not less than ten (10) percent magnesium oxide. C. Fertilizer shall be commercial type 10-20-20 with fifty (50) percent of the elements derived from organic sources.

D. Seed.

1. Seed shall be certified seed or equivalent based on North Carolina Seed Improvement Association requirements for certification. All seed shall be furnished in sealed standard containers. Seed which has become wet, moldy, or otherwise damaged prior to seeding, will not be acceptable.

2. One (1) percent maximum weed seed content permitted.

3. Seasonal mixtures for NC DOT right—of—ways:

a. From September 1 to April 1:

Seventy-five (75) pounds per acre of Kentucky 31 Fescue. fifty (50) pounds per acre of Pensacola Bahiagrass, and five (5) pounds per acre of Centipede.

b. From April 1 to September 1:

Seventy—five (75) pounds per acre of Pensacola Bahiagrass, fifty (50) pounds per acre of Kentucky 31 Fescue, and five (5) pounds per acre of Centipede.

4. Alternative seasonal mixtures outside NC DOT right-of-ways:

a. From November 15 to March 1

Twenty-five (25) pounds per acre of Rye Grain, seventy-five (75) pounds per acre of Tall Fescue, Kentucky 31 or Alta Tall Fescue and fifty (50) pounds per acre of Pensacola Bahiagrass.

b. From March 1 to May 15:

Seventy-five (75) pounds per acre of Tall Fescue, Kentucky 31 or Alta Tall Fescue and fifty (50) pounds per acre of Pensacola Bahiagrass.

c. From May 15 to September 15:

Sixty (60) pounds per acre of Pensacola Bahiagrass and forty (40) pounds per acre of Annual Lespedeza (Kobe or

d. From September 15 to November 15:

acre of Pensacola Bahiagrass.

Seventy—five (75) pounds per acre of Tall Fescue, Kentucky 31 or Alta Tall Fescue and fifty (50) pounds per

E. Mulching material shall be out or wheat straw, in dry condition, reasonably free from weeds and foreign matter detrimental to plant life.

2. GENERAL CONDITIONS

SECTION A: SELF-INSPECTION

(1) Rain gauge

good working

outfalls (SDOs)

(6) Ground

measures

were delayed shall be noted in the Inspection Record.

(during normal

At least once per

7 calendar days

and within 24

24 hours

hours of a rain

At least once per

and within 24

24 hours

(4) Perimeter of At least once per

wetlands onsite 7 calendar days

hours of a rain

7 calendar days

and within 24

and within 24

hours of a rain

24 hours

of grading

event ≥ 1.0 inch in

event > 1.0 inch in

event ≥ 1.0 inch in

usiness hours)

A. When conditions are such by reason of drought, high winds, excessive moisture or other factors where satisfactory results will not be obtained, the WORK shall be stopped, and resumed only when conditions are favorable.

SELE-INSPECTION, RECORDING AND REPORTING

Self-inspections are required during normal business hours in accordance with the table

below. When adverse weather or site conditions would cause the safety of the inspection

which it is safe to perform the inspection. In addition, when a storm event of equal to or

greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be

ormed upon the commencement of the next business day. Any time when inspection

Inspection records must include:

Identification of the measures inspected

3. Name of the person performing the inspection

4. Indication of whether the measures were operating

Description of maintenance needs for the measure,

Identification of the discharge outfalls inspected,

sheen, floating or suspended solids or discoloration

3. An explanation as to the actions taken to control future

stream has visible increased turbidity from the construction

activity, then a record of the following shall be made:

4. Evidence of indicators of stormwater pollution such as oil

Description, evidence, and date of corrective actions take

If visible sedimentation is found outside site limits, then a record

1. Actions taken to clean up or stabilize the sediment that has left

2. Description, evidence, and date of corrective actions taken, and

Description, evidence and date of corrective actions taken, and

mentation that the required ground stabilization

timeframe or an assurance that they will be provided as

Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,

(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and

Regional Office per Part III, Section C, Item (2)(a) of this permit.

2. Records of the required reports to the appropriate Division

The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm

drainage facilities, completion of all land-disturbing

measures have been provided within the required

Name of the person performing the inspection

5. Indication of visible sediment leaving the site,

of the following shall be made:

ground cover).

soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement

shall not commence until the E&SC plan authority has approved these items,

properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,

2. Date and time of the Inspection.

If no daily rain gauge observations are made during weekend

holiday periods, and no individual-day rainfall information is

attended days (and this will determine if a site inspection is

needed). Days on which no rainfall occurred shall be recorded as

"zero." The permittee may use another rain-monitoring device

personnel to be in jeopardy, the inspection may be delayed until the next business day on

SEEDBED PREPARATION

A. Protect existing underground improvements from damage.

B. Clear the ground surface of stumps, stones, roots, cables, wire, grade stakes, and other materials that might hinder proper grading, tillage, seeding or subsequent maintenance operations.

C. Remove contaminated subsoil.

D. Grade to eliminate rough spots and low area where ponding may occur. Maintain smooth, uniform grade.

E. Assure positive drainage away form buildings.

F. Finish ground level firm and sufficient to prevent sinkage pockets when irrigation is applied.

G. Grades on the area to be seeded shall be maintained to a true and even condition. Maintenance shall include any necessary repairs to previously graded areas.

H. Uniformly apply lime at a rate of 4000 pounds per acre prior to

Thoroughly till all graded areas to a depth of at least five (5) inches by plowing, disking, harrowing, or other approved methods until the condition of the soil is acceptable. On sites where soil conditions are such that high clay content and excessive compaction cause difficulty in getting clods and lumps effectively pulverized, use rotary tillage machinery until soil mixture is acceptable and no clods or clumps larger than one—half (1/2)inch in diameter remain.

J. Remove from site foreign materials collected during tilling.

K. Uniformly apply fertilizer at a rate of 500 pounds per acre of

L. Incorporate the fertilizer into the upper three (3) or four (4) inches of prepared seedbed just prior to the last tillage operation. However, never apply fertilizer more than (3) days prior to seeding. Use fertilizer immediately after delivery or store it in a manner that will not permit it to harden or destroy its

M. The seedbed should be firm and compact. Prior to seeding, grade the seedbed and lightly compact it with a land roller, such as a cultipacker.

4. SEEDING

A. Do not sow seed immediately following rain, when ground is too dry, or during windy periods. Do not apply grass seed and fertilizer at the same time in the same machine.

B. Apply seed at specified seasonal rate.

C. Rake seed in lightly.

D. Roll seeded area with roller not exceeding 112 pounds (50 kg).

E. Apply water with fine spray immediately after each area has been

5. MULCHING PRACTICES

SECTION B: RECORDKEEPING

A. Apply one (1) to two (2) tons of mulching material per acre to seeded areas. Apply mulching material with mechanical type equipment and obtain a uniform distribution which permits sunlight to penetrate to the ground surface. Bare areas and areas with thick clumps of straw are not acceptable.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

The approved E&SC plan as well as any approved deviation shall be kept on the site. The

The following items pertaining to the E&SC plan shall be kept on site and available for

and does not significantly deviate from the of the approved E&SC plan or complete, date

locations, dimensions and relative elevations | and sign an inspection report that lists each

(b) A phase of grading has been completed. Initial and date a copy of the approved E&SC

In addition to the E&SC plan documents above, the following items shall be kept on the

Division provides a site-specific exemption based on unique site conditions that make

(b) Records of inspections made during the previous twelve months. The permittee shall

record the required observations on the Inspection Record Form provided by the

Division or a similar inspection form that includes all the required elements. Use of

All data used to complete the e-NOI and all inspection records shall be maintained for a period

of three years after project completion and made available upon request. [40 CFR 122.41]

electronically-available records in lieu of the required paper copies will be allowed if

site and available for inspectors at all times during normal business hours, unless the

a) This General Permit as well as the Certificate of Coverage, after it is received.

shown to provide equal access and utility as the hard-copy records.

installation.

nstruction phase

ground cover specifications.

approved E&SC plan must be kept up-to-date throughout the coverage under this permit.

Initial and date each E&SC measure on a copy

E&SC measure shown on the approved E&SC

plan. This documentation is required upon the

initial installation of the E&SC measures or if

the E&SC measures are modified after initial

plan or complete, date and sign an inspection

Initial and date a copy of the approved E&SC

plan or complete, date and sign an inspection

Complete, date and sign an inspection report

Initial and date a copy of the approved E&SC

report to indicate the completion of the

plan or complete, date and sign an inspection

report to indicate compliance with approved

report to indicate completion of the

B. Anchor mulching material.

1. In areas with gentle slopes, crimp mulching material into soil.

2. On steeper slopes such as the sides of swales, anchor mulch

3. On road shoulders, anchor mulch with asphalt tack if crimping

4. Use asphalt tack in lieu of crimping when required by regulatory agencies or if directed by the ENGINEER. Typically, asphalt tack in lieu of crimping will be required in areas with

high traffic because of wind generated by the traffic.

5. On slopes steeper than 2:1, jute, excelsior, or synthetic matting may be required to protect the slope from erosion. They should be installed before mulch is applied to surrounding

6. WATERING

A. Lightly water to aid breakdown of fertilizer and to provide moist

MAINTENANCE PERIOD

A. Maintenance Period: until final acceptance

8. MAINTENANCE

A. Maintain surfaces and supply additional topsoil where necessary, including areas affected by erosion.

B. Water to ensure uniform seed germination and to keep surface of soil damp.

C. Apply water slowly so that surface of soil will not puddle and

D. Except for rye grain, cut grass first time when it reaches height of two and one-half (2 1/2) inches (60 mm) and maintain to minimum of two (2) inches (50 mm). Do not cut more than 1/3 of blade at any one mowing.

E. If rye grain is planted mow to maintain grass height between three (3) and six (6) inches until Fescue matures enough to provide ground cover.

F. After first mowing water grass sufficient to moisten soil from three (3) inches to five (5) inches (76 to 127 mm) deep.

G. Apply weed killer when weeds start developing, during calm weather when air temperature is above fifty (50) degrees Fahrenheit [ten (10) degrees Celsius].

H. Replant damaged grass areas showing root growth failure, deterioration, bare or thin spots, and eroded areas.

9. RESTORATION

A. Restore grassed areas until accepted.

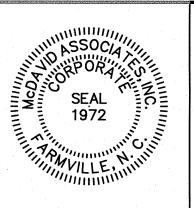
10. ACCEPTANCE

A. Seeded areas will be accepted at end of maintenance period when seeded areas are properly established and otherwise acceptable.

B-4926 UC-3F NORTH CAROLINA DESIGNED BY: DEPARTMENT OF DRAWN BY: TRANSPORTATION CHECKED BY: UTILITIES ENGINEERING SEC APPROVED BY: JWM PHONE: (919)707-6690 FAX: (919)250-4151 **REVISED:** UTILITY CONSTRUCTION

PROJECT REFERENCE NO.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



CARO, CHESSION! SEAL 28431

SHEET NO.

UTILITY CONSTRUCTION PLANS ONLY

McDAVID ASSOCIATES, INC CORPORATE OFFICE 3714 North Main Street P. O. Drawer 49 Farmville, NC 27828 Telephone: (252) 753-2139 Facsimile: (252) 753-7220

Corporate License No. C-131 BRANCH OFFICE Engineers • Planners 09 East Walnut Street P. O. Box 1776 Goldsboro, NC 27533 Telephone: (919) 736-7630 Facsimile: (919) 735-7351

DATE DESCRIPTION MAI REVIEW OFFICER APPROVAL DATE MAI REVIEW OFFICER 1-19-0309-34

SEEDING CONSTRUCTION NOTES

inspection at all times during normal business hours.

(a) Each E&SC measure has been installed

c) Ground cover is located and installed

in accordance with the approved E&SC

(d) The maintenance and repair

have been performed.

PART II, SECTION G, ITEM (4)

DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down

for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather).

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal

(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include

(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States

(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,

equirements for all E&SC measures

this requirement not practical:

(e) Corrective actions have been taken

2. Additional Documentation to be Kept on Site

3. Documentation to be Retained for Three Years

shown on the approved E&SC plan.

A

SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING 1. Occurrences that Must be Reported

Permittees shall report the following occurrences: (a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:

They are 25 gallons or more,

They are less than 25 gallons but cannot be cleaned up within 24 hours,

 They cause sheen on surface waters (regardless of volume), or They are within 100 feet of surface waters (regardless of volume).

 Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the

. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800)

Reporting Timeframes (After Discovery) and Other Requirements (a) Visible sediment • Within 24 hours, an oral or electronic notification. . Within 7 calendar days, a report that contains a description of the stream or wetland sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. If the stream is named on the NC 303(d) list as impaired for sediment related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure comp with the federal or state impaired-waters conditions. (b) Oil spills and Within 24 hours, an oral or electronic notification. The notification release of shall include information about the date, time, nature, volume and hazardous location of the spill or release.

substances per Ite (b)-(c) above vpasses [40 CFR The report shall include an evaluation of the anticipated quality and .22.41(m)(3)] effect of the bypass. (d) Unanticipated Within 24 hours, an oral or electronic notification. bypasses [40 CFR Within 7 calendar days, a report that includes an evaluation of the

122.41(m)(3)]

may endanger

health or the

(e) Noncompliance

of this permit that

quality and effect of the bypass. Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance including exact dates and times, and if the noncompliance has no been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6). Division staff may waive the requirement for a written report on a

NORTH CAROLINA Environmental Quality

EFFECTIVE: 04/01/19

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT ementing the details and specifications on this plan sheet will result in the construction

> activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION Required Ground Stabilization Timeframes Stabilize within thi many calendar Timeframe variations Site Area Description days after ceasing (a) Perimeter dikes swales, ditches, a perimeter slope None (HQW) Zones

I (b) High Quality Wate f slopes are 10' or less in length and are (c) Slopes steeper than not steeper than 2:1, 14 days are 7 days for slopes greater than 50' in ength and with slopes steeper than 4:1 7 days for perimeter dikes, swales, (d) Slopes 3:1 to 4:1 ditches, perimeter slopes and HQW -10 days for Falls Lake Watershed 7 davs for perimeter dikes, swales. ditches, perimeter slopes and HOW Zones

-10 days for Falls Lake Watershed unless

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the echniques in the table below

 Temporary grass seed covered with straw or
Permanent grass seed covered with straw or other mulches and tackifiers other mulches and tackifiers Geotextile fabrics such as permanent soil Rolled erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Shrubs or other permanent plantings covered Plastic sheeting Uniform and evenly distributed ground cover

sufficient to restrain erosion

retaining walls

Structural methods such as concrete, asphalt or

Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS Select flocculants that are appropriate for the soils being exposed during

Temporary Stabilization

flatter than 4:1

construction, selecting from the NC DWR List of Approved PAMS/Flocculants. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures Apply flocculants at the concentrations specified in the NC DWR List of Approved *PAMS/Flocculants* and in accordance with the manufacturer's instructions. Provide ponding area for containment of treated Stormwater before discharging

Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

Maintain vehicles and equipment to prevent discharge of fluids.

Provide drip pans under any stored equipment. Identify leaks and repair as soon as feasible, or remove leaking equipment from the

B

Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).

Remove leaking vehicles and construction equipment from service until the problem

5. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTI Never bury or burn waste. Place litter and debris in approved waste containers. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.

waters unless no other alternatives are reasonably available. Locate waste containers on areas that do not receive substantial amounts of runof from upland areas and does not drain directly to a storm drain, stream or wetland Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.

On business days, clean up and dispose of waste in designated waste containers.

Locate waste containers at least 50 feet away from storm drain inlets and surface

Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow. Dispose waste off-site at an approved disposal facility.

PAINT AND OTHER LIQUID WASTE

Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available

Contain liquid wastes in a controlled area. Containment must be labeled, sized and placed appropriately for the needs of site. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from

construction sites.

PORTABLE TOILETS Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place

on a gravel pad and surround with sand bags. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace

EARTHEN STOCKPILE MANAGEMENT

with properly operating unit.

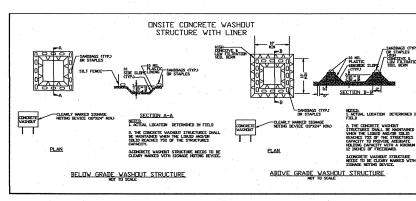
Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably

Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile Provide stable stone access point when feasible Stabilize stockpile within the timeframes provided on this sheet and in accordance

with the approved plan and any additional requirements. Soil stabilization is defined

as vegetative, physical or chemical coverage techniques that will restrain accelerated

erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

Do not discharge concrete or cement slurry from the site. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.

Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence. Install temporary concrete washouts per local requirements, where applicable. If an

alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or

discharged to the storm drain system or receiving surface waters. Liquid waste must

be pumped out and removed from project. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum. install protection of storm drain inlet(s) closest to the washout which could receive

spills or overflow. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the

approving authority Install at least one sign directing concrete trucks to the washout within the project

limits. Post signage on the washout itself to identify this location. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural omponents when no longer functional. When utilizing alternative or proprietary

products, follow manufacturer's instructions. LO. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

Do not stockpile these materials onsite.

Store and apply herbicides, pesticides and rodenticides in accordance with label Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of

accidental poisoning. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.

Create designated hazardous waste collection areas on-site. Place hazardous waste containers under cover or in secondary containment. 3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

GENERAL PERMIT NCG01 GUIDELINES