

Erosion, Sedimentation, and Pollution Control Plan General Notes

(IN PERFORMANCE WITH GENERAL NPDES PERMIT NO. GAR 100001. IT IS HIGHLY RECOMMENDED THAT THE PERMITTEE READ AND UNDERSTAND THE TERMS AND CONDITIONS OF THE PERMIT.)

- Owner/Primary Permittee:
HomeGoods, Inc.
770 Cochituate Road
Framingham, Massachusetts 01701
Phone: (508) 390-5765
Contact: Mr. Jon K. Nelson
- Engineer:
TDK Engineers LLC
2302 Paper Chase Drive
Lawrenceville, Georgia 30043
Phone: (770) 831-9122
Contact: Mr. Timothy D. Kappo, P.E.
- 24-Hour Erosion and Sediment Control Contact:
Contact: Mr. Gary Minor
Phone: (770) 841-1500
- Total Area: 104,666 Acres
- Existing Land Use / Site Description: Previously-graded building pads and undeveloped pasture and woods with moderate to steep slopes
Proposed Land Use: Office/Warehouse/Distribution
Proposed Construction Activity: Site development and building construction

- Name of Receiving Waters: Unnamed Tributary of the North Doane River & Opossum Creek Area of On-Site Wetlands: 1.14 Acres as identified in the Report of Jurisdictional Wetlands Assessment by S&ME dated May 10, 2013.
No land disturbance shall occur within stream buffers.
- Pre-Construction runoff coefficient/curve number: 70
Post-Construction runoff coefficient/curve number: 89
- The licensed professional who prepared this Erosion, Sedimentation, and Pollution Control Plan will inspect the installation of the initial sediment storage requirements and perimeter control best management practices (BMPs) which the licensed professional designed within 7 days after installation. It is the responsibility of the primary permittee to notify the licensed professional when initial construction activities will commence. The licensed professional shall determine if these BMPs have been installed and are being maintained as designed. The licensed professional shall notify the primary permittee and the permittee must correct all deficiencies within two business days of the inspection by the licensed professional.

DESIGN PROFESSIONAL 7-DAY VISIT CERTIFICATION

DATE OF INSPECTION: _____
I certify the site was in compliance with the ES&PC Plan on the date of inspection.

GSWCC LEVEL II DESIGN PROFESSIONAL

CERTIFICATION # _____

Inspection revealed the following discrepancies from the ES&PC Plan.

These deficiencies must be addressed immediately and a re-inspection scheduled. Work shall not proceed on the site until design Professional Certification is obtained.

- Secondary permittees must notify the primary permittee within 24 hours of becoming aware of any suspected BMP design deficiencies. The primary permittee must evaluate whether to address those design BMPs within seven (7) days of being notified by the secondary permittees. When this Plan is amended, the primary permittees must notify and provide a copy of the amendment to all affected secondary permittees within seven (7) day period. The secondary permittee(s) must implement any new Plan requirements affecting their site(s) within 48 hours of notification by the primary permittees. The primary or tertiary permittee remains responsible for insuring that this Plan or the tertiary erosion control (TEC) plan, as appropriate, meets the requirements of General NPDES Permit No. GAR 100001.
- STRUCTURAL PRACTICES:**
The structural practices shown on this Plan have been designed to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. For sediment and erosion control purposes, structural practices have been shown in three different phases, based on construction activities. These phases include initial perimeter control, intermediate grading and drainage, and final stabilization.

During the initial perimeter control phase, all fence (Sd1) will be utilized at several locations to keep sediment away from undisturbed areas. One construction exit (Co) will be installed. Dust control (Du) will be used on the disturbed areas as necessary. Diversion berms (Di) are to be used to divert runoff to sedimentation control structures. Vegetative (Ch-V) channel lining is to be installed in the ditches as shown. Runoff from the majority of the site shall be collected and treated in two retrofitted (Rt) micropool extended detention ponds, one of which is a modification/expansion of an existing facility which is to occur during this phase and remain as a single permanent facility, and the other which is an existing facility that will no longer be needed upon completion of the intermediate grading and drainage phase. Runoff from other portions of the site that cannot be diverted to an Rt will be treated by silt fence (Sd1). Areas that receive discharge from outlet pipes are to be protected with storm outlet protection (St). Dumped rip-rap (Rp) shall be used as specified on the plans.

During the intermediate grading and drainage phase, all grading required for building pads and parking areas, and relocation/installation of storm drainage and sanitary sewer systems, will be performed. Dust control (Du) and disturbed area stabilization (Dn1) will be used on the graded areas as necessary. Surface roughening (Su) is required on cut and fill slopes steeper than 3:1 to reduce erosion and provide sediment trapping. The temporary diversion berms (Di) will be removed after the permanent storm drainage systems make the diversion berms (Di) unnecessary. Storm outlet protection (St) will be used where concentrated flow is discharged from the storm drainage systems and detention pond.

During the final stabilization phase, paving, building construction and utility installation will be performed. Matting blankets (Mb) and permanent vegetation (Dn2) shall be used as specified on the plans. Sedimentation controls specified during the initial perimeter control phase shall be removed as necessary. Sedimentation controls specified in the final stabilization phase shall remain.

For more detail regarding the sequencing of installation of structural practices, see the Activity Schedule on sheet 3.

- SEDIMENT STORAGE:**
Each retrofitted (Rt) micropool extended detention pond facility has been designed to provide at least 67 cubic yards of sediment storage per disturbed acre that drains to each facility.

- KEEPING PLANS CURRENT:**
The primary permittee(s), as applicable, shall amend their Plan whenever there is a change in design, construction, operation, or maintenance, which has significant effect on BMPs with a hydraulic component, i.e., those BMPs where the design is based upon rainfall intensity, duration and return frequency of storms or on the potential for the discharge of pollutants to the waters of Georgia and which has not otherwise been addressed in the Plan, or if the Plan proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity. Amendments/Revisions to the Plan which have a significant effect on a BMP's with a hydraulic component as described above must be certified by a design professional.

- STORM WATER MANAGEMENT:**
Storm water detention for the site will be provided by one proposed micropool extended detention pond.

- POST-CONSTRUCTION STORM WATER POLLUTANT CONTROL:**
The micropool detention pond shall serve as the water quality BMP to control pollutants in storm water discharges that occur after construction operations have been completed. The pond has also been designed to detain the one year channel protection volume and to provide peak flow attenuation. A storm outlet protection apron shall be placed downstream of the storm water discharge location to provide non-erosive flow so that the natural, physical, and biological characteristics and functions of the water course are maintained and protected. The installation of these devices may be subject to Section 404 of the Federal Clean Water Act. The permittee is only responsible for the installation and maintenance of storm water management devices prior to final stabilization of the site and is not responsible for the operation and maintenance of such structures after construction activities have been completed.

- STABILIZATION MEASURES:**
Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased, except:

- when the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or other adverse weather conditions, stabilization measures shall be initiated as soon as practicable; or
- where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time period that construction activity is temporarily ceased is less than 21 days) then stabilization measures do not have to be initiated on that portion of the site by the 14th day after construction activity temporarily ceased.

Temporary stabilization (Dn1 and Dn2) can be applied to disturbed areas that will be inactive for less than six months. Permanent stabilization (Dn2) shall be applied to disturbed areas that will be inactive for longer than six months. Ditches, temporary diversion berms, and slopes (which have 3:1 or steeper slope and 10 feet or more high) shall be stabilized with erosion control matting (Mb). Storm control (Du) shall also be provided as needed during grading activities.

- MAINTENANCE:**
All vegetative measures, erosion and sediment control measures, and other protective measures shown on this Plan shall be maintained to ensure the measures remain in good and effective operating condition. Refer to the details contained within this Plan for additional maintenance instructions.

- NON-STORM WATER DISCHARGES:**
Non-storm water discharges (discharges from fire fighting activities, fire hydrant flushing, potable water sources including water line flushing, irrigation drainage, or conditioning condensate, springs, uncontaminated groundwater, and foundation or footing drains where flows are not contaminated with process materials or pollutants) that are combined with storm water discharges associated with construction activity shall be discharged to the proposed storm drainage system and routed through the erosion and sedimentation controls identified within this Plan. Notify the licensed professional who prepared this Plan if this is not possible.

WASTE MATERIALS AND DISPOSAL:

Waste Disposal: No solid materials, including building materials, shall be discharged to waters of the State, except as authorized by a Section 404 permit.

All waste materials shall be collected and stored in a securely lidded metal dumpster or other appropriate waste management facility permissible under GAR permit No. 100001. Waste management facilities shall meet all solid waste management regulations. All trash and construction debris from the site shall be deposited in the waste management facilities. Waste management facilities shall be emptied a minimum of once per week or more often if necessary and trash shall be hauled as required by local regulations. No construction waste shall be buried on-site.

- All personnel shall be instructed on proper procedures for waste disposal. A notice stating these practices shall be posted at the job site and the Contractor shall be responsible for seeing that these procedures are followed.

HAZARDOUS WASTES:

All hazardous waste materials shall be disposed of in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. The job site superintendent, who will also be responsible for seeing that these practices are followed, shall instruct site personnel in these practices. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site shall be obtained and used for the proper management of potential wastes that may result from these products. An MSDS shall be posted in the immediate area where such product is stored and/or used and another copy of each MSDS shall be maintained in the ES&PC file at the job site construction trailer office. Each employee who handles a substance with hazardous properties will be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control.

No spilled hazardous materials or hazardous wastes shall be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge shall be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water.

PRACTICES TO REDUCE POLLUTANTS:

Petroleum Based Products - Containers for products such as fuels, lubricants and tars shall be inspected daily for leaks and spills. This includes on-site vehicle and machinery daily inspections and regular preventive maintenance of such equipment. Equipment maintenance areas shall be located away from storm waters, natural drains and storm water drainage inlets. In addition, temporary fueling tanks shall have a secondary containment liner to prevent/minimize site contamination. Discharge of oils, fuels and lubricants is prohibited. Proper disposal methods shall include collection in a suitable container and disposal as required by local and State regulations.

Paints/Finishes/Solvent - All products shall be stored in tightly sealed original containers when not in use. Excess product will not be discharged into storm water collection systems. Excess products, materials used with these products and product containers shall be disposed of according to manufacturer's specifications and recommendations.

Concrete Truck Washing - storage locations and disposal procedures for concrete truck or mixer wash-out: Concrete truck wash-out location shall be in a temporary truck wash area located on the crest of the access road. Wash-out shall be contained within a pit or trench with no material leaving the site or impacting vegetated areas shown to be saved on the free save plan. Disposal of material shall be by on-site disposal of material into acceptable pieces and placement within unclassified fill areas as directed by the geotechnical engineer.

Building Materials - No building or construction materials shall be buried or disposed of on-site. Disposal of all such materials shall follow proper waste disposal procedures.

HAZARDOUS WASTES:

- Local, State, and manufacturer's recommended methods for spill cleanup shall be clearly posted and procedures shall be made available to site personnel.
- Material and equipment necessary for spill cleanup shall be kept in the material storage areas.
- Spill prevention practices and procedures shall be reviewed after a spill and adjusted as necessary to prevent future spills.
- All spills will be cleaned immediately upon discovery. All spills shall be reported as required by local, State and Federal regulations.
- The discharge of hazardous substances or oil in the storm water discharge(s) from a site shall be prevented.
- Where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. Sec. 12-14-2, et seq.), 40 CFR 117, or 40 CFR 302 occurs during a 24-hour period, the permittee is required to notify EPA at (404) 656-4863 or (800) 241-4113, and the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of Georgia's Oil or Hazardous Material Spills or Releases Act (O.C.G.A. Sec. 12-14-2, et seq.), 40 CFR 117, and 40 CFR 302 as soon as he has knowledge of the discharge.
- FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEET ON SURFACE WATER) OR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) SHALL BE CONTACTED WITHIN 24 HOURS AT (800) 424-8802.
- FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE GEORGIA EPO SHALL BE CONTACTED WITHIN 24 HOURS AT (404) 656-4863 OR (800) 241-4113.
- FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS, THE SPILL SHALL BE CLEANED AND LOCAL AGENCIES SHALL BE CONTACTED AS REQUIRED.
- General NPDES Permit No. GAR 100001 does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

SANITARY WASTES:

All permittees shall ensure that this Plan is in compliance with applicable State and/or local waste disposal, and sanitary sewer or septic system regulations.

A minimum of one portable sanitary unit shall be provided for every ten (10) workers on the site. All sanitary waste shall be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with the local state regulations.

All sanitary waste units shall be located in an area where the likelihood of the unit contributing to storm water discharge is negligible. Additional containment of BMP's shall be implemented as necessary, such as gravel bogs or specifically designed plastic skid containers around the base, to prevent waste from contributing to storm water discharges.

Sanitary sewer shall be provided by municipal authority at the completion of this project.

OFFSITE VEHICLE TRACKING:

A stabilized construction exit (Co) shall be provided to reduce vehicle tracking of sediment. See sheets 3, 4 and 5 for the construction exit location and see sheet 7 for the construction exit detail. The paved street adjacent to the construction exit shall be inspected daily for tracking of mud, dirt, or rock. Dump trucks hauling material from the construction site shall be covered with a tarpaulin.

CRITICAL WORK ZONE:

All slopes 2:1 or steeper and higher than 5 feet shall receive surface roughening, polymers, and erosion control matting. Additionally, all fill slopes shall receive a diversion dike and temporary down drains along the top of the slope preventing drainage spilling over the edge and down the face of the slope. The temporary down drains shall be constructed with perforated storm pipes at the top of the slope and reconstructed as the slope increases in height.

- The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to, or concurrent with, land disturbing activities.

- Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.

- Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.

General Construction Specifications

- All timber having a marketable value shall be salvaged. Timber logs, rubbish, and vegetative matter which will interfere with the grading operations or affect the planned stability of fill areas shall be removed and disposed of according to the permittee's instructions and in accordance with all local and state laws.
- Fill material is to be free of brush, rubbish, rocks, logs, and stumps in amounts that are detrimental to constructing stable fills. Topsoil is to be stripped and stockpiled in amounts necessary or available on site to complete final grading of all exposed areas.
- Cut slopes which are to be topsoiled will be scarified to a minimum depth of 3 inches prior to placement of topsoil.
- Compaction of fills will be as required to reduce slipping, erosion, or excess saturation.
- Frozen mixtures of soft, mucky, or easily compressible materials are not to be incorporated in fills intended to support buildings, parking lots, roads, structures, sewers, or conduits.
- Consult the geotechnical engineer for recommendations concerning proper placement and compaction of structural fill.
- All disturbed areas shall be left with a neat and finished appearance and stabilized with the appropriate permanent protective cover.
- All disturbed areas shall be no greater than 2 feet horizontal to 1 foot vertical.
- All proposed grades shown are finished grades, unless otherwise noted.
- All construction shall conform with these specifications, the details shown within these plans, and/or the current version of the "Manual for Erosion and Sediment Control in Georgia" and the provisions set forth in the NPDES General Permit.

V. CERTIFICATIONS (Owner or Operator or Both to Initial as Applicable)
I, _____, certify that the foregoing (where) or the outfalls or a combination of receiving waters) are outfalls as defined in accordance with the Erosion, Sedimentation and Pollution Control Plan.

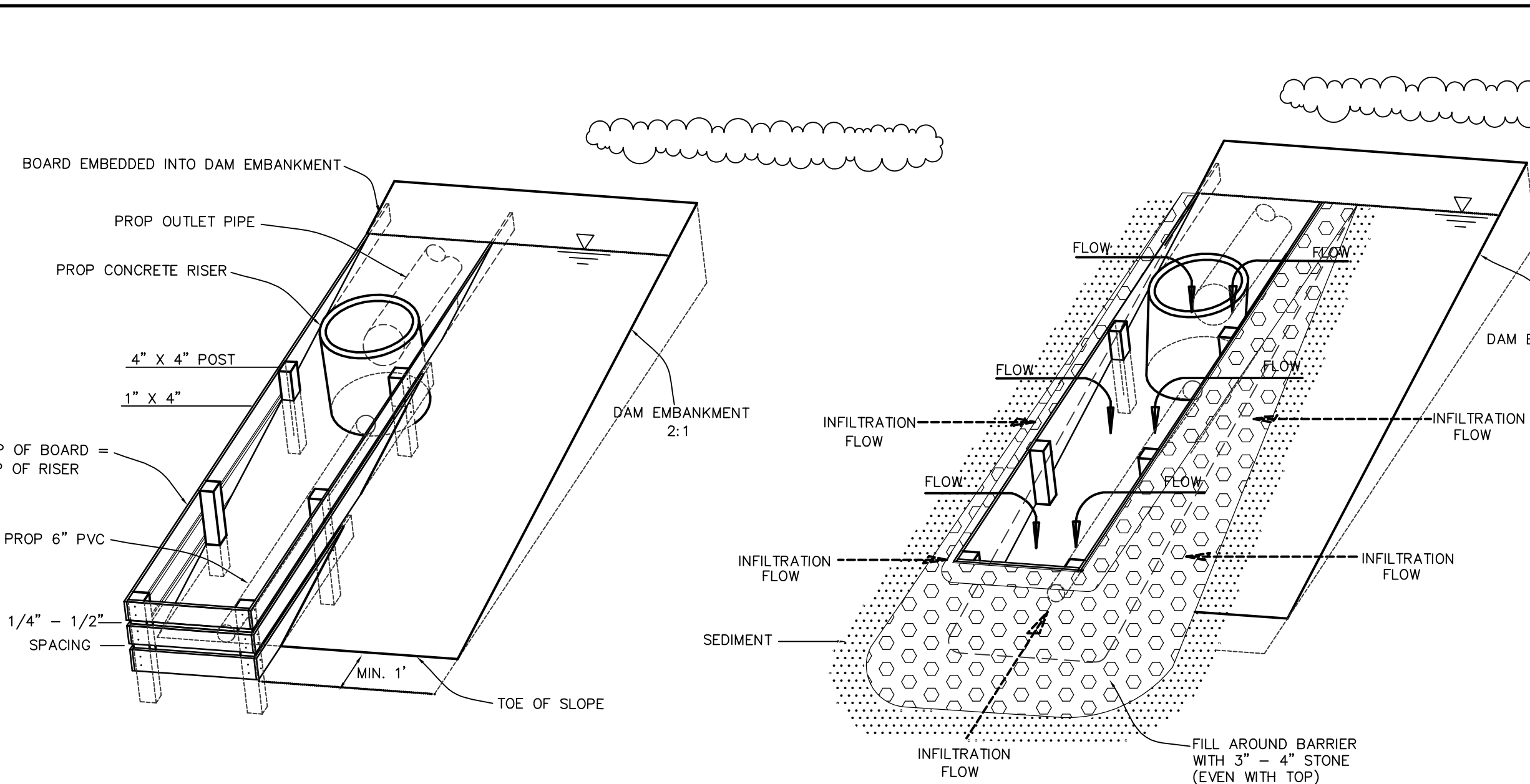
I, _____, certify that the Erosion, Sedimentation and Pollution Control Plan (Plan) has been prepared in accordance with Part IV of the General NPDES Permit No. GAR100001, No. GAR100002 or No. GAR100003, the Plan will be implemented, and that such Plan will provide for compliance with this permit.

I, _____, certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that certified personnel properly gather and report the information submitted. Based upon my inquiry of the person or persons who manage this system, these persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Owner's Printed Name: Jon K. Nelson
Signature: [Signature]
Title: Owner
Date: 6/24/13
Engineer's Printed Name: Timothy D. Kappo
Signature: [Signature]
Title: Engineer
Date: 6/24/13

GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES STATE SOIL AND WATER CONSERVATION COMMISSION OF GEORGIA STRUCTURAL PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cd	CHECKDAM			A small temporary barrier or dam constructed across a waterway, channel, ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION			Reinforcing, constructing or stabilizing an open channel, waterway, stream, or ditch.
Co	CONSTRUCTION EXIT			A washed stone pad located at the construction site exit to provide a place for removing mud from tires thereby preventing public streets.
Cr	CONSTRUCTION STABILIZATION			A temporary constructed as part of a construction site including access roads, erosion control, parking areas, and other site access transportation routes.
Dc	STREAM DIVERSION CHANNEL			A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or the located down, below, or across a slope to divert runoff. This may be temporary or permanent structure.
Dn1	TEMPORARY CONFINEMENT STRUCTURE			A flexible conduit of heavy-duty fabric or other material designed to convey runoff surface runoff down a slope. This is a temporary and impermanent structure.
Dn2	PERMANENT CONFINEMENT STRUCTURE			A paved ditch, pipe, sectioned conduit or similar material designed to convey runoff surface runoff down a slope.
Fr	FILTER RING			A temporary stone barrier constructed of storm drain inlets and point outlets.
Ga	GABION			Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE			Permanent structures installed to protect natural or artificial slopes and to prevent erosion. The slope would be sufficient for the running water to form spalls.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed areas.
Rd	ROCK FILTER DAM			A permanent or temporary stone filter dam installed across an stream or drainage.
Re	RETAINING WALL			A wall installed to stabilize cut and fill slopes where a maximum permanent slope are not adequate. Each structure will require special design.
Rt	RETROFITTING			A device or structure placed in front of a permanent sedimentation pond or outlet structure to serve as a temporary sediment filter.
Sd1	SEDIMENT BARRIER			A barrier to prevent sediment from leaving the construction site. It may be geotextile, pile of straw or log brush, topsoil, mulch, or other material.
Sd2	INLET SEDIMENT TRAP			An impounding area created by excavating around a storm drain drop side. The excavated area will be filled and stabilized on completion of construction activities.



RT RETROFITTING

MAINTENANCE

Retrofit structures shall be kept clear of trash and debris. This will require continuous monitoring and maintenance, which includes sediment removal when one-third of the sediment storage capacity has been lost. Structures are temporary and shall be removed when disturbed areas have been permanently stabilized.

OUTLET STRUCTURES AND RETROFITTED DETENTION POND FEATURES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION

SEDIMENT STORAGE MAINTENANCE INDICATORS MUST BE INSTALLED IN SEDIMENT STORAGE STRUCTURES, INDICATING THE 1/3 FULL VOLUME.

Existing utilities are shown for the contractor's convenience only. The engineer assumes no responsibility for the locations shown or for the utilities not shown. It shall be the contractor's responsibility to verify the locations of all utilities within the limits of the work. All damage made to existing utilities by the contractor shall be the sole responsibility of the contractor. The contractor is advised to notify the Utilities Protection Center at 811 prior to any excavation.

ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.

ALL BUFFERS AND TREE SAVE AREAS SHALL BE CLEARLY IDENTIFIED WITH FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.

CONTRACTOR SHALL PROVIDE SHEETING AND SHORING FOR ALL TRENCH CONSTRUCTION IN ACCORDANCE WITH O.S.H.A. GUIDELINES.

MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE PROPERTY OWNERS.

NON-EXEMPT ACTIVITIES SHALL NOT BE CONSTRUCTED WITHIN THE 25 OR THE 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF INTERESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY PERMITS.

AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THE NPDES GENERAL PERMIT AND THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Sd3	TEMPORARY CONFINEMENT STRUCTURE			A basin created by excavation or a dam across a waterway, the surface water or a waterway stored along the bank of the sediment to drop out.
St	STORM DRAIN PROTECTION			A temporary bridge or culvert-type structure protecting a construction equipment.
Su	SURFACE ROUGHENING			A paved or short section of rough channel of the outlet structure or inlet structure preventing runoff from the concentrated runoff.
Ip	TOPSOILING			A rough soil surface with horizontal depressions on a slope or in a roughened condition after grading.
Wt	VEGETATE WATERWAY OR STORMWATER CONVEYANCE CHANNEL			The practice of stripping off the more fertile soil, storing the topsoil, and then reapplying the topsoil after other construction activities are completed.

VEGETATIVE MEASURES

Bf	BUFFER ZONE		Bf	A strip of undisturbed natural vegetation, enhanced or restored existing vegetation, or the reestablishment of vegetation surrounding an area of disturbance surrounding stream.
Cs	COASTAL ZONE STABILIZATION (WITH VEGETATION)		Cs	Planting vegetation on dunes that are eroded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)		Ds1	Establishing temporary protection for disturbed areas where seedling may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedling on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)		Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, etc., or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (WITH SEEDING)		Ds4	A permanent vegetative cover using seeds on highly erodible or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadway and similar sites.
Mb	EROSION CONTROL WITH MATTING AND BLANKETS		Mb	The installation of a protective covering (blanket) or soil stabilization mat on a prepared planting area of a steep slope, stream, or shoreline.
Pm	POLYMERGEL (PAM)		Pm	The hand application of product containing anionic polymergel (PAM) as temporary soil binding agents to reduce soil erosion.
Sb	STREAM BANK STABILIZATION (WITH VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion.
Tb	TACKERS AND BINDERS		Tb	Substance used to anchor silt or other mud by coating the organic material to bind together.

STONE CHECK DAMS

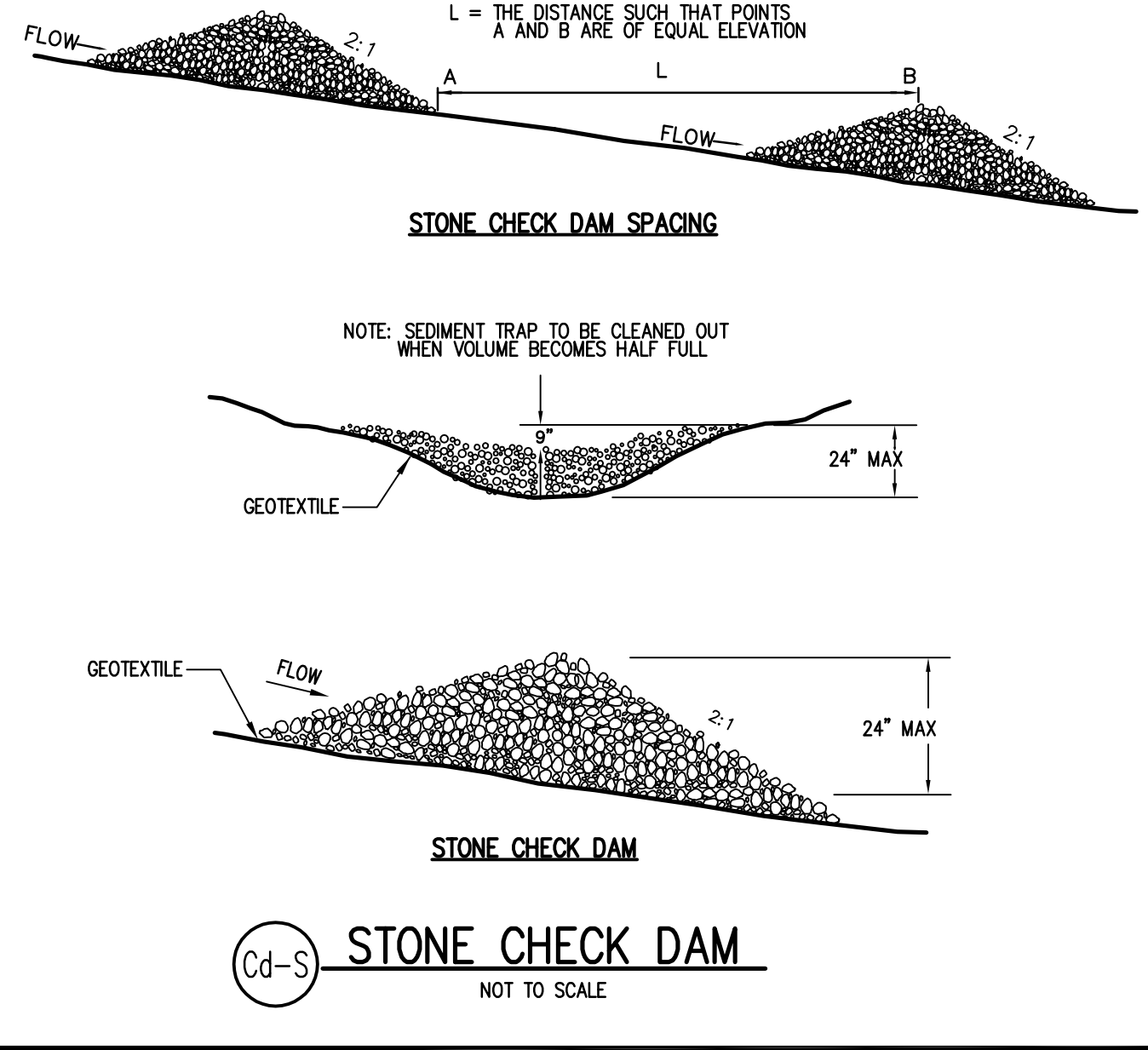
STONE CHECK DAMS SHOULD BE CONSTRUCTED OF GRADED SIZE 2-10 INCH STONE. (SEE FIGURE 6-10.2) MECHANICAL OR HAND PLACEMENT SHALL BE REQUIRED TO ENSURE COMPLETE COVERAGE OF ENTIRE WIDTH OF DITCH OR SWALE AND THAT CENTER OF DAM IS LOWER THE EDGES.

GEOTEXTILES

THE GEOTEXTILE SHALL BE SELECTED/SPECIFIED IN ACCORDANCE WITH AASHTO M288-96 SECTION 7.3, SEPARATION REQUIREMENTS, TABLE 3. GEOTEXTILES SHALL BE "SET" INTO THE SUBGRADE SOLID. THE GEOTEXTILE SHALL BE PLACED IMMEDIATELY ADJACENT TO THE SUBGRADE WITHOUT ANY JOINTS AND EXTEND FIVE FEET BEYOND THE DOWNSIDE OF THE DAM TO PREVENT SCOUR.

MAINTENANCE

PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF ONE-HALF THE ORIGINAL DAM HEIGHT OR BEFORE. IF THE AREA IS TO BE MOVED, CHECK DAMS SHALL BE REMOVED. ONCE FINAL STABILIZATION HAS OCCURRED OR OTHERWISE, CHECK DAMS MAY REMAIN IN PLACE PERMANENTLY. AFTER REMOVAL, THE AREA BENEATH THE DAM SHALL BE SEEDED AND MULCHED IMMEDIATELY.



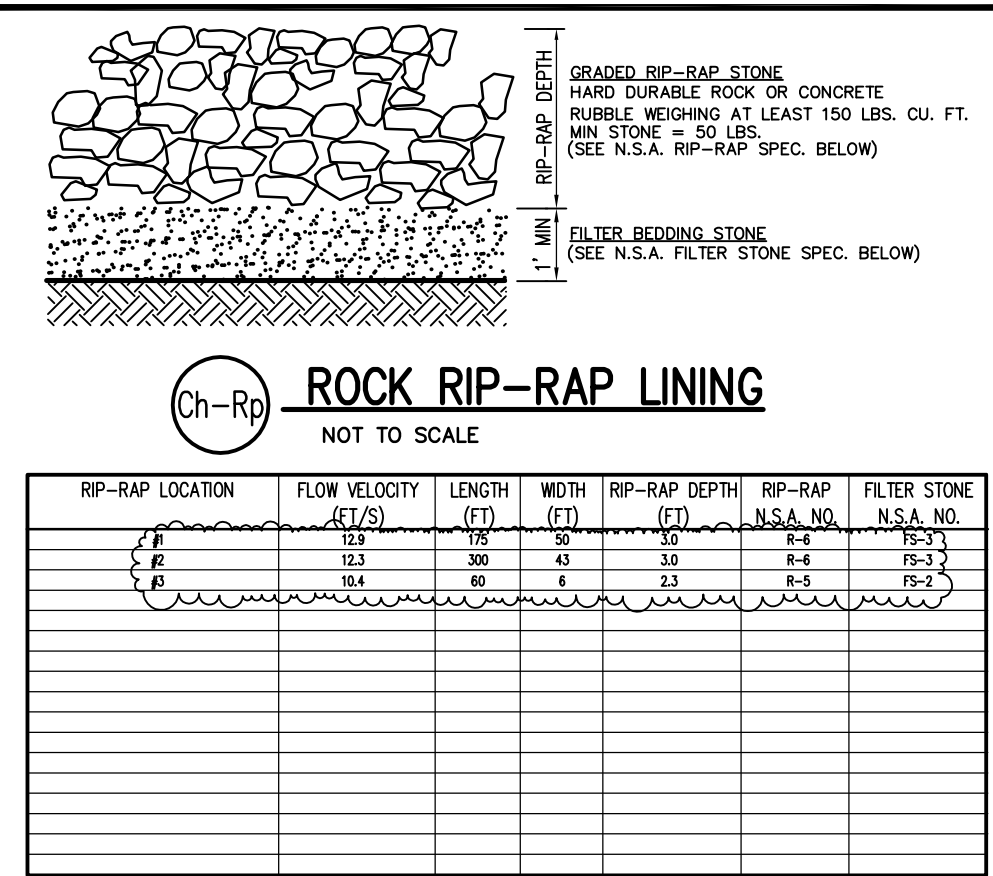
STORAGE CALCULATIONS

- Required storm water storage = 0 cy (as determined by local ordinance)
- Required sediment storage = $2,888 \text{ cy} (87 \text{ cy/ac} \times 33.1 \text{ ac})$
- Total required storage = $0 + 2,888 = 2,888 \text{ cy}$
- Available storage = 20,360 cy
- Is the available storage greater than the total required storage?
X Yes No
Sediment storage elevation = 871.6
- If "no", the sediment storage capacity of the pond must be increased.
Choose the method to be used:
Raise the invert of the outlet structure _____ inches.
Undercut the pond _____ feet.
Other _____
- Clear-out elevation = 869.2 (elevation corresponding to 22 cy/ac * drainage area)
- Is the length-width ratio 2:1 or greater?
X Yes No
- If "no", the length of flow must be increased.
Choose the method to be used:
Baffle _____
Other _____

STORAGE CALCULATIONS

- Required storm water storage = 0 cy (as determined by local ordinance)
- Required sediment storage = $6,546 \text{ cy} (87 \text{ cy/ac} \times 75.2 \text{ ac})$
- Total required storage = $0 + 6,546 = 6,546 \text{ cy}$
- Available storage = 78,875 cy
- Is the available storage greater than the total required storage?
X Yes No
Sediment storage elevation = 833.8
- If "no", the sediment storage capacity of the pond must be increased.
Choose the method to be used:
Raise the invert of the outlet structure _____ inches.
Undercut the pond _____ feet.
Other _____
- Clear-out elevation = 831.3 (elevation corresponding to 22 cy/ac * drainage area)
- Is the length-width ratio 2:1 or greater?
X Yes No
- If "no", the length of flow must be increased.
Choose the method to be used:
Baffle _____
Other _____

NOTE: BASED ON ULTIMATE (INTERMEDIATE GRADING PHASE) DRAINAGE AREA.



FLOW VELOCITY (ft/sec)	N.S.A. No. 1	Min.	Max.	Filter Stone	N.S.A. No. 1
2.5	R-1	1.5	0.75	Ns-1	1
4.5	R-2	3	1.5	Ns-2	2
6.5	R-3	6	3	Ns-3	3
9.0	R-4	12	6	Ns-4	4
11.5	R-5	24	12	Ns-5	5
13.0	R-6	24	12	Ns-6	6
14.5	R-7	30	15	Ns-7	7

1 N.S.A. is National Stone
2 Associated with the individual stone particles must be equal or larger than this listed size.

FILTER BEDDING STONE			
N.S.A. No. ¹	SIZE INCHES (Sq. opening)		
	Max.	Avg. ²	Min. ³
FS-1	3/8	#30 MESH	#100 MESH
FS-2	2	#4	#100 MESH

¹ N.S.A. is National Stone Association

² At least 50% of the individual stone particles must be equal or larger than this listed size.

³ 65-100% of the individual stone particles may be less than listed