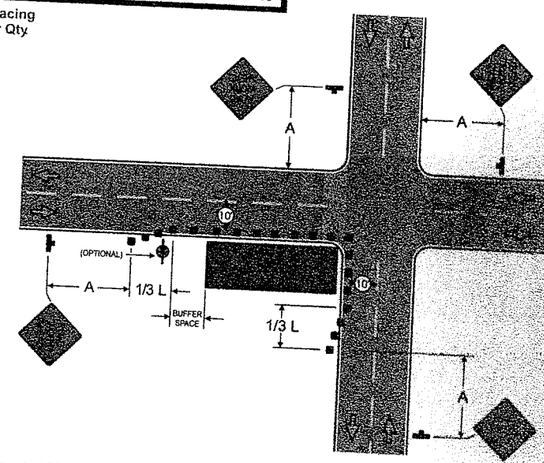
Pothole # 2
traffic plan

TAD-7 - Shoulder Work at Intersection, with Minor Encroachment

See: Table 1 for Buffer Length, Table 2 for Sign Spacing
Table 3 for Taper Length "L" and Channelizer Qty.

1. All lanes should be a minimum of 10 ft (3 m) in width as measured to the near face of the channelizing devices.
2. The TTC shown should be used on a minor road having low speeds and low volumes. For higher-speed traffic and higher volumes, a lane closure should be used.
3. Where the opposite shoulder is suitable for carrying motor vehicle traffic and of adequate width, lanes may be shifted by use of closely spaced channelizing devices, provided that the minimum lane width of 10 ft (3 m) is maintained.
4. For short-duration work operations, the channelizing devices may be eliminated if a vehicle displaying high-intensity, rotating, flashing, oscillating, or strobe lights is positioned in the work space.
5. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights but shall not be used instead of these high-intensity lights.



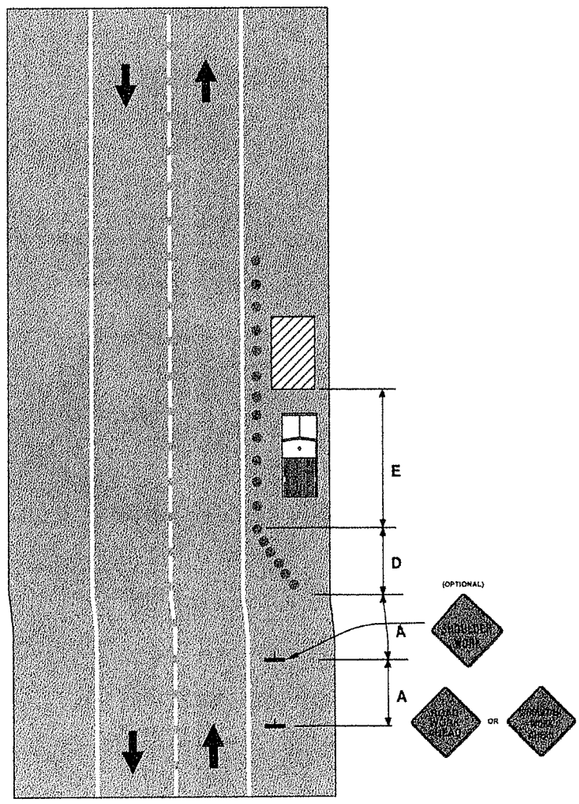
TYPICAL APPLICATIONS

NOTE: LOCAL REGULATIONS MAY VARY

© Copyright 2004 InCom, Inc. All rights reserved.

· Pothole # 3
traffic plan

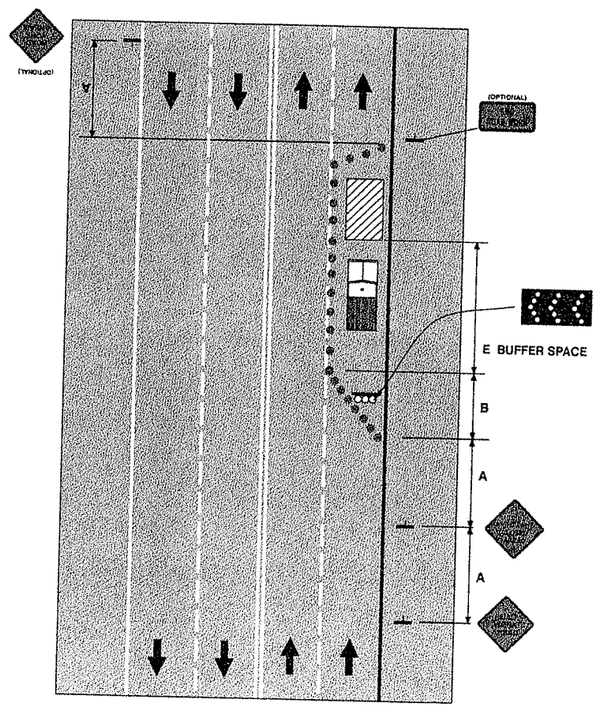
Shoulder Closure



NOT TO SCALE

· Potholes 8 & 9
Traffic Plan

Right Lane Closure



FOR HIGH SPEED SITUATIONS SEE SECTION 8

NOT TO SCALE

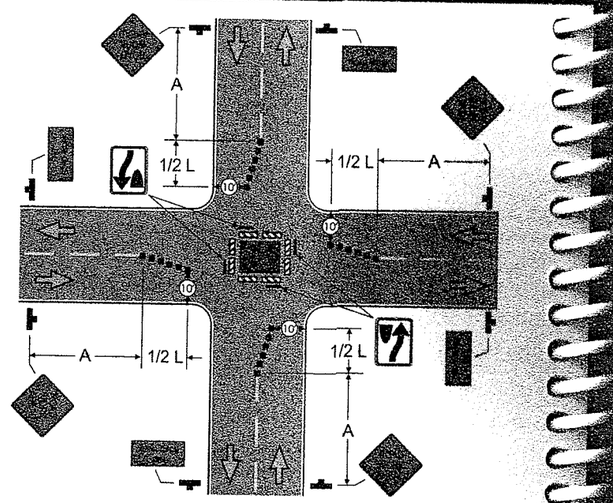
Pothole #10
Traffic plan

TAD-13 - Closure in Center of Intersection

See: Table 1 for Buffer Length, Table 2 for Sign Spacing
Table 3 for Taper Length "L" and Channelizer Qty.

TYPICAL APPLICATIONS

1. A high-level warning device may be place in the work space if there is sufficient room.
2. All lanes should be a minimum of 10 ft (3 m) in width as measured to the near face of the channelizing devices.
3. Flashing warning lights and/or flags may be used to call attention to advance warning signs.
4. Unless the streets are wide, it may be physically impossible to turn left, especially for large vehicles. Left turns may be prohibited as required by geometric conditions.
5. For short-duration work operations, the channelizing devices may be eliminated if a vehicle displaying high-intensity rotating, flashing, oscillating, or strobe lights is positioned in the work space.
6. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights, but shall not be used instead of these high-intensity lights.
7. For short-term use on low-speed, low-volume roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 ft. (2.7m) may be used.



NOTE: LOCAL REGULATIONS MAY VARY

© Copyright 2004 InCom, Inc. All rights reserved.

TABLES

Table 1

Stopping Sight Distance as a Function of Speed

Guideline Distances for: Longitudinal Buffer Space, Flagger Stations, and Road User Visibility

SPEED* - MPH	DISTANCE - FEET	CHANNELIZER - QTY.
20	115	6
25	155	7
30	200	7
35	250	8
40	305	8
45	360	8
50	425	9
55	495	9
60	570	10
65	645	10
70	730	11
75	820	11

* Posted speed, off-peak 85th percentile speed prior to work starting, or the anticipated speed in mph.

Table 2

Suggested Advance Warning Sign Spacing.

Advance Warning Sign Spacing can vary from state to state or agency to agency. These distances can be from 4 to 12 times the speed limit in feet depending on roadway conditions. Check your local regulations for guidelines.

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A	B	C
Urban (Low Speed*)	**100'** (30m)		
Urban (High Speed*)	**350'** (100m)		
Rural	**500'** (150m)		
Expressway - Freeway	**1,000'** (300m)	**1,500'** (450m)	**2,640'** (800m)

*** Speed category to be determined by highway agency.**

NOTE: LOCAL REGULATIONS MAY VARY

© Copyright 2004 InCom, Inc. All rights reserved.

Table 3

Suggested Taper Length and Channelizer Quantity Index - (Feet and MPH)

- **Downstream Taper - 100' Min.**
- **One Lane-Two Way (Flagger) Taper - 100' Max./50' Min.**

SPEED MPH	Merge Taper - "L" WIDTH OF LANE OFFSET From Normal Lane Width Due to Work Zone 4'	6'	8'	10'	12'	Shift Taper - "1/2 L" WIDTH OF LANE OFFSET From Normal Lane Width Due to Work Zone 4'	6'	8'	10'	12'	Shoulder Taper - "1/3 L" WIDTH OF LANE OFFSET From Normal Lane Width Due to Work Zone 4'	6'	8'	10'	12'
30	60' (3)	90' (4)	120' (5)	150' (6)	180' (7)	30' (3)	45' (3)	60' (3)	75' (4)	90' (4)	20' (3)	30' (3)	40' (3)	50' (3)	60' (3)
35	80' (4)	125' (5)	165' (6)	205' (7)	245' (8)	40' (3)	65' (3)	85' (4)	105' (4)	125' (5)	30' (3)	45' (3)	55' (3)	70' (3)	85' (4)
40	105' (4)	160' (5)	215' (7)	270' (8)	320' (9)	55' (3)	80' (3)	110' (4)	135' (5)	160' (5)	35' (3)	55' (3)	75' (3)	90' (4)	110' (4)
45	180' (5)	270' (7)	360' (9)	450' (11)	540' (13)	90' (4)	135' (4)	180' (5)	225' (6)	270' (7)	60' (3)	90' (3)	120' (4)	150' (5)	180' (5)
50	200' (5)	300' (7)	400' (9)	500' (11)	600' (13)	100' (4)	150' (4)	200' (5)	250' (6)	300' (7)	70' (3)	100' (3)	135' (4)	170' (5)	200' (5)
55	220' (5)	330' (7)	440' (9)	550' (11)	660' (13)	110' (4)	165' (4)	220' (5)	275' (6)	330' (7)	75' (3)	110' (3)	150' (4)	185' (5)	220' (5)
60	240' (5)	360' (7)	480' (9)	600' (11)	720' (13)	120' (4)	180' (4)	240' (5)	300' (6)	360' (7)	80' (3)	120' (3)	160' (4)	200' (5)	240' (5)
65	260' (5)	390' (7)	520' (9)	650' (11)	780' (13)	130' (4)	195' (4)	260' (5)	325' (6)	390' (7)	90' (3)	130' (3)	175' (4)	220' (5)	260' (5)
70	280' (5)	420' (7)	560' (9)	700' (11)	840' (13)	140' (4)	210' (4)	280' (5)	350' (6)	420' (7)	95' (3)	140' (3)	190' (4)	235' (5)	280' (5)

MIN. TAPER LENGTH

CHANNELIZER (MIN. QTY.)

TAPER "L" FORMULAS

40 MPH

$L = \frac{W \times S \times S}{60}$

45 MPH

$L = W \times S$

L = TAPER MIN. LENGTH (FT)
W = WIDTH OF OFFSET (FT)
S = SPEED (MPH)

The maximum distance in feet (meters) between devices in a taper should not exceed 1 times the speed limit in mph (0.2 times the speed limit in km/h).

NOTE: LOCAL REGULATIONS MAY VARY

© Copyright 2005 InCom, Inc. All rights reserved.

#PRG3A

of ILLINOIS