

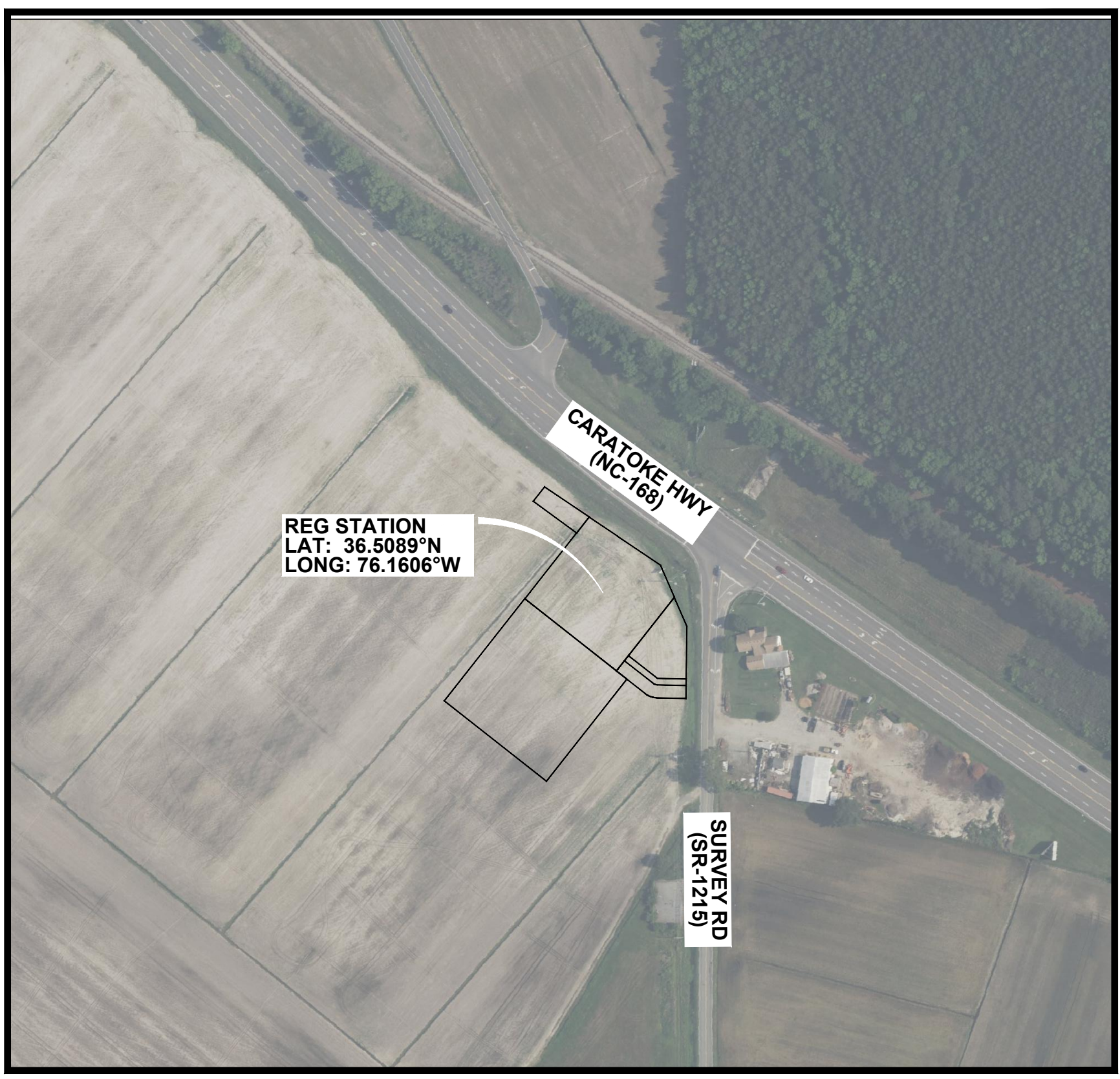
Sheet List Table

SHEET NUMBER	DRAWING NUMBER	SHEET TITLE	REVISION
01	PNG-G-031-0001077	COVER AND INDEX	D
02	PNG-G-031-0001078	GENERAL NOTES AND ABBREVIATIONS	D
03	PNG-S-031-0001014	PIPE SUPPORT DETAILS	D
04	PNG-C-031-0001104	CIVIL DETAILS	D
05	PNG-S-031-0001015	CONCRETE SUPPORT DETAILS	D
06	PNG-EX-031-0001016	CATHODIC PROTECTION DETAILS	D
07	PNG-C-031-0001105	CIVIL PLAN	D
08	PNG-EX-031-0001106	CIVIL GRADING & ESPC PLAN	D
09	PNG-C-031-000XXXX	CURRITUCK COUNTY SITE PLAN	A
10	PNG-C-031-0001107	EPSC NOTES	D
11	PNG-C-031-0001109	EPSC SEEDING REQUIREMENTS	D
12	PNG-C-031-0001110	EPSC DETAILS	D
13	PNG-C-031-0001108	EPSC NOTES NCG01	D
14	PNG-C-031-0001112	FOUNDATION PLAN	D
15	PNG-C-031-0001113	DRIVEWAY PERMIT PLAN	D
16	PNG-M-031-0001132	MECHANICAL PIPING PLAN	D
17	PNG-M-031-0001133	MECHANICAL SECTIONS 1	D
18	PNG-M-031-0001134	MECHANICAL SECTIONS 2	D
19	PNG-M-031-0001135	MECHANICAL SECTIONS 3	D
20	PNG-M-031-0001136	MECHANICAL SECTIONS 4	D
21	PNG-M-031-0001137	MECHANICAL DETAILS	D
22	PNG-M-031-0001139	BILL OF MATERIALS 1	D
23	PNG-M-031-0001140	BILL OF MATERIALS 2	D
24	PNG-M-031-0001141	BILL OF MATERIALS 3	D
25	PNG-D-031-0001028	STATION P&ID	D
26	PNG-E-031-0001086	ELECTRICAL SPECIFICATIONS	D
27	PNG-H-031-0001008	STATION HAZARDOUS CLASSIFICATION AREA	D
28	PNG-H-031-0001009	HAZARDOUS CLASSIFICATION DETAILS	D
29	PNG-EX-031-0001017	CATHODIC PROTECTION SITE PLAN	D
30	PNG-EX-031-0001018	GROUNDING PLAN	D
31	PNG-EX-031-0001019	GROUNDING DETAILS	D
32	PNG-E-031-0001087	ELECTRICAL & INSTRUMENTATION CONDUIT	D
33	PNG-E-031-0001088	CABLE AND CONDUIT SCHEDULE	D
34	PNG-E-031-0001089	ELECTRICAL & INSTRUMENTATION DETAILS	D
35	PNG-E-031-0001090	POWER DISTRIBUTION DETAILS	D
36	PNG-E-031-0001091	LIGHTING INSTALLATION DETAIL	D
37	PNG-X-031-0001064	EMERGENCY SCHEMATIC	D
38	PNG-Z-031-000XXXX	WELD MAP 1	D
39	PNG-Z-031-000XXXX	WELD MAP 2	D
40	PNG-Z-031-000XXXX	WELD MAP 3	D
41	PNG-Z-031-000XXXX	WELD MAP 4	D
42	PNG-Z-031-000XXXX	WELD LOG	D

SHEETS INCORPORATED BY REFERENCE

REF	DRAWING NUMBER	TITLE	REVISION
REF	PNG-G-000-0002250	P&ID SYMBOLS AND LEGENDS 1-3	0
REF	PNG-G-000-0003000	FENCE STANDARD - CHAINLINK (1-3)	0
REF	PNG-G-000-0003001	FENCE STANDARD - CHAINLINK	0
REF	PNG-G-000-0003002	FENCE STANDARD - CHAINLINK	0
REF	VARIOUS	MOYOCK CITY RS UPGRADE AC MITIGATION PLANS - PRELIMINARY	A

CONSTRUCTION PLANS FOR MOYOCK CITY GATE RS UPGRADE MOYOCK, NC CP#: 0235671 STATION ID: 7435



LOCATION MAP
NOT TO SCALE

ISSUED FOR BID

ISSUE DATE: 4/30/2024

LIMITS OF DISTURBANCE
2.34 ACRES

DESIGN CONSULTANTS:
ENGINEER:
W. KEITH GUALTIERI, PE
ENERGY, LAND, & INFRASTRUCTURE, LLC
4250 NORTH FAIRFAX DRIVE, SUITE 60
ARLINGTON, VA 22203
703-994-0429
SURVEYOR:
DAVID SHEEHAN, PLS
ENERGY, LAND, & INFRASTRUCTURE, LLC.
500 GREGSON DRIVE, SUITE 180
CARY, NC 27511
919-234-1974



ENERGY LAND & INFRASTRUCTURE, PLLC
500 GREGSON DRIVE, SUITE 180, NC 27511
NC LICENSE# P-1289

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE 1910			REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER 023567			MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER 0235671			PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY JEM			
						STATION ID 7435			
						CHECKER INITIALS DMC			



MOYOCK CITY GATE RS UPGRADE
COVER AND INDEX
MOYOCK, NC
Resource Center NEW BERN

REF. DWG(S)	
SHEET(S) 01 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-G-031-0001077	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	

COPYRIGHT 2018

GENERAL NOTES

- INSTALLER SHALL FURNISH ALL MATERIALS NOT PROVIDED BY THE COMPANY (UNLESS OTHERWISE NOTED ON DRAWINGS OR SPECIFICATIONS) INCLUDING EQUIPMENT TRANSPORTATION, SERVICES AND PERFORM ALL NECESSARY WORK AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREINAFTER.
- IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO VERIFY ALL DIMENSIONS GIVEN ON THE DRAWINGS. ANY ITEM IN QUESTION SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO PROCEEDING WITH THE WORK.
- INSTALLER SHALL BE RESPONSIBLE FOR PROTECTION OF ALL SURROUNDING AREAS.
- ALL BELOWGROUND WELDS SHALL BE COATED WITH HBE-95 OR SP-2888 PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.
- ALL ABOVEGROUND PIPING TO BE BLASTED TO CORRECT SOCIETY FOR PROTECTIVE COATINGS (SSPC) SURFACE PROFILE. PAINT SYSTEM TO BE UTILIZED SHALL BE PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.
- UPON BACKFILLING IN AREAS OF ROCK, BURIED PIPE SHALL HAVE 6" OF SAND PAD FILL PLACED AROUND THE PIPE'S CIRCUMFERENCE.
- PRESSURE TESTING SHALL MEET THE REQUIREMENTS OF PNG'S PRESSURE TESTING STANDARD, PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.
- INSTALLER SHALL DEWATER ALL HYDROSTATICALLY TESTED PIPING, USING CLEANING PIGS AS REQUIRED, AND DRY TO A DEWPOINT OF -40 °F PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.

CONSTRUCTION NOTES

- EXISTING OVERHEAD AND BELOWGROUND FACILITIES MAY BE IN THE WORK AREA VICINITY. INSTALLER IS RESPONSIBLE FOR HAVING SUCH FACILITIES LOCATED AND IS RESPONSIBLE FOR MAINTENANCE AND PRESERVATION OF THESE FACILITIES.
- PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS, INSTALLER IS REQUIRED TO CALL 811 FOR UTILITY LOCATES A MINIMUM OF 72 HOURS PRIOR TO COMMENCEMENT OF WORK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR DELAYS FROM ANY WORK PROVIDED BY OTHER UTILITIES.
- IF EXISTING UTILITIES OF ANY TYPE ARE ENCOUNTERED IN THE FIELD AND DEEMED TO BE IN CONFLICT WITH INSTALLATION OF FACILITIES, INSTALLER SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
- WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, INSTALLER SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR PRIVATE DRAINS OR SEWERS. RESTORATION OF THESE FACILITIES IS TO BE PERFORMED ONCE CONSTRUCTION IS COMPLETE AND ARE CONSIDERED INCIDENTAL COSTS OF THE PROJECT.
- ALL DRAWING MEASUREMENTS ARE TO BE TAKEN FROM EXISTING GRADE. FINAL GRADE SHALL BE MATCHED TO SURROUNDING GRADE AS PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.
- INSTALLER IS TO REMAIN WITHIN CONSTRUCTION WORKING LIMITS. ACCESS TO AREAS OUTSIDE WORKING LIMITS MUST BE COORDINATED WITH THE OWNER OR PIEDMONT PROJECT MANAGER.
- ALL EXCESS EXCAVATION, CONSTRUCTION DEMOLITION DEBRIS AND UNSUITABLE MATERIALS THAT DO NOT CONTAIN ASBESTOS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
- STANDARD SPECIFICATIONS REFERENCED ON THIS SHEET AND CONSTRUCTION PLANS ARE CONSIDERED AS PART OF THE CONTRACT DOCUMENTS. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED TO BE A PART OF THIS CONTRACT.
- BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY PIEDMONT OR COMPANY REPRESENTATIVE. FINAL PAYMENT SHALL BE MADE AFTER ALL OF THE INSTALLER'S WORK HAS BEEN ACCEPTED AND APPROVED AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- DURING CONSTRUCTION, ALL LOOSE MATERIAL THAT ARE DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, SHALL BE REMOVED AT THE END OF EACH WORK DAY.
- ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE EXTENDED TO OUTLET INTO AN EXISTING DRAINAGE WAY. A RECORD OF ALL FIELD TILE FOR ONSITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE INSTALLER AND TURNED OVER TO THE PROJECT MANAGER UPON COMPLETION OF THE PROJECT.
- INSTALLER IS REQUIRED TO MAINTAIN A SET OF ISSUED FOR CONSTRUCTION DRAWINGS AND ALL PERMITS AT THE JOB SITE. ANY MODIFICATIONS OR ALTERATIONS TO THE PLANS OR SPECIFICATIONS SHALL BE APPROVED BY THE PROJECT MANAGER.
- INSTALLER IS SOLELY RESPONSIBLE FOR EXECUTION OF HISHER WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. INSTALLER IS RESPONSIBLE FOR THE CONSTRUCTION METHODS AND TECHNIQUES, SEQUENCES, TIME OF PERFORMANCE ALL SAFETY PRECAUTIONS.
- MINIMUM DEPTH OF BURIAL SHALL BE PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.
- ALL PIPELINES BEING CROSSED ARE TO BE PROTECTED WITH A MINIMUM OF (3) 4 FEET X 18 FEET WOODEN MATS.
- PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS, FOR OPEN DITCH EXCAVATION, A MINIMUM OF TWO FEET OF SEPARATION SHALL BE MAINTAINED BETWEEN ALL CROSSING STRUCTURES. SEPARATION BETWEEN CROSSING STRUCTURES AND PIPELINES THAT ARE INSTALLED VIA DIRECTIONAL DRILLING METHODS IS AT THE DISCRETION OF ENGINEERING.
- DURING BACKFILLING, A SIX INCH CROWN SHALL BE PLACED ON ALL DISTURBED AREAS. COMPACTION REQUIREMENTS SHALL BE PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.
- BOLTS FOR FLANGES TO BE TORQUED PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.

CIVIL AND STRUCTURAL NOTES

- ADDITIONAL EXCAVATIONS BELOW FOOTINGS MAY BE NECESSARY TO REACH UNDISTURBED SOIL. SHOULD THIS OCCUR, THE EXCAVATION SHALL BE BROUGHT TO THE BOTTOM OF THE FOOTING ELEVATION WITH COMPACTED SAND FILL MEETING THE REQUIREMENTS OF MODIFIED PROCTOR COMPACTION TEST (ASTM D1557) TO 95% IN SIX INCH LIFTS.
- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" X 3/4" 45° CHAMFER.
- CONCRETE SHALL BE MIXED AND POURED PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS. TESTING SHALL CONFORM TO ACI 318. INSTALLER TO SUPPLY ALL CONCRETE AND TESTING.
- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 SPECIFICATION. STEEL REINFORCING BAR SHALL CONFORM TO ASTM A615 GRADE 60 AND WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. TIE WIRE SHALL CONFORM TO ASTM A82.
- UNSUITABLE OR EXCESS EARTH SPOIL SHALL BE DISPOSED OF AT AN APPROVED WASTE LOCATION. SOIL BEING TRANSPORTED ONTO THE JOB SITE SHALL BE APPROVED BY EITHER THE PROJECT MANAGER OR CONSTRUCTION MANAGER.
- ROCKSHIELD OR SIMILAR COMPANY APPROVED PRODUCT MUST BE INSTALLED BETWEEN ALL PIPE AND FITTINGS THAT COME INTO CONTACT WITH CONCRETE. A LAYER OF NON ABRASIVE MATERIAL SUCH AS FRP SHALL BE INSTALLED BETWEEN ALL PIPE SUPPORTS AND PIPING.
- ALL FIELD BENDING OF REBAR SHALL BE DONE COLD.

SOIL EROSION AND SEDIMENT CONTROL NOTES

- INSTALLER IS TO CONSTRUCT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AT THE COMMENCEMENT OF THE PROJECT. PROVIDE MAINTENANCE AND ASSURE EFFECTIVENESS THROUGHOUT THE DURATION OF THE PROJECT.
- CARE SHALL BE TAKEN TO MINIMIZE DOWNSTREAM SILTATION. RAW BANKS MAY BE SEEDED AND MULCHED TO PREVENT EROSION.
- ALL SPOILS INCLUDING ORGANIC SOILS, VEGETATION AND DEBRIS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF IN SUCH A MANNER AS TO NOT ERODE INTO ANY BODY OF WATER OR WETLAND.
- SILT FENCING SHALL BE PLACED WHERE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE WORK AREA.
- CATCH ALL INLET FILTERS ARE REQUIRED AT ALL SEWER INLETS, GRATES AND MANHOLES FOR SEDIMENT CONTROL.
- WETLAND AREAS SHALL HAVE SILT FENCING AND ONE LAYER OF STRAW LOG INSTALLED NO CLOSER THAN 50 FEET FROM POINT OF WETLAND DELINEATION.
- TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF SAID STOCKPILE ONTO OFFSITE AREAS.
- ALL ENVIRONMENTAL MEASURES SHALL BE PER PERTINENT PIEDMONT DESIGN AND CONSTRUCTION STANDARDS.

SURVEY NOTES

- ALL COORDINATES AND DISTANCES ARE GRID DISTANCES IN U.S. SURVEY FEET, BASED UPON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, OF THE NORTH AMERICAN DATUM OF 1983 (NAD 83, REALIZATIONS 2011) WITH NO SCALE FACTOR APPLIED.
- VERTICAL DATUM: NAVD 88.

PIPE COATING NOTES

- CONTRACTOR SHALL ADHERE TO PIEDMONT NATURAL GAS NGBU SYSTEM INTEGRITY SI-ST-5170 FOR PROTECTION OF ABOVE GROUND PIPING.
- CONTRACTOR SHALL ADHERE TO PIEDMONT NATURAL GAS NGBU SYSTEM INTEGRITY SI-ST-5150 FOR PROTECTION OF BELOW GROUND COATING.
- TAPECOAT H35 WRAP SHALL BE UTILIZED FOR ALL ABOVE/BELOW GRADE PIPE INTERFACES.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADD.	ADDITIONAL
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
API	AMERICAN PETROLEUM INSTITUTE
APPROX.	APPROXIMATE
ASA	AMERICAN STANDARDS ASSOCIATION
BB	BOLTED BODY
BL	BLIND
BLDG	BUILDING
CFB	COATING FUSION BONDED
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATION
CONST	CONSTRUCTION
CP	CATHODIC PROTECTION
DB	DEED BOOK
DIA	DIAMETER
DIST	DISTANCE
DRL	DOUBLE RANDOM LENGTH
DWG	DRAWING
E	EASTING
ELL	ELBOW
E.O.P	EDGE OF PAVEMENT
EPSC	EROSION PROTECTION & SEDIMENT CONTROL
ERW	ELECTRIC RESISTANCE WELDED
ESMT	EASEMENT
EX.	EXISTING
EXT	EXTENSION
FBE	FUSION BONDED EPOXY
FIG	FIGURE
FPT	FULL PORT
FRP	FIBERGLASS REINFORCED PLASTIC
FT	FOOT/FEET
FTC	FITTING
FXF	FLANGE BY FLANGE
GEOTECH	GEOTECHNICAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H.HORIZ.	HORIZONTAL
HWY	HIGHWAY
IN	INCH/INCHES
LBF	POUNDS OF FORCE
LF	LINEAR FEET
LVR	LEVER
M&R	METERING AND REGULATING
MAX.	MAXIMUM
MAOP	MAXIMUM ALLOWABLE OPERATING PRESSURE
MWP	MAXIMUM WORKING PRESSURE
MILS	THOUSANDTHS OF AN INCH
MIN.	MINIMUM
M.O.T.	MAINTENANCE OF TRAFFIC
N	NORTHING
N/A	NOT APPLICABLE
NAD 83	NORTH AMERICAN DATUM OF 1983
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
NC	NORTH CAROLINA
NCDOT	NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
N/F	NOW OR FORMERLY
NO.	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION
PC	POINT OF CURVATURE
PE	POLYETHYLENE
PG	PAGE
PI	POINT OF INFLECTION
P&ID	PIPING & INSTRUMENTATION DIAGRAM
PNG	PIEDMONT NATURAL GAS
PROP.	PROPOSED
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
QTY	QUANTITY
Rc	RADIUS OF CURVATURE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RF	RAISED FACE
RFWN	RAISED FACE WELD NECK
RMU	REMOTE MONITORING UNIT
RR	RAILROAD
RS	REGULATOR STATION
R/W	RIGHT-OF-WAY
S.R., SR	STATE ROUTE STATION
STD	STANDARD
SUE	SUBSURFACE UTILITY ENGINEERING
TBS	TOWN BORDER STATION
TEMP	TEMPORARY
THK	THICK
TI	TIE-IN
TW	TEMPERATURE WELL
TS	TEST STATION
TYP.	TYPICAL
V.VERT.	VERTICAL
W/	WITH
WLD	WELD
WT	WALL THICKNESS
WXF	WELD BY FLANGE
WXW	WELD BY WELD

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

ENERGY LAND & INFRASTRUCTURE PLLC
500 GREGGSON DRIVE SUITE 180, NC 27511
NC LICENSE NO. P-1289

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		



COPYRIGHT 2018

**MOYOCK CITY GATE RS UPGRADE
GENERAL NOTES AND ABBREVIATIONS
MOYOCK, NC**

Resource Center NEW BERN

SHEET(S) 02 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	
PNG-G-031-0001078	REVISION D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	

STRUCTURAL NOTES, SPECIFICATIONS, AND DESIGN CRITERIA

DESIGN CRITERIA:

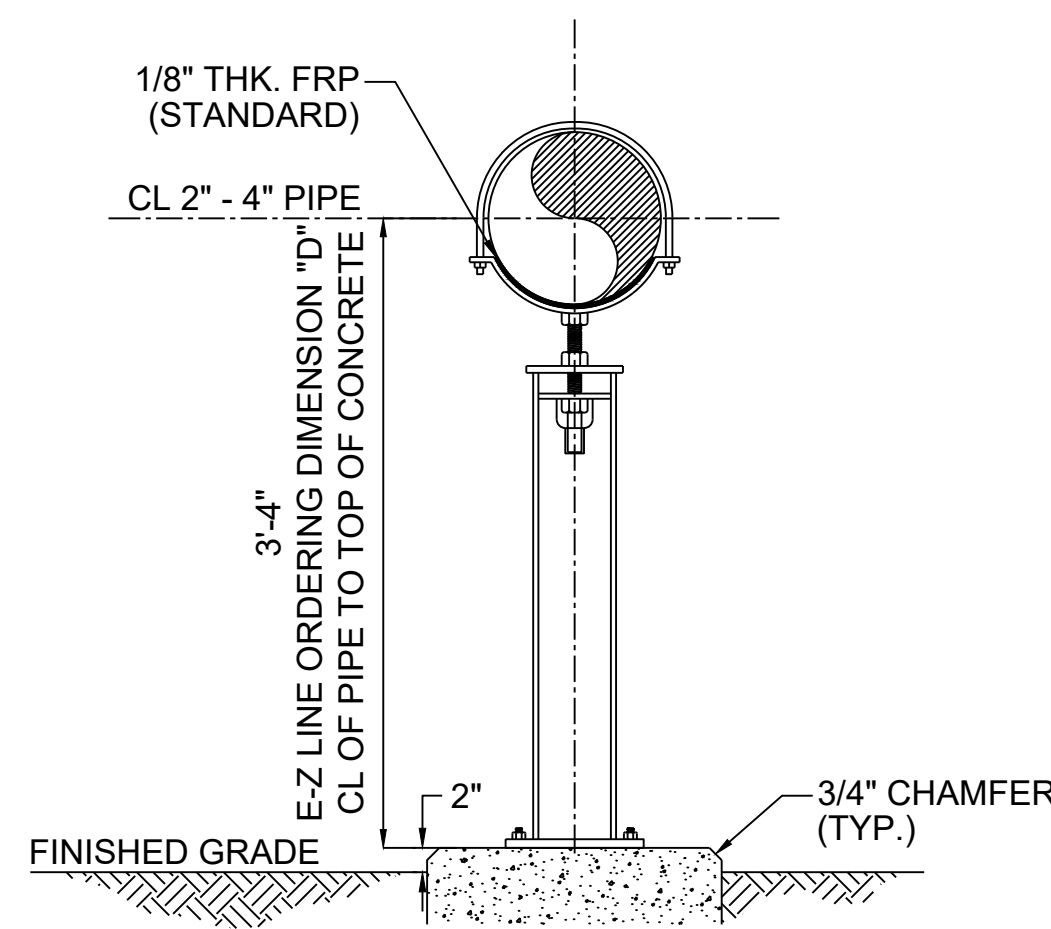
1. GEOTECHNICAL RECOMMENDATIONS
 - 1.A. NET ALLOWABLE BEARING PRESSURE: 2,500 PSF
 - 1.B. MIN. FROST EMBEDMENT: 18 INCHES
 - 1.C. COEFFICIENT OF SLIDING FRICTION: 0
 - 1.D. LATERAL PASSIVE PRESSURE: 130 PSF

CONCRETE NOTES:

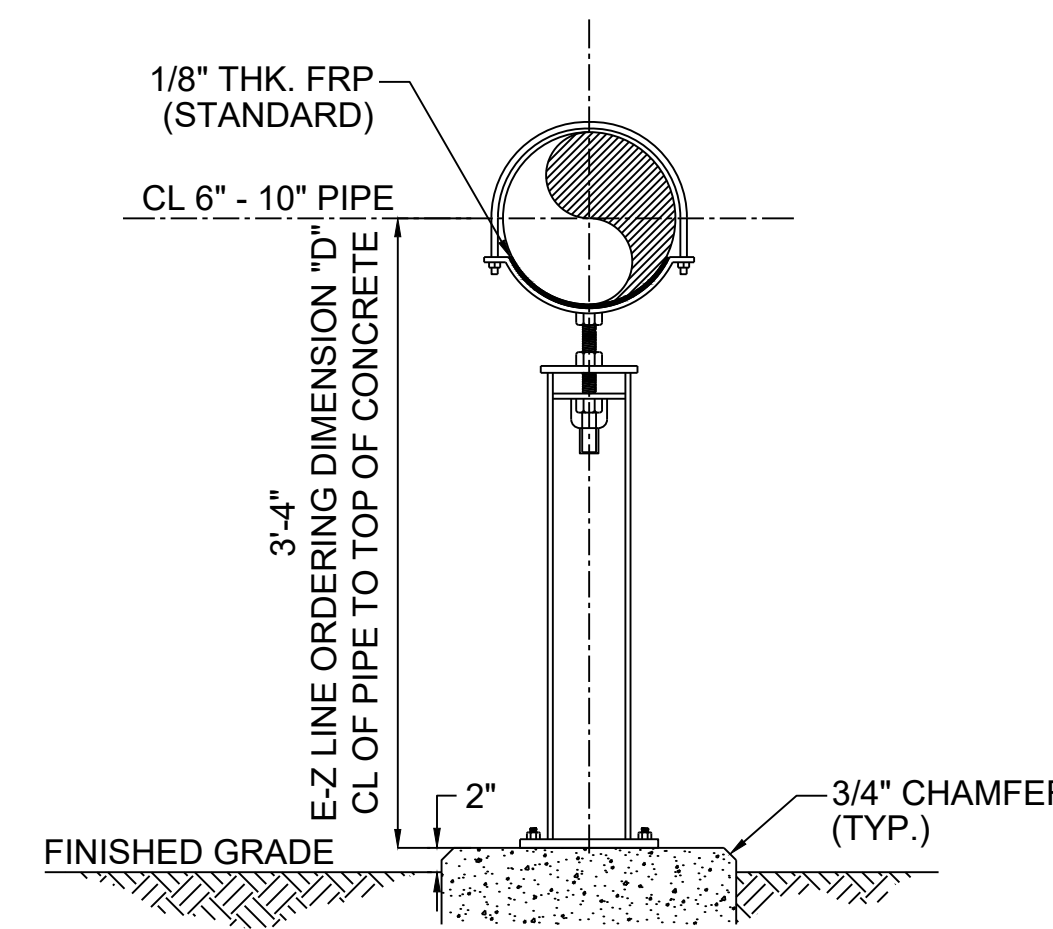
1. ALL DIMENSIONS SHOWN ON FOUNDATION PLAN ARE TO THE CENTERLINE OF FOUNDATION, UNLESS SHOWN OTHERWISE.
2. FOUNDATIONS SHALL BE FOUNDED ON ADEQUATE SOILS. ALL CONCRETE FOUNDATIONS SHALL BEAR ON EXISTING SOIL OR STRUCTURAL FILL COMPACTED TO 95% MODIFIED PROCTOR DENSITY (ASTM D1557). IN THE EVENT UNUSUAL SOIL CONDITIONS SUCH AS SOFT CLAY, LEDGE, OR WATER ARE FOUND, IT SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING.
3. CONCRETE WORK SHALL CONFORM TO THE ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" UNLESS OTHERWISE NOTED.
4. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER AROUND, UNLESS OTHERWISE NOTED.
5. ALL CONCRETE SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI:
 - 5.A. STRENGTH, F'C: 4,500PSI
 - 5.B. CEMENT TYPE: I OR II
 - 5.C. FREEZE THAW EXPOSURE: F2
 - 5.D. SULFATE EXPOSURE: SO
 - 5.E. PERMEABILITY EXPOSURE: PO
 - 5.F. CORROSION EXPOSURE: C1
6. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60 AND SHALL BE PLACED WITH A MINIMUM CONCRETE COVER OF 3" OR AS INDICATED ON DRAWING. REINFORCING SHALL BE TIED AND NOT TACK WELDED TOGETHER.
7. CAST IN PLACE ANCHOR BOLTS SHALL EXTEND 4" (OR AS INDICATED) ABOVE THE TOP OF CONCRETE. GALVANIZING SHALL EXTEND AT LEAST 6" BELOW TOP OF CONCRETE.
8. WATERSTOP: MASTIC EXPANDING WATERSTOP, GREENSTREAK SWELLSTOP, 3/4" X 1", VOLCLAY PR 101, OR EQUAL.

ADHESIVE ANCHOR NOTES:

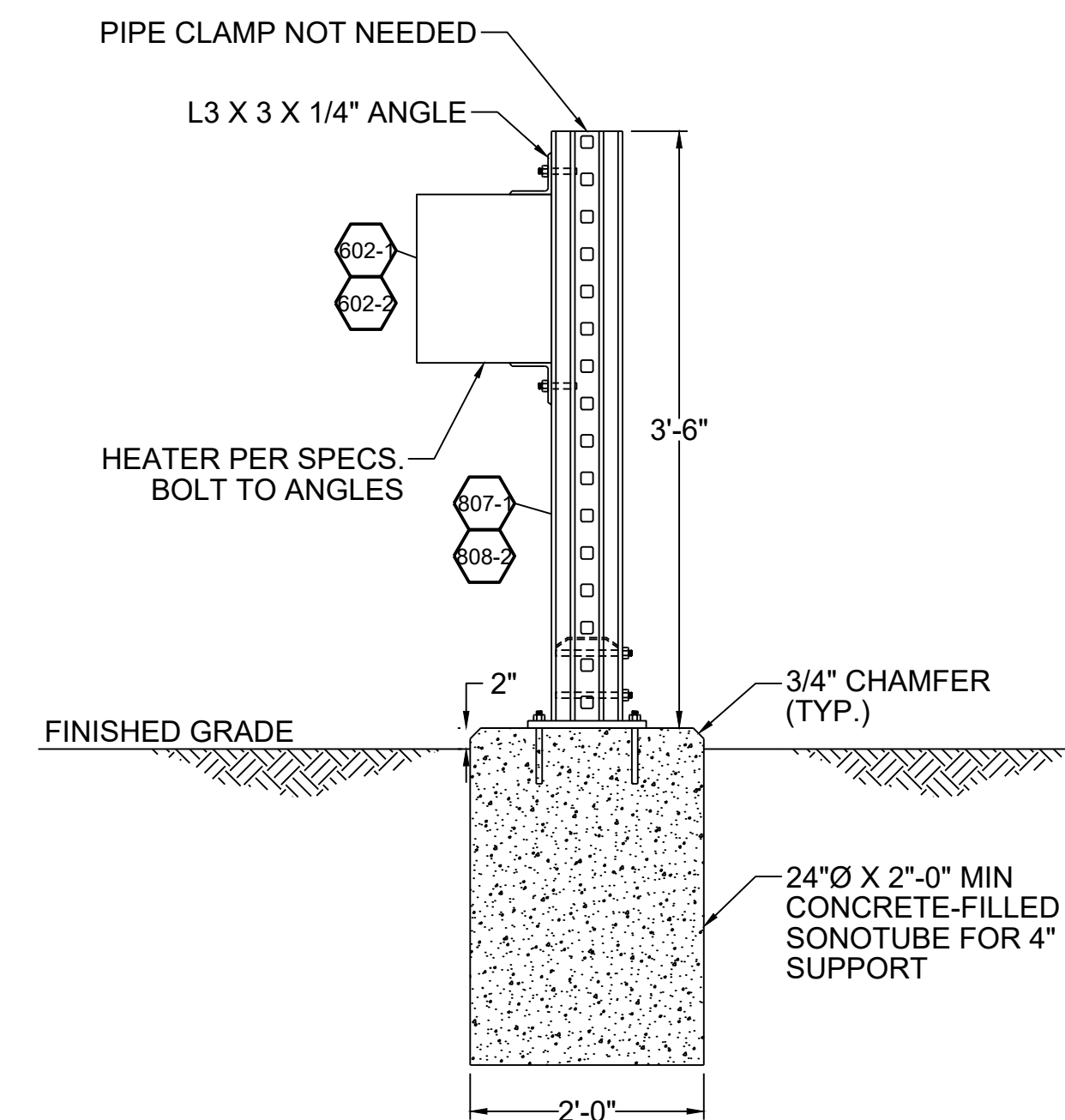
1. THE ADHESIVE ANCHOR SYSTEM USED FOR POST-INSTALLED ANCHORAGE TO CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY PUBLISHED ACI 308.4, ACCEPTANCE CRITERIA FOR QUALIFICATION OF POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE AND COMMENTARY. THE ANCHOR SYSTEM SHALL BE ONE OF THE FOLLOWING:
 - 1.A. SPECIFIED HILTI ANCHORAGE SYSTEM.
 - 1.B. AN APPROVED EQUAL MEETING ACI 308.4 AND THE MINIMUM BOND STRESS VALES BELOW. BULK-MIXED ADHESIVES ARE NOT PERMITTED.
2. THE ADHESIVE ANCHORS SELECTED SHALL BE SUPPLIED AS AN ENTIRE SYSTEM.
3. ANCHORAGE DESIGN IS IN ACCORDANCE WITH APPENDIX D OF ACI 318-08. FOR ADHESIVE ANCHORS, THE FOLLOWING MINIMUM VALUES FOR ADHESIVE ANCHOR ASSEMBLIES:
 - 3.A. CRACKED CONCRETE BOND STRESS: T CR = 723 PSI
 - 3.B. UNCRACKED CONCRETE BOND STRESS: T UNCR = 1170 PSI
4. CONCRETE SHALL BE ALLOWED TO REACH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT THE TIME OF ADHESIVE ANCHOR INSTALLATION.
5. CONCRETE TEMPERATURE AT THE TIME OF ADHESIVE ANCHOR INSTALLATION SHALL BE AT LEAST 50 DEGREES FAHRENHEIT.
6. EMBEDMENT DEPTH AND ANCHOR PROJECTION FROM THE CONCRETE SURFACE SHALL BE AS SHOWN ON THE DRAWING OR DETAIL FOR THE PARTICULAR ANCHOR OR GROUP OF ANCHORS BEING INSTALLED.
7. ADHESIVE ANCHORS SHALL BE INSTALLED BY QUALIFIED PERSONNEL TRAINED TO INSTALL ADHESIVE ANCHORS. ANCHORS SHALL BE INSTALLED IN HOLES DRILLED WITH A ROTARY IMPACT HAMMER DRILL OR ROCK DRILL.
8. ANCHOR HOLES SHALL BE THOROUGHLY CLEANED PRIOR TO ADHESIVE INJECTION, AS REQUIRED BY THE MANUFACTURERS RECOMMENDATIONS.
9. DRILLED AND CLEANED ANCHOR HOLES SHALL BE PROTECTED FROM CONTAMINATION UNTIL THE ADHESIVE IS INSTALLED.
10. INSTALLED ADHESIVE ANCHORS SHALL BE SECURELY FIXED IN-PLACE TO PREVENT DISPLACEMENT WHILE THE ADHESIVE CURES.
11. ANCHORS SHALL HAVE NO VISIBLE INDICATIONS OF DISPLACEMENT OR DAMAGE DURING OR AFTER PROOF LOAD APPLICATIONS. CONCRETE CRACKING IN THE VICINITY OF THE ANCHOR SHALL BE CONSIDERED A FAILURE.



PIPE SUPPORT SECTION VIEW



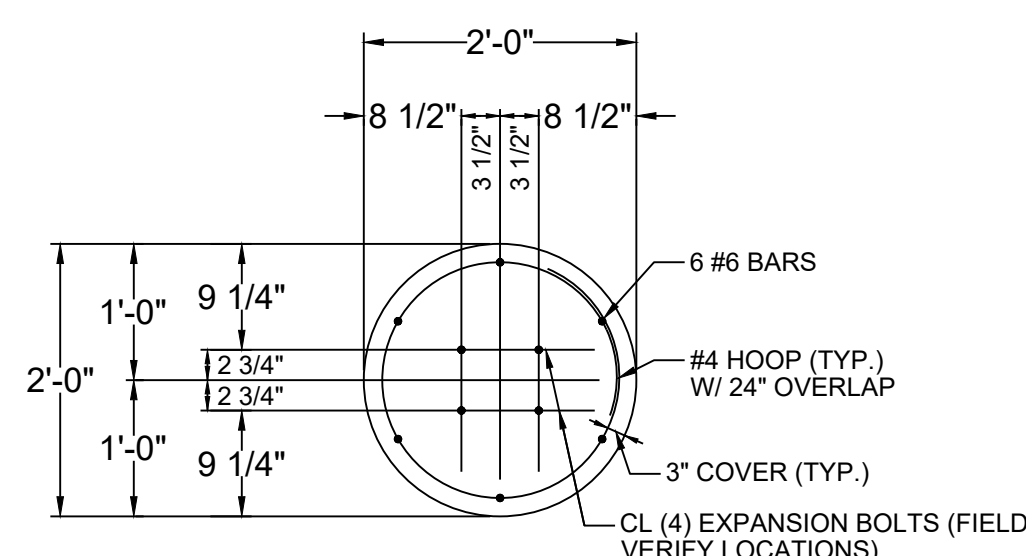
PIPE SUPPORT SECTION VIEW



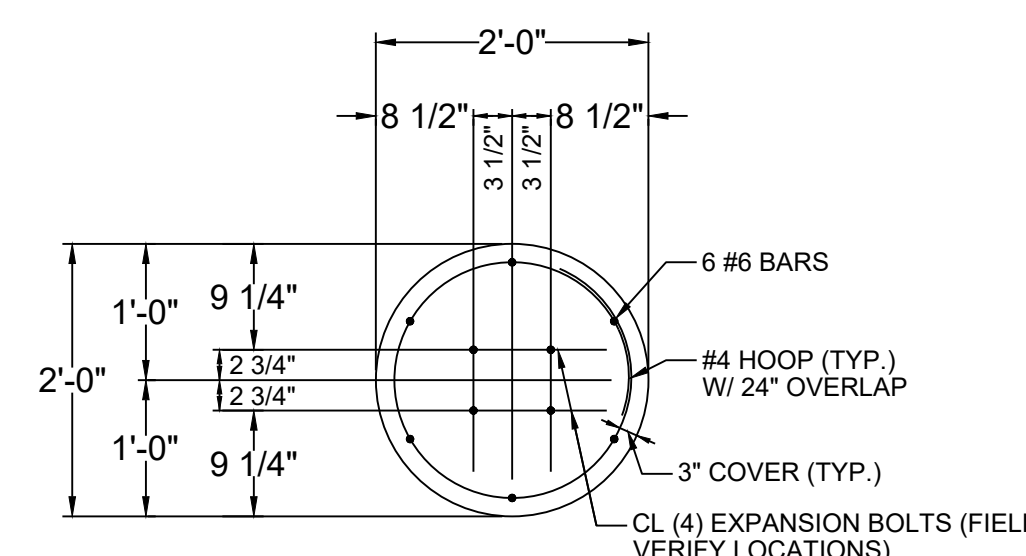
DETAIL

CATALYTIC HEATER SUPPORT W/ 24" Ø SONOTUBE
NOT TO SCALE

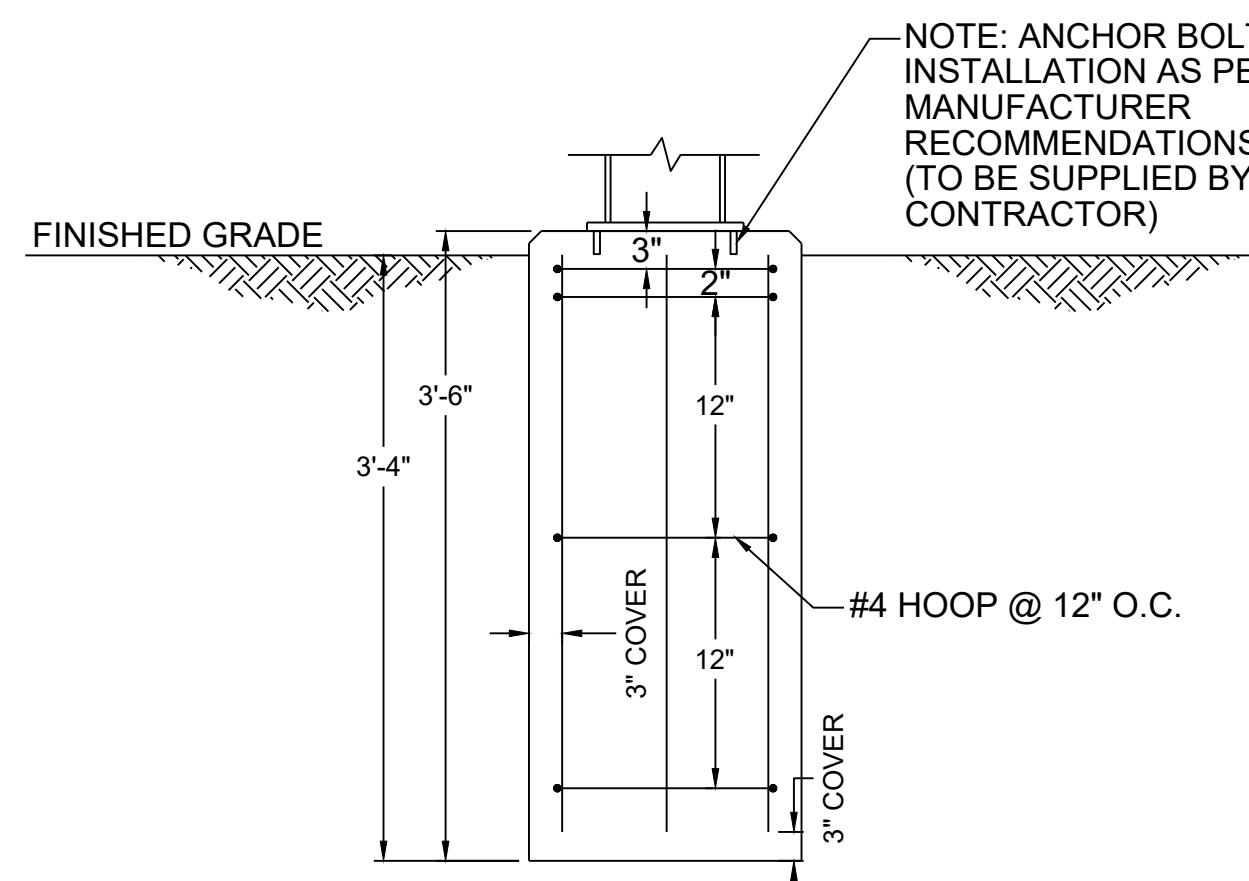
3



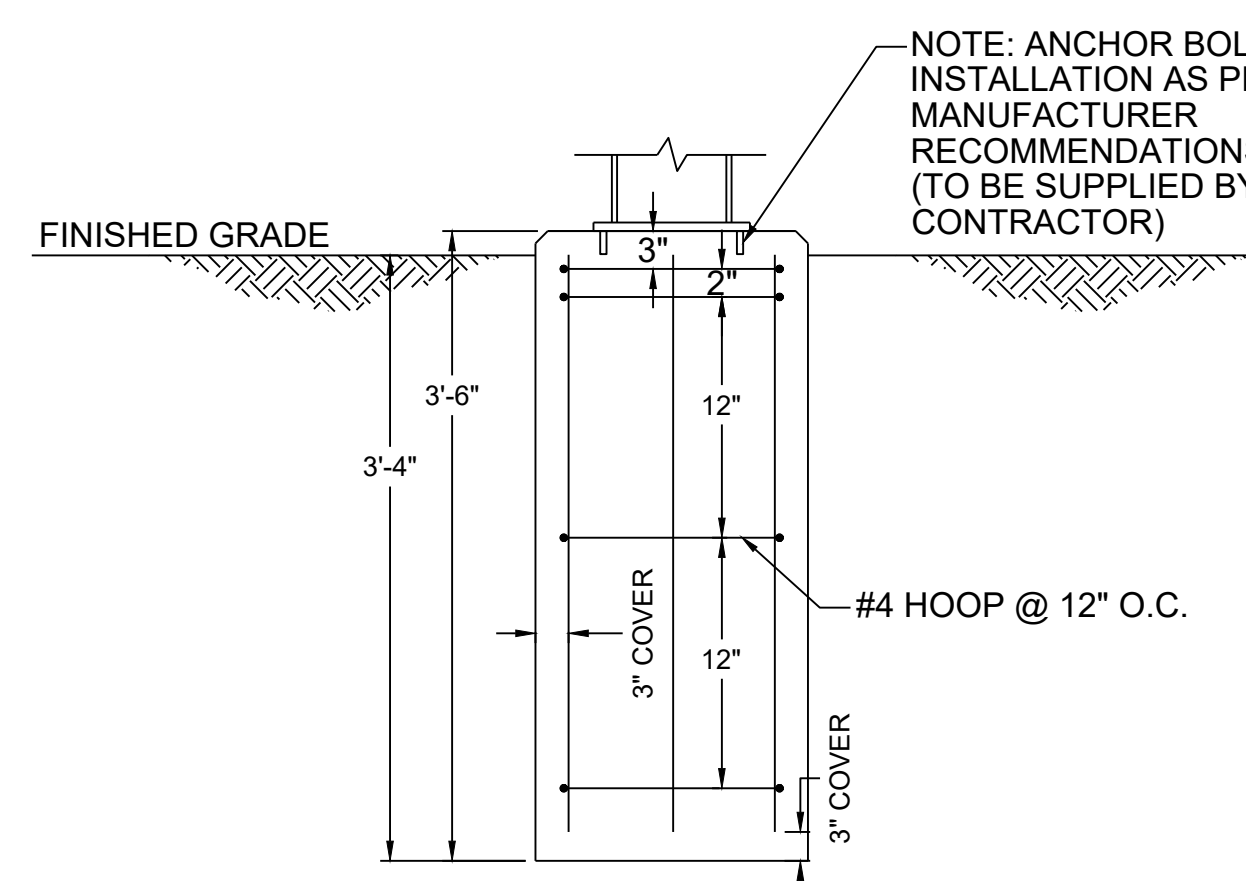
FOUNDATION PLAN VIEW



FOUNDATION PLAN VIEW



FOUNDATION ELEVATION VIEW



FOUNDATION ELEVATION VIEW

NOTE:
PIPE SUPPORT HEIGHT OF 40" UNLESS
OTHERWISE NOTED ON PLANS OR BOM

DETAIL

2" - 4" E-Z LINE PIPE SUPPORT W/ 18" Ø SONOTUBE
NOT TO SCALE

1

NOTE:
PIPE SUPPORT HEIGHT OF 40" UNLESS
OTHERWISE NOTED ON PLANS OR BOM

DETAIL

6" - 10" E-Z LINE PIPE SUPPORT W/ 24" Ø SONOTUBE
NOT TO SCALE

2

PRELIMINARY
PLANS

NOT FOR
CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		

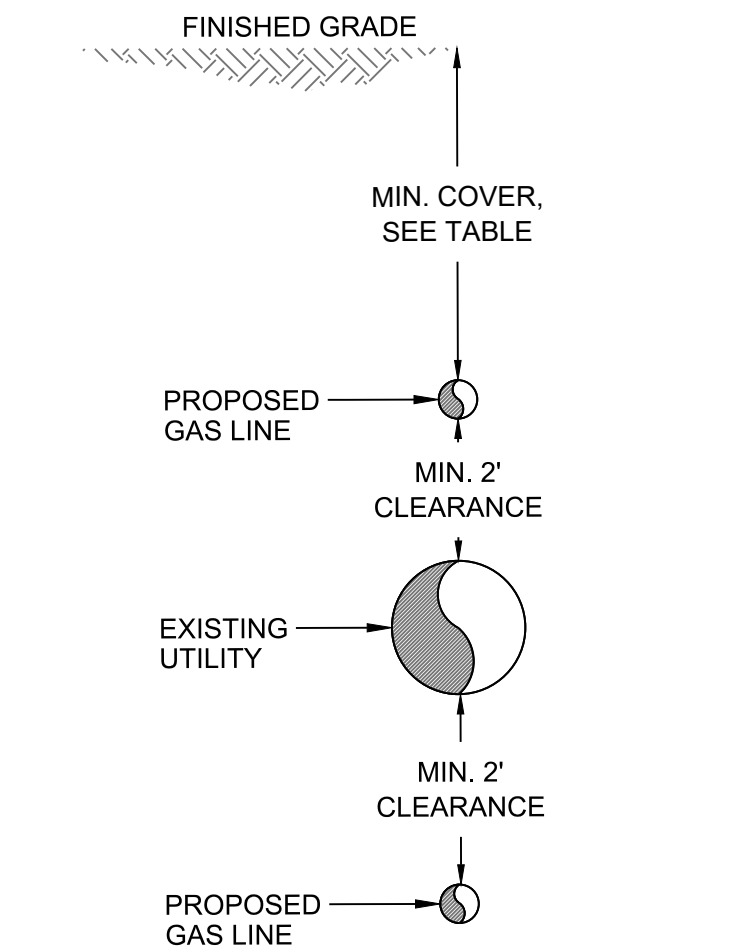


COPYRIGHT 2018

MOYOCK CITY GATE RS UPGRADE
PIPE SUPPORT DETAILS
MOYOCK, NC

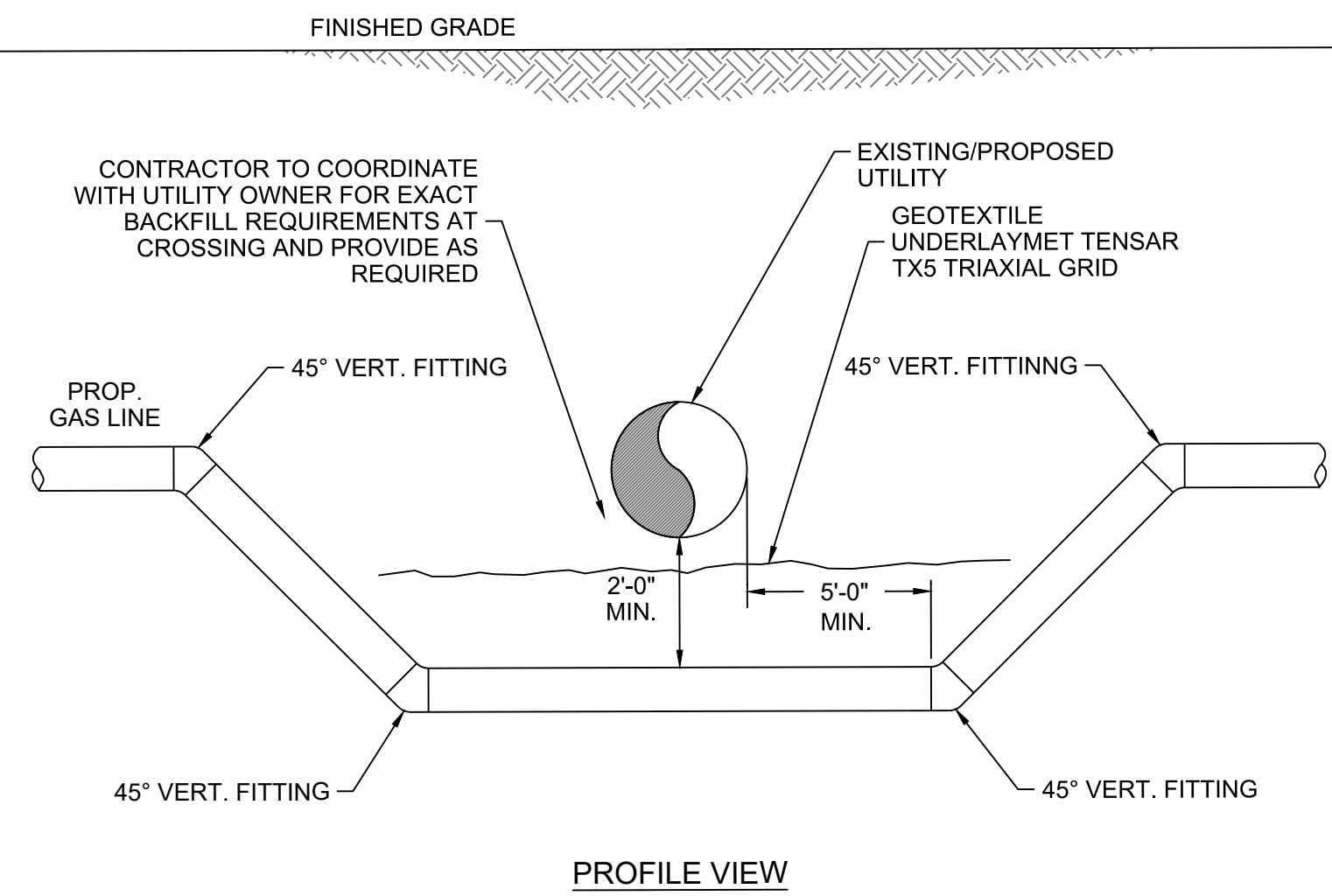
Resource Center NEW BERN

SHEET(S) 03 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-S-031-0001014	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	

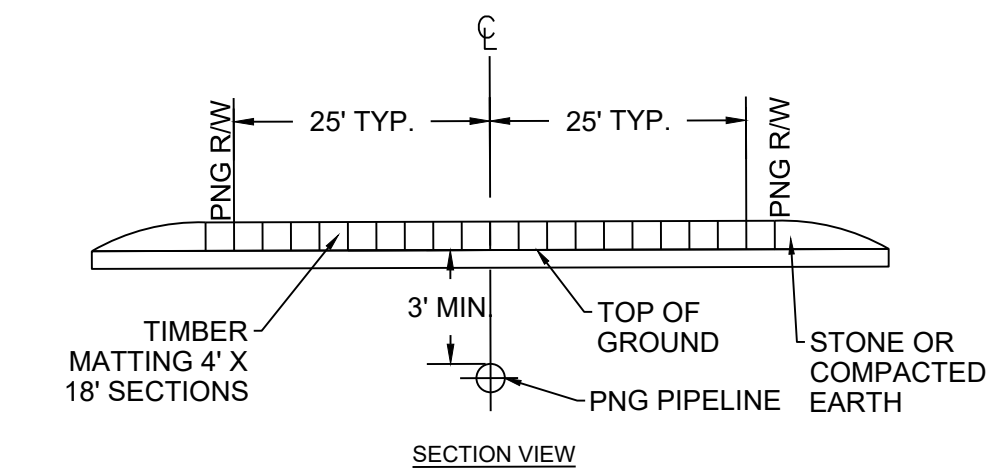
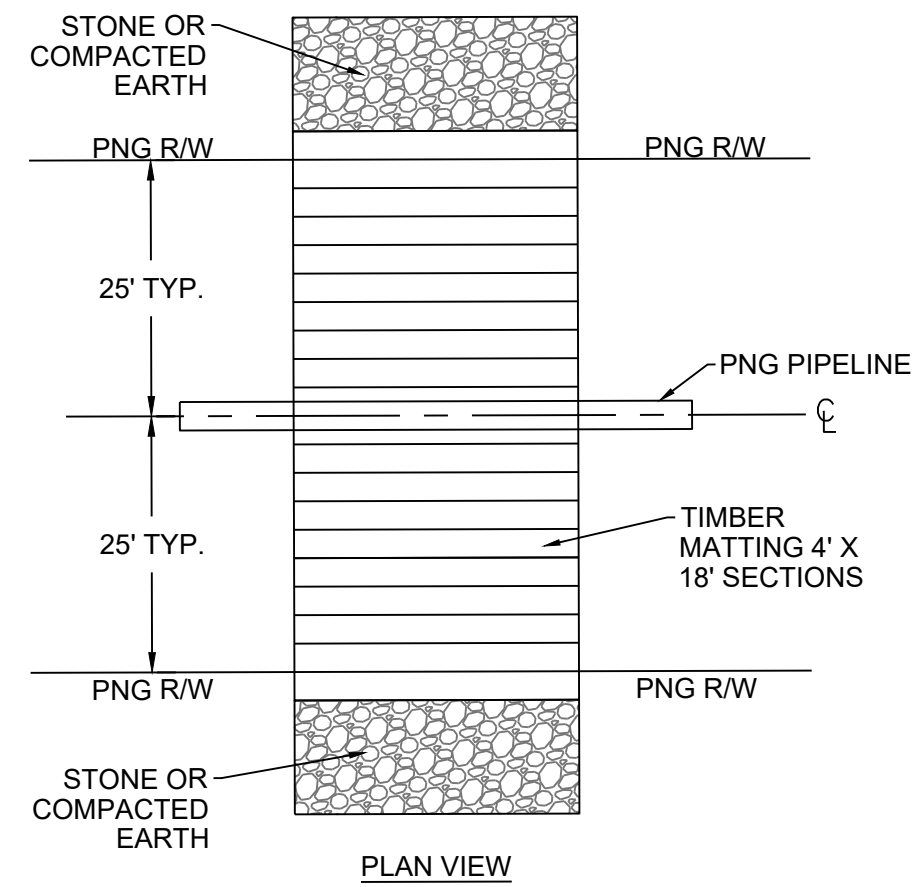


PIPE CLASSIFICATION	MIN. COVER
TRANSMISSION MAIN	3'-6"
DISTRIBUTION MAIN	2'-6"
SERVICE MAIN	1'-6"

DETAIL
PROPOSED GAS LINE OVER OR UNDER EXISTING UTILITY
NOT TO SCALE

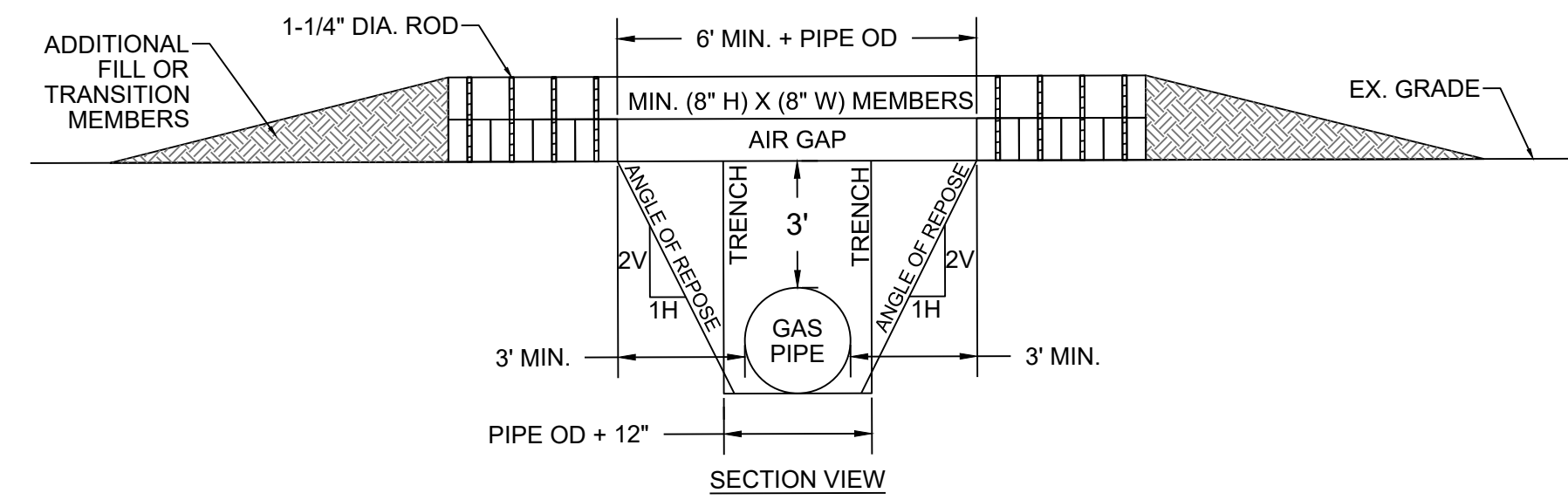
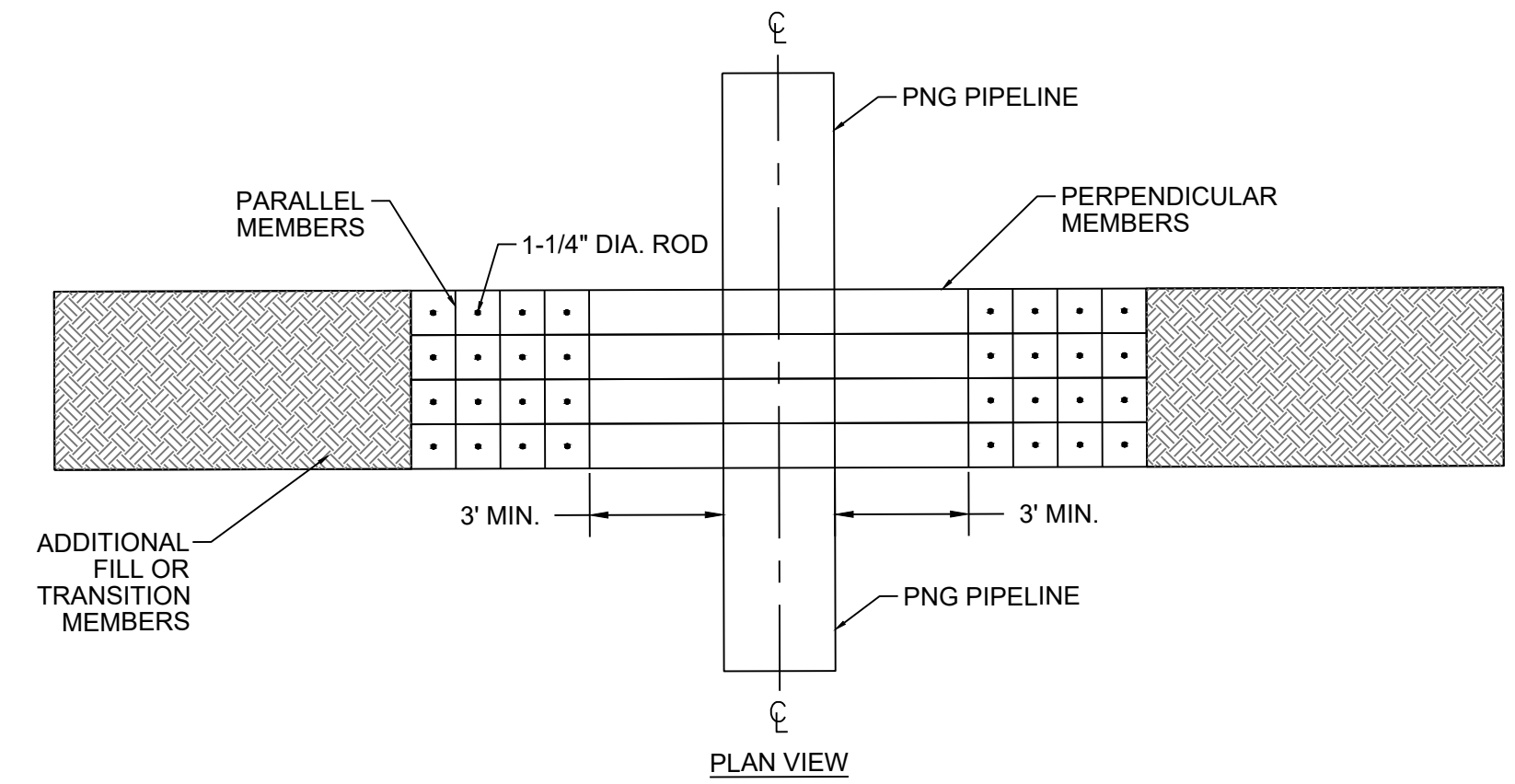


DETAIL
PROPOSED GAS LINE BOX SECTION UNDER EXISTING UTILITY
NOT TO SCALE



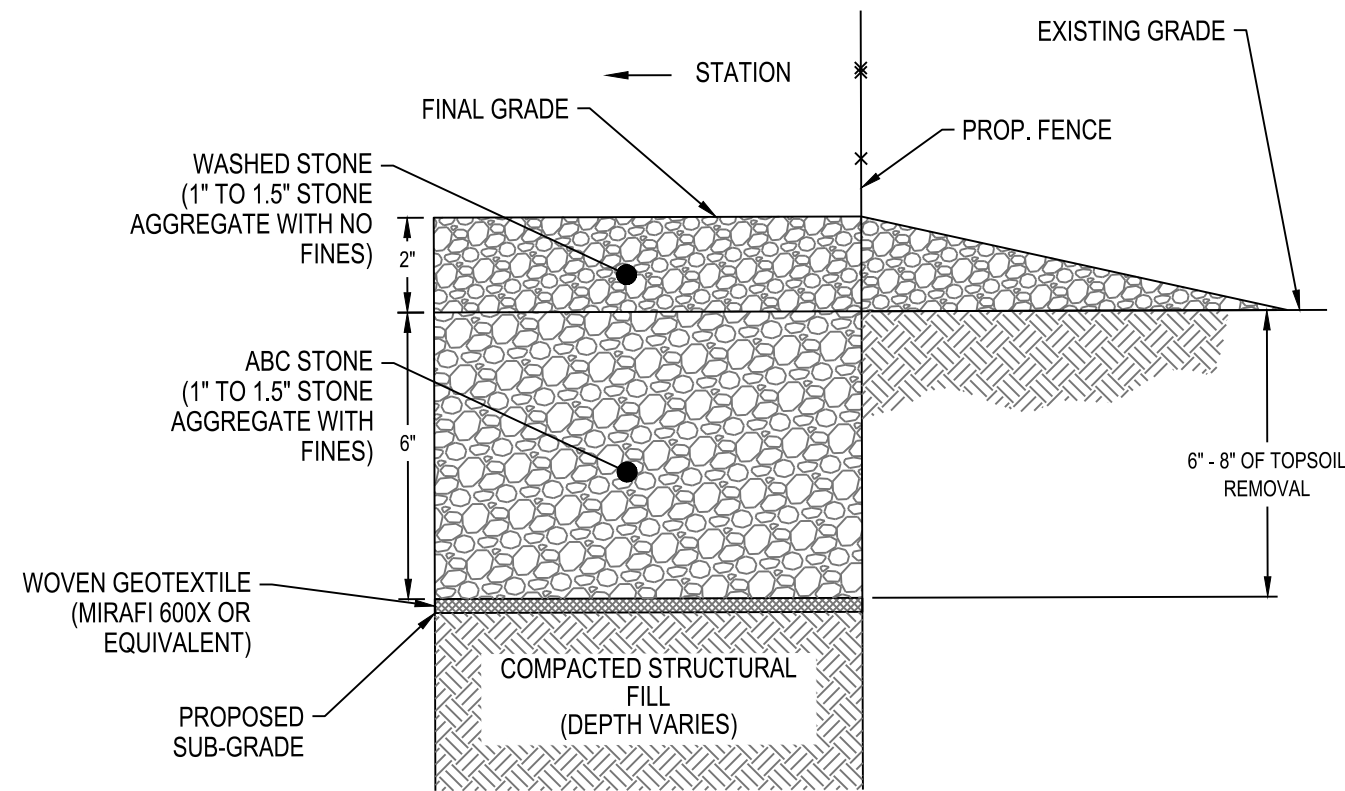
- NOTES:**
1. COMBINED WIDTH OF THE MATS SHALL BE GREATER THAN WIDEST OVERALL AXLE OR TRACK WIDTH.
 2. TIMBER MATS SHALL BE USED AS NEEDED TO PROTECT LIMITS OF PNG R/W.
 3. PIPE ASSUMED TO BE CENTERED IN TYPICAL 50' RIGHT OF WAY WIDTH.
 4. TIMBER MATS SHALL EXTEND BEYOND RIGHT OF WAY LIMITS.

DETAIL
TIMBER MATTING FOR GAS LINE CROSSING
NOT TO SCALE

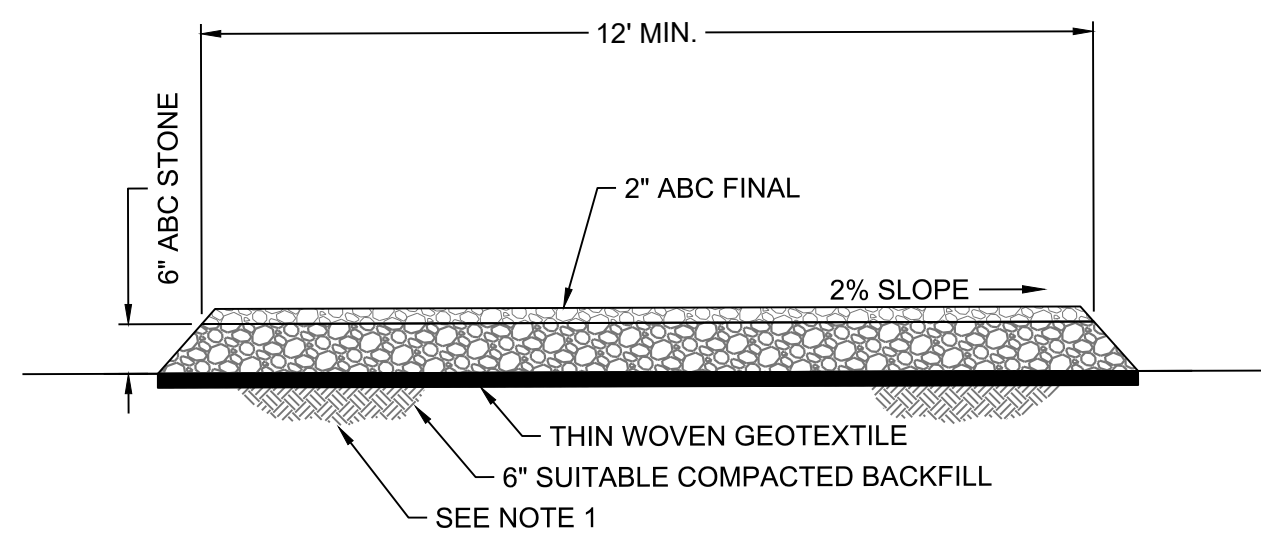


- NOTES:**
1. TIMBERS SHALL BE 8" X 8" MINIMUM.
 2. COMBINED WIDTH OF THE TIMBERS SHALL BE GREATER THAN THE WIDEST OVERALL AXLE OR TRACK WIDTH.
 3. CONTRACTOR IS RESPONSIBLE FOR ENSURING AIR BRIDGE IS CAPABLE OF SUPPORTING THE LARGEST VEHICLE LOAD. A MINIMUM 3' ON EITHER SIDE OF THE OUTSIDE DIAMETER OF THE PIPELINE SHALL BE MAINTAINED FOR THE AIR GAP SPAN.
 4. AIR GAP TO BE HIGH ENOUGH SO THAT ANY DEFLECTION IN THE MEMBERS DUE TO VEHICLE LOAD WILL NOT CONTACT THE GROUND.
 5. PARALLEL MEMBERS SHALL BE BOLTED TO PERPENDICULAR MEMBERS FOR SUPPORT USING COUNTERSUNK 1 1/4" DIAMETER RODS.
 6. THIS DETAIL ASSUMES THE BURIED DEPTH OF PIPE TO BE AT 3 FEET. PIPELINES BURIED DEEPER MAY BE WITHIN THE ANGLE OF REPOSE OF THE SOIL AND REQUIRE ADDITIONAL ANALYSIS.

DETAIL
AIR BRIDGE OVER EXISTING GAS LINE
NOT TO SCALE



DETAIL
TYPICAL STATION
NOT TO SCALE



- NOTES:**
1. CONTRACTOR MAY PLACE THE COMPACTED BACKFILL AND ABC STONE BASE TO SERVE AS AN ACCESS ROAD DURING CONSTRUCTION. FINAL STONE CAP SHALL BE PLACED DURING THE FINAL PHASE OF CONSTRUCTION.

DETAIL
TYPICAL ACCESS ROAD
NOT TO SCALE

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

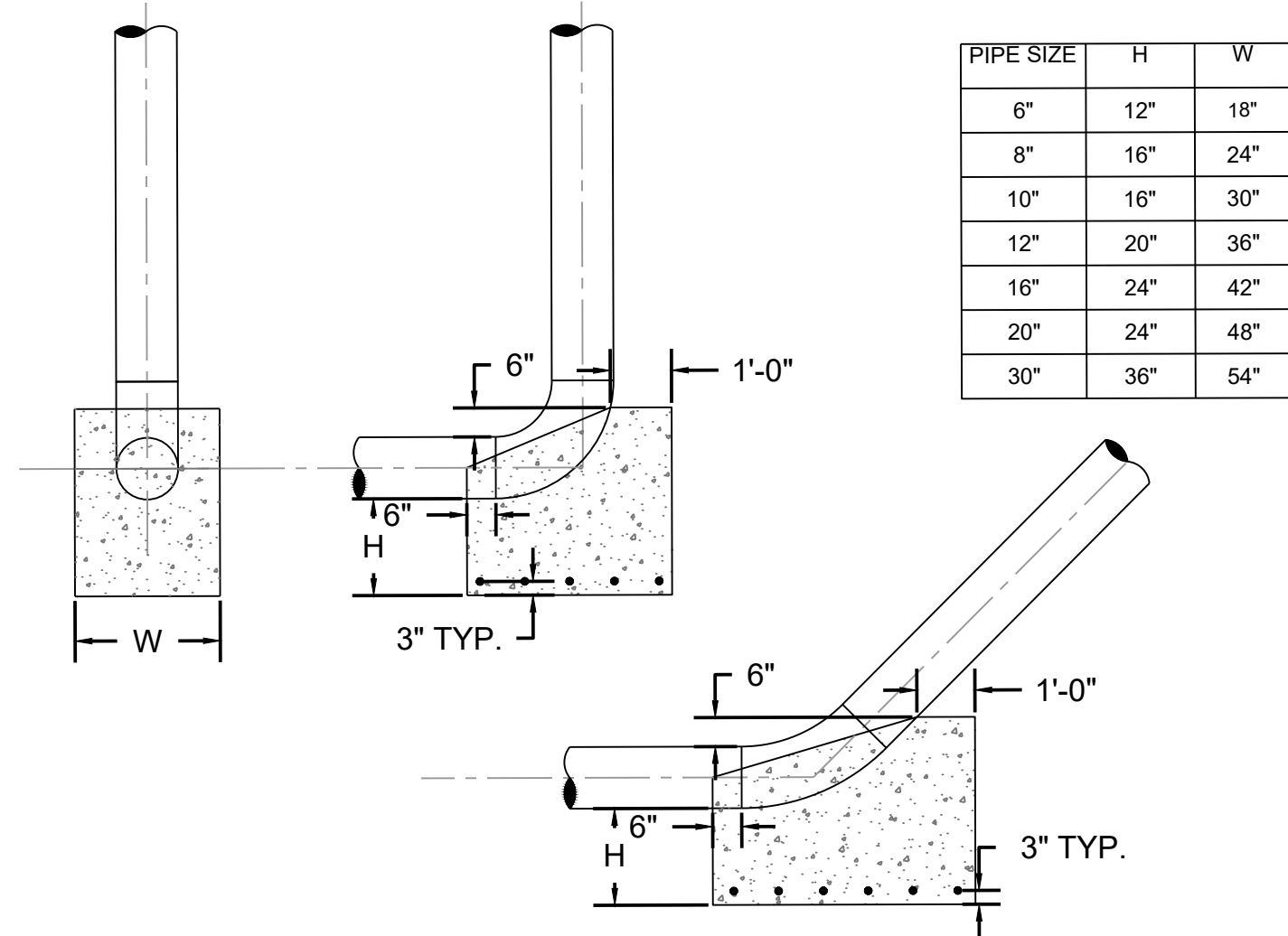
NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		



COPYRIGHT 2018

MOYOCK CITY GATE RS UPGRADE
CIVIL DETAILS
MOYOCK, NC
Resource Center NEW BERN

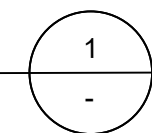
SHEET(S) 04 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-C-031-0001104	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	



- NOTES:
- USE 4x4 W2.1 WELDED WIRE FABRIC FOR REINFORCEMENT. WIRE TO MEET ASTM A82 SPECIFICATIONS.
 - USE FRP SPACER (SIZE VARIES). CONTRACTOR TO SUPPLY APPROPRIATELY SIZED SPACERS.
 - LENGTH OF BURIED PIPE SUPPORT MUST BE AT LEAST EQUAL TO THE WIDTH.

DETAIL

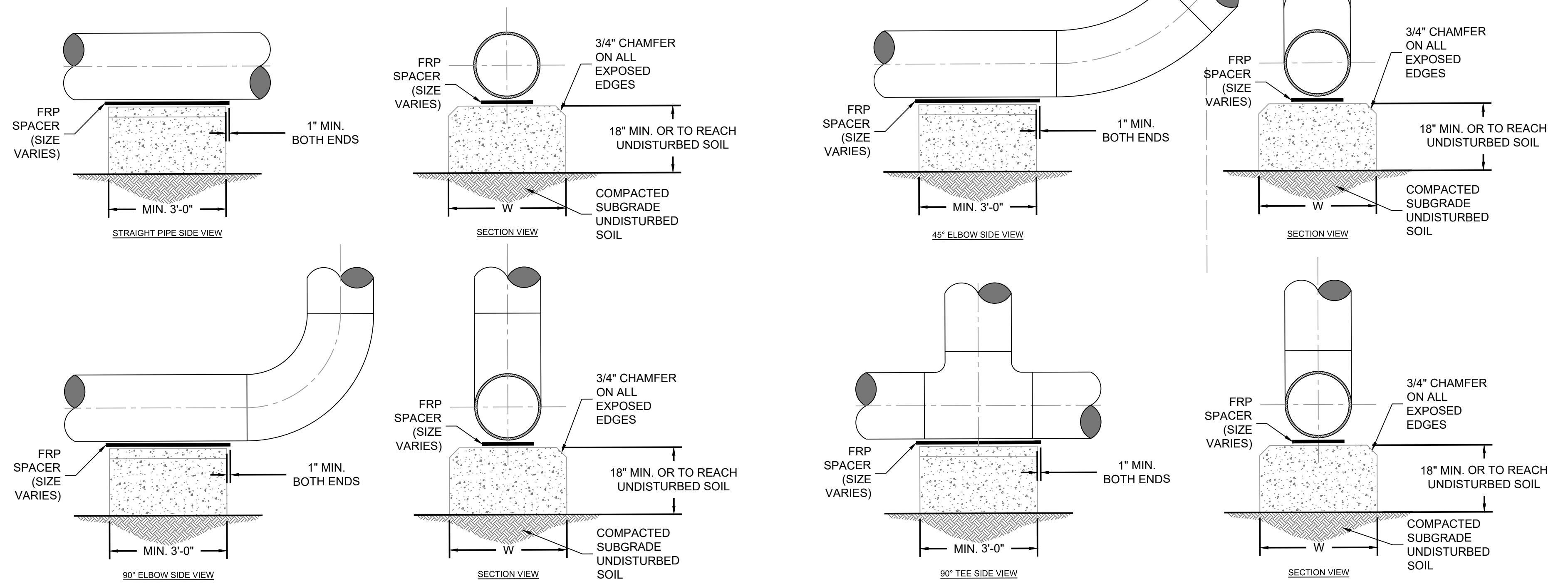
CONCRETE SUPPORT FOR PIGGABLE LINES
NOT TO SCALE



PIPE SIZE	W
2"	12"
4"	18"
6"	20"
8"	24"
10"	26"
12"	30"
16"	40"
20"	44"
24"	48"

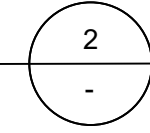
NOTES:

- USE 4x4 W2.1 WELDED WIRE FABRIC FOR REINFORCEMENT. WIRE TO MEET ASTM A82 SPECIFICATIONS. FRP SPACER FOR BEND FITTINGS CAN BE SPECIAL ORDERED FROM GLAS-MESH COMPANY. WHEN ORDERING CONTRACTOR WILL NEED TO SPECIFY LENGTH OF SPACER, PIPE SIZE, AND ELBOW TYPE (I.E. 3R, 5R, LR, ETC.)
- LENGTH OF BURIED PIPE SUPPORT MUST BE AT LEAST EQUAL TO THE WIDTH, BUT CAN VARY AS NECESSARY.



DETAIL

CONCRETE SUPPORT FOR NON-PIGGABLE LINES
NOT TO SCALE



PRELIMINARY PLANS

NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		

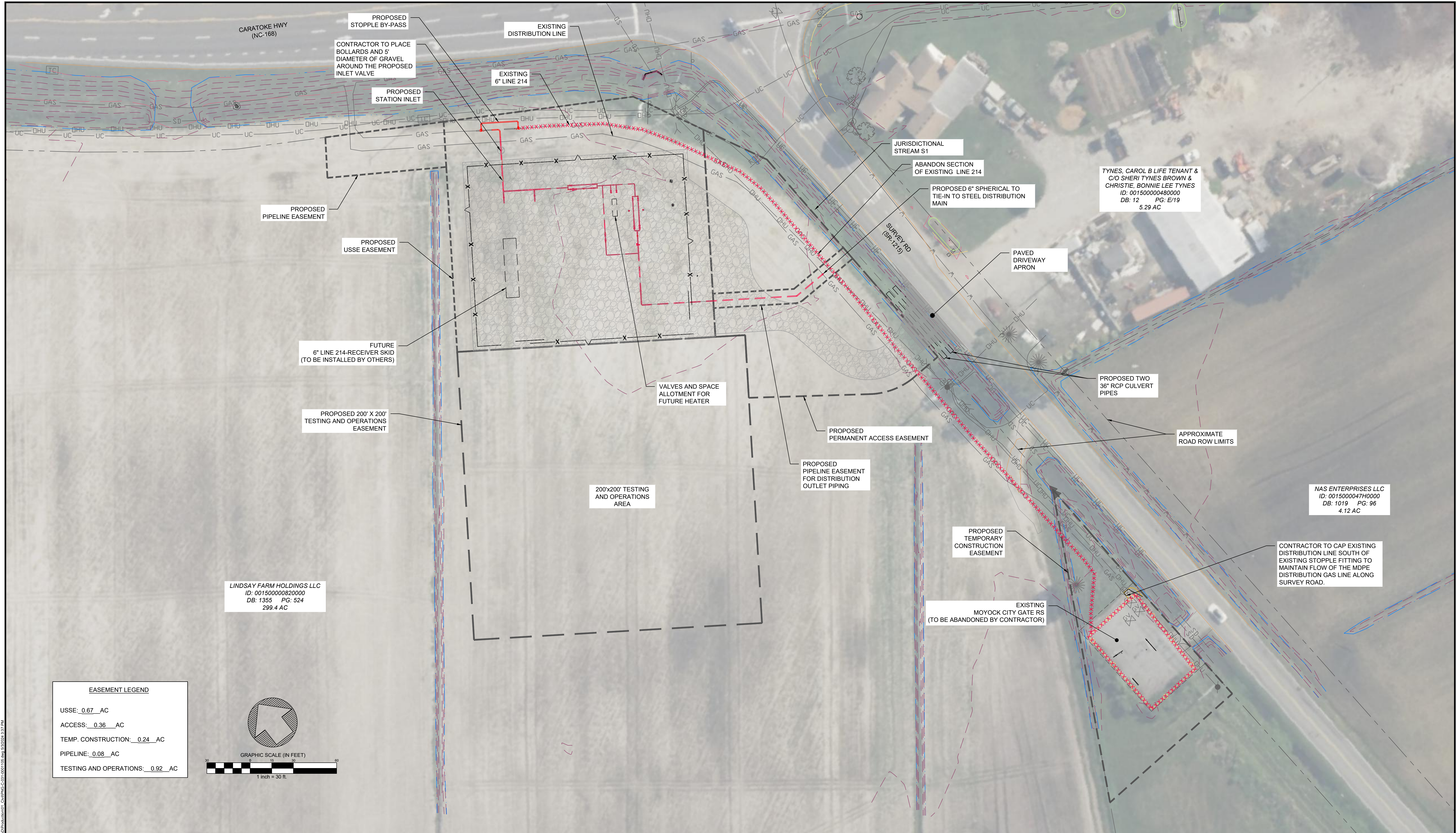


COPYRIGHT 2018

**MOYOCK CITY GATE RS UPGRADE
CONCRETE SUPPORT DETAILS
MOYOCK, NC**

Resource Center NEW BERN

SHEET(S) 05 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-S-031-0001015	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	



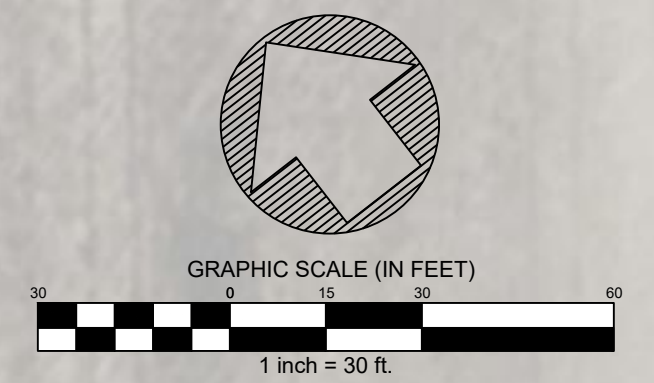
LINDSAY FARM HOLDINGS LLC
 ID: 001500000820000
 DB: 1355 PG: 524
 299.4 AC

TYNES, CAROL B LIFE TENANT &
 C/O SHERI TYNES BROWN &
 CHRISTIE, BONNIE LEE TYNES
 ID: 001500000480000
 DB: 12 PG: E/19
 5.29 AC

NAS ENTERPRISES LLC
 ID: 0015000047H0000
 DB: 1019 PG: 96
 4.12 AC

EASEMENT LEGEND

USSE: 0.67 AC
ACCESS: 0.36 AC
TEMP. CONSTRUCTION: 0.24 AC
PIPELINE: 0.08 AC
TESTING AND OPERATIONS: 0.92 AC



PRELIMINARY PLANS

NOT FOR CONSTRUCTION

*PROPRIETARY & CONFIDENTIAL *ALL RIGHTS RESERVED *DO NOT SCALE THIS DRAWING *USE DIMENSIONS ONLY
 DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

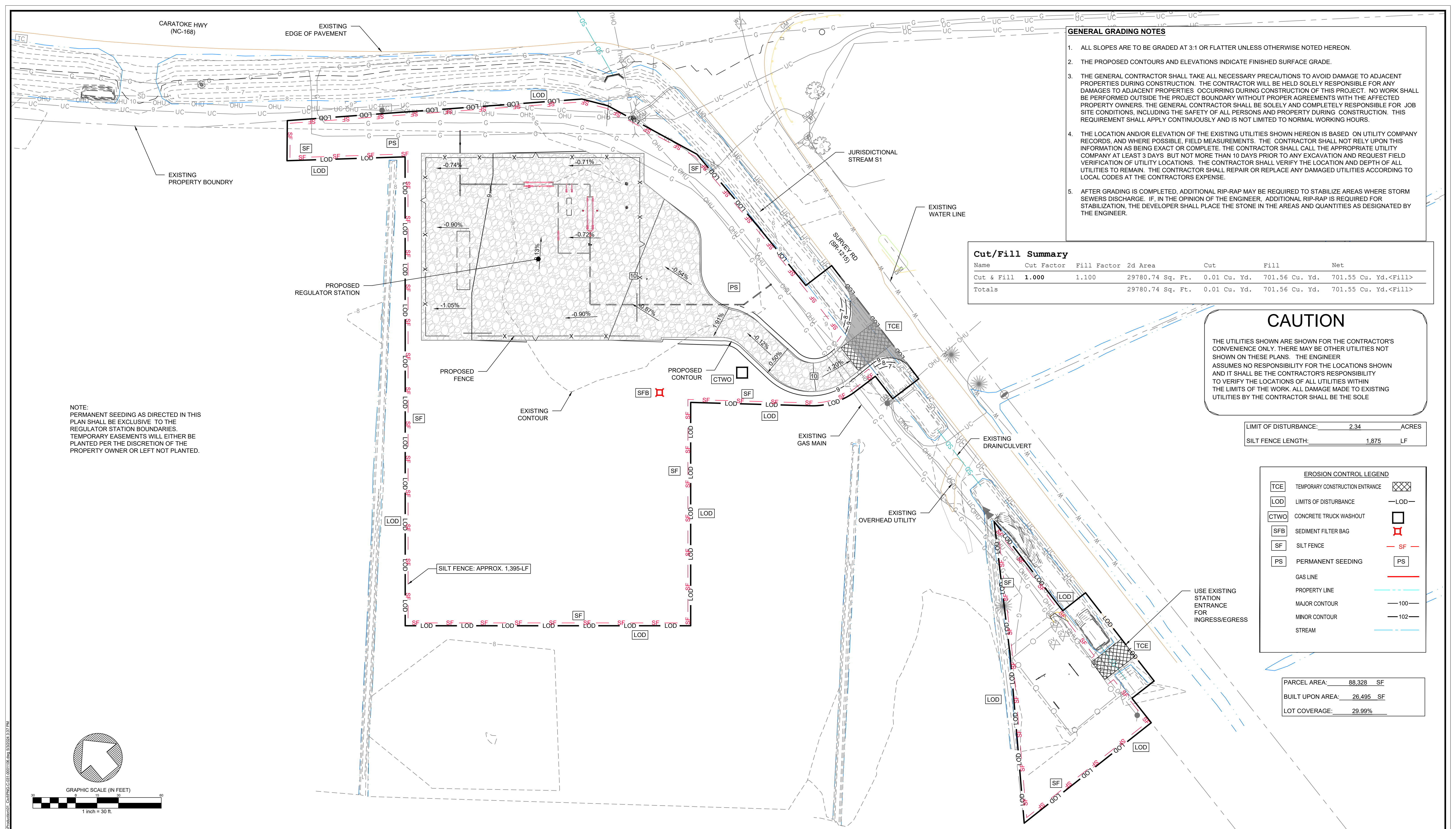
NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		

REF. DWG(S)	PNG-G-031-0001077
SHEET(S) 07 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-C-031-0001105	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	



MOYOCK CITY GATE RS UPGRADE
CIVIL PLAN
MOYOCK, NC
 Resource Center NEW BERN

COPYRIGHT 2018



- GENERAL GRADING NOTES**
- ALL SLOPES ARE TO BE GRADED AT 3:1 OR FLATTER UNLESS OTHERWISE NOTED HEREON.
 - THE PROPOSED CONTOURS AND ELEVATIONS INDICATE FINISHED SURFACE GRADE.
 - THE GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO ADJACENT PROPERTIES DURING CONSTRUCTION. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO ADJACENT PROPERTIES OCCURRING DURING CONSTRUCTION OF THIS PROJECT. NO WORK SHALL BE PERFORMED OUTSIDE THE PROJECT BOUNDARY WITHOUT PROPER AGREEMENTS WITH THE AFFECTED PROPERTY OWNERS. THE GENERAL CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR JOB SITE CONDITIONS, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY DURING CONSTRUCTION. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND IS NOT LIMITED TO NORMAL WORKING HOURS.
 - THE LOCATION AND/OR ELEVATION OF THE EXISTING UTILITIES SHOWN HEREON IS BASED ON UTILITY COMPANY RECORDS, AND WHERE POSSIBLE, FIELD MEASUREMENTS. THE CONTRACTOR SHALL NOT RELY UPON THIS INFORMATION AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 3 DAYS BUT NOT MORE THAN 10 DAYS PRIOR TO ANY EXCAVATION AND REQUEST FIELD VERIFICATION OF UTILITY LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES TO REMAIN. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED UTILITIES ACCORDING TO LOCAL CODES AT THE CONTRACTORS EXPENSE.
 - AFTER GRADING IS COMPLETED, ADDITIONAL RIP-RAP MAY BE REQUIRED TO STABILIZE AREAS WHERE STORM SEWERS DISCHARGE. IF, IN THE OPINION OF THE ENGINEER, ADDITIONAL RIP-RAP IS REQUIRED FOR STABILIZATION, THE DEVELOPER SHALL PLACE THE STONE IN THE AREAS AND QUANTITIES AS DESIGNATED BY THE ENGINEER.

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Cut & Fill	1.000	1.100	29780.74 Sq. Ft.	0.01 Cu. Yd.	701.56 Cu. Yd.	701.55 Cu. Yd.<Fill>
Totals			29780.74 Sq. Ft.	0.01 Cu. Yd.	701.56 Cu. Yd.	701.55 Cu. Yd.<Fill>

CAUTION

THE UTILITIES SHOWN ARE SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF THE WORK. ALL DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE

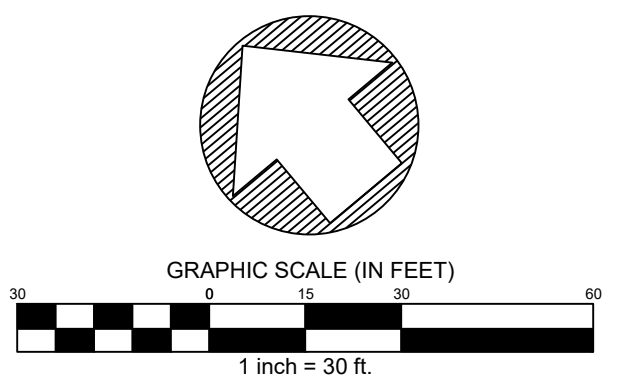
LIMIT OF DISTURBANCE:	2.34	ACRES
SILT FENCE LENGTH:	1,875	LF

EROSION CONTROL LEGEND

TCE	TEMPORARY CONSTRUCTION ENTRANCE	⊗
LOD	LIMITS OF DISTURBANCE	— LOD —
CTWO	CONCRETE TRUCK WASHOUT	□
SFB	SEDIMENT FILTER BAG	⊠
SF	SILT FENCE	— SF —
PS	PERMANENT SEEDING	PS
	GAS LINE	—
	PROPERTY LINE	—
	MAJOR CONTOUR	— 100 —
	MINOR CONTOUR	— 102 —
	STREAM	—

PARCEL AREA:	88,328	SF
BUILT UPON AREA:	26,495	SF
LOT COVERAGE:	29.99%	

NOTE:
PERMANENT SEEDING AS DIRECTED IN THIS PLAN SHALL BE EXCLUSIVE TO THE REGULATOR STATION BOUNDARIES. TEMPORARY EASEMENTS WILL EITHER BE PLANTED PER THE DISCRETION OF THE PROPERTY OWNER OR LEFT NOT PLANTED.



PRELIMINARY PLANS
NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		

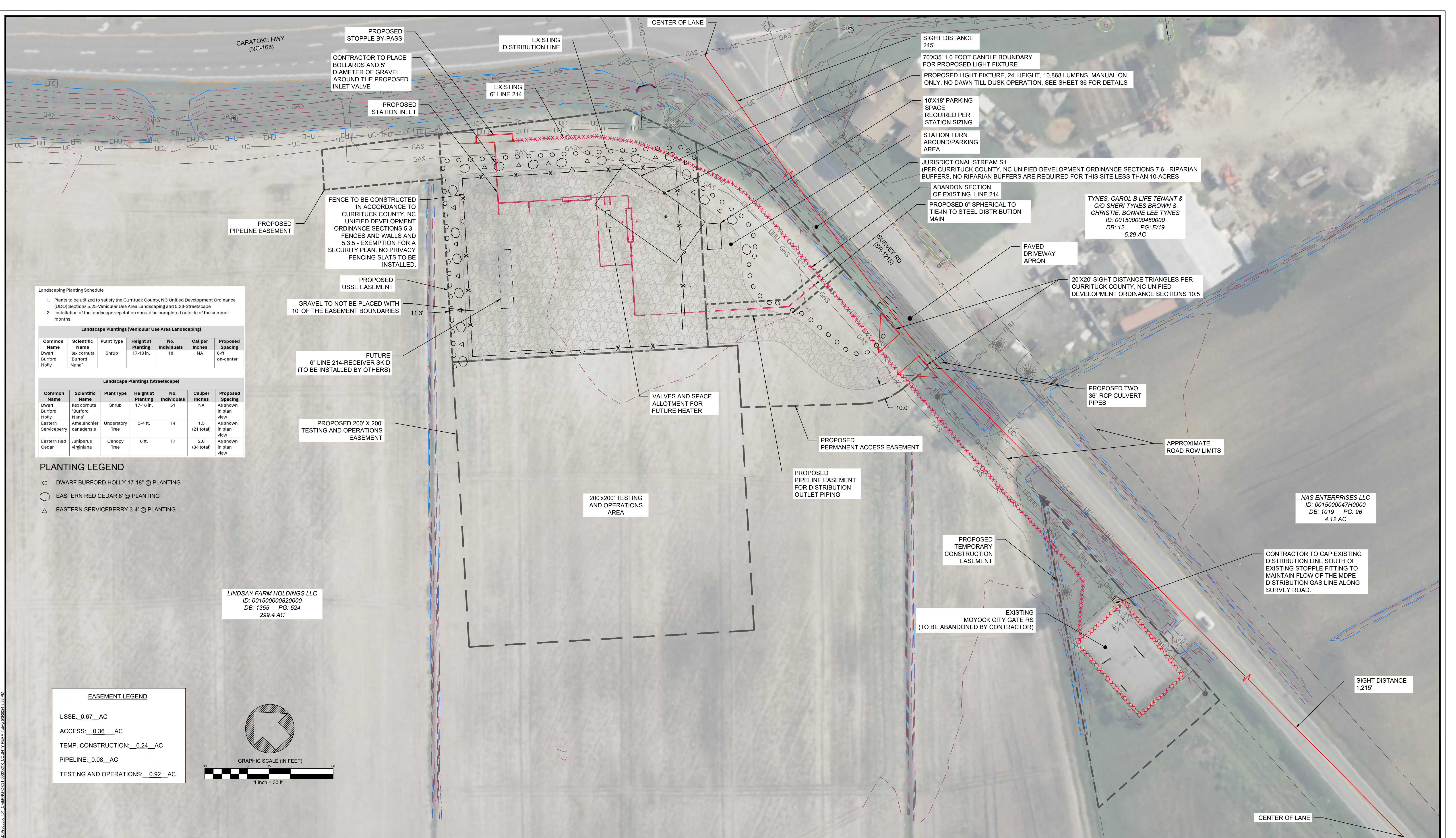


**MOYOCK CITY GATE RS UPGRADE
CIVIL GRADING & ESPC PLAN
MOYOCK, NC**

Resource Center NEW BERN

SHEET(S) 08 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-EX-031-0001106	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	

COPYRIGHT 2018



Landscaping Planting Schedule

- Plants to be utilized to satisfy the Currituck County, NC Unified Development Ordinance (UDO) Sections 5.25-Vehicular Use Area Landscaping and 5.28-Streetscape
- Installation of the landscape vegetation should be completed outside of the summer months.

Landscape Plantings (Vehicular Use Area Landscaping)						
Common Name	Scientific Name	Plant Type	Height at Planting	No. Individuals	Caliper Inches	Proposed Spacing
Dwarf Burford Holly	Ilex cornuta "Burford Nana"	Shrub	17-18 in.	18	NA	8-ft on-center

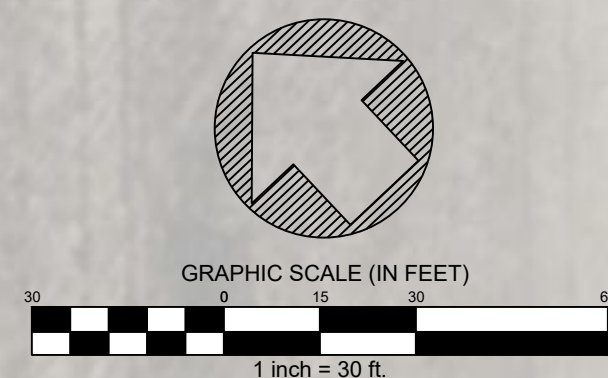
Landscape Plantings (Streetscape)						
Common Name	Scientific Name	Plant Type	Height at Planting	No. Individuals	Caliper Inches	Proposed Spacing
Dwarf Burford Holly	Ilex cornuta "Burford Nana"	Shrub	17-18 in.	51	NA	As shown in plan view
Eastern Serviceberry	Ametanchier canadensis	Understory Tree	3-4 ft.	14	1.5 (21 total)	As shown in plan view
Eastern Red Cedar	Juniperus virginiana	Canopy Tree	8 ft.	17	2.0 (34 total)	As shown in plan view

PLANTING LEGEND

- DWARF BURFORD HOLLY 17-18" @ PLANTING
- EASTERN RED CEDAR 8" @ PLANTING
- △ EASTERN SERVICEBERRY 3-4" @ PLANTING

LINDSAY FARM HOLDINGS LLC
 ID: 001500000820000
 DB: 1355 PG: 524
 299.4 AC

EASEMENT LEGEND	
USSE:	0.67 AC
ACCESS:	0.36 AC
TEMP. CONSTRUCTION:	0.24 AC
PIPELINE:	0.08 AC
TESTING AND OPERATIONS:	0.92 AC



PRELIMINARY PLANS

NOT FOR CONSTRUCTION

*PROPRIETARY & CONFIDENTIAL *ALL RIGHTS RESERVED *DO NOT SCALE THIS DRAWING *USE DIMENSIONS ONLY
 DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		

REF. DWG(S)	PNG-G-031-0001077
SHEET(S)	09 OF 42
DWG DATE	12/13/2022
DRAWING NUMBER	PNG-C-031-000XXXX
REVISION	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	



**MOYOCK CITY GATE RS UPGRADE
 CURRITUCK COUNTY SITE PLAN
 MOYOCK, NC**
 Resource Center NEW BERN

COPYRIGHT 2018

PROJECT DESCRIPTION

THIS EROSION AND SEDIMENTATION CONTROL PLAN IS FOR A PROPOSED PROJECT TO CONSTRUCT A NATURAL GAS PIPELINE IN CURRITUCK COUNTY, NORTH CAROLINA. THE DISTURBED AREA FOR THE PROJECT IS APPROXIMATELY 2.34 ACRES.

SITE DESCRIPTION

THE SITE IS COMPRISED OF EXISTING ROAD RIGHT-OF-WAY, AGRICULTURAL AND INDUSTRIAL ACREAGE.

SCHEDULE

CONSTRUCTION IS SCHEDULED TO BEGIN JULY, 2024 AND BE COMPLETED BY OCTOBER, 2024.

SOILS

THE SOILS IN THE PROJECT AREA INCLUDE:

Ro - ROANOKE FINE SANDY LOAM

PLANNED EROSION AND SEDIMENTATION CONTROL PRACTICES

- GROUND STABILIZATION SHALL BE COMPLETED PER SECTION E: GROUND STABILIZATION ON SHEET 12 IN COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT.
- SILT FENCE SHALL BE INSTALLED AT CRITICAL AREAS AS SPECIFIED BY THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- LIMITS OF DISTURBANCE SHALL BE LIMITED TO THE IMMEDIATE AREA AROUND THE GAS LINE DISTURBANCE SHALL BE MINIMIZED AS MUCH AS POSSIBLE LIMITS OF DISTURBANCE IS SHOWN APPROXIMATELY 15' WIDE.
- INLETS SHOWN ARE REPRESENTATIVE OF THEIR LOCATION ALL INLETS THAT ARE DOWNHILL OF THE PROPOSED GAS LINE TRENCH ARE TO BE PROTECTED EVEN IF NOT SHOWN ON THESE PLANS.

ADDITIONALLY, THE EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT INVOLVE THE STRATEGIC PLACEMENT OF A VARIETY OF DEVICES, INCLUDING:

- SILT FENCE
SILT FENCE RETAINS SEDIMENT FROM SMALL DISTURBED AREAS BY REDUCING THE VELOCITY OF SHEET FLOWS TO ALLOW SEDIMENT DEPOSITION. SILT FENCE IS TO BE PLACED AT THE EDGE OF THE EASEMENTS ALONG THE PROJECT. SILT FENCE IS NOT TO BE PLACED ACROSS STREAMS, DITCHES, WATERWAYS, OR WETLANDS.
- DEWATERING DEVICE/SEDIMENT FILTER BAG
THE DEWATERING DEVICE AND SEDIMENT FILTER BAG ARE USED TO DETAIN SEDIMENT-LADEN RUNOFF TO ALLOW SEDIMENT TO SETTLE OUT OF WATER BEFORE IT IS DISCHARGED. THESE STRUCTURES WILL BE USED TO ALLOW SEDIMENTS TO FILTER OUT OF WATER THAT HAS BEEN PUMPED OUT OF AN AREA OR HAS BEEN USED FOR HYDROSTATIC TESTING. THESE STRUCTURES WILL BE PLACED AS NEEDED AND ARE NOT SHOWN ON THE PLANS. DEWATER DEVICES AND SEDIMENT FILTER BAGS WILL NOT BE PLACED IN A STREAM
- PERMANENT SEEDING
- TEMPORARY CONSTRUCTION ENTRANCE/EXIT
TEMPORARY CONSTRUCTION ENTRANCE/EXIT ALLOWS FOR CONSTRUCTION VEHICLES TO DROP SEDIMENT THAT OTHERWISE WOULD BE TRACKED ON PUBLIC ROADWAYS.

CONSTRUCTION SEQUENCE:

- OBTAIN PLAN APPROVAL AND PERMITS
- HOLD PRE-CONSTRUCTION MEETING AND NOTIFY NCDEQ REGIONAL OFFICE 48 HOURS PRIOR TO CONSTRUCTION. ONLY A DUKE ENERGY/PNG ENVIRONMENTAL REPRESENTATIVE SHALL CONTACT REGULATORY AGENCIES.
- FLAG CONSTRUCTION LIMITS INCLUDING LOD, BUFFERS AND GRADING LIMITS PRIOR TO CLEARING, INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES, CONSTRUCTION OR ANY LAND DISTURBING ACTIVITIES.
- INSTALL EROSION CONTROL MEASURES, INCLUDING SILT FENCE, SEDIMENT TUBE CHECK DAMS, AND CONSTRUCTION ENTRANCES.
- BEGIN CLEARING OF PERMANENT AND TEMPORARY EASEMENTS.
- REPLACE OR INSTALL REMAINING EROSION CONTROL MEASURES.
- BEGIN INSTALLING PIPE.
- COMPLETED AREA SHOULD BE STABILIZED WITHIN THE TIMEFRAME IN THE CHART BELOW.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHOULD BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS OF 1.0 INCH OR GREATER. NEEDED REPAIRS WILL BE MADE IMMEDIATELY.
- ALL DISTURBED AREA SHALL BE STABILIZED WITH SEED AND STRAW.
- UPON ESTABLISHMENT OF FINAL VEGETATIVE GROUND COVER (80% COVERAGE), DUKE ENERGY/PNG ENVIRONMENTAL REPRESENTATIVE WILL CONTACT NCDEQ FOR FINAL SITE INSPECTION. EROSION CONTROL MEASURES NOT TO BE REMOVED UNTIL WRITTEN APPROVAL PROVIDED BY NCDEQ.

EROSION CONTROL DEVICE NOTES

- SEDIMENT FILTER BAG SHOULD BE USED WHEN WATER IS BEING PUMPED FROM THE TRENCH.
- ANY FAILURE OF ANY EROSION CONTROL DEVICE TO FUNCTION AS INTENDED FOR ANY REASON SHALL BE REPORTED TO THE PIEDMONT NATURAL GAS CONTACT IMMEDIATELY.
- ADDITIONAL EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION.
- HYDROSEEDING OR CURLEX (OR APPROVED EQUAL) IS REQUIRED FOR FINAL STABILIZATION ON STEEP SLOPES OVER 15%.

MAINTENANCE

- ALL SEDIMENT AND EROSION CONTROL DEVICES INCLUDING PLANTED AREAS SHALL BE INSPECTED AT LEAST ONCE EVERY CALENDAR WEEK AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN OR EQUAL TO 1.0 INCH PER 24 HOUR PERIOD. DAMAGED OR INEFFECTIVE DEVICES SHALL BE REPAIRED OR REPLACED AS NECESSARY BY THE END OF THE DAY.
- CONSTRUCTION ROADS AND PARKING AREAS SHOULD BE INSPECTED PERIODICALLY FOR THE CONDITION OF SURFACE. TOPDRESS WITH NEW GRAVEL AS NEEDED. CHECK ROAD DITCHES AND OTHER SEEDED AREAS FOR EROSION AND SEDIMENTATION AFTER RUNOFF-PRODUCING RAINS. MAINTAIN ALL VEGETATION IN A HEALTHY, VIGOROUS CONDITION. SEDIMENT-PRODUCING AREAS SHOULD BE TREATED IMMEDIATELY.
- MAINTENANCE ON SEDIMENT TUBES SHALL BE PERFORMED AS NEEDED. CAPTURED SOIL MATERIAL SHALL BE REMOVED WHEN CLOGGING DEVELOPS IN THE SEDIMENT TUBES.
- INSPECT DEWATERING DEVICES AFTER EACH USE AND EACH SIGNIFICANT RAINFALL EVENT AND MAKE NEEDED REPAIRS IMMEDIATELY.
- INSPECT ROLLED EROSION CONTROL PRODUCTS (RECP) AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1.0" OR GREATER) RAINFALL EVENT. MAKE REPAIRS IMMEDIATELY. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED AND EROSION MUST NOT OCCUR BENEATH THE RECP. ANY AREAS OF RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED. IF EROSION OCCURS DUE TO PROPERLY CONTROLLED DRAINAGE THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.
- NO EROSION AND SEDIMENT CONTROL DEVICES SHALL BE REMOVED FROM THE SITE WITHOUT FIRST OBTAINING AUTHORIZATION FROM NCDEQ. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER OF 80% IS ACHIEVED THAT IS UNIFORM AND WILL INHIBIT EROSION.
- NO REFUELING WITHIN 125' OF ENVIRONMENTALLY SENSITIVE AREAS, WATERWAYS OR WETLANDS PER DUKE ENERGY/PNG STANDARD.
- ANT AREA THAT WILL BE DISTURBED MUST HAVE THE TOPSOIL SEGREGATED, TEMPORARY SEEDED, MULCHED, AND SURROUNDED BY EROSION CONTROL DEVICES.

GENERAL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL DEVICES.
- ALL UNDERGROUND UTILITIES SHOULD BE LOCATED AND MARKED IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION.
- DISTURBED AREA SHALL BE STABILIZED AS SOON AS PRACTICALLY POSSIBLE FOR PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THESE AREAS SHALL BE STABILIZED NO LATER THAN 14 DAYS AFTER CONSTRUCTION HAS CEASED.
- GROUND STABILIZATION SHALL BE COMPLETED PER SECTION E: GROUND STABILIZATION ON SHEET 12 IN COMPLIANCE WITH NCG01 CONSTRUCTION GENERAL PERMIT.
- THESE PLANS ARE FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY AND DO NOT APPLY TO CONSTRUCTION PURPOSES.
- CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 24" BETWEEN THE PIPELINE AND ALL EXISTING AND PROPOSED UTILITIES.
- ANY OFF-SITE BORROW AND WASTE REQUIRED FOR THE PROJECT MUST COME FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN, A SITE REGULATED UNDER THE MINING ACT OF 1971, OR A LAND FILL REGULATED BY THE DIVISION OF SOLID WASTE MANAGEMENT.
- TRASH/ DEBRIS FROM DEMOLITION ACTIVITIES MUST BE DISPOSED OF AT A FACILITY REGULATED BY THE DIVISION OF SOLID WASTE MANAGEMENT. ANY WASTE REMOVED FROM THE PROJECT SHALL BE CHARACTERIZED PRIOR TO DISPOSAL TO DETERMINE THE APPROPRIATE HANDLING, SHIPMENT, AND DISPOSAL METHODS.

STANDARDS

ALL EROSION AND SEDIMENT CONTROLS SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) BMP HANDBOOK, LATEST EDITION.

THE PERSON TO CONTACT SHOULD ANY FIELD RELATED EROSION AND SEDIMENT CONTROL ISSUES ARISE DURING LAND-DISTURBING ACTIVITY:

LINDSAY ROTH
EMAIL: LINDSAY.ROTH@DUKE-ENERGY.COM
PH: (561) 603-5027

THE PERSON TO CONTACT FOR NOTIFICATIONS, SITE VISITS, ISSUES, SPILLS, SITE WALKS, AND/OR PERMIT CLOSURES WITH NCDEQ:

ISSAC HINSON
EMAIL: ISSAC.HINSON@DUKE-ENERGY.COM
PH: (704) 785-5378

EROSION CONTROL LEGEND		
TCE	TEMPORARY CONSTRUCTION ENTRANCE	
LOD	LIMITS OF DISTURBANCE	— LOD —
CTWO	CONCRETE TRUCK WASHOUT	
SFB	SEDIMENT FILTER BAG	
SF	SILT FENCE	— SF —
PS	PERMANENT SEEDING	
	GAS LINE	
	PROPERTY LINE	
	MAJOR CONTOUR	— 100 —
	MINOR CONTOUR	— 102 —
	STREAM	

ALL EROSION AND SEDIMENT CONTROLS SHALL BE IN ACCORDANCE WITH THE NPDES STORMWATER DISCHARGE PERMIT FOR CONSTRUCTION ACTIVITIES AND THE NCDHEC BMP HANDBOOK.

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

ENERGY LAND & INFRASTRUCTURE PLLC
500 GREGGSON DRIVE SUITE 180, NC 27511
NC LICENSE NO. P-1289

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	APPROVALS			
							DATE	INITIALS	REGIONAL ENGINEER	
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910			
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567			
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671			
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM			
						STATION ID	7435			
						CHECKER INITIALS	DMC			



COPYRIGHT 2018

MOYOCK CITY GATE RS UPGRADE
EPSC NOTES
MOYOCK, NC

Resource Center NEW BERN

SHEET(S)	10 OF 42	DWG SCALE	NOT TO SCALE
DWG DATE	12/13/2022	SUPERSEDED	—
DRAWING NUMBER		REVISION	
PNG-C-031-0001107		D	
DISCIPLINE / RESOURCE CENTER / LINE NUMBER			

GENERAL SEEDING REQUIREMENTS FOR UPLAND AREAS

PERMANENT UPLAND SEEDING SPECIFICATIONS

LOCATION	SEED MIX	APPLICATION TYPE AND RATE (LBS/ACRE)	FLEXIBLE GROWTH MEDIUM (IF USED)	MULCH OR FLEXIBLE GROWTH MEDIUM (FGM) APPLICATION RATE	NOTES
LAWNS (RESIDENTIAL, COMMERCIAL, INDUSTRIAL)	PENNINGTON™ LAWNS SIGNATURE SERIES TALL FESCUE: 33% REBEL IV TALL FESCUE 34% JUSTICE TALL FESCUE 33% RK4 TALL FESCUE	BROADCAST: 200 LBS/ACRE DRILLED: 100 LBS/ACRE	PROFILE PRODUCTS™ PROMATRIX (OPTIONAL)	MULCH: 4,000 LBS/ACRE FGM: 2,000 LBS/ACRE	APPLY MULCH BY ROVING, NETTING, OR MECHANICAL CRIMPING AT 400 GAL/ACRE. SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING FGM OR MULCH.
PASTURES	APPROVED EQUIVALENT FOR UPLAND AREAS	BROADCAST: 50 LBS/ACRE DRILLED: 25 LBS/ACRE	PROFILE PRODUCTS™ PROMATRIX (OPTIONAL)	MULCH: 4,000 LBS/ACRE FGM: 2,000 LBS/ACRE	USE SPECIFIED SEED MIX UNLESS LAND OWNER SPECIFICALLY REQUESTS A DIFFERENT SEED MIX. APPLY MULCH BY ROVING, NETTING, OR MECHANICAL CRIMPING AT 400 GAL/ACRE. SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING FGM OR MULCH.
CULTIVATED AGRICULTURAL FIELDS	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	ACTIVELY CULTIVATED FIELDS TYPICALLY DO NOT REQUIRE SEED, MULCH, OR SOIL AMENDMENTS UNLESS SPECIFICALLY REQUESTED BY LAND OWNER. SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING FGM.
REMAINDER OF ROW WITH SLOPES <10%	APPROVED EQUIVALENT FOR UPLAND AREAS	BROADCAST: 200 LBS/ACRE DRILLED: 100 LBS/ACRE	PROFILE PRODUCTS™ PROMATRIX (OPTIONAL)	MULCH: 4,000 LBS/ACRE FGM: 2,000 LBS/ACRE	APPLY MULCH BY ROVING, NETTING, OR MECHANICAL CRIMPING AT 400 GAL/ACRE. SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING FGM OR MULCH.
REMAINDER OF ROW WITH SLOPES >10% BUT < 25%	APPROVED EQUIVALENT FOR UPLAND AREAS	BROADCAST: 200 LBS/ACRE DRILLED: 100 LBS/ACRE	PROFILE PRODUCTS™ PROMATRIX (OPTIONAL)	FGM: 3,000 LBS/ACRE	SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING FGM.
REMAINDER OF ROW WITH SLOPES >25%	APPROVED EQUIVALENT FOR UPLAND AREAS	BROADCAST: 80 LBS/ACRE DRILLED: 40 LBS/ACRE	PROFILE PRODUCTS™ PROMATRIX (OPTIONAL)	FGM: 3,500 LBS/ACRE	SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING FGM.

GROUND STABILIZATION SHALL BE PERFORMED PER "STABILIZATION TIME FRAMES" CHART OR AS OTHERWISE SPECIFIED FOR SAFETY REASONS.

IF PIPELINE INSTALLATION REQUIRES WELDING, MULCH WILL NOT BE APPLIED IN ANY AREA WHERE WELDING ACTIVITIES ARE TO OCCUR. ONCE WELDING ACTIVITIES HAVE BEEN COMPLETED, MULCH SHALL BE APPLIED TO SUCH AREAS.

SOIL AMENDMENTS (PERMANENT UPLAND SEEDING)			STABILIZATION TIME FRAMES (EFFECTIVE AUG. 3, 2011)		
NOTE	AMENDMENT	APPLICATION RATE (LBS/ACRE)	SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR AT A MINIMUM APPLY LIME AND FERTILIZER AT THE SPECIFIED RATE.	GROUND AGRICULTURAL LIMESTONE	4,000	PERIMETER DIKES, SWALES, DITCHES, SLOPES	7 DAYS	NONE
	10-10-10 FERTILIZER	1,200	HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
	MAINTENANCE		SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.			SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
			ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES

DEFINITION
CONTROLLING RUNOFF AND EROSION ON DISTURBED UPLAND AREAS BY ESTABLISHING PERENNIAL VEGETATIVE COVER. DUE TO STEEP SLOPES PRESENT ON THE PROJECT, A HYDRAULICALLY APPLIED FLEXIBLE GROWTH MEDIUM (FGM) WILL BE REQUIRED TO ESTABLISH PERMANENT VEGETATION ON SLOPES >10%. OTHER AREAS CAN BE SEEDBED AND MULCHED CONVENTIONALLY OR BY USING HYDRAULIC SEEDING PROCEDURES.

PURPOSE
TO REDUCE EROSION AND DECREASE SEDIMENT YIELD FROM DISTURBED AREAS, AND TO PERMANENTLY STABILIZE SUCH AREAS IN A MANNER THAT IS ECONOMICAL, ADAPTS TO SITE CONDITIONS, AND ALLOWS SELECTION OF THE MOST APPROPRIATE PLANT MATERIALS.

SEEDBED REQUIREMENTS
ESTABLISHMENT OF VEGETATION SHOULD NOT BE ATTEMPTED ON SITES THAT ARE UNSUITABLE DUE TO EXCESSIVE SOIL COMPACTION, INAPPROPRIATE SOIL TEXTURE, POOR DRAINAGE, CONCENTRATED OVERLAND FLOW, OR STEEPNESS OF SLOPE UNTIL MEASURES HAVE BEEN TAKEN TO CORRECT THESE PROBLEMS.

TO MAINTAIN A GOOD STAND OF VEGETATION, THE SOIL MUST MEET CERTAIN MINIMUM REQUIREMENTS AS A GROWTH MEDIUM. THE EXISTING SOIL SHOULD HAVE THESE CRITERIA:

- ENOUGH FINE-GRAINED (SILT AND CLAY) MATERIAL TO MAINTAIN ADEQUATE MOISTURE AND NUTRIENT SUPPLY (AVAILABLE WATER CAPACITY OF AT LEAST .05 -INCHES OF WATER TO 1-INCH OF SOIL.
- SUFFICIENT PORE SPACE TO PERMIT ROOT PENETRATION.
- SUFFICIENT DEPTH OF SOIL TO PROVIDE AN ADEQUATE ROOT ZONE. THE DEPTH TO ROCK OR IMPERMEABLE LAYERS SUCH AS HARDPANS SHOULD BE 12-INCHES OR MORE, EXCEPT ON SLOPES STEEPER THAN 2:1 WHERE THE ADDITION OF SOIL IS NOT FEASIBLE.
- A FAVORABLE PH RANGE FOR PLANT GROWTH, USUALLY 6.0 - 6.5.
- FREE FROM LARGE ROOTS, BRANCHES, STONES, LARGE CLOUDS OF EARTH, OR TRASH OF ANY KIND. CLOUDS AND STONES MAY BE LEFT ON SLOPES STEEPER THAN 3:1 IF THEY ARE TO BE HYDRO SEEDED.

IF ANY OF THE ABOVE CRITERIA ARE NOT MET, IE: IF EXISTING SOIL IS TOO COARSE, DENSE, SHALLOW OR ACIDIC TO FOSTER VEGETATION, SPECIAL AMENDMENTS ARE REQUIRED. THE SOIL CONDITIONS DESCRIBED BELOW MAY BE BENEFICIAL OR, PREFERABLY, TOPSOIL MAY BE APPLIED.

SEEDBED PREPARATION
INSTALL NECESSARY MECHANICAL EROSION AND SEDIMENTATION CONTROL PRACTICES BEFORE SEEDING, AND COMPLETE GRADING ACCORDING TO THE APPROVED PLAN. LIME AND FERTILIZER NEEDS SHOULD BE DETERMINED BY SOIL TEST, DIRECTIONS, SAMPLE CARTRONS, AND INFORMATION SHEETS ARE AVAILABLE THROUGH COUNTY AGRICULTURAL EXTENSION OFFICES. TESTING IS ALSO DONE BY COMMERCIAL LABORATORIES.

WHEN SOIL TEST RESULTS ARE NOT AVAILABLE, FOLLOW RATES SUGGESTED IN THE SEEDING SPECIFICATIONS TABLES.

APPLY LIME AND FERTILIZER EVENLY AND INCORPORATE INTO THE TOP 4-6-INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. OPERATE MACHINERY ON THE CONTOUR, WHEN USING A HYDRO SEEDER, APPLY LIME AND FERTILIZER TO A ROUGH, LOOSE SURFACE.

ROUGHEN SURFACES PRIOR TO SEEDING.

COMPLETE SEEDBED PREPARATION BY BREAKING UP LARGE CLOUDS AND RAKING INTO A SMOOTH, UNIFORM SURFACE (SLOPES LESS THAN 3:1). FILL IN OR LEVEL DEPRESSIONS THAT CAN COLLECT WATER. BROADCAST SEED INTO A FRESHLY LOOSENEED SEEDBED THAT HAS NOT BEEN SEALED BY RAINFALL.

SEEDING
USE CERTIFIED SEED FOR PERMANENT SEEDING WHENEVER POSSIBLE.

LABELING OF NON-CERTIFIED SEED IS ALSO REQUIRED BY LAW. LABELS CONTAIN IMPORTANT INFORMATION ON SEED PURITY, GERMINATION, AND PRESENCE OF WOOD SEEDS. SEEDS MUST MEET STATE STANDARDS FOR CONTENT OF NOXIOUS WEEDS. DO NOT ACCEPT SEED CONTAINING "PROHIBITED" NOXIOUS WEED SEED.

INOCULATE LEGUME SEED WITH THE RHIZOBIUM BACTERIA APPROPRIATE TO THE SPECIES OF LEGUME.

APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DROP-TYPE SPREADER, DRILL, CULTIPACKER SEEDER, OR HYDRO SEEDER ON A FIRM, FRIABLE SEEDBED.

WHEN USING A DRILL OR CULTIPACKER SEEDER, PLANT SMALL GRAINS NO MORE THE 1-INCH DEEP. GRASSES AND LEGUMES NO MORE THAN 1/2-INCH. EQUIPMENT SHOULD BE CALIBRATED IN THE FIELD FOR DESIRED SEEDING RATE.

WHEN USING BROADCAST-SEEDING METHODS, SUBDIVIDE THE AREA INTO WORKABLE SECTIONS AND DETERMINE THE AMOUNT OF SEED NEEDED FOR EACH SECTION. APPLY 1/2 THE SEED WHILE MOVING BACK AND FORTH ACROSS THE AREA, MAKING A UNIFORM PATTERN; THEN APPLY THE SECOND HALF IN THE SAME WAY, BUT MOVING AT RIGHT ANGLES TO THE FIRST PASS.

MULCH ALL PLANTING IMMEDIATELY AFTER SEEDING WHEN USING A DRILL OR BROADCAST SPREADER.

HYDRAULIC SEEDING
SURFACE ROUGHENING IS PARTICULARLY IMPORTANT WHEN HYDRAULICALLY SEEDING, AS A ROUGHENED SLOPE WILL PROVIDE SOME NATURAL COVERAGE FOR LIME, FERTILIZER, FLEXIBLE GROWTH MEDIUM (FGM) AND SEED. THE SURFACE SHOULD NOT BE COMPACTED OR SMOOTH. FINE SEEDBED PREPARATION IS NOT NECESSARY FOR HYDRAULIC SEEDING OPERATIONS; SOIL CLOUDS, STONES, AND IRREGULARITIES PROVIDE CAVITIES IN WHICH SEEDS CAN LODGE.

RATE OF FGM APPLICATION SHOULD VARY BY TYPE AND SHOULD ADHERE TO SEEDING SPECIFICATIONS TABLE.

IF A MACHINERY BREAKDOWN OF 1/2 TO 2 HOURS OCCURS, ADD 50% MORE SEED TO THE TANK, BASED ON THE PROPORTION OF THE SLURRY REMAINING. THIS SHOULD COMPENSATE FOR DAMAGE TO SEED. BEYOND 2 HOURS, A FULL RATE OF NEW SEED MAY BE NECESSARY.

LIME IS NOT NORMALLY APPLIED WITH A HYDRAULIC SEEDER BECAUSE IT IS ABRASIVE. IT CAN BE BLOWN OR BROADCAST ONTO STEEP SLOPES IN DRY FORM.

MAINTENANCE
GENERALLY, A STAND OF VEGETATION CANNOT BE DETERMINED TO BE FULLY ESTABLISHED UNTIL SOIL COVER HAS BEEN MAINTAINED FOR ONE FULL YEAR FROM PLANTING. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RESEEDINGS WITHIN THE SAME SEASON, IF POSSIBLE.

RE-SEEDING - IF A STAND HAS INADEQUATE COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER. RE-ESTABLISH THE STAND AFTER SEEDBED PREPARATION OR OVER-SEED THE STAND. CONSIDER SEEDING TEMPORARY, ANNUAL SPECIES IF THE TIME OF YEAR IS NOT APPROPRIATE FOR PERMANENT SEEDING.

IF VEGETATION FAILS TO GROW, SOIL MUST BE TESTED TO DETERMINE IF ACIDITY OR NUTRIENT IMBALANCE IS RESPONSIBLE.

FERTILIZATION - ON THE TYPICAL DISTURBED SITE, FULL ESTABLISHMENT USUALLY REQUIRES RE-FERTILIZATION IN THE SECOND GROWING SEASON. FINE TURF REQUIRES ANNUAL MAINTENANCE FERTILIZATION. USE SOIL TESTS IF POSSIBLE OR FOLLOW THE GUIDELINES GIVEN FOR THE SPECIFIC SEEDING MIXTURE.

SEEDING SPECIFICATIONS
SEE TABLES FOR UPLAND AREAS TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS.

SEEDING BAR NOTE
SEEDING BAR LOCATIONS BASED ON PLAN VIEWS. THESE LOCATIONS ARE GENERALIZED, AND FINAL SEEDING METHODS SHALL BE APPROVED BY THE OWNER OR ON-SITE ENVIRONMENTAL INSPECTOR DURING CONSTRUCTION.

TEMPORARY UPLAND SEEDING SPECIFICATIONS				
LOCATION	SEED MIX	APPLICATION TYPE AND RATE (LBS/ACRE)	MULCH, TACKIFIER OR FGM APPLICATION RATE	NOTES
SLOPES <10%	AUGUST 15 - APRIL 15 ANNUAL RYE GRAIN	120 LBS/ACRE	MULCH (4,000 LBS/ACRE)	APPLY MULCH BY ROVING, NETTING, OR MECHANICAL CRIMPING AT 400 GAL/ACRE. SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING MULCH.
	APRIL 15 - AUGUST 15 GERMAN MILLET	40 LBS/ACRE		
SLOPES >10% TO <25%	ANNUAL RYE GRAIN	45 LBS/ACRE	TACKIFIER - PLANTAGO (4,000 LBS/ACRE) OR GUAR (150 LBS/ACRE)	SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING TACKIFIER.
SLOPES >25%	ANNUAL RYE GRAIN	45 LBS/ACRE	FGM - PROMATRIX (1,500 LBS/ACRE)	SEED AND SOIL AMENDMENTS WILL BE BROADCAST PRIOR TO APPLYING FGM.

SOIL AMENDMENTS (TEMPORARY UPLAND SEEDING)		
NOTE	AMENDMENT	APPLICATION RATE (LBS/ACRE)
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR AT A MINIMUM APPLY LIME AND FERTILIZER AT THE SPECIFIED RATE.	GROUND AGRICULTURAL LIMESTONE	2,000 LBS/ACRE
	10-10-10 FERTILIZER	750 LBS/ACRE
MAINTENANCE		
RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.		

UPLAND SEEDING SPECIFICATIONS			
SEED MIX	APPLICATION TYPE AND RATE (LBS/ACRE)	AMENDMENT	NOTES
TALL FESCUE	100 LBS/ACRE	PELLITIZED LIME (250 LBS/ACRE)	SOIL AMENDMENT RATES REDUCED DUE TO CURRENT VEGETATION STATE AND ACTIVE SOIL CONDITION, AS WELL AS AMENDMENTS PLACED WITHIN PROJECT DURATION.
BAHA	25 LBS/ACRE	10-10-10 FERTILIZER (500 LBS/ACRE)	
GERMAN MILLET	25 LBS/ACRE		
BASED ON PELLETIZED LIME RATES AT A 1:10 VALUE OF AGRICULTURAL LIME (250 LBS P = 2,500 LBS A).			

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		MGR TECH REC & STD
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		PRINCIPAL ENGINEER
						CHECKER INITIALS	DMC		



COPYRIGHT 2018

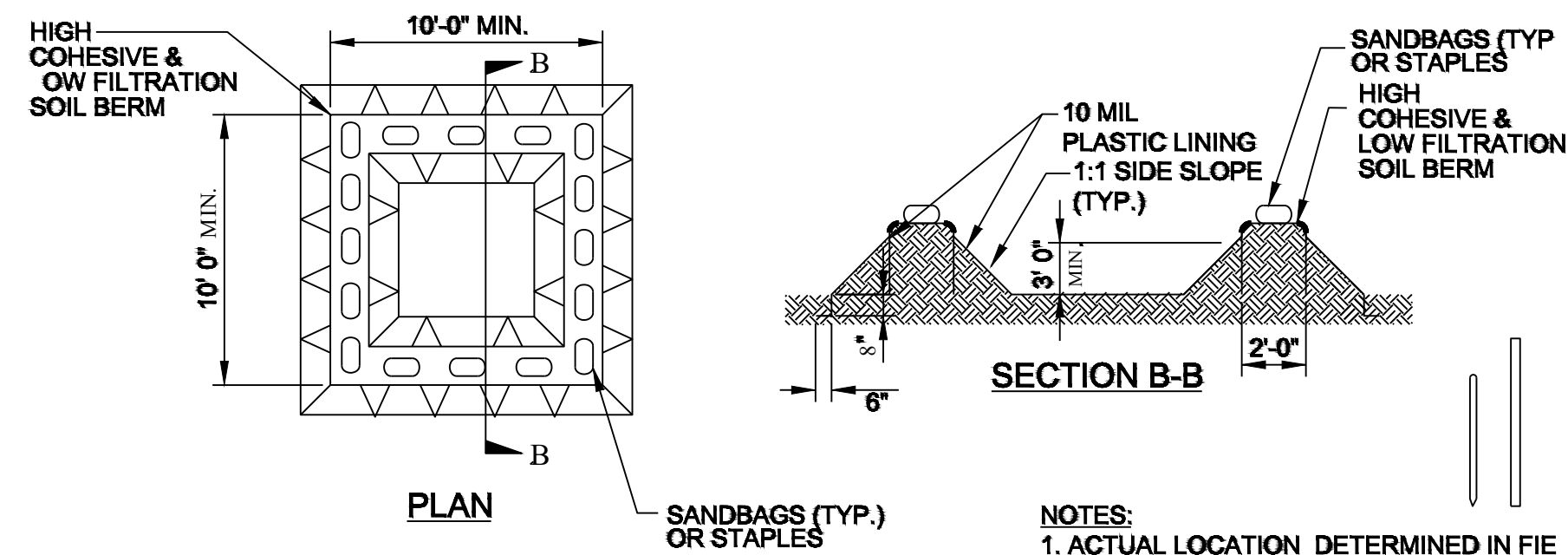
**MOYOCK CITY GATE RS UPGRADE
EPSC SEEDING REQUIREMENTS
MOYOCK, NC**

Resource Center NEW BERN

SHEET(S) 11 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-C-031-0001109	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	

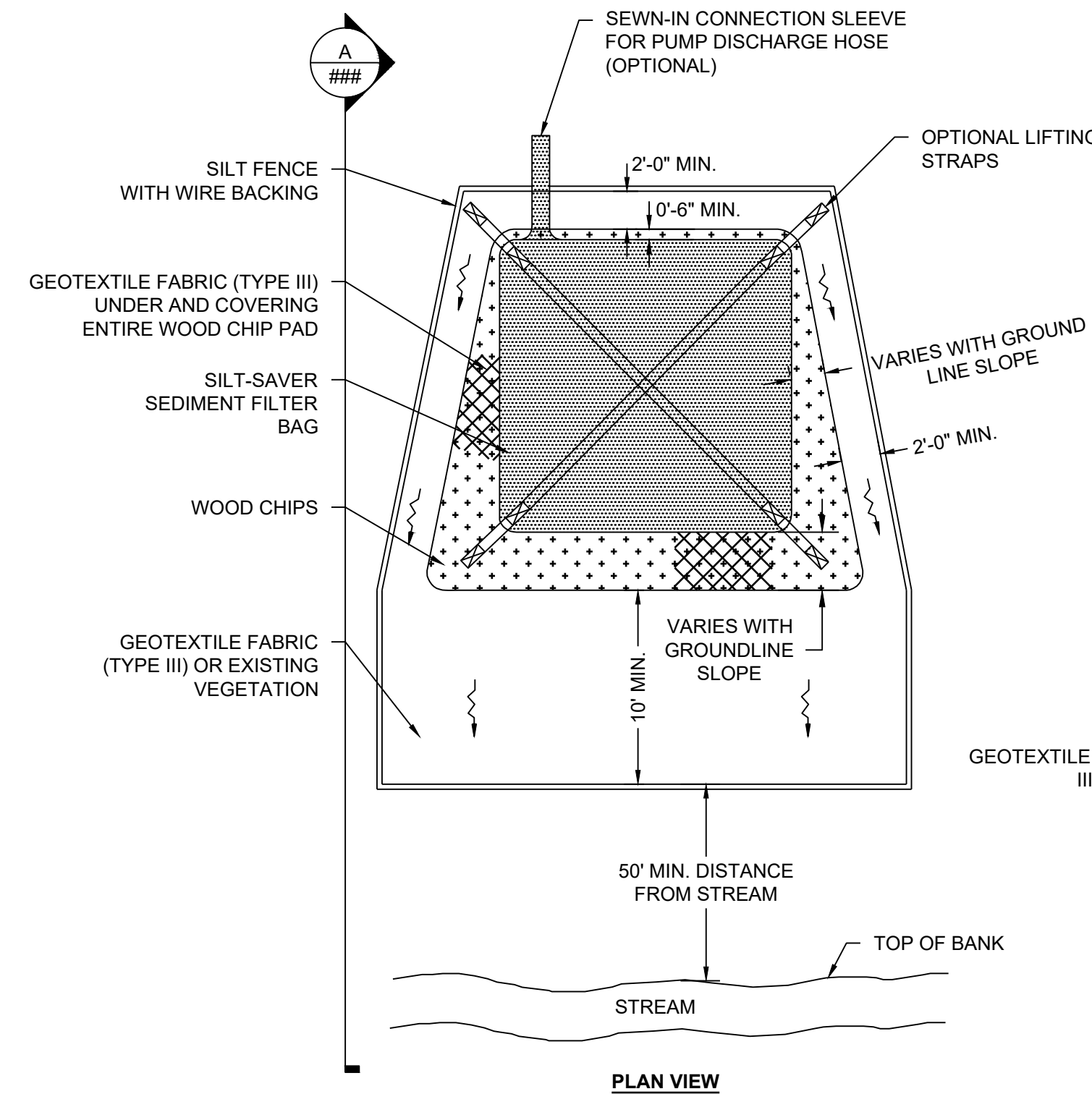
MOYOCK CITY GATE RS UPGRADE EPSC SEEDING REQUIREMENTS MOYOCK, NC 27556-3274

ABOVE GRADE CONCRETE WASHOUT



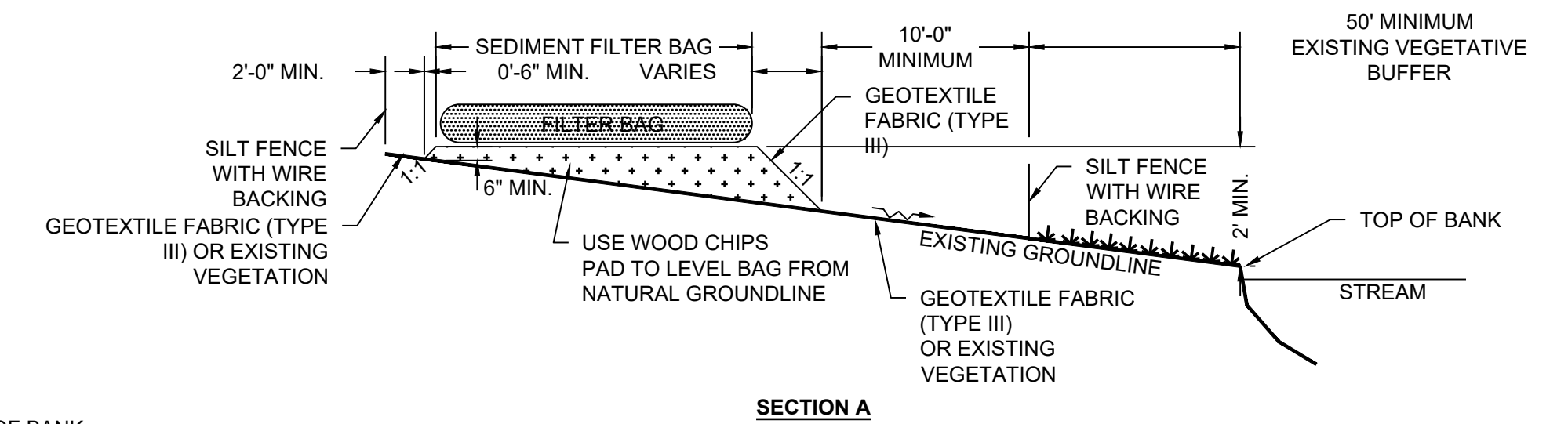
- NOTES:**
1. ACTUAL LOCATION DETERMINED IN FIE
 2. THE CONCRETE WASHOUT STRUCTURE SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEE TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

CONCRETE WASHOUT
DETAIL 1 NOT TO SCALE

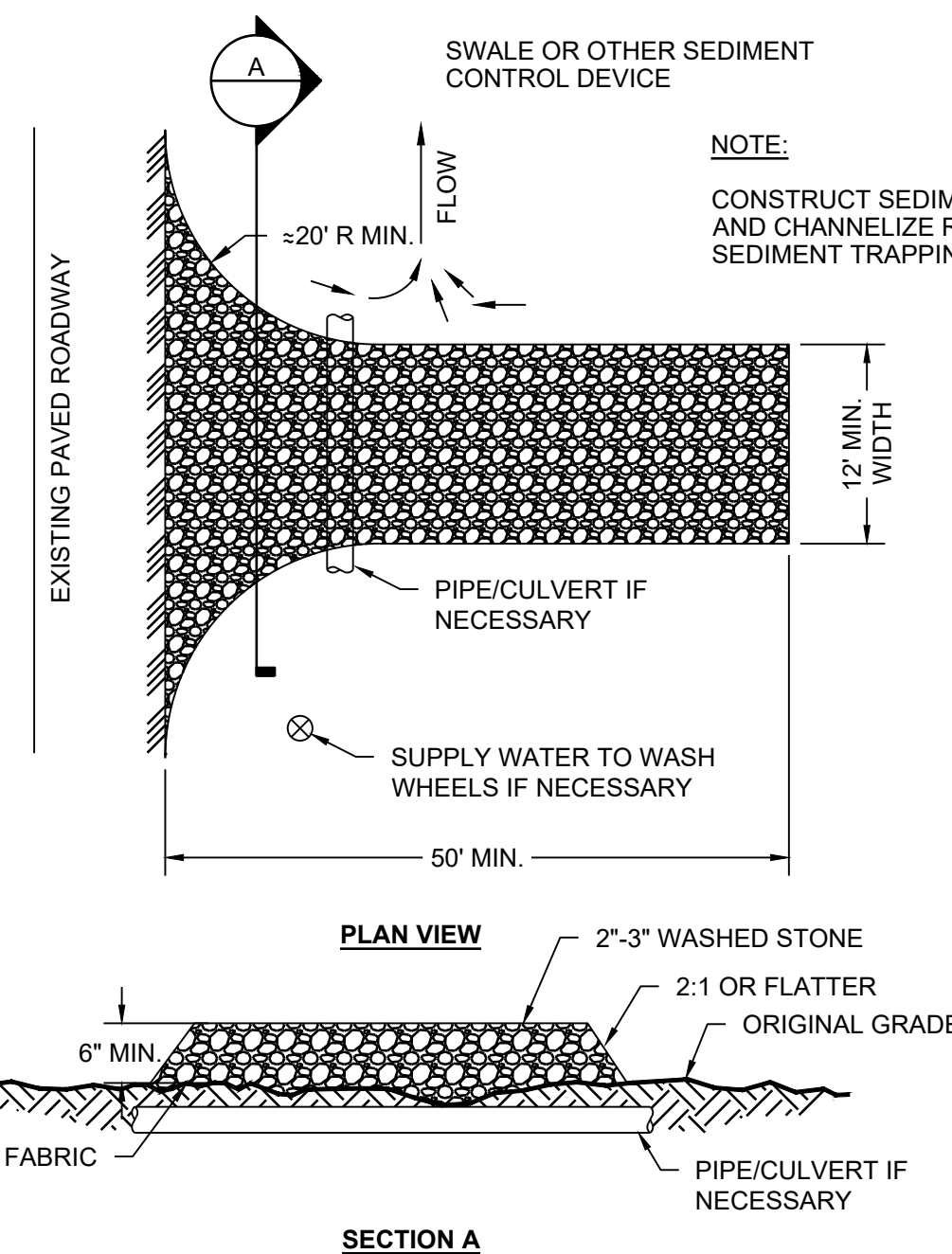


- NOTES:**
1. SEDIMENT FILTER BAGS SHOULD NOT BE PLACED WITHIN A JURISDICTIONAL WETLAND OR WITHIN 50 FEET OF A STABILIZED OUTLET, STREAM, OR OTHER NATURAL WATERS RESOURCE.
 2. CONTRACTOR SHALL EXERCISE CAUTION NOT TO BURST OR DAMAGE THE SEDIMENT FILTER BAG WHEN PUMPING.
 3. SEDIMENT FILTER BAGS SHALL BE REPLACED WHEN SEDIMENT HAS ACCUMULATED TO 1/2 OF THE BAGS CAPACITY OR IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.

SILT-SAVER DEWATER FILTER BAG		
6" X 15"	2" - 3"	PUMP
13" X 15"	0'-4"	PUMP
13" X 25"	0'-6"	PUMP



TYPICAL SEDIMENT FILTER BAG
DETAIL 2 NOT TO SCALE

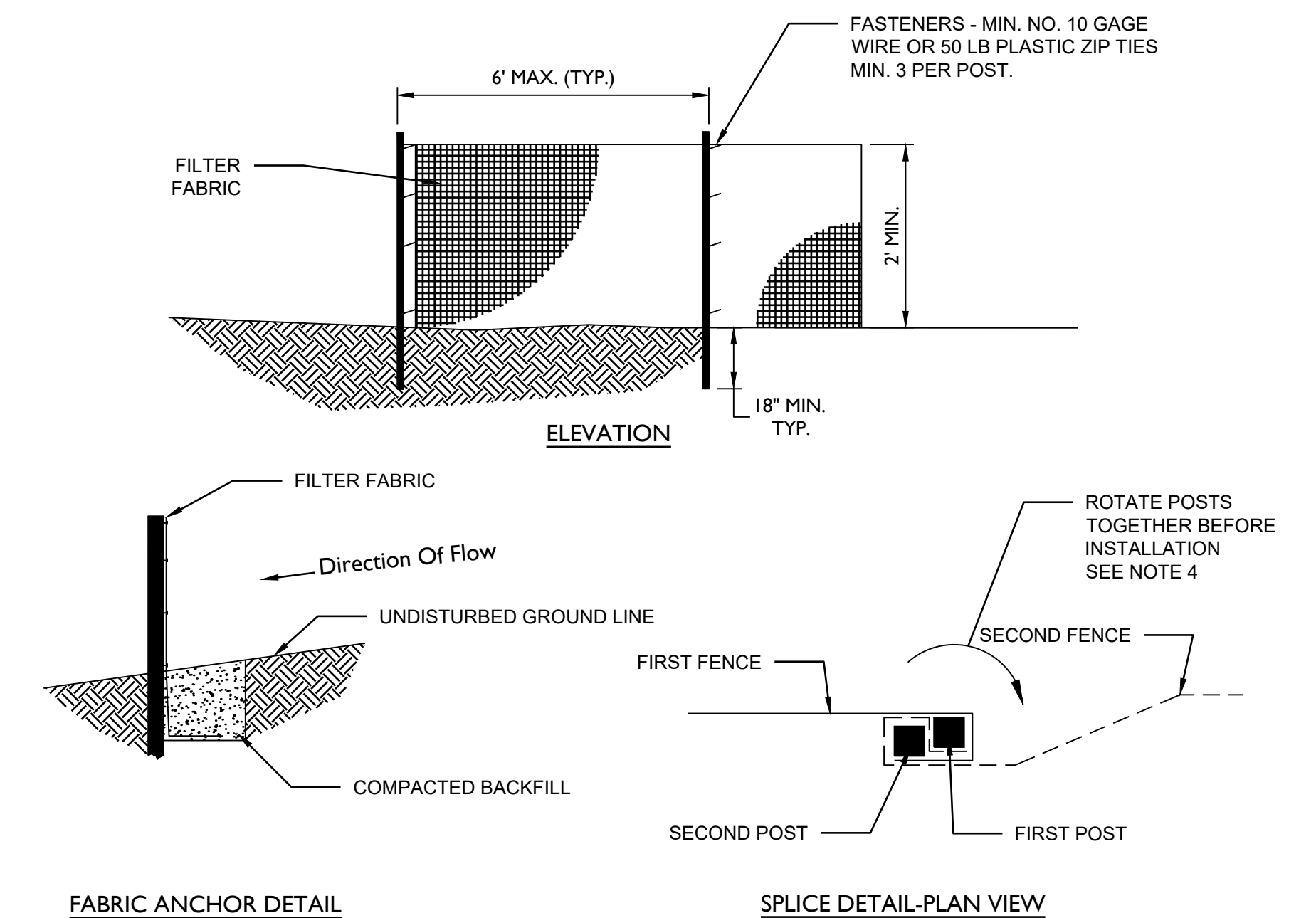


- NOTE:**
- CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE

CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE - USE 2"-3" WASHED STONE OR LARGER AS SPECIFIED IN N.C. DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
2. WIDTH - 12' MIN.
3. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC R.O.W. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
4. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC R.O.W. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC R.O.W. MUST BE REMOVED IMMEDIATELY.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT (TCE)
DETAIL 3 NOT TO SCALE



NOTES:

1. FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD, INCLUDING FINAL GRADING, STABILIZATION, AND RESTORATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
3. FENCE POSTS SHALL BE EITHER WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 1.5" X 1.5" OR A STANDARD STEEL POST.
4. WHEN SPLICES ARE NECESSARY MAKE SPLICE AT POST ACCORDING TO SPLICE DETAIL. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE. ROTATE BOTH POSTS TOGETHER AT LEAST 180 DEGREES TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL. CUT THE FABRIC NEAR THE BOTTOM OF THE POSTS TO ACCOMMODATE THE 6 INCH FLAP. THEN DRIVE BOTH POSTS AND BURY THE FLAP. COMPACT BACKFILL WELL.
5. SILT FENCE MAY BE REMOVED ONCE SITE HAS ACHIEVED APPLICABLE STATE REVEGETATION RATE AND REGULATORY APPROVAL HAS BEEN OBTAINED, IF REQUIRED (SEE PERMIT).

TYPICAL SILT FENCE DETAIL
DETAIL 4 NOT TO SCALE

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		



COPYRIGHT 2018

MOYOCK CITY GATE RS UPGRADE
EPSC DETAILS
MOYOCK, NC
Resource Center NEW BERN

SHEET(S)	12 OF 42	DWG SCALE	NOT TO SCALE
DWG DATE	12/13/2022	SUPERSEDED	
DRAWING NUMBER	PNG-C-031-0001110		
REVISION	D		
DISCIPLINE / RESOURCE CENTER / LINE NUMBER			

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

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

SECTION E: GROUND STABILIZATION		
Required Ground Stabilization Timeframes		
Site 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

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

GROUND STABILIZATION SPECIFICATION	
Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:	
Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Roller erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting 	<ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Roller 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.
 - Provide ponding area for containment of treated Stormwater before discharging offsite.
 - Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

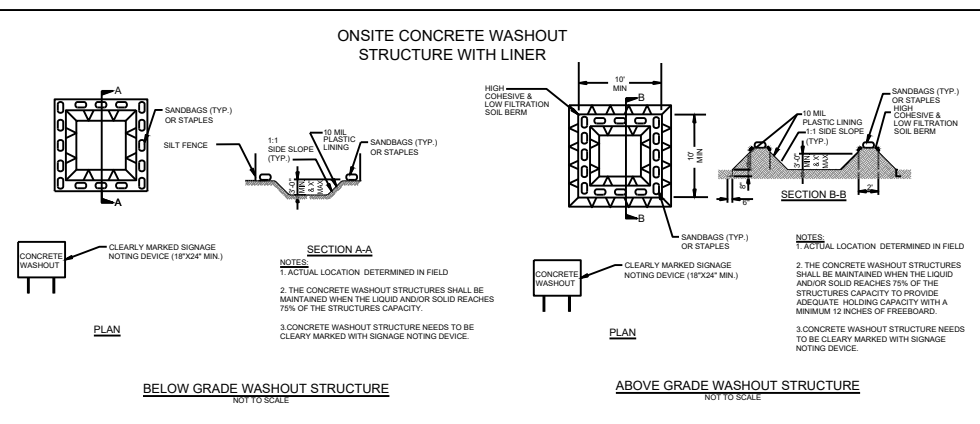
- EQUIPMENT AND VEHICLE MAINTENANCE**
- Maintain vehicles and equipment to prevent discharge of fluids.
 - Provide drip pans under any stored equipment.
 - Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
 - Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
 - Remove leaking vehicles and construction equipment from service until the problem has been corrected.
 - Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

- LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**
- 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 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.
 - 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.

- PAINT AND OTHER LIQUID WASTE**
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
 - Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
 - Contain liquid wastes in a controlled area.
 - Containment must be labeled, sized and placed appropriately for the needs of site.
 - Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

- PORTABLE TOILETS**
- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
 - Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
 - Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

- EARTHEN STOCKPILE MANAGEMENT**
- 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 available.
 - Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
 - Provide stable stone access point when feasible.
 - Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



- CONCRETE WASHOUTS**
- Do not discharge concrete or cement slurry from the site.
 - Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
 - Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
 - Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
 - Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
 - Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
 - Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
 - Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
 - Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary 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 caused by removal of washout.

- HERBICIDES, PESTICIDES AND RODENTICIDES**
- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
 - Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
 - Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
 - Do not stockpile these materials onsite.

- 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.

PART III 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	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	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&S Measures	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. 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	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. 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&S measures, desiring 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.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&S Plan Documentation

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

Item to Document	Documentation Requirements
(a) Each E&S measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&S plan.	Initial and date each E&S measure on a copy of the approved E&S plan or complete, date and sign an inspection report that lists each E&S measure shown on the approved E&S plan. This documentation is required upon the initial installation of the E&S measures or if the E&S measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&S 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&S plan.	Initial and date a copy of the approved E&S 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&S measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&S measures.	Initial and date a copy of the approved E&S plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

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

- This General Permit as well as the Certificate of Coverage, after it is received.
 - 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 down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The E&S 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&S plan authority has approved these items,
- 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,
- 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 sized, designed and maintained dewatering tanks, weir tanks, and filtration systems,
- 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,
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- 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.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).
- Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
- Anticipated bypasses and unanticipated bypasses.

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) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. 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. 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.
(b) Oil spills and release of hazardous substances per Item 1)(b)-(c) above	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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 effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(i)(7)]	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(i)(6)]. Division staff may waive the requirement for a written report on a case-by-case basis.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

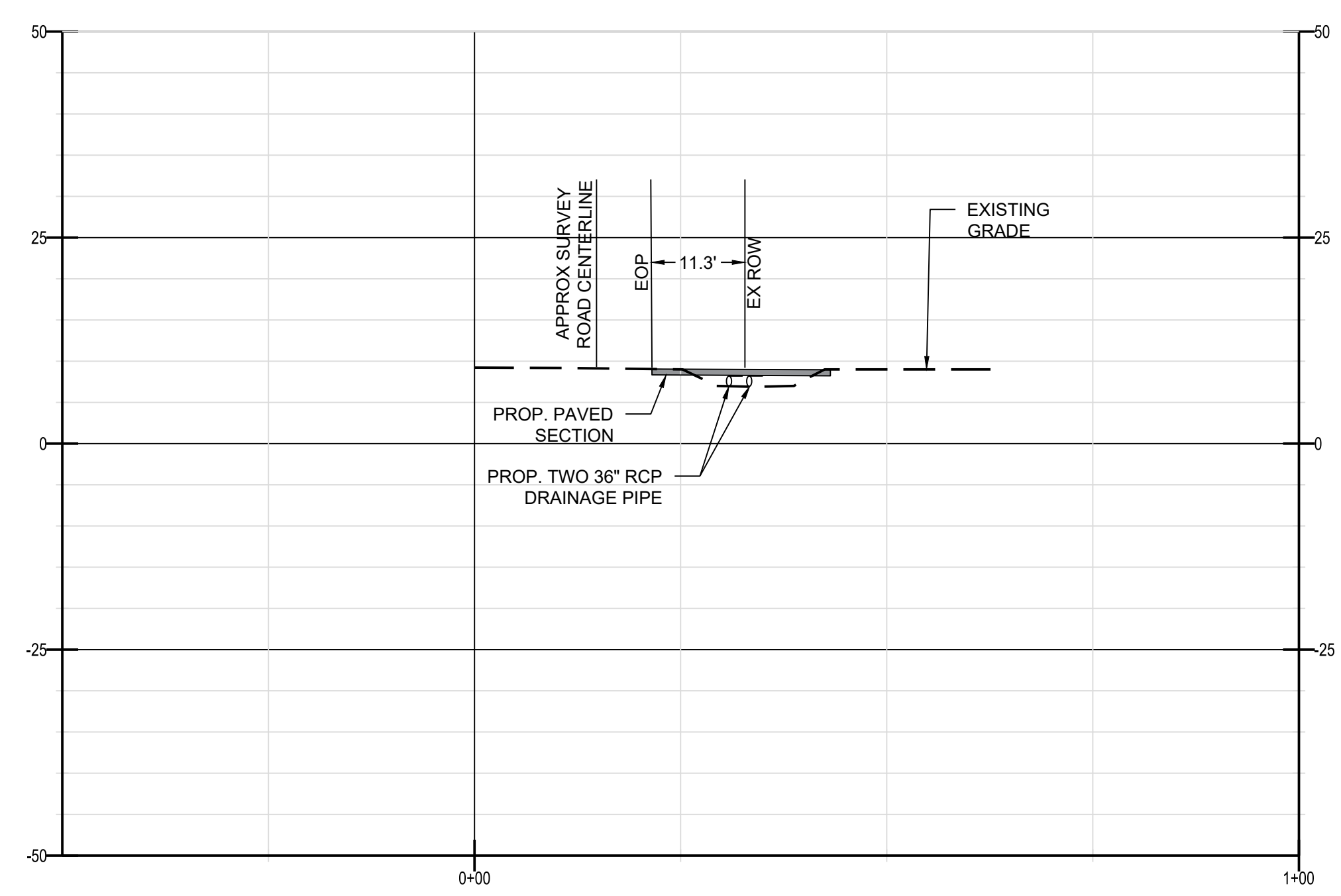
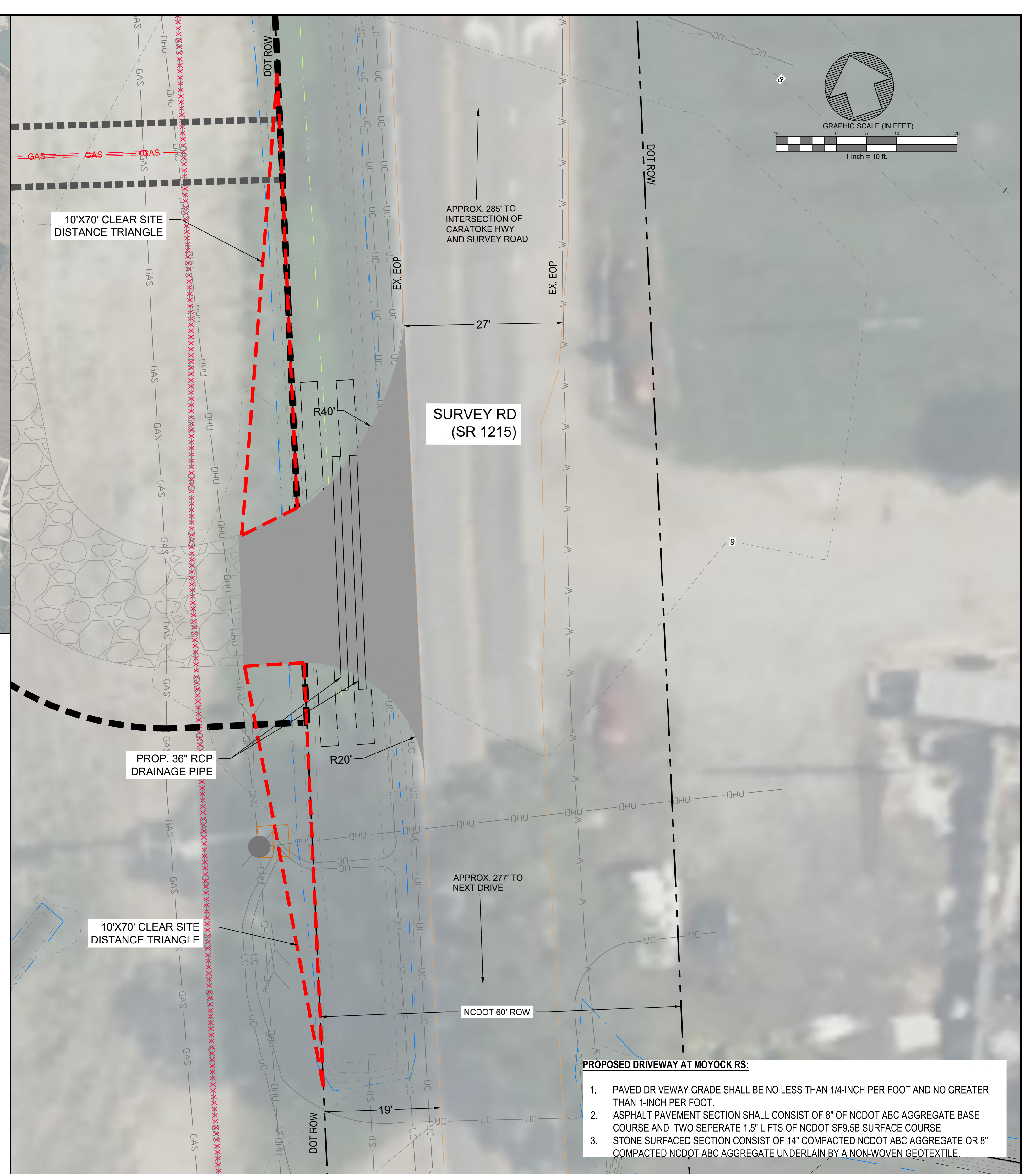
NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

<p>PRELIMINARY PLANS</p> <p>NOT FOR CONSTRUCTION</p>	<p>DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)</p>										<p>REF. DWG(S) PNG-G-031-0001077</p>																																													
	<p>MOYOCK CITY GATE RS UPGRADE EPSC NOTES NCG01 MOYOCK, NC Resource Center NEW BERN</p>										<p>SHEET(S) 13 OF 42 DWG SCALE NOT TO SCALE</p>																																													
	<p>NO. DATE REVISION(S) DESCRIPTION BY CHK APPD DESCRIPTION DATE INITIALS APPROVALS</p> <table border="1"> <tr> <td>A</td> <td>06/05/2023</td> <td>30% PLAN SUBMISSION</td> <td>JEM</td> <td>DMC</td> <td>WKG</td> <td>AREA CODE</td> <td>1910</td> <td>DATE</td> <td>INITIALS</td> <td>REGIONAL ENGINEER</td> </tr> <tr> <td>B</td> <td>07/10/2023</td> <td>60% PLAN SUBMISSION</td> <td>JEM</td> <td>DMC</td> <td>WKG</td> <td>ACCOUNT NUMBER</td> <td>023567</td> <td>DATE</td> <td>INITIALS</td> <td>MGR TECH REC & STD</td> </tr> <tr> <td>C</td> <td>12/18/2023</td> <td>90% PLAN SUBMISSION</td> <td>JEM</td> <td>DMC</td> <td>WKG</td> <td>PROJECT NUMBER</td> <td>0235671</td> <td>DATE</td> <td>INITIALS</td> <td>PRINCIPAL ENGINEER</td> </tr> <tr> <td>D</td> <td>04/30/2024</td> <td>ISSUED FOR BID</td> <td>JEM</td> <td>DMC</td> <td>WKG</td> <td>DRAWING BY</td> <td>JEM</td> <td>DATE</td> <td>INITIALS</td> <td>PRINCIPAL ENGINEER</td> </tr> </table>										A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910	DATE	INITIALS	REGIONAL ENGINEER	B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567	DATE	INITIALS	MGR TECH REC & STD	C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671	DATE	INITIALS	PRINCIPAL ENGINEER	D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM	DATE	INITIALS	PRINCIPAL ENGINEER	<p>DWG DATE 12/13/2022 SUPERSEDED</p>	
	A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910	DATE	INITIALS	REGIONAL ENGINEER																																													
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567	DATE	INITIALS	MGR TECH REC & STD																																														
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671	DATE	INITIALS	PRINCIPAL ENGINEER																																														
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM	DATE	INITIALS	PRINCIPAL ENGINEER																																														
<p>ENERGY LAND & INFRASTRUCTURE, PLLC 500 GREGGSON DRIVE SUITE 180, NC 27511 NC LICENSE NO. P-1289</p>										<p>DRAWING NUMBER PNG-C-031-0001108 REVISION D</p>																																														



VICINITY MAP
NOT TO SCALE



DRIVEWAY PROFILE
HORIZONTAL: 1" = 10'
VERTICAL: 1" = 10'

- PROPOSED DRIVEWAY AT MOYOCK RS:**
- PAVED DRIVEWAY GRADE SHALL BE NO LESS THAN 1/4-INCH PER FOOT AND NO GREATER THAN 1-INCH PER FOOT.
 - ASPHALT PAVEMENT SECTION SHALL CONSIST OF 8" OF NCDOT ABC AGGREGATE BASE COURSE AND TWO SEPERATE 1.5" LIFTS OF NCDOT SF9.5B SURFACE COURSE
 - STONE SURFACED SECTION CONSIST OF 14" COMPACTED NCDOT ABC AGGREGATE OR 8" COMPACTED NCDOT ABC AGGREGATE UNDERLAIN BY A NON-WOVEN GEOTEXTILE.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	MJG	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	MJG	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	MJG	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	MJG		
						STATION ID	7435		
						CHECKER INITIALS	DMC		



**MOYOCK CITY GATE RS UPGRADE
DRIVEWAY PERMIT PLAN
MOYOCK, NC**
Resource Center NEW BERN

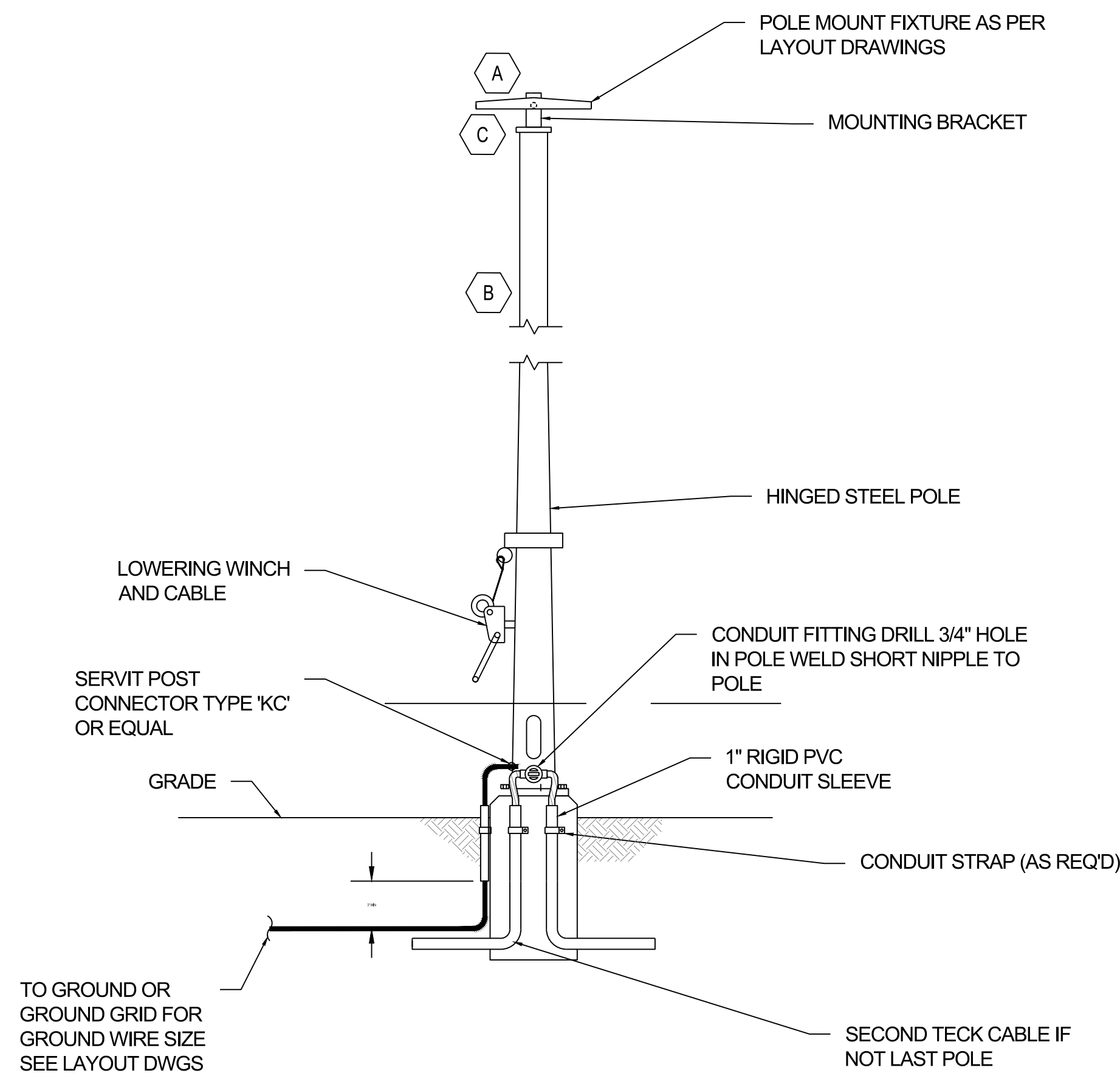
SHEET(S) 15 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-C-031-0001113	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	

LIGHTING BILL OF MATERIALS (PER LIGHT)					
ITEM	QTY	MATERIAL DESCRIPTION	MANUFAC.	MODEL	SUPPLIER
(A)	1	DSXF2 LED P340K70CRI HMF MVOLT IS PE DDBXD WITH 0 DEGREE TILT	LITHONIA	DSXF2 LED 3-40K (OR EQ.) S-302/M51 (SLIPFITTER)	CONSTRUCTION CONTRACTOR
(B)	1	24' HIGH HINGED LIGHTING POLE c/w LOWERING WINCH	APPLETON	GLW-PHSM-24 (OR EQ.) W/ GLW24 WINCH	CONSTRUCTION CONTRACTOR
(C)	1	23/8" MOUNT, ADAPTOR FOR 4" SQUARE TOP POLE	DIALLIGHT	FLX-4SPA-20DB (OR EQ.)	CONSTRUCTION CONTRACTOR

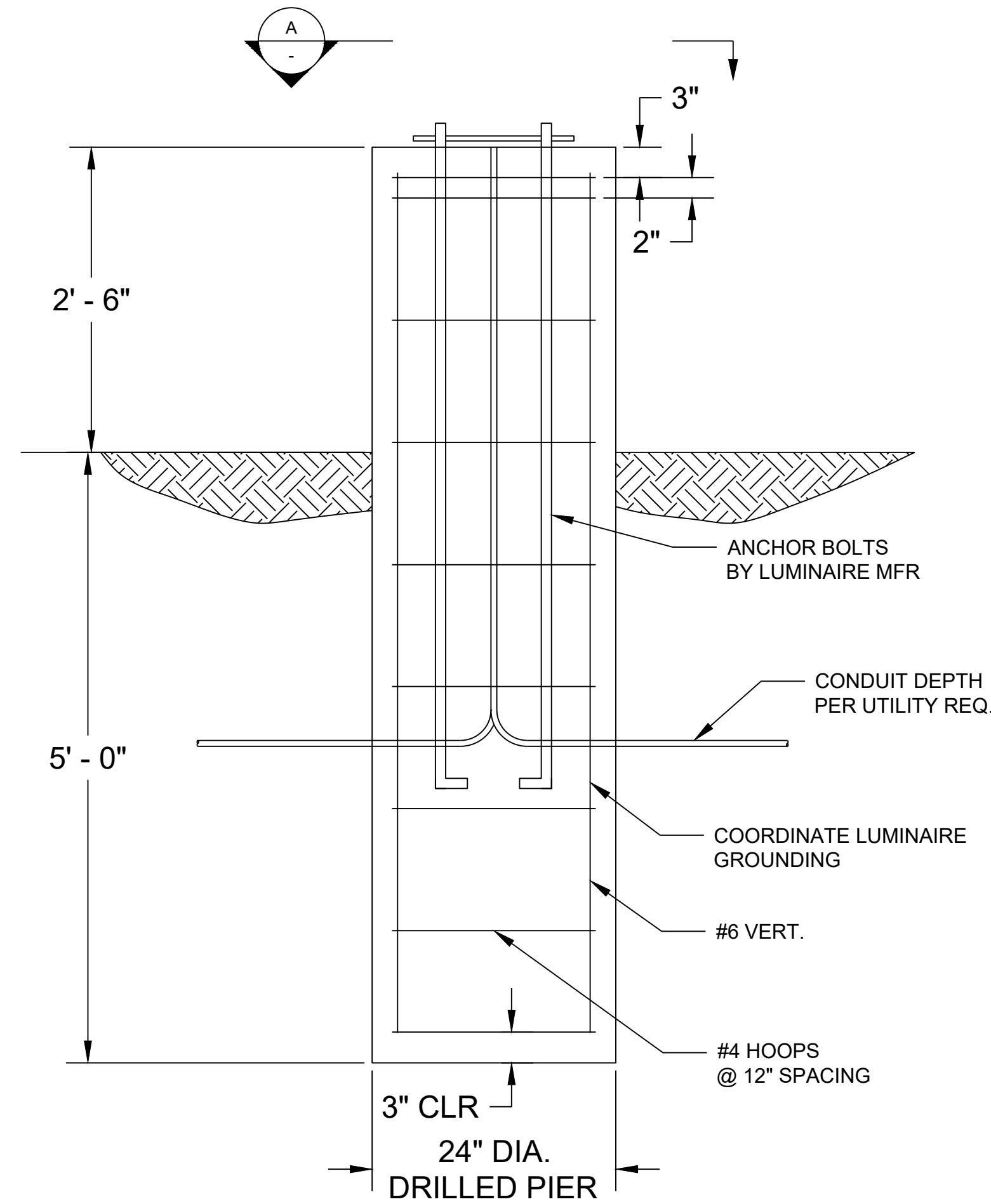
SEE PHOTOMETRIC PLAN ATTACHED

NOTES:

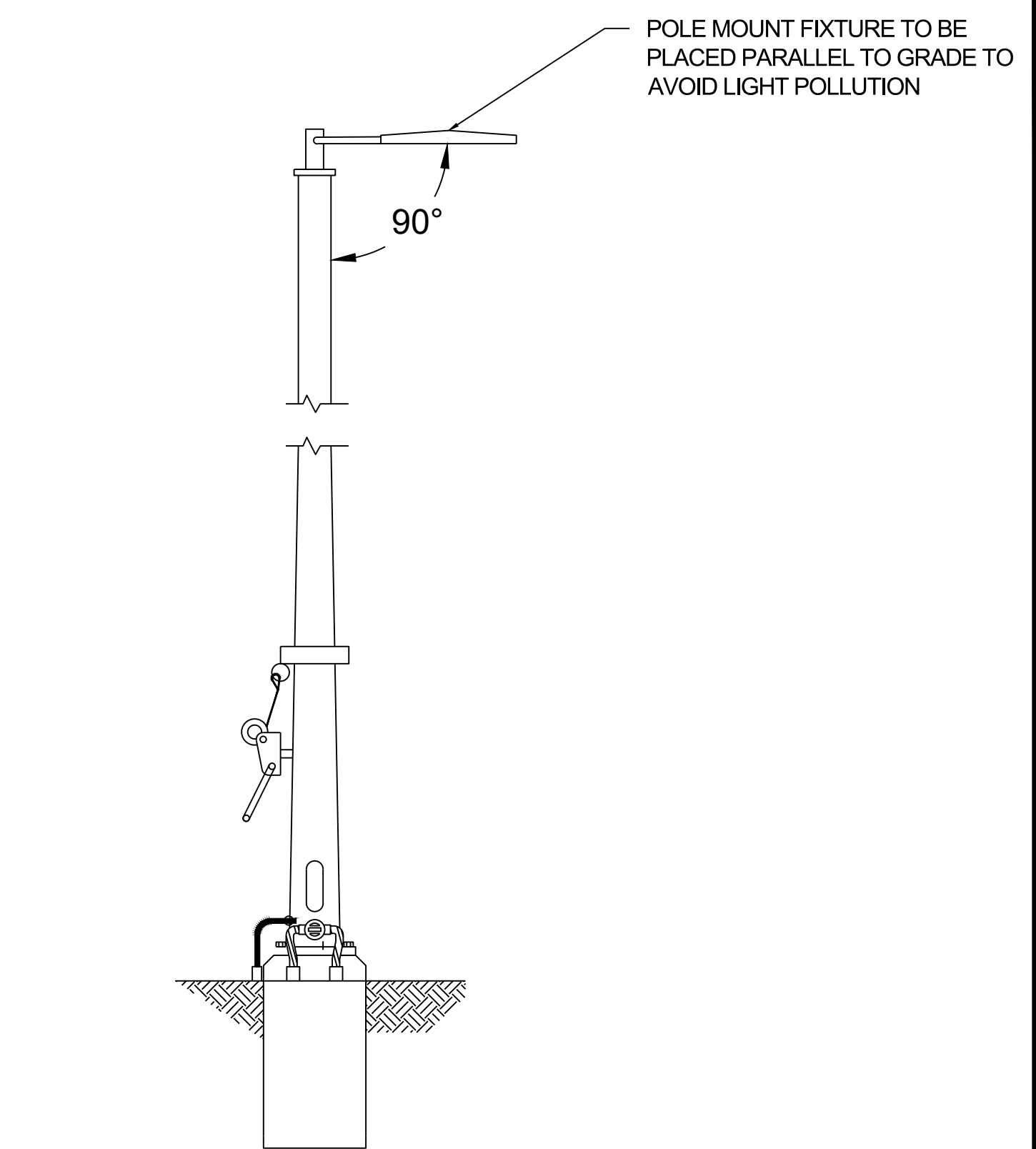
- CONDUIT FITTINGS: CLASS I, DIV 1 - EXPLOSION PROOF CLASS 1, DIV 2 - VAPOURTIGHT
- HINGED-OVER POSITION OF POLE AND LUMINAIRE: LOCATE BASE AND POLE SO MOTION IS NOT INTERFERED WITH BY EQUIPMENT, PIPING, FENCING, ETC. INSTALL SUCH LOWERED FIX FALLS WITH YARD.



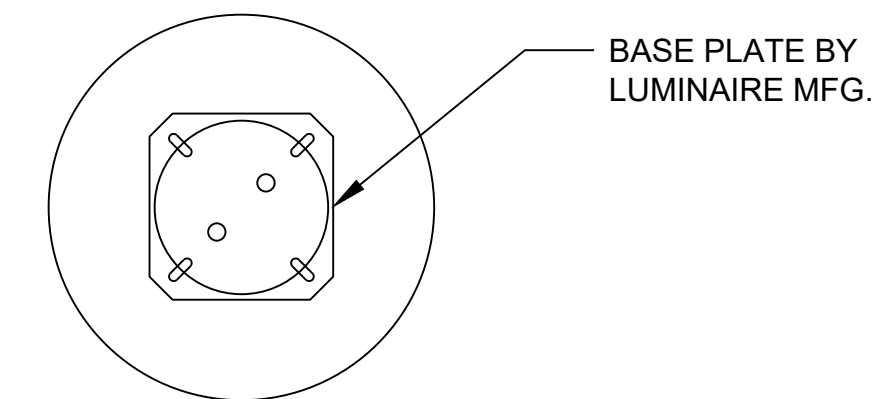
POLE MOUNTED FLOODLIGHT FIXTURE
SCALE: NTS



DETAIL
LUMINAIRE FOUNDATION DRILLED PIER
SCALE: NTS



DETAIL
FLOODLIGHT FIXTURE SIDE VIEW
SCALE: NTS



SECTION
LUMINAIRE FOUNDATION DRILLED PIER
SCALE: NTS

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

REF. DWG(S) PNG-G-031-0001077

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	06/05/2023	30% PLAN SUBMISSION	JEM	DMC	WKG	AREA CODE	1910		REGIONAL ENGINEER
B	07/10/2023	60% PLAN SUBMISSION	JEM	DMC	WKG	ACCOUNT NUMBER	023567		MGR TECH REC & STD
C	12/18/2023	90% PLAN SUBMISSION	JEM	DMC	WKG	PROJECT NUMBER	0235671		PRINCIPAL ENGINEER
D	04/30/2024	ISSUED FOR BID	JEM	DMC	WKG	DRAWING BY	JEM		
						STATION ID	7435		
						CHECKER INITIALS	DMC		



COPYRIGHT 2018

MOYOCK CITY GATE RS UPGRADE LIGHTING INSTALLATION DETAIL
MOYOCK, NC

Resource Center NEW BERN

SHEET(S) 36 OF 42	DWG SCALE NOT TO SCALE
DWG DATE 12/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG-E-031-0001091	D
DISCIPLINE / RESOURCE CENTER / LINE NUMBER	

DUKE ENERGY AND PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

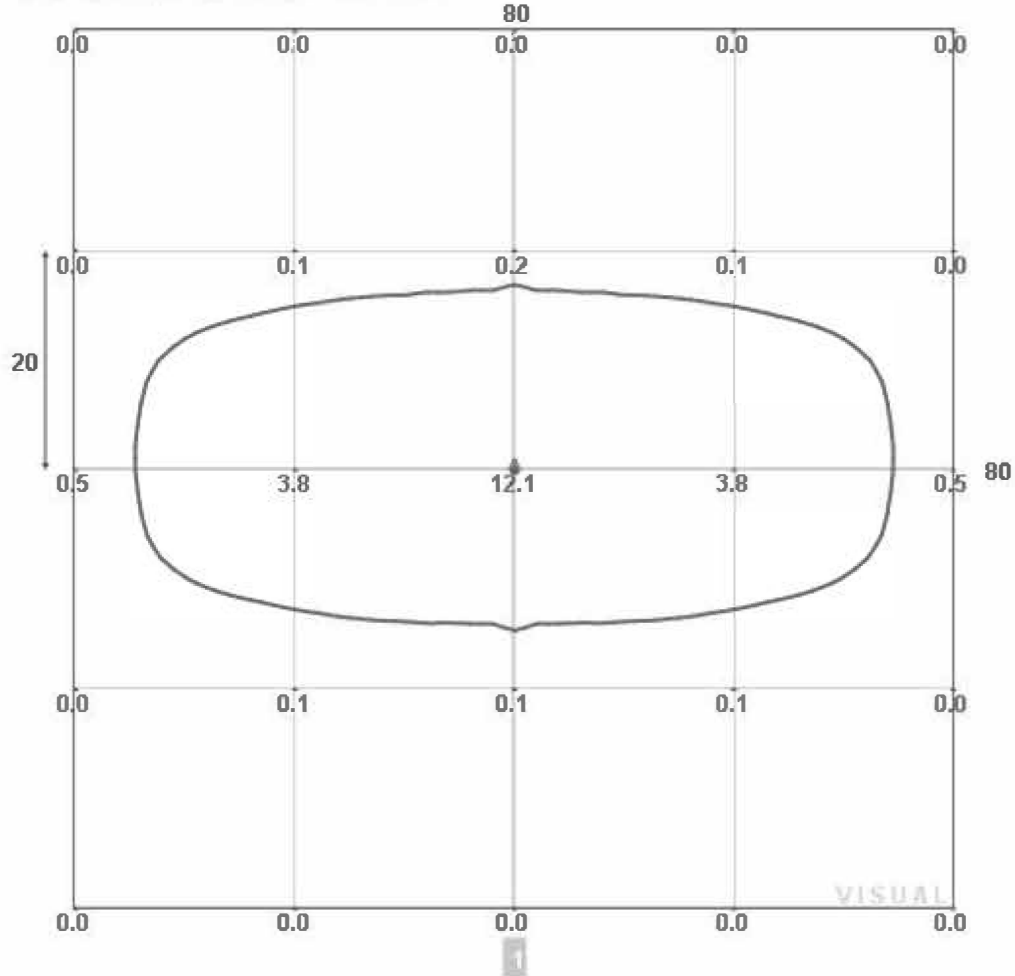
Visual - Template Tool

Design Information

Project
Description

Name
Company
Phone
Email

[A] - DSXF2 LED P3 40K 70CRI HMF



[A] - DSXF2 LED P3 40K 70CRI HMF



Manufacturer
Lamp Lumens
Lamp Quantity
Light Loss Factor
Input Power
Max Illuminance

Lithonia Lighting Configuration
10868 Orientation
1 Mounting Height
1 Arm Length
99.8 Tilt
14 Area > 1fc

Single
Single
24
1
0
1832

These lighting calculation results are for general informational purposes only and are provided without warranty as to accuracy, completeness, reliability or otherwise. Results are based on user provided data and data provided from publicly available sources; actual field conditions may affect calculated output. Visit www.Visual-3D.com.