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GENERAL NOTES NYS STANDARDS AND SPECIFICATIONS FOR EROSION

AND SEDMIMENT CONTROL, NOVEMBER 2016 I. PHYSICALLY MARK LIMITS OF LAND DISTURBANCE ON THE SITE WITH TAPE, SIGNS, OR ORANGE CONSTRUCTION FENCE, SO THAT WORKERS CAN SEE THE AREAS TO BE PROTECTED.

2. DIVERT OFF-SITE RUNOFF FROM HIGHLY ERODIBLE SOILS AND STEEP SLOPES TO STABLE AREAS.

3. CLEAR ONLY WHAT IS REQUIRED FOR IMMEDIATE CONSTRUCTION ACTIVITY. LARGE PROJECTS SHOULD BE CLEARED AND GRADED AS CONSTRUCTION PROGRESSES. AREAS EXCEEDING TWO ACRES IN SIZE SHOULD NOT BE DISTURBED WITHOUT A SEQUENCING PLAN THAT REQUIRES PRACTICES TO BE INSTALLED AND THE SOIL STABILIZED, AS DISTURBANCE BEYOND THE TWO ACRES CONTINUES. MASS CLEARINGS AND GRADING OF ENTIRE SITE SHOULD BE AVOIDED.

4. RESTABILIZE DISTURBED AREAS AS SOON AS POSSIBLE AFTER CONSTRUCTION IS COMPLETED. ON SITES GREATER THAN TWO ACRES IN SIZE, WAITING UNTIL ALL DISTURBED AREAS ARE READY FOR SEEDING IS UNACCEPTABLE. FOURTEEN DAYS SHALL BE THE MAXIMUM EXPOSURE PERIOD. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. EXCEPT AS NOTED BELOW, ALL SITES SHALL BE SEEDED AND STABILIZED WITH EROSION CONTROL MATERIALS, SUCH AS STRAW MULCH, JUTE MESH, OR EXCELSIOR, INCLUDING AREAS WHERE CONSTRUCTION HAS BEEN SUSPENDED OR SECTIONS COMPLETED:

A. FOR ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS AND AREAS WITHIN 50 FT. OF A BUILDING UNDER CONSTRUCTION, A PERIMETER SEDIMENT CONTROL SYSTEM CONSISTING, FOR EXAMPLE, SILT FENCING, SHALL BE INSTALLED AND MAINTAINED TO CONTAIN SOIL. EXPOSED DISTURBED AREAS ADJACENT TO A CONVEYANCE THAT PROVIDES RAPID OFF-SITE DISCHARGE OF SEDIMENT, SUCH AS A CUT SLOPE AT AN ENTRANCE, SHALL BE COVERED WITH PLASTIC OR, GEOTEXTILE FABRIC TO PREVENT SOIL LOSS UNTIL IT CAN BE STABILIZED. STABILIZED CONSTRUCTION ENTRANCES WILL BE MAINTAINED TO CONTROL VEHICLE TRACKING MATERIAL OFF-SITE.

B. ON THE CUT SIDE OF ROADS, DITCHES SHALL BE STABILIZED IMMEDIATELY WITH ROCK RIP-RAP OR OTHER NON-ERODIBLE LINERS (EG. ROLLED EROSION PRODUCTS), OR WHERE APPROPRIATE, VEGETATIVE MEASURES SUCH AS SOD.

C. PERMANENT SEEDING SHOULD OPTIMALLY BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER AND EARLY FALL FROM SEPTEMBER TO OCTOBER 15. DURING THE PEAK SUMMER MONTHS AND IN THE FALL AFTER OCTOBER 15, WHEN SEEDING IS FOUND TO BE IMPRACTICABLE, AN APPROPRIATE TEMPORARY MULCH SHALL BE APPLIED. PERMANENT SEEDING MAY BE UNDERTAKEN DURING THE SUMMER IF PLANS PROVIDE FOR ADEQUATE WATERING. TEMPORARY SEEDING WITH RYE CAN BE UTILIZED THROUGH NOVEMBER.

D. ALL SLOPES STEEPER THAN 3:1 (H:V), OR 33.3%, AS WELL AS PERIMETER DIKES, SEDIMENT BASINS AND TRAPS, AND EMBANKMENTS SHALL, UPON COMPLETION, BE IMMEDIATELY STABILIZED WITH SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES. AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM SHALL NOT BE DISTURBED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

E. TEMPORARY SEDIMENT TRAPPING DEVICES SHALL NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONTIRBUTORY DRAINAGE AREAS. SIMILARLY, STABILIZATION SHALL BE ESTABLISHED PRIOR TO CONVERTING SEDIMENT TRAPS/BASINS INTO PERMANENT (POST-CONSTRUCTION) STORMWATER MANAGEMENT PRACTICES.

5. IF TEMPORARY WORK ROADS OR HAUL ROADS CROSS STREAM CHANNELS. ADEQUATE WATERWAY OPENINGS SHALL BE CONSTRUCTED USING SPANS, CULVERTS, WASHED ROCK BACKFILL, OR OTHER ACCEPTABLE, CLEAN METHODS THAT WILL ENSURE THAT ROAD CONSTRUCTION AND THEIR USE DO NOT RESULT IN TURBIDITY AND SEDIMENT DOWNSTREAM. ALL CROSSING ACTIVITIES AND APPURTENANCES ON STREAMS REGULATED BY ARTICLE 15 OF THE ENVIRONMENTAL CONSERVATION LAW SHALL BE IN COMPLIANCE WITH A PERMIT ISSUED PURSUANT TO ARTICLE 15 OF THE ECL.

6. MAKE SURE THAT ALL CONTRACTORS AND SUB-CONTRACTORS UNDERSTAND THE ESC PLAN AND SIGN THE CERTIFICATION STATEMENT REQUIRED BY NYSDEC GP.

7. DESIGNATE RESPONSIBLITY FOR THE ESC PLAN TO ONE INDIVIDUAL. THIS PERSON SHALL BE NAMED IN THE NOTICE OF INTENT.

8. AN ESC PLAN INSPECTION PROGRAM MEETING THE REQUIREMENTS OF THE NYSDEC GP, IS NECESSARY TO DETERMINE WHEN ESC MEASURES NEED MAINTENANCE OR REPAIR. PAY PARTICULAR ATTENTION TO INSPECTIONS REQUIRED AFTER RAINFALL. THE INSPECTION PROGRAM SHALL ALSO STATE THE COMPLETION OF IDENTIFIED REPAIR AND MAINTENANCE ITEMS.

9. IF CONSTRUCTION ACTIVITIES CONTINUE DURING WINTER, ACCESS POINTS SHOULD BE ENLARGED AND STABILIZED TO PROVIDE FOR SNOW STOCKPILING. IN ADDITION SNOW MANAGEMENT PLAN SHOULD BE PREPARED WITH ADEQUATE STORAGE AND CONTROL OF MELTWATER. A MINIMUM 25 FOOT BUFFER SHALL BE MAINTAINED FROM PERIMETER CONTROLS SUCH AS SILT FENCING. KEEP DRAINAGE STRUCTURES OPEN AND FREE OF SNOW AND ICE DAMS. INSPECTION AND MAINTENANCE ARE NECESSARY TO ENSURE THE FUNCTION OF THESE PRACTICES DURING RUNOFF EVENTS.

> LAND GRADING SPECIFICATIONS

I. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, MILLION SHALL NOT BE USED. 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

2. ALL FILL TO BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

3. 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.

4. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

5. STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATION.



SPECIFICATIONS

I. PRESERVE EXISTING TOPSOIL IN PLACE WHERE POSSIBLE. THEREBY REDUCING THE NEED FOR ADDED TOPSOIL.

2. AS NEEDED, INSTALL EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, CHANNELS, SEDIMENT TRAPS, AND STABILIZING MEASURES. OR MAINTAIN IF ALREADY INSTALLED.

3. COMPLETE ROUGH GRADING AND FINAL GRADE, ALLOWING FOR DEPTH OF TOPSOIL TO BE ADDED.

4. SCARIFY ALL COMPACT, SLOWLY PERMEABLE, MEDIUM AND FINE TEXTURED SUBSOIL AREAS. SCARIFY AT APPROXIMATELY RIGHT ANGLES TO THE SLOPE DIRECTION IN SOIL AREAS THAT ARE STEEPER THAN 5%. AREAS THAT HAVE BEEN OVERLY COMPACTED SHALL BE DECOMPACTED TO A MINIMUM DEPTH OF 12-INCHES WITH A DEEP RIPPER OR CHISEL PLOW PRIOR TO TOPSOILING.

5. REMOVE REFUSE, WOODY PLANT PARTS, STONES OVER 3-INCHES IN DIAMETER, AND OTHER LITTER.

6. TOPSOIL SHALL HAVE AT LEAST 6% BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN 20%. MUCK SOIL SHALL NOT BE CONSIDERED TOPSOIL.

7. TOPSOIL SHALL HAVE NOT LESS THAN 20% FINE TEXTURED MATERIAL (PASSING THE NO. 200 SIEVE) AND NOT MORE THAN 15% CLAY.

8. TOPSOIL TREATED WITH SOIL STERILANTS OR HERBICIDES SHALL BE SO IDENTIFIED TO THE PURCHASER.

9. TOPSOIL SHALL BE RELATIVELY FREE OF STONES OVER 1 1/2-INCHES IN DIAMETER, TRASH, NOXIOUS WEEDS SUCH AS NUT SEDGE AND QUACKGRASS, AND WILL HAVE LESS THAN 10% GRAVEL.

IO. TOPSOIL CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER

II. TOPSOIL SHALL BE DISTRIBUTED TO A UNIFORM DEPTH OVER THE AREA. IT SHALL NOT BE PLACED WHEN IT IS PARTIALLY FROZEN, MUDDY, OR ON FROZEN SLOPES OR OVER ICE, SNOW, OR STANDING WATER PUDDLES.

12. TOPSOIL PLACED AND GRADED ON SLOPES STEEPER THAN 5% SHALL BE PROMPTLY FERTILIZED, SEEDED, MULCHED, AND STABILIZED BY "TRACKING" WITH SUITABLE EQUIPMENT.



NOTES: POND EMBANKMENT CONSTRUCTION:

1: EMBANKMENT MATERIAL SPECIFICATIONS: EMBANKMENT CORE AND CUT OFF TRENCH MATERIAL SHALL BE MATERIAL CONFORMING TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL WITH AT LEAST 30% PASSING #200 SIEVE. CORE AND CUT OFF TRENCH MATERIAL SHALL BE STOCKPILED SPEARATELY FROM OUTER SHELL MATERIAL. SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6-INCHES, FROZEN OR OTHER OBJECTIONABLE MATERIALS. STOCKPILED MATERIAL SHALL BE OVERED AND PROTECTED FROM WATER, TRAFFIC AND OTHER DELETERIOUS SUBSTANCES OR LIFTS MAXIMUM AND COMPACTED. THE MINIMUM REQUIRED DENSITY SHALL BE PLACED IN 12-INCH THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN 2% OF OPTIMUM. ALL COMPACTION TO BE DETERMINED BY AASHTO METHOD 99 STANDARD PROCTOR. 3: EMBANKMENT CORE DIMENSIONS: THE CORE SHALL BE PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE TOP WOTH OF THE CORE SHALL BE A MINIMUM OF FOUR FEET. THE HEIGHT SHALL EXTEND UP TO AT LEAST THE TO YEAR WATER ELEVATION OR AS SHOWN ON THE PLANS. THE SIDE SLOPES SHALL BE 1 TO 1 OF FLATTER. THE CORE SHALL BE COMPACTED WITH CONSTRUCTION COMPACTION EQUIPMENT, ROLLERS, OR TAMPS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY. THE CORE SHALL BE CONSTRUCTED/PLACED CONCURRENTLY WITH THE OUTER SHELL OF THE EMBANKMENT.

MIRAFI 700X GEOTEXTILE OR APPROVED EQUA SPILLWAY SLOPES TO BASIN





BASIN VOLUME CERTIFICATION: Upon completion of construction, a basin volume certification must be performed and certified by a licensed professional engineer or land surveyor to ensure that the structure meets the storage volume requirements contained on this sheet. Certification shall be submitted to the local reviewing jurisdication for approval.

date 5-15-20 N.T.S. project no. sheet no. [™] ST−4

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Existing Subcatchment - 1 (ESC-1) Proposed Site Conditions - Area 61,335-SF (1.41-AC)

Surface Conditions & Soils: 73.0% Mm - Manmade Fill - Hydrologic Soil Group (HSG) D 27.0% - CnB - Chenango - Hydrologic Soil Group (HSG) A

Runoff Curve Number = 98, Gravel Drive, Roof - HSG D Soils Runoff Curve Number = 98, Gravel Drive, HSG A Soils Runoff Curve Number = 30, Woods, HSG A Soils

Overland Stormwater Runoff - Longest Flowpath = 288lf +/-Sheet Flow, Smooth Surfaces, 31-LF @ S = 33.0% avg +/-Shallow Conc. Flow, Unpaved, 20-LF @ S = 1.0% avg +/-Shallow Conc. Flow, Grassed Waterway, 20-LF @ S = 25.0% avg +/-Shallow Conc. Flow, Grassed Waterway, 217-LF @ S = 5.0% avg +/-

To Design Point - (DPP)

Proposed Subcatchment - 3 (PSC-3) Proposed Site Conditions - Area 26,972-SF (0.62-AC)

Surface Conditions & Soils: 59.0% Mm - Manmade Fill - Hydrologic Soil Group (HSG) D 41.0% CnB - Chenango, Hydrologic Soil Group (HSG) A

Runoff Curve Number = 98, Gravel Drive, Roof - HSG D Soils *Runoff Curve Number* = 39, >75% *Grass Cover, HSG A Soils*

Overland Stormwater Runoff - Longest Flowpath = 330lf +/-Sheet Flow - Smooth Surfaces, 87-LF @ S = 3.4% avg +/-Trap/Vee Channel Flow, 243-LF @ S = 4.1% avg +/-

To Design Point - (DPP)

Proposed Subcatchment - 2 (PSC-2) Proposed Site Conditions - Area 16,671-SF (0.38-AC)

Surface Conditions & Soils: 76.0% Mm - Manmade Fill - Hydrologic Soil Group (HSG) D 24.0% CnB - Chenango, Hydrologic Soil Group (HSG) A

Runoff Curve Number = 98, Gravel Drive, Roof - HSG D Soils Runoff Curve Number = 39, >75% Grass Cover, HSG A Soils Runoff Curve Number = 80, >75% Grass Cover, HSG D Soils

Overland Stormwater Runoff - Longest Flowpath = 350lf +/-Sheet Flow - Dense Grass, 100-LF @ S = 2.0% avg +/-Shallow Conc. Flow, Grassed Waterway, 9-LF @ S = 2.0% avg +/-Trap/Vee Channel Flow, 241-LF @ S = 3.3% avg +/-

To Design Point - (DPP)

REFERENCE HYDROCAD (HYDRAULIC & HYDROLOGIC) MODELING RESULTS PRESENTED WITH THESE PLANS



DPP



PROPOSED SUBCATCHMENT

Overland Stormwater Runoff - Longest Flowpath = 534lf +/-Sheet Flow, Smooth Surfaces, 31-LF @ S = 30.0% avg +/-Shallow Conc. Flow, Unpaved, 21-LF @ S = 1.0% avg +/-Shallow Conc. Flow, Grassed Waterway, 21-LF @ S = 25% avg +/-Trap/Vee Channel Flow, 461-LF @ S = 2.8% avg +/-

EXISTING SUBCATCHMENT



Proposed Subcatchment - 1 (PSC-1) Proposed Site Conditions - Area 17,773-SF (0.41-AC)

Surface Conditions & Soils: 94.0% Mm - Manmade Fill - Hydrologic Soil Group (HSG) D 6.0% CnB - Chenango - Hydrologic Soil Group (HSG) A

Runoff Curve Number = 98, Gravel Drive, Roof - HSG D Soils Runoff Curve Number = 39, >75% Grass Cover, HSG A Soils *Runoff Curve Number = 80, >75% Grass Cover, HSG D Soils*

To Design Point - (DPP)