PROJECT REFERENCE NO.	SHEET NO.
R-5968EA	EC-3

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 040377 ENGINEER ROBERT S. TUCKER 8/4/21

EROSION AND SEDIMENT CONTROL NOTES

EROSION CONTROL NOTES:

1. ALL CONSTRUCTION MUST BE IN ACCORDANCE WITH NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROADS AND STRUCTURES DATED JANUARY 2018.
2. CONTRACTOR MUST MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT UNLESS OTHERWISE INDICATED ON THE PLANS OR DIRECTED BY THE INSPECTOR.
3. CONTRACTOR MUST CONSTRUCT DIVERSION DITCHES WHEN NECESSARY TO ENSURE ALL SEDIMENT IS DIRECTED INTO EROSION CONTROL MEASURES.
4. CUT AND FILL SLOPES SHALL BE STABILIZED WITHIN 15 DAYS OF ANY PHASE OF GRADING.
5. ALL ROADWAYS ADJACENT TO THIS PROJECT MUST REMAIN CLEAN AT ALL TIMES OR A WASH STATION MAY BE REQUIRED.
6. INSTALL WATTLES AROUND BASINS AND FOREBAYS ONCE CONSTRUCTED, TO REMAIN IN PLACE UNTIL SURROUNDING AREA HAS STABILIZED WITH VEGETATION.

GENERAL NOTES:

1. EXISTING TOPOGRAPHY TAKEN FROM FIELD SURVEY BY SEPI ENGINEERING AND CONSTRUCTION.
2. THE SILT FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITEWORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED.
3. RESEEDING OF PERMANENT GROUNDCOVER WILL BE ESTABLISHED IN 15 WORKING DAYS OR 30 CALENDAR DAYS, WHICHEVER IS SHORTER.
4. IF NECESSARY, PUMPS SHALL BE USED TO DEWATER THE WORKING AREA. THE PUMPS MUST BE OF SUFFICIENT SIZE TO DEWATER THE WORK AREA AND TO PUMP WATER FROM THE BOTTOM OF THE WORKING AREA TO A SPECIAL STILLING BASIN. ALL PUMP EFFLUENT SHALL BE DISCHARGED THROUGH A SPECIAL STILLING BASIN.

SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTION LEAVING SURFACES REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW).
5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP
6. SEED A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE OVER 70% DAMAGED, RE-ESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT CONSERVATION INPSECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

   APPLY: AGRICULTURAL LIMESTONE 2 TONS/ACRE (34 TONS/ACRE ON CLAY SOILS)
   FERTILIZER 1,000 LBS/ACRE; 10 10 10
   SUPERPHOSPHATE 500 LBS/ACRE; 20%
   MULCH 2 TONS/ACRE; SMALL GRAIN STRAW
   ANCHOR ASPHALT EMULSION @ 300 GAL/ACRE

MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF PRODUCING RAINFALL EVENT BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ALL NEEDED REPAIRS WILL BE MADE IMMEDIATEDLY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES 6-INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
3. INLET PROTECTION DEVICES MUST BE INSPECTED AFTER EVERY RAINFALL EVENT. DAMAGED SILT FENCE MUST BE REPLACED AND GRAVEL MUST BE CLEANED OR REPLACED WHEN INLET NO LONGER DRAINS PROPERLY.
4. ALL TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED ONCE THE OWNER AGENCY ACCEPTS THE CONSTRUCTION AND VEGETATION HAS BEEN FULLY ESTABLISHED.

CONSTRUCTION SEQUENCE NOTES:

1. INSTALL CONSTRUCTION ENTRANCE.
2. INSTALL ALL SILT FENCE AS SHOWN ON PLAN. OBTAIN APPROVAL OF INSTALLATION.
3. CLEAR PROJECT WORK LIMITS ONLY AS NEEDED TO INSTALL PERIMETER EROSION CONTROL DEVICES.
4. INSTALL EROSION CONTROL MEASURES. OBTAIN CERTIFICATE OF COMPLIANCE FROM EROSION CONTROL INSPECTOR.
5. CLEAR AND GRUB AREAS WITHIN CONSTRUCTION LIMITS AND BEGIN GRADING ACTIVITIES.
6. INSTALL STORM DRAINAGE, BEGINNING AT DOWNSTREAM END AND WORKING UPSTREAM. MAINTAIN INLET PROTECTION DEVICES AS DRAINAGE STRUCTURES ARE INSTALLED AND AREAS ARE BROUGHT UP TO FINISHED GRADE. CAP ALL OPENINGS FOR UNDERDRAINS IN OUTLET STRUCTURES AS NEEDED.
7. INSTALL TEMPORARY AND PERMANENT EROSION CONTROL SLOPE MATTING AS STABILIZE ALL BARE AREAS AND PRODUCE VEGETATIVE COVER.
8. EXCAVATE AND REMOVE SOIL FOR GRAVEL BED. INSTALL LINER, UNDERDRAINS, AND SUBMERGED GRAVEL WETLAND MEDIA.
9. AFTER WETLAND MEDIA INSTALLATION, IMMEDIATELY INSTALL PROTECTIVE WATTLES AROUND WETLANDS AND FOREBAYS AS SHOWN ON THE PLANS.
10. UPON SUBSTANTIAL COMPLETION OR WORK, REQUEST FINAL APPROVAL FROM EROSION CONTROL INSPECTOR. UPON APPROVAL, REMOVE ALL TEMPORARY EROSION CONTROL DEVICES.

SEEDING SCHEDULE SHOULDERS, SIDE DITCHES, SLOPES (MAX. 3:1)

DATE	TYPE	PLANTING RATE
AUG 15 – NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1 – MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1 – APR 15	TALL FESCUE	300 LBS/ACRE
APR 15 – JUNE 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRES
JUNE 30 – AUG 15	TALL FESCUE AND ***BROWNTOP MILLET ***OR SORGHUM-SUDAN HYBRIDS	35 LBS/ACRE

SLOPES (3:1 TO 2:1)

DATE	TYPE	PLANTING RATE
MAR 1 – JUNE 1	SERICEA LESPEDEZA (SCARIFIED) AND	50 LBS/ACRE
MAR 1 – APR 15	ADD TALL FESCUE AND	120 LBS/ACRE
MAR 1 – JUNE 30	ADD WEEPING LOVEGRASS OR	10 LBS/ACRE
MAR 1 – JUNE 30	ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUNE 1 – SEP 1	***TALL FESCUE AND ***BROWNTOP MILLET ***OR SORGHUM-SUDAN HYBRIDS	120 LBS/ACRE 35 LBS/ACRE 30 LBS/ACRE
SEP 1 – MAR 1	SERICEA LESPEDEZA (UNHULLED-UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE 120 LBS/ACRE
NOV 1 – MAR 1	ADD ABRUZZI RYE	25 LBS/ACRE

CONSULT EROSION CONTROL ENGINEER FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDTIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***TEMPORARY – RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOVWING, OTHERWISE FESCUE MAY BE SHADED OUT.

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