

TEMPORARY EROSION AND SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE LATEST EDITION OF "NEW YORK STANDARD & SPECIFICATIONS FOR EROSION & SEDIMENT CONTROL". EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. IT IS THE INTENT OF THE EROSION CONTROL PLANS AND NOTES TO BE USED AS A GUIDE BY THE CONTRACTOR TO INSURE THAT NO ERODED MATERIAL MIGRATES FROM THE SITE OR ENTERS ANY WATER COURSE AS WELL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THIS GOAL IS MET, BY IMPLEMENTING THESE PLANS AS WELL AS ANY ADDITIONAL MEASURES THAT MAY BE NEEDED TO ACHIEVE THIS GOAL. ADDITIONAL MEASURES MAY BE REQUIRED BY THE TOWN ENGINEER.
3. EROSION CONTROL DEVICES SHALL BE INSPECTED EACH WEEK AND IMMEDIATELY FOLLOWING ANY RAINFALL GREATER THAN 1/2 INCH WITHIN A 24 HR PERIOD. DEVICES SHALL BE CLEANED AND REPAIRED AS NECESSARY TO ENSURE THEIR PROPER OPERATION, ABOVE.
4. EROSION CONTROL DEVICE SHALL BE REMOVED ONLY WITH THE APPROVAL OF THE TOWN ENGINEER, OR AFTER PERMANENT CONTROL MEASURES ARE FUNCTIONING.
5. ALL SMPs TO BE INSTALLED PER PLAN DETAILS.
6. WATER PUMPED AS A RESULT OF DEWATERING ACTIVITIES SHALL BE DISCHARGED INTO A DEWATERING PIT, THAT IS PROPERLY CONNECTED TO APPROPRIATE SMPs.
7. IT IS RECOMMENDED THAT ALL EROSION CONTROL DEVICES BE PLACED FOR THE ENTIRE PHASE AS SHOWN ON THE EROSION CONTROL PLAN. HOWEVER, PLACEMENT MAY BE DONE TO BETTER SUIT CONSTRUCTION SEQUENCING IF PREVIOUSLY APPROVED BY THE TOWN ENGINEER.
8. PRIOR TO CONSTRUCTION OF ANY PHASE, AS SHOWN ON THE EROSION CONTROL PLANS, THE STABILIZED CONSTRUCTION ENTRANCES MUST BE CONSTRUCTED AS SHOWN ON THE PLANS.
9. UPON INSTALLATION OF ANY CATCH BASIN, AN EXCAVATED DROP INLET DEVICE SHALL BE PLACED AT THE STRUCTURE AND SHALL REMAIN UNTIL ROADWAY PAVING IS COMPLETE, OR ABOVE.
10. ALL DISTURBED AREAS SHALL BE HAY MULCHED AND SEEDED AS SOON AS POSSIBLE.
11. DUST SHALL BE CONTROLLED ON ROADWAY AREAS BY THE APPLICATION OF WATER AT THE DIRECTION OF THE TOWN ENGINEER, OR STORMWATER INSPECTOR.
12. EXISTING PAVEMENT AREAS SHALL BE CLEANED AS REQUIRED AT THE DIRECTION OF THE TOWN ENGINEER, OR STORMWATER INSPECTOR.
13. WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY CEASES ON ANY PARTICULAR AREA, ALL DISTURBED GROUND MUST BE SEEDED WITH FAST-GERMINATING TEMPORARY SEED AND PROTECTED WITH MULCH.
14. ALL DISTURBED SLOPES SHALL BE RE-SEEDED WITHIN 14 DAYS OF DISTURBANCE.
15. SILT FENCING SHALL BE INSTALLED AT THE DOWN GRADIENT PERIMETERS OF ALL SLOPES TO BE RE-GRADED.
15. ONCE ROAD SURFACE HAS BEEN STABILIZED, SILT FENCING SHALL BE INSTALLED ALONG ROADWAY TO PREVENT SEDIMENT FROM ENTERING THE CLOSED DRAINAGE NETWORK WITHIN THE ROADWAY.
16. WATER TRUCKS SHALL BE UTILIZED TO MINIMIZE DUST POLLUTION.

CONSTRUCTION SEQUENCE NOTES

- A) TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THEIR TRIBUTARY AREAS.
- B) CONTRACTOR SHALL COMMENCE SITE CONSTRUCTION ACTIVITIES AS REQUIRED.
- C) INSTALL SILT FENCING AS NEEDED AS CLEARING AND GRADING ACTIVITIES PROGRESS. UPON COMPLETION OF INITIAL ROUGH GRADING OF BUILDING AREAS, TEMPORARY SEEDING AND ESTABLISHMENT OF VEGETATIVE COVER SHALL OCCUR.
- D) IMMEDIATELY FOLLOWING COMPLETION OR SUSPENSION OF CONSTRUCTION ACTIVITIES OR WITHIN 14 DAYS IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS.
- E) PRIOR TO FINALIZING CONNECTION TO THE STORM SEWER SYSTEM, ALL CATCH BASINS AND DRAINAGE LINES SHALL BE CLEANED OF ALL SILT AND SEDIMENT.
- F) ONCE ROAD SURFACE HAS BEEN STABILIZED, SILT FENCING SHALL BE INSTALLED ALONG ROADWAY TO PREVENT SEDIMENT FROM ENTERING THE CLOSED DRAINAGE NETWORK WITHIN THE ROADWAY.
- G) CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AND IMMEDIATELY ESTABLISH PERMANENT VEGETATION ON THE AREAS DISTURBED DURING THE REMOVAL.

SOIL EROSION AND SEDIMENT CONTROL MEASURES

1. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE PREVENTED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
2. EXCLUDING DISTURBED AREAS ON PLANS, EXISTING VEGETATION SHALL BE PRESERVED.
3. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE AREA AND DURATION OF SOIL DISRUPTION.
4. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED.
5. CONSTRUCTION TRAFFIC SHALL NOT CROSS STREAMS OR DITCHES EXCEPT AT SUITABLE CROSSING FACILITIES, AND SHALL NOT OPERATE UNNECESSARILY WITHIN WATERWAYS OR DRAINAGE DITCHES.

PARTICULAR MEASURES:

1. PRIOR TO PAVING OF THE PROPOSED ROADWAY, ALL STORM DRAIN INLETS SHALL UTILIZE EXCAVATED DROP INLET PROTECTION TO PREVENT SEDIMENT FROM ENTERING THE CLOSED DRAINAGE SYSTEM. ONCE THE PROPOSED ROADWAY HAS BEEN PAVED, STONE & BLOCK DROP INLET PROTECTION SHALL BE PLACED AT ALL STORM DRAIN INLETS.
2. HAY BALE BERMS: HAY BALE BERMS OR SILT FENCE SHALL BE CONSTRUCTED AROUND ALL STOCKPILES OF FILL, TOPSOIL, AND EXCAVATED OVERBURDEN THAT ARE TO REMAIN EXPOSED FOR PERIODS LESS THAN 14 DAYS. HAY BALE BERMS SHALL BE ANCHORED AND MAINTAINED IN GOOD CONDITION UNTIL SUCH TIME AS SAID STOCKPILES ARE REMOVED AND STOCKPILING AREAS ARE BROUGHT TO FINAL GRADE AND PERMANENTLY STABILIZED.
3. TOPSOIL AND FILL THAT IS TO REMAIN STOCKPILED ON-SITE FOR PERIODS GREATER THAN 14 DAYS SHALL BE STABILIZED BY SEEDING. PRIOR TO THE SEEDING OPERATION, THE STOCKPILED MATERIAL SHALL BE GRADED AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND MULCH ANCHORING.
4. IN NO CASE SHALL ERODIBLE MATERIALS BE STOCKPILED WITHIN 25 FEET OF ANY DITCH, STREAM OR OTHER SURFACE WATER BODY.
5. WITHIN 14 DAYS AFTER CONSTRUCTION ACTIVITY CEASES ON ANY PARTICULAR AREA, ALL DISTURBED GROUND MUST BE SEEDED WITH FAST-GERMINATING TEMPORARY SEED AND PROTECTED WITH MULCH.

SPRING OR SUMMER OR EARLY FALL
SEED AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 30 LBS. PER ACRE (APPROX. 0.7 LB./1000 sq. ft. OR USE 1 lb./1000 sq. ft.)

LATE FALL OR EARLY WINTER SEED CERTIFIED
"AROSTOCK" WINTER RYE (CEREAL RYE) AT 100 LBS. PER ACRE (2.5 LBS./1000 sq. ft.)

MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 90 LBS./1000 sq. ft. OR 2 BALES).

ALL HEALTHY TREES OF DESIRABLE SPECIES ARE TO BE PROTECTED FROM DAMAGE. ALL UNNECESSARY REMOVAL OF HEALTHY TREES SHALL BE AVOIDED.

MAINTENANCE OF EROSION CONTROL MEASURES

1. THE DEVELOPER/CONTRACTOR OR HIS BUILDER SHALL INSPECT AND MAINTAIN THE INTEGRITY AND FUNCTION OF ALL TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE DEVELOPMENT PROCESS. TO ASSURE PROPER FUNCTION, SITUATION BARRIERS SHALL BE MAINTAINED IN GOOD CONDITION AND REINFORCED, EXTENDED, REPAIRED, RE-SEEDED AND PROTECTED FROM FURTHER EROSION. ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AND CONTAINED IN APPROPRIATE SPOIL AREAS. WATER SHALL BE APPLIED TO NEWLY SEEDED AREAS AS NEEDED UNTIL GRASS COVER IS WELL ESTABLISHED.
2. SEDIMENTATION CONTROL MEASURES SHALL BE MONITORED TO ENSURE PROPER FUNCTIONALITY. THE FOLLOWING ITEMS SHALL BE INSPECTED EACH WEEK AND IMMEDIATELY FOLLOWING ANY RAINFALL GREATER THAN 1/2 INCH WITHIN A 24 HR PERIOD.
 - A. CATCH BASINS SHALL BE CHECKED FOR SEDIMENT ACCUMULATION.
 - B. HAY/STRAW BALES AND SILT FENCING SHALL BE INSPECTED REGULARLY FOR UNDERMINING AND DETERIORATION.
 - C. SEEDED/MULCHED AREAS SHALL BE INSPECTED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE REPAIRED AS NECESSARY.
 - D. THE CONSTRUCTION ENTRANCE(S) SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS - OF - WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS - OF - WAY MUST BE REMOVED IMMEDIATELY.
3. SEDIMENT SHALL BE REMOVED FROM SEDIMENT TRAPS WHENEVER THEIR CAPACITY HAS BEEN REDUCED BY 50% FROM THE DESIGN CAPACITY.

GENERAL NOTES

1. REFERENCE STORM DRAINAGE REPORT PREPARED BY INGALLS & ASSOCIATES LLP, DATED JUNE 29, 2007, LAST REVISED ON FEBRUARY 27, 2008.
2. RESPONSIBLE PARTIES:
 - OWNER/OPERATOR - ULTIMATE RESPONSIBLE TO EDUCATE CONTRACTOR/BUILDER & RESPONSIBLE FOR SWPPP IMPLEMENTATION
 - SITE CONTRACTOR - WORK WITHIN R.O.W., INCLUDING ROAD AND RELATED UTILITY INSTALLATION, AND OVERALL SITE GRADING, FOLLOWING SWPPP
 - BUILDER - DEVELOP INDIVIDUAL LOTS, FOLLOWING SWPPP

WORK WITHIN R.O.W., INCLUDING ROAD AND RELATED UTILITY INSTALLATION, AND OVERALL SITE GRADING, FOLLOWING SWPPP

DEVELOP INDIVIDUAL LOTS, FOLLOWING SWPPP

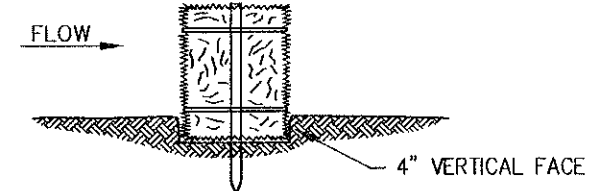
EXCAVATED DROP INLET PROTECTION DETAILS FOR UNPAVED AREAS

NOT TO SCALE

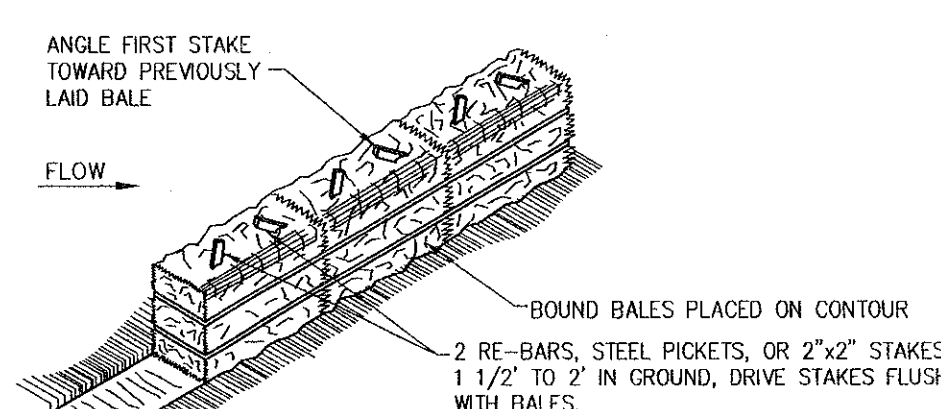
CONSTRUCTION SPECIFICATIONS:

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEED HOLES SHALL BE PROTECTED BY GRAVEL.
4. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
5. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION SHALL BE MINIMIZED.
6. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEED HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING. MAXIMUM DRAINAGE AREA 1 ACRE

BEDDING DETAIL:



ANCHORING DETAIL:



CONSTRUCTION SPECIFICATIONS

1. INSTALL STRAW BALE DIKES IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
2. BALES SHALL BE PLACED AT THE TOE OF A SLOPE, OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ADJUTING THE ADJACENT BALES. BALES SHALL NOT BE USED AS CHECK DAMS.
3. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BRIDGES ARE HORIZONTAL.
4. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE DIKE DETAIL

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FEET MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY - FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS - OF - WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS - OF - WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

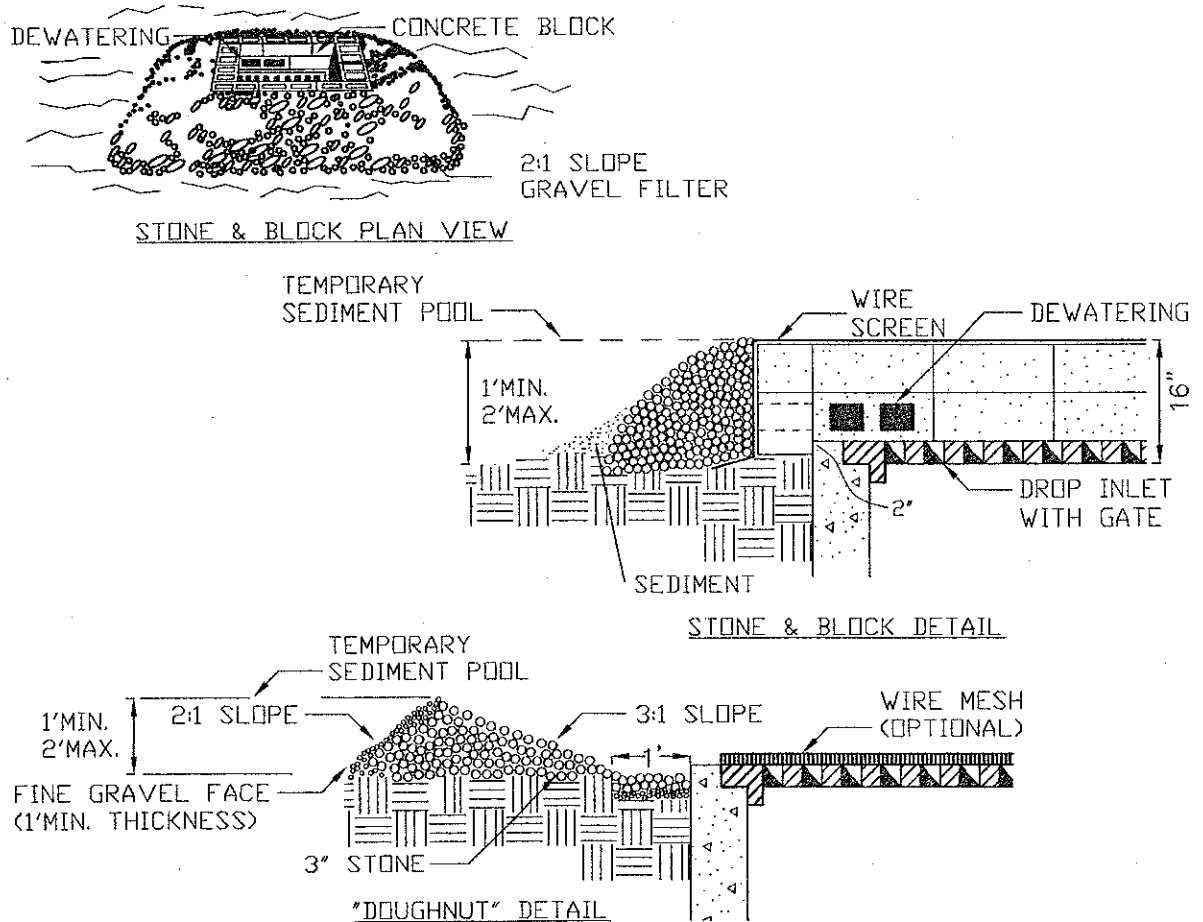
STABILIZED CONSTRUCTION

ENTRANCE DETAILS

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. INSTALL SILT FENCE IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", SECTION 7A.
2. WOVEN WIRE FENCE SHALL BE 12 1/2 GA., 6" MAXIMUM MESH OPENING, FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
3. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
4. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE WRAPPED TOGETHER PER DETAIL 4 ON THIS PAGE.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SEDIMENT REMOVED WHEN ACCUMULATION REACHES 1/2 OF DESIGN CAPACITY OF FENCE (1/2 HEIGHT OF FILTER FABRIC) OR WHEN "BULGES" DEVELOP IN FENCING.

POSTS: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 12 1/2 GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

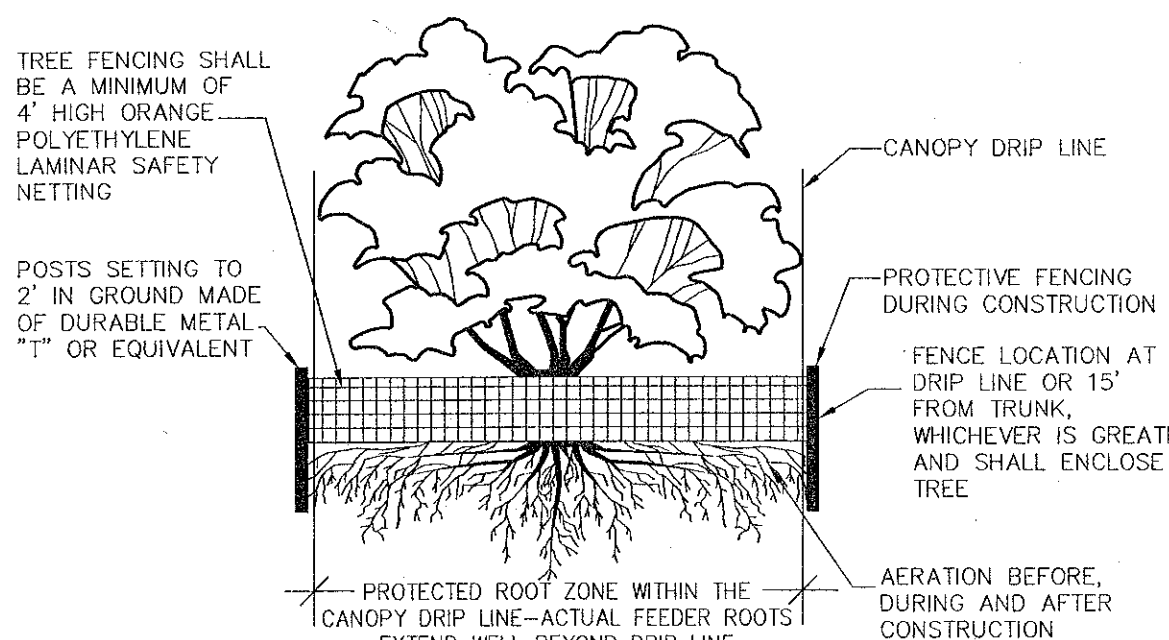


CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS. MAXIMUM DRAINAGE AREA 1 ACRE

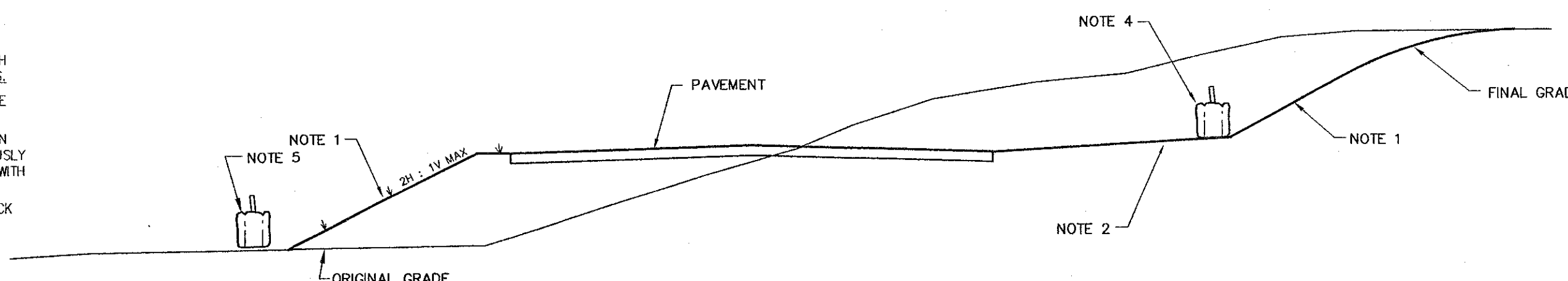
STONE & BLOCK DROP INLET PROTECTION DETAILS FOR PAVED AREAS

NOT TO SCALE



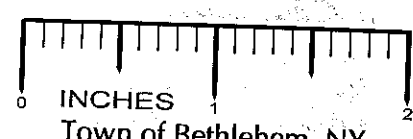
TREE PROTECTION DETAIL

NOT TO SCALE



NOTES:

- 1) WHEN CUT/FILL SLOPE HAS BEEN COMPLETED, THE SLOPE SHOULD BE TRIMMED AND THE PERMANENT EROSION CONTROL MEASURES OF SEEDING AND MULCHING SHOULD BE CARRIED OUT. IF THE CUT/FILL IS TRIMMED "OUT OF SEASON" (FROM NOV. 1 THRU APRIL 1), MULCH THE SLOPE AND SEED ON TOP OF THE MULCH IN THE NEXT SEEDING SEASON.
- 2) IF THE SLOPE CAN NOT BE COMPLETED BECAUSE PAVING IS REQUIRED OR FOR OTHER REASONS, THE SEEDING AND MULCHING SHOULD BE COMPLETED TO THE MAXIMUM EXTENT POSSIBLE.
- 3) WHEN THE CUT/FILL CANNOT BE BROUGHT TO FINAL GRADE IN A REASONABLE LENGTH OF TIME (WITHIN 14 DAYS) IT SHOULD BE MULCHED.
- 4) PROVIDE A CONTINUOUS LINE OF HAY OR STRAW BALES AT TOE OF CUT SLOPE UNTIL SLOPE GRASS HAS TAKEN HOLD.
- 5) PROVIDE A CONTINUOUS LINE OF HAY OR STRAW BALES AT TOE OF EMBANKMENT SLOPE UNTIL SLOPE GRASS HAS TAKEN HOLD.



AUG 1 2008

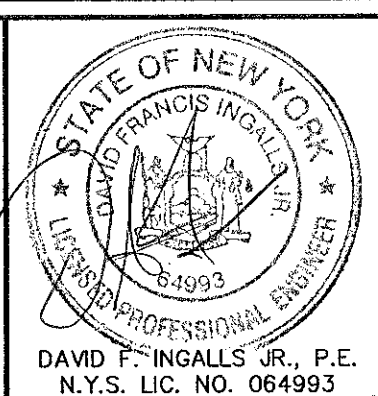
FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SEEDING AND MULCHING GUIDES - CUT/FILL SLOPES

NO.	DATE	REVISIONS	BY
1	2/27/08	REVISED PER TOWN COMMENT LETTER 2/13/08	PJY
2	12/27/07	REVISED PER TOWN COMMENT LETTER 11/28/07	PJY
3	8/24/07	REVISED PER TOWN COMMENT LETTER 7/23/07	RF
4	3/15/07	REVISED PER TOWN COMMENT LETTER 5/02/07	RF

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209 SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW. ONLY COPIES MADE FROM THE ORIGINAL OF THIS DRAWING BEARING AN ORIGINAL INKED OR EMBOSSED SEAL AND SIGNATURE SHALL BE CONSIDERED TO BE VALID TRUE COPIES.

© Copyright 2007 - Ingalls & Associates - All rights reserved



ingalls & associates, LLP
engineers / surveyors
2893 GUILDERLAND AVENUE
SCHENECTADY, N.Y. 12306
PHONE: (518) 393-7229
FAX: (518) 393-3761

EROSION & SEDIMENT CONTROL DETAILS			
COTTONWOOD LANE ESTATES LANDS OF CARMELO CRISAFULLI, JR.			
TOWN OF BETHLEHEM COUNTY OF ALBANY STATE OF NEW YORK			
DRAWN BY: RF	CHECKED BY: DF	SCALE: 1" = 50'	
CADD: 06-018DF	JOB NO. 06-018		
DATE: APRIL 12, 2007			
			SHEET 6 OF 7