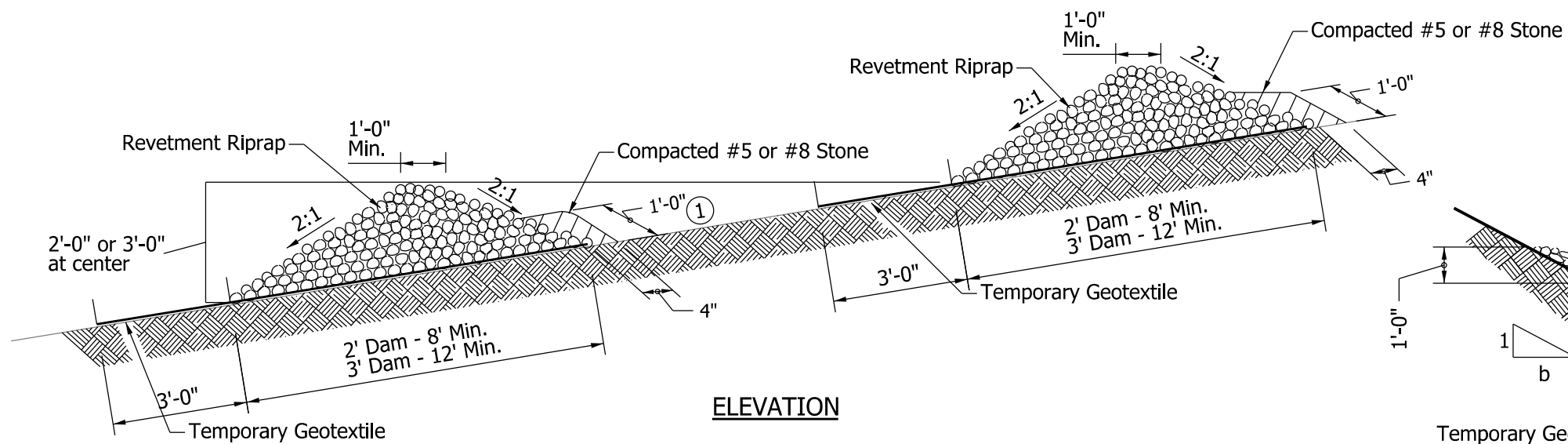


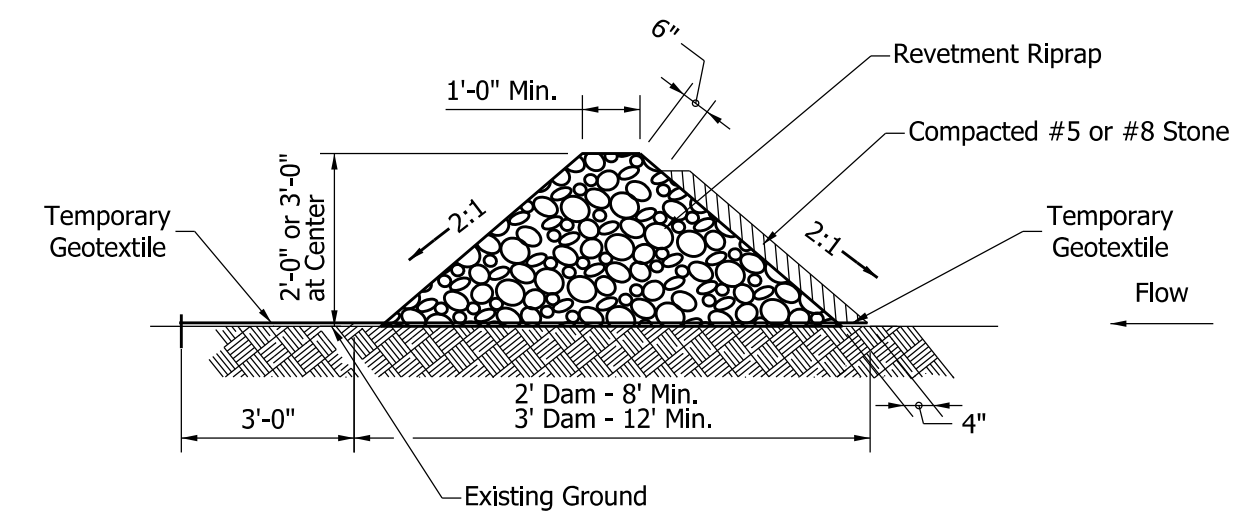
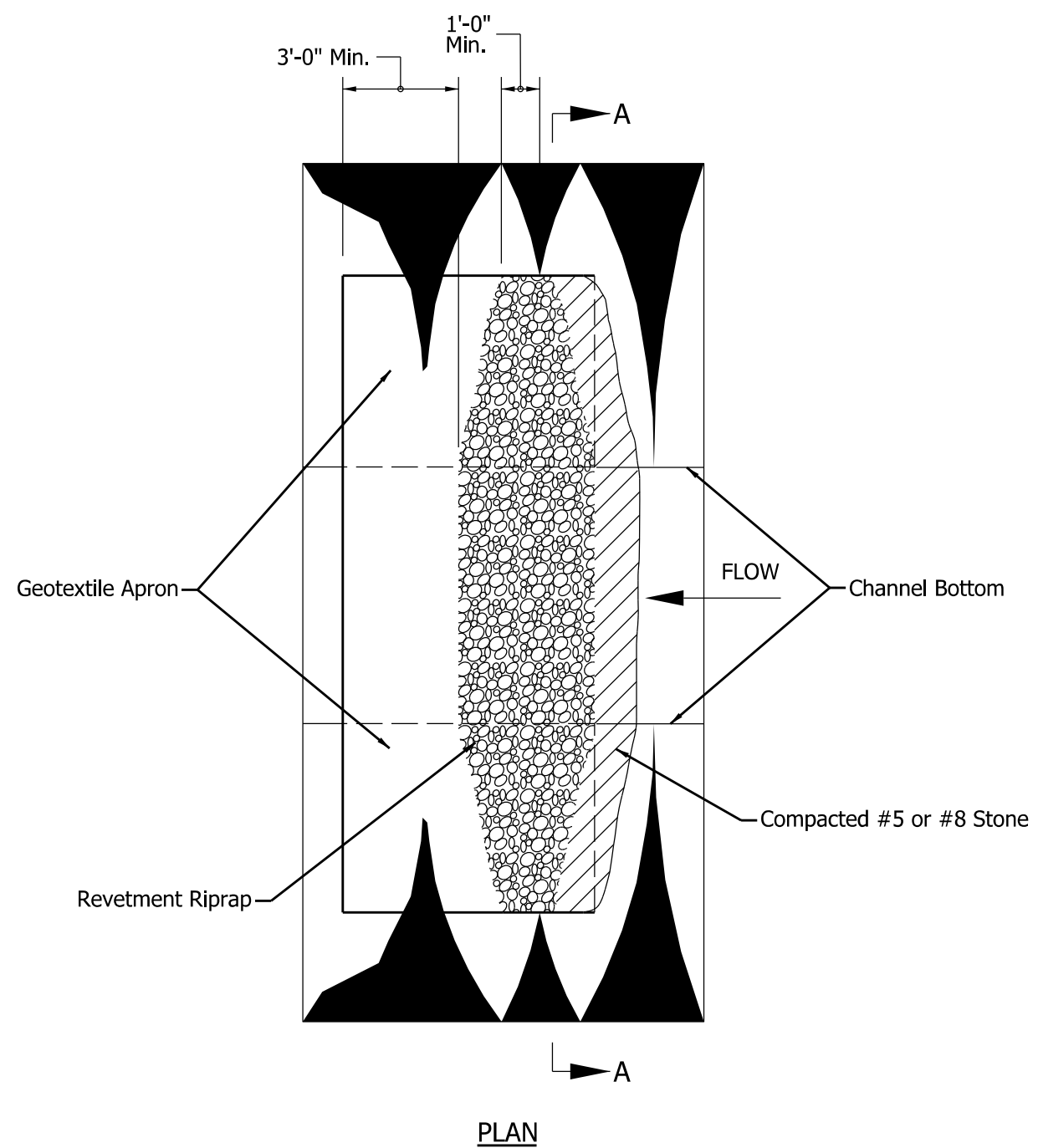
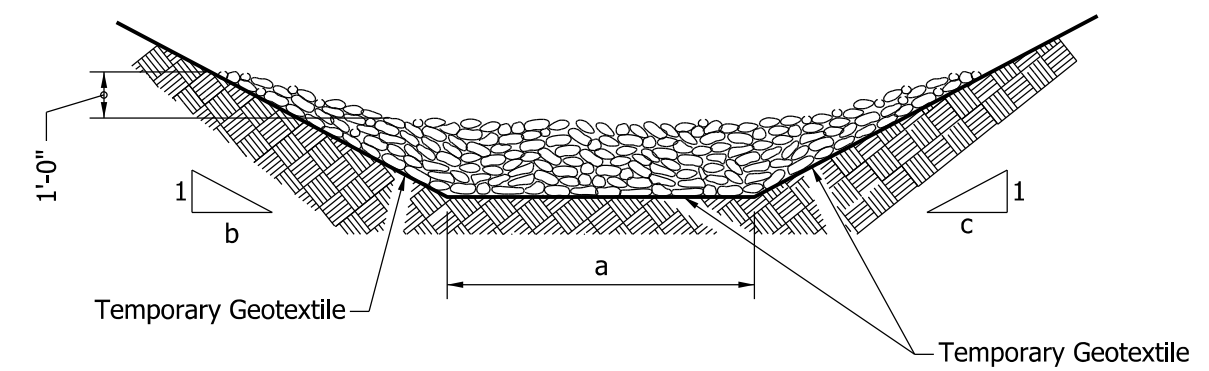
**METHOD FOR DETERMINING QUANTITIES
WITHIN STRUCTURE LIMITS**

INDIANA DEPARTMENT OF TRANSPORTATION	
ROAD & BRIDGE	
CONTRACT LIMITS	
SEPTEMBER 2000	
STANDARD DRAWING NO. E 105-RBCL-01	
	/s/ Anthony L. Uremovich 9-01-00 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 9-01-00 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

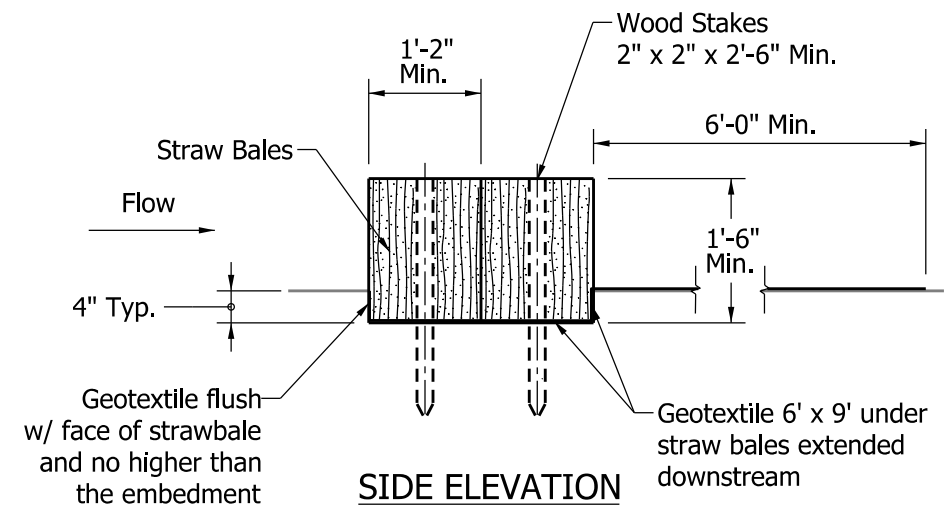


NOTES:

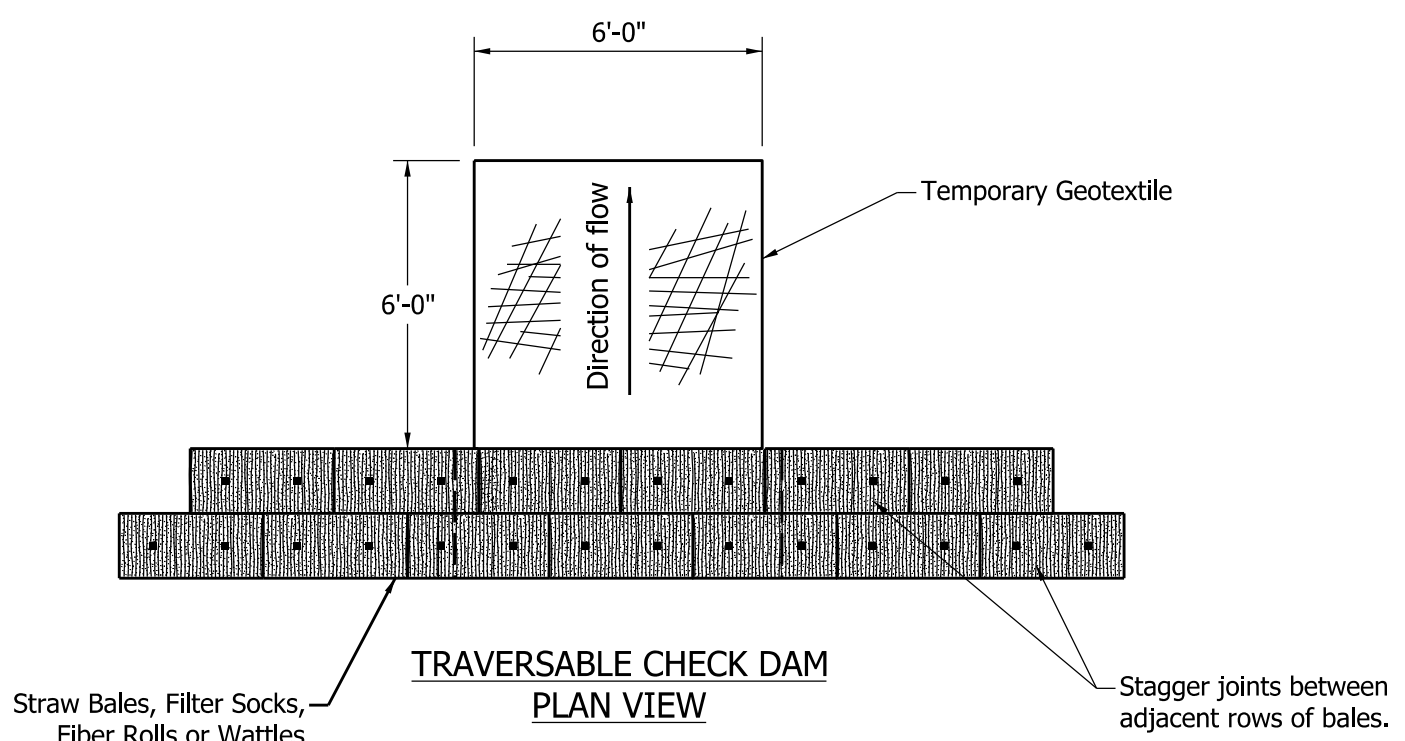
- ① Riprap ditch check dams shall be spaced such that the top of the downstream check dam is at the same elevation as the toe of the adjacent upstream check dam.



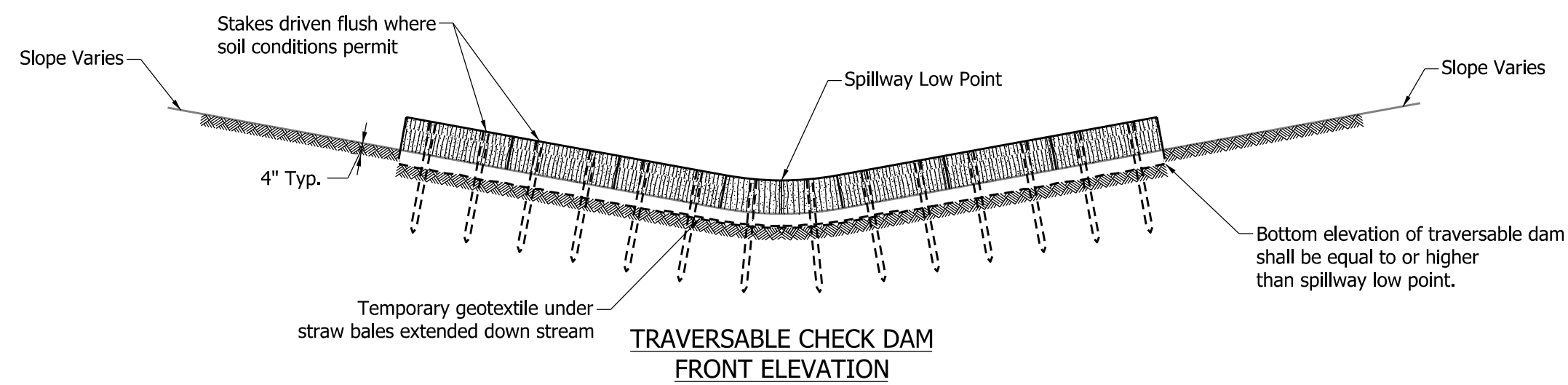
INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY CHECK DAM REVTMENT RIPRAP	
SEPTEMBER 2012	
STANDARD DRAWING NO.	E 205-TECD-01
	/s/ <i>Richard L. VanCleave</i> 09/04/12 SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12 CHIEF ENGINEER DATE



**SIDE ELEVATION
STRAW BALE INSTALLATION**



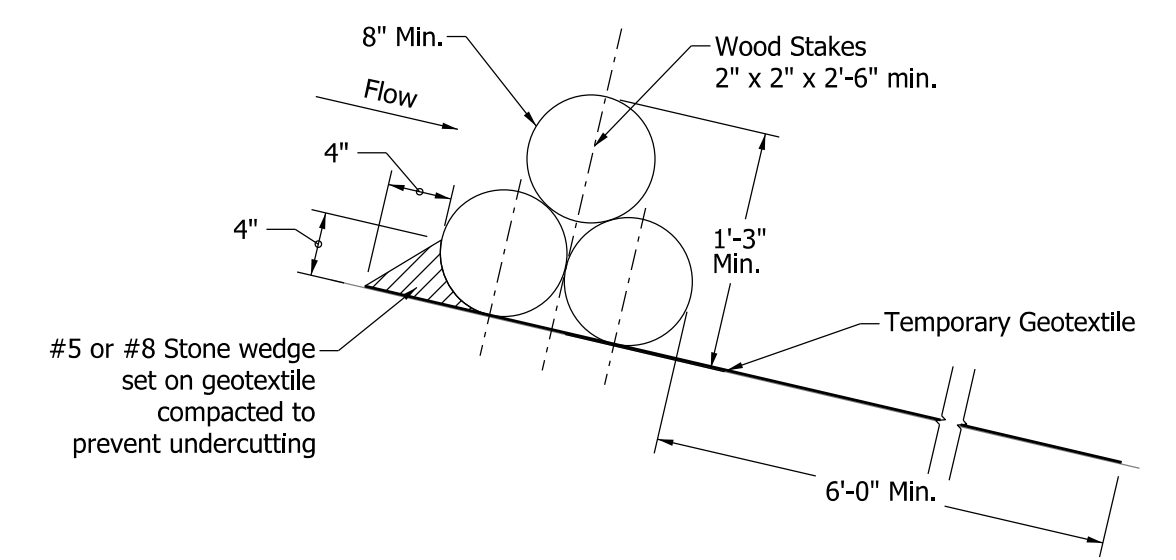
**TRAVERSABLE CHECK DAM
PLAN VIEW**



**TRAVERSABLE CHECK DAM
FRONT ELEVATION**

NOTES:

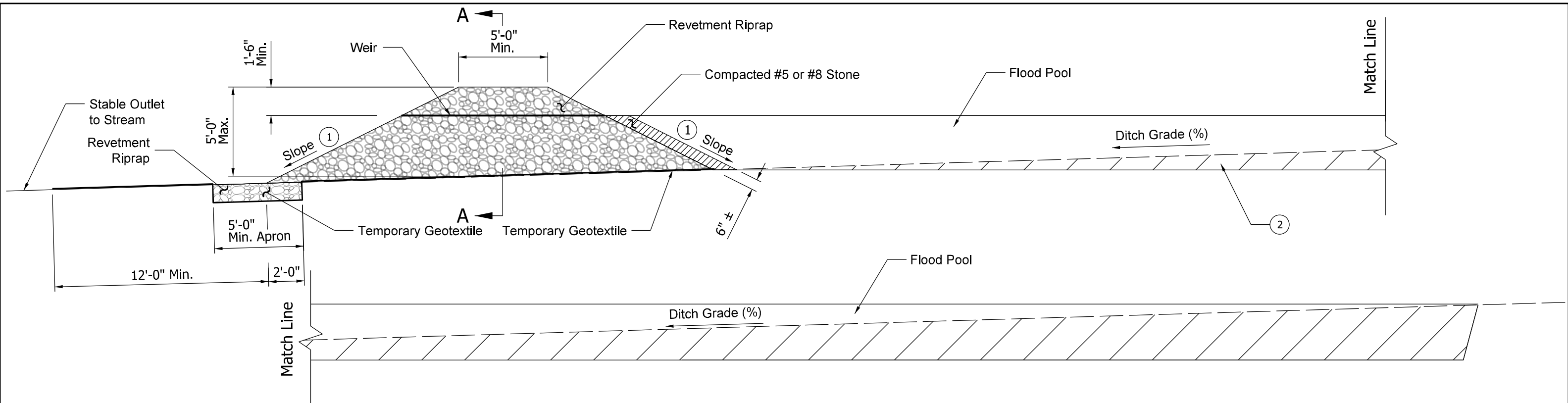
1. Ditch check dams shall be spaced such that the top of the downstream check dam is at the same elevation as the toe of the adjacent upstream check dam.



**SIDE ELEVATION
ROLLED EROSION CONTROL PRODUCT OPTION**

Stacking Method:
Filter Socks, Fiber Rolls or Wattle Installation

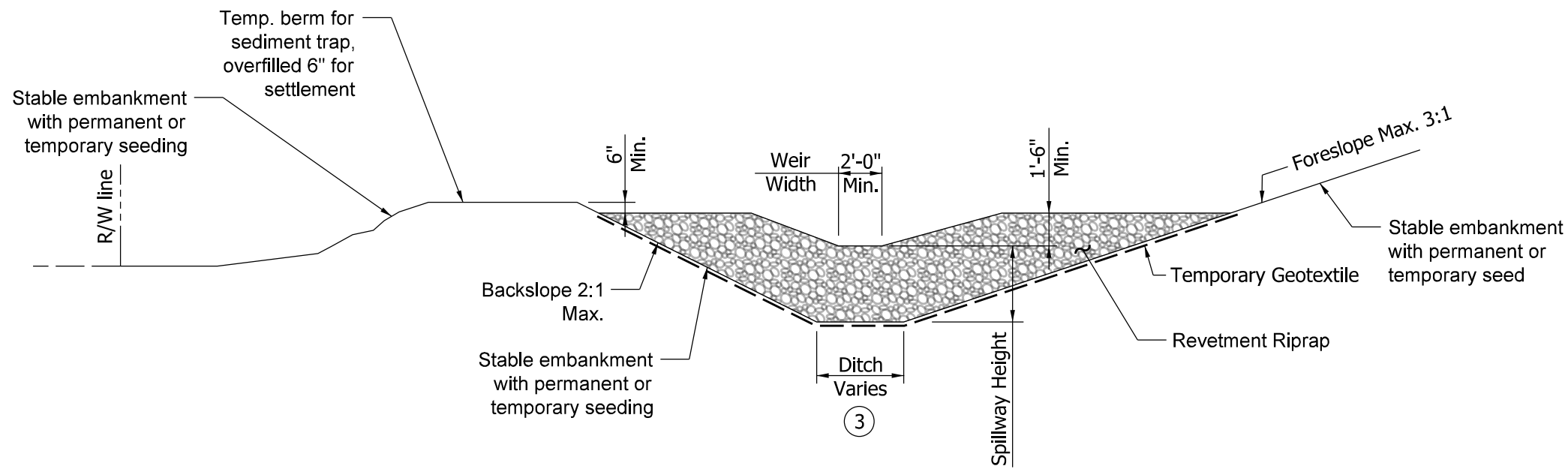
INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY CHECK DAM, TRAVERSABLE FOR CLEAR ZONE	
SEPTEMBER 2012	
STANDARD DRAWING NO.	E-205-TECD-02
	/s/ <i>Richard L. VanCleave</i> 09/04/12 SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12 CHIEF ENGINEER DATE



ELEVATION VIEW

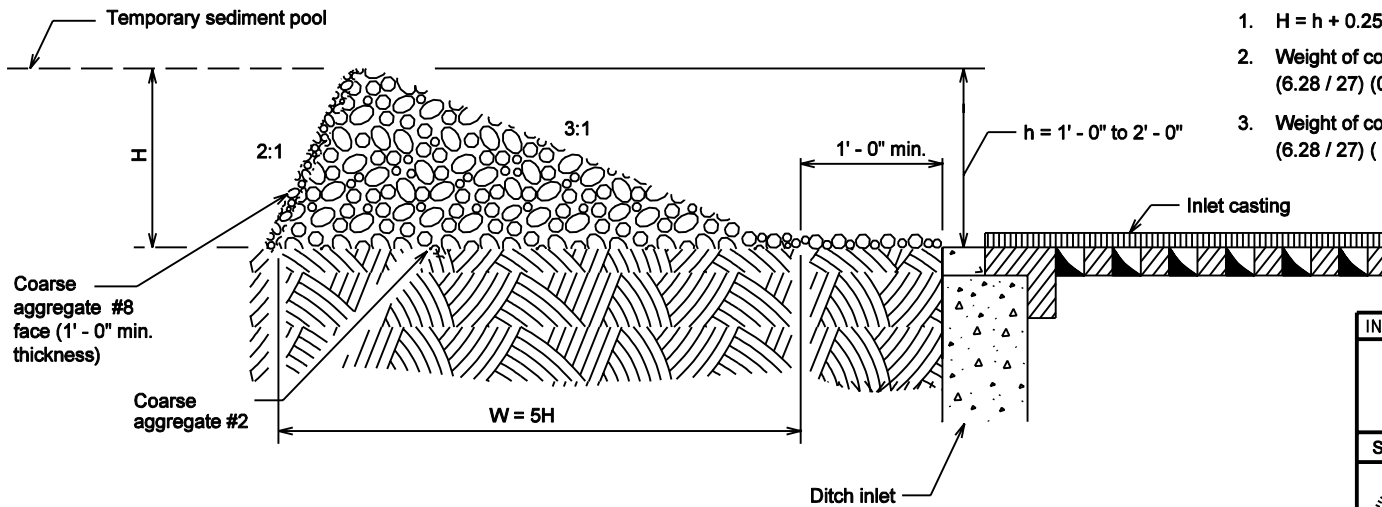
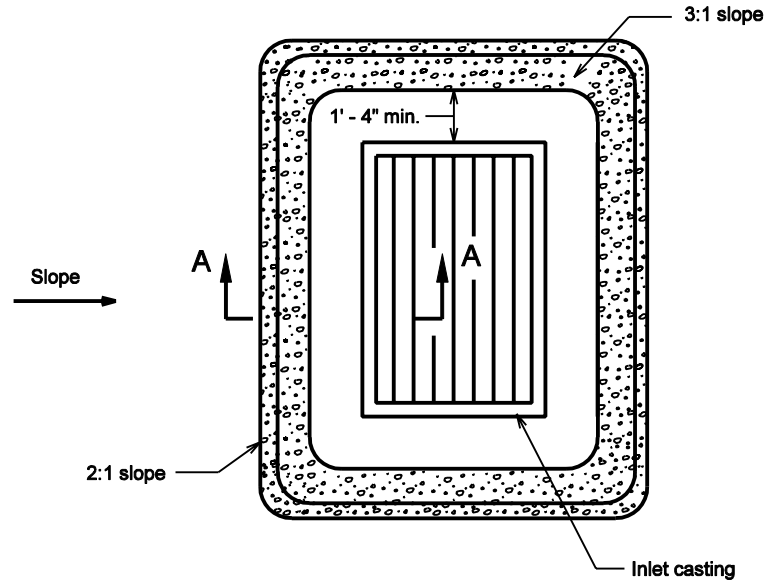
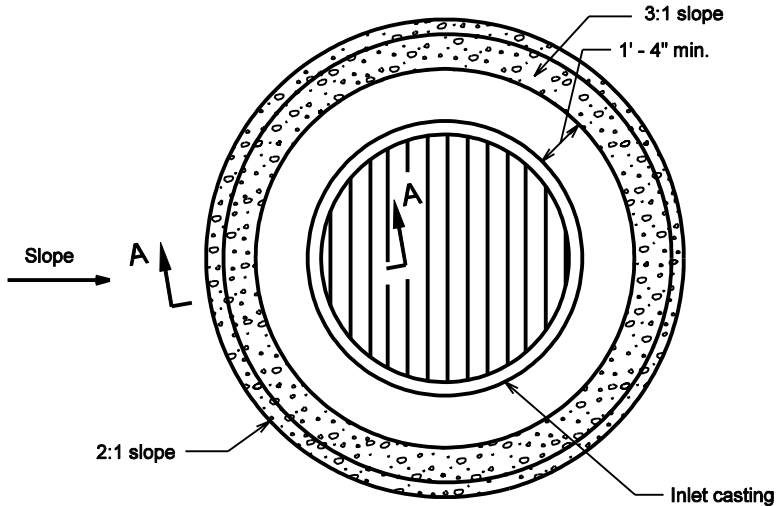
NOTES:

- ① Slope should be 3:1 maximum on the near side with respect to the direction of traffic while the far side slope may be 2:1 maximum.
- ② This area may be excavated below planned ditch grade to achieve sediment trap capacity. It shall not be excavated to below the bottom elevation of sediment trap riprap. However, over-excavation does not count toward trap capacity of 2-year 24-hour storm event.
- ③ Spillway width equals ditch bottom width, min. 2 ft.



SECTION A-A

INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY SEDIMENT TRAP	
SEPTEMBER 2012	
STANDARD DRAWING NO. E 205-TECD-03	
	/s/ <i>Richard L. VanCleave</i> 09/04/12 SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12 CHIEF ENGINEER DATE



SECTION A-A

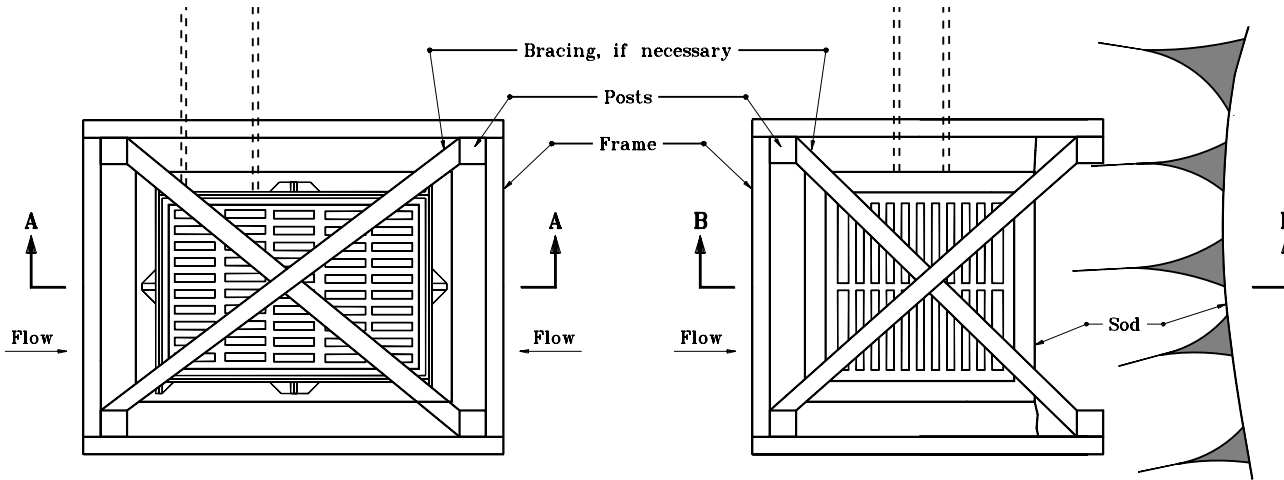
GENERAL NOTES

1. $H = h + 0.25$, ft
2. Weight of coarse aggregate #2, Tons:
 $(6.28 / 27) (0.67^2 + 2.5H) (1 + 3H + 1/2 \text{ inlet width}) (0.6)$
3. Weight of coarse aggregate #8, Tons:
 $(6.28 / 27) (H) (1 + 4H + 1/2 \text{ inlet width}) (0.6)$

INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY DITCH INLET PROTECTION, GRAVEL RING	
MARCH 2002	
STANDARD DRAWING NO. E 205-TECI-01	
	/s/ Richard L. VanCleave 3-01-02 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 3-01-02 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

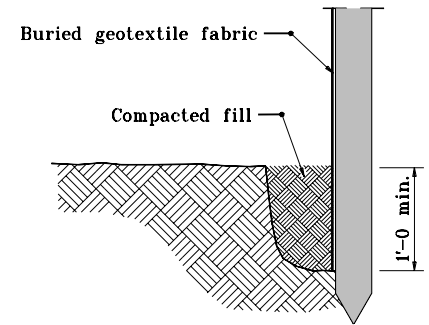
NOTES:

1. The frame shall be wrapped with one continuous piece of geotextile fabric, and a 2'-0" overlap shall be provided.

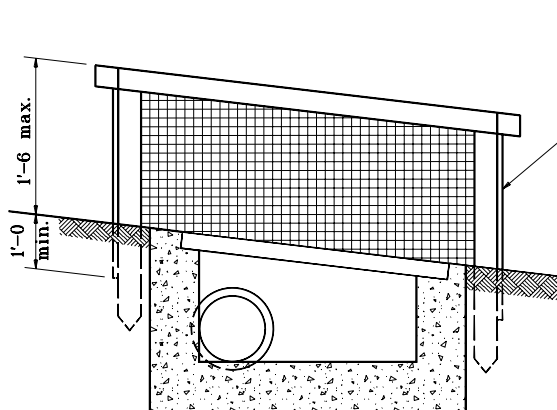


PLAN VIEW

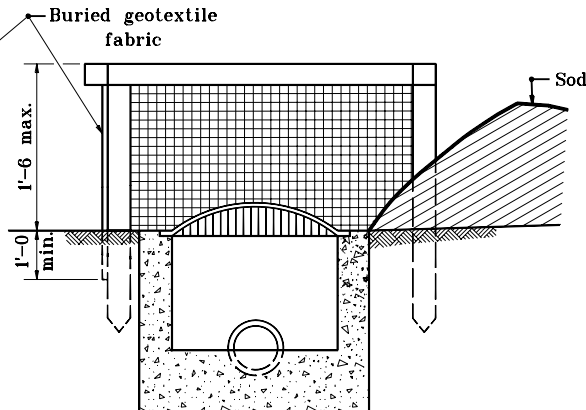
PLAN VIEW



TRENCH DETAIL

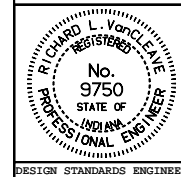


SECTION A-A



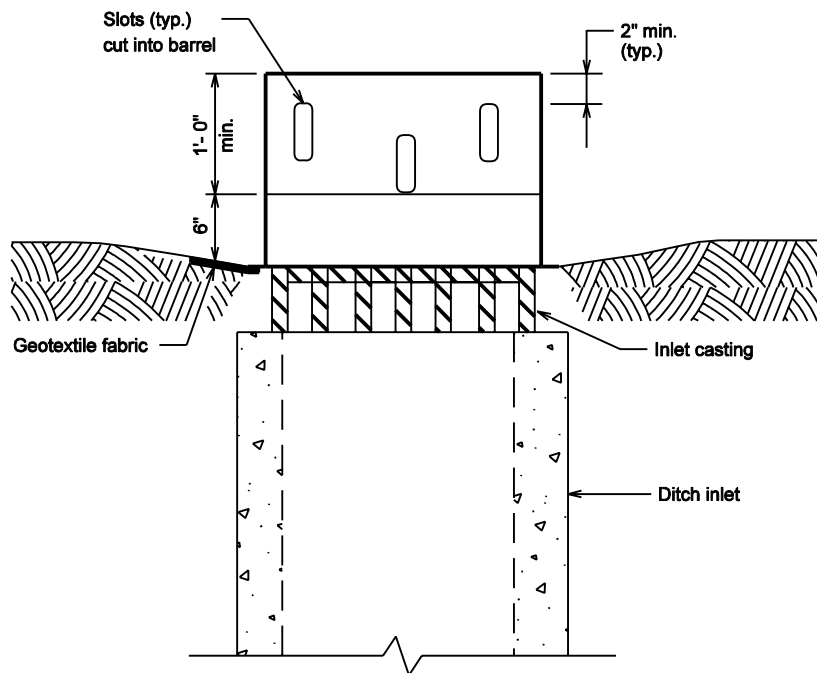
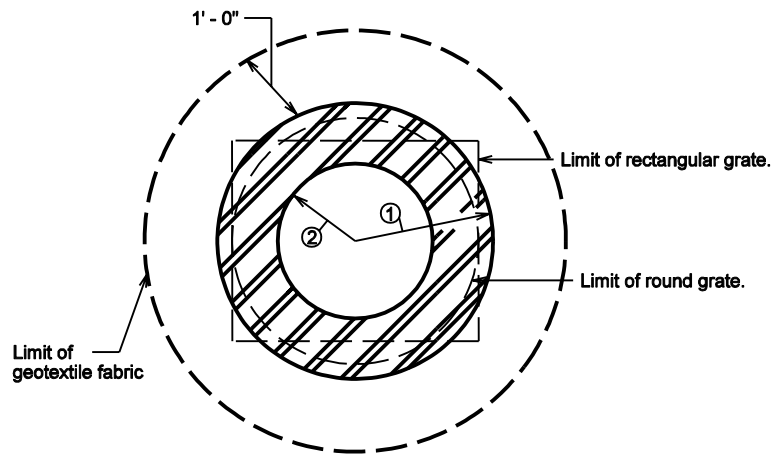
SECTION B-B

INDIANA DEPARTMENT OF TRANSPORTATION
**TEMPORARY DITCH INLET
 PROTECTION, GEOTEXTILE BOX**
 MARCH 2002
 STANDARD DRAWING NO. E 205-TECI-02



/s/ Richard L. VanCleave 3-01-02
 DESIGN STANDARDS ENGINEER DATE

/s/ Richard Smutzer 3-01-02
 CHIEF HIGHWAY ENGINEER DATE



GENERAL NOTES

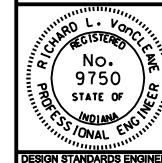
- ① Radius shall be equal to or greater than that of a round casting grate, or equal to, or greater than half of the longer length of a rectangular grate.
- ② Distance shall be greater than half of the radius of a round grate, or greater than one-quarter of the shorter length of a rectangular grate.
- 3 Slots shall be 5" min. height by 1" min. width.

INDIANA DEPARTMENT OF TRANSPORTATION

**TEMPORARY DITCH INLET
PROTECTION SLOTTED BARREL**

MARCH 2002

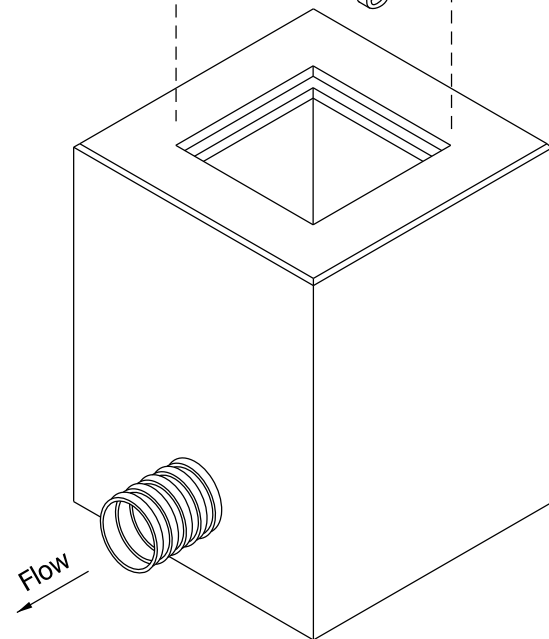
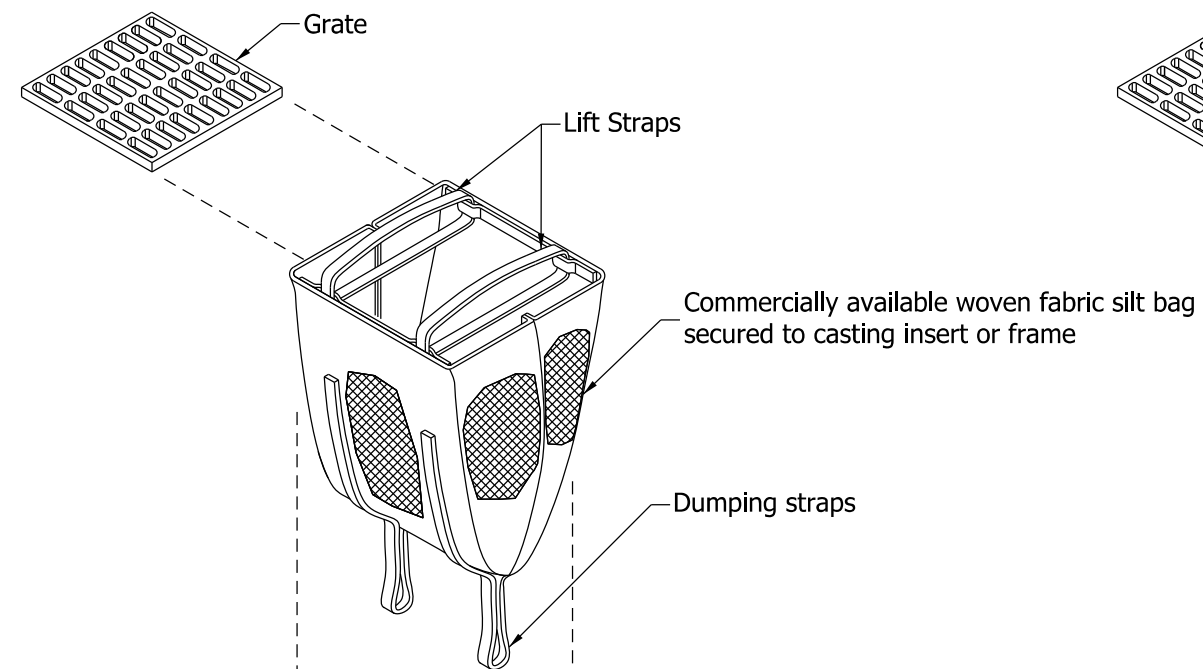
STANDARD DRAWING NO. E 205-TECI-03



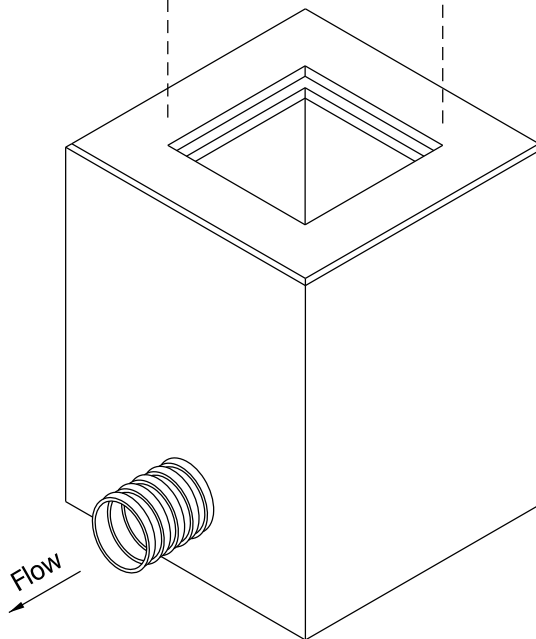
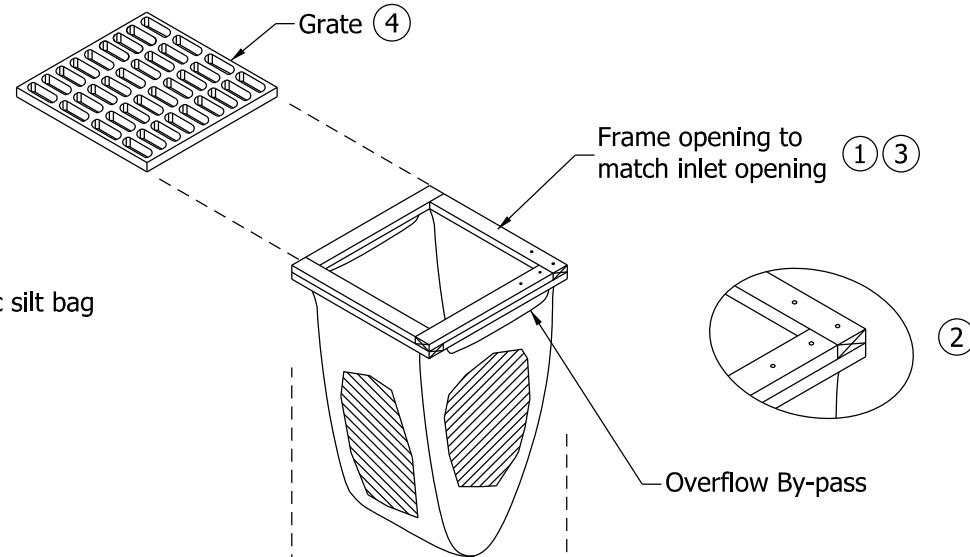
/s/ Richard L. VanCleave 3-01-02
DESIGN STANDARDS ENGINEER DATE

/s/ Richard K. Smutzer 3-01-02
CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER



MANUFACTURED



BUILT IN FIELD

NOTES:

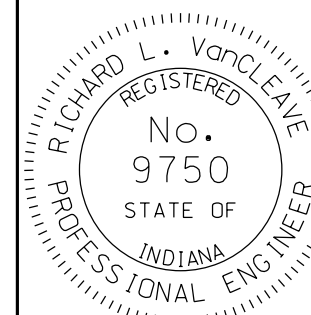
- ① Frame opening sized to match inlet opening.
- ② Geotextile bag shall be fabricated from piece of geotextile 2 times the opening size pushed through opening to form weephole. Secured by nails.
- ③ Frame with bag to be placed over inlet opening.
- ④ Bag frame shall be secured in place by weight of inlet grate. Grate may be rotated 45 degrees to the bag's frame.

INDIANA DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION CONTROL INLET
BAG PROTECTION

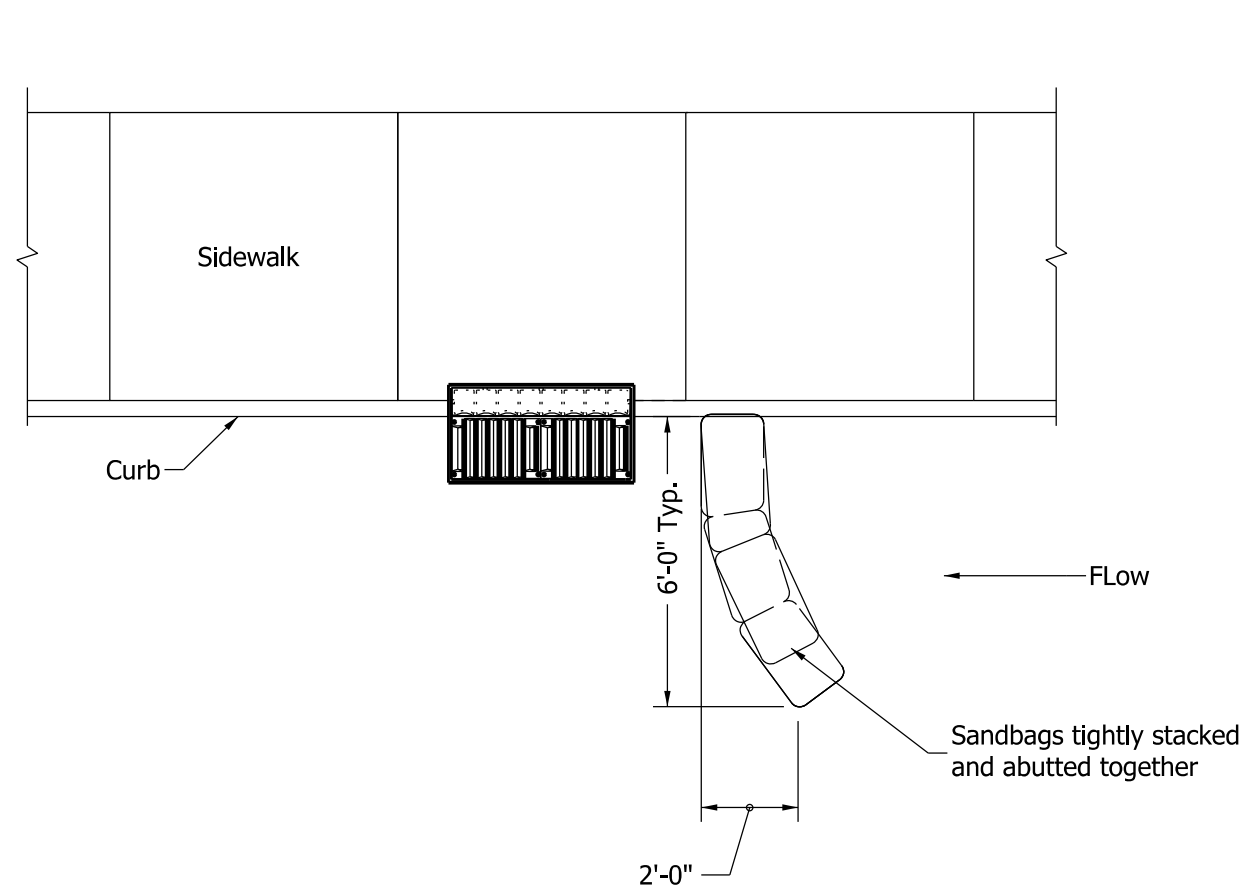
SEPTEMBER 2012

STANDARD DRAWING NO. E 205-TECI-04

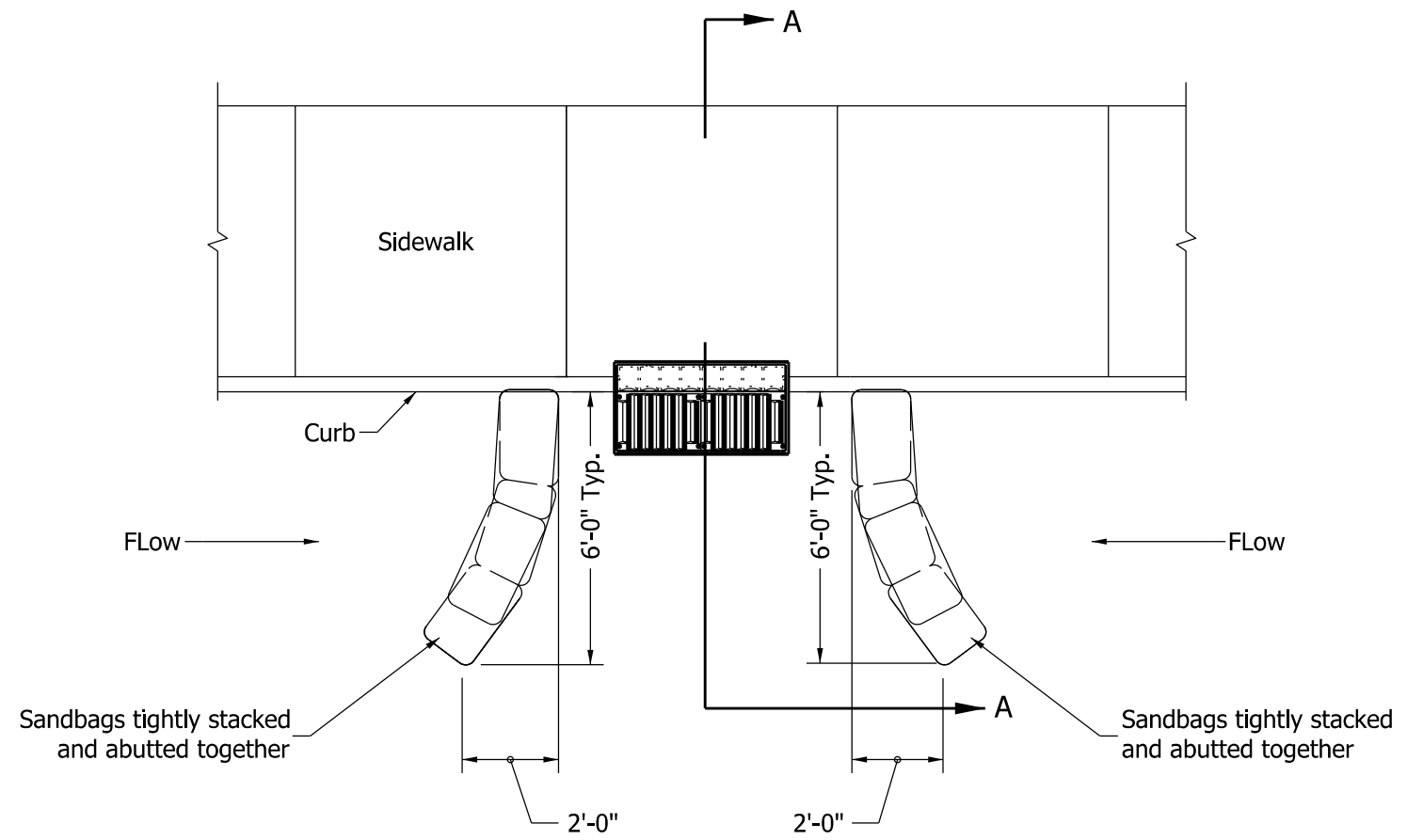


/s/ Richard L. VanCleave 09/04/12
SUPERVISOR, ROADWAY STANDARDS DATE

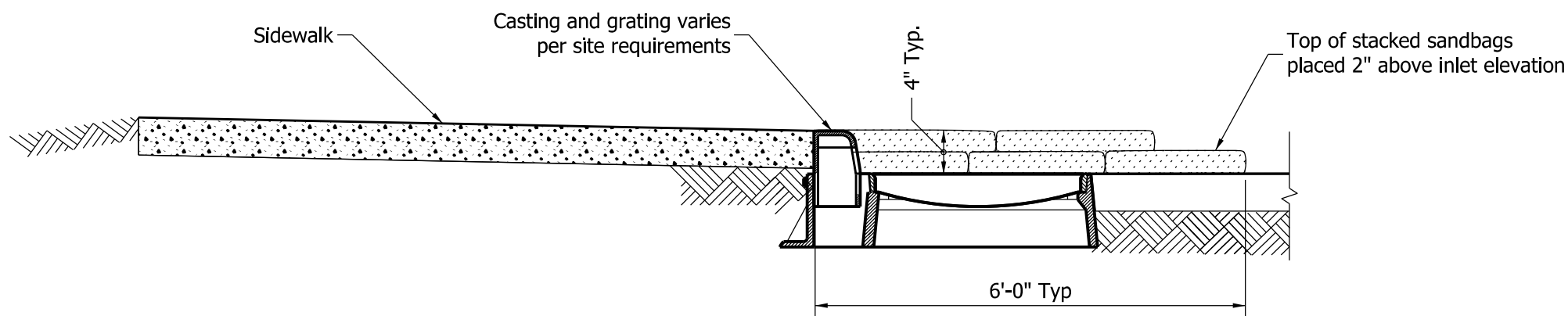
/s/ Mark A. Miller 09/04/12
CHIEF ENGINEER DATE



SINGLE DIRECTION FLOW



DUAL DIRECTION FLOW

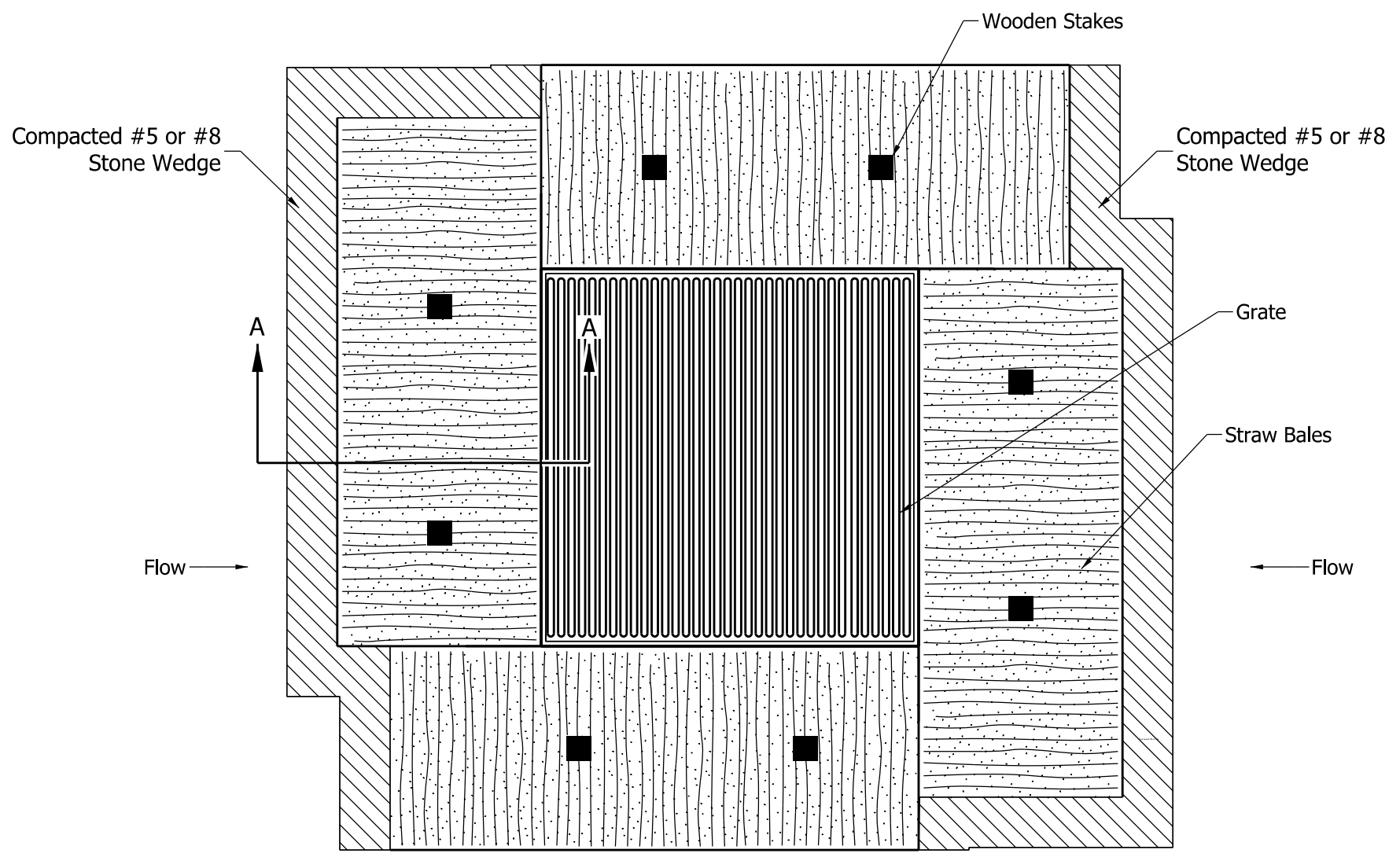


SECTION A-A

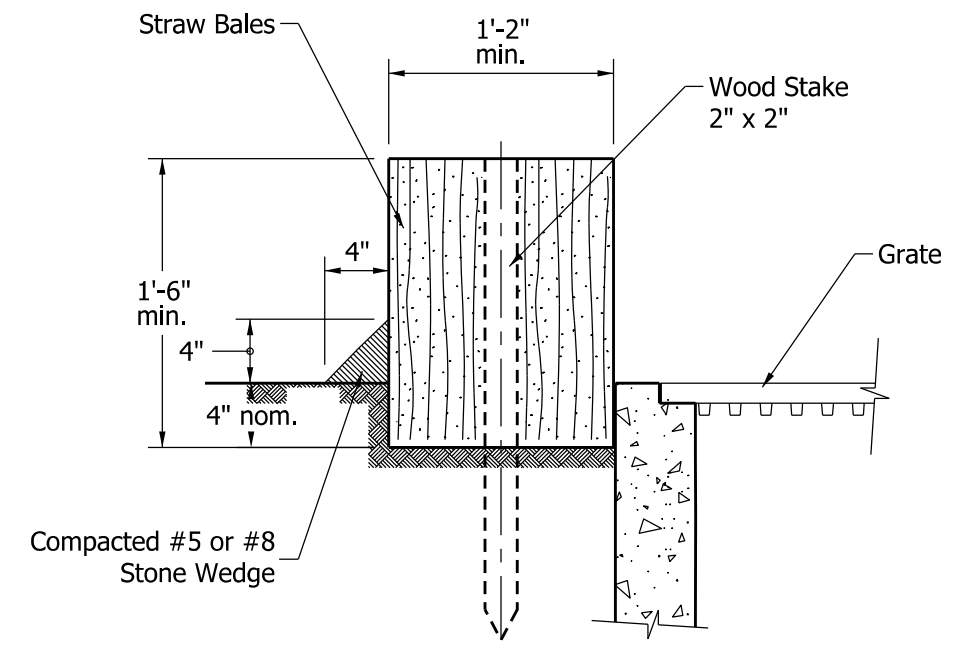
INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY EROSION CONTROL INLET SANDBAG CURB INLET PROTECTION	
SEPTEMBER 2012	
STANDARD DRAWING NO.	E 205-TECI-05
	/s/ <i>Richard L. VanCleave</i> 09/04/12 SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12 CHIEF ENGINEER DATE

NOTE:

① For use with inlets of up to 3' x 3'.

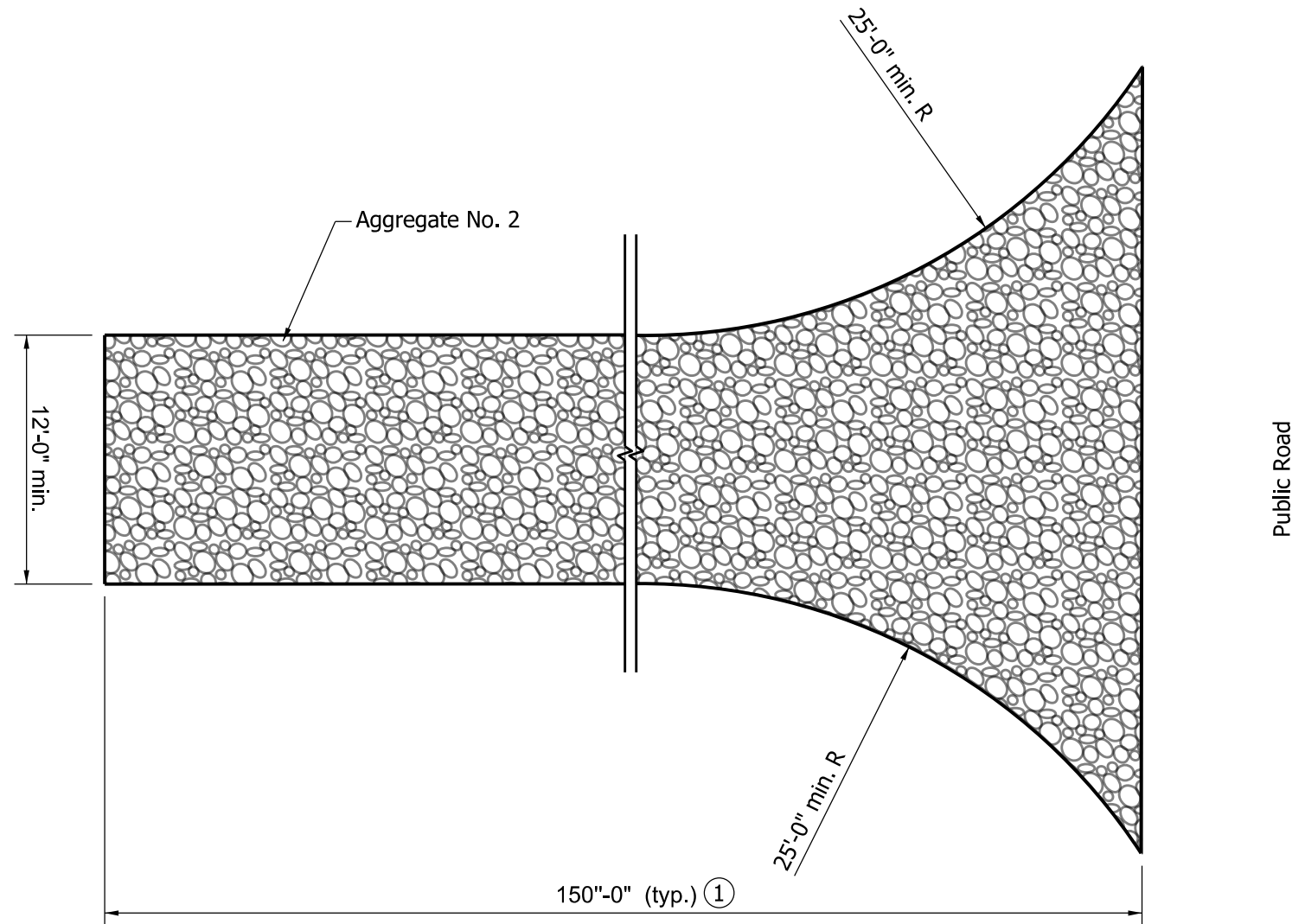


PLAN VIEW ①

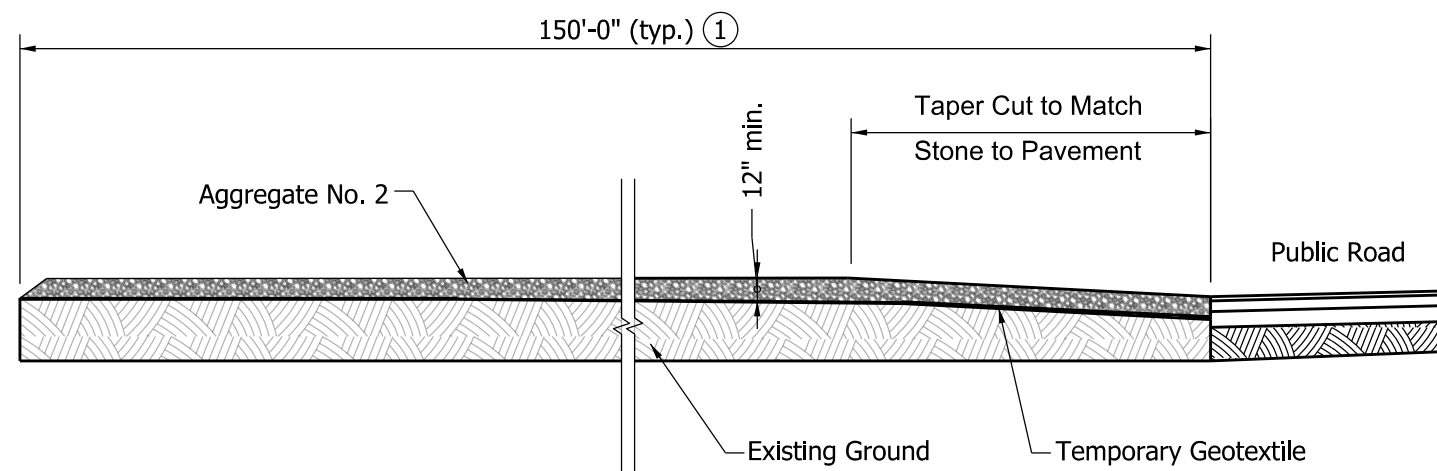


SECTION A-A

INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY EROSION CONTROL INLET STRAW BALE INLET PROTECTION	
SEPTEMBER 2012	
STANDARD DRAWING NO.	E 205-TECI-06
	/s/ <i>Richard L. VanCleave</i> 09/04/12
	SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12
	CHIEF ENGINEER DATE



PLAN VIEW



PROFILE VIEW

NOTE:

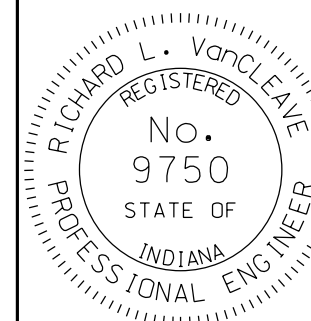
- ① May be reduced as justified by site conditions, but shall not be less than 50 ft.

INDIANA DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION CONTROL PERIMETER
CONSTRUCTION ENTRANCE

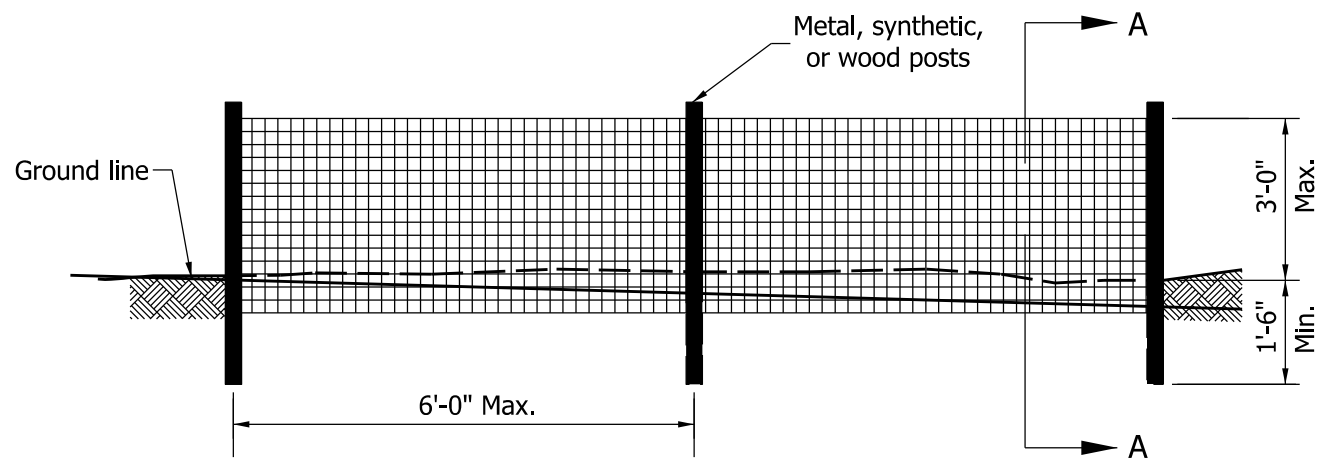
SEPTEMBER 2012

STANDARD DRAWING NO. E 205-TECP-01

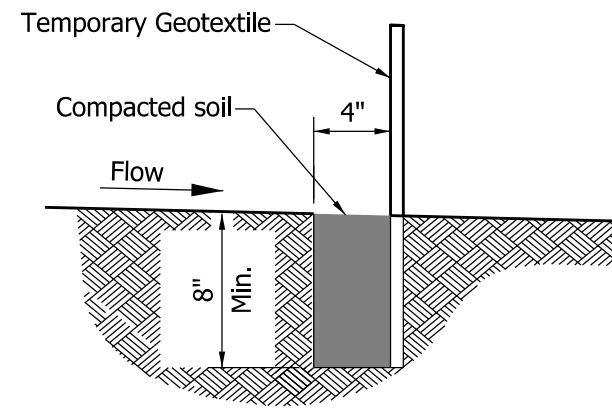


/s/ Richard L. VanCleave 09/04/12
SUPERVISOR, ROADWAY STANDARDS DATE

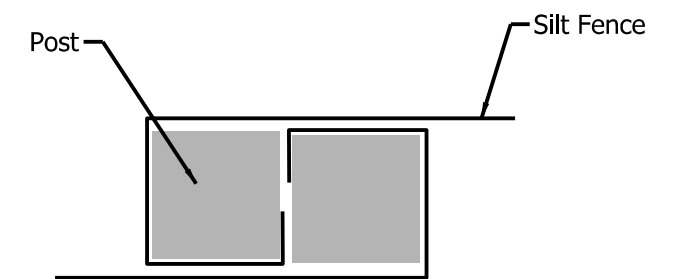
/s/ Mark A. Miller 09/04/12
CHIEF ENGINEER DATE



SILT FENCE ELEVATION



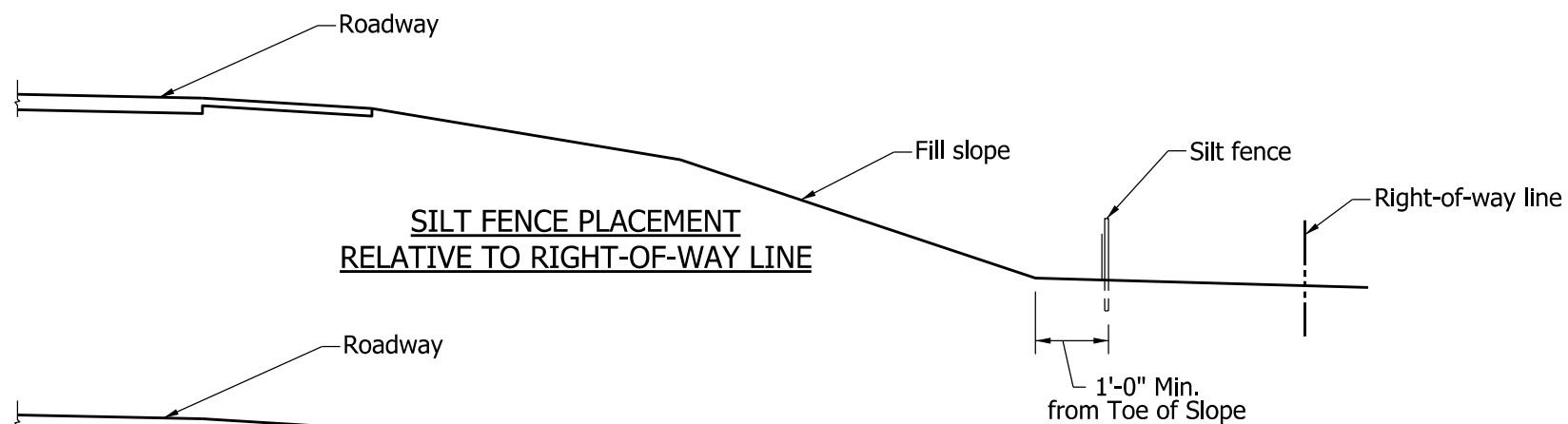
SECTION A-A



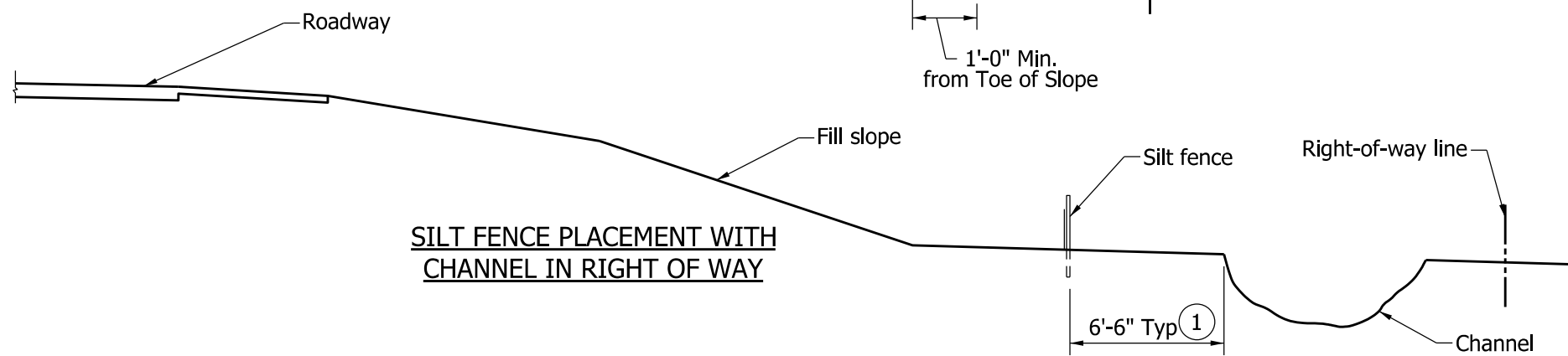
**JOINT DETAIL
PLAN VIEW**

NOTES:

- ① Dimension can vary based on right of way availability. Silt fence shall be placed as close as possible to edge of construction limits.
2. Silt fence may be placed by plowing if minimum embedment of 8 in. is maintained.

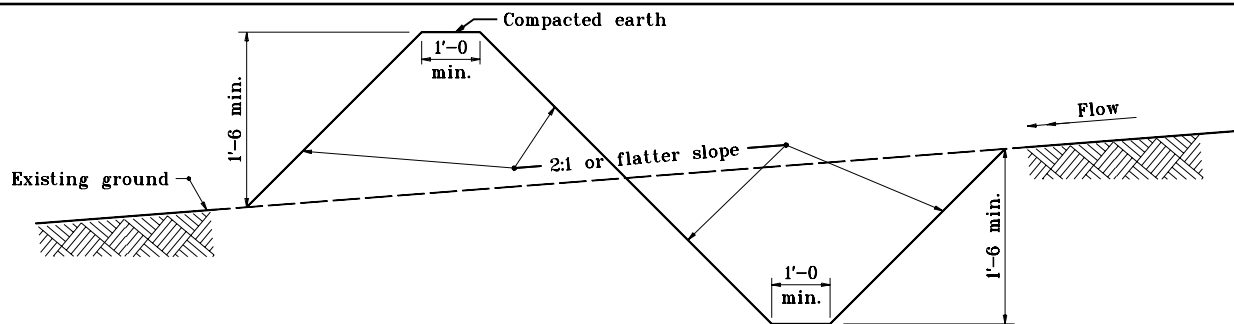


**SILT FENCE PLACEMENT
RELATIVE TO RIGHT-OF-WAY LINE**

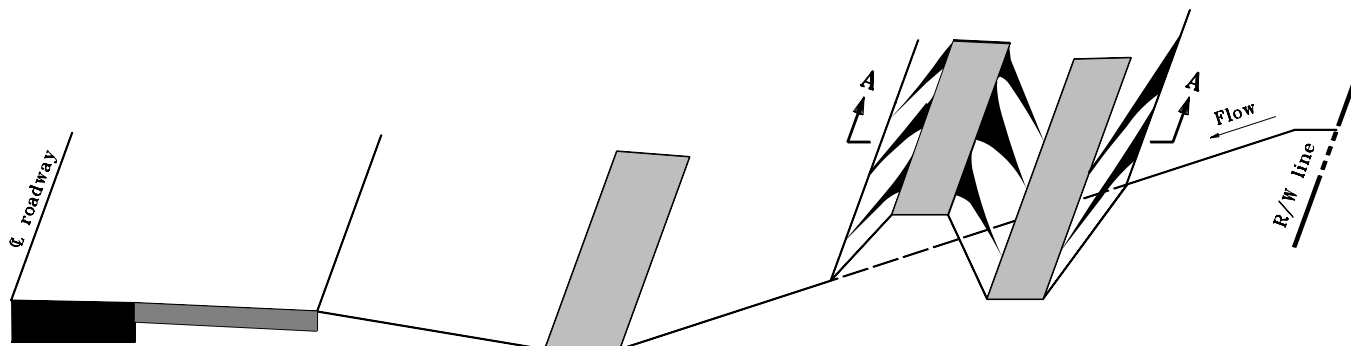


**SILT FENCE PLACEMENT WITH
CHANNEL IN RIGHT OF WAY**

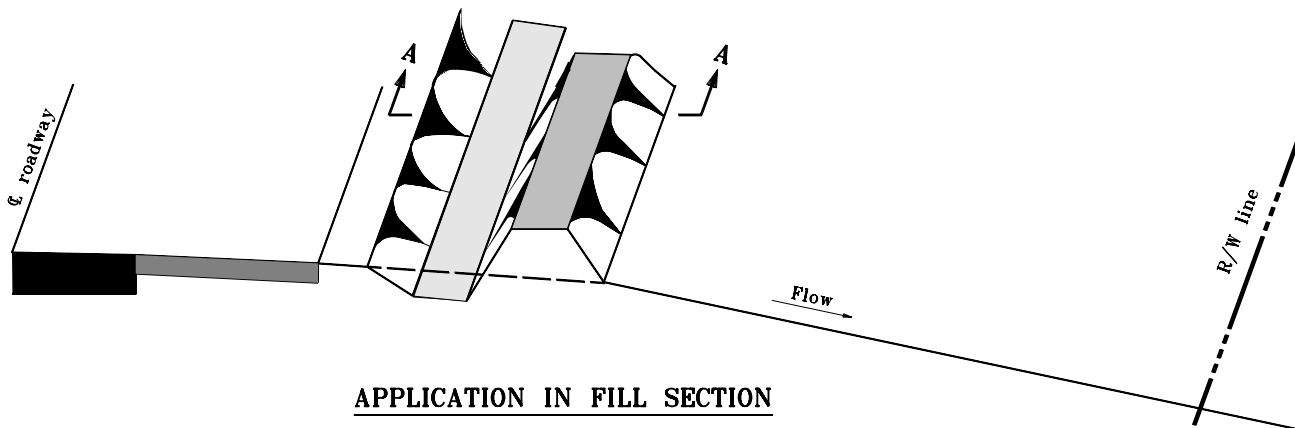
INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY SILT FENCE	
SEPTEMBER 2012	
STANDARD DRAWING NO.	E 205-TECP-02
	/s/ <i>Richard L. VanCleave</i> 09/04/12 SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12 CHIEF ENGINEER DATE



SECTION A-A

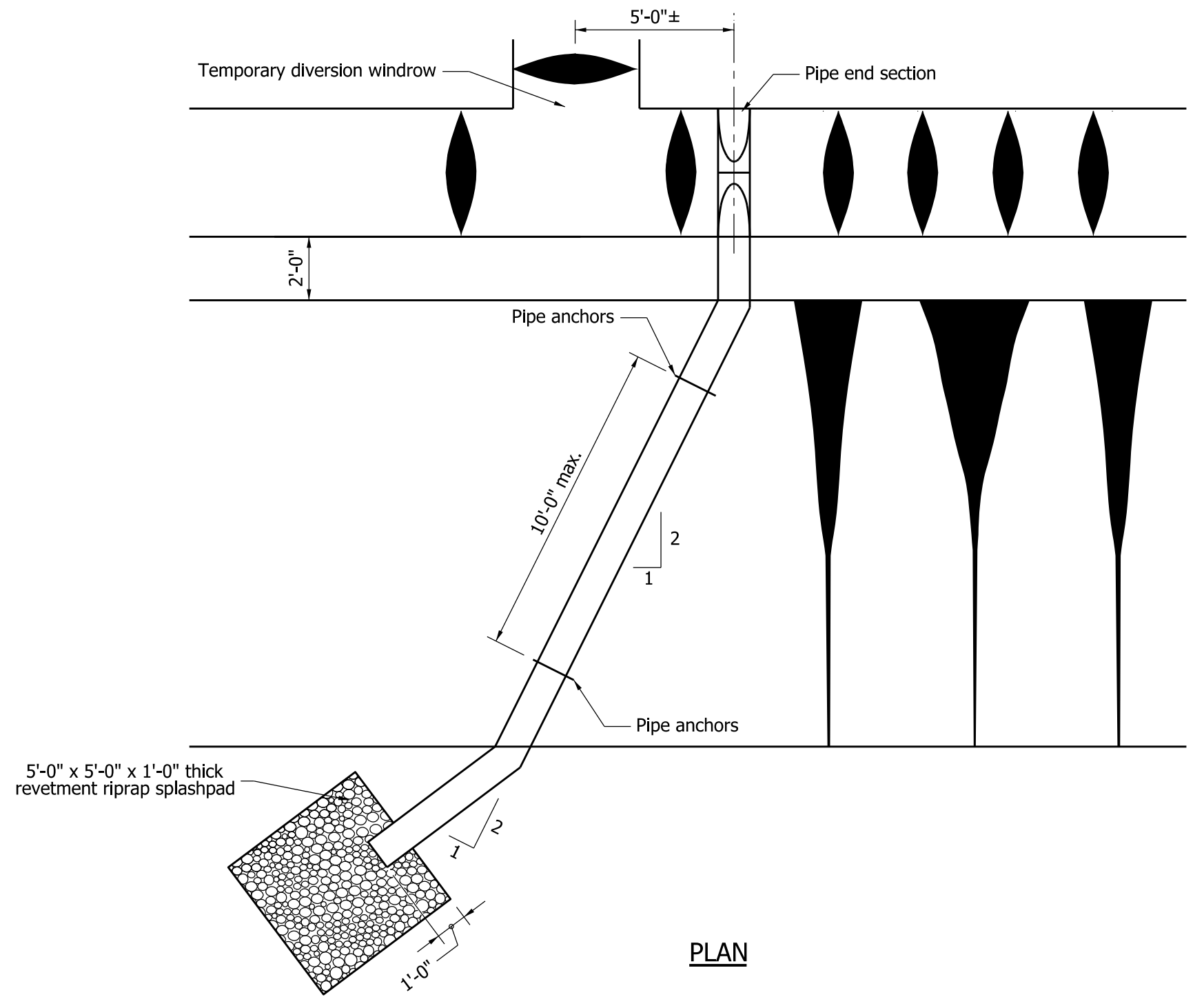


APPLICATION IN CUT SECTION

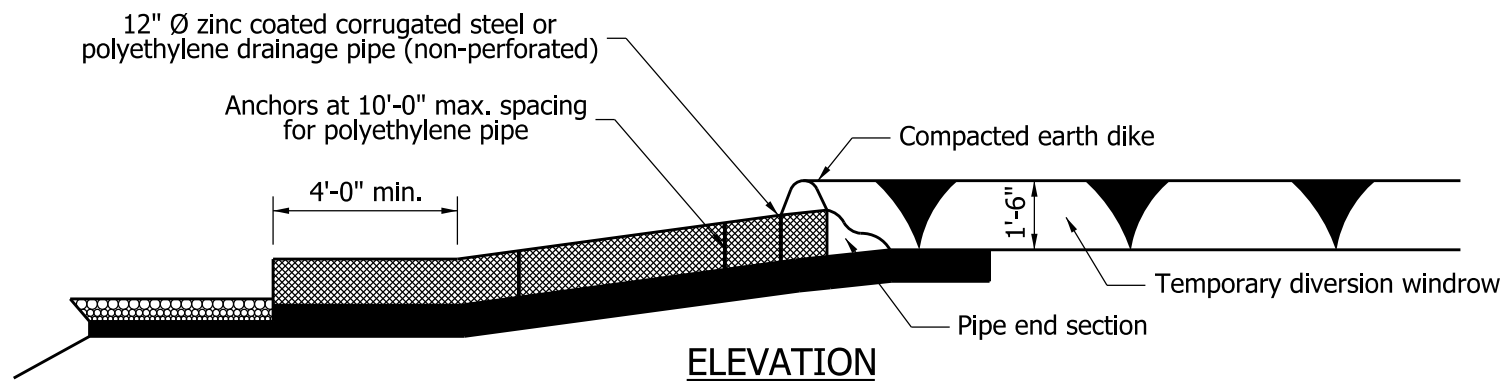


APPLICATION IN FILL SECTION

INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY INTERCEPTOR DITCH	
MARCH 2002	
STANDARD DRAWING NO. E 205-TECS-01	
	/s/ Richard L. VanCleave 3-01-02 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 3-01-02 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



PLAN



ELEVATION

NOTES:

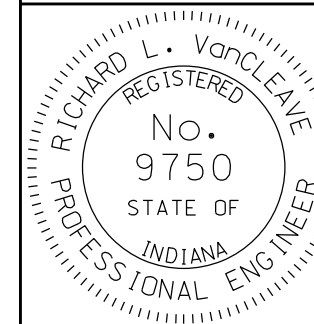
1. Length of slope drain shall be extended as required as fill slope is constructed.
2. The maximum drainage area for a 12" dia. pipe is 1 acre.
3. The required revetment riprap weight is 1.4 tons.

INDIANA DEPARTMENT OF TRANSPORTATION

TEMPORARY SLOPE DRAIN

SEPTEMBER 2010

STANDARD DRAWING NO. E 205-TECS-02



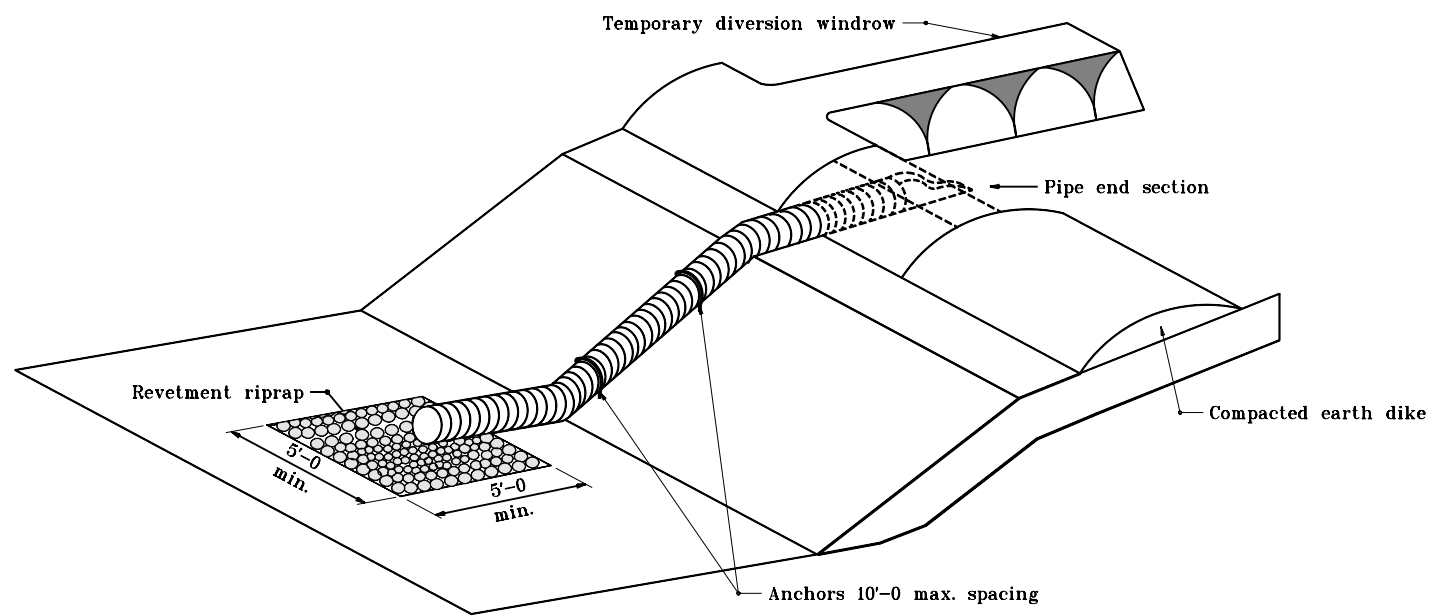
/s/ *Richard L. VanCleave* 09/01/10
DESIGN STANDARDS ENGINEER DATE

/s/ *Mark A. Miller* 09/01/10
CHIEF HIGHWAY ENGINEER DATE

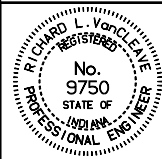
DESIGN STANDARDS ENGINEER

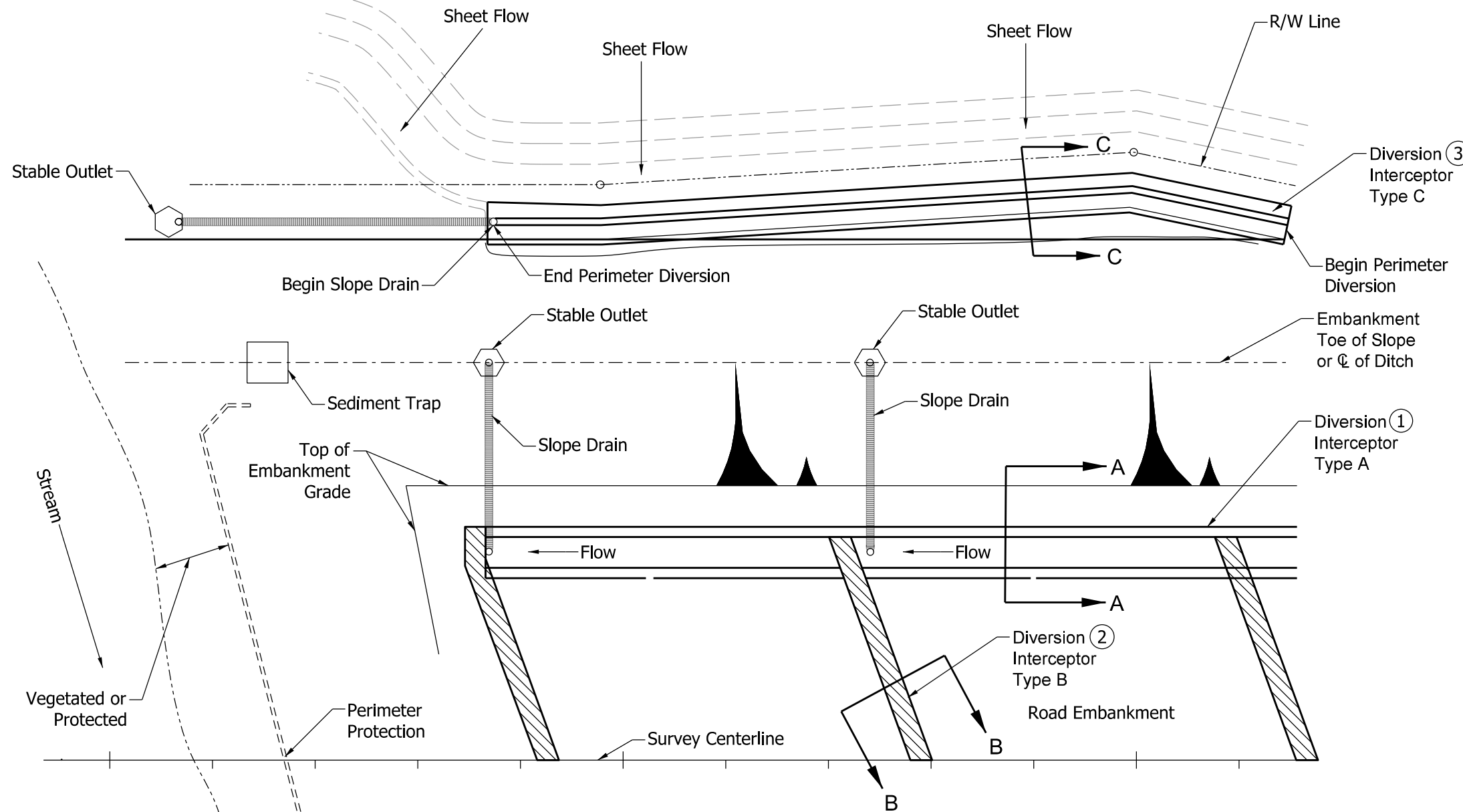
NOTES:

- 1. See Standard Drawing E 205-TECS-02 for Notes.

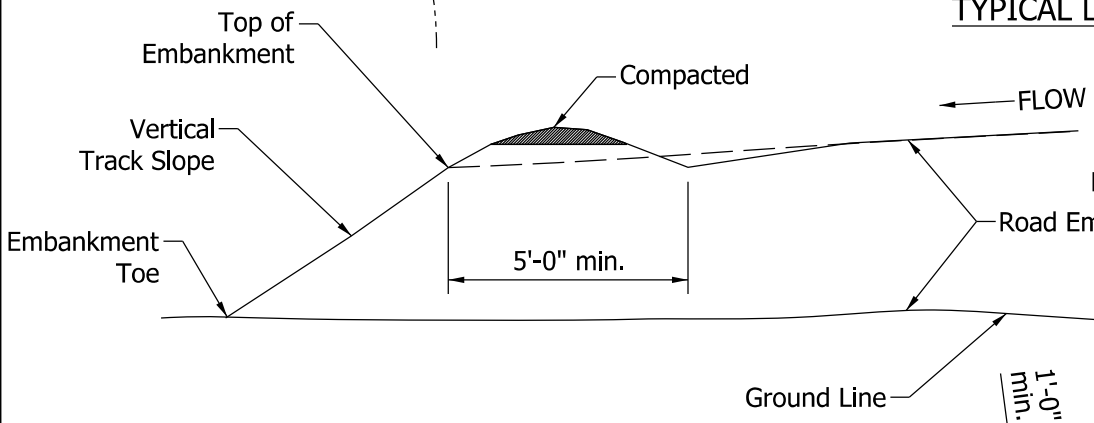


ISOMETRIC

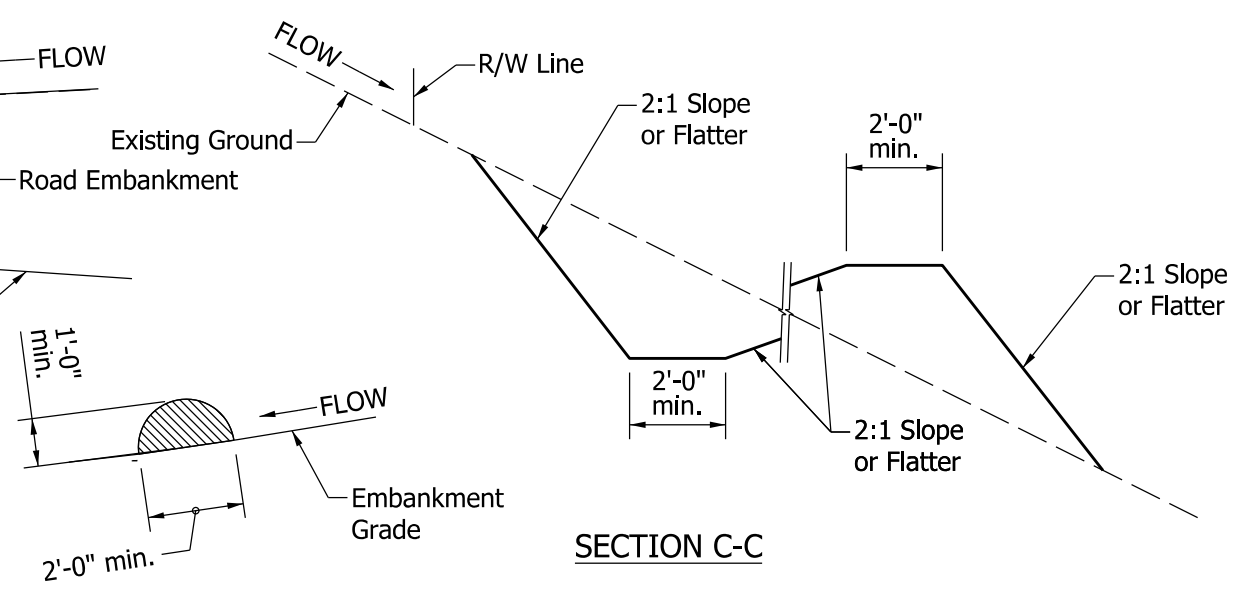
INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY SLOPE DRAIN	
SEPTEMBER 2001	
STANDARD DRAWING NO. E 205-TECS-03	
	/s/ Richard L. VanCleave 9-04-01 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 9-04-01 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	



PLAN VIEW
TYPICAL LAYOUTS



SECTION A-A



SECTION C-C

SECTION B-B

NOTES:

- ① Diversion Interceptor Type A shall be used to control embankment runoff to slope drains during grading operations.
- ② Diversion Interceptor Type B shall be a series of ridges used to divert runoff from long narrow corridor. Maximum length of the ridges shall not exceed 100 ft. Ridges shall be used for dividing grades and haul roads.
- ③ Diversion Interceptor Type C shall be used to collect offsite runoff before entering the disturbed portion of project site. Maximum allowed runoff captured from offsite drainage area is 5 acres.

INDIANA DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION CONTROL SLOPE
DIVERSION INTERCEPTORS

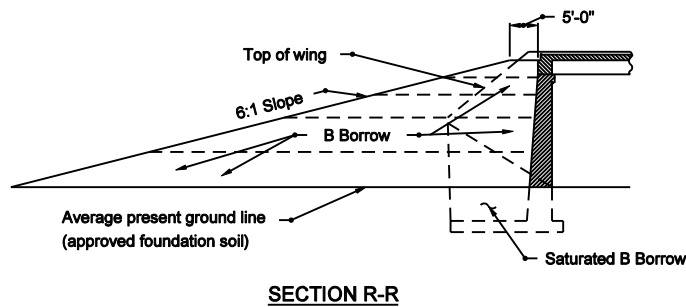
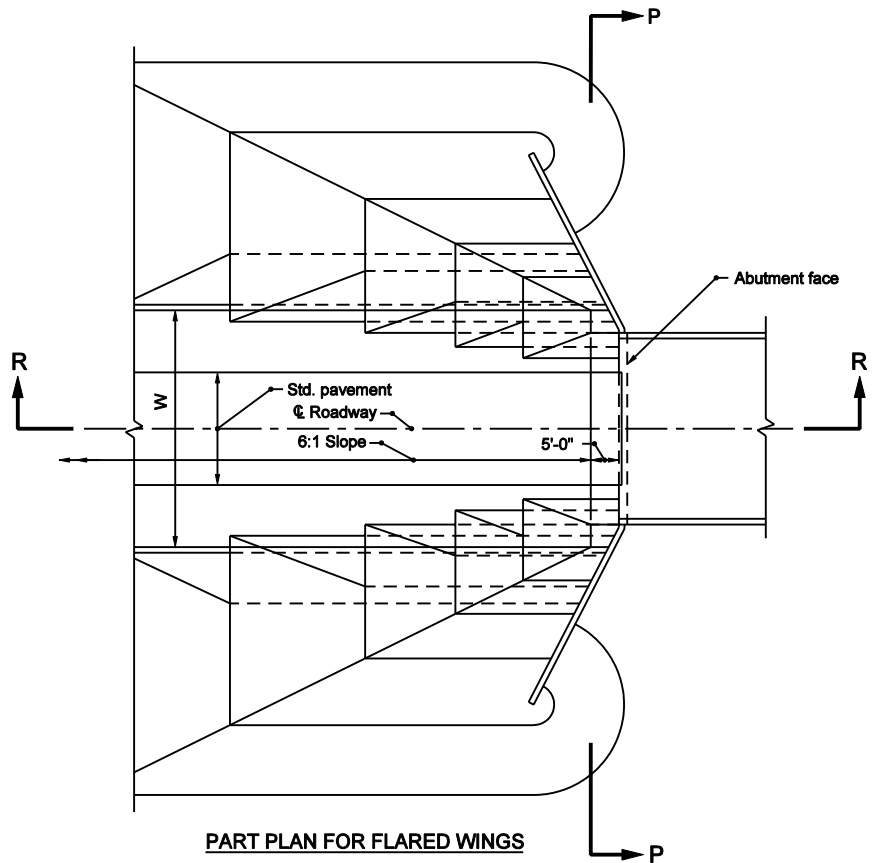
SEPTEMBER 2012

STANDARD DRAWING NO. E 205-TECS-04



/s/ *Richard L. VanCleave* 09/04/12
SUPERVISOR, ROADWAY STANDARDS DATE

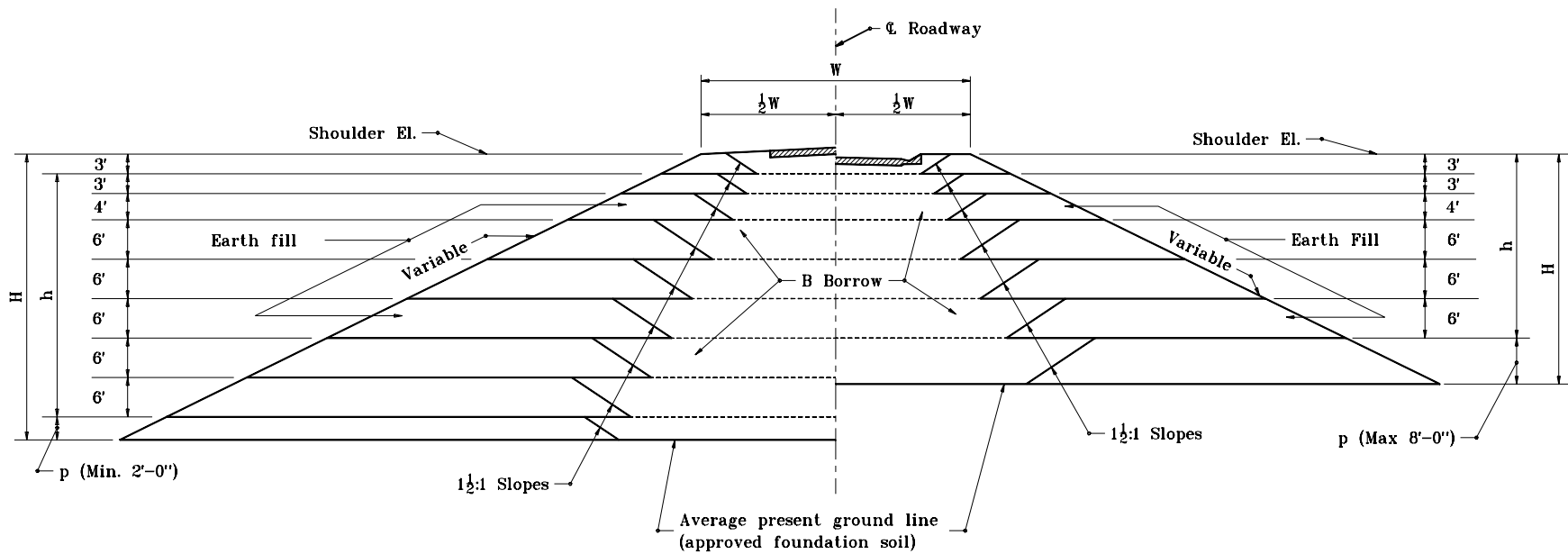
/s/ *Mark A. Miller* 09/04/12
CHIEF ENGINEER DATE



NOTES

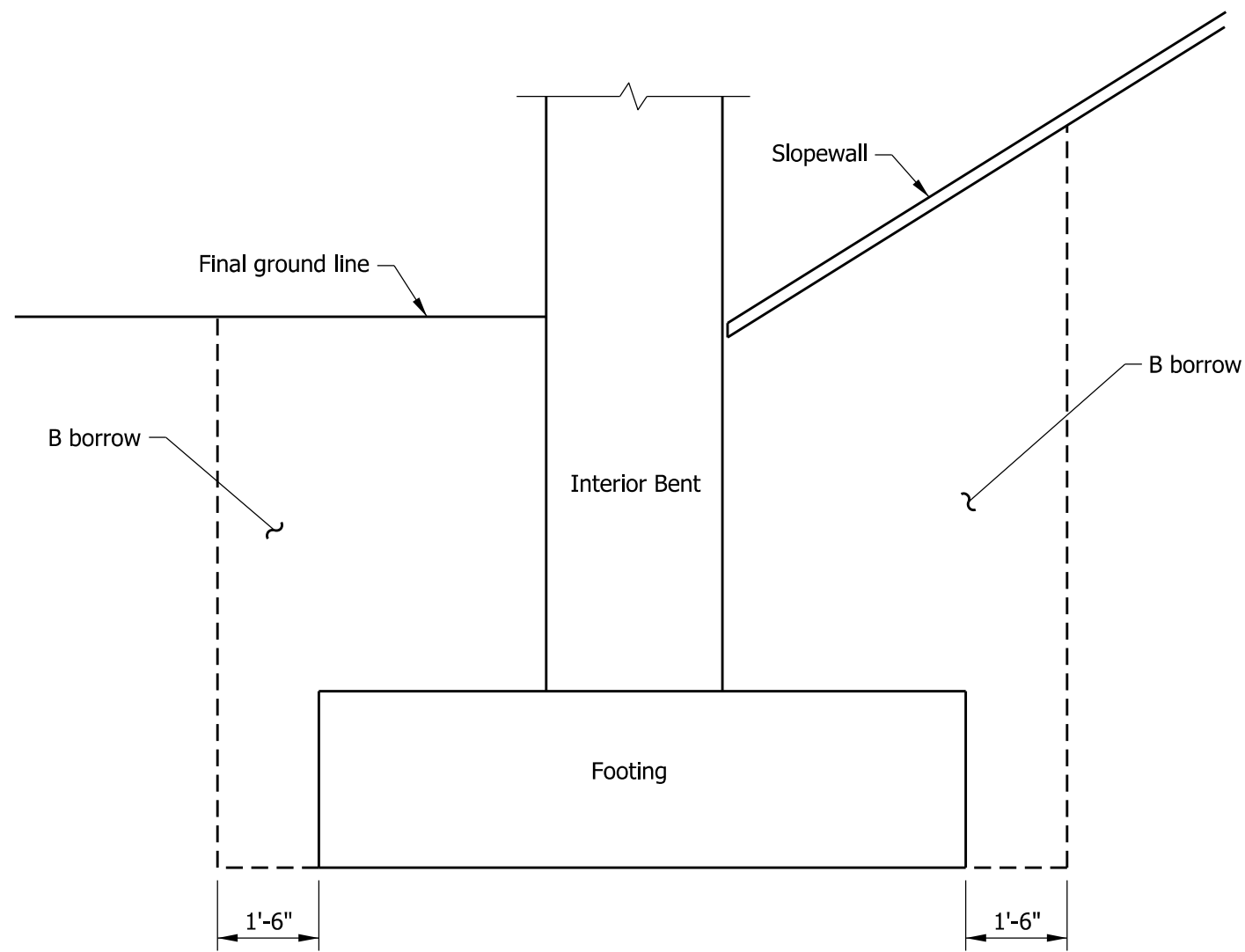
1. See Standard E 211-BFIL-02 for Section P-P

INDIANA DEPARTMENT OF TRANSPORTATION	
PART PLAN FOR FLARED WINGS	
MARCH 2003	
STANDARD DRAWING NO. E 211-BFIL-01	
	/s/ Richard L. VanCleave 3-03-03 DESIGN STANDARDS ENGINEER DATE
	/s/ Richard K. Smutzer 3-03-03 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	

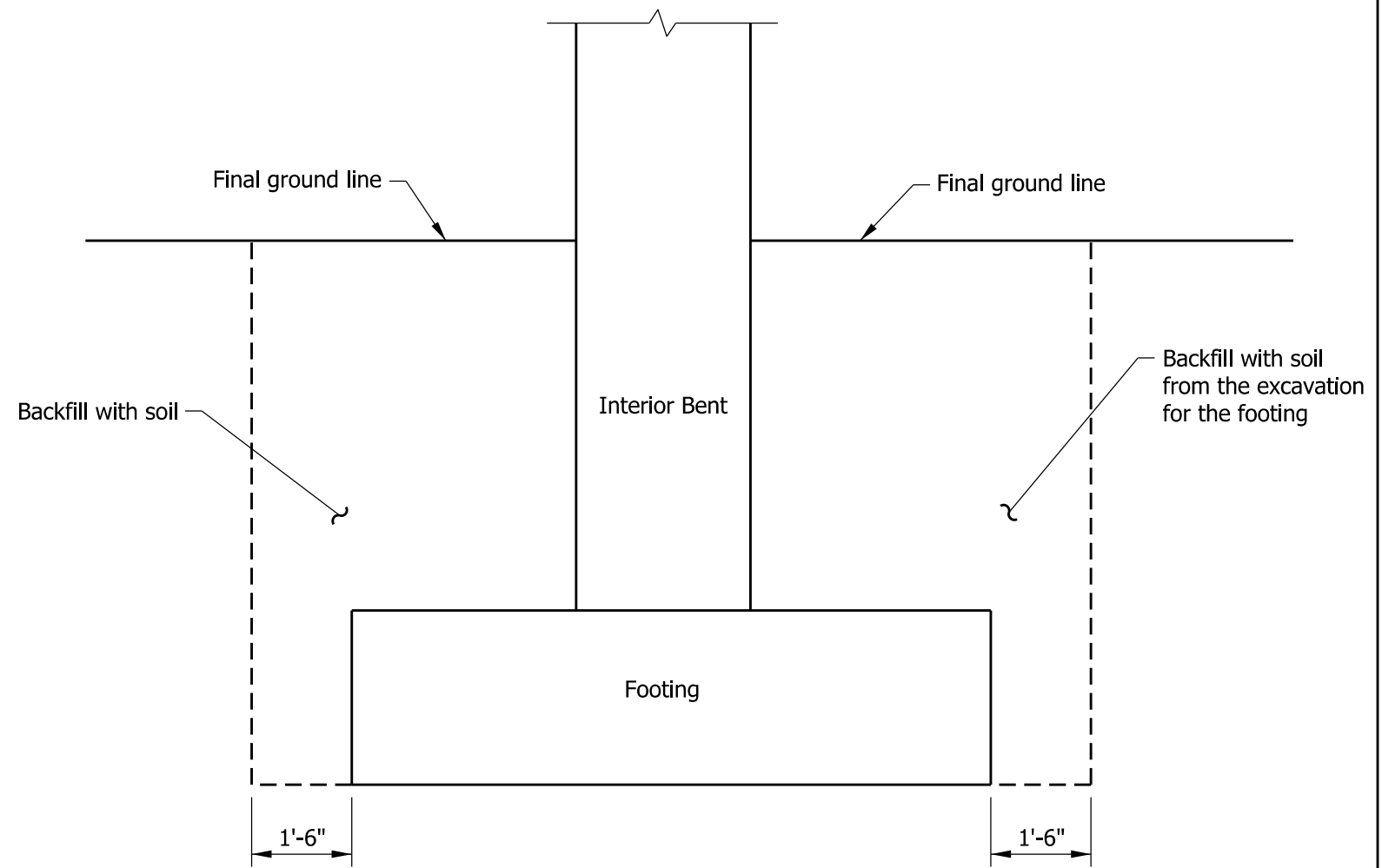


TYPICAL SECTION P-P

INDIANA DEPARTMENT OF TRANSPORTATION	
FLARED WINGS	
TYPICAL CROSS SECTION	
SEPTEMBER 1994	
STANDARD DRAWING NO. E 211-BFIL-02	
	DETAILS PLACED IN THIS FORMAT 11-15-99
	/s/ Anthony L. Uremovich 11-15-99 DESIGN STANDARDS ENGINEER DATE
	/s/ Firooz Zandi 11-15-99 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	ORIGINALLY APPROVED 9-30-94

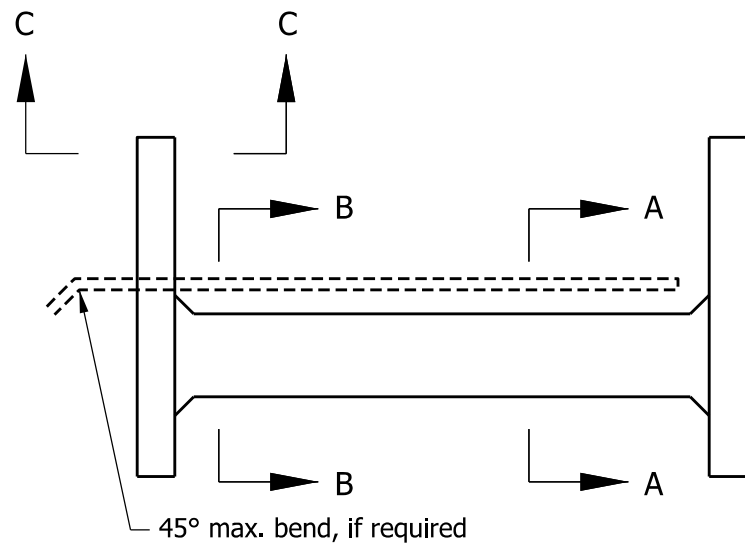


ADJACENT TO RAILROAD OR HIGHWAY

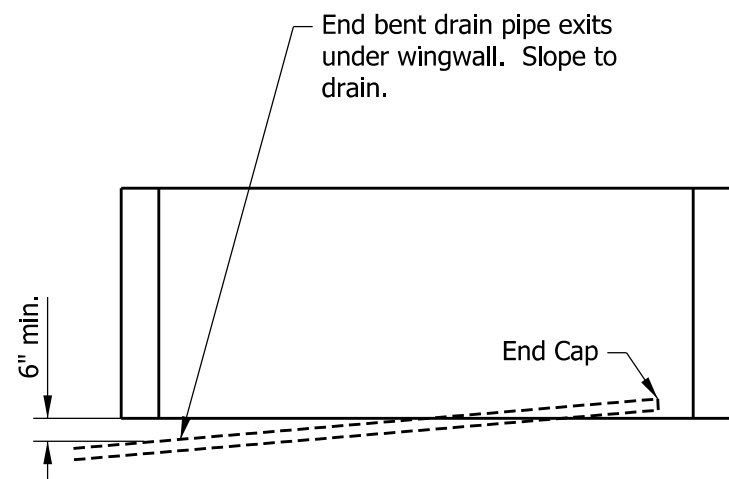


BRIDGE OVER WATERWAY

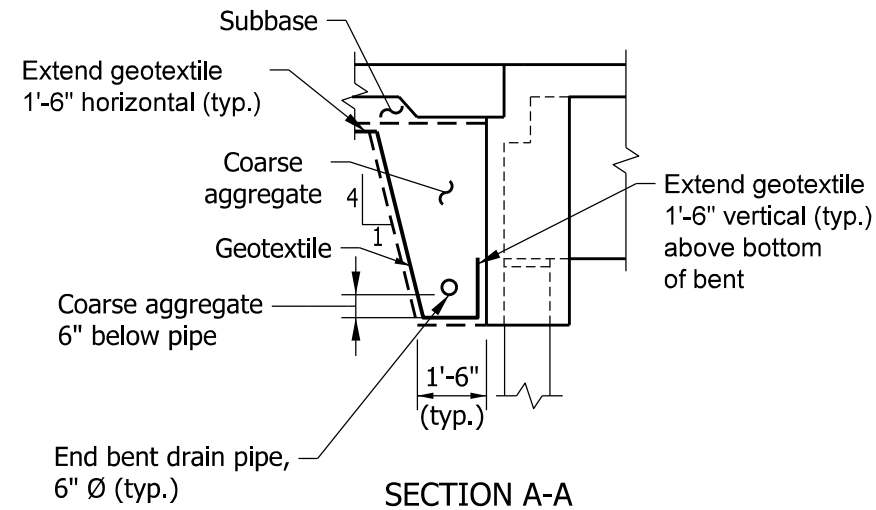
INDIANA DEPARTMENT OF TRANSPORTATION	
BACKFILL PLACEMENT INTERIOR BENT OR PIER	
SEPTEMBER 2003	
STANDARD DRAWING NO.	E 211-BFIL-03
	DETAILS PLACED IN THIS FORMAT 09/04/12
	/s/ <i>Richard L. VanCleave</i> 09/04/12
	SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12
CHIEF ENGINEER	DATE



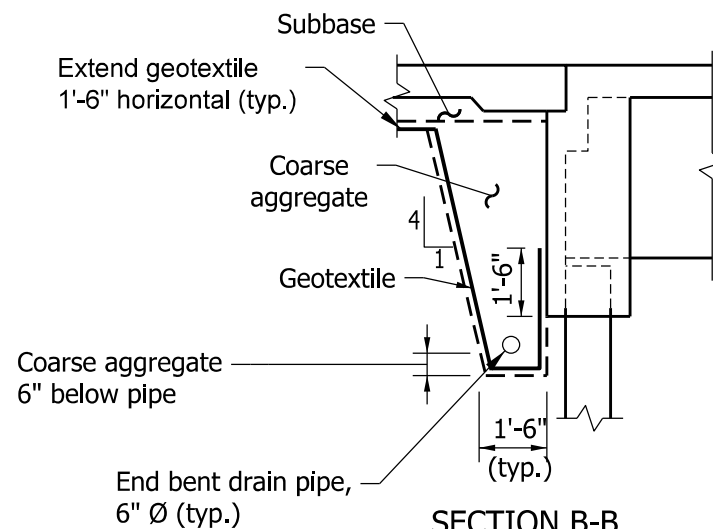
PLAN - END BENT



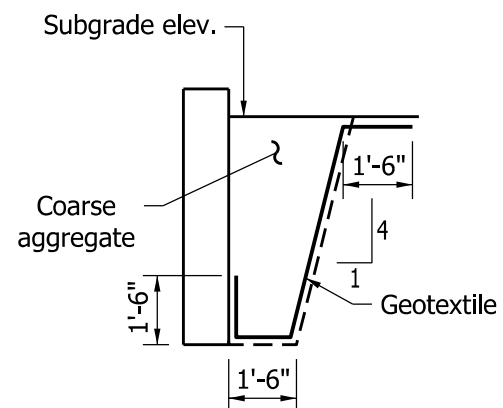
ELEVATION - END BENT



SECTION A-A



SECTION B-B



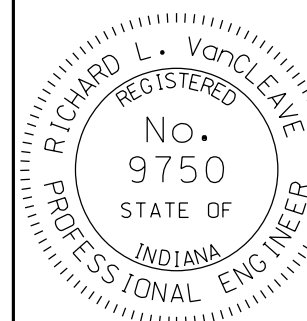
SECTION C-C

INDIANA DEPARTMENT OF TRANSPORTATION

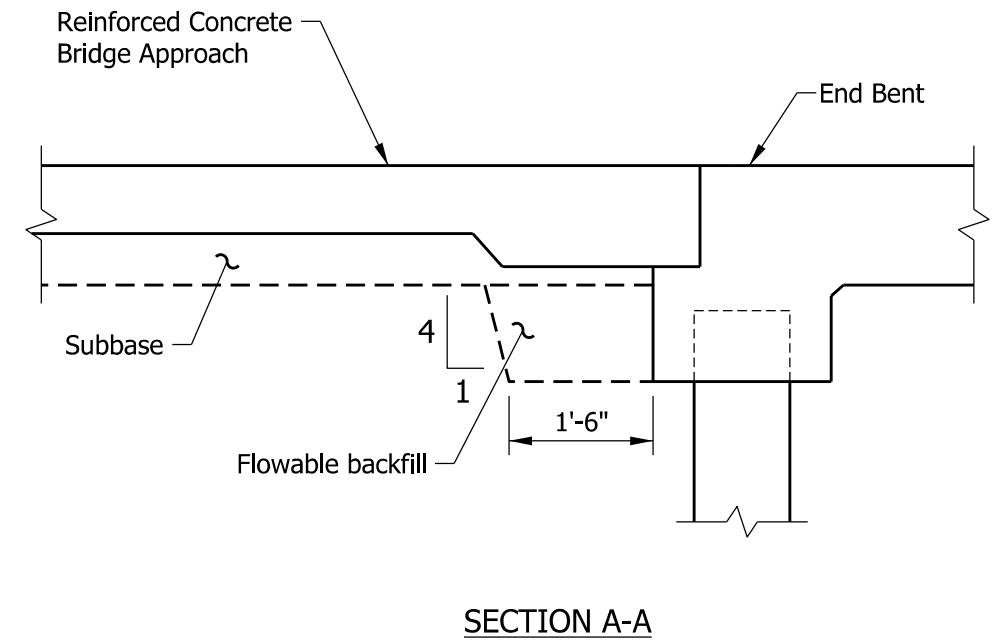
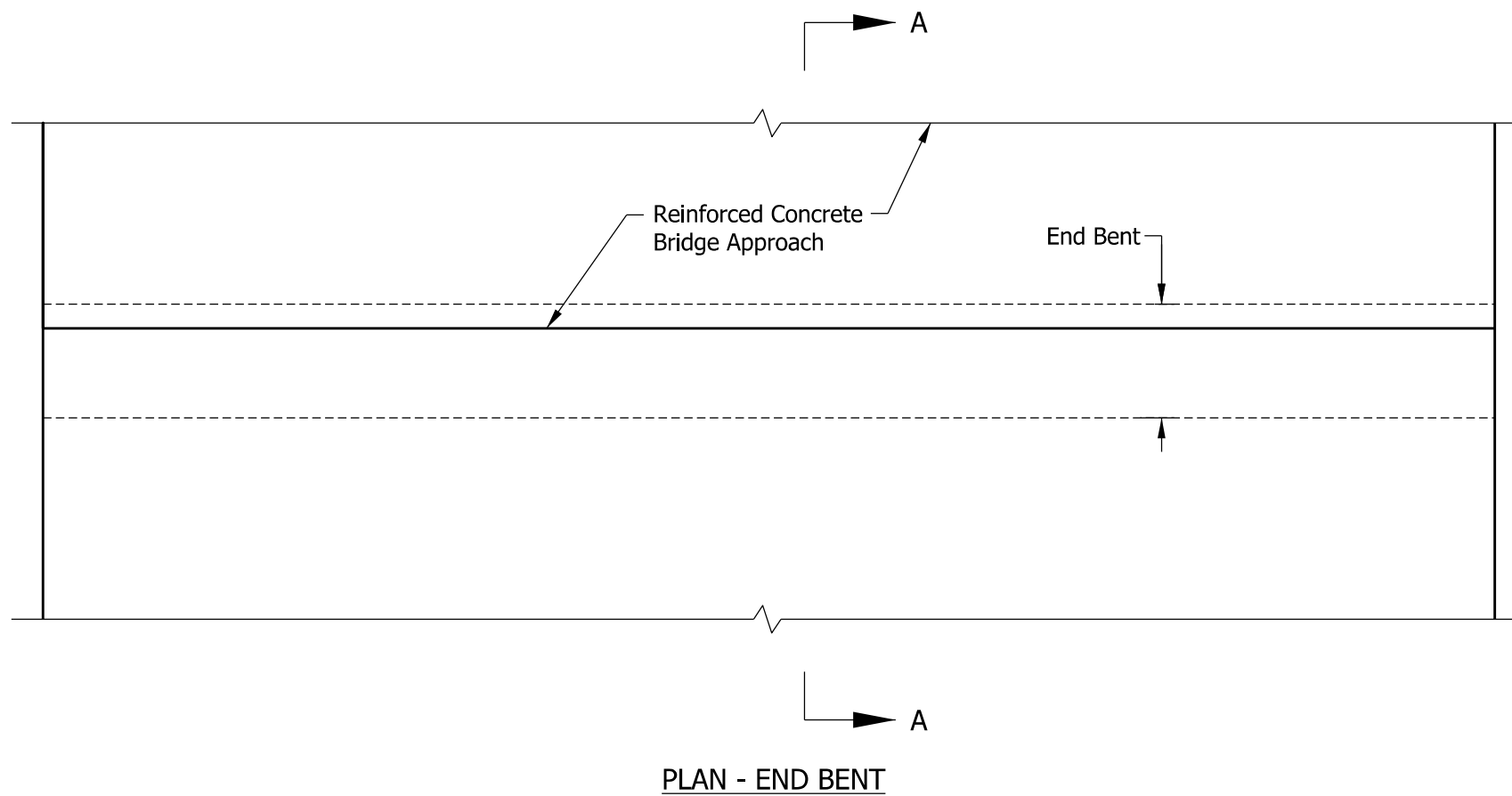
BACKFILL PLACEMENT BEHIND END BENT
BEAM OR GIRDER STRUCTURE

SEPTEMBER 2003

STANDARD DRAWING NO. E 211-BFIL-04



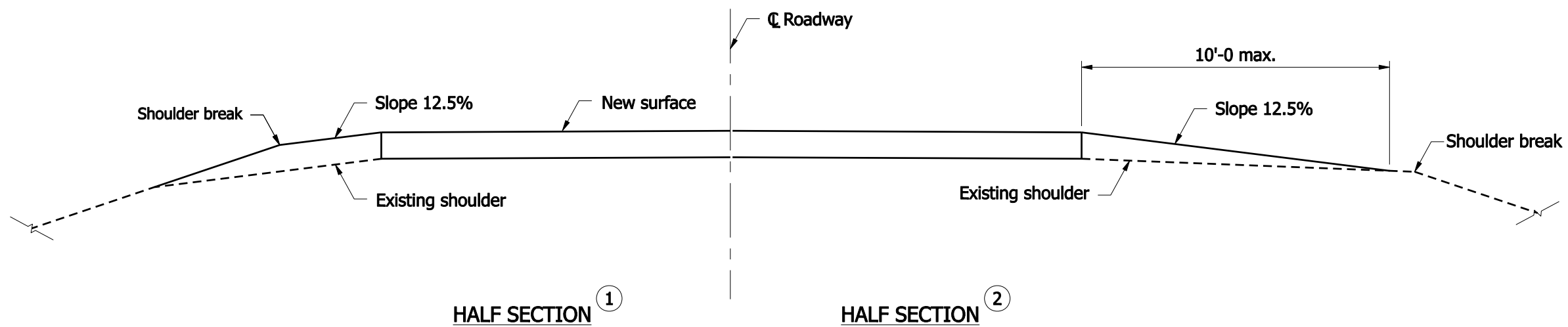
DETAILS PLACED IN THIS FORMAT	09/04/12
/s/ <i>Richard L. VanCleave</i>	09/04/12
SUPERVISOR, ROADWAY STANDARDS	DATE
/s/ <i>Mark A. Miller</i>	09/04/12
CHIEF ENGINEER	DATE



INDIANA DEPARTMENT OF TRANSPORTATION	
BACKFILL PLACEMENT BEHIND END BENT REINFORCED-CONCRETE SLAB BRIDGE	
SEPTEMBER 2004	
STANDARD DRAWING NO.	E 211-BFIL-05
	DETAILS PLACED IN THIS FORMAT 09/04/12
	/s/ <i>Richard L. VanCleave</i> 09/04/12
	SUPERVISOR, ROADWAY STANDARDS DATE
	/s/ <i>Mark A. Miller</i> 09/04/12
CHIEF ENGINEER	DATE

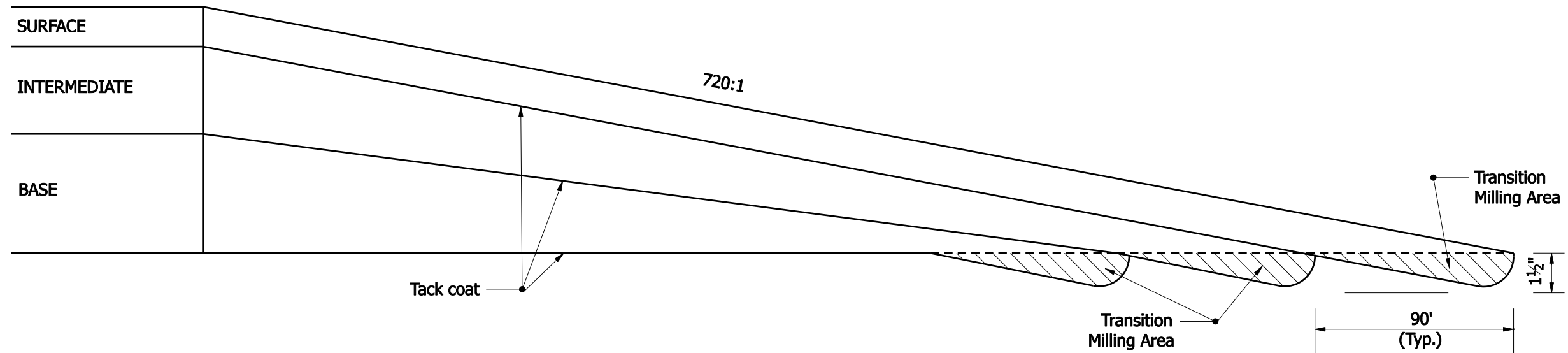
GENERAL NOTES

- ① This section shall be used when the existing shoulder width is less than 3 ft. or the slope is steeper than 12.5%.
- ② This section shall be used when the existing shoulder slope is flatter than 12.5%.



TYPICAL SECTION FOR SHOULDER TREATMENT

INDIANA DEPARTMENT OF TRANSPORTATION											
SHOULDER TREATMENT FOR RESURFACING WORK											
SEPTEMBER 2007											
STANDARD DRAWING NO. E 303-STRW-01											
	<table style="width: 100%; border: none;"> <tr> <td style="border: none;"><i>/s/ Richard L. VanCleave</i></td> <td style="border: none; text-align: right;"><i>09/04/07</i></td> </tr> <tr> <td style="border: none;">DESIGN STANDARDS ENGINEER</td> <td style="border: none; text-align: right;">DATE</td> </tr> <tr> <td colspan="2" style="border: none;"> </td> </tr> <tr> <td style="border: none;"><i>/s/ Mark A. Miller</i></td> <td style="border: none; text-align: right;"><i>09/04/07</i></td> </tr> <tr> <td style="border: none;">CHIEF HIGHWAY ENGINEER</td> <td style="border: none; text-align: right;">DATE</td> </tr> </table>	<i>/s/ Richard L. VanCleave</i>	<i>09/04/07</i>	DESIGN STANDARDS ENGINEER	DATE			<i>/s/ Mark A. Miller</i>	<i>09/04/07</i>	CHIEF HIGHWAY ENGINEER	DATE
<i>/s/ Richard L. VanCleave</i>	<i>09/04/07</i>										
DESIGN STANDARDS ENGINEER	DATE										
<i>/s/ Mark A. Miller</i>	<i>09/04/07</i>										
CHIEF HIGHWAY ENGINEER	DATE										
DESIGN STANDARDS ENGINEER											



INDIANA DEPARTMENT OF TRANSPORTATION	
HMA-PAVEMENT WEDGING AND TRANSITION MILLING	
SEPTEMBER 2007	
STANDARD DRAWING NO. E 306-TMPT-01	
	<i>/s/ Richard L. VanCleave</i> 9/4/07 DESIGN STANDARDS ENGINEER DATE
	<i>/s/ Mark A. Miller</i> 9/4/07 CHIEF HIGHWAY ENGINEER DATE
DESIGN STANDARDS ENGINEER	