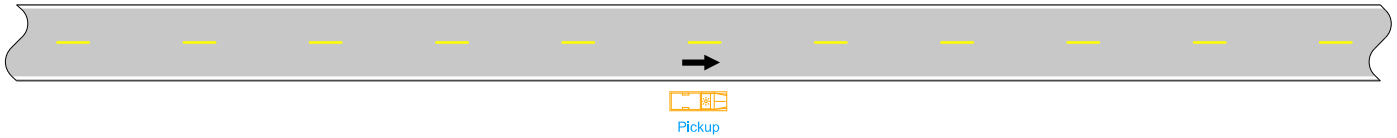
Do not allow work to interfere with the flow of traffic.

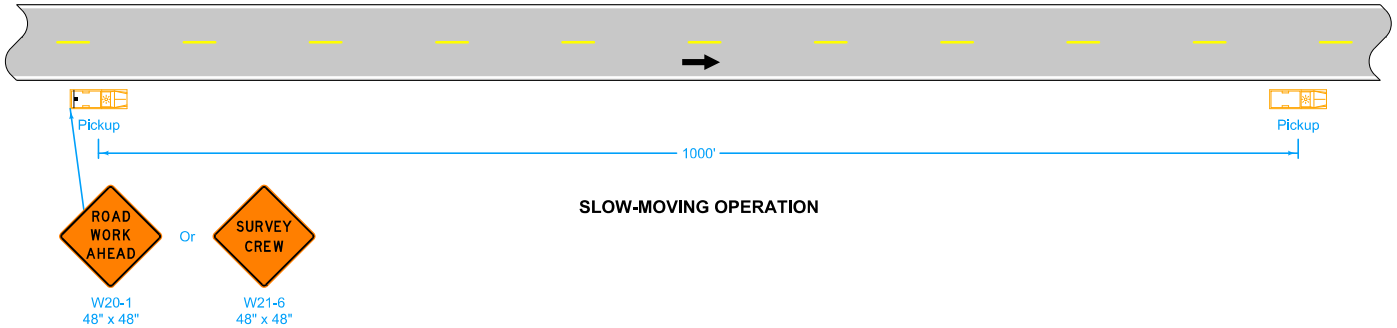
When parked, locate vehicles as far from the open traffic lane as possible. Entrances and driveways should be used whenever appropriate.

Equip all vehicles with an amber revolving light or amber strobe light.

(1) For work lasting longer than one hour, refer to TC-202 or TC-402.



VEHICLE STOPPED ON SHOULDER FOR LESS THAN ONE HOUR (1)



SLOW-MOVING OPERATION

LEGEND

- Traffic Sign
- Direction of Traffic

Possible Contract Item:
Traffic Control

IOWA DOT

REVISION
3 | 10-15-19

STANDARD ROAD PLAN

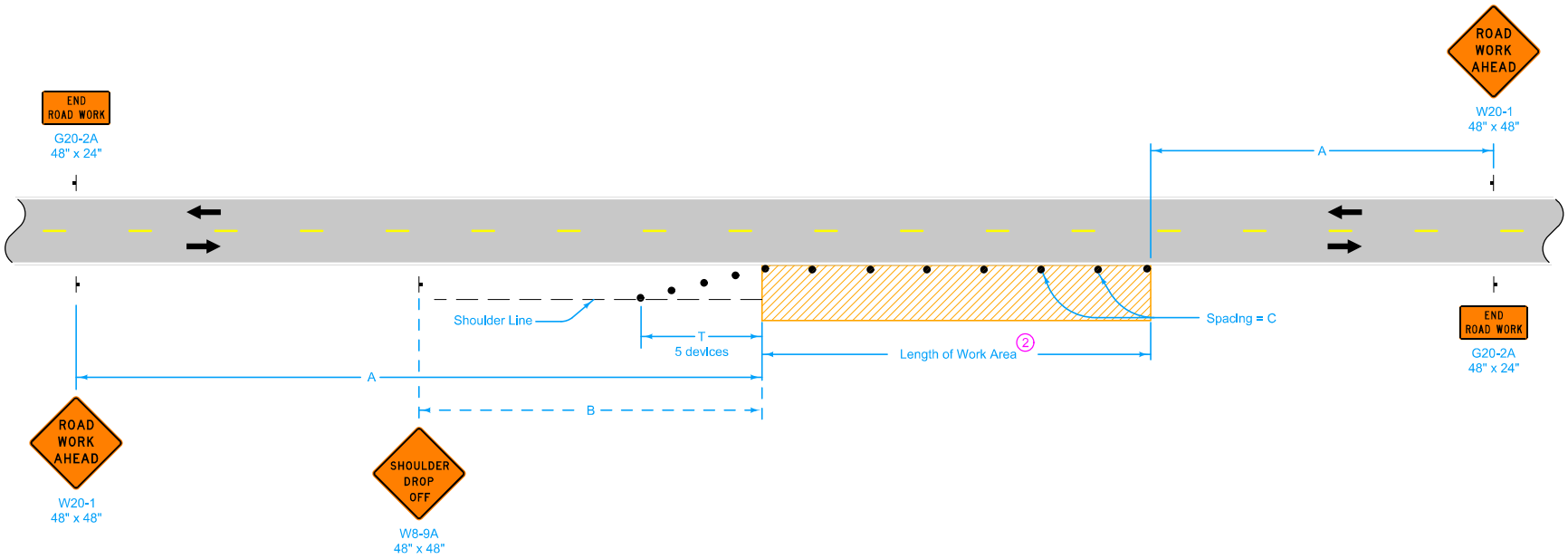
TC-1

SHEET 1 of 1

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

WORK NOT AFFECTING TRAFFIC (TWO-LANE OR MULTI-LANE)



When a pavement edge drop-off exists, install a SHOULDER DROP-OFF sign.

No pavement edge drop-offs greater than pavement depth will be allowed during non-working hours.

Shoulder edge drop-offs shall be mitigated according to Article 1107.08.L2 of the Standard Specifications.

For work lasting less than one hour, refer to TC-1.

Possible Contract Item:
Traffic Control

LEGEND

- Traffic Sign
- 42" Channellzer
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	B	C (2)	T
35 or less	500'	250'	40'	100'
40 - 45	700'	350'	80' (1)	200'
50 or greater	1000'	500'	100' (1)	200'

(1) When the length of a pavement edge drop-off is 1000 feet or less, the temporary fillet requirement of Article 1107.08 of the Standard Specifications does not apply. Reduce channelizer spacing to 40 feet.

(2) For work areas less than 200 feet long, use channelizers spaced at 20 foot centers or use a vehicle with an amber revolving light or amber strobe light.

IOWA DOT

STANDARD ROAD PLAN

REVISION
8 | 04-21-15

TC-202

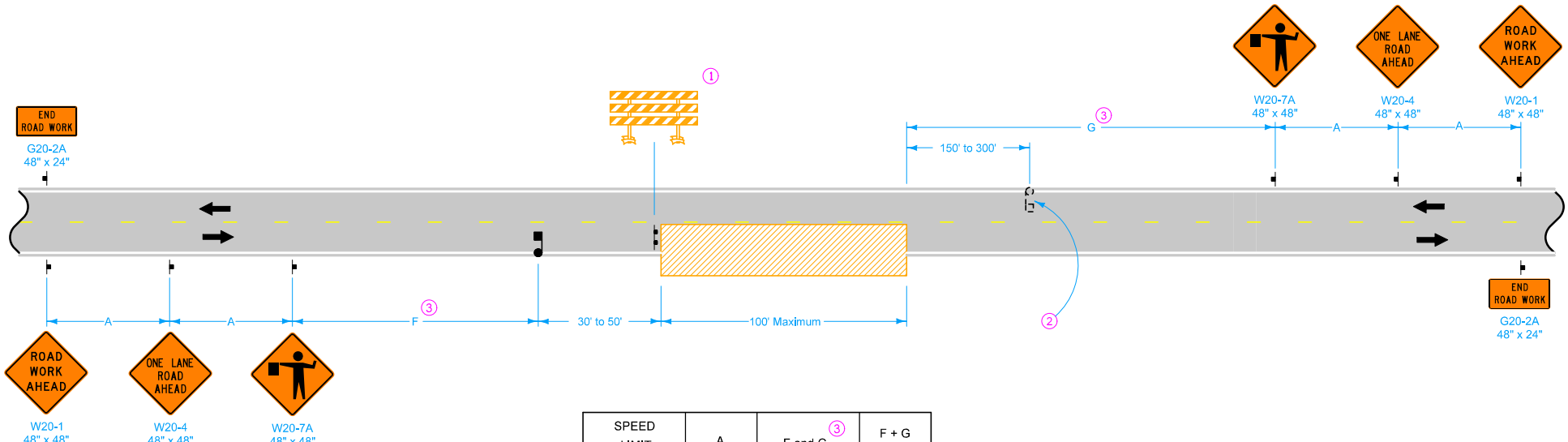
SHEET 1 of 1

REVISIONS: Modified general notes, changed title and replaced the DOT logo in the title block with the new version.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

WORK WITHIN 15 FT OF TRAVELED WAY

DO NOT USE ON PRIMARY ROADWAYS



SPEED LIMIT (mph)	A	F and G Range ③	F + G Max.
35 or less	250'	250'-3250'	3500'
40 - 45	350'	350'-3350'	3700'
50 or greater	500'	500'-3500'	4000'

LEGEND
- Traffic Sign
- Flagger
- Work Area
- Type III Barricade
- Direction of Traffic

Use only during daylight hours. Typical applications include:
- Pavment repair
- Bridge repair when signals are not required.
- Guardrail connections at bridge.
- Secondary road intersections with Primary road.
- Sawing for ful depth patch
- Joint sealing
- PR joints
- Surface patching
- Crack sealing

No parking on opposite shoulder within 500 feet of work area.

Ensure traffic in the open lane flows freely. Stop the first vehicle in the closed lane from the postion shown, then cross the traffic lane to stop other vehicles.

① A vehicle with an amber revolving light or amber strobe light may be substituted for the Type III barricade.

② Provide a second flagger if:

The flagger's veiw of approaching traffic in the open lane is less than $\frac{1}{4}$ mile or the work site is in an area of restricted sight distance, such as a No Passing zone, or

Excessive traffic delays are encountered.

③ F and G distances are to remain as near minimum values as work permits. However, to be able to move the work area without moving the advance signing, F and G distances may be varied within the limits of the table. Maximum movement can be achieved by setting one F or G value at the minimum and the other value at its maximum.

Possible Contract Items:
- Flaggers
- Traffic Control

IOWA DOT

STANDARD ROAD PLAN

REVISION	
6	04-21-20

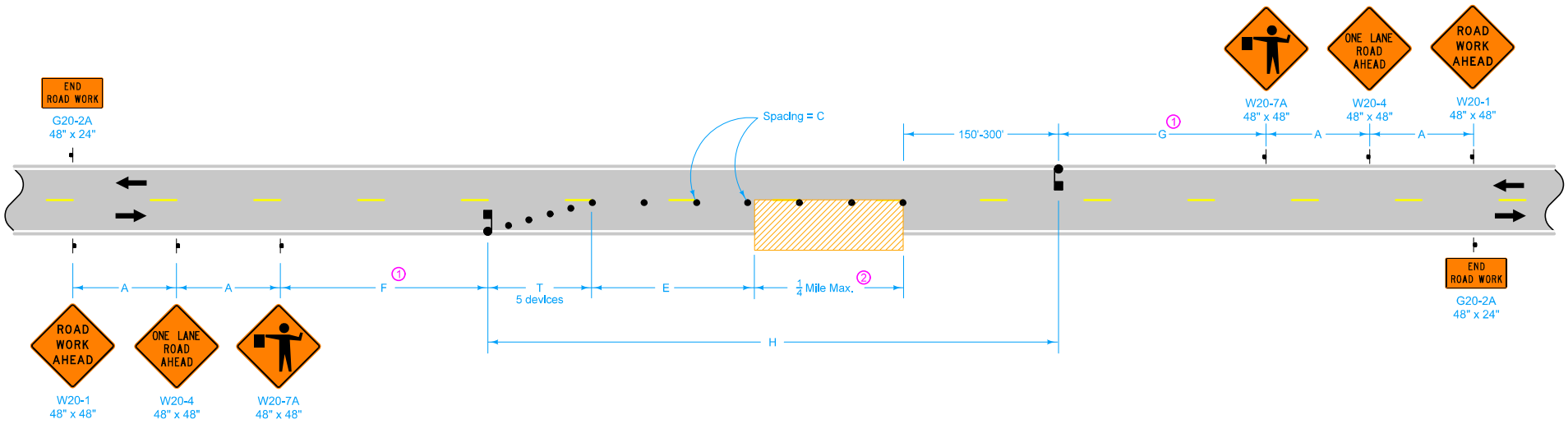
TC-212

SHEET 1 of 1

REVISIONS: Added note DO NOT USE ON PRIMARY ROADWAYS and new general notes.

APPROVED BY DESIGN METHODS ENGINEER

SPOT LOCATION LANE CLOSURE WITH FLAGGERS



Possible Contract Items:
Flaggers
Traffic Control

LEGEND

- Traffic Sign
- Flagger
- 42" Channellzer
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	C	E	F and G Range (1)	F + G Max.	H Max.	T
35 or less	250'	40'	0'-200'	500'-3000'	3500'	2000'	50'
40 - 45	350'	80'	0'-200'	700'-3000'	3700'	2000'	100'
50 or greater	500'	100'	200'-300'	1000'-3000'	4000'	2000'	100'

(1) Keep F and G distances as near to minimum values as work permits. However, to allow advancement of the work area without moving signs, F and G distances may be varied within the limits of the table. Maximum movement can be achieved by setting one F or G value at the minimum and the other value at its maximum.

(2) If length of work area exceeds 1/4 mile, use TC-214.

IOWA DOT

STANDARD ROAD PLAN

REVISION 4 10-15-19

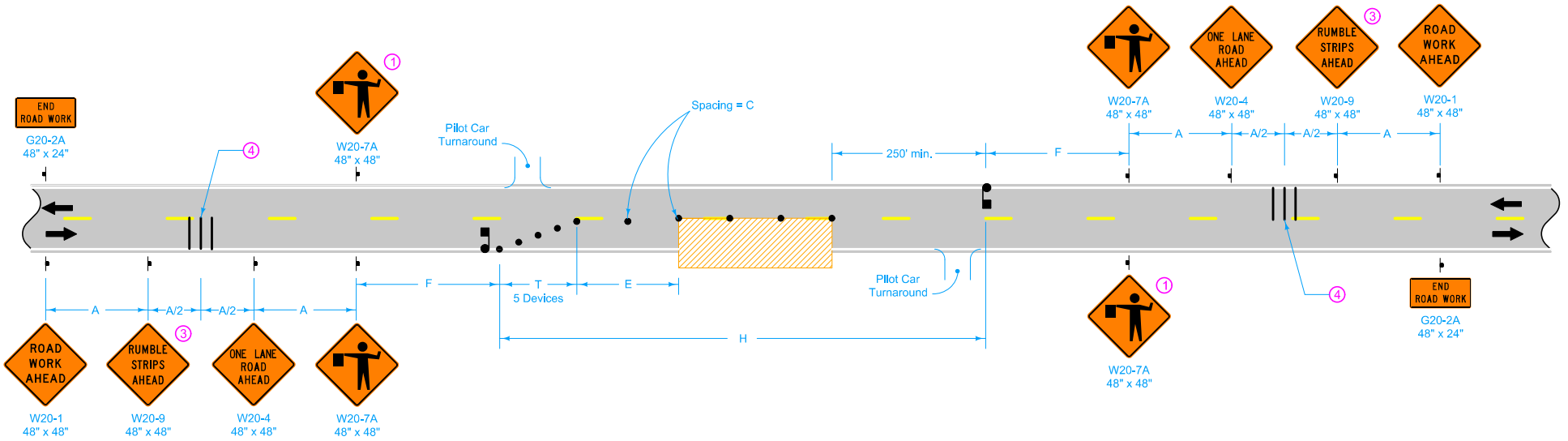
TC-213

SHEET 1 of 1

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE WITH FLAGGERS



LEGEND

- Traffic Sign
- Flagger
- 42" Channelizer
- Work Area
- Direction of Traffic
- Portable Rumble Strip Panel ④

SPEED LIMIT (mph)	ADT	A	C	E	F	H ② max.	T
35 or less	up to 2,500	250'	40'	0'-200'	500'	2.5 mi.	50'
	2,500 - 5,000	250'	40'	0'-200'	500'	2.0 mi.	50'
	more than 5,000	500'	40'	0'-200'	1000'	1.5 mi.	50'
40 - 45	up to 2,500	350'	80'	0'-200'	700'	2.5 mi.	100'
	2,500 - 5,000	350'	80'	0'-200'	700'	2.0 mi.	100'
	more than 5,000	700'	80'	0'-200'	1400'	1.5 mi.	100'
50 or greater	up to 2,500	500'	160'	200'-300'	1000'	2.5 mi.	100'
	2,500 - 5,000	500'	160'	200'-300'	1000'	2.0 mi.	100'
	more than 5,000	1000'	160'	200'-300'	2000'	1.5 mi.	100'

① Sign optional for ADT less than 5,000.

② In rural areas, as work activity nears the downstream limits of dimension H, the lane closure may be extended up to 1.0 mile beyond the maximum distance, H, shown in the table. After the traffic control devices have been placed to extend the closure and after work activity has progressed, the advanced signing and devices at the beginning of the traffic control zone should be moved downstream so that the H distance is once again within the limits shown in the table. This one-mile extension will not be allowed during any peak traffic hours listed in the contract documents.

③ Refer to SI-881 for sign details.

④ For traffic control zones lasting more than 2 hours, place temporary Portable Rumble Strip Panel.

Possible Contract Items:
Flagger
Pilot Car
Traffic Control

IOWA DOT

REVISION
8 | 4-21-20

STANDARD ROAD PLAN

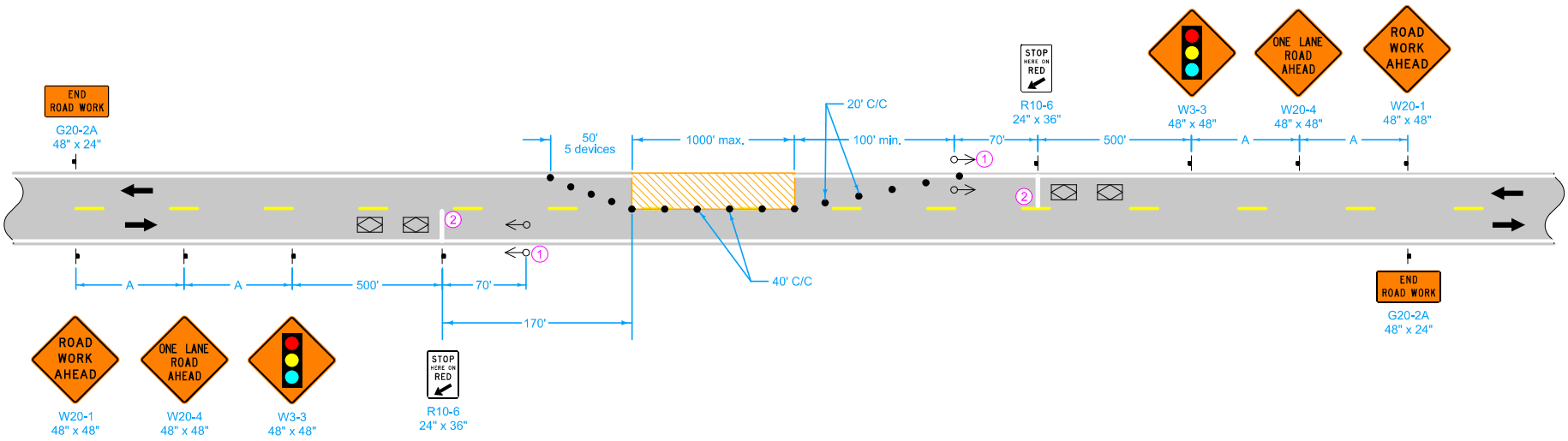
TC-214

SHEET 1 of 1

REVISIONS: Modified circle note 4.

APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE WITH FLAGGERS FOR USE WITH PILOT CAR



SPEED LIMIT (mph)	A
35 or less	250'
40-45	350'
50 or greater	500'

LEGEND

- Vehicle Detection Area
- Temporary Traffic Signal
- Traffic Sign
- 42" Channelizer
- Work Area
- Direction of Traffic

TIMING FOR ACTUATED SIGNALS
Recommended Settings (secs)

Initial = 12.0
Extension = 2.5
Max. Green = 45.0
Yellow = 4.0
All Red = (see table)

Distance between stop lines	All Red* (secs)	Distance between stop lines	All Red* (secs)
450'	9 - 15	950'	19 - 33
550'	11 - 19	1050'	21 - 36
650'	13 - 22	1150'	23 - 39
750'	15 - 26	1250'	25 - 43
850'	17 - 29	1350'	27 - 46

* All Red values based on operating speeds between 20 mph and 35 mph

This layout is for conditions lasting up to three calendar days. For situations lasting longer than three days refer to TC-216.

(1) For Temporary Traffic Signals, meet the requirements of Section 2528.03 of the Standard Specifications except for the following:
In lieu of a trailer or span-wire mounted system, signal heads may be located on the shoulders, one on each side of the roadway. Mount shoulder signal heads a minimum of 8 feet from the bottom of the signal head to the top of the ground surface.

(2) 24-inch stop lines required during nighttime operation.

Possible Contract Items:
Pavement Marking Items
Pavement Markings Removed
Temporary Traffic Signals
Traffic Control

Possible Tabulations:
108-22
108-28

IOWA DOT

REVISION
4 | 10-15-19

STANDARD ROAD PLAN

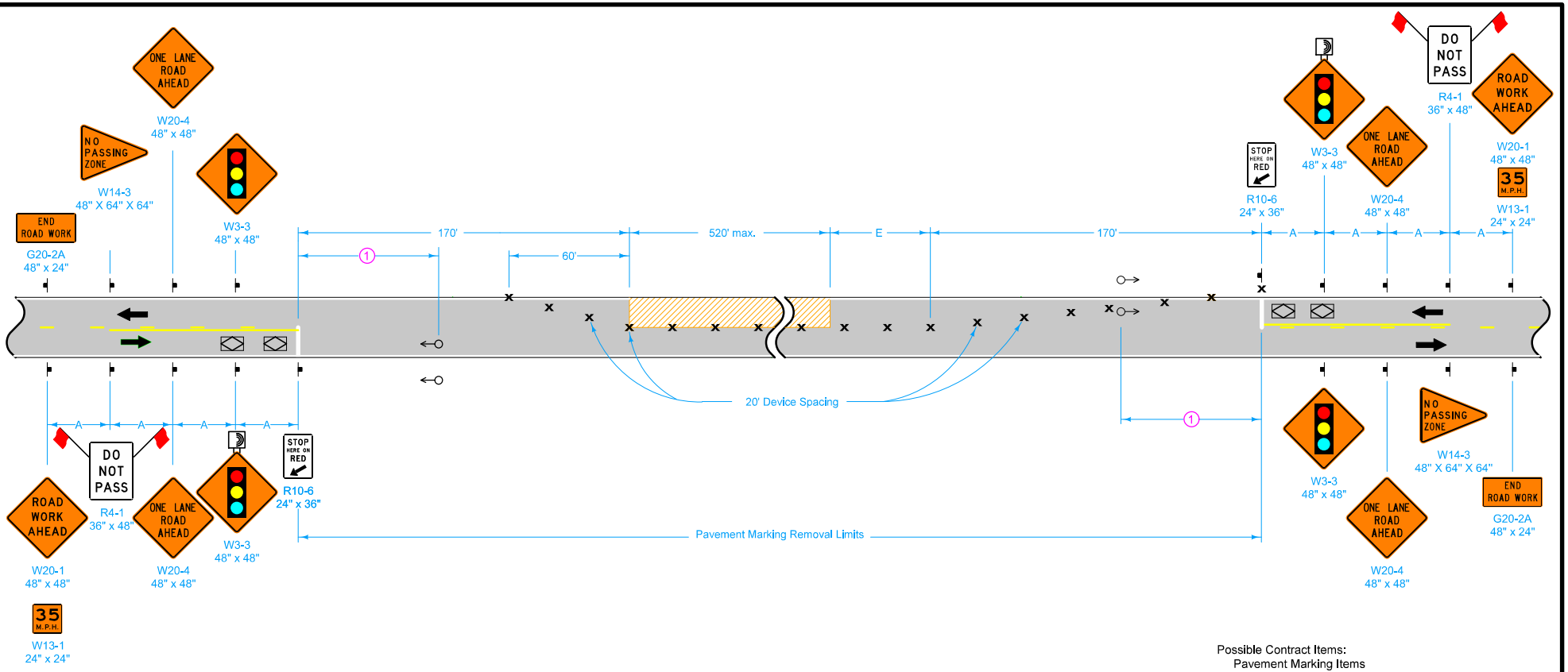
TC-215

SHEET 1 of 1

REVISIONS: Added Vehicle Detection Area graphic.

APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE WITH SIGNALS (UP TO THREE DAYS)



LEGEND

- Vehicle Detection Area
- Traffic Sign
- Drum
- Type 'B' High-Intensity Flashing Warning Light
- Work Area
- Temporary Traffic Signal
- Direction of Traffic

TIMING FOR ACTUATED SIGNALS Recommended Settings, secs.	Distance Between Stop Lines	All Red (secs.)*
Initial = 12.0 Extension = 2.5 Maximum Green = 45.0 Yellow = 5.0 All Red = (see table)	1050'	20.4-35.7
	950'	18.5-32.3
	850'	17-30
	750'	15-27
	650'	14-23
	550'	12-20

* Range of values are based on operating speeds between 20 and 35 mph

SPEED LIMIT (mph)	A	E
35 or less	250'	0'-50'
40 - 45	350'	0'-100'
50 or greater	500'	100'

No drop-offs greater than pavement depth will be allowed during non-working hours.

No vehicles, unattended equipment, materials or stock-piled waste are permitted between the shoulder lines during non-working hours.

(1) Locate signal heads 70 to 100 feet beyond stop bar. Adjust location of signal heads as field conditions warrant.

Possible Contract Items:
- Pavement Marking Items
- Pavement Markings Removed
- Temporary Traffic Signals
- Traffic Control

Possible Tabulations:
- 108-22
- 108-28

IOWA DOT

STANDARD ROAD PLAN

REVISION	
7	10-18-16

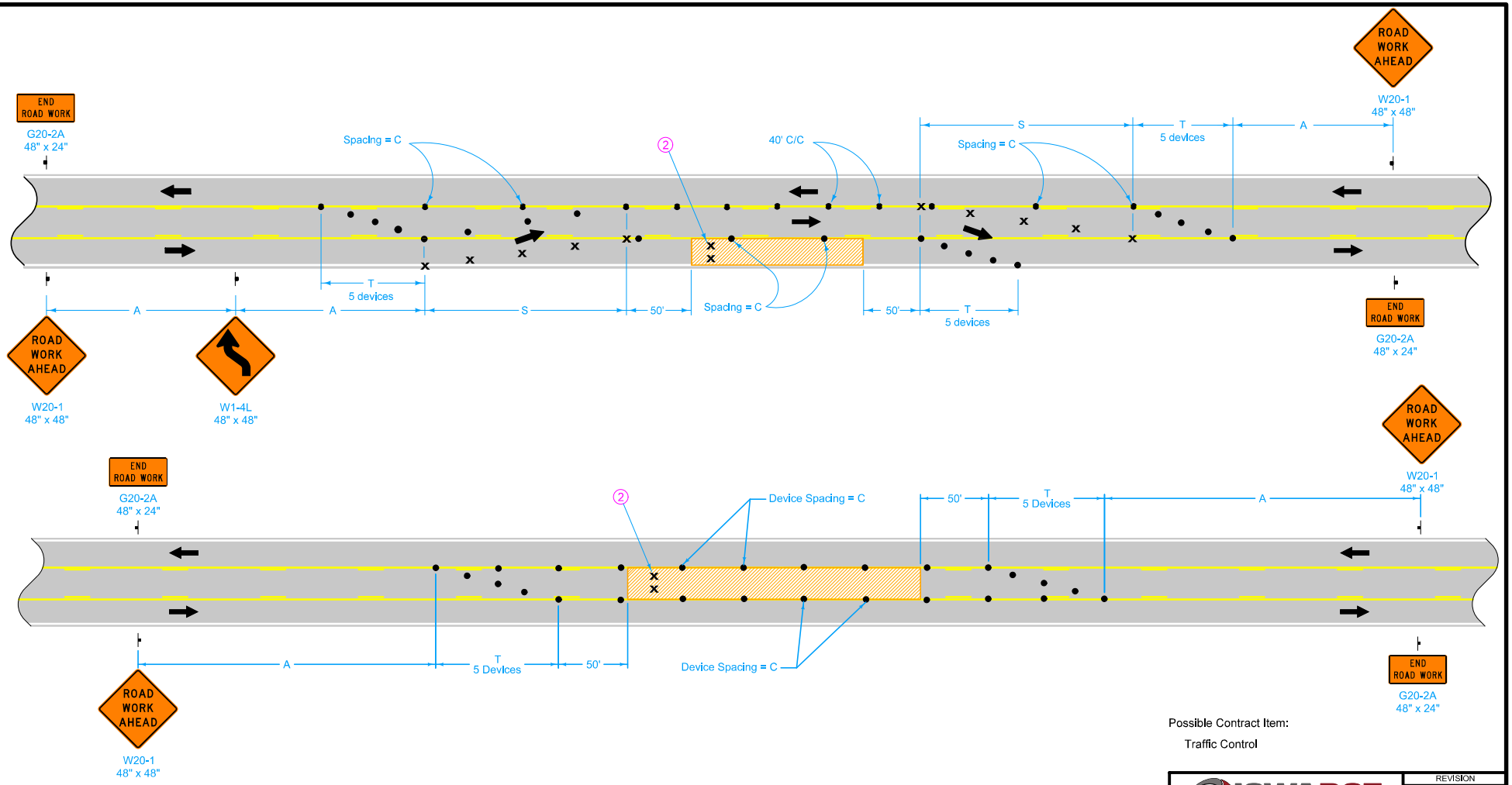
TC-216

SHEET 1 of 1

REVISIONS: Changed No Passing Zone sign size from 48" x 60" x 60" to 48" x 64" x 64".

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE WITH SIGNALS



SPEED LIMIT (mph)	A	C	D	S	T
25 or less	100'	40'	25'	100'	50'
30 - 35	250'	40'	30'	120'	50'
40 - 45	350'	80'	40'	280'	100'
50 or greater	500'	100'	50'	350'	100'

LEGEND

- 42" Channelizer
- Drum (1)
- Traffic Sign
- Work Area
- Direction of Traffic

(1) Spacing = D for drums placed in tapers.

(2) For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

Possible Contract Item:

Traffic Control

IOWA DOT

STANDARD ROAD PLAN

REVISION 5 10-16-18

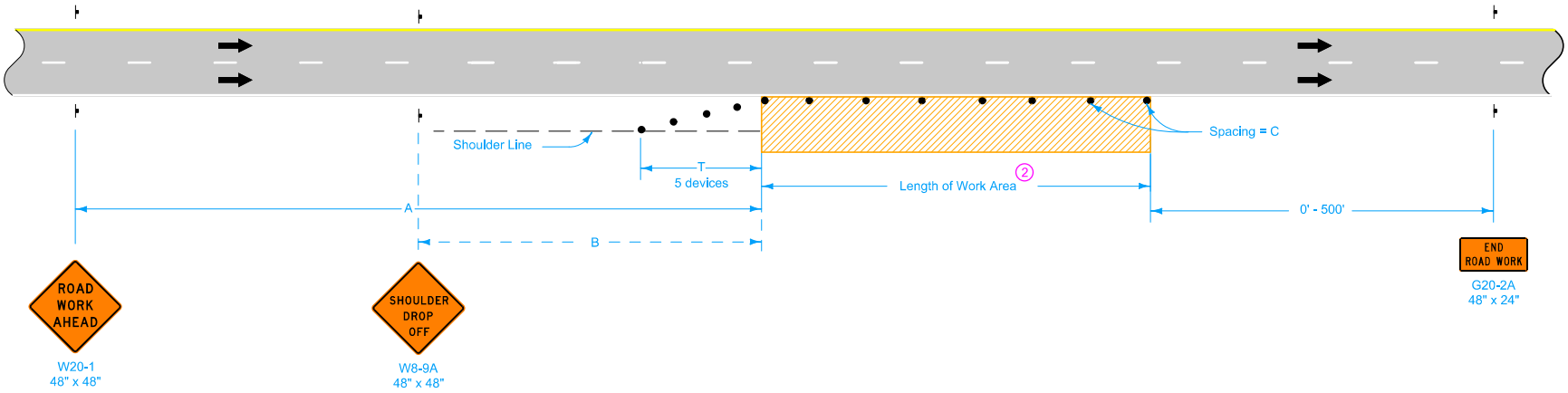
TC-228

SHEET 1 of 1

REVISIONS: Added circle note 2 and drums in work area. Updated DOT logo.

APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE INVOLVING TWLTL



LEGEND

- Traffic Sign
- 42" Channellzer
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	B	C (2)	T
40 or less	500'	250'	40'	100'
45 - 50	700'	350'	80' (1)	200'
55 - 60	1500'	500'	100' (1)	200'
65 - 70	1500'	500'	100' (1)	230'

When a pavement edge drop-off exists, install a SHOULDER DROP-OFF sign.

No pavement edge drop-offs greater than pavement depth will be allowed during non-working hours.

Shoulder edge drop-offs shall be mitigated according to Article 1107.08.L2 of the Standard Specifications.

For work lasting less than one hour, refer to TC-1.

(1) When the length of a pavement edge drop-off is 1000 feet or less, the temporary fillet requirement of Article 1107.08 of the Standard Specifications does not apply. Reduce channelizer spacing to 40 feet.

(2) For work areas less than 200 feet long, use channelizers spaced at 20 foot centers or use a vehicle with an amber revolving light or amber strobe light.

Possible Contract Item:
Traffic Control

IOWA DOT

REVISION
8 | 04-21-15

STANDARD ROAD PLAN

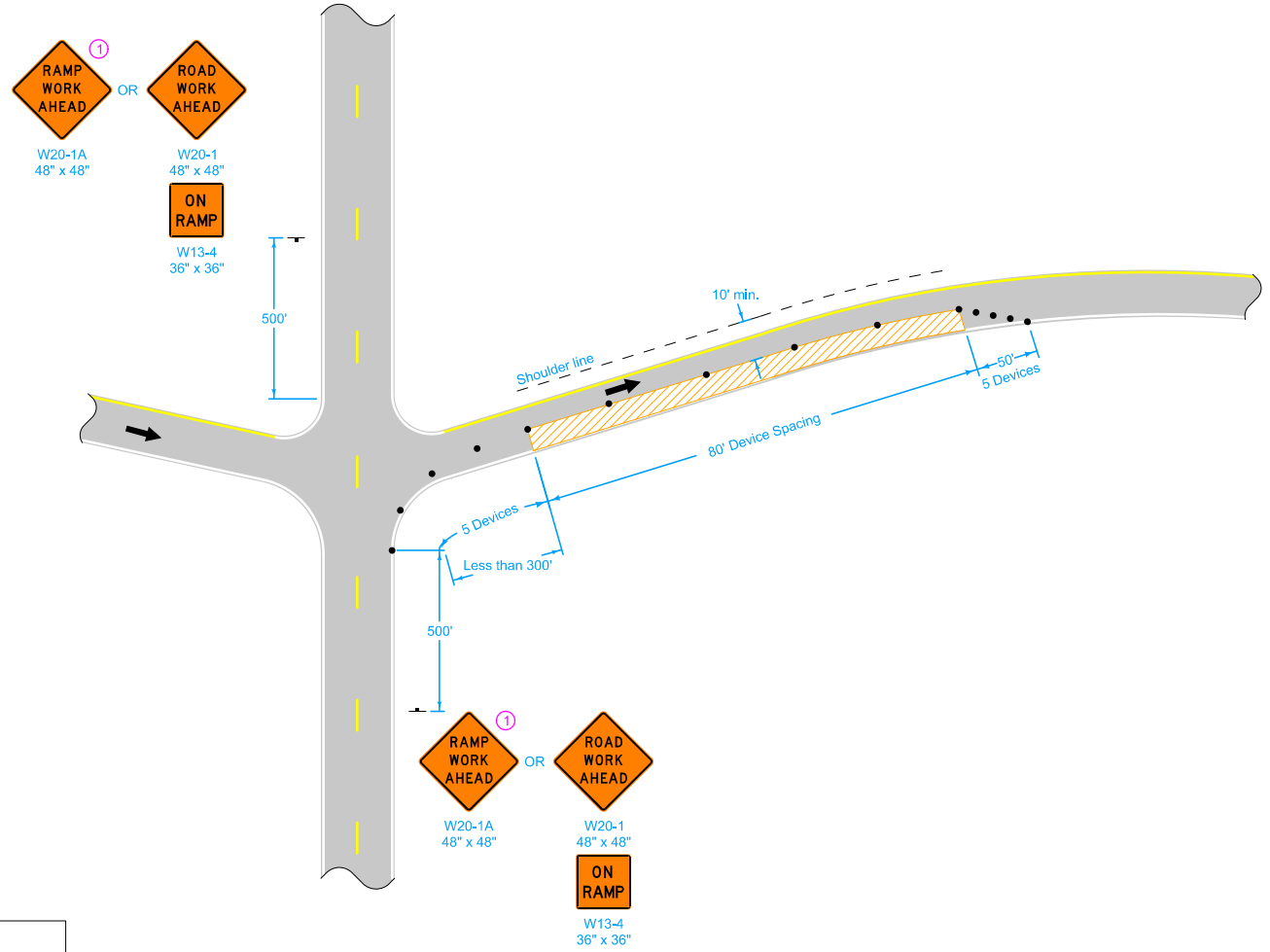
TC-402

SHEET 1 of 1

REVISIONS: Modified general notes, changed title and replaced the DOT logo in the title block with the new version.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

WORK WITHIN 15 FT OF TRAVELED WAY



(1) Refer to SI-881 for sign details.

LEGEND

- Traffic Sign
- 42" Channellzer
- Direction of Traffic
- Work Area

Possible Contract Item:
Traffic Control

IOWA DOT

REVISION 3 10-15-19

STANDARD ROAD PLAN

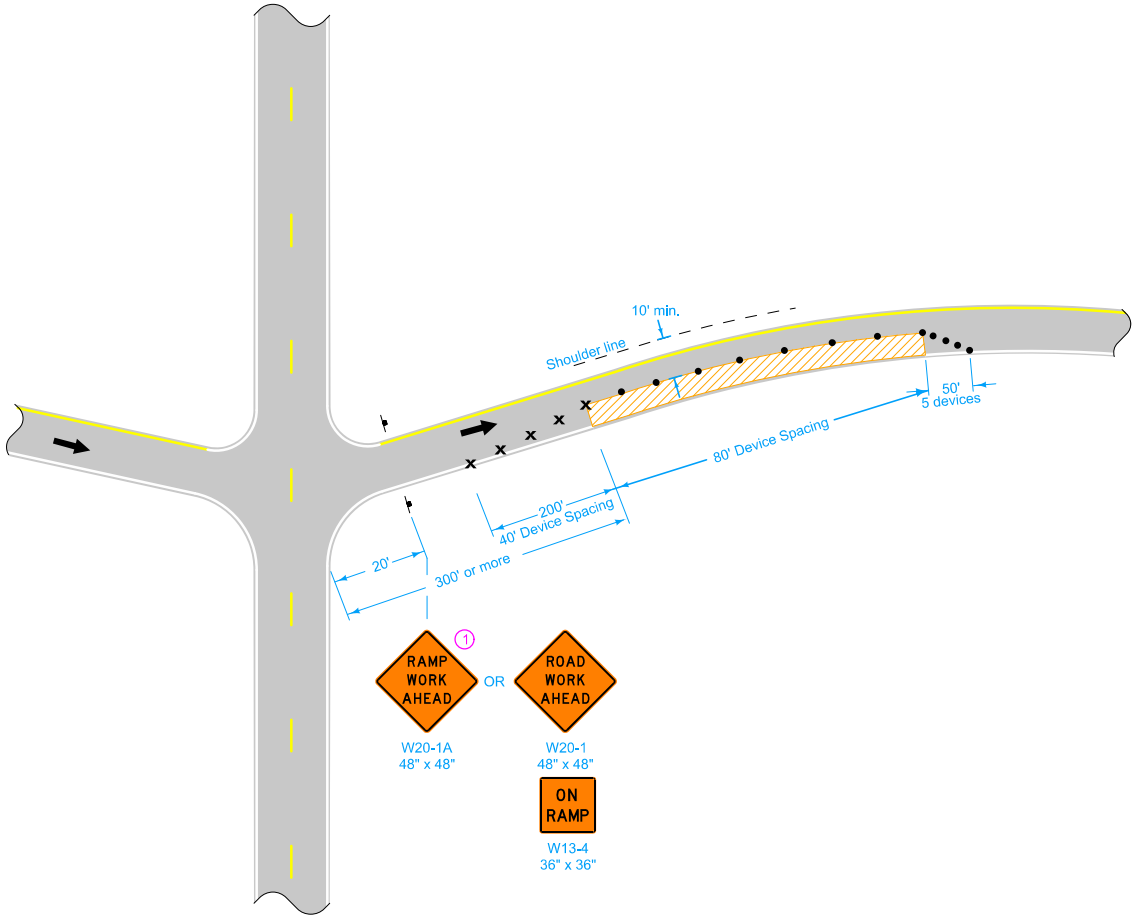
TC-416

SHEET 1 of 4

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

PARTIAL LANE CLOSURE ON RAMPS



(1) Refer to SI-881 for sign details.

LEGEND

- × Drum
- Traffic Sign
- • 42" Channellzer
- Direction of Traffic
- Work Area

IOWA DOT

REVISION 3 10-15-19

STANDARD ROAD PLAN

TC-416

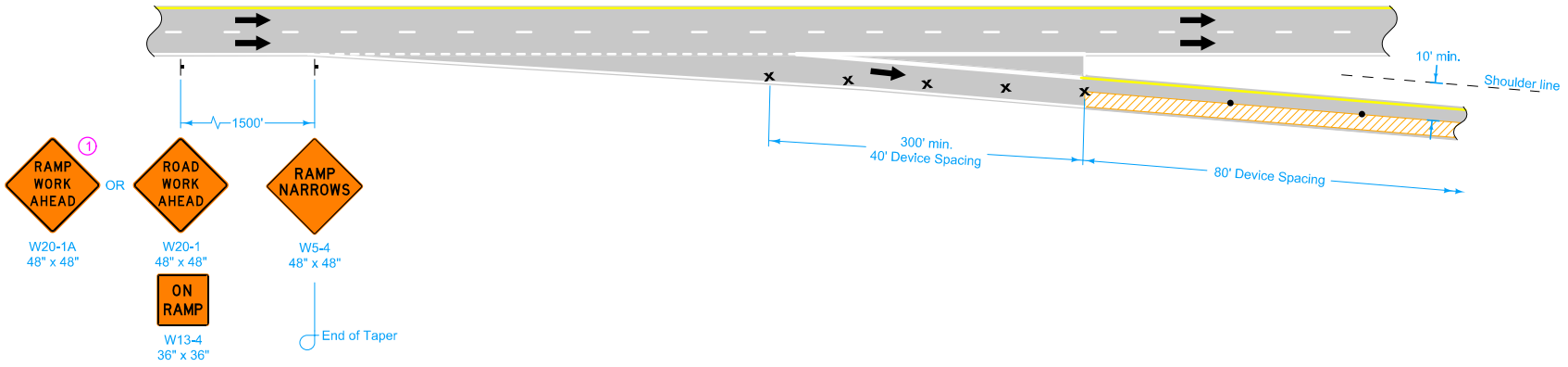
SHEET 2 of 4

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

PARTIAL LANE CLOSURE ON RAMPS

(1) Refer to SI-881 for sign details.



LEGEND

- × Drum
- Traffic Sign
- • 42" Channellzer
- ← Direction of Traffic
- Work Area

IOWA DOT

REVISION 3 10-15-19

STANDARD ROAD PLAN

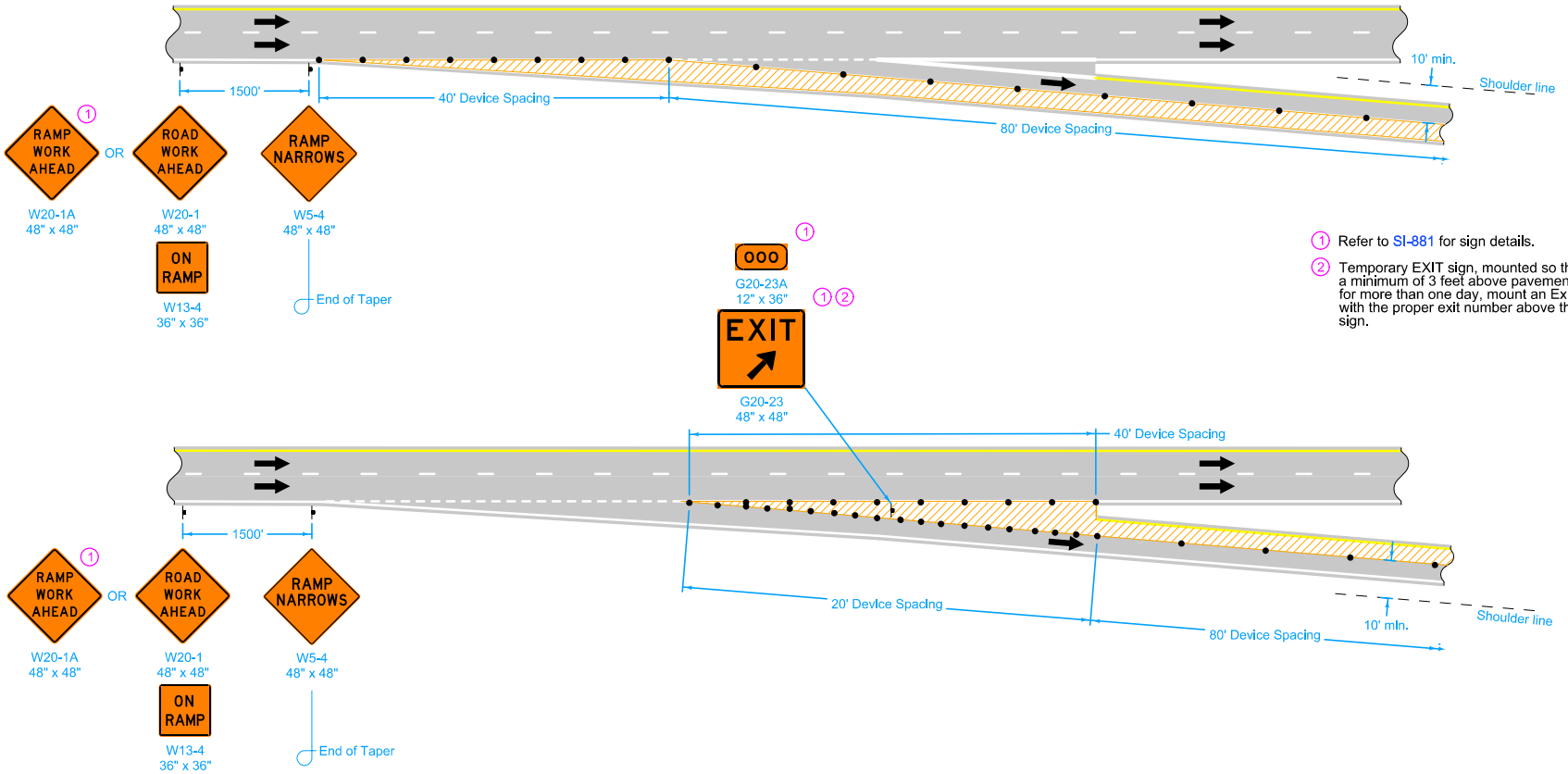
TC-416

SHEET 3 of 4

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

PARTIAL LANE CLOSURE ON RAMPS



1. Refer to SI-881 for sign details.
2. Temporary EXIT sign, mounted so that bottom of sign is a minimum of 3 feet above pavement surface. If in place for more than one day, mount an Exit Number Panel with the proper exit number above the temporary EXIT sign.

LEGEND

- Traffic Sign
- 42" Channellzer
- Direction of Traffic
- Work Area

IOWA DOT

REVISION 3 10-15-19

STANDARD ROAD PLAN

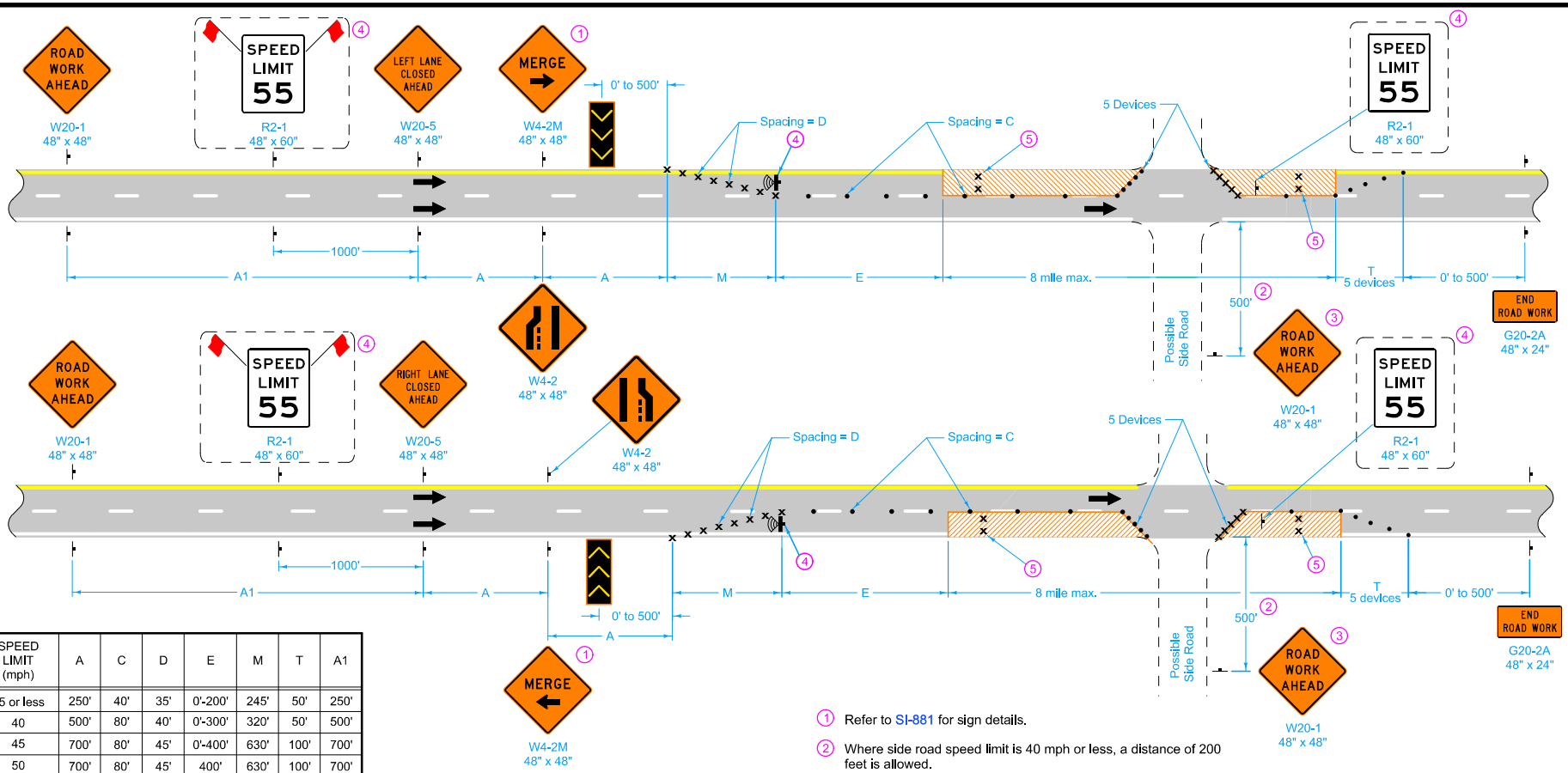
TC-416

SHEET 4 of 4

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

PARTIAL LANE CLOSURE ON RAMPS



SPEED LIMIT (mph)	A	C	D	E	M	T	A1
35 or less	250'	40'	35'	0'-200'	245'	50'	250'
40	500'	80'	40'	0'-300'	320'	50'	500'
45	700'	80'	45'	0'-400'	630'	100'	700'
50	700'	80'	45'	400'	630'	100'	700'
55 - 60	1000'	100'	55'	600'	770'	100'	2000'
65 - 70	1000'	100'	65'	700'	910'	100'	2000'

LEGEND

- Direction Of Traffic
- Traffic Sign
- Drum
- 42" Channelizer
- Speed Feedback Sign
- Arrow Board
- Work Area

When the Average Daily Traffic (ADT) exceeds 20,000 vehicles per day or when a traffic queue extends beyond the advanced signing, place RIGHT/LEFT LANE CLOSED 4 MILES and RIGHT/LEFT LANE CLOSED 2 MILES signs (W20-5) on both sides of the roadway 4 miles and 2 miles in advance of the lane closure, respectively, as appropriate.

Where there is a lane line drop-off or rise, do not allow traffic to cross over the drop-off or rise, except for ramp locations where a BUMP (W8-1) sign is placed.

Lane line drop-offs greater than a nominal 4 inches are not allowed during non-working hours.

(1) Refer to SI-881 for sign details.

(2) Where side road speed limit is 40 mph or less, a distance of 200 feet is allowed.

(3) Place a ROAD WORK AHEAD sign on the opposite side of the intersection in a similar location.

(4) For roadways with a posted speed limit of 60 mph or greater before road work:

Place SPEED LIMIT 55 signs prior to the lane closure as shown.

When the length of closure is greater than 1 mile, install SPEED LIMIT 55 signs in the closed lane at 1-mile intervals.

Remove or cover all existing signs that conflict with 55 mph speed limit while 55 mph speed limit is in effect.

For traffic control zones lasting more than 4 hours, place a Speed Feedback Sign at the end of the merge taper.

(5) For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

Possible Contract Item:
Traffic Control

IOWA DOT

STANDARD ROAD PLAN

REVISION
13 | 4-21-20

TC-418

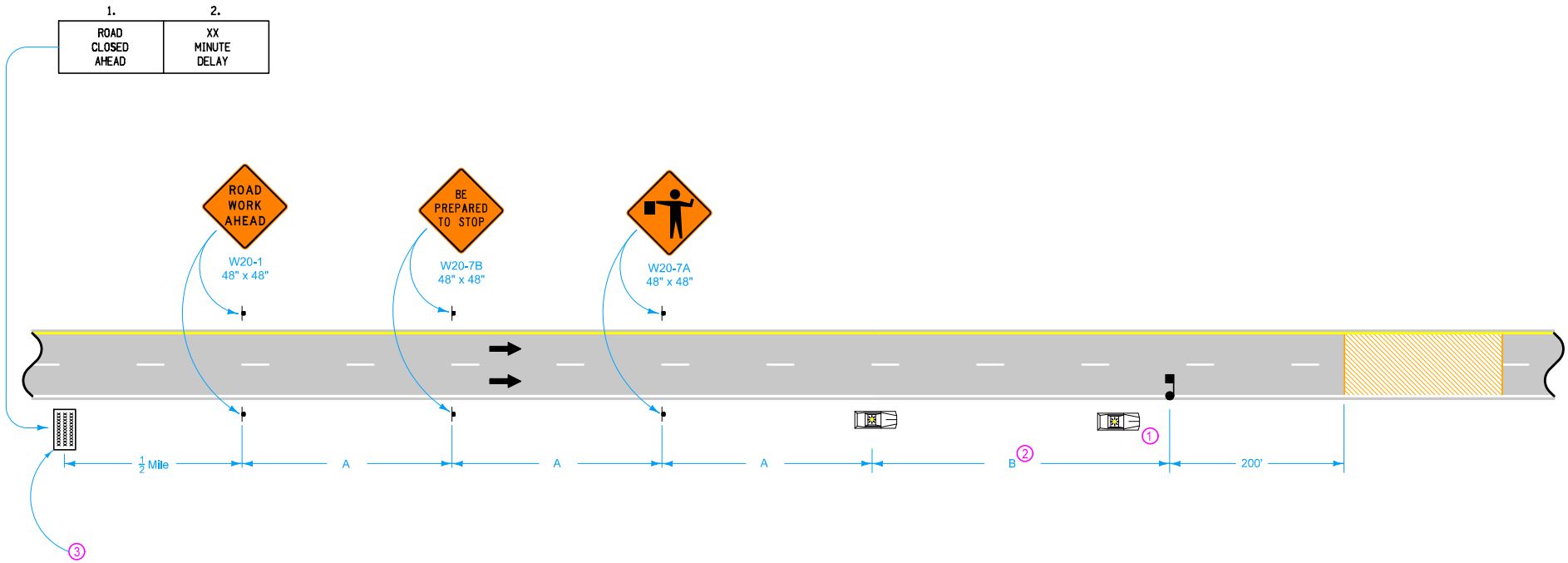
SHEET 1 of 1

REVISIONS: Modified circle note 4.

APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE ON DIVIDED HIGHWAY

DESIGNER INFO



LEGEND

- Traffic Sign
- Law Enforcement Vehicle
- Flagger
- Portable Dynamic Message Sign
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	B
35 or less	250'	250'
40 - 45	350'	350'
50 or greater	1000'	2500'

This layout is intended for a preplanned closure of 20 minutes or less.

1. A vehicle with an amber revolving light or amber strobe light may be substituted for leading law enforcement vehicle.
2. This distance may be increased to provide adequate storage for stopped vehicles.
3. Optional for speed limits less than 55 mph.

Possible Contract Items:

Flaggers
Portable Dynamic Message Sign
Traffic Control

IOWA DOT

STANDARD ROAD PLAN

REVISION 7 04-21-15

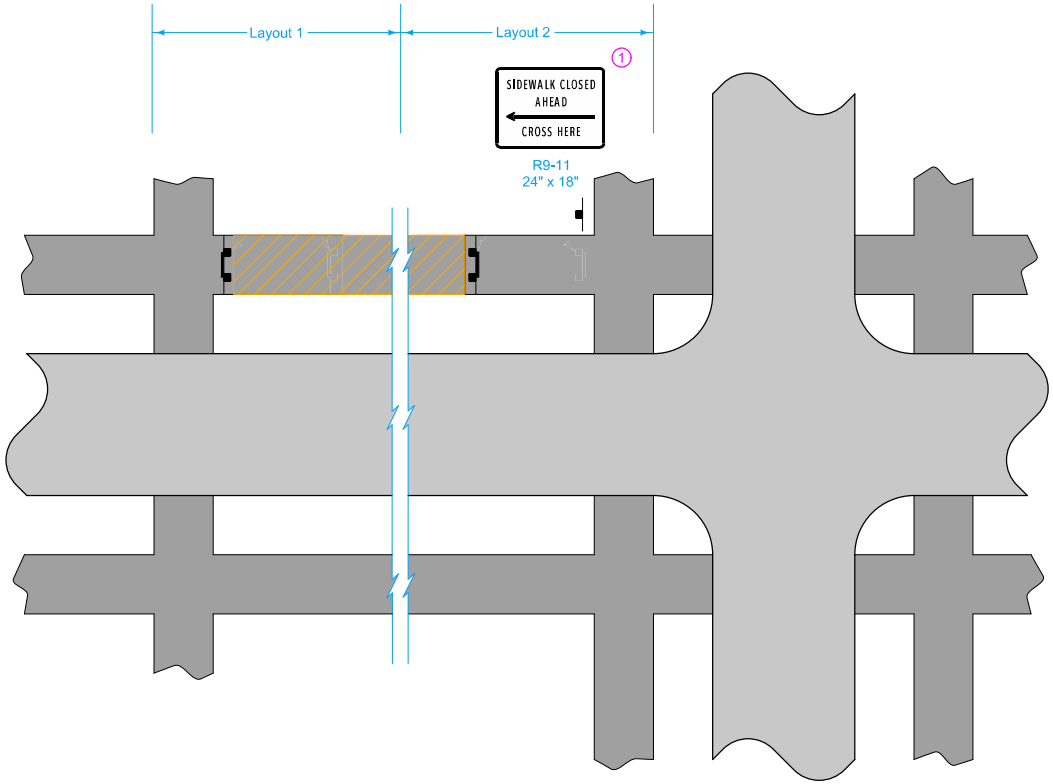
TC-451

SHEET 1 of 1

REVISIONS: Corrected typo in title.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

TEMPORARY ROAD CLOSURE ON DIVIDED HIGHWAY



1 Omit "SIDEWALK CLOSED AHEAD CROSS HERE" (R9-11) sign when closure is at sidewalk intersection as shown in layout 1.

MID-BLOCK CLOSURE

LEGEND

- Roadway
- Sidewalk
- Sign
- Pedestrian Path Closure
- Work Area

Possible Contract Item:
Traffic Control

Possible Tabulation:
113-2

IOWA DOT

REVISION
1 | 10-15-19

STANDARD ROAD PLAN

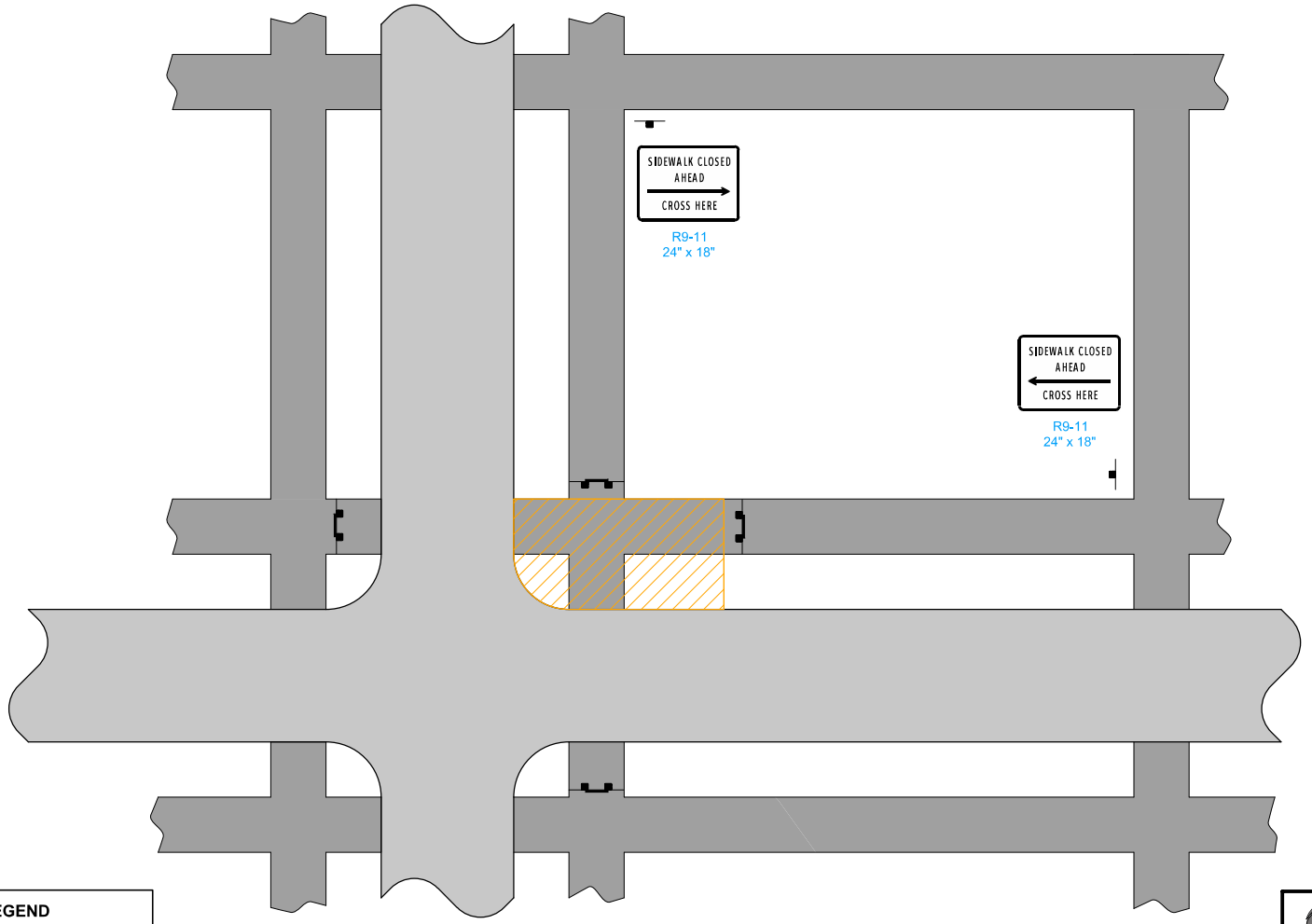
TC-601

SHEET 1 of 2

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

PEDESTRIAN DETOUR



LEGEND

- Roadway
- Sidewalk
- Sign
- Pedestrian Path Closure
- Work Area

CLOSURE AT INTERSECTION

IOWADOT

REVISION
1 | 10-15-19

STANDARD ROAD PLAN

TC-601

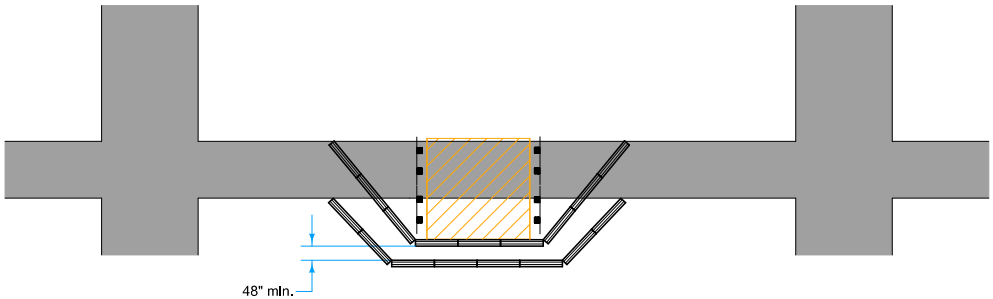
SHEET 2 of 2

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

PEDESTRIAN DETOUR

Acceptable materials and construction method for Pedestrian Channelizer will be defined in the contract documents. When Temporary Barrier Rail is specified as the Pedestrian Channelizer, Section 2528 of the Standard Specifications applies. For other types of Pedestrian Channelizers, the length of Pedestrian Channelizer installed will be measured in feet. Payment will be at the contract price per linear foot.



Possible Contract Items:

- Pedestrian Channelizer
- Temporary Barrier Rail
- Maintenance of Pedestrian Traffic

Possible Tabulation:

113-3

LEGEND

- Sidewalk
- Direction of Traffic
- Work Area
- Type III Barricade
- Pedestrian Channelizer

IOWA DOT

REVISION

1	10-15-19

STANDARD ROAD PLAN

TC-602

SHEET 1 of 1

REVISIONS: New logo.

APPROVED BY DESIGN METHODS ENGINEER

SIDEWALK DIVERSION