GENERAL CONSTRUCTION NOTES

- UNLESS OTHERWISE STATED, ALL FILL AREAS SHALL BE CONSTRUCTED IN LAYERS OF 8" MAXIMUM THICKNESS. WITH WATER ADDED OR SOIL CONDITIONED TO THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE ENGINEER AND COMPACTED WITH A SHEEP'S FOOT ROLLER TO A COMPACTION EQUAL TO OR GREATER THAN 95% (100% IN THE TOP 2' OF THE SUB GRADE BELOW ROADWAYS AND PARKING LOTS) OF THE DENSITY OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH THE STANDARD PROCTOR METHOD OF MOISTURE-DENSITY RELATIONSHIP TEST, ASTM D698 OR AASHTO-99 UNLESS SPECIFIED IN OTHER
- ENTIRE AREA TO BE GRADED SHALL BE CLEARED AND GRUBBED. NO FILL SHALL BE PLACED ON ANY AREA NOT CLEARED AND GRUBBED.
- ALL SOIL EROSION CONTROL MEASURES REQUIRED BY THE GRADING PLAN SHALL BE PERFORMED PRIOR TO GRADING, CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES, ETC., SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT AND SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY ON THE ENGINEER'S APPROVAL. IF DURING THE LIFE OF THE PROJECT, A STORM CAUSES SOIL EROSION WHICH CHANGES FINISH GRADES OR CREATES "GULLIES" AND "WASHED AREAS", THESE SHALL BE REPAIRED.

DISPOSABLE MATERIAL

- A. CLEARING AND GRUBBING WASTES SHALL BE DISPOSED OF ON SITE AT THE DIRECTION OF THE OWNER.
- B. ON SITE BURNING IS AN ACCEPTABLE METHOD OF DISPOSING OF FLAMMABLE WASTES. WHEN BURNING IS ANTICIPATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND
- AFTER BURNING IS COMPLETED, PURE ASH MAY BE DISPOSED OF BY MIXING WITH FILL DIRT. EXISTING FENCING AND GATES, INCLUDING BAR GATES, THAT IS TO BE REMOVED AS PART OF
- THE CONTRACTOR SHALL CONTROL ALL "DUST" BY PERIODIC WATERING.

DEMOLITION SHALL BE REMOVED FROM THE SITE.

- ALL AREAS WHERE THERE IS EXPOSED DIRT SHALL BE SEEDED, FERTILIZED AND MULCHED ACCORDING TO THE SPECIFICATIONS. THE SURFACE SHALL BE LOOSENED TO A DEPTH OF ±4"-6" TO ACCEPT SEED. SEEDING MAY BE PERFORMED BY A MECHANICAL "HYDRO-SEEDER". HAND SEEDING SHALL BE AUTHORIZED ON AN AREA BY AREA APPROVAL BY THE ENGINEER.
- WHERE SPECIFIED, STORM DRAIN PIPE SHALL BE HIGH DENSITY POLYETHYLENE (HDPE). SMOOTH WALL INTERIOR, WITH WATER TIGHT JOINTS, BACKFILLED WITH # 57 WASHED STONE UP TO MIN. 6" OVER THE TOP OF THE PIPE. HDPE PIPE USED FOR STORM DRAINAGE SHALL BE ADS N12 WT, OR APPROVED EQUAL.

WHERE RCP IS SPECIFIED, STORM DRAIN PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CONFORMING TO AASHTO M-170, AS CONTAINED IN NCDOT STANDARD SPECIFICATION 1032-9 FOR WALL "B" TYPE.

WHERE CMP IS SPECIFIED, CORRUGATED METAL STORM DRAIN PIPE (CMP) SHALL BE ALUMINIZED TYPE 2 CORRUGATED STEEL MANUFACTURED IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO M-36. THE PIPE SHALL BE MANUFACTURED FROM ALUMINIZED STEEL TYPE 2 MATERIAL CONFORMING TO THE REQUIREMENTS OF AASHTO M-274. ALL PIPE SHALL BE FURNISHED WITH REROLLED ENDS AND SHALL BE JOINED WITH HUGGER BANDS. THE USE OF DIMPLE BANDS WILL NOT BE ALLOWED. PIPE THROUGH 24" DIAMETER SHALL BE 16 GAUGE, PIPE THROUGH 42" DIAMETER SHALL BE 14 GAUGE, PIPE THROUGH 54" DIAMETER SHALL BE 12

- CONTRACTOR SHALL VERIFY ALL ELEVATIONS BEFORE INSTALLATION OF FACILITIES.
- CATCH BASINS CAST-IN-PLACE SHALL CONFORM TO THE REQUIREMENTS OF NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES (LATEST EDITION) ARTICLES 840-1 THROUGH 840-3. CURB INLET CATCH BASIN SHALL CONFORM TO NCDOT STANDARD DETAILS 840.02 THROUGH 840.04. DROP INLETS SHALL CONFORM TO STANDARD DETAIL 840.14. JUNCTION BOXES SHALL CONFORM TO STANDARD DETAIL 840.31.
- CONCRETE AND MASONRY SHALL MEET THE REQUIREMENTS OF APPROPRIATE SECTION OF NCDOT STANDARD SPECIFICATIONS FOR ROAD AND STRUCTURES (LATEST EDITION). CONCRETE SHALL BE CLASS A OR B, 4000 PSI MINIMUM, MEETING THE REQUIREMENTS OF SECTION 1000, CONSTRUCTED IN ACCORDANCE WITH SECTION 825. MASONRY SHALL MEET THE REQUIREMENTS OF SECTION 1040, CONSTRUCTED IN ACCORDANCE WITH SECTION 830 AND/OR 834.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

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

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

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

were delayed shall be noted in the Inspection Record.

(during normal

At least once per

hours of a rain

At least once pe

hours of a rain

7 calendar day and within 24

hours of a rain

At least once per

and within 24

hours of a rain

After each phase

(4) Perimeter of At least once per

event > 1.0 inch in

good working

(2) E&SC

performed upon the commencement of the next business day. Any time when inspections

Inspection records must include:

If no daily rain gauge observations are made during weekend

holiday periods, and no individual-day rainfall information i

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

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

Indication of whether the measures were operating

. Description of maintenance needs for the measure

Identification of the discharge outfalls inspected,

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

Evidence of indicators of stormwater pollution such as o

Description, evidence, and date of corrective actions tal

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

Actions taken to clean up or stabilize the sediment that has let

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

If the stream or wetland has increased visible sedimentation or a

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

Records of the required reports to the appropriate Division

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

The phase of grading (installation of perimeter E&SC

drainage facilities, completion of all land-disturbing

activity, construction or redevelopment, permanen

neasures have been provided within the required

cumentation that the required ground stabilization

timeframe or an assurance that they will be provided as

sheen, floating or suspended solids or discoloration,

Identification of the measures inspected

2. Date and time of the inspection

Date and time of the inspection

the site limits,

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

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

PRE CAST CONCRETE BOXES ARE ACCEPTABLE ALTERNATIVES FOR PROPOSED CATCH BASINS.

NPDES STORMWATER PHASE II REQUIREMENTS FOR CONSTRUCTION SITES

FEDERAL NPDES STORMWATER PHASE II REQUIREMENTS SHALL BE MET BY THE CONTRACTOR FOR ALL CONSTRUCTION SITES LARGER THAN 1 ACRE. THESE REQUIREMENTS ARE SUMMARIZED AS FOLLOWS:

- IMPLEMENT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND KEEP A COPY OF THE PLAN ON SITE. DEVIATION FROM THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN WILL BE CONSIDERED A VIOLATION OF THE FEDERAL NPDES GENERAL PERMIT.
- PREVENT SPILLING OF FUELS, LUBRICANTS, COOLANTS, HYDRAULIC FLUIDS, AND ANY OTHER PETROLEUM PRODUCTS ONTO THE GROUND OR INTO SURFACE WATERS. DISPOSE OF SPENT FUELS APPROPRIATELY.
- USE HERBICIDES, PESTICIDES, AND FERTILIZER IN A MANNER CONSISTENT WITH THE FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT AND IN ACCORDANCE WITH LABEL RESTRICTIONS.
- CONTROL MANAGEMENT AND DISPOSAL OF LITTER AND SANITARY WASTE FROM THE SITE SO THAT NO ADVERSE
- INSPECT ALL EROSION AND SEDIMENTATION CONTROL FACILITIES EVERY SEVEN CALENDAR DAYS (TWICE IN SEVEN CALENDAR DAYS FOR STORMWATER DISCHARGES TO STREAMS ON THE LATEST EPA-APPROVED 303(d) LIST) AND WITHIN 24 HOURS OF ANY STORM EVENT OF MORE THAN 0.5 INCH OF RAIN IN A 24-HOUR PERIOD. MAINTAIN A RAIN GAUGE ON SITE AND KEEP A RECORD OF THE RAINFALL AMOUNTS AND DATES.
- OBSERVE STORMWATER RUNOFF DISCHARGES AND LOOK FOR CLARITY. FLOATING SOLIDS. SUSPENDED OILS. OIL SHEEN AND OTHER OBVIOUS INDICATORS OF POLLUTION AND EVALUATE THE EFFECTIVENESS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES. IF SEDIMENTATION IS LEAVING THE DISTURBED AREA, TAKE IMMEDIATE ACTION O CONTROL THE DISCHARGE.
- KEEP A RECORD OF INSPECTIONS. RECORD ANY VISIBLE SEDIMENTATION FOUND OUTSIDE THE DISTURBED LIMIT AND RECORD MEASURES TAKEN TO CLEAN UP THE SEDIMENT. MAKE THESE RECORDS AVAILABLE TO THE DIVISION OF WATER QUALITY OR ITS AUTHORIZED AGENT UPON REQUEST.
- 8. MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES TO KEEP THEM OPERATING AT OPTIMUM EFFICIENCY. CONTACT THE ENGINEER FOR A COPY OF THE GENERAL PERMIT TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM.

VIOLATIONS OF THE NPDES STORMWATER RULES CONSTITUTE A VIOLATION OF THE FEDERAL CLEAN WATER ACT AND ARE SUBJECT TO CIVIL PENALTIES OF UP TO \$27,000 PER DAY. UNDER STATE LAW, A DAILY CIVIL PENALTY OF \$10,000 PER VIOLATION CAN BE ASSESSED FOR VIOLATION OF TERMS OF THE PERMIT.

NOTES:STATEMENT OF PERMIT AND CONTRACTOR RESPONSIBILITIES

- PROJECT SITE CONTAINS JURISDICTIONAL WATERS OF THE U.S (WOTUS).
- PROJECT INVOLVES IMPACTS TO WOTUS IN SEVERAL LOCATIONS.

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 documented in the manner

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

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

Documentation Requirements

tial and date each E&SC Measure on a cop

E&SC Measure shown on the approved E&S

Plan. This documentation is required upon the

initial installation of the E&SC Measures or if

the E&SC Measures are modified after initia

Plan or complete, date and sign an inspection

Initial and date a copy of the approved E&Se

Plan or complete, date and sign an inspection

eport to indicate compliance with approved

Complete, date and sign an inspection report

Initial and date a copy of the approved E&Se

report to indicate the completion of the

report to indicate completion of the

nstruction phase.

corrective action.

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

and available for agency 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.

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

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

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

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

Records of inspections made during the previous 30 days. The permittee shall record

the required observations on the Inspection Record Form provided by the Division or

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

All data used to complete the Notice of Intent and older inspection records shall be

maintained for a period of three years after project completion and made available

SECTION B: RECORDKEEPING

. E&SC Plan Documentation

Item to Document

shown on the approved E&SC Plan.

in accordance with the approved E&SC

(d) The maintenance and repair

. Additional Documentatio

requirement not practical:

upon request. [40 CFR 122.41]

have been performed.

to E&SC Measures.

requirements for all E&SC Measures

(e) Corrective actions have been taken

a) Each E&SC Measure has been installed

IMPACTS TO WATER QUALITY OCCUR.

- PROPOSED IMPACTS TO WOTUS ARE REGULATED BY THE CLEAN WATER ACT SECTIONS 404 AND 401.
- PERMITS SHALL BE OBTAINED BY THE CLIENT TO AUTHORIZE THE PROPOSED IMPACTS TO WOTUS AND ARE SUBJECT TO THE TERMS AND CONDITIONS OF THE PERMITS.
- CWA 404/401 PERMIT REQUIREMENTS, TERMS, AND CONDITIONS ARE SUMMARIZED ON THIS SHEET ALONG WITH VARIOUS ASSOCIATED DETAILS AND SPECIFICATIONS.
- A COPY OF THE PERMITS HAVE BEEN PROVIDED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. THE CONTRACTOR IS RESPONSIBLE FOR READING THE PERMITS, PLANS AND SPECIFICATIONS, AND UNDERSTANDING HIS/HER RESPONSIBILITIES UNDER THE PERMITS, WHICH INCLUDE BUT ARE NOT LIMITED TO:
- A) COMPLIANCE WITH ALL PERMIT CONDITIONS RELATING TO CONTRACTED CONSTRUCTION ACTIVITIES BOTH ON-SITE AND OFF-SITE, IF OFF-SITE AREAS ARE USED FOR PROJECT RELATED PURPOSES (EG: ACCESS, LAYDOWN, STAGING, BORROW, WASTE, ETC.)
- B) COMMUNICATION OF PERMIT COMPLIANCE RESPONSIBILITIES TO SUBCONTRACTORS WORKING ON THE PROJECT.
- C) COORDINATION WITH PROJECT ENGINEER REGARDING PERMIT COMPLIANCE RELATED ISSUES AND QUESTIONS.
- D) IMMEDIATE REPORTING TO PROJECT ENGINEER AND OWNER OF ANY VIOLATION OR SUSPECTED VIOLATION OF PERMIT

Permittees shall report the following occurrences:

(Ref: 40 CFR 302.4) or G.S. 143-215.85.

Reporting Timeframes and Other Requiremen

(b) Anticipated bypasses and unanticipated bypasses

They are 25 gallons or more,

(a) Visible sediment deposition in a stream or wetland.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

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

Releases of hazardous substances in excess of reportable quantities under Section 31

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

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

Reporting Timeframes (After Discovery) and Other Requirement

Within 7 calendar days, a report that contains a description of the

sediment and actions taken to address the cause of the deposition

Division staff may waive the requirement for a written report on a

If the stream is named on the NC 303(d) list as impaired for sedimen

related causes, the permittee may be required to perform additiona

determine that additional requirements are needed to assure compliant

monitoring, inspections or apply more stringent practices if staff

Within 24 hours, an oral or electronic notification. The notification

shall include information about the date, time, nature, volume and

A report at least ten days before the date of the bypass, if possible

The report shall include an evaluation of the anticipated quality and

Within 7 calendar days, a report that includes an evaluation of the

Within 7 calendar days, a report that contains a description of the

including exact dates and times, and if the noncompliance has not

continue; and steps taken or planned to reduce, eliminate, and revent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6)

Division staff may waive the requirement for a written report on a

| EFFECTIVE: 04/01/1

noncompliance, and its causes; the period of noncompliance,

vith the federal or state impaired-waters condition

Within 24 hours, an oral or electronic notification

Within 24 hours, an oral or electronic notification

eported to the Division's Emergency Response personnel at (800) 662-7956, (800)

(a) Visible sediment • Within 24 hours, an oral or electronic notification.

location of the spill or release.

quality and effect of the bypass.

effect of the bypass.

of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA

• They cause sheen on surface waters (regardless of volume), or

They are within 100 feet of surface waters (regardless of volume).

E) A COPY OF ALL PERMITS AND CONDITIONS SHOULD BE MADE AVAILABLE AT THE PROJECT SITE DURING CONSTRUCTION AND MAINTENANCE ACTIVITIES.

SECTION C: REPORTING

(b) Oil spills if:

deposition in a

release of

substances per Iten

bypasses [40 CFR

bypasses [40 CFR

vith the condition

of this permit that

health or the

22.41(m)(3)]

122.41(m)(3)]

1(b)-(c) above

stream or wetland

CONSTRUCTION SEQUENCE

- OBTAIN THE NECESSARY EROSION CONTROL PERMITS FROM THE NCDEQ PRIOR TO BEGINNING GRADING OPERATIONS, INCLUDING THE CONSTRUCTION STORMWATER PERMIT, NCG01. CONTACT THE AGENCIES PER THE REQUIREMENTS OF THE PERMITS, PRIOR TO AND AFTER COMPLETION OF CONSTRUCTION.
- PRIOR TO BEGINNING ANY GRADING OPERATIONS, INCLUDING THE EROSION CONTROL MEASURES, THE CONTRACTOR SHALL FLAG ALL LANDFILL GAS AND GROUNDWATER MONITORING INFRASTRUCTURE NEAR THE WORK ZONE, INCLUDING (BUT NOT LIMITED TO) ALL OF THE WELLS ON THE NORTHERN PORTION OF THE PROJECT, AS WELL AS MW 15 AND MM 7. THE CONTRACTOR SHALL PLACE THE MONITORING WELL PROTECTION MEASURES AROUND THE WELLS NEAR ANY GRADING OPERATIONS PRIOR TO BEGINNING TO INSTALL THE SEDIMENT BASINS.
- 3. THE WETLANDS NEAR PROPOSED SEDIMENT BASIN 2 SHALL BE FLAGGED AND SILT FENCE INSTALLED AROUND THE WETLANDS PRIOR TO BEGINNING ANY GRADING WORK, INCLUDING INSTALLING SEDIMENT CONTROL STRUCTURES. THE CONTRACTOR WILL BE PROVIDED DIGITAL INFORMATION FOR THE LIMITS OF IMPACT TO THE WETLANDS. CARE MUST BE TAKEN TO CONFINE WETLANDS IMPACTS TO THE LIMITS NOTED. IF THE CONTRACTOR IMPACTS THE WETLANDS BEYOND THE PERMITTED AMOUNT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINES ASSOCIATED WITH THE ADDITIONAL IMPACT AS WELL AS ALL COSTS ASSOCIATED WITH REBUILDING THE WETLANDS.
- 4. THE EROSION CONTROL MEASURES REQUIRED BY THE INITIAL GRADING PLAN SHALL BE INSTALLED PRIOR TO GRADING, TREE CLEARING OR GRUBBING. ALL EROSION CONTROL DEVICES SUCH AS SILT FENCES. ETC.. SHALL BE MAINTAINED IN WORKABLE CONDITION FOR THE LIFE OF THE PROJECT AND SHALL BE REMOVED AT THE COMPLETION OF THE PROJECT ONLY ON THE ENGINEER'S APPROVAL. THE CONTRACTOR MAY UTILIZE THE EXISTING SEDIMENT BASIN NEAR THE FLARE STATION FOR THE CONSTRUCTION OF THE ACCESS ROAD ON THE WEST SIDE OF THE SITE. DIVERT ALL RUNOFF FROM ROAD GRADING TO THE EXISTING SEDIMENT BASIN.
- 5. INSTALL SILT FENCES.
- 6. INSTALL SEDIMENT BASINS AND SKIMMER BASIN AT LOWER END OF SITE.
- 7. INSTALL TEMPORARY DIVERSION DITCHES.
- 8. BEGIN CLEARING AND GRUBBING AND GRADING OPERATIONS.
- AS STORM DRAINAGE STRUCTURES ARE INSTALLED, INCLUDE SEDIMENT CONTROL MEASURES AROUND INLETS AND INSTALL RIPRAP APRONS AT PIPE OUTLETS.
- 10. SEE STABILIZATION REQUIREMENTS FOR GRADED AREAS, THIS SHEET AND FOLLOWING SHEET.
- 11. SEE SKIMMER BASIN MAINTENANCE REQUIREMENTS, THIS SHEET.
- 12. BEGIN SOIL STABILIZATION WHEN FINAL GRADES ARE REACHED, IN ACCORDANCE WITH THE REQUIREMENTS OF THE NCDEQ. USE EROSION CONTROL MATTING ON FINISHED SLOPES 3:1 OR STEEPER, AND AS SHOWN ON THE PLANS. INCLUDING ALL AREA WITHIN THE LIMITS OF THE PROPOSED LINER.
- 13. ENSURE THAT SITE IS STABILIZED PRIOR TO THE REMOVAL OF ANY EROSION CONTROL MEASURES. OBTAIN FINAL APPROVAL FROM ENGINEER AND NCDEQ PRIOR TO REMOVAL OF ANY EROSION CONTROL MEASURES.
- 14. SEE ADDITIONAL CONSTRUCTION SEQUENCE REQUIREMENTS IN THE PLANS.

MAINTENANCE PLAN

necessary.

sediment-control/forms

DUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITI

ementing the details and specifications on this plan sheet will result in the construct

ivity being considered compliant with the Ground Stabilization and Materials Handling

tions of the NCG01 Construction General Permit (Sections E and F, respectively). The

mittee shall comply with the Erosion and Sediment Control plan approved by the

lelegated authority having jurisdiction. All details and specifications shown on this shee

ay not apply depending on site conditions and the delegated authority having jurisdiction

Required Ground Stabilization Timeframes

Note: After the permanent cessation of construction activities, any areas with temporar

ound stabilization shall be converted to permanent ground stabilization as soon as

acticable 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

pilize the ground sufficiently so that rain will not dislodge the soil. Use one of the

Temporary grass seed covered with straw or | • Permanent grass seed covered with straw or

construction, selecting from the NC DWR List of Approved PAMS/Flocculants.

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 structure

Apply flocculants at or before the inlets to Erosion and Sediment Control Measur

Apply flocculants at the concentrations specified in the NC DWR List of Approved

Timeframe variation

None

None

not steeper than 2:1, 14 days are

7 days for slopes greater than 50' in

7 days for perimeter dikes, swales,

ditches, perimeter slopes and HQW

10 davs for Falls Lake Watershed

here is zero slope

other mulches and tackifier

sufficient to restrain erosion

reinforcement matting

Geotextile fabrics such as permanent soil

Shrubs or other permanent plantings covere

Uniform and evenly distributed ground cover

• Structural methods such as concrete, asphalt of

Rolled erosion control products with grass seed

days for perimeter dikes, swales

litches, perimeter slopes and HQW Zon

-10 days for Falls Lake Watershed unless

ength and with slopes steeper than 4:

slopes are 10' or less in length and are

Stabilize within thi

nany calendar

days after ceasi

HE NCG01 CONSTRUCTION GENERAL PERMI

ECTION E: GROUND STABILIZATION

Site Area Descriptio

swales, ditches, an

perimeter slopes

(b) High Quality Wate

(HOW) Zones

) Slopes 3:1 to 4:1

Areas with slope

flatter than 4:1

GROUND STABILIZATION SPECIFICATION

Temporary Stabilization

Rolled erosion control products with or

Appropriately applied straw or other mulch

chniques in the table below:

other mulches and tackifiers

without temporary grass seed

) Slopes steeper that

- 1. All erosion and sediment control practices shall be checked for stability and operation following every runoff-producing rainfall but in no case not less than once every week. Any needed repairs shall be made immediately to maintain all practices as designed.
- 2. Sediment shall be removed from the basins when sediment accumulates to one-half the height of the first baffle. Clean out and reshape basin back to its' original dimensions. Repair any damaged baffles. Skimmers shall be checked for clogging and cleaned out.
- 3. Sediment shall be removed from behind the silt fence when it becomes about one-half the height of the silt fence. The silt fence shall be repaired as necessary to maintain a barrier.
- 4. All seeded areas shall be fertilized, reseeded as necessary and mulched according to specifications in the Seeding Specification to maintain a vigorous and dense vegetative cover
- Maintain all matting that has been placed on slopes and in ditches. Check for good ground contact and for the occurrence of any erosion under the matting. Monitor and repair or replace as
- 6. The Contractor shall maintain Self Inspection Reports as required by NCDEQ and the NPDES Construction Stormwater Permit. Self-Inspections are to be conducted after each phase of the project for the record of the installation and maintenance of the erosion control measures. For documentation of Self-Inspection reports and NPDES Self-Monitoring Reports, DWQ and DEMLR developed a combined form. The Self-Inspection program is separate from the weekly selfmonitoring program of the NPDES Stormwater Permit for Construction Activities. The focus of the self-inspection report is the installation and maintenance of erosion and sedimentation control measures according to the approved plan. The inspections should be conducted after each phase of the project, and continued until permanent ground cover is established. The form can be accessed at: https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-

EXISTING CONDITIONS LEGEND

TELEPHONE PEDESTAL CALCULATED POINT 1/2" REBAR SET WITH CAP ELECTRIC PEDESTAL CABLE TV PEDESTAL CONCRETE MONUMENT RIGHT-OF-WAY MONUMENT UNDERGROUND CABLE TV SIGN D.O.T. CONTROL POINT UNDERGROUND FIBER OPTIC CABLE SIGN REBAR FOUND PK NAIL FOUND / SET UNDERGROUND TELEPHONE CABLE SIGN UNDERGROUND GAS LINE SIGN SPINDLE FOUND / SET HUB & TACK SET UNDERGROUND ELECTRIC LINE SIGN LIGHT POLE CONTROL POINT NAIL SET / FOUND UTILITY POLE CONTROL POINT/NAIL SET GPS GUY WIRE ANCHOR CONTROL POINT TEMPORARY MARK STAKE FOUND MANHOLE INTERSTATE HIGHWAY SANITARY SEWER MANHOLE STORM DRAIN MANHOLE U.S. HIGHWAY ELEVATION COMMUNICATION MANHOLE FINISHED FLOOR ELEVATION MONITORING WELL ELECTRICAL MANHOLE JUNCTION BOX PIEZOMETER SPIGOT/YARD HYDRANT LANDFILL GAS MONITORING PROBE ⊙ c.o. SURFACE WATER SAMPLING LOCATION SEWER CLEAN-OUT O E.SS ELECTRIC SERVICE STUB-OUT LANDFILL GAS VENT GAS SERVICE STUB-OUT LANDFILL GAS COLLECTION WELLHEAD CATCH BASIN POTABLE WATER WELL CURB INLET MAILBOX OR PAPER BOX WATER METER POSTAL DROP BOX SATELLITE DISH FIRE HYDRANT OYARD ORNAMENT STATUE, BIRD BATHS, ETC. WATER VALVE ⋈ BLOW '.BLOW OFF VALVE TREES GAS METER SHURBS / BUSHES GAS VALVE IRRIGATION CONTROL VALVE

_ _ _ _ _ _ _ _ CULVERT

-o-o-o-o-o-o-o-o-o-o- GUARD RAIL

SILT FENCE

APPROXIMATE LOCATION OF

EXISTING SEWER LINES

_____X ____X _____ FENCE

_____s__s___s__



POST INDICATOR VALVE

ELECTRIC JUNCTION BOX OR OUTLET

- 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. Locate waste containers at least 50 feet away from storm drain inlets and surface
- 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. 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. On business days, clean up and dispose of waste in designated waste containers.

Maintain vehicles and equipment to prevent discharge of fluid

to a recycling or disposal center that handles these materials.

Identify leaks and repair as soon as feasible, or remove leaking equipment from the

Remove leaking vehicles and construction equipment from service until the problen

Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum produc

Collect all spent fluids, store in separate containers and properly dispose as

Provide drip pans under any stored equipment.

TTER, BUILDING MATERIAL AND LAND CLEARING WASTE

hazardous waste (recycle when possible).

AINT AND OTHER LIQUID WAST Do not dump paint and other liquid waste into storm drains, streams or wetlands

foot traffic areas.

QUIPMENT AND VEHICLE MAINTENANCE

has been corrected.

- 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
- Install portable toilets on level ground, at least 50 feet away from storm drains

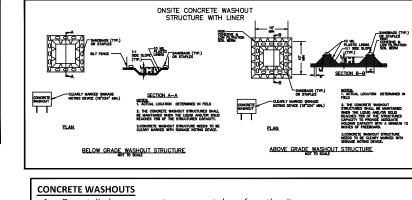
streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags Provide staking or anchoring of portable toilets during periods of high winds or in hi

Monitor portable toilets for leaking and properly dispose of any leaked material Utilize a licensed sanitary waste hauler to remove leaking portable toilets and repla

EARTHEN STOCKPILE MANAGEMEN Show stockpile locations on plans. Locate earthen-material stockpile areas at leas

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

- 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 o five feet from the toe of stockpil
- 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 erosion on disturbed soils for temporary or permanent control needs.



- 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 with lot perimeter silt fence. Install temporary concrete washouts per local requirements, where applicable. If 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 mus Locate washouts at least 50 feet from storm drain inlets and surface waters unless in 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
- products, follow manufacturer's instructions.). 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

overflow events. Replace the tarp, sand bags or other temporary structural

components when no longer functional. When utilizing alternative or proprietar

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 wate or surface water. If a spill occurs, clean area immediately. Do not stockpile these materials onsite.

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

EFFECTIVE: 04/01/19

APPROXIMATE LOCATION OF EXISTING WATER LINES APPROXIMATE LOCATION OF EXISTING GAS LINES ----- EXISTING MAJOR CONTOUR EXISTING MINOR CONTOUR APPROXIMATE LOCATION OF ______FOC_____FOC__ UNDERGROUND FIBER OPTIC CABLE LINE APPROXIMATE LOCATION OF UNDERGROUND ELECTRIC LINE APPROXIMATE LOCATION OF _____E____E____ OVERHEAD ELECTRIC LINE ________T____T___APPROXIMATE LOCATION OF UNDERGROUND TELEPHONE LINES APPROXIMATE LOCATION OF OVERHEAD TELEPHONE LINES RIGHT-OF-WAY · · · · · · · · · · SHRUBLINI ----- PROPERTY LINE NOT SURVEYED CENTERLINE ROADS —— CENTERLINE OTHER THAN ROADS SWAMPLINE/WETLANDS IPS IRON PIN SET RBF REBAR FOUND OTIPF OPEN TOP IRON PIN FOUND CTIPF CRIMPED TOP IRON PIN FOUND CONCRETE MASONRY UNIT RIGHT OF WAY CENTERLINE CURVE (SEE CURVE TABLE) POINT OF BEGINNING CALCULATED POINT PLAT BOOK DEED BOOK LINE (SEE LINE TABLE) BUILDING CAST IRON PIPE CORRUGATED METAL PIPE CONCRETE CONCRETE MASONRY UNIT CORRUGATED PLASTIC PIPE DUCTILE IRON PIPE ELECTRIC & TELEPHONE FIBER OPTIC CABLE GALVANIZED IRON PIPE OVERHEAD REINFORCED CONCRETE PIPE UNDERGROUND VITRIFIED CLAY PIPE POLYVINYL CHLORIDE PIPE FINISHED FLOOR ELEVATION RFFFRFNCF DEPARTMENT OF TRANSPORTATION NATIONAL GEODETIC SYRVEY NORTH CAROLINA STATE PLANE

BID DOCUMENTS



IIS DOCUMENT HAS BEEN DIGITALI TH THE STANDARD CERTIFICATION QUIREMENTS FOUND IN NO DMINISTRATIVE CODE 21-56.1103(E THIS DIGITAL SIGNATURE HAS BEEN OUND BY THE NC BOARD OF SURVEYORS TO MEET THESE GNER IF YOU NEED ASSISTANCE DATE

FRANCIS FARM LANDFILL RESTRICTIVE COVER IMPLEMENTATION

> HAYWOOD COUNTY HAYWOOD COUNTY, NORTH CAROLINA

FFICE MANAGER ESIGNER DAP MDC ROJECT MANAGER REVIEWER

GENERAL NOTES AND LEGEND

G-002

SHEET

FUNDING # DECEMBER 2019 14.00708 N/A

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