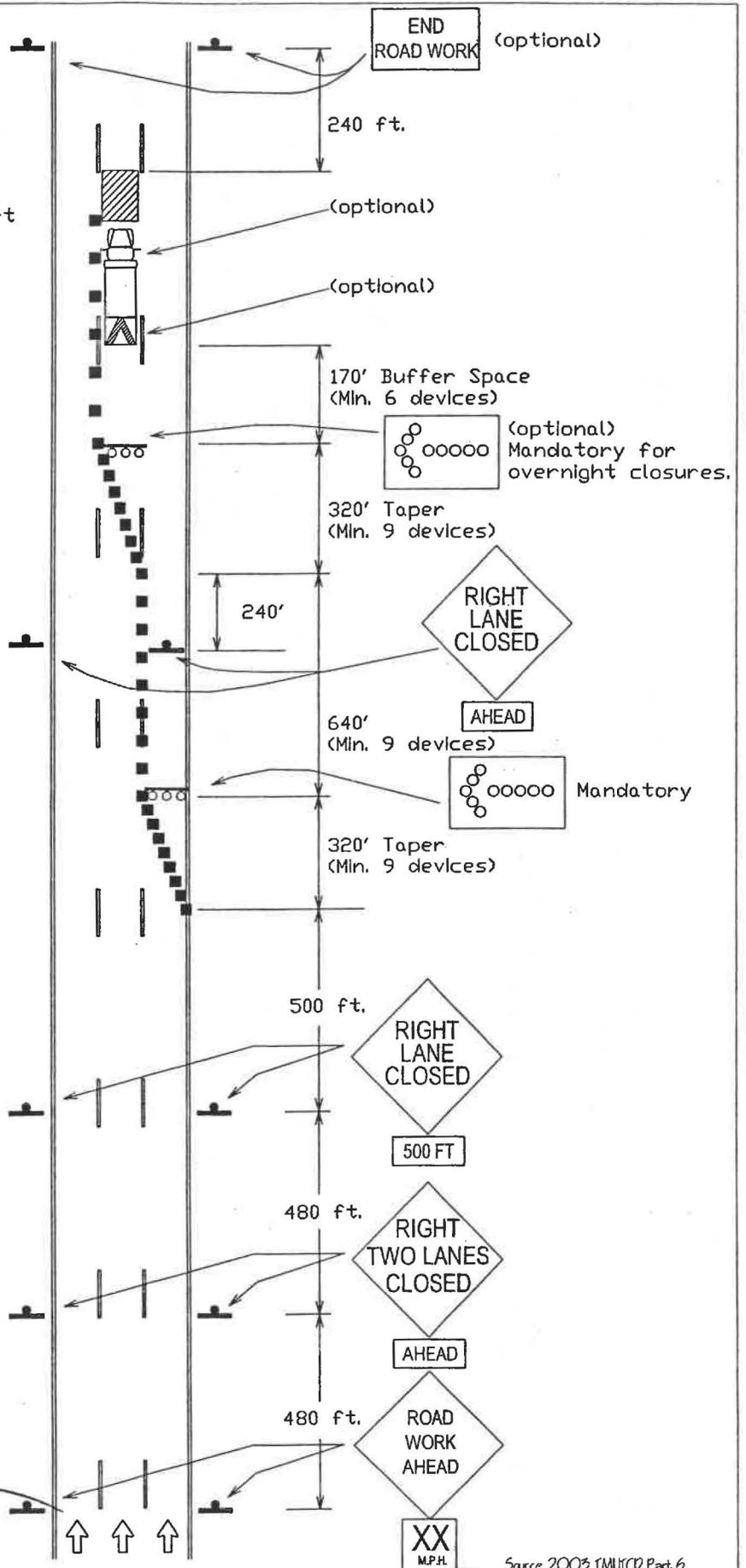
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 80-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. DETERMINATION OF, AND DECISION TO DISPLAY, ADVISORY SPEEDS SHALL BE MADE BY THE PROJECT ENGINEER OF RECORD.



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMLICD Part 6

CITY OF MESQUITE, TEXAS  
**DOUBLE LANE CLOSURE  
ON 6-LANE ARTERIAL**

**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

STD.  
DETAIL  
**TC-20c**  
(40 MPH)

**LEGEND**

-  Arrow panel
-  Arrow display support or trailer
-  Channelizing devices
-  Direction of traffic
-  Sign (facing down)
-  Work space
-  Work vehicle

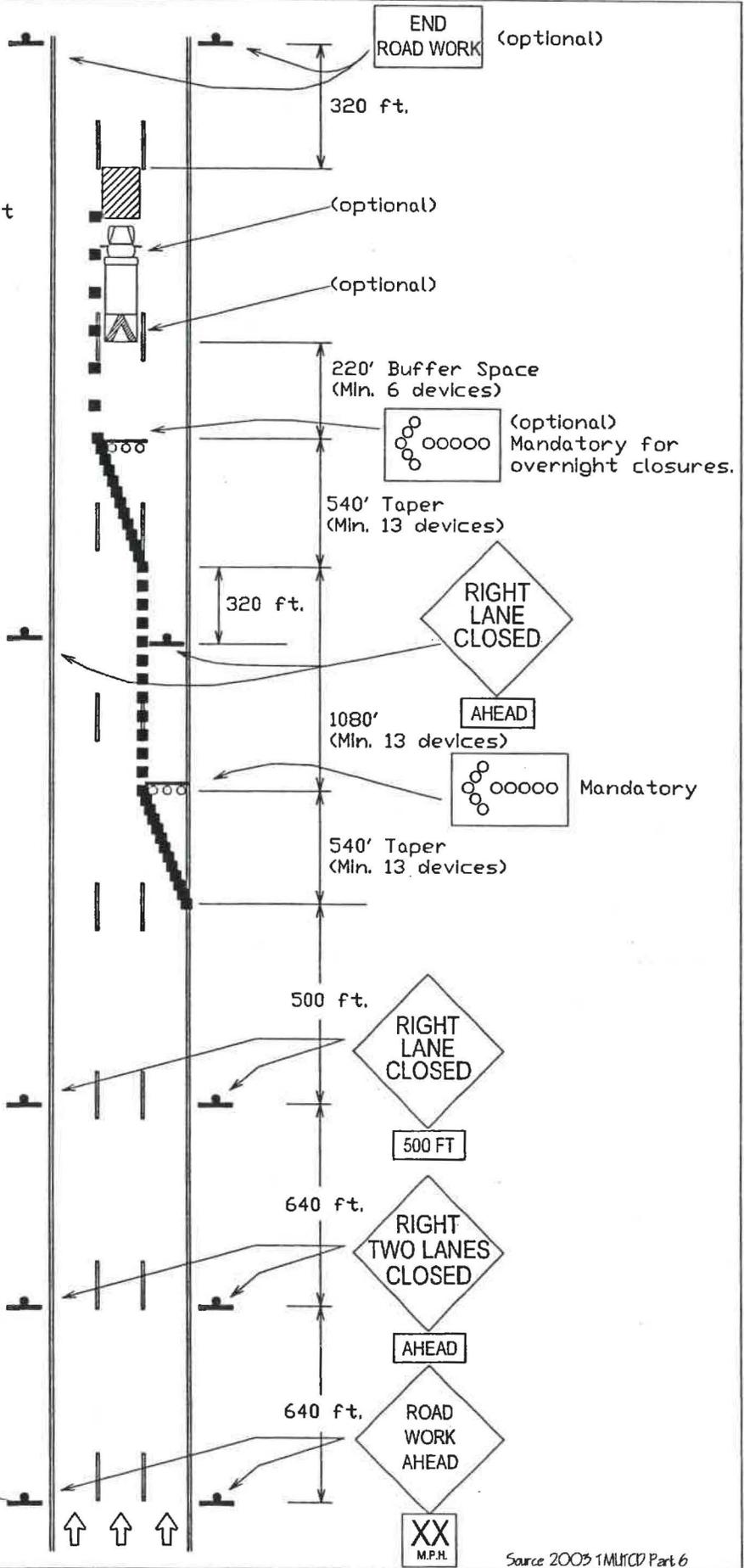
**NOTES:**

1. MAXIMUM ALLOWED SPACE BETWEEN CHANNELIZING DEVICES IS 90-FOOT CENTER TO CENTER.
2. USE OF AN ARROW BOARD IS MANDATORY WHEN THE LANE CLOSURE EXTENDS OVERNIGHT.
3. DETERMINATION OF, AND DECISION TO DISPLAY, ADVISORY SPEEDS SHALL BE MADE BY THE PROJECT ENGINEER OF RECORD.



*Richard A. Berry*  
9-28-05

NOT TO SCALE



Source 2003 TMURCD Part 6

CITY OF MESQUITE, TEXAS  
**DOUBLE LANE CLOSURE  
ON 6-LANE ARTERIAL**

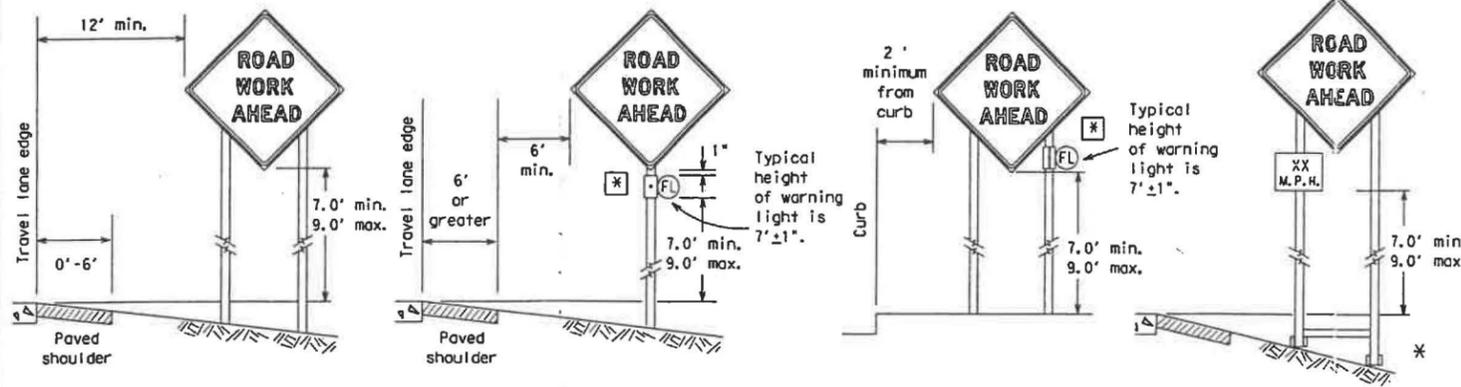
**WORK ZONE TRAFFIC  
CONTROL GUIDELINES**

**STD.  
DETAIL  
TC-20d  
(45 MPH)**

# APPENDIX

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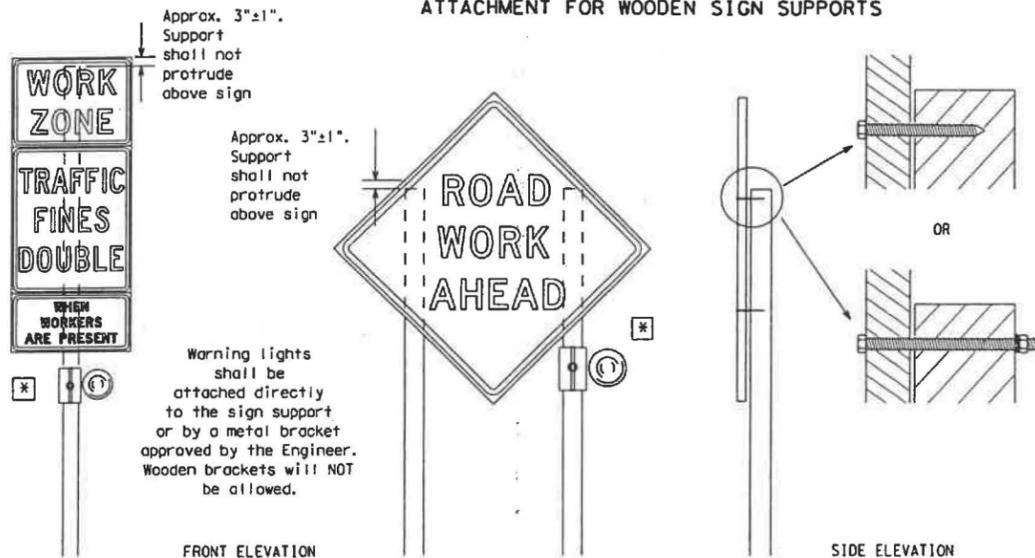
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS



It is the intent of these plans to provide positive guidance to motorists throughout the project limits by the use of signs, pavement markings, delineation and/or channelizing devices. All traffic control devices shall conform with the "Texas Manual on Uniform Traffic Control Devices for Streets and Highways" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" list (CWZTCD).

\* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

ATTACHMENT FOR WOODEN SIGN SUPPORTS



Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports.

Nails will NOT be allowed.

Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Supports shall not be extended or repaired by splicing or other means.

GENERAL NOTES FOR WORK ZONE SIGNS

- Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
  - Wooden sign posts shall be painted white.
  - Barricades shall NOT be used as sign supports.
  - Nails shall NOT be used to attach signs to any support.
  - All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
  - The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes. The additional signs requested by the Engineer/Inspector shall not be subsidiary.
  - The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD). The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so that the Engineer can verify the correct procedures are being followed.
  - The contractor is responsible for sign installations and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
  - Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1".
  - The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.
- Duration of Work (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part VI)
- Long-term stationary - work that occupies a location more than 3 days.
  - Intermediate-term stationary - work that occupies a location from overnight to 3 days.
  - Short-term stationary - daytime work that occupies a location from 1 to 12 hours.
  - Short, duration - work that occupies a location up to 1 hour.
  - Mobile - work that moves intermittently or continuously. Does not stop for more than 15 minutes at a time.

SIGN MOUNTING HEIGHT

- The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface.
- The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
- Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
- Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday.
- Regulatory signs shall be mounted at least 7 feet, but not more than 9.0 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

- The Engineer may allow the use of smaller size construction warning signs on secondary roads or city streets where speeds are low if the sign size is listed as an option on the "Typical Construction Warning Sign Size and Spacing" chart shown on BC(2).
- The Contractor shall furnish the sign sizes shown in plans, the BC Sheets, the TCP sheets or as directed by the Engineer.

SIGN SUBSTRATES

- The Contractor shall ensure that the sign substrate is allowed for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
- "Mesh" type materials are NOT an approved sign substrate.
- All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign faces.

REFLECTIVE SHEETING

- Reflectorized signs shall be constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 or DMS-8310. The DMS specifications can be accessed from the following web address:  
[http://manuals.dot.state.tx.us:80/dynaweb/calnotes/#Generic\\_CollectionView;cs=default;ts=default](http://manuals.dot.state.tx.us:80/dynaweb/calnotes/#Generic_CollectionView;cs=default;ts=default)
- White sheeting, meeting the requirements of DMS-8300 Type C (High Specific Intensity), shall be used for signs with white background and channelizing devices.
- Orange sheeting, meeting the requirements of DMS-8300 Type E (Fluorescent Prismatic), shall be used for signs with orange backgrounds.

SIGN LETTERS

- All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

- When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
- Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This type of sign support meets the crashworthiness standards regardless of the direction of impact. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
- Signs installed on skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
- When signs are covered, the material used shall be opaque, such as heavy mil black plastic.
- Burlap shall NOT be used to cover signs.
- Duct tape or other adhesive material shall NOT be affixed to a sign face. These materials can damage the retroreflectivity of sign sheeting.
- Signs shall be removed upon completion of the work.

SIGN SUPPORT WEIGHTS

- Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended.
- The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
- Rock, concrete, iron, steel or other solid objects will not be permitted for use as sign support weights.
- Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
- Sandbags shall be made of a durable material that tears upon vehicular impact.
- Rubber (such as tire inner tubes) shall NOT be used for sandbags.
- Rubber ballasts (such as those used with cones or edgeline channelizers) shall NOT be used as sign support weights.
- Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
- Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer  
Traffic Operations Division - TE  
Texas Department of Transportation  
125 East 11th Street  
Austin, Texas 78701-2483  
Phone (512) 416-3120  
Fax (512) 416-3299

Instructions to locate the "CWZTCD" on TxDOT website are:

Start at website - [www.dot.state.tx.us](http://www.dot.state.tx.us)  
Click on "About TxDOT",  
Click on "Organizational Chart",  
Click on Traffic Operations Box,  
Click on "Compliant Work Zone Traffic Control Devices",  
Click on "View PDF".  
This site is printable.

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

- Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
- When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition.
- When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
- If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
- If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC sheets or the CWZTCD. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
- Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

(FL) Flashing Type A - Low Intensity Warning Light

\* The Type A Warning lights shall not be used with Type E Sheeting (Fluorescent Prismatic) meeting the requirements of DMS-8300.

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LEVELS DISPLAYED  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32  
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STANDARD PLANS  
Texas Department of Transportation  
Traffic Operations Division

BARRICADE AND CONSTRUCTION  
TEMPORARY SIGN NOTES  
STANDARD

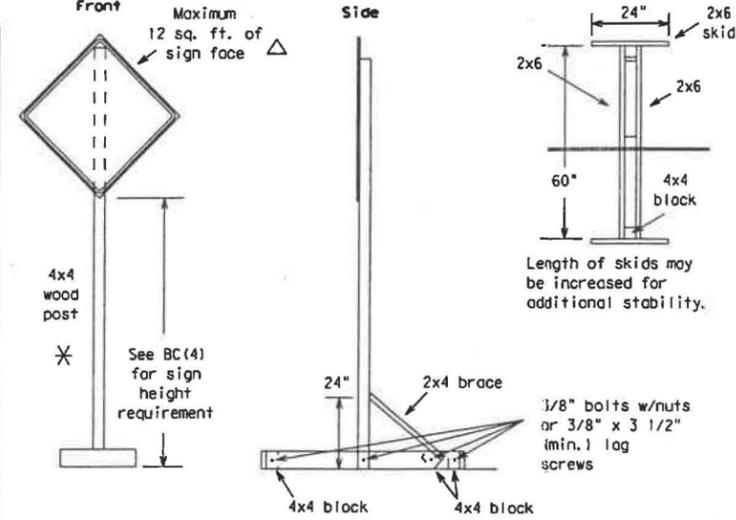
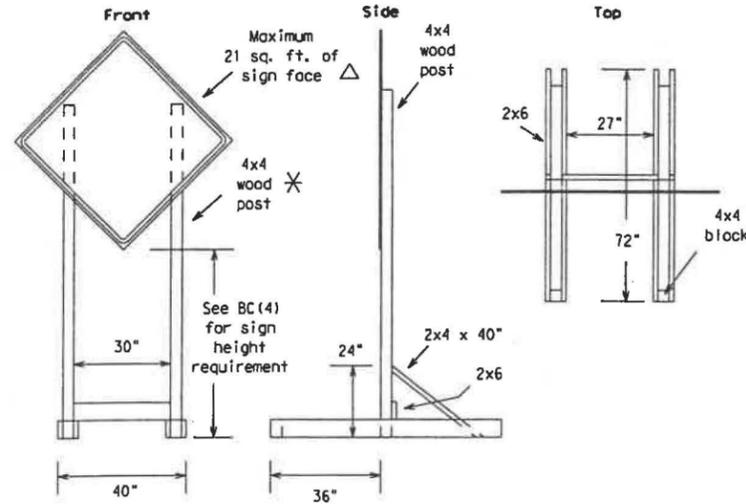
4 of 12 BC(4)-03

TxDOT 11-4-02	DR- BAS	CR- GRB	DR- FON	CR- CAL
REVISONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
	6			
	COUNTY	CONTRACT	SECTION	JOB
				HIGHWAY

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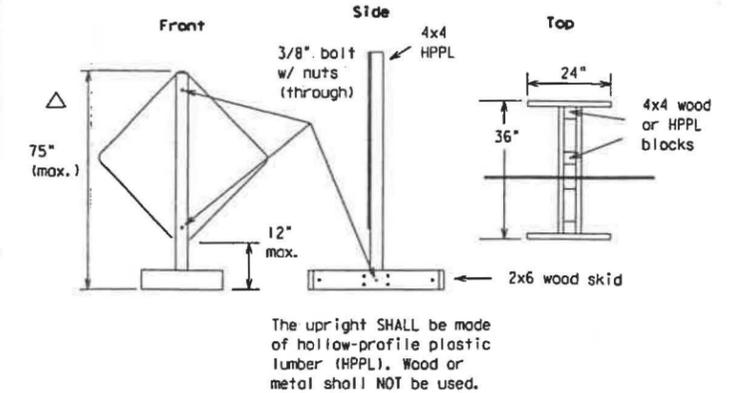
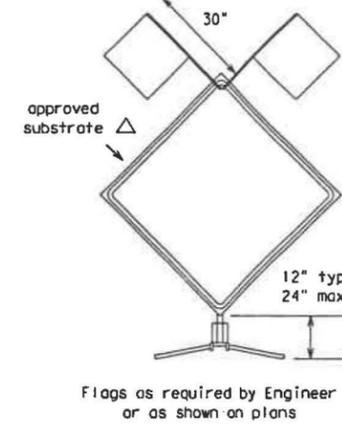
## EXAMPLES OF SKID MOUNTED SIGN SUPPORTS

### LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS □

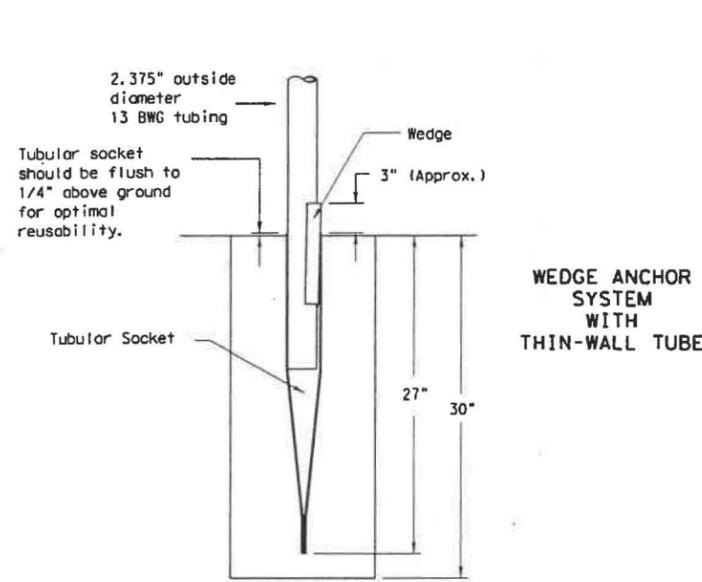


### SHORT TERM STATIONARY/SHORT DURATION - PORTABLE SIGN SUPPORTS □

For Daytime use only.  
1 Foot Mounting Height



## EXAMPLES OF GROUND MOUNTED SIGN SUPPORTS



**WEDGE ANCHOR SYSTEM WITH THIN-WALL TUBE**

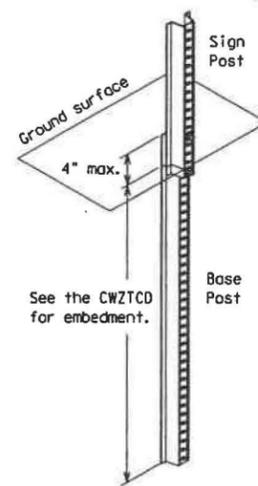
The wedge anchor system with thin wall tubing may be used to support up to 10 sq. ft. of sign area.

Where solid rock is encountered at ground level, the foundation shall be a minimum depth of 18 inches. When solid rock is encountered below ground level, the foundation shall extend in the solid rock a minimum depth of 18 inches or provide a minimum foundation depth of 30 inches. If solid rock is encountered, the socket/stub may be reduced in length as required to a min. length of 18 inches. Any material removed from the socket/stub shall be from the bottom and the clearance requirements shown above must still be adhered to. The inner surfaces of the socket/stub must remain free of debris. Install Wedge Anchor System per manufacturer recommendations. Attach the sign to the sign post. Insert the sign post into the socket and align the sign face with the roadway. Drive the wedge into the socket to secure post. This will leave approximately 3 inches of the wedge exposed.

Supports shall be straight within 1/4 inch per 5 feet of length and shall have a smooth, uniform finish free from defects affecting strength or appearance. Any bolt holes and sheared ends shall be free from burrs.

### WING CHANNEL

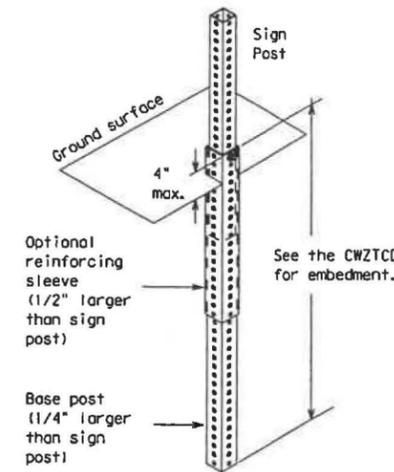
Lap-splice/base bolted anchor



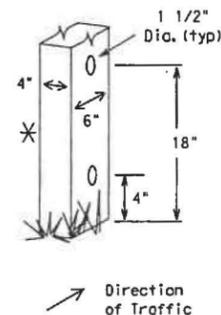
Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support. The maximum sign square footage shall adhere to the manufacturer's recommendation. Two post installations can be used for larger signs.

### PERFORATED SQUARE METAL TUBING

With Anchor



### WOOD POST SYSTEM FOR GROUND MOUNTED SIGN SUPPORTS



Nominal Post Size	No. of Posts	Maximum Sq. feet of Sign Face	Minimum Soil Embedment	Drilled Holes/ Required
4 x 4	1	12	36"	NO
4 x 4	2	21	36"	NO
4 x 6	1	21	36"	YES
4 x 6	2	36	36"	YES

No more than 2 sign posts shall be mounted within a 7 ft. circle.

When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

□ See BC(4) for definition of "Work Duration."

\* Sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

△ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer  
Traffic Operations Division - TE  
Texas Department of Transportation  
125 East 11th Street  
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Click on "Traffic Operations Box",  
Click on "Compliant Work Zone Traffic Control Devices",  
Click on "View PDF".  
This site is printable.



## BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT STANDARD

5 of 12 BC(5)-03

© TxDOT 11-4-02		Dr. - JMT	Co. - GRB	Dr. - FDN	Dr. - CAL
STATE	FEDERAL	FEDERAL AID PROJECT		SHEET	
6					
COUNTY	CONTROL	SECTION	JOB	HIGHWAY	

LEVELS DISPLAYED  
 ACC: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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## PORTABLE CHANGEABLE MESSAGE SIGNS

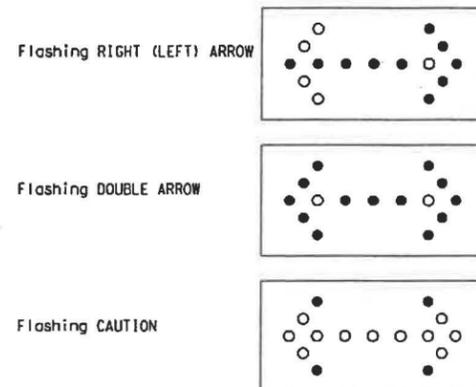
- The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
- PCMS placed on the shoulder or within the R-O-W, but are not behind a concrete traffic barrier shall have a minimum of four plastic drums placed perpendicular to traffic, on the upstream side of the PCMS.
- Messages on PCMS should contain no more than 8 words (four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
- Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed.
- Each phase of the message should convey a single thought.
- Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
- Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
- Specify the actual days of the week; e.g., TUES THROUGH FRI or TUES-FRI in the coming week that work activity will occur.
- The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
- The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for two seconds each.
- Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
- Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
- Do not use the words "Danger" or "Caution" in message.
- Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
- Do not display messages that scroll horizontally or vertically across the face of the sign.
- The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated.

Word or Phrase	Abbreviation	Word or Phrase	Abbreviation
Access Road	ACCES RD	Miles	MI
Air Quality	AIR QLT	Miles Per Hour	MPH
Avenue	AVE	Time Minutes	Time MIN
Best Route	BEST RTE	Monday	MON
Boulevard	BLVD	Normal	NORM
Bridge	BRDG	North	N
Cannot	CANT	Parking	PKING
Center	CNTR	Parking Lot	PRK LOT
Construction Ahead	CONST AHEAD	Road	RD
Detour Route	DETOUR RTE	Right Lane	RGT LN
East	E	Saturday	SAT
Emergency	EMER	Service Road	SERV RD
Emergency Vehicle	EMER VEH	Shoulder	SHLDR
Entrance, Enter	ENT	Slippery	SLIP
Express Lanes	EXP LANE	South	S
Expressway	EXPWY	Speed	SPD
Distance Feet	Distance FT	Street	ST
Fog Ahead	FOG AHD	Sunday	SUN
Freeway	FRWY, FWY	Telephone	PHONE
Freeway Blocked	FWY BLKD	Thursday	THURS
Friday	FRI	To Downtown	TO DWN TN
Hazardous Driving	HAZ DRIVING	Traffic	TRAF
Highway	HWY	Travelers	TRVLRS
Hours	HR	Tuesday	TUES
Information	INFO	Turnpike	Name TRNPK
Left	LFT	Upper Level	UPPR LVL
Left Lane	LFT LN	Warning	WARN
Lane Closed	LN CLSD	Wednesday	WED
Lower Level	LOWR LVL	Weight Limit	WT LIMIT
Maintenance	MAINT	Wet Pavement	WET PVMT
Roadway designation #	IH-number, US-number, SH-number, FM-number	West	W

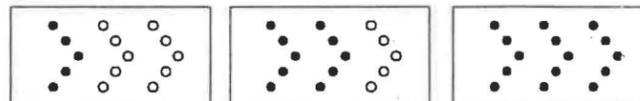
WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND CONCRETE TRAFFIC BARRIER.

## TYPICAL FLASHING ARROW PANEL

- The Flashing Arrow Panel should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
- Flashing Arrow Panels should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
- The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Panel.
- The Flashing Arrow Panel should be able to display the following symbols:



- The "CAUTION" display consists of four corner lamps flashing simultaneously.
- The straight line caution display is NOT ALLOWED.
- The Flashing Arrow Panel shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
- Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
- The sequential arrow display is NOT ALLOWED.
- The flashing arrow display is the TxDOT standard; however, the sequential Chevron display may be used during daylight operations.



- The Flashing Arrow Panel shall be mounted on a vehicle, trailer or other suitable support.
- A Flashing Arrow Panel SHOULD NOT BE USED to laterally shift all lanes of traffic on a multi-lane roadway at once.

### REQUIREMENTS

TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION: Flashing Arrow Panels shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW PANEL FROM THE RIGHT-OF-WAY OR PLACE THE ARROW PANEL BEHIND CONCRETE TRAFFIC BARRIER.

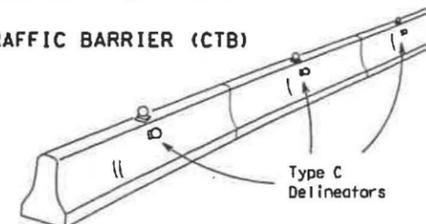
### TRUCK-MOUNTED ATTENUATORS

- Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the National Cooperative Highway Research Report No. 350 (NCHRP 350).
- Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMA's.
- Refer to the dates shown in the CWZTCD to ensure that the TMA meets the age requirements and the crashworthiness criteria established by the Federal Highway Administration (FHWA) for TMA's.
- Refer to the CWZTCD for a list of approved TMA's.
- TMA's are required on freeways unless otherwise noted in the plans.
- A TMA should be used anytime that it can be positioned approximately 100 feet or less in advance of the area of crew exposure without adversely affecting the work performance.
- The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

## TYPE C DELINEATORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS

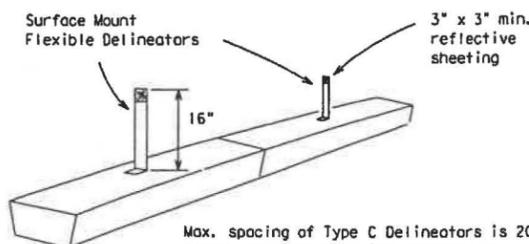
- Type C Delineators shall be prequalified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Type C Delineators can be found at the following Web site: <ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/dms8600preq.pdf>.
- Color of delineators shall be as specified in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD). The cost of the Type C Delineators shall be considered subsidiary to Item 502.

### CONCRETE TRAFFIC BARRIER (CTB)



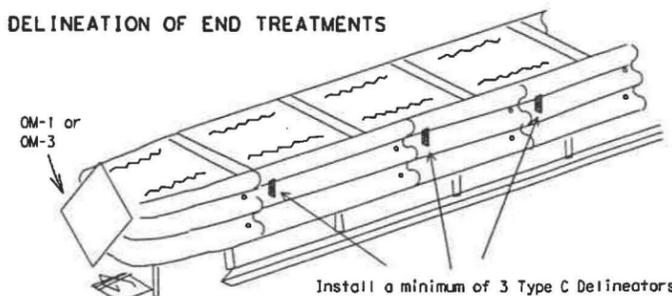
- Two (2) Type C Delineators should be mounted on each section of CTB in approximately the midsection of the CTB. The Type C Delineator on the side of the CTB shall be installed directly below the Type C Delineator mounted on top of the CTB.
- Maximum spacing of Type C Delineators is 40 feet.
- Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
- Attach Type C Delineators on CTB as per manufacturer's recommendations.
- Missing or damaged Type C Delineators shall be replaced as directed by the Engineer.

### LOW PROFILE CONCRETE BARRIER (LPCB)



Max. spacing of Type C Delineators is 20 feet. Attach the Type C Delineators as per manufacturer's recommendations.

### DELINEATION OF END TREATMENTS



DELINEATION	APPROACHING TRAFFIC	
	BOTH SIDES	ONE SIDE
	OM-1	OM-3 or Vertical Panel

Attach the Type C Delineators as per manufacturer's recommendations.

## WARNING LIGHTS

- Warning lights shall meet the requirements of the TMUTCD.
- Warning lights shall NOT be installed on barricades.
- Type A-Low Intensity Flashing Warning Lights are commonly used with signs. They are intended to warn of an approaching potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type E Sheeting (Fluorescent Prismatic) meeting the requirements of Departmental Material Specification DMS-8300.
- Type-C Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
- The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
- When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.

## END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet crashworthy standards as defined in the National Cooperative Highway Research Report 350. Refer to the CWZTCD List for approved end treatments and manufacturers.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer  
 Traffic Operations Division - TE  
 Texas Department of Transportation  
 125 East 11th Street  
 Austin, Texas 78701-2483  
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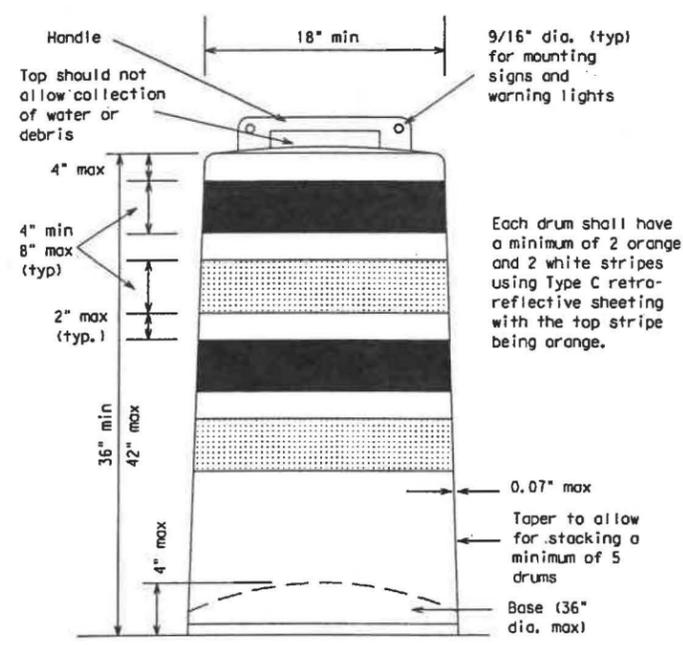
STANDARD PLANS  
 Texas Department of Transportation  
 Traffic Operations Division

BARRICADE AND CONSTRUCTION  
 ARROW & MESSAGE SIGNS,  
 REFLECTORS & WARNING LIGHT  
 STANDARD  
 6 of 12 BC(6) -03

REVISIONS	STATE DISTRICT	FEDERAL SECTION	DP - BAS	CR - GRB	DR - FDN	CS - CAL
	6					
	COUNTY	CITY	SECTION	JOB	REVISION	

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**GENERAL NOTES**

- Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
- The Contractor shall have a maximum of 24 hours to replace any plastic drums or other traffic control devices identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

Prequalified plastic drums shall meet the following requirements:

**GENERAL DESIGN REQUIREMENTS**

- Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
- The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
- Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
- Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
- The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, delineator reflector unit or non-plywood sign.
- The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflective space between any two adjacent stripes shall not exceed 2 inches in width.
- Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
- Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
- Drum body shall have a minimum unballasted weight of 7.7 lbs. and maximum unballasted weight of 11 lbs. The wall of the drum

body shall be a minimum of 0.07 inch in thickness. Weight of any drum supplied shall not vary more than 0.5 lb. from that of the prequalified sample.

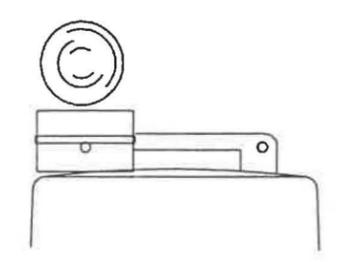
10. Drum and base shall be marked with manufacturer's name and model number.

**RETROREFLECTIVE SHEETING**

- The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Flat Surface Reflective Sheeting." High Specific Intensity (Type C) retro-reflective sheeting shall be supplied unless otherwise specified in the plans.
- The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, checking, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

**BALLAST**

- Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, shall weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
- Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
- The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
- When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
- Ballast shall not be placed on top of drums.
- Adhesives may be used to secure base of drums to pavement.

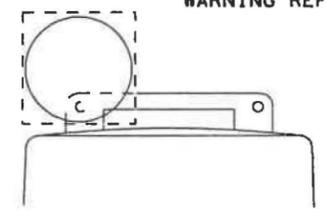


Type C Warning Light or approved substitute mounted adjacent to the travel way.

**WARNING LIGHTS AND DELINEATORS MOUNTED ON PLASTIC DRUMS**

- Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
- Type A flashing warning lights are not intended for delineation and shall not be used in a series.
- Type C steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
- Type A and Type C warning lights shall be installed at locations as detailed on other sheets in the plans.
- Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
- Type A Class 1, Type A Class 2, or Type B Reflector Units (D & OM Standard) may be attached to drums to delineate the intended vehicular path. The color of the reflector unit shall correspond to the pavement marking it is supplementing or for which it is substituting (left edgeline-yellow or right edgeline-white). The reflective unit shall be attached to the handle of the drum using the mounting hole nearest the travel lane and shall be aligned perpendicular to approaching traffic.
- Delineators may be used as directed by the Engineer. Delineators may not be used as a substitute for warning lights.

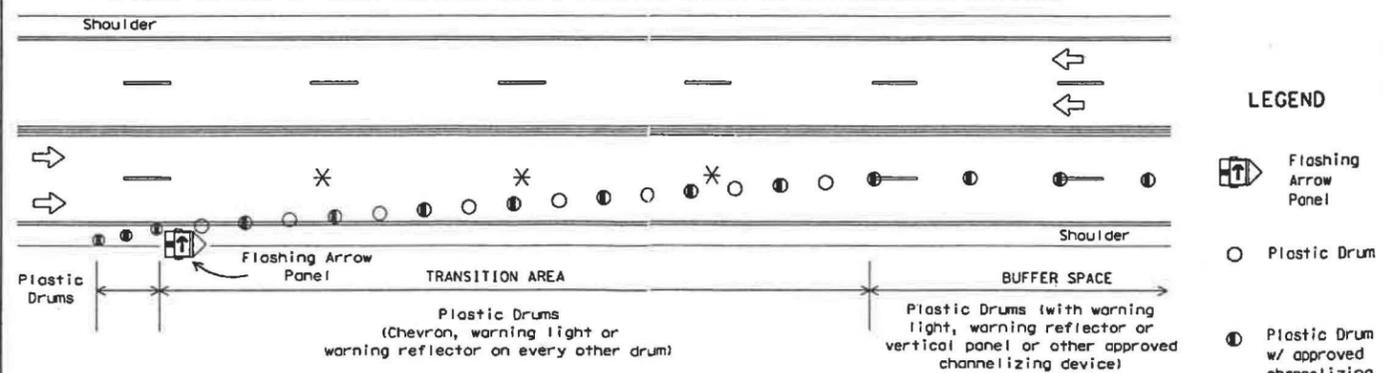
**WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C WARNING LIGHTS**



Warning reflector may be round or square. Must have a reflective surface area of at least 30 square inches

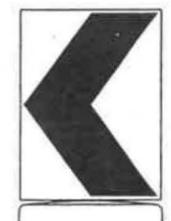
- A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
- The warning reflector shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
- The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
- Round reflectors shall be fully reflectorized, including the area where attached to the drum.
- Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
- The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type D (Non-fluorescent Prismatic).
- When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
- The warning reflector should be mounted on the side of the handle nearest approaching traffic.

**TYPICAL DETAIL OF LANE CLOSURE USING PLASTIC DRUMS AS CHANNELIZING DEVICES**



Provide adequate sight distance when placing lane closures. Do not place lane closures in vertical or horizontal curves. See BC(8) for table showing the spacing of channelizing devices in the taper and tangent section.

\* NOTE: Lane lines shall be removed when the lane closure occupies a location for longer than 2 weeks.



18" x 24" Sign (Maximum Sign Dimension) Chevron CW1-8, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24" Vertical Panel mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

**SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS**

- Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
- Chevrons and other work zone signs with an orange background shall be manufactured with Type E (Fluorescent Prismatic) sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Flat Surface Reflective Sheeting," unless otherwise specified in the plans.
- Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type C (High Specific Intensity). Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
- Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height.
- Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
- Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer  
 Traffic Operations Division - TE  
 Texas Department of Transportation  
 125 East 11th Street  
 Austin, Texas 78701-2483  
 Phone (512) 416-3120  
 Fax (512) 416-3299

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 Click on "View PDF".  
 This site is printable.

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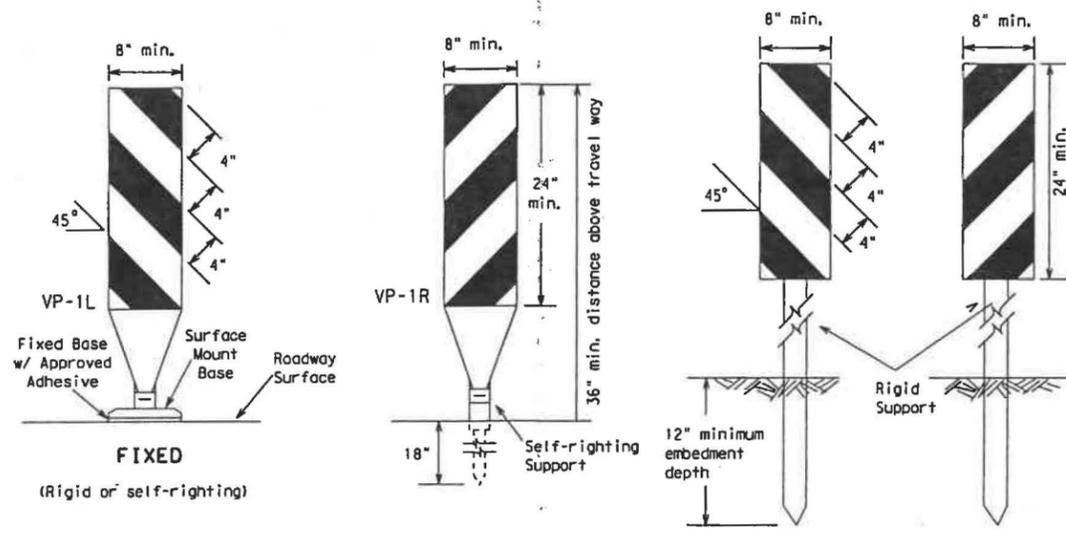
**BARRICADE AND CONSTRUCTION PLASTIC DRUM STANDARD**

7 of 12 BC(7)-03

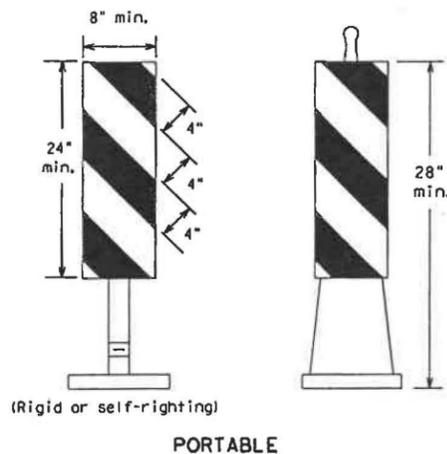
TxDOT 11-4-02	REVISED	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
4-03	6	COUNTY	CONTROL	SECTION	JOB
					HIGHWAY

# CHANNELIZING DEVICES

## VERTICAL PANELS

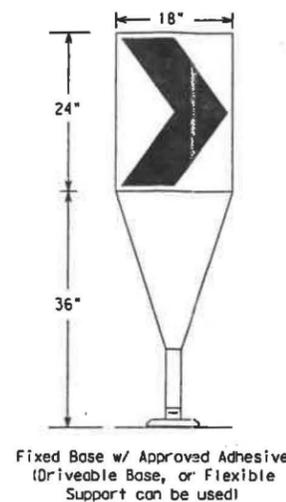


## DRIVEABLE



- Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
- VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual Appendix B "Treatment of Pavement Drop-offs in Work Zones" for additional guidelines on the use of VP's for drop-offs.
- VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
- VP's used on expressways, freeways, and on high speed roadways shall have a minimum of 2 square feet of retroreflective area facing traffic.
- Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- Sheeting for the VP's shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless noted otherwise.

## CHEVRONS



- The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
- Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
- Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
- To be effective, the chevron should be visible for at least 500 feet.
- Chevrons shall be orange with a black non-reflective legend. Sheeting for the chevron shall be retroreflective Type E (Fluorescent Prismatic) conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall be black vinyl non-reflective decal sheeting meeting the requirements of DMS-8320.

Posted Speed	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices	
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60' - 75'
35		205'	225'	245'	35'	70' - 90'
40		265'	295'	320'	40'	80' - 100'
45	L=WS	450'	495'	540'	45'	90' - 110'
50		500'	550'	600'	50'	100' - 125'
55		550'	605'	660'	55'	110' - 140'
60		600'	660'	720'	60'	120' - 150'
65		650'	715'	780'	65'	130' - 165'
70	700'	770'	840'	70'	140' - 175'	
75	750'	825'	900'	75'	150' - 185'	

\*\*Taper lengths have been rounded off.  
L=Length of Taper (FT.) W=Width of Offset (FT.) S=Posted Speed (MPH)

## GENERAL NOTES:

- Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
- Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
- Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- The contractor shall maintain devices in a clean condition and replace damaged, non-reflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
- Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh approximately 35 lbs.
- Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
- The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.
- Examples on this sheet are the most commonly used channelizing devices in work zones. For other devices, refer to the CWZTCD.

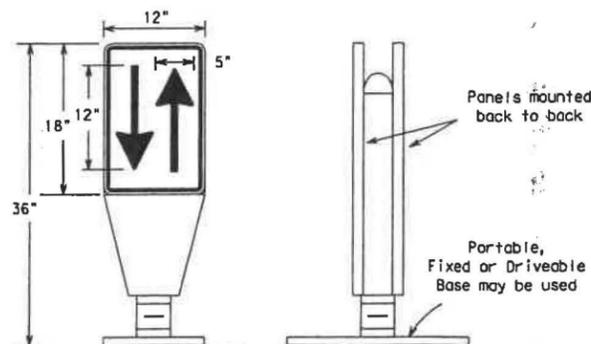
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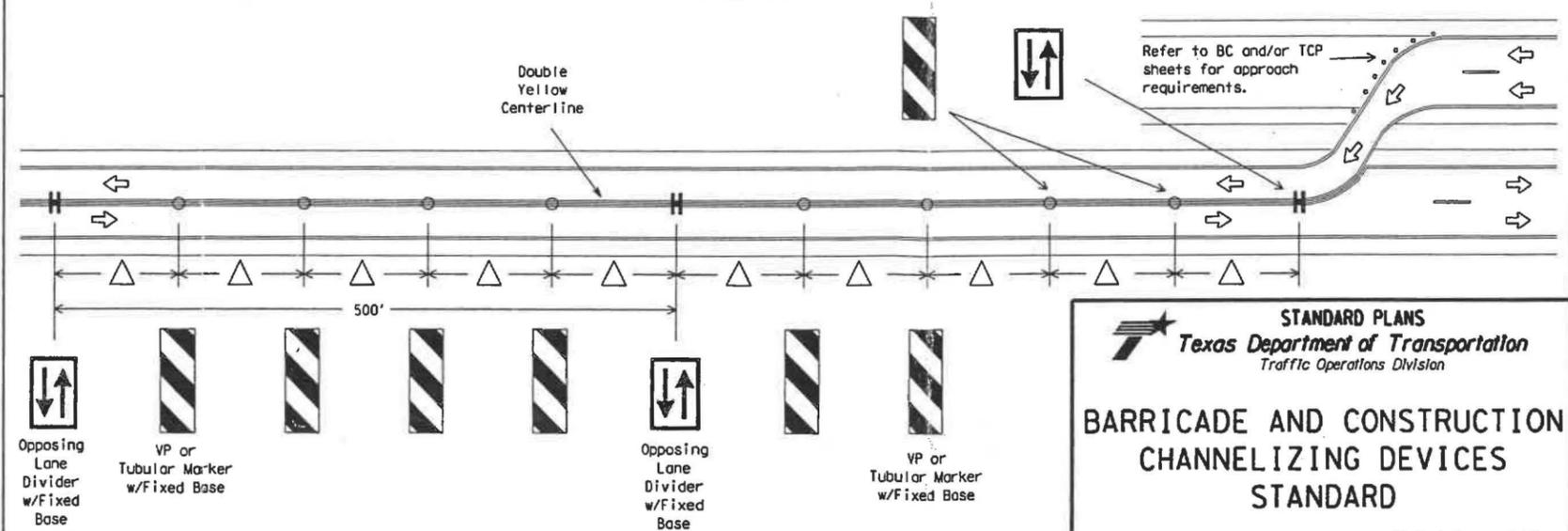
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Start at website - [www.dot.state.tx.us](http://www.dot.state.tx.us)  
Click on "About TxDOT",  
Click on "Organizational Chart",  
Click on Traffic Operations Box,  
Click on "Compliant Work Zone Traffic Control Devices",  
Click on "View PDF".  
This site is printable.

## OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



- Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust. The OTLD is placed on a flexible self-righting support that returns to an upright position when impacted by a vehicle.
- The OTLD may be used in combination with simple tubular markers or vertical panels (vp's).
- Spacing between the OTLD shall not exceed 500 feet. Tubular markers or vp's placed between the OTLD's should not exceed 100 foot spacing.
- The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type E (Fluorescent Prismatic) conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall be black vinyl non-reflective decal sheeting meeting the requirements of DMS-8320.



△ Spacing between the VP's or tubular markers shall not exceed 100 feet. On roadways with speeds less than 45 MPH, spacing between the tubular markers or VP's shall be as shown on the channelizing spacing table shown on this page. If the table shows spacing greater than 100 feet based on the roadway speed, then use a maximum of 100 feet spacing between the tubular markers or VP's. Every fifth channelizing device shall be an OTLD. Spacing between the OTLD shall not exceed 500 feet. When using this type of traffic control set-up, the OTLD, VP's or tubular markers shall have the fixed base with approved adhesive per the manufacturer's recommendations.

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## BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES STANDARD

8 of 12 BC(8)-03

TXDOT 11-4-02	DR-BAS	CR-GRB	DR-FDN	CR-CAL
STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET	
6			COUNTY	CENTRAL SECTION JOB HIGHWAY

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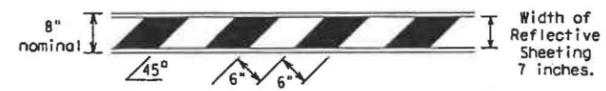
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**TYPE III BARRICADES**

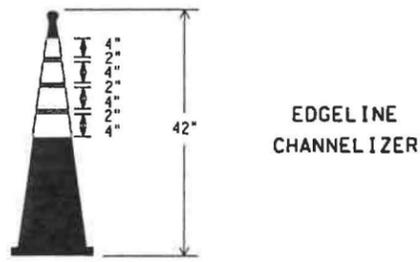
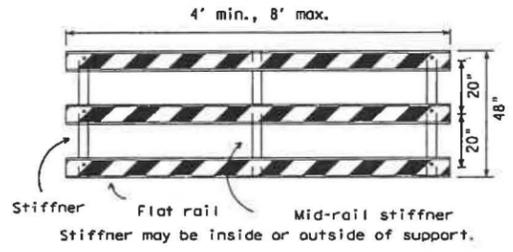
1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type III Barricades and a list of all materials used in the construction of Type III Barricades.
2. Type III Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.

**Barricades shall NOT be used as a sign support.**

**TYPICAL STRIPING DETAIL FOR BARRICADE RAIL**

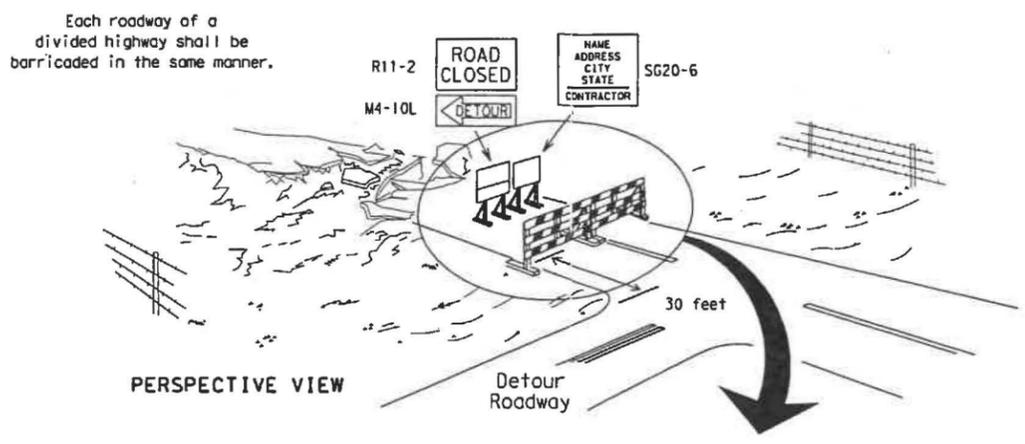


**TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES**



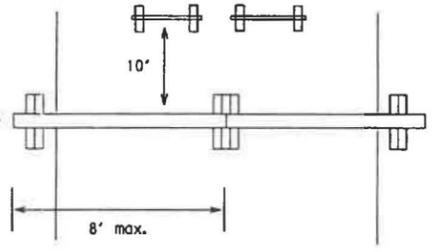
1. This device is intended only for use in place of a vertical panel to channelize traffic by indicating the edge of the travel lane.
2. This device shall not be used to separate lanes of traffic (opposing or otherwise) or warn of objects.
3. This device is based on a 42 inch, two-piece cone with an alternate striping pattern: four 4 inch retroreflective bands, with an approximate 2 inch gap between bands. The color of the band should correspond to the color of the edgeline (yellow for left edgeline, white for right edgeline) for which the device is substituted or for which it supplements. The reflectorized bands shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
4. The base must weigh a minimum of 30 lbs.

**TYPE III BARRICADE (POST AND SKID) TYPICAL APPLICATION**



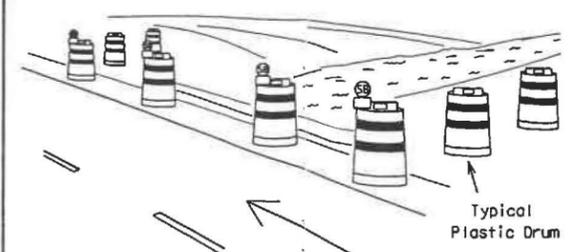
Each roadway of a divided highway shall be barricaded in the same manner.

The three rails on Type III barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic. Barricade striping should slant downward in the direction of detour.

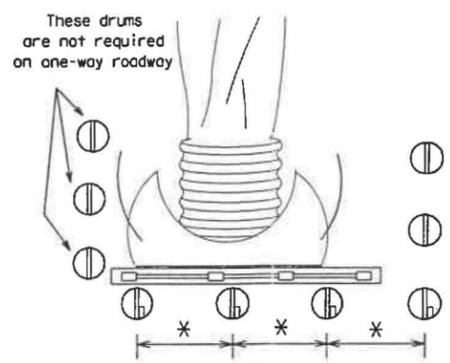


1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type III Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

**CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS**



PERSPECTIVE VIEW



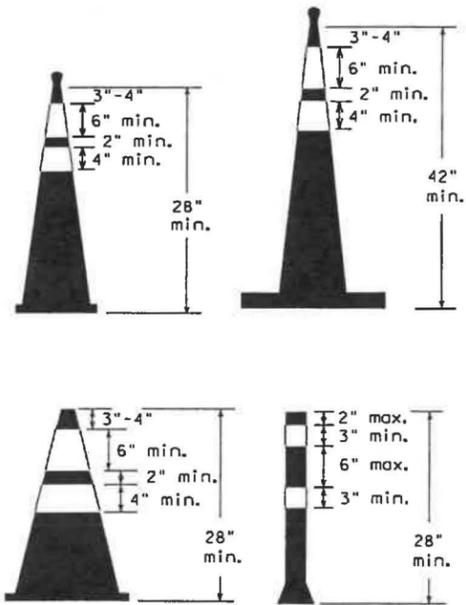
- Legend
- Plastic drum
  - Plastic drum with steady burn light

1. Where positive redirection capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.

Increase number of plastic drums on the side of approaching traffic if the crown width makes it necessary. (minimum of 2 and maximum of 4 drums)

\* Maximum spacing between drums shall be 10 feet. A minimum of two drums shall be used across the work area.

**CONES**



28" Cones shall have a minimum weight of 9 1/2 lbs.  
 42" 2-piece cones shall have a minimum weight of 30 lbs.

1. Traffic cones and tubular markers shall be a minimum of 28 inches in height when used either on freeways or at nighttime.
2. Cones or tubular markers shall be predominantly orange, fluorescent red-orange, or fluorescent yellow-orange. They should be kept clean and bright for maximum visibility.
3. Cones used only for daytime operations do not require the reflectorized bands.
4. Cones used for nighttime operations shall be reflectorized. Reflectorized material shall have a smooth, sealed outer surface that displays the same approximate color during the day and night. The reflectorized bands shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
5. When used at night, appropriate personnel shall ensure that cones and tubular markers remain in their proper location and in an upright position.
6. Reflectorization of cones shall consist of a minimum 6 inch band placed at least 3 inches but not more than 4 inches from the top, supplemented by a minimum 4 inch band spaced a minimum of 2 inches below the 6 inch band.
7. Reflectorization of tubular markers shall be a minimum of two 3 inch bands placed a maximum of 2 inches from the top with a maximum of 6 inches between bands. The reflectorized bands shall be retroreflective Type C (High Specific Intensity) conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
8. One-piece cones or tubular markers are generally suitable for temporary usage (up to 8 hours) with other channelization devices such as vertical panels, drums or two-piece cones for long term usage. Care should be taken to ensure they remain in their proper location and in an upright position.
9. Cones or tubular markers used on each project shall be of the same size and shape. The handle may be designed as a hook or other shape, fabricated from non-rigid materials similar to the cone material, and may extend up to a maximum of 8 inches above the top of cone. Length of the handle shall not be considered with regard to the overall height of the cone.
10. The handle may be designed as a hook or other shape, fabricated from non-rigid materials similar to the cone material, and may extend up to a maximum of 8 inches above the top of cone. Length of the handle shall not be considered with regard to the overall height of the cone.

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 Traffic Operations Division - TE  
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**BARRICADE AND CONSTRUCTION  
 TYPE III BARRICADE  
 & CONES STANDARD**

9 of 12 BC(9)-03

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STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET	
6					
COUNTY	CONTROL	SECTION	JOB	HIGHWAY	

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LEVELS DISPLAYED  
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## WORK ZONE PAVEMENT MARKINGS

### GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and the sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

### RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(11).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.
3. A list of prequalified reflective raised pavement markers can be found at the following web site:  
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/dms4200preq.pdf
4. A list of prequalified non-reflective traffic buttons can be found at the following web site:  
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/4300preq.pdf

### PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241. A list of prequalified products can be found at the following web site:  
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/pavemark.pdf
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240 or the TxDOT Purchase Specification No. 550-74-89. A list of prequalified products and a copy of the TxDOT Purchase Specifications can be found at web sites:  
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/pavement.pdf  
ftp://ftp.dot.state.tx.us/pub/txdot-info/gsd/pdf/tss/tss377.pdf

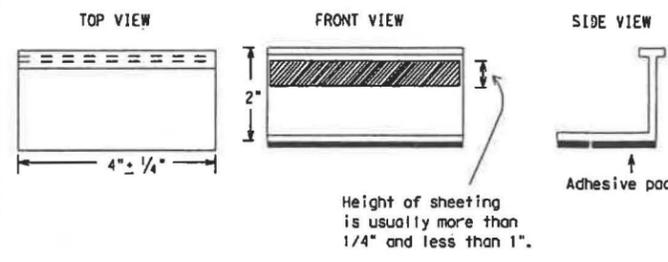
### MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 150 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria shall be replaced as required by the Engineer at the expense of the Contractor.

### REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway, shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than two weeks, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernible marking, by any method that does not materially damage the surface or texture of the pavement.
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.

## Temporary Flexible-Reflective Roadway Marker Tabs



**STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE**

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
  - A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
  - B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.

## Raised Pavement Markers used as Guidemarks

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:  
 YELLOW - (two amber reflective surfaces with yellow body).  
 WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PREFABRICATED PAVEMENT MARKINGS-PERMANENT	DMS-8240
PREFABRICATED PAVEMENT MARKINGS-REMOVABLE	DMS-8241
TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS	DMS-8242

Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer  
 Traffic Operations Division - TE  
 Texas Department of Transportation  
 125 East 11th Street  
 Austin, Texas 78701-2483  
 Phone (512) 416-3120  
 Fax (512) 416-3299

Instructions to locate the "CWZTCD" on TxDOT website are:

Start at website - [www.dot.state.tx.us](http://www.dot.state.tx.us)  
 Click on "About TxDOT",  
 Click on "Organizational Chart",  
 Click on "Traffic Operations Box",  
 Click on "Compliant Work Zone Traffic Control Devices",  
 Click on "View PDF".  
 This site is printable.



**STANDARD PLANS**  
 Texas Department of Transportation  
 Traffic Operations Division

BARRICADE AND CONSTRUCTION  
 PAVEMENT MARKINGS  
 STANDARD

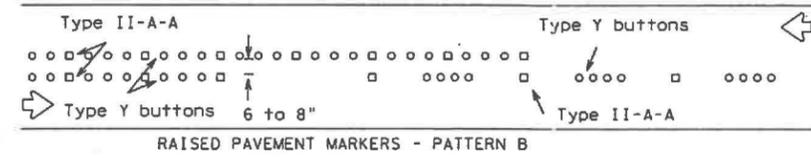
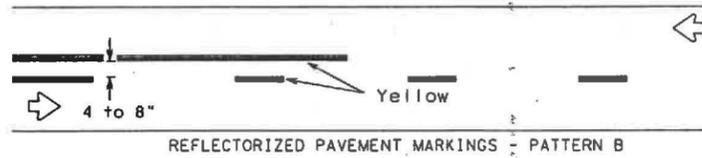
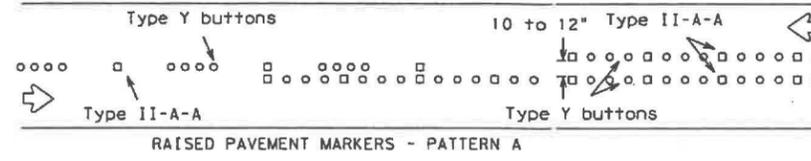
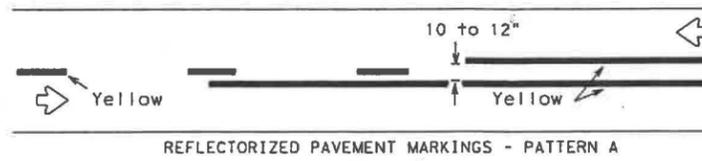
10 of 12
BC(10)-03

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REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT		SHEET
1-97		6			
2-98			COUNTY	CONTROL SECTION	JOB HIGHWAY
1-02					
11-02					

DISCLAIMER  
The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

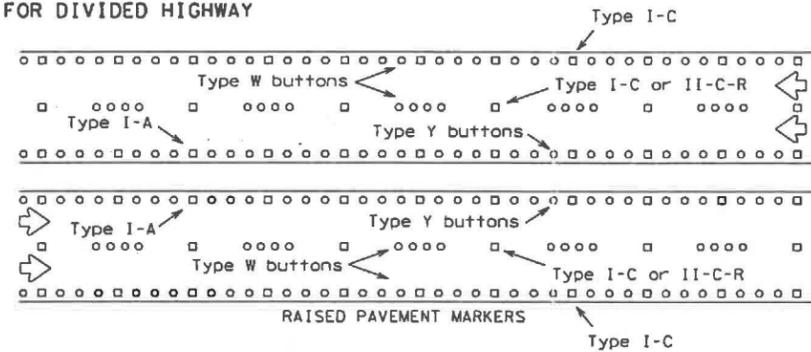
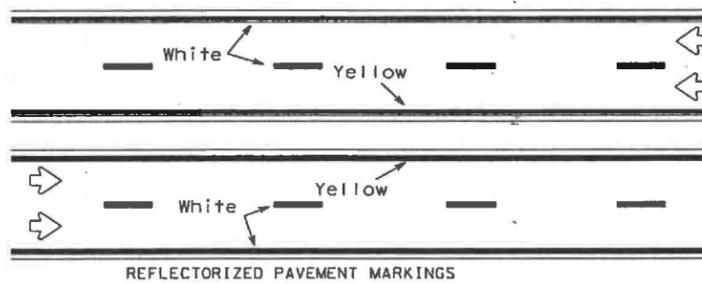
## PAVEMENT MARKING PATTERNS

### CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



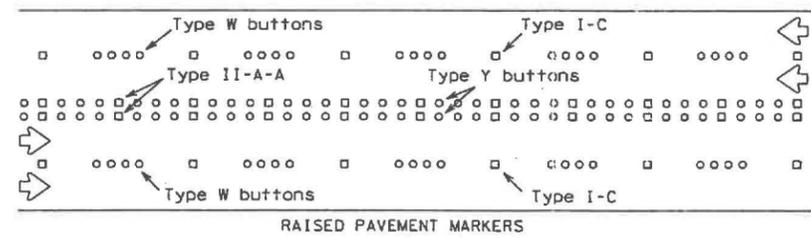
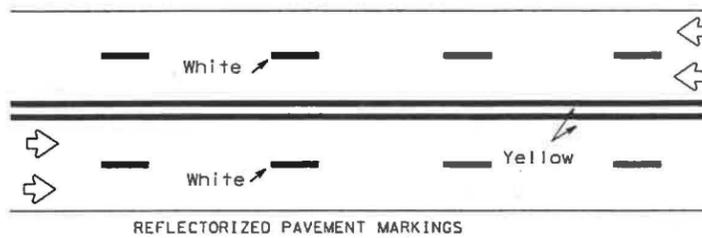
Pattern A is the TxDOT Standard, however Pattern B may be used if approved by the Engineer. Prefabricated markings may be substituted for reflectorized pavement markings.

### EDGE & LANE LINES FOR DIVIDED HIGHWAY



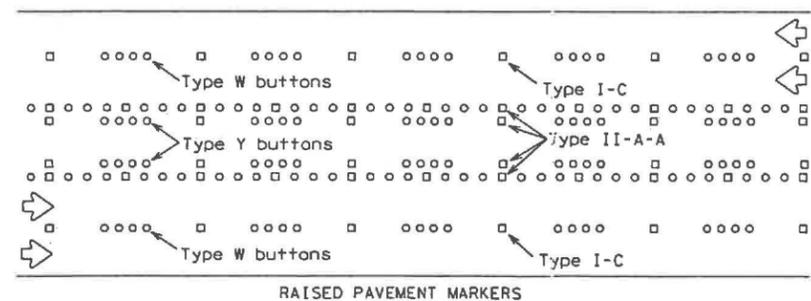
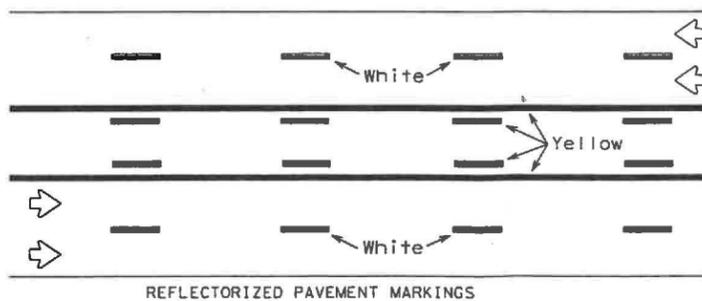
Prefabricated markings may be substituted for reflectorized pavement markings.

### LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



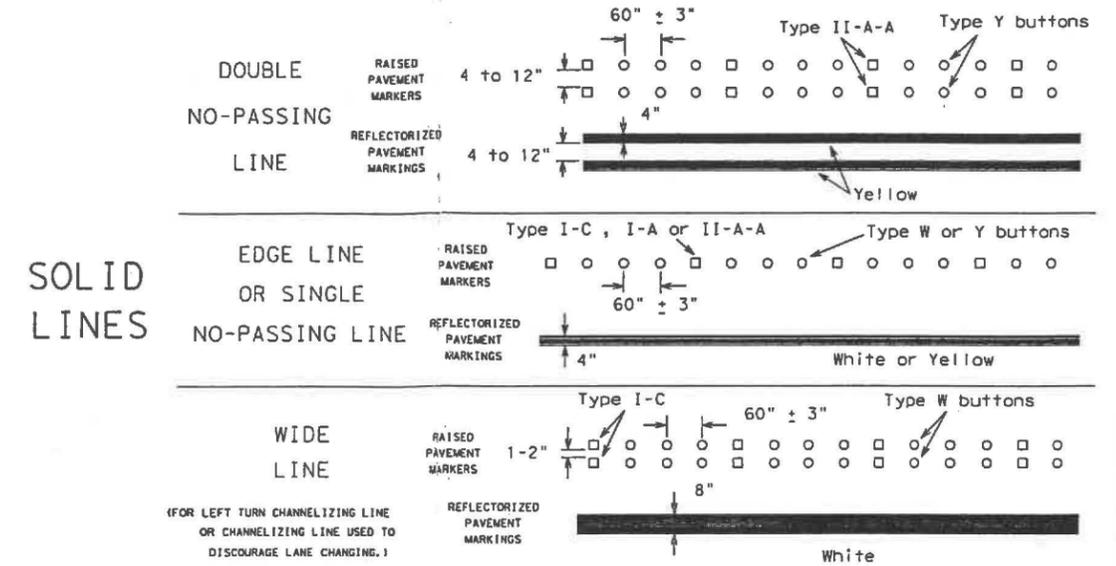
Prefabricated markings may be substituted for reflectorized pavement markings.

### TWO-WAY LEFT TURN LANE



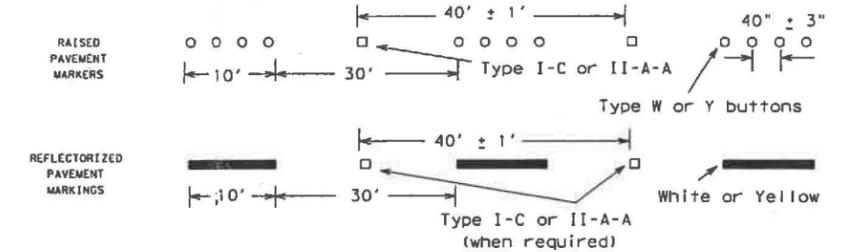
Prefabricated markings may be substituted for reflectorized pavement markings.

## STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS



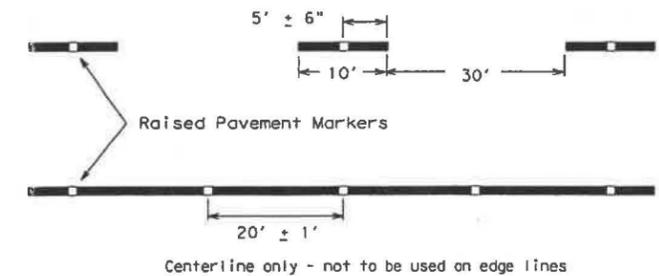
## BROKEN LINE

(FOR CENTER LINE OR LANE LINE.)



## REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be obtained by contacting:

Standards Engineer  
Traffic Operations Division - TE  
Texas Department of Transportation  
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Click on "Organizational Chart",  
Click on "Traffic Operations Box",  
Click on "Compliant Work Zone Traffic Control Devices",  
Click on "View PDF".  
This site is printable.

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item "RAISED PAVEMENT MARKERS."

STANDARD PLANS  
Texas Department of Transportation  
Traffic Operations Division

## BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS STANDARD

11 of 12

BC(11)-03

REVISED	DATE	BY	DESCRIPTION
2-94	1-97	6	
2-98	11-02		

LEVELS DISPLAYED  
ACC:  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100