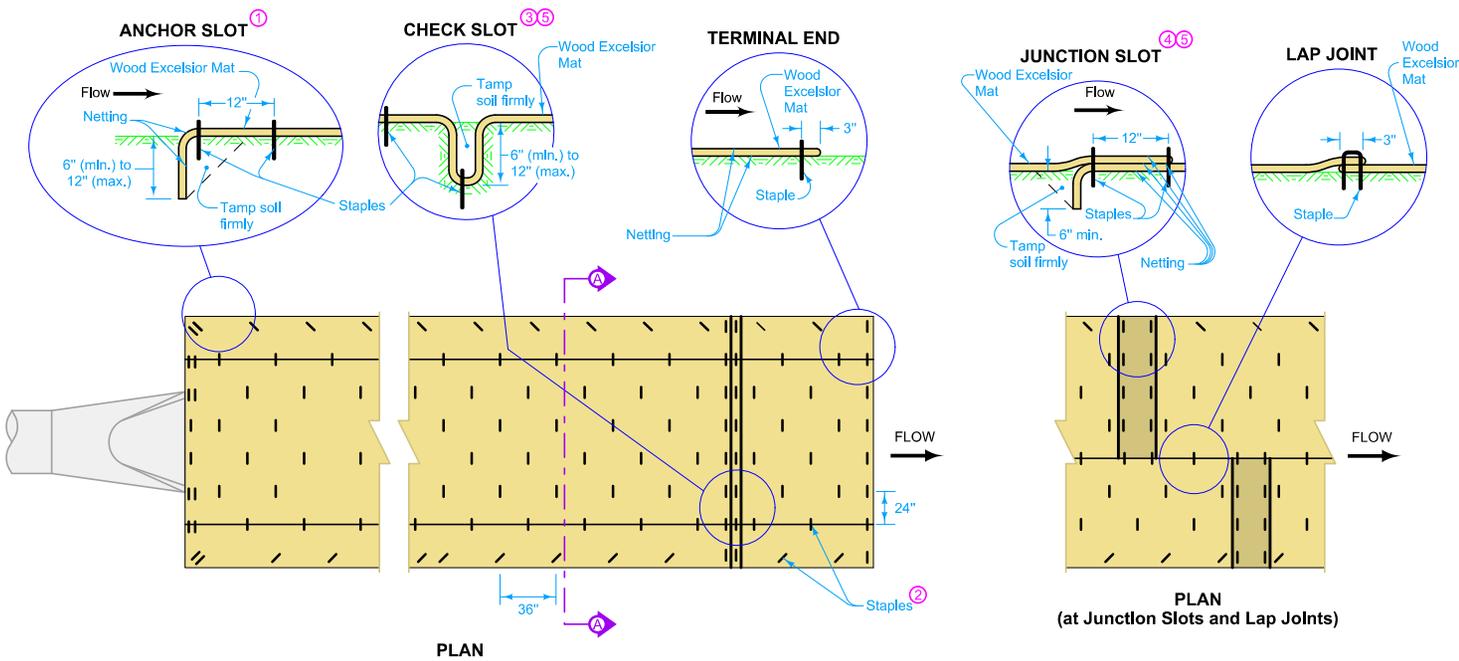


Erosion Control

Erosion Control

NO.	DATE	TITLE
EC-101	04-19-16	Wood Excelsior Mat for Ditch Protection
EC-102	04-21-15	Sod for Ditch Protection
EC-103	04-21-15	Wood Excelsior Mat for Slope Protection
EC-104	04-17-18	Turf Reinforced Mat (TRM)
EC-105	04-17-18	Transition Mat
EC-201	10-15-19	Silt Fence
EC-202	10-21-14	Floating Silt Curtain
EC-204	04-21-20	Perimeter and Slope Sediment Control Devices
EC-301	10-18-16	Rock Erosion Control (REC)
EC-302	10-16-18	Rock Check Dam
EC-303	10-20-20	Stabilized Construction Entrance
EC-501	04-21-15	Trees and Shrubs
EC-502	04-21-15	Seeding in Rural Areas
EC-601	10-16-18	Temporary Sediment Control Basin
EC-602	04-21-20	Open-Throat Curb Intake Sediment Filter

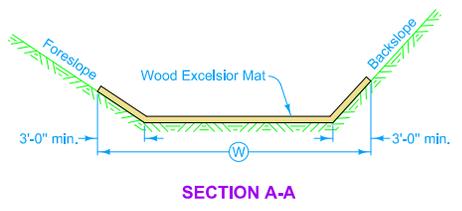


Provide necessary excavation at locations where silt conditions require shaping of a ditch to provide a proper type of area for installation of wood excelsior mat for special ditch control.

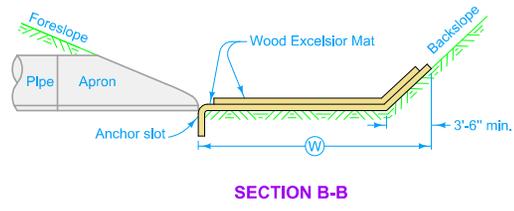
Ensure ground surface adjacent to any channels is shaped to facilitate natural drainage into the protected area.

Use all excavated material to fill low areas, gullies, backslope scours, and otherwise facilitate the free flow of surface water into the channel as directed by the Engineer. Alignment should be smooth and avoid abrupt changes.

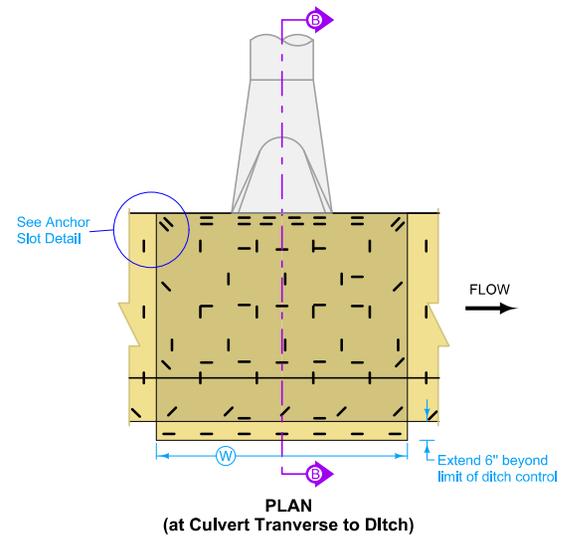
- ① Install anchor slot at the beginning (upstream end) of all wood excelsior mat installations.
- ② Place staples alternately in rows approximately 24 inches apart. Approximately 30 staples required per square (100 sq. ft.) of wood excelsior mat.
- ③ Space Check Slots in ditch channel so that one occurs within each 50 feet on slopes of more than 4%.
- ④ Stagger Junction Slots (end of rolls).
- ⑤ Do not use Junction Slots or Check Slots when Wood Excelsior Mat is placed over Turf Reinforced Mat.



SECTION A-A



SECTION B-B

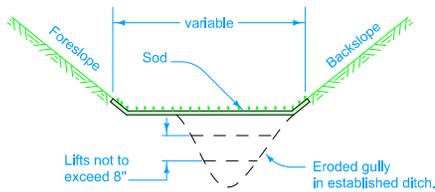


PLAN (at Culvert Transverse to Ditch)

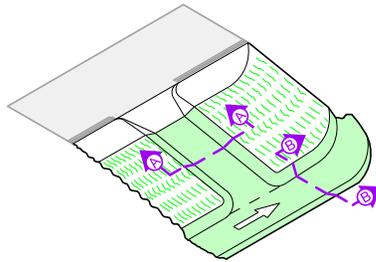
Possible Contract Item:
Special Ditch Control, Wood Excelsior Mat

Possible Tabulation:
100-22

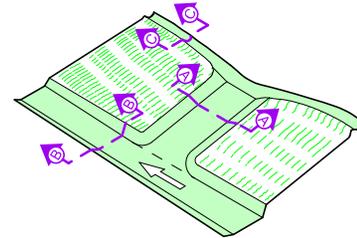
IOWA DOT	REVISION
	2 04-19-16
	STANDARD ROAD PLAN
EC-101	SHEET 1 of 1
<small>REVISIONS: Revised to show placement of erosion control beginning at the end of the apron.</small>	
<i>Brian Smith</i> <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
SPECIAL DITCH CONTROL	



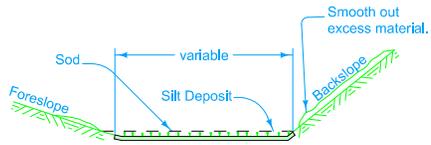
SECTIONS A-A AND B-B
Sod placement for eroded gully.



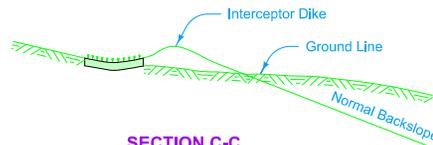
PERSPECTIVE FORESLOPE FLUME AND ROADWAY DITCH



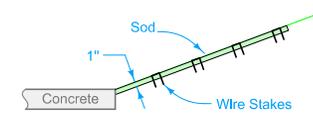
PERSPECTIVE BACKSLOPE WITH FLUME AND INTERCEPTING DITCH



SECTION B-B
Sod placement for silted ditch in cut.

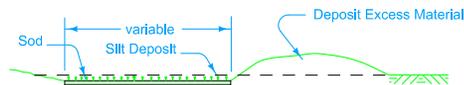


SECTION C-C
Sod placement on Interceptor Ditch

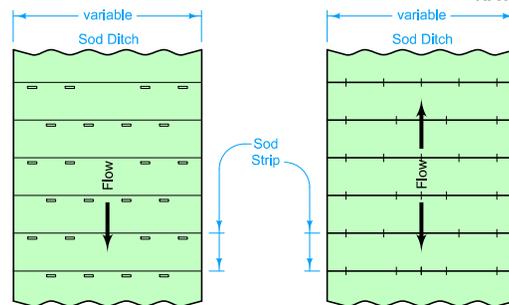


Ground surface shall be graded 1" below the edge of concrete before sod is placed.

CASE 1
NATURAL GROUND SLOPES TOWARD CONCRETE

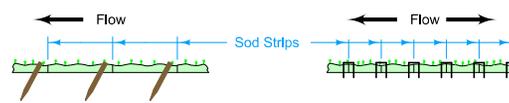


SECTION B-B
Sod placement for silted area in no-ditch section.



4 Wood Stakes per row, staggered in rows

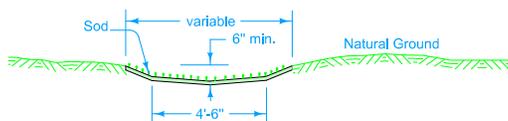
5 Wire Stakes per row, staggered in rows



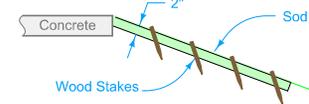
WOOD STAKES

WIRE STAKES

STAKING FOR SOD CHANNELS



SECTION A-A
Sod placement on slopes where excavation is required for proper installation of sod.



Grade ground surface 2" below the edge of concrete before sod is placed.

CASE 2
NATURAL GROUND SLOPES AWAY FROM CONCRETE



Through ditches or borrow areas, construct sod channels at the low point. Use all excavated material to fill low areas to facilitate the free flow of surface water into the channel. Alignment should be smooth and avoid abrupt changes.

Provide necessary excavation at locations where silt conditions require shaping of a ditch to provide a proper type of area for installation of sod for special ditch control. Dispose excavated material in adjacent area as directed by the Engineer.

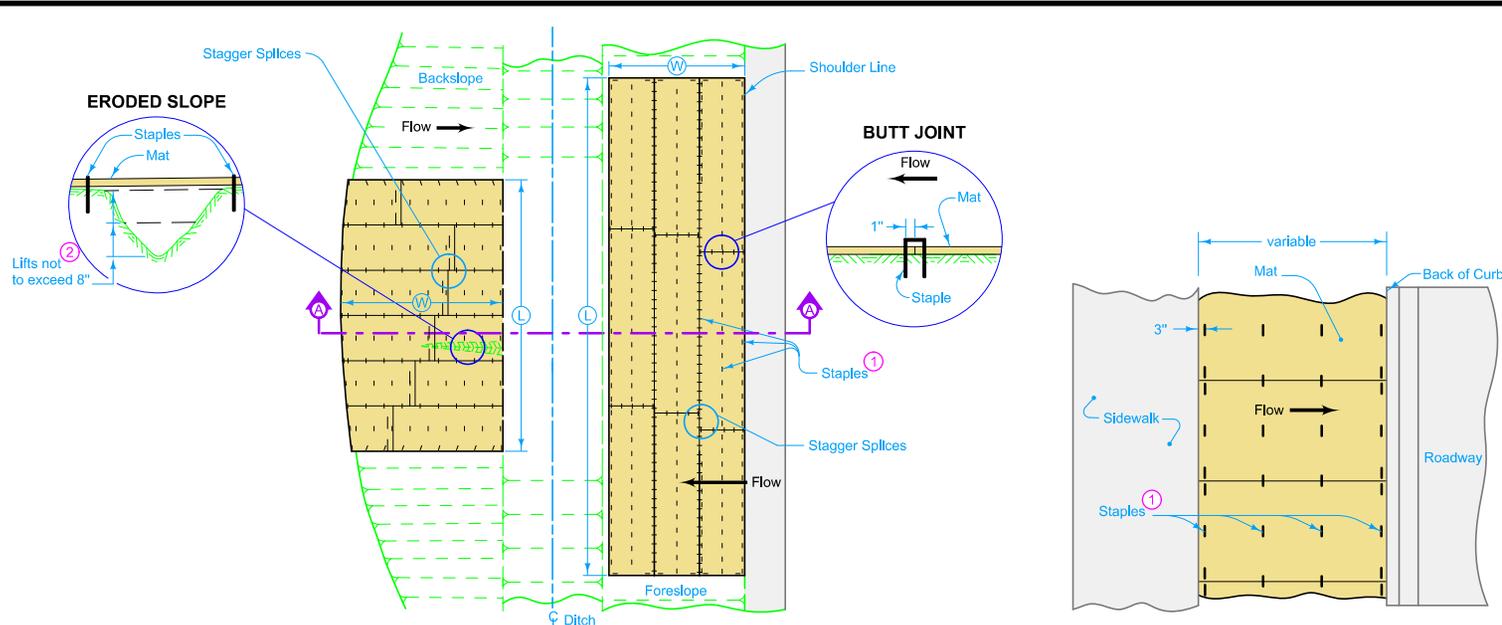
At locations where erosion has created gullies in ditches or backslopes, fill and compact gullies in lifts not more than 8-inches thick.

Unless specifically required otherwise by the Engineer, install wire stakes or wood stakes. Stagger wire stakes as shown. Minimum 33 stakes per square. Use wood stakes in sod flumes when designated by the Engineer. When directed by the Engineer, longer stakes may be required for certain soil conditions to properly hold sod in place.

Work for providing proper ditches will not be paid for directly but is incidental to other work on the project.

Shaping and grading work necessary to prepare the ground for sodding adjacent to concrete surfaces will not be paid for separately but is incidental to other work on the project. Such grading and shaping may include the removal and disposal of excess earth, as directed by the Engineer, in order to obtain satisfactory drainage and appearance for the finished work.

	REVISION
	1 04-21-15
	STANDARD ROAD PLAN
EC-102	
SHEET 1 of 1	
REVISIONS: Replaced DOT logo with new version, Revised Section A-A and B-B drawings to show ditch bottoms being flat.	
APPROVED BY DESIGN METHODS ENGINEER	
SOD FOR DITCH PROTECTION	



PLAN FOR BACKSLOPE AND FORESLOPE PROTECTION

PLAN FOR SIDEWALK ADJACENT TO PAVEMENT

The work of providing suitable earth surface for placement of slope protection is incidental to preparation of seedbed.

Ensure that ground surfaces adjacent to any channels are shaped to facilitate natural drainage into the protected area.

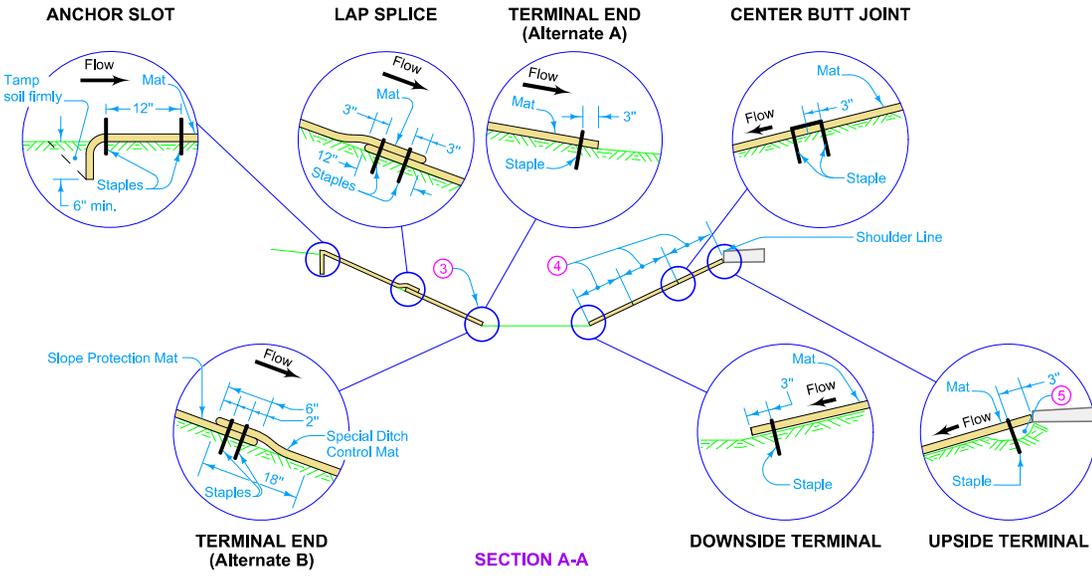
Excelsior mat for backslope protection is installed with strips placed approximately perpendicular to roadway. Locations for slope protection are shown on detail plans.

Excelsior mat for foreslope protection is installed with strips placed approximately parallel to roadway. The location, width, and number of strips are specified on project plans.

- ① Space top row of staples at 18 inch centers, bottom row at 36 inch centers, and all others at 24 inch centers. Approximately 30 staples required per square (100 sq. ft) of wood excelsior mat.
- ② Where erosive gullies have developed in backslope, fill with soil and compact prior to placement of mat.
- ③ Where excelsior mat is to be placed as Special Ditch Control, install slope protection to facilitate placement of the ditch control as indicated (Alternate B). Where there is no Special Ditch Control, install slope protection as shown (Alternate A).
- ④ 4 feet unless specified otherwise for foreslope protection.
- ⑤ If erosive fill has developed adjacent to shoulder material, fill with suitable soil and compact prior to placement of mat.

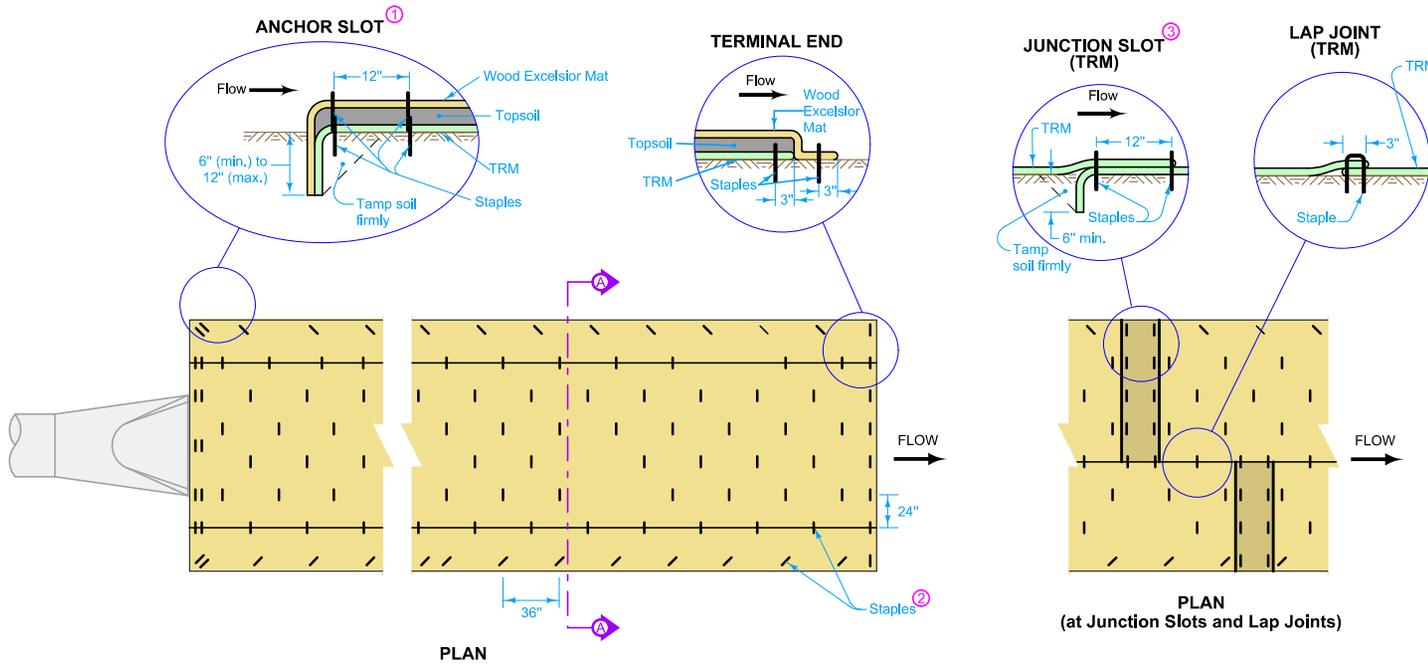
Possible Contract Item:
Slope Protection, Wood Excelsior Mat

Possible Tabulation:
100-22

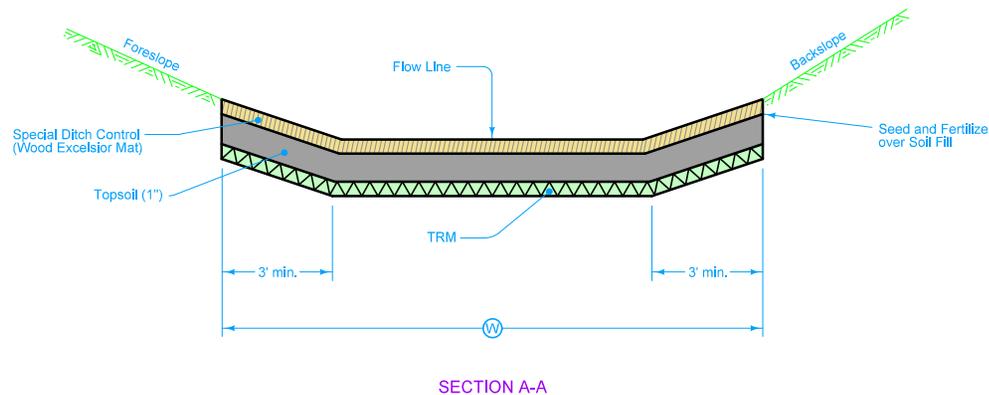


IOWA DOT	REVISION
	1 04-21-15
	STANDARD ROAD PLAN
EC-103	
SHEET 1 of 1	
<small>REVISIONS: Removed language from general notes already in the Specifications. Modified drawings. Added Possible Contract Item and Possible Tabulation.</small>	
<i>Brian Smith</i> <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
WOOD EXCELSIOR MAT FOR SLOPE PROTECTION	

Refer to [EC-101](#) for Special Ditch Control (Wood Excelsior Mat).



- ① Install anchor slot at the beginning (upstream end) of all mat installations.
- ② Place staples alternately in rows approximately 24 inches apart. Approximately 30 staples required per square (100 sq. ft.) of each type of mat.
- ③ Stagger Junction Slots.

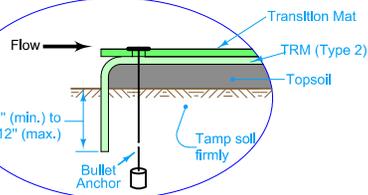


Possible Contract Items:
Turf Reinforcement Mat

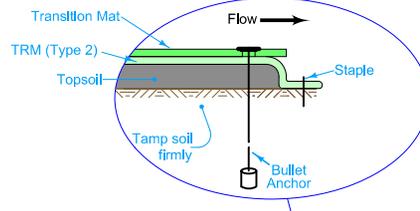
Possible Tabulation:
100-22

	REVISION
	3 04-17-18
STANDARD ROAD PLAN	EC-104
REVISIONS: Added Designer Info button.	SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER	
TURF REINFORCEMENT MAT (TRM)	

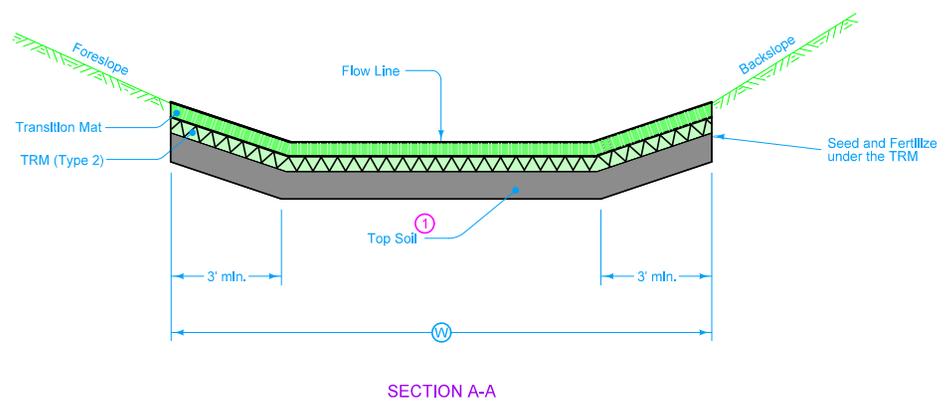
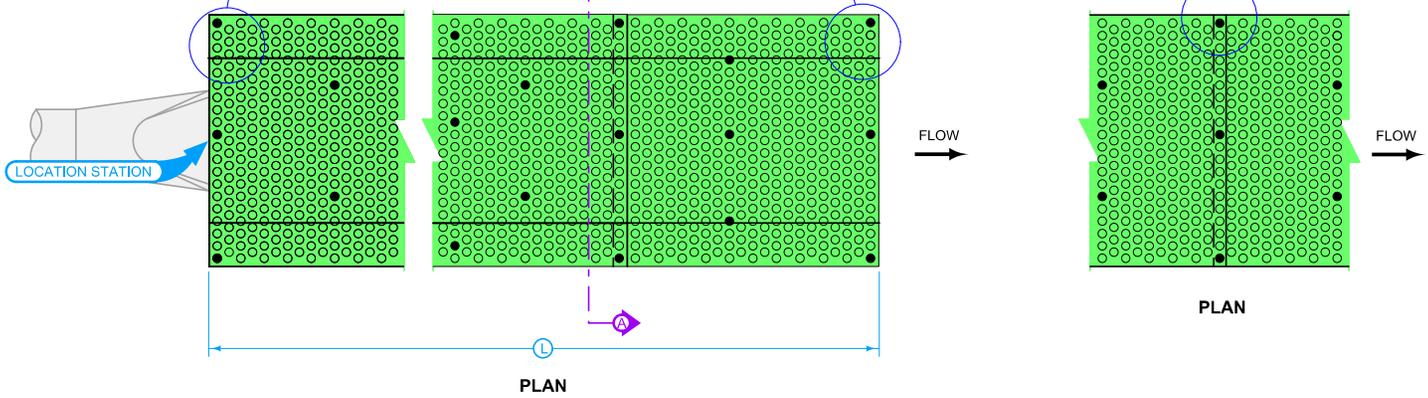
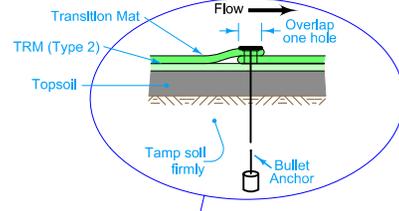
START OF PROTECTION



TERMINAL END



LAP JOINT (TM)



- TM
- TRM (Type 2)

Refer to Standard Road Plan [EC-104](#) for the placement of the TRM.

- 1 Place at same thickness as surrounding area. Refer to T Sheets to determine topsoil thickness for the surrounding area.

Possible Contract Items:
Transition Mat

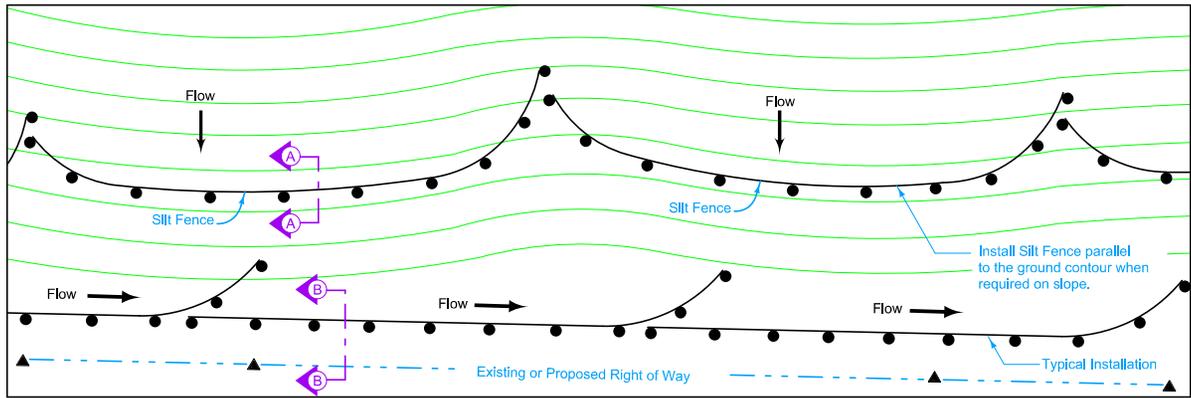
Possible Tabulation:
100-09

 STANDARD ROAD PLAN	REVISION
	3 04-17-18
	EC-105
SHEET 1 of 1	

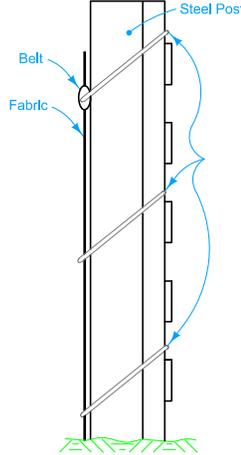
REVISIONS: Changed Possible Contract Items to Transition Mat.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

TRANSITION MAT (TM)



PLAN FOR SILT FENCE (1)



**PROFILE VIEW
ATTACHMENT TO POST**

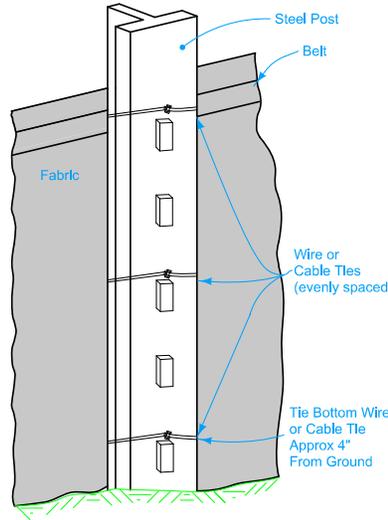
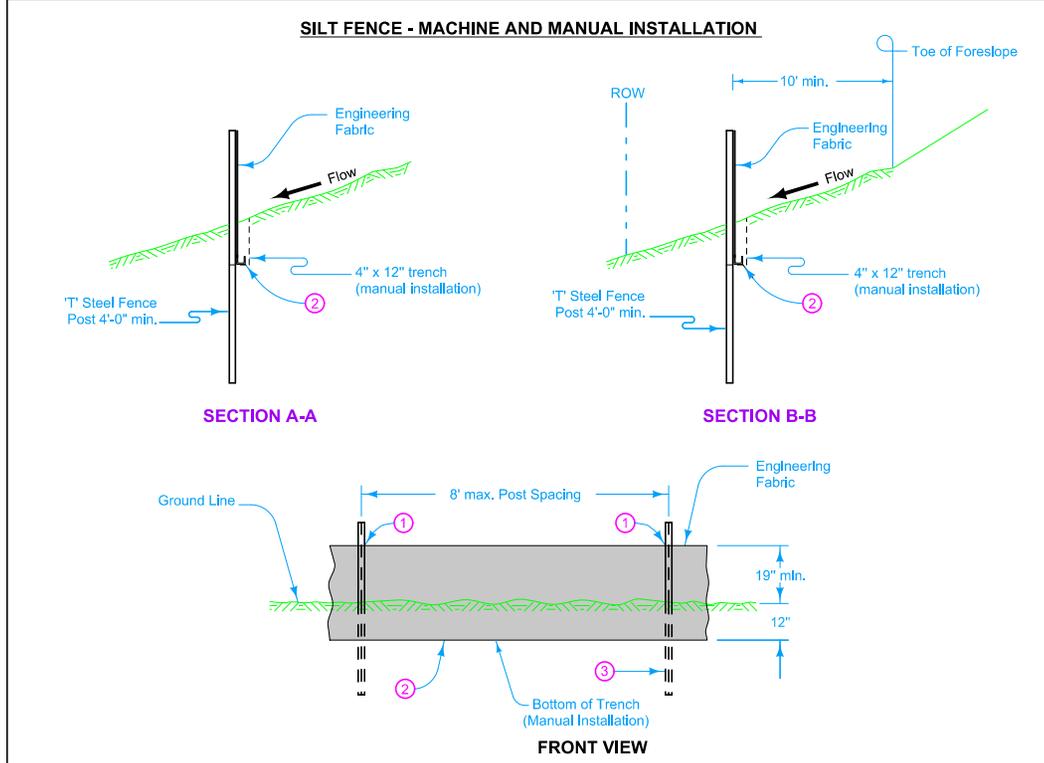
Install all silt fence using a silt fence machine. Use manual (trench) installation if physical conditions prohibit machine installation.

For machine installation, compact by driving over each side of silt fence at least two times with a rubber-tired vehicle.

For manual installation, compact with a mechanical or pneumatic tamper.

Place silt fence continuously up to a maximum length of 200 feet. For every segment of silt fence that is placed, flare up the slope the last 20 feet of the segment to contain runoff as shown.

- ① Secure top of engineering fabric to steel posts using cable ties (50 lb.) or wire passing through or encompassing the belt. See attachment to post.
- ② For manual installation only, fold engineering fabric along bottom of trench.
- ③ Embed all posts 28 inches below the ground line.
- ④ Refer to Tab. 100-17



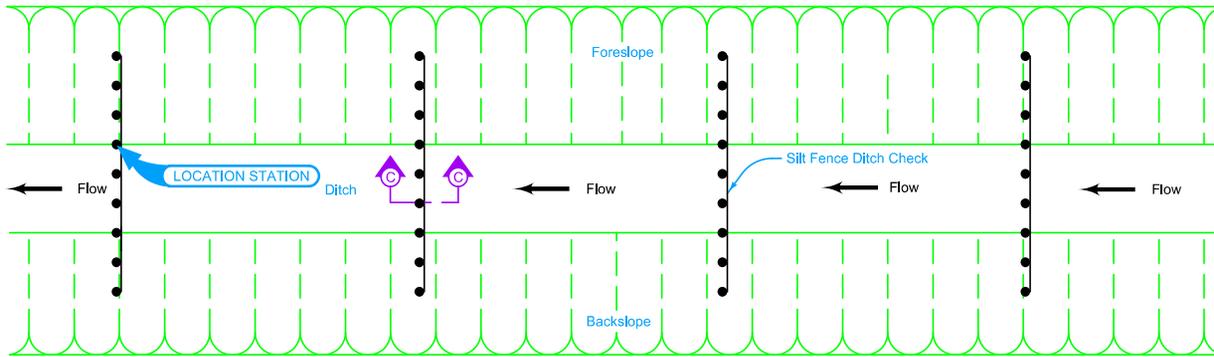
**BACK VIEW
ATTACHMENT TO POST**

- Possible Contract Items:
Silt Fence
Silt Fence for Ditch Checks
- Possible Tabulations:
100-17
100-18

IOWA DOT	REVISION	5	10-15-19
	STANDARD ROAD PLAN	EC-201	
		SHEET 1 of 6	

REVISIONS: Modified circle note 1.

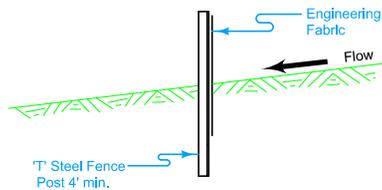
Handwritten Signature
APPROVED BY DESIGN METHODS ENGINEER



PLAN FOR DITCH CHECK (TYPE 1) ¹²

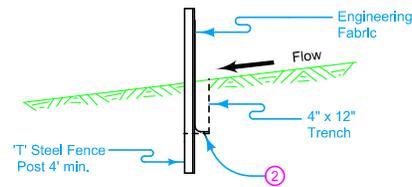
- ① Secure top of engineering fabric to steel posts using cable ties (50 lb.) or wire passing through or encompassing the belt. See attachment to post.
- ② For manual installation only, fold engineering fabric along bottom of trench.
- ③ Embed all posts 28 inches below the ground line.
- ④ Locate posts at toe of foreslope and toe of backslope and space remaining posts equally.
- ⑤ Minimum end span (in feet) = 2 X Foreslope (H:V).
- ⑥ Minimum end span (in feet) = 2 X Backslope (H:V).
- ⑫ Refer to Tab. 100-18

DITCH CHECK - MACHINE INSTALLATION

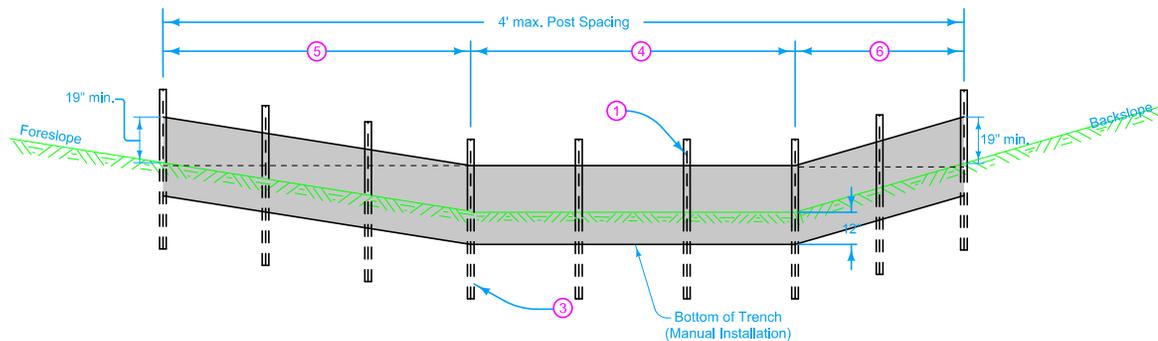


SECTION C-C

DITCH CHECK - MANUAL INSTALLATION



SECTION C-C



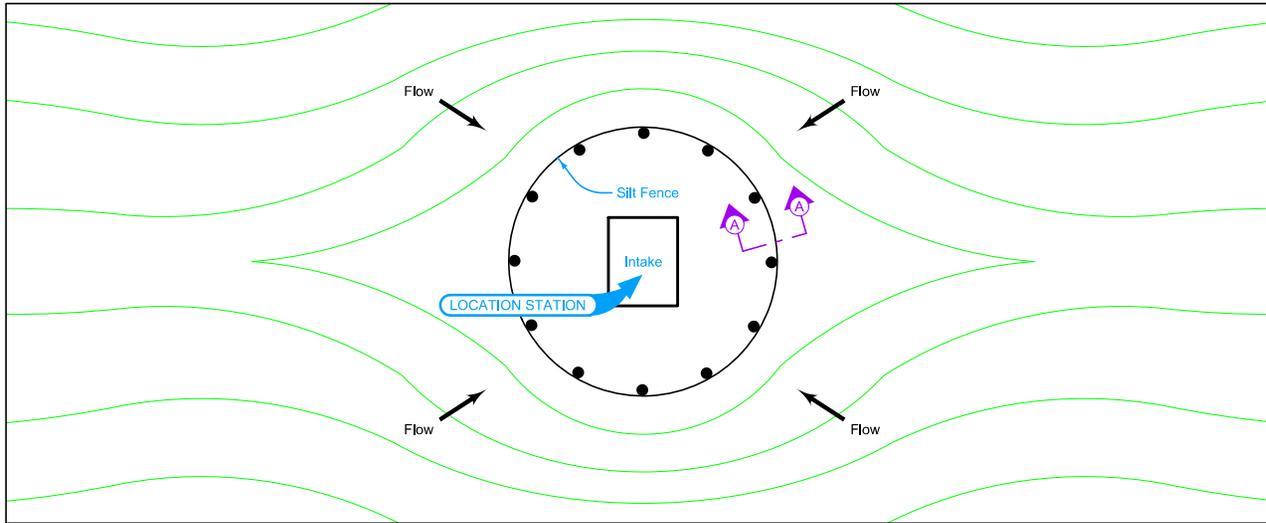
FRONT VIEW

IOWA DOT	REVISION	
	5	10-15-19
STANDARD ROAD PLAN		EC-201
		SHEET 2 of 6

REVISIONS: Modified circle note 1.

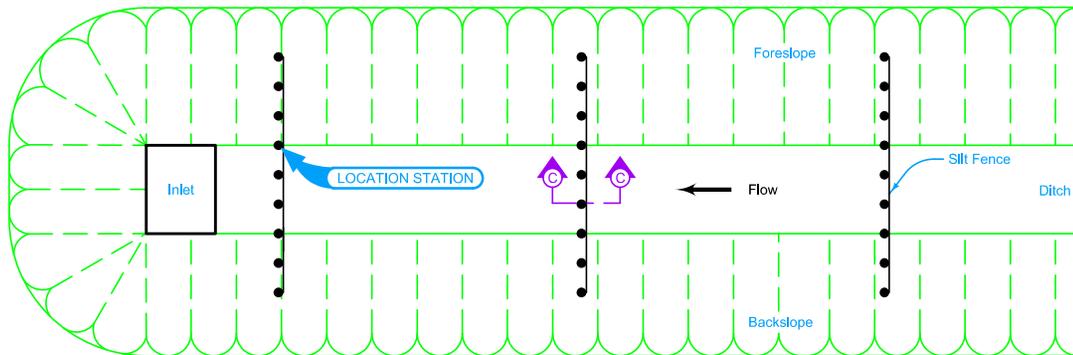
Handwritten Signature
APPROVED BY DESIGN METHODS ENGINEER

SILT FENCE



PLAN FOR SILT FENCE AT INTAKE (TYPE 2) ¹²

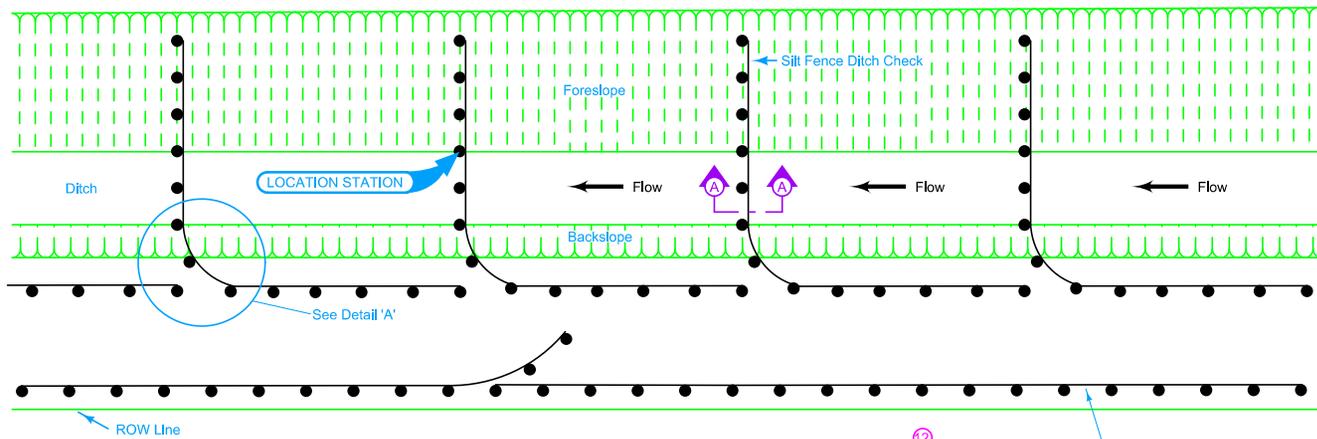
¹² Refer to Tab. 100-18



PLAN FOR SILT FENCE DITCH CHECK AT INLET (TYPE 3) ¹²

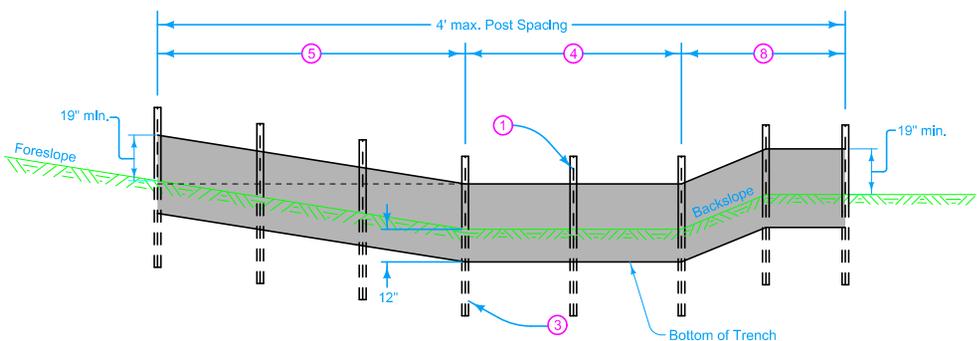
 Contour Lines

 STANDARD ROAD PLAN	REVISION	
	5	10-15-19
EC-201 SHEET 3 of 6		
REVISIONS: Modified circle note 1.		
APPROVED BY DESIGN METHODS ENGINEER 		
SILT FENCE		

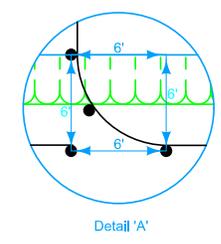


PLAN FOR SILT DITCH (SHALLOW DITCH SECTION-TYPE 4) ⑫

- ① Secure top of engineering fabric to steel posts using cable ties (50 lb.) or wire passing through or encompassing the belt. See attachment to post..
- ③ Embed all posts 28 inches below the ground line.
- ④ Locate posts at toe of foreslope and toe of backslope and space remaining posts equally.
- ⑤ Minimum end span (in feet) = 2 X Foreslope (H:V).
- ⑧ Place posts shown in Detail 'A' to transition from transverse to parallel installation. Place one post at the back slope intercept and the other beyond the intercept.
- ⑫ Refer to Tab. 100-18

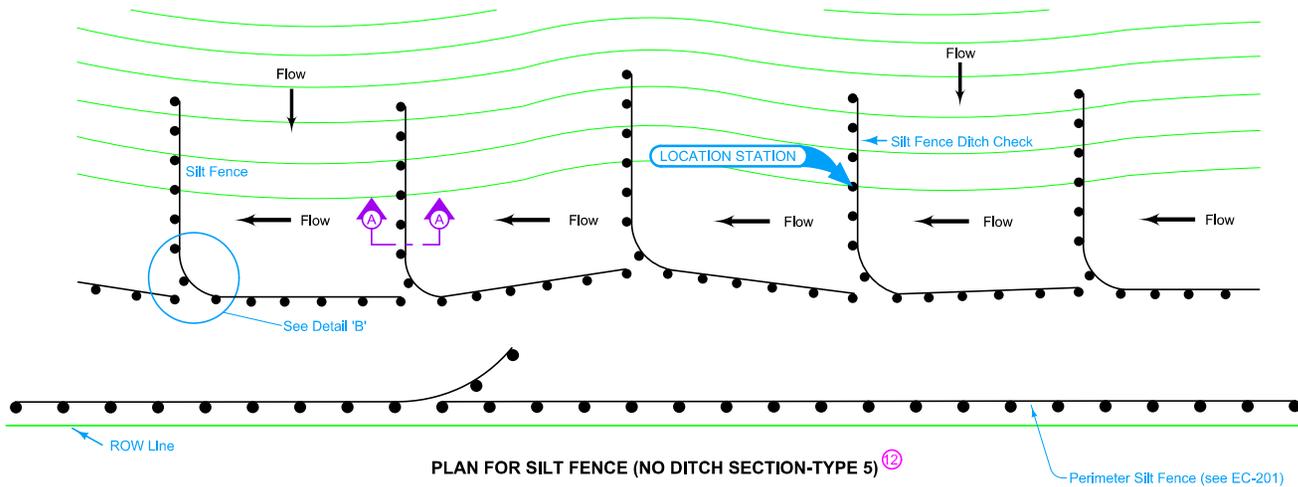


FRONT VIEW

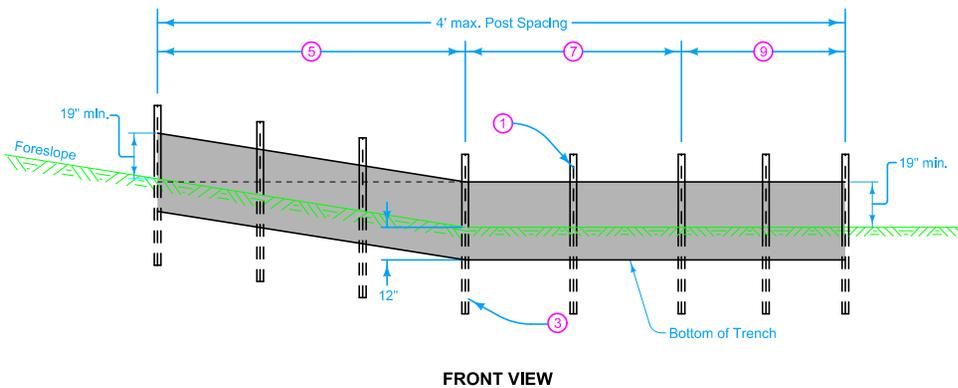


Detail 'A'

 STANDARD ROAD PLAN	REVISION
	5 10-15-19
EC-201	SHEET 4 of 6
REVISIONS: Modified circle note 1.	
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
SILT FENCE	

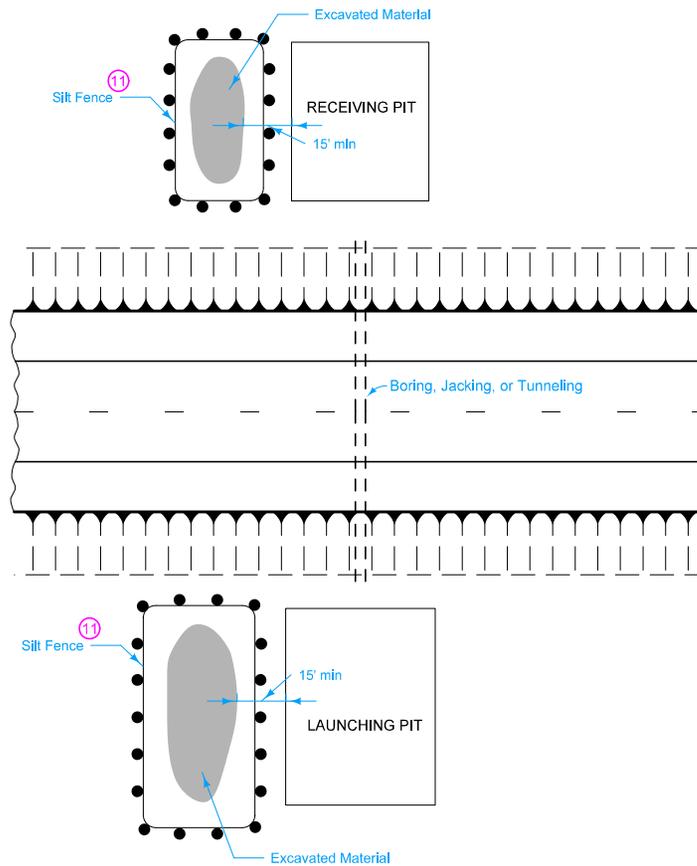


- ① Secure top of engineering fabric to steel posts using cable ties (50 lb.) or wire passing through or encompassing the belt. See attachment to post..
- ③ Embed all posts 28 inches below the ground line.
- ⑤ Minimum end span (in feet) = 2 X Foreslope (H:V).
- ⑦ Locate posts at toe of foreslope. Locate posts at 4 foot spacing
- ⑨ Place posts as shown in Detail 'B' to transition from transverse to parallel installation. The parallel portion of the installation should approximately parallel the intercept of the foreslope.
- ⑫ Refer to Tab. 100-18



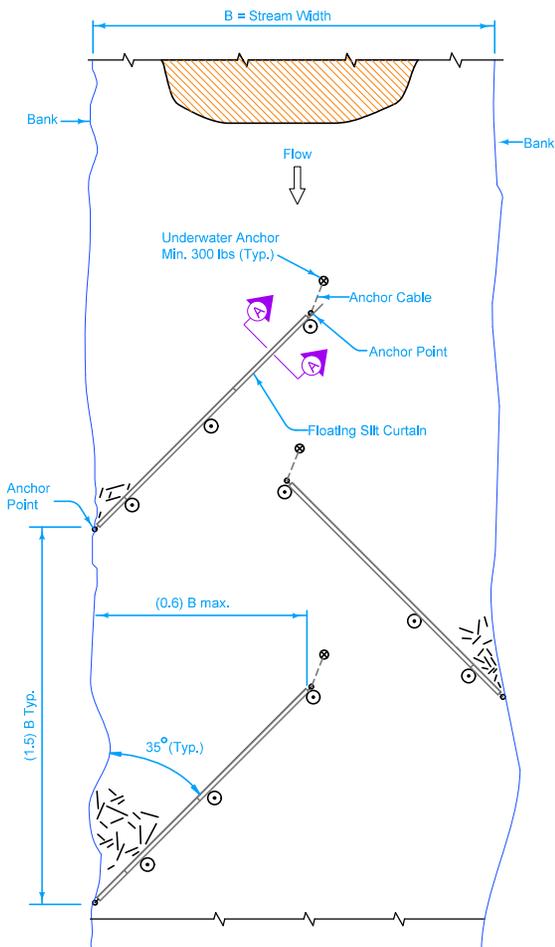
IOWA DOT	REVISION	
	5	10-15-19
STANDARD ROAD PLAN		EC-201
		SHEET 5 of 6
REVISIONS: Modified circle note 1.		
 APPROVED BY DESIGN METHODS ENGINEER		
SILT FENCE		

11 Refer to Tab. 100-17

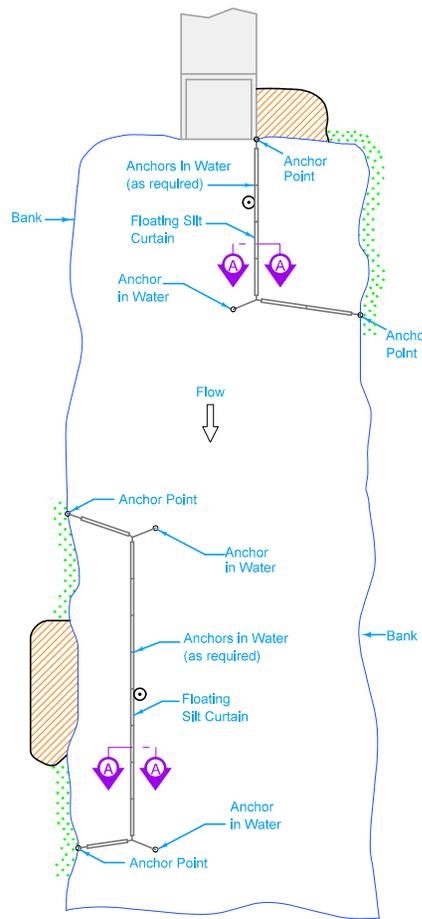


PLAN FOR SILT FENCE FOR TRENCHLESS CONSTRUCTION

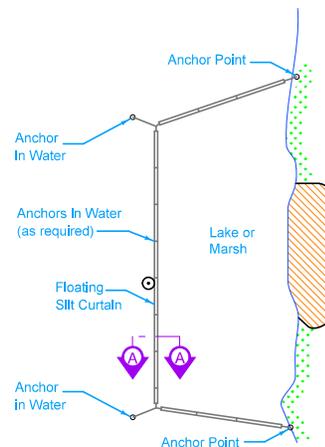
IOWA DOT	REVISION	
	5	10-15-19
STANDARD ROAD PLAN	EC-201	
REVISIONS: Modified circle note 1.	SHEET 6 of 6	
APPROVED BY DESIGN METHODS ENGINEER		
<i>Handwritten Signature</i>		
SILT FENCE		



PLAN
Disturbed Area within Stream



PLAN
Disturbed Area Adjacent to Stream



PLAN
Still Water Only

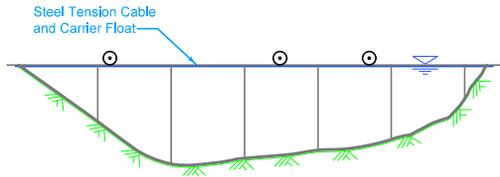
LEGEND	
	Carrier Float
	Buoy
	Undisturbed Vegetation
	Disturbed Soil

Keep silt curtain as close to work area as possible.
 Depth of curtain is the dimension of the curtain fabric extending below the flotation, i.e. hanging in the water.
 Install according to Hanging Installation unless specified otherwise.

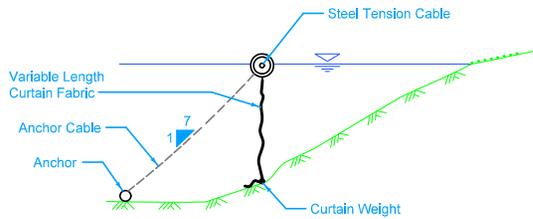
Possible Tabulation:
100-10

Possible Contract Items:
 Clean-out of Floating Silt Curtain (Containment)
 Floating Silt Curtain (Containment)
 Floating Silt Curtain (Hanging)
 Maintenance of Floating Silt Curtain

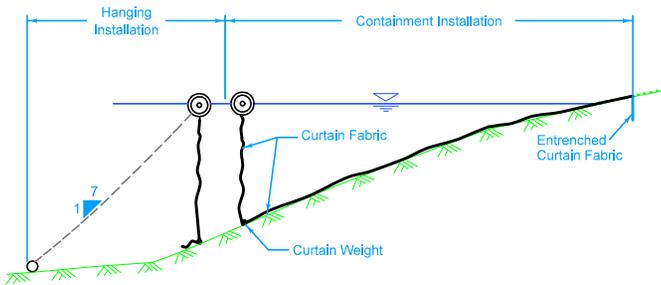
 STANDARD ROAD PLAN	REVISION
	6 10-21-14
EC-202 SHEET 1 of 2	
REVISIONS: Removed 100' typical spacing between anchors on page 2. Added possible contract item. Removed sections of standard notes and circle note 1.	
APPROVED BY DESIGN METHODS ENGINEER 	



PROFILE

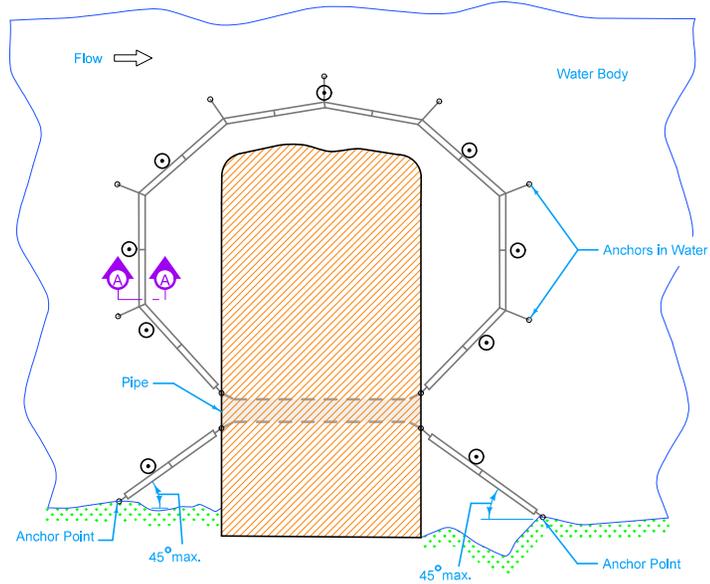


SECTION A-A
Hanging Installation

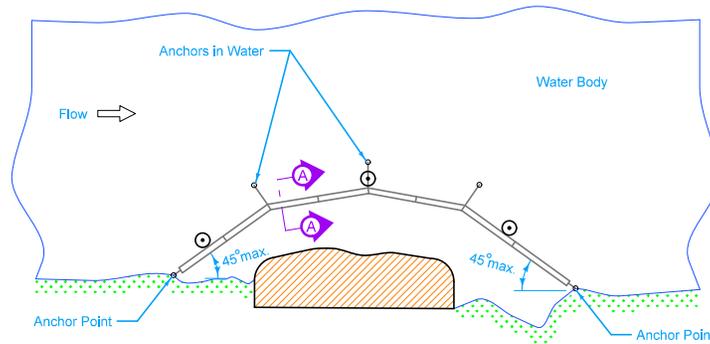


SECTION A-A
Containment Installation ①

LEGEND	
	Carrier Float
	Buoy
	Undisturbed Vegetation
	Disturbed Soil
	Water Surface



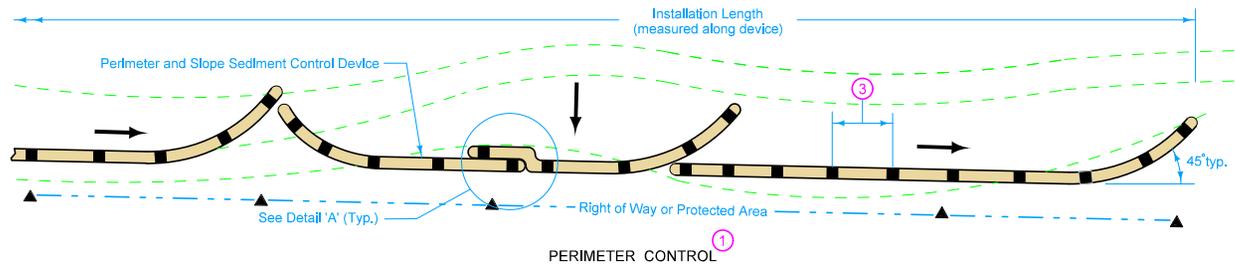
PLAN
Stream Crossing or Causeway
(with pipe)



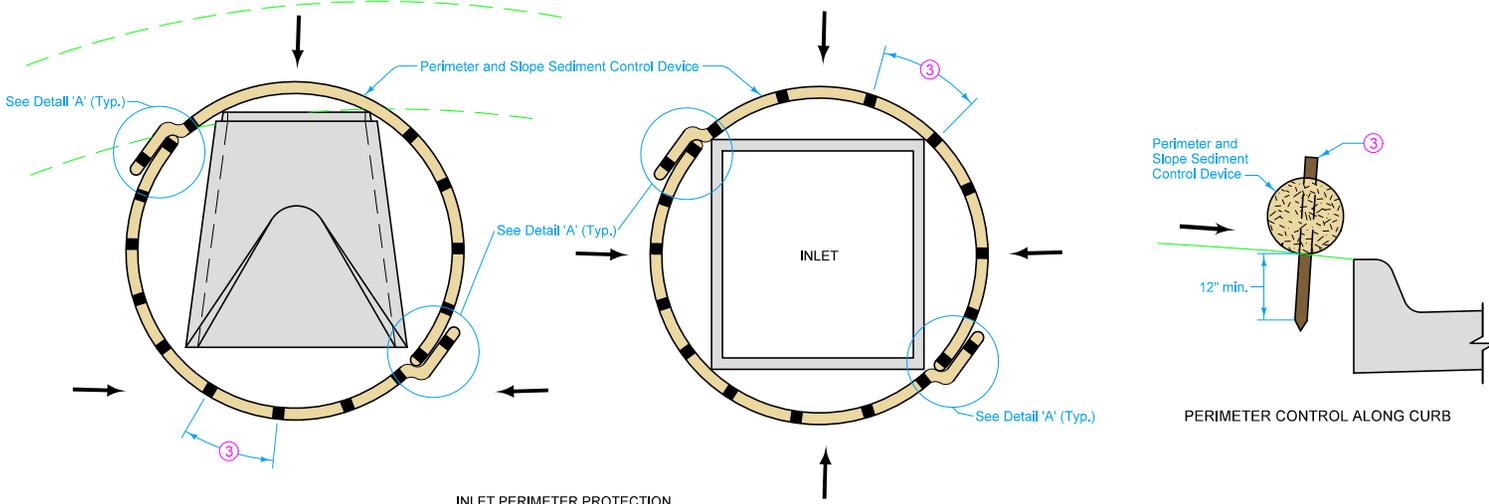
PLAN
Causeway or Pad

① When Containment Installation is specified, it will be in combination with a Hanging Installation that is paid for separately.

 STANDARD ROAD PLAN	REVISION
	6 10-21-14
	EC-202
SHEET 2 of 2	
<small>REVISIONS: Removed 100' typical spacing between anchors on page 2. Added possible contract item. Removed sections of standard notes and circle note 1.</small>	
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
FLOATING SILT CURTAIN	



PERIMETER CONTROL ①

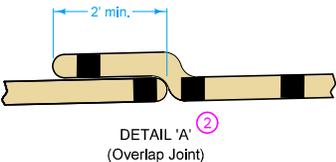


INLET PERIMETER PROTECTION

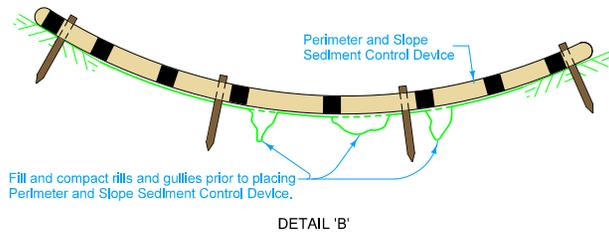
PERIMETER CONTROL ALONG CURB

LEGEND

- Contour Lines
- Flow
- Wood Stake ③



DETAIL 'A' ②
(Overlap Joint)



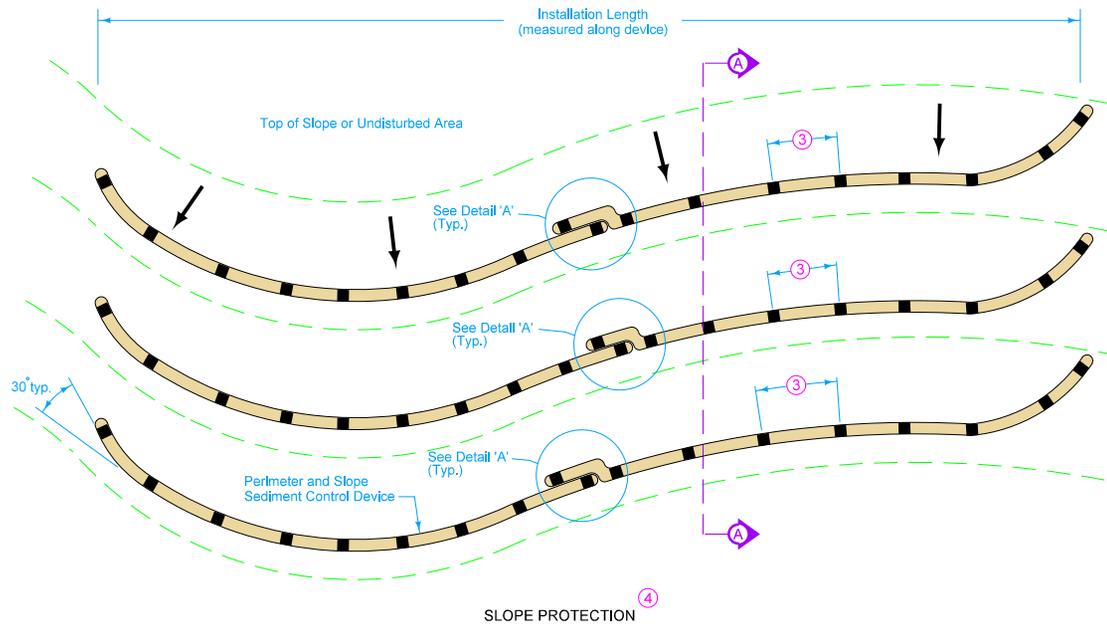
DETAIL 'B'

- Not intended for use in perennial or intermittent streams.
- Fill and compact rills and gullies (see Detail 'B') prior to placing Perimeter and Slope Sediment Control Device. Ensure ground surface is smooth in order to provide continuous contact with Perimeter and Slope Sediment Control Device. Minor ground shaping may be required. Filling and compacting rills and gullies, and minor ground shaping, is incidental to Perimeter and Slope Sediment Control Device.
- ① Overlap joints per Detail 'A'. Turn the lower 10 feet of each run up the slope to help contain runoff. When placed such that runoff is conveyed along the device, additional run-ups and/or means may be required to reduce erosion along the device. Run-ups will be included in the installation length.
 - ② Extra material required to install overlaps will not be included in the installation length.
 - ③ Space stakes at 4 foot maximum spacing. Use minimum actual stake size $\frac{3}{4}$ " X $\frac{3}{4}$ " wood stakes.

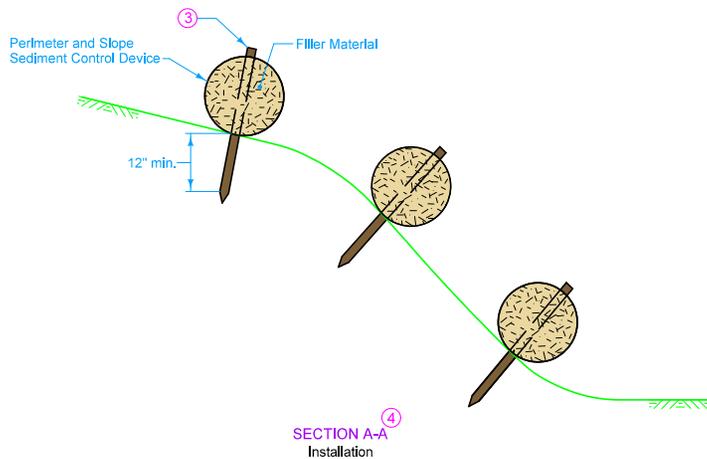
Possible Contract Item:
Perimeter and Slope Sediment Control Device

Possible Tabulation:
100-19

IOWA DOT	REVISION
	4 04-21-20
STANDARD ROAD PLAN	EC-204
SHEET 1 of 3	
REVISIONS: Modified circle notes 3 and 5.	
APPROVED BY DESIGN METHODS ENGINEER	
PERIMETER AND SLOPE SEDIMENT CONTROL DEVICES	

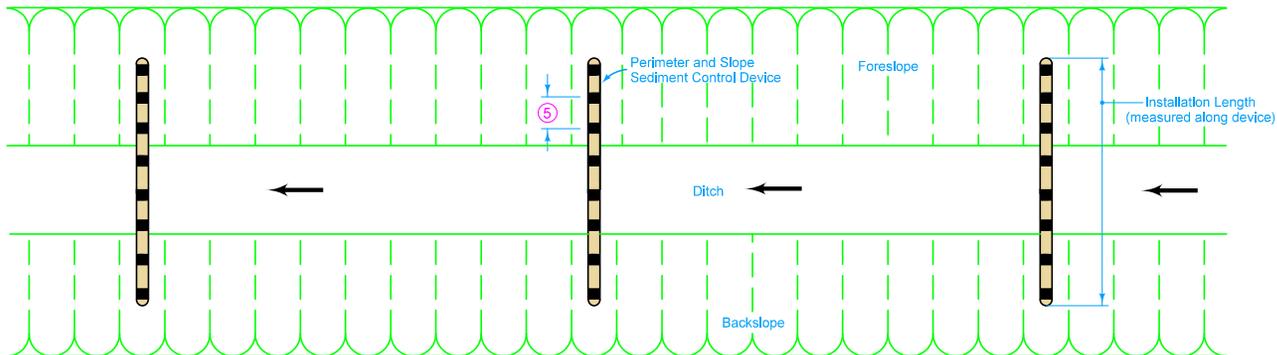


- ③ Space stakes at 4 foot maximum spacing. Use minimum actual stake size $\frac{3}{4}$ " X $\frac{3}{4}$ " wood stakes.
- ④ Install Slope Protection perpendicular to slope (parallel to contours). Overlap joints per Detail 'A'. Run the last 10 feet of each device up the slope to prevent flow runaround. Run-ups will be included in the installation length.

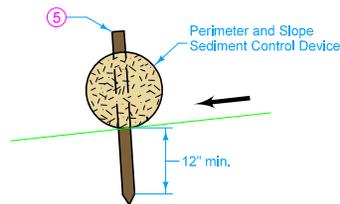


LEGEND	
	Contour Lines
	Flow
	Wood Stake ③

IOWA DOT	REVISION	
	4	04-21-20
STANDARD ROAD PLAN		EC-204
REVISIONS: Modified circle notes 3 and 5.		SHEET 2 of 3
 APPROVED BY DESIGN METHODS ENGINEER		
PERIMETER AND SLOPE SEDIMENT CONTROL DEVICES		



DITCH PROTECTION ⁶

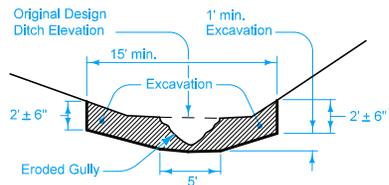


INSTALLATION IN DITCH

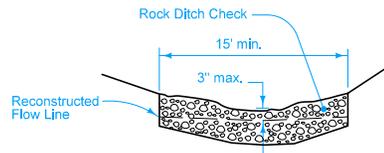
LEGEND	
	Contour Lines
	Flow
	Wood Stake ⁵

- ⁵ Space stakes at 2 foot maximum spacing. Use minimum actual stake size $\frac{3}{4}$ " X $\frac{3}{4}$ " wood stakes.
- ⁶ Install Ditch Protection perpendicular to ditch. Overlap joints per Detail 'A'.

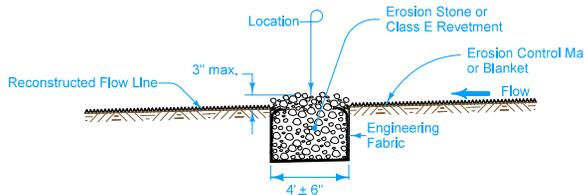
	REVISION	
	4	04-21-20
STANDARD ROAD PLAN	EC-204	
REVISIONS: Modified circle notes 3 and 5.		
APPROVED BY DESIGN METHODS ENGINEER		
PERIMETER AND SLOPE SEDIMENT CONTROL DEVICES		



EXCAVATION SECTION



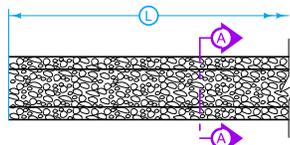
DITCH CHECK SECTION



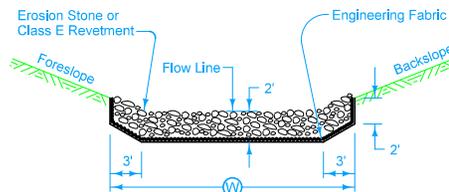
LONGITUDINAL SECTION AT CENTERLINE OF DITCH

**TYPE 1
(Rock Ditch Check)**

Class 10 excavation required to install Rock Erosion Control is incidental and will not be paid for separately.

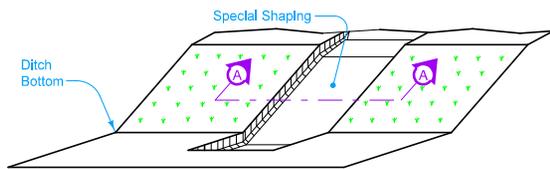


PLAN

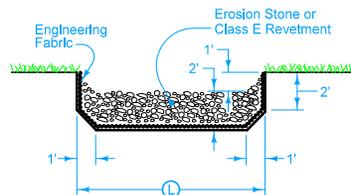


SECTION A-A

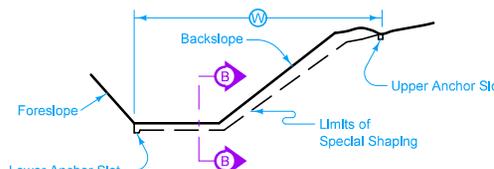
**TYPE 2
(Rock Ditch)**



ISOMETRIC VIEW



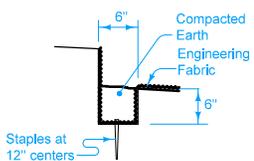
SECTION A-A



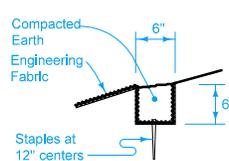
TYPICAL SECTION

Possible Contract Items:
Erosion Stone
Class E Revetment
Engineering Fabric

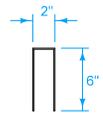
Possible Tabulation:
100-23



LOWER ANCHOR SLOT

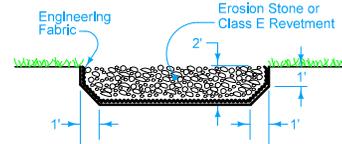


UPPER ANCHOR SLOT



**STAPLE
(No. 11 wire)**

**TYPE 3
(Rock Flume)**



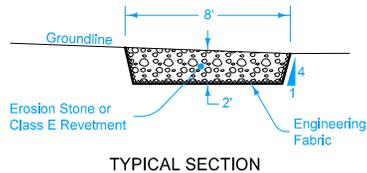
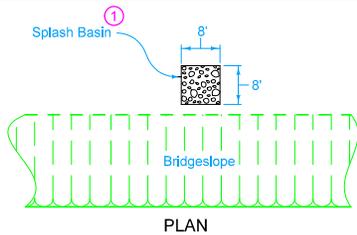
SECTION B-B

	REVISION
	1 10-18-16
	EC-301
STANDARD ROAD PLAN	
SHEET 1 of 2	

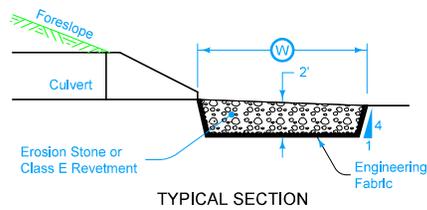
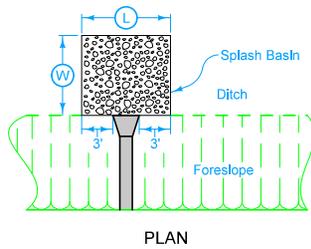
REVISIONS: Modified details for Type 3 and Type 4 Installations. Deleted old note 2 and renumbered old note 3 as note 2. Added Designer Info button.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

**ROCK EROSION CONTROL
(REC)**



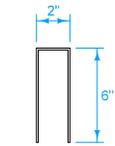
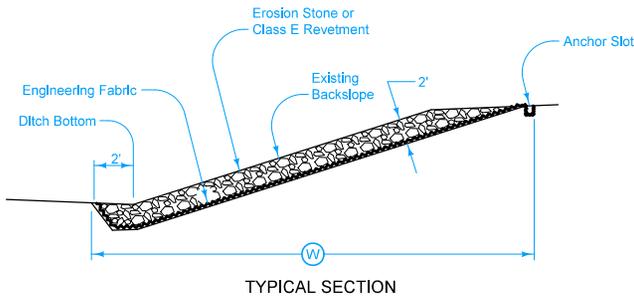
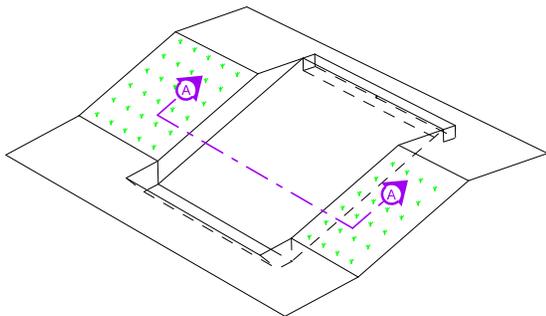
SPLASH BASIN UNDER BRIDGE DRAIN



SPLASH BASIN AT PIPE CULVERT OUTLET

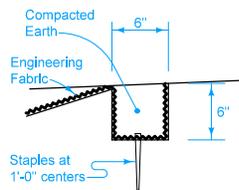
TYPE 4
(Rock Splash Basin)

- ① Center splash basin directly under bridge drain.
- ② Staples at 12 inch centers.

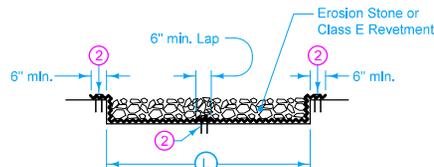


STAPLE
(No. 11 wire)

ISOMETRIC VIEW



ANCHOR SLOT



SECTION A-A

TYPE 5
(Rock Slope Protection)

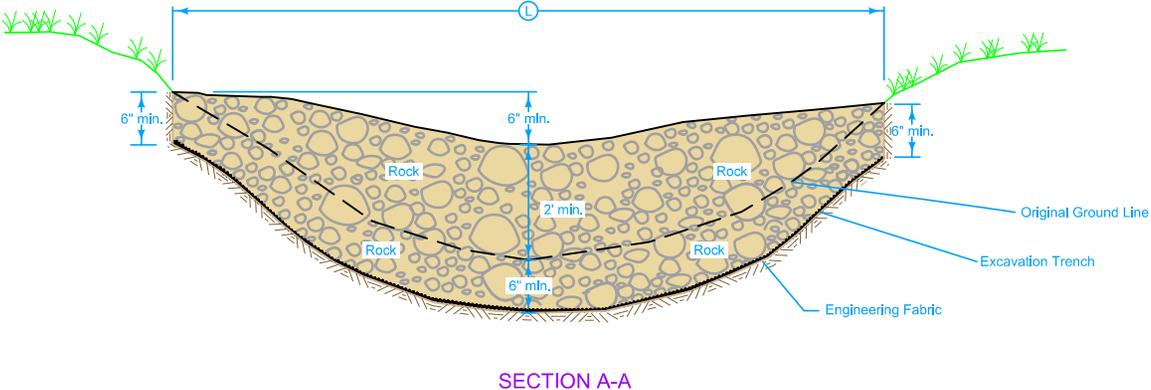
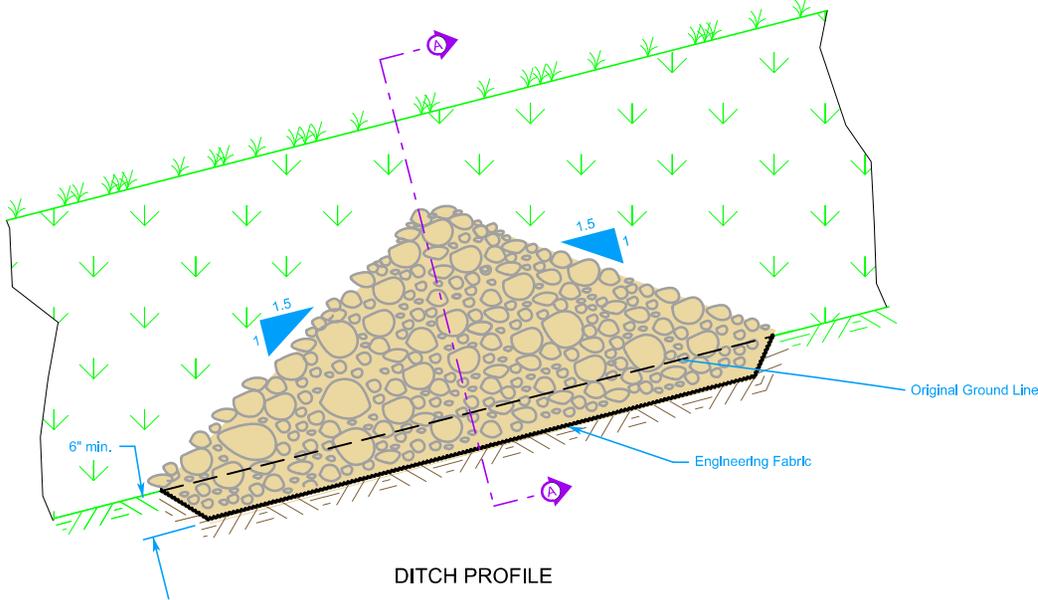
IOWA DOT	REVISION
	1 10-18-16
	STANDARD ROAD PLAN
EC-301	
SHEET 2 of 2	

REVISIONS: Modified details for Type 3 and Type 4 Installations. Deleted old note 2 and renumbered old note 3 as note 2. Added Designer Info button.

Brian Smith
APPROVED BY DESIGN METHODS ENGINEER

**ROCK EROSION CONTROL
(REC)**

Use Class D Revetment to construct Rock Check Dam.



Possible Contract Items:
 Rock Check Dam
 Maintenance of Rock Check Dam
 Removal of Rock Check Dam

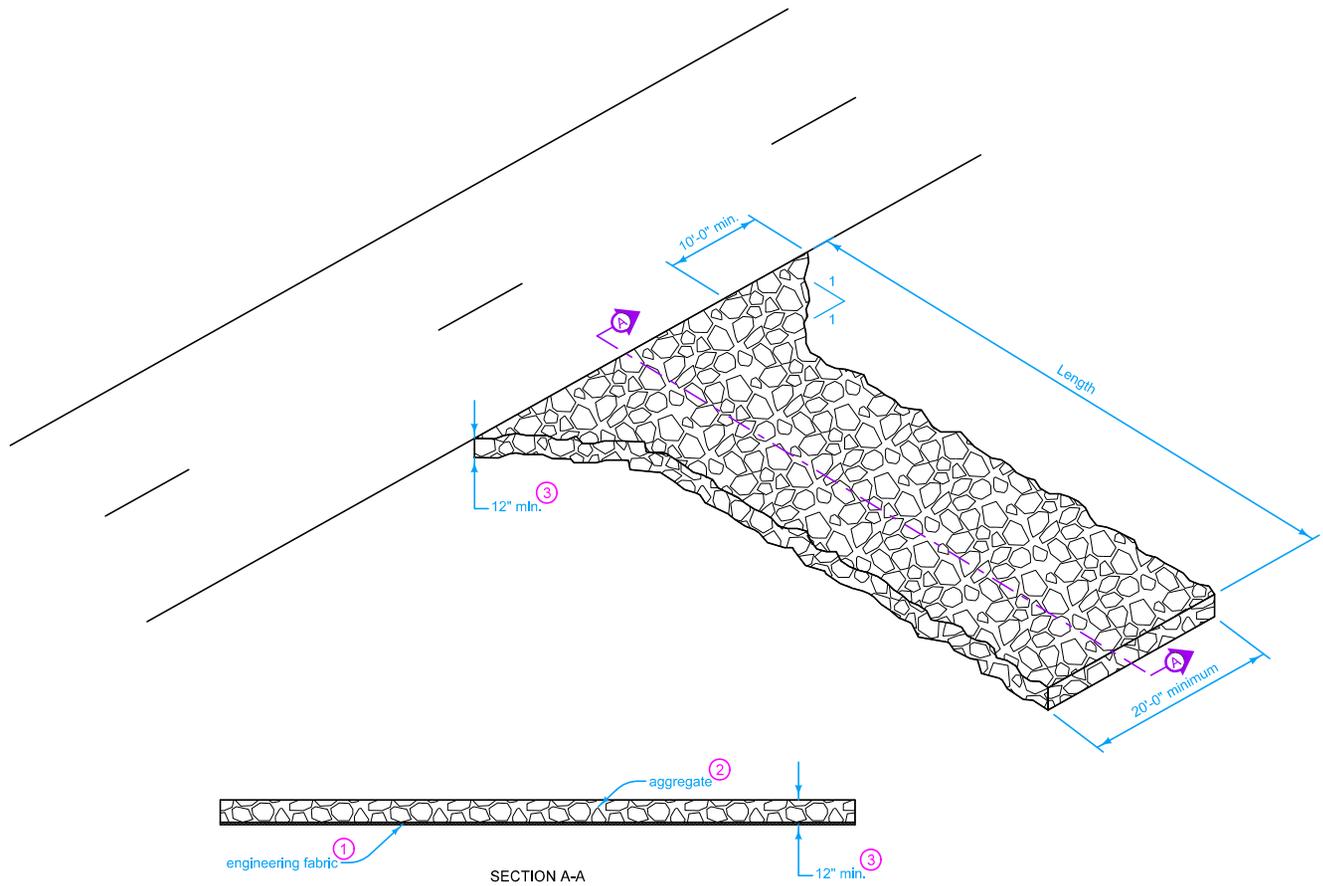
Possible Tabulation:
 100-32

	REVISION
	New 10-16-18
STANDARD ROAD PLAN	EC-302
REVISIONS: New. Replaces Design Detail 570-2.	SHEET 1 of 1
APPROVED BY DESIGN METHODS ENGINEER	
ROCK CHECK DAM	

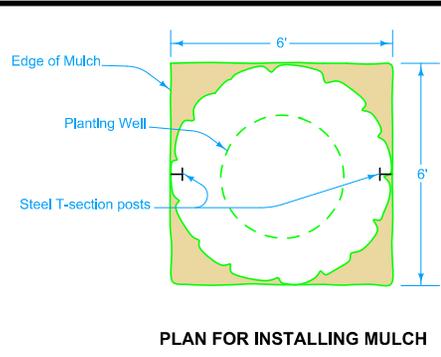
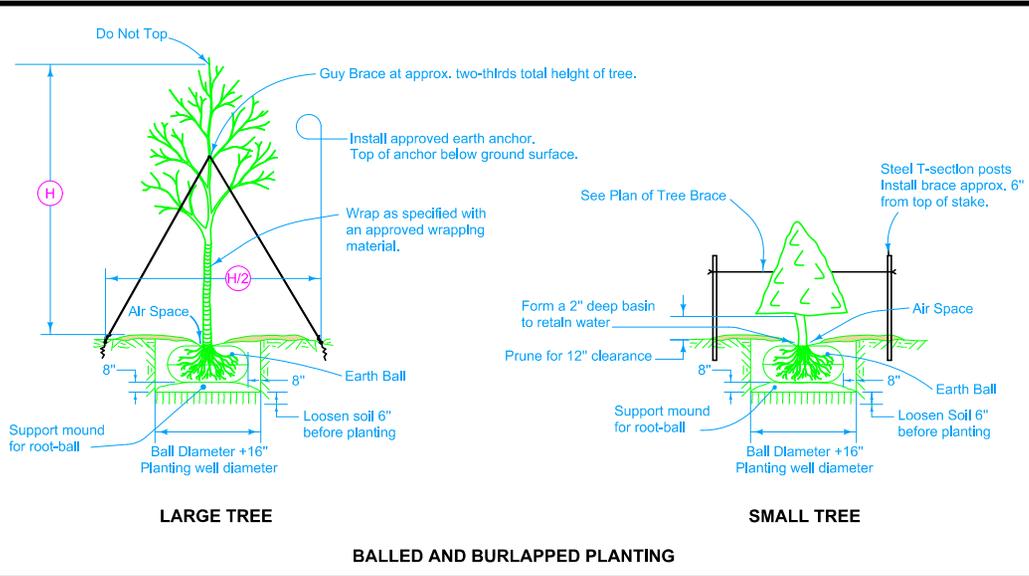
**DESIGNER
INFO**

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
REVISIONS: Removed Interim from standard.	SHEET 1 of 1
APPROVED BY DESIGN METHODS ENGINEER	
STABILIZED CONSTRUCTION ENTRANCE	



Refer to detail project plans for additional information regarding planting location and layout.

When no specific requirement is indicated, complete planting as directed by the Engineer.

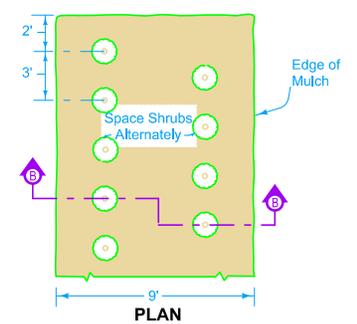
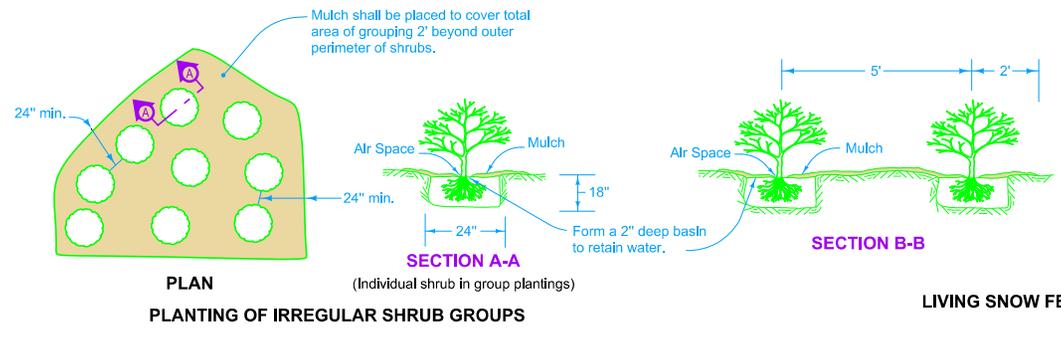
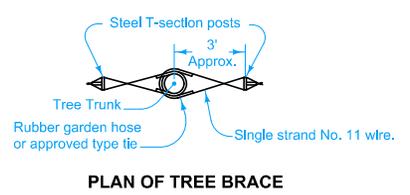
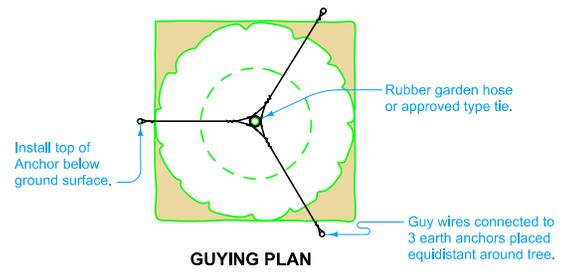
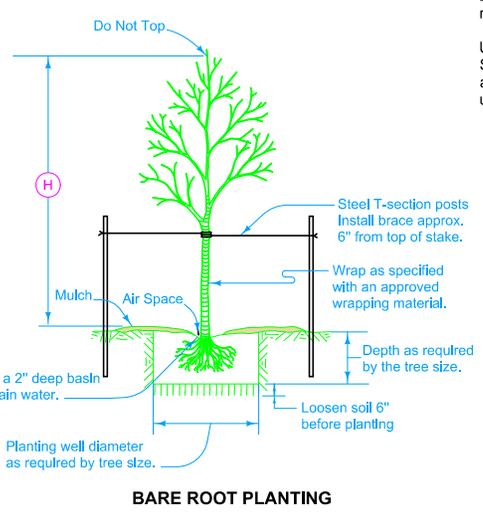
Till entire area to be mulched with a rotary tiller or other method approved by the Engineer.

Rake smooth the entire area to be mulched and ensure it is free of vegetation, debris, clods and rocks. Form a 2 inch deep basin around plants to retain water. Plant plants at the same depth as they were in the nursery.

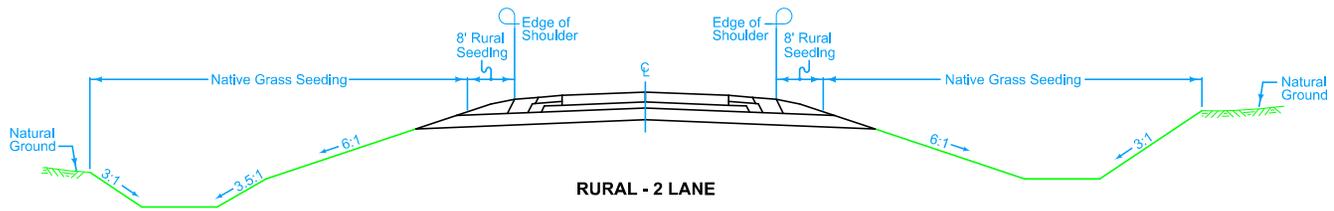
Follow mulch material and depth as designated on the plans. Pull mulch back 1/2 inch to 1 inch from the plants to allow air circulation at a uniform depth to reflect the 2 inch basin.

Pruning consists of removing dead, broken, and irregular branches only. Do not prune the tops of plants unless it is to remove dead or broken material.

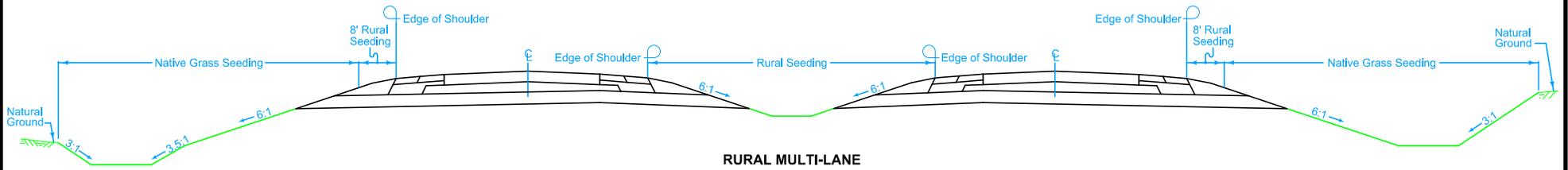
Use steel posts complying with Article 4154.09 of the Standard Specifications for staking. For trees 5 feet in height and less use posts 5 feet in length. For trees taller than 5 feet use posts 7 feet in length.



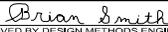
 STANDARD ROAD PLAN	REVISION 1 04-21-15
	EC-501
	SHEET 1 of 1
REVISIONS: Replaced DOT logo with new version.	
 APPROVED BY DESIGN METHODS ENGINEER	
TREES AND SHRUBS	

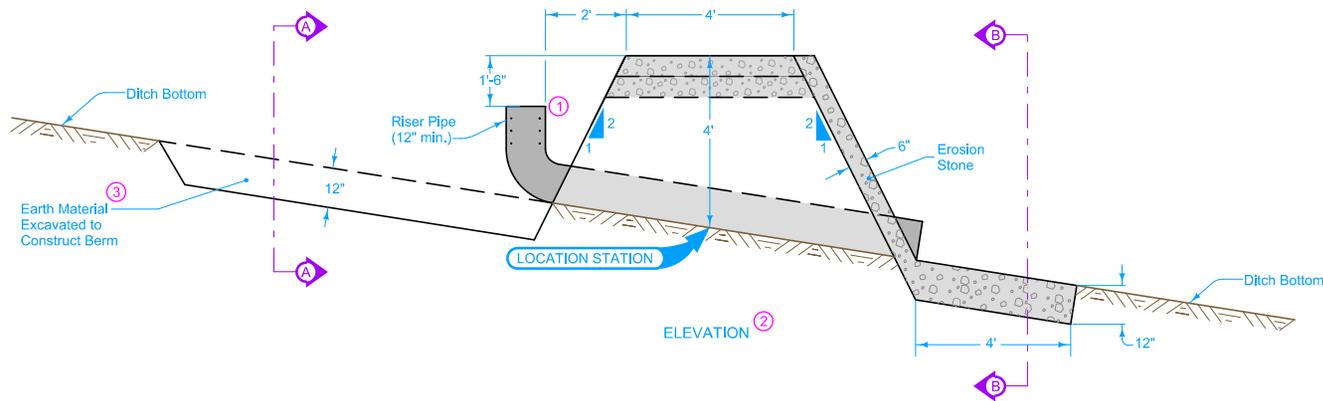


RURAL - 2 LANE

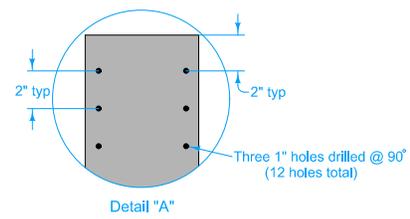
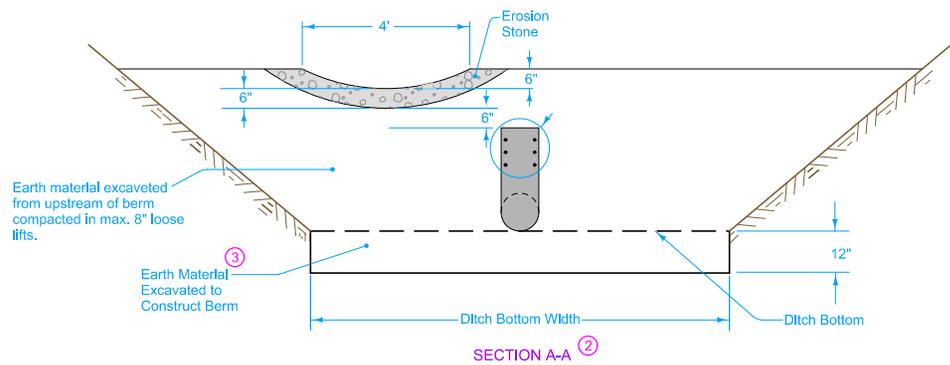


RURAL MULTI-LANE

	REVISION
	New 04-21-15
STANDARD ROAD PLAN	EC-502
REVISIONS: New.	SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER	
SEEDING IN RURAL AREAS	



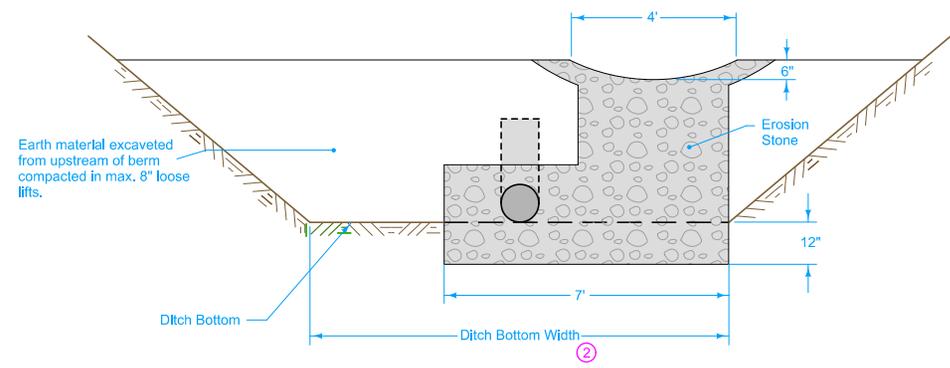
- ① Ensure Riser Pipe remains vertical.
- ② Dimensions shown are minimums.
- ③ When Temporary Sediment Control Basin is removed, if basin has not silted in to designed ditch grade, use topsoil to bring up to designed ditch grade.



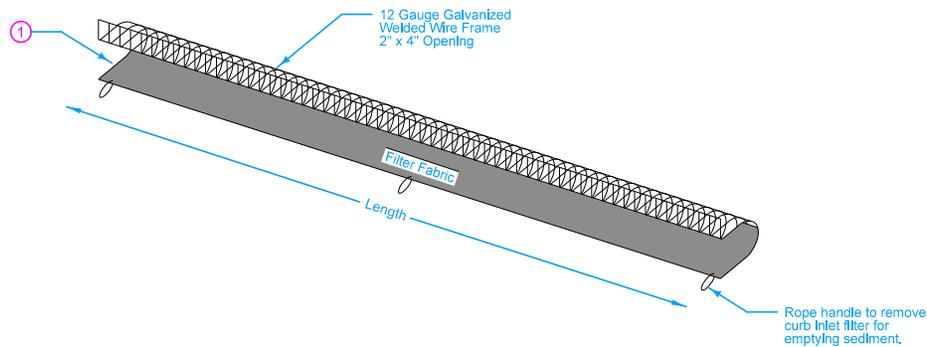
Possible Contract Items:
 Temporary Sediment Control Basin
 Maintenance of Temporary Sediment Control Basin
 Removal of Temporary Sediment Control Basin

Incidental to Temporary Sediment Control Basin:
 Erosion Stone
 Pipe
 Excavated Earth Material

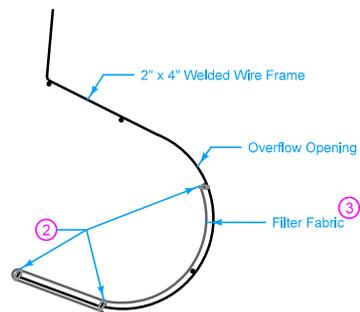
Possible Tabulation:
 100-33



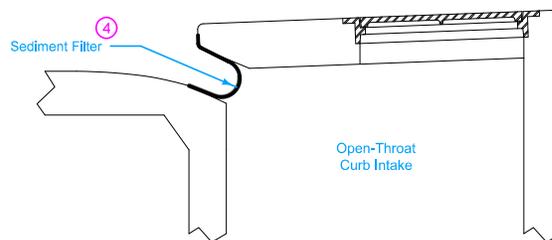
	REVISION
	New 10-16-18
STANDARD ROAD PLAN	EC-601
SHEET 1 of 1	
REVISIONS: New. Replaces Design Detail 570-3	
APPROVED BY DESIGN METHODS ENGINEER	
TEMPORARY SEDIMENT CONTROL BASIN	



OPEN-THROAT CURB INTAKE SEDIMENT FILTER



SEDIMENT FILTER CROSS SECTION



SEDIMENT FILTER PLACEMENT

Remove sediment filter upon stabilization of sediment sources.

- 1 Trim frame as needed to tightly fit in the intake throat. Overlap fabric a minimum of 3 inches and securely fasten.
- 2 Securely attach filter fabric to the wire frame leaving an overflow opening above the filter fabric.
- 3 Woven material meeting the requirements of Table 4196.01-1 of the Standard Specifications, except a maximum apparent opening size US Sieve No. 10 and a minimum flow rate of 145 gallons per minute per square foot.
- 4 Insert sediment filter to create a compression fit in the intake throat. If overflow opening is not present after inserting filter, trim filter fabric so opening is present.

Possible Contract Items:
 Open-throat Curb Intake Sediment Filter
 Maintenance of Open-throat Curb Intake Sediment Filter
 Removal of Open-throat Curb Intake Sediment Filter

Possible Tabulation:
 100-36

IOWA DOT	REVISION	
	1	10-21-20
STANDARD ROAD PLAN		EC-602
		SHEET 1 of 1

REVISIONS: Modified circle note 4.

Scott Miller
 APPROVED BY DESIGN METHODS ENGINEER

**OPEN-THROAT CURB INTAKE
 SEDIMENT FILTER**