

## **FAYETTEVILLE PUBLIC WORKS COMMISSION** PROCUREMENT DEPARTMENT

https://www.faypwc.com/bids/

#### **Bid Addendum**

PWC Number: PWC2324067

Bid Title: Branson Creek Water Main Replacement Along Raeford Road

Bid Opening Date and Time: Thursday, April 4, 2024 at 1:30 P.M. E.T.

Addendum Number:

Addendum Date: March 18, 2024

Procurement Advisor: Victoria McAllister, Procurement Manager

procurement@faypwc.com

1. Acknowledgement of this Addendum must be done within Bid Summary section listed within the Bid Documents.

2. The solicitation is hereby modified as follows:

#### M1. APPENDICES, APPENDIX A, DRAWINGS

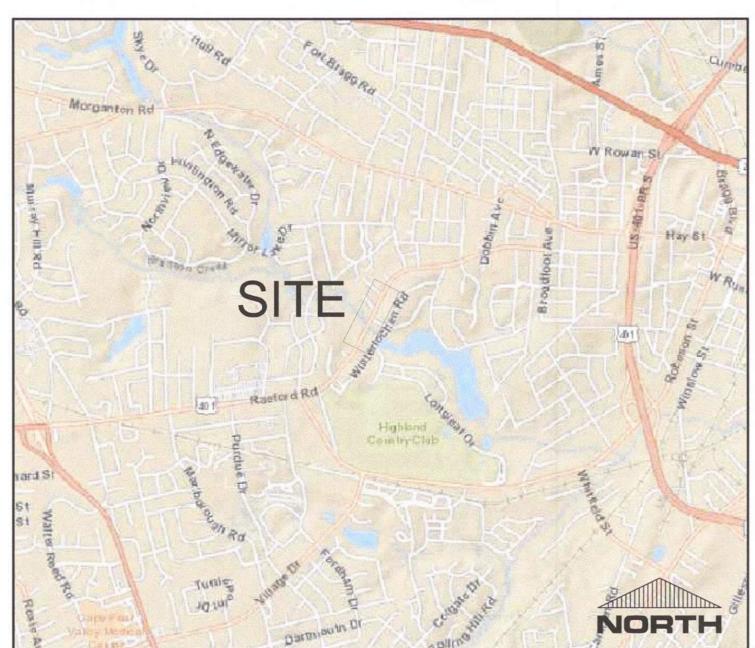
Appendix A, included within the Bid Documents is deleted in its entirety and replaced with the version attached to this Addendum.





FAYETTEVILLE, N.C.

# BRANSON CREEK WATER MAIN RELOCATION ALONG RAEFORD ROAD



VICINIT

FINAL PLANS
ISSUED FOR BID

**MARCH 2024** 

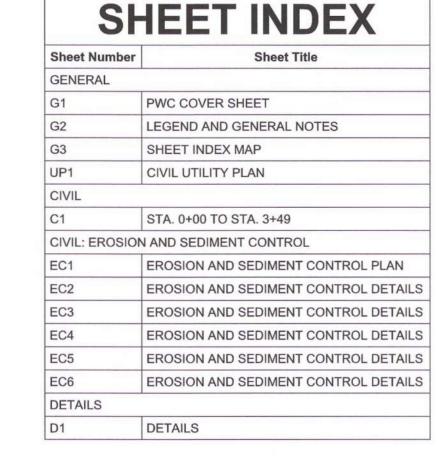


**SMCKIM&CREED** 

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NC License# F-1222 www.mckimcreed.com

M&C Project #02532-0032





ASBESTOS CEMENT

AIR RELEASE VALVE

BUTTERFLY VALVE

SLOW OFF VALVE

CABLE TELEVISION

CURB AND GUTTER

CORRUGATED METAL PIP

CONCRETE MASONRY UNIT

CORRUGATED PLASTIC PIPE

DROP INLET / DUCTILE IRON

FLANGE COUPLING ADAPTER

FIRE HYDRANT ASSEMBLY

FIRE DEPARTMENT CONNECTOR

FIBERGLASS REINFORCED PIPE

HIGH-DENSITY POLYETHYLENE

COMBO SILT / TREE PROTECTION FENCE

CLEAN WATER TEMPORARY DIVERSION

**CATCH BASIN** 

CURB INLE

CLEAN OU

CONCENTR

CONCRETE

COUPLING

COPPER

COMPOST SOCK

CHECK VALVE

DRIVE WAY

**DUCT BANK** 

**ELEVATION** 

EXPANSION

LOOR DRAIN

FIRE HYDRAN

FIBER OPTIC

UTTER LIN

GAS METER

GAS VALVE

HIGH WATER LEVE

INVERT ELEVATION

IRON POST FOUND

LANDSCAPE AREA

OW WATER LEVE

MECHANICAL JOIN

NORMALLY CLOSED

NORMALLY OPEN

NOT IN CONTRACT

OVERFLOW

PLAIN END

POLYMER

**POWER POLE** 

PLUG VALVE

NORMAL WATER LEVE

OVER HEAD ELECTRIC

**OVER HEAD UTILITIES** 

POST INDICATOR VALVE

POLY VINYL CHLORIDE

ESTRAINED JOINT

**TORM DRAIN MANHOLE** 

SUPER / HIGH HAZARD SILT FENCE

SUBSURFACE UTILITY ENGINEERING

SANITARY SEWER MANHOLE

TEMPORARY BENCH MARK

**REE PROTECTION FENCE** 

UNLESS NOTED OTHERWISE

RAFFIC LIGHT POLE

TOP OF CONCRETE

TRAFFIC SIGNAL BOX

VITRIFIED CLAY PIPE

WELDED WIRE FABRI

CROSS LIGHT POLE

POTABLE WATER

PER RECORD

RIGHT OF WAY

LT FENCE

STATION

SIDE WALK SERVICE

TERRA COTTA

OP OF BANK

UNKNOWN VARIABLE

WATER LINE

WATER METER

WATER VALVE

SANITARY SEWER

TAINLESS STEEL

PRESSURE REDUCING VALVE

REINFORCED CONCRETE PIPE

ESTRAINED FLANGE COUPLING ADAPTER

LIMITS OF DISTURBANCE

JUNCTION BOX

LINEAR FEET

MANHOLI

OHE/OE

R/W, ROW

MINIMUM

FLANGE

GRAVE

DUCTILE IRON PIPE

DGE OF GRAVE

END OF INFORMATIO

EDGE OF PAVEMEN

CENTERLINE

ALUMINUM

STORY FRAMED DWELLING

1 STORY BRICK BUSINESS

EXISTING SYMBOL LEGEND | 4 | PROPOSED SYMBOL LEGEND DESCRIPTION SYMBOL

11.25° HORIZONTAL BEND

22.50° HORIZONTAL BEND

45° HORIZONTAL BEND

90° HORIZONTAL BEND

AC UNIT

**BENCH MARK** 

TEMP. BENCH MARK

**BLOW OFF VALVE** 

BOLLARD

TEST BORE HOLE LOCATION

CABLE TV PEDISTAL

CATCH BASIN

**CLEAN OUT** 

CONCRETE MONUMENT FOUND

CONTROL POINT

CROSS

**CURB INLET** 

**ELECTRIC BOX** 

ELECTRIC MANHOLE

**END OF INFORMATION** 

FLAG POLE

GAS METER

**GUY POLE** 

**GUY WIRE** 

HANDHOLE

HYDRANT

IRON POST FOUND

IRON ROD FOUND

LIGHT POLE

MAIL BOX

MONITOR WELL

POWER POLE

WATER MANHOLE

PK FOUND

RAIL ROAD SPIKE

SANITARY SEWER MANHOLE

SHRUB

STORM DRAIN MANHOLE

TAPPING SLEEVE AND VALVE

TEE

TELEPHONE MANHOLE

TELEPHONE PEDESTAL

TRAFFIC SIGNAL BOX

TRANSFORMER

**DECIDUOUS TREE** 

PINE TREE

UTILITY POLE

VALVE

WATER METER

WATER WELL

YARD HYDRANT

DESCRIPTION

UNDERGROUND CABLE TV

UNDERGROUND PER RECORD CABLE TV

UNDERGROUND ELECTRIC

PER RECORD UNDERGROUND ELECTRIC

UDERGROUND FIBER OPTIC

PER RECORD UNDERGROUND FIBER OPTIC

SANITARY SEWER FORCEMAIN

PER RECORD SANITARY SEWER FORCE MAIN

UNDERGROUND GAS

UNDERGROUND PER RECORD GAS

**OVER HEAD UTILITIES** 

RECLAIMED WATER LINE

PER RECORD RECLAIMED WATER LINE

GRAVITY SANITARY SEWER

PER RECORD GRAVITY SANITARY SEWER

STORM DRAINAGE

UNDERGROUND TELEPHONE

UNDERGROUND PER RECORD TELEPHONE

UNDERGROUND UNKNOWN

WATER LINE

PER RECORD WATER LINE

FENCE

**GUARD RAIL** 

**BACK OF CURB** 

EASEMENT

**EDGE OF GRAVEL** 

**EDGE OF PAVEMENT** PROPERTY LINE

RIGHT OF WAY

ROAD CENTER LINE 100 YEAR FLOODPLAIN

DITCH &

MAJOR CONTOUR

MINOR CONTOUR

RIPARIAN BUFFER ZONE

RIPARIAN BUFFER ZONE 2

TOP OF BANK

TREELINE

WATERCOURSE 9

WETLAND BOUNDARY

**EXISTING LINE LEGEND** 

4 PROPOSED STIVIBOL L			
	DESCRIPTION	SYME	
	11.25° HORIZONTAL BEND	-	
	22.50° HORIZONTAL BEND	1	
	45° HORIZONTAL BEND	~	
	90° HORIZONTAL BEND	T	
	VERTICAL BEND	II	
	AIR RELEASE VALVE	A	
	VALVE	H	
	BLOWOFF VALVE	H	
	HYDRANT	-Ç	
	YARD HYDRANT	5	
	CROSS	H	
	TEE	ц	
	TAPPING SLEEVE AND VALVE	I <sub>3</sub>	
	REDUCER	•	
	CAP/PLUG	_	
P	OTABLE WATER SERVICE METER	W	
RE	CLAIMED WATER SERVICE METER	R	
EXISTI	NG UTILITY SERVICE RECONNECTION	_	
CONC	ENTRIC SANITARY SEWER MANHOLE	<b>©</b>	
ECCE	ENTRIC SANITARY SEWER MANHOLE	0	
FLA	T TOP SANITARY SEWER MANHOLE	0	
	CLEAN OUT	€	
	ARC FILTER	8	
	CHECK DAM	•	
	INLET PROTECTION	B as	
		1	

45° HORIZONTAL BEND	4
90° HORIZONTAL BEND	4
VERTICAL BEND	II
AIR RELEASE VALVE	(A)
VALVE	H
BLOWOFF VALVE	Me
HYDRANT	••
YARD HYDRANT	೮
CROSS	田
TEE	凸
TAPPING SLEEVE AND VALVE	墨
REDUCER	•
CAR/RILIC	

45° HORIZONTAL BEND	4
90° HORIZONTAL BEND	4
VERTICAL BEND	11
AIR RELEASE VALVE	A
VALVE	Н
BLOWOFF VALVE	He
HYDRANT	φ.
YARD HYDRANT	ರ
CROSS	田
TEE	凸
TAPPING SLEEVE AND VALVE	<b>X</b>
REDUCER	•
CAP/PLUG	
POTABLE WATER SERVICE METER	M
RECLAIMED WATER SERVICE METER	R
EXISTING UTILITY SERVICE RECONNECTION	_
CONCENTRIC SANITARY SEWER MANHOLE	0
ECCENTRIC SANITARY SEWER MANHOLE	0
FLAT TOP SANITARY SEWER MANHOLE	0
CLEAN OUT	•

## GENERAL NOTES

#### ALL WATER MAINS, LATERALS AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN 11 ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.

CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO

CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR ALL WATER OUTAGES. CONSTRUCTION STAKING IS REQUIRED FOR ALL PWC WATER AND SEWER UTILITY INSTALLATIONS. CUT SHEETS, SIGNED AND SEALED BY A NC PLS, SHALL BE PROVIDED TO THE PWC WATER

CONSTRUCTION FOR PWC WATER AND SEWER UTILITIES. CONTRACTOR SHALL MAINTAIN A COPY OF THE SIGNED AND SEALED CUT SHEET ON THE JOB SITE. CONSTRUCTION ON PWC WATER AND SEWER UTILITIES CANNOT BEGIN UNTIL THE CONTRACTOR POSSESSES, ON SITE, A SIGNED AND SEALED CUT SHEET FROM THE

ALL NEW WATER AND SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE TESTED AND/OR DISINFECTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS PRIOR TO PLACING

RESOURCES ENGINEERING DEPARTMENT AND THE CONTRACTOR IN ADVANCE OF

CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE FAYETTEVILLE PWC PROJECT COORDINATOR.

CONTRACTOR SHALL REPAIR ALL WATER LATERALS AND MAINS DAMAGED DURING CONSTRUCTION. THE CONTRACTOR SHALL REPORT IMMEDIATELY ALL WATER MAIN AND LATERAL BREAKS TO THE PWC PROJECT COORDINATOR. THE CONTRACTOR SHALL INITIATE IMMEDIATE REPAIRS IN ACCORDANCE WITH PWC STANDARDS. CONTRACTOR SHALL NOT OPERATE PWC WATER MAIN VALVES WITHOUT PWC APPROVAL AND SHALL COORDINATE ALL VALVE CLOSINGS

THE CONTRACTOR SHALL NOT USE HOUSE HOSE BIBBS OR ANY OTHER METHOD OF BLOW OFF WHICH ALLOWS DOMESTIC WATER CONTAINING SEDIMENTS OR HIGH LEVELS OF CHLORINE TO PASS THRU RESIDENT'S METERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES RESULTING FROM ALLOWING "DIRTY" WATER TO ENTER RESIDENT'S PLUMBING SYSTEM, SUCH AS WATER HEATERS, STAINED CLOTHING, CLOGGED SCREENS, ETC.

TRANSFER OF WATER SERVICES SHALL BE ACCOMPLISHED AS FOLLOWS:

A. INSTALL, TEST AND STERILIZE NEW MAIN AND LATERALS. LATERALS SHALL BE INSTALLED 18" INSIDE RIGHT-OF-WAY UNLESS OTHERWISE DIRECTED BY PWC B. TRANSFER EXISTING METER TO NEW METER BOX AND TIE NEW WATER LATERA TO EXISTING DOMESTIC SERVICE UTILIZING BRASS FITTINGS. SAME METER NUMBER SHALL BE INSTALLED ON SAME ADDRESS AND/OR CUSTOMER. BLOW

C. AFTER ALL SERVICES ARE TRANSFERRED TO THE NEW SYSTEM, SHUT OFF VALVE ON EXISTING SYSTEM AND ABANDON EXISTING MAINS IN ACCORDANCE WITH

OFF SERVICE AT HOSE BIBB ON HOUSE ONLY AFTER METER HAS BEEN

PWC REQUIREMENTS. D. CONTRACTOR SHALL SUPPLY NEW METER BOXES AND DISPOSE OF EXISTING

DWG. NO. W.1 DWG. BY: FAYPWC

DATE: JAN. 01, 2024 APPROVED BY: M.M.M.

WATER UTILITY NOTES

SHEET NO.

SHEET NO.

2 OF 2

1.	CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING WATER SERVICES THAT
	WILL NOT BE UTILIZED BY CUTTING THE SERVICE AT THE MAIN, PLUGGING THE
	CORPORATION, AND TURNING OFF THE CORPORATION AT THE METER BOX, THE
	ABANDONED SERVICE IS TO BE CUT OR CRIMPED, AND BURIED A MINIMUM OF 3 FEET

12. ALL EXISTING UTILITIES IMPACTED BY CONSTRUCTION SHALL BE ADJUSTED TO

FINISHED GRADE, IN ACCORDANCE WITH PWC REQUIREMENTS ALL WORK ON PWC WATER UTILITIES (MAINS, LATERALS, ETC) SHALL BE PERFORMED BY A LICENSED UTILITY CONTRACTOR. THE FAYETTEVILLE PUBLIC WORKS

LATERAL SEPARATION OF SEWERS AND WATER MAINS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET LATERALLY FROM EXISTING OR PROPOSED SEWER MAIN/LATERAL, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10-FOOT LATERAL SEPARATION - IN WHICH CASE:

COMMISSION SHALL OBSERVE AND APPROVE ALL WORK ON PWC WATER UTILITIES.

ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH PWC REQUIREMENTS.

THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER

ii. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER MAIN/LATERAL WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE

TOP OF THE SEWER MAIN/LATERAL. CROSSING A WATER MAIN OVER A SEWER: WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER MAIN/LATERAL, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18-INCHES ABOVE THE TOP OF THE SEWER

CROSSING WATER MAIN UNDER A SEWER: WHENEVER IT IS NECESSARY FOR A WATER MAIN TO ROSS UNDER A SEWER MAIN/LATERAL A MINIMUM OF 18-INCHES OF SEPARATION SHALL BE PROVIDED. BOTH THE WATER MAIN AND THE SEWER MAIN/LATERAL SHALL BE CONSTRUCTED OF DUCTILE IRON MATERIAL AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10-FEET ON EACH SIDE OF THE POINT OF CROSSING, A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING

NO. DATE

01/01/18 ADDED NOTES 6, 8

11/23 | REVISED NOTES 10, 14

REVISION

06/01/21 ADDED NOTES 1-7 AND RENUMBERED

W1-WATER-UTILITY-NOTES.dwg

**ADDITIONAL GENERAL NOTES:** 

1. ALL WATER MAINS, LATERALS AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.

2. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS.

3. SUE QLA TEST HOLES WERE NOT COMPLETED DURING DESIGN. CONTRACTOR SHALL FIELD VERIFY HORIZONTAL, VERTICAL LOCATION, PIPE MATERIAL AND DIAMETER FOR ALL UTILITIES

PRIOR TO CONSTRUCTION. 4. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE

FOR ALL WATER OUTAGES. 5. CONTRACTOR SHALL NOTIFY FAYETTEVILLE PWC A MINIMUM OF 48 HOURS IN ADVANCE FOR CONSTRUCTION STAKING. CONTRACTOR SHALL MAINTAIN A COPY OF THE CUT SHEET ON THE JOB SITE.

5. THE NEW WATER MAINS, LATERALS, AND APPURTENANCES SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH FAYETTEVILLE PWC STANDARDS PRIOR TO PLACING INTO SERVICE. ONCE IN SERVICE, THE CONTRACTOR SHALL TRANSFER WATER SERVICES AND ABANDON THE EXISTING

CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE FAYETTEVILLE PWC PROJECT COORDINATOR.

CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL OF THE TRAFFIC CONTROL REQUIREMENTS OF THE CITY OF FAYETTEVILLE, N.C.D.O.T., AND THESE CONTRACT DOCUMENTS. 9. CONTRACTOR SHALL SAWCUT AND PATCH ALL ASPHALT AND

CONCRETE DISTURBED BY CONSTRUCTION. 10. ALL NON-PAVED AREAS SHALL HAVE SOD INSTALLED, UNLESS

OTHERWISE NOTED. 11. CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY EROSION CONTROL DEVICES IN ORDER TO PREVENT ANY SEDIMENT FROM ENTERING STORM DRAINS, DITCHES, ETC. ALL EROSION CONTROL DEVICES SHALL BE IN ACCORDANCE WITH

N.C. DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS. NO SEPARATE PAYMENT. 12. CONTRACTOR SHALL CAREFULLY SUPPORT & PROTECT ANY UTILITIES, STRUCTURES, POWER POLES, PIPELINES, & CONDUITS WHICH MAY BE ENCOUNTERED DURING COMPLETION OF WORK. ANY DAMAGE RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR TO THE

CONTRACTORS EXPENSE. 13. CONTRACTOR SHALL RESET ALL DISTURBED MAILBOXES, SIGNS, PROPERTY IRONS, ETC. UNDER UNIT PRICE BID ITEMS FOR PIPE INSTALLATION.

SATISFACTION OF THE ENGINEER AND OWNER AT THE

14. UNLESS NOTED OTHERWISE ON THE PLANS, WHERE RESTRAINED JOINTS ARE REQUIRED, CONTRACTOR MAY USE FACTORY

RESTRAINED JOINT OR MECHANICAL JOINT. 15. CONSTRUCTION STAKING IS REQUIRED FOR ALL PWC WATER AND SEWER UTILITY INSTALLATIONS, CUT SHEETS, SIGNED AND SEALED BY A NC PLS, SHALL BE PROVIDED TO THE PWC WATER RESOURCES ENGINEERING DEPARTMENT AND THE

CONTRACTOR IN ADVANCE OF CONSTRUCTION FOR PWC WATER AND SEWER UTILITIES. 16. CONSTRUCTION ON PWC WATER AND SEWER UTILITIES CANNOT

BEGIN UNTIL THE CONTRACTOR POSSESSES, ON SITE, A SIGNED AND SEALED CUT SHEET FROM THE PROFESSIONAL LAND

17. CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING WATER SERVICES THAT WILL NOT BE UTILIZED BY CUTTING THE SERVICE AT THE MAIN, PLUGGING THE CORPORATION, AND TURNING OFF THE CORPORATION AT THE METER BOX, THE ABANDONED SERVICE IS TO BE CUT OR CRIMPED, AND BURIED A MINIMUM OF 3 FEET BELOW GRADE.

DESCRIPTION	LINETYPE
PERMANENT EASEMENT	
TEMPORARY EASEMENT	
SANITARY SEWER FORCE MAIN	FM
RECLAIMED WATER LINE	
GRAVITY SANITARY SEWER	ss
WATER LINE	w
TO BE ABANDONED	. 1. 1. 1. 1. 1. 1. 1. 1. 1.
DIVERSION DITCH	$\longrightarrow$
LIMITS OF DISTURBANCE/CLEARING LIMITS	LOD
COMBINATION SILT FENCE/TREE PROTECTION	
TEMPORARY SILT FENCE	SF
TEMPORARY SUPER SILT FENCE	SSF
TEMPORARY TREE PROTECTION FENCE	TPF
COMPOST SOCK	cs
PERMANENT FENCE	
GUARD RAIL	0 0

# PROFILE LINE LEGEND

DESCRIPTION	LINETYPE
EXISTING GRADE PAVEMENT PROFILE	400000000000000000000000000000000000000
EXISTING GRADE GROUND PROFILE	<b> </b>
PROPOSED GRADE PROFILE	
THEORETICAL 1:1 SLOPE	
WETLAND CROSSING	

	* * * * *
WETLANDS	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
RIP-RAP	
TEMP. SLOPE STABILIZATION	+ + + + + + + + + + + + + + + + + + +
STRAW WITH NET LINER	

D. CROSSING STORM DRAINAGE LINES: A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN A WATER LINE CROSSING OVER STORM DRAINAGE LINE UNLESS DUCTILE IRON PIPE IS USED. IN ADDITION, THREE AND A HALF (3.5) FEET OF COVER MUST BE MAINTAINED OVER THE WATER MAIN OR IT SHALL BE DUCTILE IRON. IF DUCTILE IRON PIPE IS USED THEN TWO AN A HALF (2.5) FEET OF COVER MUST BE MAINTAINED OVER THI WATER MAIN AND A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND THE STORM DRAINAGE LINE WHERE A WATER MAIN CROSSES UNDER A STORM DRAINAGE LINE THE MINIMUM OF TWELVE (12) INCHES OF VERTICAL SEPARATION SHALL BE MAINTAINED AND THE WATER MAIN SHALL BE DUCTILE IRON FOR A DISTANCE OF 10-FEET ON EACH SIDE OF THE CROSSING.

WATER OUTAGES: THE CONTRACTOR SHALL SCHEDULE A COORDINATION MEETING WITH THE PWC PROJECT COORDINATOR AND PROJECT ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO ANY PLANNED WATER OUTAGE. THE COORDINATION MEETING SHALL BE CONDUCTED PRIOR TO ANY NOTICES BEING ISSUED, ADDITIONALLY, THE CONTRACTOR SHALL LOCATE (VERTICALLY AND HORIZONTALLY) ANY UTILITIES WITHIN THE WORK AREA, IN ACCORDANCE WITH THESE CONTRACT DOCUMENTS. THE LOCATIONS OF ALL UTILITIES WITHIN THE WORK AREA SHALL BE DETERMINED PRIOR TO THE COORDINATION MEETING. ANY CONFLICTS WITH THE PENDING WORK AND THE EXISTING UTILITIES SHALL BE IDENTIFIED AND A PLAN FOR RESOLVING ANY CONFLICTS SHALL BE PRESENTED. THE PURPOSE OF THIS COORDINATION MEETING IS TO ENSURE THAT THE CONTRACTOR HAS A GOOD UNDERSTANDING OF THE REQUIREMENTS RELATED TO THE PENDING OUTAGE, VERIFY THAT THERE ARE NO UTILITY CONFLICTS THAT WILL PREVENT THE WORK FROM BEING COMPLETED, ALL EQUIPMENT IS IN GOOD WORKING ORDER, ALL EQUIPMENT IS FUNCTIONAL, ALL MATERIALS ARE ON SITE ALL NECESSARY TOOLS ARE ON SITE, DISCUSS ANY NECESSARY CONTINGENCY PLANS, AND ANY OTHER ITEMS NECESSARY TO ENSURE THAT THE FAYETTEVILLE PUBLIC WORKS COMMISSION HAS CONFIDENCE THAT THE WORK CAN BE ACCOMPLISHED WITHIN THE GIVEN TIME PERIOD. SHOULD, FOR ANY REASON, THE FAYETTEVILLE PUBLIC WORKS COMMISSION DEEM THAT THE CONTRACTOR IS NOT PREPARED FOR THE PROPOSED OUTAGE. THE OUTAGE NOTIFICATIONS WILL NOT BE DISTRIBUTED AND THE OUTAGE SHALL BE POSTPONED A MINIMUM OF TWO (2) WEEKS. THE FAYETTEVILLE PUBLIC WORKS COMMISSION WILL PROVIDE WRITTEN NOTIFICATION TO THE CONTRACTOR OF THIS DECISION. NO ADDITIONAL CONTRACT TIME WILL BE GRANTED FOR THIS DELAY. SHOULD THE CONTRACT TIME EXPIRE WITHIN THAT TWO (2) WEEK PERIOD. THE FAYETTEVILLE PUBLIC WORKS COMMISSION RESERVES THE RIGHT TO ASSESS LIQUIDATED DAMAGES, AS OUTLINED IN THESE CONTRACT DOCUMENTS.

COORDINATION MEETING WITH THE PWC PROJECT COORDINATOR AND PROJECT ENGINEER SHALL BE HELD A MINIMUM OF 24 HOURS PRIOR TO THE SCHEDULED THE PURPOSE OF THIS MEETING IS TO VERIFY THAT THE CONTRACTOR IS PREPARED TO PROCEED WITH THE OUTAGE, AND THAT ALL EQUIPMENT, MATERIALS TOOLS, AND ALL OTHER INCIDENTALS ARE ON THE PROJECT SITE AND FUNCTIONING IF FOR ANY REASON THE FAYETTEVILLE PUBLIC WORKS COMMISSION DEEMS THAT THE CONTRACTOR IS NOT PREPARED, THE OUTAGE SHALL BE POSTPONED AND ALL CUSTOMERS IMMEDIATELY NOTIFIED OF THE CANCELLATION. THE OUTAGE SHALL BE POSTPONED A MINIMUM OF TWO (2) WEEKS. NO ADDITIONAL CONTRACT TIME WILL BE GRANTED FOR THIS DELAY. SHOULD THE CONTRACT TIME EXPIRE WITHIN THAT TWO (2) WEEK PERIOD, THE FAYETTEVILLE PUBLIC WORKS COMMISSION RESERVES THE RIGHT TO ASSESS LIQUIDATED DAMAGES, AS OUTLINED IN THESE CONTRACT

ONCE THE WATER OUTAGE NOTIFICATIONS HAVE BEEN ISSUED. A FOLLOW-UP

**FAYETTEVILLE** 

FAYETTEVILLE, N.C.

ENGINEERING DEPARTMENT

PUBLIC WORKS COMMISSION

WATER RESOURCES

THE CONTRACTOR SHALL COMPLETE THE REQUIRED WORK AND RESTORE WATER SERVICE WITHIN THE GIVEN TIME PERIOD FOR THE OUTAGE. IF THE FAYPWC PROJECT COORDINATOR DETERMINES THAT THE CONTRACTOR WILL NOT RESTORE WATER SERVICE WITHIN THE APPROVED TIMEFRAME, THE FAYPWC PROJECT COORDINATOR WILL DIRECT THE CONTRACTOR ON HOW TO RESTORE WATER SERVICE. THE CONTRACTOR SHALL ADHERE TO ALL INSTRUCTIONS GIVEN BY THE PWC PROJECT COORDINATOR.

SHOULD THE CONTRACTOR FAIL TO COMPLETE THE WORK WITHIN THE ALLOTTED TIME, THE FAYETTEVILLE PUBLIC WORKS COMMISSION SHALL ASSESS A PENALTY OF \$500 PER 15-MINUTE INTERVAL OR ANY PORTION THEREOF UNTIL WATER SERVICE IS RESTORED. THIS PENALTY WILL BE DEDUCTED FROM THE CONTRACTOR'S PAY APPLICATION OR BE BILLED DIRECTLY TO THE CONTRACTOR. THE PENALTY MAY BE WAIVED FOR CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL, AS DEEMED BY THE FAYETTEVILLE PUBLIC WORKS COMMISSION. THE PWC PROJECT COORDINATOR AND/OR PROJECT ENGINEER RESERVE THE RIGHT TO CANCEL OR POSTPONE THE OUTAGE AT ANY GIVEN TIME, IF DEEMED NECESSARY.

NO. DATE

11/23

V.	ATER UTILITY NO	OTES	FAYETTEVILLE PUBLIC WORKS COMMISSION FAYETTEVILLE, N.C.	
	DWG. NO. W.1	DWG. BY: FAYPWC	WATER RESOURCES	P
	DATE: JAN. 01, 2024	APPROVED BY: M.M.M.	ENGINEERING DEPARTMENT	

W1-WATER-UTILITY-NOTES.dwg

REVISION

06/01/21 ADDED NOTES 1-7 AND RENUMBERE

REVISED NOTES 10, 14

01/01/18 ADDED NOTES 6, 8

BRANSON RESOURCES

ZOZ

1140

国下の

REEK WALLONG RA

DW-15820

MCKIME

CREED

Know what's below. Call before you dig

PWC DWG # DW-15820

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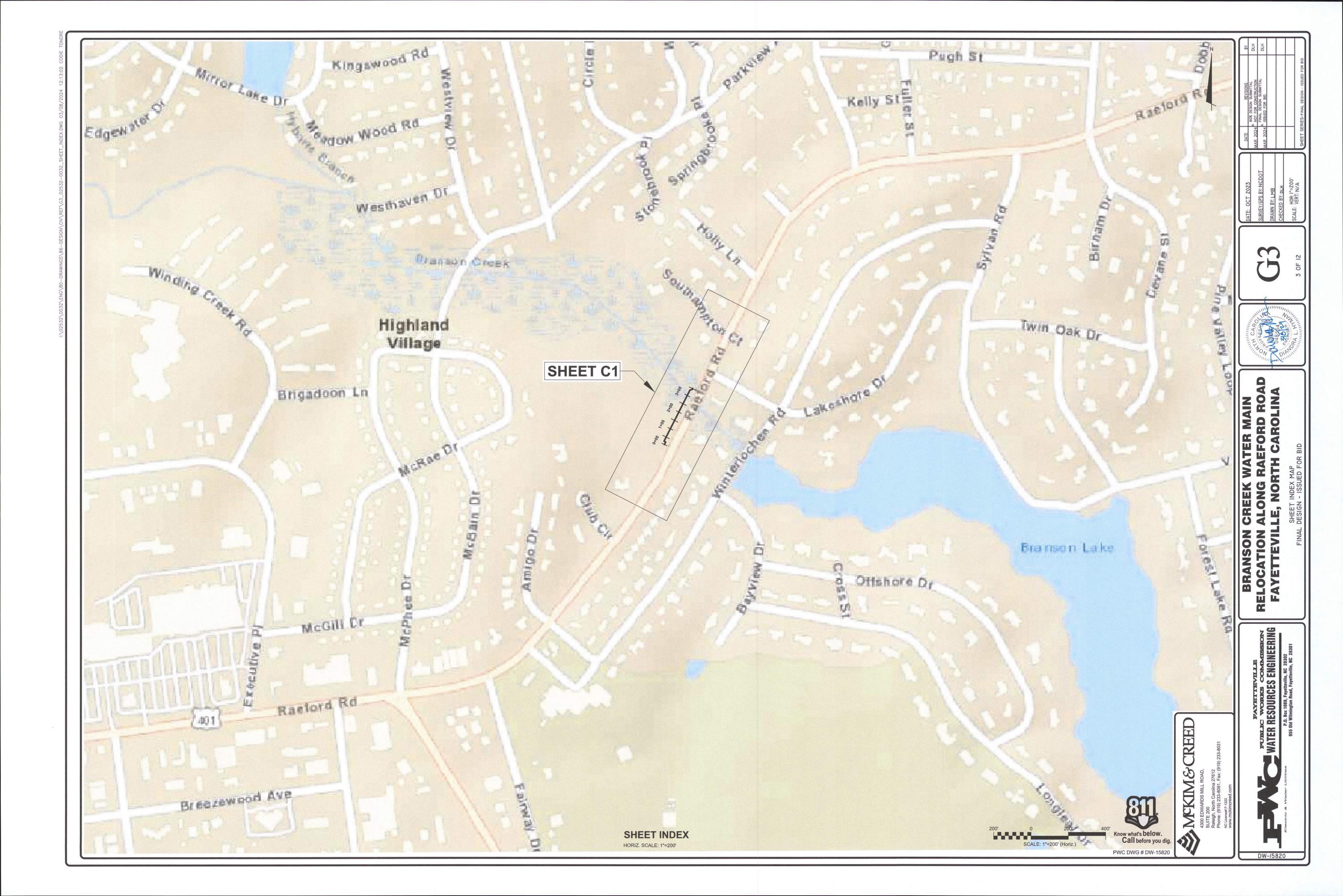
--- E(R) ---

GM()

PIPE INLET PROTECTION SILT FENCE OUTLET WATTLE B

PROPOSED LINE LEGEND

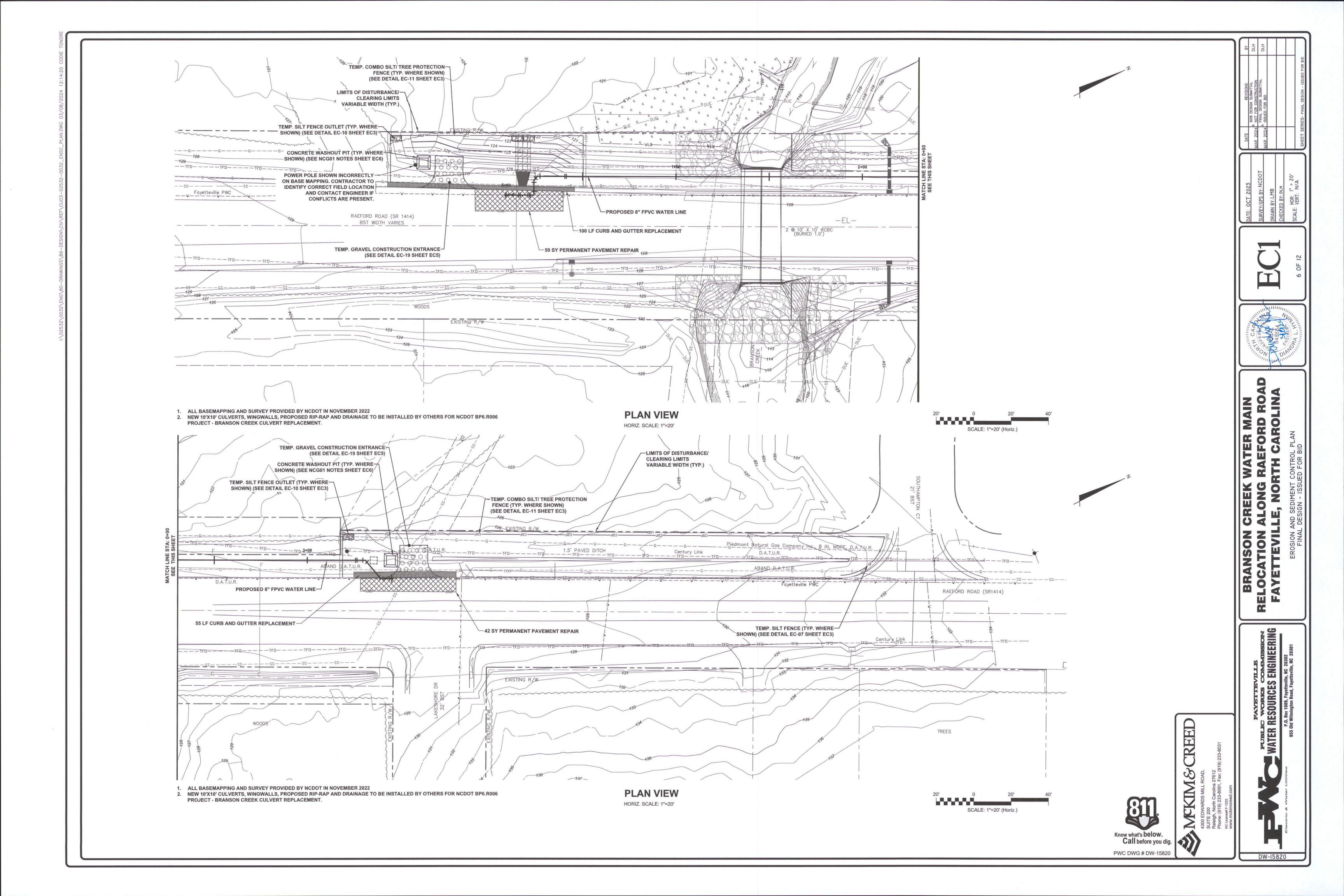
7	AREA LEG	END								
	WETLANDS	+	<b>V</b>	<b>y</b>	*	<b>y</b>	<b>y</b>	<b>*</b>	Ψ	<b>*</b>
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Know what's below.
Call before you dig.

PWC DWG # DW-15820



EC-01 EROSION CONTROL CONSTRUCTION SEQUENCE

THE INTENT OF THE CONSTRUCTION SEQUENCE IS TO PROVIDE THE CONTRACTOR WITH A GENERAL GUIDE FOR CONSTRUCTION PURPOSES. THIS SEQUENCE IS NOT INTENDED TO OUTLINE ALL CONSTRUCTION

ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA

ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED

IF IT IS DETERMINED DURING CONSTRUCTION THAT ANY SEDIMENT IS LEAVING THE SITE, DESPITE PROPER

IMPLEMENTATION AND MAINTENANCE, THE CONTRACTOR IS OBLIGATED TO TAKE ADDITIONAL CORRECTIVE

ACTION. CONTACT OWNER'S REPRESENTATIVE AND ENGINEER WITH ANY ADDITIONAL MEASURES NEEDED CONTRACTOR SHALL ESTABLISH GROUNDCOVER ON DISTURBED AREAS WITHIN DAYS SPECIFIED BY THE

NPDES GENERAL PERMIT STABILIZATION REQUIREMENTS AFTER COMPLETION OF ANY PHASE OF GRADING.

INSTALLATION OF EROSION CONTROL MEASURES, STORM SEWER PIPES AND UNDERGROUND UTILITY LINES.

CONTRACTOR IS TO CALL 1-800-632-4949 FOR "NC ONE CALL" OR "811" TO HAVE EXISTING UTILITIES LOCATED.

INSTALL TEMPORARY GRAVEL ACCESS POINTS PER THE PLANS. INSTALL CONSTRUCTION ENTRANCES WHERE

INSTALL TEMPORARY SILT FENCE, COMPOST SOCKS, TREE PROTECTION FENCE AND OTHER MEASURES AS

SHOWN ON PLANS. SILT FENCE SHOULD BE INSTALLED ON ALL DOWNSLOPE PORTIONS OF THE DISTURBED

INSTALLED AT ALL LOW SPOTS AND ANYWHERE WATER IS POOLING. SILT FENCE AND OUTLET LOCATIONS MAY

VARY FROM THE APPROVED PLANS PER SITE CONDITIONS. CONTRACTOR SHALL PROVIDE SILT FENCE AROUND

AREA. SILT FENCE SHOULD NOT BE INSTALLED ON THE HIGH SIDE OF THE DISTURBANCE AREA (TREE PROTECTION FENCING IS AN ACCEPTABLE ALTERNATIVE IF DESIRED). SILT FENCE OUTLETS SHOULD BE

ALL BORROW/STOCKPILE/WASTE AREAS, ALL LAYOUT/STAGING AREAS, AND ALONG EITHER SIDE OF ALL

CONTRACTOR TO INSTALL EROSION CONTROL MEASURES AS SHOWN AND DETAILED IN THESE PLANS.

12. OPEN TRENCH, INSTALL WATER LINE AND BACKFILL TRENCH DAILY. WHEN BACKFILLING IN UNPAVED AREAS

CONTRACTOR TO COORDINATE THE EROSION CONTROL INSTALLATION WITH THE PWC, AND NCDOT.

CONTRACTOR TO PHASE THE OVERALL EROSION CONTROL BASED ON INSTALLATION OF THE WATER LINE.

CONTRACTOR TO HAVE A PROFESSIONAL LAND SURVEYOR FLAG PROPERTY LINES, EASEMENTS, TREE

PROTECTION AREAS AND LIMITS OF DISTURBANCE PRIOR TO LAND DISTURBING ACTIVITIES.

CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES TO AVOID CONFLICT DURING

CONTRACTOR SHALL ARRANGE PRE-CONSTRUCTION MEETING WITH THE OWNER'S REPRESENTATIVE,

ENGINEER, PWC, AND NCDOT PRIOR TO ANY LAND DISTURBING ACTIVITY ON SITE.

EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL.

SEEDING SHALL BE IN ACCORDANCE WITH EC-05 AND EC-06 ON THIS SHEET.

REQUIRED AND SHOWN IN THESE PLANS TO ACCESS WORK AREAS.

TEMPORARY CONSTRUCTION ACCESS ROADS/CORRIDORS.

ACTIVITIES ON THIS PROJECT.

REPAIRS SHALL BE MADE IMMEDIATELY.

STABILIZATION SHALL BE UP DENDED TRENCH DAILY AS NEEDED BUT AT A MINIMUM AFTER EVERY RAINFALL EVENT.  1. SPOIL PLACEMENT SHALL BE ON THE UPSTREAM SIDE OF THE TRENCH ONLY. ANY ADDITIONAL EXCAVATED MATERIAL IS TO HAULED OFF AND DISPOSED OF IN AN APPROVED LANDFILL AT THE CONTRACTORS EXPENSE.  1. ANY DEWATERING ON THE PROJECT SHALL BE DONE THOUGH A SILT SEDIMENT FILTER BAG (REFER TO DETAIL.  EC-18).  1. STABILIZE SITE AS TRENCH IS RESTORED TO ORIGINAL GRADE WITH VEGETATION AND/OR PAVING AS SHOWN ON PLANS. THIS STABILIZATION IS TO BE COMPLETED DAILY.  1. PERFORM SEEDING AND MULCHING AS REQUIRED IN ACCORDANCE WITH THE EROSION CONTROL (EC) DETAILS AND TECHNICAL SPECIFICATIONS.  1. REMOVE TEMPORARY CONSTRUCTION ENTRANCES WHEN WORK IS COMPLETE IN AN AREA AND BRING AREAS BACK TO ORIGINAL GRADES AS REQUIRED.  2. ONCE ALL GROUNDCOVER HAS BEEN ESTABLISHED IN A SPECIFIC AREA, THE CONTRACTOR SHALL CONTROL  MEASURES.  2. ONCE AREA HAS BEEN APPROVED FOR REMOVAL OF EROSION AND SEDIMENTATION MEASURES, CONTRACTOR SHALL REMOVE THESE MEASURES AND INSTALL PERMANENT SEEDING APPROVAL IS GIVEN, REMOVE ENDINGERS, PWC. AND NCDOT TO REMOVEL OF REMOVAL. OF EROSION AND SEDIMENTATION MEASURES, CONTRACTOR SHALL REMOVE THESE MEASURES AND INSTALL PERMANENT SEEDING PER DETAIL EC-06.  2. AFTER THE ENTIRE SITE IS COMPLETELY STABILIZED, CONTRACTOR SHALL REQUEST PERMISSION FROM ENGINEER, PWC, AND NCDOT TO REMOVE ALL TEMPORARY MEASURES. ONCE APPROVAL IS GIVEN, REMOVE ALL TEMPORARY MEASURES AND DISTALL PERMANENT SEEDING PER DETAIL EC-06.  2. AFTER THE ENTIRE SITE IS COMPLETELY STABILIZED. CONTRACTOR SHALL REQUEST PERMISSION FROM ENGINEER, PWC, AND NCDOT TO REMOVE ALL TEMPORARY MEASURES. ONCE APPROVAL IS GIVEN, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VECETATION AS REQUIRED AND ON ANY RESULTING BARE AREAS. REPAIR ANY AREAS DISTURBED DURING REMOVAL.	ACCEPTABLE FOR THESE USES.  15. UTILIZE SILT FENCE J-HOOKS AT SILT FENCE OUTLET LOCATIONS IN WHICH THE RUNOFI THIS WILL HELP PREVENT OUTLET BYPASS AND REDUCE RUNOFF ALONG THE SILT FENCE  16. PLACE A LAYER OF SAND, SCREENINGS OR FINES ON PAVED SURFACES PRIOR TO DEPOTE AREAS ARE TO BE WITHIN THE PERMITTED LIMITS OF DISTURBANCE.
EC-05 TEMPORARY SEEDING SCHEDULE N.T.S.	EC-06 PERMANENT SEEDING SCHEDU
RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING SEEDING MIXTURE: SPECIES: RATE (lb/acre): RYE (GRAIN) 120 ANNUAL LESPEDEZA (KOBE IN 50 PIEDMONT & COASTAL PLAIN,	RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING SEEDING MIXTURE: SPECIES: RATE (lb/acre): TALL FESCUE 300 KOBE LESPEDEZA 40
KOREAN IN MOUNTAINS)  OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE	NURSE PLANTS: BETWEEN MAY 1 AND AUG. 15, ADD 10 lb/acre GERMAN MILLET OR 15 lb/acre SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15, ADD 40 lb/ac RYE (GRAIN)
SEEDING DATES:  MOUNTAINS  (ABOVE 2,500'): FEB. 15 - MAY 15  (BELOW 2,500'): FEB. 1 - MAY 1  PIEDMONT:  COASTAL PLAIN:  JAN. 1 - MAY 1  DEC. 1 - APR. 15	SEEDING DATES:  BEST: POSSIBLE:  FALL AUG. 15 - SEPT. 15 AUG. 20 - OCT. 25  LATE WINTER: FEB. 15 - MAR. 21 FEB. 1 - APR. 15.  FALL IS BEST FOR TALL FESCUE AND LATER WINTER FOR LESPEDEZAS. OVERSEEDING OF DOBE LESPEDEZA OVER.
SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER.  MULCH: ADDITIONAL OF SOUR AND LODGE STRAW BY TACKING WITH ASPLIA TO THE ANGLORING TOOL ADDITIONAL OF SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANGLORING TOOL.	FALL-SEEDED TALL FESCUE IS VERY EFFECTIVE.  SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND
APPLY 4.000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT (min. 400 gal/acre), NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.  MAINTENANCE: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.	AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER  MULCH: APPLY 4.000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT (min. 400 gal/acre), NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL. *
RECOMMENDATIONS FOR FALL SEEDING MIXTURE: SPECIES: RATE (lb/acre): RYE (GRAIN) 120	MAINTENANCE: REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. MAY BE MOWED ONCE OR TWICE A YEAR, BUT MOWING IS NOT NECESSARY. RESEED, FERTILIZE AND MULCH DAMAGED AREAS IMMEDIATELY.
SEEDING DATES:  MOUNTAINS:  AUG. 15 - DEC. 15  COASTAL PLAIN AND PIEDMONT: AUG. 15 - DEC. 30	RECOMMENDATIONS FOR GRASS-LINED CHANNELS SEEDING MIXTURE: SPECIES RATE (lb/acre) TALL FESCUE 300
SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER  MULCH:	NURSE PLANTS: BETWEEN MAY 1 AND AUG. 15, ADD 10 lb/acre SUDANGRASS OR 15 lb/acre GERMAN MILLET. PRIOR TO MAY 1 OR AFTER AUG. 15, ADD 40 lb/ac RYE (GRAIN)
APPLY 4.000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT (min. 400 gal/acre), NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL. IF CRIMPING IS TO BE USED, INSTALL 1/2 OF THE MULCH, THEN CRIMP, AND INTSALL THE OTHER 1/2 OF MULCH ON TOP.  MAINTENANCE:	SEEDING DATES: BEST: AUG. 25 - OCT. POSSIBLE: FEB APR. 15
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 lb/acre OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 lb/acre KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.	AVOID SEEDING FROM NOV. TO JAN. IF SEEDING MUST BE DONE AT THIS TIME, ADD 40 lb/acre RYE GRAIN AND USE A CHANNEL LINING THAT OFFERS MAXIMUM PROTECTION SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 4,000 lb/acre GROUND
RECOMMENDATIONS FOR SUMMER SEEDING MIXTURE:	AGRICULTURAL LIMESTONE AND 1,000 lb/acre 10-10-10 FERTILIZER  MULCH: USE ROLLED EROSION CONTROL PRODUCT TO COVER THE BOTTOM OF THE CHANNELS
SPECIES: RATE (lb/acre): GERMAN MILLET 40  IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDANGRASS MAY BE SUBSTITUTED AT A RATE OF 50 lb/acre.	AND DITCHES, AND STAPLE SECURELY. THE LINING SHOULD EXTEND TO THE TOP OF BANK. ON CHANNEL SIDE SLOPES ABOVE THIS HEIGHT, AND IN DRAINAGES NOT REQUIRING TEMPORARY LININGS, APPLY 4,000 lb/acre GRAIN STRAW, AND ANCHOR STRAW BY STAPLING NETTING OVER THE TOP.
SEEDING DATES:  MOUNTAINS MAY 15 - AUG. 15 PIEDMONT: MAY 1 - AUG. 15	MULCH AND ANCHORING MATERIALS MUST NOT BE ALLOWED TO WASH DOWN SLOPES WHERE THEY CAN CLOG DRAINAGE DEVICES.
COASTAL PLAIN:  APR. 15 - AUG. 15  SOIL AMENDMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER	MAINTENANCE: INSPECT AND REPAIR MULCH FREQUENTLY. REFERTILIZE IN LATE WINTER OF THE FOLLOWING YEAR; USE SOIL TESTS OR APPLY 150 lb/acre 10-10-10. MOW REGULARLY TO A HEIGHT OF 2-4 INCHES.
MULCH: APPLY 4.000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT (min. 400 gal/acre), NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL. IF CRIMPING IS TO BE USED, INSTALL 1/2 OF THE MULCH, THEN CRIMP, AND INTALL THE OTHER 1/2 OF MULCH ON TOP.	
MAINTENANCE: REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.	

# EC-02 EROSION CONTROL GENERAL NOTES

ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA EROSION AND

SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL. TOTAL DISTURBED AREA IS 0.25 ACRES. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED REPAIRS SHALL BE MADE IMMEDIATELY.

ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY NEED TO BE INSTALLED IF DEEMED NECESSARY BY EITHER THE ENGINEER OR ENVIRONMENTAL INSPECTOR.

ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE MAINTAINED UNTIL ALL UPGRADE DRAINAGE AREAS HAVE BEEN STABILIZED WITH THE ESTABLISHMENT OF PERMANENT VEGETATION. 5. DUST ON SITE SHALL BE MINIMIZED BY SPRAYING WATER ON DRY AREAS OF THE SITE. THE USE OF OILS AND OTHER PETROLEUM

BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS STRICTLY PROHIBITED. 6. IF THE MAJORITY OF MUD OR DIRT IS NOT REMOVED FROM CONSTRUCTION TRAFFIC BY CONSTRUCTION ENTRANCES, CONTRACTOR SHALL CONSTRUCT VEHICLE WASH AREAS AT CONSTRUCTION TRAFFIC EXIT POINTS. MUD AND DIRT SHALL BE INTERCEPTED AND

TRAPPED BEFORE WASH WATER IS ALLOWED TO BE DISCHARGED OFFSITE. RINSE-OFF WILL NOT BE ALLOWED OUTSIDE THE PROJECT CONSTRUCTION LIMITS.

SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT REACHES 1-FOOT DEEP.

MAXIMUM GRADED SLOPE SHALL NOT EXCEED 3:1. 9. NO CONCRETE OR CEMENT SLURRY SHALL BE DISCHARGED FROM THE SITE. ANY HARDENED CONCRETE RESIDUE WILL BE DISPOSED OF, OR RECYCLED OFF SITE, IN ACCORDANCE WITH LOCAL AND STATE SOLID WASTE REGULATIONS.

10. ALL SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT PER THE STABILIZATION TIMEFRAMES DETAILED IN THESE PLANS (REFER TO REQUIRED GROUND STABILIZATION TIMEFRAMES TABLE IN THE NCG01 GROUND STABILIZATION AND MATERIALS HANDLING NOTES SHEET EC6). REFER TO EROSION CONTROL DETAILS FOR

11. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A PERMIT FOR ANY BORROW AND/OR SPOIL AREAS OR DISTURBED AREAS NOT SHOWN ON THESE PLANS. THIS SHALL INCLUDE ALL COST ASSOCIATED WITH OBTAINING PERMIT.

12. CONTRACTOR SHALL FOLLOW EROSION CONTROL CONSTRUCTION SEQUENCE UNLESS GIVEN WRITTEN APPROVAL FROM ENGINEER FOR VARIANCE. 13. IF RIP-RAP IS NOT REQUIRED AND STRAW WITH TACK LINER IS TO BE USED, WATER COURSE SHALL BE SEEDED PER SIDE DITCH

SEEDING SCHEDULE DETAIL USING SEEDBED PREPARATION SCHEDULE DETAIL. 14. COMPOST SOCK MAY BE SUBSTITUTED FOR SILT FENCE OUTLET GRAVEL, SLOPE BREAKS, CHECK DAMS AND INLET PROTECTION. THE COMPOST SOCK MUST BE INSTALLED PER MANUFACTURER SPECIFICATIONS. THEY MUST BE SIZED TO PREVENT OVERTOPPING. FOR SILT FENCE OUTLETS, THE INSTALLED HEIGHT CAN BE NO LESS THAN 16 INCHES. WATTLES, COIR LOGS, FILTER LOGS, ETC. ARE NOT

CEPTABLE FOR THESE USES. LIZE SILT FENCE J-HOOKS AT SILT FENCE OUTLET LOCATIONS IN WHICH THE RUNOFF FLOW DIRECTION IS PARALLEL TO THE OUTLET S WILL HELP PREVENT OUTLET BYPASS AND REDUCE RUNOFF ALONG THE SILT FENCE.

ACE A LAYER OF SAND, SCREENINGS OR FINES ON PAVED SURFACES PRIOR TO DEPOSITION OF EXCAVATED MATERIALS. THESE EAS ARE TO BE WITHIN THE PERMITTED LIMITS OF DISTURBANCE.

PERMANENT SEEDING SCHEDULE

# EC-03 SEEDBED PREPERATION

CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, WHERE REQUIRED. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.

REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM. 4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE EC-4).

5. CONTINUE TILLAGE UNTIL A WELL - PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP. 6. SEE EC-06 FOR PERMANENT SEEDING SCHEDULE.

. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING. 8. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH. 9. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND

SHOULD BE OVER 60% DAMAGED REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES. 10. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

# EC-04 SOIL STOCKPILE MAINTENANCE REQMTS.

N.T.S.

N.T.S.

I. EXCAVATED MATERIAL FROM TRENCHES ARE TO BE PLACED ON THE UPSTREAM SIDE OF THE TRENCH, NO ADDITIONAL "STOCKPILE" AREAS ARE TO BE UTILIZED OUTSIDE OF THE EXISTING LIMITS OF DISTURBANCE. SEEDING OR COVERING OF STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDER THE PLASTIC.

THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE(S)

STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.

RECOMENDATIONS FOR RIPARIAN BUFFERS AND WETLANDS SEEDING MIXTURE:

AS SPECIFIED BY MELLOW MARSH IN SILER CITY OR APPROVED EQUAL.

CREEPING BENTGRASS

WNED BARNYARD GRASS

BLUESTEN

CONTRACTOR TO WORK COMPOST INTO THE SOILS SURFACE AT A MINIMUM OF 2 INCHES.

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 1,500 lb/acre GROUND AGRICULTURAL

INSPECT AND REPAIR MULCH FREQUENTLY. MOWING IN AUGUST - SEPTEMBER ONLY TO HELP

SEE NCDENR'S EROSION AND SEDIMENT CONTROL PLANNING DESIGN MANUAL

IF CRIMPING IS TO BE USED, INSTALL 1/2 OF THE MULCH, THEN CRIMP, AND

SECTION 6.11 FOR ADDITIONAL PERMANENT SEEDING OPTIONS.

INSTALL THE OTHER 1/2 OF MULCH ON TOP.

RECOMMENDED APPLICATION RATE: 20-25 LBS. PER ACRE

GROSTIS STOLONIFERA

ANICUM CLANDESTINUM NDROPOGON GERARDI

CHINOCHLOA MURICATA CHIZACHYRIUM SCOPARIUM

ORGHASTRUM NUTANS TRIPSACUM DACTYLOIDES

BEST: MAR. 1 - MAY 1

NO SEEDING FROM JUNE TO SEPTEMBER.

POSSIBLE: OCT. - FEB.

MAINTENANCE:

N.T.S.

STOCKPILE HEIGHT SHALL NOT EXCEED 10 FEE TALL.



CREEI MCKIMS





USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT

OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B OF THE EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL . SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6

MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F. 4. ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.25 LB/LINEAR FT MINIMUM STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE

FASTENING THE FABRIC 5. FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. 2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. . REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID

UNDERMINING THE FENCE DURING CLEANOUT. 4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

\* FOR REPAIR OF SILT FENCE FAILURES, USE No. 57 WASHED -STEEL POST - WOVEN WIRE FABRIC - SILT FENCE FABRIC -FILL SLOPE -8" MINIMUM COVER **OVER SKIRT \*** SKIRT TO BE TRENCHED IN, AT MINIMUM, 8-INCHES VERTICALLY AND 4-INCHES HORIZONTALLY.

SIDE VIEW

FILTER IN LIEU OF BURYING SKIRT, 6" OF #5 -SKIRT TO BE TRENCHED IN, AT WASHED STONE MAY BE USED MINIMUM, 8-INCHES VERTICALLY AND OVER TURNDOWN. 4-INCHES HORIZONTALLY.

GENERAL NOTES:

1. WIRE FENCING SHALL BE A MINIMUM OF 60" IN WIDTH AND SHALL BE STEEL CHAIN LINK FENCING, MIN #10 GAUGE. 2. WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR

A PERIOD OF MORE THAN 30 DAYS. 3. STEEL POSTS SHALL BE MIN 7' LONG. POSTS SHALL BE OF ADEQUATE SIZE AND THICKNESS TO SUPPORT SPECIFIED WIRE FENCING AND 4. TURN SILT FENCE UP SLOPE AT ENDS.

5. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE (WITHIN 5

FT.) WHEN GRADING IS ADJACENT TO SWIM BUFFERS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES). 6. WHEN SILT FENCE IS PLACED IN DUPLICATE AT STREAM AND WETLAND

CROSSINGS, THE FENCING SHALL BE SPACED A MINIMUM OF 3' APART.

FILTER BARRIERS SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY. 2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO

THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. 3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THE DEPOSITS REACH 1-FOOT IN HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

. USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B OF THE EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F.

-PLASTIC OR

INTERMEDIATE

WIRE TIES

WIRES

-GRADE

-STEEL POST

- WOVEN WIRE FABRIC

-8" MINIMUM COVER

**OVER SKIRT\*** 

TREE PROTECTION AREA

DO NOT ENTER

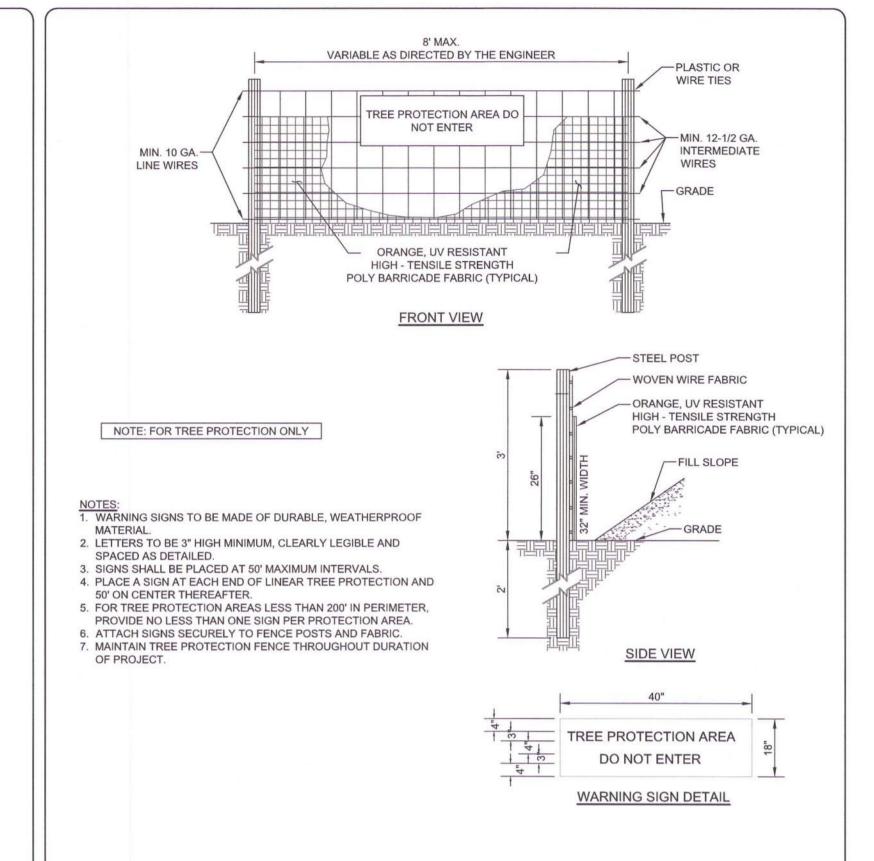
WARNING SIGN DETAIL

-SKIRT TO BE TRENCHED IN, AT

MINIMUM, 8-INCHES VERTICALLY

AND 4-INCHES HORIZONTALLY.

- SILT FENCE FABRIC



EC-07 TEMPORARY SILT FENCE

EC-08 TEMPORARY SUPER SILT FENCE

N.T.S. | EC-09 | TEMPORARY TREE PROTECTION FENCE

N.T.S.

VARIABLE AS DIRECTED BY THE ENGINEER TREE PROTECTION AREA DO NOT ENTER MIN. 10 GA. SILT FENCE FABRIC LINE WIRES INSTALLED TO SECOND WIRE FROM TOP TOP OF SILT FENCE MUST BE - AT LEAST 1' ABOVE FRONT VIEW THE TOP OF THE WASHED STONE. \* FOR REPAIR OF SILT FENCE FAILURES, USE No. 57 WASHED SKIRT TO BE TRENCHED IN, AT MINIMUM, 8-INCHES VERTICALLY STEEL POST AND 4-INCHES HORIZONTALLY. SET MAX 2' **APART MIN 2'** NOTES:

1. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF INTO SOLID GROUND 2. LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS

N.T.S.

STEEL POST -WOVEN WIRE FABRIC -HARDWARE CLOTH-SECTION VIEW FILTER OF #57 — WASHED STONE — 3' FILTER FABRIC APRON ON GROUND SKIRT TO BE TRENCHED IN, AT BURY WIRE FENCE AND -MINIMUM, 8-INCHES VERTICALLY HARDWARE CLOTH AND 4-INCHES HORIZONTALLY.

OUTLET IS COVERED. 2. REPLACE STONE AS NEEDED TO ENSURE

1. REMOVE SEDIMENT WHEN HALF OF STONE DEWATERING.

N.T.S. | EC-11 TEMP. COMBO SILT/TREE PROTECTION FENCE N.T.S. | EC-12 COMPOST SOCK

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO

4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT

REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.

OR SAND BAGS COMPOST SOCK SIZED AS NEEDED PAVEMENT OR -- CONCRETE BLOCKS **IMPERVIOUS** OR SAND BAGS SURFACE SIZED AS NEEDED AREA TO BE PROTECTED COMPOST SOCK **WORK AREA** AREA TO BE PROTECTED WATER FLOW \_ WORK AREA

1. USE A MINIMUM 8 INCH DIAMETER COMPOST SOCK. 2. INSTALL COMPOST SOCK SO FLOW WILL NOT WASH AROUND SOCK.

1. MATERIALS USED IN THE COMPOST SOCK MUST MEET THE SPECIFICATIONS OUTLINED IN PRACTICE 6.18, COMPOST

2. COMPOST SOCKS SHOULD BE LOCATED AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN. 3. PRIOR TO INSTALLATION, CLEAR ALL OBSTRUCTIONS INCLUDING ROCKS, CLODS, AND OTHER DEBRIS GREATER THAN ONE

INCH THAT MAY INTERFERE WITH PROPER FUNCTION OF COMPOST SOCK. 4. COMPOST SOCKS SHOULD BE INSTALLED PARALLEL TO THE TOE OF A GRADED SLOPE, A MINIMUM OF 10 BEYOND THE TOE OF THE SLOPE. SOCKS LOCATED BELOW FLAT AREAS SHOULD BE LOCATED AT THE EDGE OF THE LAND-DISTURBANCE. THE ENDS OF THE SOCKS SHOULD BE TURNED SLIGHTLY UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE END OF THE

5. FILL SOCK NETTING UNIFORMLY WITH COMPOST TO THE DESIRED LENGTH SUCH THAT LOGS DO NOT DEFORM 6. OAK OR OTHER DURABLE HARDWOOD STAKES 2" X 2" IN CROSS SECTION SHOULD BE DRIVEN VERTICALLY PLUMB, THROUGH THE CENTER OF THE COMPOST SOCK. STAKES SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 4 FEET, OR A MAXIMUM INTERVAL OF 8 FEET IF THE SOCK IS PLACED IN A 4 INCH TRENCH. SEE FIGURE 6.66B. THE STAKES SHOULD BE DRIVEN TO A

MINIMUM DEPTH OF 12 INCHES, WITH A MINIMUM OF 3 INCHES PROTRUDING ABOVE THE COMPOST SOCK. 7. IN THE EVENT STAKING IS NOT POSSIBLE (I.E., WHEN SOCKS ARE USED ON PAVEMENT) HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SOCK TO HOLD IT IN PLACE DURING RUNOFF EVENTS. 8. IF THE COMPOST SOCK IS TO BE LEFT AS PART OF THE NATURAL LANDSCAPE, IT MAY BE SEEDED AT TIME OF INSTALLATION

FOR ESTABLISHMENT OF PERMANENT VEGETATION USING THE SEEDING SPECIFICATION IN TEH EROSION AND SEDIMENTATION CONTROL PLAN. 9. COMPOST SOCKS ARE NOT TO BE USED IN PERENNIAL OR INTERMITTENT STREAMS.

1. INSPECT COMPOST SOCKS WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL (1/2 INCH OR GREATER) REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS.

2. THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN.

3. IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE.

4. THE SOCK NEED TO BE REINSTALLED IF UNDERMINED OR DISLODGED. 5. THE COMPOST SOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

N.T.S.



REI DW-15820

ROLII

EC-10 SILT FENCE OUTLET

3. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS.

5. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.

7. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF

CONSIDERATIONS (HOWEVER FLOW SHALL NOT RUN PARALLEL WITH

10. SEE N.C. STATE DENR PRACTICE & SPECIFICATION SEDIMENTS FENCE

SECTION. FOR CONDITIONS WHERE PRACTICE APPLIES; PLANNING

11. SEE N.C. STATE DENR PRACTICE & SPECIFICATION SEDIMENTS FENCE SECTION. (HOWEVER FLOW SHALL NOT RUN PARALLEL WITH THE

AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.

8. FOR CONDITIONS WHERE PRACTICE APPLIES; PLANNING

9. END OF SILT FENCE NEEDS TO BE TURNED UPHILL

THE FENCE) AND DESIGN CRITERIA.

CENTER THEREAFTER

CONSIDERATIONS.

PROJECT.

4. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON

PWC DWG # DW-15820

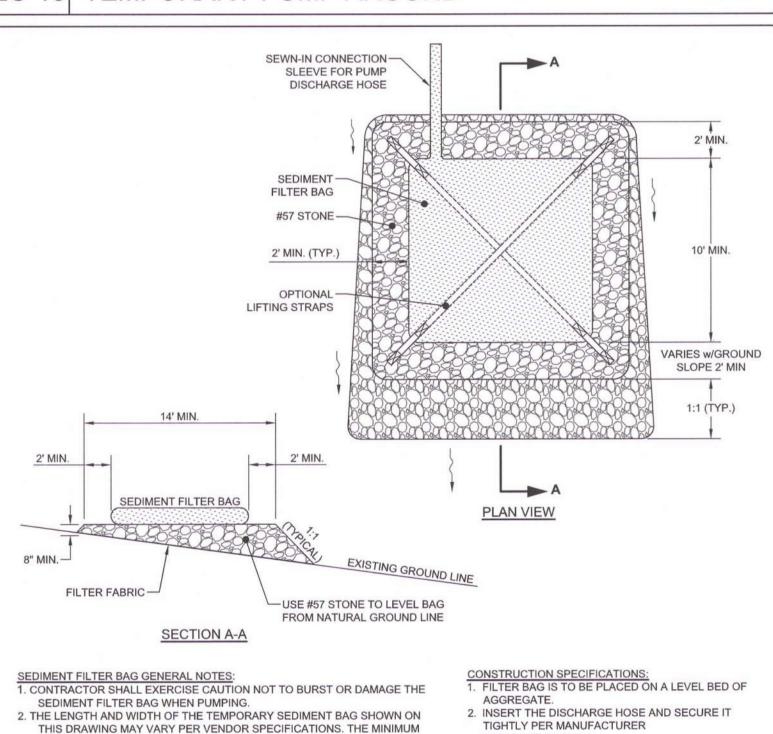
# <u>PUMP-AROUND PRACTICE:</u> TEMPORARY MEASURE FOR DEWATERING STREAM CROSSING SITES.

THE WORK SHALL CONSIST OF INSTALLING A TEMPORARY PUMP AROUND AND SUPPORTING MEASURES TO DIVERT FLOW AROUND CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING PUMPS TO ENSURE ADEQUATE CAPACITY TO KEEP FLOW FROM ENTERING WORK AREA.

SEDIMENT CONTROL MEASURES, PUMP-AROUND PRACTICES, AND ASSOCIATED CONSTRUCTION SHALL BE COMPLETED IN THE FOLLOWING SEQUENCE (REFER TO DETAIL).

- 1. COFFER DAMS SHALL BE SITUATED AT THE ENDS OF THE WORK AREA AS SHOWN ON THE PLANS (REFER TO DETAIL EC-12), AND WATER ON THE UPSIDE OF THE DAM AREA SHALL BE PUMPED AROUND THE WORK AREA.
- 2. THE DIVERSION PUMPS SHALL DISCHARGE ONTO A STABLE VELOCITY DISSIPATER MADE OF RIP-RAP 3. WATER FROM THE WORK AREA SHALL BE PUMPED TO A SEDIMENT FILTERING MEASURE SUCH AS A
- TEMPORARY WOOD CHIP DEWATERING BASIN, SILT BAG OR OTHER APPROVED SEDIMENT FILTERING MEASURE (REFER TO DETAIL EC-16).
- 4. AFTER THE SANITARY SEWER IS INSTALLED AND THE SLOPES HAVE BEEN STABILIZED, THE PUMP INTAKE HOSES, DISSIPATOR PADS AND FILTER MEASURES SHALL BE REMOVED AND THEN THE COFFER DAMS SHALL BE REMOVED.
- 5. A PUMP AROUND MUST BE INSTALLED ON ANY TRIBUTARY OR STORM DRAIN OUTFALL WHICH CONTRIBUTES BASEFLOW TO THE WORK AREA. THIS SHALL BE ACCOMPLISHED BY LOCATING A COFFER DAM AT THE DOWNSTREAM END OF THE TRIBUTARY OR STORM DRAIN OUTFALL AND PUMPING THE STREAM FLOW AROUND THE WORK AREA. THIS WATER SHALL DISCHARGE ONTO THE
- SAME VELOCITY DISSIPATER USED FOR THE MAIN STREAM PUMP AROUND. 6. CONTRACTOR MAY USE INTERMEDIATE COFFER DAM ALONG STREAM ALIGNMENT TO ALLOW PHASED CROSSING W/A MAXIMUM OF 2 SEPARATE BYPASS PHASES.

# EC-13 TEMPORARY PUMP AROUND



- THIS DRAWING MAY VARY PER VENDOR SPECIFICATIONS. THE MINIMUM "FOOTPRINT" OF THE BAG SHALL BE 10 x 15 FEET
- 3. SEDIMENT FILTER BAGS SHALL BE EQUIPPED WITH A SEWN-IN SLEEVE OF SUFFICIENT SIZE TO ACCEPT A MINIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE DISCHARGE HOSE SHOULD BE EXTENDED INTO THIS SLEEVE A MINIMUM OF 6 INCHES AND BE TIGHTLY SECURED WITH A HOSE CLAMP OR OTHER SUITABLE MEANS TO PREVENT LEAKAGE. HOSE CONNECTION THROUGH A SLIT IN THE BAG WILL NOT BE ACCEPTABLE 4. THE PUMP DISCHARGE HOSE CONNECTION SLEEVE SHALL BE SECURELY TIED OFF DURING DISPOSAL OF THE SEDIMENT FILTER BAG IN ORDER TO
- PREVENT LEAKAGE OF COLLECTED SEDIMENTS. 5. SEDIMENT FILTER BAG SHALL BE MAINTAINED AND REPLACED WHEN ONE HALF FULL OF SEDIMENT OR IN ACCORDANCE WITH THE MANUFACTURER'S
- RECOMMENDATIONS. 3. THE BAG IS TO BE MONITORED TO AVOID RUPTURE OR EXCESSIVE LEAKAGE AROUND THE DISCHARGE
- 4. SEDIMENT FILTER BAG AND THE CAPTURED SEDIMENT SHOULD BE DISPOSED OF PER LOCAL
- REGULATIONS. INSPECT TEMPORARY STREAM CROSSINGS AFTER RUNOFF-PRODUCING RAINS TO CHECK FOR BLOCKAGE IN CHANNEL, EROSION OF ABUTMENTS, CHANNEL SCOUR, RIPRAP DISPLACEMENT, OR PIPING. MAKE ALL REPAIRS IMMEDIATELY TO PREVENT FURTHER DAMAGE TO THE INSTALLATION.

EC-16 SEDIMENT FILTER BAG WITH GRAVEL PAD

EC-17 TEMPORARY STRAW WITH NET LINER

EVEN IF PROPERLY DESIGNED, IF NOT PROPERLY INSTALLED, RECP'S WILL PROBABLY NOT FUNCTION AS DESIRED. PROPER INSTALLATION IS IMPERATIVE. EVEN IF PROPERLY INSTALLED, IF NOT PROPERLY TIMED AND NOURISHED, VEGETATION WILL PROBABLY NOT GROW AS DESIRED. PROPER SEED/VEGETATION SELECTION IS ALSO IMPERATIVE. GRADE THE SURFACE OF INSTALLATION AREAS SO THAT THE GROUND IS SMOOTH AND LOOSE. WHEN SEEDING PRIOR TO INSTALLATION, FOLLOWING THE STEPS FOR SEED BED PREPARATION, SOIL AMENDMENTS, AND SEEDING IN SURFACE STABILIZATION, 6.1. ALL GULLIES, RILLS, AND ANY OTHER DISTURBED AREAS MUST BE FINE GRADED PRIOR TO INSTALLATION. SPREAD SEED BEFORE RECP INSTALLATION. (IMPORTANT: REMOVE ALL LARGE ROCKS, DIRT CLODS, STUMPS, ROOTS, GRASS CLUMPS, TRASH, AND OTHER OBSTRUCTIONS FROM THE SOIL SURFACE TO ALLOW FOR DIRECT CONTACT BETWEEN SOIL SURFACE AND THE RECP.) TERMINAL ANCHOR TRENCHES ARE REQUIRED AT RECP ENDS AND INTERMITTENT TRENCHES MUST BE CONSTRUCTED ACROSS CHANNELS AT 25-FOOT INTERVALS. TERMINAL ANCHOR TRENCHES SHOULD BE A MINIMUM OF 12 INCHES IN DEPTH AND 6 INCHES IN WIDTH, WHILE INTERMITTENT TRENCHES NEED BE ONLY 6 INCHES DEEP AND 6 INCHES WIDE.

INSTALLATION FOR SLOPES - PLACE THE RECPS 2-3 FEET OVER TOP OF THE SLOPE AND INTO AN EXCAVATED END TRENCH MEASURING APPROXIMATELY 12 INCHES DEEP BY 6 INCHES WIDE. PIN THE RECP AT 1 FOOT INTERVALS ALONG THE BOTTOM OF THE TRENCH, BACKFILL, AND COMPACT. UNROLL THE RECP DOWN (OR ALONG) THE SLOPE MAINTAINING DIRECT CONTACT BETWEEN THE SOIL AND RECP. OVERLAP ADJACENT ROLLS A MINIMUM OF 3 INCHES. PIN THE RECP TO THE GROUND USING STAPLES OR PINS IN A 3 FOOT CENTER-TO-CENTER PATTERN. LESS FREQUENT STAPLING/PINNING IS ACCEPTABLE ON MODERATE SLOPES. AND LOWER END OF THE LINED CHANNEL SECTIONS. AT 25-FOOT INTERVALS ALONG THE CHANNEL, ANCHOR THE RECP ACROSS THE

INSTALLATION IN CHANNELS - EXCAVATE TERMINAL TRENCHES (12 INCHES DEEP AND 6 INCHES WIDE) ACROSS THE CHANNEL AT THE UPPER CHANNEL EITHER IN 6 INCH BY 6 INCH TRENCHES OR BY INSTALLING TWO CLOSELY SPACED ROWS OF ANCHORS. EXCAVATE LONGITUDINAL TRENCHES 6 INCHES DEEP AND WIDE ALONG CHANNEL EDGES (ABOVE WATER LINE) IN WHICH TO BURY THE OUTSIDE RECP EDGES. PLACE THE FIRST RECP IN THE TERMINAL TRENCH AND PINE IT AT 1 FOOT INTERVALS ALONG THE BOTTOM OF THE TRENCH. NOTE: THE RECP SHOULD BE PLACED UPSIDE DOWN IN THE TRENCH WITH THE ROLL ON THE DOWNSTREAM SIDE OF THE BENCH.

ONCE PINNED AND BACKFILLED, THE RECP IS DEPLOYED BY WRAPPING OVER THE TOP OF THE TRENCH AND UNROLLING UPSTREAM. IF THE CHANNEL IS WIDER THAN THE PROVIDED ROLLS, PLACE ENDS OF ADJACENT ROLLS IN THE TERMINAL TRENCH, OVERLAPPING THE ADJACENT ROLLS A MINIMUM OF 3 INCHES, PIN AT 1 FOOT INTERVALS, BACKFILL, AND COMPACT, UNROLL THE RECP IN THE UPSTREAM DIRECTION UNTIL REACHING THE FIRST INTERMITTENT TRENCH. FOLD THE RECP BACK OVER ITSELF, POSITIONING THE ROLL ON THE DOWNSTREAM SIDE OF THE TRENCH, AND ALLOWING THE MAT TO CONFORM TO THE TRENCH.

THEN PIN THE RECP (TWO LAYERS) TO THE BOTTOM OF THE TRENCH, BACKFILL, AND COMPACT. CONTINUE UP THE CHANNEL (WRAPPING OVER THE TOP OF THE INTERMITTENT TRENCH) REPEATING THIS STEP AT OTHER INTERMITTENT TRENCHES, UNTIL REACHING THE UPPER TERMINAL TRENCH. AT THE UPPER TERMINAL TRENCH, ALLOW THE RECP TO CONFORM TO THE TRENCH, SECURE WITH PINES OR STAPLES, BACKFILL, COMPACT

AND THEN BRING THE MAT BACK OVER THE TOP OF THE TRENCH AND ONTO THE EXISTING MAT (2 TO 3 FEET OVERLAP IN THE DOWNSTREAM DIRECTION), AND PIN AT 1 FOOT INTERVALS ACROSS THE RECP. WHEN STARTING INSTALLATION OF A NEW ROLL, BEGIN IN A TRENCH OR SHINGLE-LAP ENDS OF ROLLS A MINIMUM OF 1 FOOT WITH UPSTREAM RECP ON TOP TO PREVENT UPLIFTING. PLACE THE OUTSIDE EDGES OF THE RECP(S) IN LONGITUDINAL TRENCHES, PIN, BACKFILL, AND COMPACT. ANCHORING DEVICES - 11 GAUGE, AT LEAST 6 INCHES LENGTH BY 1 INCH WIDTH STAPLES OR 12 INCH MINIMUM LENGTH WOODEN STAKES

ARE RECOMMENDED FOR ANCHORING THE RECP TO THE GROUND. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE/STAKE LENGTHS GREATER THAN 6"/12" MAY BE NECESSARY TO PROPERLY SECURE THE RECPS. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN. DRIVE STAPLES OR PINS SO THAT THE TOP OF THE STAPLE OR PIN IS FLUSH WITH THE GROUND SURFACE. ANCHOR EACH RECP EVERY 3

FEET ALONG ITS CENTER. LONGITUDINAL OVERLAPS MUST BE SUFFICIENT TO ACCOMMODATE A ROW OF ANCHORS AND UNIFORM ALONG THE ENTIRE LENGTH OF OVERLAP AND ANCHORED EVERY 3 FEET ALONG THE OVERLAP LENGTH. ROLL ENDS MAY BE SPLICED BY OVERLAPPING 1 FOOT (IN THE DIRECTION OF WATER FLOW), WITH THE UPSTREAM/UPSLOPE MAT PLACED ON TOP OF THE DOWNSTREAM/DOWNSLOP RECP. THIS OVERLAP SHOULD BE ANCHORED AT 1 FOOT SPACING ACROSS THE RECP. WHEN INSTALLING MULTIPLE WIDTH MATS HEAT SEAMED IN THE FACTORY, ALL FACTORY SEAMS AND FIELD OVERLAPS SHOULD BE SIMILARLY ANCHORED.

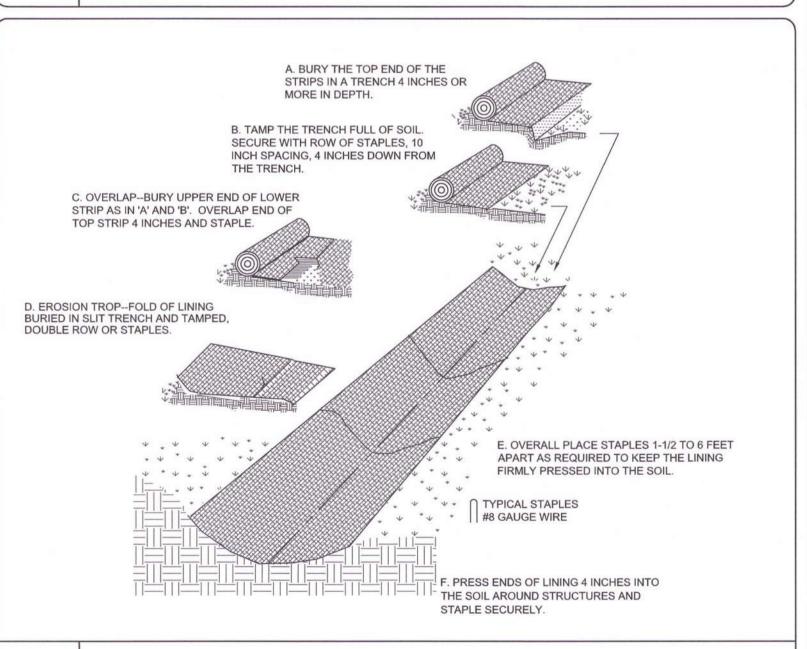
INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAIN FALL

GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED. AND EROSION MUST NOT OCCUR BENEATH THE RECP. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED. STABILIZATION NOTE: STABILIZED GROUND COVER MUST BE ESTABLISHED WITHIN 7 DAYS IN AREAS WHERE SLOPES ARE STEEPER THAN 3:1 (SEE NPDES STABILIZATION TIMEFRAME SHEET EC8)

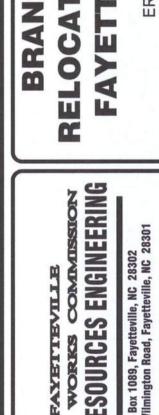
# EC-14 TEMPORARY SLOPE STABILIZATION

N.T.S.

N.T.S.







DW-15820

REEL MCKIMS

Know what's below. Call before you dig PWC DWG # DW-15820

EC-22 CONCRETE WASHOUT PIT

N.T.S.



DW-15820

CREED MCKIMS

Know what's below.

Call before you dig.

PWC DWG # DW-15820

lementing 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 rmittee shall comply with the Erosion and Sediment Control plan approved by the lelegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

	Re	quired Ground Stabil	ization Timeframes
Si	te Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a)	Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b)	High Quality Water (HQW) Zones	7	None
(c)	Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d)	Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e)	Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

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 techniques in the table below:

- Temporary grass seed covered with straw or Permanent grass seed covered with straw or other mulches and tackifiers Hydroseeding · Rolled erosion control products with or
- without temporary grass seed · Plastic sheeting
- other mulches and tackifier
- Hydroseeding

retaining walls

- Geotextile fabrics such as permanent soil Appropriately applied straw or other mulch
   Shrubs or other permanent plantings covered Uniform and evenly distributed ground cover sufficient to restrain erosion · 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 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.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures

Provide ponding area for containment of treated Stormwater before discharging

- **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
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- has been corrected. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

Remove leaking vehicles and construction equipment from service until the problem

#### ITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers. 2. 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 runoff
- 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. 7. Empty waste containers as needed to prevent overflow. Clean up immediately if
- containers overflow. 8. Dispose waste off-site at an approved disposal facility.
- 9. On business days, clean up and dispose of waste in designated waste containers.

- 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 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. 2. 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.
- controls may be required by the approving authority. 8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to
- 9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

- 7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional
- identify this location.
- 10. At the completion of the concrete work, remove remaining

# HERBICIDES, PESTICIDES AND RODENTICIDES

Store and apply herbicides, pesticides and rodenticides in accordance with label Store herbicides, pesticides and rodenticides in their original containers with the

ONSITE CONCRETE WASHOUT

STRUCTURE WITH LINER

BELOW GRADE WASHOUT STRUCTURE

NOTING DEVICE (18"X24" MIN.)

ABOVE GRADE WASHOUT STRUCTURE

NOTING DEVICE (18"X24" MIN.

SECTION A-A

1. ACTUAL LOCATION DETERMINED IN FIELD

75% OF THE STRUCTURES CAPACITY.

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES

ACTUAL LOCATION DETERMINED IN FIELD

THE CONCRETE WASHOUT STRUCTURES

SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE

ADEQUATE HOLDING CAPACITY WITH A

MINIMUM 12 INCHES OF FREEBOARD

NEEDS TO BE CLEARY MARKED WITH

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE

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. Do not stockpile these materials onsite.

label, which lists directions for use, ingredients and first aid steps in case of

## HAZARDOUS AND TOXIC WASTE

- 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: 04/01/1

## SELF-INSPECTION, RECORDKEEPING AND REPORTING

## SECTION A: SELF-INSPECTION

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 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 performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	(during normal business hours)	Inspection records must include:			
(1) Rain gauge maintained in good working order		Daily rainfall amounts.  If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended 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 approved by the Division.			
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 Inch in 24 hours	Identification of the measures inspected,     Date and time of the inspection,     Name of the person performing the inspection,     Indication of whether the measures were operating properly,     Description of maintenance needs for the measure,     Description, evidence, and date of corrective actions taken.			
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	Identification of the discharge outfalls inspected,     Date and time of the inspection,     Name of the person performing the inspection,     Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration,     Indication of visible sediment leaving the site,     Description, evidence, and date of corrective actions taken.			
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made:  1. Actions taken to clean up or stabilize the sediment that has left the site limits,  2. Description, evidence, and date of corrective actions taken, and  3. An explanation as to the actions taken to control future releases.			
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made:  1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.			
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover).  2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.			

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

## SELF-INSPECTION, RECORDKEEPING AND REPORTING

## SECTION B: RECORDKEEPING

1. E&SC Plan Documentation The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

**Documentation Requirements** 

(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each 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 installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

- site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:
- (a) This General Permit as well as the Certificate of Coverage, after it is received.
- (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 electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

## 3. Documentation to be Retained for Three Years

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]

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

- (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 shall not commence until the E&SC plan authority has approved these items,
- (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, (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
- properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
- (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, (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and

# (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

## 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).
- (c) 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

## 2. 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)

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul> <li>Within 24 hours, an oral or electronic notification.</li> <li>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 case-by-case basis.</li> <li>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 compliance with the federal or state impaired-waters conditions.</li> </ul>
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul> <li>A report at least ten days before the date of the bypass, if possible.</li> <li>The report shall include an evaluation of the anticipated quality and effect of the bypass.</li> </ul>
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(I)(7)]	<ul> <li>Within 24 hours, an oral or electronic notification.</li> <li>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 not 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).</li> <li>Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>

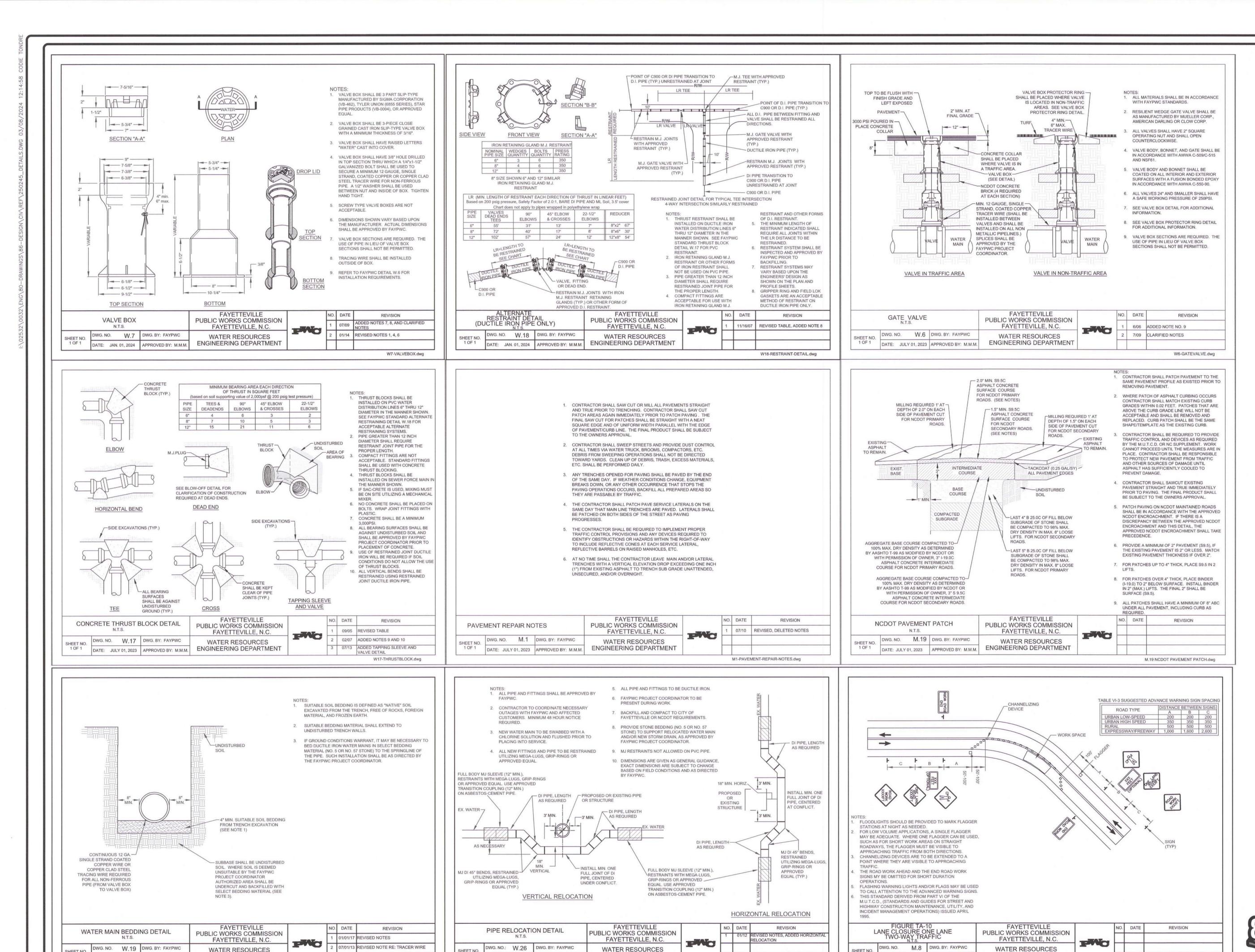
NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING **EFFECTIVE: 04/01/1** 







DW-15820



WATER RESOURCES

DATE: JAN. 01, 2024 APPROVED BY: M.M.M.

W19-WATER-BEDDING.dwg

ENGINEERING DEPARTMENT

W26-PIPE-RELOCATION-DETAIL.dwg

DWG. NO. W.19 DWG. BY: FAYPWC

DATE: JAN. 01, 2024 APPROVED BY: M.M.M.

WATER RESOURCES

ENGINEERING DEPARTMENT



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ENGINEERING DEPARTMENT

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