GENERAL NOTES FOR EROSION AND SEDIMENT CONTROL

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL SEDIMENT AND EROSION CONTROL PRACTICES. THE SEDIMENT AND EROSION CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. TIMELY MAINTENANCE OF SEDIMENT CONTROL STRUCTURES IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL STRUCTURES SHALL BE MAINTAINED IN GOOD WORKING ORDER AT ALL TIMES. THE SEDIMENT LEVEL IN ALL SILT FENCES SHALL BE CLOSELY MONITORED AND SHALL BE REMOVED PROMPTLY WHEN MAXIMUM LEVELS ARE REACH OR WHEN ORDERED BY THE ENGINEER. ALL SEDIMENT CONTROL STRUCTURES SHALL BE INSPECTED ON A REGULAR BASIS, AND AFTER EACH HEAVY RAIN TO INSURE PROPER OPERATION AS DESIGNED.
3. THE LOCATION AND INSTALLATION TIMES OF THE SEDIMENT CAPTURING DEVICES SHALL BE ORDERED BY THE ENGINEER, AND IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THIS PLAN.
4. ALL TOPSOIL NOT TO BE USED FOR FINAL GRADING SHALL BE REMOVED FROM THE SITE IMMEDIATELY AND PLACED IN A STABILIZED STOCKPILE OR FILL AREA. ALL TOP SOIL THAT IS REQUIRED FOR FINAL GRADING AND STORED ON THE SITE SHALL BE LIMED, FERTILIZED, AND TEMPORARILY SEEDED AND MULCHED WITHIN 14 DAYS.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THEN 21 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL IMMEDIATELY RECEIVE TEMPORARY SEEDING. MULCH SHALL BE USED IF THE SEASON PREVENTS THE ESTABLISHMENT OF COVER. DISTURBED AREAS SHALL BE LIMED AND FERTILIZED PRIOR TO TEMPORARY SEEDING.
6. THE CONTRACTOR SHALL KEEP THE ROADWAYS WITHIN THE PROJECT AREA CLEAR OF SOIL AND DEBRIS AND IS RESPONSIBLE FOR ANY STREET CLEANING NECESSARY DURING THE COURSE OF THE PROJECT.
7. SEDIMENT AND EROSION CONTROL DEVICES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED BY PERMANENT MEASURES.
8. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL".

EROSION CONTROL SEQUENCE

1. THE SITE OWNER OR AUTHORIZED REPRESENTATIVE SHALL BE RESPONSIBLE CHECKING ON CONTRACTORS MAINTENANCE OF EROSION AND SEDIMENT CONTROL PRACTICES.
2. CONTACT SITE CIVIL ENGINEER INSPECTION OF EROSION CONTROL MEASURES BEFORE STARTING ANY SITE CONSTRUCTION.
3. ESTABLISH LIMITS OF DISTURBANCE FOR PROPOSED CONSTRUCTION.
4. INSTALLATION OF SILT FENCE AS SHOWN OR NEEDED TO CAPTURE SEDIMENT FROM PROPOSED CONSTRUCTION. SILT FENCE SHALL BE INSTALLED PER THE ACCEPTED EROSION AND SEDIMENT CONTROL PLAN AS WELL AS IN LOCATIONS DEEMED NECESSARY DURING CONSTRUCTION INSPECTIONS OF THE SITE. SILT FENCE SHALL BE INSTALLED ALONG THE CONTOURS.
5. INSTALL SILT FENCE OR CONSTRUCTION FENCE AROUND AREAS TO BE BIORETENTION OR RAIN GARDENS TO PROTECT FROM DISTURBANCE AND COMPACTION DURING CONSTRUCTION. IF AREAS FOR BIORETENTION OR RAIN GARDENS IS DISTURBED, SOIL RESTORATION WILL BE REQUIRED.
6. PERFORM GRADING, EXCAVATION, AND RELATED CONSTRUCTION ACTIVITIES. TOPSOIL SHALL BE REMOVED FROM CUT AREAS AND STORED ON APPLICABLE LOCATIONS SO AS NOT TO INTERFERE WITH THE FILLING OPERATIONS AND TO PROTECT THE WETLANDS. LOCATIONS FOR TOPSOIL STOCKPILES ARE SHOWN ON THE EROSION CONTROL PLAN.
7. CONTRACTOR SHALL PERFORM DAILY INSPECTION AND REPAIR OF EROSION AND SEDIMENT CONTROL PRACTICES. WEEKLY INSPECTION OF SITE BY THE OWNER WITH ALL RECOMMENDATIONS IMPLEMENTED IMMEDIATELY.
8. ONCE AN AREA IS CUT OR FILLED, IT SHALL BE STABILIZED BY SEEDING AND MULCHING.
9. AS CONSTRUCTION PROCEEDS, ALL DISTURBED AREAS SHALL BE PAVED, SEEDED, OR PLANTED AS SPECIFIED ON THE PLANS IN A TIMELY MANNER TO PREVENT UNNECESSARY EROSION.
10. AFTER UPSLOPE AREAS ARE PERMANENTLY STABILIZED OR DISTURBANCE OF BIORETENTION OR RAIN GARDEN AREAS IS COMPLETE, CONSTRUCT BIORETENTION OR RAIN GARDENS.
11. UPON COMPLETION OF CONSTRUCTION ACTIVITIES, UPON STABILIZATION OF SITE SOILS, TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED.

EROSION CONTROL INSTALLATION AND MAINTENANCE

1. INTRODUCTION
THE PURPOSE OF THIS PLAN IS TO OUTLINE PROCEDURES FOR MAINTAINING THE EROSION CONTROL STRUCTURES CONSTRUCTED ON THE SITE. THE TYPE OF STRUCTURES FOR THIS SITE WILL BE TEMPORARY FOR USE DURING CONSTRUCTION,

II EROSION CONTROL STRUCTURES
SILT FENCE STRUCTURES WILL BE USED TO MINIMIZE SOIL EROSION DURING THE CONSTRUCTION PHASE OF THE PROJECT. IN ORDER FOR THE EROSION CONTROL STRUCTURES TO WORK PROPERLY THEY MUST BE INSTALLED PROPERLY AND MAINTAINED. INSPECTIONS SHALL BE PERFORMED PERIODICALLY AS STATED BELOW AND SHALL BE PERFORMED AFTER ANY MAJOR STORM EVENT. SILT FENCE TO BE INSTALLED PARALLEL WITH CONTOURS.

III INSTALLATION GUIDELINES

IN ORDER TO ASSURE THAT THE EROSION CONTROL STRUCTURES WILL WORK THERE MUST BE AN ASSURANCE THAT THEY ARE INSTALLED PROPERLY. IN ORDER TO ACCOMPLISH THIS ALL EROSION CONTROL MUST BE INSTALLED AS PER THE DETAILS ON THIS PLAN. THE EROSION CONTROL SHALL BE INSPECTED BY BY A PROFESSIONAL ENGINEER OR CERTIFIED PROFESSIONAL. NO WORK SHALL BE STARTED ON THE SITE UNTIL THE EROSION CONTROL IS IN PLACE AND ACCEPTED.

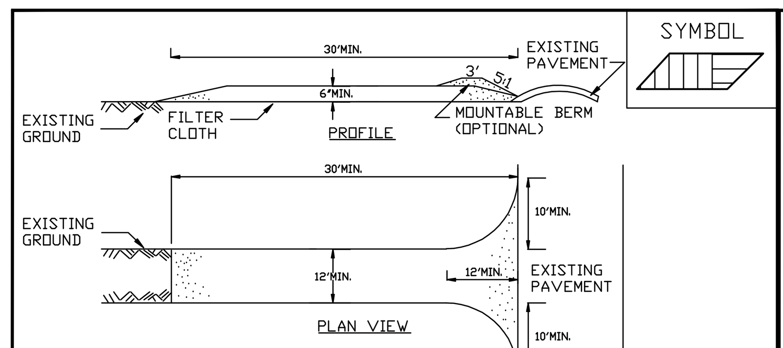
IV. MAINTENANCE PLAN FOR EROSION CONTROL DEVICES
1. TEMPORARY EROSION CONTROL DEVICES
THESE STRUCTURES SHALL INCLUDE ALL EROSION CONTROL DEVICES THAT WILL BE INSTALLED AND UTILIZED DURING THE CONSTRUCTION OF THE SITE. THESE SHALL INCLUDE DEVICES SUCH AS SILT FENCES, STOCK PILES, AND CHECK DAMS.
2. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
3. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE
4. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT , TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POST, AND TO SEE THAT THE FENCE POST ARE FIRMLY IN THE GROUND.
5. TEMPORARY SEEDING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
6. ALL INDIVIDUALS PERFORMING THE SITE INSPECTION SHALL BE FAMILIAR WITH THE EROSION CONTROL PLAN AND BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING CONDITION.

SEEDING AND MULCHING

ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN 21 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, SHALL IMMEDIATELY RECEIVE SEEDING AND MULCHING. DISTURBED AREAS SHALL BE LIMITED AND BE COVER WITH A LAYER OF TOPSOIL PRIOR TO SEEDING. SEEDING WILL BE INSPECTED FOR BARE SPOTS, WASH OUTS, AND HEALTHY GROWTH. IF REQUIRED ADDITIONAL SEEDING SHALL BE PERFORMED. THE SEED MIX SPECIFIED FOR THIS SITE IS FROM THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, TABLE 3.2 (SITE CHOICE 1A) WHICH IS AS FOLLOWS:

SPECIES (% by weight)	Pure Live Seed Values lbs/1000SF	lbs/acre
50% perennial ryegrass	1.5 – 2.0	65 – 87
50% Kentucky bluegrass blend	1.5 – 2.0	65 – 88
	3.0 – 4.0	130 – 175

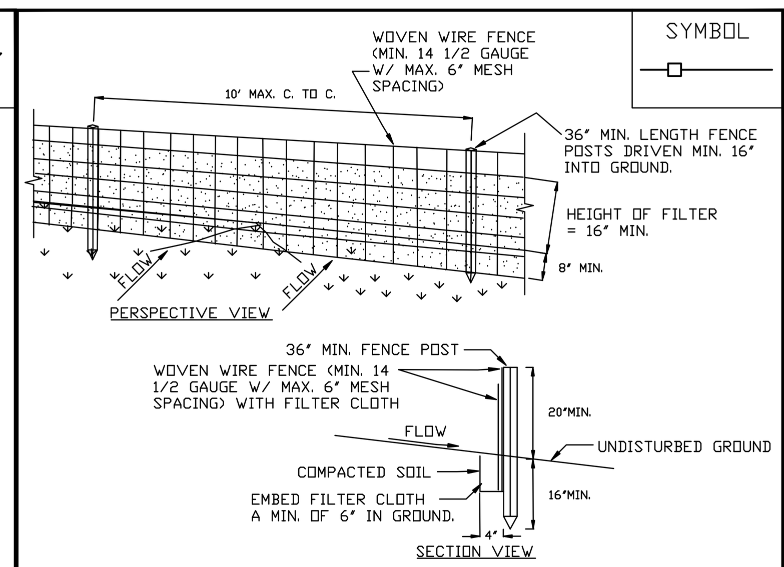
OR USE SEED MIX SPECIFIED BY SITE ARCHITECT OR LANDSCAPE ARCHITECT.



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 FOOT 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 51 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 A 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.

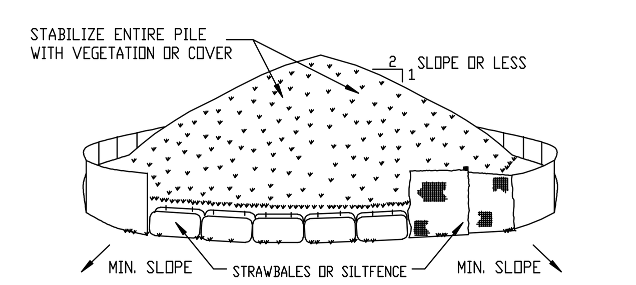
STABILIZED CONSTRUCTION ENTRANCE



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

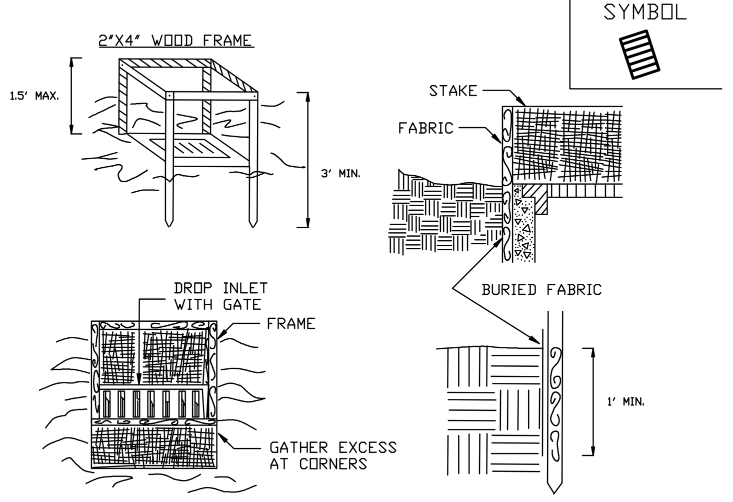
SILT FENCE



INSTALLATION NOTES

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 12.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS (THIS MANUAL) FOR INSTALLATION OF SILTFENCE.

STOCK PILE



CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

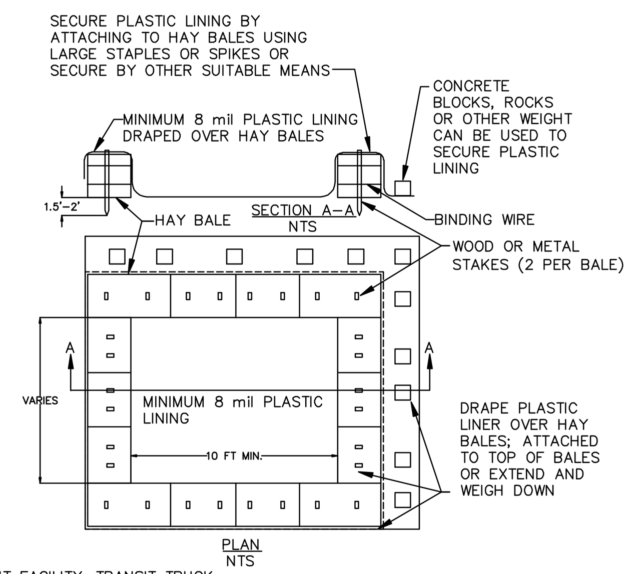
FILTER FABRIC DROP INLET PROTECTION

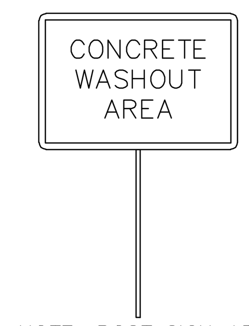
CONSTRUCTION SPECIFICATIONS

1. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.
2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN AND THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS".
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
5. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT OF TOPSOIL.
6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
7. ALL FILL TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
8. EXCEPT FOR APPROVED LANDFILLS, FILL MATERIAL SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
9. FROZEN MATERIALS OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED IN FILLS.
10. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
12. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
14. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

LANDGRADING SPECIFICATIONS



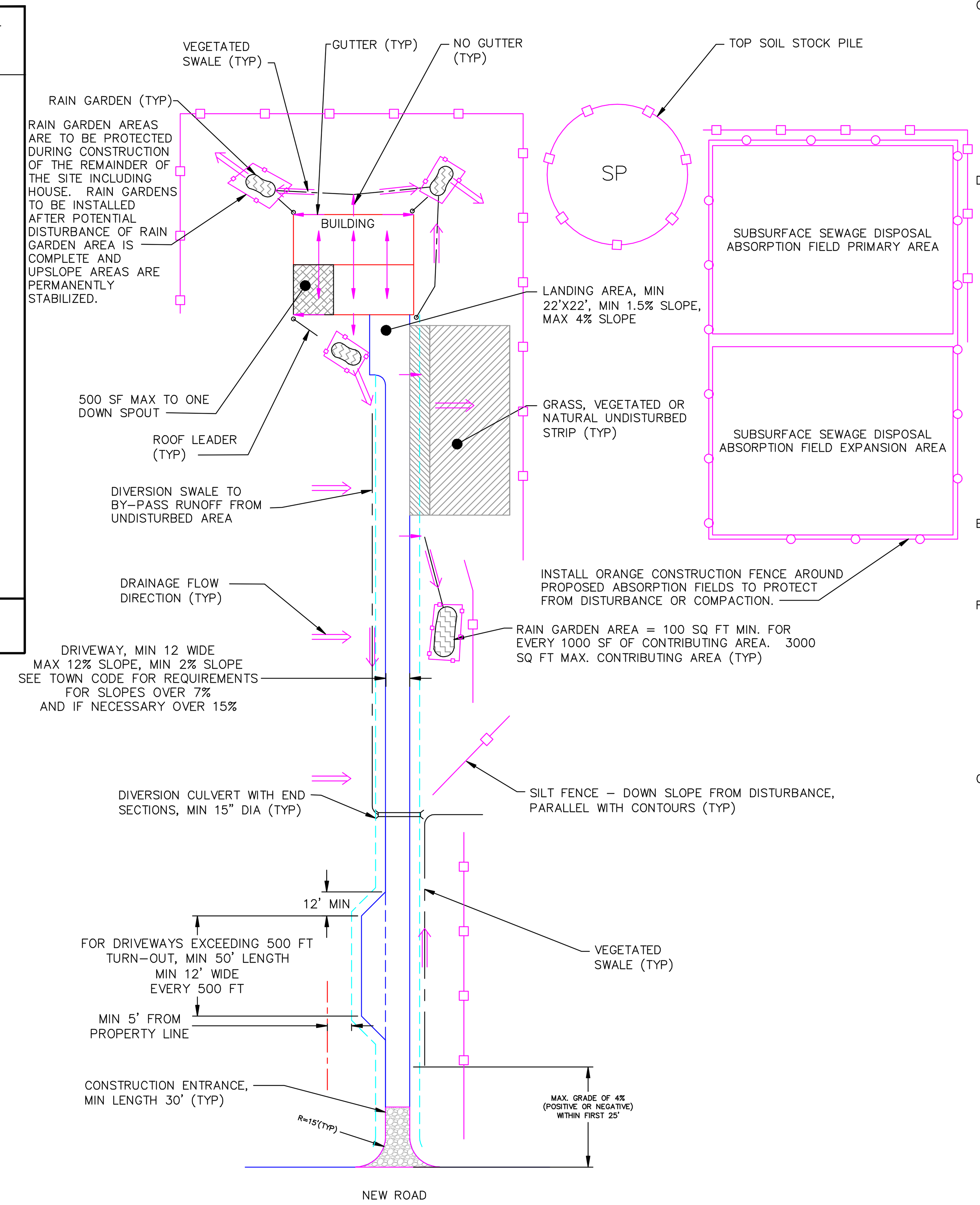


NOTE: POST SIGN AT WASHOUT AREA

ONSITE TEMPORARY CONCRETE WASHOUT FACILITY, TRANSIT TRUCK WASHOUT PROCEDURES:
1. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 100 FT FROM WETLANDS.
2. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
-APPROXIMATELY 7 GALLONS OF WASH WATER ARE USED TO WASH ONE TRUCK CHUTE.
-APPROXIMATELY 50 GALLONS ARE USED TO WASH OUT THE HOPPER OF A CONCRETE PUMP TRUCK
3. WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED ONLY AT CONCRETE WASHOUT FACILITY.
4. CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OF OFFSITE.
5. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER APPLICABLE SOLID WASTE REGULATIONS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.
6. TEMPORARY ABOVE-GRADE CONCRETE WASHOUT FACILITY
-TEMPORARY CONCRETE WASHOUT FACILITY (TYPE ABOVE GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAIL, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT, BUT WITH SUFFICIENT QUANTITY AND VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
7. TYPICAL LOCATION SHOWN ON LOT 2, ACTUAL LOCATION TO BE DETERMINED AT PRE-CONSTRUCTION MEETING.

HAY BALE ABOVE GRADE CONCRETE WASHOUT DETAIL
NTS

NOTE:
PORTABLE CONCRETE WASHOUT AREAS SUCH AS THOSE MANUFACTURED BY OUTPAK MAYBE SUBSTITUTED PROVIDED THE CAPACITY IS NOT EXCEEDED. LOCATION RESTRICTIONS MUST BE MET.



TYPICAL LOT STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL PLAN
NOT TO SCALE

POST CONSTRUCTION STORMWATER OPERATION AND MAINTENANCE

A. VEGETATED SWALE (NYSDEC SMDM 5.3.3)

A VEGETATED SWALE IS AN OPEN, VEGETATED CHANNEL OR DEPRESSION EXPLICITLY DESIGNED TO DETAIN AND PROMOTE THE INFILTRATION OF STORMWATER RUNOFF INTO THE UNDERLYING SOILS. THE AMOUNT OF RUNOFF REDUCTION IS DEPENDENT TO THE UNDERLYING SOIL. FOR SYSTEMS IN HYDRAULIC SOIL GROUPS A AND B, A REDUCTION VALUE OF 20% MAY BE USED. C AND D SOILS ARE ALLOWED A 10% REDUCTION UNLESS THE SOIL IS MODIFIED. FOR MODIFIED C SOILS, A 15% REDUCTION IS ALLOWED. FOR MODIFIED D SOILS, A 12% REDUCTION IS ALLOWED.

LANDSCAPING

LANDSCAPING OF THE SWALE WILL INVOLVE GRASS SEEDING IN COMPLIANCE WITH THE STANDARDS OUTLINED ON THE EROSION AND SEDIMENT CONTROL PLAN FOR THIS SITE.

CHECK DAMS

WHERE SWALE SLOPES ARE GREATER THAN 4% OR WHERE ADDITIONAL DETENTION IS DESIRED, STONE CHECK DAMS CAN BE INSTALLED TO SLOW DOWN THE FLOW AND PROVIDE DETENTION. THIS WILL ALSO ALLOW FOR GREATER INFILTRATION AND TREATMENT. (NO CHECK DAMS PROPOSED FOR THIS PROJECT UNLESS ORDERED BY ENGINEER DURING CONSTRUCTION.)

MAINTENANCE

SEDIMENT BUILD-UP WITHIN THE BOTTOM OF THE CHANNEL SHALL BE REMOVED WHEN SEDIMENT DEPTH REACHES 2 INCHES. VEGETATION SHOULD BE MOWED AS REQUIRED DURING THE GROWING SEASON TO MAINTAIN GRASS HEIGHTS BETWEEN 4 AND 6 INCHES. MOWING TO BE DONE BY LOT OWNER.

FULL INSPECTIONS SHALL TAKE PLACE YEARLY. FULL INSPECTIONS INVOLVE CHECKING FOR SEDIMENT, EROSION, POOR VEGETATION GROWTH AND EXCESSIVE PONDING. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED IN A TIMELY FASHION. REMOVE SEDIMENT BUILD UP.

SWALE ACROSS EACH DRIVEWAY SHALL BE PAVED AND MAINTAINED AS SHOWN ON THE SWPPP, OR IT SHALL BE REWORKED TO CONFORM, AND THAT CERTIFYING THE DRIVEWAY CONSTRUCTION AND MAINTENANCE SHALL BE INCLUDED IN THE ANNUAL REPORT TO THE TOWN.

B. SHEET FLOW TO VEGETATED FILTER STRIPS (NYSDEC SMDM 5.3.2)

VEGETATED FILTER STRIPS AND UNDISTURBED NATURAL AREAS ARE USED TO TREAT AND CONTROL RUNOFF. VEGETATED FILTER STRIPS ARE OFTEN MAINTAINED GRASS BUFFERS BETWEEN IMPERVIOUS AREAS AND NATURAL AREAS.

LANDSCAPING

GOOD GRASS OR PLANT COVER CHOSEN FOR THE SOIL AND SUN EXPOSURE. NATURAL COVER IS ALSO ACCEPTABLE.

MAINTENANCE

BARE PATCHES AND DEAD PLANTS SHOULD BE RESEED OR REPLACED AS SOON AS POSSIBLE. AREA OF EROSION SHOULD BE REPAIRED WHEN DISCOVERED. THE RILLS OR CHANNELS FORM, METHODS OF SPREADING THE INFLOW TO RETURN TO SHEET FLOW SHOULD BE INSTALLED. (VEGETATED FILTER STRIPS ARE PROPOSED FOR THIS PROJECT. LAWNS AND UNMOWED AREA WILL ACT AS FILTER STRIPS FOR ADDITIONAL PRETREAMENT BY REMOVING SEDIMENT)

C. LEVEL SPREADER / PERMEABLE BERM

STORMWATER SYSTEM CAPTURES AND TEMPORARILY STORES THE FLOW AND THEN ALLOWS FOR A GRADUAL RELEASE AS SHEET FLOW. THE PERMEABLE BERM IS OFTEN LOCATED AT THE TOE OF SLOPE AND BEFORE VEGETATED FILTER STRIPS, RIPARIAN BUFFERS OR BEFORE LEAVING PROPERTY.

MAINTENANCE
MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE OWNER. FULL INSPECTIONS SHALL TAKE PLACE YEARLY. FULL INSPECTIONS INVOLVE CHECKING ALL COMPONENTS. REMOVAL OF SEDIMENT AND DEBRIS. RESHAPING STONE BERM. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED IN A TIMELY FASHION.

D. BIORETENTION AND RAIN GARDENS (NYSDEC SMDM F-5 & 5.3.7)

STORMWATER FILTERING SYSTEMS CAPTURE AND TEMPORARILY STORE THE WATER QUALITY VOLUME AND PASS IT THROUGH A FILTER BED OF SAND, ORGANIC MATTER, OR SOIL. SPECIFIED AS A STANDARD PRACTICE IN THE "NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL," A BIORETENTION AREA IS A SHALLOW STORMWATER BASIN OR LANDSCAPED AREA THAT TREATS STORMWATER AS IT FLOWS THROUGH PLANTS AND A SOIL MATRIX. ANY REMAINING STORMWATER IS THEN RETURNED TO THE STORM DRAIN SYSTEM. THE PRACTICE IS OFTEN LOCATED IN PARKING LOT ISLANDS, AND CAN ALSO BE USED TO TREAT OTHER AREAS.

LANDSCAPING: PLANTS FOR THE LANDSCAPING PLAN WILL BE CHOSEN FROM THE NATIVE PLANT LIST IN APPENDIX H OF THE "NYS STORMWATER MANAGEMENT DESIGN MANUAL," A LIST DEVELOPED BY APPLIED ECOLOGICAL SERVICES INC. IN A BROCHURE CALLED "BUILD YOUR OWN RAIN GARDENS," AND/OR A PLANT LIST AVAILABLE THROUGH NATIVE LANDSCAPES IN PAWLING, NY.

MAINTENANCE: TREATMENT AREA PLANTS AND COMPONENTS SHOULD BE REPAIRED OR REPLACED WHEN NEEDED. A 6 INCH STONE DROP SHOULD BE PROVIDED AND MAINTAINED AT ANY PIPE INLET. MULCH SHOULD BE REPLACED ANNUALLY. FULL INSPECTIONS SHALL TAKE PLACE YEARLY. FULL INSPECTIONS INVOLVE CHECKING ALL COMPONENTS OF THE BIORETENTION AREA THOROUGHLY. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED IN A TIMELY FASHION. NO EQUIPMENT SHALL BE DRIVEN ON BIORETENTION OR RAIN GARDEN AREA. HAND TOOLS ONLY.

E. ROOFTOP DISCONNECTION (NYSDEC SMDM 5.3.5)

DISCONNECTING ROOFTOPS IS ALLOWING THE RUNOFF FROM ROOFS TO FLOW OVERLAND TO A FILTRATION OR INFILTRATION AREA. THIS ALLOWS FOR THE INITIAL TREATMENT PRIOR TO THE PRACTICE AND SLOWS DOWN THE RUNOFF RATE.

F. SOIL RESTORATION (NYSDEC SMDM 5.1.6)

SOIL RESTORATION IS REQUIRED WHERE SOILS HAVE BEEN DISTURBED AND WILL BE VEGETATED. FOR THIS PROJECT, THE MAJORITY OF THE HEAVY TRAFFIC DISTURBANCE WILL BE IN AREAS THAT WILL BE BUILDING OR PARKING AREA. MINIMAL SOIL DISTURBANCE WILL OCCUR IN PROPOSED VEGETATED AREAS. THE COMMON PRACTICE IN PREPARING AN AREA FOR LANDSCAPE IS TO LOOSEN THE SOIL AND APPLY TOPSOIL. THE NATIVE SOIL IN BIORETENTION AREAS IS REMOVED AND REPLACED WITH ENHANCED SOIL. THE NEED FOR FULL SOIL RESTORATION IS NOT WARRANTED FOR THE DISTURBED, PROPOSED VEGETATED AREAS. IF EXCESSIVE COMPACTION OCCURS DURING CONSTRUCTION, MITIGATION INCLUDING, BUT NOT LIMITED TO DEEP RIPPING AND DE-COMPACTION AS OUTLINED IN THE NYSDEC STORMWATER MANUAL, SECTION 5.1.6, MAY BE ORDERED BY THE SITE ENGINEER.

G. **DETENTION BASIN**

STORMWATER FACILITY TO TEMPORARY DETENTION OF STORM RUNOFF. A DETENTION BASIN HAS OUTLET STRUCTURES TO CONTROL THE DISCHARGE RATE.

LANDSCAPING: DETENTION BASIN IS LINED WITH GRASS AND SIMILAR VEGETATION.

MAINTENANCE: VEGETATION TO BE CUT TWICE A YEAR. ONCE IN THE MIDDLE OF GROWING SEASON AND ONCE AFTER GROWING SEASON. ANY WOODY VEGETATION OR TREES ARE TO BE REMOVED. REMOVE ANY DEBRIS. ONCE EACH YEAR INSPECT EMBANKMENT, SIDES AND OVERFLOW WEIR FOR EROSION AND RILLS. CHECK OUTLET PIPES ONCE A YEAR FOR BLOCKAGES.

BERGER ENGINEERING AND SURVEYING
100 FULTON AVE.
POUGHKEEPSIE N.Y. 12603
(845) 471 - 7383
bergereng@gmail.com

UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL OR A PLAN BEARING A PROFESSIONAL ENGINEER'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.

STATE OF NEW YORK · JOSEPH PAUL BERGER · LICENSED PROFESSIONAL ENGINEER

MYERS RUN
MYERS CORNERS ROAD
TOWN OF WAPPINGER NY

DETAILS FOR EROSION CONTROL

No.	DATE	REVISIONS	BY
1	05/03/21	revised drawings	JPB

Date: 01/5/21

Sheet: sh 7 of 10