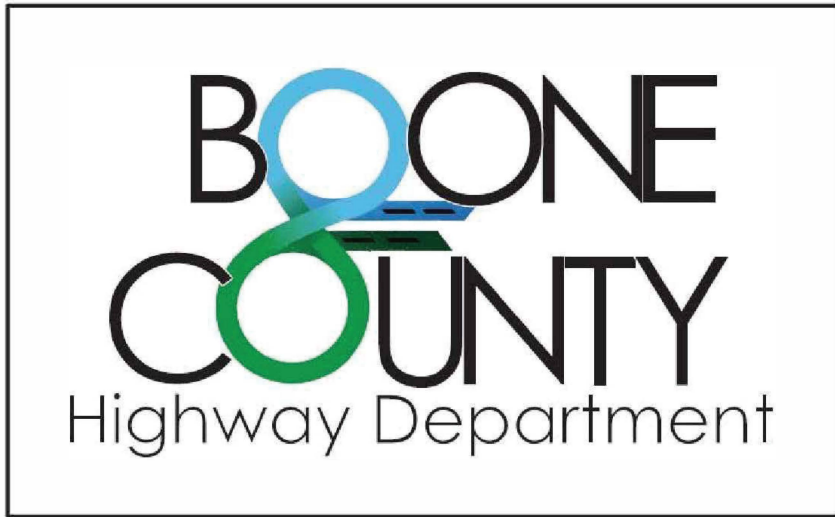


BOONE COUNTY HIGHWAY DEPARTMENT

STANDARD DRAWINGS



Boone County

THESE BOONE COUNTY HIGHWAY DEPARTMENT STANDARD DRAWINGS ARE APPROVED ON THIS 21st DAY OF AUGUST, 2023 BY:

THE BOONE COUNTY HIGHWAY DEPARTMENT:

BY: 
Nick Parr, Director of Highways

8/21/2023
Date

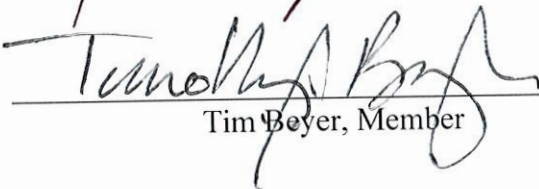
THE BOONE COUNTY BOARD OF COMMISSIONERS:

BY: 
Donnie Lawson, President

08/21/2023
Date

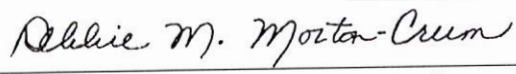

Jeff Wolfe, Member

08/21/23
Date


Tim Beyer, Member

8/21/2023
Date

ATTEST:


Debbie Crum, County Auditor

8/21/23
Date

ALL PREVIOUS STANDARD DRAWINGS ARE HEREBY REPEALED AND REPLACED WITH THESE STANDARD DRAWINGS, EFFECTIVE ON THIS 21st DAY OF AUGUST, 2023.



BOONE COUNTY HIGHWAY DEPARTMENT
1955 INDIANAPOLIS AVENUE
LEBANON, IN 46052

INDEX OF BOONE COUNTY STANDARD DRAWINGS

Section 100	General Provisions (Not Used)
Section 200	Earthwork (Not Used)
Section 300	Aggregate Pavements And Bases
Section 400	Asphalt Pavements
Section 500	Concrete Pavements (Not Used)
Section 600	Incidental Construction
Section 700	Structures (Not Used)
Section 800	Traffic Control Devices
Section 900	Street Signs



INDEX OF BOONE COUNTY STANDARDS
200 SERIES STANDARD DRAWINGS
EARTHWORK

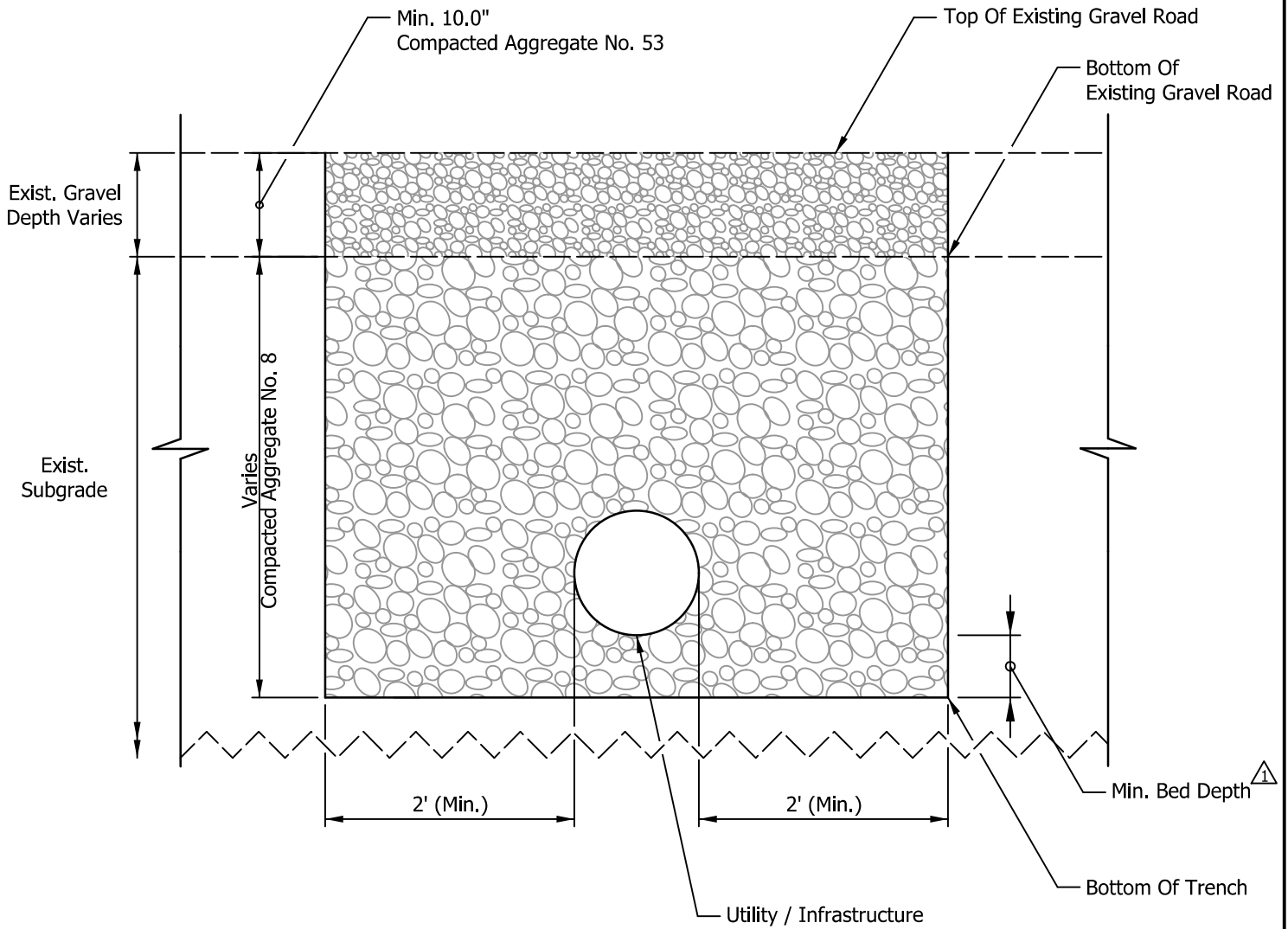
NOT USED

INDEX OF BOONE COUNTY STANDARDS
300 SERIES STANDARD DRAWINGS
AGGREGATE PAVEMENTS AND BASES

Typical Gravel Road Cut Patch Detail.....BC-302-001



3/27/2019 7:23:52 AM I:\170004 - Boone County As-Needed Assistance\Standards Consultation\09Road\04 Design files\02 DGN\Plans\3005\302-001_BC_Full Depth Gravel Road Cut_Typical.dgn



NOTES:



Bed Depth	
Pipe Diameter (in.)	Min. Bed Depth (in.)
6" To 15"	6"
18" And Above	8"

BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL GRAVEL ROAD CUT PATCH DETAIL



STANDARD DRAWING
 NO. BC-302-001
 SHEET 1 OF 1
 SCALE: NO SCALE

INDEX OF BOONE COUNTY STANDARDS
400 SERIES STANDARD DRAWINGS
ASPHALT PAVEMENTS

Typical Rural Arterial Street Cross Section.....BC-400-001

Typical Urban Arterial Street With Raised Median Cross Section.....BC-400-002A

Typical Urban Arterial Street With Striped Median Cross Section.....BC-400-002B

Typical Rural Major Collector Cross Section.....BC-400-003

Typical Urban Major Collector With Raised Median Cross Section.....BC-400-004A

Typical Urban Major Collector With Striped Median Cross Section.....BC-400-004B

Typical Rural Minor Collector Street Cross Section.....BC-400-005

Typical Urban Minor Collector Street Cross Section.....BC-400-006

Typical Rural Local Street/Residential Feeder Cross Section.....BC-400-007

Typical Urban Local Street/Residential Feeder Cross Section.....BC-400-008

Typical Underdrain Detail.....BC-401-001

Typical Full Depth Patch Detail.....BC-402-001

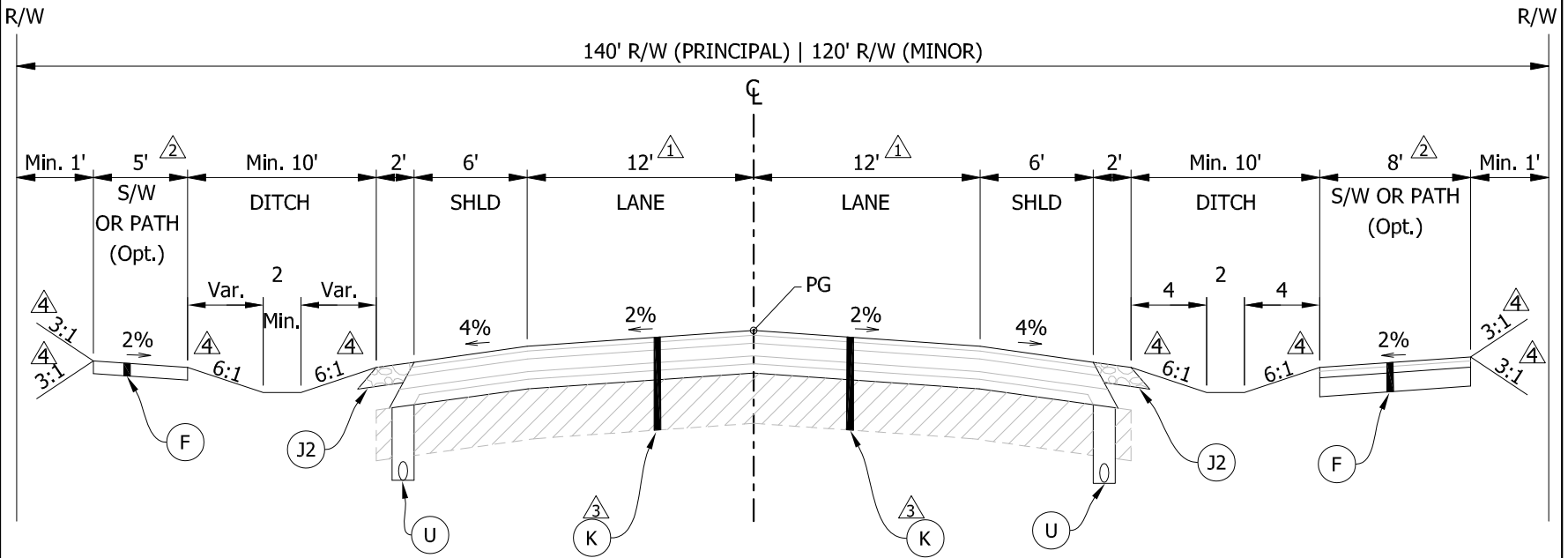
Typical HMA Road Cut Patch Detail.....BC-402-002

Terminus Transitions.....BC-403-001

Typical Safety Edge Details.....BC-403-002

TYPICAL RURAL ARTERIAL STREET
CROSS SECTION

BOONE COUNTY HIGHWAY DEPARTMENT



LEGEND:

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (J2) 6.0" Compacted Aggregate Shoulder
- (K)

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001

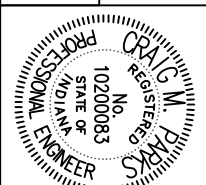
NOTES:

- 1 See Boone County Thoroughfare Plan;
2 Lane Roadway - 1 x 12' Lane Each Direction
4 Lane Roadway - 2 x 12' Lanes Each Direction
Addition Of Auxilliary Lane - 12'
Addition Of Optional Bike Lane - 5'
- 2 See Boone County Thoroughfare Plan;
Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path
- 3 Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- 4 Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- 5. For Safety Edge Details, See STD Drawing BC-403-002

RECOMMENDED FOR APPROVAL

[Signature]
DESIGN ENGINEER

REVISED 07/05/2022



STANDARD DRAWING

NO. BC-400-001

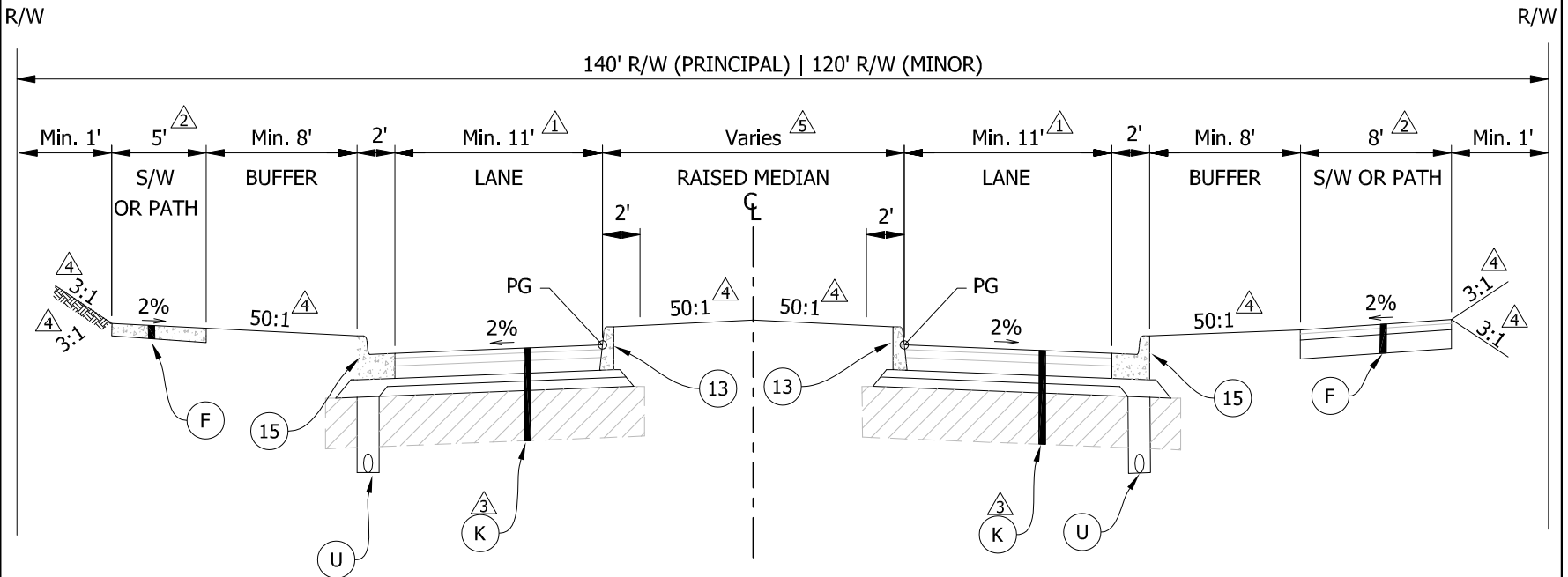
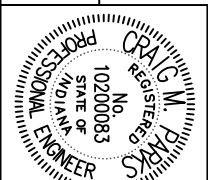
SHEET 1 OF 1

SCALE: NO SCALE

TYPICAL URBAN ARTERIAL STREET WITH
RAISED MEDIAN CROSS SECTION

BOONE COUNTY HIGHWAY DEPARTMENT

RECOMMENDED FOR APPROVAL
[Signature]
DESIGN ENGINEER
REVISED 07/05/2022



LEGEND:

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K)

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrde Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (13) Concrete Curb - See STD Drawing BC-601-001
- (15) Concrete Curb And Gutter - See STD Drawing BC-601-001

NOTES:

- △1 See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.) 4 Lane Roadway - 2 x 11' Lanes Each Direction (Min.) Addition Of Auxiliary Lane - 11' (Min.) Addition Of Optional Bike Lane - 5'
- △2 See Boone County Thoroughfare Plan; Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- △3 Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- △4 Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- △5 See Boone County Thoroughfare Plan; Optional Raised Median 3' - 16' When Median < 3' Use STD Drawing BC-400-002B

STANDARD DRAWING

NO. BC-400-002A

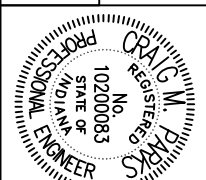
SHEET 1 OF 1

SCALE: NO SCALE

TYPICAL URBAN ARTERIAL STREET WITH
STRIPED MEDIAN CROSS SECTION

BOONE COUNTY HIGHWAY DEPARTMENT

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DESIGN ENGINEER
REVISED 07/05/2022

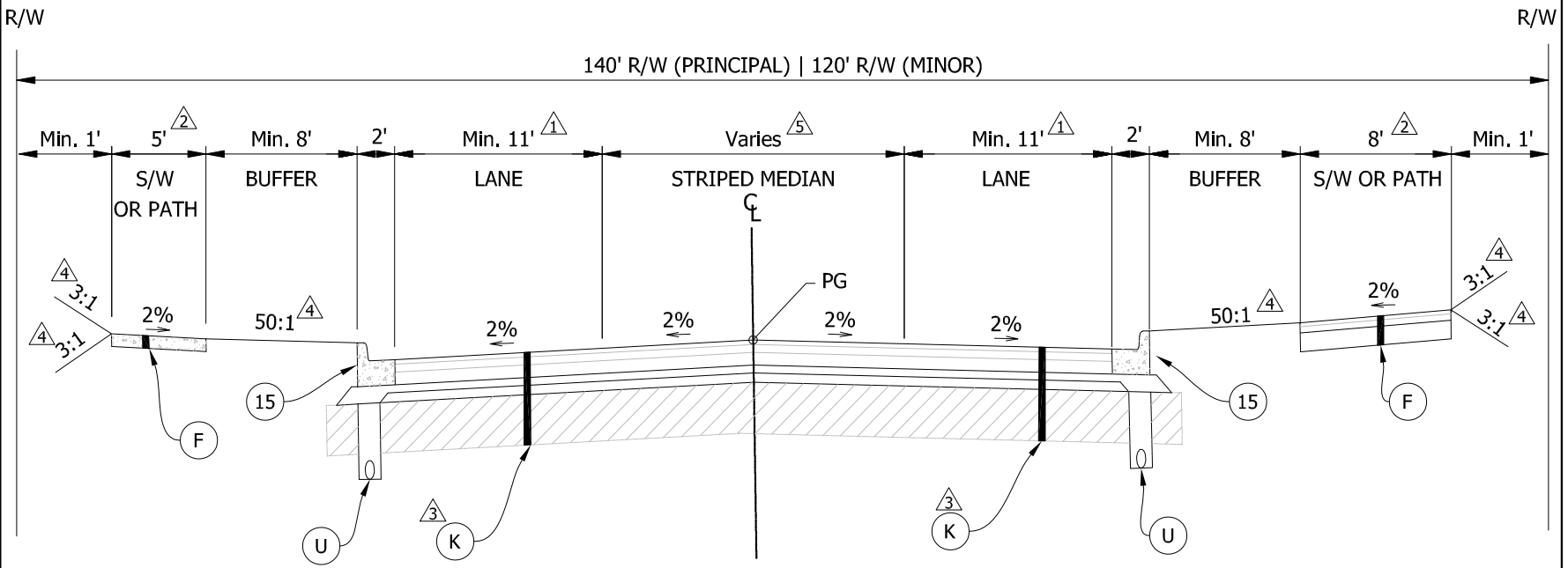


STANDARD DRAWING

NO. BC-400-002B

SHEET 1 OF 1

SCALE: NO SCALE



LEGEND:

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K) Underdrain (Typ.) - See STD Drawing BC-401-001
- (U) Concrete Curb And Gutter - See STD Drawing BC-601-001
- (15) Concrete Curb And Gutter - See STD Drawing BC-601-001

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrde Treatment IB or IC	Yes	Yes

NOTES:

- △1 See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.) 4 Lane Roadway - 2 x 11' Lanes Each Direction (Min.) Addition Of Auxiliary Lane - 11' (Min.) Addition Of Optional Bike Lane - 5'
- △2 See Boone County Thoroughfare Plan; Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- △3 Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- △4 Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- △5 See Boone County Thoroughfare Plan; Optional Striped Median 0' - 16'

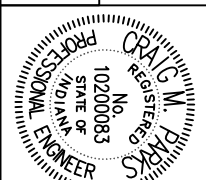
TYPICAL RURAL MAJOR COLLECTOR STREET
CROSS SECTION

BOONE COUNTY HIGHWAY DEPARTMENT

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DESIGN ENGINEER

REVISED 07/05/2022

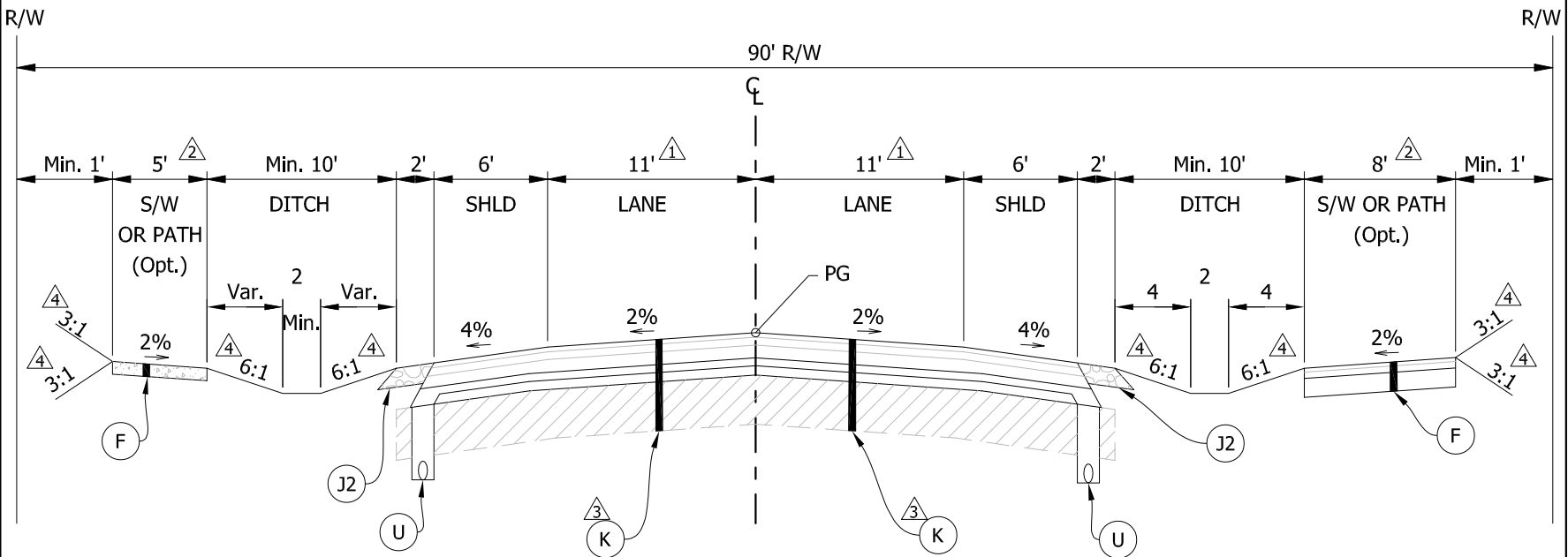


STANDARD DRAWING

NO. BC-400-003

SHEET 1 OF 1

SCALE: NO SCALE



LEGEND:

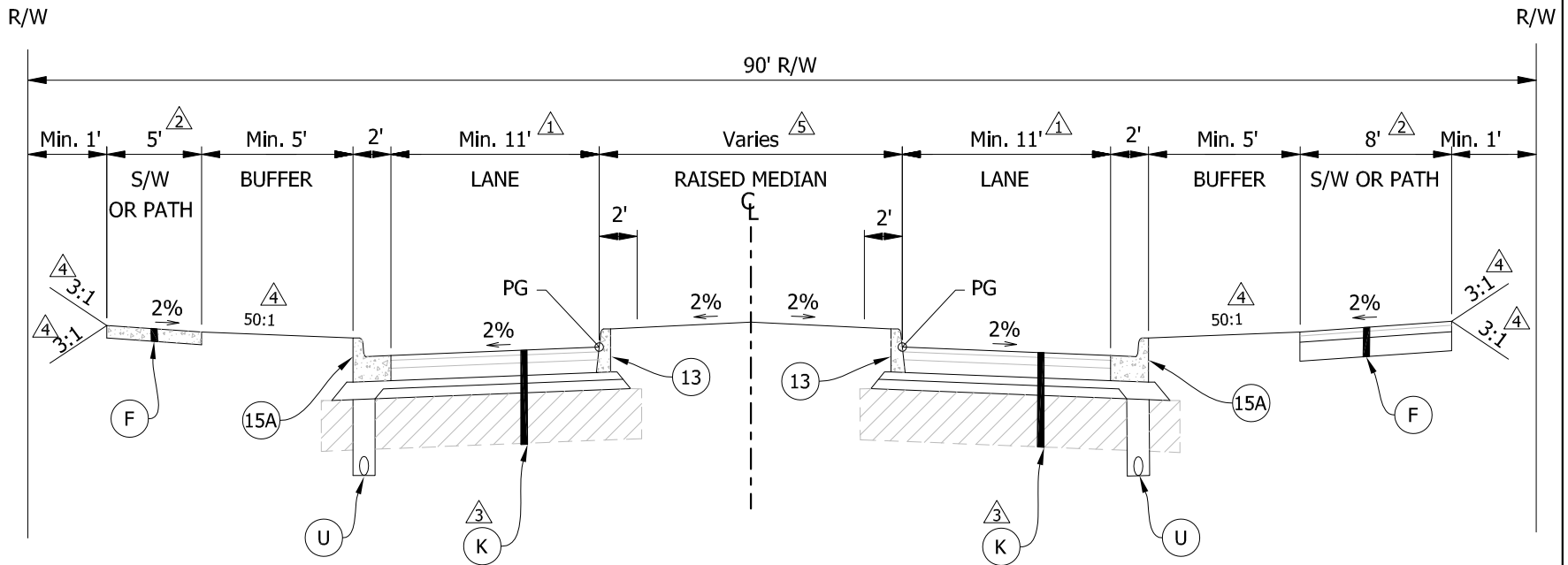
- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (J2) 6.0" Compacted Aggregate Shoulder
- (K)

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrde Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001

NOTES:

1. See Boone County Thoroughfare Plan;
2 Lane Roadway - 1 x 11' Lane Each Direction
Addition Of Optional Bike Lane - 5'
Addition Of Auxiliary Lane - 11'
2. See Boone County Thoroughfare Plan;
Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path
3. Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
4. Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
5. For Safety Edge Details, See STD Drawing BC-403-002

BOONE COUNTY HIGHWAY DEPARTMENT
TYPICAL URBAN MAJOR COLLECTOR
STREET WITH RAISED MEDIAN CROSS SECTION



LEGEND:

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K)

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15A) Mountable Concrete Curb And Gutter (Typ.) - See STD Drawing BC-601-001
- (13) Concrete Curb - See STD Drawing BC-601-001

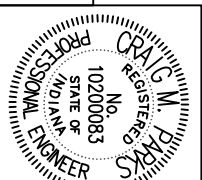
NOTES:

- △1 See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
Addition Of Optional Bike Lane - 5'
Addition Of Auxiliary Lane - 11' (Min.)
Addition Of Optional Parking Lane - 8' (Min.)
- △2 See Boone County Thoroughfare Plan; Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- △3 Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- △4 Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- △5 See Boone County Thoroughfare Plan; Optional Raised Median 3' - 16'
When Median < 3' Use STD Drawing BC-400-004B

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[Signature]
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STANDARD DRAWING

NO. BC-400-004A

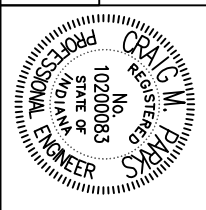
SHEET 1 OF 1

SCALE: NO SCALE

TYPICAL URBAN MAJOR COLLECTOR
STREET WITH STRIPED MEDIAN CROSS SECTION

BOONE COUNTY HIGHWAY DEPARTMENT

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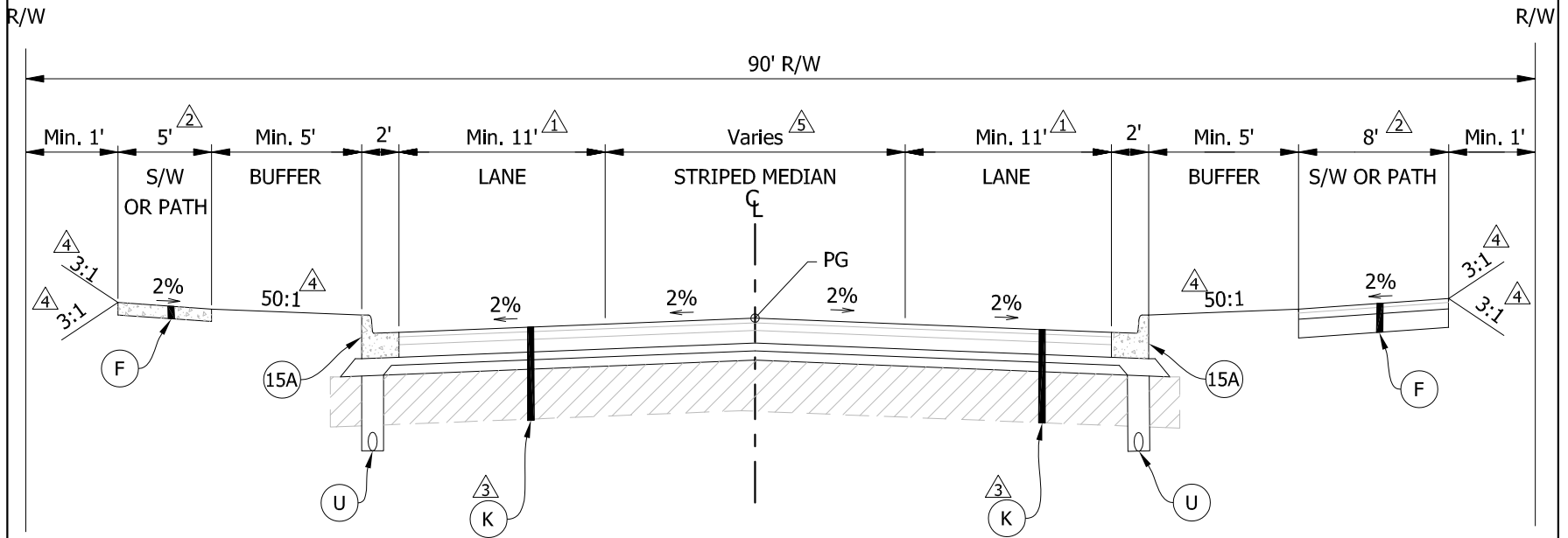


STANDARD DRAWING

NO. BC-400-004B

SHEET 1 OF 1

SCALE: NO SCALE



LEGEND:

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K) Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15A) Mountable Concrete Curb And Gutter (Typ.) - See STD Drawing BC-601-001

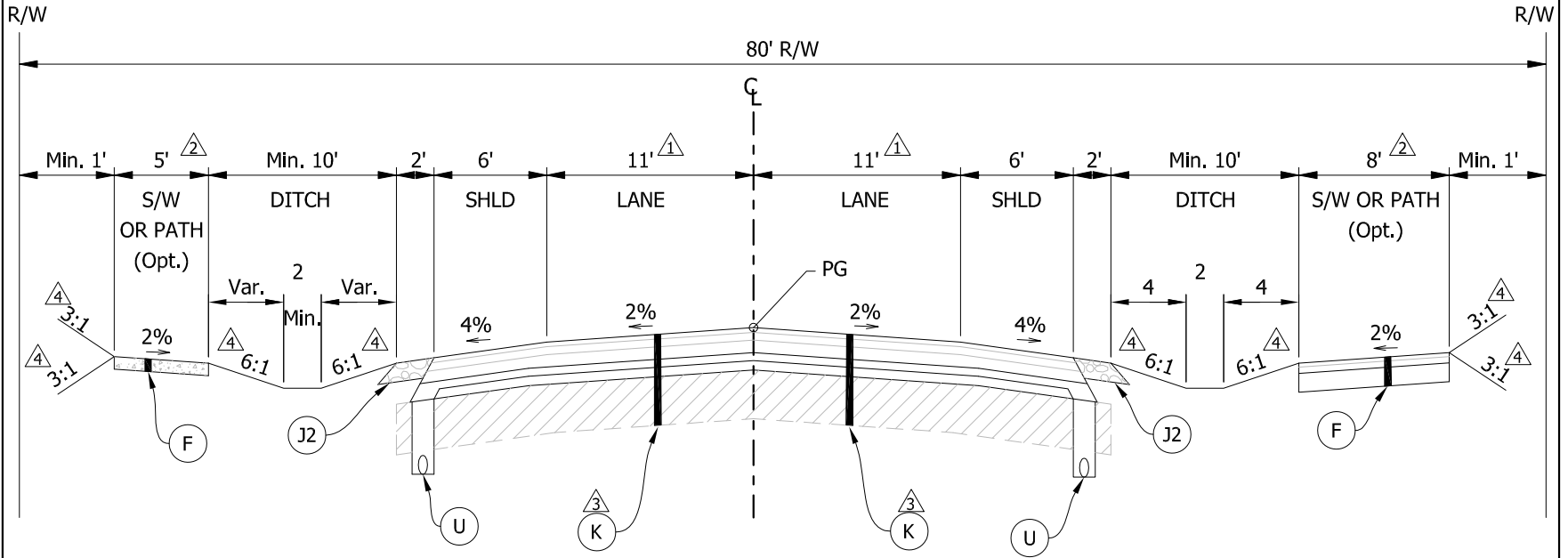
Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes

NOTES:

- (1) See Boone County Thoroughfare Plan;
2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
Addition Of Optional Bike Lane - 5'
Addition Of Optional Parking Lane - 8' (Min.)
- (2) See Boone County Thoroughfare Plan;
Both Side Require 5' Sidewalk Or 8' - 12' Multi-use Path
- (3) Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- (4) Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- (5) See Boone County Thoroughfare Plan;
Optional Striped Median 0' - 16'

TYPICAL RURAL MINOR COLLECTOR
STREET CROSS SECTION

BOONE COUNTY HIGHWAY DEPARTMENT



LEGEND:

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (J2) 6.0" Compacted Aggregate Shoulder
- (K)

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrde Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001

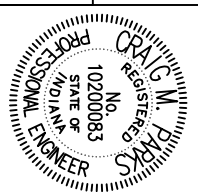
NOTES:

- △ See Boone County Thoroughfare Plan;
2 Lane Roadway - 1 x 11' Lane Each Direction
- △ See Boone County Thoroughfare Plan;
Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path
- △ Tack Coat To Be Applied Between Pavement Lifts And On
All Vertical Surfaces
- △ Foreslopes And Backslopes Shall Be In Accordance
With Clear Zone Requirements Set Forth By
INDOT Design Manual (Current Edition)
- △ For Safety Edge Details, See STD Drawing BC-403-002

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FOR APPROVAL

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REVISED 07/05/2022



STANDARD DRAWING

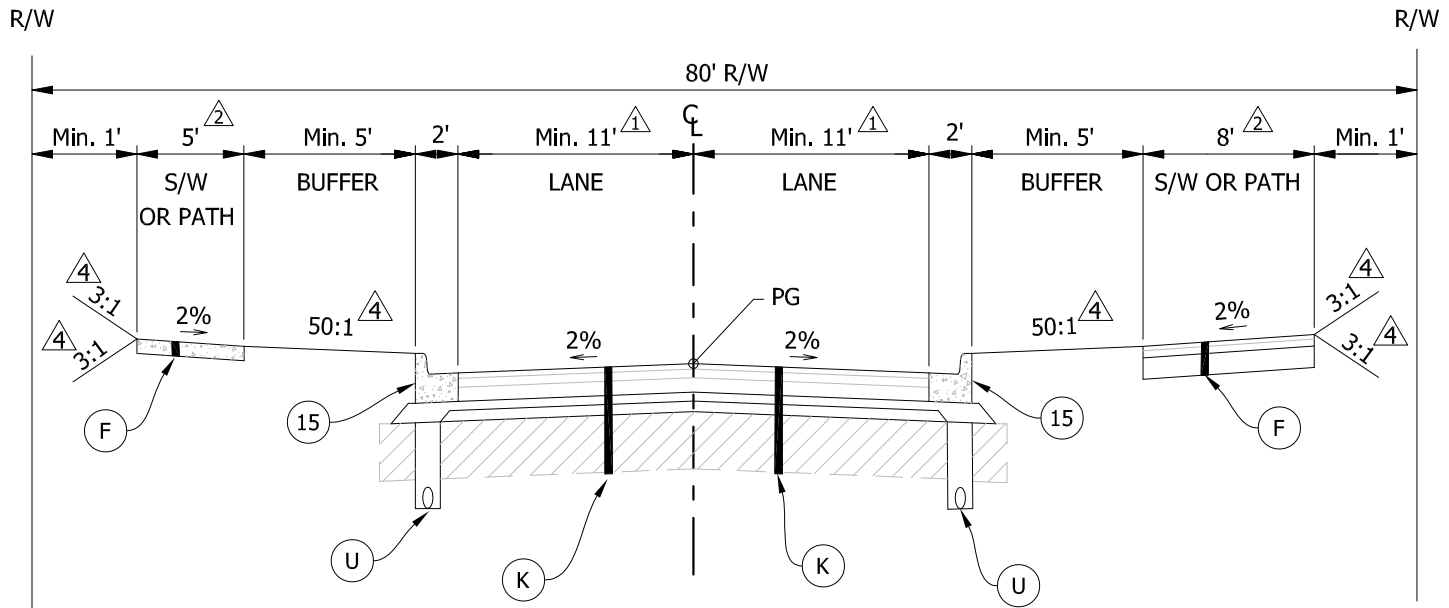
NO. BC-400-005

SHEET 1 OF 1

SCALE: NO SCALE

TYPICAL URBAN MINOR COLLECTOR
STREET CROSS SECTION

BOONE COUNTY HIGHWAY DEPARTMENT



LEGEND:

- (F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002
- (K)

Pavement Layer	Bridge Rehabilitation/ Replacement Approach	New Construction or Expansion
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	2.5"
Compacted Aggregate No. 53	6.0"	3.0"
INDOT Subgrade Treatment IB or IC	Yes	Yes
- (U) Underdrain (Typ.) - See STD Drawing BC-401-001
- (15) Concrete Curb And Gutter - See STD Drawing BC-601-001

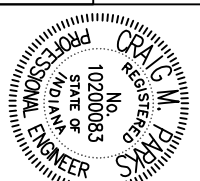
NOTES:

- ① See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 11' Lane Each Direction (Min.)
Addition Of Optional Bike Lane - 4'
Addition Of Optional Parking Lane - 8' (Min.)
- ② See Boone County Thoroughfare Plan; Both Sides Require 5' Sidewalk Or 8' - 12' Multi-use Path
- ③ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces
- ④ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)

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REVISED 07/05/2022

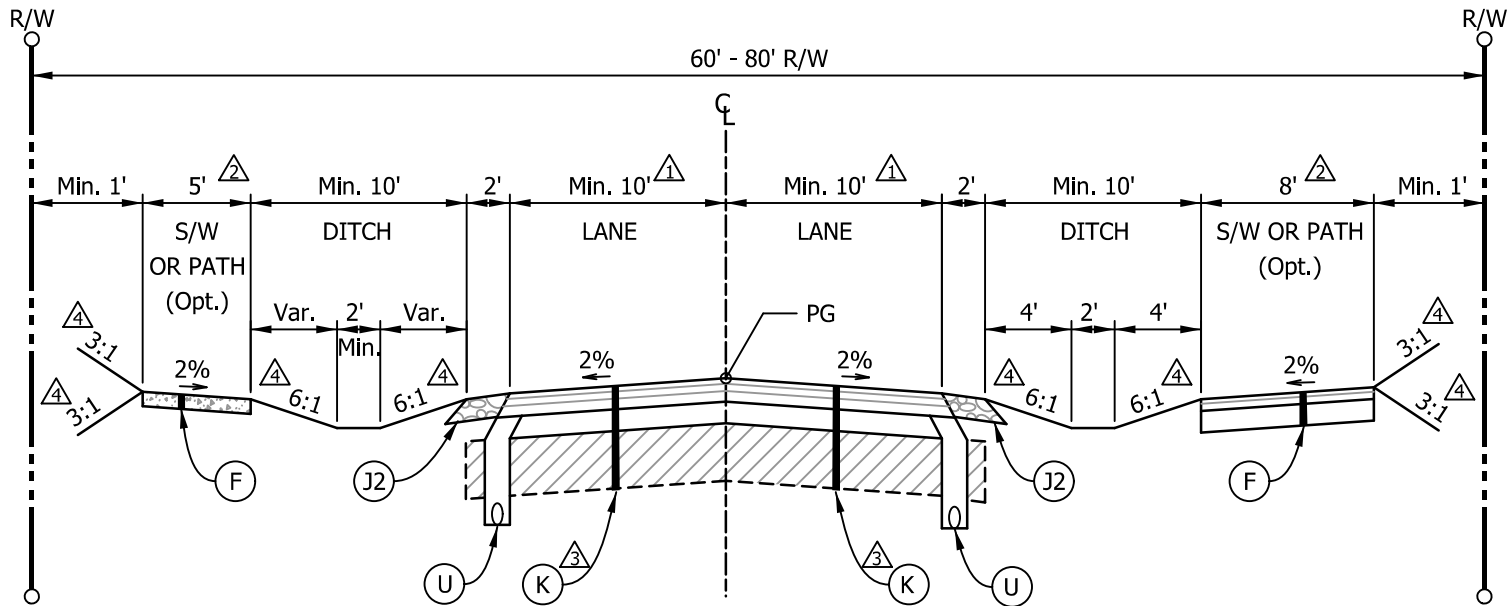


STANDARD DRAWING

NO. BC-400-006

SHEET 1 OF 1

SCALE: NO SCALE



LEGEND:

(F) Concrete Sidewalk - See STD Drawing BC-602-001 Or HMA Path - See STD Drawing BC-602-002

(J2) 6.0" Compacted Aggregate Shoulder

Pavement Layer	Local Streets	Residential Feeder
HMA Surface, 9.5mm, Type B	1.5"	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base, 19.0mm, Type B	3.0"	4.0"
HMA Intermediate OG, 19.0mm, Type B	-	-
Compacted Aggregate No. 53	6.0"	8.0"
INDOT Subgrade Treatment, IB or IC	Yes	Yes

(U) Underdrain (Typ.) - See STD Drawing BC-401-001

NOTES:

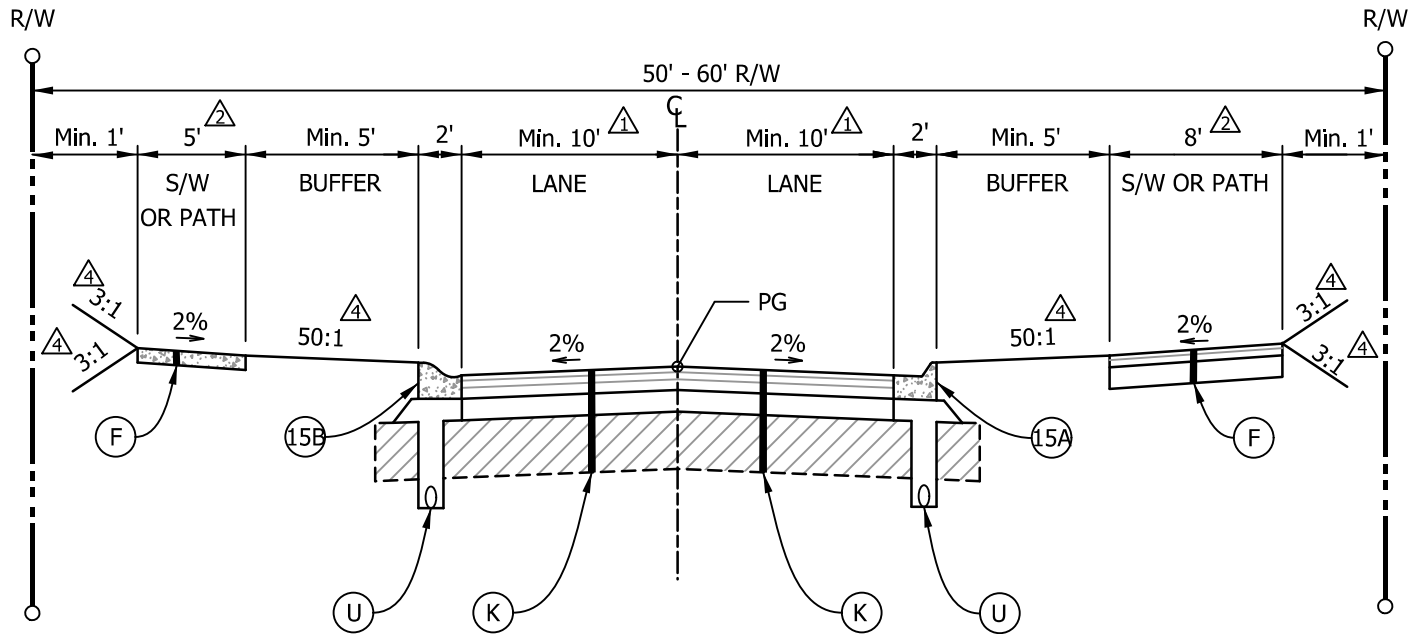
△ See Boone County Thoroughfare Plan; 2 Lane Roadway - 1 x 10' Lane Each Direction (Min.)

△ See Boone County Thoroughfare Plan; Both Sides Optional 5' Sidewalk Or 8' - 12' Multi-use Path

△ Tack Coat To Be Applied Between Pavement Lifts And On All Vertical Surfaces

△ Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)

5. For Safety Edge Details, See STD Drawing BC-403-002



LEGEND:

NOTES:

(F) Concrete Sidewalk - See STD Drawing BC-602-001 Or
HMA Path - See STD Drawing BC-602-002

Pavement Layer	Local Streets	Residential Feeder
	HMA Surface, 9.5mm, Type B	1.5"
HMA Intermediate, 12.5mm, Type B	2.0"	2.5"
HMA Base, 19.0mm, Type B	3.0"	2.5"
HMA Intermediate OG, 19.0mm, Type B	-	2.0"
Compacted Aggregate No. 53	6.0"	8.0"
INDOT Subgrade Treatment, IB or IC	Yes	Yes

(A) See Boone County Thoroughfare Plan;
2 Lane Roadway - 1 x 10' Lane Each Direction (Min.)
Addition Of Optional Bike Lane - 4'
Addition Of Optional Parking Lane - 8' (Min.)

(A) See Boone County Thoroughfare Plan;
Both Sides Required 5' Sidewalk Or 8' - 12' Multi-use Path

(A) Tack Coat To Be Applied Between Pavement Lifts And On
All Vertical Surfaces

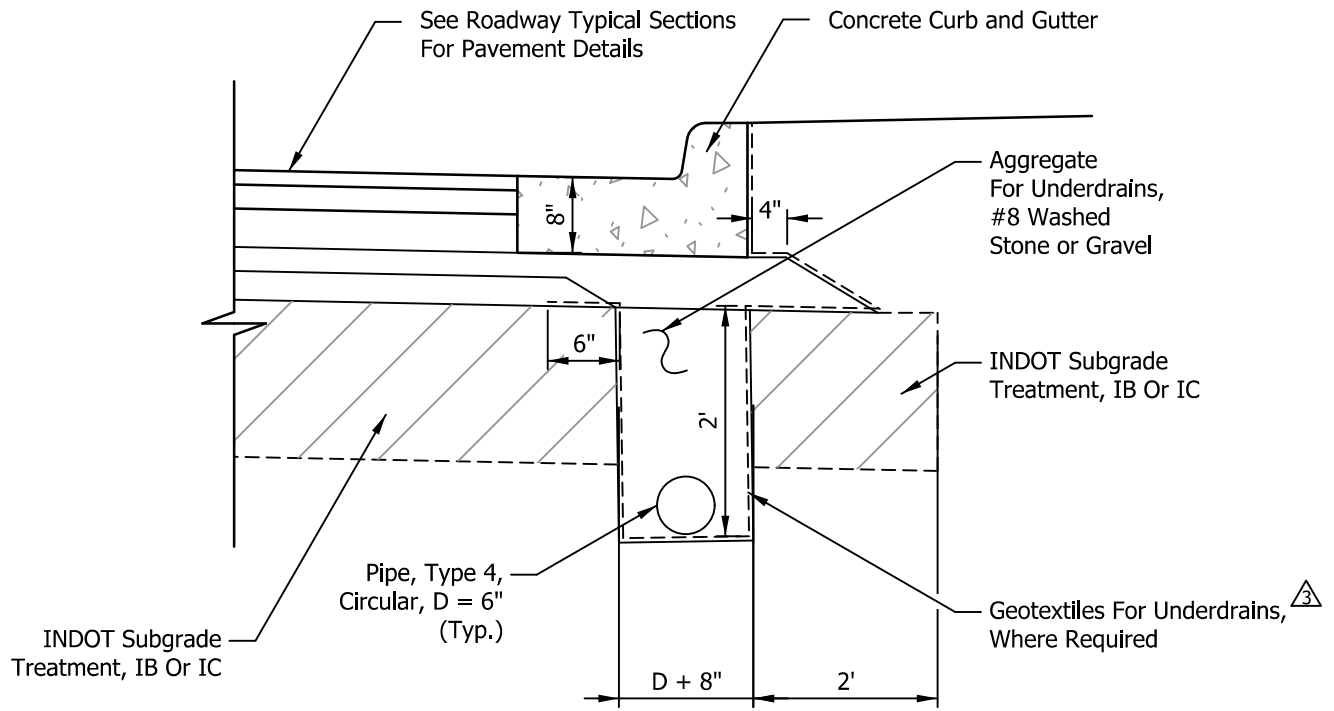
(A) Foreslopes And Backslopes Shall Be In Accordance
With Clear Zone Requirements Set Forth By
INDOT Design Manual (Current Edition)

(U) Underdrain (Typ.) - See STD Drawing BC-401-001

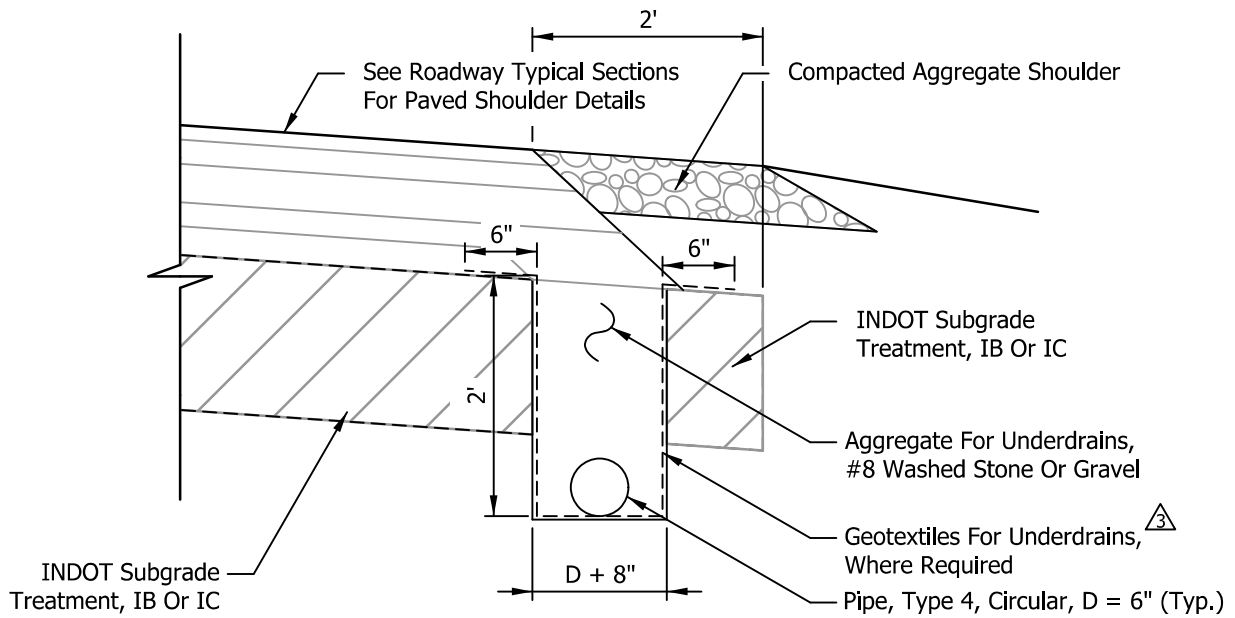
(15A) Mountable Concrete Curb And Gutter (Typ.) - See STD Drawing BC-601-001
Local Streets Only

(15B) Rolled Curb (Typ.) - See STD Drawing BC-601-001
Subdivision Only

3/27/2019 7:23:58 AM I:\P\170004 - Boone County As-Needed Assistance\Standards Consultation\09Road\04 Design files\02 DGN\Plans\4005\401-001_BC_UnderDrain_Detail.dgn



CURB AND GUTTER UNDERDRAIN DETAIL



PAVED SHOULDER UNDERDRAIN DETAIL

NOTES:

1. Underdrain Outlets To Be Connected To Existing/Proposed Storm System Or Roadside Ditches As Approved By Boone County Highway Engineer
 2. No Blind Taps Into Storm System Permitted
- ⚠ Per INDOT Standard Specifications

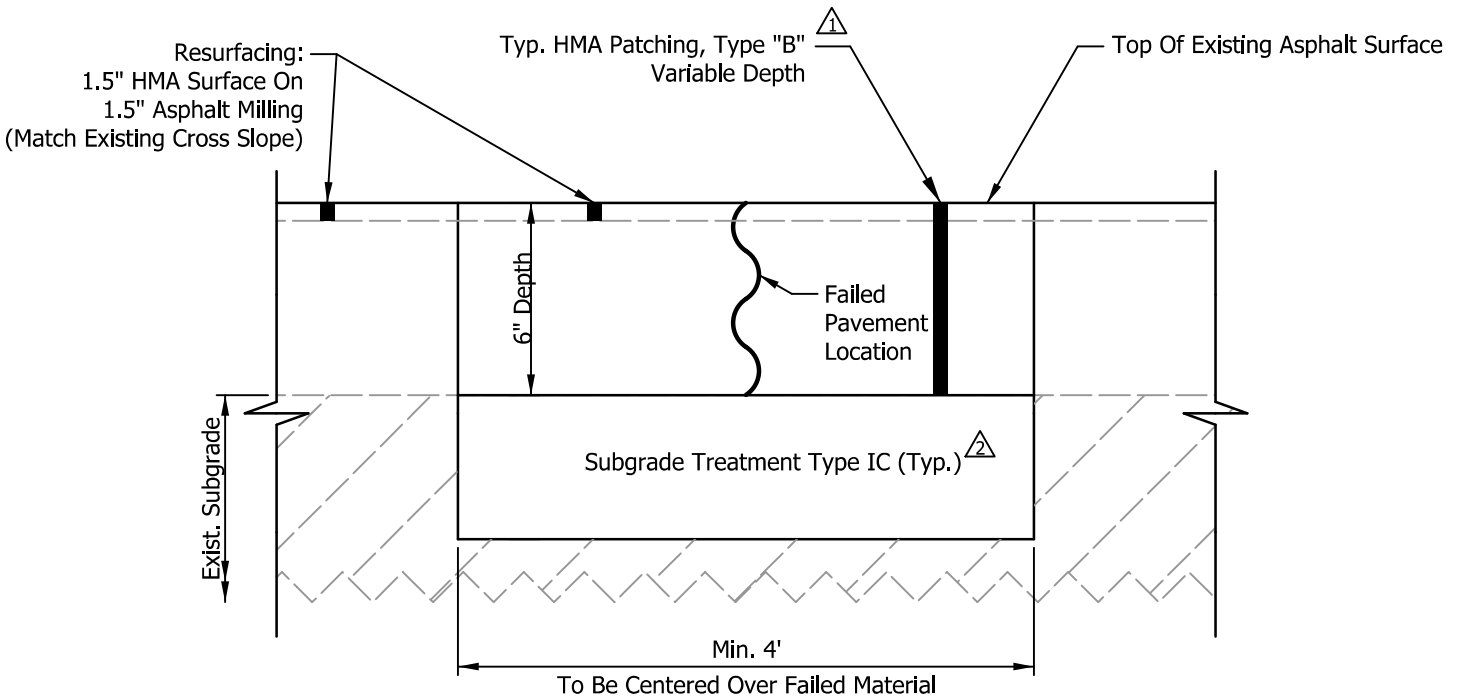
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL UNDERDRAIN DETAILS

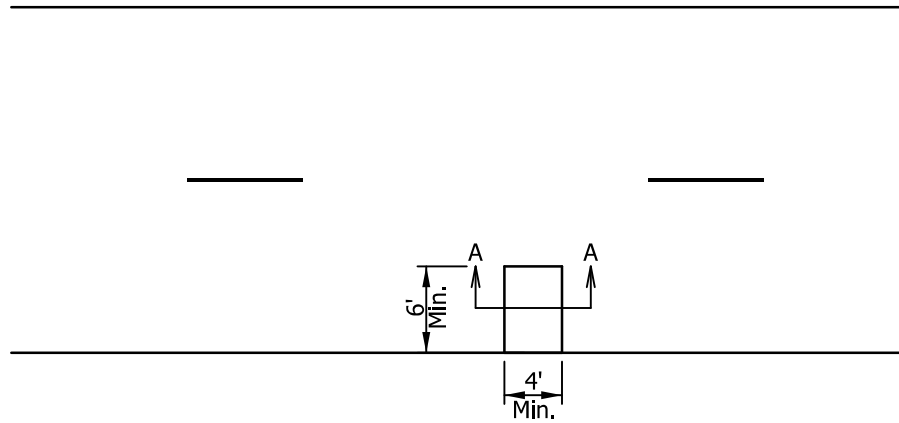


STANDARD DRAWING
NO. BC-401-001
SHEET 1 OF 1
SCALE: NO SCALE

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SECTION A-A



PLAN VIEW

- Typ. HMA Patching To Consist Of:
 6.0" HMA Base, 25.0mm, Type B
 As Needed To Match Existing Mainline Pavement Thickness
 Mill And Remove Existing Pavement - Clean Break Required
 Place Patch Prior To Milling And Resurfacing

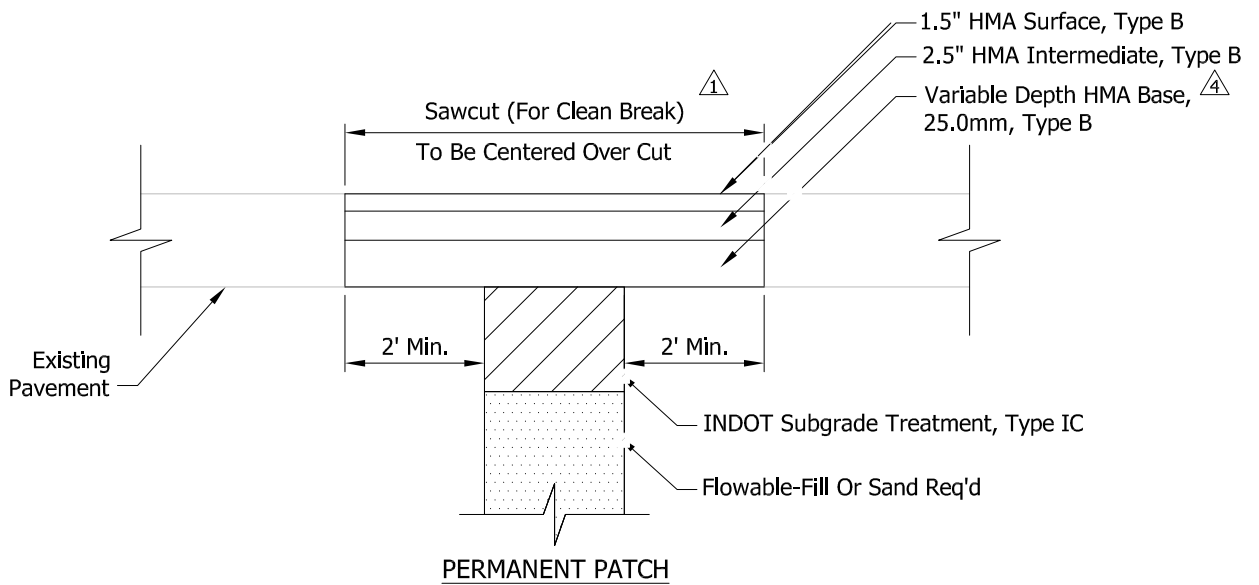
- INDOT Subgrade Treatment Type IC May Be Substituted With The Following;
 Excavate And Replace 12" Of The Subgrade With Flowable - Fill
 may Substitute INDOT Subgrade Treatment Type III As Approved By Boone
 County Highway Engineer.

BOONE COUNTY HIGHWAY DEPARTMENT



TYPICAL FULL DEPTH PATCH DETAIL

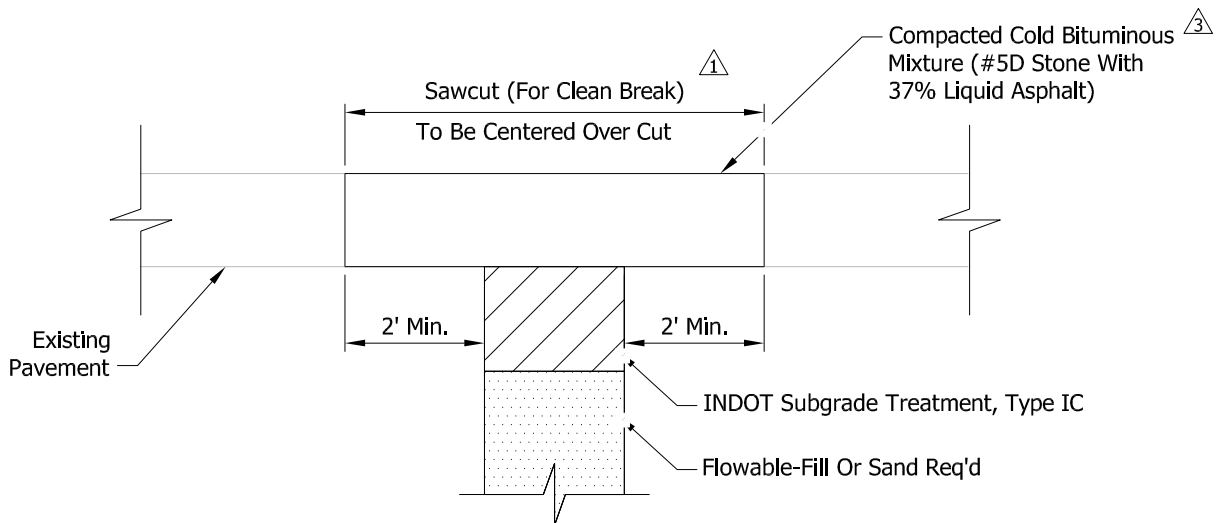
STANDARD DRAWING
NO. BC-402-001
SHEET 1 OF 1
SCALE: NO SCALE



PERMANENT PATCH

NOTES:

- ① Saw Cut And Remove Existing Pavement - Clean Break Required
- 2. Contractor Shall Mill (1.5") Existing Pavement 10' In Each Direction From Trench Centerline or 2' Wider Than Excavation Limit, Whichever Is Greater, And From Edge Of Pavement To Edge Of Pavement Then Replace With 1.5" HMA Surface, 9.5mm, And Appropriate Pavement Markings.
- 3. The Existing Vertical Edge Of Pavement Is To Be Tack Coated Prior To The Placement Of New Asphalt.
- ④ Base Layer Thickness Determined By Roadway Classification Or Existing Pavement Thickness, But Shall Be Minimum 6".



TEMPORARY PATCH (FROM NOV. 10 - APRIL 15)

NOTES:

- ① Saw Cut And Remove Existing Pavement - Clean Break Required
- 2. The Existing Vertical Edge Of Pavement Is To Be Tack Coated Prior To The Placement Of New Asphalt.
- ③ Thickness Determined By Roadway Classification Or Existing Pavement Thickness.

REVISED APRIL 2021

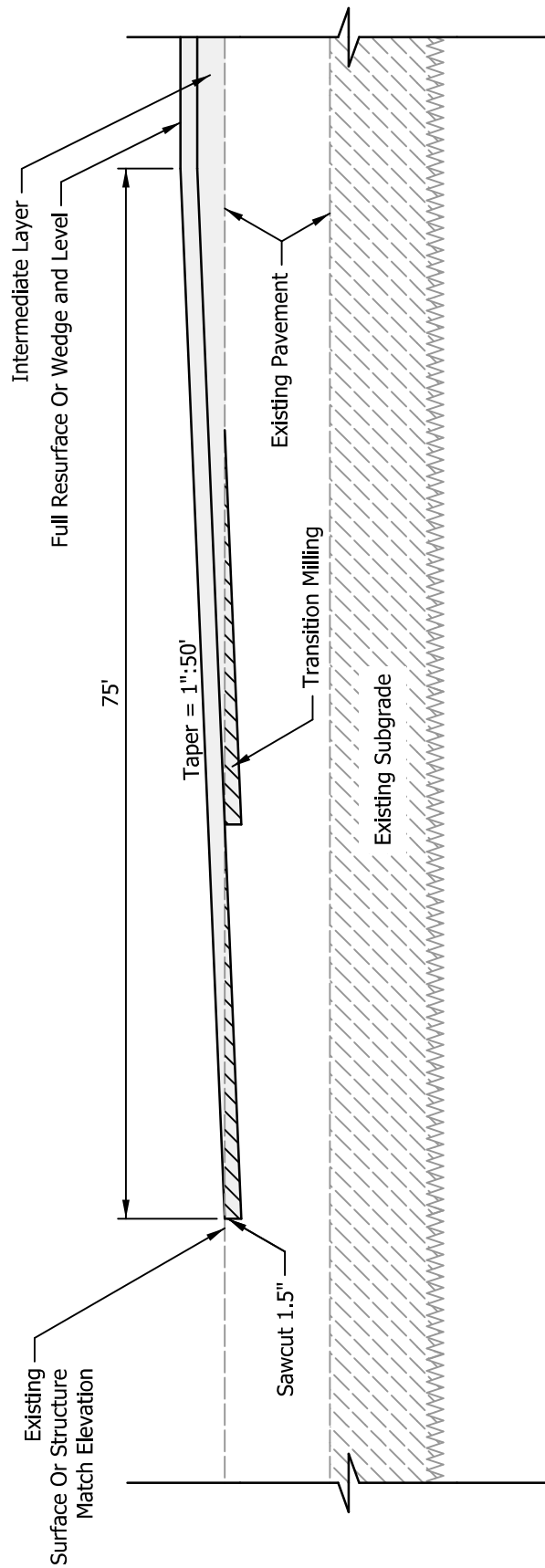
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL HMA ROAD CUT PATCH DETAIL



STANDARD DRAWING
NO. BC-402-002
SHEET 1 OF 1
SCALE: NO SCALE

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BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL TERMINUS TRANSITION

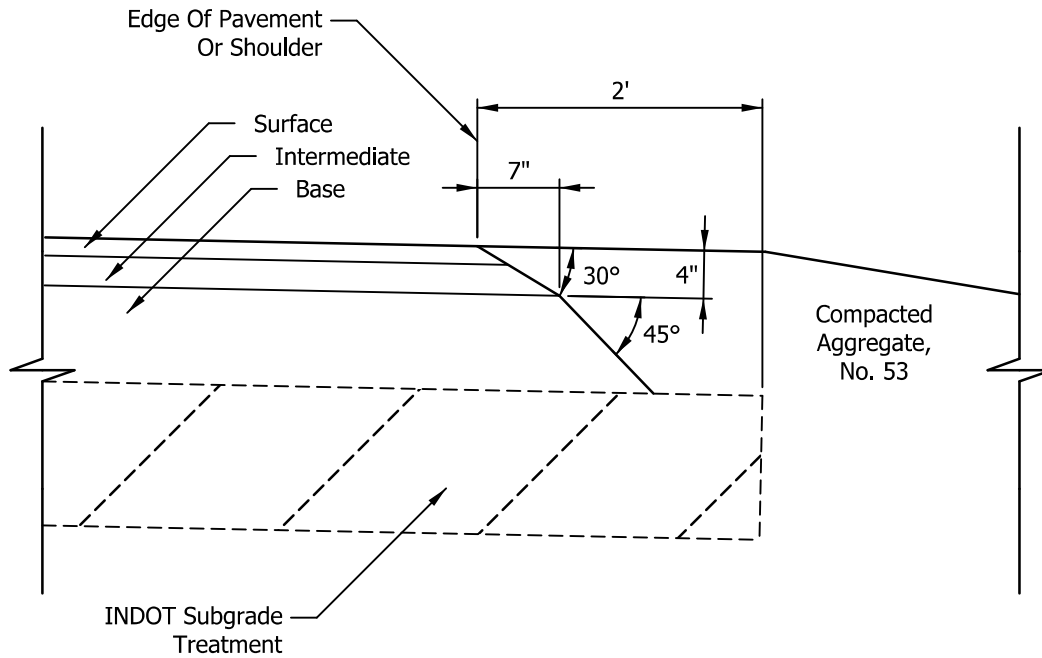


STANDARD DRAWING

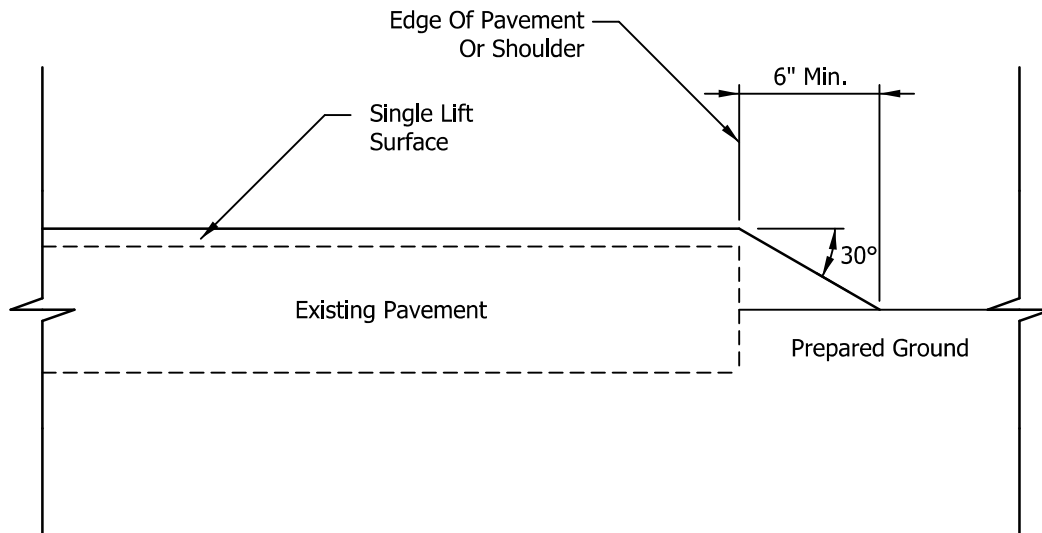
NO. BC-403-001

SHEET 1 OF 1

SCALE: NO SCALE



HMA SAFETY EDGE



SINGLE LIFT SURFACE SAFETY EDGE

BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL SAFETY EDGE DETAILS

STANDARD DRAWING

NO. BC-403-002

SHEET 1 OF 1

SCALE: NO SCALE

INDEX OF BOONE COUNTY STANDARDS
500 SERIES STANDARD DRAWINGS
CONCRETE PAVEMENTS

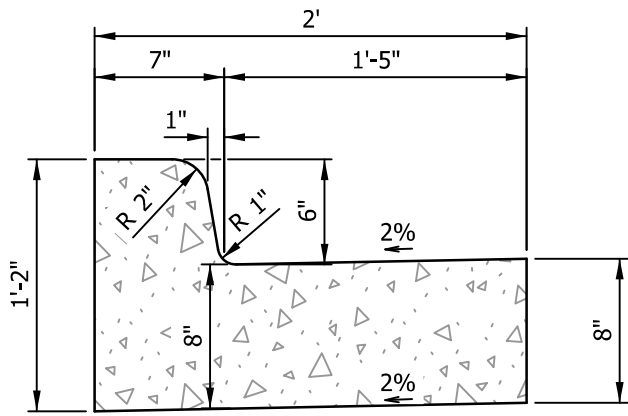
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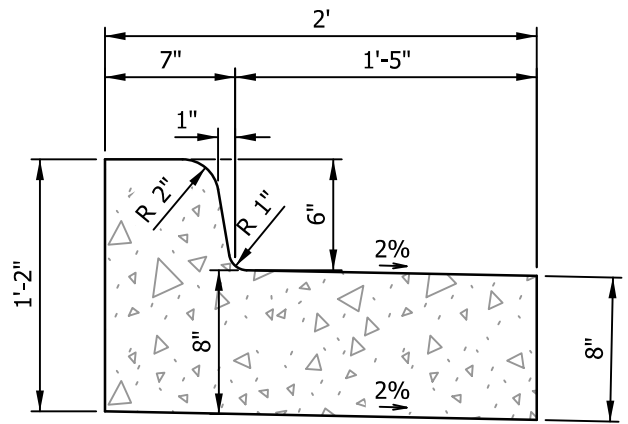
INDEX OF BOONE COUNTY STANDARDS
600 SERIES STANDARD DRAWINGS
INCIDENTAL CONSTRUCTION

Typical Concrete Curb and Gutter and Concrete Curb.....	BC-601-001
Typical Concrete Sidewalk Detail.....	BC-602-001
Typical HMA Multi-Use Path.....	BC-602-002
Typical Subdivision Residential Drive.....	BC-603-001
Typical Urban Commercial Drive.....	BC-603-002
Typical Field Entrance.....	BC-603-003
Typical Rural Residential Drive.....	BC-603-004
Typical Rural Commercial Drive.....	BC-603-005
Typical Subdivision Entrance.....	BC-603-006
Typical Street Approach.....	BC-603-007
Typical Acceleration/Deceleration Lane.....	BC-603-008
Typical Mailbox Approach.....	BC-603-009
Typical Culvert Detail With Open Ditches.....	BC-603-010
Typical Cul-De-Sac.....	BC-604-001
Typical Temporary Cul-De-Sac.....	BC-604-002

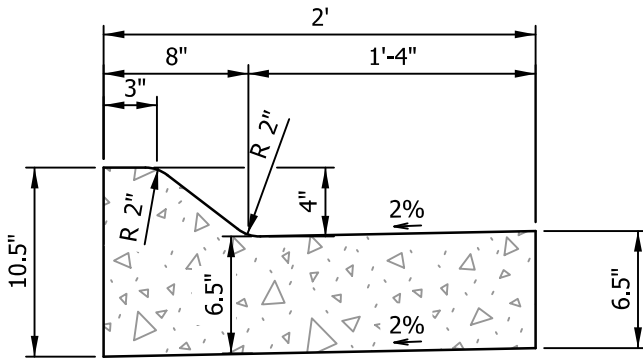
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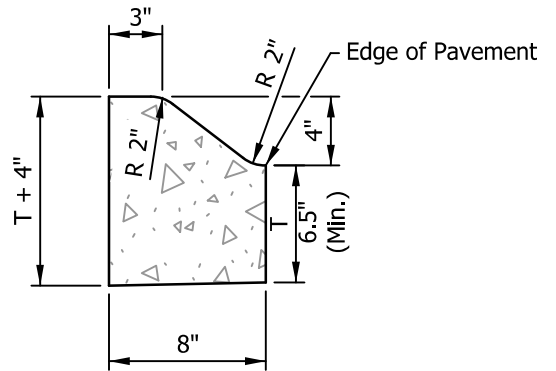
**CONCRETE CURB AND GUTTER
STANDARD (Typ.)**



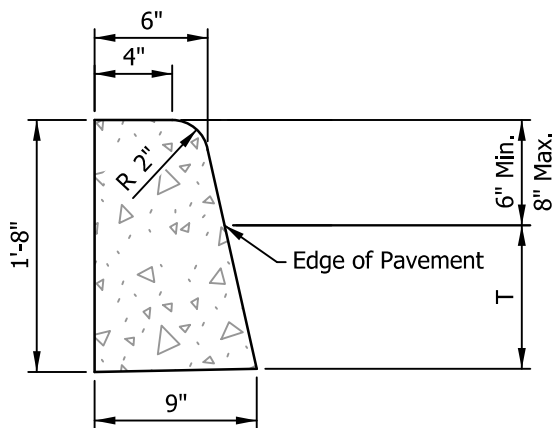
**CONCRETE CURB AND GUTTER
MODIFIED (Typ.)**



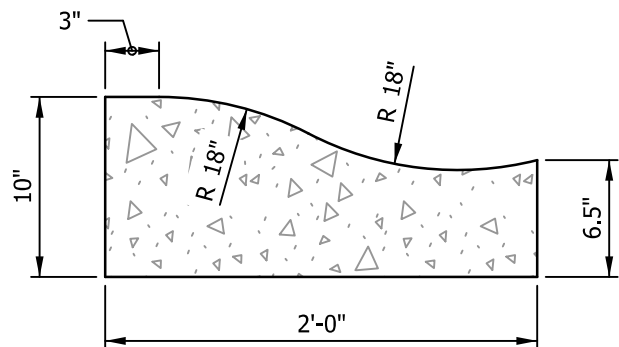
**CONCRETE CURB AND GUTTER
MOUNTABLE (Typ.)**



**CONCRETE CURB
MOUNTABLE**



**CONCRETE CURB
BARRIER**



ROLLED CURB

NOTES

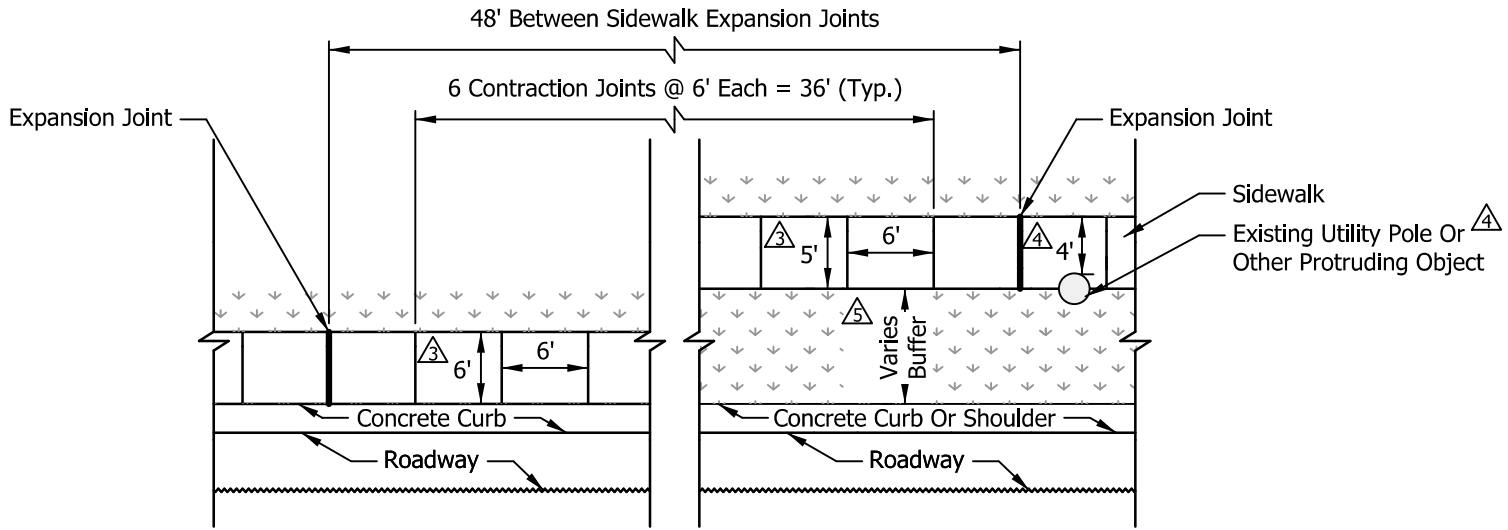
T = Nominal Pavement Thickness

BOONE COUNTY HIGHWAY DEPARTMENT

**CONCRETE CURB AND GUTTER
AND CURB**

STANDARD DRAWING
NO. BC-601-001
SHEET 1 OF 1
SCALE: NO SCALE

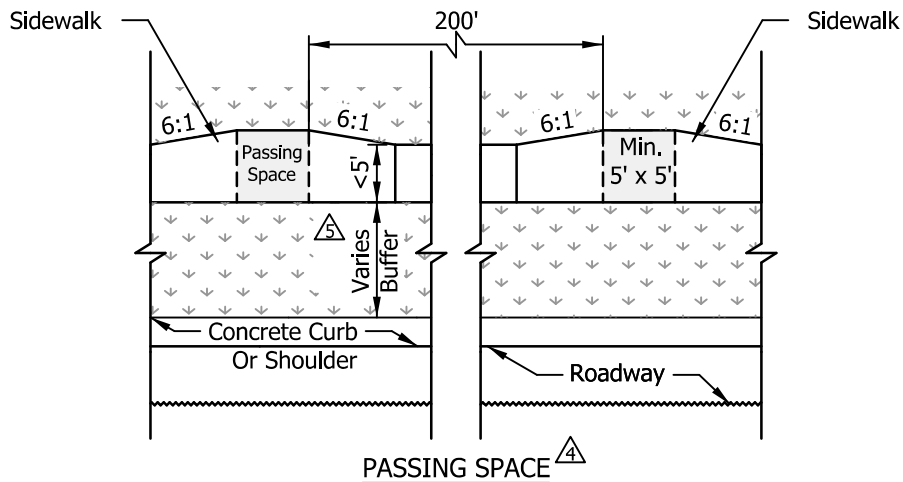




SIDEWALK PLAN VIEW

NOTES:

1. All Slopes Are Absolute Rather Than Relative To The Sidewalk Or Roadway Grade And Are Given As Maximums. Slopes At Least 0.50% Less Than The Maximum Are Preferred.
 2. The Grade Of The Sidewalk Is Measured In The Direction Of Pedestrian Travel And Shall Not Exceed The Grade Of The Adjacent Roadway. The Cross Slope Is Measured Perpendicular To The Direction Of Pedestrian Travel And Shall Not Exceed 2.00%
- ⚠ Where There Is A Buffer Between The Sidewalk And The Curb, The Preferred Minimum Sidewalk Clear Width Is 5'. Where There Is No Buffer Between The Sidewalk And The Curb, The Preferred Minimum Sidewalk Width Is 6'.
- ⚠ A 4' Minimum Clear Width Shall Be Provided Adjacent To Street Furniture, Mailbox, Utility Pole, Or Other Protruding Object. Where The Sidewalk Clear Width Is Less Than 5', A Passing Space With Dimensions Of 5' X 5' Shall Be Provided At 200' Intervals
- ⚠ See Roadway Typical Sections for Dimensions

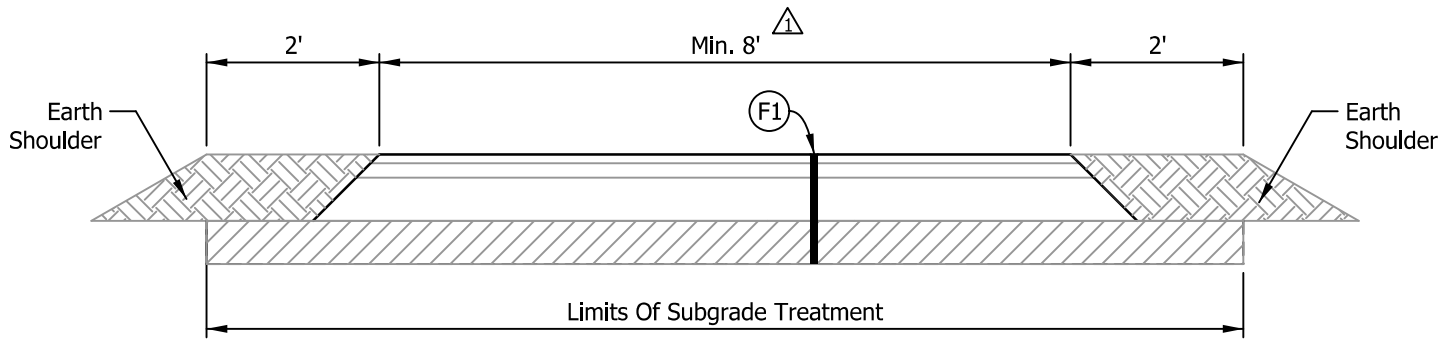


PASSING SPACE

LEGEND:

- (F) 4" Sidewalk, Concrete On
4" Compacted Aggregate No. 53

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LEGEND:

NOTES:

- (F1) 1.5" HMA Surface, 9.5mm On
- 2.5" HMA Intermediate, 19.0mm On
- 6.0" Compacted Aggregate. No. 53 On
- Typ. INDOT Subgrade Treatment Type III

- △ Width Varies, Typ. 8' - 12'
- Cross Slope Varies, Typ. Max. 2.0%

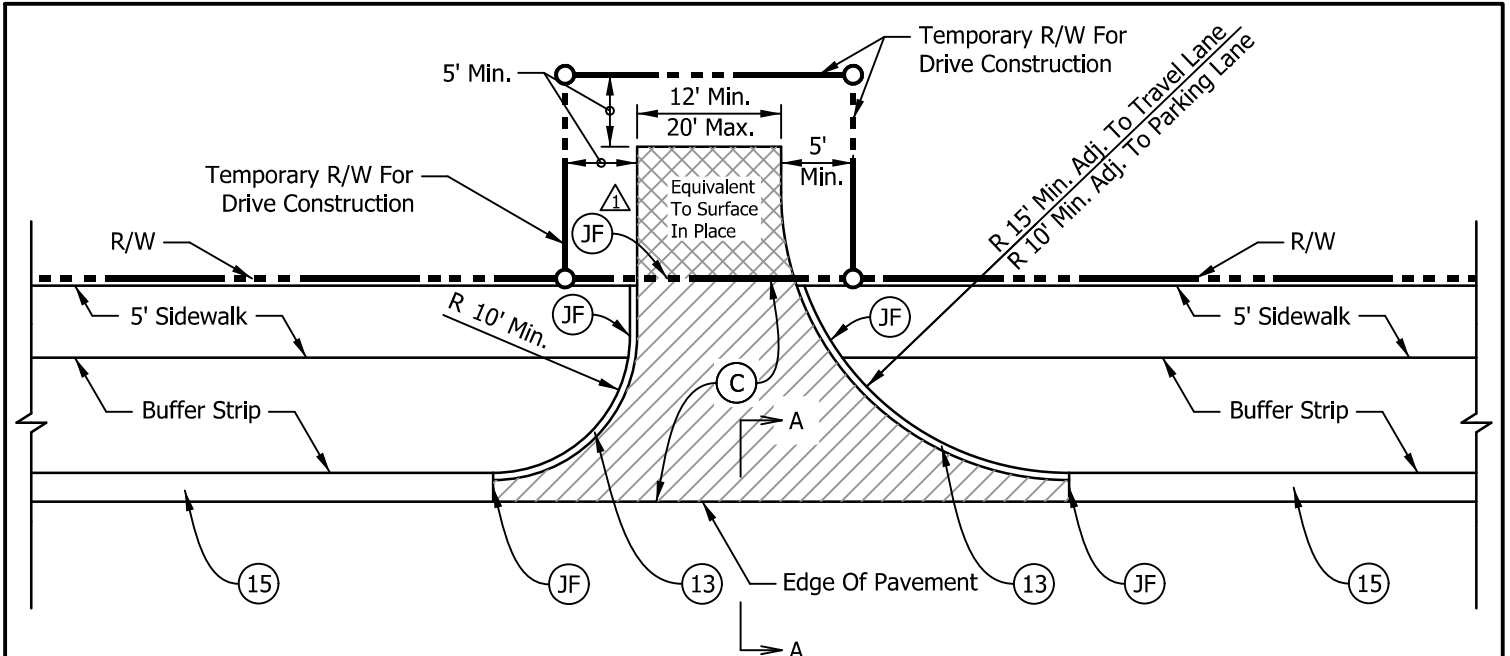
BOONE COUNTY HIGHWAY DEPARTMENT



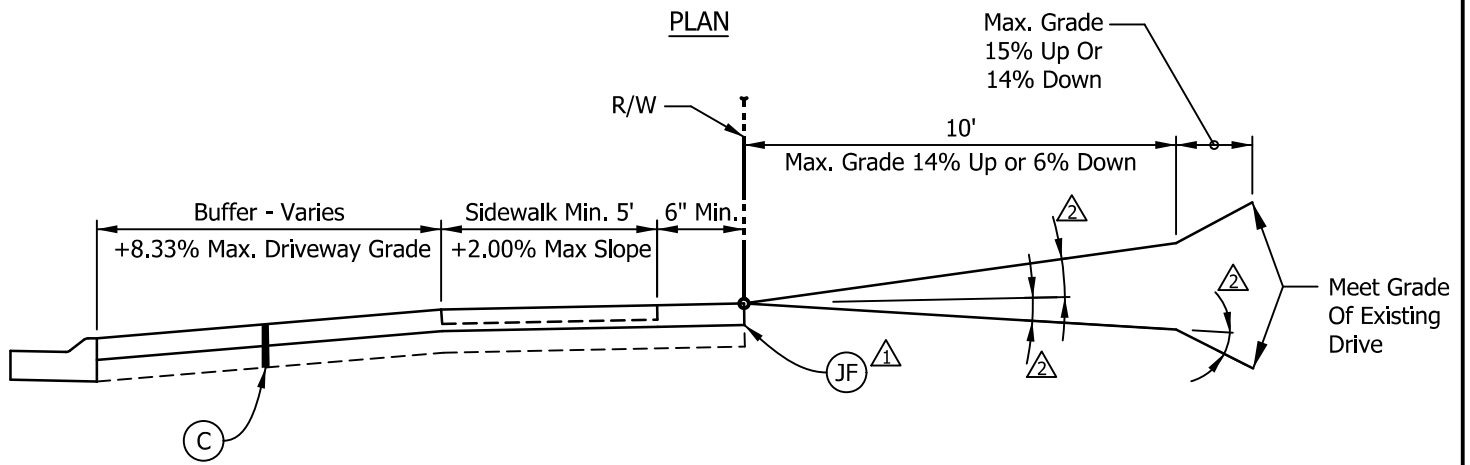
TYPICAL HMA MULTI-USE PATH

STANDARD DRAWING
NO. BC-602-002
SHEET 1 OF 1
SCALE: NO SCALE

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PLAN



SECTION A-A

LEGEND:

Symbol	Pavement Layer			
	Asphalt	Concrete	Aggregate	
(C)	HMA Surface, Type B	-	-	-
	HMA Intermediate, Type B	-	-	-
	HMA Base, Type B	-	-	-
	Compacted Aggregate No. 53	-	-	-
	INDOT Subgrade Treatment	-	Type II	8" (3)
	PCCP for Approaches	N/A	6"	N/A

- (JF) 1/2" Preformed Joint Filler
- (13) Monolithic Curb See STD Drawing BC-601-001
- (15) Concrete Curb And Gutter See STD Drawing BC-601-001

NOTES:

- (A) Joint Filler Required When Existing Drive Is PCCP
- (B) Max. Algebraic Diff. In Grades; Crests 8.00% Sags 12.00%
- (C) 8" Compacted Aggregate May Be Substituted For PCCP With Approval From County Engineer
- 4. Sidewalk Elevation Transitions At Drives To Be In Compliance With Current ADA Guidelines
- 5. Driveway Culverts Which Cannot Be Located Outside Of The Clear Zone Shall Require Grated End Sections In Accordance With INDOT Standards
- 6. For Drainage Structure Details See STD Drawing BC-603-010

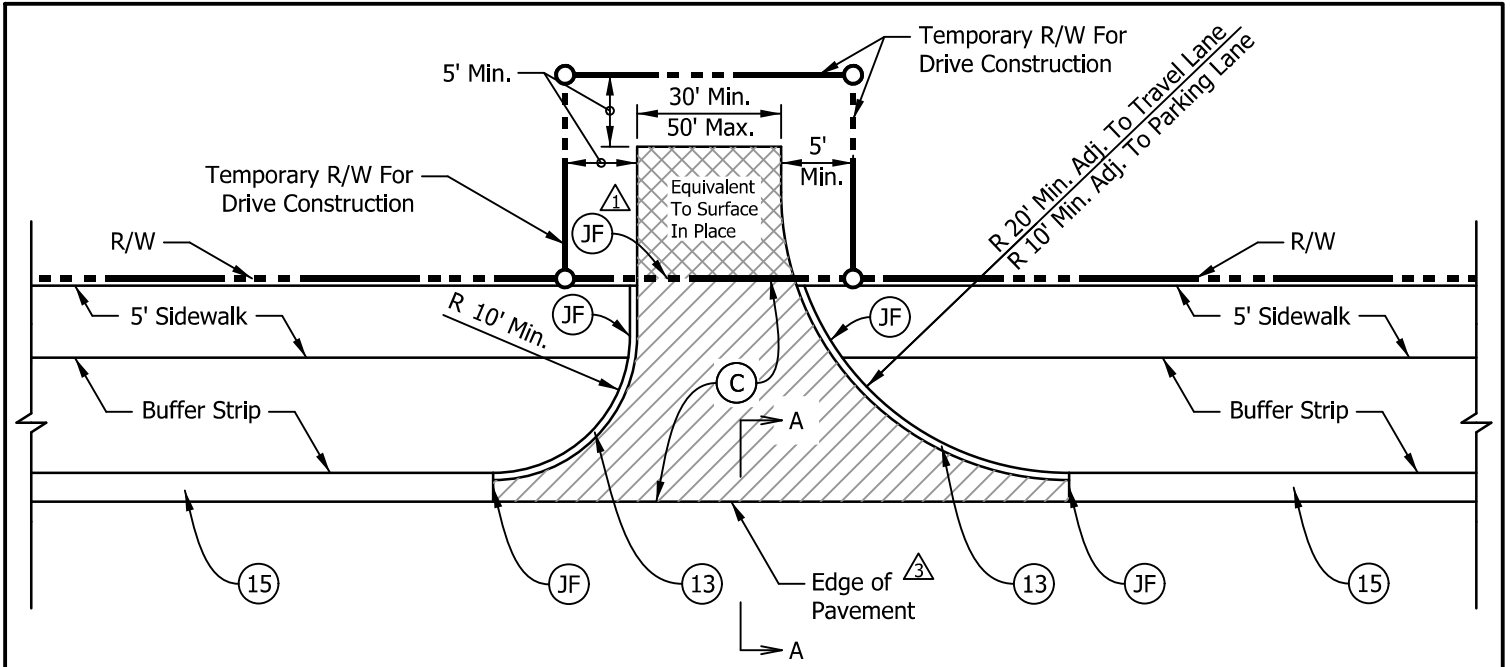
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL SUBDIVISION RESIDENTIAL DRIVEWAY

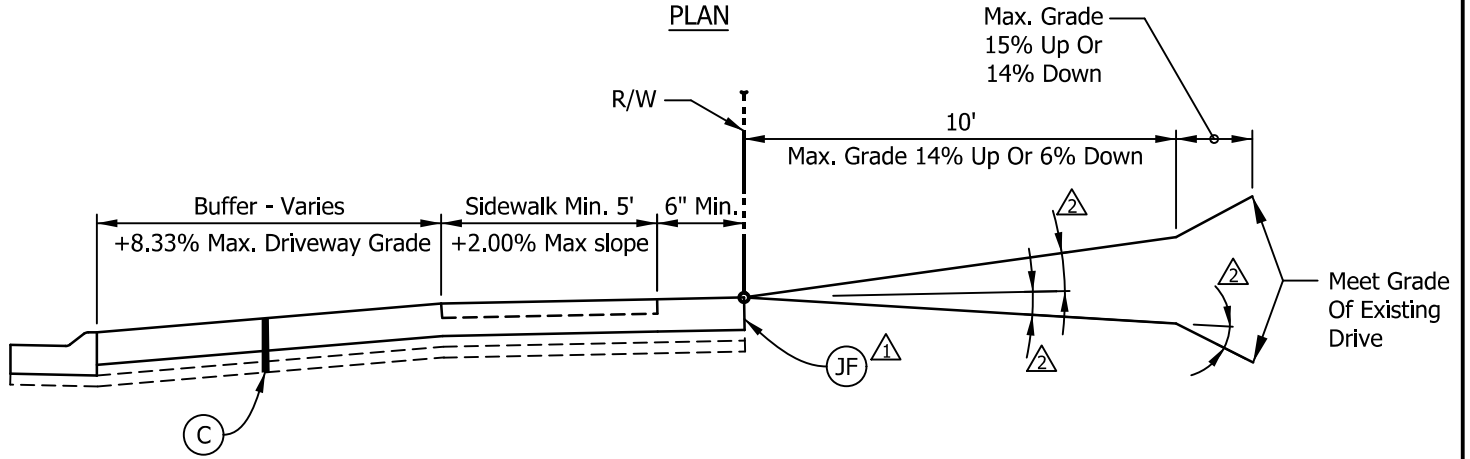


STANDARD DRAWING
NO. BC-603-001
SHEET 1 OF 1
SCALE: NO SCALE

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PLAN



SECTION A-A

LEGEND:

NOTES:

(C)	Pavement Layer	Asphalt	Concrete	Aggregate
	HMA Surface, Type B	-	-	-
	HMA Intermediate, Type B	-	-	-
	HMA Base, Type B	-	-	-
	Compacted Aggregate No. 53	-	-	-
	INDOT Subgrade Treatment	-	Type II	-
	PCCP for Approaches	N/A	9"	N/A

- (JF) 1/2" Preformed Joint Filler
- (13) Monolithic Curb See STD Drawing BC-601-001
- (15) Concrete Curb And Gutter See STD Drawing BC-601-001

- △ Joint Filler Required When Existing Drive Is PCCP
- △ Max. Algebraic Diff. In Grades;
Crests 8.00%
Sags 12.00%
- △ If Warranted By County Engineer Acceleration/
Deceleration Taper To Be Added,
See STD Drawing BC-603-008
- 4. Sidewalk Elevation Transitions At Drives To Be
In Compliance With Current ADA Guidelines
- 5. Driveway Culverts Which Cannot Be located
Outside Of The Clear Zone Shall Require Grated
End Sections In Accordance With INDOT Standards
- 6. Commercial Drives Shall Be Required At
Truck Stops And Entrances To Heavy
Industrial Properties
- 7. For Drainage Structure Details
See STD Drawing BC-603-010

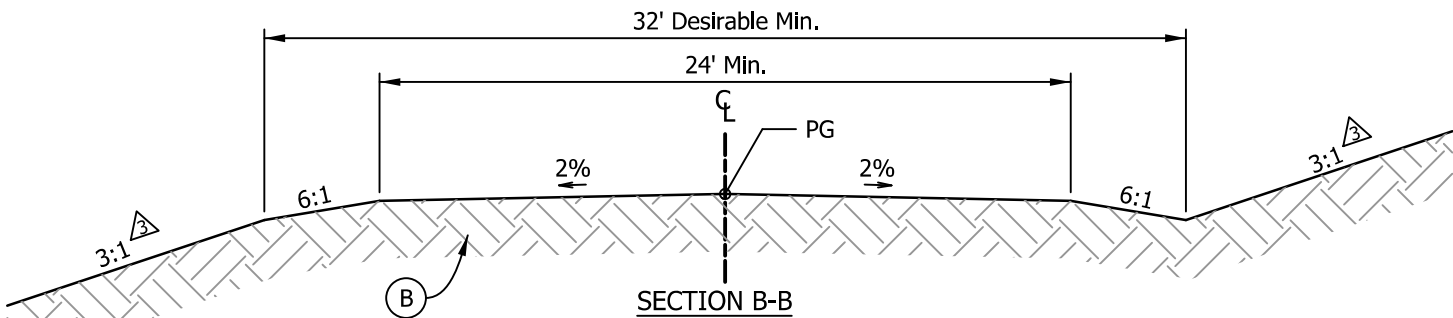
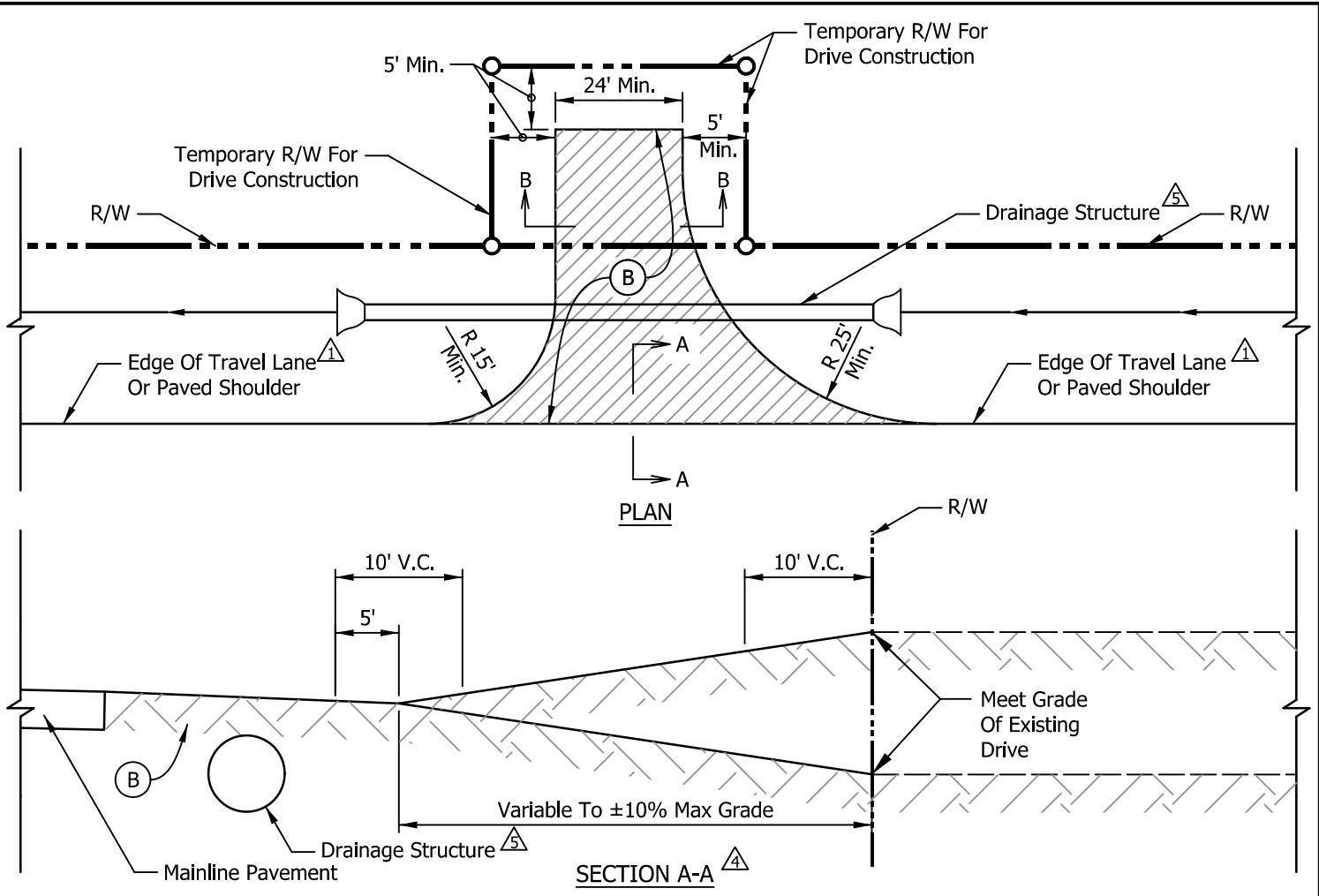
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL URBAN COMMERCIAL DRIVEWAY



STANDARD DRAWING
NO. BC-603-002
SHEET 1 OF 1
SCALE: NO SCALE

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NOTES:

- 1. Where The Shoulder Is Earth Or Aggregate, Or When The Paved Shoulder Is Less Than 8', The Drive Radii Shall Be Tangent To The Travel Lane. Where The Paved Shoulder Is 8' Or More, The Drive Radii Shall Be Tangent To The Paved Shoulder
- 2. Driveway Culverts Which Cannot Be located Outside Of The Clear Zone Shall Require Grated End Sections In Accordance With INDOT Standards
- 3. Foreslopes And Backslopes Shall Be In Accordance With Clear Zone Requirements Set Forth By INDOT Design Manual (Current Edition)
- 4. Minimum 2% Grade For 10' Away From Edge Of Pavement Required For Gravel Drives
- 5. For Drainage Structure Details - See STD Drawing BC-603-010

LEGEND:

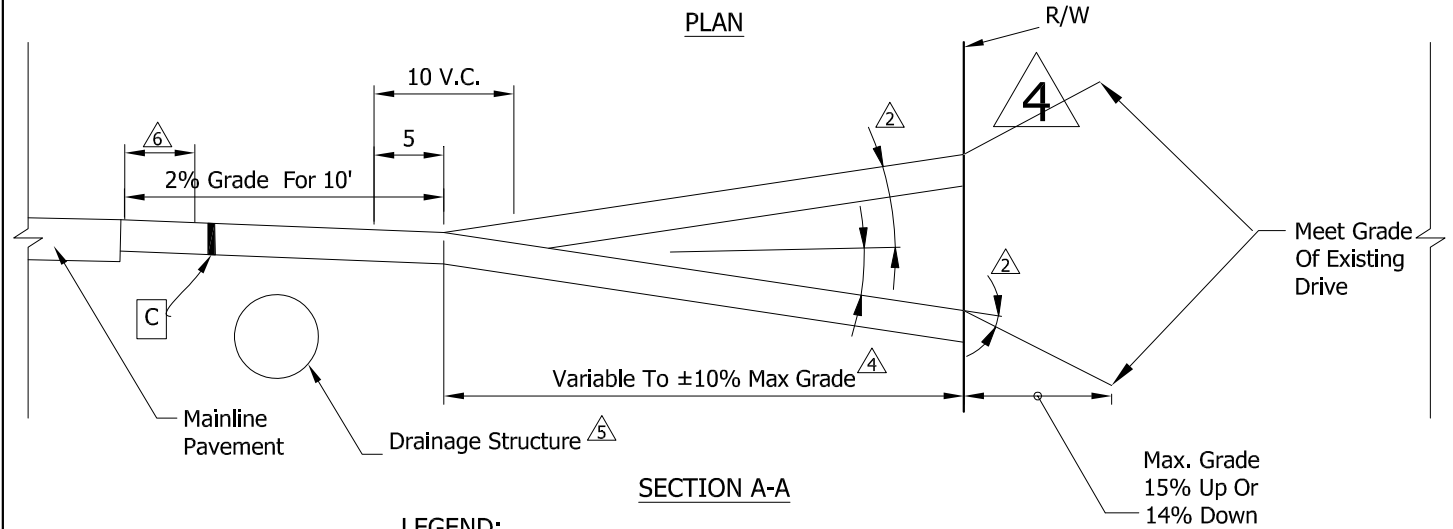
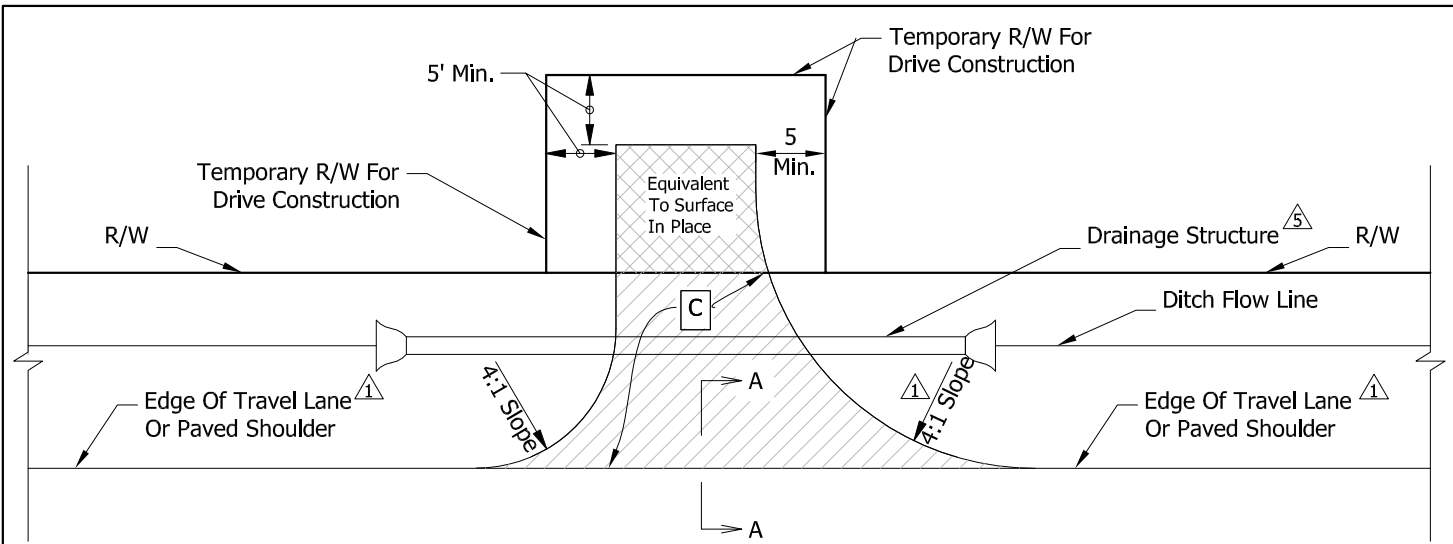
Earth Fill Or Aggregate As Needed

BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL FIELD ENTRANCE



STANDARD DRAWING
NO. BC-603-003
SHEET 1 OF 1
SCALE: NO SCALE



LEGEND:

Pavement Layer	Asphalt	Concrete	Aggregate	Mainline Resurfacing
HMA Surface, Type B	1.5"	-	-	per plan
HMA Intermediate, Type B	3.5"	-	-	per plan
HMA Base, Type B	-	-	-	N/A
Compacted Aggregate No. 53	-	-	6"	N/A
INDOT Subgrade Treatment	Type II	Type II	Type II	N/A
PCCP for Approaches	N/A	6"	N/A	N/A
Minimum Width for HMA Approach $\triangle 6$	N/A	2'	N/A	2'

NOTES:

- $\triangle 1$ Where The Shoulder Is Earth Or Aggregate, Or When The Paved Shoulder Is Less Than 8', The Drive Radii Shall Be Tangent To The Travel Lane. Where The Paved Shoulder Is 8' Or More, The Drive Radii Shall Be Tangent To The Paved Shoulder
- $\triangle 2$ Max. Algebraic Diff. In Grades; Crests 8.00%, Sags 12.00%
- 3. Driveway Culverts Which Cannot Be Located Outside Of The Clear Zone Shall Require Grated End Sections In Accordance With INDOT Standards. Drainage Structure Should Be Minimum Of 10' From Edge Of Pavement (Clear Zone)
- $\triangle 4$ Minimum 2% Grade For 10' Away From Edge Of Pavement Required For All Drives. 2.5" For Every 10' From Edge Of Pavement
- $\triangle 5$ For Drainage Structure Details - See STD Drawing BC-603-010

BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL RURAL RESIDENTIAL DRIVEWAY

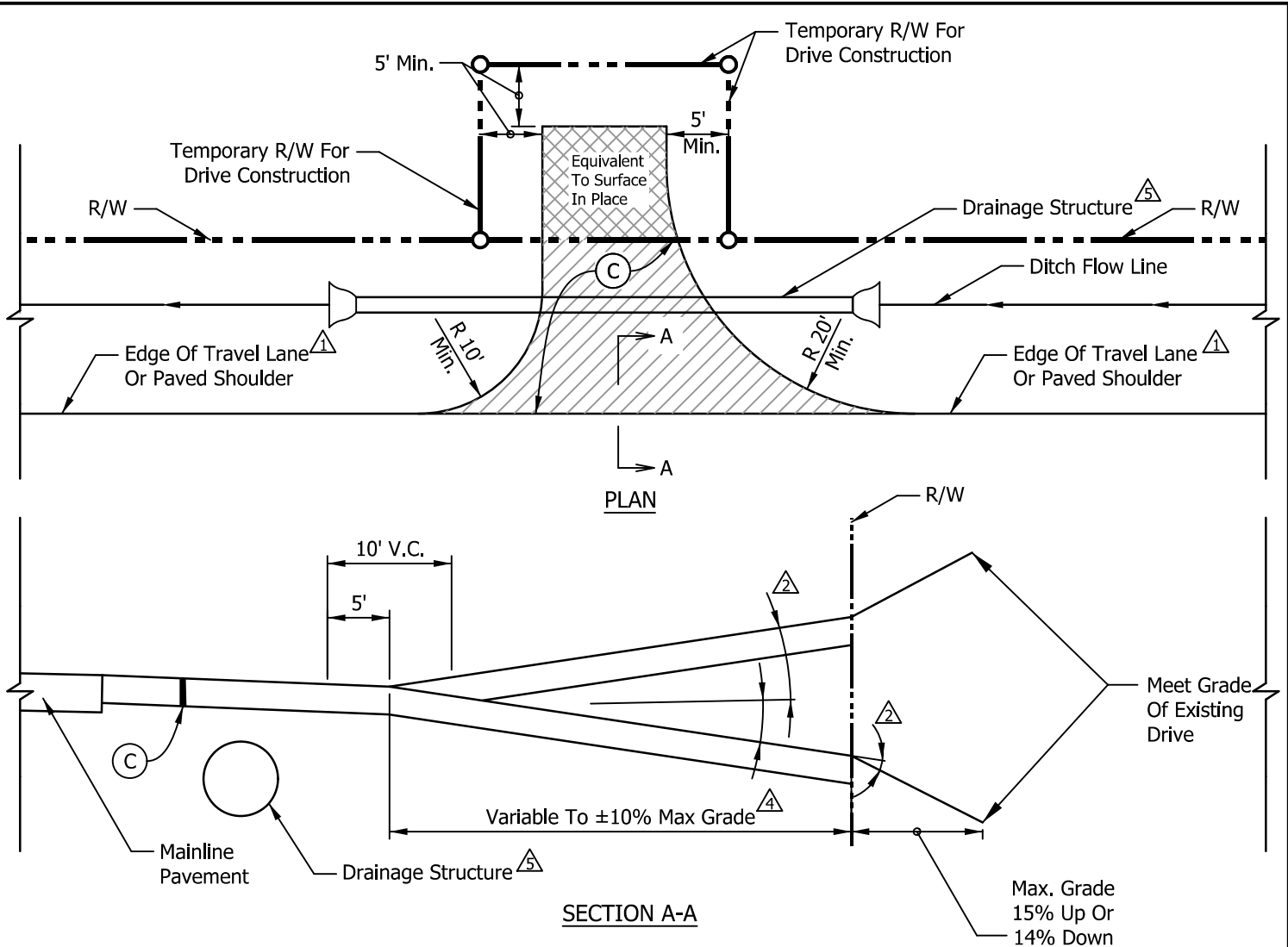
STANDARD DRAWING
NO. BC-603-004
SHEET 1 OF 1
SCALE: NO SCALE

REVISED MAY 2021

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LEGEND:

(C)	Pavement Layer	Asphalt	Concrete	Aggregate
	HMA Surface, Type B	1.5"	-	-
	HMA Intermediate, Type B	2.5"	-	-
	HMA Base, Type B	8.0"	-	-
	Compacted Aggregate No. 53	-	-	12"
	INDOT Subgrade Treatment	Type II	Type II	Type II
	PCCP for Approaches	N/A	9"	N/A

NOTES:

- △ Where The Shoulder Is Earth Or Aggregate, Or When The Paved Shoulder Is Less Than 8', The Drive Radii Shall Be Tangent To The Travel Lane. Where The Paved Shoulder Is 8' Or More, The Drive Radii Shall Be Tangent To The Paved Shoulder
- △ Max. Algebraic Diff. In Grades; Crests 8.00%, Sags 12.00%
- 3. Driveway Culverts Which Cannot Be located Outside Of The Clear Zone Shall Require Grated End Sections In Accordance With INDOT Standards
- △ Minimum 2% Grade For 10' Away From Edge Of Pavement Required For Gravel Drives
- △ For Drainage Structure Details - See STD Drawing BC-603-010

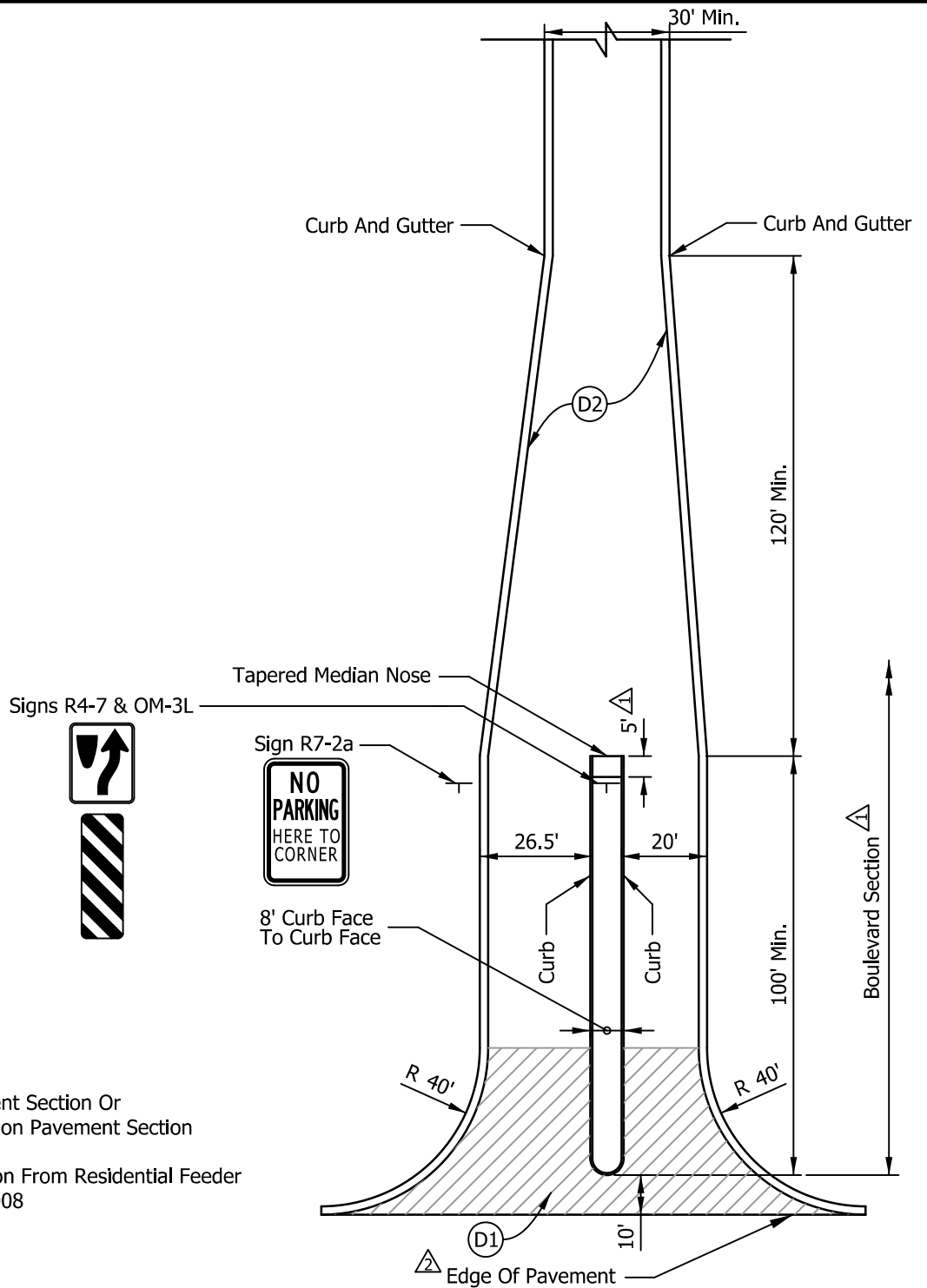
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL RURAL COMMERCIAL DRIVEWAY



STANDARD DRAWING
NO. BC-603-005
SHEET 1 OF 1
SCALE: NO SCALE

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LEGEND:

- (D1) Match Existing Pavement Section Or Acceleration/Deceleration Pavement Section
- (D2) Match Pavement Section From Residential Feeder STD Drawing BC-400-008

NOTES:

- △ For Boulevard Sections, Continue Median Section; Maximum Length Between Breaks In Medians Shall Be 600' Minimum Length Between Islands Shall Be 30'
- △ For Major Subdivisions, Acceleration/Deceleration Taper To Be Used To Tie Into Existing, See STD Drawing BC-603-008
- 3. Vegetation Shall Not Obstruction Sight Line
- 4. All Sign Posts Shall Be Mounted On Breakaway Anchors.

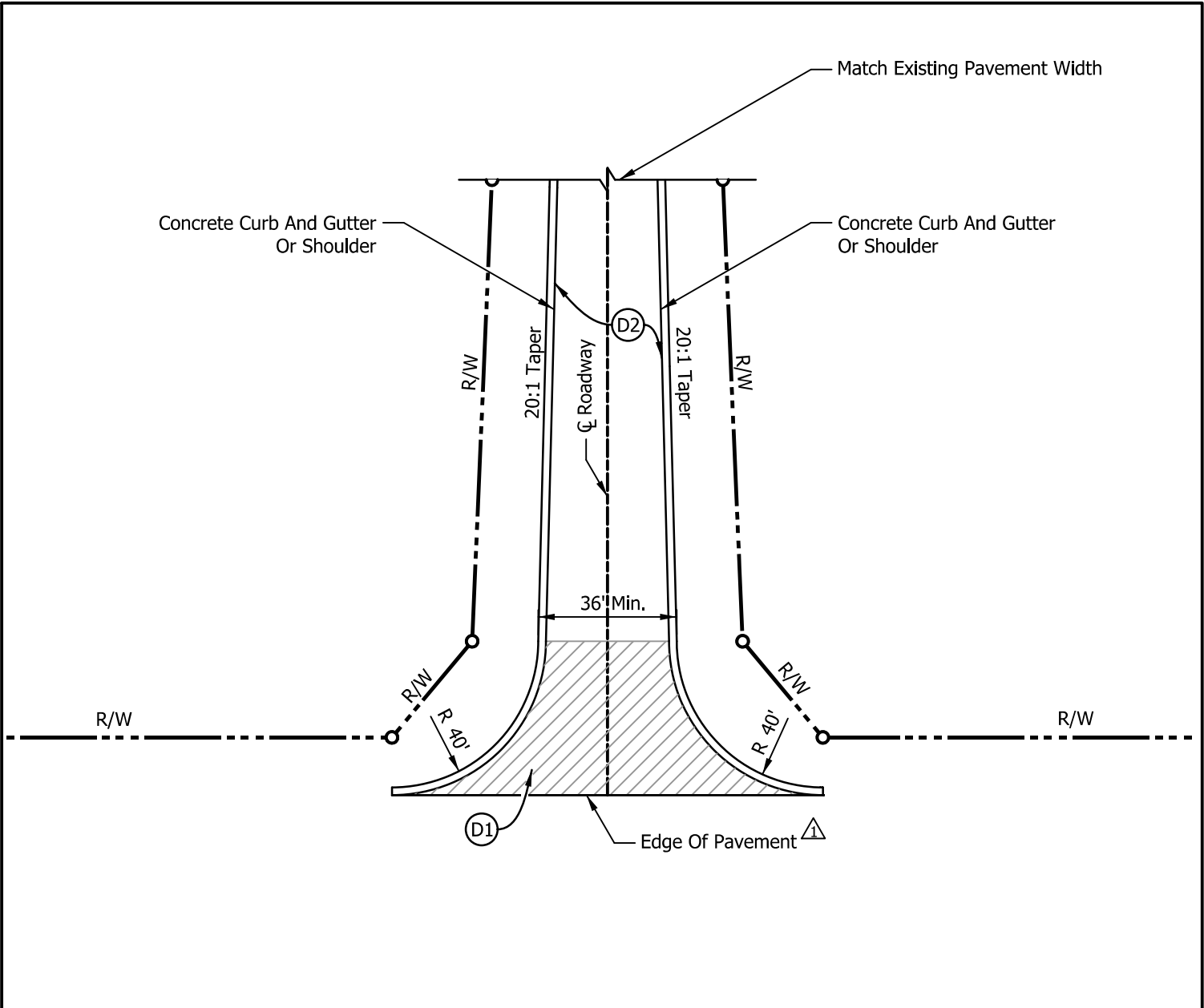
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL SUBDIVISION ENTRANCE



STANDARD DRAWING
NO. BC-603-006
SHEET 1 OF 1
SCALE: NO SCALE

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LEGEND:

- (D1) Match Existing Roadway Pavement Section
- (D2) Match Pavement Section From Residential Feeder STD Drawing BC-400-008

NOTES:

- △ Acceleration/Deceleration Taper To Used To Tie Into Existing, See STD Drawing BC-603-008

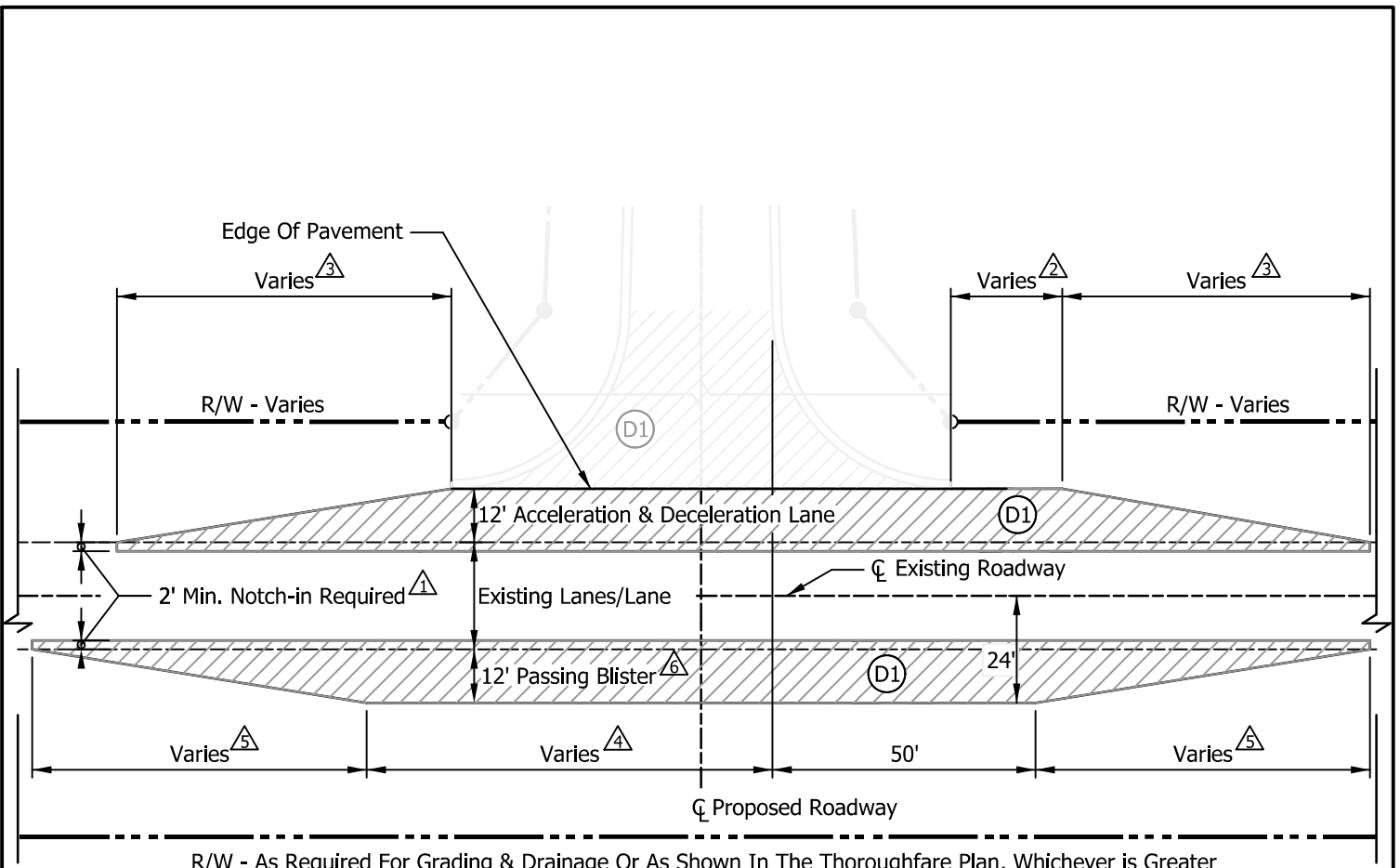
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL STREET APPROACH



STANDARD DRAWING
NO. BC-603-007
SHEET 1 OF 1
SCALE: NO SCALE

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NOTES:

- △1 Acceleration/Deceleration & Passing Blister To Be Notched Into Existing Pavement With A Minimum Of 2' Clean Saw Cut Edge
- △2 Deceleration Tangent See Table
- △3 Acceleration/Deceleration Taper See Table
- △4 Passing Blister Variable Tangent See Table
- △5 Passing Blister Tapers See Table
- △6 Passing Blisters Required When Deemed Necessary By The County Engineer
- 7. Construction Plans Shall Include Centerline Profile Of The Existing Road Being Intersected By The Proposed Road. The Profile Shall Extend A Minimum Of 500' From The Entrance Centerline In Each Direction.

Accel And Decel Dimension		
Speed (MPH)	△2	△3
30 Or Less	75'	125'
Greater Than 30 & Less Than 50	100'	150'
Greater Than 50	100'	200'

Passing Blister Dimension		
Speed (MPH)	△4	△5
30 Or Less	150'	150'
Greater Than 30 & Less Than 50	150'	200'
Greater Than 50	200'	300'

LEGEND:

- (D1) Match Existing Roadway Pavement Section

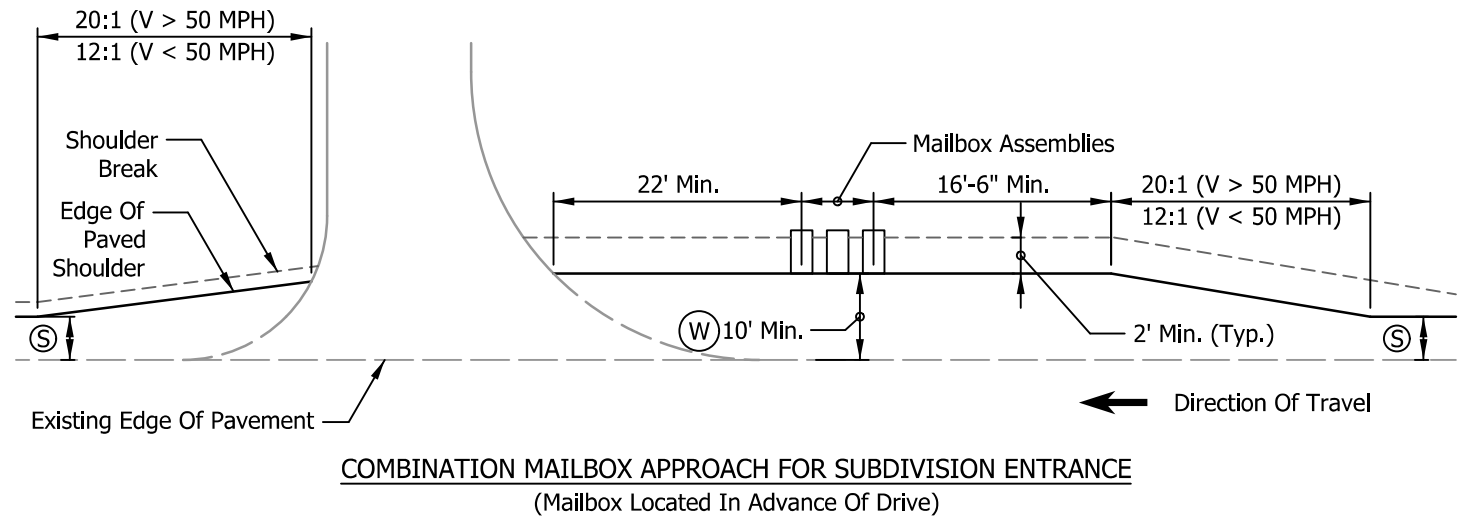
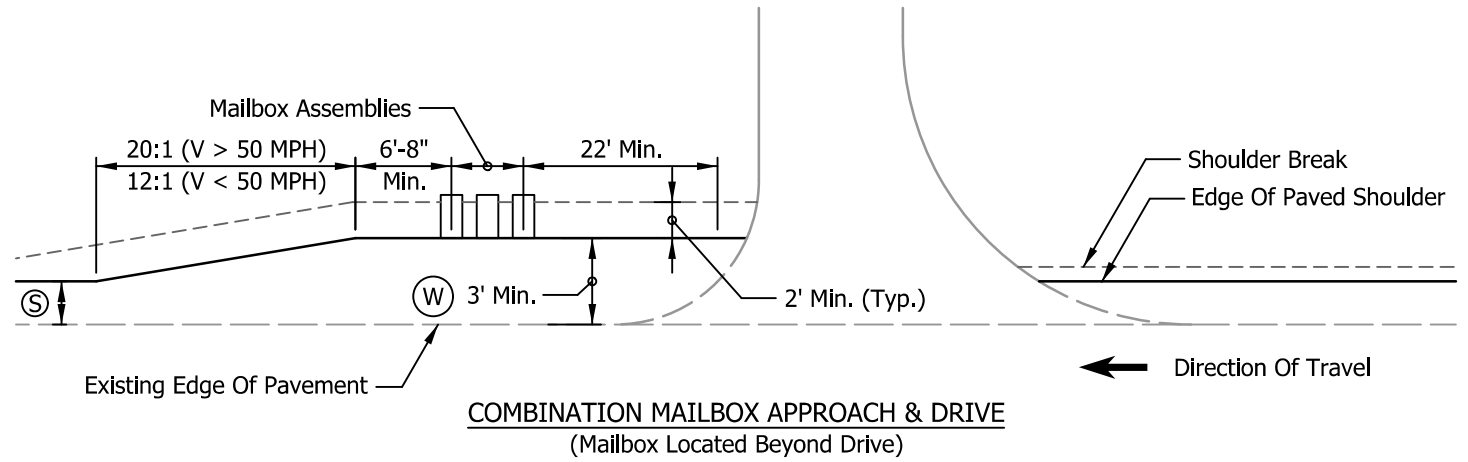
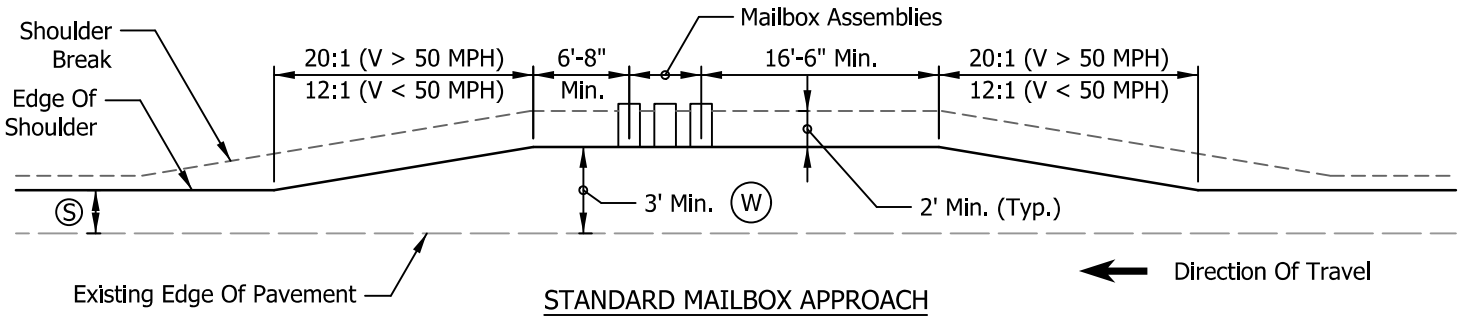
BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL ACCELERATION / DECELERATION LANE



STANDARD DRAWING
NO. BC-603-008
SHEET 1 OF 1
SCALE: NO SCALE

3/27/2019 7:24:07 AM I:\170004 - Boone County As-Needed Assistance\Standards Consultation\09Road\04 Design files\02 DGN\Plans\6005\603-009_BC_Mailbox Approach_Sht_Typical.dgn



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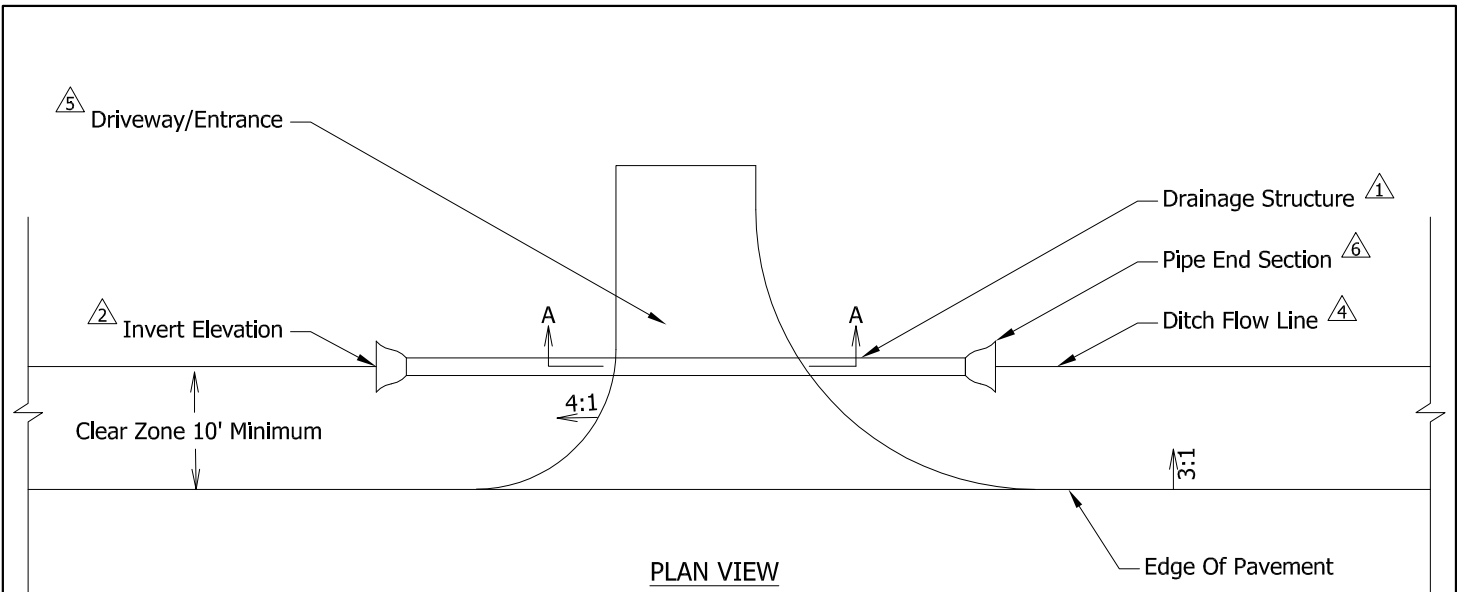
- (W) Match Existing Adjacent Pavement Section (Shoulder Or Lane)
- (S) Shoulder Width From Plans

BOONE COUNTY HIGHWAY DEPARTMENT

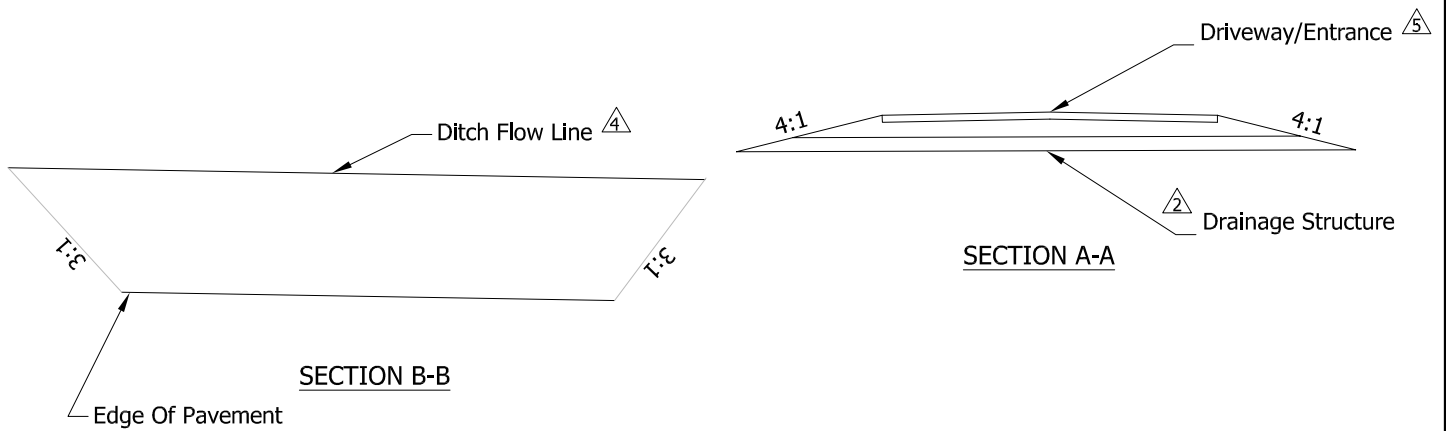
TYPICAL MAILBOX APPROACH



STANDARD DRAWING
NO. BC-603-009
SHEET 1 OF 1
SCALE: NO SCALE



PLAN VIEW



SECTION B-B

SECTION A-A

NOTES:

- ① 12" Min. Diameter Structure (15" Diameter Desirable)
Or As Directed By Boone County Engineer, Minimum 12" Cover
- ② Invert Elevations Shall Be Provided At All Downstream And Upstream Inverts.
- 3. Any And All Necessary Ditch And Drainage Improvements Shall Be Provided By Individual Performing The Installation
- ④ Flow Line Elevations Shall Be Provided At The Beginning, End, And Every Grade Break.
- ⑤ For Subdivision Residential Driveway Details - See STD Drawing BC-603-001
For Urban Commercial Driveway Details - See STD Drawing BC-603-002
For Field Entrance Details - See STD Drawing BC-603-003
For Rural Residential Drive - See STD Drawing BC-603-004
- ⑥ Pipe End Sections Shall Be In Accordance With Clear Zone Criteria Outlined In Current Version Of AASHTO Roadside Design Guide
Drainage Structure Should Be a Min of 10' From Edge Of Pavement

REVISED MAY 2021

BOONE COUNTY HIGHWAY DEPARTMENT

TYPICAL CULVERT DETAIL WITH OPEN DITCHES



STANDARD DRAWING

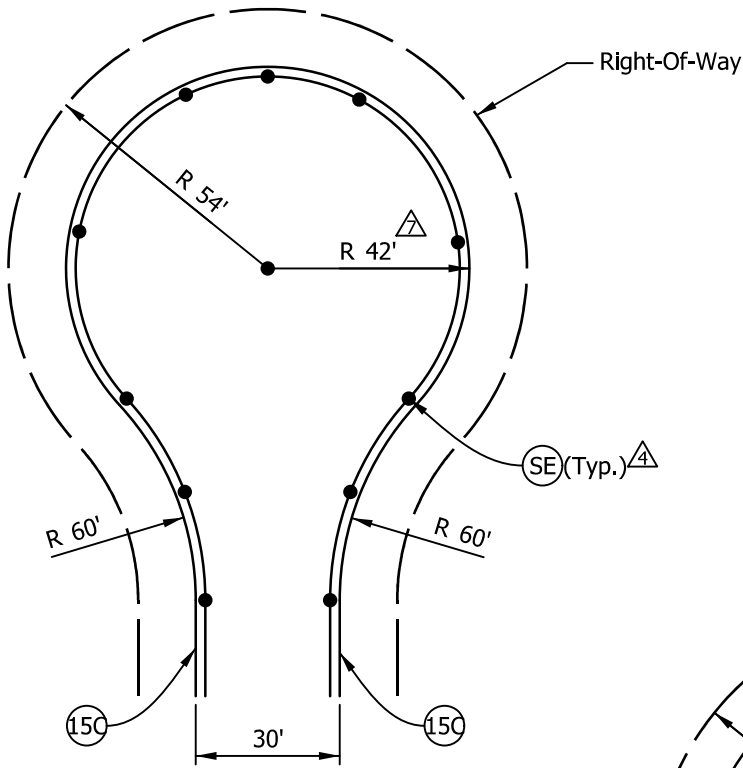
NO. BC-603-010

SHEET 1 OF 1

SCALE: NO SCALE

SDATES 1 \$TIMES 1 \$FILEL\$

3/27/2019 7:24:08 AM I:\170004 - Boone County As-Needed Assistance\Standards Consultation\09Road\04 Design files\02 DGN\Plans\6005\604-001_BC_Sub Div Cul-De-Sac_Sht_Typical.dgn



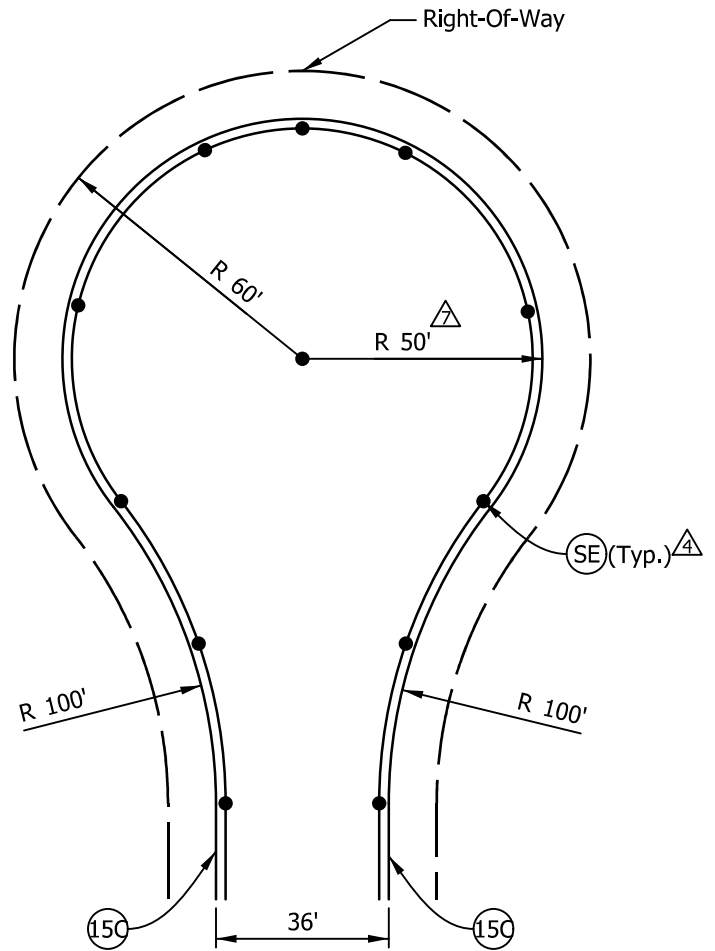
TYPE-1 (CUL-DE-SAC)

NOTES:

1. Type-1 Shall Be Used Only In Residential Subdivisions, All Others Shall Be Type-2.
2. Warning Signs Shall Be Posted At The Street Entrance, Indicating No Outlet.
3. One Detail Shall Be Provided For Each Cul-De-Sac. Each Detail Shall Be Identified By Street Name.
- △ Elevations Provided Shall Be Proposed Flow Line Of Gutter.
5. Street Width And Radius Lengths Are Measured To The Back Of Curb.
6. No Center Islands Permitted.
- △ Radius Shall Be In Accordance With Current Fire Protection Ordinance. May Differ From Dimensions Shown.

LEGEND:

- ⊙ 150 Rolled Curb, See STD Drawing BC-601-001
- ⊙ SE Spot Elevations To Be Provided At Locations As Described Below:
Beginning, Middle, And End Of Curves Approximately 40' Spacing
Along Cul-De-Sac Edge Of Pavement Center Of Cul-De-Sac (High-Point)



TYPE-2 (CUL-DE-SAC)

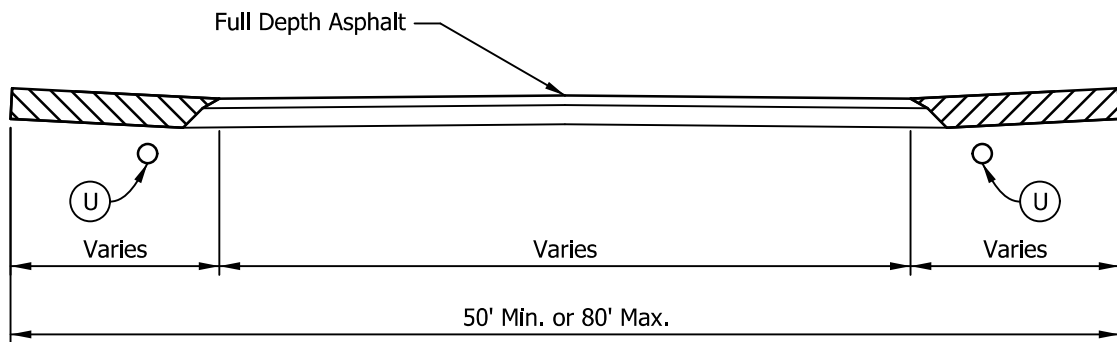
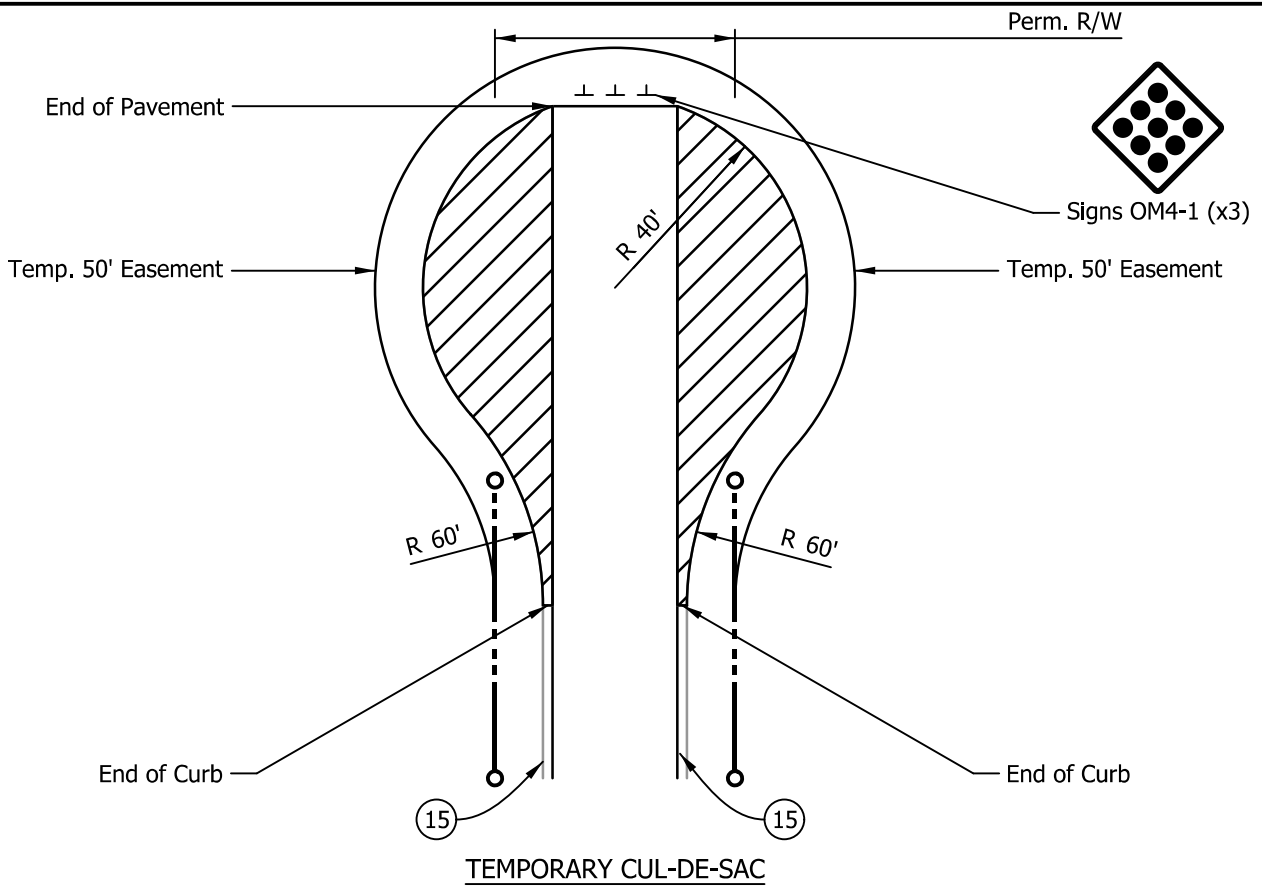
BOONE COUNTY HIGHWAY DEPARTMENT

CUL-DE-SAC



STANDARD DRAWING
NO. BC-604-001
SHEET 1 OF 1
SCALE: NO SCALE

3/27/2019 7:24:08 AM I:\P\170004 - Boone County As-Needed Assistance\Standards Consultation\09Road\04 Design files\02 DGN\Plans\6005\604-002_BC_Temp_Sub.DW_Cul-De-Sac_Typical.dgn



LEGEND

- 15
 Concrete Curb And Gutter - See STD Drawing BC-601-001
- U
 Underdrain (Typ.) - See STD Drawing BC-401-001
- Temporary Pavement To Be Removed When Street Is Continued. Thickness And Type To Match Permanent Pavement.

BOONE COUNTY HIGHWAY DEPARTMENT



TEMPORARY CUL-DE-SAC

STANDARD DRAWING
NO. BC-604-002
SHEET 1 OF 1
SCALE: NO SCALE

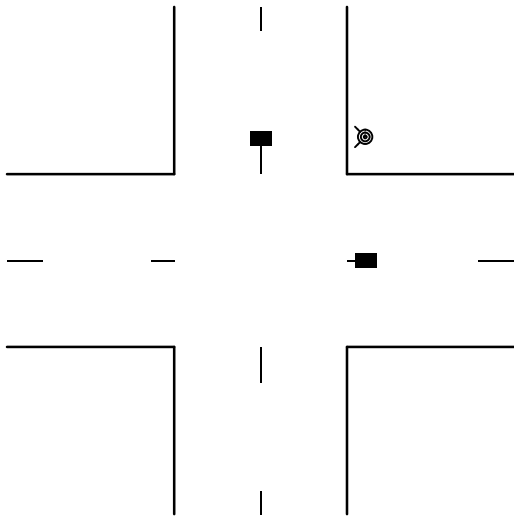
INDEX OF BOONE COUNTY STANDARDS
700 SERIES STANDARD DRAWINGS
STRUCTURES

NOT USED

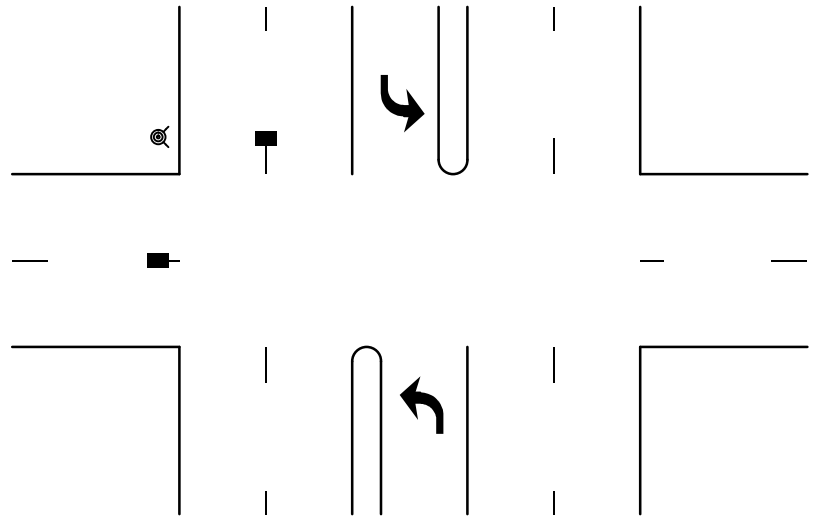
INDEX OF BOONE COUNTY STANDARDS
800 SERIES STANDARD DRAWINGS
TRAFFIC CONTROL DEVICES

Typical Blue RPM Locations.....	BC-800-001
Standard Barricade.....	BC-801-001
Typical Application For Work Beyond The Shoulder.....	BC-801-002
Typical Application For Shoulder Work With Minor Encroachment.....	BC-801-003
Typical Application For Lane Closure On A Two-Lane Road Using Flaggers.....	BC-801-004
Typical Application For Lane Closure On A Two-Lane Road With Low Traffic Volumes.....	BC-801-005
Typical Application For Temporary Road Closure.....	BC-801-006
Typical Application For Lane Closure On A Minor Street.....	BC-801-007
Typical Applicaiton Diagram For Additional Information.....	BC-801-008

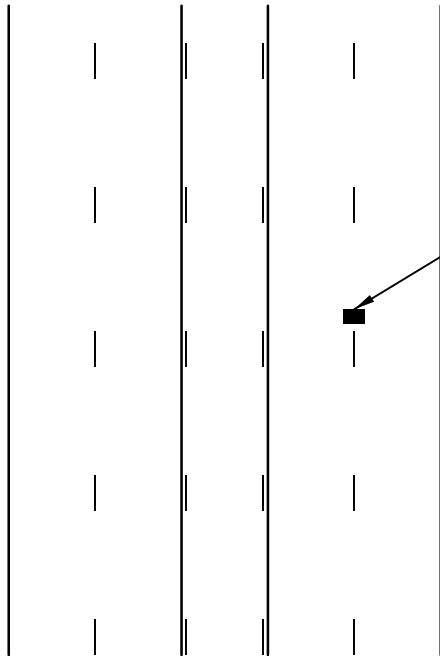
3/27/2019 7:24:10 AM I:\170004 - Boone County As-Needed Assistance\Standards Consultation\09Road\04 Design files\02 DGN\Plans\800s\800-01_Blue RPM.dgn



TWO-LANE STREET
AT INTERSECTION



MULTI-LANE STREET
AT INTERSECTION



MULTI-LANE STREET
WITH TURN LANE OR
MEDIAN

Blue Raised Pavement Marker Location (Typ.)
Fire Hydrant Location (Typ.)

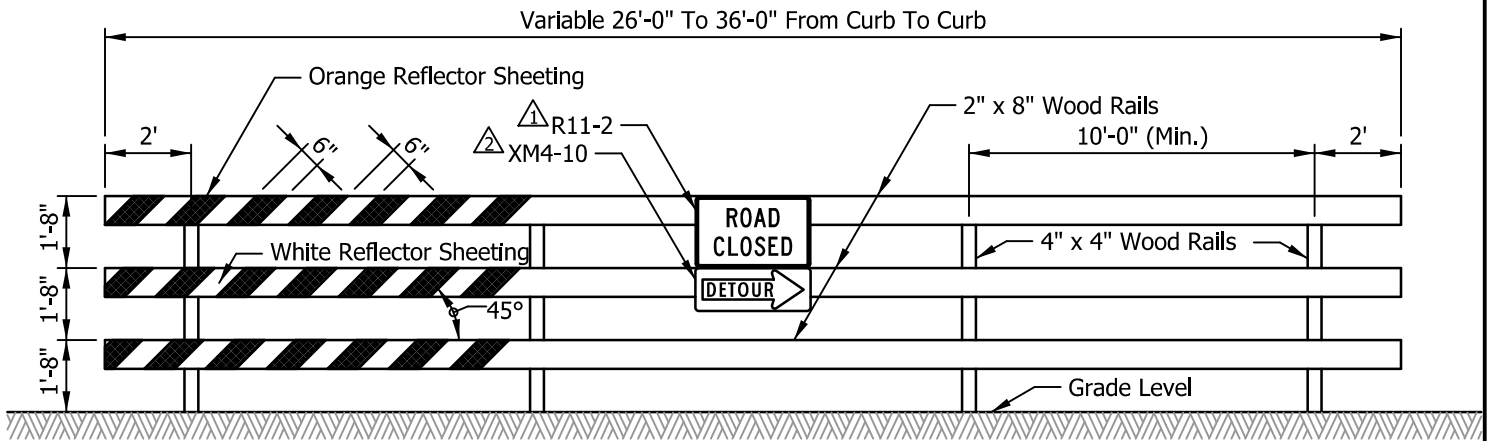
BOONE COUNTY HIGHWAY DEPARTMENT



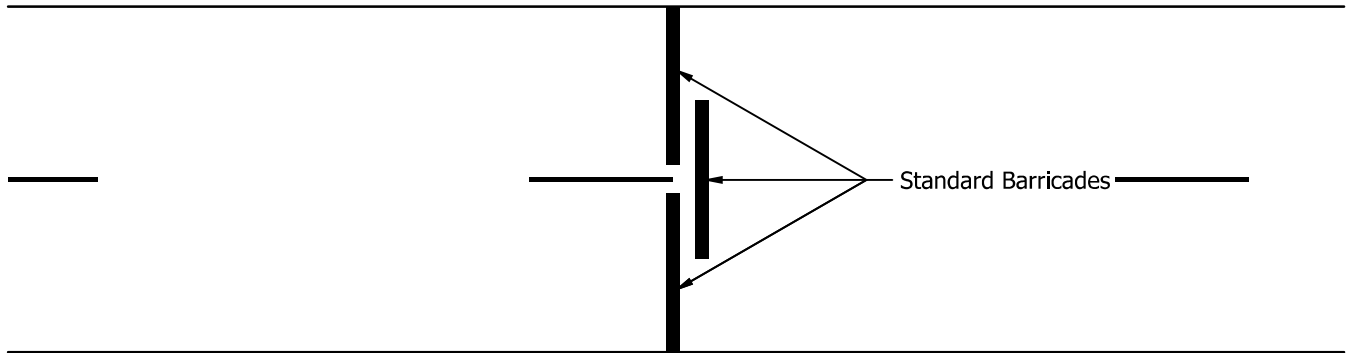
**RAISED PAVEMENT MARKER
(BLUE)**

STANDARD DRAWING
NO. BC-800-001
SHEET 1 OF 1
SCALE: NO SCALE

3/27/2019 7:24:11 AM I:\170004 - Boone County As-Needed Assistance\Standards Consultation\09Road\04 Design files\02 DGN\Plans\8005\801-001_Standard Barricade.dgn



**ROAD CLOSURE DETAIL
ELEVATION VIEW**



PLAN VIEW

NOTES:

- 1. The Legend Of The R11-2 May Be Modified To "BRIDGE CLOSED" As Indicated On The Plans Or As Directed By The County Engineer.
- 2. The Detour Arrow Sign Shall Be Used Only When A Detour Route Has Been Signed.
- 3. Barricades, Lights, Signs, And Supports Shall Meet NCHRP 350 Or Mash Crash Evaluation Criteria.
- 4. All Wood Posts And Support Members Shall Be Painted With Two Coats Of White Paint.
- 5. Location Of Barricades Shall Be In Accordance With The Plans.
- 6. Reflective Sheeting Shall Be In Accordance With INDOT Standard Specifications.
- 7. Refer To Section 801 Of The INDOT Standard Specifications And The Latest Edition Of The Indiana Manual Of Uniform Traffic Control Devices (MUTCD) For Any Additional Information.

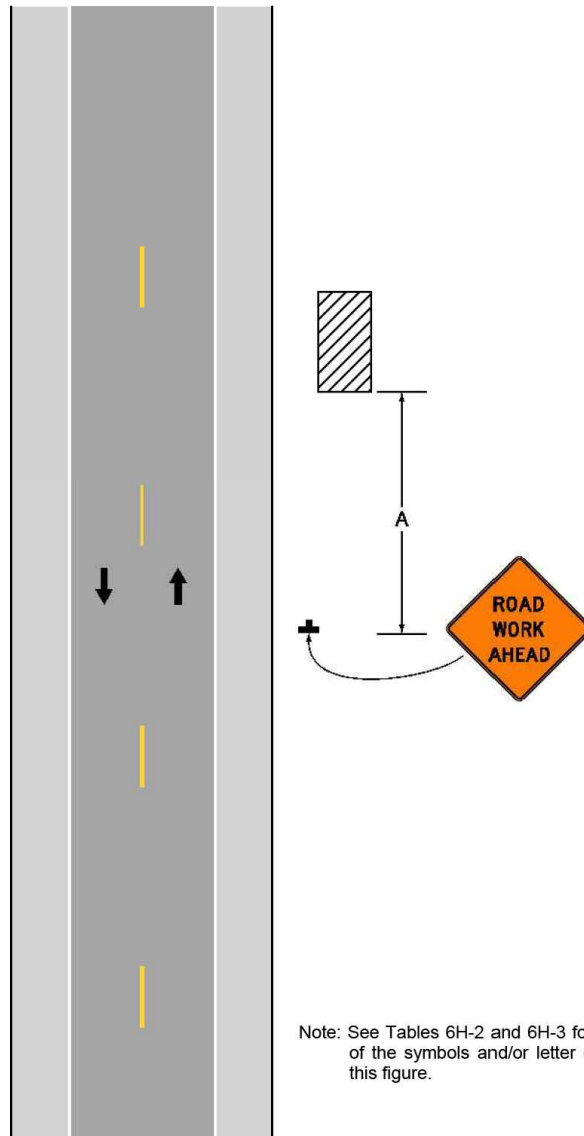
BOONE COUNTY HIGHWAY DEPARTMENT



STANDARD BARRICADE

STANDARD DRAWING
NO. BC-801-001
SHEET 1 OF 1
SCALE: NO SCALE

Figure 6H-1. Work Beyond the Shoulder (TA-1)



Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 1

November 2011

Sect. 6H.01

NOTES:

1. Figure From 2011 Indiana Manual On Uniform Traffic Control Devices (MUTCD)
2. For Additional Information See 2011 IMUTCD and See STD Drawing - BC-801-008

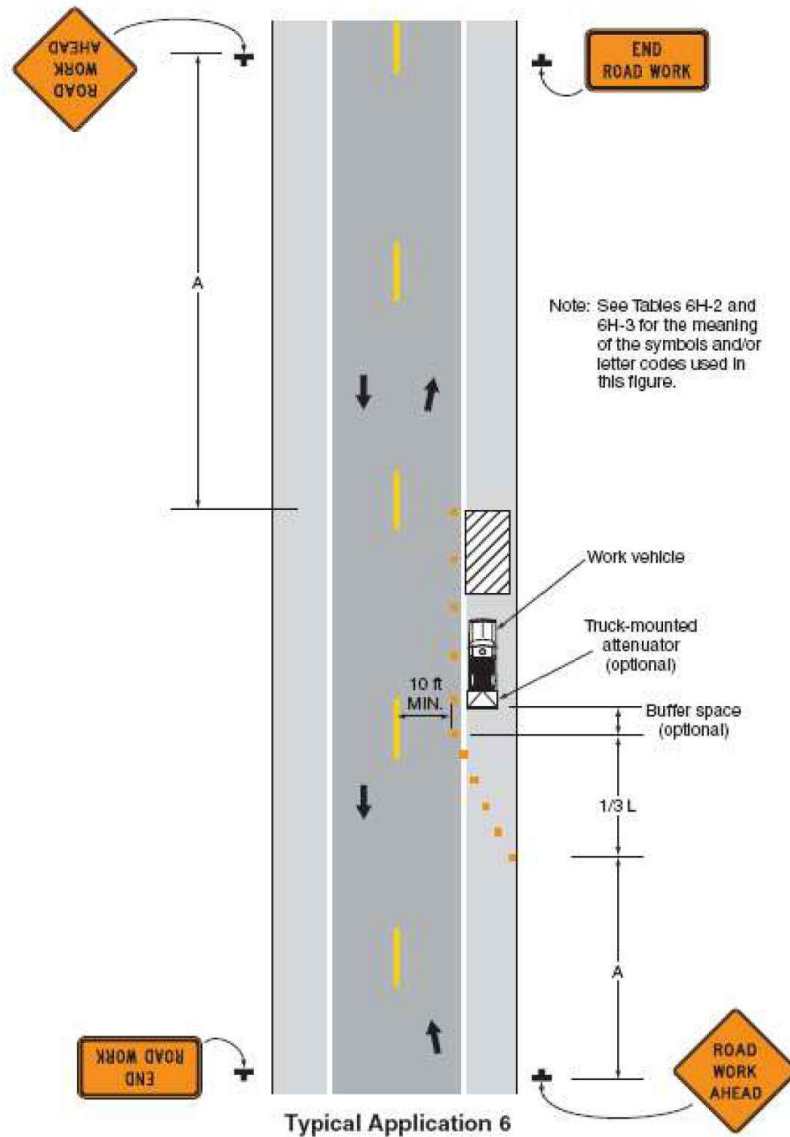
BOONE COUNTY HIGHWAY DEPARTMENT

**TYPICAL APPLICATION FOR
WORK BEYOND THE SHOULDER**

STANDARD DRAWING
NO. BC-801-002
SHEET 1 OF 1
SCALE: NO SCALE



Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



November 2011

Sect. 6H.01

NOTES:

1. Figure From 2011 Indiana Manual On Uniform Traffic Control Devices (MUTCD)
2. For Additional Information See 2011 IMUTCD and See STD Drawing - BC-801-008

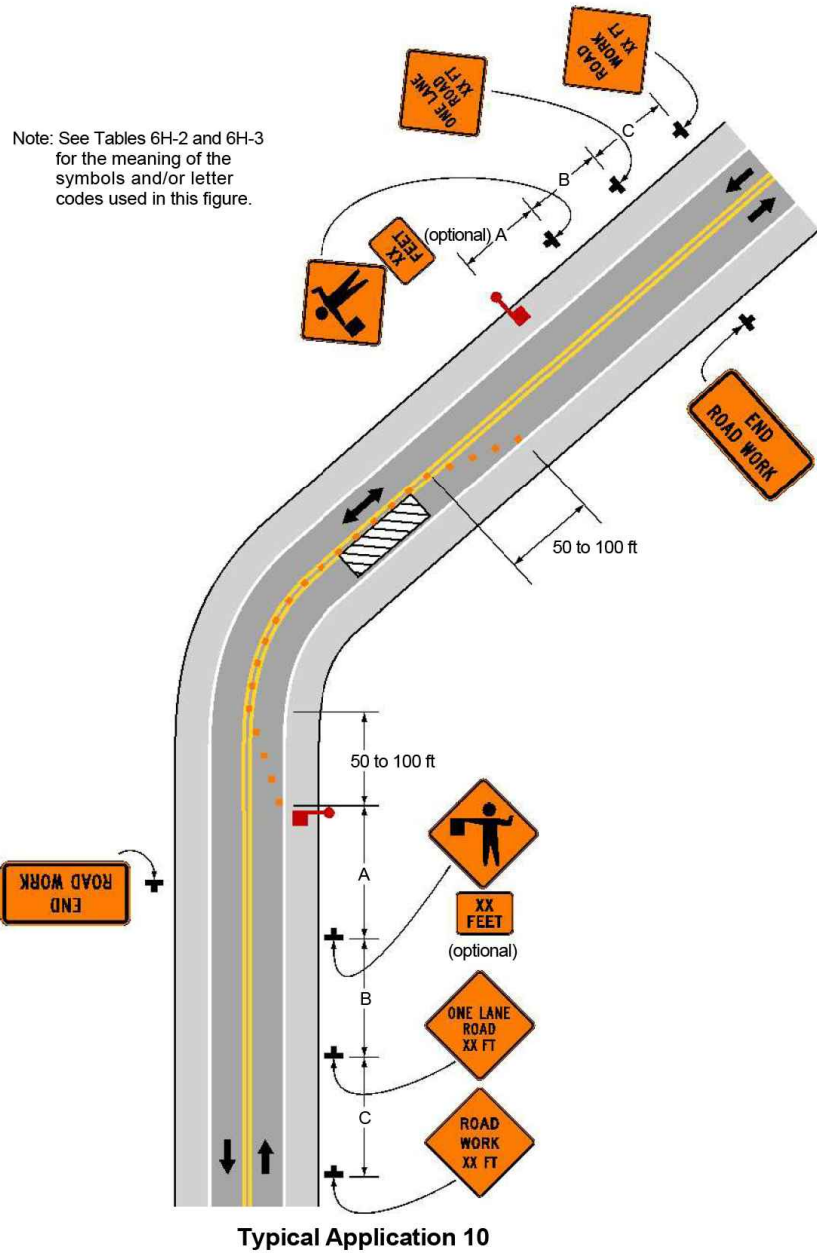
BOONE COUNTY HIGHWAY DEPARTMENT

**TYPICAL APPLICATION FOR
SHOULDER WORK WITH MINOR ENCROACHMENT**

STANDARD DRAWING
NO. BC-801-003
SHEET 1 OF 1
SCALE: NO SCALE



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



November 2011

Sect. 6H.01

NOTES:

1. Figure From 2011 Indiana Manual On Uniform Traffic Control Devices (MUTCD)
2. For Additional Information See 2011 IMUTCD and See STD Drawing - BC-801-008

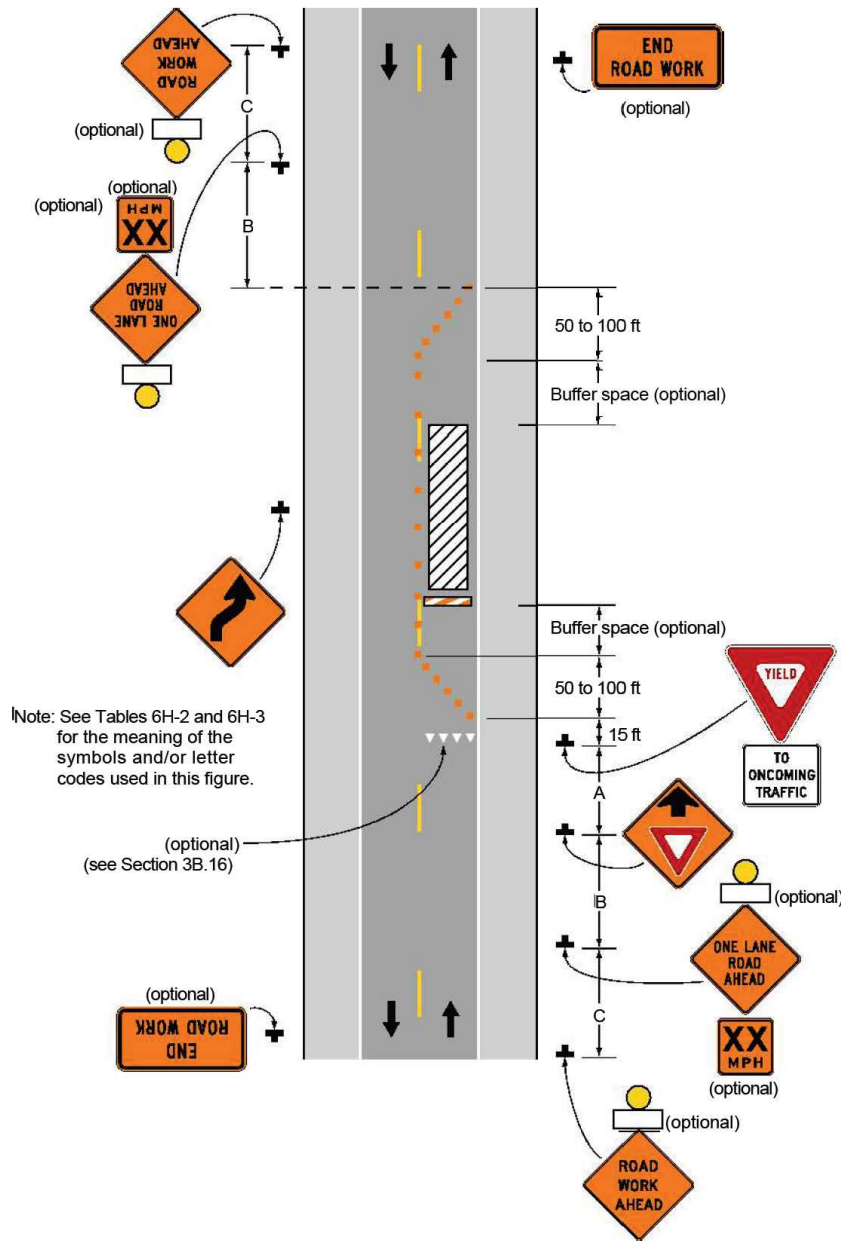
BOONE COUNTY HIGHWAY DEPARTMENT

**TYPICAL APPLICATION FOR
LANE CLOSURE ON A TWO-LANE ROAD USING FLAGGERS**

STANDARD DRAWING
NO. BC-801-004
SHEET 1 OF 1
SCALE: NO SCALE



Figure 6H-11. Lane Closure on a Two-Lane Road with Low Traffic Volumes (TA-11)



Typical Application 11

November 2011

Sect. 6H.01

NOTES:

1. Figure From 2011 Indiana Manual On Uniform Traffic Control Devices (MUTCD)
2. For Additional Information See 2011 IMUTCD and See STD Drawing - BC-801-008

BOONE COUNTY HIGHWAY DEPARTMENT

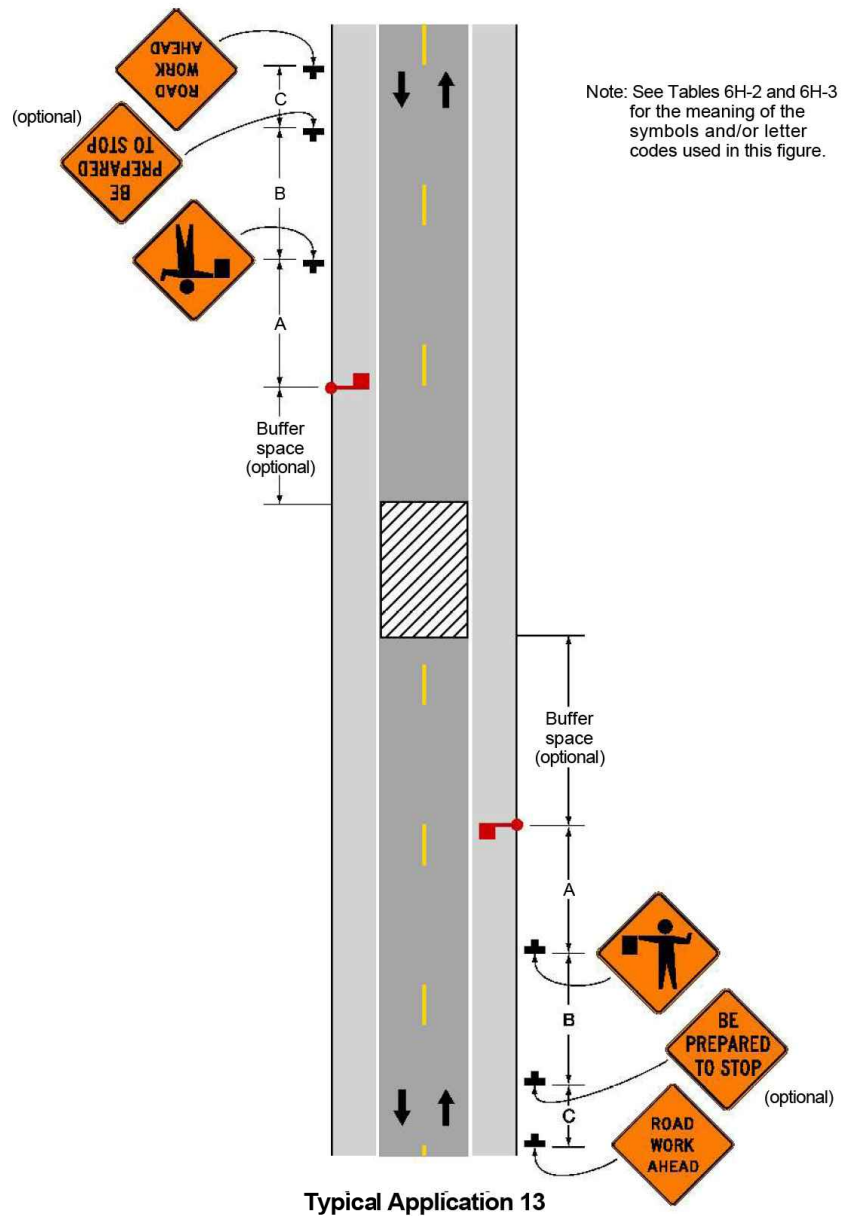
**TYPICAL APPLICATION FOR
LANE CLOSURE ON A TWO-LANE ROAD
WITH LOW TRAFFIC VOLUME**

STANDARD DRAWING
NO. BC-801-005
SHEET 1 OF 1
SCALE: NO SCALE



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Figure 6H-13. Temporary Road Closure (TA-13)



November 2011

Sect. 6H.01

NOTES:

1. Figure From 2011 Indiana Manual On Uniform Traffic Control Devices (MUTCD)
2. For Additional Information See 2011 IMUTCD and See STD Drawing - BC-801-008

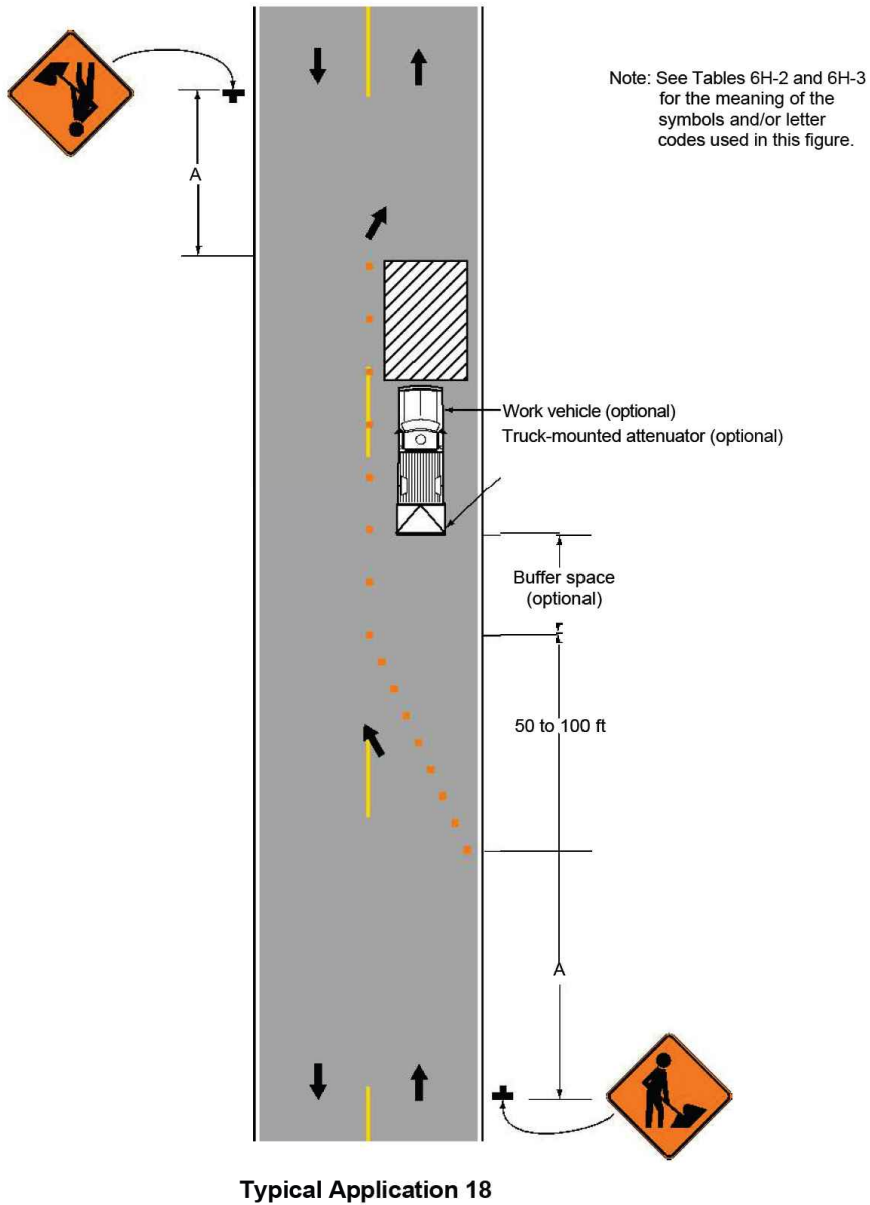
BOONE COUNTY HIGHWAY DEPARTMENT



TYPICAL APPLICATION FOR TEMPORARY ROAD CLOSURE

STANDARD DRAWING
NO. BC-801-006
SHEET 1 OF 1
SCALE: NO SCALE

Figure 6H-18. Lane Closure on a Minor Street (TA-18)



3/27/2019 7:24:15 AM I:\170004 - Boone County As-Needed Assistance\Standards Consolidation\09Road\04 Design files\02 DGN\Plans\8005\801-007_Lane Closure_Minor Street.dgn

November 2011

Sect. 6H.01

NOTES:

1. Figure From 2011 Indiana Manual On Uniform Traffic Control Devices (MUTCD)
2. For Additional Information See 2011 IMUTCD and See STD Drawing - BC-801-008

BOONE COUNTY HIGHWAY DEPARTMENT

**TYPICAL APPLICAITON FOR
LANE CLOSURE ON A MINOR STREET**



STANDARD DRAWING
NO. BC-801-007
SHEET 1 OF 1
SCALE: NO SCALE

Table 6H-2. Meaning of Symbols on Typical Application Diagrams


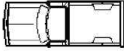



















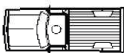

	Arrow board		Shadow vehicle
	Arrow board support or trailer (shown facing down)		Sign (shown facing left)
	Changeable message sign or support trailer		Surveyor
	Channelizing device		Temporary barrier
	Crash cushion		Temporary barrier with warning light
	Direction of temporary traffic detour		Traffic or pedestrian signal
	Direction of traffic		Truck-mounted attenuator
	Flagger		Type 3 barricade
	High-level warning device (Flag tree)		Warning light
	Longitudinal channelizing device		Work space
	Luminaire		Work vehicle
	Pavement markings that should be removed for a long-term project		

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
	A	B	C
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

* Speed category to be determined by highway agency

** The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

Table 6H-4. Formulas for Determining Taper Length

Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where: L = taper length in feet
 W = width of offset in feet
 S = posted speed limit, or off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

November 2011

Sect. 6H.01

NOTES:

1. Figure From 2011 Indiana Manual On Uniform Traffic Control Devices (MUTCD)

BOONE COUNTY HIGHWAY DEPARTMENT

**ADDITIONAL INFORMATION FOR
TYPICAL APPLICATION DIAGRAMS**



STANDARD DRAWING
NO. BC-801-008
SHEET 1 OF 1
SCALE: NO SCALE

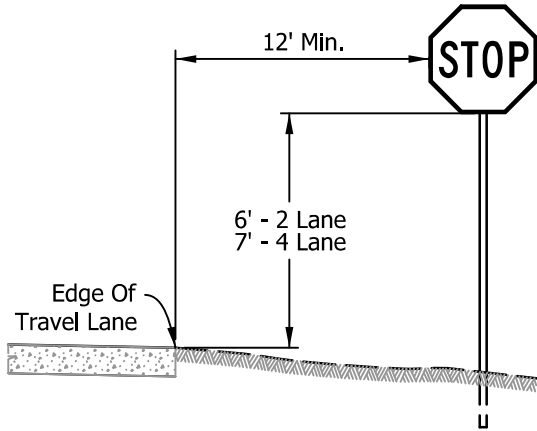
INDEX OF BOONE COUNTY STANDARDS
900 SERIES STANDARD DRAWINGS
STREET SIGNS

Typical Street Sign Locations.....BC-900-001

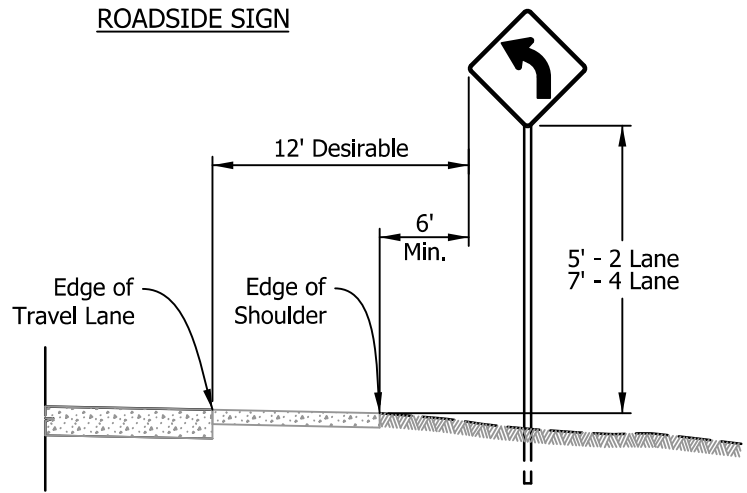
Typical Street Sign Details.....BC-900-002



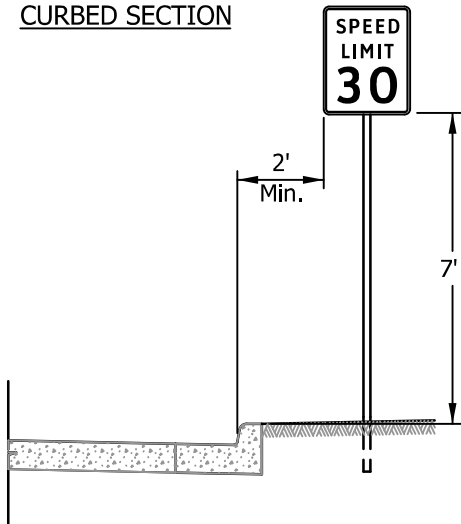
STOP SIGN



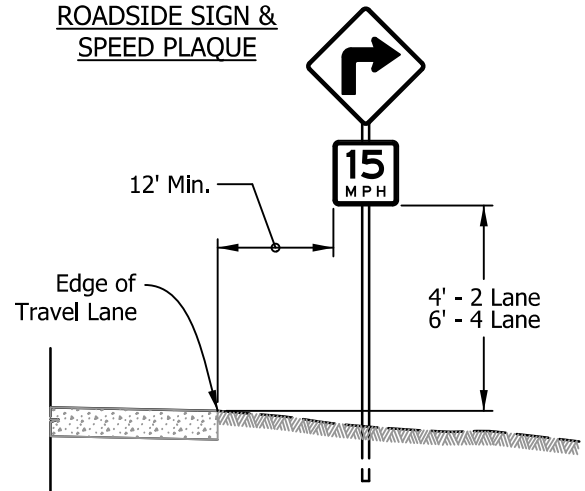
ROADSIDE SIGN



CURBED SECTION



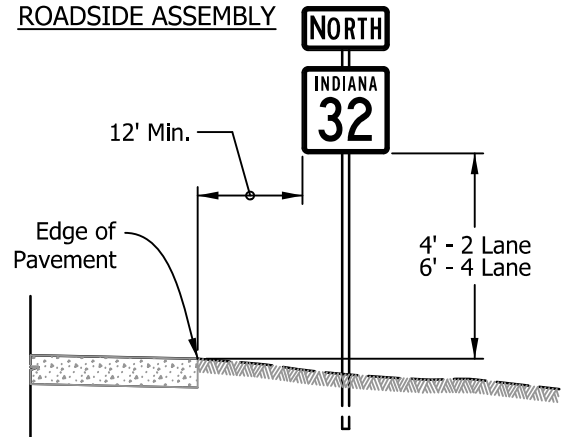
ROADSIDE SIGN & SPEED PLAQUE



NOTES:

- 1. See MUTCD Section 2A.19 For Reduced Lateral Offset Distances, 2' May Be Used In Areas Where Lateral Offsets Are Limited.
- 2. For Additional Information See MUTCD.
- 3. All Signs Shall Have H.I.P. Retroreflective Backgrounds.
- 4. All Sign Posts Shall Be Mounted On Breakaway Anchors.

ROADSIDE ASSEMBLY



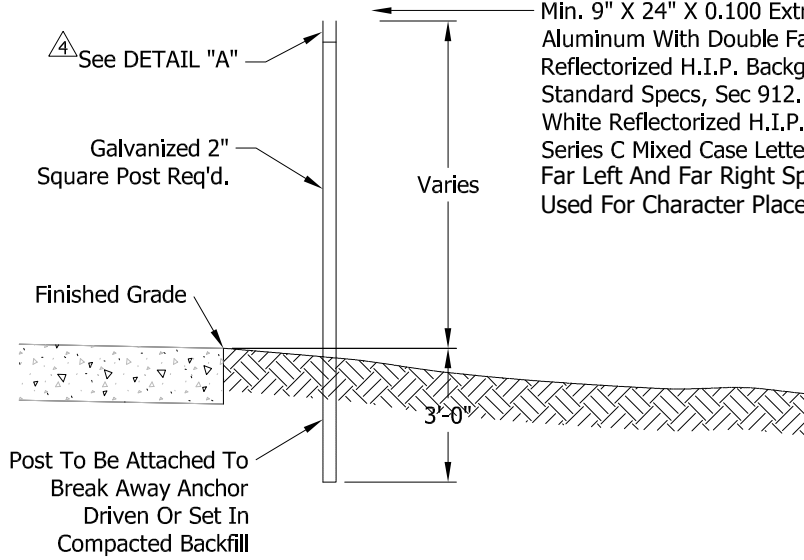
BOONE COUNTY HIGHWAY DEPARTMENT

**POSITION OF SIGNS IN RELATION TO ROADWAY
(CONVENTIONAL ROADS AND STREETS)**

STANDARD DRAWING
NO. BC-900-001
SHEET 1 OF 1
SCALE: NO SCALE

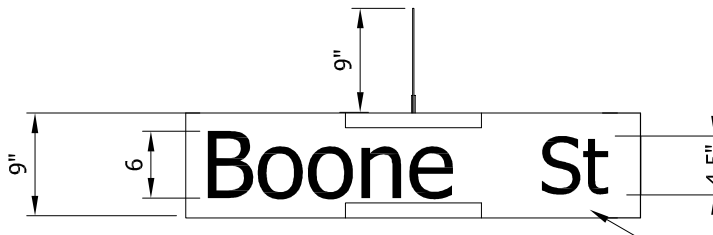
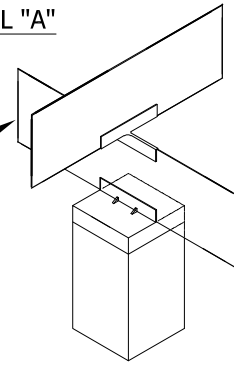


STREET SIGN



Min. 9" X 24" X 0.100 Extruded Aluminum With Double Faced Green ReflectORIZED H.I.P. Background Per Standard Specs, Sec 912.10 And 6 White ReflectORIZED H.I.P. Type IV, Series C Mixed Case Letters. Far Left And Far Right Spacing Shall Be Used For Character Placement.

DETAIL "A"



STREET SIGN SIZE

Min. 9" X 24" X 0.100 Extruded Aluminum With Double Faced Green ReflectORIZED H.I.P. Background Per Standard Specs, Sec 912.10 And 6" White ReflectORIZED H.I.P. Type IV, Series C Mixed Case Letters. Far Left And Far Right Spacing Shall Be Used For Character Placement.

1. Private Streets Shall Be So Indicated On The Left Hand Side Of The Sign With Dual Line 1-1/2" Black Letters On Yellow ReflectORIZED Background Preceding The Street Name.
2. One Sign Assemble Shall Be Located At Each Intersection On The Northeast Corner When Possible.
3. Stop Signs Shall Not Be Installed On The Street Name Sign Posts.
4. All Hardware To Be Galvanized Steel
5. For Additional Information See MUTCD.
6. All Sign Posts Shall Be Mounted On Breakaway Anchors.

REVISED APRIL 2021

BOONE COUNTY HIGHWAY DEPARTMENT

**STREET NAME SIGNS
(DETAILS)**

STANDARD DRAWING
NO. BC-900-002
SHEET 1 OF 1
SCALE: NO SCALE

