



Subject: **Revision of Standard Road Plan Manual**

Revision Date: **10/20/2020**

To: **Holders of Standard Road Plans**

From: **Design Bureau**

INSTRUCTIONS: The attached Standard Road Plans have received approval and may be referred to in the plans by number. Questions concerning information contained on the Standard Road Plans should be directed to the Methods Section, Design Bureau, telephone (515) 239-1727 or email daniel.harness@iowadot.us.

****NOTE**** The following revisions are effective with the 10/20/2020 letting. Projects let prior to this date may reference earlier versions of these Standard Road Plans.

**Standard
Road Plan**

Description of Revision

BA Index

BA-252

Modified to reflect change to add 25' of W-beam to BA-203.

EC Index

EC-303

Removed Interim from standard.

EW Index

EW-203

Modified dimension line "A" on page 1.

EW-204

Modified dimension line "A" on page 1.

PV Index

PV-12

On Sheet 1 replaced 12" dimension in PLAN view with L. Added RAILROAD CROSSING on Sheet 2.

SI Index

SI-123

Modified dimension from 0.78 to 0.070 in Full Panel Section.

SW Index

SW-542

Removed Interim from standard.

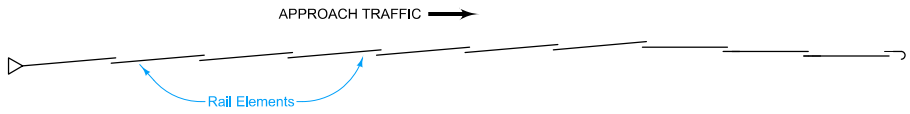
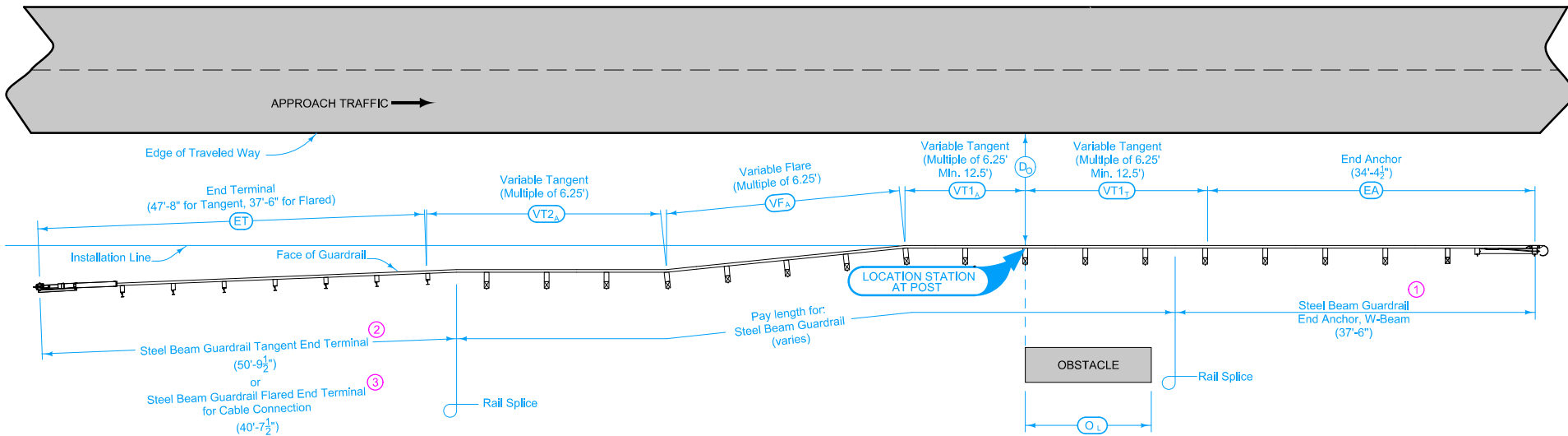
TC Index

TC-062

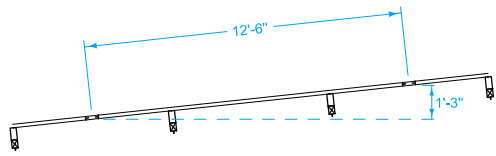
Modified Type III barricades note from Section 3F.01 to Section 2B.67.

TC-423

Modified circle note 3.



LAPPING PROCEDURE



VARIABLE FLARE

Install delineators and object markers according to [SI-211](#).
 For grading requirements, see [EW-301](#).
 For general guardrail details, see [BA-200](#).

- ① See [BA-203](#).
- ② See [BA-205](#).
- ③ See [BA-206](#).

Possible Contract Items:
 Steel Beam Guardrail
 Steel Beam Guardrail End Anchor, W-Beam
 Steel Beam Guardrail Flared End Terminal, BA-206
 Steel Beam Guardrail Tangent End Terminal, BA-205

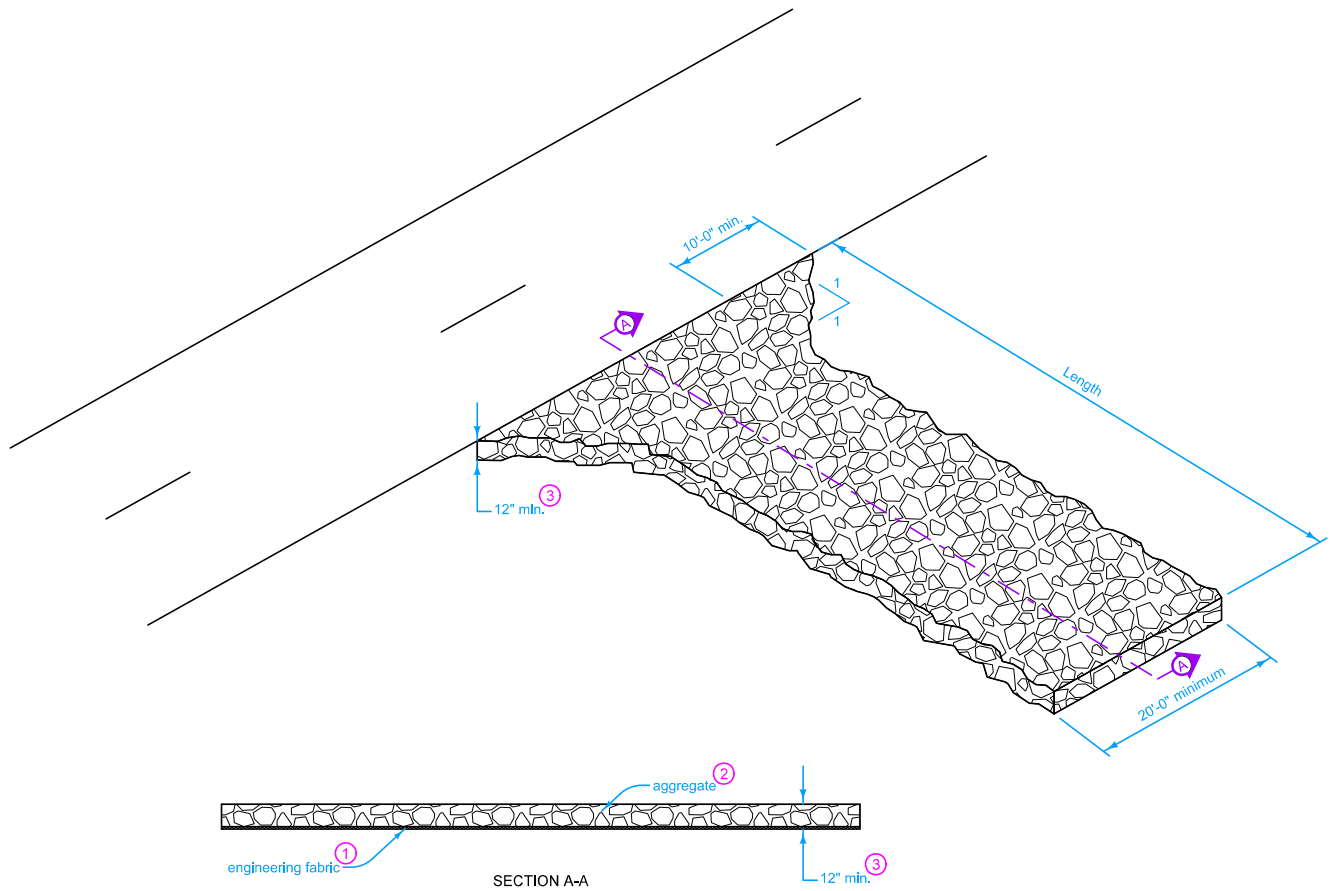
Possible Tabulation:
[108-8C](#)

| | | |
|--|----------|---------------|
| IOWA DOT | REVISION | |
| | 5 | 10-20-20 |
| STANDARD ROAD PLAN | | BA-252 |
| | | SHEET 1 of 1 |
| REVISIONS: Modified to reflect change to add 25' of W-beam rail to BA-203. | | |
| <i>Handwritten Signature</i> | | |
| APPROVED BY DESIGN METHODS ENGINEER | | |
| STEEL BEAM GUARDRAIL INSTALLATION AT SIDE OBSTACLE (ONE-WAY PROTECTION) | | |

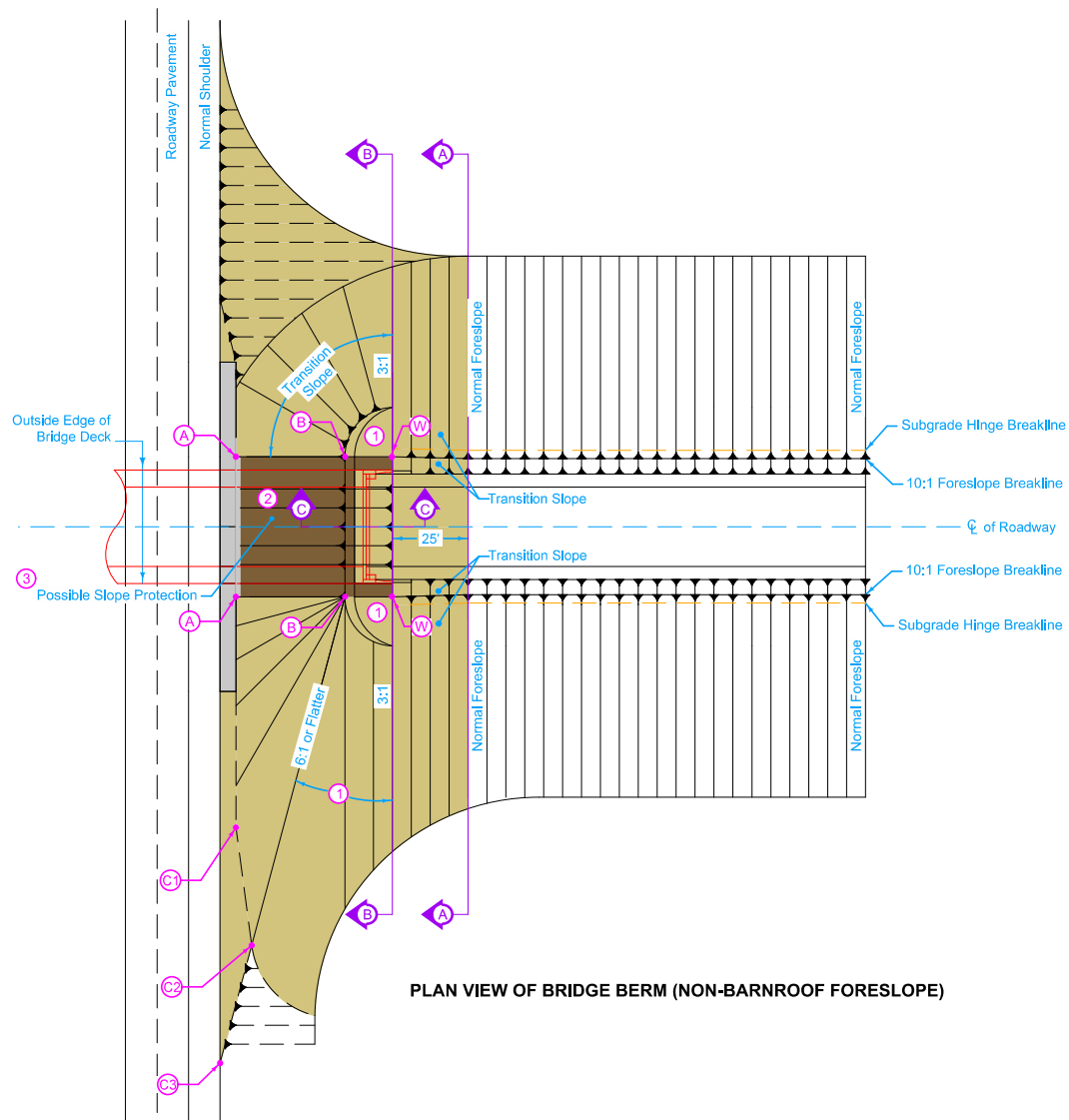
**DESIGNER
INFO**

Obtain the Engineer's approval for location and length of stabilized entrances prior to constructing.

- ① Place engineering fabric prior to placing aggregate. Use fabric for Embankment Erosion Control complying with Section 4196 of the Standard Specifications.
- ② Use aggregate meeting Gradation No. 13a of Section 4109 of the Standard Specifications.
- ③ Depth may need to be increased depending on the weight of contractor vehicles and equipment.



| | |
|---|---------------|
| | REVISION |
| | 3 10-20-20 |
| STANDARD ROAD PLAN | EC-303 |
| SHEET 1 of 1 | |
| REVISIONS: Removed Interim from standard. | |
| | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| STABILIZED CONSTRUCTION ENTRANCE | |



PLAN VIEW OF BRIDGE BERM (NON-BARNROOF FORESLOPE)

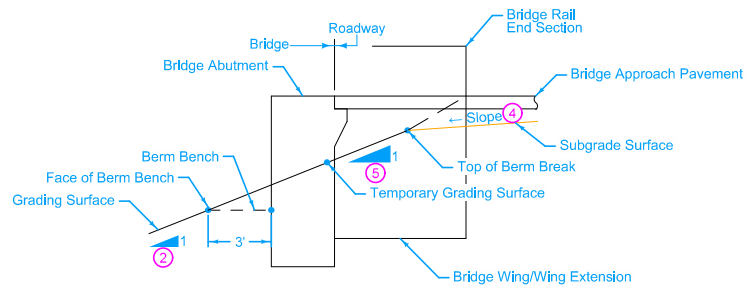
Grading Surface:
Refer to berm slope location table in project plans for locations of A, B, C, W and possible other points.

The cost of removal, stockpiling and placement of macadam stone shall be considered incidental to "Paved Shoulder, P.C. Concrete".

- ① Special shaping.
- ② Bridge Berm slope may vary and is determined by the A and B points. Slope is normally 2.5:1 or flatter.
- ③ Refer to contract documents for limits of the slope protection.

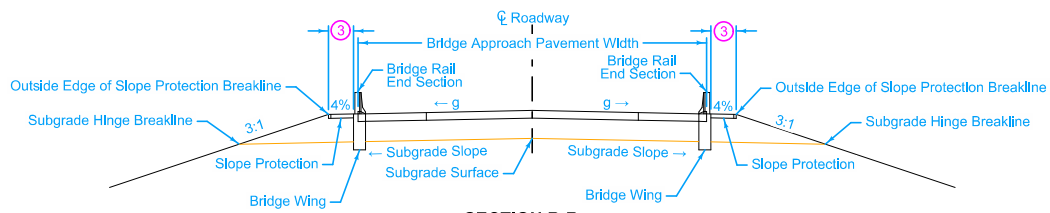
Possible Tabulation: 104-9

| | | |
|--|----------|---------------|
| IOWA DOT | REVISION | |
| | 6 | 10-20-20 |
| STANDARD ROAD PLAN | | EW-203 |
| | | SHEET 1 of 5 |
| REVISIONS: Modified dimension line "A" on page 1. | | |
| <i>Handwritten Signature</i> | | |
| APPROVED BY DESIGN METHODS ENGINEER | | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (NON-BARNROOF SECTION) | | |

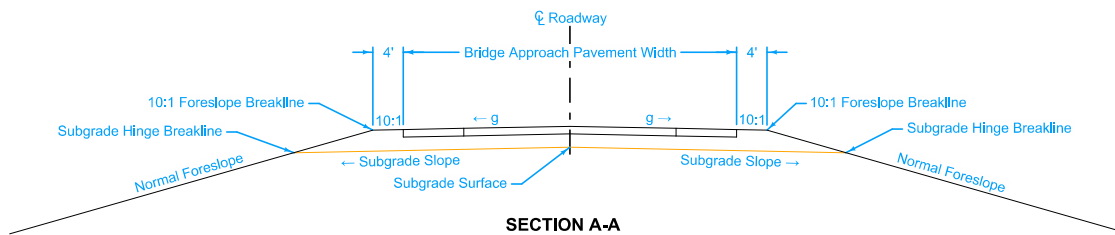


SECTION C-C

- ② Bridge Berm slope may vary and is determined by the A and B points. Slope is normally 2.5:1 or flatter.
 - ③ Refer to contract documents for limits of the slope protection.
 - ④ Refer to **BR series** for longitudinal subgrade slope.
 - ⑤ Temporary grading slope.
- g = pavement cross slope.

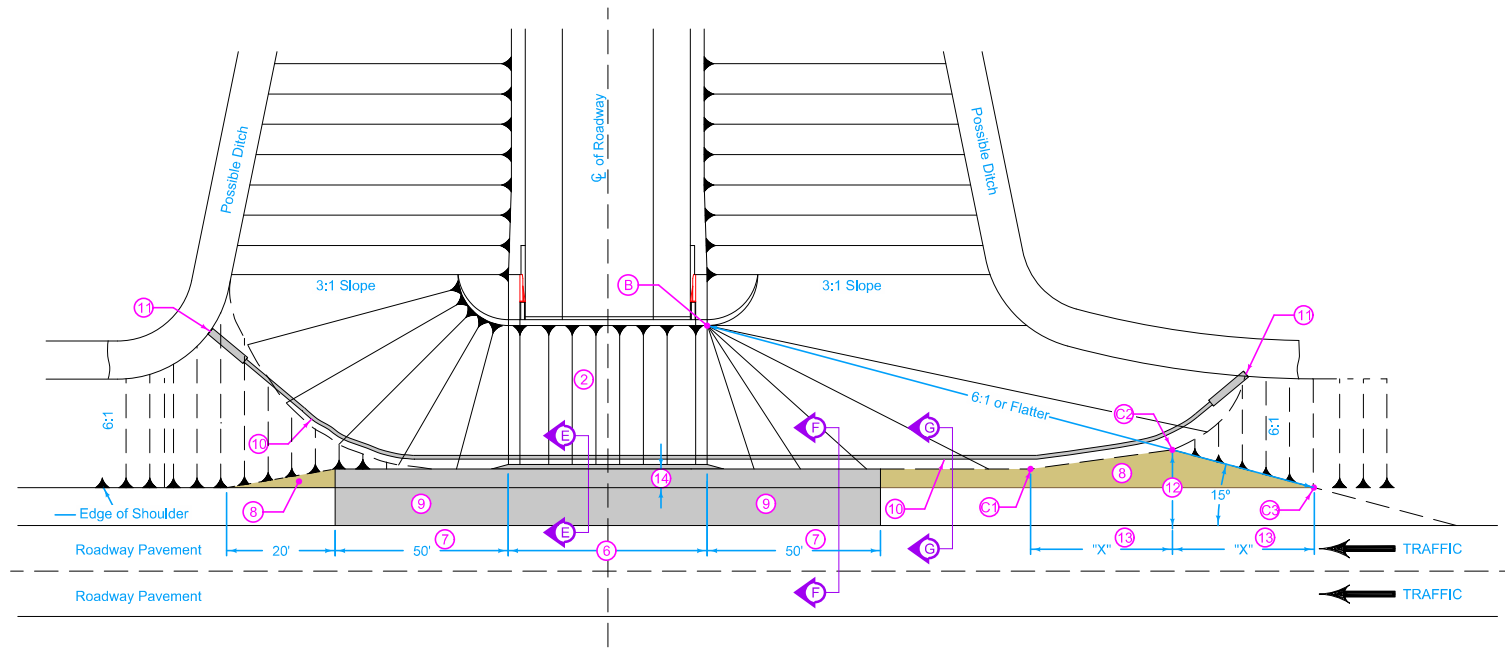


SECTION B-B

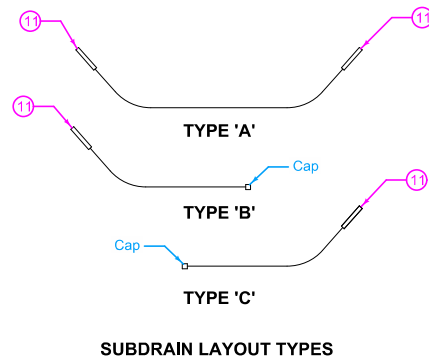


SECTION A-A

| | | |
|--|----------|---------------|
| | REVISION | |
| | 6 | 10-20-20 |
| STANDARD ROAD PLAN | | EW-203 |
| | | SHEET 2 of 5 |
| REVISIONS: Modified dimension line "A" on page 1. | | |
| | | |
| APPROVED BY DESIGN METHODS ENGINEER | | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (NON-BARNROOF SECTION) | | |



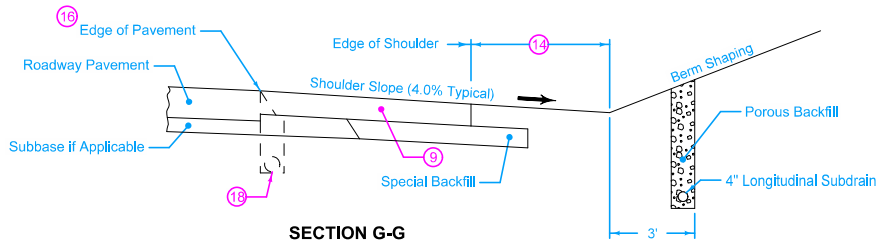
PLAN VIEW OF BRIDGE BERM AREA



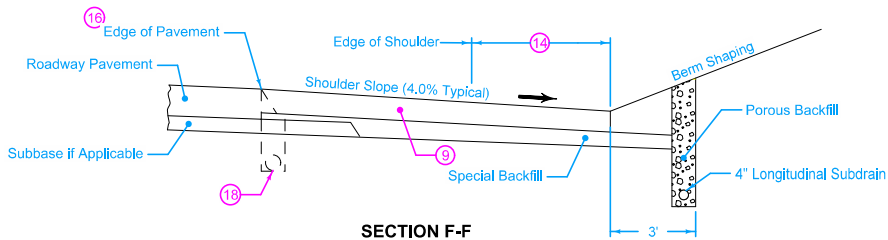
SUBDRAIN LAYOUT TYPES

- ② Bridge Berm slope may vary and is determined by the A and B points. Slope is normally 2.5:1 or flatter.
- ⑥ Width of bridge slab + 3' on each side. Build 6" sloped curb to this width. Refer to PV-102 for curb details.
- ⑦ Includes curb runout length. Refer to PV-102 for curb runout details.
- ⑧ Match typical shoulder slope.
- ⑨ See typical cross-sections for details of paved shoulder.
- ⑩ Approximate location of bridge subdrain.
- ⑪ Refer to DR-306 subdrain outlet. When flow of subdrain does not require an outlet at both ends, cap the end without an outlet in a method approved by the Engineer.
- ⑫ 2 times typical shoulder width.
- ⑬ "X" distance based on station difference between points C2 and C3.
- ⑭ 5' offset unless otherwise noted on the Bridge Situation Plan, 4' offset minimum.

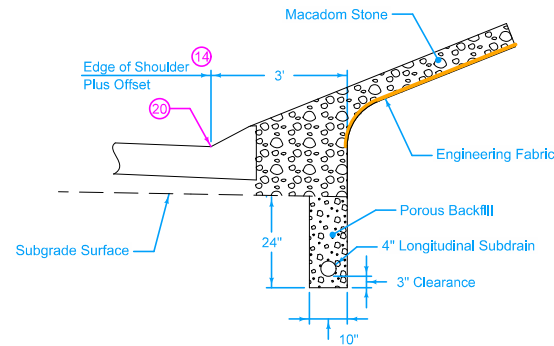
| | |
|--|-------------------------------|
| STANDARD ROAD PLAN | REVISION 6 10-20-20 |
| | EW-203 SHEET 3 of 5 |
| REVISIONS: Modified dimension line "A" on page 1. | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (NON-BARNROOF SECTION) | |



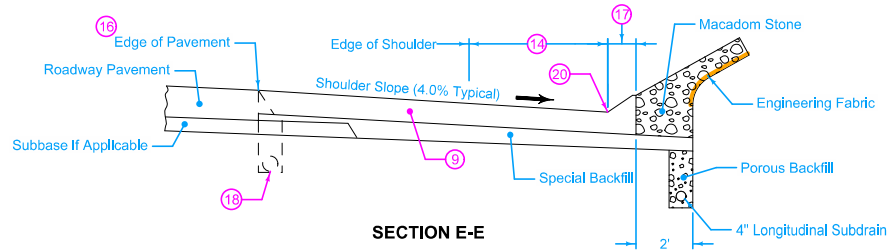
SECTION G-G



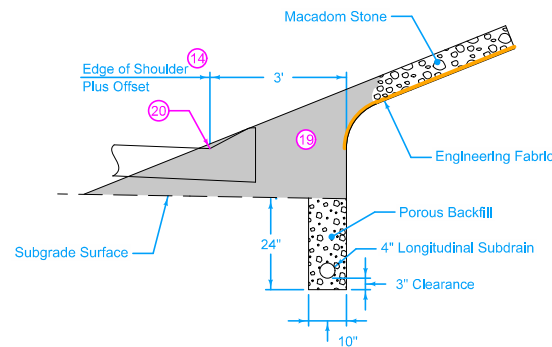
SECTION F-F



PARTIAL SECTION E-E
As constructed by others



SECTION E-E



PARTIAL SECTION E-E
Proposed construction



- 9 See typical cross-sections for details of paved shoulder.
- 14 5' offset unless otherwise noted on the Bridge Situation Plan, 4' offset minimum.
- 16 If roadway pavement is newly-constructed PCC, use BT-1 or BT-2 joint. If roadway pavement is existing PCC, use BT-3, BT-4, or BT-5 joint. Refer to PV-101 joint details.
- 17 6" sloped curb. Refer to PV-102 curb details.
- 18 Roadway subdrain location. Use caution when excavating. Maintain porous material in trench to bottom of roadway pavement.
- 19 Remove and stockpile macadam stone. Carefully separate the macadam stone from the surrounding soil. Preserve the integrity of the engineering fabric.
- 20 Toe of the berm. Refer to A points on the berm slope location table.

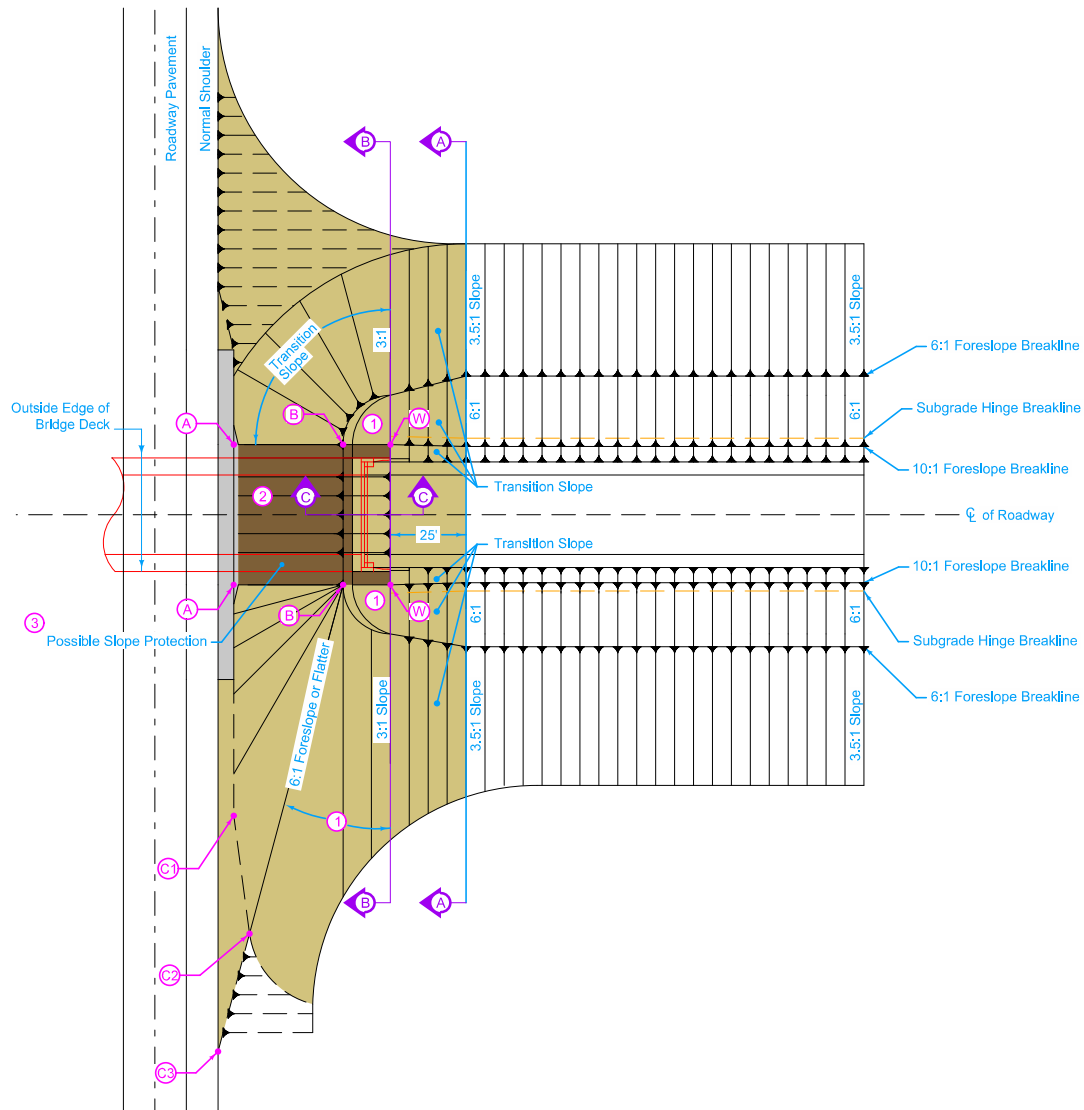
| | |
|--|------------------------|
| STANDARD ROAD PLAN | REVISION 6 10-20-20 |
| | EW-203 |
| | SHEET 4 of 5 |
| REVISIONS: Modified dimension line "A" on page 1. | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (NON-BARNROOF SECTION) | |

This image can be viewed in 3D on the the ERL or at our website <http://www.iowadot.gov/design/stdrdpln.htm>



This image can be viewed in 3D on the the ERL or at our website <http://www.iowadot.gov/design/stdrdpln.htm>

| | | |
|---|---------------|----------|
|  | REVISION | |
| | 6 | 10-20-20 |
| STANDARD ROAD PLAN | EW-203 | |
| | SHEET 5 of 5 | |
| REVISIONS: Modified dimension line "A" on page 1. | | |
|  | | |
| APPROVED BY DESIGN METHODS ENGINEER | | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (NON-BARNROOF SECTION) | | |



PLAN VIEW OF BRIDGE BERM (BARNROOF FORESLOPE)

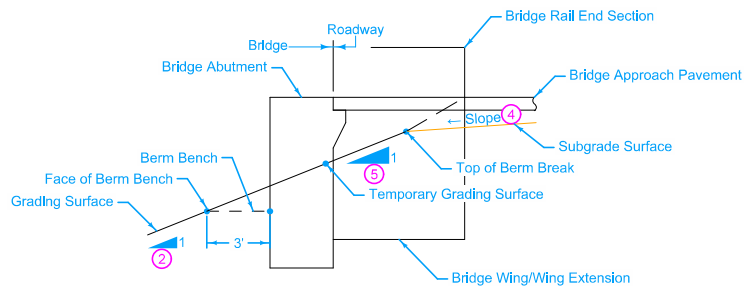
Grading Surface:
Refer to berm slope location table in project plans for locations of A, B, C, W and possible other points.

The cost of removal, stockpiling and placement of macadam stone shall be considered incidental to "Paved Shoulder, P.C. Concrete".

- ① Special shaping.
- ② Face of Bridge Berm slope may vary and is determined by the A and B points. Slope is normally 2.5:1 or flatter.
- ③ Refer to contract documents for limits of the slope protection.

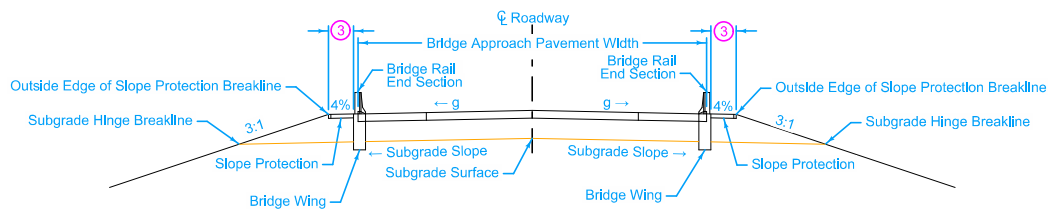
Possible Tabulation: 104-9

| | | |
|--|----------|---------------|
| IOWA DOT | REVISION | |
| | 6 | 10-20-20 |
| STANDARD ROAD PLAN | | EW-204 |
| | | SHEET 1 of 5 |
| REVISIONS: Modified dimension line "A" on page 1. | | |
| <i>Handwritten Signature</i> | | |
| APPROVED BY DESIGN METHODS ENGINEER | | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (BARNROOF SECTION) | | |

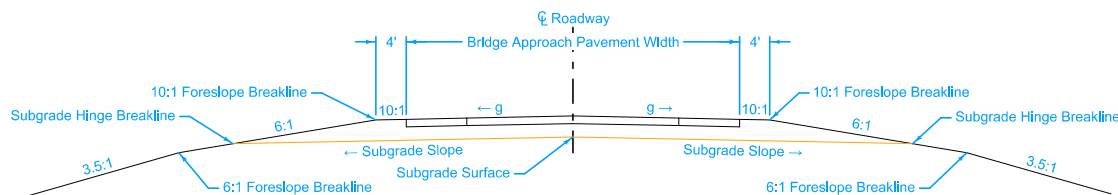


SECTION C-C

- ② Bridge Berm slope may vary and is determined by the A and B points. Slope is normally 2.5:1 or flatter.
 - ③ Refer to contract documents for limits of the slope protection.
 - ④ Refer to **BR series** for longitudinal subgrade slope.
 - ⑤ Temporary grading slope.
- g = pavement cross slope.

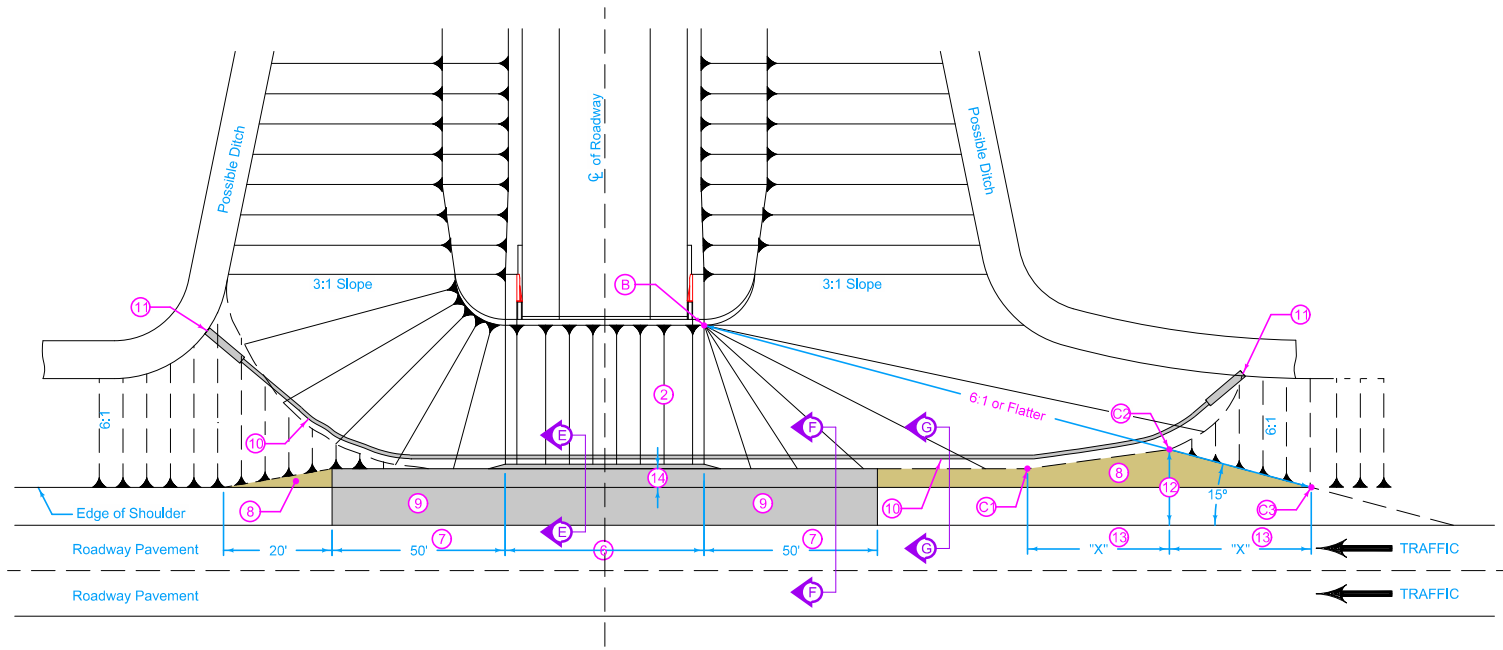


SECTION B-B



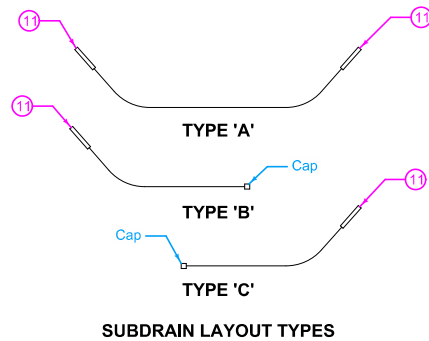
SECTION A-A

| | |
|--|---------------|
| | REVISION |
| | 6 10-20-20 |
| STANDARD ROAD PLAN | EW-204 |
| REVISIONS: Modified dimension line "A" on page 1. | SHEET 2 of 5 |
| | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (BARNROOF SECTION) | |



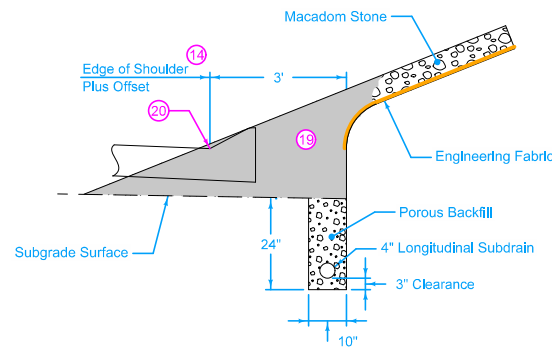
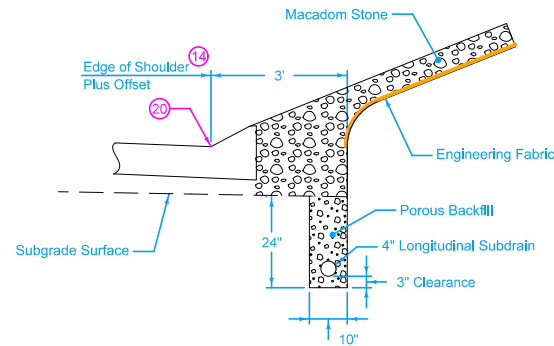
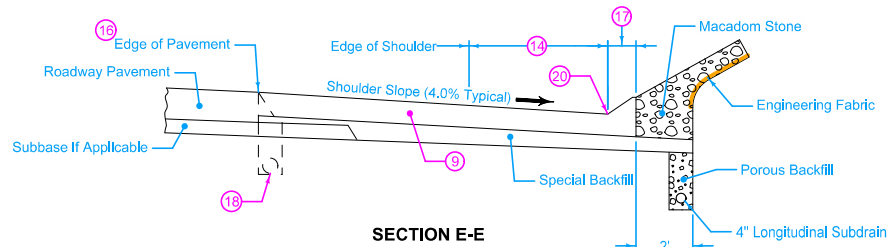
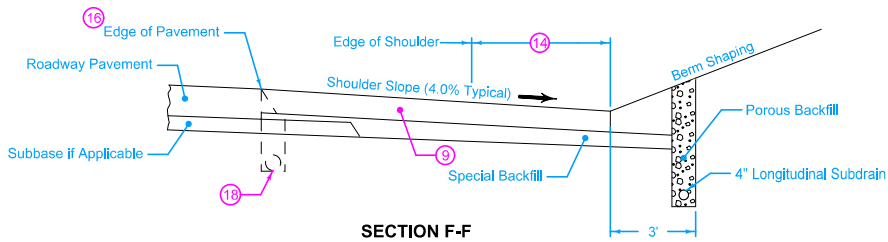
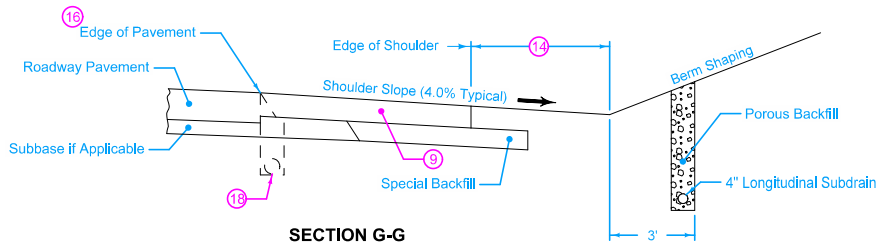
PLAN VIEW OF BRIDGE BERM AREA

- ② Bridge Beam slope may vary and is determined by the A and B points. Slope is normally 2.5:1 or flatter.
- ⑥ Width of bridge slab + 3' on each side. Build 6" sloped curb to this width. Refer to PV-102 for curb details.
- ⑦ Includes curb runout length. Refer to PV-102 for curb runout details.
- ⑧ Match typical shoulder slope.
- ⑨ See typical cross-sections for details of paved shoulder.
- ⑩ Approximate location of bridge subdrain.
- ⑪ Refer to DR-306 subdrain outlet. When flow of subdrain does not require an outlet at both ends, cap the end without an outlet in a method approved by the Engineer.
- ⑫ 2 times typical shoulder width.
- ⑬ "X" distance based on station difference between points C2 and C3.
- ⑭ 5' offset unless otherwise noted on the Bridge Situation Plan. 4' offset minimum.



SUBDRAIN LAYOUT TYPES

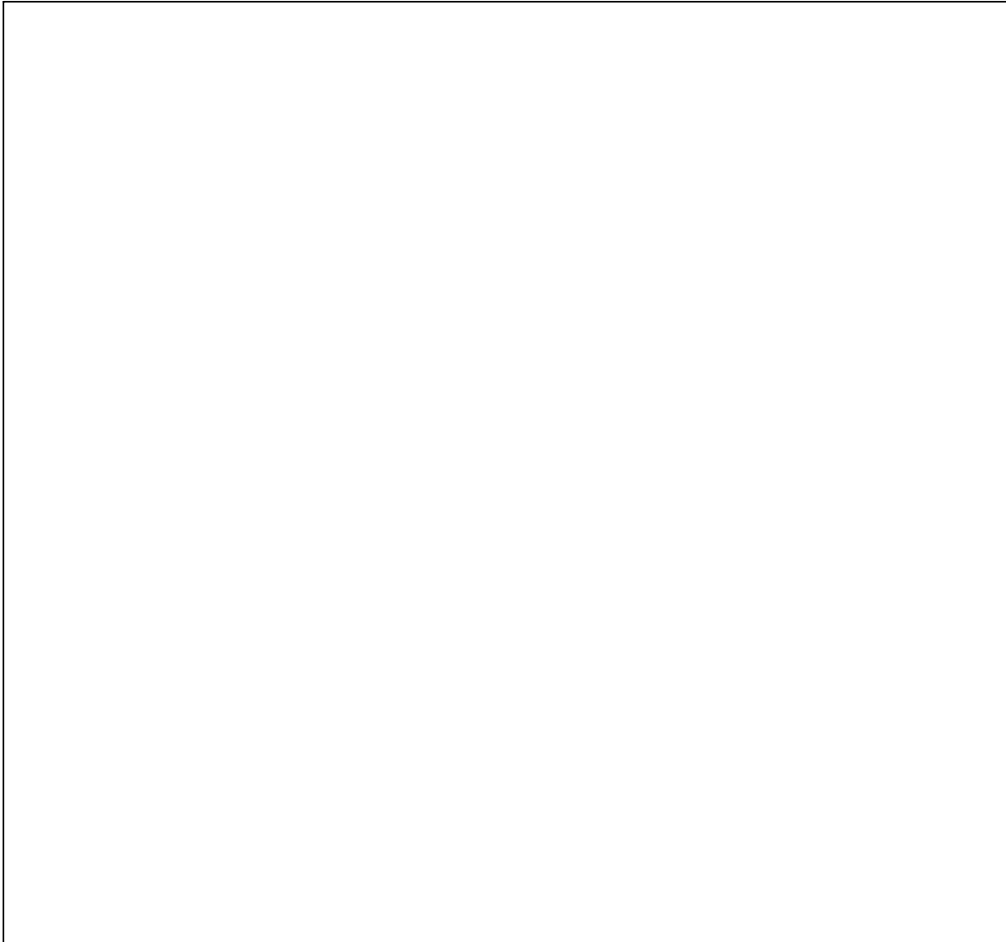
| | |
|--|------------|
| | REVISION |
| | 6 10-20-20 |
| STANDARD ROAD PLAN | EW-204 |
| SHEET 3 of 5 | |
| REVISIONS: Modified dimension line "A" on page 1. | |
| | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (BARNROOF SECTION) | |





- 9 See typical cross-sections for details of paved shoulder.
- 14 5' offset unless otherwise noted on the Bridge Situation Plan, 4' offset minimum.
- 16 If roadway pavement is newly-constructed PCC, use BT-1 or BT-2 joint. If roadway pavement is existing PCC, use BT-3, BT-4, or BT-5 joint. Refer to PV-101 joint details.
- 17 6" sloped curb. Refer to PV-102 curb details.
- 18 Roadway subdrain location. Use caution when excavating. Maintain porous material in trench to bottom of roadway pavement.
- 19 Remove and stockpile macadam stone. Carefully separate the macadam stone from the surrounding soil. Preserve the integrity of the engineering fabric.
- 20 Toe of the berm. Refer to A Points on the berm slope location table.

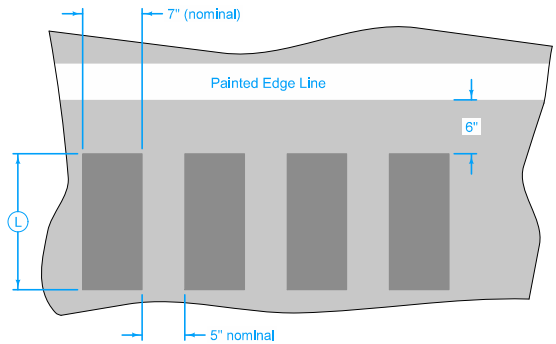
| | |
|--|---------------|
| STANDARD ROAD PLAN | REVISION |
| | 6 10-20-20 |
| | EW-204 |
| SHEET 4 of 5 | |
| REVISIONS: Modified dimension line "A" on page 1. | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (BARNROOF SECTION) | |

This image can be viewed in 3D on the the ERL or at our website <http://www.iowadot.gov/design/stdrdpln.htm>

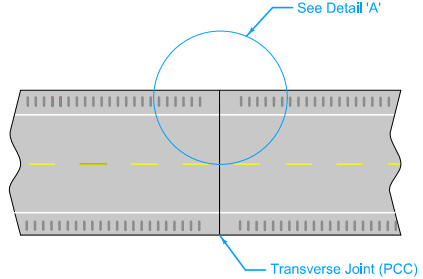


This image can be viewed in 3D on the the ERL or at our website <http://www.iowadot.gov/design/stdrdpln.htm>

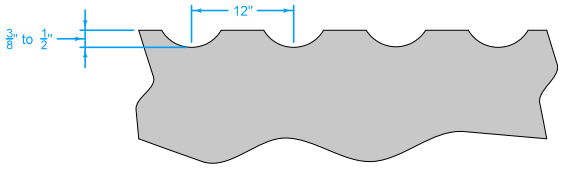
| | | |
|---|---------------|----------|
|  | REVISION | |
| | 6 | 10-20-20 |
| STANDARD ROAD PLAN | EW-204 | |
| | SHEET 5 of 5 | |
| REVISIONS: Modified dimension line "A" on page 1. | | |
|  | | |
| APPROVED BY DESIGN METHODS ENGINEER | | |
| BRIDGE BERM GRADING WITH RECOVERABLE SLOPE (BARNROOF SECTION) | | |



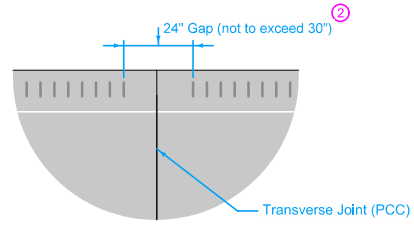
PLAN



Transverse Joint (PCC)



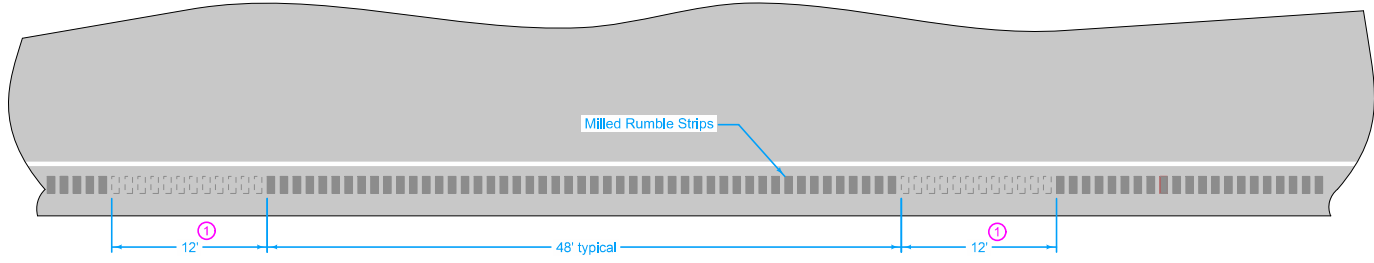
SECTION



Detail 'A'

MILLED RUMBLE STRIP

- ① Place continuous Milled Rumble Strips (no 12 foot gaps) on all median side shoulders and on all interstate shoulders.
- ② Gap rumble strips at transverse joints. Centering the gap about the joint is desirable. Maintain a minimum of 3 inches between rumble and transverse joint.



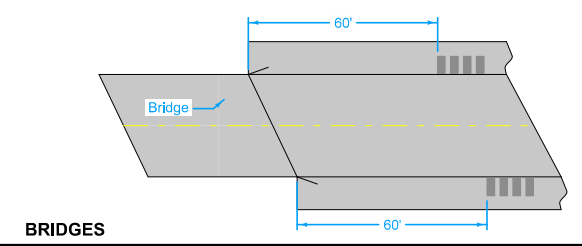
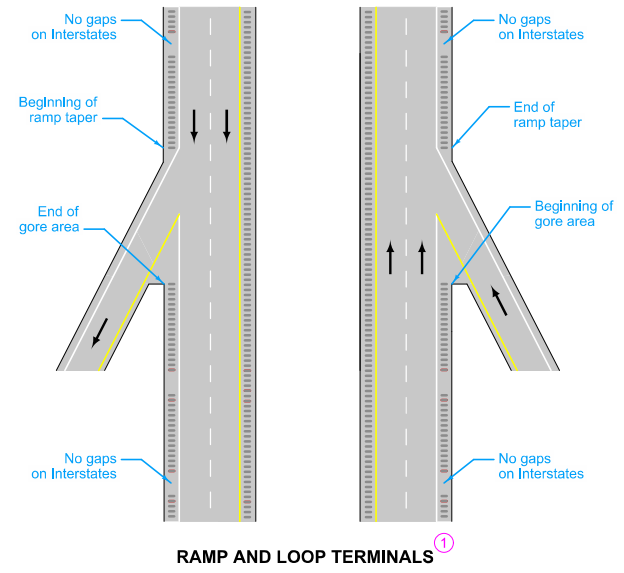
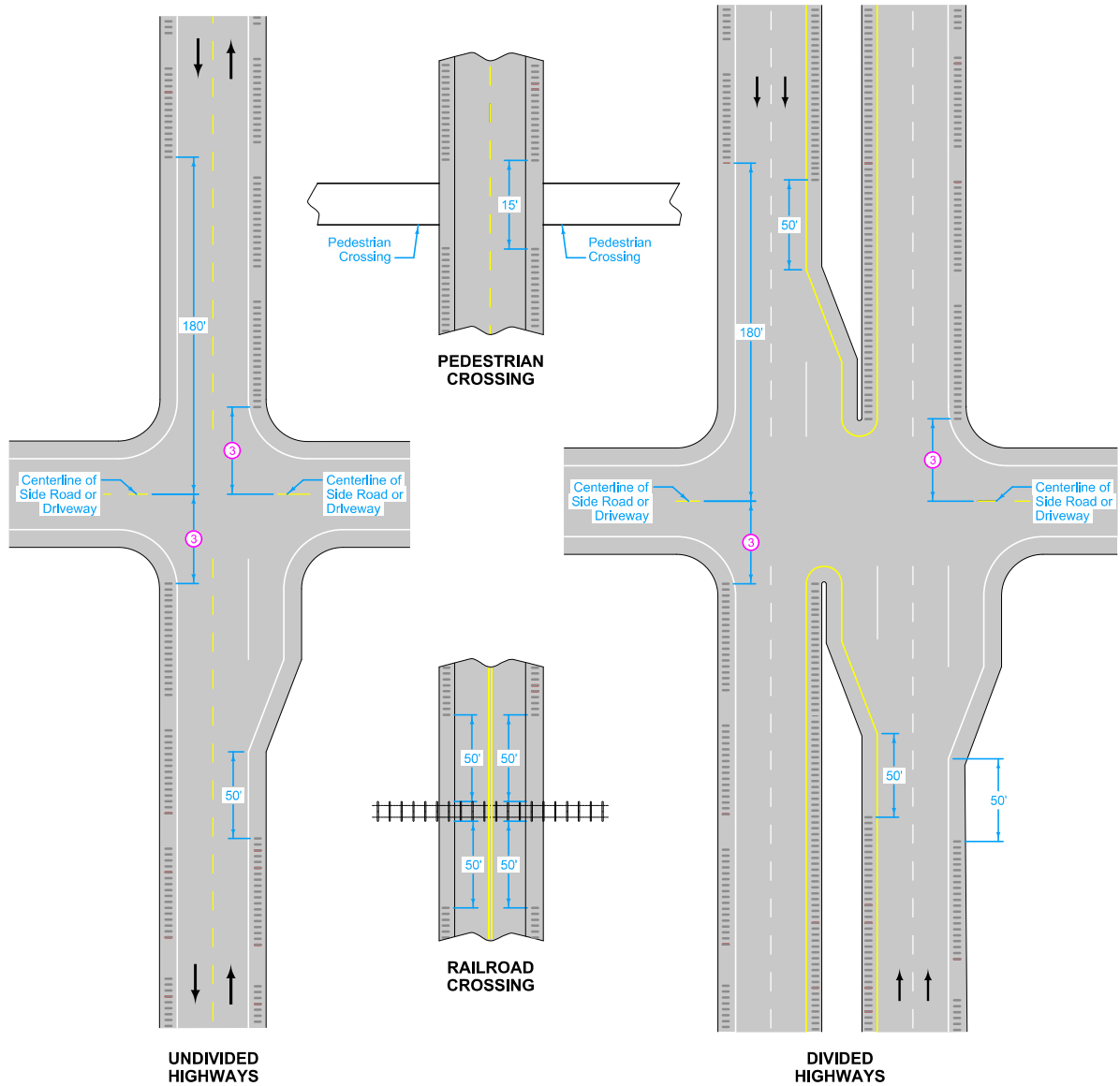
GAP DETAILS

Possible Contract Items:
 Asphalt Emulsion for Fog Seal (Shoulder Rumble Strips)
 Milled Shoulder Rumble Strips, HMA Surface
 Milled Shoulder Rumble Strips, PCC Surface

Possible Tabulation:
 112-10

| | | |
|--|------------------------------|----------|
| | REVISION | |
| | 7 | 10-20-20 |
| | PV-12 SHEET 1 of 2 | |
| REVISIONS: On Sheet 1 replaced 12' dimension in PLAN view with L. Added detail for RAILROAD CROSSING on Sheet 2. | | |
| APPROVED BY DESIGN METHODS ENGINEER | | |

MILLED SHOULDER RUMBLE STRIPS



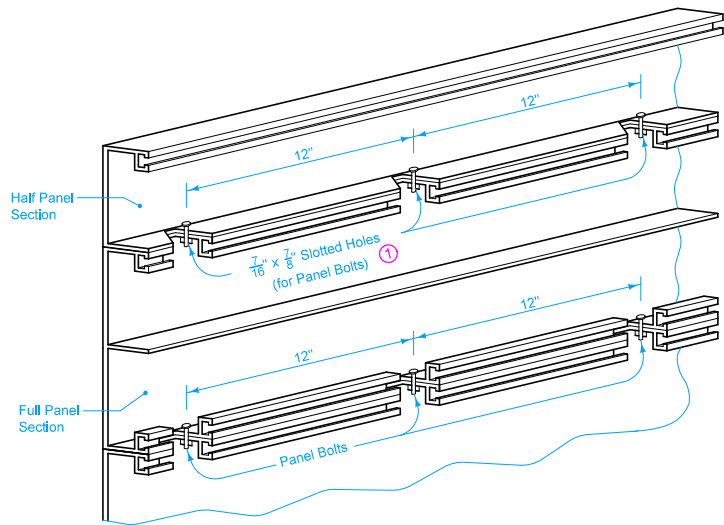
- ① Place continuous Milled Rumble Strips (no 12 foot gaps) on all median side shoulders and on all interstate shoulders.
- ③ Begin rumbles 100 feet beyond paved side roads or 50 feet for driveways or granular side roads.

| | | |
|---------------------------|----------|--------------|
| IOWA DOT | REVISION | |
| | 7 | 10-20-20 |
| STANDARD ROAD PLAN | | PV-12 |
| | | SHEET 2 of 2 |

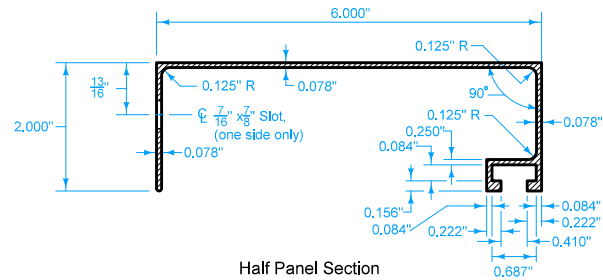
REVISIONS: On Sheet 1 replaced 12" dimension in PLAN view with L. Added detail for RAILROAD CROSSING on Sheet 2.

Steve Miller
APPROVED BY DESIGN METHODS ENGINEER

MILLED SHOULDER RUMBLE STRIPS



ASSEMBLY DETAIL

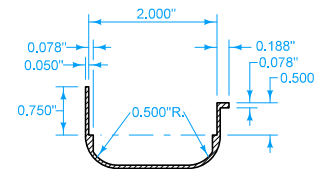


Panel bolt slotted holes spaced at 12 inch centers shall be located along the full length of each panel, such that the outermost slots are of equal distances (not to exceed 6 inches) from the ends of the panel.

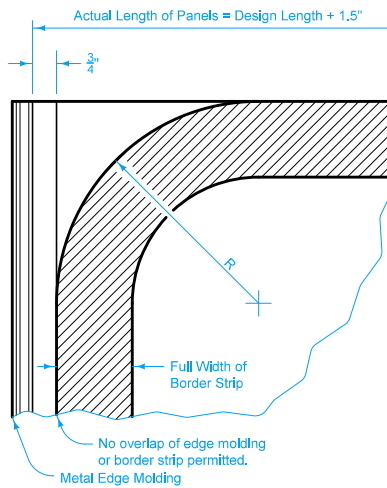
Signs shall be made up of full panels unless a half panel is required, in which case it shall be placed at the top edge of the sign.

Refer to detail project plans and summary sheet for exact data for individual sign fabrication requirements.

① Two washers per panel bolt, one each side of sign.

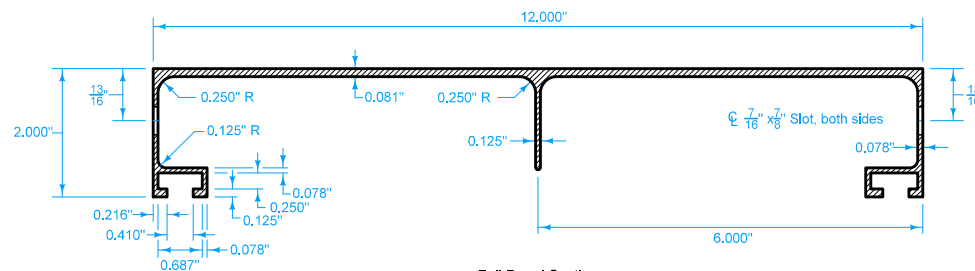


EDGE MOLDING



EDGE MOLDING BORDER STRIP DETAIL

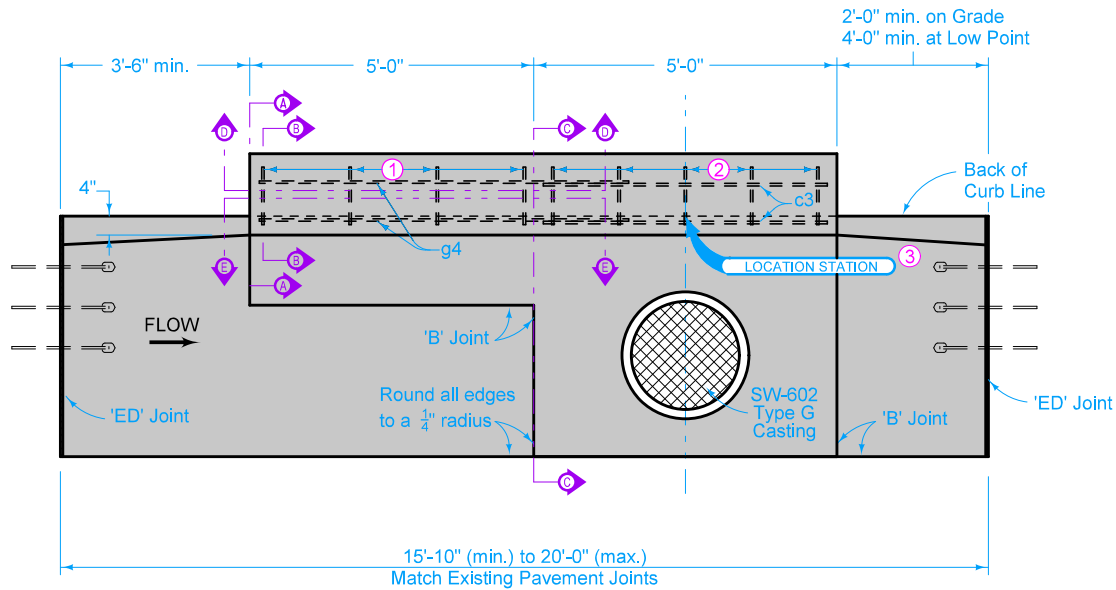
Edge molding shall be installed full length of each vertical side of each sign. Attach in accordance with current specifications.



Full Panel Section

STANDARD STRUCTURAL SIGN PANELS

| | | | |
|---|---------------|---|----------|
| STANDARD ROAD PLAN | REVISION | 3 | 10-20-20 |
| | SI-123 | | |
| | SHEET 1 of 1 | | |
| REVISIONS: Modified dimension from 0.78 to 0.078 in Full Panel Section. | | | |
| APPROVED BY DESIGN METHODS ENGINEER | | | |
| FABRICATION - TYPE 'B' SIGNS | | | |



PLAN
(SW-542 EXTENSION AND SW-541 INTAKE)

Extension unit may be used on either or both sides of SW-541 intakes. Details are similar when extension unit is on the opposite side.

- ① g3 for 6 inch standard curb; g5 for 4 inch sloped curb.
- ② c1 for 6 inch standard curb; c2 for 4 inch sloped curb. See SW-541 for reinforcing.
- ③ The location station is where the centerline of intake meets the back of the curb line.

Placing sequence: 1. Base; 2. Walls and Extension; 3. Top; 4. Insert

| REINFORCING BAR LIST | | | | | | | |
|----------------------|------|-------------|-------|-----|----------|----------|---------|
| BAR | SIZE | LOCATION | SHAPE | NO. | LENGTH | WEIGHT | SPACING |
| b2 | 4 | Intake Wall | | 3 | 2'-6" | 5.0 | 9" |
| f1 | 4 | Bottom | | 3 | 4'-9" | 9.5 | 9" |
| f2 | 4 | Bottom | | 4 | 1'-7" | 4.2 | 18" |
| g1 | 4 | Wall | | 5 | Varies* | Varies* | 12" |
| g2 | 4 | Wall | | 1 | 4'-8" | 3.1 | - |
| g3 | 4 | Top | | 4 | Varies** | Varies** | 18" |
| g4 | 4 | Top | | 3 | 6'-4" | 12.7 | - |
| g5 | 4 | Top | | 4 | Varies** | Varies** | 18" |

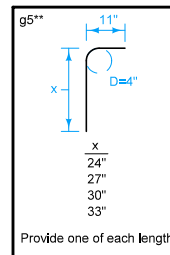
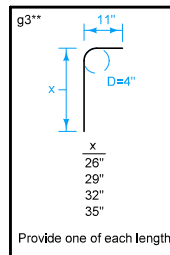
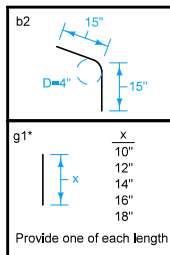
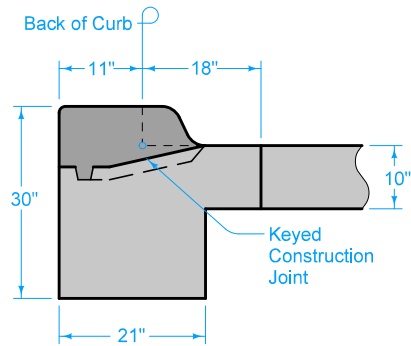
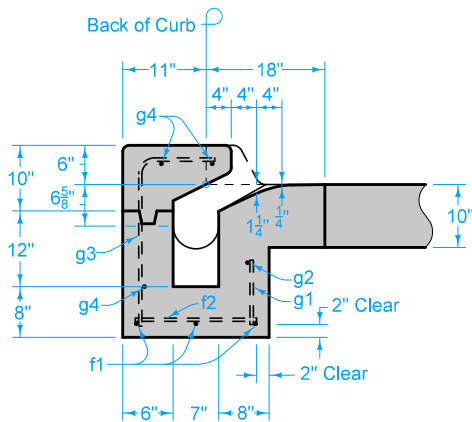


FIGURE 6010.542 SHEET 1 OF 4

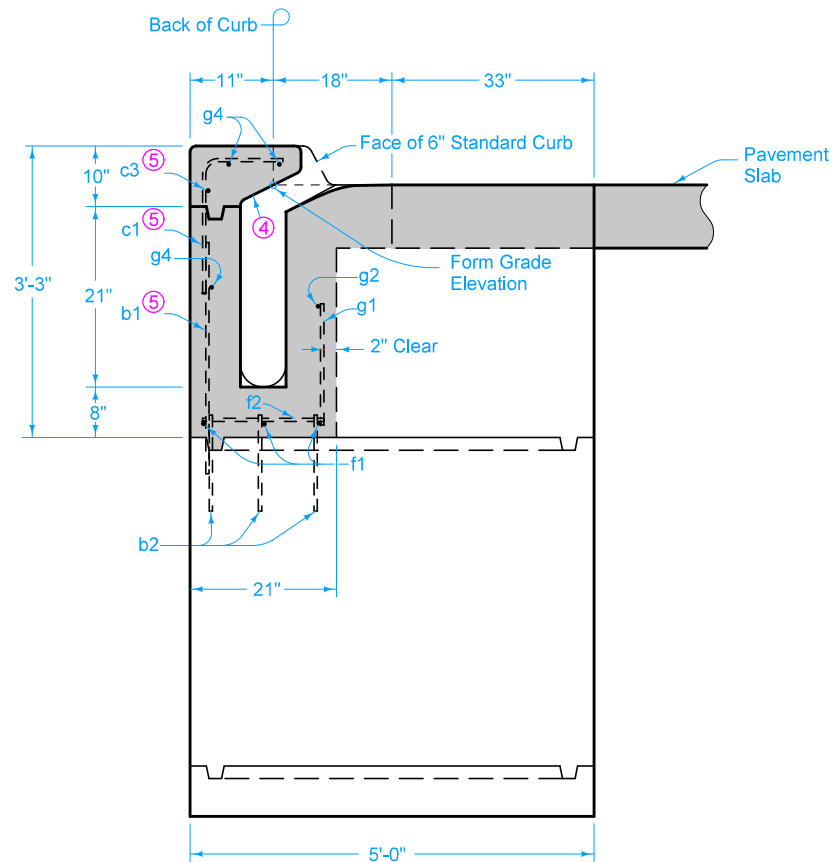
| | | | |
|--|-----------------|-------------------------|---------------|
| | REVISION | 5 | 10-20-20 |
| | FIGURE 6010.542 | STANDARD ROAD PLAN | SW-542 |
| REVISIONS: Removed Interim from standard. | | | SHEET 1 of 4 |
| | | | |
| SUDAS DIRECTOR | | DESIGN METHODS ENGINEER | |
| EXTENSION UNIT FOR OPEN-THROAT CURB INTAKE UNDER PAVEMENT | | | |



SECTION A-A



SECTION B-B

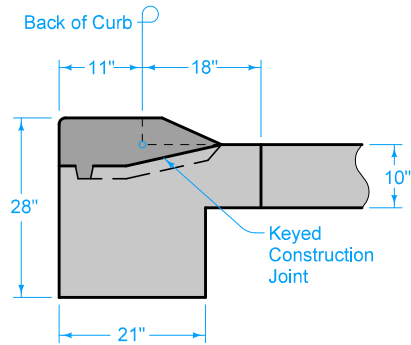


SECTION C-C

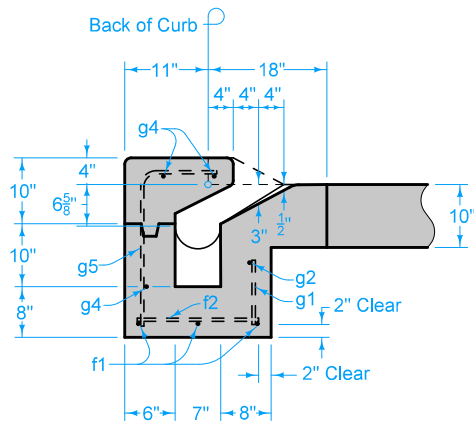
- ④ 2:1 Slope (Horizontal:Vertical)
- ⑤ See SW-541 for reinforcing.

6 INCH STANDARD CURB

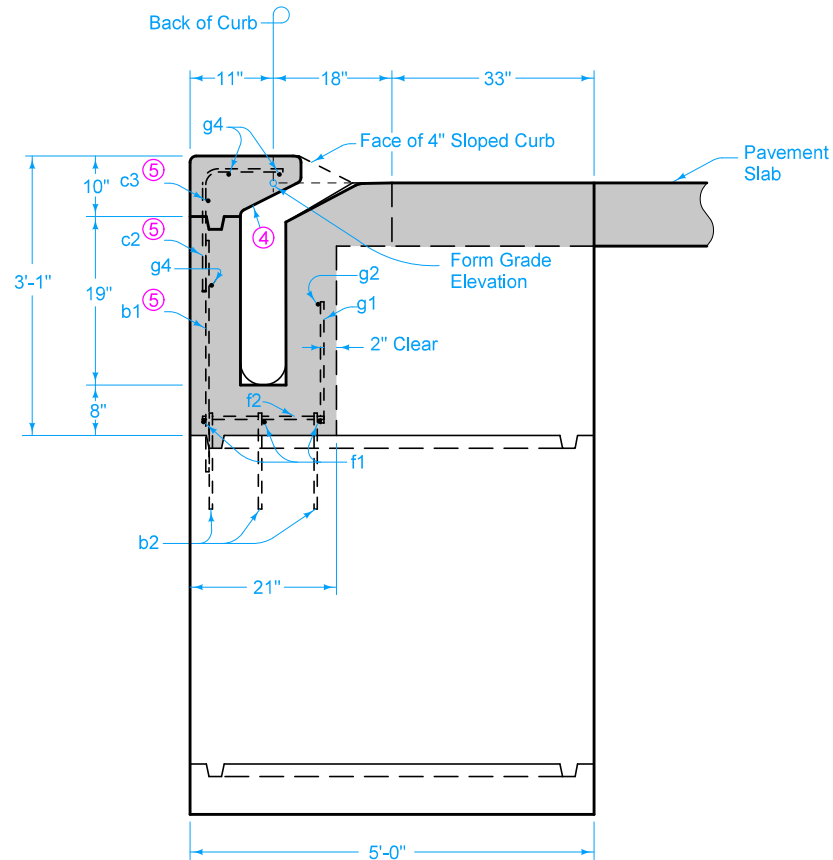
| | | | |
|--|-----------------|-----------------------------|---------------|
| | REVISION | 5 | 10-20-20 |
| | FIGURE 6010.542 | STANDARD ROAD PLAN | SW-542 |
| REVISIONS: Removed Interim from standard. | | | SHEET 2 of 4 |
| SUDAS DIRECTOR | | DESIGN METHODS ENGINEER | |
| EXTENSION UNIT FOR OPEN-THROAT CURB INTAKE UNDER PAVEMENT | | | |



SECTION A-A



SECTION B-B

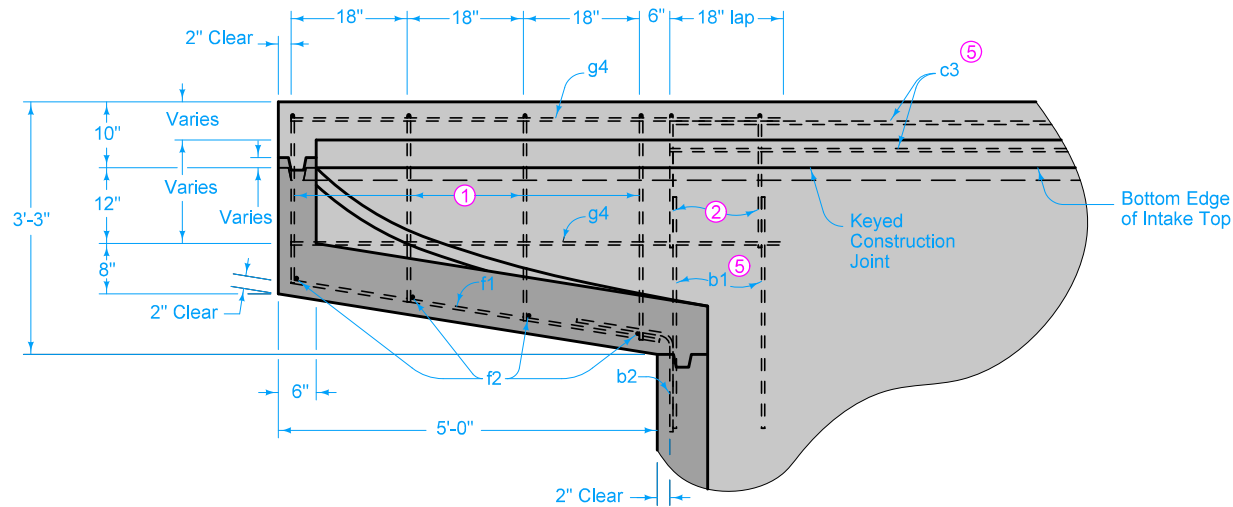


SECTION C-C

- ④ 2:1 Slope (Horizontal:Vertical)
- ⑤ See SW-541 for reinforcing.

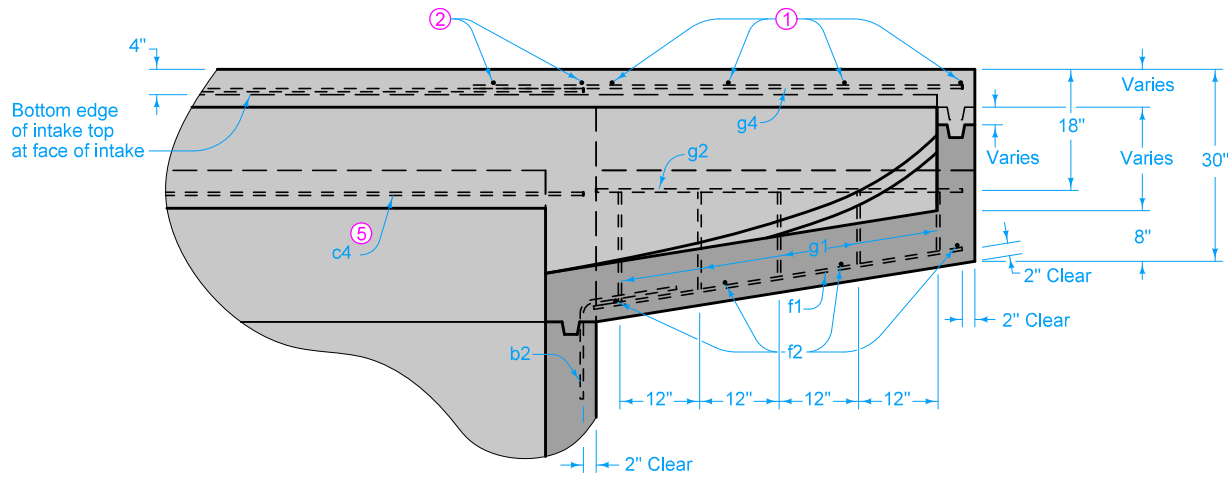
4 INCH SLOPED CURB

| | | | |
|--|-----------------|-----------------------------|---------------|
| | REVISION | 5 | 10-20-20 |
| | FIGURE 6010.542 | STANDARD ROAD PLAN | SW-542 |
| REVISIONS: Removed Interim from standard. | | | SHEET 3 of 4 |
| SUDAS DIRECTOR | | DESIGN METHODS ENGINEER | |
| EXTENSION UNIT FOR OPEN-THROAT CURB INTAKE UNDER PAVEMENT | | | |



SECTION D-D

- ① g3 for 6 inch standard curb; g5 for 4 inch sloped curb.
- ② c1 for 6 inch standard curb; c2 for 4 inch sloped curb. See SW-541 for reinforcing.
- ⑤ See SW-541 for reinforcing.



SECTION E-E

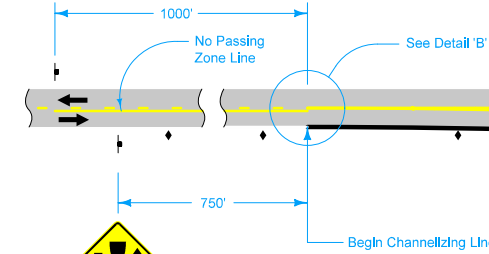
FIGURE 6010.542 SHEET 4 OF 4

| | | | |
|--|-----------------|-----------------------------|---------------|
| | REVISION | 5 | 10-20-20 |
| | FIGURE 6010.542 | STANDARD ROAD PLAN | SW-542 |
| REVISIONS: Removed Interim from standard. | | | SHEET 4 of 4 |
| SUDAS DIRECTOR | | DESIGN METHODS ENGINEER | |
| EXTENSION UNIT FOR OPEN-THROAT CURB INTAKE UNDER PAVEMENT | | | |

CROSS TO THE RIGHT



W14-3
48" X 64" X 64"



W6-1
48" x 48"

Channelizing Lines

100' C/C

Channelizing Line

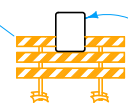


R6-1
30" x 30"



W6-3
48" x 48"

8" Yellow Cross Hatching
Lines, 20' C/C @ 45°



R4-7B
36" x 48"

Future
Roadway Pavement



R5-1
30" x 30"



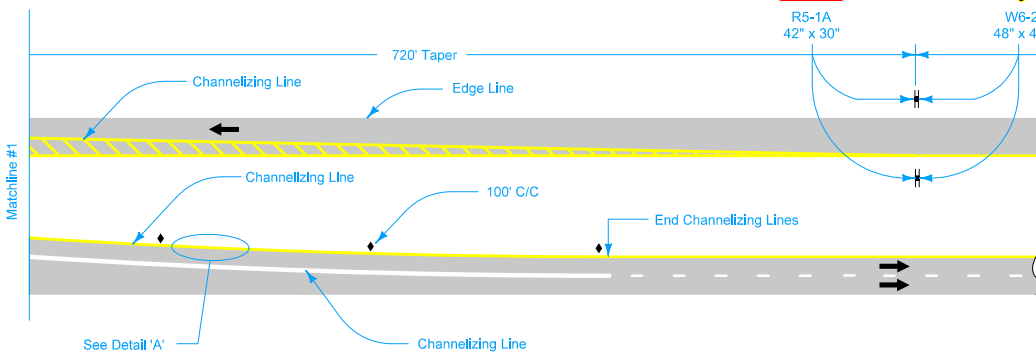
R5-1A
42" x 30"



W6-2
48" x 48"



W4-2
48" x 48"



See Detail 'A'

Channelizing Line

750'

200'

300'

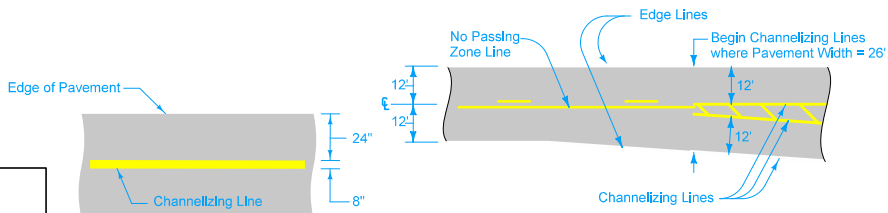
End Broken Lane Line

Possible Contract Items:
Pavement Marking Items
Permanent Road Closure
Delineators



W9-2
48" x 48"

Possible Tabulations: 102-4, 108-22



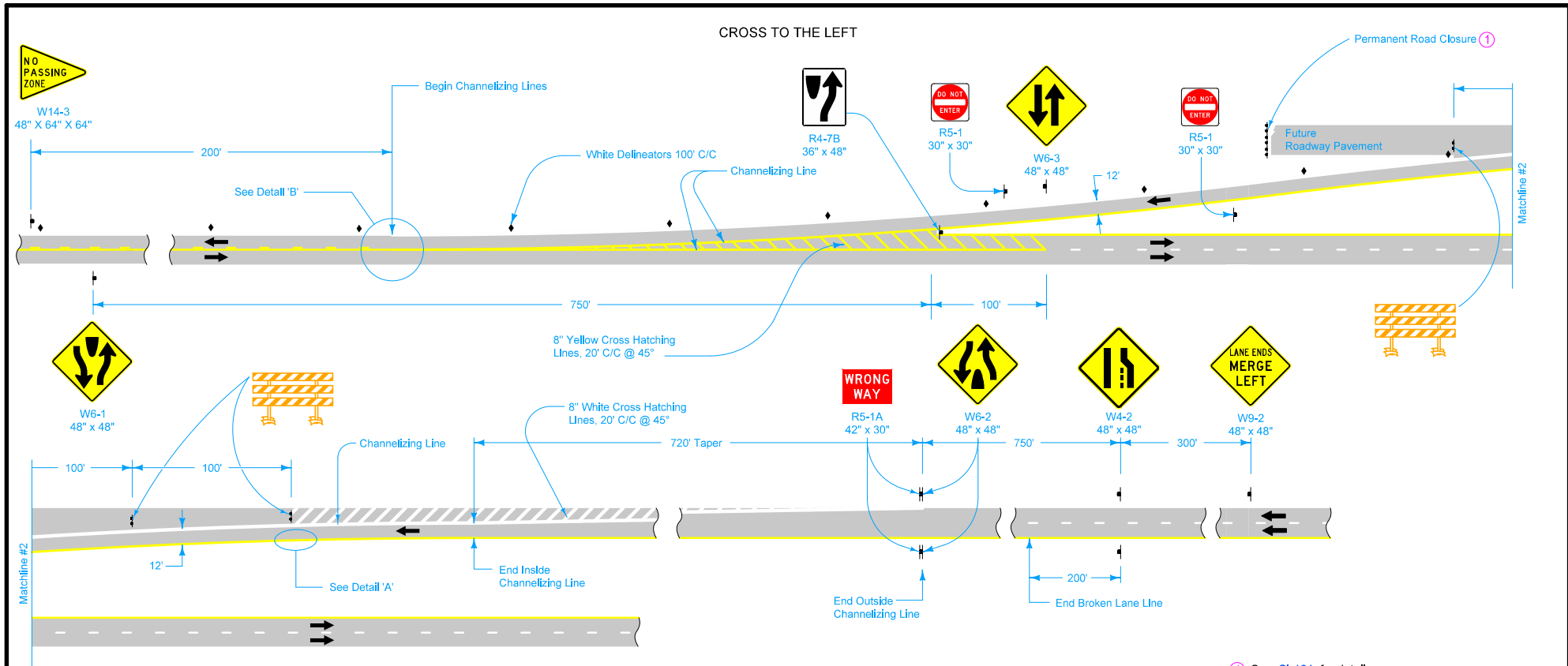
DETAIL 'A'
TYPICAL CHANNELIZING LINE PLACEMENT

DETAIL 'B'
BEGINNING OF PAINTED MEDIAN

| LEGEND | |
|--------|----------------------|
| | Traffic Sign |
| | Type III Barricade |
| | Delineator |
| | Direction of Traffic |

Place yellow warning signs with black legend and symbols.
Place Type III barricades complying with Section 2B.67 of the MUTCD.

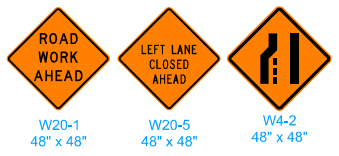
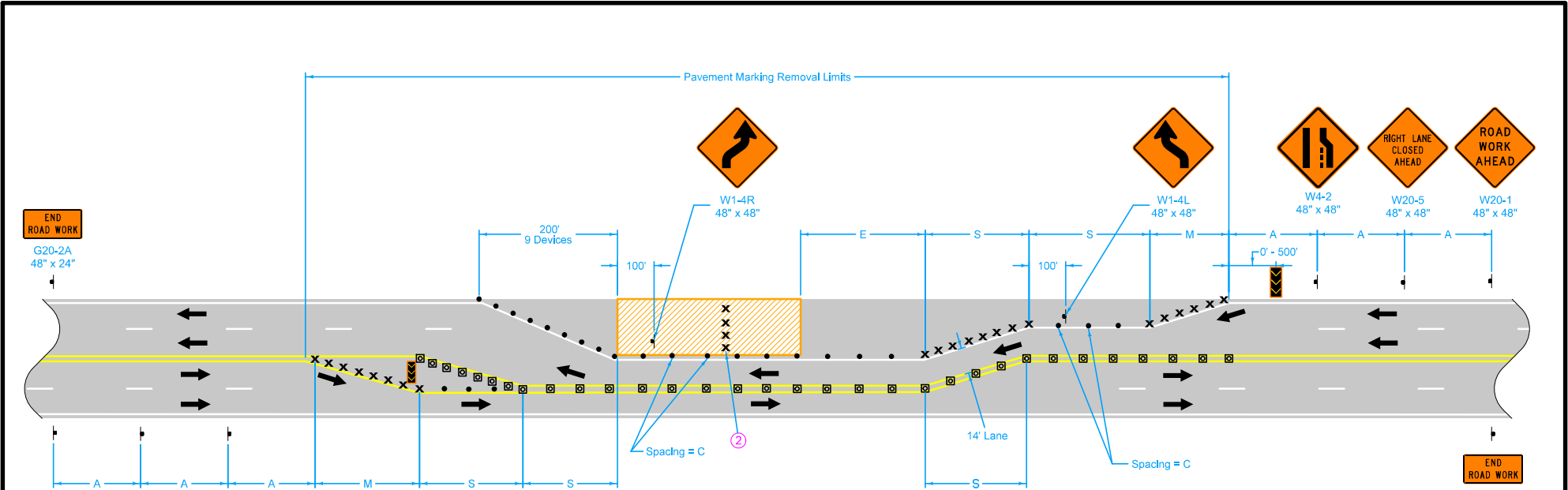
| | |
|---|--------------------|
| | REVISION |
| | 9 10-20-20 |
| | STANDARD ROAD PLAN |
| TC-62 | |
| SHEET 1 of 2 | |
| REVISIONS: Modified Type III barricades note from Section 3F.01 to Section 2B.67. | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| PERMANENT TWO-LANE TO FOUR-LANE DIVIDED TRANSITION | |



① See SI-181 for details.

| LEGEND | |
|--------|----------------------|
| | Traffic Sign |
| | Type III Barricade |
| | Delineator |
| | Direction of Traffic |

| | |
|---|--------------|
| IOWA DOT | REVISION |
| | 9 10-20-20 |
| | TC-62 |
| STANDARD ROAD PLAN | |
| SHEET 2 of 2 | |
| REVISIONS: Modified Type III barricades note from Section 3F.01 to Section 2B.67. | |
| <i>Scott Miller</i> | |
| APPROVED BY DESIGN METHODS ENGINEER | |
| PERMANENT TWO-LANE TO FOUR-LANE DIVIDED TRANSITION | |



LEGEND

- Traffic Sign
- Drum ①
- 42" Channelizer
- Arrow Board
- Work Area
- Direction of Traffic
- Temporary Lane Separator System ③

| SPEED LIMIT (mph) | A | C | D | E | M | S |
|-------------------|-------|------|-----|---------|------|------|
| 35 or less | 250' | 40' | 35' | 0'-200' | 245' | 140' |
| 40 | 500' | 80' | 40' | 0'-300' | 320' | 160' |
| 45 | 700' | 80' | 45' | 0'-400' | 630' | 315' |
| 50 | 700' | 80' | 45' | 400' | 630' | 315' |
| 55 - 60 | 1000' | 100' | 55' | 600' | 770' | 385' |

For traffic control zones in place for 3 calendar days or less, place arrow boards, devices and signs as shown. For traffic control zones in place for 4 calendar days or more, also remove permanent pavement markings and place temporary pavement markings as shown.

When this layout is used during nighttime hours and the width of existing traffic lanes is 11 feet or less, use tubular markers to separate two-way two-lane 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.
- ③ For work zones in place more than 3 calendar days, use TLSS. For work zones in place for 3 calendar days or less, 42" channelizers spaced at 40' c/c may be substituted for TLSS.

Possible Contract Items:
 Pavement Marking Items
 Pavement Markings Removed
 Traffic Control
 Temporary Lane Separator System

Possible Tabulation:
 108-22

IOWA DOT

STANDARD ROAD PLAN

REVISIONS: Modified circle note 3.

APPROVED BY DESIGN METHODS ENGINEER

CLOSURE OF TWO ADJACENT LANES ON UNDIVIDED HIGHWAY

| | | |
|---------------|----|----------|
| REVISION | 10 | 10-20-20 |
| TC-423 | | |
| SHEET 1 of 1 | | |