DIVISION 1000 EROSION AND SEDIMENT CONTROL

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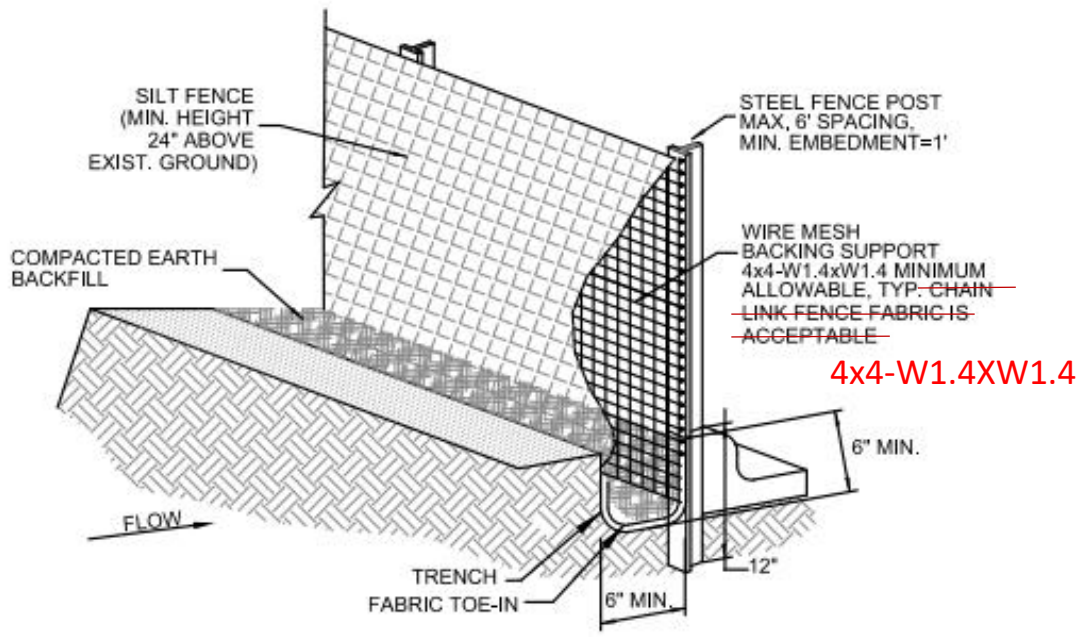
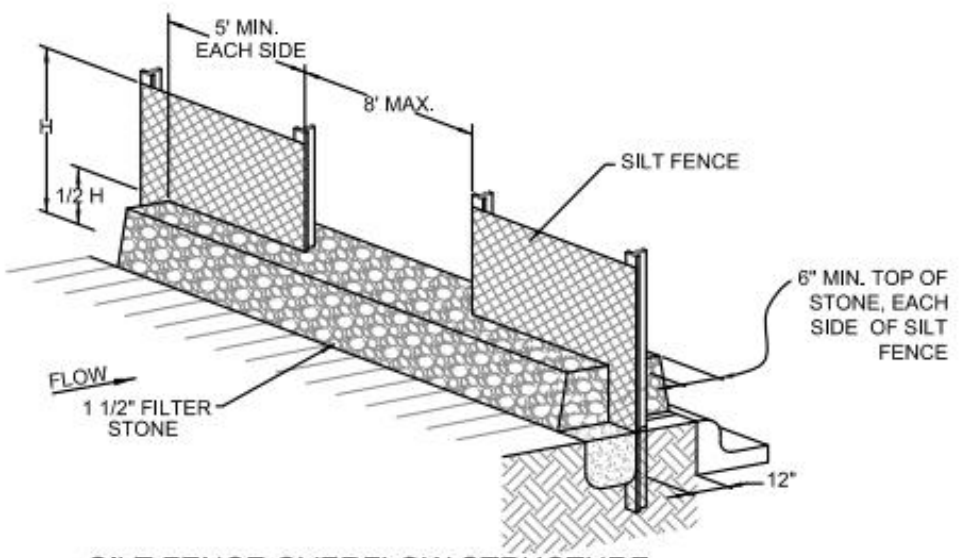
1020A



~~ISOMETRIC PLAN VIEW~~ SILT FENCE

N.T.S.



SILT FENCE OVERFLOW STRUCTURE

N.T.S.

*202.5

FIGURE 3.28 STANDARD CONSTRUCTION DETAIL - FOR SILT FENCE (1 OF 2)

Replacing Original Drawing 1020

SILT FENCE GENERAL NOTES:

1. DESIGN SHALL SHOW ON THE DRAWINGS THE LOCATIONS WHERE OVERFLOW STRUCTURES SHALL BE INSTALLED. OVERFLOW STRUCTURES ARE REQUIRED AT ALL LOW POINTS AND AT A SPACING OF APPROXIMATELY 300 FEET WHERE NO LOW POINT IS APPARENT.

2. DESIGNER SHALL SHOW ON THE DRAWINGS THE LOCATIONS WHERE SILT FENCE IS TO BE TURNED UPSLOPE AT THE ENDS. UPSLOPE LENGTHS SHALL BE A MINIMUM OF 10 FEET.

3. POST WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.

4. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

5. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

6. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WIRE BACKING, WHICH IN TURN IS ATTACHED TO THE FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.

7. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

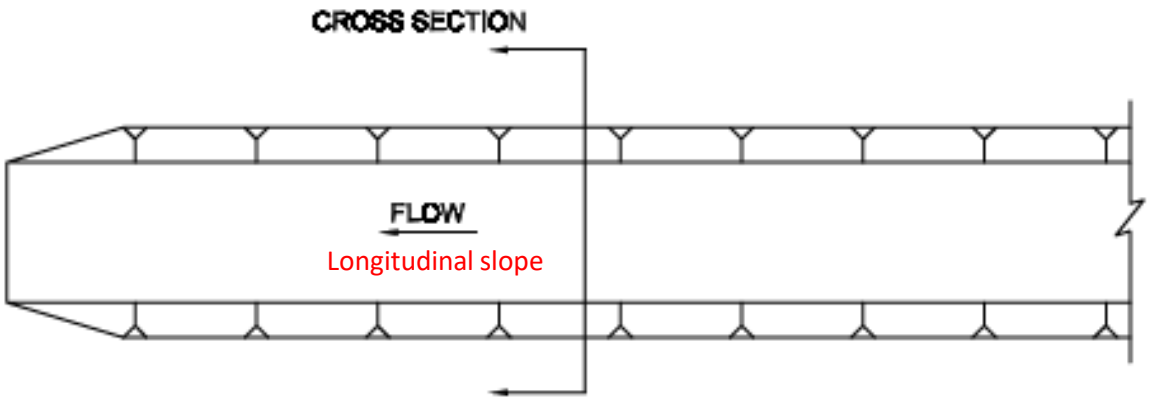
8. SILT FENCE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.

9. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

10. SEE NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.5

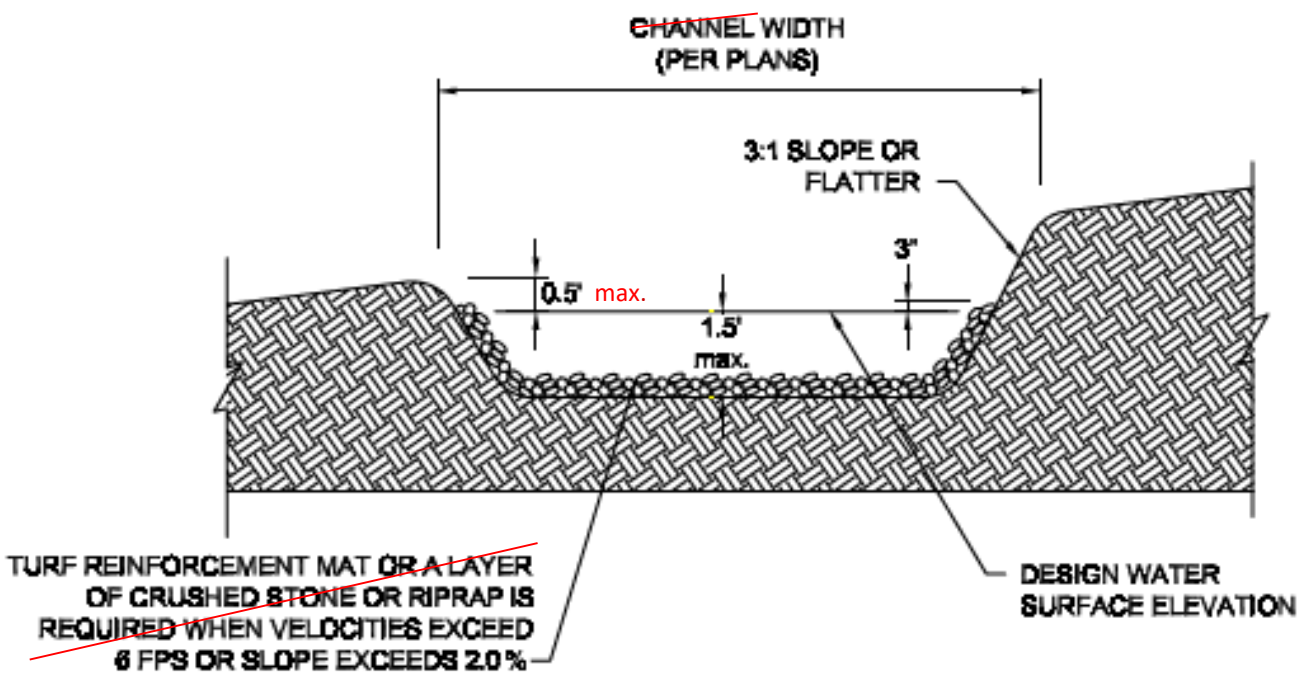
FIGURE 3.28 NOTES FOR SILT FENCE (2 OF 2)

1030A



PLAN VIEW

Swale



For swale material, see Note 6

CROSS SECTION

INTERCEPTOR SWALE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.6 *
		DATE ~~OCT.~~ '04 / STANDARD DRAWING NO. 1030A

Update Drawing Date

1030B

INTERCEPTOR SWALE GENERAL NOTES:

1. ALL TREES, BRUSH, STUMPS, OBSTUCTIONS AND OTHER MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.

2. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS-SECTION AS REQUIRED TO MEET CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.

3. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE DISPOSED OF IN AN APPROVED SPOILS SITE SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.

4. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED UPLAND AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.

5. THE ON-SITE LOCATION MAY NEED TO BE ADJUSTED TO MEET FIELD CONDITIONS IN ORDER TO UTILIZE THE MOST SUITABLE OUTLET.

Replace "grades" with "longitudinal slopes"

6. FOR ~~GRADES~~ LESS THAN 2 PERCENT AND VELOCITIES LESS THAN 6 FEET PER SECOND, THE MINIMUM REQUIRED ~~CHANNEL~~ swale STABILIZATION SHALL BE GRASS, EROSION CONTROL MATS OR MULCHING. FOR ~~GRADES~~ IN EXCESS OF 2 PERCENT OR VELOCITIES EXCEEDING 6 FEET PER SECOND, STABILIZATION IS REQUIRED IN THE FORM OF TURF REINFORCEMENT MATS (OR ~~A LAYER OF CRUSHED STONE OR RIP-RAP~~ WITH APPROPRIATE SIZE, GRADATION, AND THICKNESS AS SPECIFIED IN THE PLANS SWPPP). SEE NOTES 9 AND 10.

STABILIZED RIP-RAP

7. MINIMUM COMPACTION FOR THE SWALE SHALL BE ~~90~~ 95 PERCENT STANDARD PROCTOR.

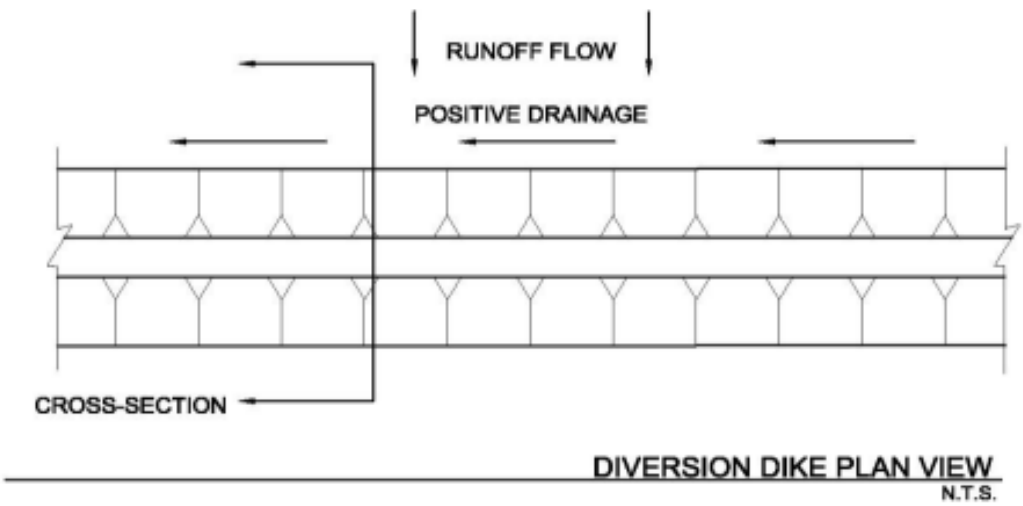
8. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

9. For temporary stabilization rip-rap; width, depth, and surface water elevation should be designed by owner or owner's representative.
10. Refer to Drawing 1230A and B for turf reinforcement mat.
11. See integrated Stormwater Management Manual for more information on interceptor swale.

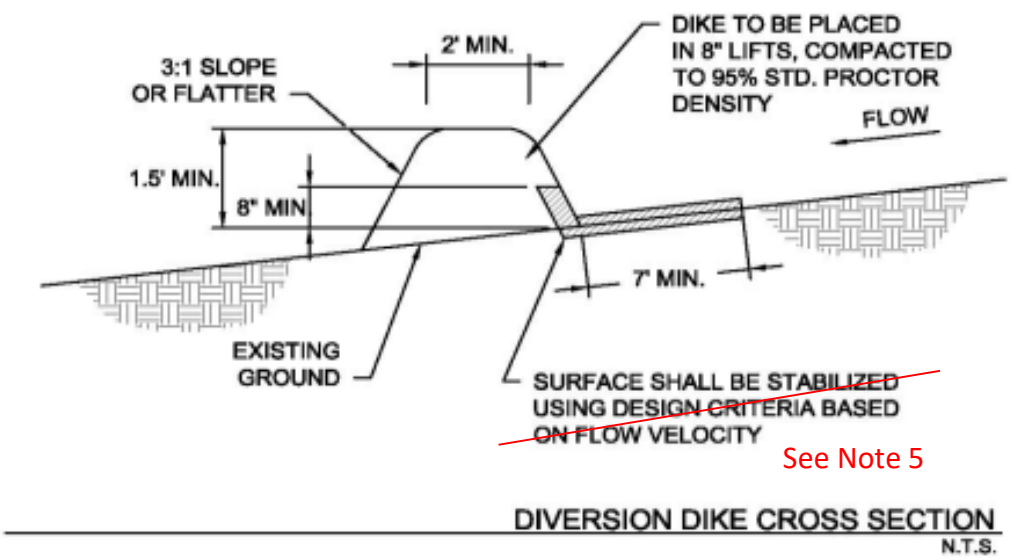
INTERCEPTOR SWALE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.6 *	
		DATE ~~OCT. '04~~	STANDARD DRAWING NO. 1030B

Update Drawing Date

1040A



DIVERSION DIKE PLAN VIEW
N.T.S.



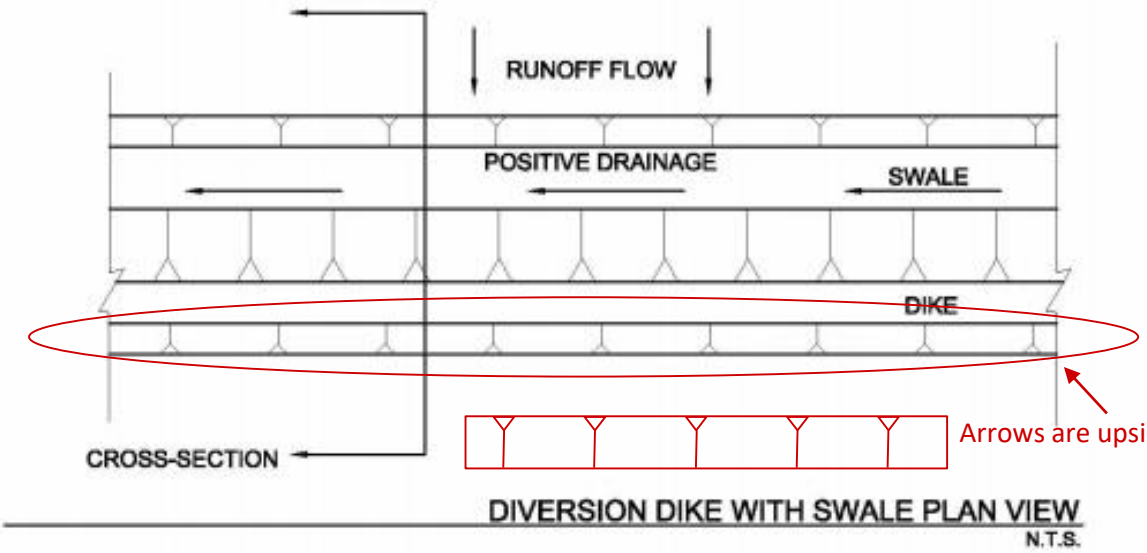
See Note 5

DIVERSION DIKE CROSS SECTION
N.T.S.

~~**Figure 2.5 Schematics of Diversion Dike**~~

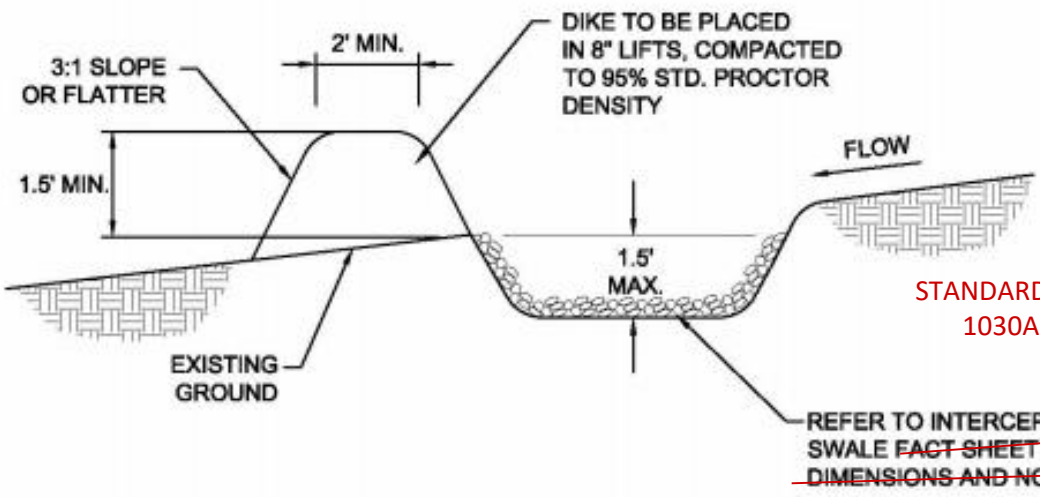
Replacing Original Drawing 1040A

1040B



Arrows are upside down

DIVERSION DIKE WITH SWALE PLAN VIEW
N.T.S.



STANDARD DRAWINGS
1030A AND 1030B.

DIVERSION DIKE WITH SWALE CROSS SECTION
N.T.S.

Standard Specification Reference 202.7*	
Date	Standard Drawing No. 1040B

~~**Figure 2.6 Schematics of Diversion Dike with Swale**~~

New Drawing

Taken from iSWM manual to accompany 1040A

1040C

DIVERSION DIKE GENERAL NOTES:

1. ALL DIKES SHALL BE PLACED IN 8" LIFTS OR LESS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.

2. ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO A CONTROLLED OUTLET.

3. DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL HAVE ITS OUTLET FLOW DIRECTED TO AN UNDISTURBED STABILIZED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE.

Refer to Item 202.7 in the Standard Specifications.

4. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.

Replace "grades" with "longitudinal slopes"

5. FOR ~~GRADES~~ LESS THAN 2 PERCENT AND VELOCITIES LESS THAN 6 FEET PER SECOND, THE MINIMUM REQUIRED ~~CHANNEL~~ STABILIZATION SHALL BE GRASS, EROSION CONTROL MATS OR MULCHING. FOR ~~GRADES~~ IN EXCESS OF 2 PERCENT OR VELOCITIES EXCEEDING 6 FEET PER SECOND, STABILIZATION IS REQUIRED IN THE FORM OF TURF REINFORCEMENT MATS (OR ~~A LAYER OF CRUSHED STONE OR RIP-RAP~~ WITH APPROPRIATE SIZE, GRADATION, AND THICKNESS AS SPECIFIED IN THE ~~SWPPP~~). SEE NOTES 8 AND 9.

swale

STABILIZED RIP-RAP

PLANS

6. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

7. See integrated Stormwater Management Manual for more information on interceptor swale.

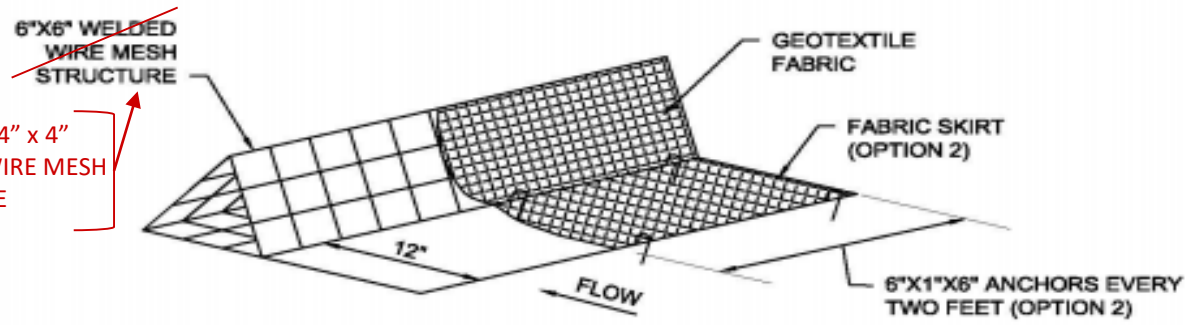
8. For temporary stabilization rip-rap; width, depth, and surface water elevation should be designed by owner or owner's representative.

9. Refer to Drawing 1230A and B for turf reinforcement mat.

DIVERSION DIKE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 202.7 *
		DATE: ~~OCT. '04~~	STANDARD DRAWING NO.: 1040B

Update Drawing Date

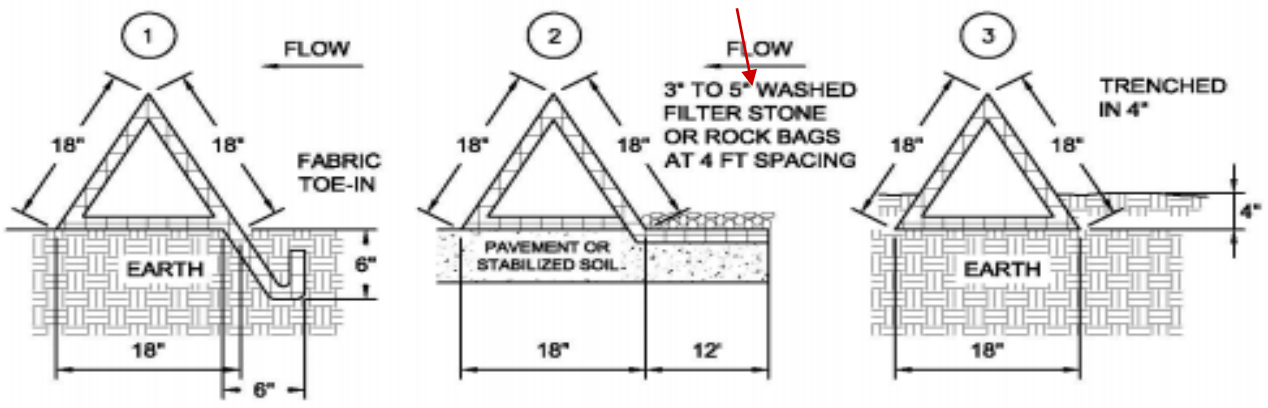
1050A



6” x 6” OR 4” x 4” WELDED WIRE MESH STRUCTURE

ISOMETRIC PLAN VIEW
N.T.S.

deep



1. TOE-IN 6" MIN
2. FABRIC SKIRT WEIGHTED WITH FILTER STONE (ROCK BAGS MAY BE SUBSTITUTED FOR FILTER STONE)
3. TRENCHED IN 4"

CROSS SECTION OF INSTALLATION OPTIONS
N.T.S.

Standard Specification Reference 202.8 *	
Date	Standard Drawing No. 1050A

~~Figure 3.32 Schematics of Triang~~

Replacing Original Drawing 1050A

1050B

TRIANGULAR SEDIMENT FILTER DIKE GENERAL NOTES:

1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.

2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE, AND FABRIC SHALL BE OVERLAPPED A MINIMUM OF 12".

3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF TYPE 'A' RIP RAP, OR TOED-IN 6" WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED TO A DEPTH OF 4 INCHES.

4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 6-INCH WIRE STAPLES ON 2-FOOT CENTERS ON BOTH EDGES AND SKIRTS.

5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 6" TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.

6. THE DIKE STRUCTURE SHALL BE 6 GA. ~~6" X 6"~~ WIRE MESH, 18" ON A SIDE.

6" x 6" or 4" x 4" WELDED WIRE MESH

Call out the W designation in other places. 6ga is w2.9

7. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.

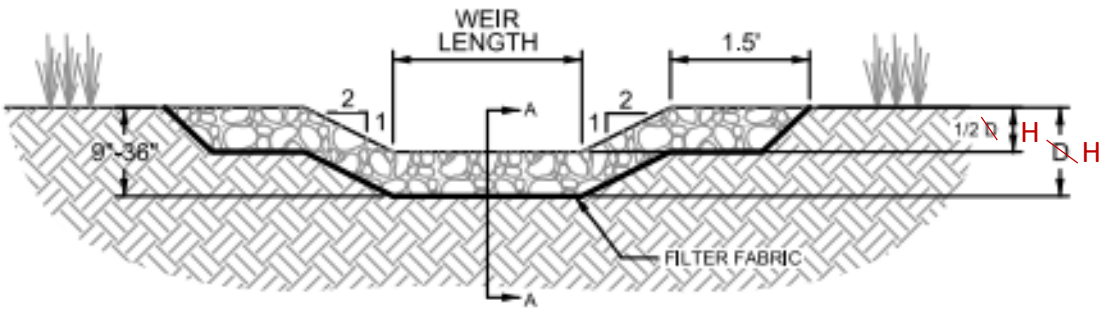
8. THE FILTER DIKE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.

9. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES APPROXIMATELY 6-INCHES IN DEPTH. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

TRIANGULAR SEDIMENT FILTER DIKE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 202.8*
		DATE: ~~OCT. '04~~ / STANDARD DRAWING NO.: 1050B

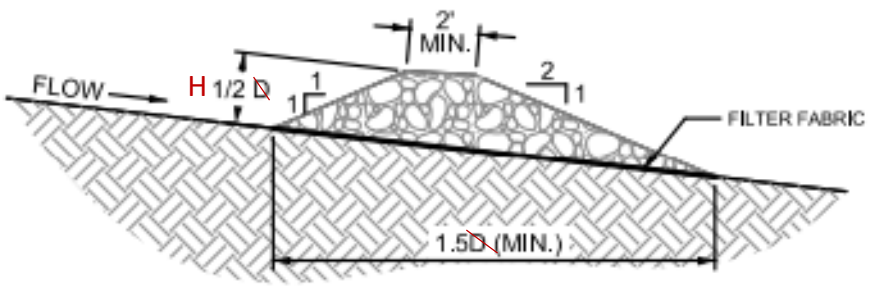
Update Drawing Date

1060A



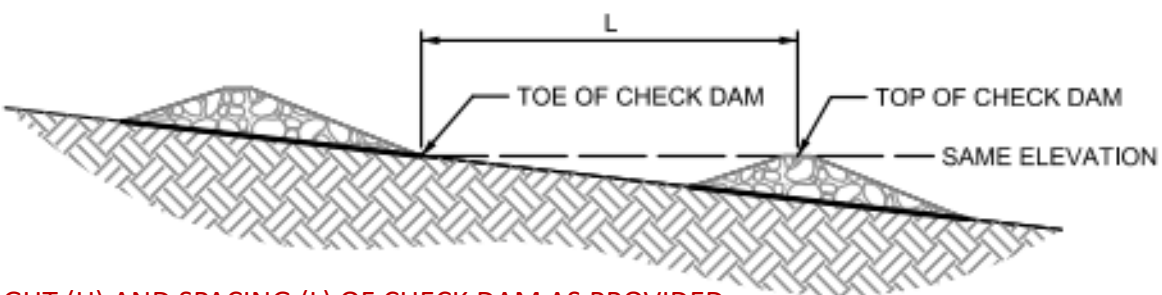
ROCK CHECK DAM VIEW LOOKING UPSTREAM

N.T.S.



CROSS SECTION A-A

N.T.S.



HEIGHT (H) AND SPACING (L) OF CHECK DAM AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.

SPACE BETWEEN ROCK CHECK DAMS

N.T.S.

NOTES:
ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE CHECK DAM.

-HEIGHT OF CHECK DAMS (D) BASED ON SWALE OR DITCH DIMENSIONS AND FLOW CONDITIONS

-SPACING OF CHECK DAMS BASED ON GRADE OF THE SWALE OR DITCH. TOP OF DOWNSTREAM DAM SHALL BE AT THE SAME ELEVATION AS TOE OF UPSTREAM DAM

*202.9

FIGURE 2.1 STANDARD CONSTRUCTION DETAIL - ROCK CHECK DAMS (1 OF 2)

Replacing Original Drawing 1060A

1060B

ROCK CHECK DAM GENERAL NOTES:

1. SEE NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.9 CHECK DAM (ROCK).

2. STONE SHALL BE WELL GRADED WITH SIZE RANGE FROM 1 1/2 TO 3 1/2 INCHES IN DIAMETER DEPENDING ON EXPECTED FLOWS.

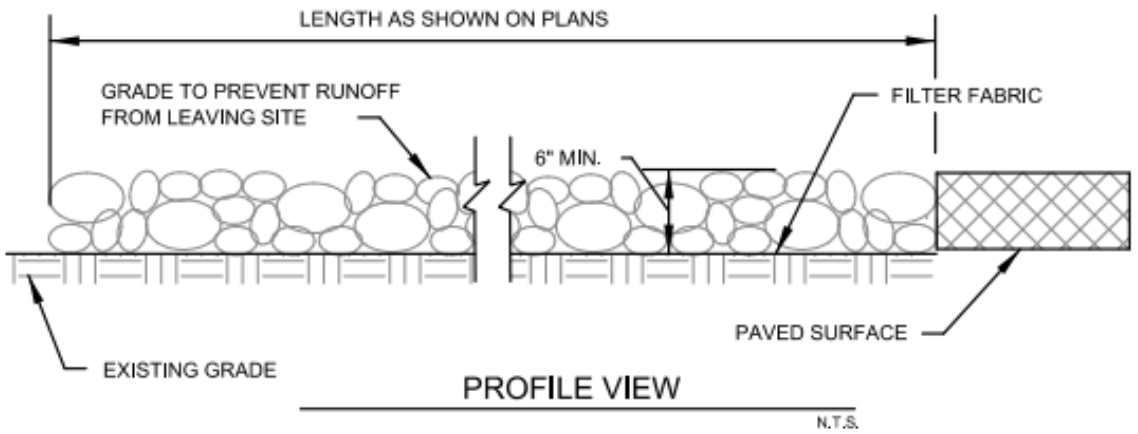
3. THE CHECK DAM SHALL BE INSPECTED AS SPECIFIED IN THE SWPPP AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE CHECK DAM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.

5. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED, THE CHECK DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

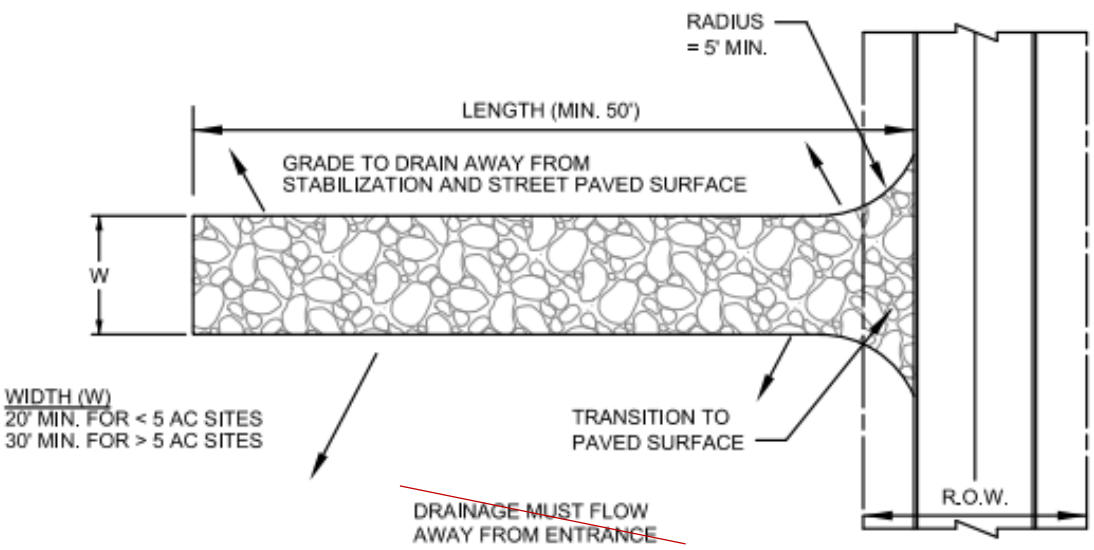
FIGURE 2.1 NOTES ON ROCK CHECK DAM (2 OF 2)

1070A



PROFILE VIEW

N.T.S.



PLAN VIEW

N.T.S.

EXIT ~~ENTRACE~~ MUST BE SLOPED SO THAT STORM WATER IS NOT ALLOWED TO LEAVE THE SITE AND ENTER ROADWAYS

*202.11

FIGURE 3.29 STANDARD CONSTRUCTION DETAIL - STABILIZED CONSTRUCTION EXIT (1 OF 2)

Replacing Original Drawing 1070A

1070B

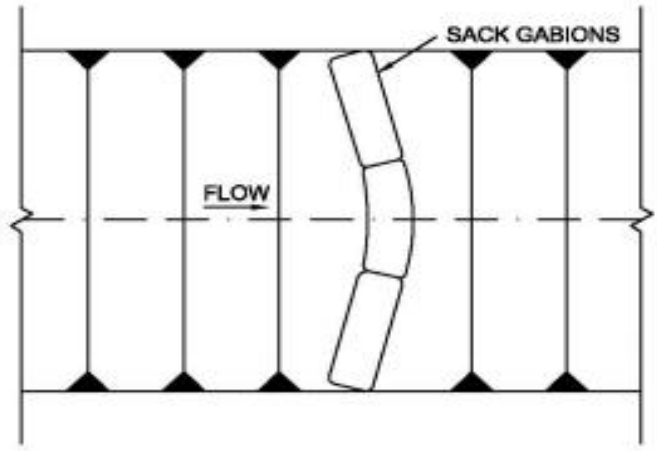
*REPLACE “ENTRANCE” WITH EXIT THROUGHOUT

STABILIZED CONSTRUCTION ~~ENTRANCE~~ GENERAL NOTES:

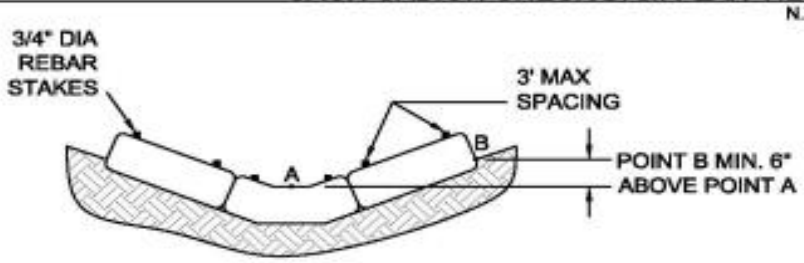
1. SEE NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.11
2. THE THICKNESS SHALL NOT BE LESS THAN 6 INCHES.
3. STONE SHALL BE 3 TO 5 INCH DIAMETER COURSE AGGREGATE, NO CRUSHED PORTLAND CEMENT CONCRETE ALLOWED.
4. LENGTH SHALL BE SHOWN ON PLANS, WITH A MINIMUM LENGTH OF 50 FEET.
5. THE WIDTH SHALL BE NO LESS THAN 20' FOR SITES LESS THAN 5 AC, AND 30' FOR SITES GREATER THAN 5 AC, AT ALL POINTS OF INGRESS OR EGRESS.
6. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ~~ENTRANCE~~. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
7. THE ~~ENTRANCE~~ SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
8. THE ~~ENTRANCE~~ MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
9. INSPECTION SHALL BE SPECIFIED IN THE SWPPP.

FIGURE 3.29 NOTES FOR STABILIZED CONSTRUCTION EXIT (2 OF 2)

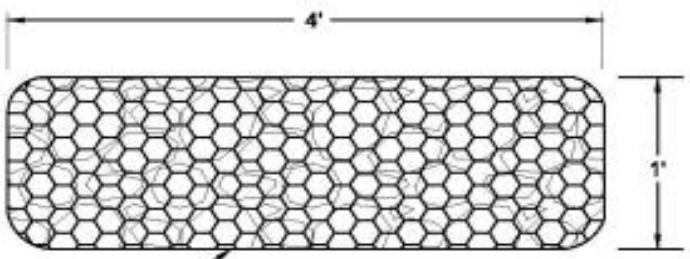
1080



SACK GABION CHECK DAM PLAN VIEW
N.T.S.



SACK GABION CHECK DAM VIEW LOOKING UPSTREAM
N.T.S.



HEIGHT (H) AND SPACING (L) OF CHECK DAM AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.

TYPICAL SACK GABION
N.T.S.

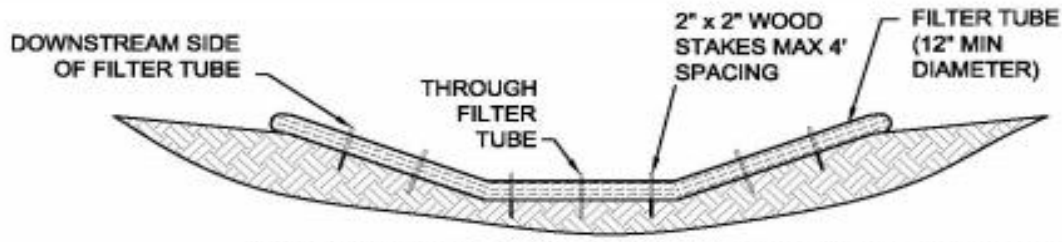
NOTES: ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH. ~~PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE CHECK DAMS.~~

- ~~HEIGHT OF CHECK DAMS BASED ON SWALE OR DITCH DIMENSIONS AND FLOW CONDITIONS.~~
- ~~SPACING OF CHECK DAMS BASED ON GRADE OF THE SWALE OR DITCH. TOP OF DOWNSTREAM DAM SHALL BE AT SAME ELEVATION AS TOE OF UPSTREAM DAM.~~

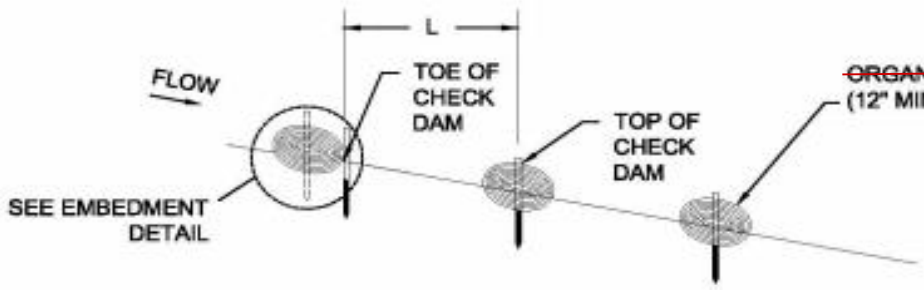
Figure 2.3 Schematics of Sack Gabion Check Dams
(Source: Modified from Texas Department of Transportation Detail Sheet EC (2)-93)

Replacing Original Drawing 1080A

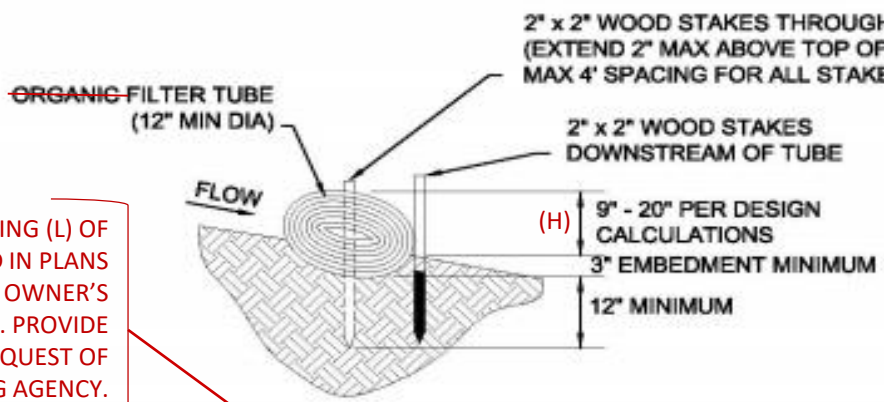
Standard Specification Reference NOT YET AVAILABLE (after 202.10)	
Date	Standard Drawing No. *New Drawing*



~~ORGANIC~~ FILTER TUBE CHECK DAM VIEW LOOKING UPSTREAM
N.T.S.



~~ORGANIC~~ FILTER TUBE CHECK DAM PROFILE
N.T.S.



HEIGHT (H) AND SPACING (L) OF CHECK DAM AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.

EMBEDMENT DETAIL FOR ~~ORGANIC~~ FILTER TUBE CHECK DAM
N.T.S.

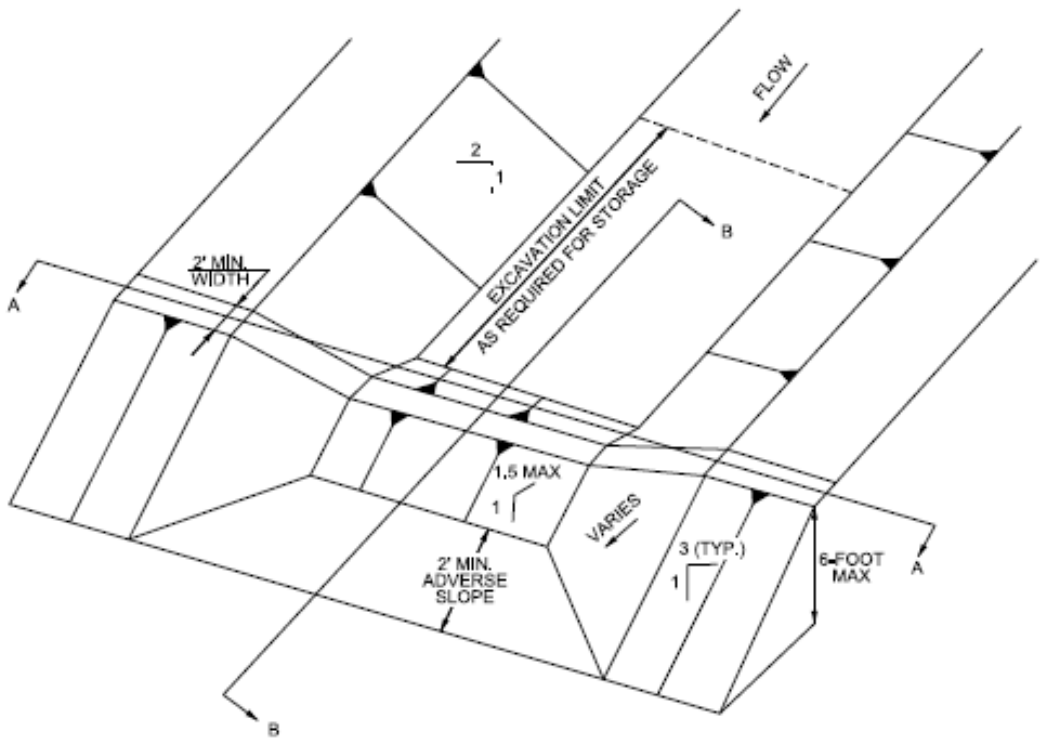
NOTES: ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH. ~~PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE CHECK DAMS.~~

- ~~HEIGHT OF CHECK DAMS BASED ON SWALE OR DITCH DIMENSIONS AND FLOW CONDITIONS.~~
- ~~SPACING OF CHECK DAMS BASED ON GRADE OF THE SWALE OR DITCH. TOP OF DOWNSTREAM DAM SHALL BE AT SAME ELEVATION AS TOE OF UPSTREAM DAM.~~

Figure 2.4 Schematics of Organic Filter Tube Check Dams
(Source: Modified from City of Plano BMP S-7)

New Drawing
Taken from iSWM manual to accompany Figure 2.3/1080 replacement

Standard Specification Reference 202.18	
Date	Standard Drawing No. *New Drawing*



EXCAVATED STONE OUTLET SEDIMENT TRAP ISOMETRIC VIEW

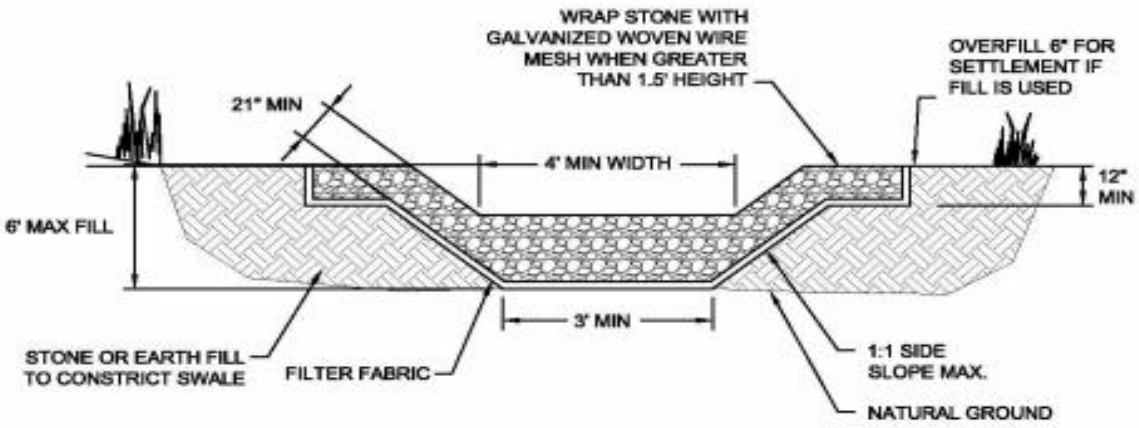
N.T.S.

NOTE: ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETER USED TO DESIGN THE TRAP.

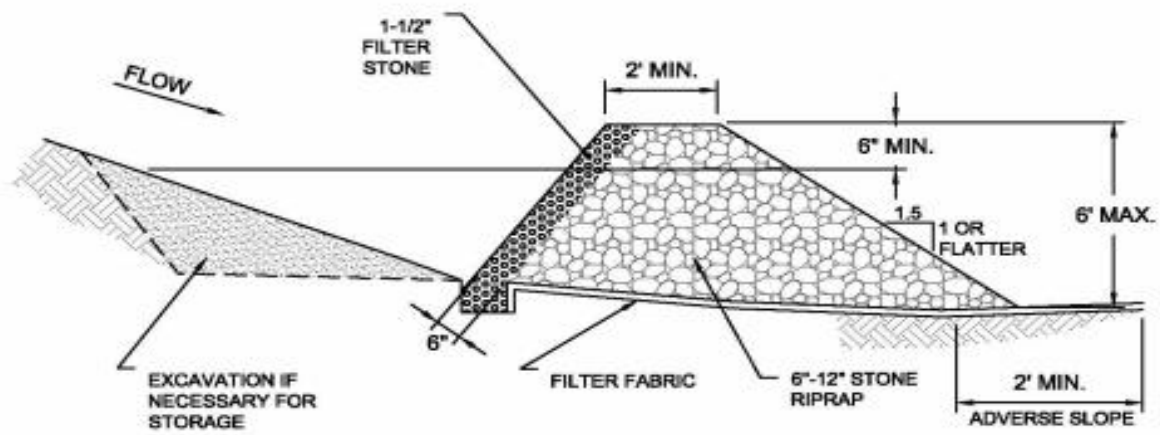
- SIZE OF CONTRUBUTING DRAINAGE AREA
- DESIGN STORM VOLUME AND FLOW RATE AT THE TRAP
- HEIGHT, SLOPE, AND LENGTH OF STONE OUTLET
- STORAGE VOLUME
- EXTENT OF GRADING TO PROVIDE THE CONTROLLED OUTLET

FIGURE 3,30 SCHEMATICS OF EXCAVATED STONE OUTLET SEDIMENT TRAP (1 OF 2)

1100



EXCAVATED STONE OUTLET SEDIMENT TRAP VIEW LOOKING UPSTREAM
N.T.S.



EXCAVATED STONE OUTLET SEDIMENT TRAP SECTION VIEW
N.T.S.

NOTE: ~~ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETER USED TO DESIGN THE~~ TRAP.

- ~~SIZE OF CONTRIBUTING DRAINAGE AREA~~
- ~~DESIGN STORM VOLUME AND FLOW RATE AT THE TRAP~~
- ~~HEIGHT, SLOPE, AND LENGTH OF STONE OUTLET~~
- ~~STORAGE VOLUME~~
- ~~EXTENT OF GRADING TO PROVIDE THE CONTROLLED OUTLET~~

Standard Specification Reference 202.12*	
Date	Standard Drawing No.

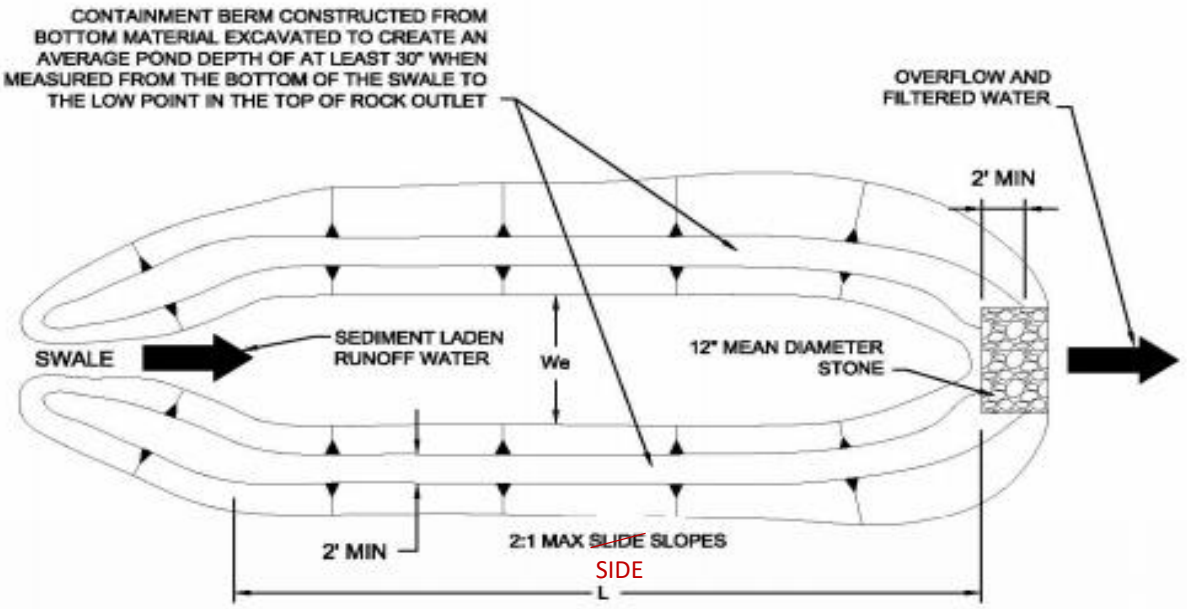
~~**Figure 3.30 Schematics of Excavated Stone Outlet Sediment Trap**~~

Replacing Original Drawing 1090

NOTES:

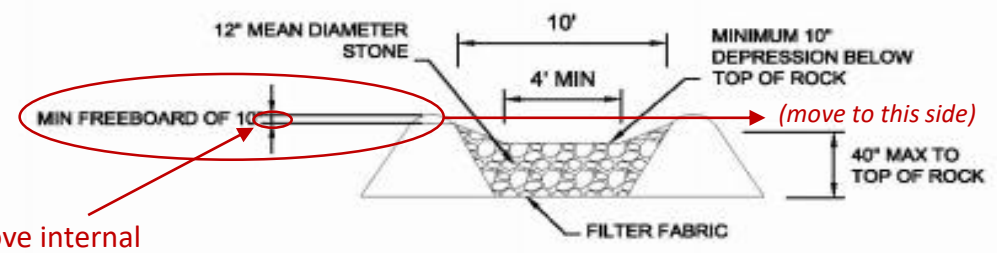
- ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY.
- PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.
- DESIGN OF VOLUME, HEIGHT, SLOPE, AND LENGTH AS PROVIDED IN PLANS PROVIDED BY OWNER OR OWNER'S REPRESENTATIVE.

1110



BERMED STONE OUTLET SEDIMENT TRAP PLAN VIEW

N.T.S.



Remove internal leader line

BERMED STONE OUTLET SEDIMENT TRAP SECTION VIEW

N.T.S.

NOTE: ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETER USED TO DESIGN THE TRAP.

- SIZE OF CONTRIBUTING DRAINAGE AREA
- DESIGN STORM VOLUME AND FLOW RATE AT THE TRAP
- HEIGHT, SLOPE, AND LENGTH OF STONE OUTLET
- STORAGE VOLUME
- EXTENT OF GRADING TO PROVIDE THE CONTROLLED OUTLET

TRIBUTARY AREA (ACRES)	L (FT)	We (FT)
< 0.5	59	13
0.51-1.0	82	16

NOTES:

- ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY.
- PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.
- DESIGN OF VOLUME, HEIGHT, SLOPE, AND LENGTH AS PROVIDED IN PLANS PROVIDED BY OWNER OR OWNER'S REPRESENTATIVE.

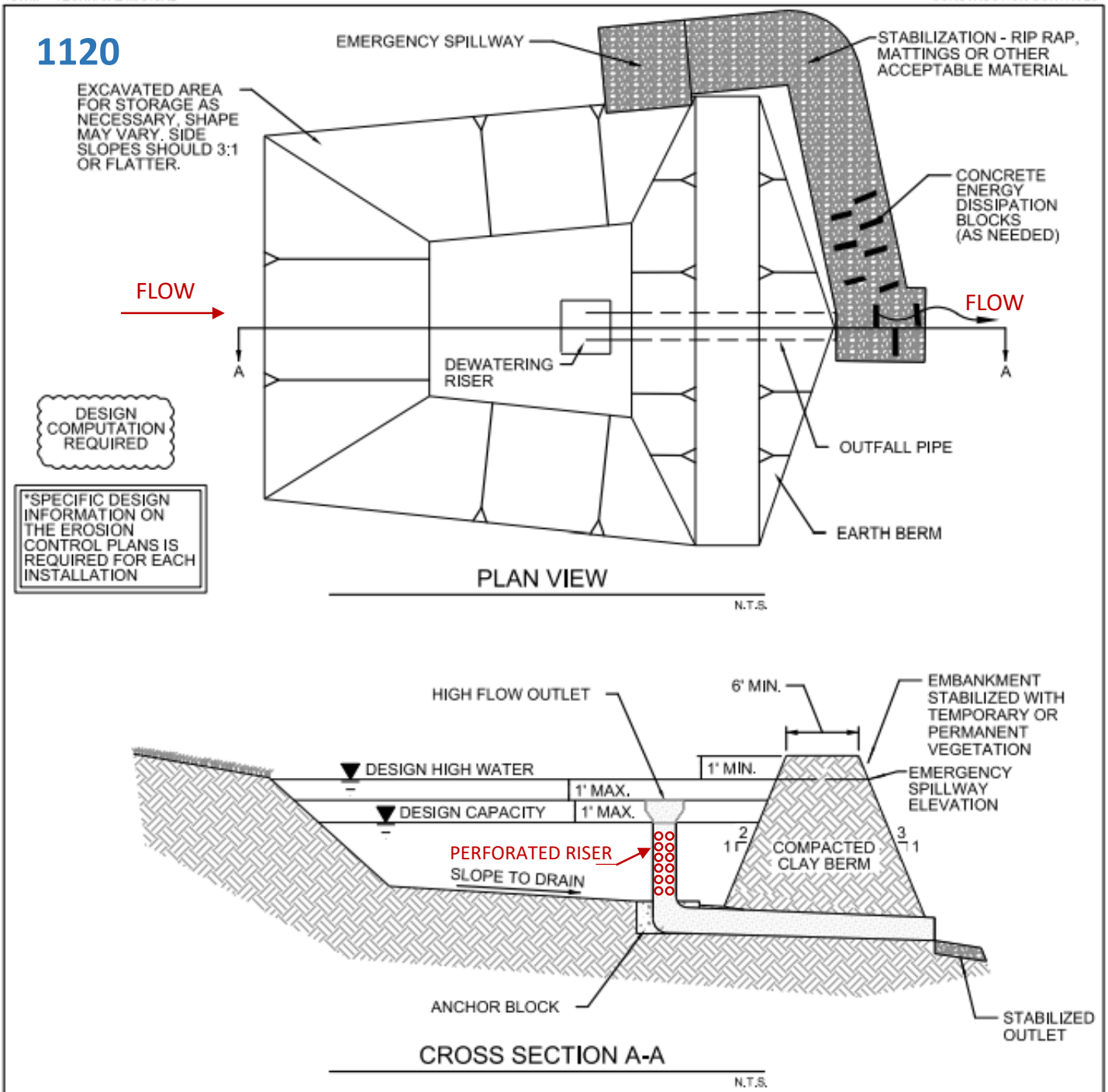
Figure 3.31 Schematics of Bermed Stone Outlet Sediment Trap

(Source: City of Chesterfield Department of Public Work

New Drawing
Taken from iSWM manual to accompany
Figure 3.30/1090 replacement

Standard Specification Reference NOT YET AVAILABLE (after 202.12)	
Date	Standard Drawing No.

1120



REFERENCE: NCTCOG iSWM CRITERIA MANUAL FOR SITE DEVELOPMENT AND CONSTRUCTION, SECTION 3.9 SEDIMENT BASIN.

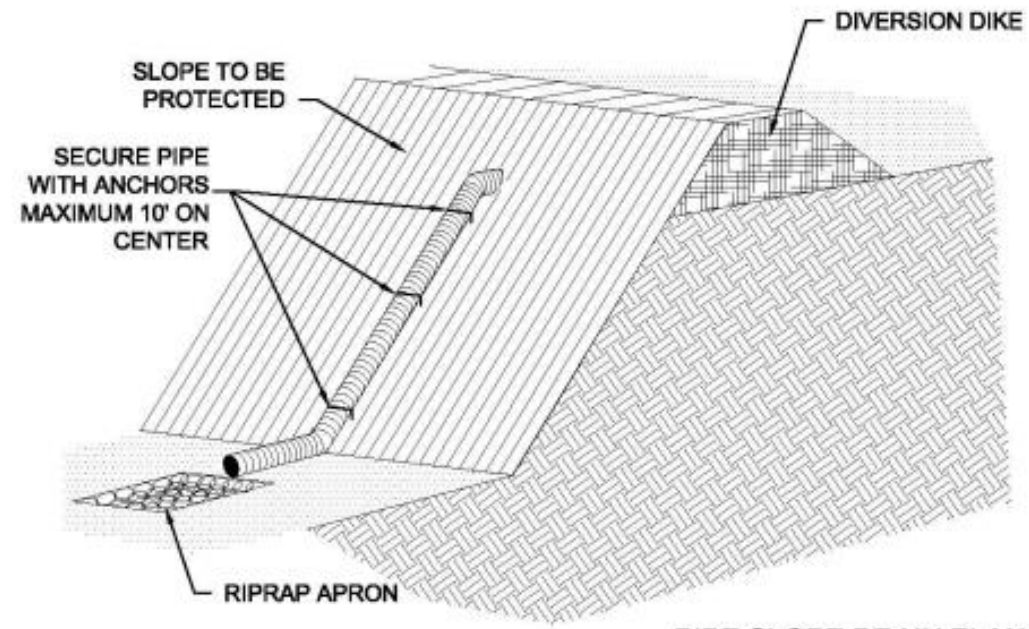
FIGURE 3.20 STANDARD CONSTRUCTION DETAIL - SEDIMENT BASIN WITH OVERFLOW RISER

Replacing Original Drawing 1100

Note:
- Pipe size, rock size, and berm height as provided in plans by owner or owner's representative
- Optional: A collar of 1.5-3 inch, well graded gravel (not shown) may be placed around the perforated riser

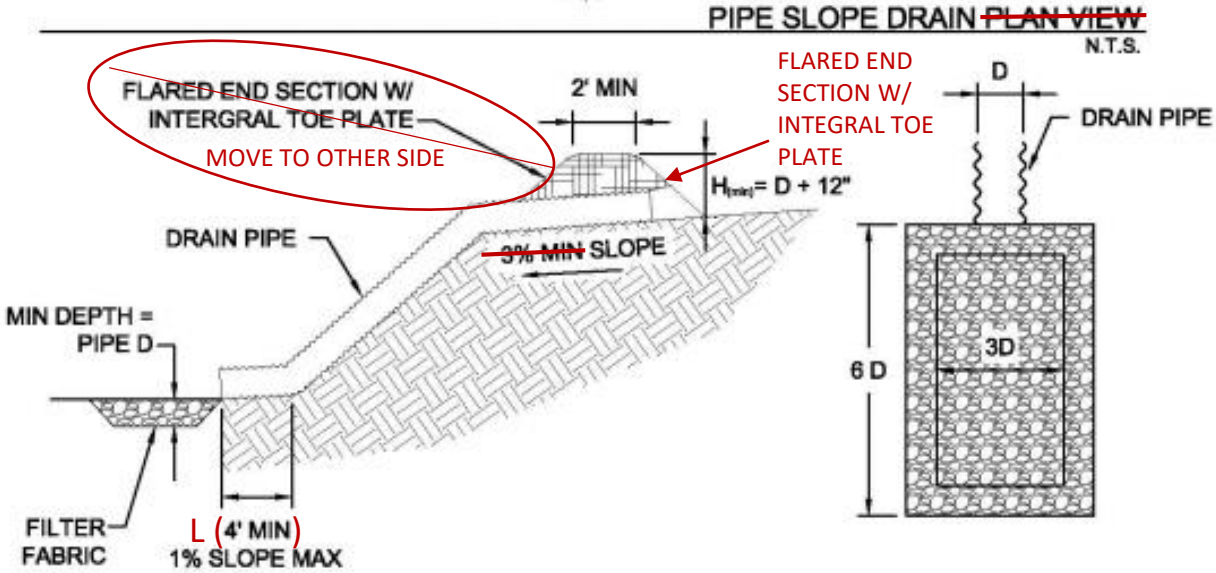
Specs Reference NOT YET AVAILABLE (after 202.12)

1130



PIPE SLOPE DRAIN ~~PLAN VIEW~~

N.T.S.



~~RIPRAP SHALL CONSIST OF 50 TO 150 POUND STONES PLACED IN A LAYER OF NOT LESS THAN 12 INCHES. THE DEPTH OF THE APRON SHALL EQUAL THE PIPE DIAMETER BUT IN NO CASE SHALL IT BE LESS THAN 12 INCHES.~~

PIPE SLOPE DRAIN CROSS-SECTION AND APRON PLAN VIEW

N.T.S.

~~NOTE: DIMEN~~ NOTE: DIMENSIONS OF THE PIPE SLOPE DRAIN AND APPURTENANCES SHALL BE DESIGNED BASED ON SITE TOPOGRAPHY AND FLOW CONDITIONS. H, L, AND D AS SHOWN SHALL BE PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE PIPE SLOPE DRAIN UPON REQUEST OF THE REVIEWING AGENCY. ~~ED BASED ON THE~~

~~SITE TOPOGI~~
~~FOLLOWING~~

- ~~SIZE O~~
- ~~DESIGN~~
- ~~PIPE M~~
- ~~DISCHA~~
- ~~STONE~~
- PIPE MATERIAL AND SIZE
- DISCHARGE VELOCITY
- STONE SIZE AND DIMENSIONS OF RIPRAP APRON
- PIPE LENGTH AND SLOPE

*202.13

Figure 2.10 Schematics of Pipe Slope Drain

Replacement for Original Drawing 1110

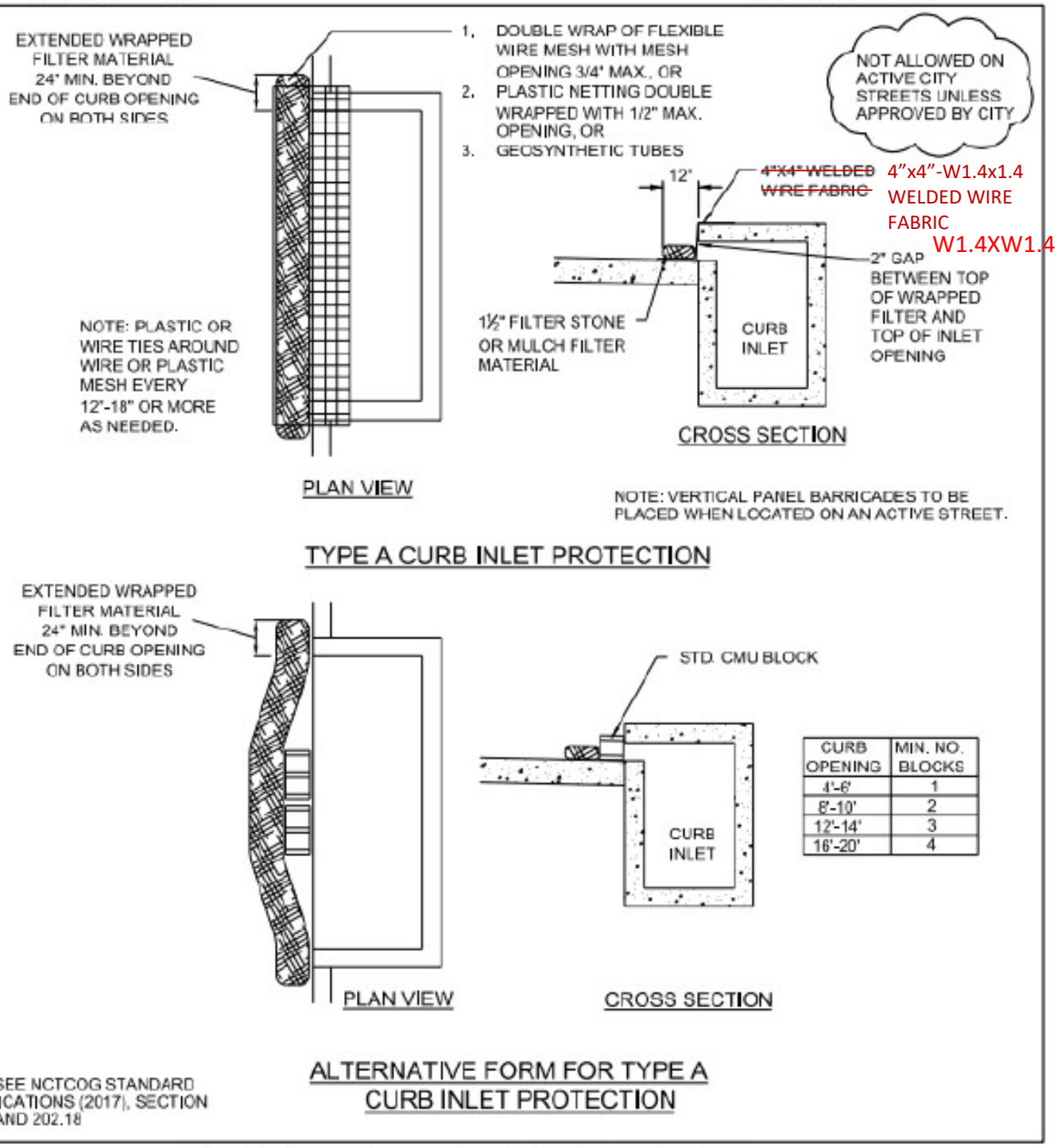


FIGURE 3.6 STANDARD CONSTRUCTION DETAIL - FILTER TUBE CURB INLET PROTECTION

Updated by Halff Associates in 2017

Not to be included in the PWCS Fifth Edition

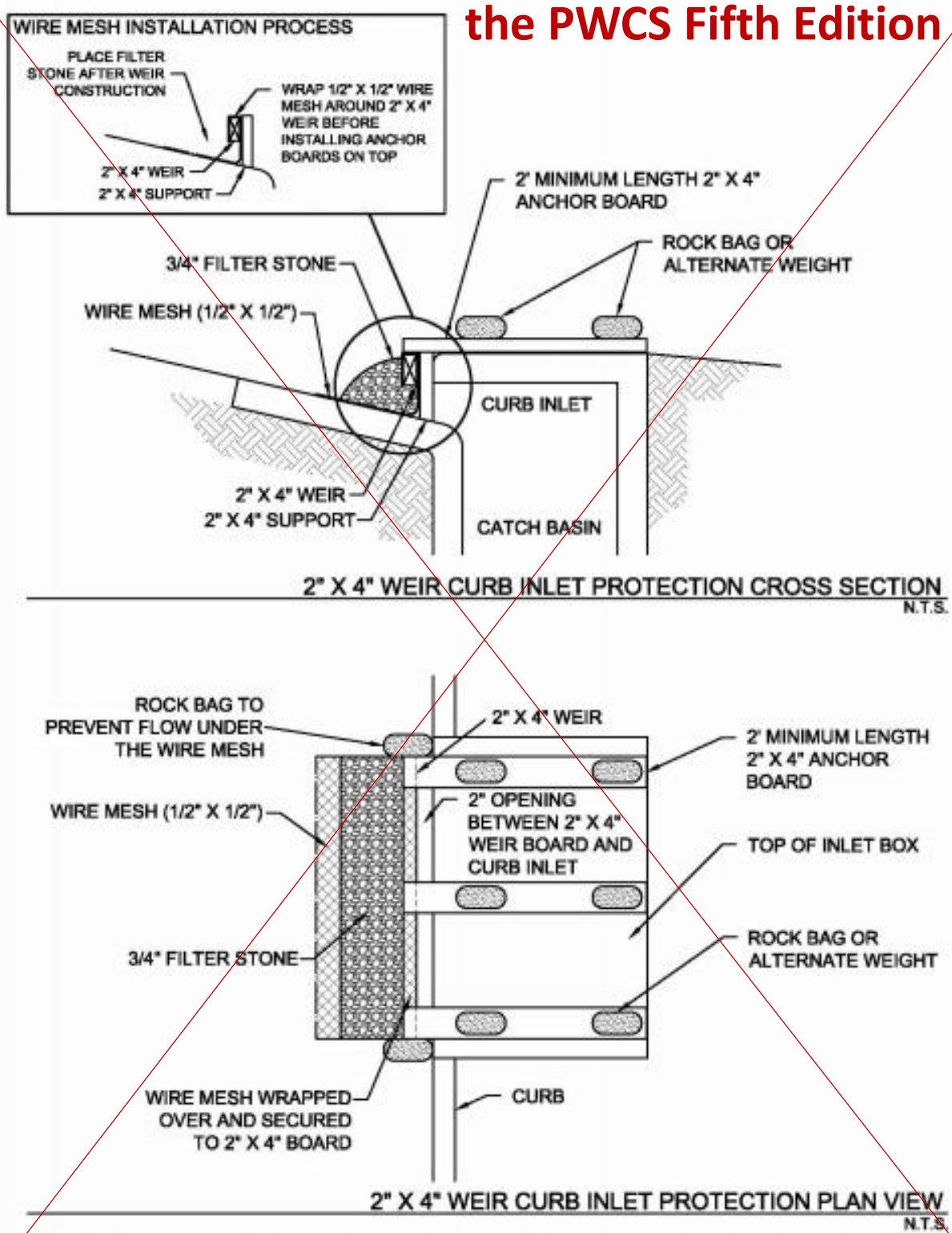
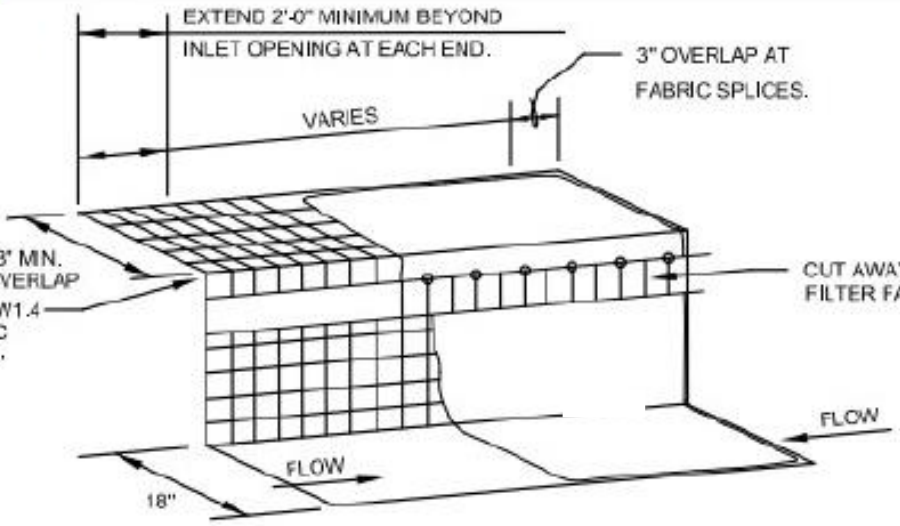


Figure 3.5 Schematics of 2"x4" Weir Curb Inlet Protection
(Source: Modified from Washington Suburban Sanitary Commission Detail SC-16.0)

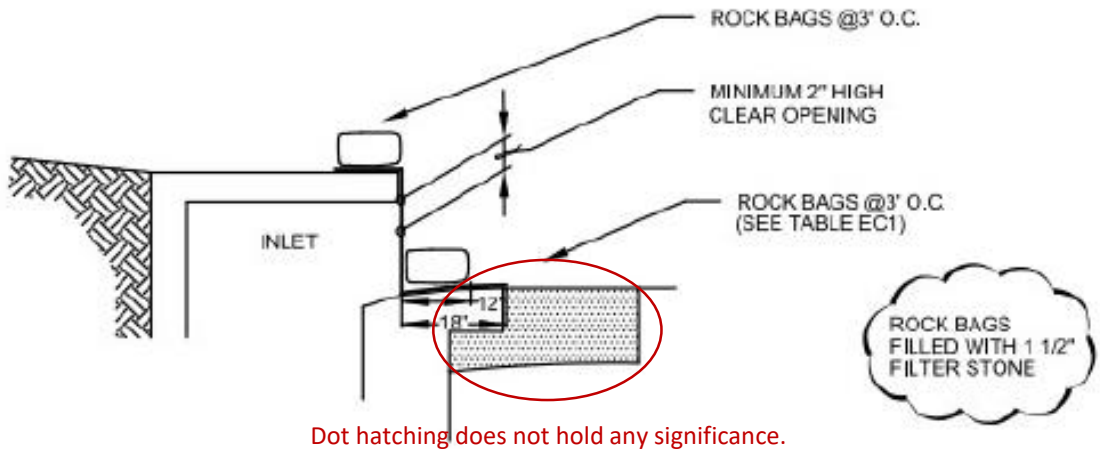
To Be Updated by Halff Associates in 2018/2019



4x4 is common?

~~HOG~~ WIRE WEIR CURB INLET PROTECTION ISOMETRIC VIEW

N.T.S.



Dot hatching does not hold any significance. Eliminate and replace with depiction similar to that found in Figure 3.6

~~HOG~~ WIRE WEIR CURB INLET PROTECTION CROSS SECTION

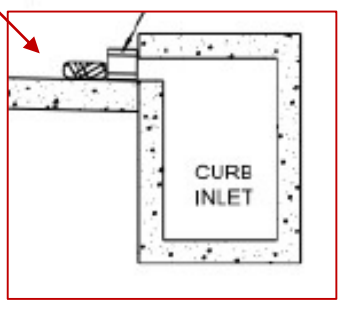
N.T.S.

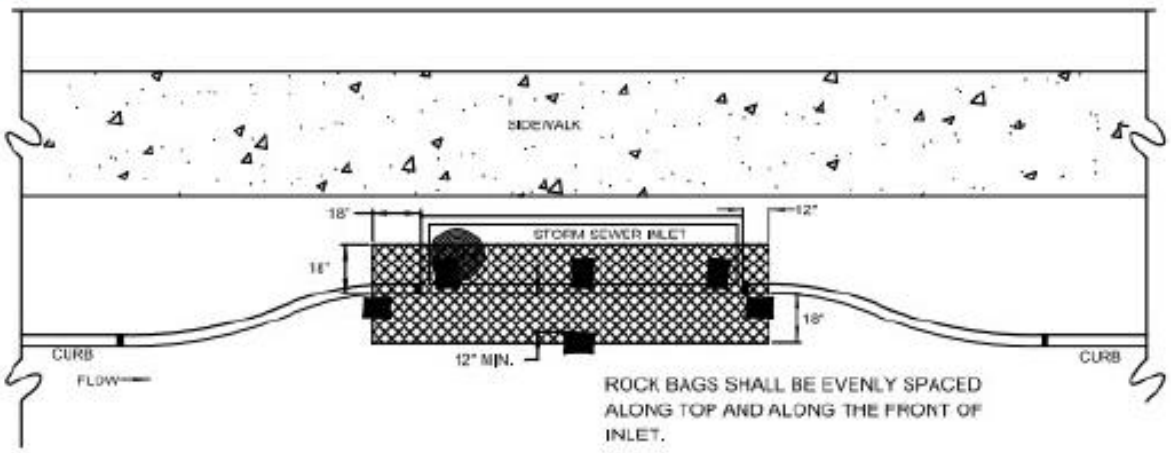
NOTE: THIS CONTROL WILL DECREASE THE CAPACITY OF THE INLET. IT SHALL ONLY BE USED WHEN AN ENGINEER HAS DETERMINED THERE IS ADEQUATE STORAGE OR POSITIVE OVERFLOW.

REFERENCE: NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.14

FIGURE 3.7 STANDARD CONSTRUCTION DETAIL - ~~HOG~~ WIRE WEIR CURB INLET PROTECTION (1 OF 2)

Updated by Halff Associates in 2017





~~HOG~~ WIRE WEIR CURB INLET PROTECTION PLAN VIEW

N.T.S.

TABLE EC1

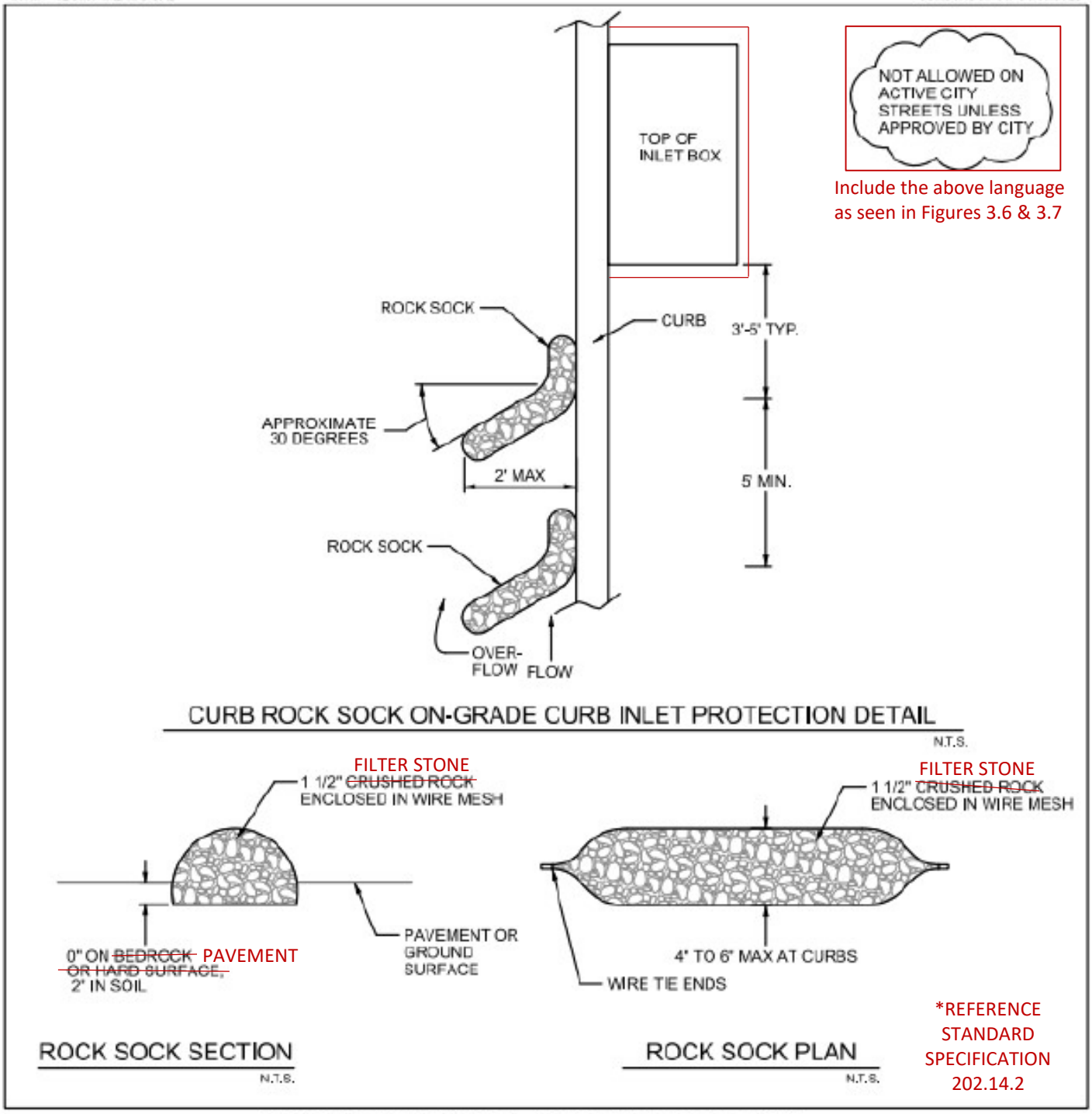
INLET OPENING	MINIMUM NUMBER OF ROCK BAGS	
	TOP	FRONT
5'	2	3
10'	3	3
15'	3	4
20'	4	4

NOTES:

1. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL TO PROVIDE A 2" MINIMUM CLEAR OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
2. INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
3. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

FIGURE 3.7 STANDARD CONSTRUCTION DETAIL - ~~HOG~~ WIRE WEIR CURB INLET PROTECTION (2 OF 2)

Updated by Halff Associates in 2017



Include the above language as seen in Figures 3.6 & 3.7

*REFERENCE STANDARD SPECIFICATION 202.14.2

FIGURE 3.9 STANDARD CONSTRUCTION DETAIL - CURB ROCK SOCK ON-GRADE CURB INLET PROTECTION (1 OF 2)

Updated by Halff Associates in 2017

CURB ROCK SOCK ON-GRADE CURB INLET PROTECTION GENERAL NOTES:

1. THIS DETAIL IS INTENDED FOR USE WITH ON-GRADE INLETS (NOT A LOW POINT) TO TRAP SEDIMENT.
2. DO NOT INSTALL ON INLETS WHERE THE ROCK SOCKS WOULD EXTEND INTO AN ACTIVE TRAVEL LANE.
3. ROCK SOCKS MAY BE USED ON PAVED OR UNPAVED SURFACES.
4. MAXIMUM ROCK SOCK DIAMETER 4" TO 6".
5. MINIMUM OF 2 CURB ROCK SOCKS.

INCLUDE THESE NOTES ON THE FIRST PAGE OF FIGURE 3.9

FIGURE 3.9 STANDARD CONSTRUCTION DETAIL -
CURB ROCK SOCK ON-GRADE CURB INLET PROTECTION (2 OF 2)

Updated by Halff Associates in 2017

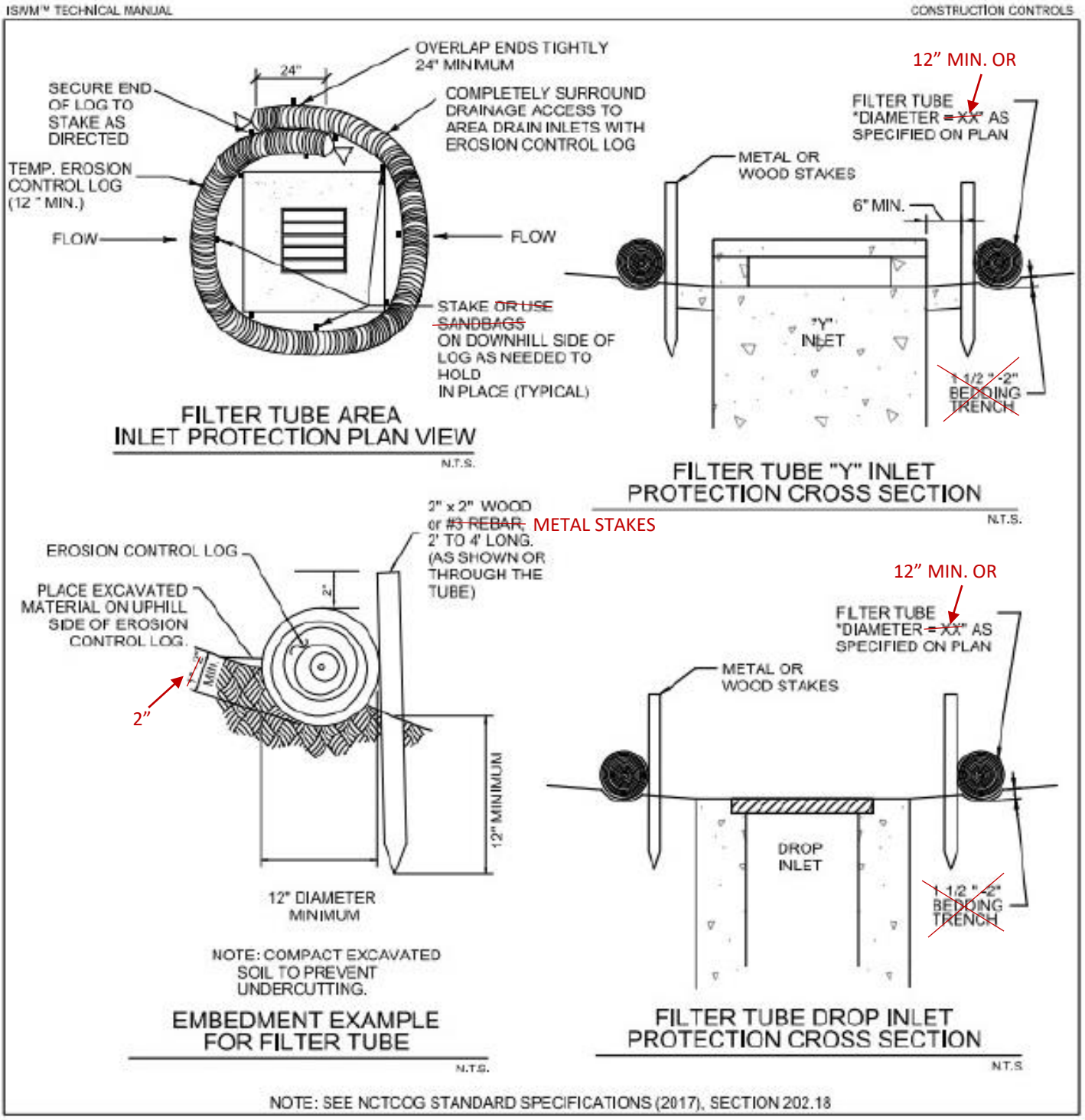
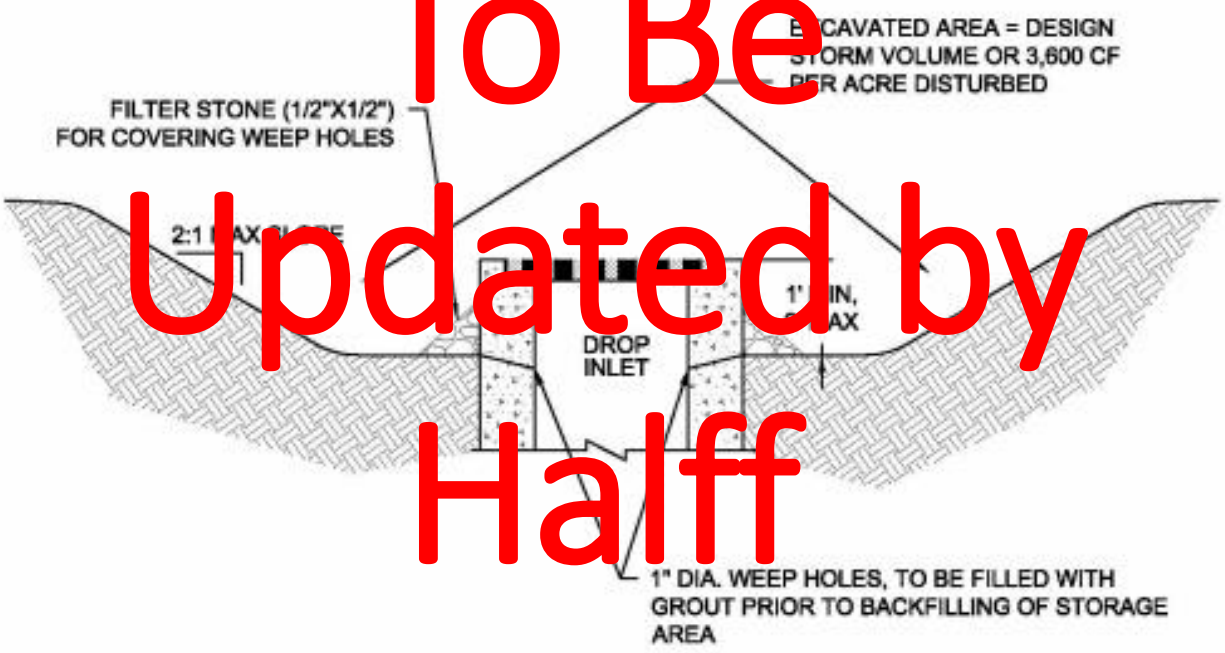


FIGURE 3.13 STANDARD CONSTRUCTION DETAIL - FILTER TUBE AREA INLET PROTECTION

Updated by Halff Associates in 2017

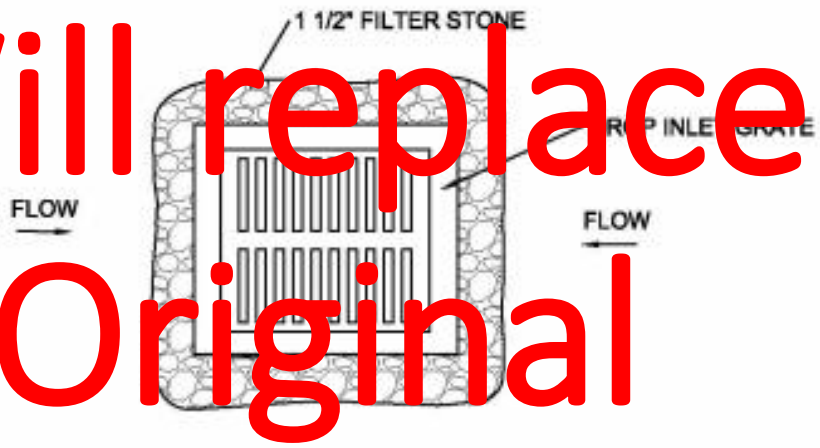
1200

To Be Updated by Halff



EXCAVATED IMPOUNDMENT DROP INLET PROTECTION CROSS SECTION
N.T.S.

Will replace Original

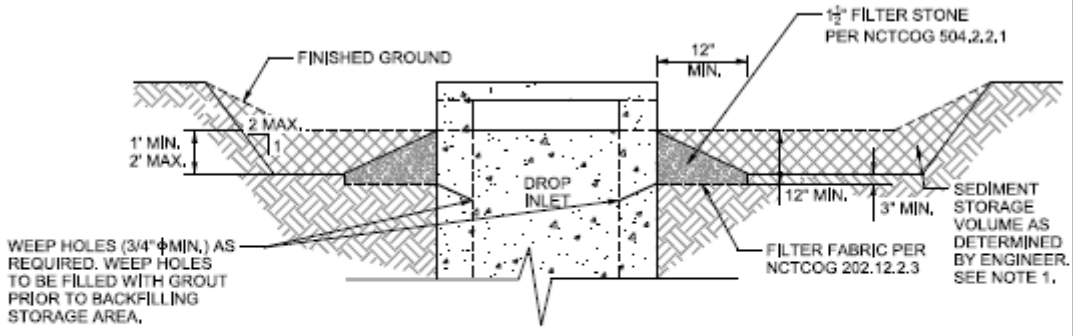


EXCAVATED IMPOUNDMENT AREA INLET PROTECTION PLAN VIEW
N.T.S.

Drawing 1150

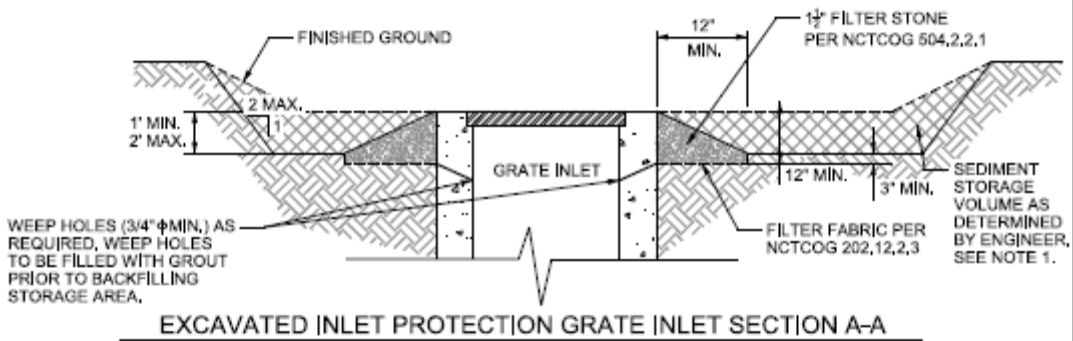
*202.14

Figure 3.11 Schematics of Excavated Impoundment Area Inlet Protection



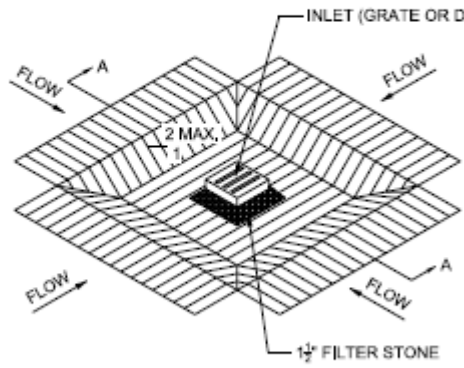
EXCAVATED INLET PROTECTION "Y" INLET SECTION A-A

N.T.S.



EXCAVATED INLET PROTECTION GRATE INLET SECTION A-A

N.T.S.



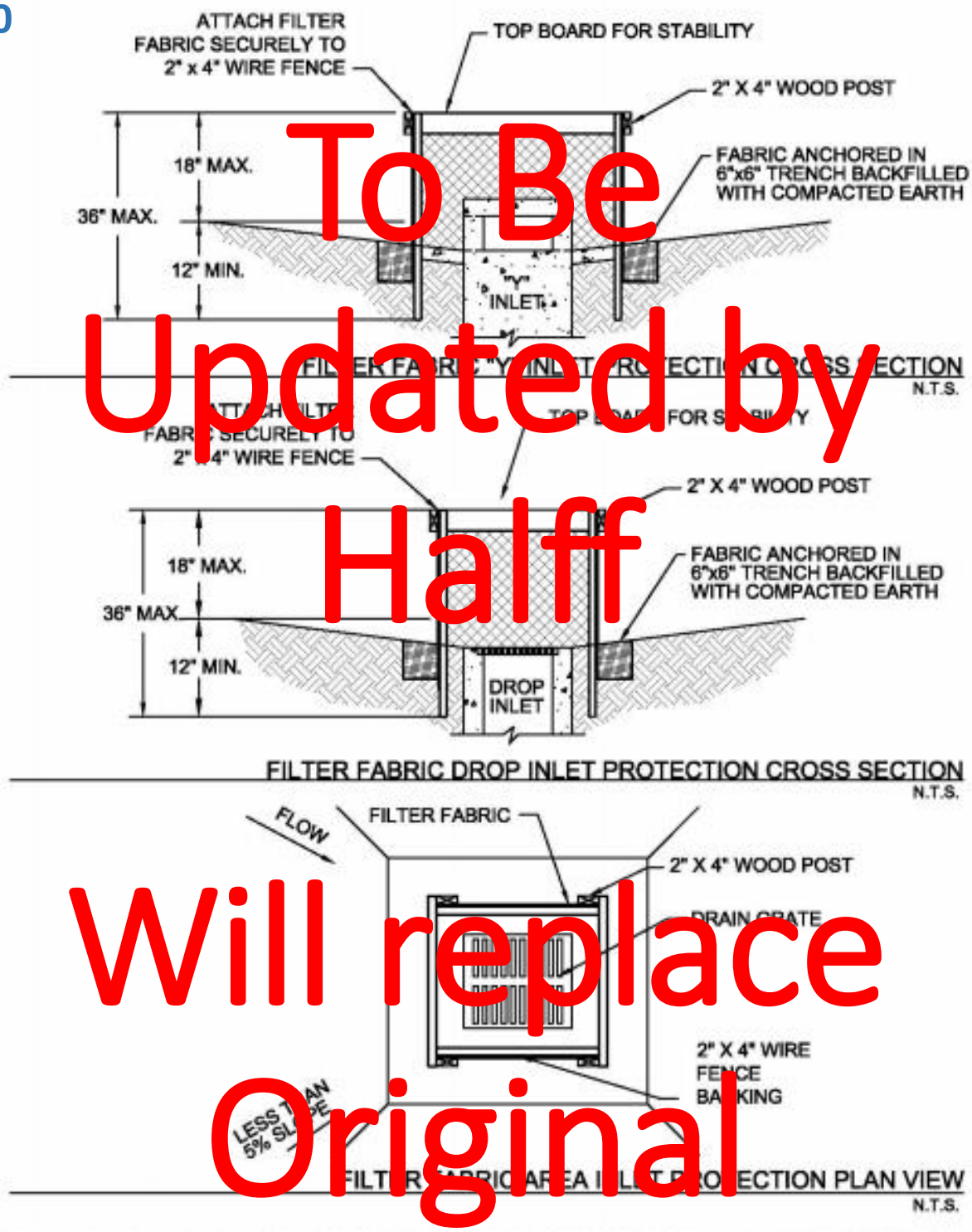
NOTE;
1. STORAGE VOLUME SHALL BE DESIGN STORM VOLUME OR 3,600 CUBIC FEET PER ACRE DISTURBED.
2. CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDES TOWARD THE INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE INLET.

EXCAVATED INLET PROTECTION PLAN VIEW

N.T.S.

FIGURE 3.11 SCHEMATICS OF EXCAVATED INLET PROTECTION

1210



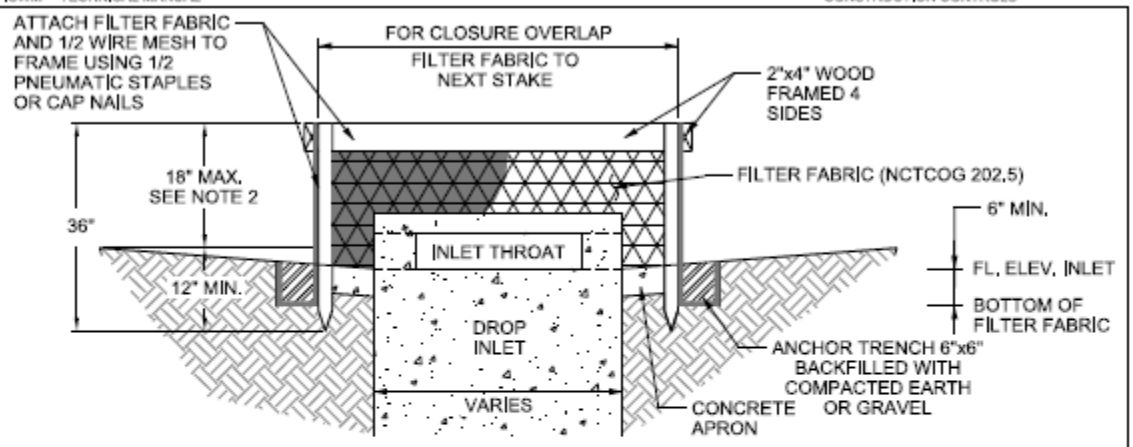
To Be Updated by Halff

Will replace Original Drawing 1120

NOTES: 1. CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDES TOWARD THE INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE INLET (SEE *SECTION 3.10 SILT FENCE*).

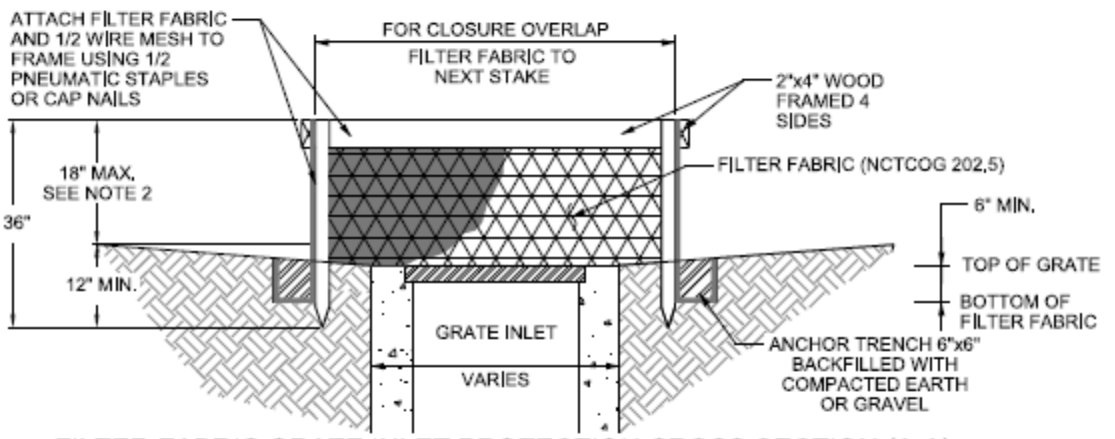
*202.14

Figure 3.10 Schematics of Filter Fabric Area Inlet Protection
(Source: City of Plano BMP SP-4)



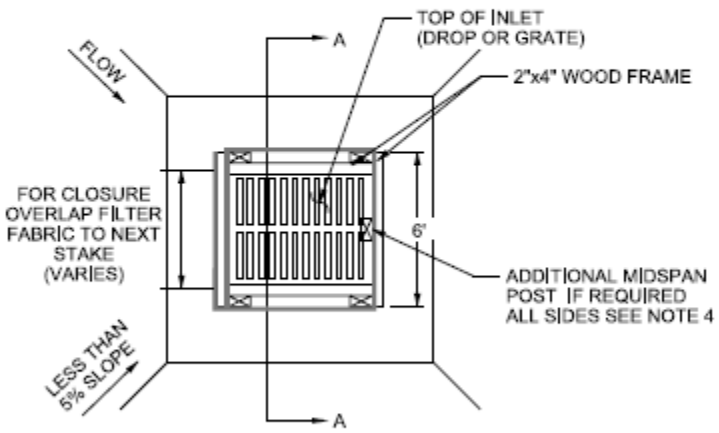
FILTER FABRIC DROP INLET PROTECTION CROSS SECTION (A-A)

N.T.S.



FILTER FABRIC GRATE INLET PROTECTION CROSS SECTION (A-A)

N.T.S.



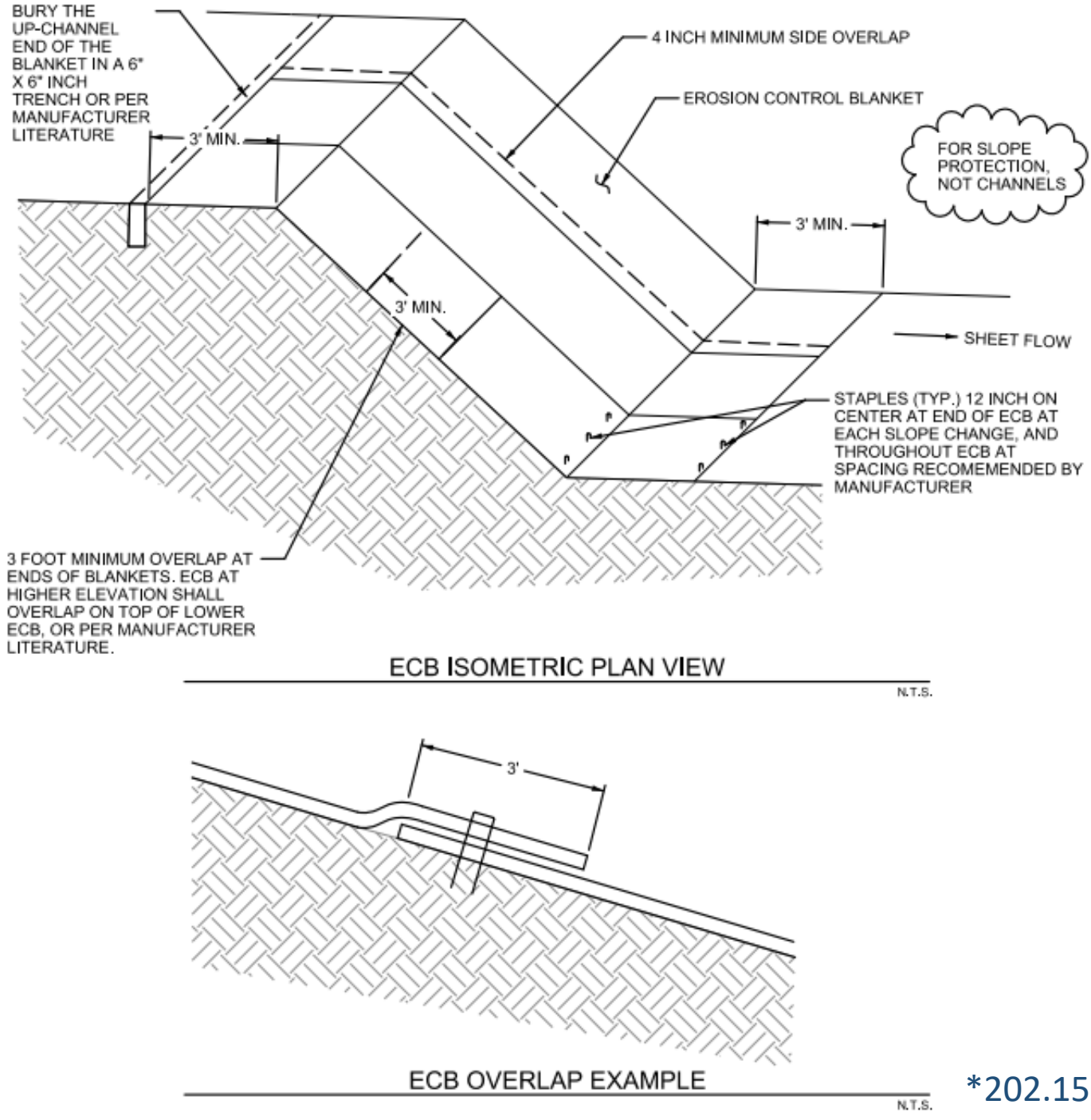
NOTE:
1. STAKES SHALL CONFORM TO SPECIFICATIONS SECTION 202.5.2.2
2. HEIGHT OF INLET PROTECTION SURROUNDING THE INLET SHALL BE SHOWN ON THE PLANS AND MUST BE CHECKED TO VERIFY PONDING WATER WILL NOT CAUSE FLOODING OF PROPERTY OR DAMAGE.
3. CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDES TOWARD THE INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE INLET.
4. POST SHALL BE INSTALLED AT EACH CORNER AND BETWEEN CORNERS IF THE DISTANCE IS GREATER THAN 6' BETWEEN CORNER POSTS.

AREA INLET PROTECTION FILTER BARRIER PLAN VIEW

N.T.S.

FIGURE 3.10 SCHEMATICS OF FILTER FABRIC AREA INLET PROTECTION

1220A



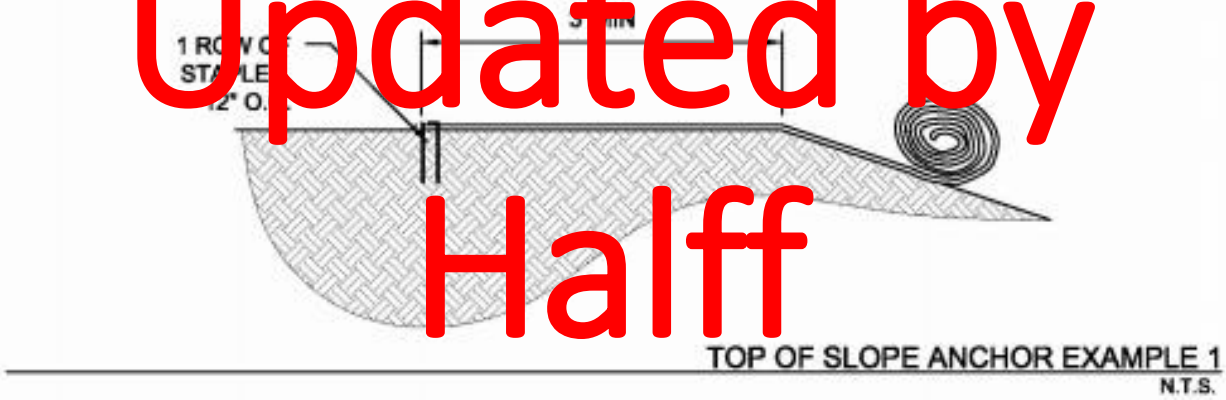
*202.15

FIGURE 2.7 STANDARD CONSTRUCTION DETAIL - TEMPORARY EROSION CONTROL BLANKETS (1 OF 2)

Replacing Original Drawing 1160A

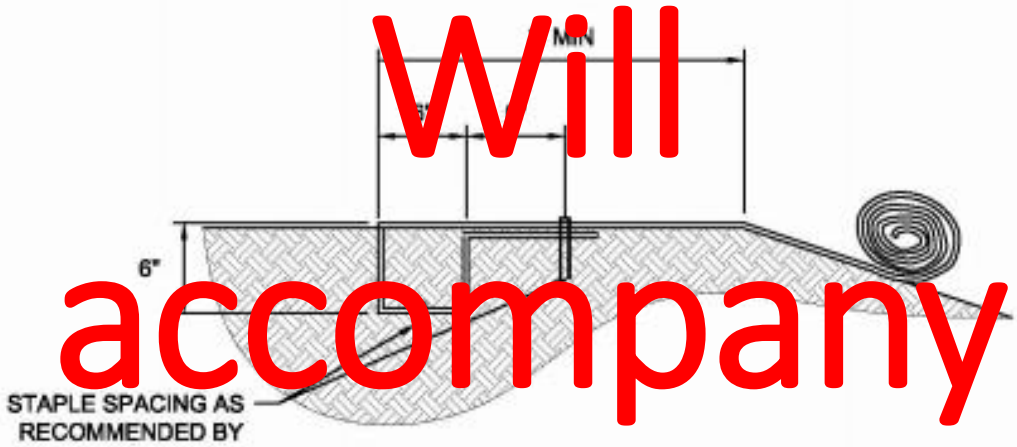
1220B

To Be Updated by Halff



TOP OF SLOPE ANCHOR EXAMPLE 1
N.T.S.

Will accompany Figure 2.8



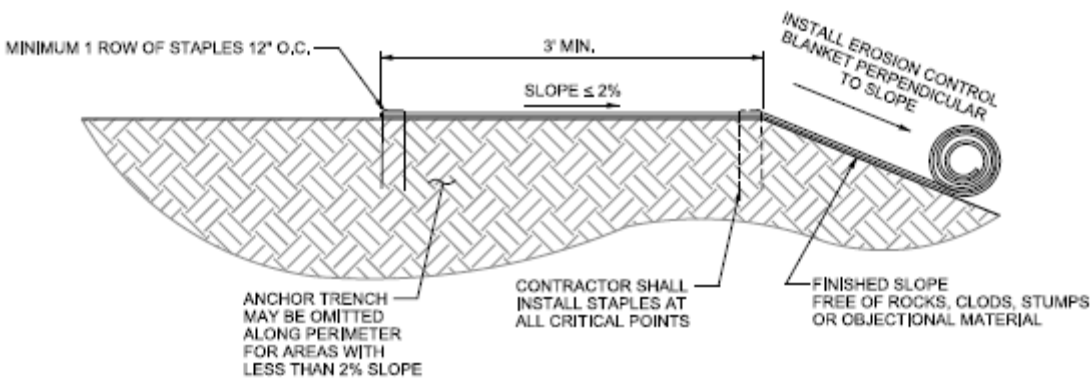
TOP OF SLOPE ANCHOR EXAMPLE 2
N.T.S.

NOTE: ANCHORING METHODS PROVIDED ARE EXAMPLES OF THE TYPE OF ANCHORING THE ECB MANUFACTURER MAY RECOMMEND. THERE ARE MORE THAN A DOZEN DIFFERENT TOP OF SLOPE ANCHORING METHODS BASED ON TYPE OF ECB, TYPE OF SOIL, SPECIFIED PERFORMANCE PERIOD, SLOPE STEEPNESS, ETC. ALWAYS FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR ANCHORING BASED ON THE SITE-SPECIFIC APPLICATION.

New Drawing
Taken from iSWM manual to accompany
Figure 2.7/1160 replacement

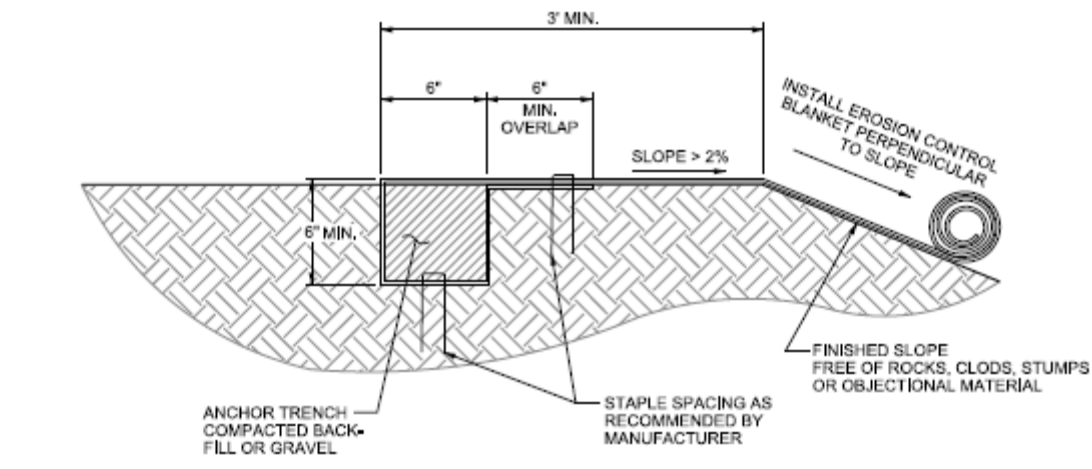
*202.15

Figure 2.8 Anchor Examples for Erosion Control Blankets
(Sources: American Excelsior Company and Western Excelsior Corporation)



TOP OF SLOPE ANCHOR EXAMPLE 1

N.T.S.



TOP OF SLOPE ANCHOR TRENCH EXAMPLE 2

N.T.S.

FIGURE 2.8 STANDARD CONSTRUCTION DETAIL -
ANCHOR EXAMPLES FOR TEMPORARY EROSION CONTROL BLANKETS (1 OF 2)

1220C

EROSION CONTROL BLANKETS GENERAL NOTES:

1. SEE NCTCOG STANDARD SPECIFICATIONS (2017) SECTION 202.15.

2. PRIOR TO THE INSTALLATION OF ANY EROSION CONTROL BLANKETS, ALL ROCKS, DIRT CLODS, STUMPS, ROOTS, TRASH AND ANY OTHER OBSTRUCTIONS THAT WOULD PREVENT THE BLANKET FROM LYING IN DIRECT CONTACT WITH THE SOIL SHALL BE REMOVED. ANCHOR TRENCHING SHALL BE LOCATED ALONG THE ENTIRE PERIMETER OF THE INSTALLATION AREA, EXCEPT FOR SMALL AREAS WITH LESS THAN 2% SLOPE.

3. INSTALLATION AND ANCHORING SHALL CONFORM TO THE RECOMMENDATIONS SHOWN WITHIN THE MANUFACTURER'S PUBLISHED LITERATURE FOR THE APPROVED EROSION CONTROL BLANKET. PARTICULAR ATTENTION MUST BE PAID TO JOINTS AND OVERLAPPING MATERIAL.

4. IN ABSENCE OF MANUFACTURE'S LITERATURE, A MINIMUM 11-GUAGE WIRE STAPLES, 6-INCHES IN LENGTH AND 1-INCH WIDTH WILL BE USED.

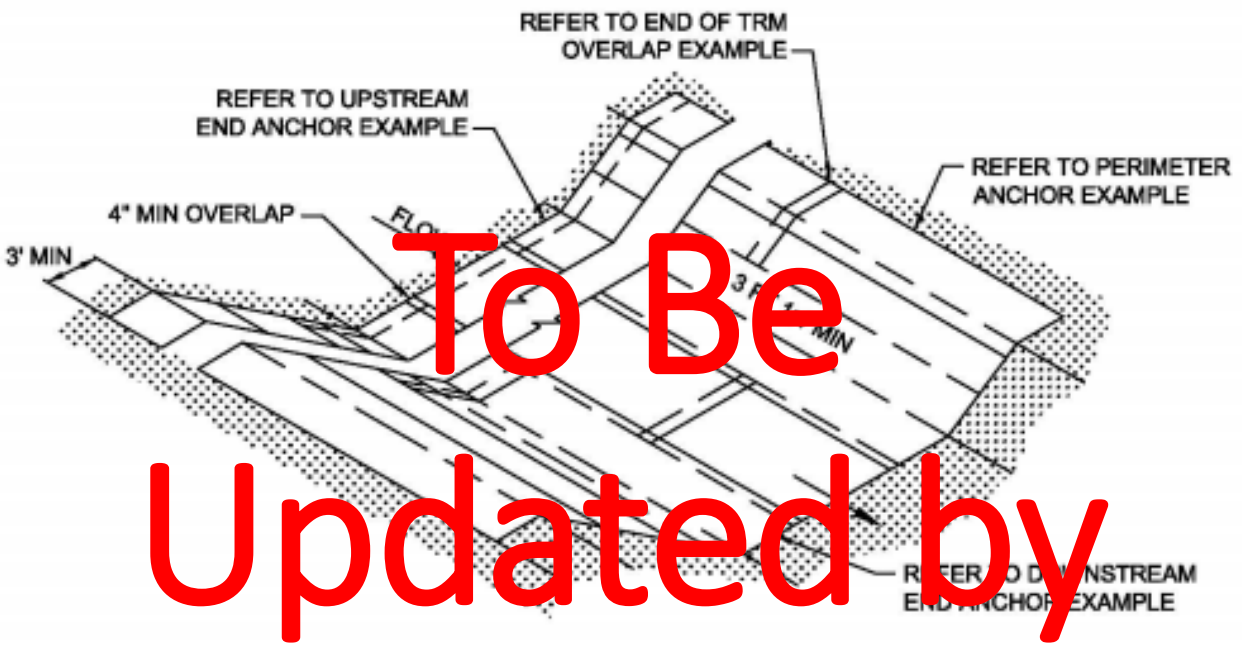
5. AFTER APPROPRIATE INSTALLATION, THE BLANKETS SHOULD BE CHECKED FOR UNIFORM CONTACT WITH THE SOIL, SECURITY OF THE LAP JOINTS, AND FLUSHNESS OF THE STAPLES WITH THE GROUND.

6. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

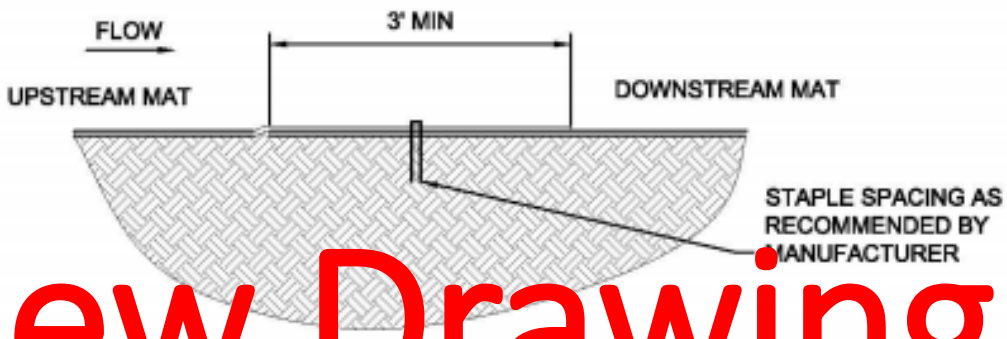
FIGURE 2.7 NOTES ON TEMPORARY EROSION CONTROL BLANKETS (2 OF 2)

Replacing Original Drawing 1160B

1230A



TRM ISOMETRIC PLAN VIEW
N.T.S.



END OF TRM OVERLAP EXAMPLE
N.T.S.

To Be Updated by Halff

New Drawing

New Drawing
Taken from iSWM manual

*202.16

Figure 2.11 Schematics of Turf Reinforcement Mats
(Sources: Modified from American Excelsior Company and Texas Department of Transportation)

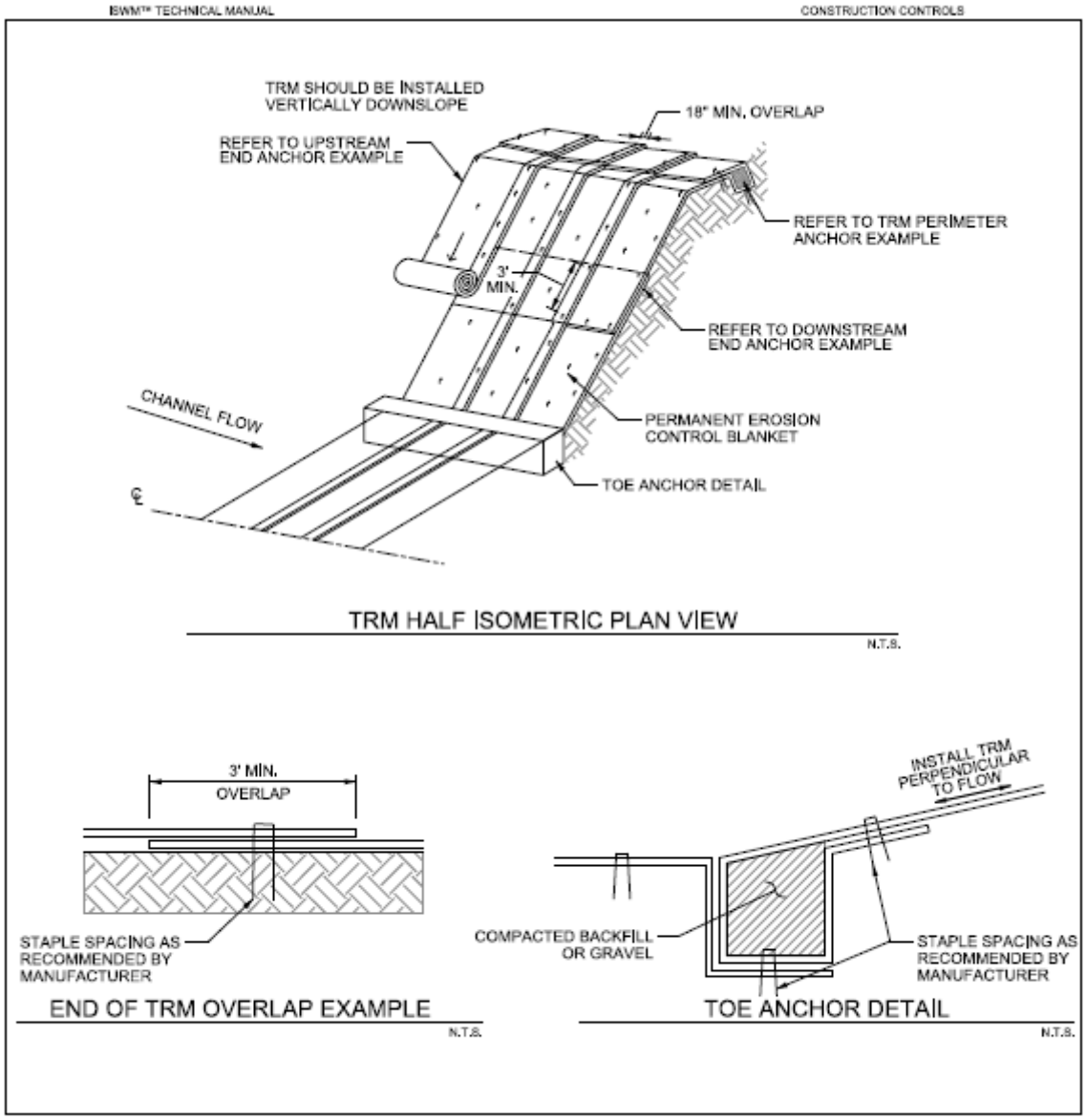
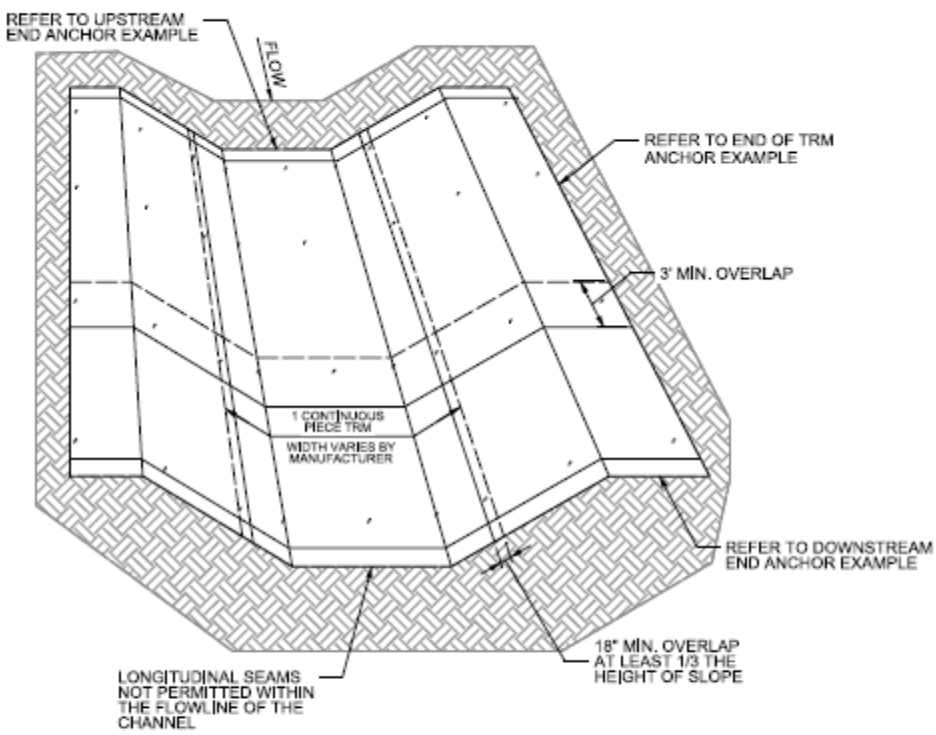


FIGURE 2.11 SCHEMATICS OF TURF REINFORCEMENT MATS (1 OF 3)



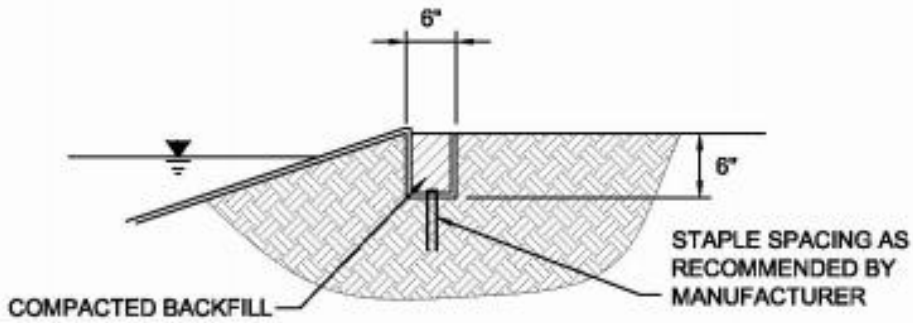
TRM ISOMETRIC PLAN VIEW FOR SMALL CHANNELS/DITCHES

N.T.S.

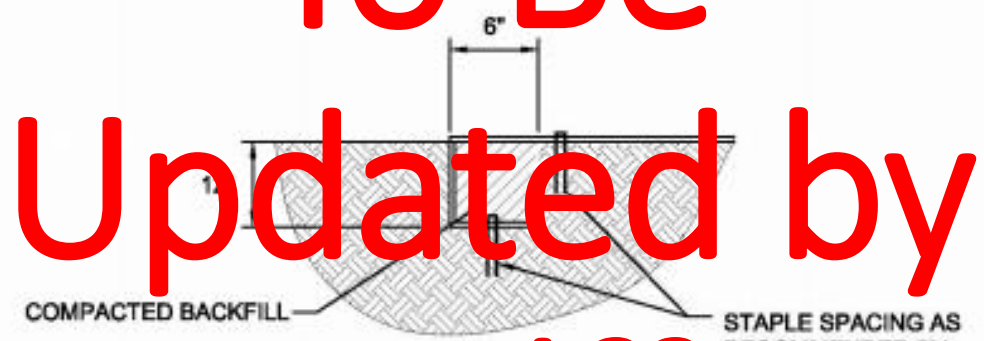
NOTE: LONGITUDINAL INSTALLATION OF TURF REINFORCEMENT MAT PERMITTED ONLY FOR CHANNEL WIDTHS 0' TO 8'. CONTRACTOR SHALL VERIFY MAT MEETS OVERLAP AND SLOPE REQUIREMENTS STATED ABOVE.

FIGURE 2.11 SCHEMATICS OF TURF REINFORCEMENT MATS (2 OF 3)

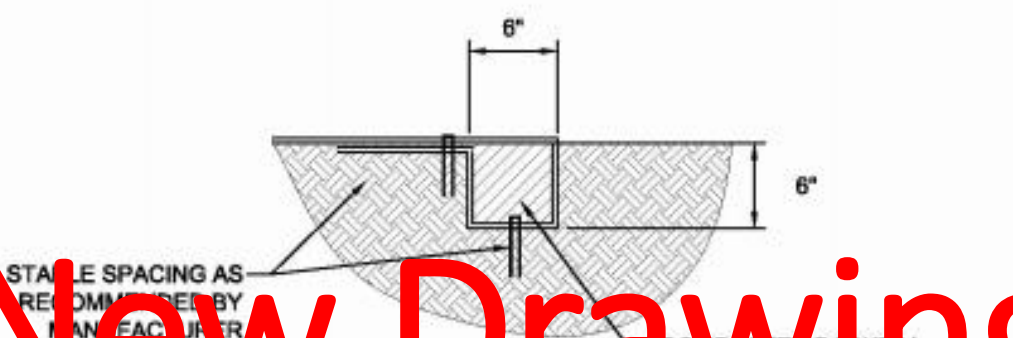
1230B



TRM PERIMETER ANCHOR EXAMPLE
N.T.S.



TRM UPSTREAM END ANCHOR EXAMPLE
N.T.S.



TRM DOWNSTREAM END ANCHOR EXAMPLE
N.T.S.

NOTE: ANCHORING METHODS PROVIDED ARE EXAMPLES OF THE TYPE OF ANCHORING THE TRM MANUFACTURER MAY RECOMMEND. THERE ARE DOZENS OF DIFFERENT ANCHORING METHODS DEPENDING ON THE TRM AND SITE-SPECIFIC CONDITIONS. ALWAYS FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR ANCHORING.

New Drawing
Taken from iSWM manual

*202.16

Figure 2.12 Examples of Turf Reinforcement Mat Anchoring
(Source: Modified from Texas Department of Transportation Soil Retention Blanket Product Installation Sheet)

To Be Updated by Halff New Drawing

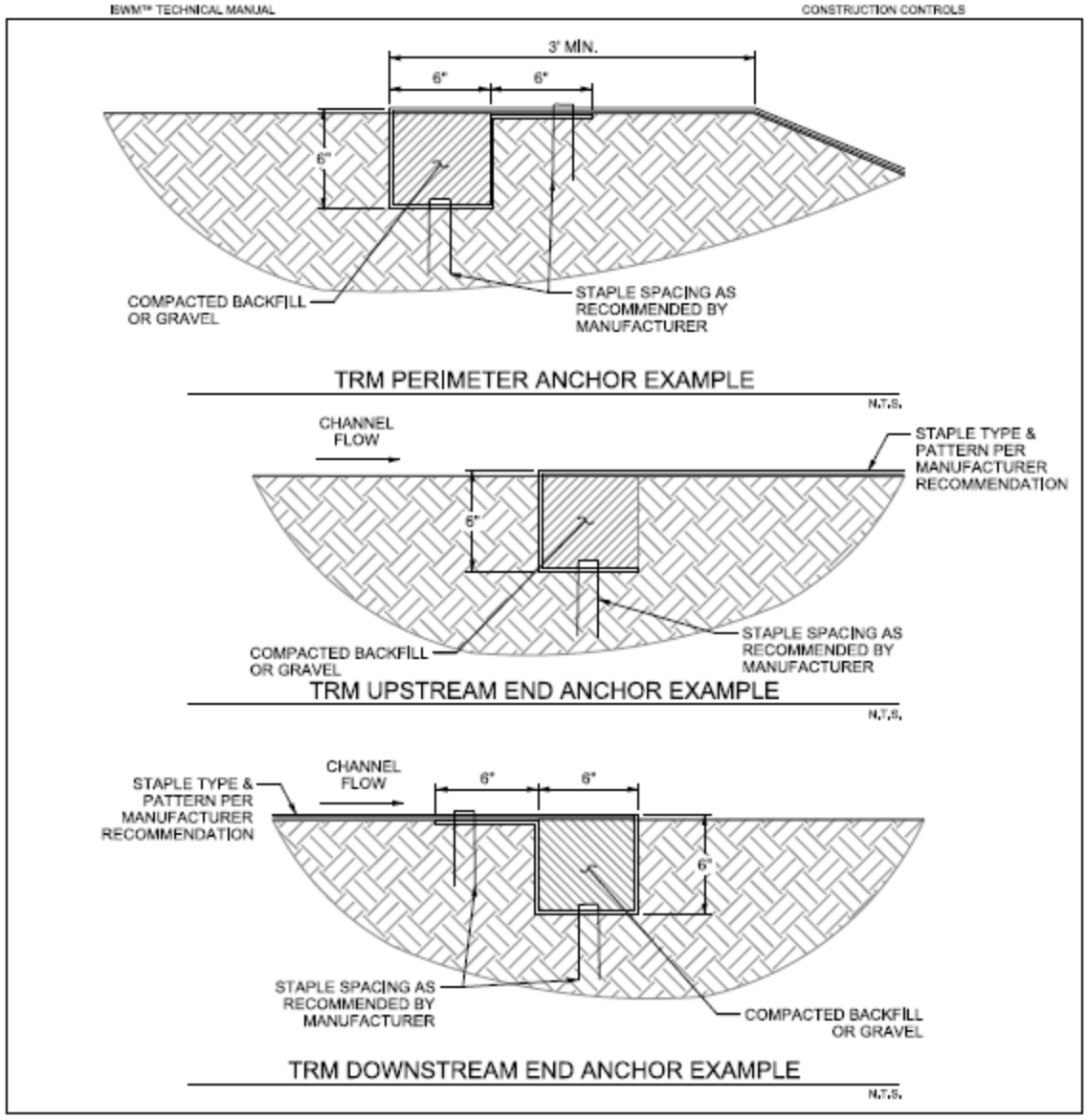
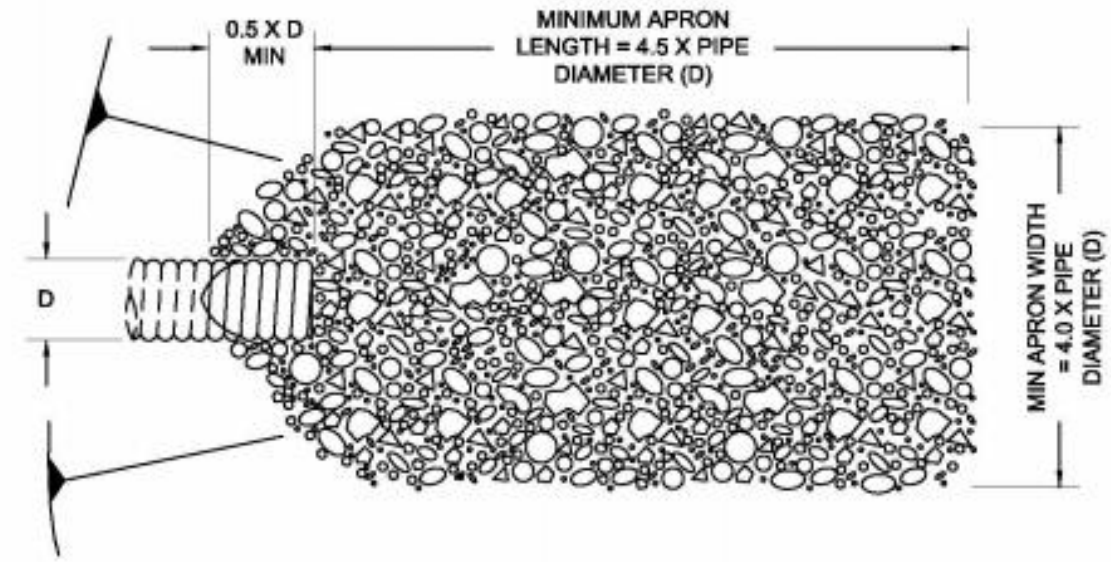
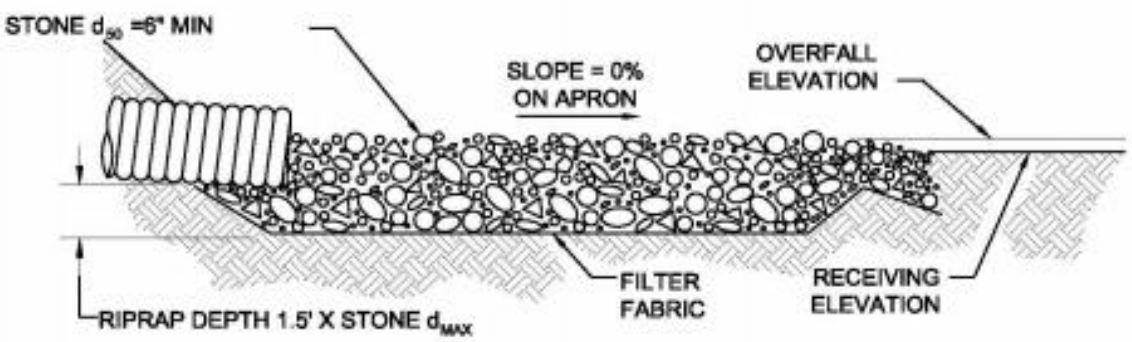


FIGURE 2.11 SCHEMATICS OF TURF REINFORCEMENT MATS (3 OF 3)

1180



TEMPORARY VELOCITY DISSIPATION DEVICE PLAN VIEW
N.T.S.



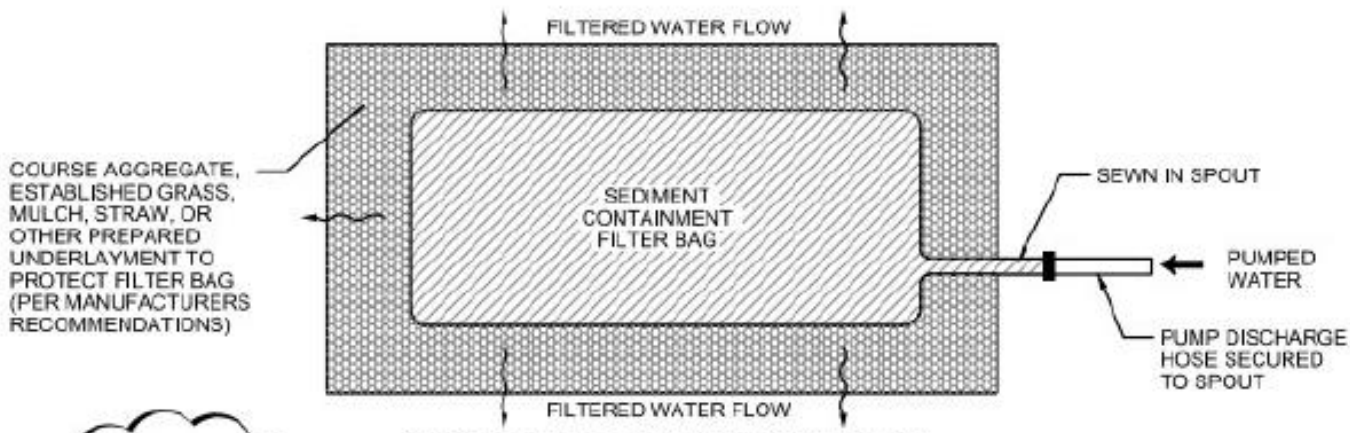
TEMPORARY VELOCITY DISSIPATION DEVICE PROFILE VIEW
N.T.S.

NOTE: DIMENSIONS OF THE RIPRAP APRON SHALL BE DESIGNED BASED ON FLOW CONDITIONS. TEMPORARY CONTROL DESIGN STORM (2-YEARS, 24-HOUR). PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE APRON.

- PIPE DIAMETER (OR EQUIVALENT FOR FLUME, SWALE, ETC.)
- DISCHARGE VELOCITY FROM DRAINAGE STRUCTURE
- MEDIAN STONE DIAMETER (d_{50}) AND MAXIMUM STONE DIAMETER (d_{MAX})
- DEPTH OF APRON

Figure 2.13 Schematics of Velocity Dissipation Device
(Source: Modified from Oklahoma City Public Works Engineering Division Detail ERO-A17)

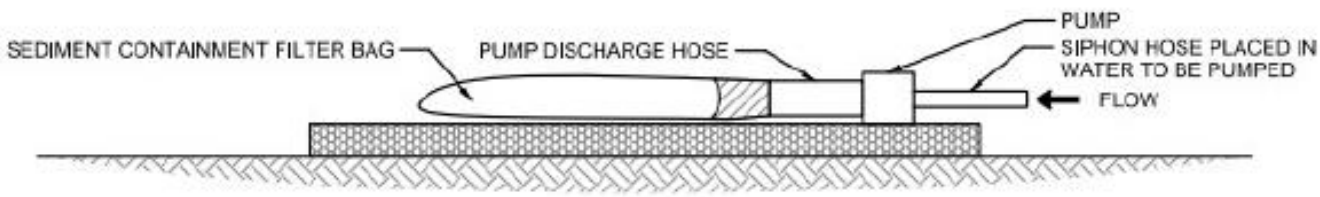
To Be Updated by Halff Associates in 2018/2019



SEDIMENT FILTER BAG PLAN VIEW

N.T.S.

SHOW LOCATIONS OF FILTER BAGS ON THE DRAWINGS.



SEDIMENT FILTER BAG PROFILE

N.T.S.

1. THE BAG SHOULD BE A NON-WOVEN, NEEDLE-PUNCHED, GEOTEXTILE. MATERIALS SHOULD CONFORM TO SPECIFICATION 202.5.2.1 AS A MINIMUM.

DEWATERING CONTROL GENERAL NOTES:

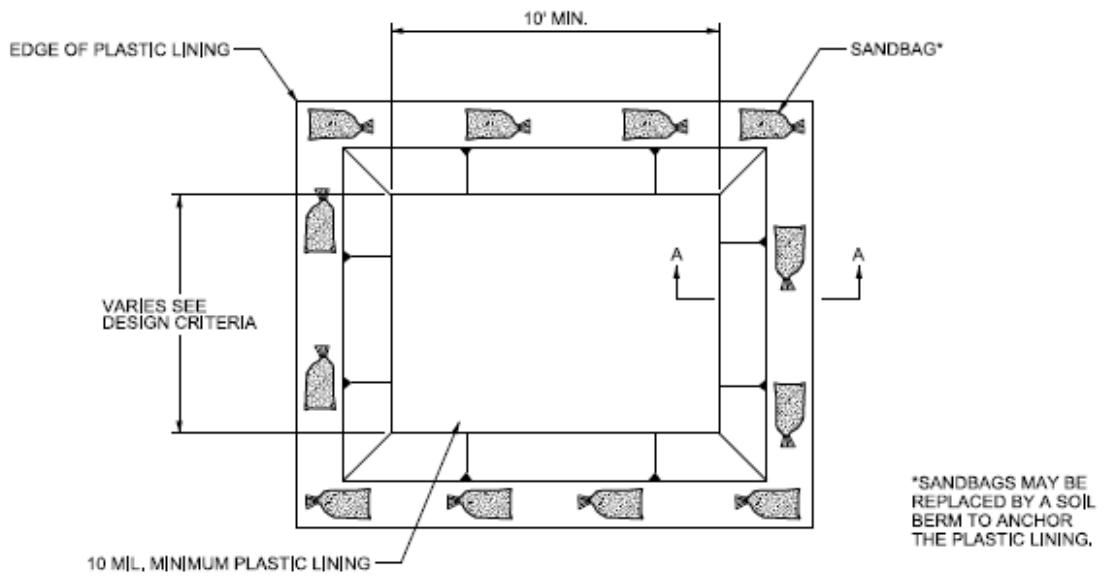
~~1. THE BAG SHOULD BE A NON-WOVEN, NEEDLE-PUNCHED, GEOTEXTILE THAT MEETS ASTM CRITERIA D4632 , D4833, D-3786, D-4355, D-4491, AND D-4751.~~

2. CAPACITY, INSTALLATION, MAINTENANCE , AND REMOVAL OF BAGS AND PUMPS SHOULD CONFORM TO PUBLISHED MANUFACTURER LITERATURE.

FIGURE 3.4 STANDARD CONSTRUCTION DETAIL - DEWATERING CONTROLS

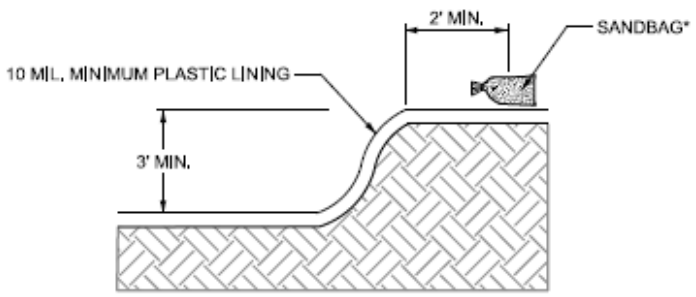
Updated by Halff Associates in 2017

1250



CONCRETE WASHOUT PLAN VIEW

N.T.S.



CONCRETE WASHOUT SECTION A-A

N.T.S.

CONCRETE WAHSOUT NOTES:

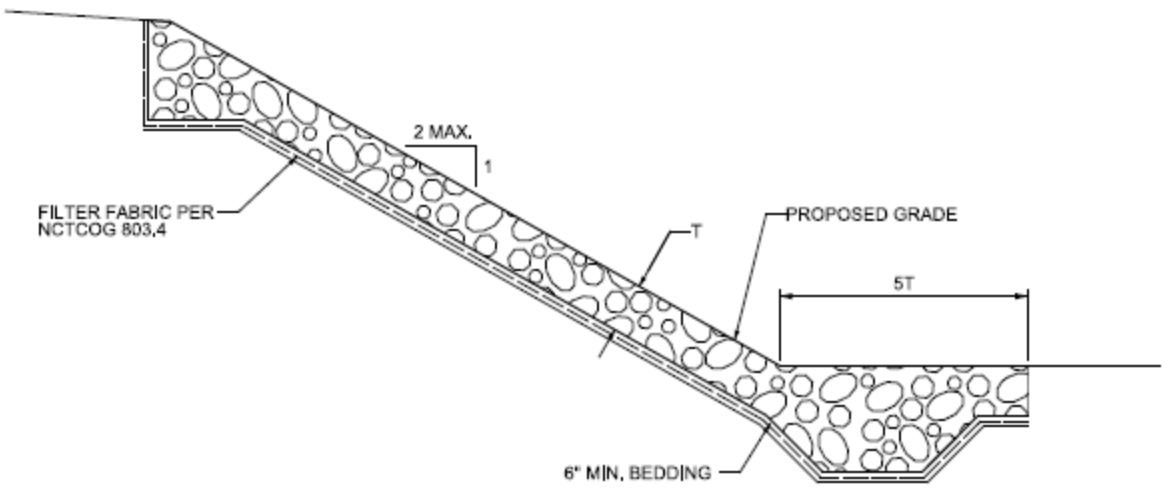
1. WASHOUT AREA MUST BE CLEARLY MARKED WITH SIGNAGE NOTING THE WASHOUT AREA.

2. WASHOUT STRUCTURES SHALL BE CLEANED OUT WHEN THE STRUCTURE IS 75% FULL. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY.

FIGURE 4.1 SCHEMATICS OF CONCRETE WASHOUT CONTAINMENT

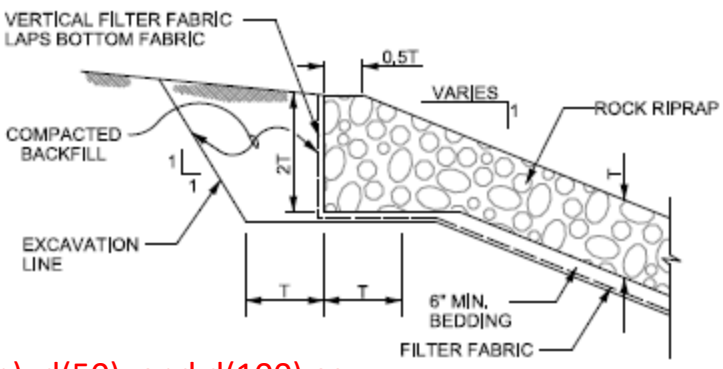
To Be Updated by Halff Associates in 2018/2019

1260



TYPICAL ROCK RIPRAP SLOPE PROTECTION SECTION

N.T.S.



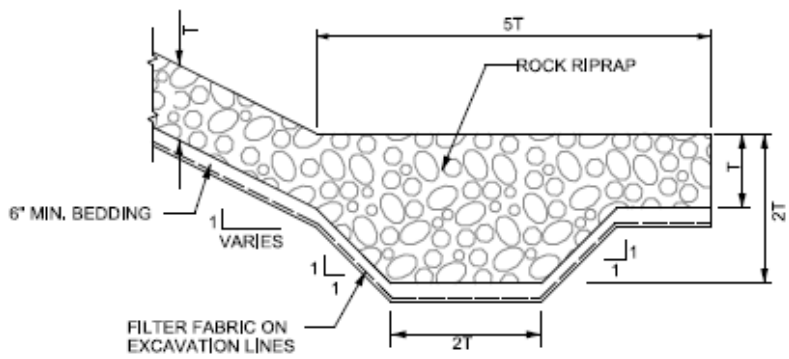
Sizing of d(min), d(50), and d(100) as determined by owner.

ROCK RIPRAP TOP OF BANK DETAIL

N.T.S.

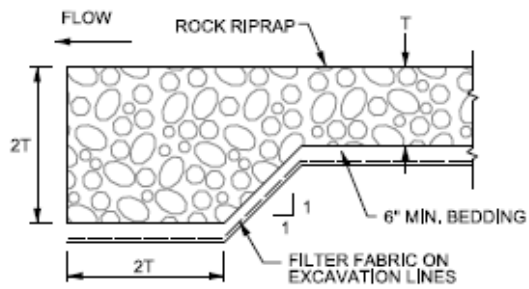
- ROCK RIPRAP DRY OR GROUTED AS SHOWN ON EROSION CONTROL PLANS — $T = 1.5 \times d_{50}$
- FILTER FABRIC SPLICES SHALL HAVE A MINIMUM 18 INCHES OVERLAP — $d_{min.} =$ _____
- DETERMINE GRADATION FOR d_{50} WELL GRADED STONE — $d_{50} =$ _____
- MEDIAN STONE DIAMETER d_{50} AND MAXIMUM STONE DIAMETER d_{100}, FEET — $d_{100} =$ _____

FIGURE X.XX RIPRAP SCHEMATICS OF ROCK RIPRAP (SHEET 1 OF 2)



ROCK RIPRAP TOE OF SLOPE DETAIL

N.T.S.



UPSTREAM ROCK RIPRAP TOE WALL DETAIL

N.T.S.

FIGURE X.XX RIPRAP SCHEMATICS OF ROCK RIPRAP (SHEET 2 OF 2)

1270

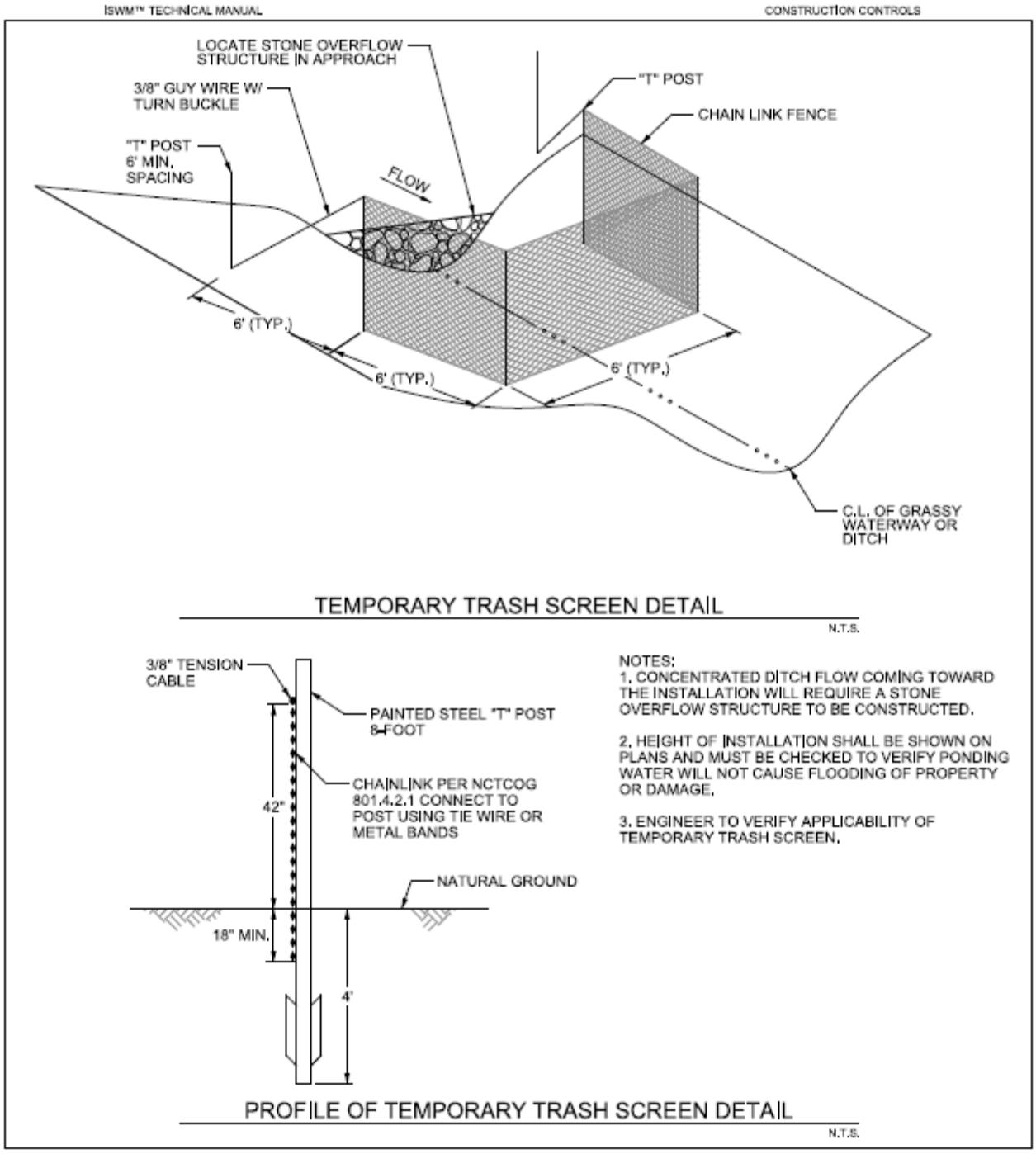
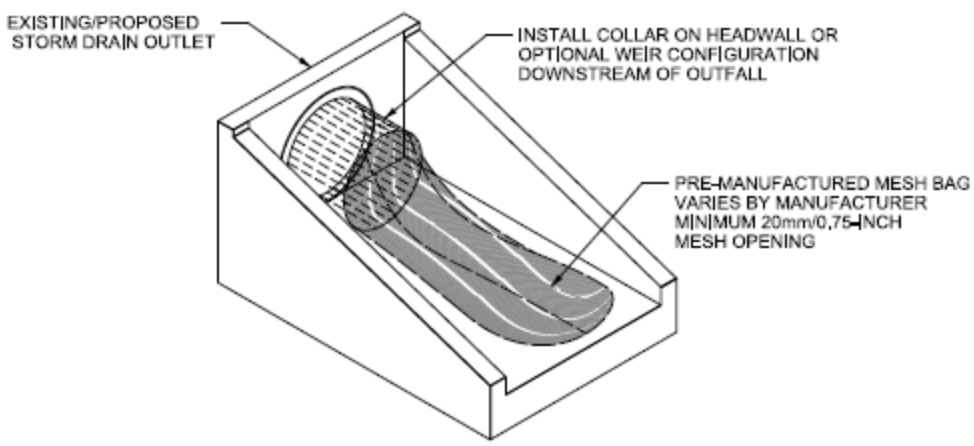


FIGURE X.XX TRASH SCREEN/CATCH DETAIL (SHEET 1 OF 2)

Install collar and bag sized by owner and from owner's manufacturer of choice.



OUTLET TRASH SCREEN BAG

N.T.S.

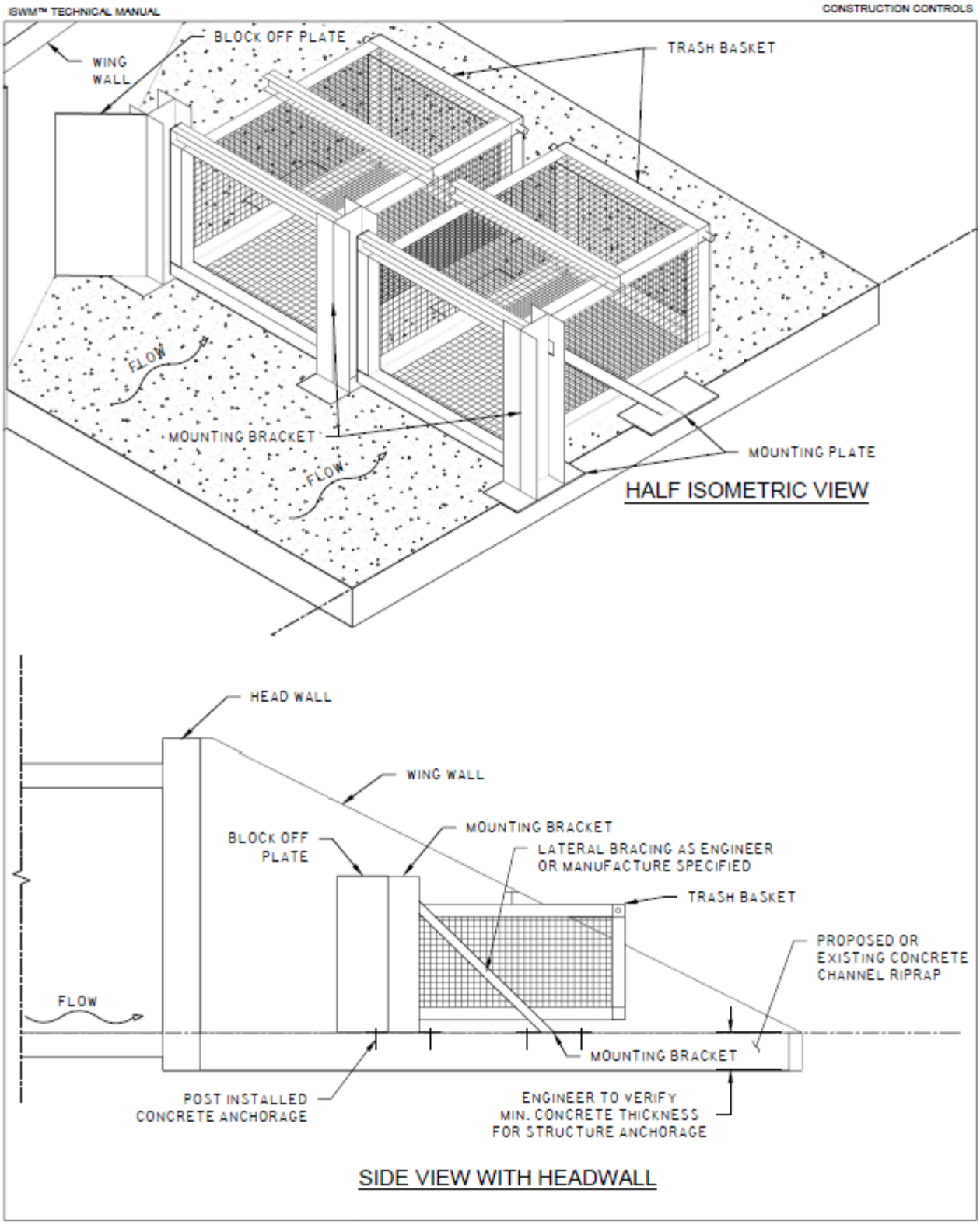
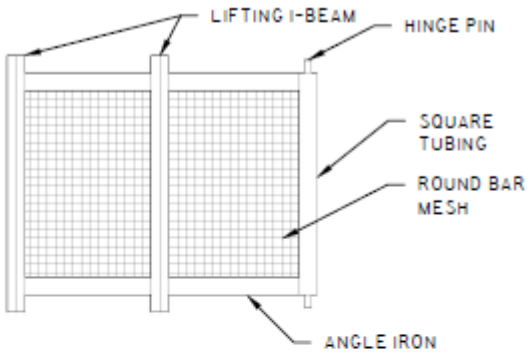
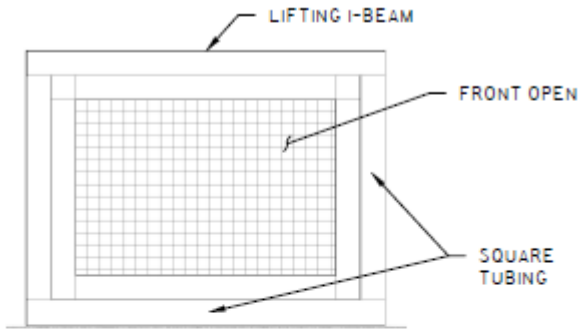


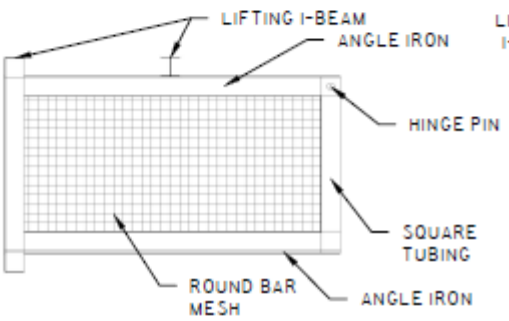
FIGURE X.XX TRASH RACK ISOMETRIC



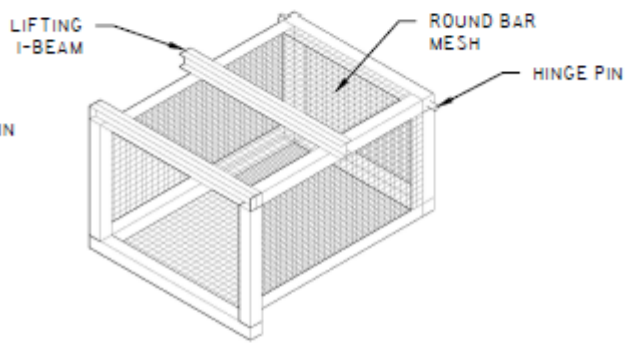
TRASH BASKET
TOP VIEW



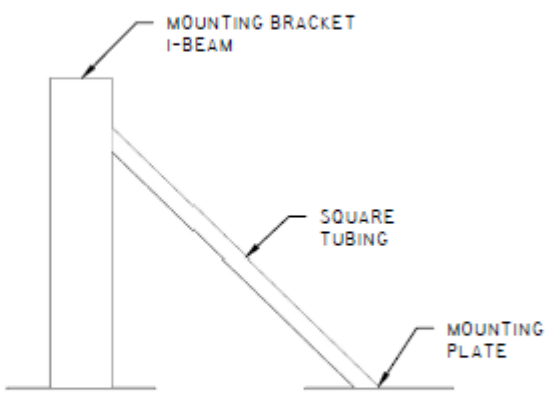
TRASH BASKET
FRONT VIEW



TRASH BASKET
SIDE VIEW



TRASH BASKET
ISOMETRIC VIEW



MOUNTING BRACKET

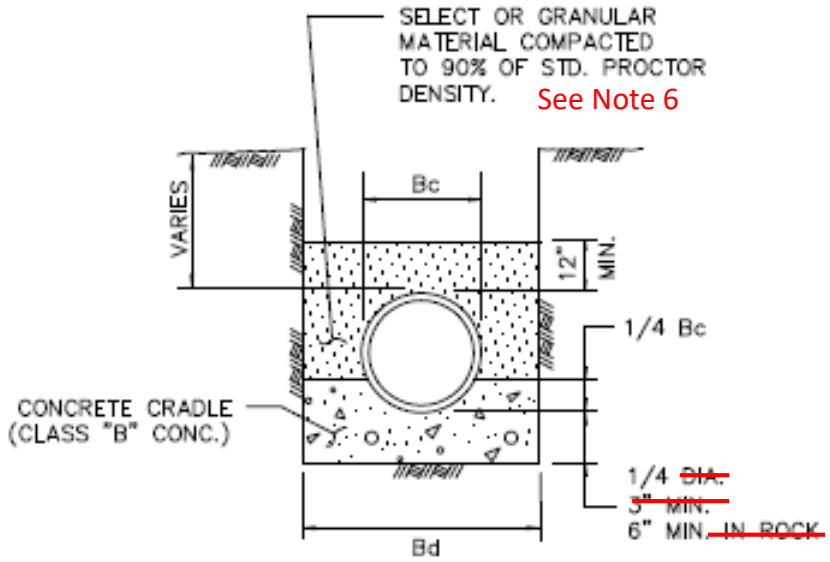
NOTES:
1. OVERALL SIZE AND LOCATION TO BE DETERMINED BY THE ENGINEER.
2. SIZE AND SPACING OF MESH VARIES AS NEEDED.

1. Overall size and location to be determined by the owner.
2. Size and spacing of mesh to be determined by owner.
3. Sizing of structural members and connections as determined by owner.

FIGURE X.XX TRASH RACK PLAN

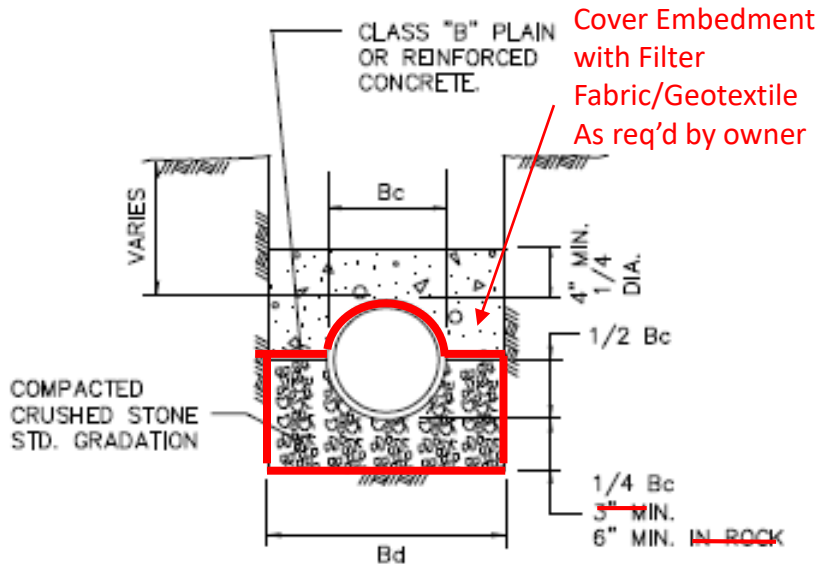
DIVISION 3000 GENERAL UNDERGROUND CONDUIT

TABLE OF CONTENTS



CLASS "A"

CLASS "B" CONCRETE CRADLE N.T.S.
PLAIN CONC. LF 2.8
REINF. CONC. LF 3.4 P=0.4%



CLASS "A-1"

CLASS "B" CONCRETE CAP N.T.S.
PLAIN CONC. LF 2.8
REINF. CONC. LF 3.4 P=0.4%
REINF. CONC. LF 4.8 P=1.0%

NOTES:

1. LF. = LOAD FACTOR TO BE USED TO DETERMINE 3 EDGE BEARING BASED ON TYPE OF EMBEDMENT.
2. FREE-FALL OF CONCRETE NOT TO EXCEED 5 FT. MAXIMUM.
3. P = Rho FOR STEEL %
4. Bc = OUTSIDE DIAMETER OF PIPE
5. Bd = TRENCH WIDTH

6. Use 95% density under paved surface and 90% in unpaved areas

Center text

STANDARD DRAWING NO. 3010

EMBEDMENT

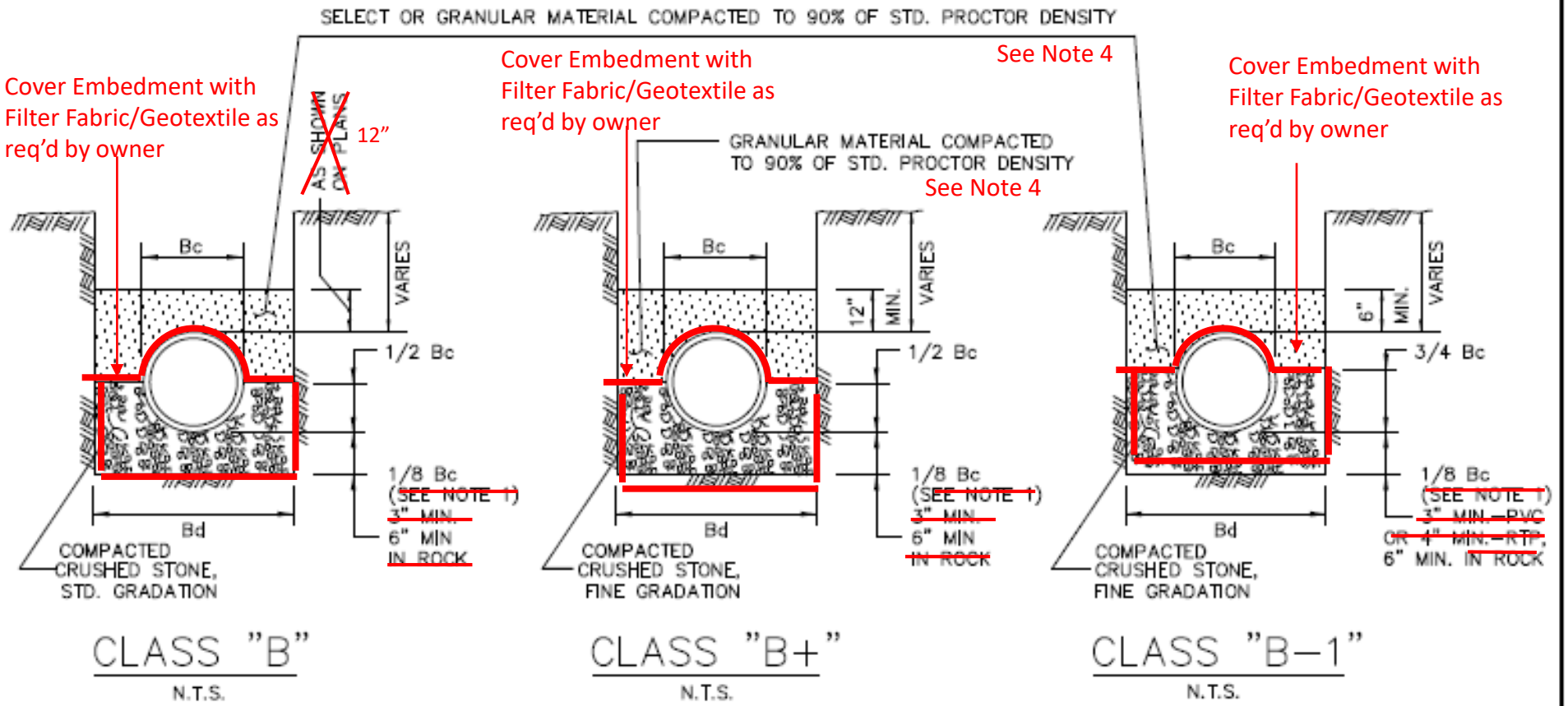
CLASS "A" & "A-1"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

DATE OCT. '04

STANDARD DRAWING NO. 3010



NOTES:

1. ~~FOR MAINS 42" DIAMETER AND LARGER LARGER, 1/8 Bc SHALL BE TAKEN AS 6".~~
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH
4. Use 95% density under paved surface and 90% in unpaved areas

STANDARD DRAWING NO. 3020

EMBEDMENT

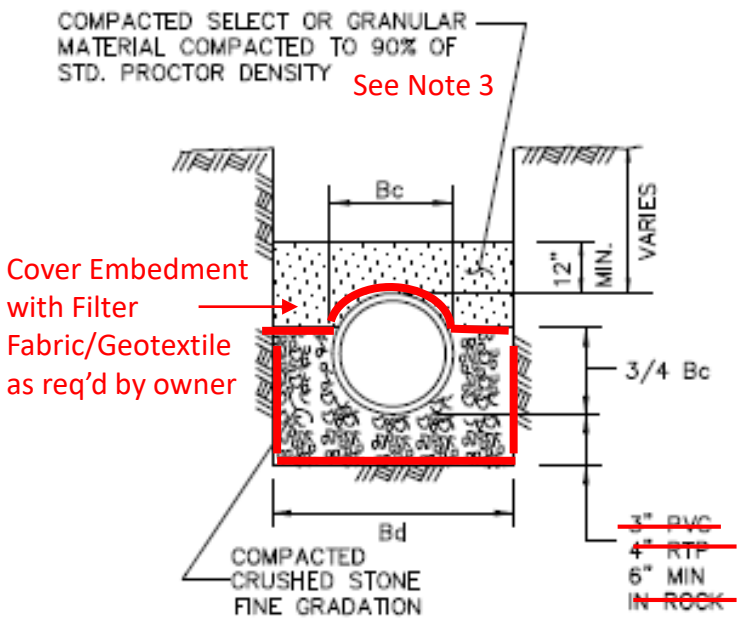
CLASS "B", "B+", & "B—1"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

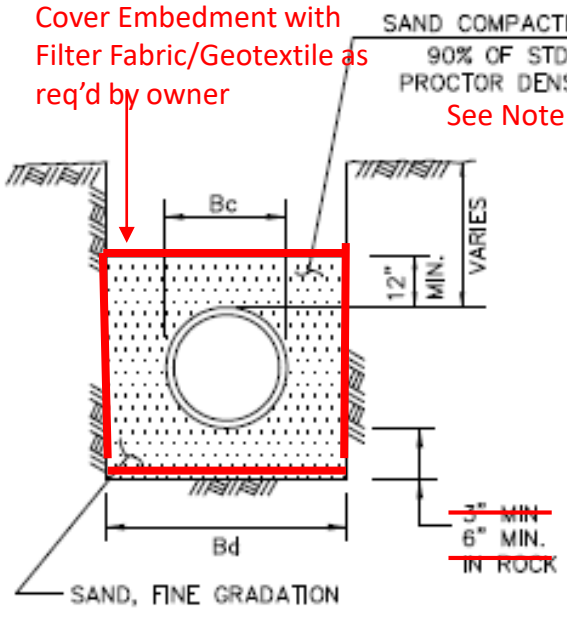
DATE OCT. '04

STANDARD DRAWING NO. 3020



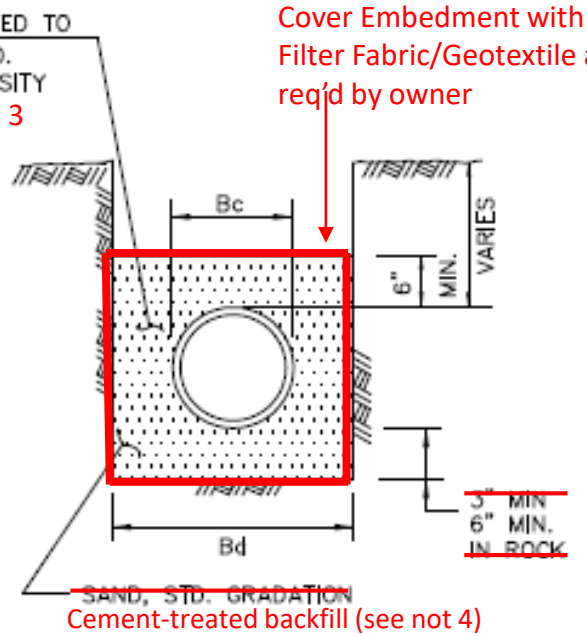
CLASS "B-2"

N.T.S.



CLASS "B-3"

N.T.S.



CLASS "B-4"

N.T.S.

NOTES:

1. Bc = OUTSIDE DIAMETER OF PIPE
2. Bd = TRENCH WIDTH
3. Use 95% density under paved surface and 90% in unpaved areas
4. Refer to 504.6.2

STANDARD DRAWING NO. 3030

EMBEDMENT

CLASS "B-2","B-3", & "B-4"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

DATE OCT. '04

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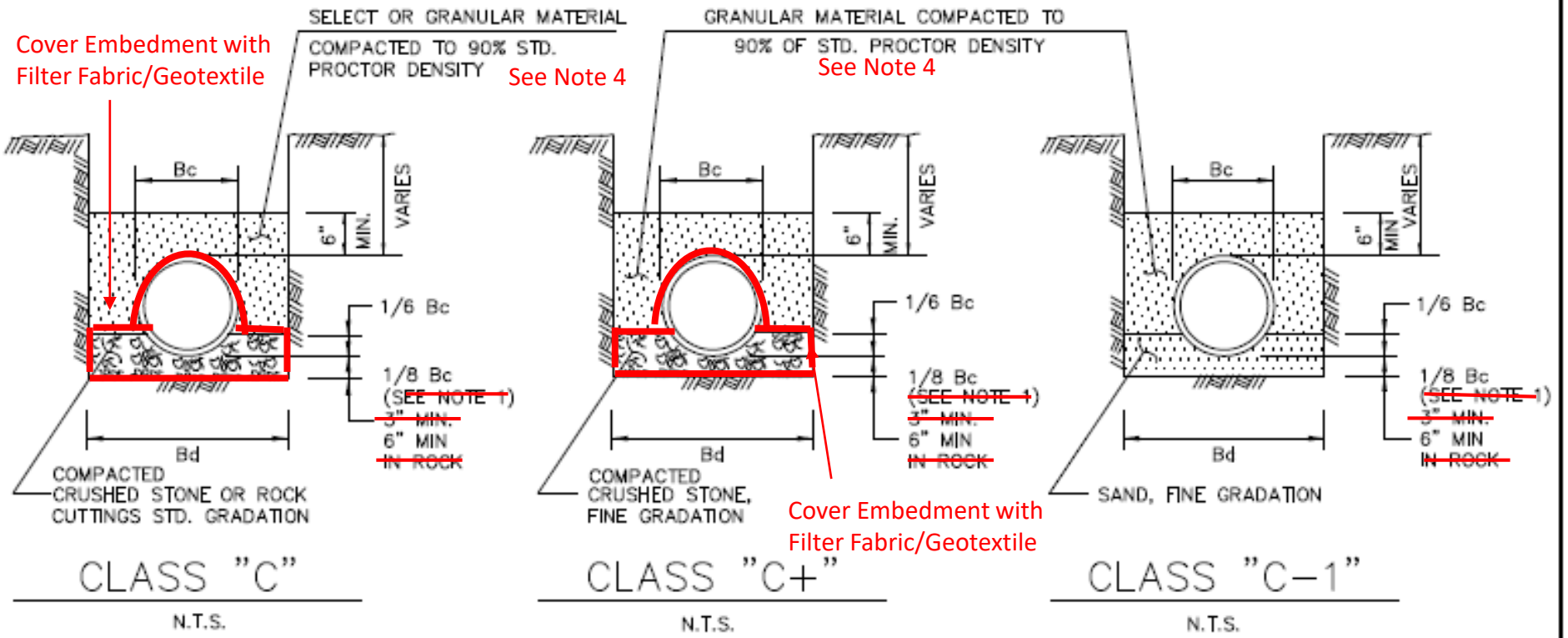


NOTES:

1. ~~FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".~~
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH
4. Use 95% density under paved surface and 90% in unpaved areas

STANDARD DRAWING NO. 3040

EMBEDMENT

CLASS "C", "C+", & "C-1"

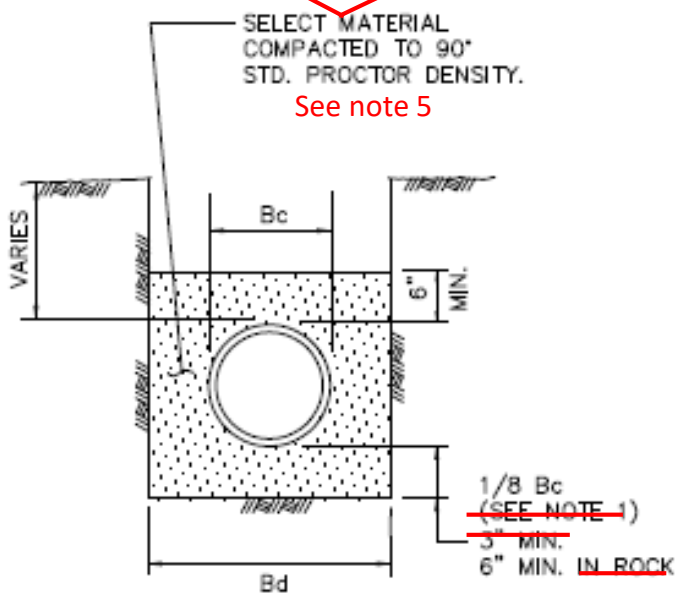
North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

DATE OCT. '04

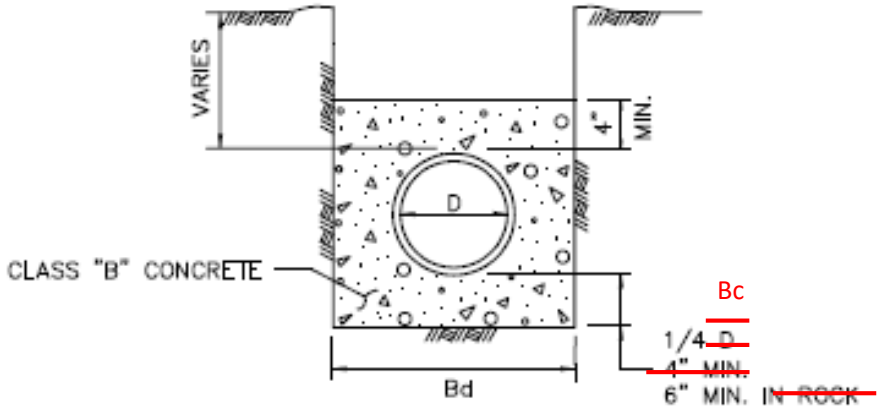
STANDARD DRAWING NO. 3040

Or granular



CLASS "D+"

N.T.S.



CLASS "G"

N.T.S.

NOTES:

1. FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".
2. Bc = OUTSIDE DIAMETER OF PIPE
3. Bd = TRENCH WIDTH
4. D = INSIDE DIAMETER OF PIPE
5. Use 95% density under paved surface and 90% in unpaved areas

STANDARD DRAWING NO. 3050

EMBEDMENT

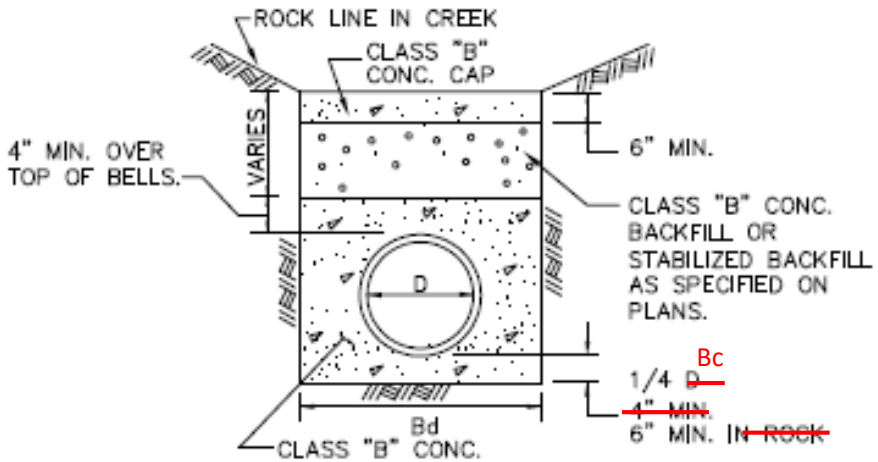
CLASS "D+" & "G"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

DATE OCT. '04

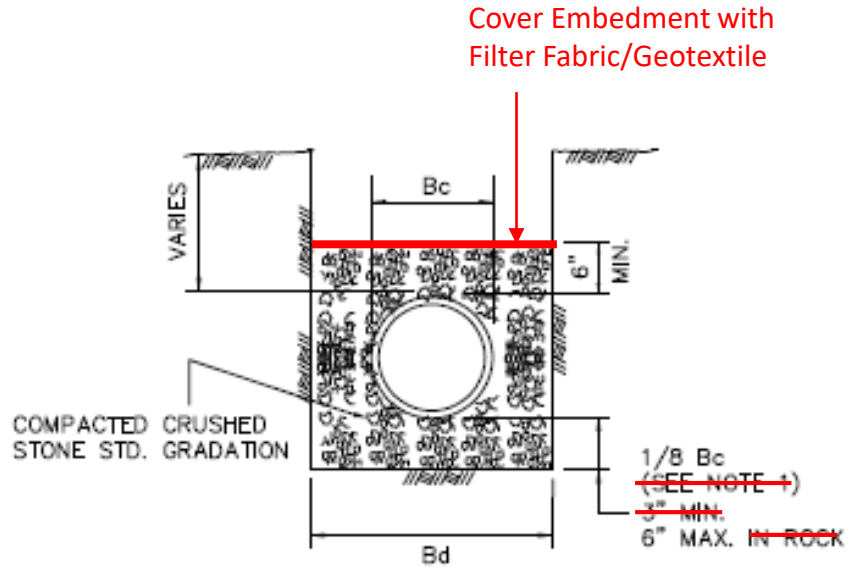
STANDARD DRAWING NO. 3050



CLASS "G-1"

~~(FOR ROCK DITCHES IN CREEKS)~~

N.T.S.



CLASS "H"

N.T.S.

NOTES:

1. ~~FOR MAINS 42" DIAMETER AND LARGER, 1/8 Bc SHALL BE TAKEN AS 6".~~
2. Bd = TRENCH WIDTH
3. Bc = OUTSIDE DIAMETER OF PIPE
4. D = INSIDE DIAMETER OF PIPE

STANDARD DRAWING NO. 3060

EMBEDMENT

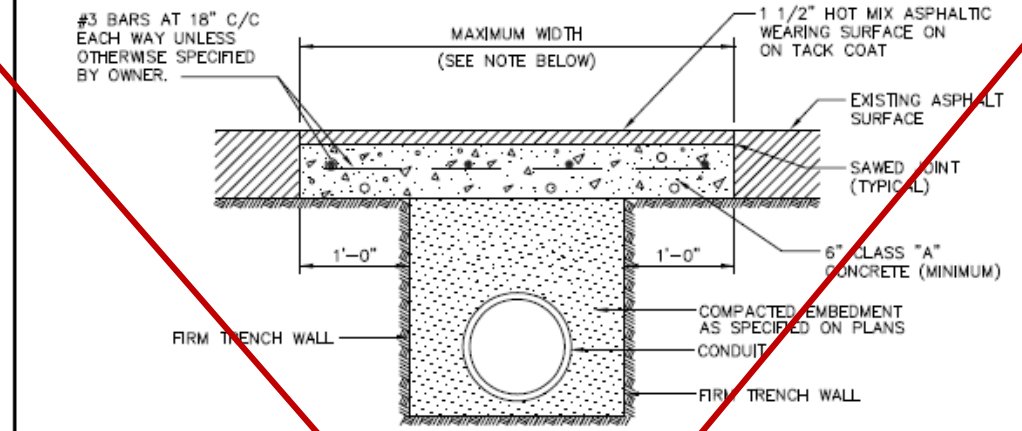
CLASS "G-1" & "H"

North Central Texas Council of Governments

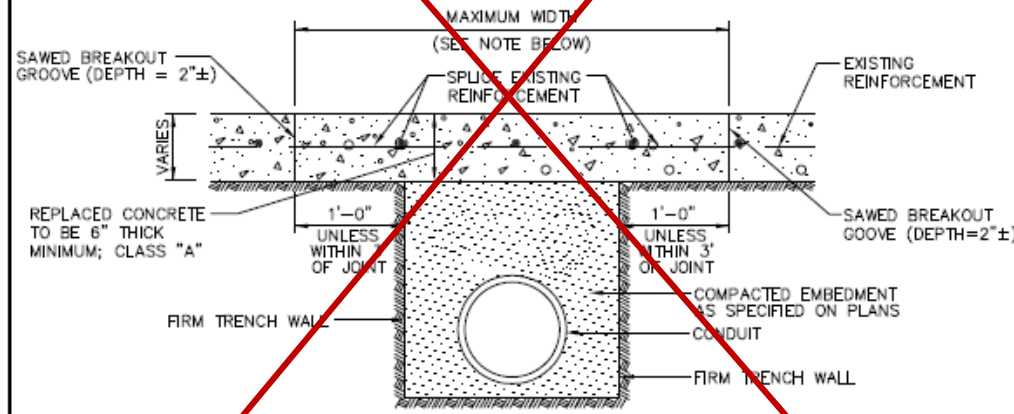
STANDARD SPECIFICATION REFERENCE 504.5

DATE OCT. '04

STANDARD DRAWING NO. 3060



ASPHALT PAVEMENT
N.T.S.



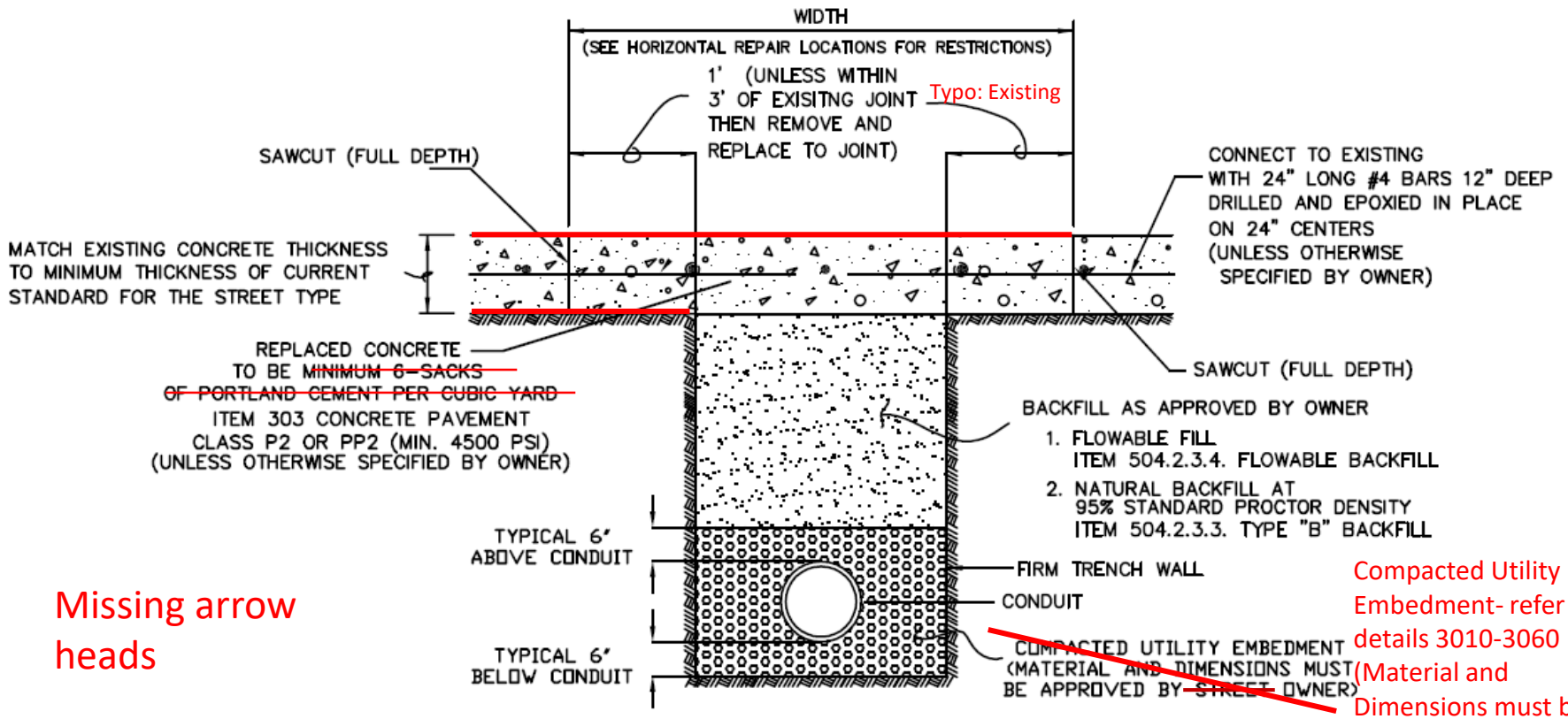
CONCRETE PAVEMENT
N.T.S.

NOTES:

1. PAYMENT TO THE CONTRACTOR FOR REPLACEMENT OF PAVEMENT AND/OR DRIVEWAYS WILL BE BASED ON ACTUAL MEASUREMENTS UP TO A MAXIMUM WIDTH EQUAL TO THE SPECIFIED MAXIMUM TRENCH WIDTH (PER STD. SPEC. ITEM 6.2.) PLUS 2 FEET. ANY EXISTING PAVEMENT DAMAGED OR REMOVED IN EXCESS OF THE MAXIMUM LIMITS SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
2. WHEN REMOVING CONCRETE PAVEMENT THE CONTRACTOR SHALL ENDEAVOR TO LIMIT DAMAGE TO EXISTING REINFORCEMENT SO IT MAY BE EMPLOYED IN THE REPLACEMENT OPERATION. IF ORIGINAL REINFORCEMENT IS CUT OR BROKEN, REPLACEMENT BARS OF THE SAME SIZE SHALL BE INSTALLED BY DRILLING AND DOWELLING AS DIRECTED BY THE OWNER.

PAVEMENT CUTS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 402.1	
REMOVAL AND REPLACEMENT		DATE OCT. '04	STANDARD DRAWING NO. 3070

GENERAL NOTE: CHECK WITH STREET OWNER FOR SPECIFIC REQUIREMENTS NOT CONTAINED HEREIN



Missing arrow heads

Compacted Utility Embedment- refer to details 3010-3060 (Material and Dimensions must be approved by Owner)

CONCRETE PAVEMENT
N.T.S.

Top Detail

PAVEMENT CUT AND REPAIR

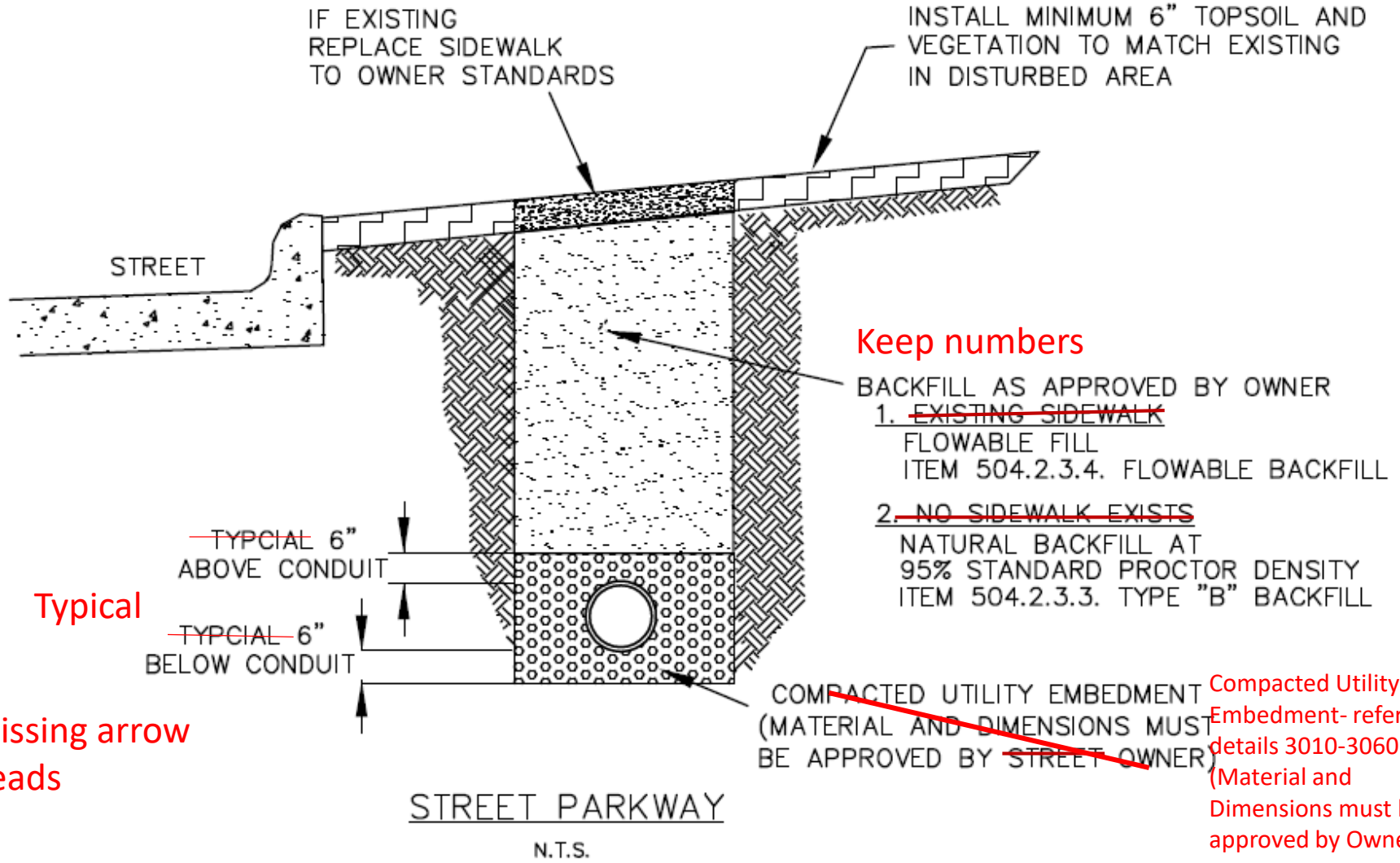
CONCRETE AND PARKWAY

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
402

DATE
OCT. '04

STANDARD DRAWING NO.
3070A



Bottom Detail

PAVEMENT CUT AND REPAIR

CONCRETE AND PARKWAY

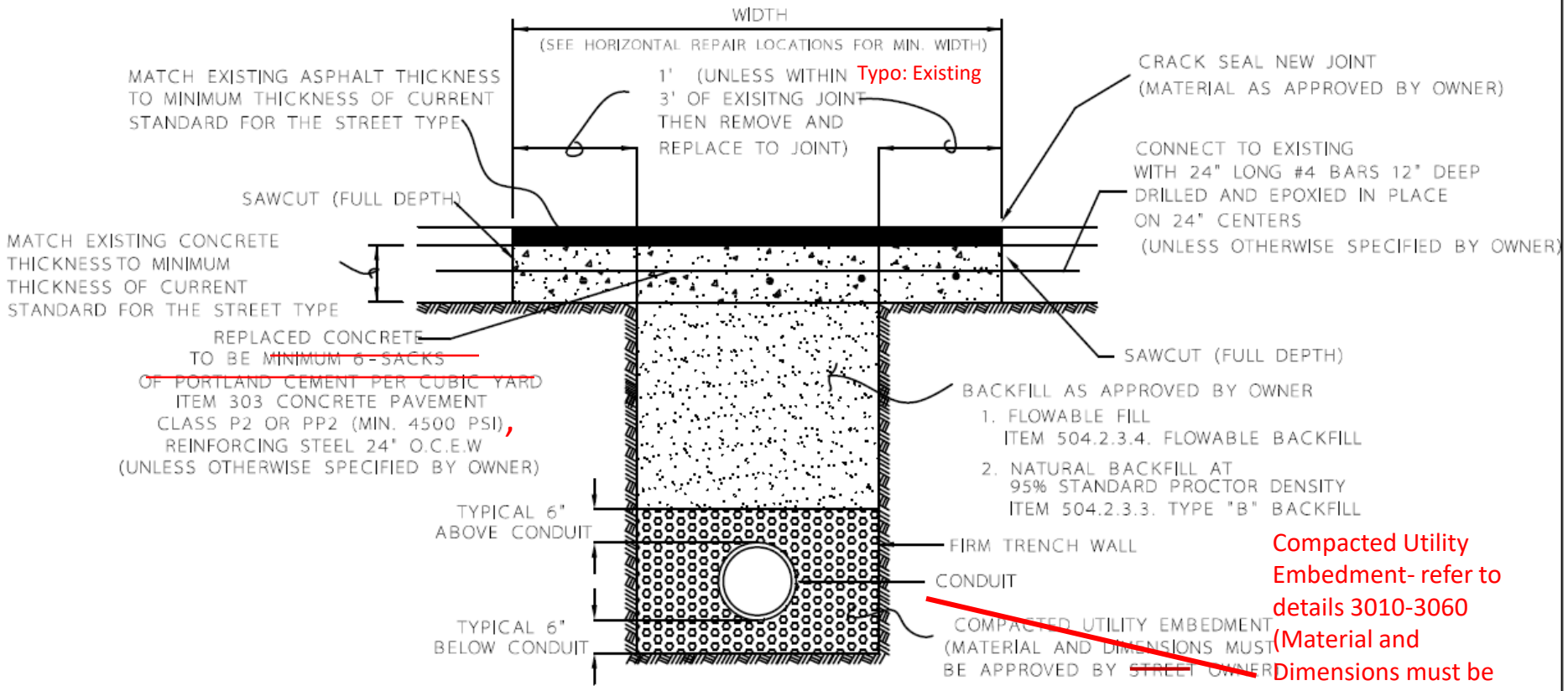
North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
402

DATE
OCT. '04

STANDARD DRAWING NO.
3070A

GENERAL NOTE: CHECK WITH STREET OWNER FOR SPECIFIC REQUIREMENTS NOT CONTAINED HEREIN



CONCRETE PAVEMENT WITH ASPHALT OVERLAY

N.T.S.

Top Detail

PAVEMENT CUT AND REPAIR

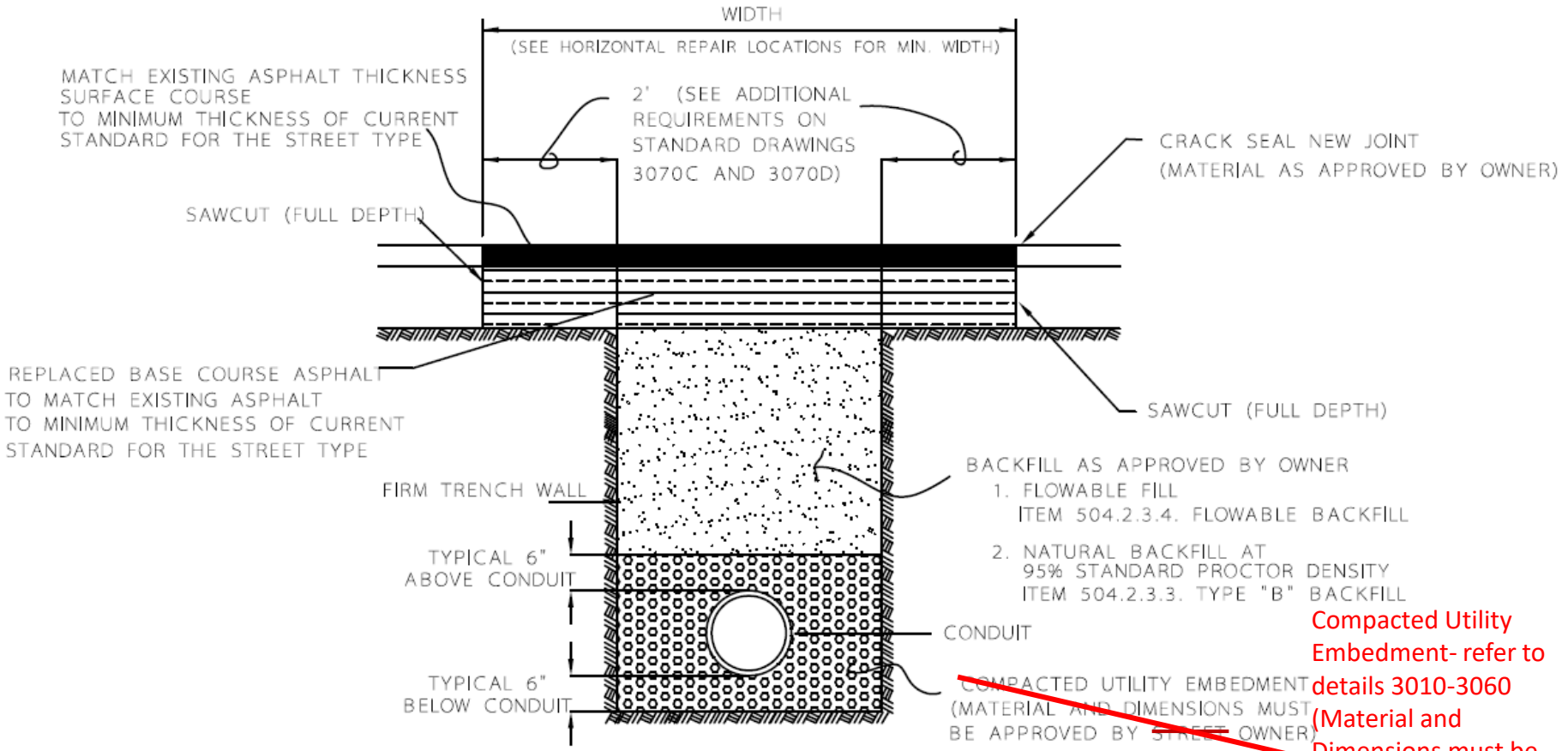
ASPHALT

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
402

DATE
OCT. '04

STANDARD DRAWING NO.
3070B



FULL DEPTH ASPHALT PAVEMENT

N.T.S.

Compacted Utility Embedment- refer to details 3010-3060 (Material and Dimensions must be approved by Owner)

Bottom Detail

PAVEMENT CUT AND REPAIR

ASPHALT

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
402

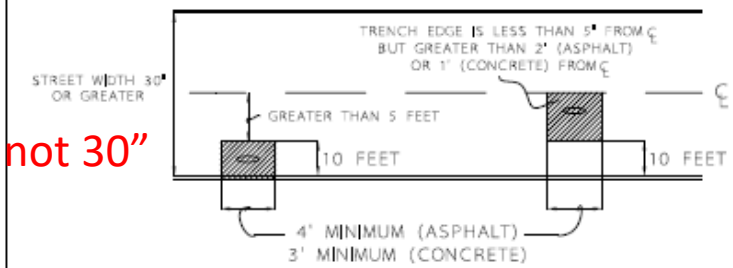
DATE
OCT. '04

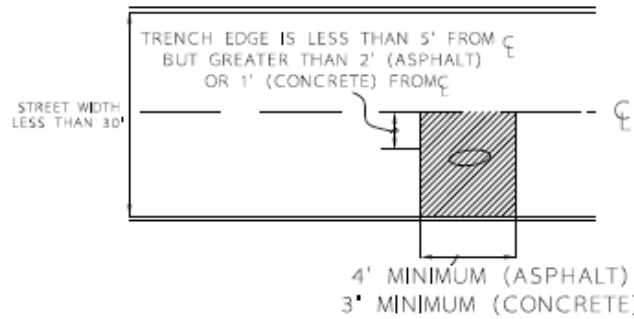
STANDARD DRAWING NO.
3070B

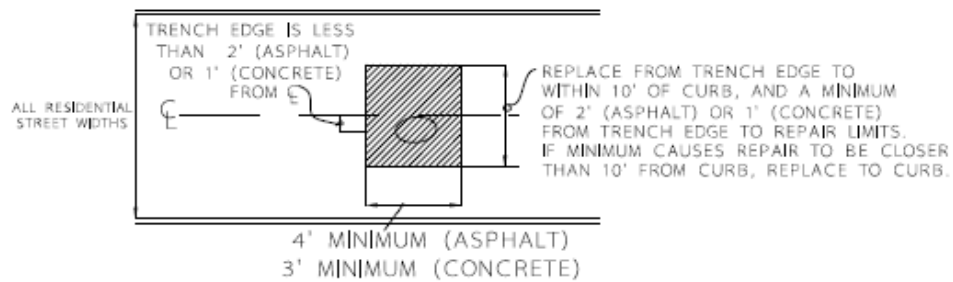
GENERAL NOTES

1. REMOVE AND REPLACE A MINIMUM OF 4' (ASPHALT) OR 3' (CONCRETE) LONGITUDINAL, OR 2' (ASPHALT) 1' (CONCRETE) FROM THE EDGE OF THE TRENCH, WHICHEVER IS GREATER
2. IF WITHIN 3' OF AN EXISTING JOINT, THEN REMOVE TO THE EXISTING JOINT
3. MULTIPLE LOCATIONS ARE TO BE A MINIMUM OF 10' APART FROM EDGE OF REPAIR TO EDGE OF REPAIR, IF LESS THAN 10' APART, A CONTINUOUS SECTION MUST BE REPLACED.
4. A GUTTER OF AT LEAST 12" MAY REMAIN, PROVIDED THAT THE CURB AND GUTTER IS NOT DAMAGED BY THE CONSTRUCTION ACTIVITY.
5. EXACT PAVEMENT REMOVAL LOCATIONS TO BE APPROVED BY OWNER PRIOR TO CONSTRUCTION.

30’ not 30”





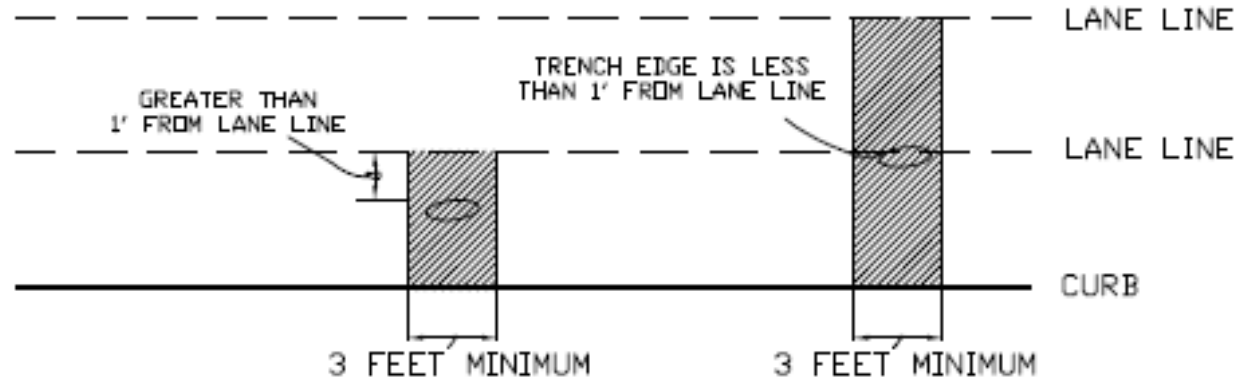


VARIABLE WIDTH RESIDENTIAL STREET

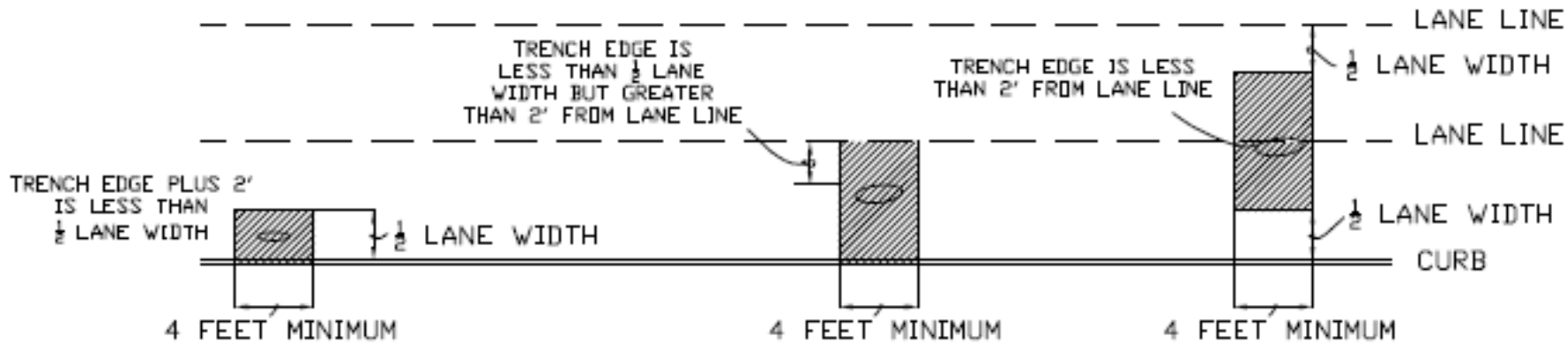
PAVEMENT CUT AND REPAIR	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 402	
EXTENT - RESIDENTIAL		DATE: OCT. '04	STANDARD DRAWING NO: 3070C

GENERAL NOTES

1. REMOVE AND REPLACE A MINIMUM OF 3' (CONCRETE) OR 4' (ASPHALT) LONGITUDINAL, OR 1' (CONCRETE) OR 2' (ASPHALT) FROM THE EDGE OF THE TRENCH, WHICHEVER IS GREATER
2. IF WITHIN 3' OF AN EXISTING JOINT, THEN REMOVE TO THE EXISTING JOINT
3. MULTIPLE LOCATIONS ARE TO BE A MINIMUM OF 10' APART FROM EDGE OF REPAIR TO EDGE OF REPAIR. IF LESS THAN 10' APART, A CONTINUOUS SECTION MUST BE REPLACED.
4. A GUTTER OF AT LEAST 12" MAY REMAIN, PROVIDED THAT THE CURB AND GUTTER IS NOT DAMAGED BY THE CONSTRUCTION ACTIVITY.
5. EXACT PAVEMENT REMOVAL LOCATIONS TO BE APPROVED BY OWNER PRIOR TO CONSTRUCTION.



VARIABLE WIDTH CONCRETE STREET WITH MULTIPLE LANES



VARIABLE WIDTH ASPHALT STREET WITH MULTIPLE LANES

STANDARD DRAWING NO. 3070D

PAVEMENT CUT AND REPAIR
EXTENT – MULTIPLE LANES

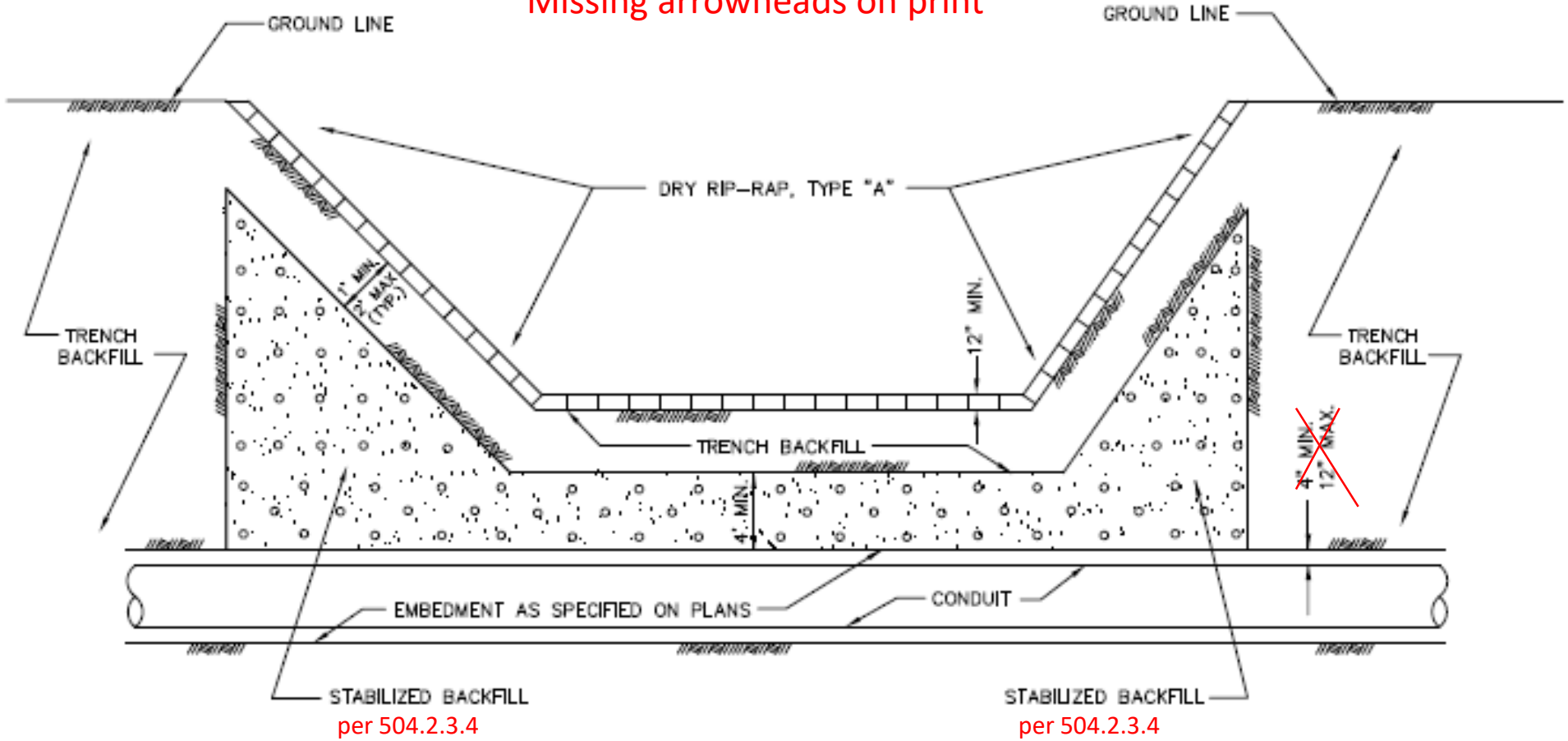
North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 402

DATE: OCT. '04

STANDARD DRAWING NO.: 3070D

Missing arrowheads on print



STANDARD DRAWING NO. 3080

INFILTRATION PROTECTION
CONDUIT UNDER CHANNEL

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
504; 803

DATE
OCT. '04

STANDARD DRAWING NO.
3080

Additional Comments

- Edit Spec 504.5.2.7 from granular material back to sand for water mains
- Edit Spec 504.5.2.12 to include granular material
- Incorporate note “Use 95% density under paved areas and 90% density in unpaved areas” into Specs 504.5
- Note 2 on 3070C change 3’ to 5’ only after the specs are modified (402.4.4 and others)

DRAFT

DIVISION 1000 EROSION AND SEDIMENT CONTROL

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1150B	**Wire Weir Curb Inlet Protection**	202.14 Pages 202-9 to 202-11
1160	**Curb Rock Sock On-Grade Curb Inlet Protection**	202.14 Pages 202-9 to 202-11
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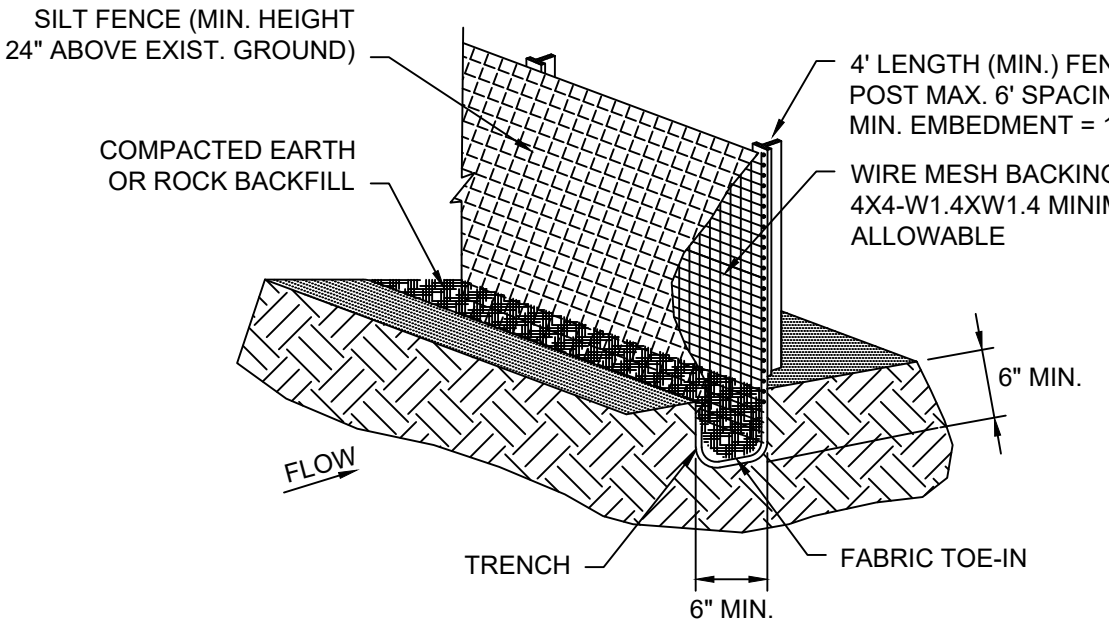
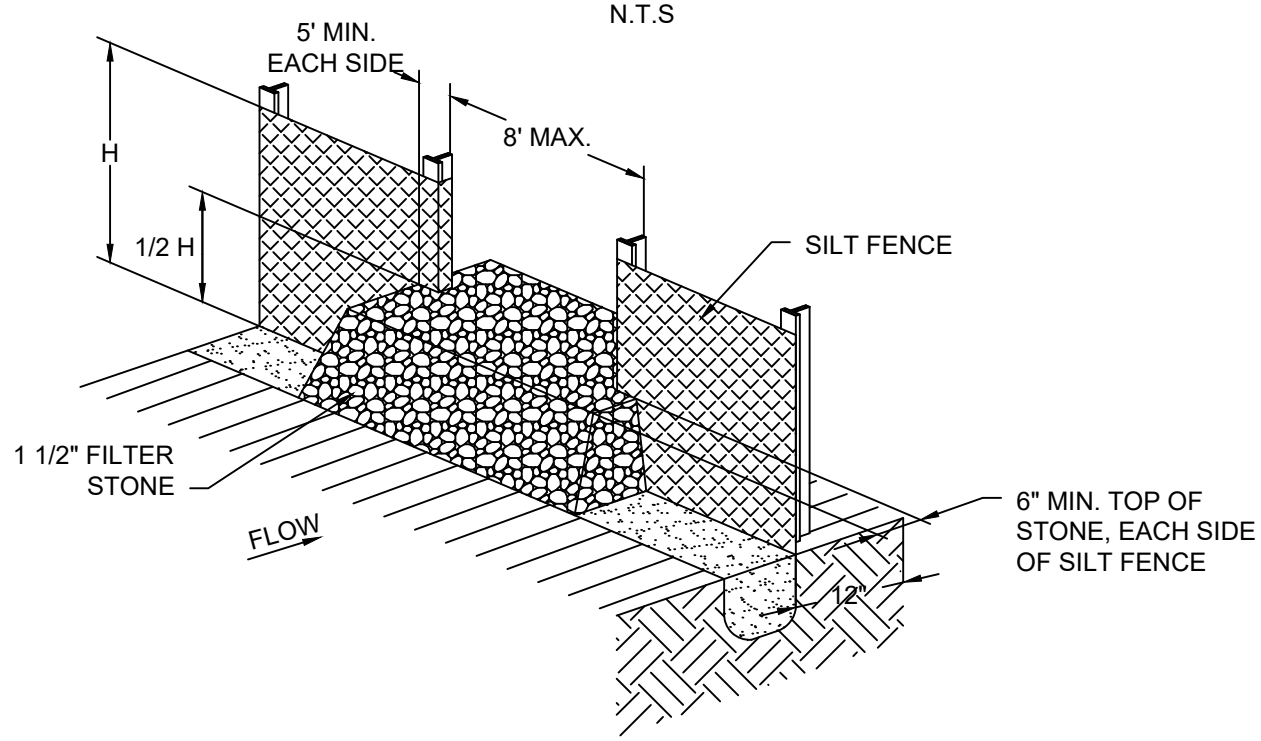
1260B	**Stream Trash Catch/Screen**	N/A
1270A	**Trash Rack Catch/Screen**	N/A
1270B	**Trash Rack Catch/Screen**	N/A

DRAFT



SILT FENCE

N.T.S



SILT FENCE OVERFLOW STRUCTURE

N.T.S

SILT FENCE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.5	
		DATE TBD	STANDARD DRAWING NO. 1020A

DRAFT

SILT FENCE GENERAL NOTES:

1. DESIGN SHALL SHOW ON THE DRAWINGS THE LOCATIONS WHERE OVERFLOW STRUCTURES SHALL BE INSTALLED. OVERFLOW STRUCTURES ARE REQUIRED AT ALL LOW POINTS AND AT A SPACING OF APPROXIMATELY 300 FEET WHERE NO LOW POINT IS APPARENT.

2. DESIGNER SHALL SHOW ON THE DRAWINGS THE LOCATIONS WHERE SILT FENCE IS TO BE TURNED UPSLOPE AT THE ENDS. UPSLOPE LENGTHS SHALL BE A MINIMUM OF 10 FEET.

3. POST WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.

4. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

5. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

6. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WIRE BACKING, WHICH IN TURN IS ATTACHED TO THE FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.

7. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

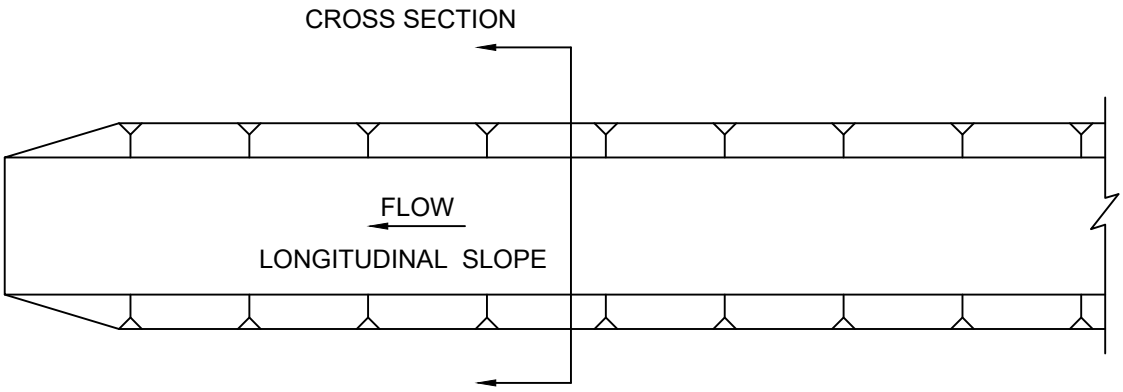
8. SILT FENCE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.

9. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

10. SEE NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.5

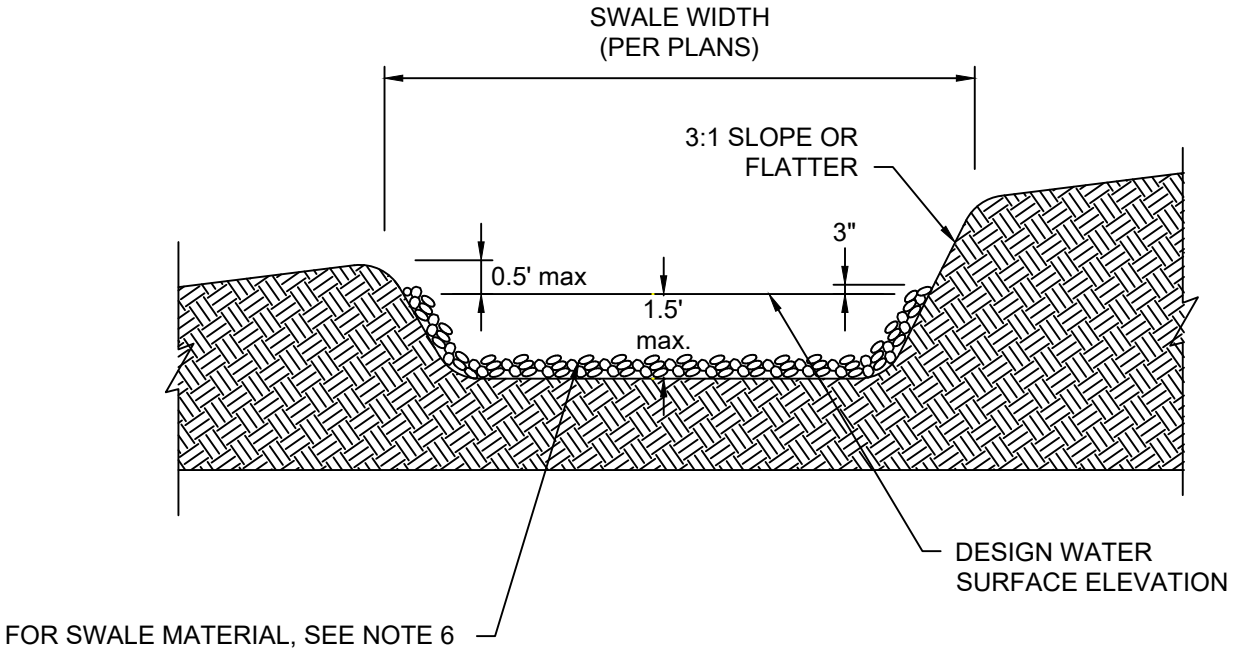
SILT FENCE GENERAL NOTES	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.5
		DATE TBD
		STANDARD DRAWING NO. 1020B

DRAFT



INTERCEPTOR SWALE PLAN VIEW

N.T.S.



INTERCEPTOR SWALE CROSS SECTION

N.T.S.

INTERCEPTOR SWALE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.6	
		DATE TBD	STANDARD DRAWING NO. 1030A

DRAFT

INTERCEPTOR SWALE GENERAL NOTES:

1. ALL TREES, BRUSH, STUMPS, OBSTUCTIONS AND OTHER MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.

2. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE AND CROSS-SECTION AS REQUIRED TO MEET CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.

3. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE DISPOSED OF IN AN APPROVED SPOILS SITE SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.

4. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED UPLAND AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.

5. THE ON-SITE LOCATION MAY NEED TO BE ADJUSTED TO MEET FIELD CONDITIONS IN ORDER TO UTILIZE THE MOST SUITABLE OUTLET.

6. FOR LONGITUDINAL SLOPES LESS THAN 2 PERCENT AND VELOCITIES LESS THAN 6 FEET PER SECOND, THE MINIMUM REQUIRED SWALE STABILIZATION SHALL BE GRASS, EROSION CONTROL MATS OR MULCHING. FOR LONGITUDINAL SLOPES IN EXCESS OF 2 PERCENT OR VELOCITIES EXCEEDING 6 FEET PER SECOND, STABILIZATION IS REQUIRED IN THE FORM OF TURF REINFORCEMENT MATS (OR STABILIZED RIP-RAP WITH APPROPRIATE SIZE, GRADATION, AND THICKNESS AS SPECIFIED IN THE PLANS). SEE NOTES 9 AND 10.

7. MINIMUM COMPACTION FOR THE SWALE SHALL BE 95 PERCENT STANDARD PROCTOR.

8. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

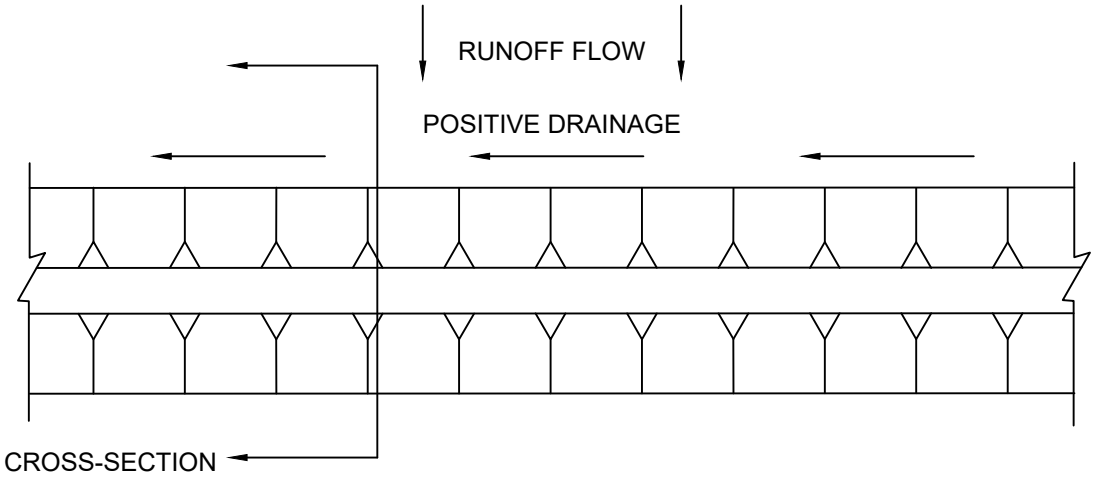
9. FOR TEMPORARY STABILIZATION RIP-RAP; WIDTH, DEPTH, AND SURFACE WATER ELEVATION SHOULD BE DESIGNED BY OWNER OR OWNER'S REPRESENTATIVE

10. REFER TO DRAWING 1210A, B, AND C FOR TURF REINFORCEMENT MAT.

11. SEE INTEGRATED STORMWATER MANAGEMENT MANUAL FOR MORE INFORMATION ON INTERCEPTOR SWALE.

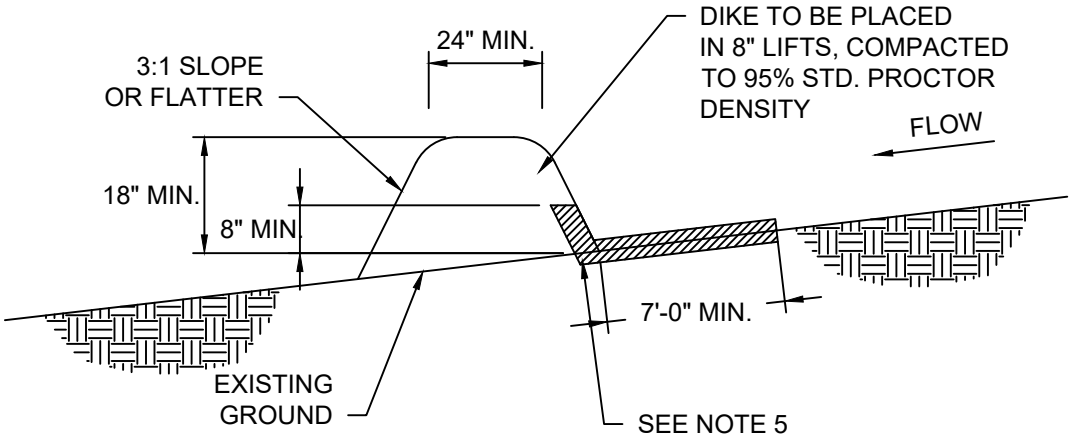
INTERCEPTOR SWALE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.6	
GENERAL NOTES		DATE TBD	STANDARD DRAWING NO. 1030B

DRAFT



PLAN VIEW

N.T.S

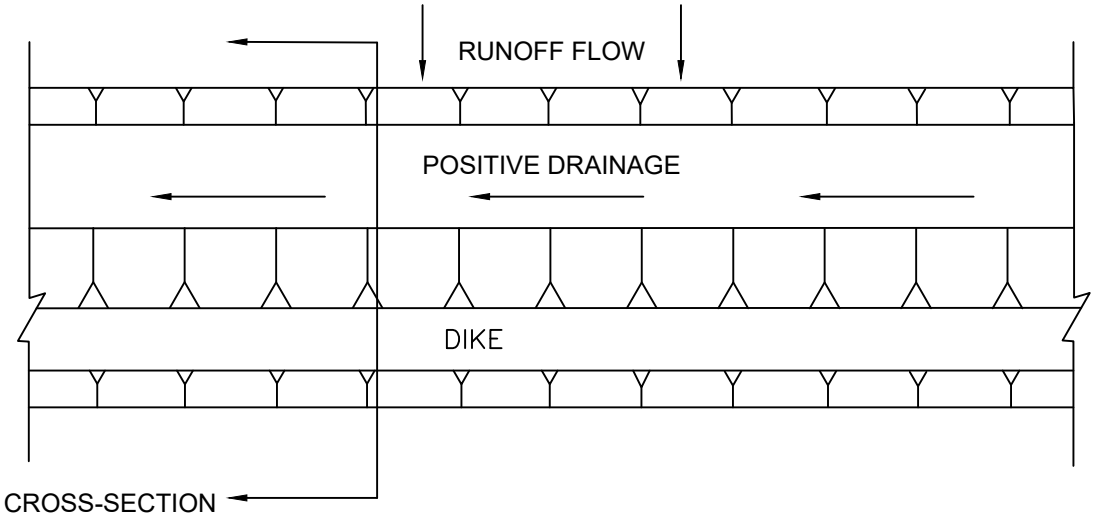


CROSS SECTION

N.T.S

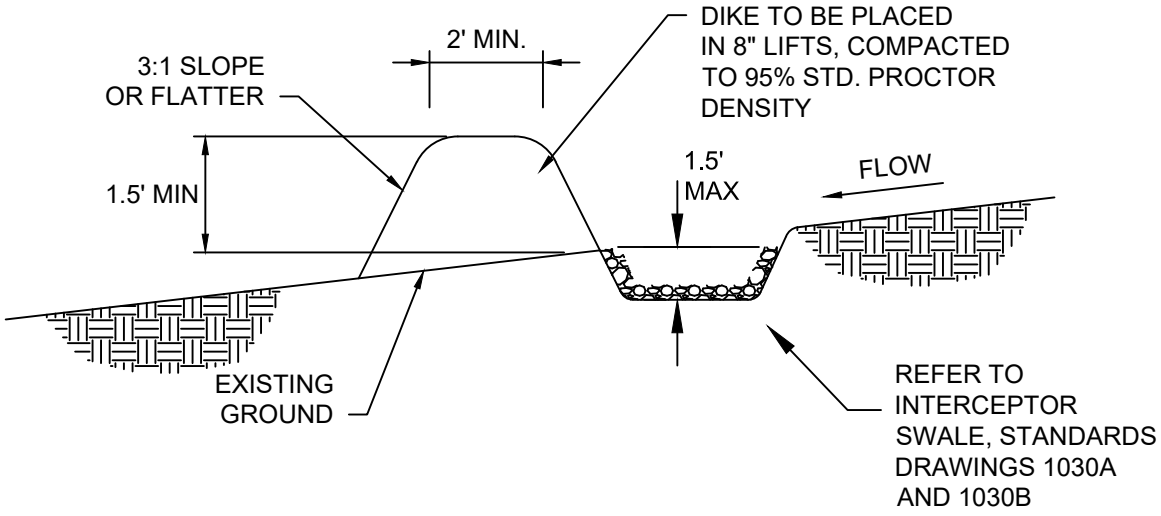
DIVERSION DIKE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.7	
		DATE TBD	STANDARD DRAWING NO. 1040A

DRAFT



DIVERSION DIKE WITH SWALE PLAN VIEW

N.T.S



DIVERSION DIKE WITH SWALE CROSS SECTION

N.T.S

DIVERSION DIKE WITH SWALE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.7	
		DATE TBD	STANDARD DRAWING NO. 1040B

DRAFT

DIVERSION DIKE GENERAL NOTES:

1. ALL DIKES SHALL BE PLACED IN 8" LIFTS OR LESS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.

2. ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO A CONTROLLED OUTLET.

3. DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL HAVE ITS OUTLET FLOW DIRECTED TO AN UNDISTURBED STABILIZED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE. REFER TO ITEM 202.7 IN THE STANDARD SPECIFICATIONS.

4. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.

5. FOR LONGITUDINAL SLOPES LESS THAN 2 PERCENT AND VELOCITIES LESS THAN 6 FEET PER SECOND, THE MINIMUM REQUIRED SWALE STABILIZATION SHALL BE GRASS, EROSION CONTROL MATS OR MULCHING. FOR LONGITUDINAL SLOPES IN EXCESS OF 2 PERCENT OR VELOCITIES EXCEEDING 6 FEET PER SECOND, STABILIZATION IS REQUIRED IN THE FORM OF TURF REINFORCEMENT MATS (OR STABILIZED RIP-RAP WITH APPROPRIATE SIZE, GRADATION, AND THICKNESS AS SPECIFIED IN THE PLANS). SEE NOTES 8 AND 9.

6. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

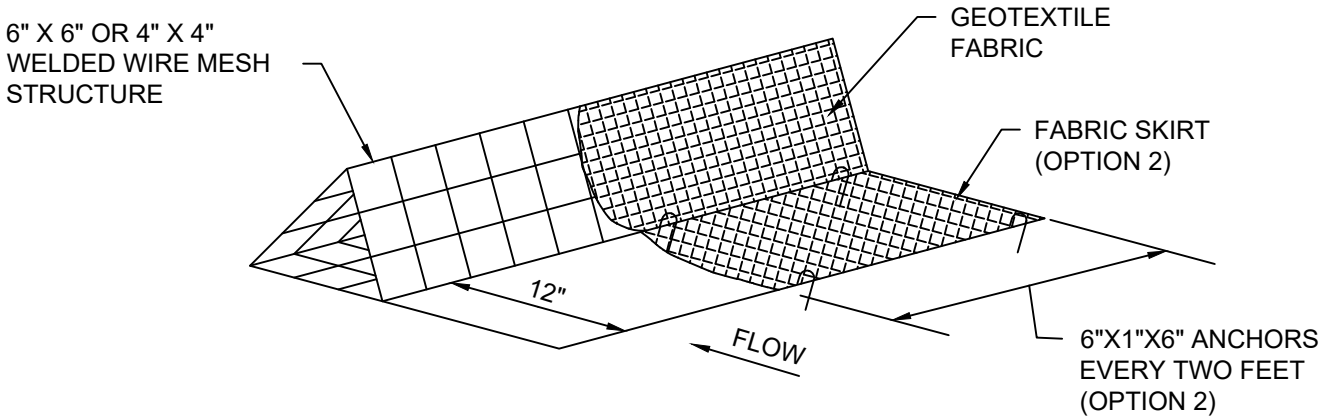
7. SEE INTEGRATED STORMWATER MANAGEMENT MANUAL FOR MORE INFORMATION ON INTERCEPTOR SWALE.

8. FOR TEMPORARY STABILIZATION RIP-RAP; WIDTH, DEPTH, AND SURFACE WATER ELEVATION SHOULD BE DESIGNED BY OWNER OR OWNER'S REPRESENTATIVE.

9. REFER TO DRAWING 1230A AND B FOR TURF REINFORCEMENT MAT.

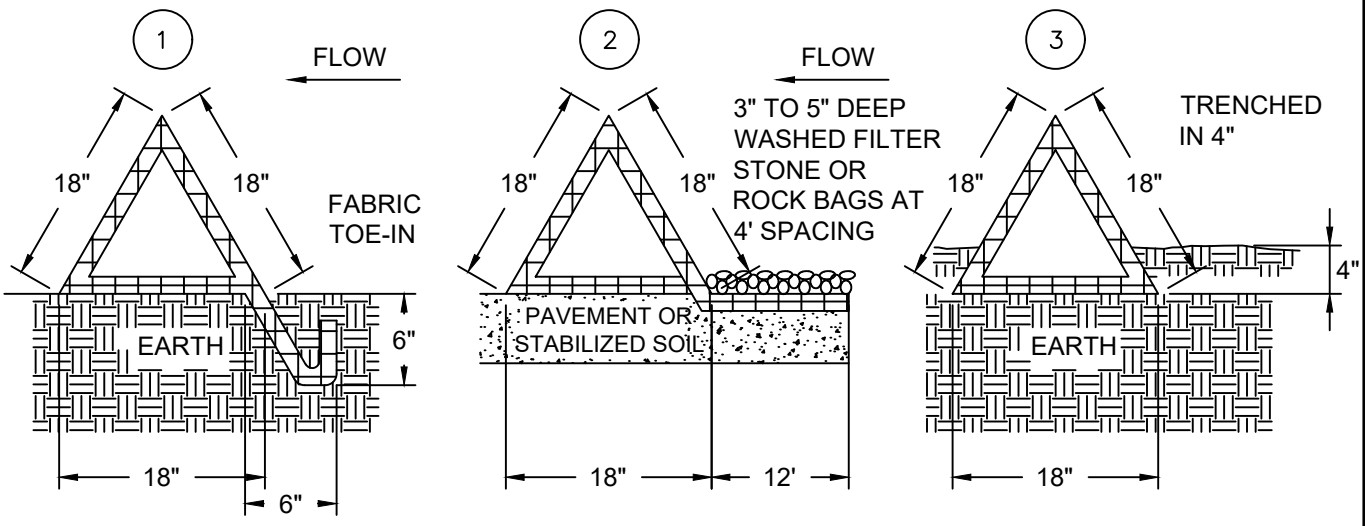
DIVERSION DIKE GENERAL NOTES	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.7	
		DATE TBD	STANDARD DRAWING NO. 1040C

DRAFT



ISOMETRIC PLAN VIEW

N.T.S



1. TOE-IN 6" MIN.
2. FABRIC SKIRT WEIGHTED WITH FILTER STONE
   (ROCK BAGS MAY BE SUBSTITUTED FOR FILTER STONE)
3. TRENCHED IN 4"

CROSS SECTION OF INSTALLATION OPTIONS

N.T.S

TRIANGULAR SEDIMENT FILTER DIKE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.8	
		DATE TBD	STANDARD DRAWING NO. 1050A

DRAFT

TRIANGULAR SEDIMENT FILTER DIKE GENERAL NOTES:

1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.

2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE, AND FABRIC SHALL BE OVERLAPPED A MINIMUM OF 12".

3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF TYPE 'A' RIP RAP, OR TOED–IN 6" WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED TO A DEPTH OF 4 INCHES.

4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 6–INCH WIRE STAPLES ON 2–FOOT CENTERS ON BOTH EDGES AND SKIRTS.

5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 6" TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.

6. THE DIKE STRUCTURE SHALL BE W2.9–6" X 6" OR 4" X 4" WELDED WIRE MESH, 18" ON A SIDE.

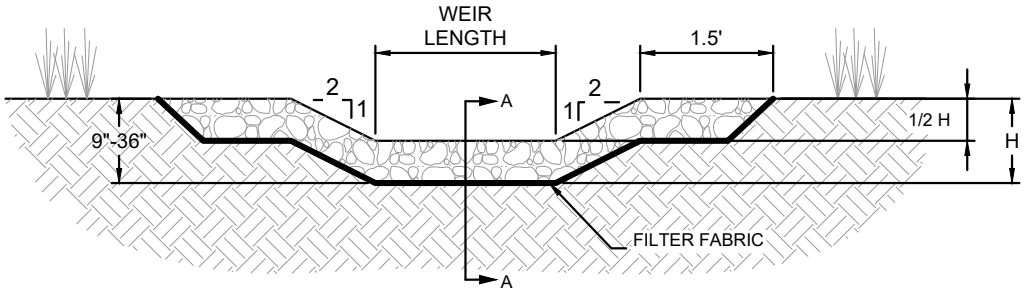
7. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.

8. THE FILTER DIKE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.

9. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES APPROXIMATELY 6–INCHES IN DEPTH. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

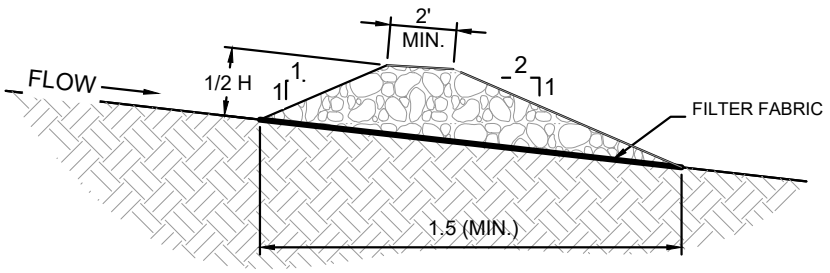
TRIANGULAR SEDIMENT FILTER DIKE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.8
GENERAL NOTES		DATE TBD / STANDARD DRAWING NO. 1050B

DRAFT



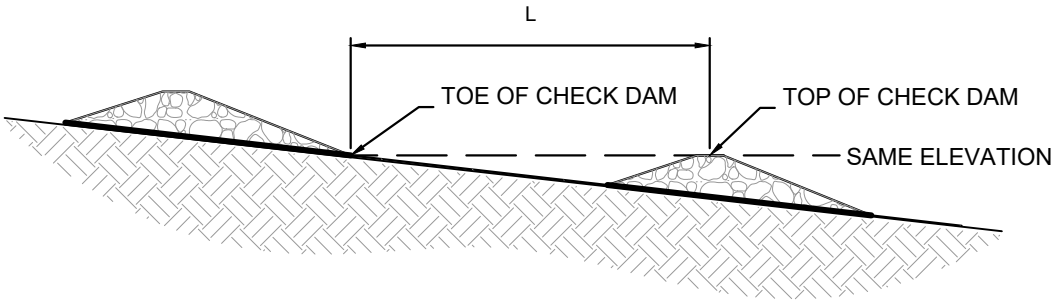
ROCK CHECK DAM VIEW LOOKING UPSTREAM

N.T.S.



CROSS SECTION A-A

N.T.S.



SPACE BETWEEN ROCK CHECK DAMS

N.T.S.

NOTES:
ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH. HEIGHT (H) AND SPACING (L) OF CHECK DAM AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.

ROCK CHECK DAM	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.9	
		DATE TBD	STANDARD DRAWING NO. 1060A

DRAFT

ROCK CHECK DAM GENERAL NOTES:

1. SEE NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.9 CHECK DAM (ROCK)

2. STONE SHALL BE WELL GRADED WITH SIZE RANGE FROM 1½ TO 3½ INCHES IN DIAMETER DEPENDING ON EXPECTED FLOWS.

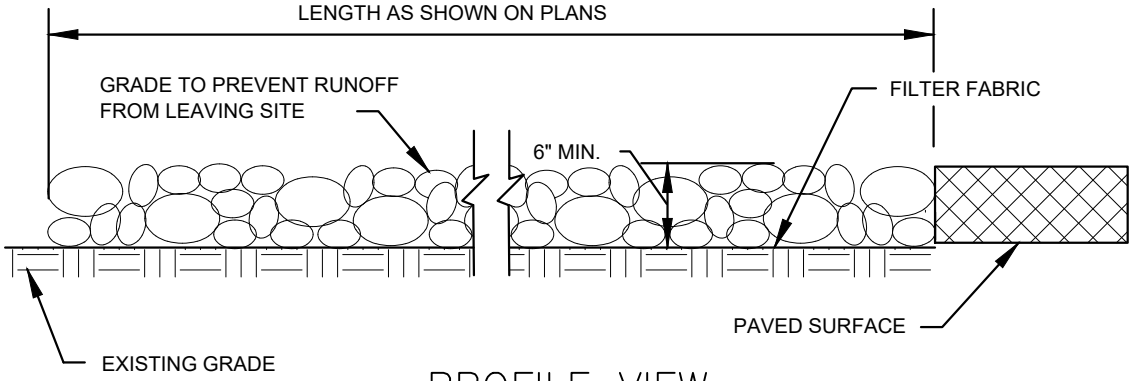
3. THE CHECK DAM SHALL BE INSPECTED AS SPECIFIED IN THE SWPPP AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

4. WHEN SILT REACHES A DEPTH EQUAL TO ONE–THIRD OF THE HEIGHT OF THE CHECK DAM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.

5. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED, THE CHECK DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

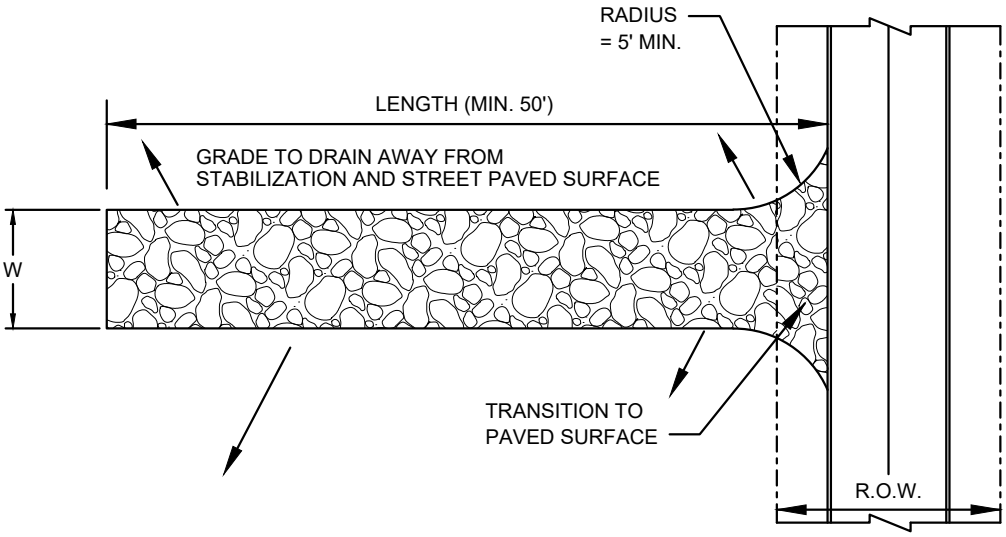
ROCK CHECK DAM	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.9	
GENERAL NOTES		DATE TBD	STANDARD DRAWING NO. 1060B

DRAFT



PROFILE VIEW

N.T.S.



WIDTH (W)
20' MIN. FOR < 5 AC SITES
30' MIN. FOR > 5 AC SITES

PLAN VIEW

N.T.S.

EXIT MUST BE SLOPED SO THAT
STORM WATER IS NOT ALLOWED TO
LEAVE THE SITE AND ENTER ROADWAYS

STABILIZED CONSTRUCTION EXIT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.11	
		DATE TBD	STANDARD DRAWING NO. 1070A

DRAFT

STABILIZED CONSTRUCTION EXIT GENERAL NOTES:

1. SEE NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.11

2. THE THICKNESS SHALL NOT BE LESS THAN 6 INCHES.

3. STONE SHALL BE 3 TO 5 INCH DIAMETER COURSE AGGREGATE, NO CRUSHED PORTLAND CEMENT CONCRETE ALLOWED.

4. LENGTH SHALL BE SHOWN ON PLANS, WITH A MINIMUM LENGTH OF 50 FEET.

5. THE WIDTH SHALL BE NO LESS THAN 20' FOR SITES LESS THAN 5 AC, AND 30' FOR SITES GREATER THAN 5 AC, AT ALL POINTS OF INGRESS OR EGRESS.

6. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED EXIT. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.

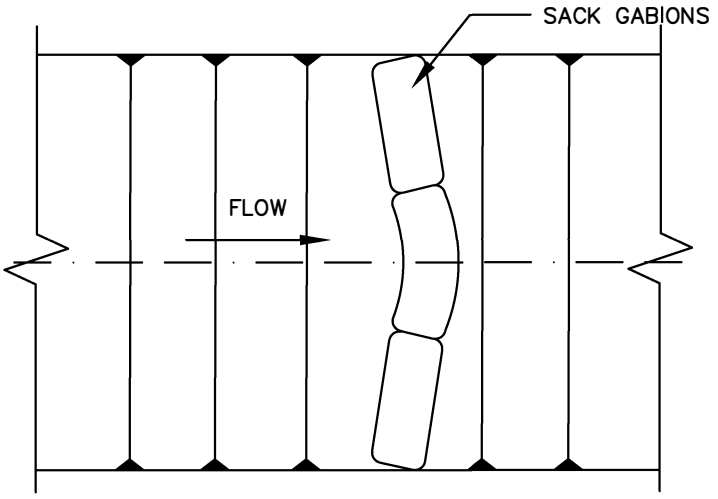
7. THE EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.

8. THE EXIT MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

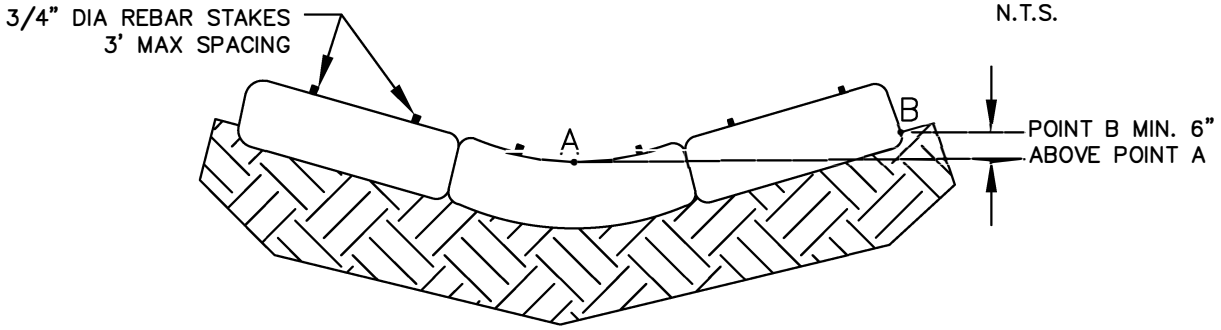
9. INSPECTION SHALL BE SPECIFIED IN THE SWPPP.

STABILIZED CONSTRUCTION EXIT, GENERAL NOTES	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.11	
		DATE TBD	STANDARD DRAWING NO. 1070B

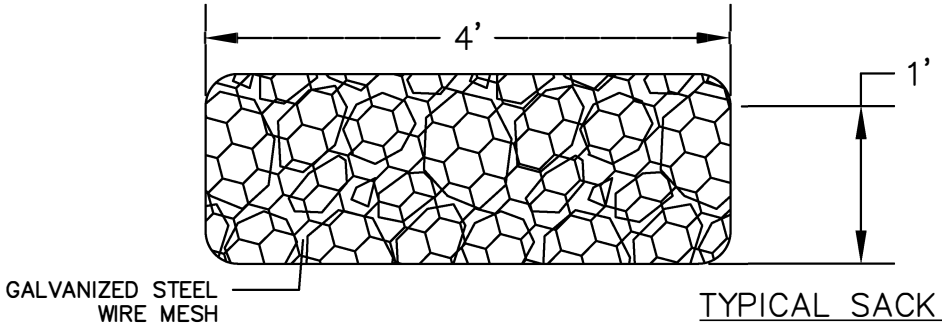
DRAFT



SACK GABION CHECK DAM PLAN VIEW
N.T.S.



SACK GABION CHECK DAM VIEW LOOKING UPSTREAM
N.T.S.



TYPICAL SACK GABION
N.T.S.

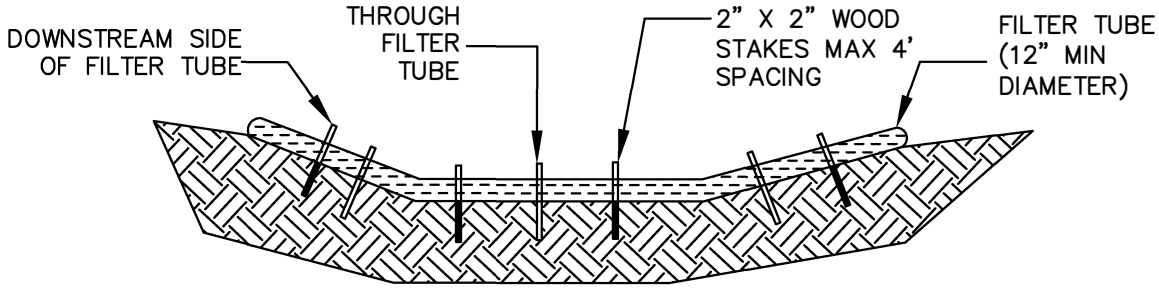
SACK GABION CHECK DAM GENERAL NOTES:

1. ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH.
2. HEIGHT (H) AND SPACING (L) OF CHECK DAM AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.

NOTES:
ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH. HEIGHT (H) AND SPACING (L) OF CHECK DAM AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.

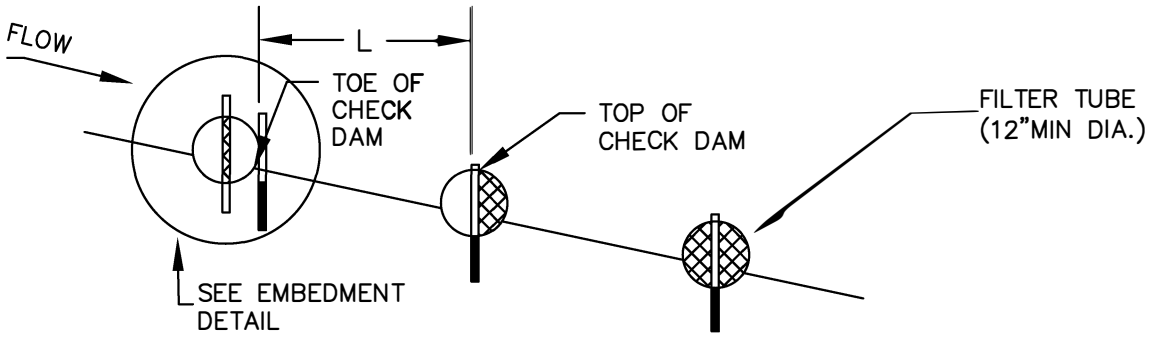
SACK GABION CHECK DAMS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: N/A	
		DATE: TBD	STANDARD DRAWING NO.: 1080

DRAFT



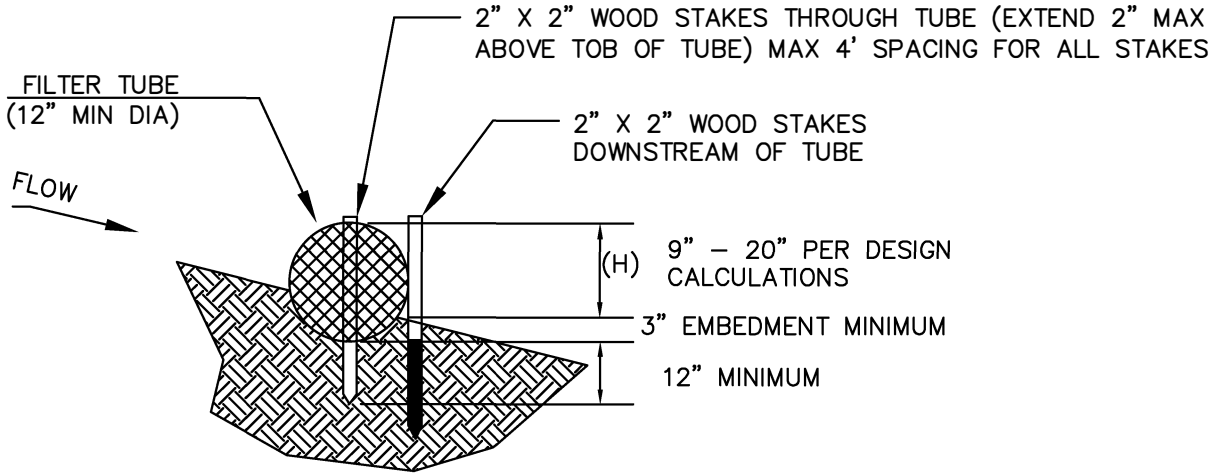
FILTER TUBE CHECK DAM VIEW LOOKING UPSTREAM

N.T.S.



FILTER TUBE CHECK DAM PROFILE

N.T.S.



EMBEDMENT DETAIL FOR FILTER TUBE CHECK DAM

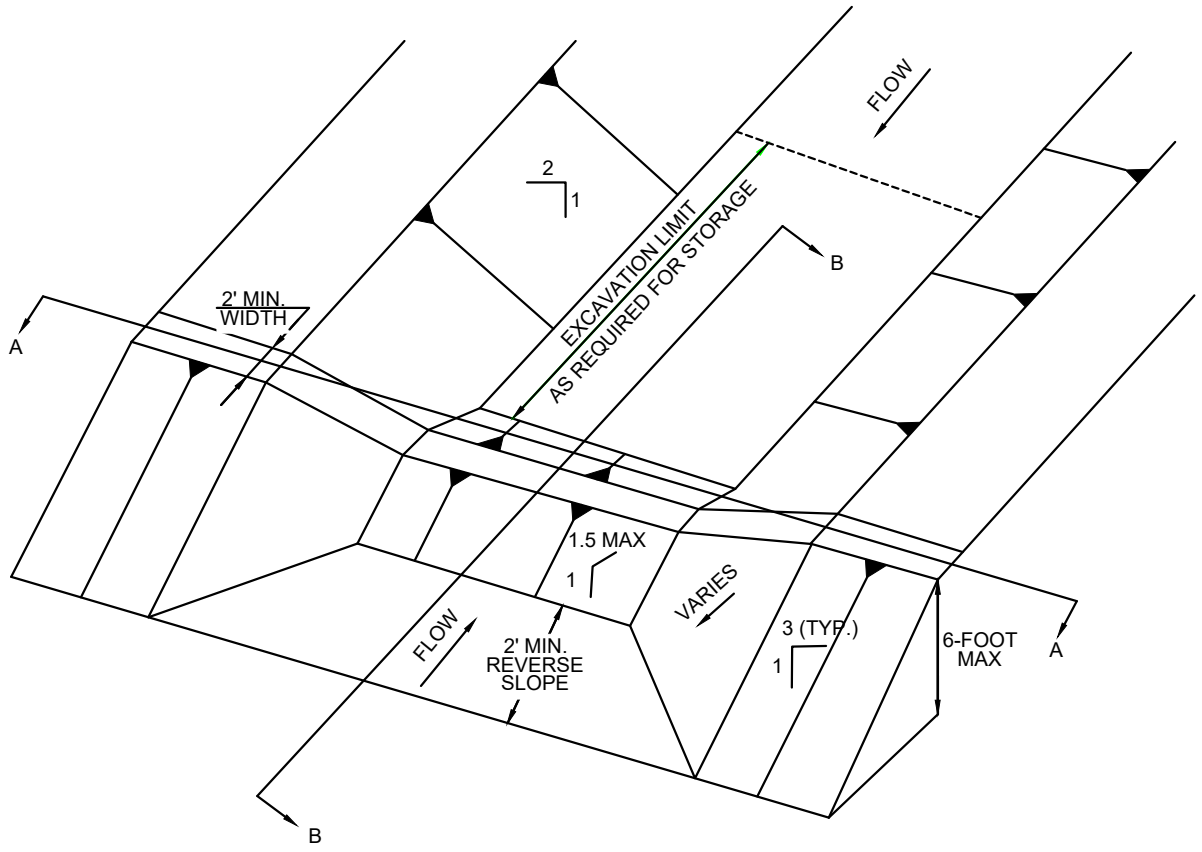
N.T.S.

GENERAL NOTES:

1. ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH.
2. HEIGHT (H) AND SPACING (L) OF CHECK DAM AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.

FILTER TUBE CHECK DAM	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.10	
		DATE TBD	STANDARD DRAWING NO. 1090

DRAFT



EXCAVATED STONE OUTLET SEDIMENT TRAP ISOMETRIC VIEW

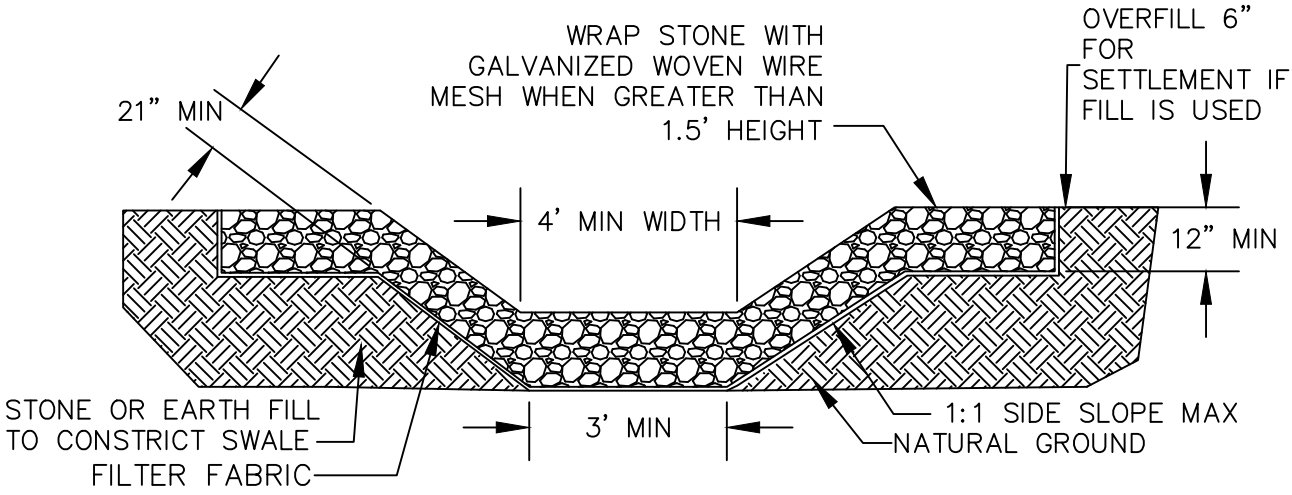
N.T.S.

NOTE: ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETER USED TO DESIGN THE TRAP.

- ·SIZE OF CONTRUBUTING DRAINAGE AREA
- ·DESIGN STORM VOLUME AND FLOW RATE AT THE TRAP
- ·HEIGHT, SLOPE, AND LENGTH OF STONE OUTLET
- ·STORAGE VOLUME
- ·EXTENT OF GRADING TO PROVIDE THE CONTROLLED OUTLET

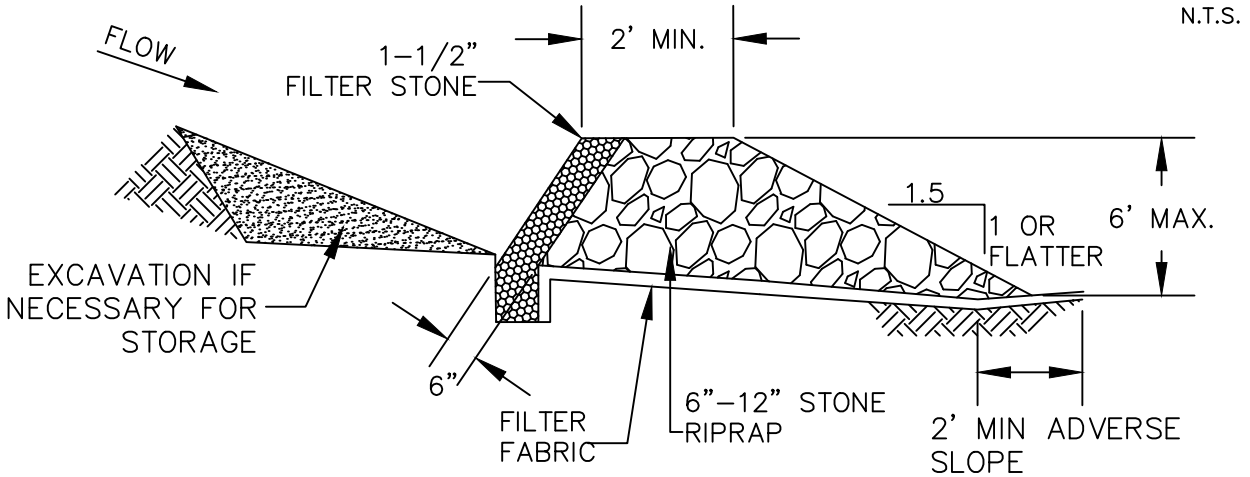
EXCAVATED STONE OUTLET SEDIMENT TRAP	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.12	
		DATE TBD	STANDARD DRAWING NO. 1100A

DRAFT



EXCAVATED STONE OUTLET SEDIMENT TRAP VIEW LOOKING UPSTREAM

N.T.S.



EXCAVATED STONE OUTLET SEDIMENT TRAP SECTION VIEW

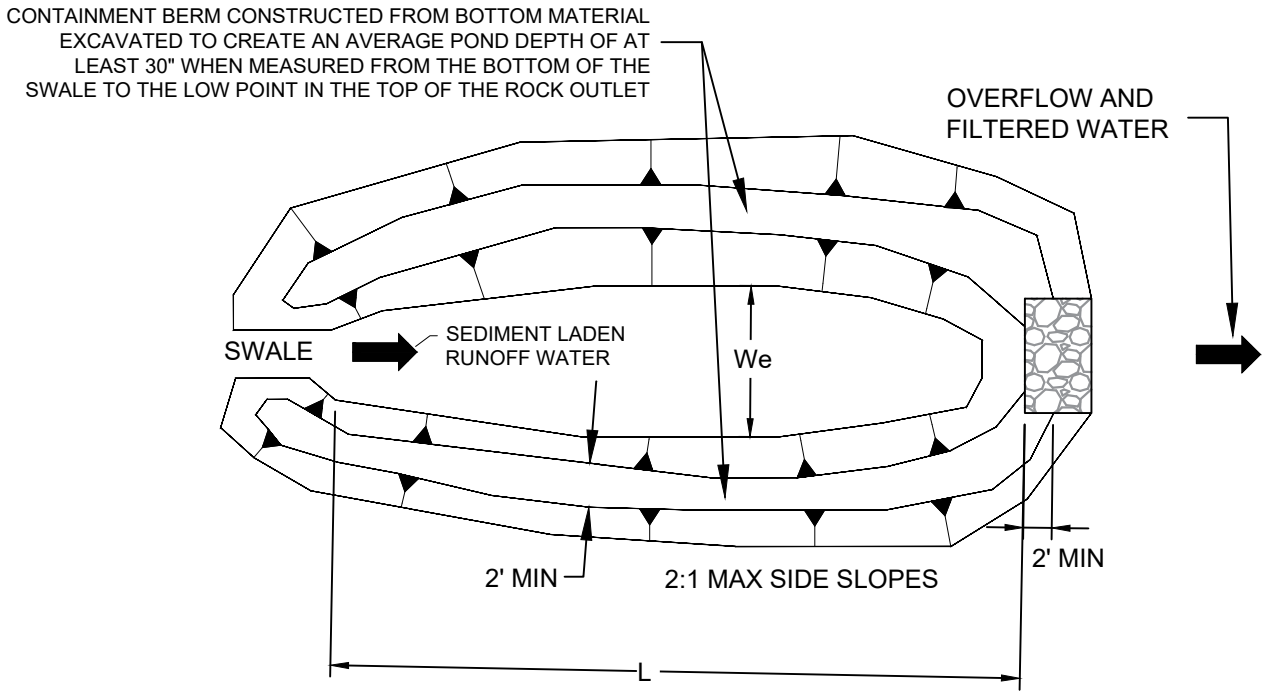
N.T.S.

NOTES:

- ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TYPOLOGY.
- PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.
- DESIGN VOLUME, HEIGHT, SLOPE, AND LENGTH AS PROVIDED IN PLANS PROVIDED BY OWNER OR OWNER'S REPRESENTATIVE.

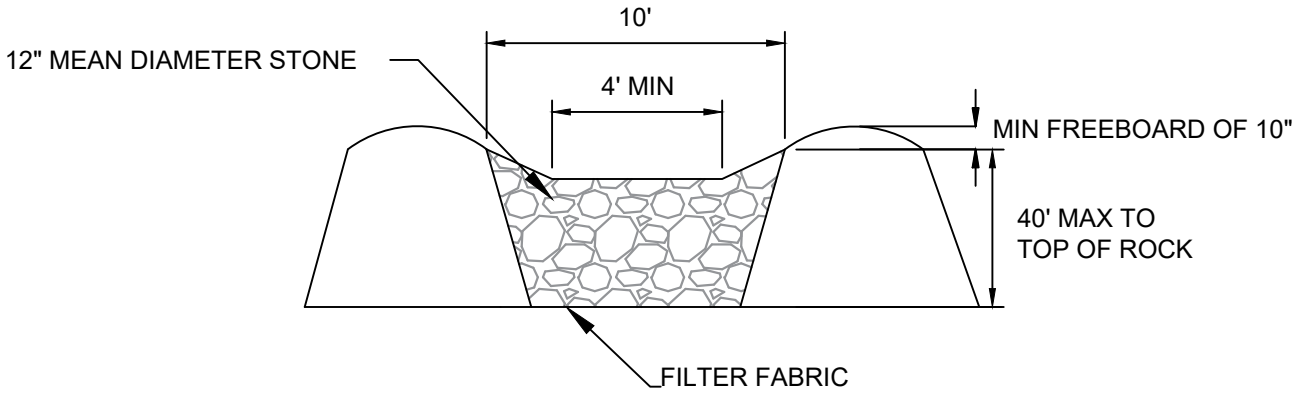
EXCAVATED STONE OUTLET	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.12	
SEDIMENT TRAP, GENERAL NOTES		DATE TBD	STANDARD DRAWING NO. 1100B

DRAFT



BERMED STONE OUTLET SEDIMENT TRAP PLAN VIEW

N.T.S.



BERMED STONE OUTLET SEDIMENT TRAP SECTION VIEW

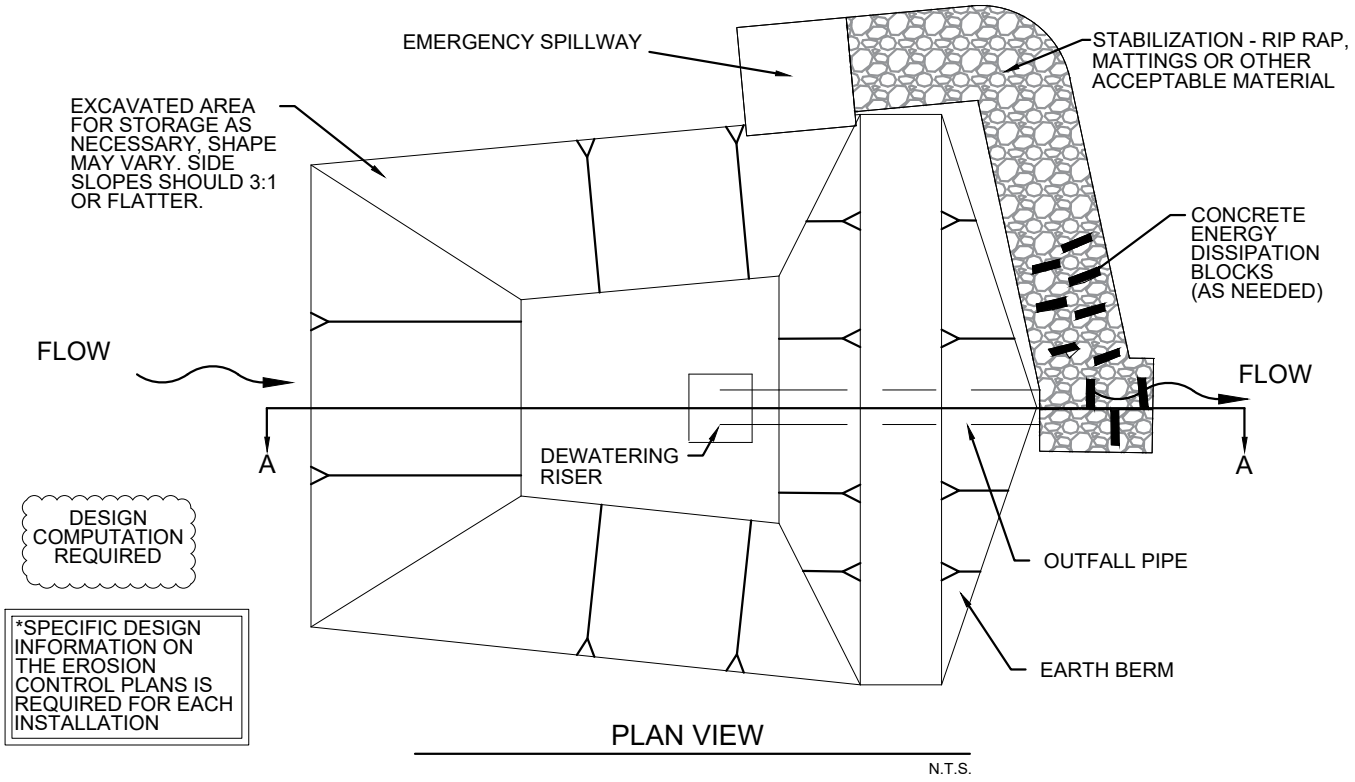
N.T.S.

GENERAL NOTES:

1. ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY.
2. PROVIDE CALCULATIONS UPON REQUEST OF THE REVIEWING AGENCY.
3. DESIGN OF VOLUME, HEIGHT, SLOPE, AND LENGTH AS PROVIDED IN PLANS PROVIDED BY OWNER OR OWNER'S REPRESENTATIVE.

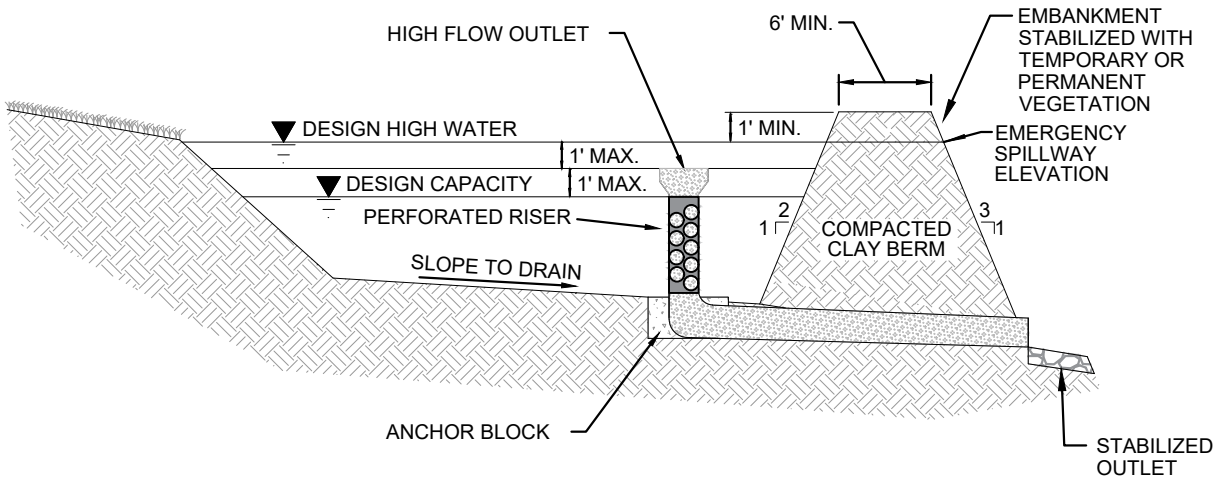
BERMED STONE OUTLET SEDIMENT TRAP	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.12	
		DATE TBD	STANDARD DRAWING NO. 1110

DRAFT



PLAN VIEW

N.T.S.



CROSS SECTION A-A

N.T.S.

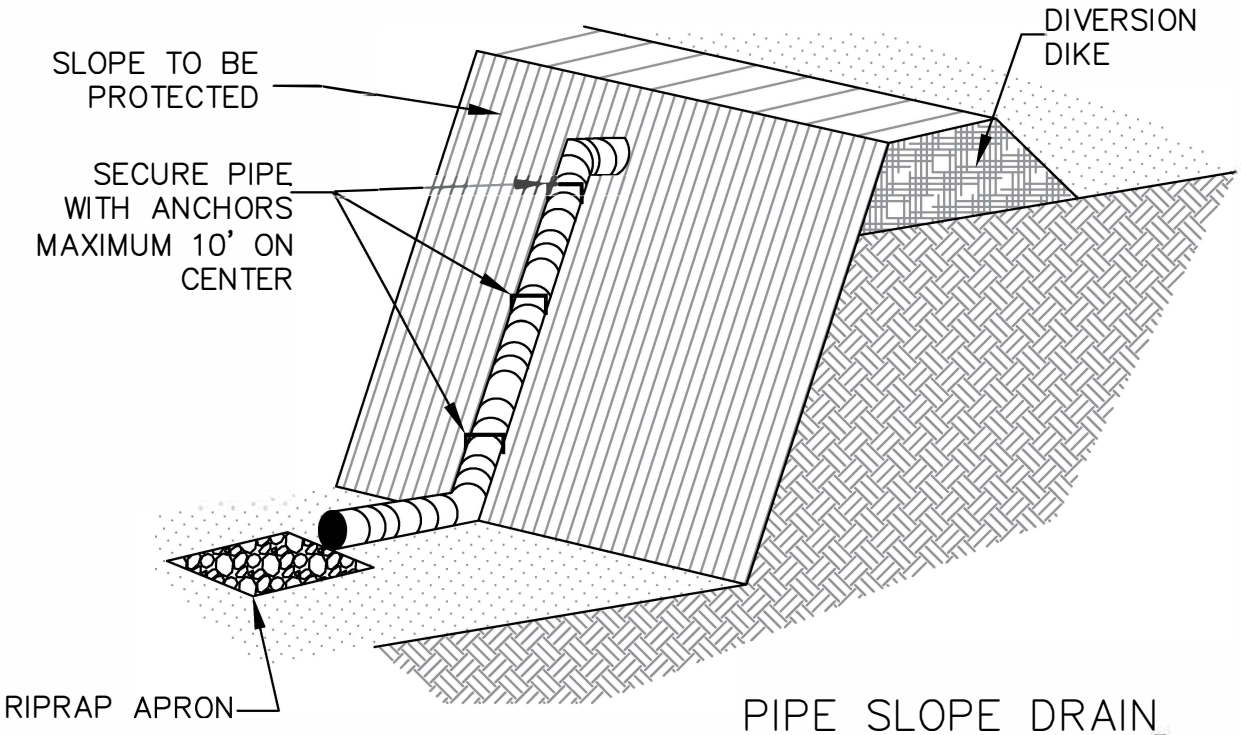
REFERENCE: NCTCOG iSWM CRITERIA MANUAL FOR SITE DEVELOPMENT AND CONSTRUCTION, SECTION 3.9 SEDIMENT BASIN.

NOTE:

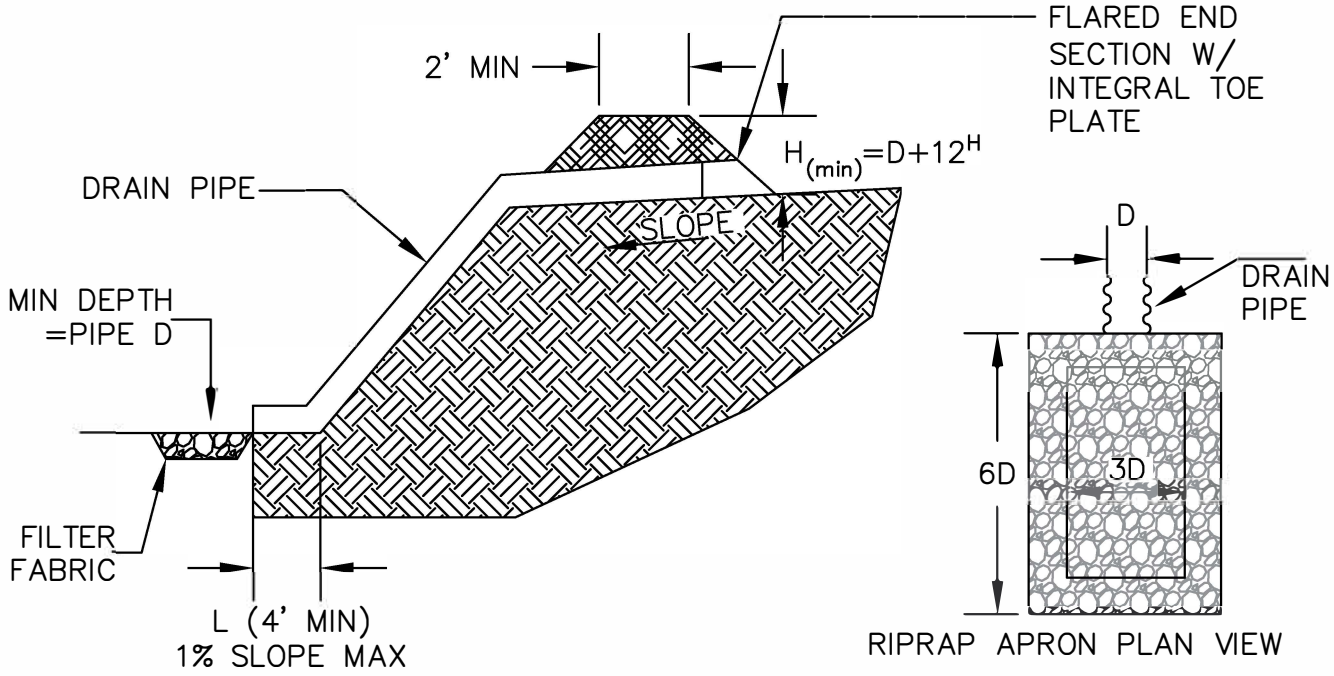
1. PIPE SIZE, ROCK SIZE, AND BERM HEIGHT AS PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE.
2. OPTIONAL: A COLLAR OF 1.5 - 3 INCH, WELL GRADED GRAVEL (NOT SHOWN) MAY BE PLACED AROUND THE PERFORATED RISER.

SEDIMENT BASIN WITH OVERFLOW RISER	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: N/A
		DATE: TBD
		STANDARD DRAWING NO.: 1120

DRAFT



PIPE SLOPE DRAIN
N.T.S.



PIPE SLOPE DRAIN CROSS-SECTION AND APRON PLAN VIEW
N.T.S.

PIPE SLOPE DRAIN	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.13	
		DATE TBD	STANDARD DRAWING NO. 1130A

DRAFT

GENERAL NOTES:

1. DIMENSIONS OF THE PIPE SLOPE DRAIN AND APPURTENANCES SHALL BE DESIGNED BASED ON SITE TOPOGRAPHY AND FLOW CONDITIONS.

2. H, L, AND D AS SHOWN SHALL BE PROVIDED IN PLANS BY OWNER OR OWNER'S REPRESENTATIVE.

3. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE PIPE SLOPE DRAIN UPON REQUEST OF THE REVIEWING AGENCY.
   - PIPE MATERIAL AND SIZE
   - DISCHARGE VELOCITY
   - STONE SIZE AND DIMENSIONS OF RIPRAP APRON
   - PIPE LENGTH AND SLOPE

PIPE SLOPE DRAIN GENERAL NOTES	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.13 DATE: TBD STANDARD DRAWING NO.: 1130B

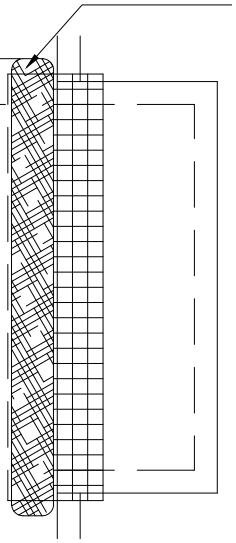
DRAFT

NOT ALLOWED ON ACTIVE CITY STREETS UNLESS APPROVED BY CITY

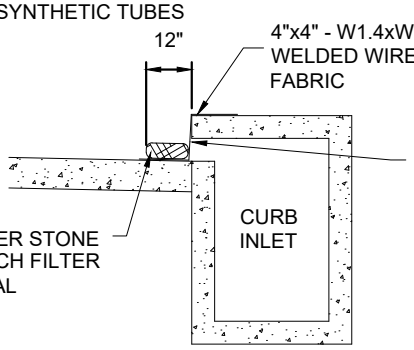
EXTENDED WRAPPED FILTER MATERIAL 24" MIN. BEYOND END OF CURB OPENING ON BOTH SIDES

1. DOUBLE WRAP OF FLEXIBLE WIRE MESH WITH MESH OPENING 3/4" MAX., OR
2. PLASTIC NETTING DOUBLE WRAPPED WITH 1/2" MAX. OPENING, OR
3. GEOSYNTHETIC TUBES

NOTE: PLASTIC OR WIRE TIES AROUND WIRE OR PLASTIC MESH EVERY 12"-18" OR MORE AS NEEDED



PLAN VIEW

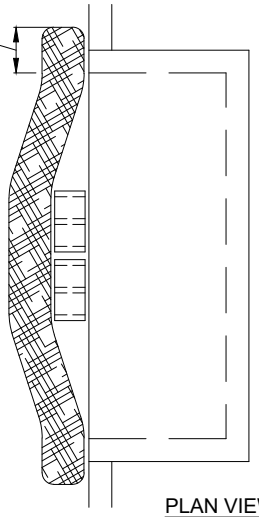


CROSS SECTION

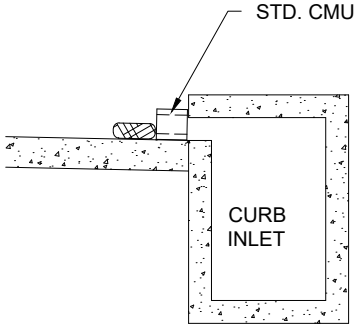
NOTE: VERTICAL PANEL BARRICADES TO BE PLACED WHEN LOCATED ON AN ACTIVE STREET.

TYPE A CURB INLET PROTECTION

EXTENDED WRAPPED FILTER MATERIAL 24" MIN. BEYOND END OF CURB OPENING ON BOTH SIDES



PLAN VIEW



CROSS SECTION

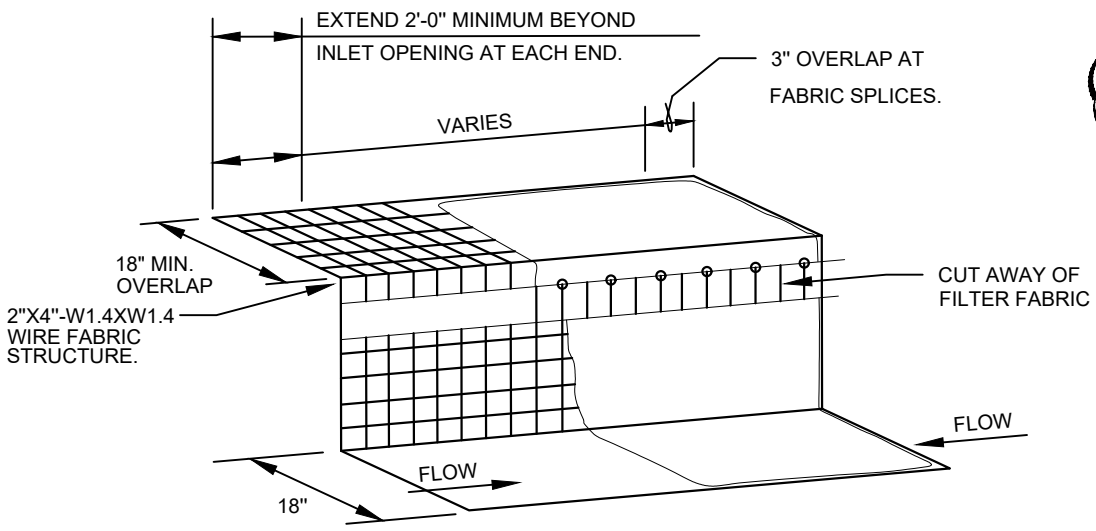
CURB OPENING	MIN. NO. BLOCKS
4'-6'	1
8'-10'	2
12'-14'	3
16'-20'	4

ALTERNATIVE FORM FOR TYPE A CURB INLET PROTECTION

NOTE: SEE NCTCOG STANDARD SPECIFICATIONS (2017), SECTION 202.14 AND 202.18

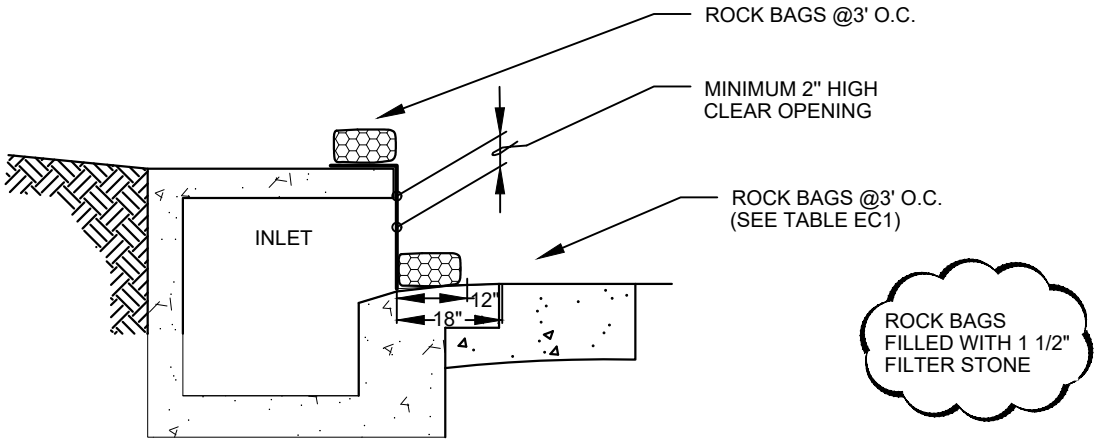
FILTER TUBE CURB INLET PROTECTION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 202.14
		DATE: TBD
		STANDARD DRAWING NO.: 1140

DRAFT



WIRE WEIR CURB INLET PROTECTION ISOMETRIC VIEW

N.T.S.



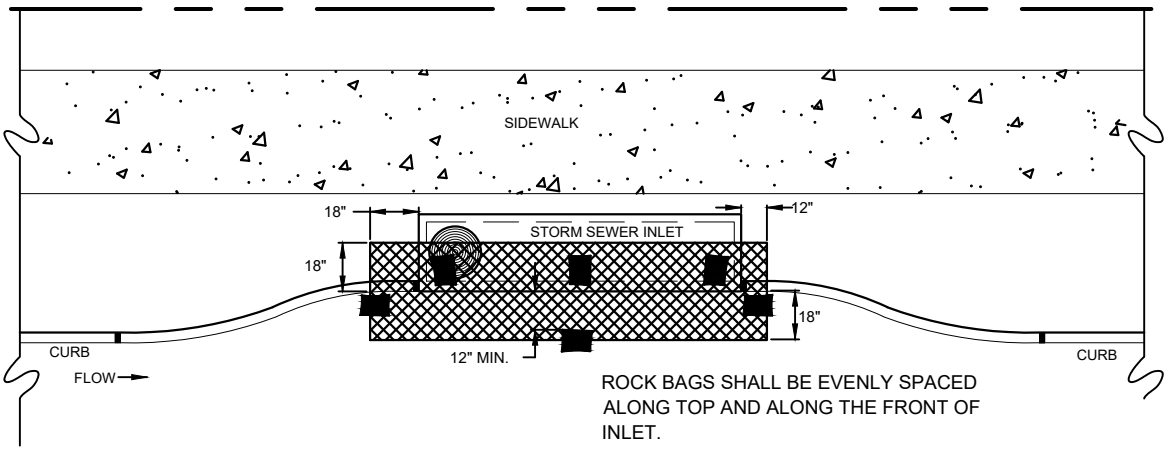
WIRE WEIR CURB INLET PROTECTION CROSS SECTION

N.T.S.

NOTE: THIS CONTROL WILL DECREASE THE CAPACITY OF THE INLET. IT SHALL ONLY BE USED WHEN AN ENGINEER HAS DETERMINED THERE IS ADEQUATE STORAGE OR POSITIVE OVERFLOW.

WIRE WEIR CURB INLET PROTECTION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.14	
		DATE TBD	STANDARD DRAWING NO. 1150A

DRAFT



ROCK BAGS SHALL BE EVENLY SPACED ALONG TOP AND ALONG THE FRONT OF INLET.

WIRE WEIR CURB INLET PROTECTION PLAN VIEW

N.T.S.

TABLE EC1

INLET OPENING	MINIMUM NUMBER OF ROCK BAGS	
	TOP	FRONT
5'	2	3
10'	3	3
15'	3	4
20'	4	4

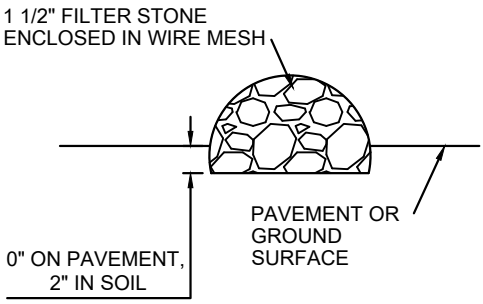
NOT ALLOWED ON ACTIVE CITY STREETS UNLESS APPROVED BY CITY

NOTES:

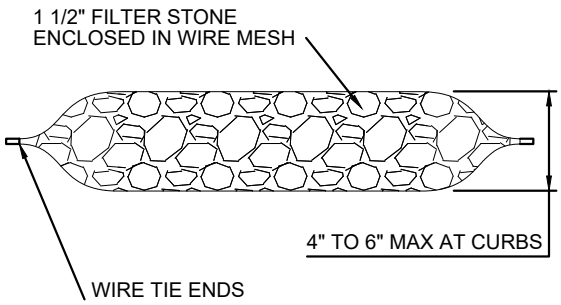
1. A SECTION OF FILTER FABRIC SHALL BE REMOVED AS SHOWN ON THIS DETAIL TO PROVIDE A 2" MINIMUM CLEAR OPENING. FABRIC MUST BE SECURED TO WIRE BACKING WITH CLIPS OR HOG RINGS AT THIS LOCATION.
2. INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
3. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

WIRE WEIR CURB INLET PROTECTION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.14	
		DATE TBD	STANDARD DRAWING NO. 1150B

DRAFT

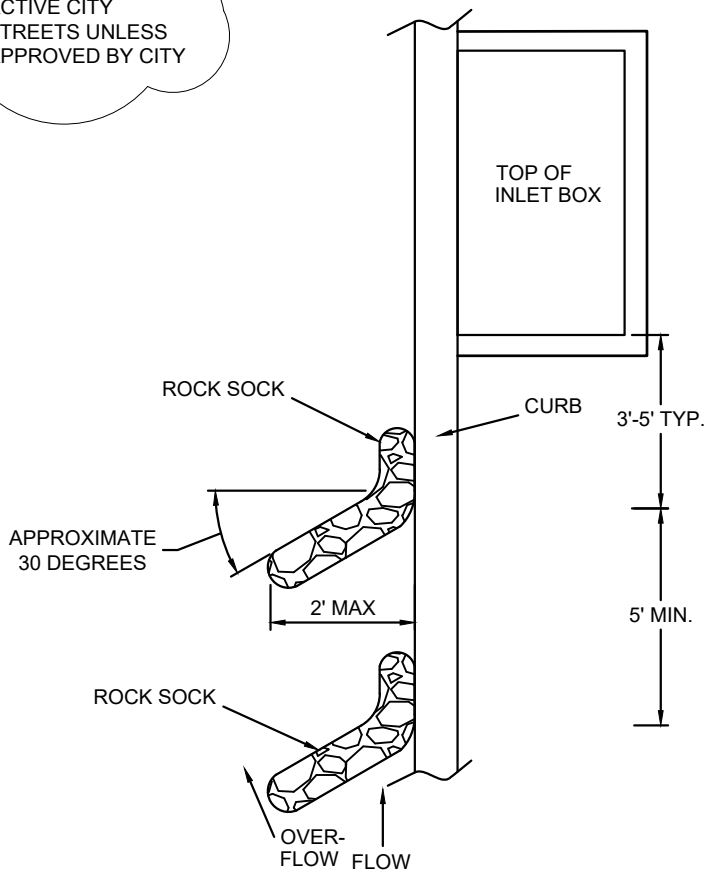


ROCK SOCK SECTION
N.T.S.



ROCK SOCK PLAN
N.T.S.

NOT ALLOWED ON ACTIVE CITY STREETS UNLESS APPROVED BY CITY



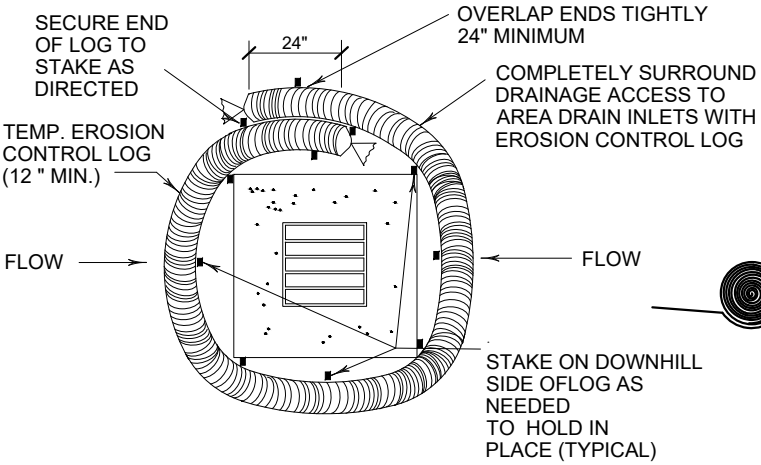
CURB ROCK SOCK ON-GRADE CURB INLET PROTECTION DETAIL
N.T.S

CURB ROCK SOCK ON-GRADE CURB INLET PROTECTION GENERAL NOTES:

1. THIS DETAIL IS INTENDED FOR USE WITH ON-GRADE INLETS (NOT A LOW POINT) TO TRAP SEDIMENT.
2. DO NOT INSTALL ON INLETS WHERE THE ROCK SOCKS WOULD EXTEND INTO AN ACTIVE TRAVEL LANE.
3. ROCK SOCKS MAY BE USED ON PAVED OR UNPAVED SURFACES.
4. MAXIMUM ROCK SOCK SIAMETER 4" TO 6".
5. MINIMUM OF 2 CURB ROCK SOCKS.

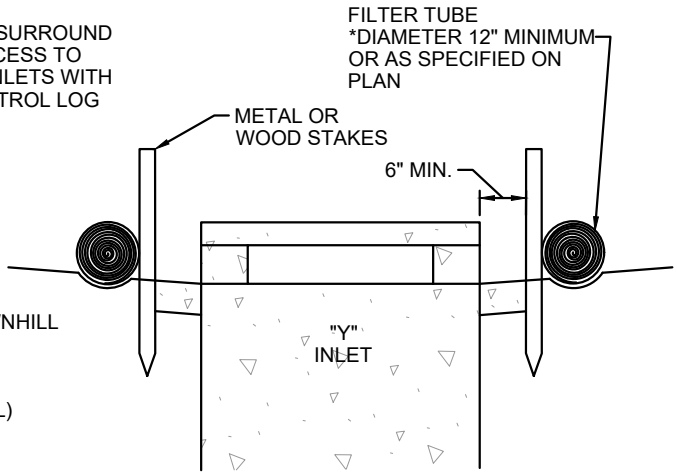
CURB ROCK SOCK ON-GRADE CURB INLET PROTECTION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.14	
		DATE TBD	STANDARD DRAWING NO. 1160

DRAFT



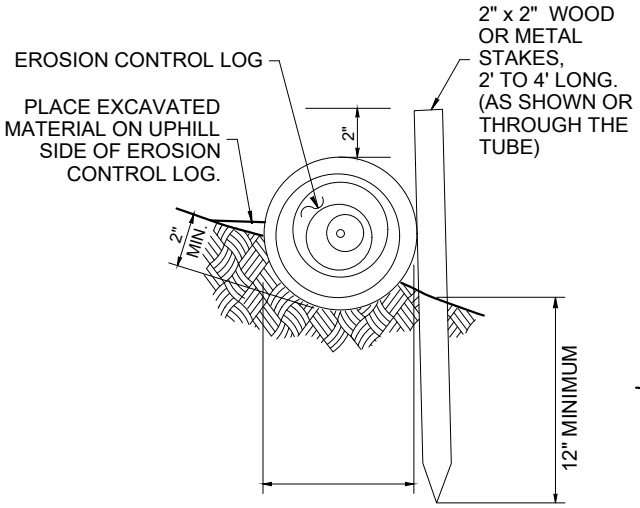
FILTER TUBE AREA
INLET PROTECTION PLAN VIEW

N.T.S.



FILTER TUBE "Y" INLET
PROTECTION CROSS SECTION

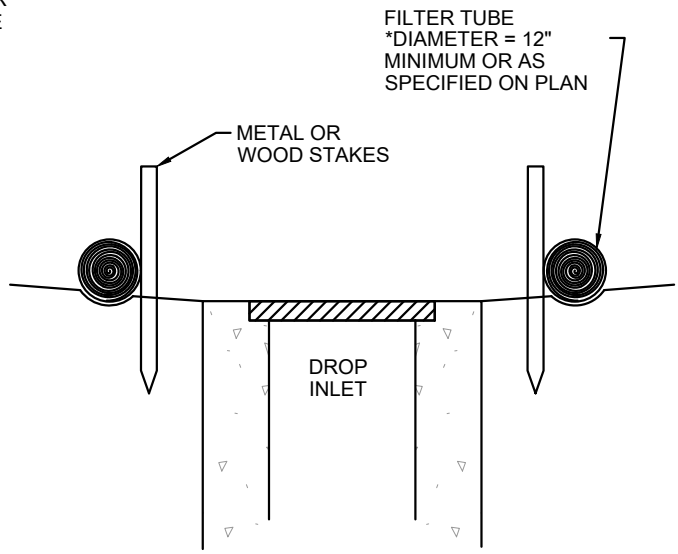
N.T.S.



NOTE: COMPACT EXCAVATED SOIL TO PREVENT UNDERCUTTING.

EMBEDMENT EXAMPLE
FOR FILTER TUBE

N.T.S.

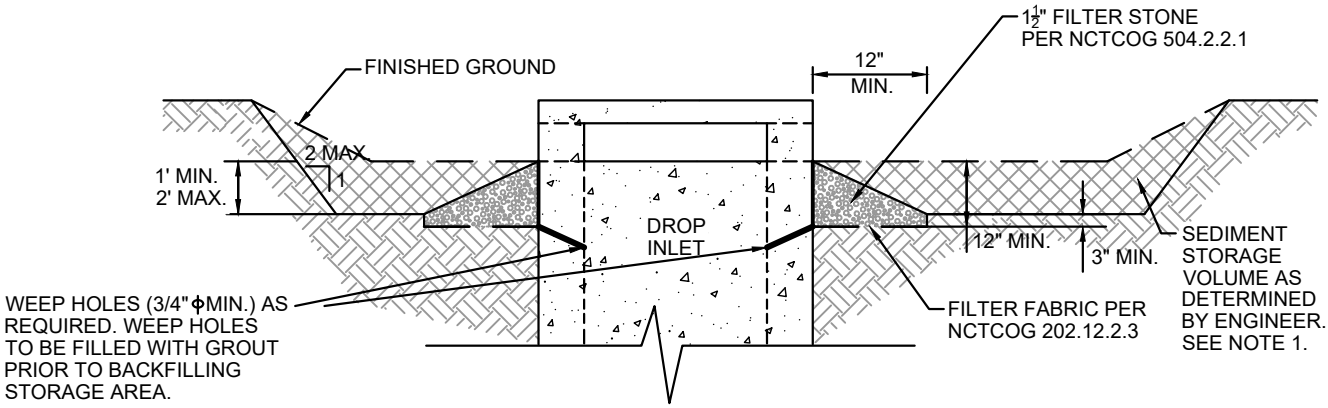


FILTER TUBE DROP INLET
PROTECTION CROSS SECTION

N.T.S.

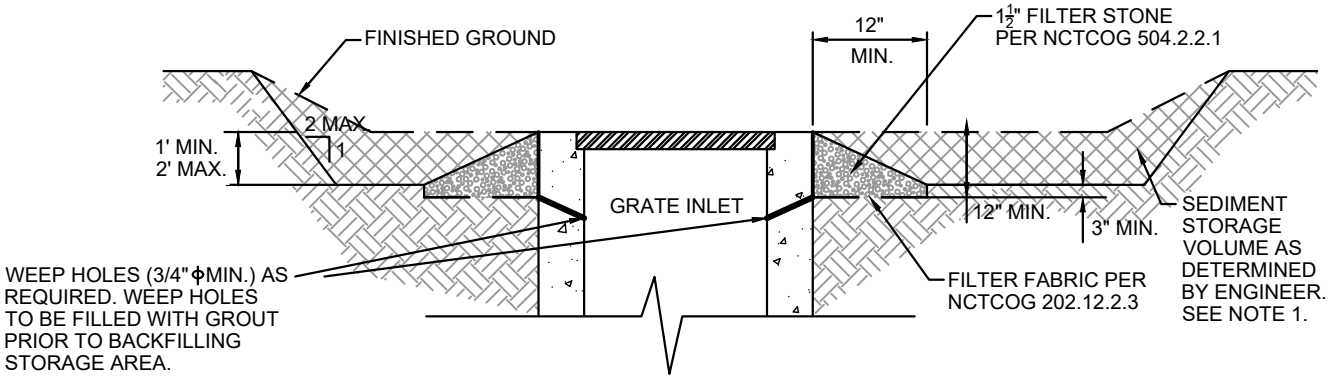
FILTER TUBE AREA INLET PROTECTION	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.14 DATE: TBD STANDARD DRAWING NO.: 1170

DRAFT



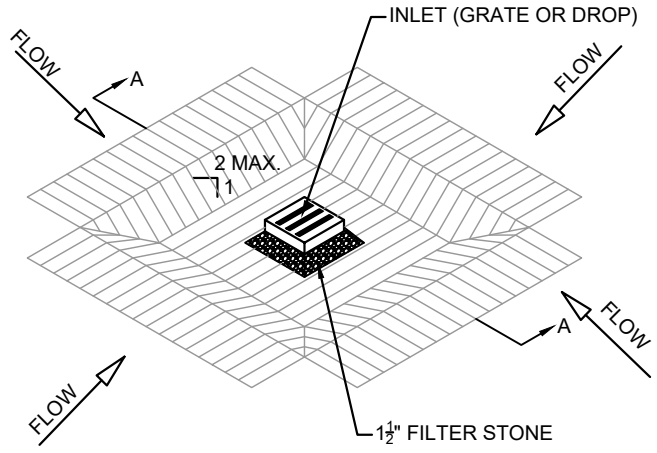
EXCAVATED INLET PROTECTION "Y" INLET SECTION A-A

N.T.S.



EXCAVATED INLET PROTECTION GRATE INLET SECTION A-A

N.T.S.



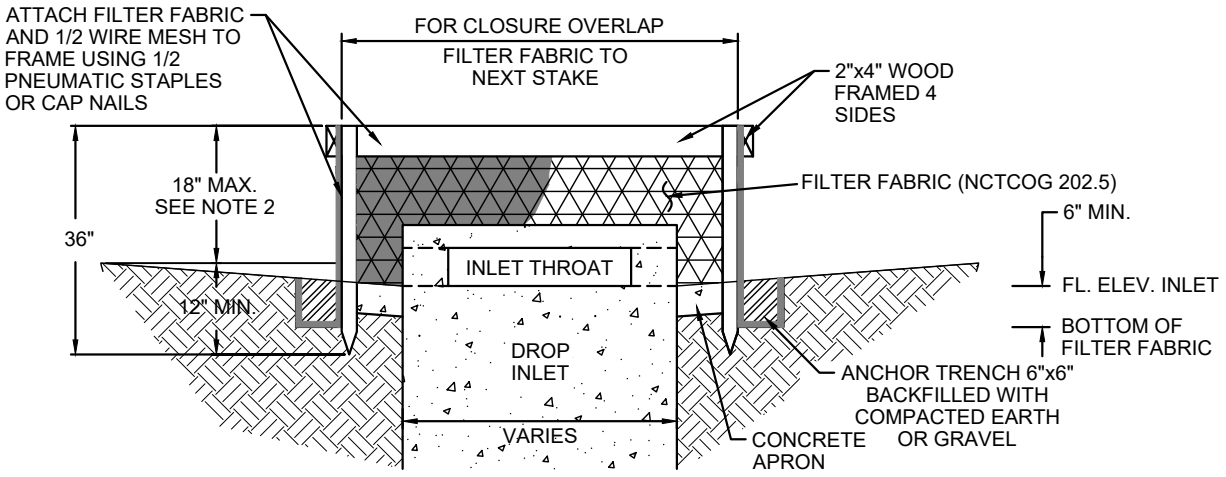
NOTE:
1. STORAGE VOLUME SHALL BE DESIGN STORM VOLUME OR 3,600 CUBIC FEET PER ACRE DISTURBED.
2. CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDES TOWARD THE INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE INLET.

EXCAVATED INLET PROTECTION PLAN VIEW

N.T.S.

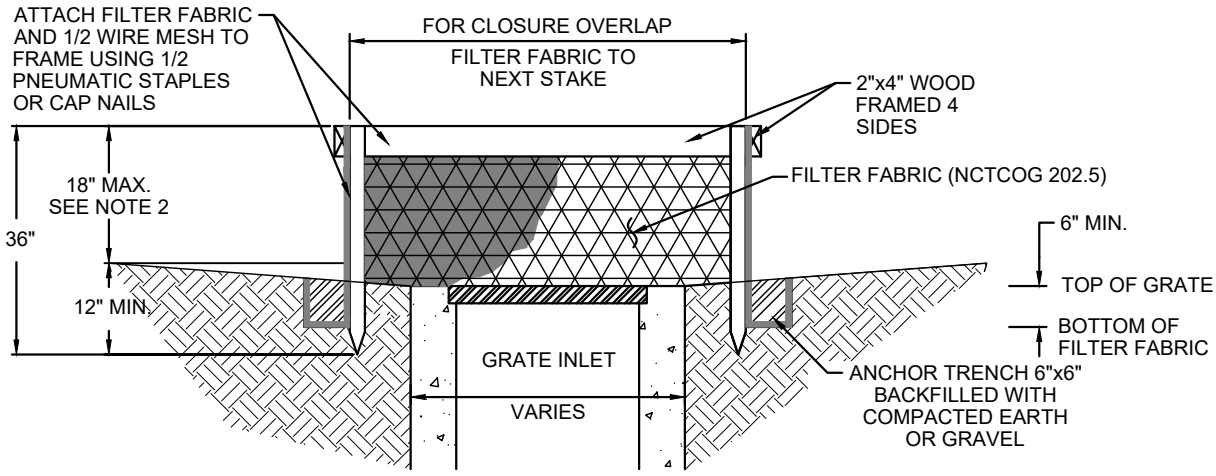
AREA INLET PROTECTION EXCAVATED IMPOUNDMENT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.14 DATE: TBD STANDARD DRAWING NO.: 1180

DRAFT



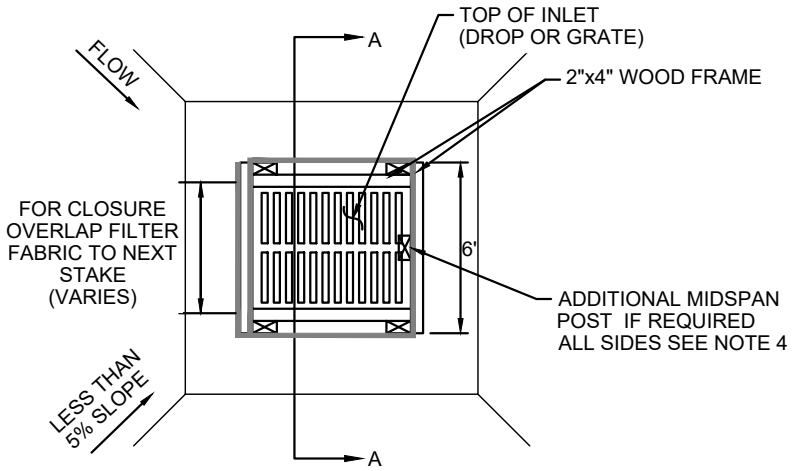
FILTER FABRIC DROP INLET PROTECTION CROSS SECTION (A-A)

N.T.S.



FILTER FABRIC GRATE INLET PROTECTION CROSS SECTION (A-A)

N.T.S.



NOTE:
1. STAKES SHALL CONFORM TO SPECIFICATIONS SECTION 202.5.2.2
2. HEIGHT OF INLET PROTECTION SURROUNDING THE INLET SHALL BE SHOWN ON THE PLANS AND MUST BE CHECKED TO VERIFY PONDING WATER WILL NOT CAUSE FLOODING OF PROPERTY OR DAMAGE.
3. CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDES TOWARD THE INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE INLET.
4. POST SHALL BE INSTALLED AT EACH CORNER AND BETWEEN CORNERS IF THE DISTANCE IS GREATER THAN 6' BETWEEN CORNER POSTS.

AREA INLET PROTECTION FILTER BARRIER PLAN VIEW

N.T.S.

AREA INLET PROTECTION FILTER BARRIER

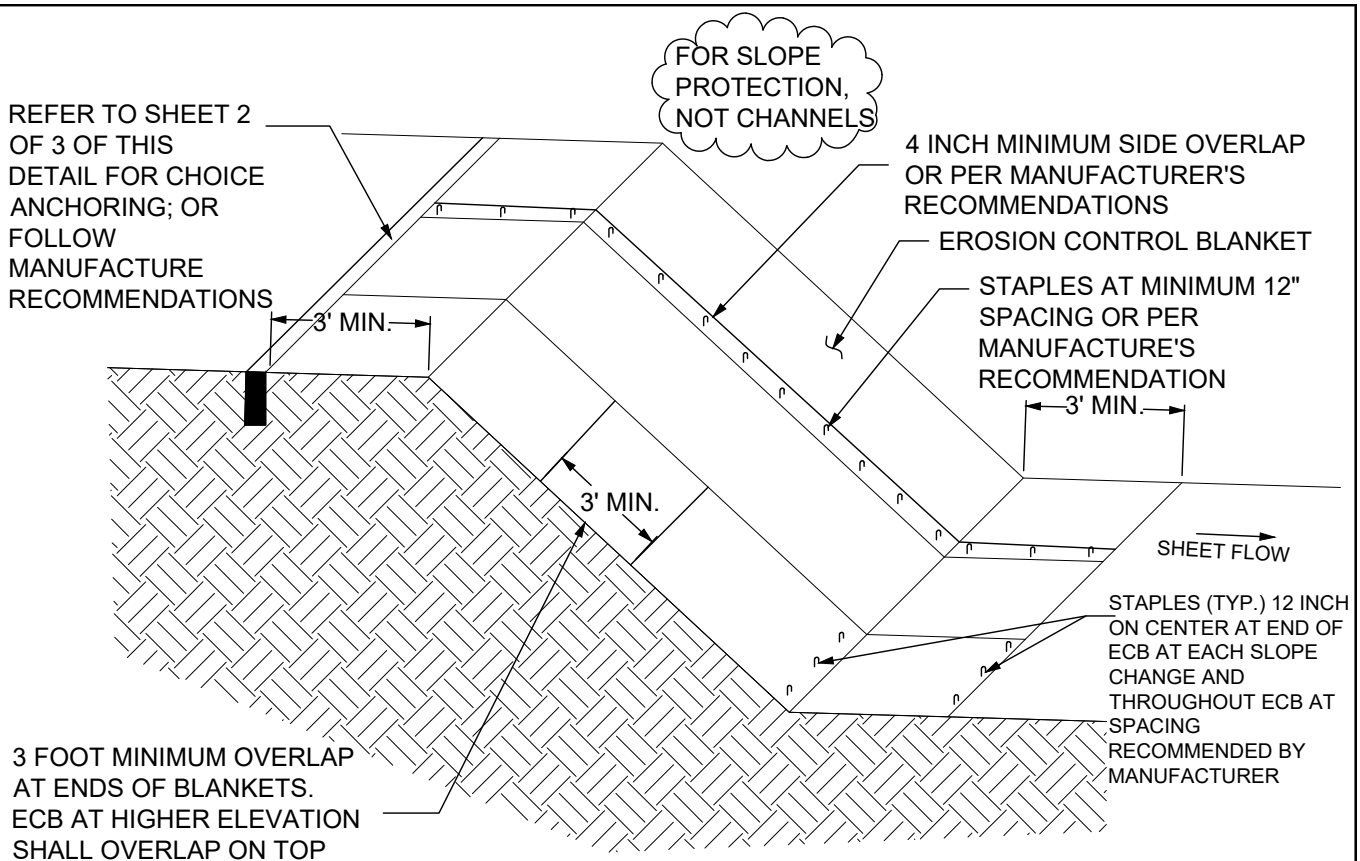
North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
202.14

DATE
TBD

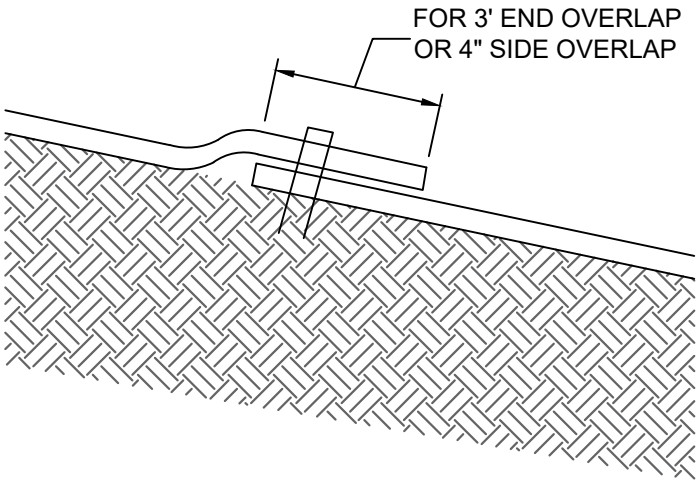
STANDARD DRAWING NO.
1190

DRAFT



ECB ISOMETRIC PLAN VIEW

N.T.S.

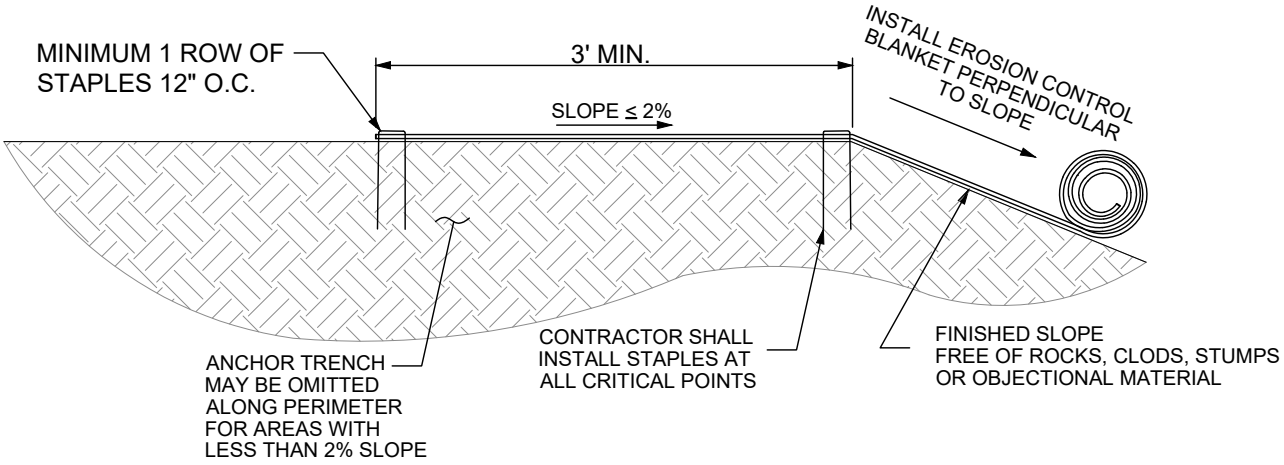


ECB OVERLAP EXAMPLE

N.T.S.

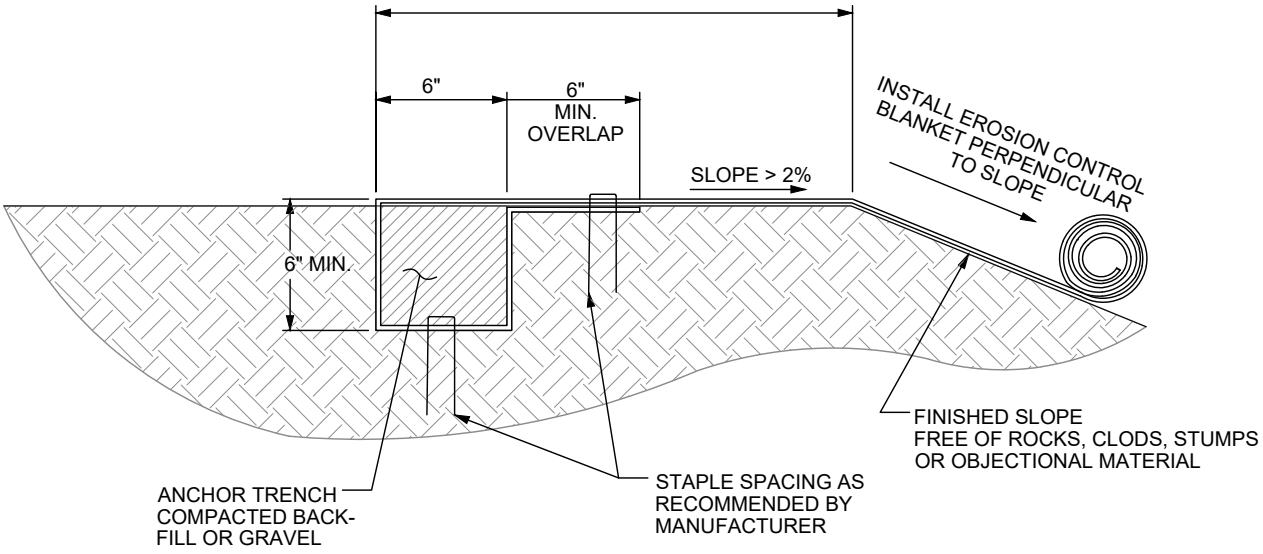
TEMPORARY EROSION CONTROL BLANKETS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.15	
		DATE TBD	STANDARD DRAWING NO. 1200A

DRAFT



TOP OF SLOPE ANCHOR EXAMPLE 1

N.T.S.



TOP OF SLOPE ANCHOR TRENCH EXAMPLE 2

N.T.S.

TEMPORARY EROSION CONTROL	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE	
BLANKET, ANCHOR EXAMPLES		202.15	
		DATE: TBD	STANDARD DRAWING NO.: 1200B

DRAFT

EROSION CONTROL BLANKETS GENERAL NOTES:

1. NCTCOG STANDARD SPECIFICATIONS (2017) SECTION 202.15.

2. EROSION CONTROL BLANKET SHALL BE INSTALLED VERTICALLY DOWN SLOPE AS SHOWN.

3. PRIOR TO THE INSTALLATION: ALL ROCK, DIRT CLODS, STUMPS, ROOTS, TRASH, AND ANY OTHER OBSTRUCTIONS THAT WOULD PREVENT THE BLANKET FROM LYING IN DIRECT CONTRACT WITH THE SOIL SHALL BE REMOVED.

4. ANCHORING METHODS PROVIDED ARE EXAMPLES OF HE TYPE OF ANCHORING THE ECB MANUFACTURER MAY RECOMMEND. ALWAYS FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR ANCHORING BASED ON THE SITE-SPECIFIC APPLICATION.

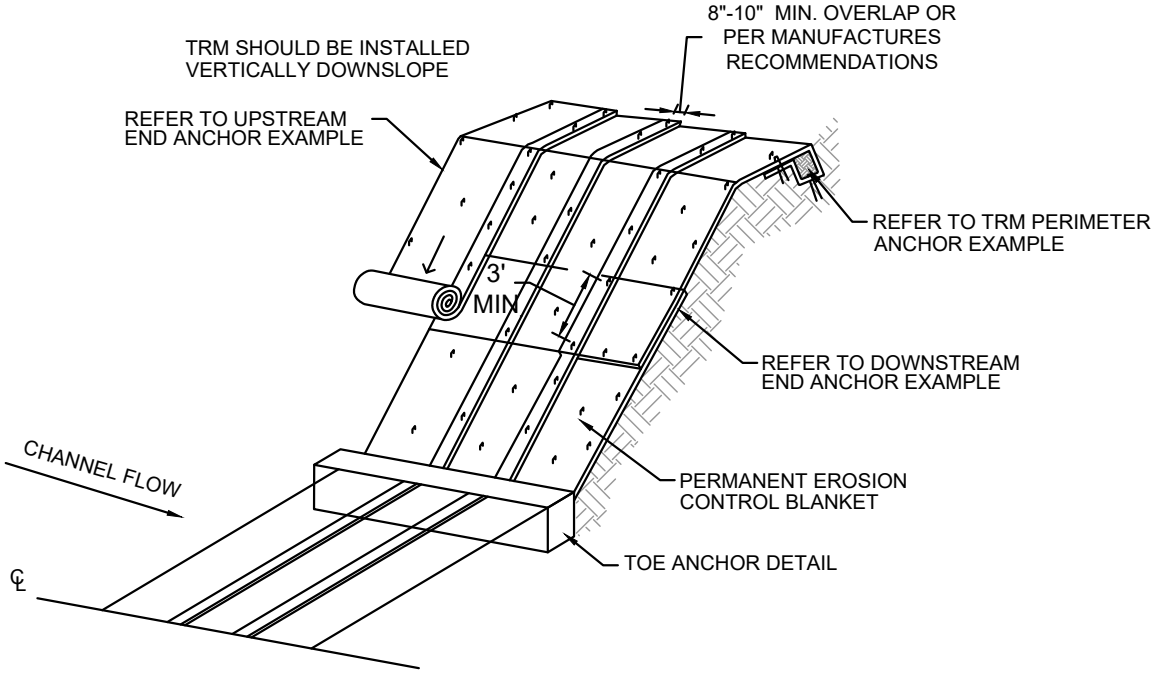
5. INSTALLATION AND ANCHORING SHALL CONFORM TO THE RECOMMENDATIONS SHOWN WITHIN THE MANUFACTURER'S PUBLISHED LITERATURE FOR THE APPROVED EROSION CONTROL BLANKET. PARTICULAR ATTENTION MUST BE PAID TO JOINTS AND OVERLAPPING MATERIAL. AT A MINIMUM, THE END OF EACH ROLL OF ECB SHALL OVERLAP THE NEXT ROLL BY 3 FEET AND THE SIDES OF ROLLS SHALL OVERLAP 4 INCHES.

6. IN ABSENCE OF MANUFACTURE'S LITERATURE, A MINIMUM 11-GAUGE WIRE STAPLES, 6-INCHES IN LENGTH AND 1-INCH WIDTH WILL BE USED.
7. AFTER APPROPRIATE INSTALLATION, THE BLANKETS SHOULD BE CHECKED FOR UNIFORM CONTACT WITH THE SOIL, SECURITY OF THE LAP JOINTS, AND THE FLUSHNESS OF THE STAPLES WITH THE GROUND.

8. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

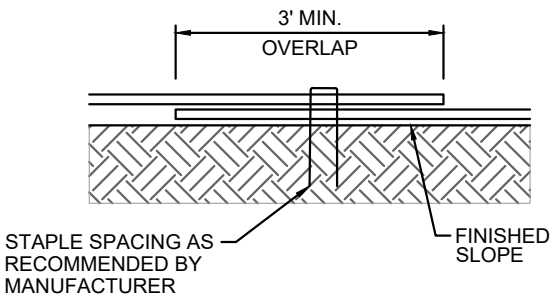
TEMPORARY EROSION CONTROL BLANKETS, GENERAL NOTES	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: 202.15
		DATE: TBD
		STANDARD DRAWING NO.: 1200C

DRAFT



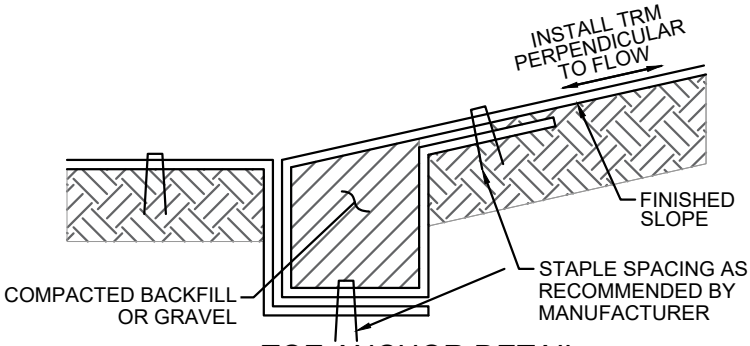
TRM HALF ISOMETRIC PLAN VIEW

N.T.S.



END OF TRM OVERLAP EXAMPLE

N.T.S.



TOE ANCHOR DETAIL

N.T.S.

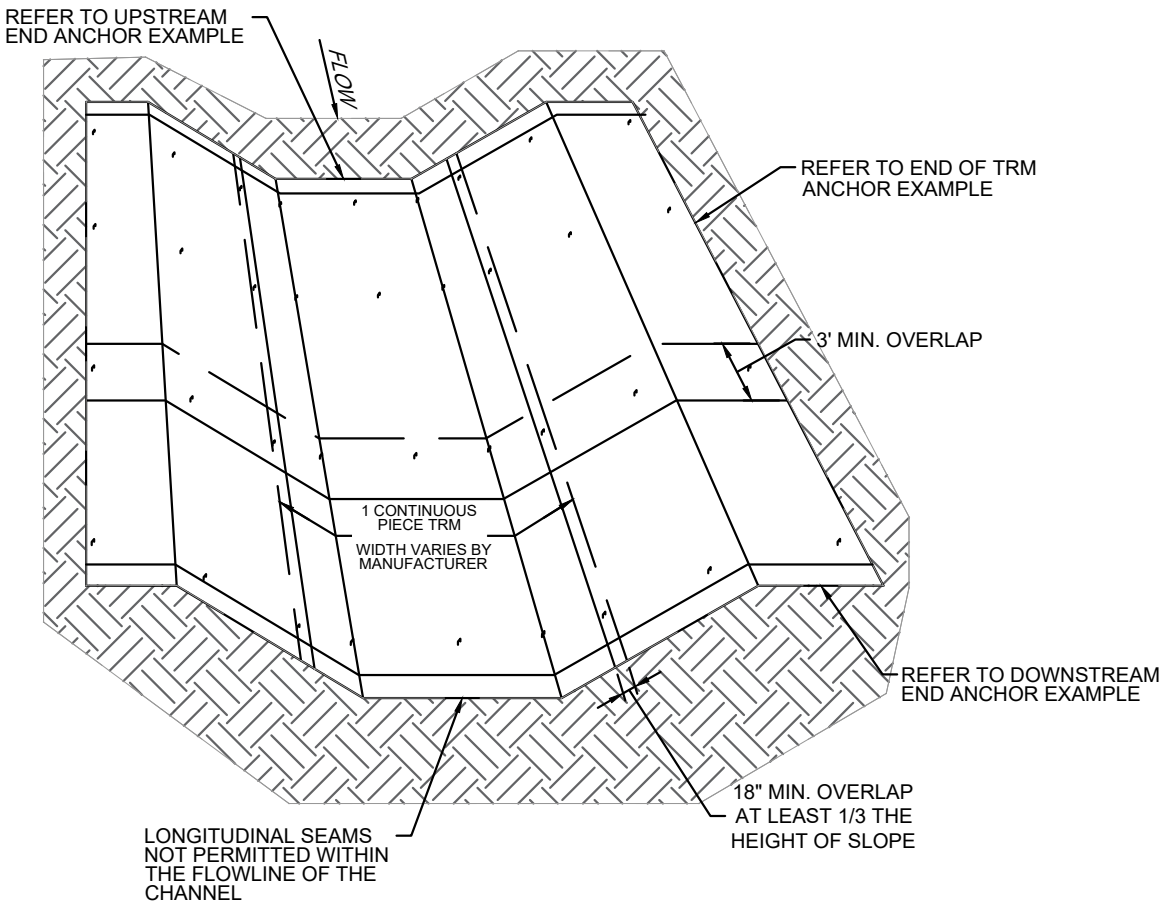
TURF REINFORCEMENT MATS NOTES:

1. TURF REINFORCEMENT MATS SHALL BE INSTALLED VERTICALLY DOWN SLOPE AS SHOWN.

2. PRIOR TO THE INSTALLATION: ALL ROCKS, DIRT CLODS, STUMPS, ROOTS, TRASH AND ANY OTHER OBSTRUCTIONS THAT WOULD PREVENT THE MAT FROM DIRECT CONTACT WITH THE FINISHED SLOPE, SHALL BE REMOVED.

PERMANENT TURF REINFORCEMENT MATS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: N/A
		DATE: TBD
		STANDARD DRAWING NO.: 1210A

DRAFT



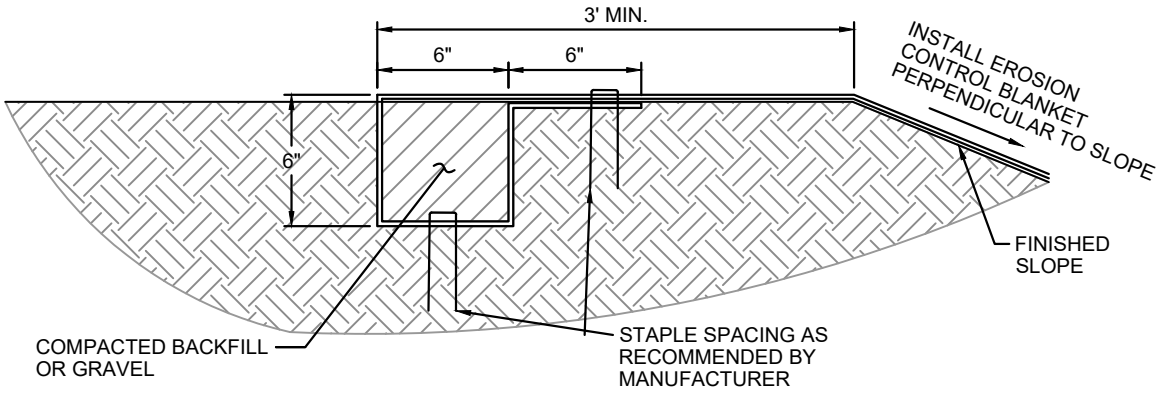
TRM ISOMETRIC PLAN VIEW FOR SMALL CHANNELS/DITCHES

N.T.S.

NOTE: LONGITUDINAL INSTALLATION OF TURF REINFORCEMENT MAT PERMITTED ONLY FOR CHANNEL WIDTHS 0' TO 8'. CONTRACTOR SHALL VERIFY MAT MEETS OVERLAP AND SLOPE REQUIREMENTS STATED ABOVE.

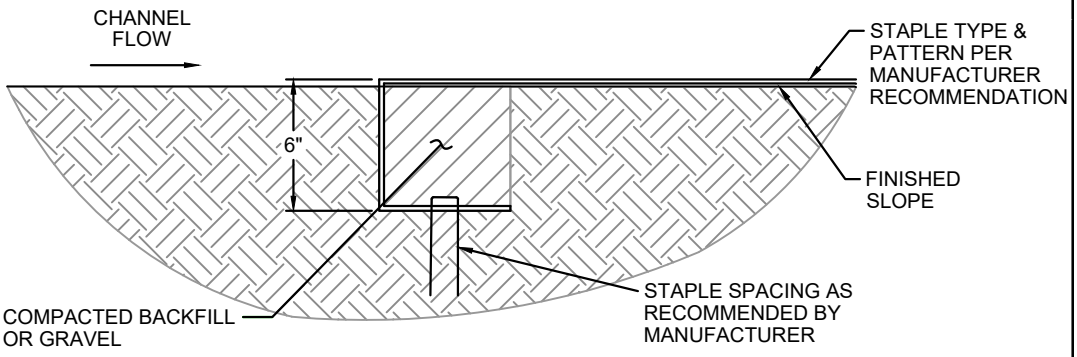
PERMANENT TURF REINFORCEMENT MATS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: N/A	
		DATE: TBD	STANDARD DRAWING NO.: 1210B

DRAFT



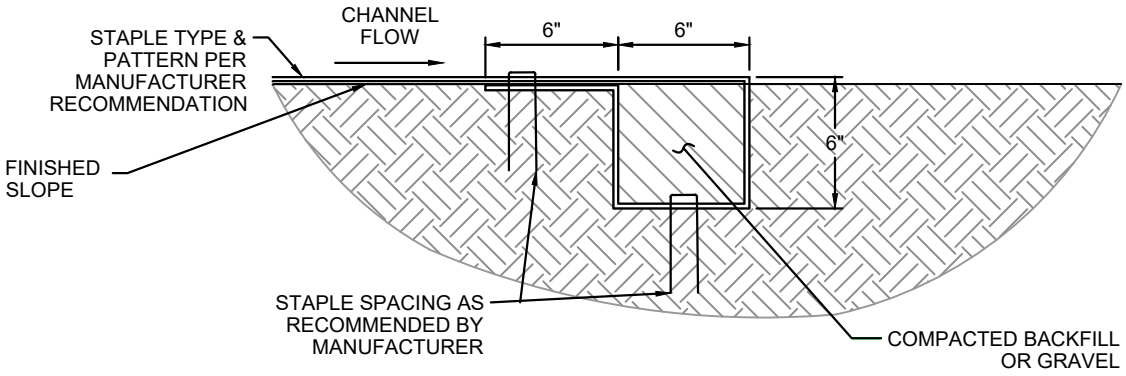
TRM PERIMETER ANCHOR EXAMPLE

N.T.S.



TRM UPSTREAM END ANCHOR EXAMPLE

N.T.S.



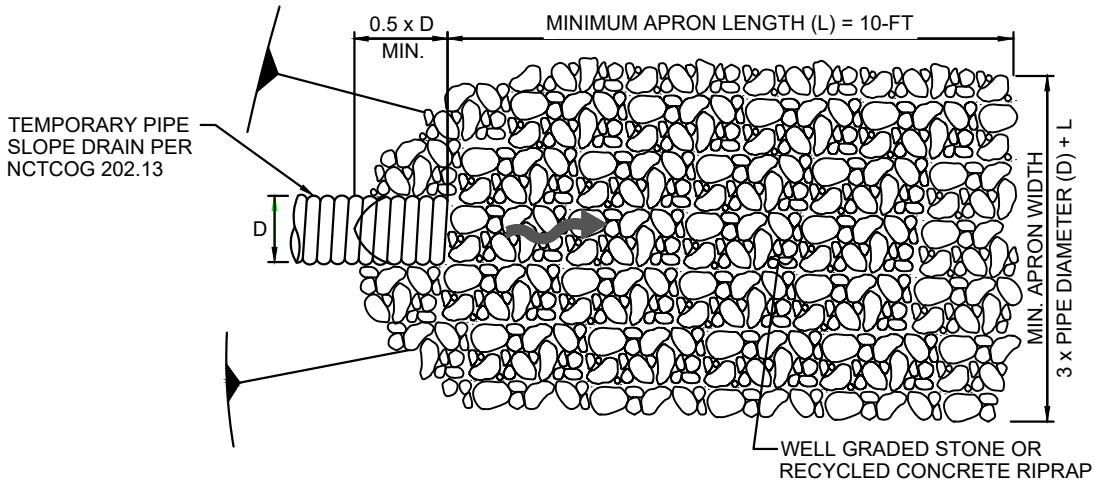
TRM DOWNSTREAM END ANCHOR EXAMPLE

N.T.S.

PERMANENT TURF REINFORCEMENT MAT ANCHORING	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE N/A
		DATE TBD
		STANDARD DRAWING NO. 1210C

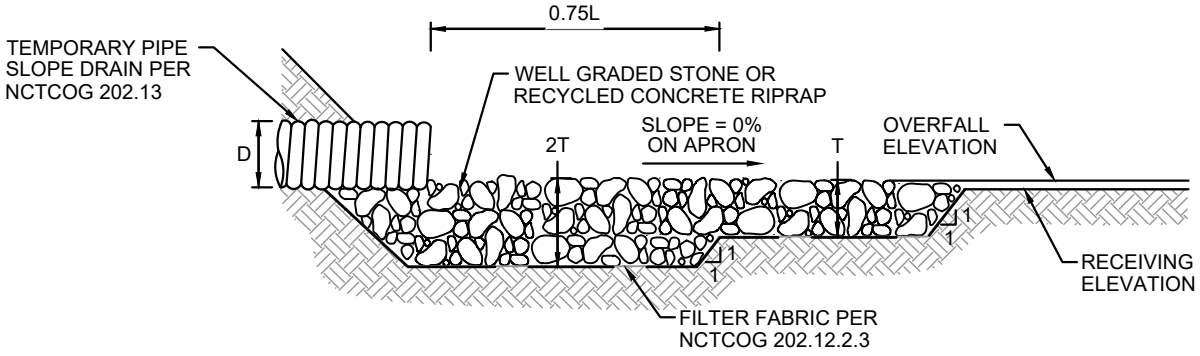
DRAFT

SPECIFIC DESIGN INFORMATION ON THE EROSION CONTROL PLANS IS REQUIRED FOR EACH INSTALLATION



TEMPORARY VELOCITY DISSIPATION DEVICE PLAN VIEW

N.T.S



TEMPORARY VELOCITY DISSIPATION DEVICE PROFILE VIEW

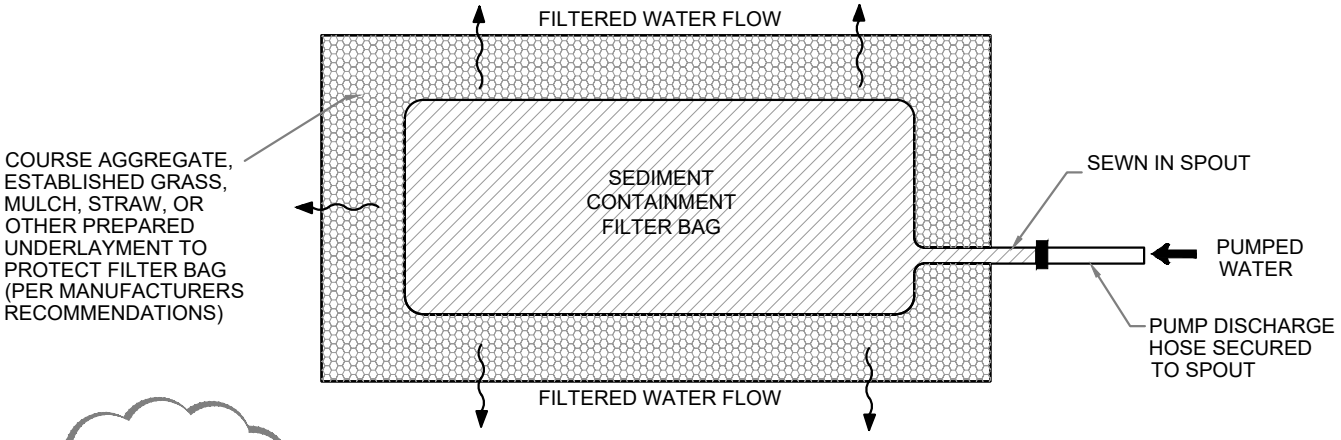
N.T.S

NOTE: DIMENSIONS OF THE RIPRAP APRON SHALL BE DESIGNED BASED ON FLOW CONDITIONS. TEMPORARY CONTROL DESIGN STORM (2-YEARS, 24-HOUR). PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE APRON.

- PIPE DIAMETER (OR EQUIVALENT FOR FLUME, SWALE, ETC.), D, FEET
- DISCHARGE VELOCITY FROM DRAINAGE STRUCTURE, V_{PIPE}, FT/S
- DETERMINE GRADATION FOR d_{50} WELL GRADED STONE OR RECYCLED CONCRETE RIPRAP
- MEDIAN STONE DIAMETER d_{50} AND MAXIMUM STONE DIAMETER (d_{100}), FEET

VELOCITY DISSIPATION DEVICE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 202.13	
		DATE TBD	STANDARD DRAWING NO. 1220

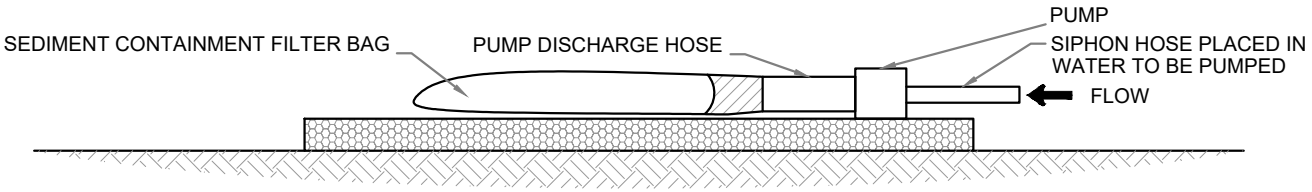
DRAFT



SHOW LOCATIONS OF FILTER BAGS ON THE DRAWINGS.

SEDIMENT FILTER BAG PLAN VIEW

N.T.S.



SEDIMENT FILTER BAG PROFILE

N.T.S.

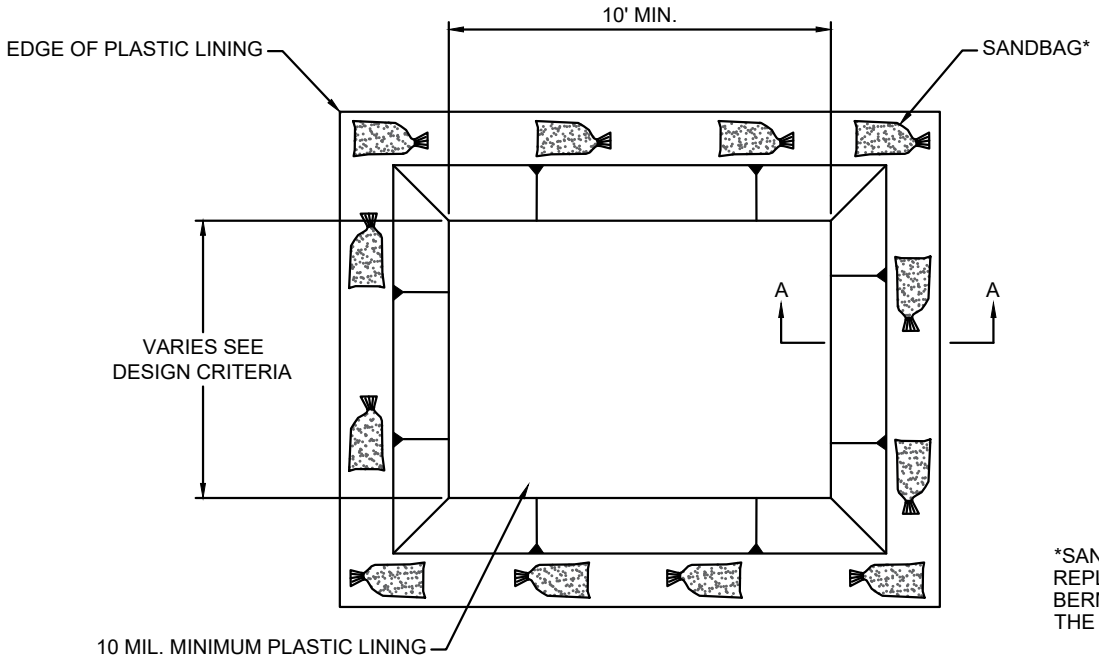
DEWATERING CONTROL GENERAL NOTES:

1. THE BAG SHOULD BE A NON-WOVEN, NEEDLE-PUNCHED, GEOTEXTILE. MATERIALS SHOULD CONFORM TO SPECIFICATION 202.5.2.1 AS A MINIMUM.

2. CAPACITY, INSTALLATION, MAINTENANCE, AND REMOVAL OF BAGS AND PUMPS SHOULD CONFORM TO PUBLISHED MANUFACTURER LITERATURE.

DEWATERING CONTROLS	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 203.2	
		DATE TBD	STANDARD DRAWING NO. 1230

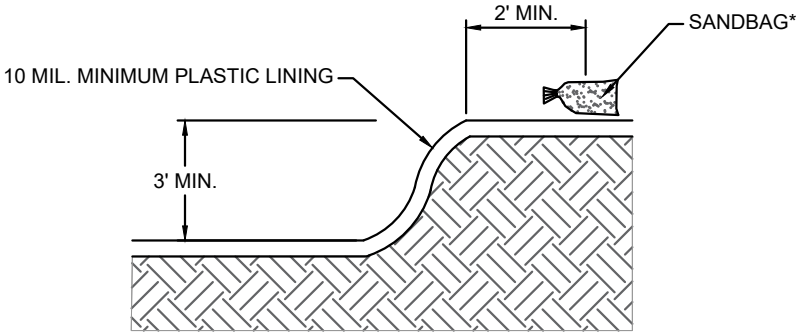
DRAFT



*SANDBAGS MAY BE REPLACED BY A SOIL BERM TO ANCHOR THE PLASTIC LINING.

CONCRETE WASHOUT PLAN VIEW

N.F.S



CONCRETE WASHOUT SECTION A-A

N.F.S

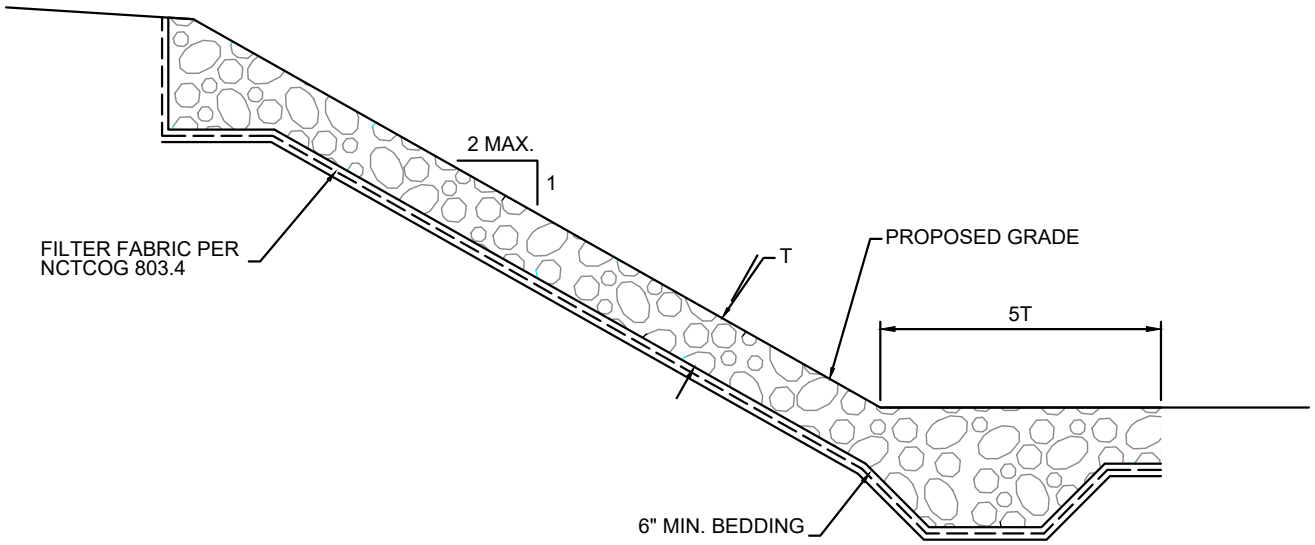
CONCRETE WASHOUT NOTES:

1. WASHOUT AREA MUST BE CLEARLY MARKED WITH SIGNAGE NOTING THE WASHOUT AREA.

2. WASHOUT STRUCTURES SHALL BE CLEANED OUT WHEN THE STRUCTURE IS 75% FULL. TEMPORARY CONCRETE WASHOUT FACILITY SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY.

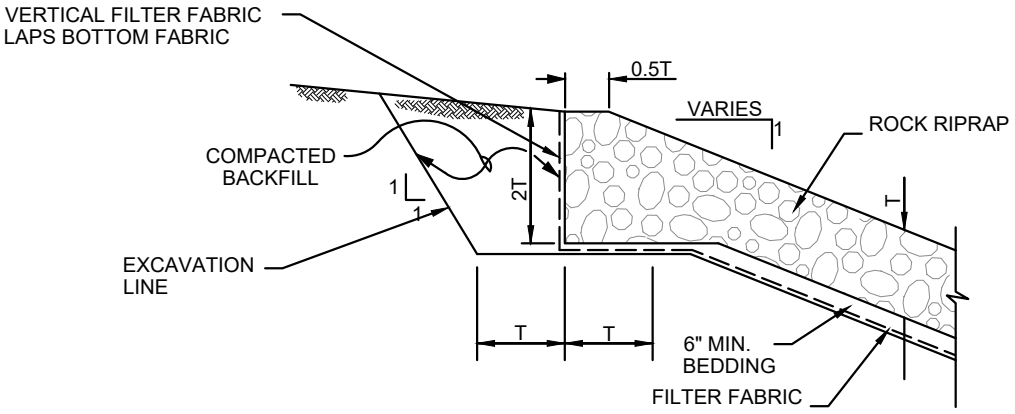
CONCRETE WASHOUT CONTAINMENT	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE: N/A
		DATE: TBD / STANDARD DRAWING NO.: 1240

DRAFT



TYPICAL ROCK RIPRAP SLOPE PROTECTION SECTION

N.T.S.



ROCK RIPRAP TOP OF BANK DETAIL

N.T.S.

- ROCK RIPRAP DRY OR GROUTED AS SHOWN ON EROSION CONTROL PLANS
- FILTER FABRIC SPLICES SHALL HAVE A MINIMUM 18 INCHES OVERLAP
- DETERMINE GRADATION FOR d_{50} WELL GRADED STONE
- MEDIAN STONE DIAMETER d_{50} AND MAXIMUM STONE DIAMETER d_{100}, FEET
- SIZING OF d(min), d(50), AND d(100) AS DETERMINED BY OWNER

$T = 1.5 \times d_{50}$

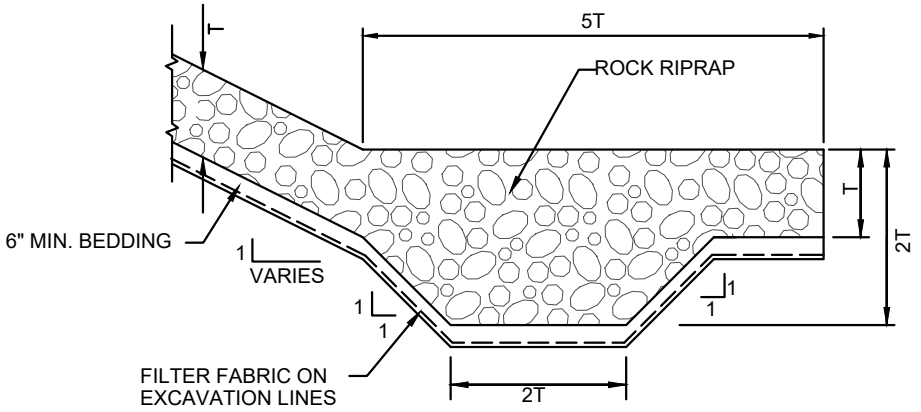
$d_{min.} =$_____

$d_{50} =$ _____

$d_{100} =$ _____

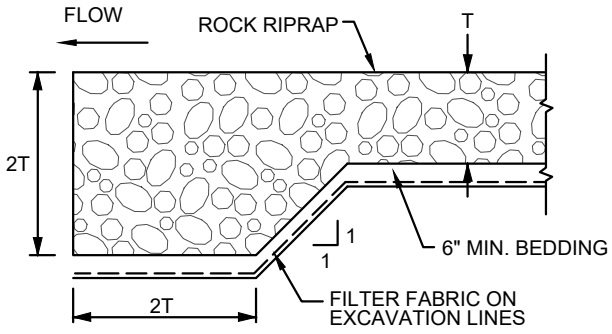
GROUTED ROCK RIP RAP	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 803.3	
		DATE TBD	STANDARD DRAWING NO. 1250A

DRAFT



ROCK RIPRAP TOE OF SLOPE DETAIL

N.T.S.

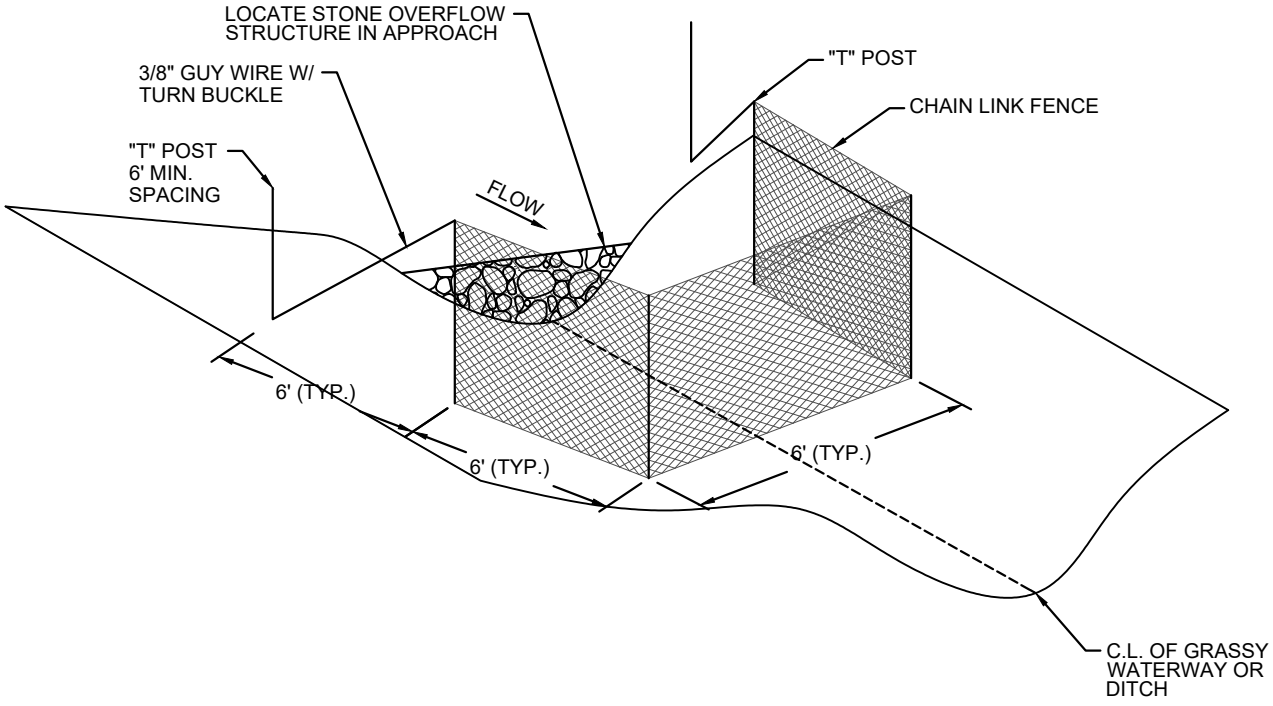


UPSTREAM ROCK RIPRAP TOE WALL DETAIL

N.T.S.

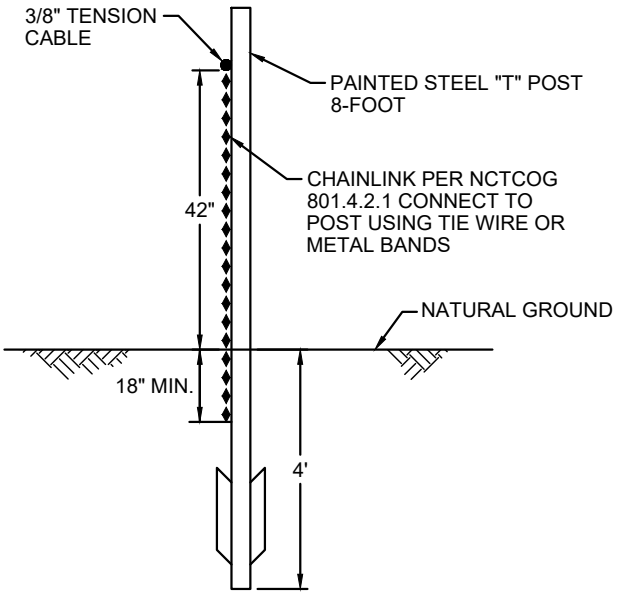
GROUTED ROCK RIP RAP	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 803.3
		DATE TBD / STANDARD DRAWING NO. 1250B

DRAFT



TEMPORARY TRASH SCREEN DETAIL

N.T.S.



NOTES:
1. CONCENTRATED DITCH FLOW COMING TOWARD THE INSTALLATION WILL REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED.

2. HEIGHT OF INSTALLATION SHALL BE SHOWN ON PLANS AND MUST BE CHECKED TO VERIFY PONDING WATER WILL NOT CAUSE FLOODING OF PROPERTY OR DAMAGE.

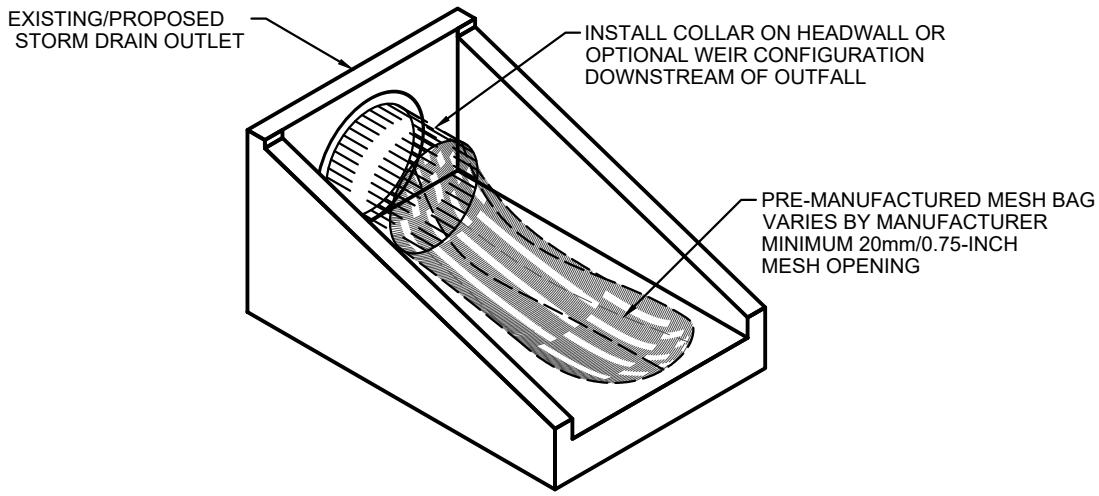
3. ENGINEER TO VERIFY APPLICABILITY OF TEMPORARY TRASH SCREEN.

PROFILE OFTEMPORARY TRASH SCREEN DETAIL

N.T.S.

STREAM TRASH CATCH/SCREEN	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE N/A	
		DATE TBD	STANDARD DRAWING NO. 1260A

DRAFT



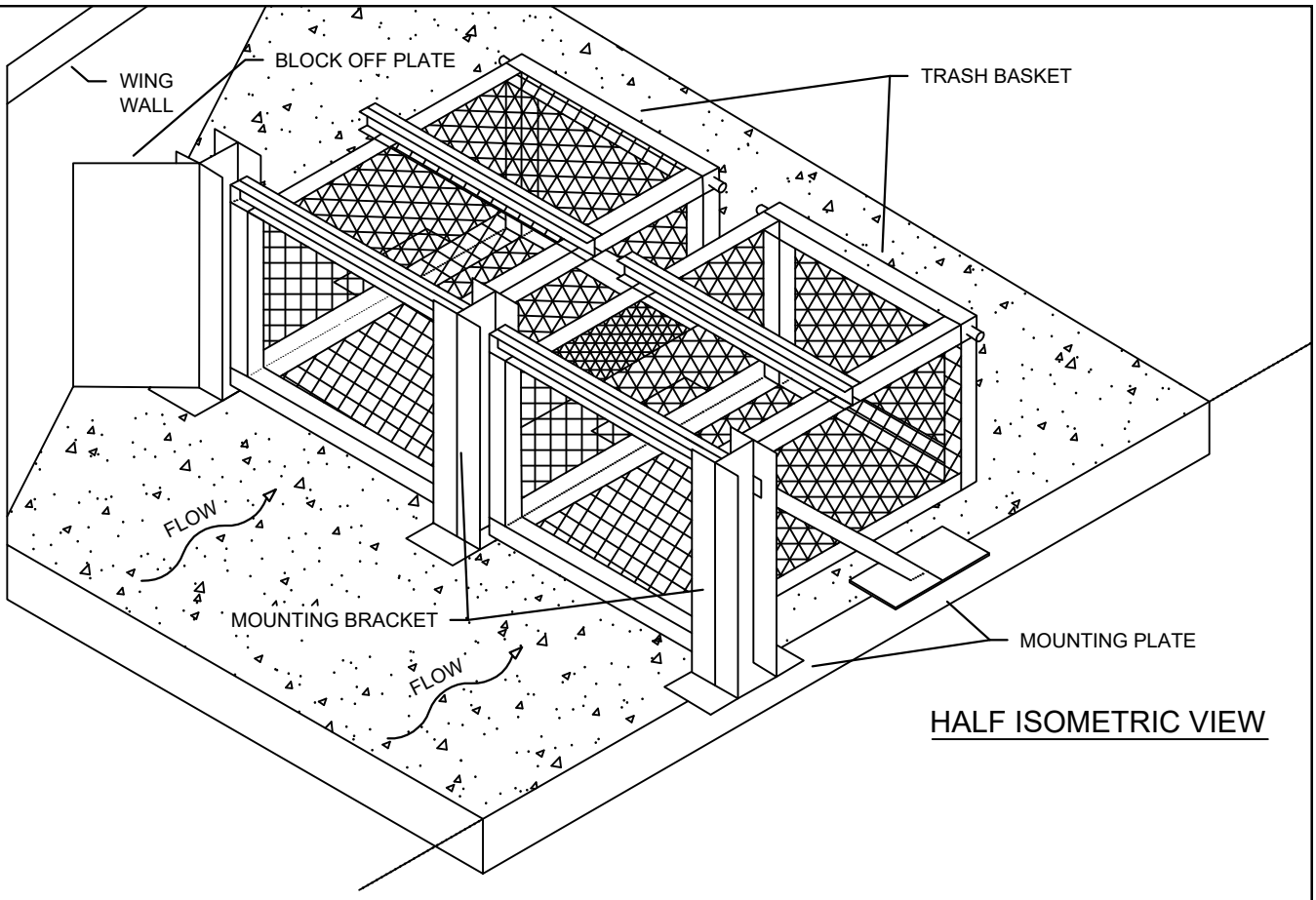
OUTLET TRASH SCREEN BAG

N.T.S.

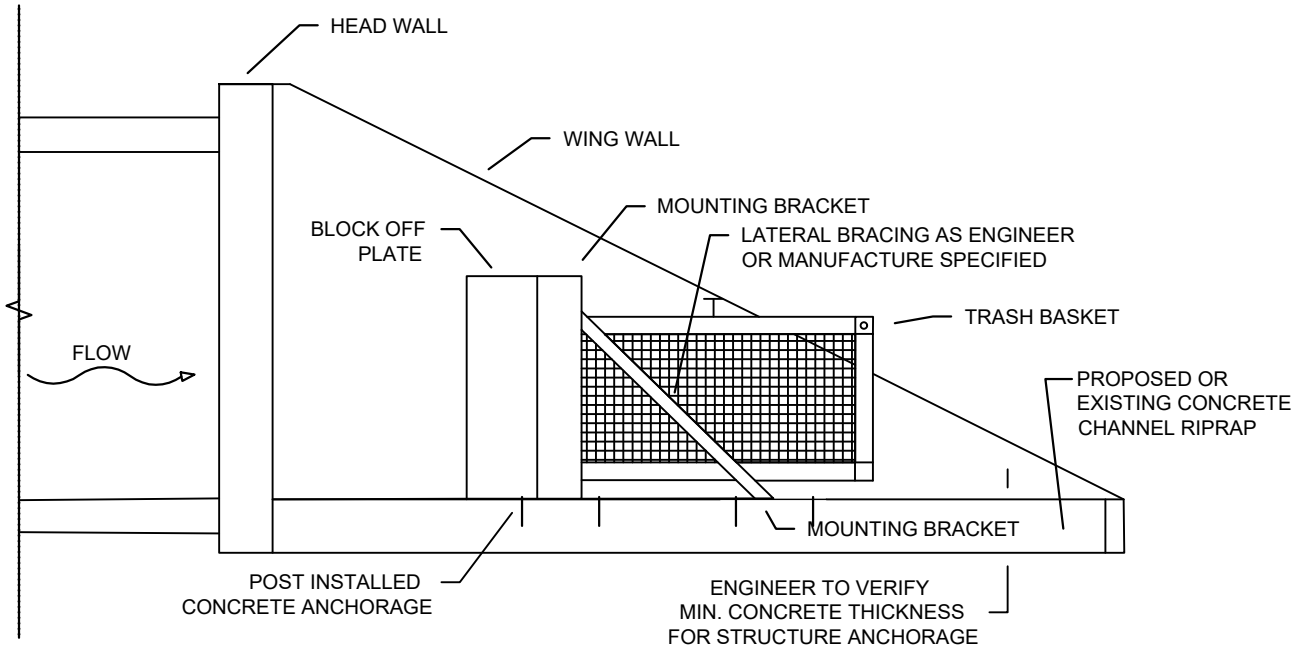
NOTE: INSTALL COLLAR AND BAG SIZED BY OWNER AND FROM OWNER'S MANUFACTURER OF CHOICE

STREAM TRASH CATCH/SCREEN	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE N/A	
		DATE TBD	STANDARD DRAWING NO. 1260B

DRAFT



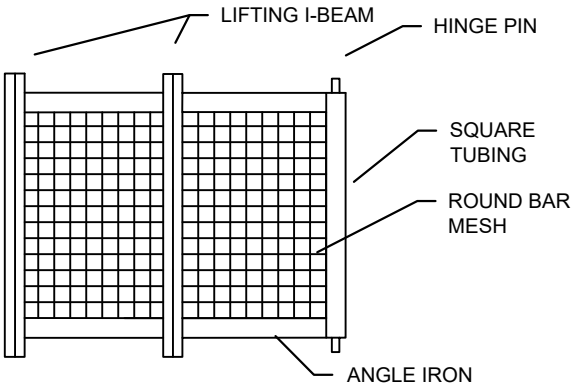
HALF ISOMETRIC VIEW



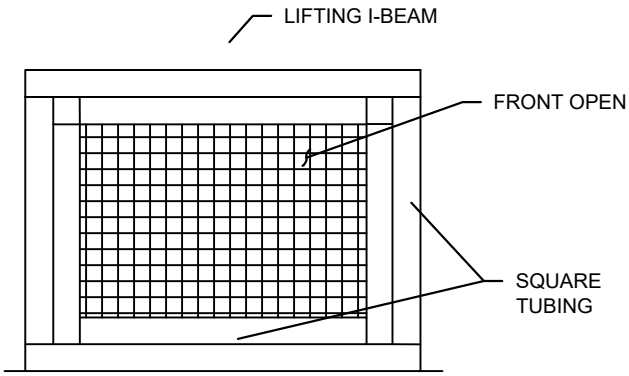
SIDE VIEW WITH HEADWALL

TRASH RACK	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE N/A	
CATCH/SCREEN		DATE NOV. '20	STANDARD DRAWING NO. 1270A

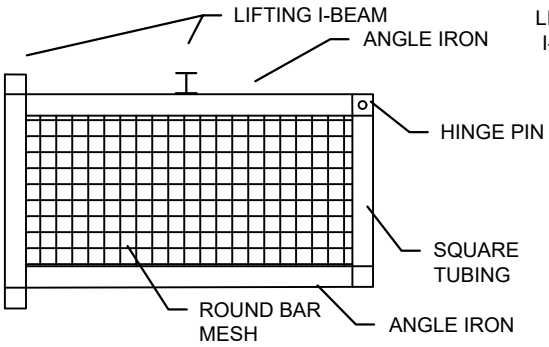
DRAFT



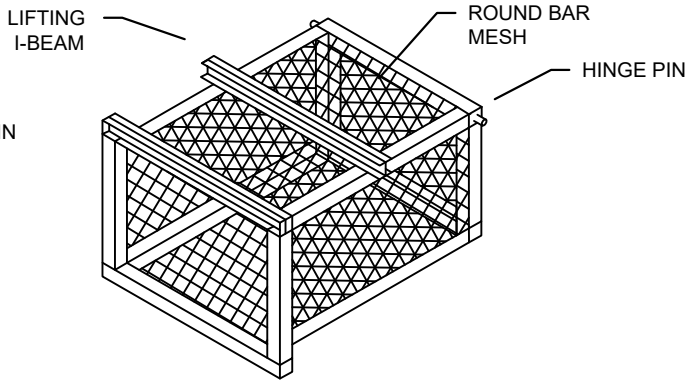
TRASH BASKET
TOP VIEW



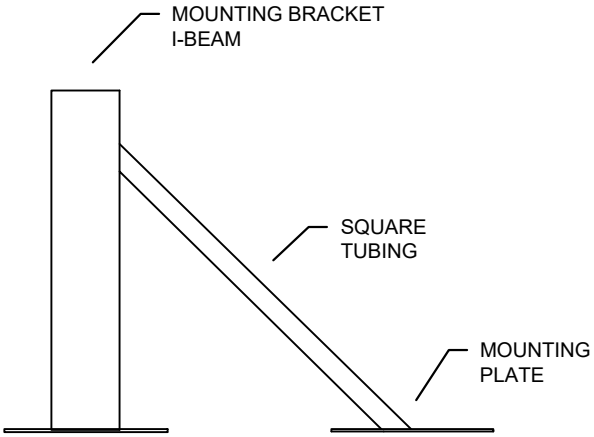
TRASH BASKET
FRONT VIEW



TRASH BASKET
SIDE VIEW



TRASH BASKET
ISOMETRIC VIEW



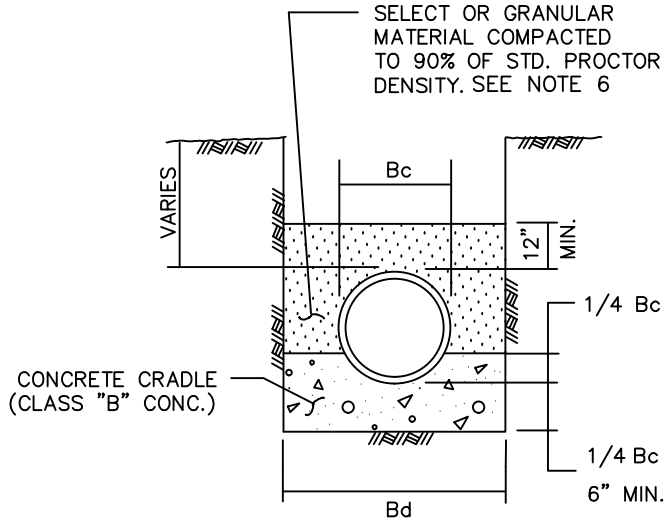
MOUNTING BRACKET

NOTES:
1. OVERALL SIZE AND LOCATION TO BE DETERMINED BY THE OWNER.
2. SIZE AND SPACING OF MESH TO BE DETERMINED BY THE OWNER.
3. SIZING OF STRUCTURAL MEMBERS AND CONNECTIONS AS DETERMINED BY OWNER.

TRASH RACK	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE N/A	
CATCH/SCREEN		DATE TBD	STANDARD DRAWING NO. 1270B

DIVISION 3000 EROSION AND SEDIMENT CONTROL

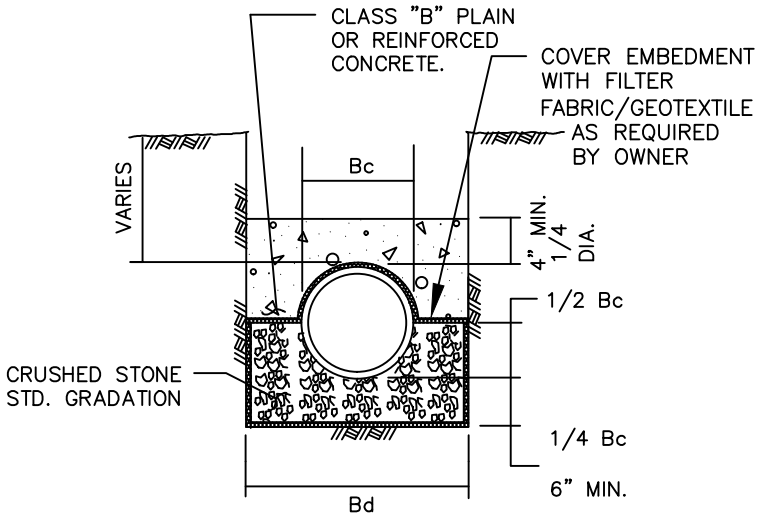
TABLE OF CONTENTS



CLASS "A"

CLASS "B" CONCRETE CRADLE
PLAIN CONC. LF 2.8
REINF. CONC. LF 3.4 P=0.4%

N.T.S



CLASS "A-1"

CLASS "B" CONCRETE CAP
PLAIN CONC. LF 2.8
REINF. CONC. LF 3.4 P=0.4%
REINF. CONC. LF 4.8 P=1.0%

N.T.S

NOTES:

1. LF. = LOAD FACTOR TO BE USED TO DETERMINE 3 EDGE BEARING BASED ON TYPE OF EMBEDMENT.
2. FREE-FALL OF CONCRETE NOT TO EXCEED 5 FT. MAXIMUM.
3. P = Rho FOR STEEL %
4. Bc = OUTSIDE DIAMETER OF PIPE
5. Bd = TRENCH WIDTH
6. USE OF 95% DENSITY UNDER PAVED SURFACE AND 90% IN UNPAVED AREAS

STANDARD DRAWING NO. 3010

EMBEDMENT

CLASS "A" & "A-1"

North Central Texas Council of Governments

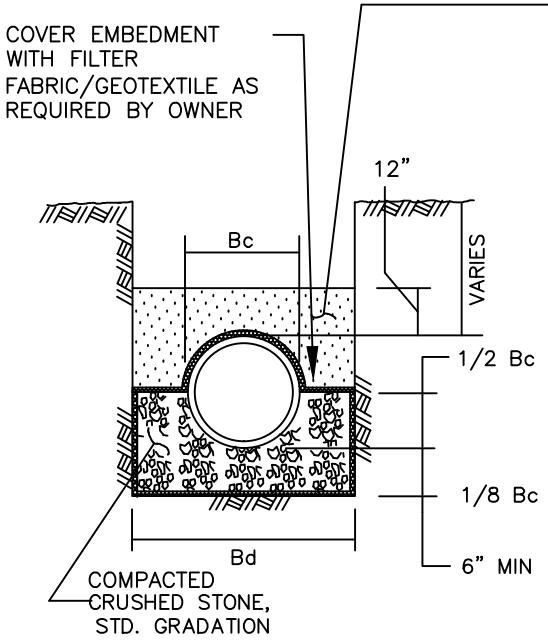
STANDARD SPECIFICATION REFERENCE 504.5

DATE TBD

STANDARD DRAWING NO. 3010

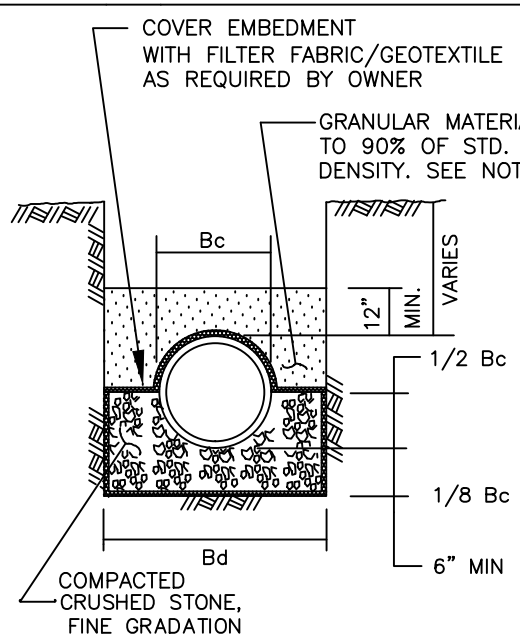
DRAFT

SELECT OR GRANULAR MATERIAL COMPACTED TO 90% OF STD. PROCTOR DENSITY SEE NOTE 3



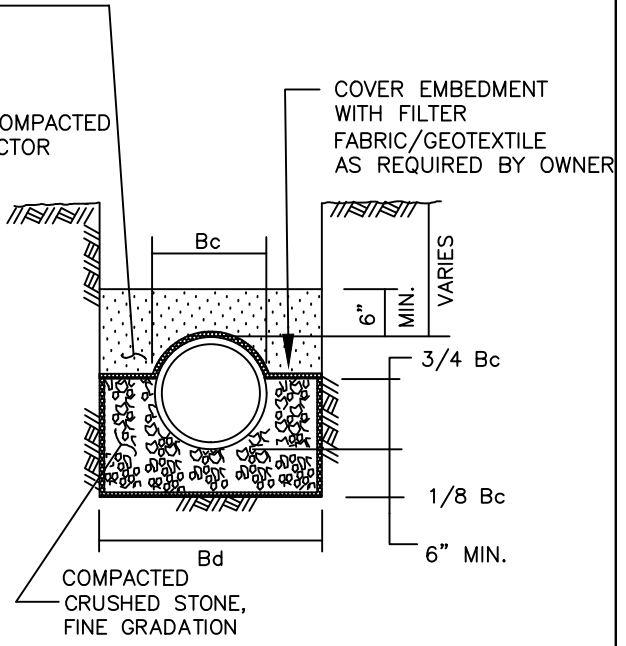
CLASS "B"

N.T.S.



CLASS "B+"

N.T.S.



CLASS "B-1"

N.T.S.

NOTES:

1. Bc = OUTSIDE DIAMETER OF PIPE
2. Bd = TRENCH WIDTH
3. USE 95% DENSITY UNDER PAVED SURFACE AND 90% IN UNPAVED AREAS

STANDARD DRAWING NO. 3020

EMBEDMENT

CLASS "B", "B+", & "B-1"

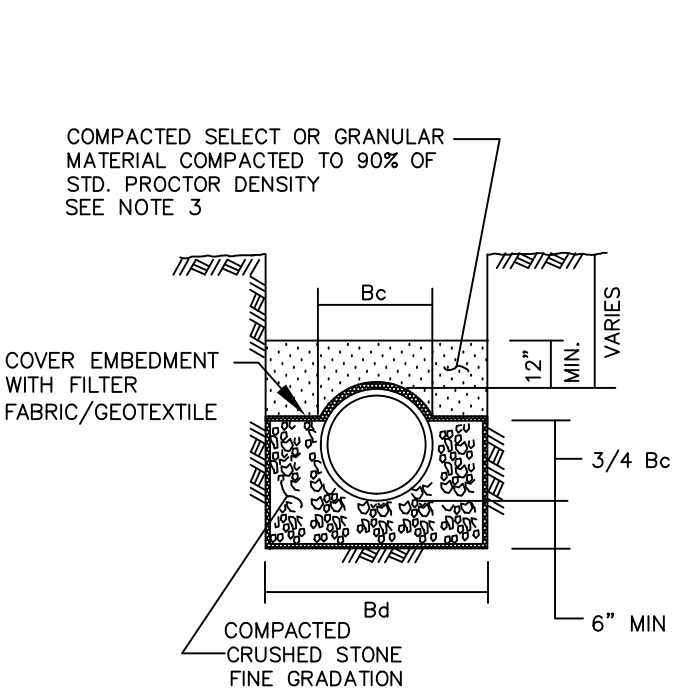
North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

DATE TBD

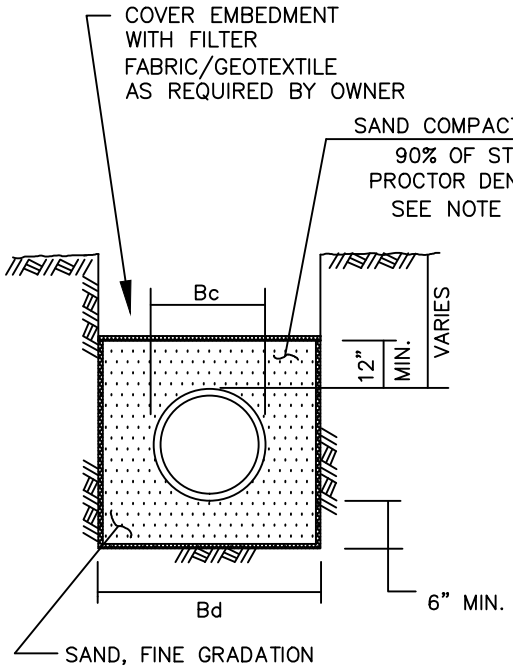
STANDARD DRAWING NO. 3020

DRAFT



CLASS "B–2"

N.T.S.



CLASS "B–3"

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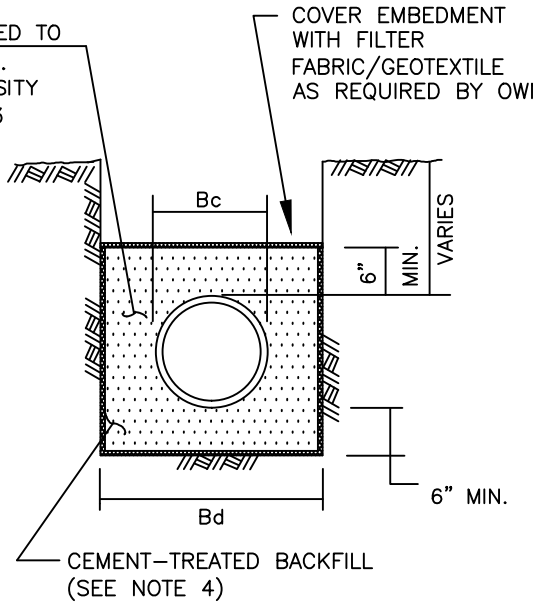


CLASS "B–4"

N.T.S.

NOTES:

1. Bc = OUTSIDE DIAMETER OF PIPE
2. Bd = TRENCH WIDTH
3. USE 95% DENSITY UNDER PAVED SURFACE AND 90% IN UNPAVED AREAS
4. REFER TO 504.6.2

STANDARD DRAWING NO. 3030

EMBEDMENT

CLASS "B–2", "B–3", & "B–4"

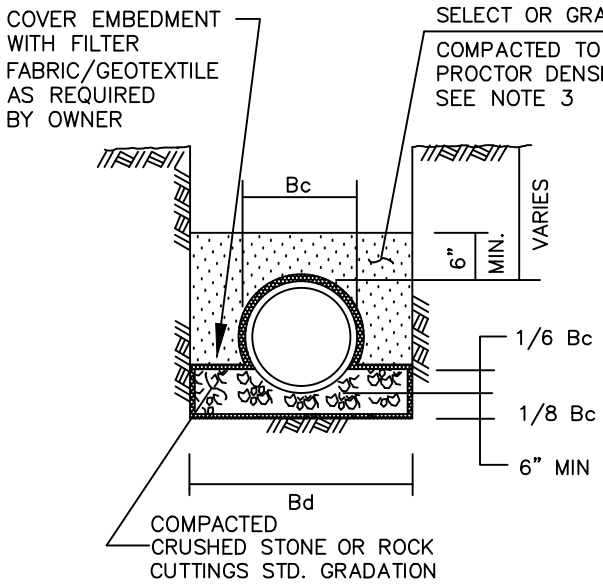
North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

DATE TBD

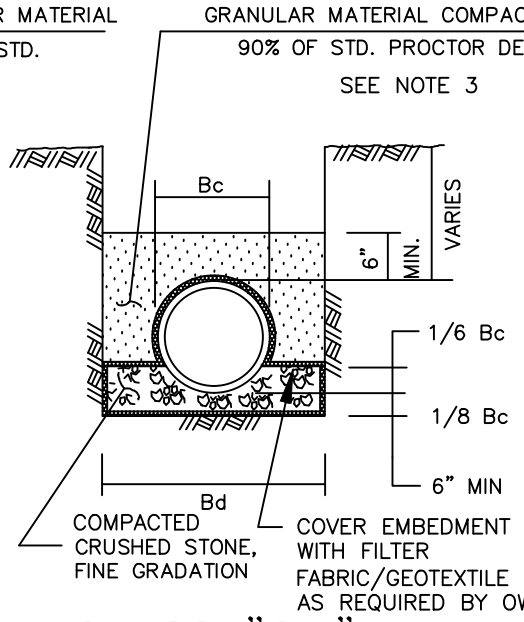
STANDARD DRAWING 3030

DRAFT



CLASS "C"

N.T.S.



CLASS "C+"

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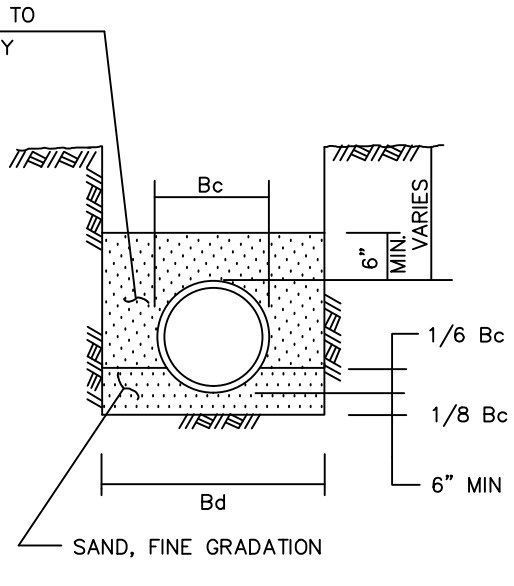


CLASS "C-1"

N.T.S.

NOTES:

1. Bc = OUTSIDE DIAMETER OF PIPE
2. Bd = TRENCH WIDTH
3. USE 95% DENSITY UNDER PAVED SURFACE AND 90% IN UNPAVED AREAS

STANDARD DRAWING NO. 3040

EMBEDMENT

CLASS "C", "C+", & "C-1"

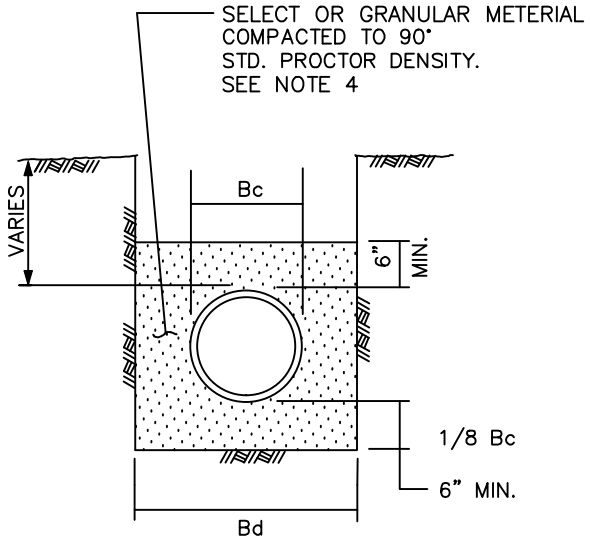
North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 504.5

DATE TBD

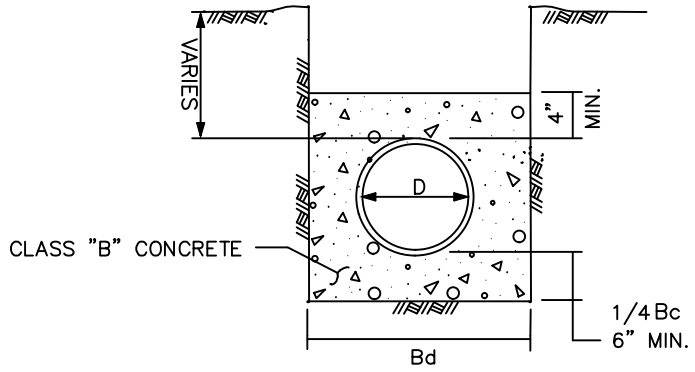
STANDARD DRAWING NO. 3040

DRAFT



CLASS "D+"

N.T.S.



CLASS "G"

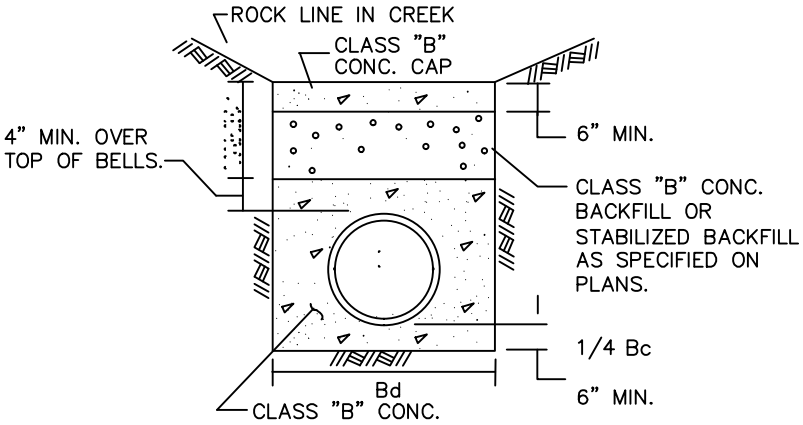
N.T.S.

NOTES:

1. Bc = OUTSIDE DIAMETER OF PIPE
2. Bd = TRENCH WIDTH
3. D = INSIDE DIAMETER OF PIPE
4. USE 95% DENSITY UNDER PAVED SURFACE AND 90% IN UNPAVED AREAS

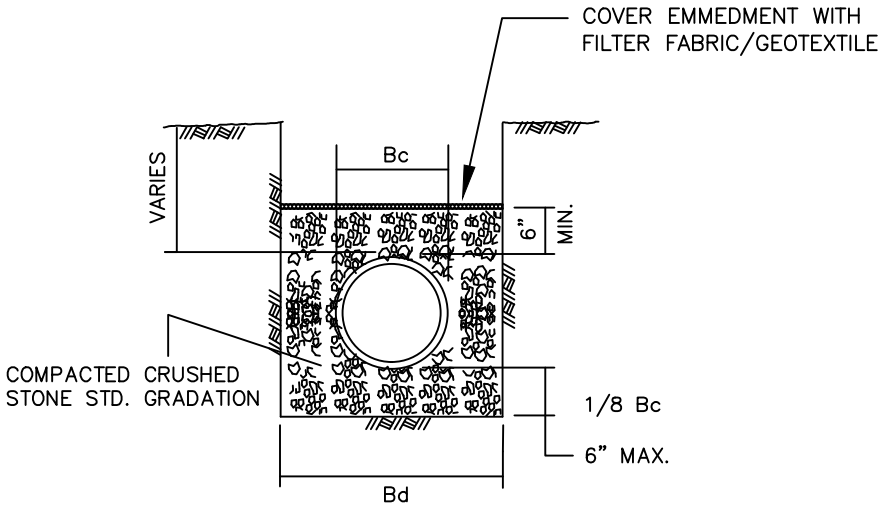
STANDARD DRAWING NO. 3050	EMBEDMENT CLASS "D+" & "G"	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 504.5 DATE TBD / STANDARD DRAWING NO. 3050

DRAFT



CLASS "G-1"

N.T.S.



CLASS "H"

N.T.S.

NOTES:
1. Bc = OUTSIDE DIAMETER OF PIPE
2. Bd = TRENCH WIDTH
3. D = INSIDE DIAMETER OF PIPE
4. USE 95% DENSITY UNDER PAVED SURFACE AND 90% IN UNPAVED AREAS

STANDARD DRAWING NO. 3060

EMBEDMENT

CLASS "G-1" & "H"

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE: 504.5

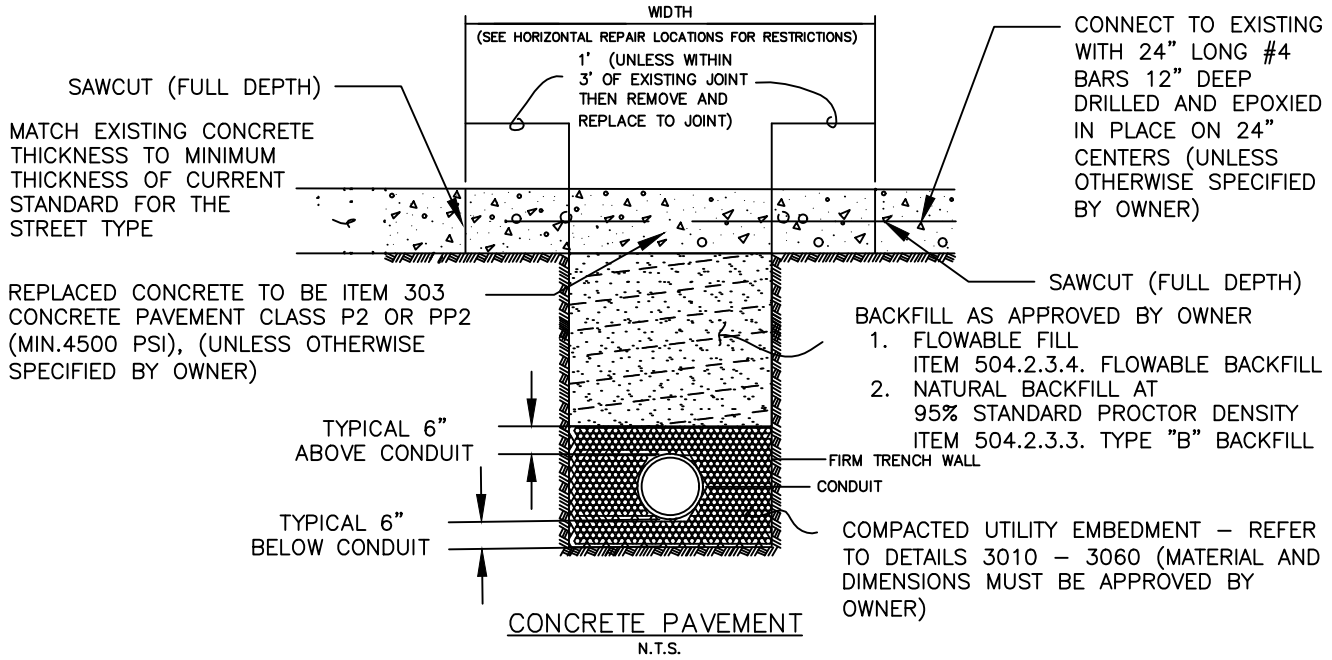
DATE: TBD

STANDARD DRAWING NO.: 3060

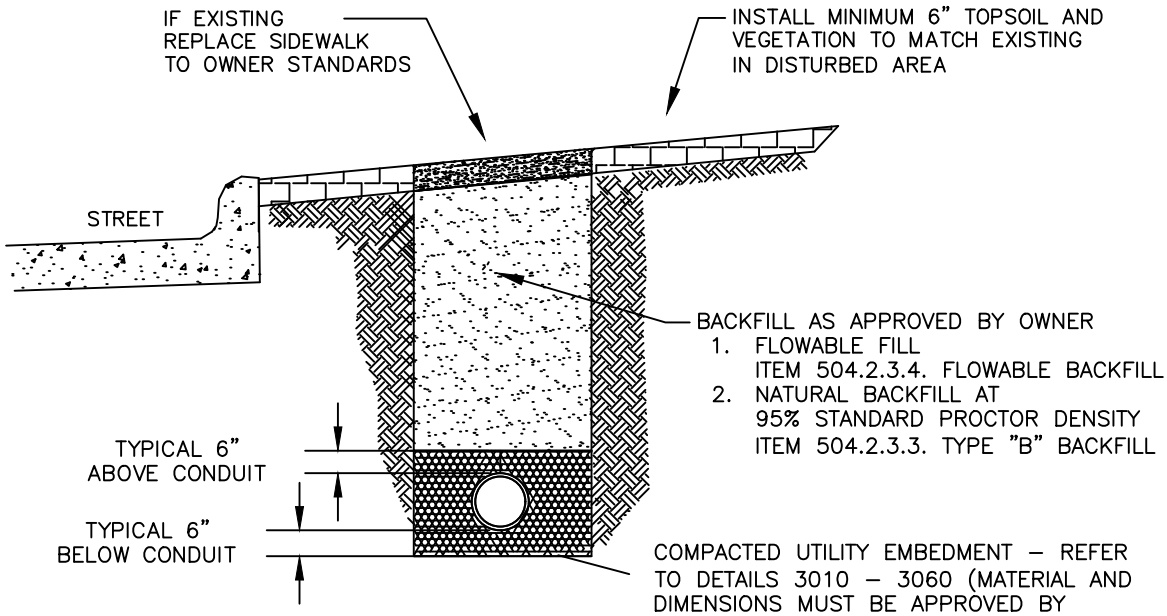
DRAFT

DRAFT

GENERAL NOTE: CHECK WITH STREET OWNER FOR SPECIFIC REQUIREMENTS NOT CONTAINED HEREIN



CONCRETE PAVEMENT
N.T.S.

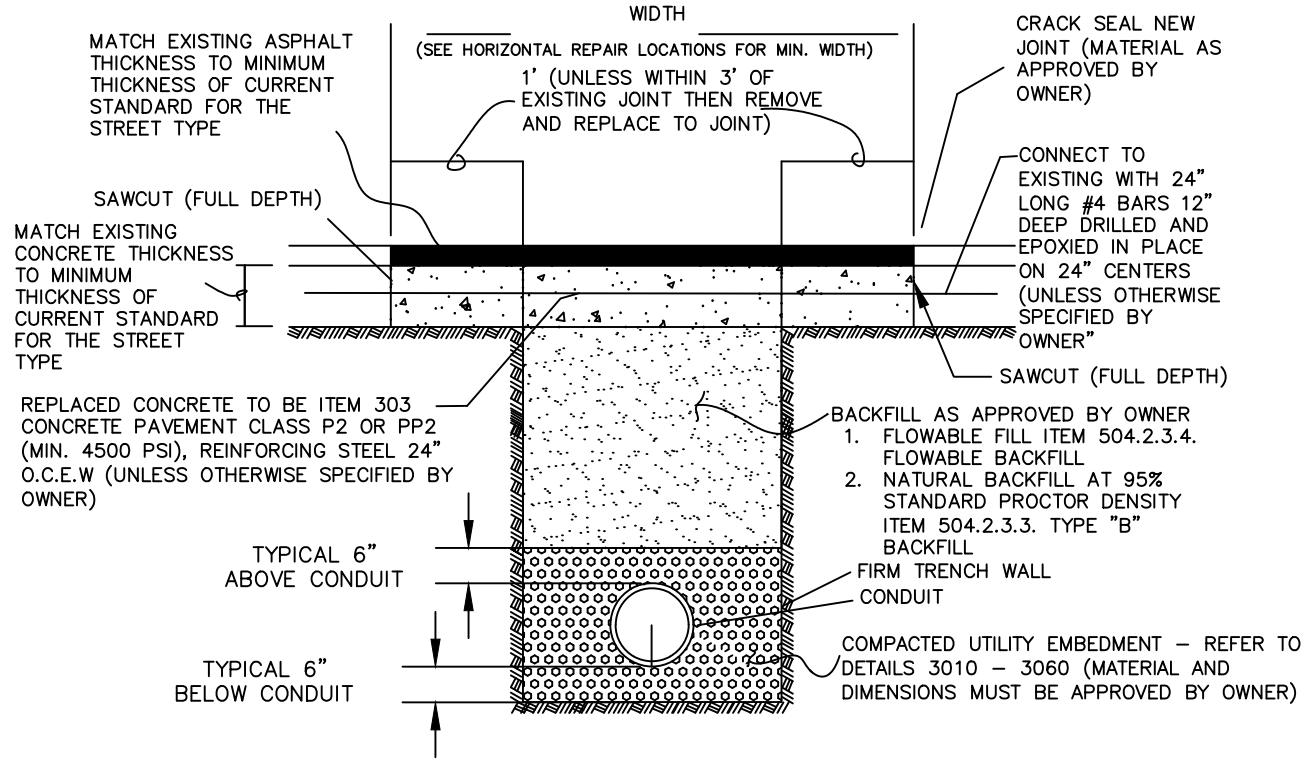


STREET PARKWAY
N.T.S.

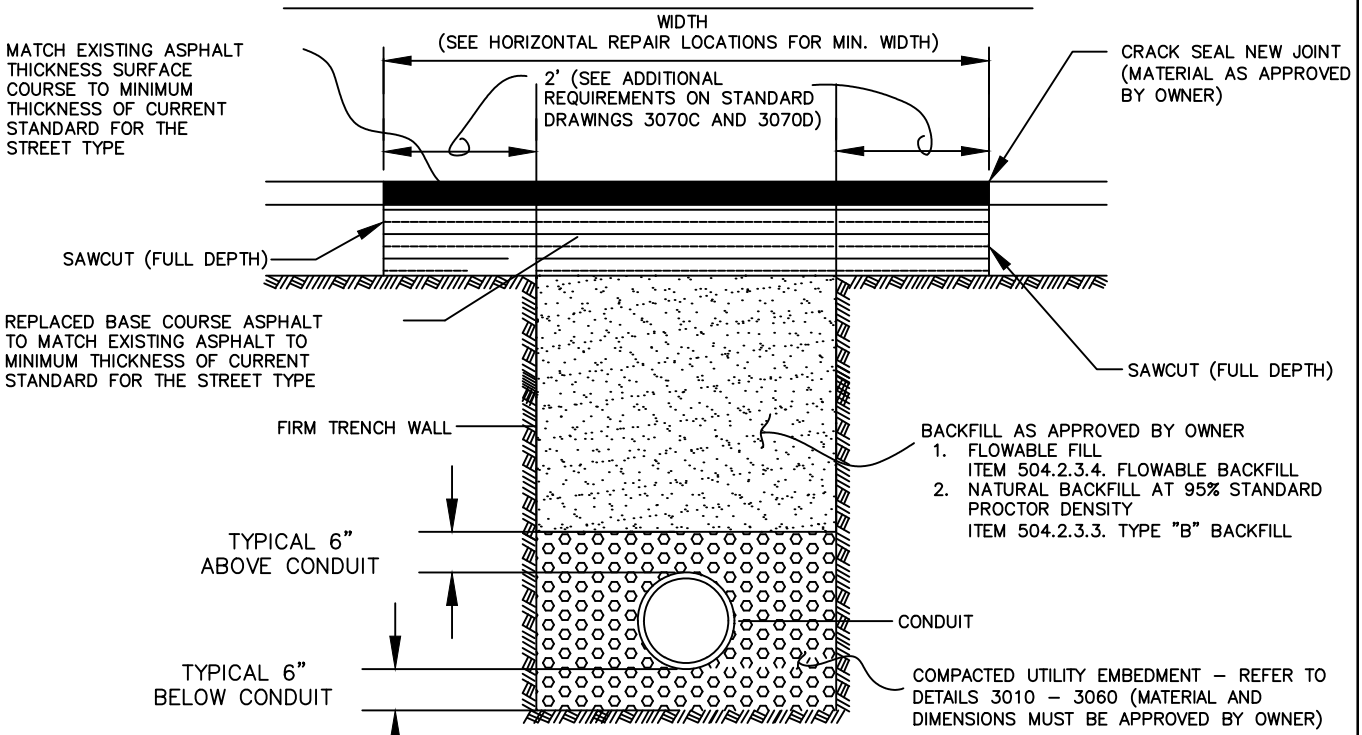
PAVEMENT CUT AND REPAIR	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 402	
CONCRETE AND PARKWAY		DATE TBD	STANDARD DRAWING NO. 3070A

DRAFT

GENERAL NOTE: CHECK WITH STREET OWNER FOR SPECIFIC REQUIREMENTS NOT CONTAINED HEREIN



CONCRETE PAVEMENT WITH ASPHALT OVERLAY



FULL DEPTH ASPHALT PAVEMENT

N.T.S.

PAVEMENT CUT AND REPAIR

ASPHALT

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
402

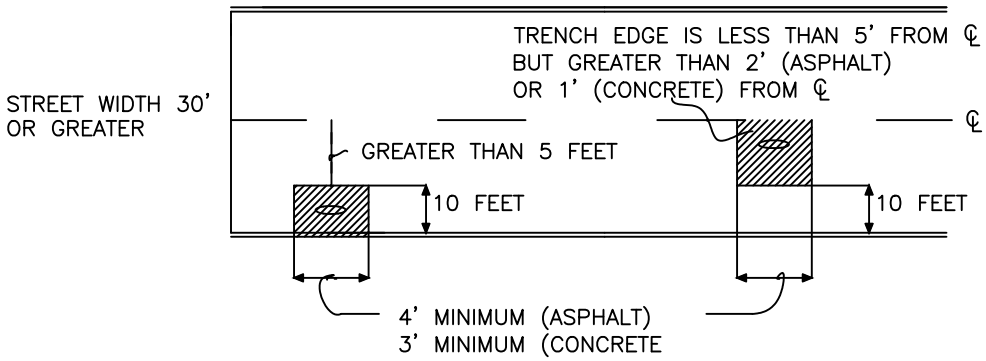
DATE
TBD

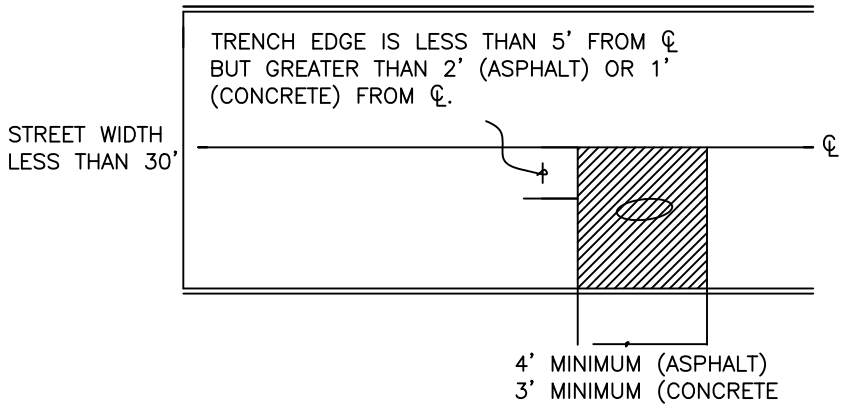
STANDARD DRAWING NO.
3070B

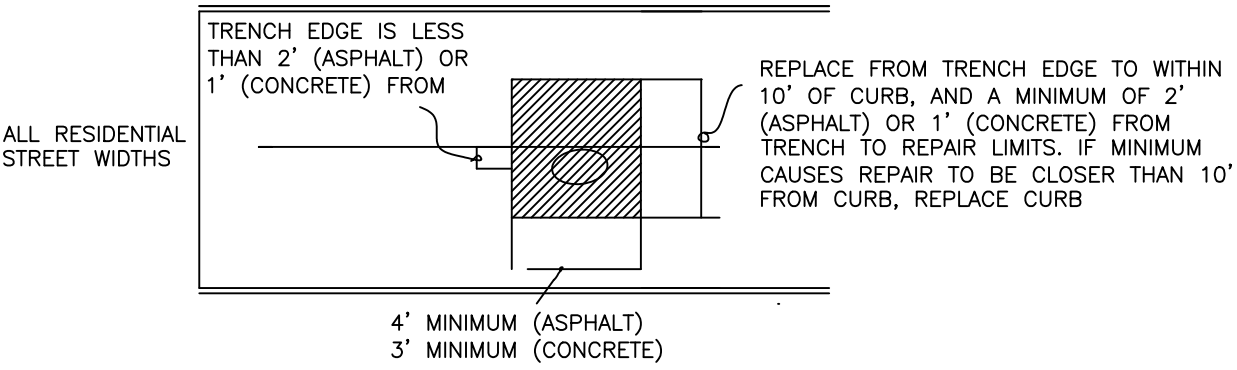
DRAFT

GENERAL NOTES

1. REMOVE AND REPLACE A MINIMUM 4' (ASPHALT) OR 3' (CONCRETE) LONGITUDINAL, OR 2' (ASPHALT) 1' (CONCRETE) FROM THE EDGE OF THE TRENCH, WHICHEVER IS GREATER.
2. IF WITHIN 3' OF AN EXISTING JOINT, THEN REMOVE TO THE EXISTING JOINT.
3. MULTIPLE LOCATIONS ARE TO BE A MINIMUM OF 10' APART FROM EDGE OF REPAIR TO EDGE OF REPAIR, IF LESS THAN 10' APART, A CONTINUOUS SECTION MUST BE REPLACED.
4. A GUTTER OF AT LEAST 12' MAY REMAIN, PROVIDED THAT THE CURB AND GUTTER IS NOT DAMAGED BY THE CONSTRUCTION ACTIVITY.
5. EXACT PAVEMENT REMOVAL LOCATIONS TO BE APPROVED BY OWNER PRIOR TO CONSTRUCTION.





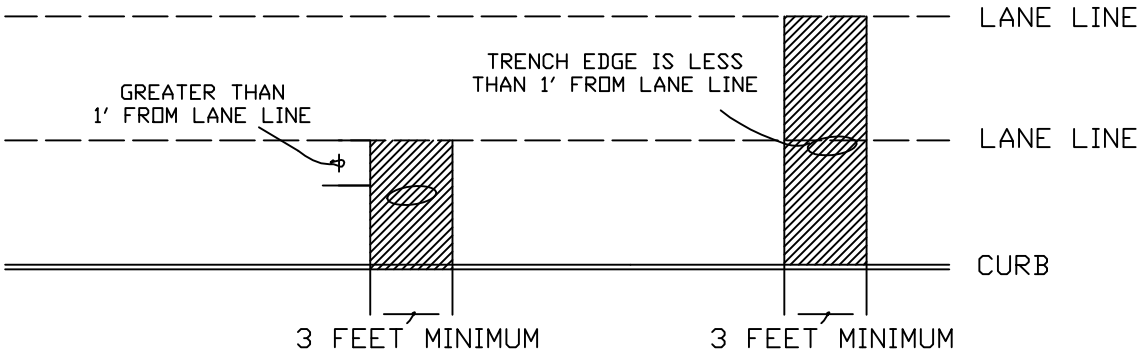


VARIABLE WIDTH RESIDENTIAL STREET

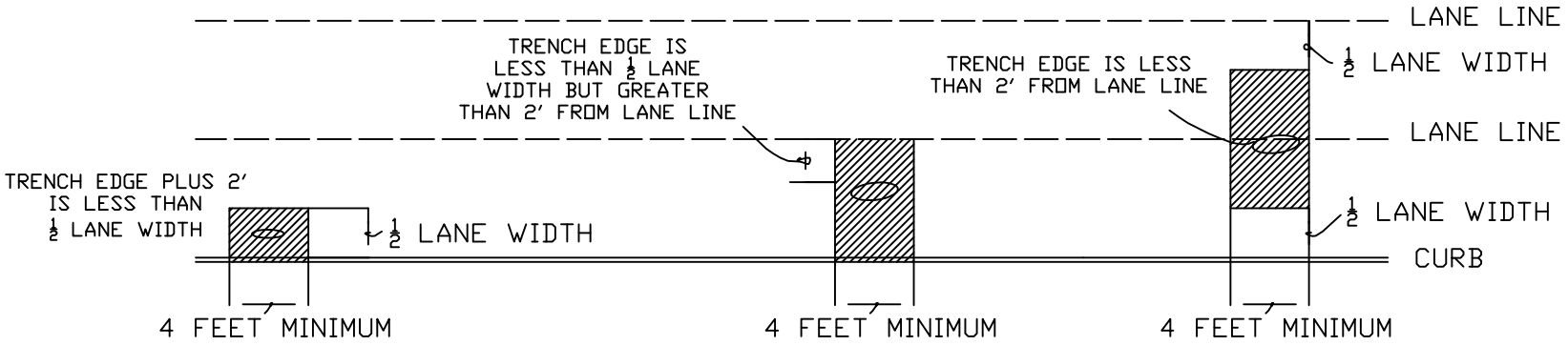
PAVEMENT CUT AND REPAIR	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 402	
EXTENT – RESIDENTIAL		DATE TBD	STANDARD DRAWING NO. 3070C

GENERAL NOTES

1. REMOVE AND REPLACE A MINIMUM OF 3' (CONCRETE) OR 4' (ASPHALT) LONGITUDINAL, OR 1' (CONCRETE) OR 2' (ASPHALT) FROM THE EDGE OF THE TRENCH, WHICHEVER IS GREATER.
2. IF WITHIN 3' OF AN EXISTING JOINT, THEN REMOVE TO THE EXISTING JOINT.
3. MULTIPLE LOCATIONS ARE TO BE A MINIMUM OF 10' APART FROM EDGE OF REPAIR IF LESS THAN 10' APART, A CONTINUOUS SECTION MUST BE REPLACED.
4. A GUTTER OF AT LEAST 12' MAY REMAIN, PROVIDED TAT THE CURB AND GUTTER IS NOT DAMAGED BY THE CONSTRUCTION ACTIVITY.
5. EXACT PAVEMENT REMOVAL LOCATIONS TO BE APPROVED BY OWNER PRIOR TO CONSTRUCTION.



VARIABLE WIDTH CONCRETE STREET
WITH MULTIPLE LANES

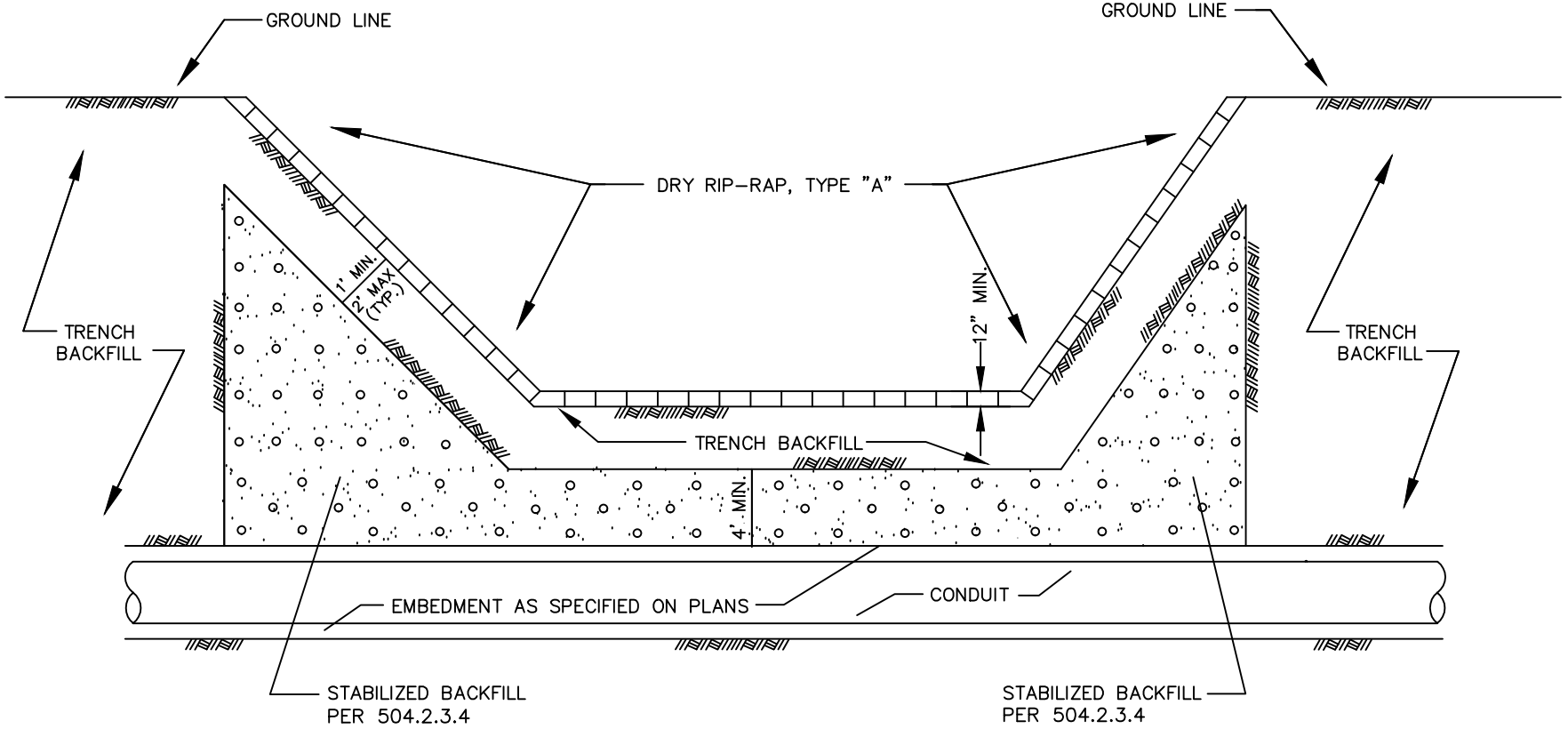


VARIABLE WIDTH ASPHALT STREET
WITH MULTIPLE LANES

STANDARD DRAWING NO. 3070D

PAVEMENT CUT AND REPAIR	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE 402	
EXTENT – MULTIPLE LANES		DATE TBD	STANDARD DRAWING NO. 3070D

DRAFT



STANDARD DRAWING NO. 3080

INFILTRATION PROTECTION
CONDUIT UNDER CHANNEL

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
504; 803

DATE
TBD

STANDARD DRAWING NO.
3080

DRAFT