# TOWN OF ZEBULON

# ZEBULON NORTH CAROLINA

ZEBULON MAINTENANCE YARD EXPANSION

# OWNER INFORMATION

TOWN OF ZEBULON 1003 N. ARENDELL AVE. ZEBULON, NC 27597-2309

# 450 E. HORTON ST. ZEBULON, NC 57597

PIN: 2705558698

ZONING: HI - HEAVY INDUSTRIAL **EXISTING USE: PUBLIC WORKS** 

# ACREAGE: 7.8 ACRES BUILDING SETBACKS

FRONT - 25' REAR - 25' SIDE - 20'

PARKING EXISTING: 23

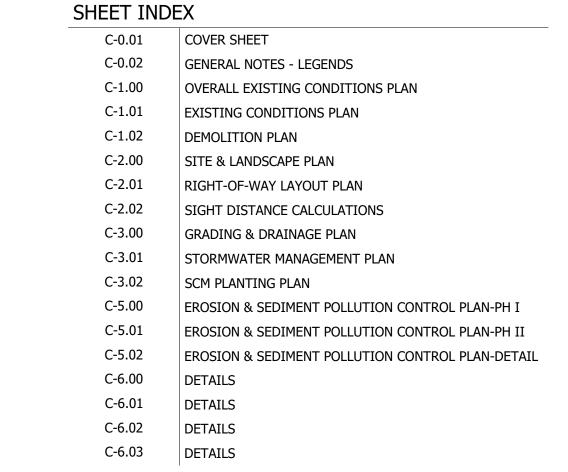
IMPERVIOUS COVER (TOTAL) EXISTING CONDITIONS: 93,356 SF, 27.5% PROPOSED CONDITIONS: 137,577 SF, 40.5% FUTURE: 32,788 SF, 9.7%

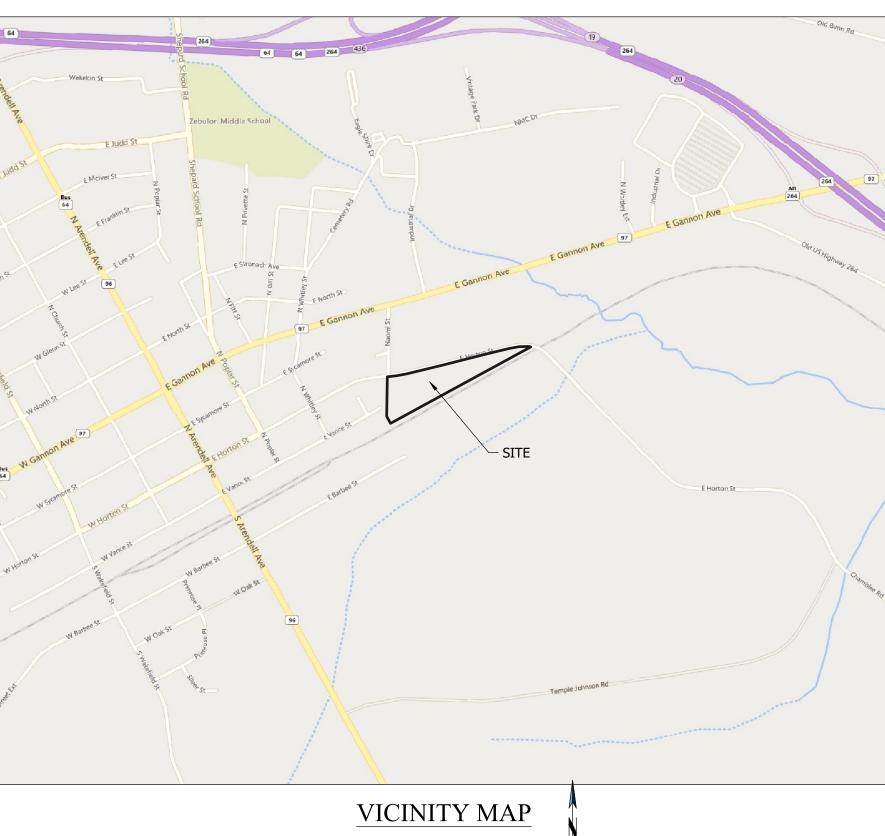
# REQUIRED: 3.12 ACRES (40%) PROVIDED: 3.29 ACRES (42%)

FLOODPLAIN ZONE X, AREA OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD, MAP #3720270500K, DATED JULY 19, 2022

# WATERSHED

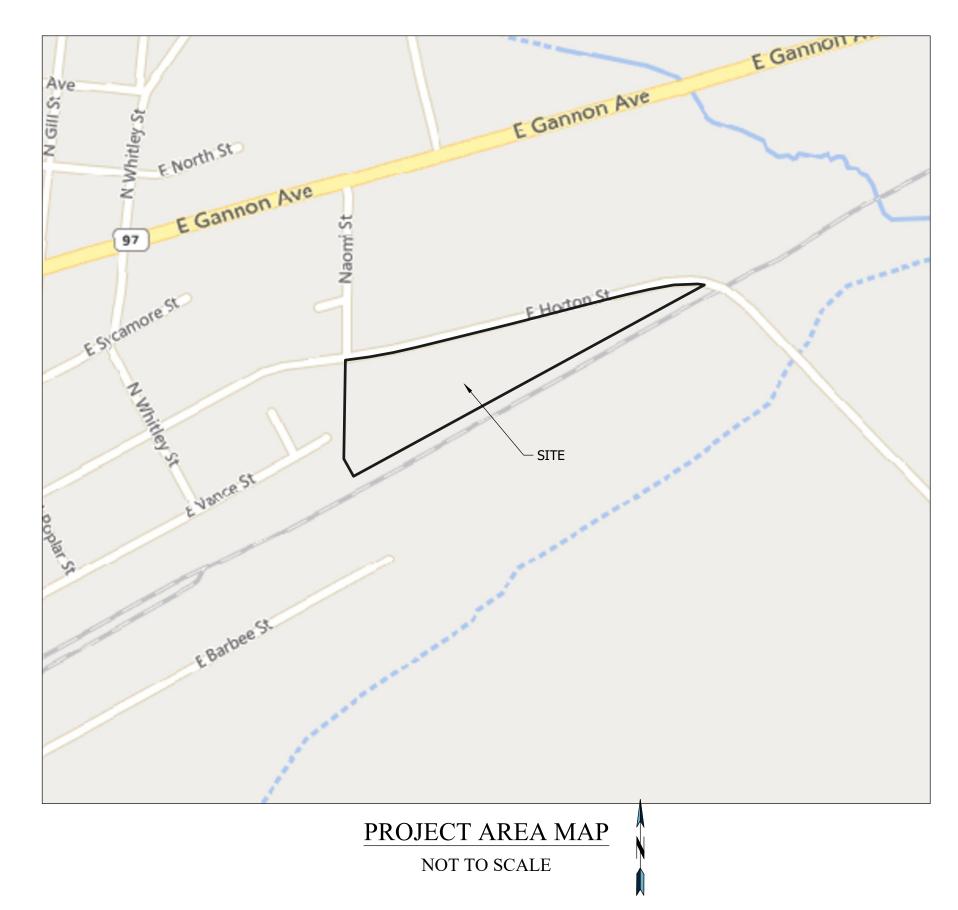
# ZEBULON NORTH CAROLINA

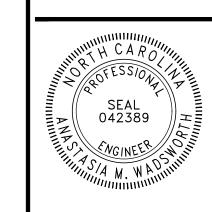






License Number : F-0115 awadsworth@thewootencompany.com





DATE: 1/26/2024 DRAWN BY:

PERMITTING

CHECKED BY: PROJECT NO.

C-0.01

the Contract Documents.

- 1. The Contractor Shall have a Complete Set of Contract Documents as well as All Permit Approvals and Easements on the Job Site at All Times.
- Approvals and Easements on the Job Site at All Times.

  2. Construction and Material Specifications Shall Conform to The State of North Carolina and
- 3. All Shop Drawings must be Reviewed and Approved by Engineer before any Equipment
- Contractor Shall make every Effort to Preserve Property Irons, Monuments, Other Permanent Points and Lines of Reference, and Construction Stakes. A Registered Land Surveyor, at the Contractor's Expense, Shall Replace Property Irons, Monuments, and
- Other Permanent Points of Reference Disturbed Reference by the Contractor.

  5. Coordinates are based on GNSS Observations Processed in Conjunction with the NC RTN.
  Horizontal Datum is North Carolina State Plane NAD 83 (2011) and the Vertical Datum is
- 6. Utilities (i.e., Power Poles, Light Poles, Telephone, and Cable Pedestals, etc.) Located within Project Limits to Remain unless shown Otherwise.
- 7. All Individual Trees to Remain unless noted otherwise on Plan or as Directed by
- the Engineer and Approved by Owner.
- 8. Land Disturbance for the Project Is Greater than 1 (One) Acre. Erosion Control Plan Approval Is Required. It is the Contractor's Responsibility to Comply with the Erosion Control Requirements, Devices, Maintenance, etc. as Indicated on the Plans.
- 9. It is the Contractor's Responsibility to Accurately Locate both Horizontally and Vertically All Existing Utilities Prior to Start of Construction (One Call Center 1-800-632-4949).
  All Costs Associated with Any Damage to Known or Unknown Existing Utilities Resulting from the Contractor's Failure to Adequately Protect the Existing Utilities during Construction Shall be Borne Solely by the Contractor.
- 10. The Engineer and the Owner Shall be Notified 24 hours prior to any Service Interruptions or Connections being Made. Any Service Interrupted by the Contractor Shall be Returned to Service before the End of the Working Day.
- 11. Support Existing Poles, Fences, Culverts, Pavement, Utilities, Curbing, and Other Structures during Construction. Repair Damaged Items to their Original Condition at No Additional Cost to Owner.
- 12. Temporarily Remove Minor Items as Required for Construction. Minor Items shall Include, but are NOT Limited to: Existing Signs, Fences, Mailboxes, etc. Reinstall Items to their Original Condition at a Location as Close to the Original Location as Practicable.
- 13. Where Indicated, Remove and Replace Existing Curb & Gutter (Match Existing Elevation and Location Unless Otherwise Shown). Remove to Nearest Joint if within 5' of Full Height Curb; otherwise Provide New Joint in Curb & Gutter.
- 14. Where Practicable Sidewalk Transitions Shall Not Exceed 12:1 Slope per ADA and
- Sidewalk Cross-Slope shall be 2% Maximum. See Spot Elevations and Cross-Sections.

  15. Sidewalks to Join Flush with Existing or Proposed Concrete Drives and Existing
- Curb & Gutter to Remain.

Otherwise Noted.

- 16.Driveway Impacts are anticipated with this Project and Access during Construction Shall be Coordinated with each Owner.
- 17.Contractor will Adjust Manholes, Water Valves, and Meter Boxes as necessary to Coordinate with Sidewalk or Grade Changes.
- 18.All Proposed Concrete Driveways shall be 6-inches Thick (3,000 PSI) Unless Otherwise Noted. All Proposed Concrete Sidewalk shall be 4-inches Thick (3,000 PSI) Unless
- 19.If any Lane Closure is Necessary, Streets shall Remain Open (at least One Lane) to Local Traffic during Construction. Contractor shall Submit Traffic Control Plan, highlighting Key Milestones, to Engineer for Approval prior to Beginning Construction. No Lane of Traffic shall be Closed or Restricted Monday through Friday between the Hours of 6 AM to 9 AM or between 4 PM to 7 PM. Comply with All NCDOT Provisions in the Approved Encroachment Agreement including Posting of any Required Bonds.

LEGEND

Font Style Indicates Existing Features

FONT STYLE INDICATES DESIGN FEATURES

YARD HYDRANT YH

SURVEY		R	OADW	AY		UTILITIES					
	<u>CODE</u>	<b>Existing</b>	PROPOSED		CODE	<b>Existing</b>	PROPOSED		<u>CODE</u>	<b>Existing</b>	PROPOSED
BENCHMARK	BM	$\wedge$		ASPHALT DRIVEWAY				CABLE TV CABLE	CTV	CTV	стv
CONTROL POINT	СР	$\triangle$		ASPHALT OVERLAY				UNDERGROUND ELECTRICAL CABLE	UGE	UGE	——— UGE ———
				BRICK DRIVEWAY				OVERHEAD ELECTRICAL WIRE	OHE	——— OHE ———	OHE
IRON PIPE FOUND IRON PIPE SET		•		EDGE OF PAVEMENT	EP			ELECTRICAL HAND HOLE	ЕНН	mener	
IRON ROD FOUND		0		GRAVEL DRIVEWAY / PATH				ELECTRICAL METER	EM	M	
IRON ROD SET		<ul><li>O</li></ul>		SOIL DRIVEWAY / PATH				ELECTRICAL PEDESTAL	EPED	B	
NAIL FOUND		(N)						FIBER OPTIC CABLE	FOC	FOC	FOC
NAIL SET		•			SITE			FIBER OPTIC HAND HOLE	FOHH	POH	
PK NAIL FOUND		$\otimes$			CODE	Evicting	DDODOCED	GAS LINE	GL	<i>G</i>	G
PK NAIL SET		<b>⊗</b>			CODE	Existing	PROPOSED	GAS METER	GM	G	
PROPERTY LINE				AREA LIGHT / LIGHT POLE	LP		×	GAS VALVE	GV	${f e}\!$	
		$\triangle$		BOLLARD	BOLL	0		GUY / ANCHOR WIRE	GUY	$\ni$	Э
TEMPORARY BENCHMARK	TBM			FENCE	FNC -	x x	x x	LIGHT POLE / AREA LIGHT	LP	X	×
				FIRE HOSE	HOSE		HOSE —	POWER POLE	PP		<i>9</i> 5
E	ASEME	NTS		FIRE WATER LINE		FWL		TELECOMMUNICATIONS CABLE	COM	сом	COM
				SIGN	SN	-		TELEPHONE CABLE	COM	СОМ	COM
		<b>Existing</b>	PROPOSED	STOR	M DRA	AINAGE		TELEPHONE HAND HOLE	THH	THE	
ACCESS EASEMENT	AE	AE	——— AE ———		CODE	Existing	PROPOSED	TELEPHONE PEDESTAL	TPED	T	
DRAINAGE EASEMENT		SDE	——— PDE ———		CODE	Existing	PROPOSED	TRAFFIC SIGNAL BOX	TFCB	THIC	
PUBLIC UTILITY EASEMENT		<i>UE</i>	——— PUE ———	CATCH BASIN / COMBINATION INLET	CB	IIIII	IIIIII	TRAFFIC SIGNAL POLE	TFCP	\$	
RIGHT-OF-WAY	RW			CURB INLET	CI			TRANSFORMER	TRNS	ET	
RIGHT-OF-WAY (RAILROAD)	RRW -	RRW		DROP INLET	DI			UTILITY POLE	UP	Ø	ø
SEWER EASEMENT	SSE	SSE	SSE	FLARED END SECTION	FES	$\equiv$					
TEMPORARY CONSTRUCTION			TCE	JUNCTION BOX	JB	J	<b>5</b>	VF	GETA	TION	
EASEMENT			102	DRAINAGE MANHOLE	SDMH	D	•	, _			
WATER EASEMENT	WLE	WLE	—— WLE ——	STORM DRAINAGE PIPE	=				CODE	<i>Existing</i>	PROPOSED
EDOG		NITDOI						CONIFEROUS TREE	CTREE		
ERUS	ION CC	NTROL			SEWE	R		DECIDUOUS TREE	DTREE		
	<u>CODE</u>	<b>Existing</b>	PROPOSED		CODE	Existing	PROPOSED	HEDGE / SHRUB ROW	HED		
CHECK DAM	RCHK							LANDSCAPING	LSCP		
INLET PROTECTION			<b>-</b>	CLEAN OUT GRAVITY SEWER LINE	SSCO SS -		SS ——	SHRUB	SHB	Samma J	
RIP-RAP	RPRP			SEWER MANHOLE	SSMH	<b>S</b>	9	STUMP	SHD	O	
LIMITS OF DISTURBANCE			LOD					TREELINE / WOODS		~~~~~.	
RIPARIAN BUFFER - ZONE 1		RBZ1									
RIPARIAN BUFFER - ZONE 2		RBZ2							WATE	ים	
SILT FENCE		SF	SF						WATE	λſ	
SILT FENCE OUTLET									<u>CODE</u>	<b>Existing</b>	PROPOSED
SILT FENCE / TREE PROTECTION	SE/TDE		SF/TPF					FIRE HYDRANT	FH	-5-	•
FENCE			,					FIRE HYDRANT VALVE	FHV	$\bowtie$	H
SUPER SILT FENCE			SSF					REDUCER / INCREASER	RDCR	$\triangleright$	<b>•</b>
TREE PROTECTION FENCE			——————————————————————————————————————					WATER LINE	WL		
WATTLE	WTTL							WATER METER	WM		_
WATTLE BARRIER	WB		——— WB ———					WATERWEILER	VV 1V1		_

| REVIS | (919) 828-0531 • thewootencompany.com | License Number : F-0115

ZEBULON MAINTENANCE

SEBULON MAINTENANCE

CEBULON M

YARD

NOT RELEASED FOR CONSTRUCTION

ISSUED FOR:

PERMITTING

DATE: 1/26/2024

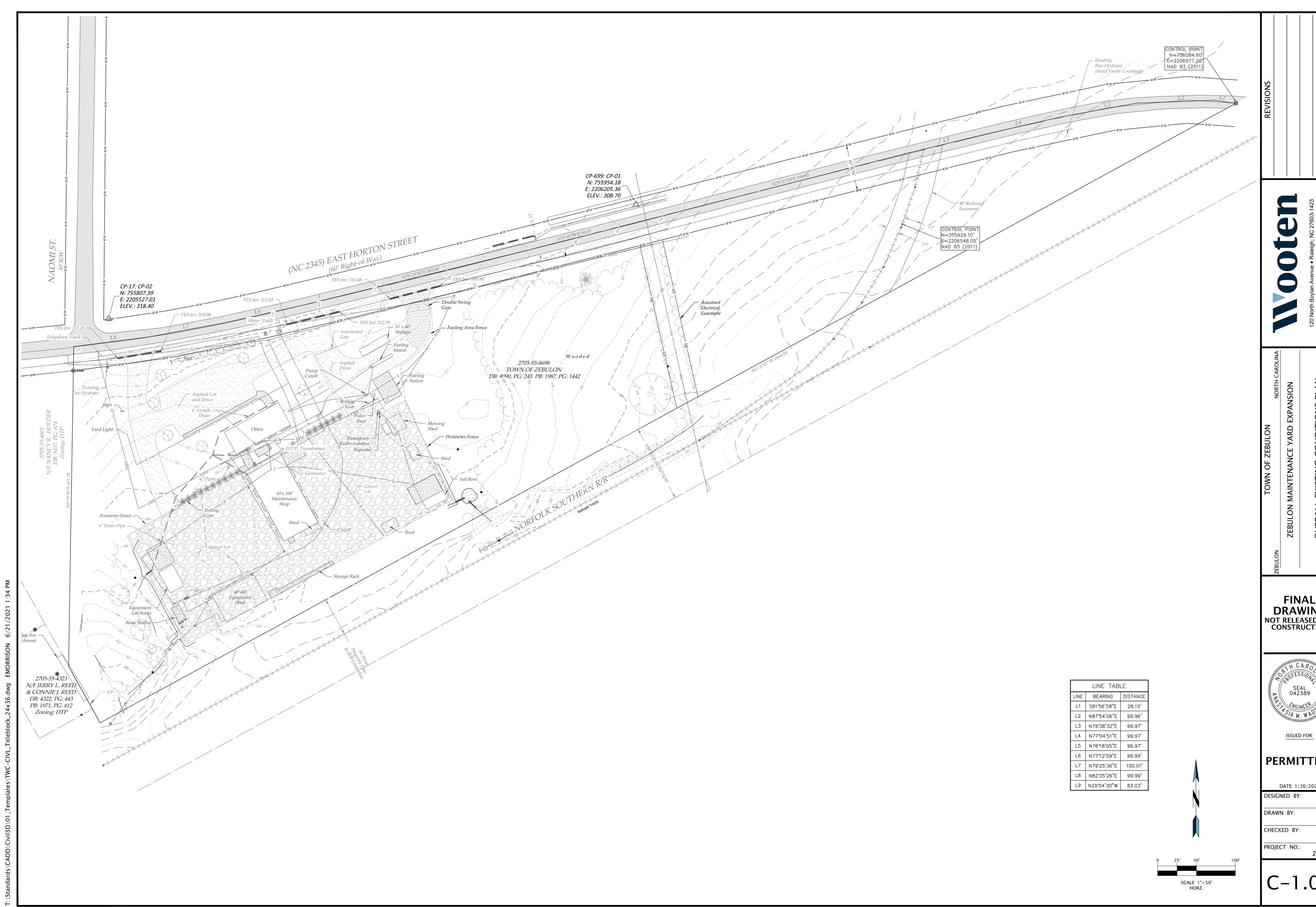
DESIGNED BY:
AMW

DRAWN BY:
THR

CHECKED BY:
AMW

PROJECT NO.:
2922-S

C-0.02



OVERALL EXIST

FINAL
DRAWING
NOT RELEASED FOR
CONSTRUCTION

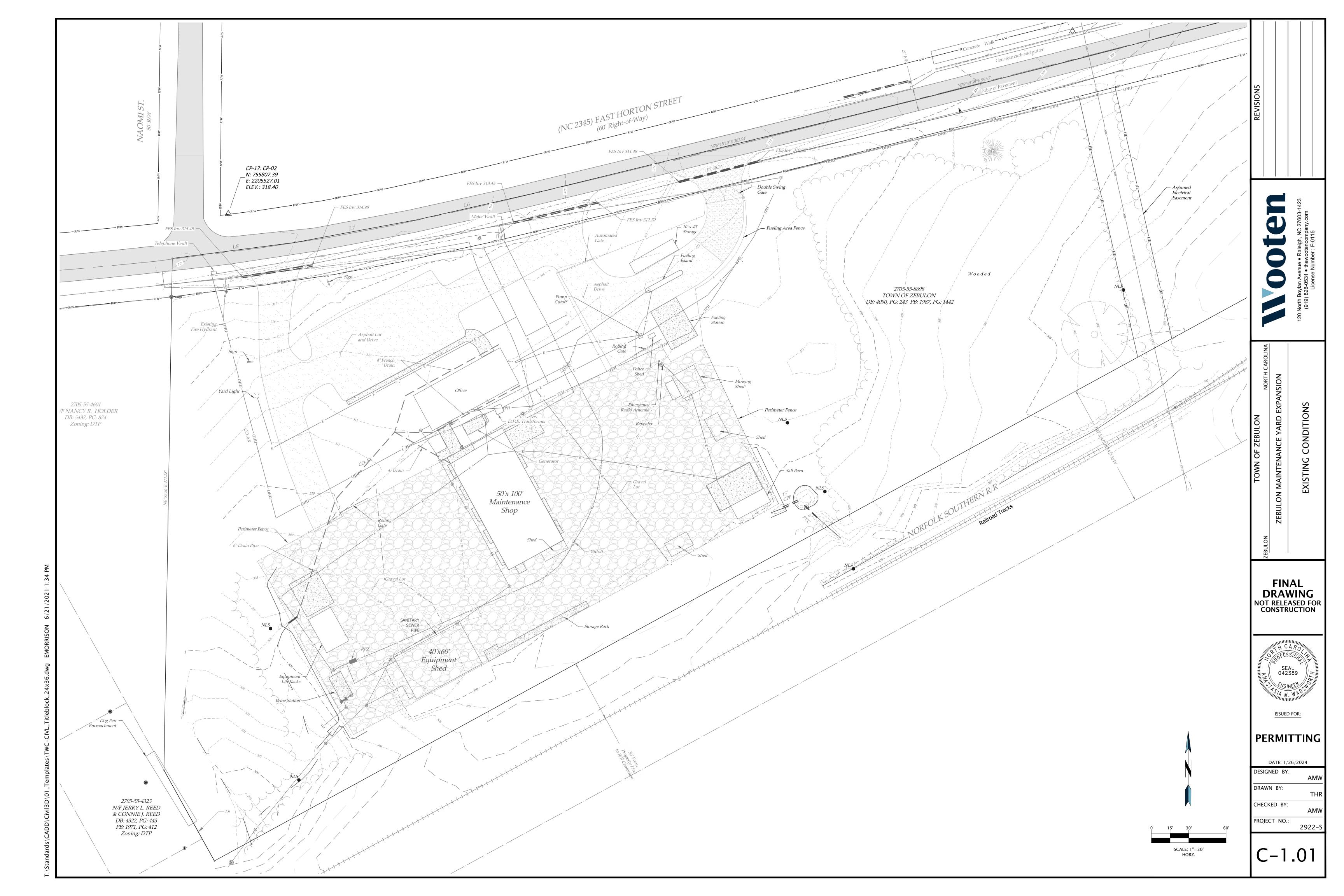


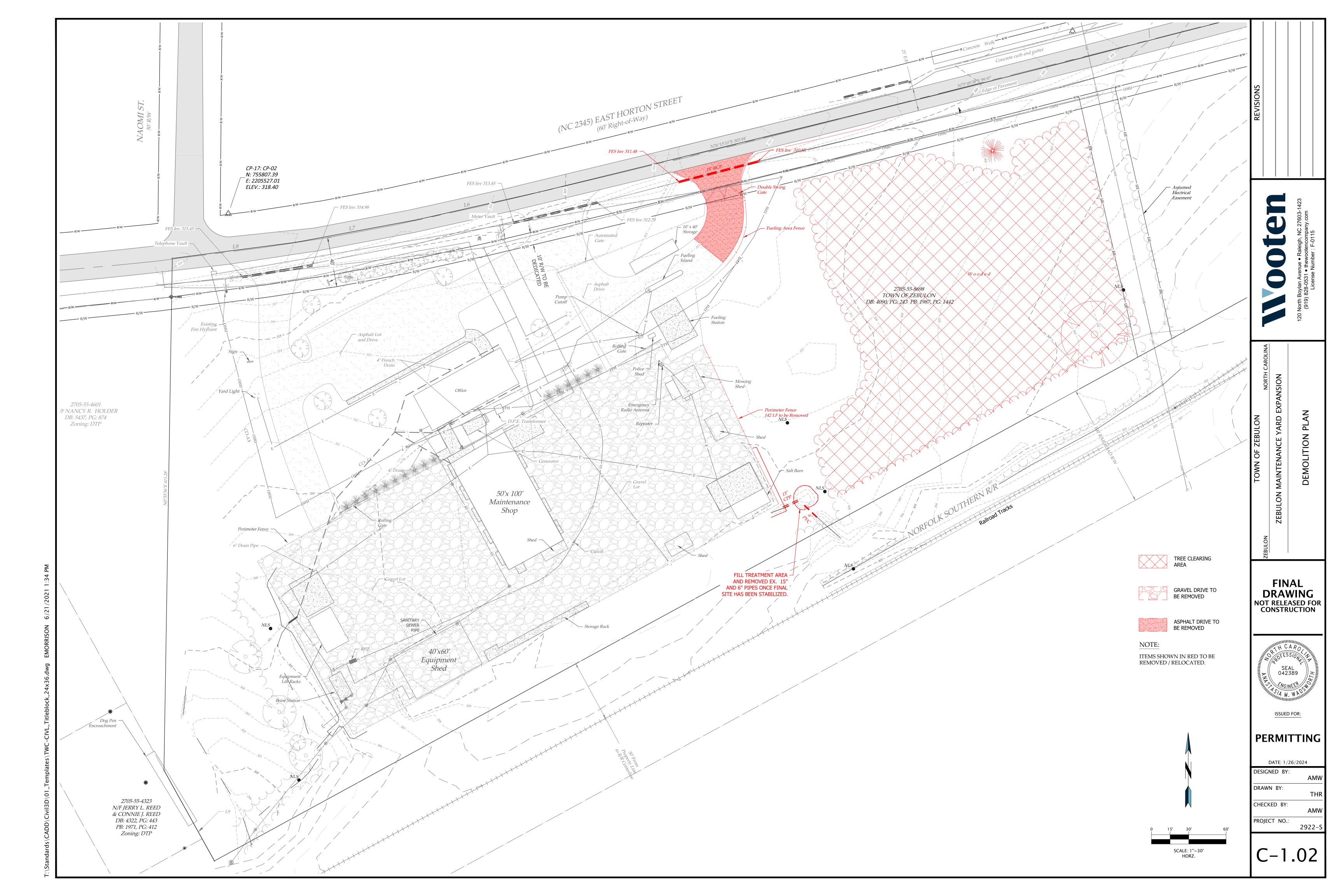
PERMITTING

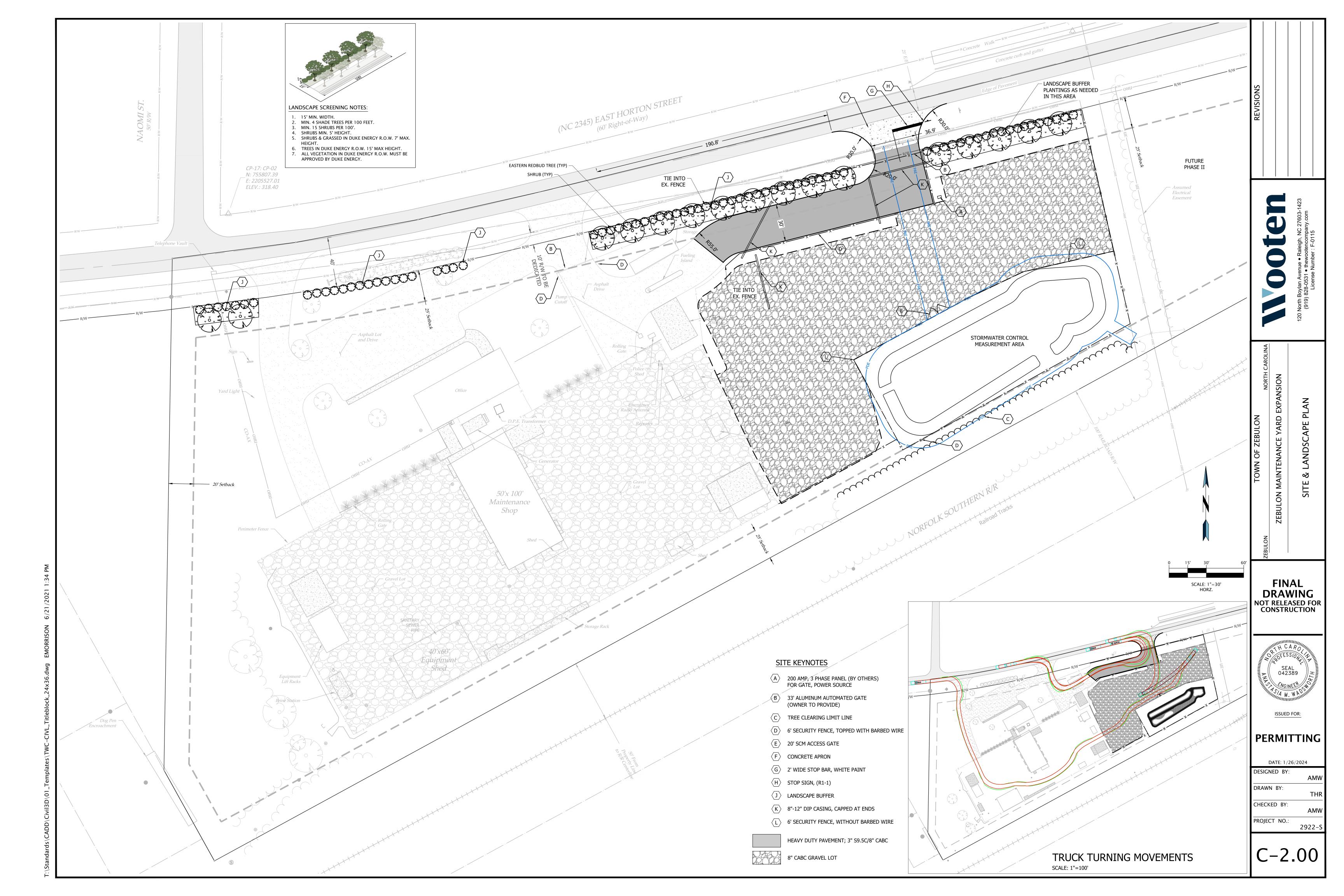
DATE: 1/26/2024

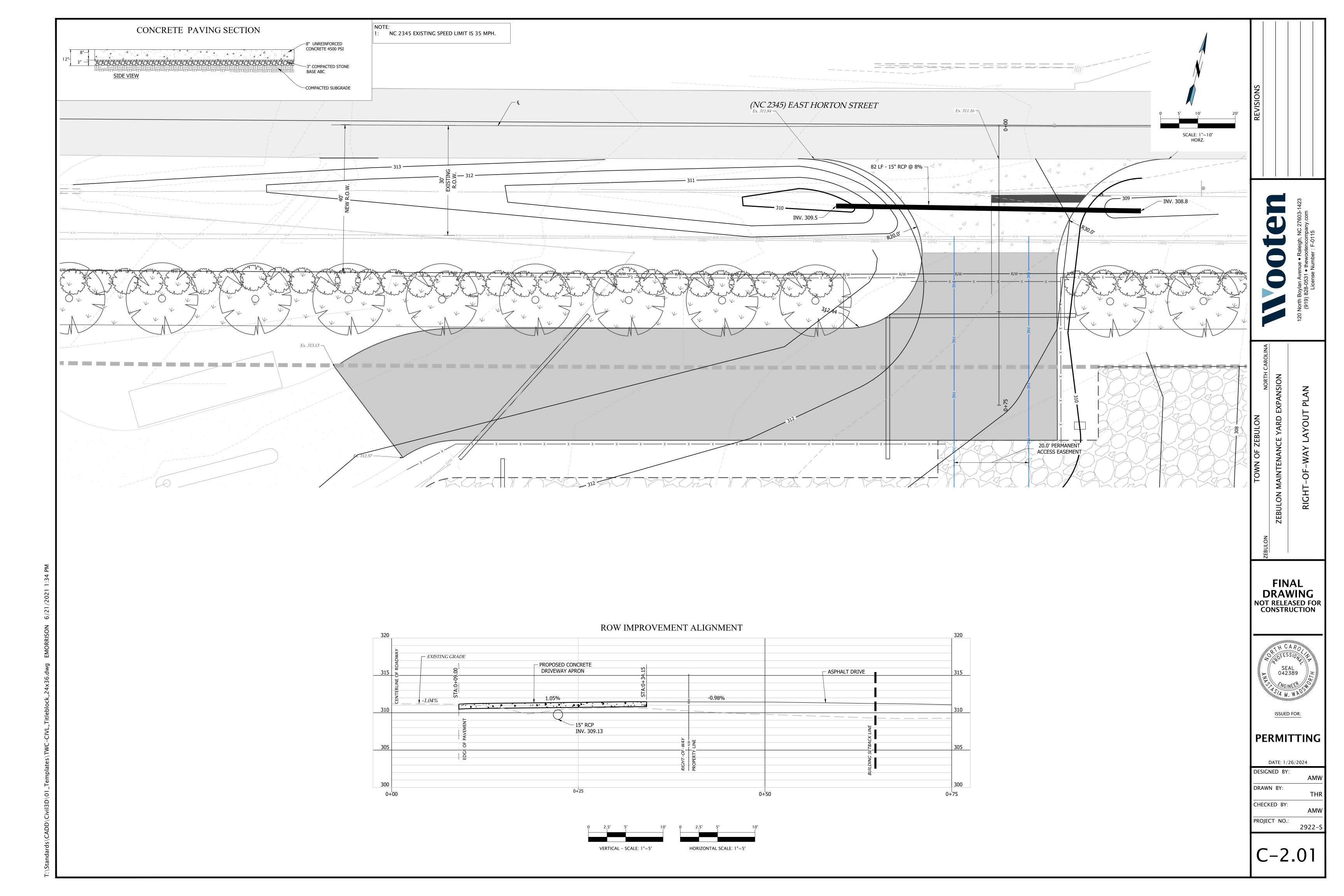
2922-S

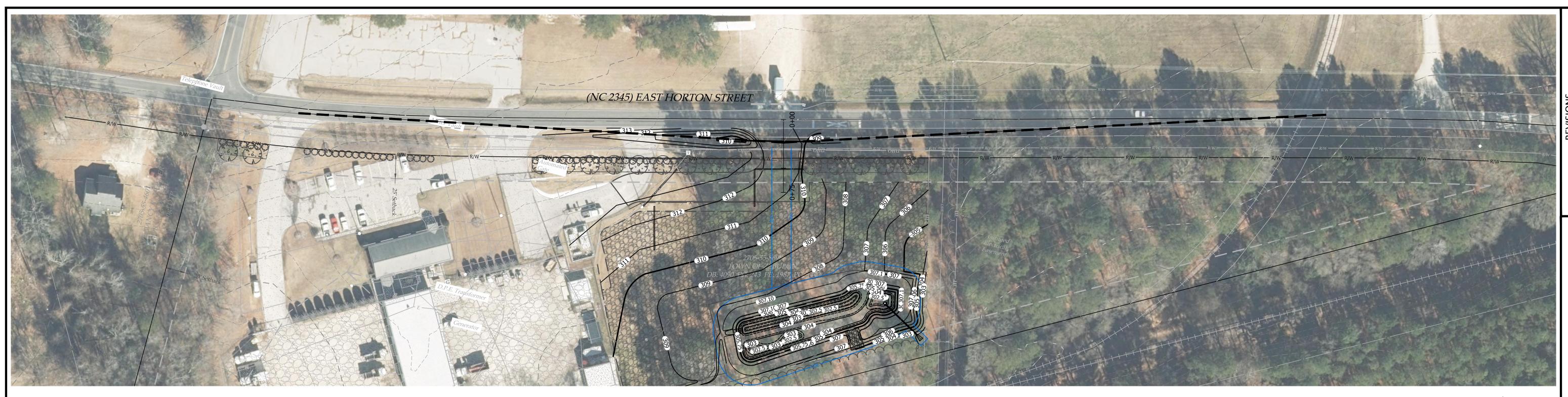
C-1.00











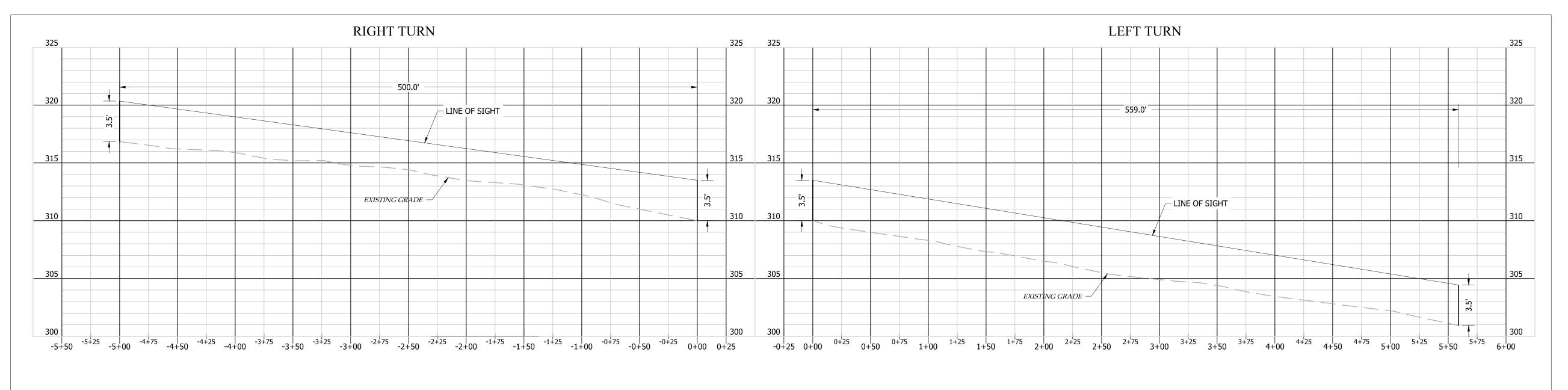
# 0 25' 50' SCALE: 1"=50' HORZ.

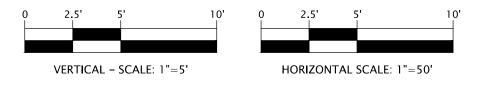
# SIGHT DISTANCE CALCULATIONS

POSTED SPEED LIMIT : 35 MPH DESIGN SPEED LIMIT: 40 MPH

CASE B1- LEFT TURN FROM MINOR ROAD ISD = 1.47 \* 40MPH \* 9.5 ISD = 559 LF

CASE B2- RIGHT TURN FROM MINOR ROAD ISD = 1.47 \* 40MPH \* 8.5 ISD = 500 LF





300 -5+50 -5+25 -5+00 -4+75 -4+50 -4+25 -4+00 -3+75 -3+50 -3+25 -3+00 -2+75 -2+50 -2+25 -2+00 -1+75 -1+50 -1+25 -1+00 ZEBULON

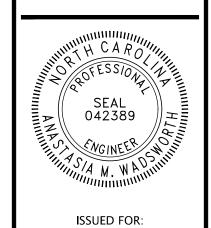
ZEBULON

ZEBULON

ZEBULON MAINTENANCE YARD EXPANSION

SIGHT DISTANCE CALCULATIONS

FINAL
DRAWING
NOT RELEASED FOR
CONSTRUCTION



PERMITTING

DATE: 1/26/2024

DESIGNED BY:

AM

DRAWN BY:

THR

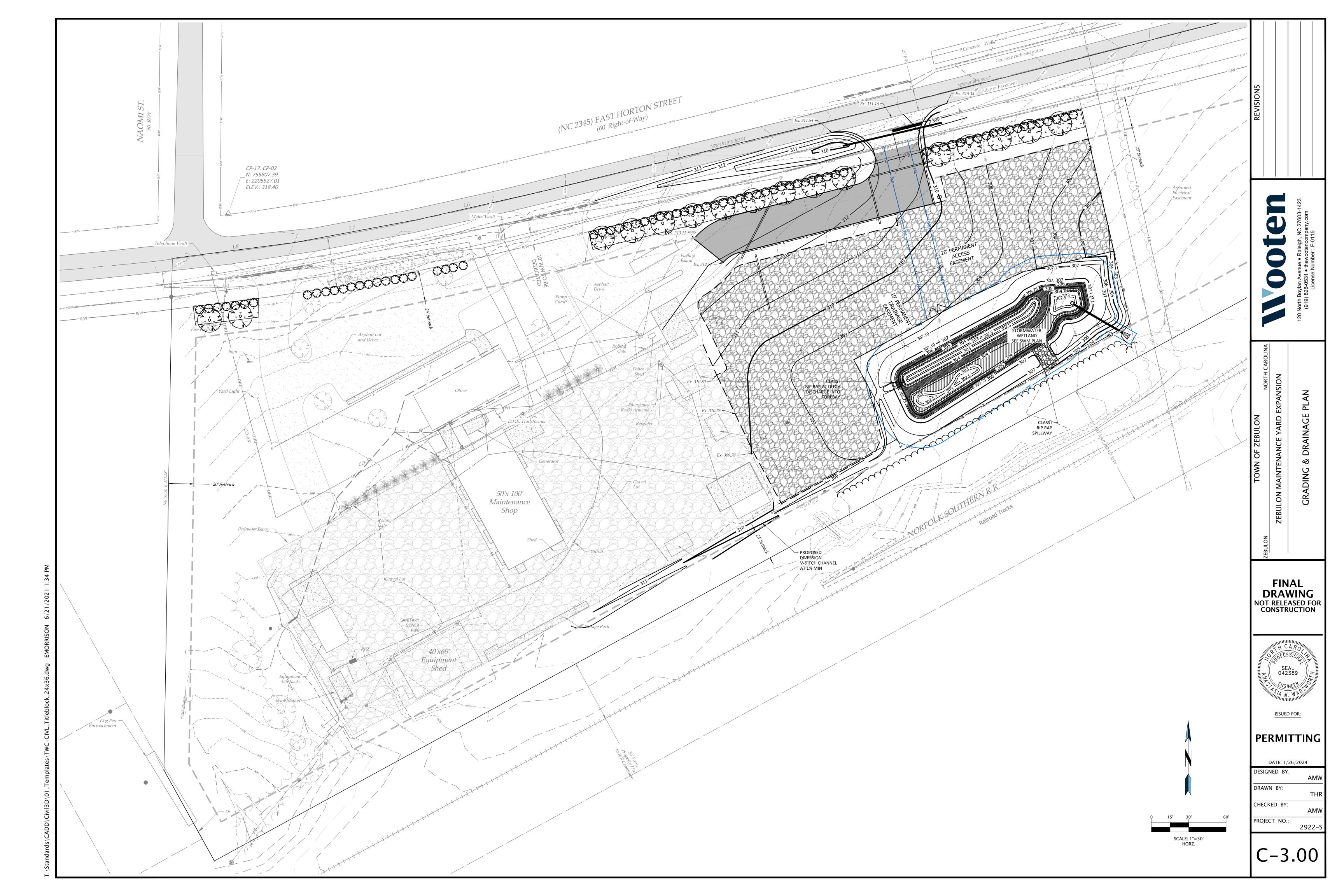
CHECKED BY:

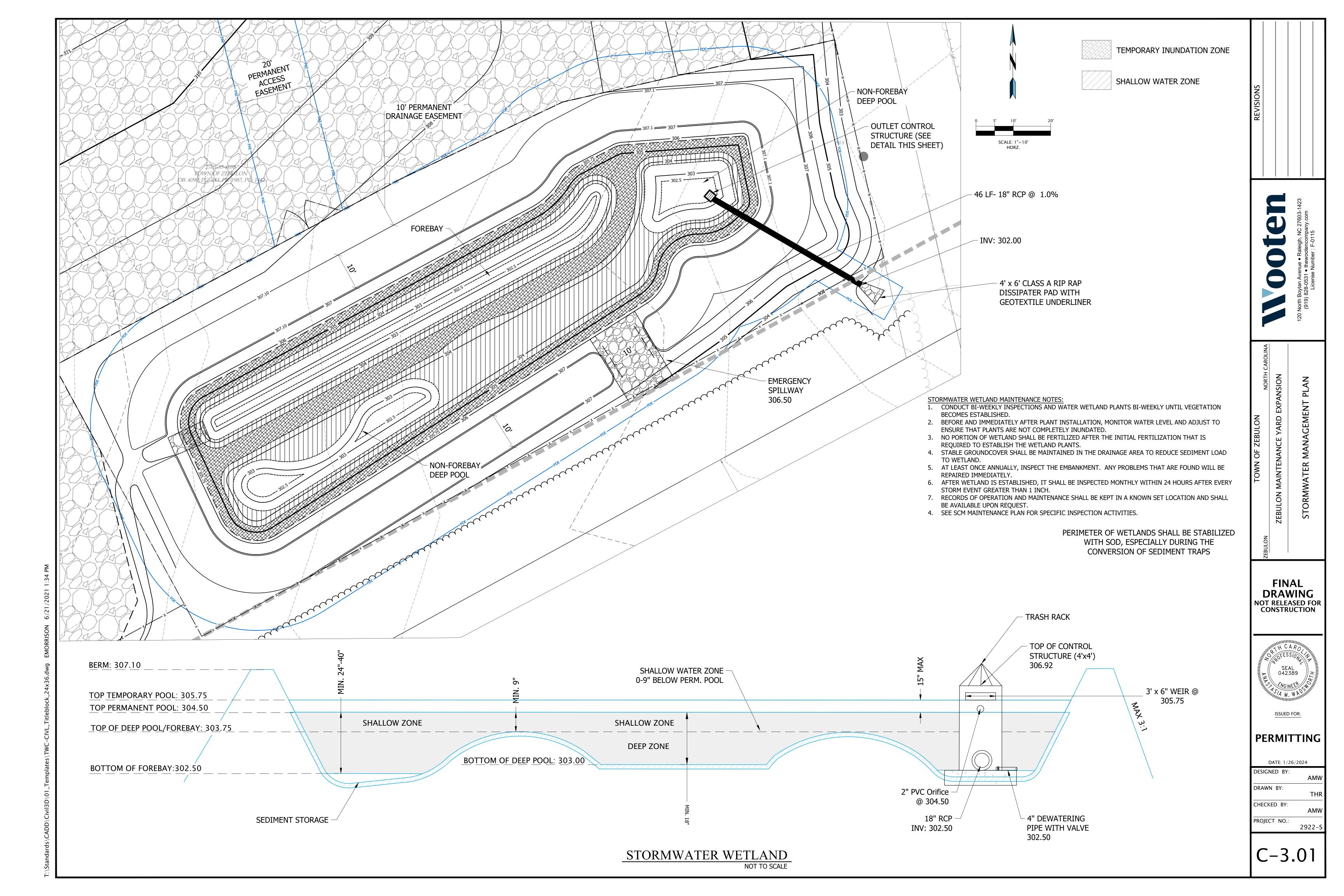
AMW

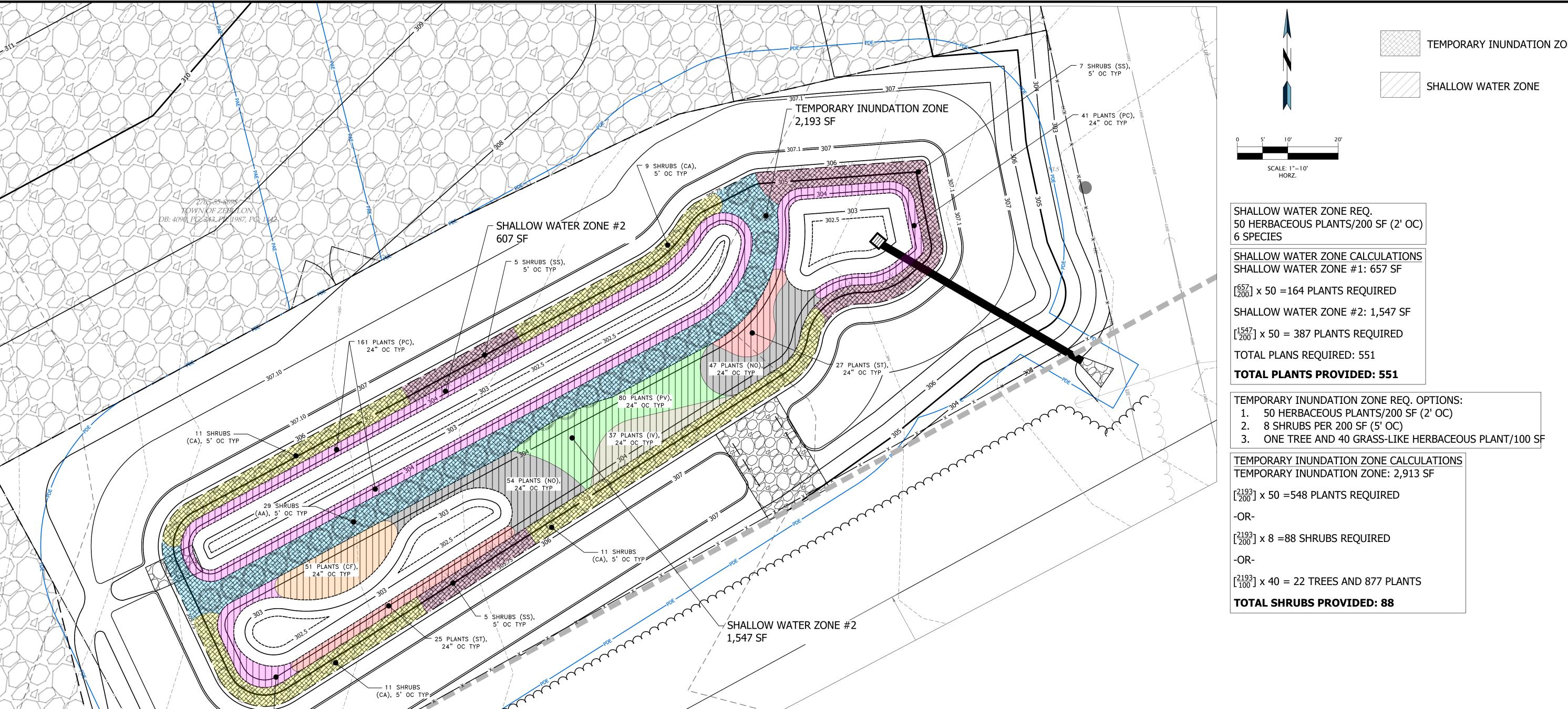
PROJECT NO.:

2922-S

C-2.02

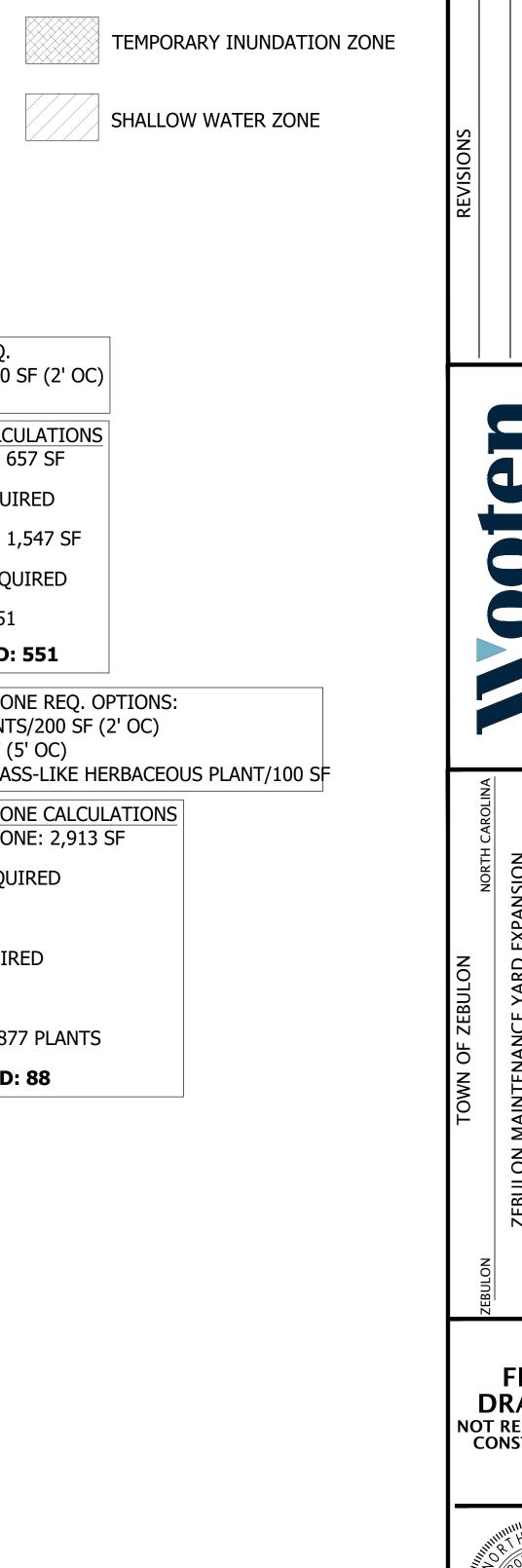






PLANTS LIST- WETLAND AREA PLANTINGS ONLY							
QTY	SYM	BOTANICAL NAMME	COMMON NAME	MIN. SIZE	REMARKS		
HERBAC	HERBACEOUS PLANTS (SHALLOW WATER ZONE PLANTINGS)- 6 VARIETIES						
51	CF	CANNA FLACCIDA	YELLOW CANNA	1 QT	24" O.C		
37	IV	IRIS VIRGINIANA	VIRGINIA IRIS	1 QT	24" O.C		
101	NO	NYMPHAEA ODORATA	AMERICAN WHITE WATERLILY	1 QT	24" O.C		
230	PC	POTEDERIA CORDATA	PICKERELWEED	1 QT	24" O.C		
80	PV	PELTANDRA VIRGINICA	ARROW ARUM	1 QT	24" O.C		
52	ST	SCHOENOPLECTUS TABERNWMONTANI	SOFTSTEM BULRUSH	1 QT	24" O.C		
SHRUBS	(TEMPOR	RARY INUNDATION ZONE I	PLANTINGS)- OPTION 2				
29	AA	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	3 GAL	5' O.C		
42	CA	CORNUS AMOMUM	SILKY DOGWOOD	3 GAL	5' O.C		
17	SS	SALIX SERICA	SILKY WILLOW	3 GAL	5' O.C		

28 PLANTS (PC), — 24" OC TYP



**FINAL DRAWING** NOT RELEASED FOR CONSTRUCTION

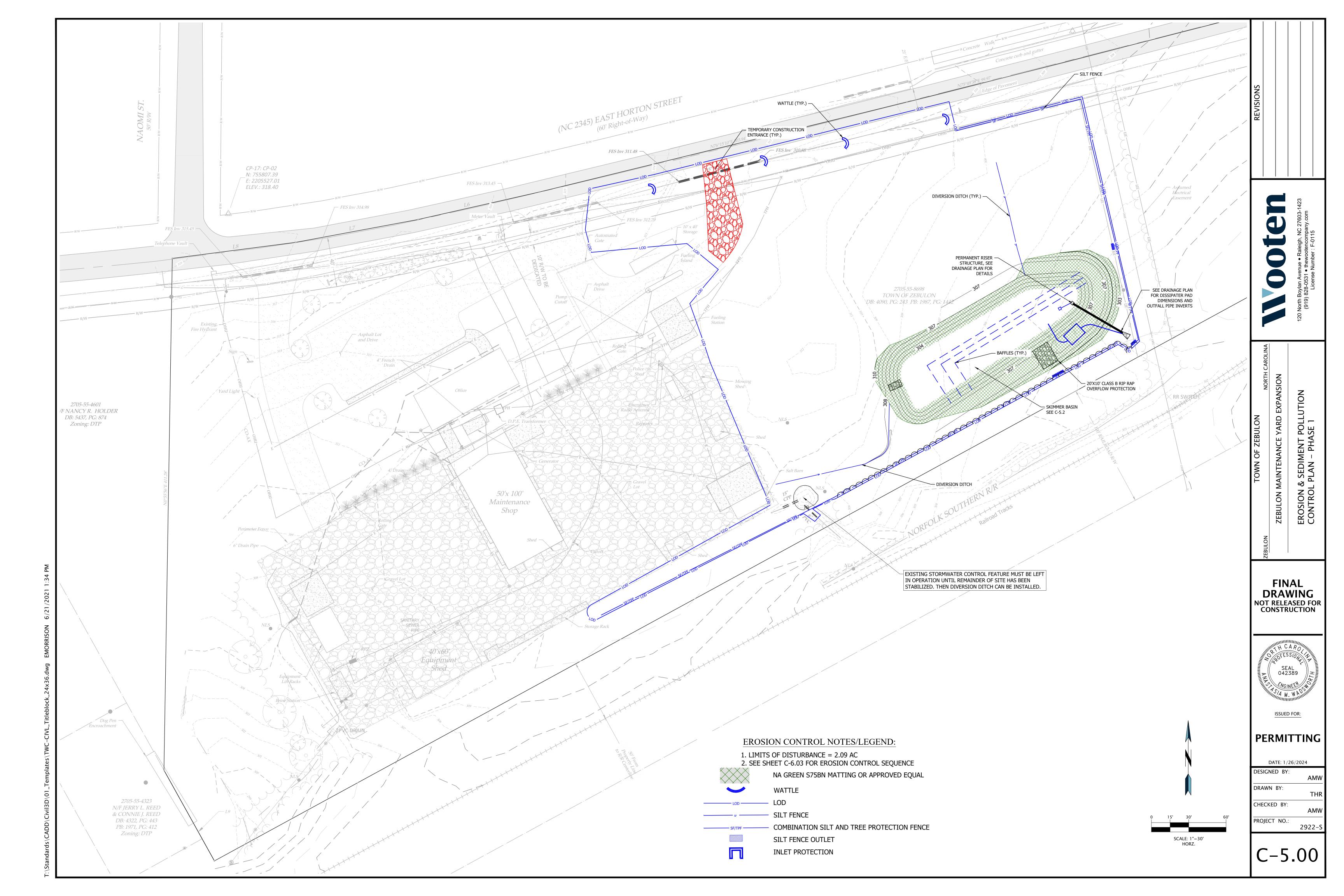


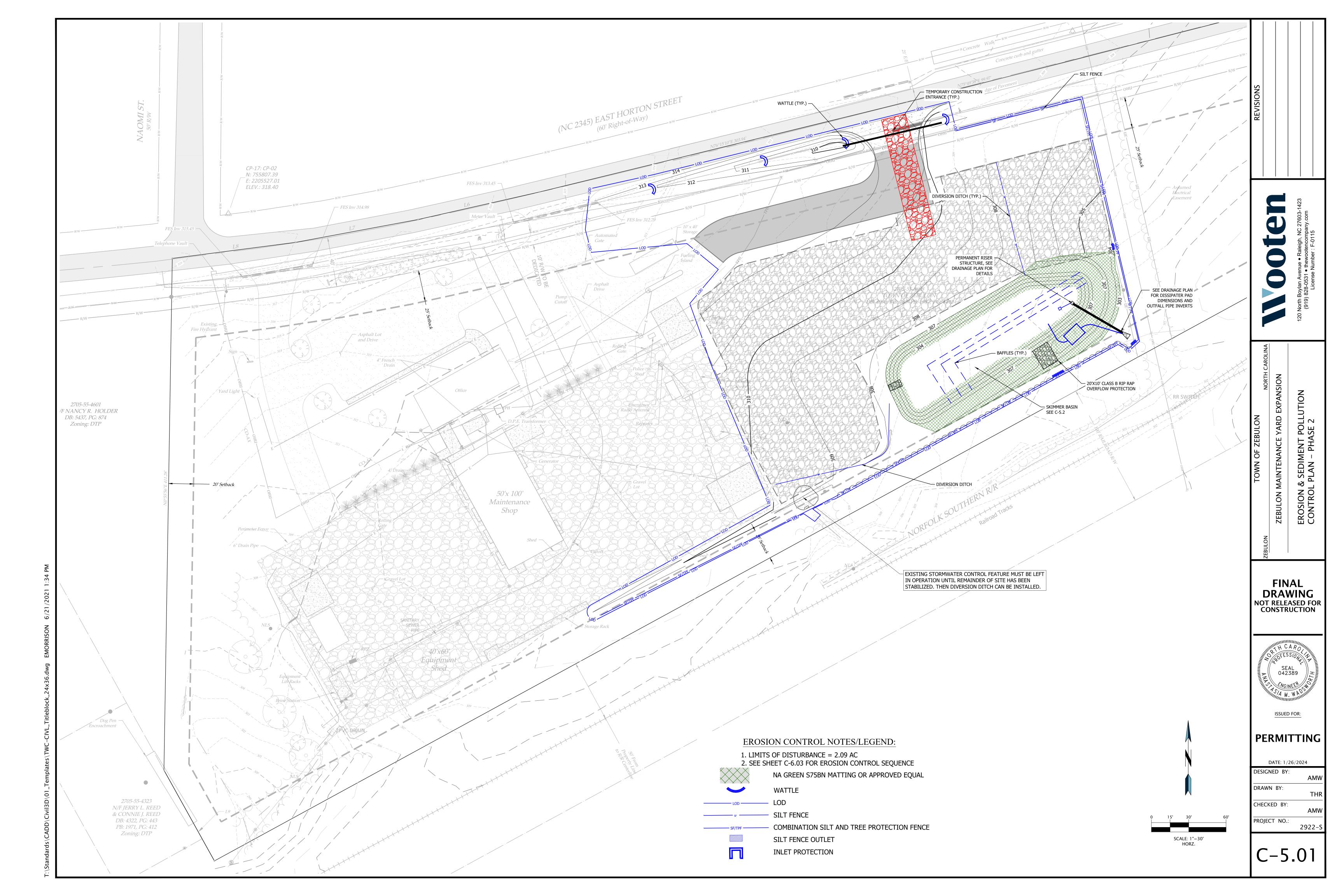
PERMITTING

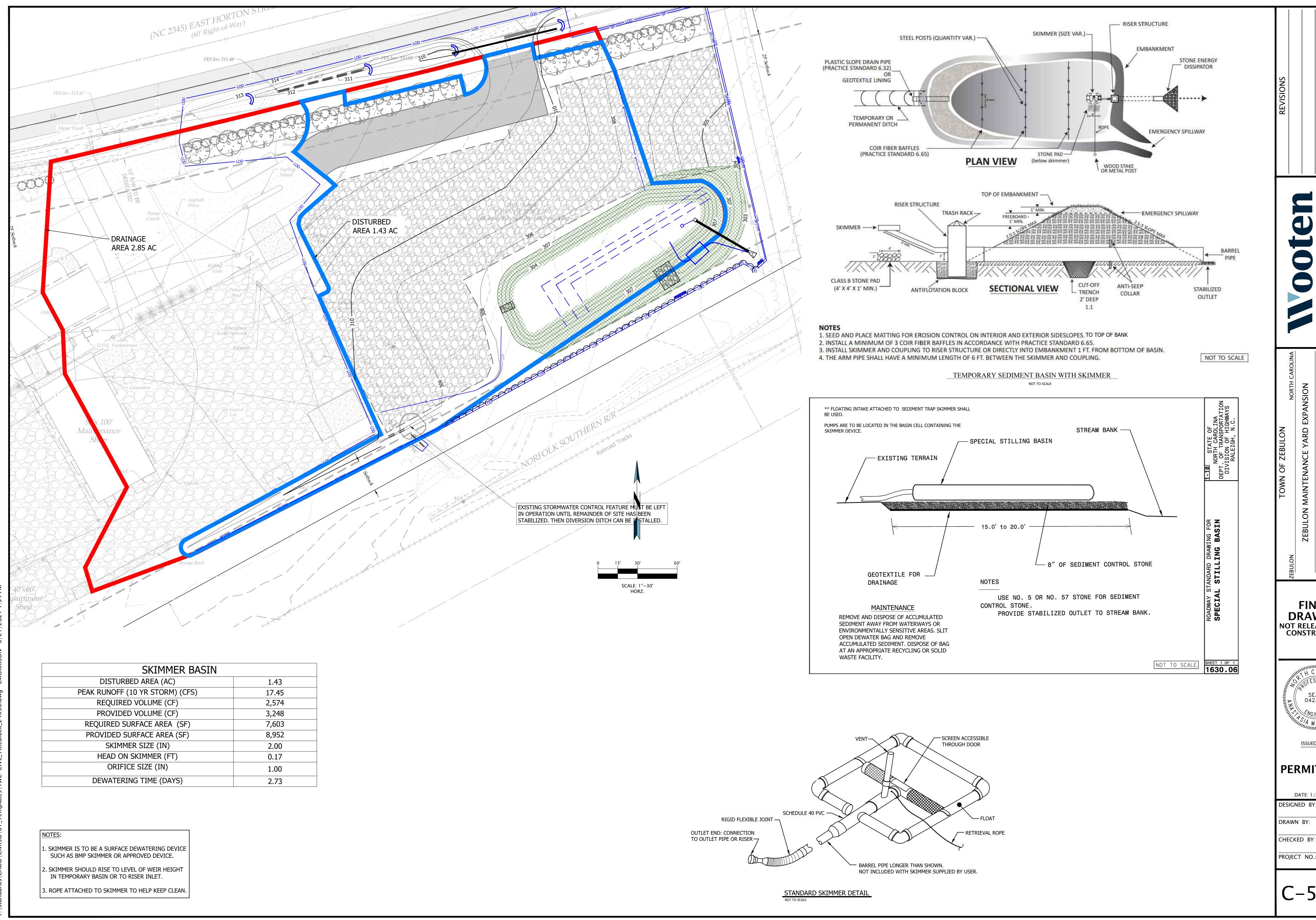
DATE: 1/26/2024 DESIGNED BY: DRAWN BY:

CHECKED BY: PROJECT NO.:

C-3.02







YARD

EROSION & SED CONTROL PLAN ZEBULON MAINT

FINAL **DRAWING** NOT RELEASED FOR CONSTRUCTION



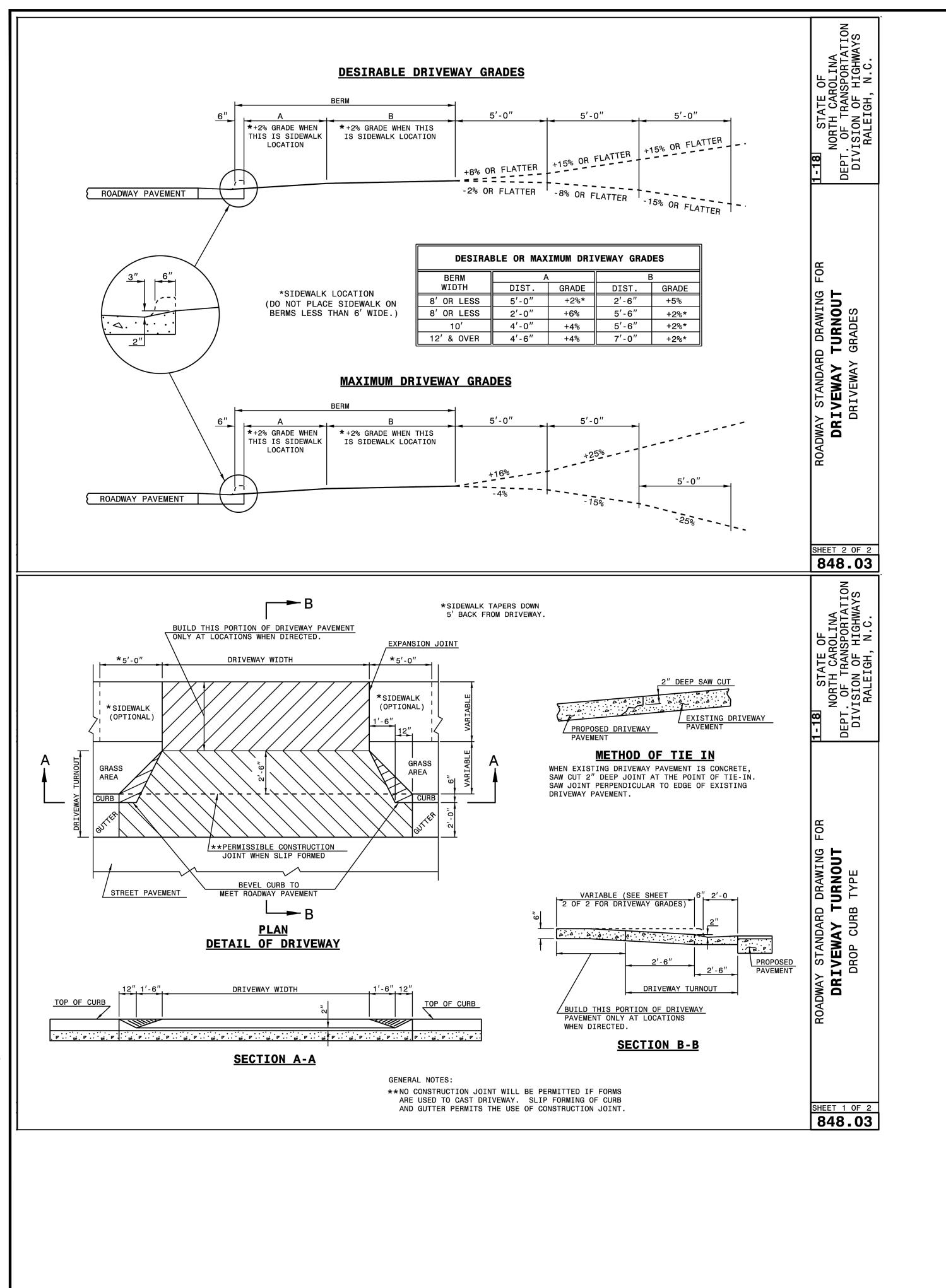
PERMITTING

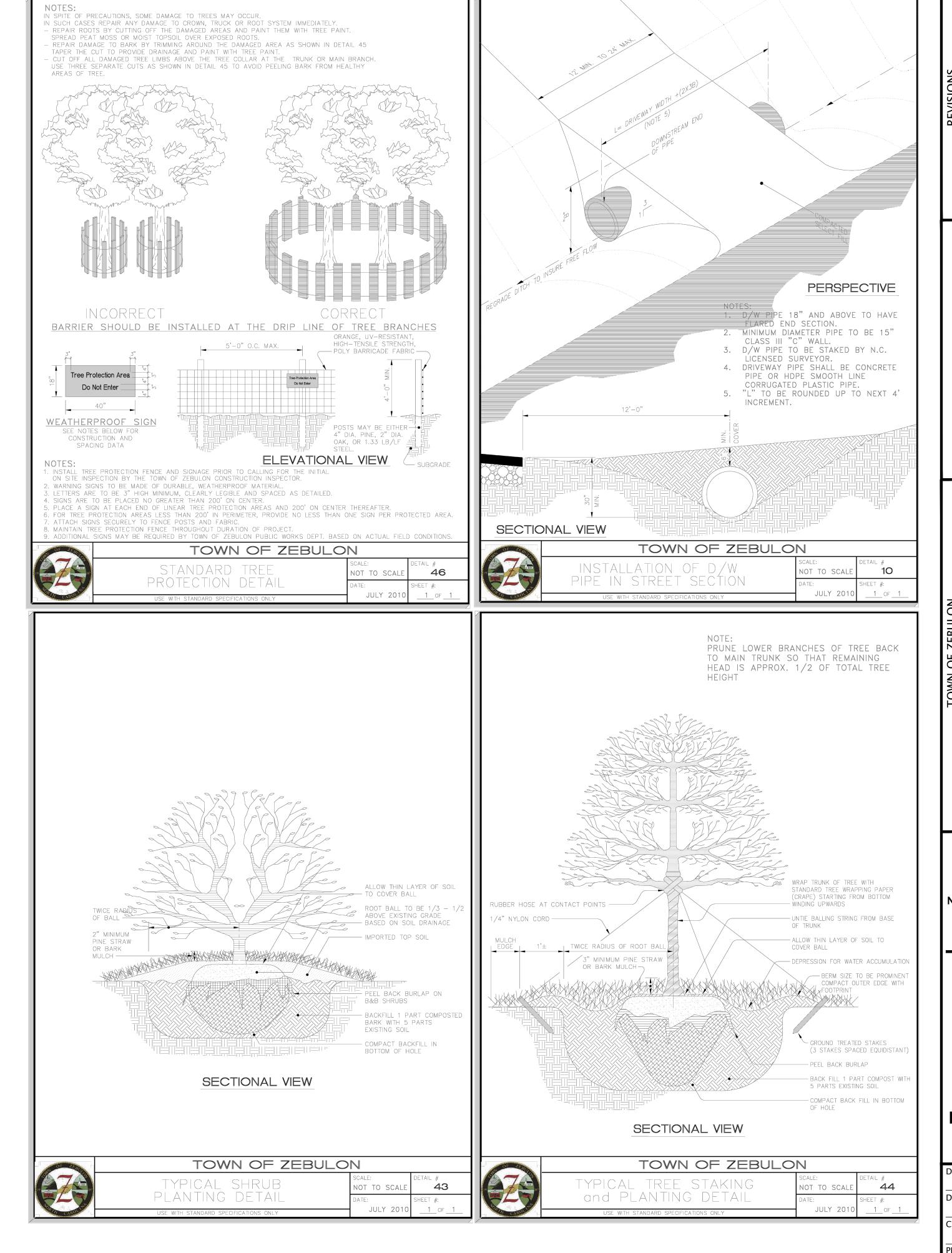
ISSUED FOR:

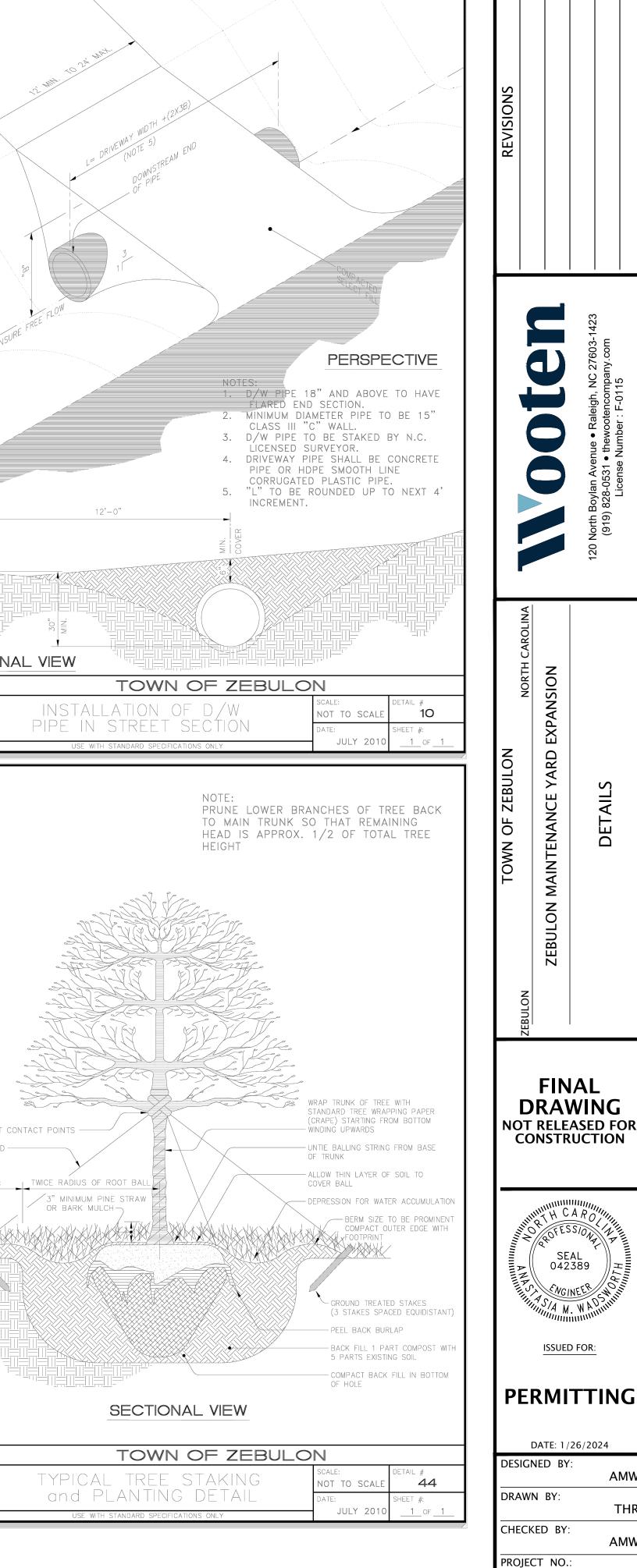
DATE: 1/26/2024 DESIGNED BY: DRAWN BY: CHECKED BY:

2922-S

C-5.02

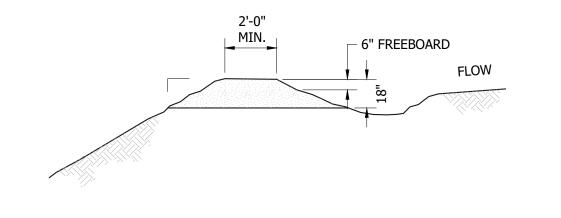


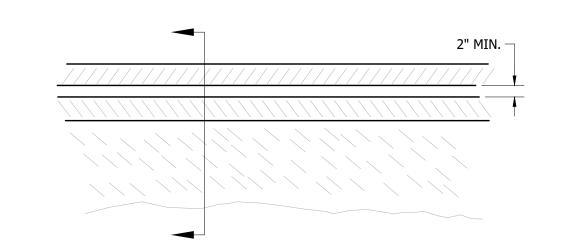




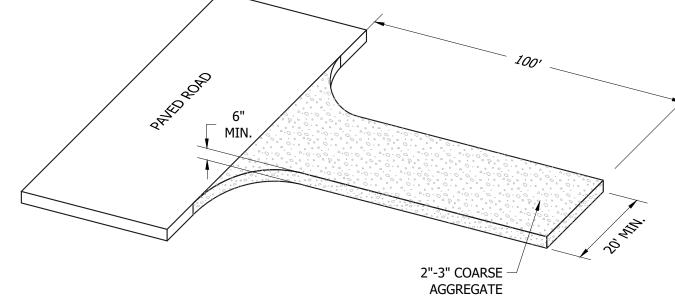
C-6.00

2922-S





DIVERSION DITCH NOT TO SCALE

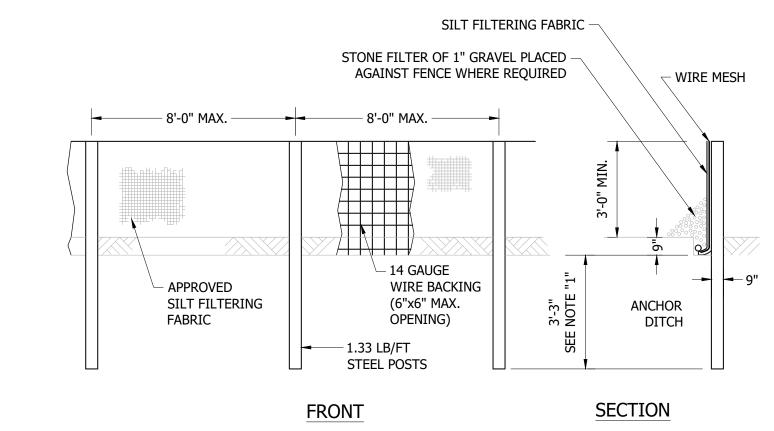


- 1. ENTRANCE APPLICABLE AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED.
- 2. CONSTRUCTION ENTRANCE SHALL BE PLACED FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES.
- 3. PERIODIC TOP DRESSING AND ROUTINE MAINTENANCE SHALL BE PROVIDED ON ENTRANCE AS REQUIRED. CONTRACTOR SHALL STOCKPILE FRESH STONE ON SITE.
- 4. ANY MATERIAL THAT MAKES IT TO EXISTING PUBLIC ROADWAY SHALL BE REMOVED AND CLEANED IMMEDIATELY.

# MAINTENANCE REQUIREMENTS:

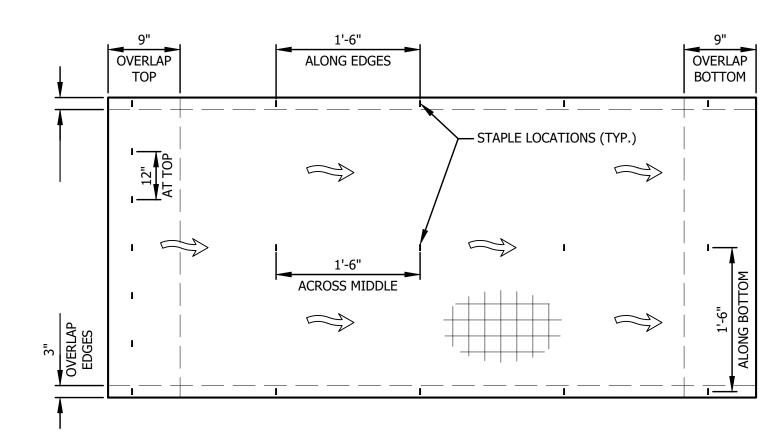
1. MAINTAIN ENTRANCE IN A CONDITION WHICH PREVENTS TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2 INCHES OF STONE, AS CONDITIONS REQUIRE, AT NO ADDITIONAL COST TO THE OWNER.

> TEMPORARY CONSTRUCTION ENTRANCE NOT TO SCALE



- 1. POSTS SET AT DEPTHS OF 4' FOR EARTH BACKFILL. ANCHOR DITCH IS 9" x 9" AND FILL IS TO BE COMPACTED.
- 2. PROVIDE ADEQUATE EXCAVATION AHEAD OF SILT FENCE TO ACT AS A VELOCITY BREAK AND
- 3. CONTRACTOR MAY USE ALTERNATE MATERIAL OR METHOD UPON APPROVAL FROM ENGINEER.

SILT FENCE NOT TO SCALE



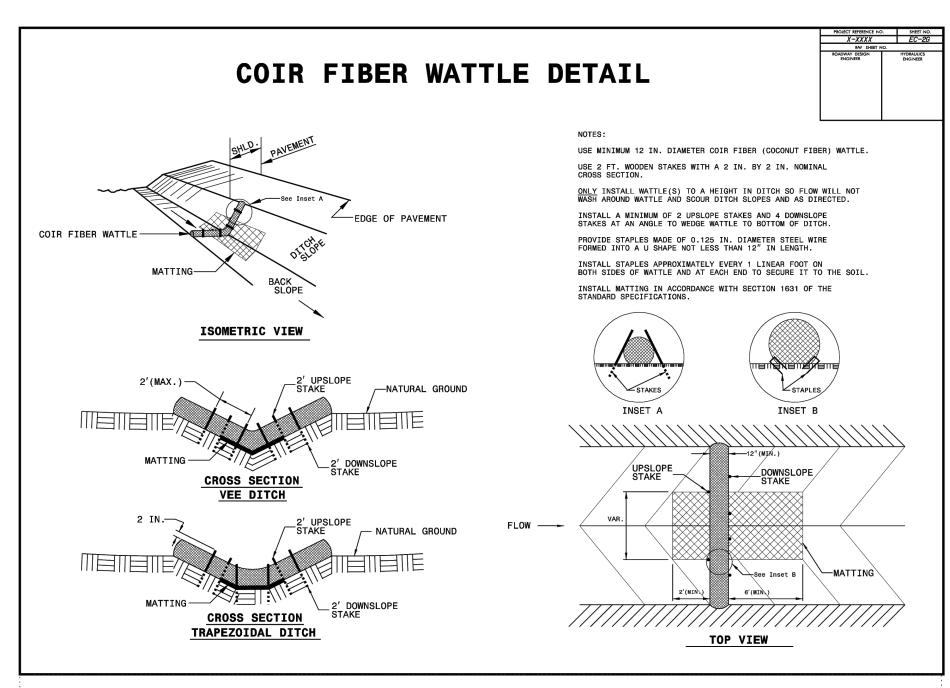
# INSTALLATION OF LINER:

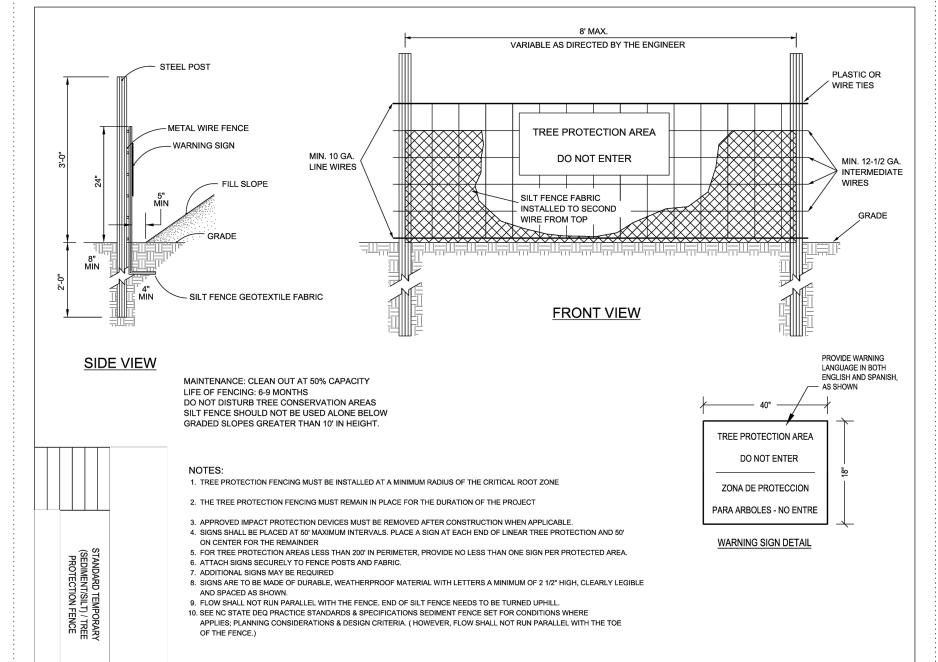
- 1. APPLY LIME, FERTILIZER, AND SEED BEFORE LAYING LINER.
- 2. LAY LINER FROM TOP OF DITCH OR CHANNEL AND UNROLL IT DOWNGRADE. DO NOT STRETCH OR LEAVE WRINKLES.
- 3. BURY THE UPSLOPE END IN A SLOT 6" DEEP. PROVIDE STAPLES AND OVERLAP AS SHOWN ABOVE.

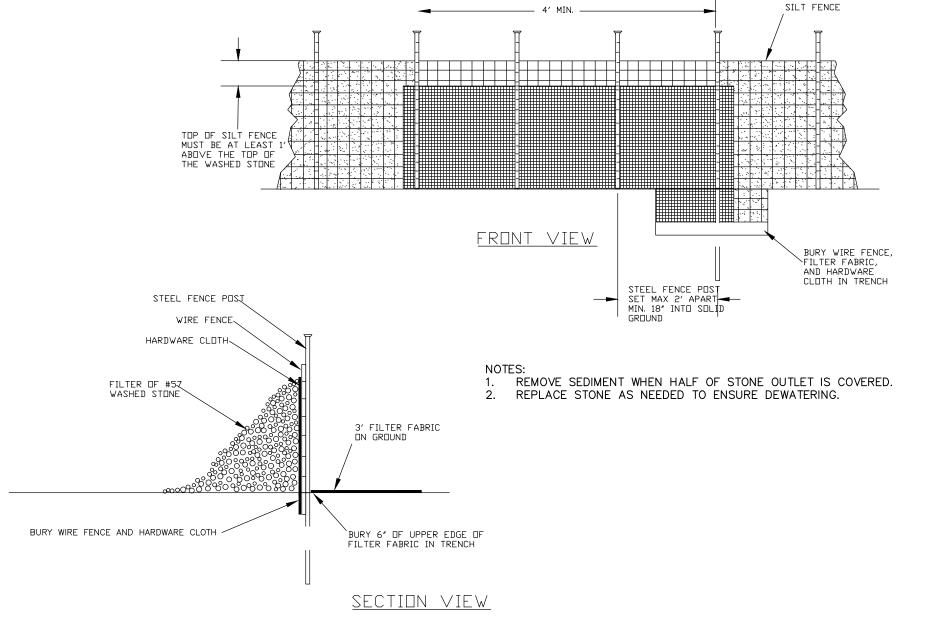
# MAINTENANCE:

INSPECT AFTER RAINSTORMS FOR EROSION OR FAILURE. REPAIR ALL WASHED OUT AREAS BY REGRADING, RESEEDING, AND REINSTALLING MULCH.

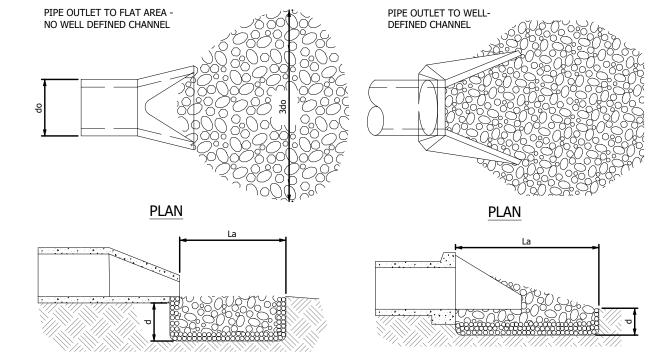
**EROSION CONTROL BLANKET** 







SILT FENCE OUTLET DETAIL



SECTION THRU PIPE

NOTES: 1. La IS THE LENGTH OF THE EXISTING RIP-RAP APRON.

- 2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
- 3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
- 4. A TYPE 2 FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIP-RAP

ENERGY DISSIPATION PAD/RIPRAP APRON

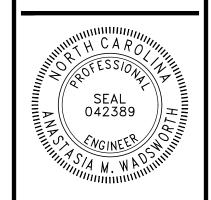
SECTION THRU PIPE

**FINAL DRAWING NOT RELEASED FOR** CONSTRUCTION

YARD

ENANCE

DET



ISSUED FOR:

PERMITTING

DATE: 1/26/2024 DESIGNED BY: DRAWN BY: CHECKED BY: PROJECT NO.:

2922-9

C-6.01

	Re	equired Ground Stabil	ization 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 ar not steeper than 2:1, 14 days are allowed
(d)	Slopes 3:1 to 4:1	14	<ul> <li>-7 days for slopes greater than 50' in length and with slopes steeper than 4:</li> <li>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones</li> <li>-10 days for Falls Lake Watershed</li> </ul>
(e)	Areas with slopes flatter than 4:1	14	<ul> <li>-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zor</li> <li>-10 days for Falls Lake Watershed unless there is zero slope</li> </ul>

ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

# GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

• Temporary grass seed covered with straw or | • Permanent grass seed covered with straw or other mulches and tackifiers

 Hvdroseeding • Rolled erosion control products with or without temporary grass seed Plastic sheeting

other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Appropriately applied straw or other mulch
 Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosio • Structural methods such as concrete, asphalt or retaining walls

Rolled erosion control products with grass seed

Permanent Stabilization

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

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

Remove leaking vehicles and construction equipment from service until the problem

# ITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers. Provide a sufficient number and size of waste containers (e.g dumpster, trash
- receptacle) on site to contain construction and domestic wastes. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runof
- from upland areas and does not drain directly to a storm drain, stream or wetland. Cover waste containers at the end of each workday and before storm events or
- provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.

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

- Do not dump paint and other liquid waste into storm drains, streams or wetlands. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- 4. 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

- 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
- 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

erosion on disturbed soils for temporary or permanent control needs.

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

# HERBICIDES, PESTICIDES AND RODENTICIDES

caused by removal of washout.

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

<u>IDTES:</u> L'ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE

Do not discharge concrete or cement slurry from the site.

and state solid waste regulations and at an approved facility.

types of temporary concrete washouts provided on this detail.

limits. Post signage on the washout itself to identify this location.

be pumped out and removed from project.

products, follow manufacturer's instructions.

Dispose of, or recycle settled, hardened concrete residue in accordance with local

addition place the mixer and associated materials on impervious barrier and within

Install temporary concrete washouts per local requirements, where applicable. If an

review and approval. If local standard details are not available, use one of the two

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

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.

Locate washouts in an easily accessible area, on level ground and install a stone

install protection of storm drain inlet(s) closest to the washout which could receive

entrance pad in front of the washout. Additional controls may be required by the

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

Remove leavings from the washout when at approximately 75% capacity to limit

components when no longer functional. When utilizing alternative or proprietary

in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance

10. At the completion of the concrete work, remove remaining leavings and dispose of

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

alternate method or product is to be used, contact your approval authority for

Manage washout from mortar mixers in accordance with the above item and in

BELOW GRADE WASHOUT STRUCTURE

lot perimeter silt fence.

spills or overflow.

approving authority.

CLEARLY MARKED SIGNAGE NOTING DEVICE (18'X24' MIN

ABOVE GRADE WASHOUT STRUCTURE

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WI SIGNAGE NOTING DEVICE.

# Do not stockpile these materials onsite.

# HAZARDOUS AND TOXIC WASTE

**SECTION C: REPORTING** 

(b) Oil spills if:

environment.

(a) Visible sediment

stream or wetland

deposition in a

(b) Oil spills and

substances per Iter

1(b)-(c) above

(c) Anticipated

122.41(m)(3)]

bypasses [40 CFR

(d) Unanticipated

bypasses [40 CFR

(e) Noncompliance

of this permit that

with the conditions

122.41(m)(3)]

health or the

environment[40

CFR 122.41(I)(7)]

release of

hazardous

1. Occurrences that Must be Reported

They are 25 gallons or more,

Permittees shall report the following occurrences:

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

2. Reporting Timeframes and Other Requirements

case-by-case basis.

case-by-case basis.

location of the spill or release.

(d) Anticipated bypasses and unanticipated bypasses.

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

- 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.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

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

(c) Releases of hazardous substances in excess of reportable quantities under Section 311

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

After a permittee becomes aware of an occurrence that must be reported, he shall contact

the appropriate Division regional office within the timeframes and in accordance with the

other requirements listed below. Occurrences outside normal business hours may also be

Reporting Timeframes (After Discovery) and Other Requirements

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

sediment and actions taken to address the cause of the deposition Division staff may waive the requirement for a written report on a

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

determine that additional requirements are needed to assure compliance

monitoring, inspections or apply more stringent practices if staff

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

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

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

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

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

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

been corrected, the anticipated time noncompliance is expected to

prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6).

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

continue; and steps taken or planned to reduce, eliminate, and

noncompliance, and its causes; the period of noncompliance,

The report shall include an evaluation of the anticipated quality and

with the federal or state impaired-waters conditions.

Within 24 hours, an oral or electronic notification

Within 24 hours, an oral or electronic notification

reported to the Department's Environmental Emergency Center personnel at (800)

Within 24 hours, an oral or electronic notification

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

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

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

# NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

**Documentation Requirements** 

Initial and date each E&SC measure on a copy

plan or complete, date and sign an inspection

of the approved E&SC plan or complete, date

EFFECTIVE: 04/01/19

# 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

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 holiday periods, and no individual-day rainfall information available, record the cumulative rain measurement for those u attended days (and this will determine if a site inspection needed). Days on which no rainfall occurred shall be recorded "zero." The permittee may use another rain-monitoring devi approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	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	<ol> <li>Identification of the discharge outfalls inspected,</li> <li>Date and time of the inspection,</li> <li>Name of the person performing the inspection,</li> <li>Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration,</li> <li>Indication of visible sediment leaving the site,</li> <li>Description, evidence, and date of corrective actions taken.</li> </ol>
(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 let the site limits,  2. Description, evidence, and date of corrective actions taken, a  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, ar  2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permi
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover).  2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

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

# SELF-INSPECTION, RECORDKEEPING AND REPORTING

# L. E&SC Plan Documentatio

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

(a)	Each E&SC measure has been installed
an	d does not significantly deviate from the
loc	cations, dimensions and relative elevations
sh	own on the approved E&SC plan.
sh	own on the approved E&SC plan.

Item to Documen

and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial

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

report to indicate completion of the construction phase. c) Ground cover is located and installed Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.

(d) The maintenance and repair requirements for all E&SC measures have been performed (e) Corrective actions have been taken to E&SC measures.

# Complete, date and sign an inspection repor Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the

2. Additional Documentation to be Kept on Site In addition to the E&SC 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:

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

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records

. 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:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- (b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit, (c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
- (d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above, (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- (f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

# TEMPORARY SEEDING (BY SEASON)

RATE (lb/acre)

# LATE WINTER AND EARLY SPRING

SEEDING MIXTURE

120

Mountains - Aug 15 thru Dec 15

Coastal plain and piedmont - Aug 15 thru Dec 30

SOIL AMENDMENTS Follow recommendation of soil tester or apply 2,000 lb/acre (4,000 lbs/acre in clay soils) Ground Agricultural Limestone, 1000 lb/acre 10-10-10 fertilizer, and

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting

400 gallons/acre asphalt emulsion tack rate.

# **MAINTENANCE**

Repair and fertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal plain) lespedeza in late February or early March.

cover is not to extend beyond June.

# Omit annual Lespedeza when duration of temporary

SEEDING DATES Mountains - Above 2,500 ft: Feb 15 thru May 15 Below 2,500 ft: Feb 1 thru May 1

Piedmont - Jan 1 thru May 1 Coatal Plain - Dec 1 thru Apr 15

SEEDING MIXTURE

Annual Lespedeza (kobe

in piedmont and coastal

plain, Korean in mountains

Rye (grain)

# SOIL AMENDMENTS

Follow recommendation of soil tester or apply 2,000 lb/acre (4,000 lbs/acre in clay soils) Ground Agricultural Limestone, 1000 lb/acre 10-10-10 fertilizer, and 400 gallons/acre asphalt emulsion tack rate.

# <u>MULCH</u>

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting

# **MAINTENANCE**

Refertilize if growth is not fully adequate. Reseed, refertilze and mulch immediately following erosion or other damage.

# STABILIZATION NOTES

- 1) STABILIZATION FOR THIS PROJECT SHALL COMPLY WITH THE TIMEFRAME GUIDELINES AS SPECIFIED BY THE NCG-01 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 2, 2011 ISSUED BY NCDWQ. TEMPORARY OR PERMANENT GROUND COVER STABILIZATION SHALL OCCUR WITHIN 7 CALENDAR DAYS FROM LAST LAND-DISTURBING ACTIVITIES, WITH THE FOLLOWING EXCEPTIONS IN WHICH TEMPORARY OR PERMANENT GROUND COVER SHALL BE PROVIDED IN 14 CALENDAR DAYS FROM LAST LAND DISTURBING ACTIVITIES.
- SLOPES BETWEEN 2:1 AND 3:1, WITH A SLOPE LENGTH OF 10 FEET OR LESS SLOPES 3:1 OR FLATTER, WITH A SLOPE LENGTH OF 50 FEET OR LESS.

# SLOPES 4:1 OR FLATTER

# EROSION CONTROL MAINTENANCE

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION CONTROL DEVICES THROUGH THE PROJECT DURATION.

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS BECAME EFFECTIVE OCTOBER 1, 2010. TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, A COMBINED FORM IS NOW AVAILABLE. THE NEW FORM WAS DEVELOPED TO SATISFY THE REOUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG 010000, BEGINNING AUGUST 1, 2013, THE DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES IS RESPONSIBLE FOR ADMINISTERING BOTH THE SPCA AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG 010000. THE COMBINED FORM SHOULD MAKE IT EASIER TO COMPLY WITH SELF-INSPECTION REQUIREMENTS. THE COMBINED SELF-MONITORING FORM IS AVAILABLE AS A PDF AND WORD DOCUMENT FROM THE LAND QUALITY WEB SITE:

https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms

ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL (≥1.0 IN.) BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.

3. SEDIMENT WILL BE REMOVED FROM THE BEHIND ANY EROSION CONTROL DEVICES WHEN STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY.

4. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 6 INCHES DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A

5. SEDIMENTS WILL BE REMOVED FROM THE GRAVEL INLET PROTECTION AND ALL INLET PROTECTIONS AFTER EACH SIGNIFICANT RAINFALL EVENT. 6. ANY DEWATERING OF SEDIMENT CONTAINMENT DEVICES FOR MAINTENANCE, REMOVAL OR CONVERSION PURPOSES IS TO BE DONE THROUGH A SILT BAG

7. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY AND MULCHED ACCORDING TO

SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. 8. SEE NCDEQ SEDIMENTATION AND EROSION CONTROL PLANNING AND DESIGN MANUAL FOR FURTHER INSTALLATION/MAINTENANCE INSTRUCTIONS.

RATE (lb/acre)

SEEDING MIXTURE RATE (lb/acre)

German Millet

In the piedmont and mountains, a small stemmed Sundagrass may be substituted at a rate of 50 lb/acre.

# SEEDING DATES

Mountains - May 15 thru Aug 15 Piedmont - May 1 thru Aug 15 Coastal plain - Apr 15 thru Aug 15

# SOIL AMENDMENTS

Follow recommendation of soil tester or apply 2,000 lb/acre (4,000 lbs/acre in clay soils) Ground Agricultural Limestone, 1000 lb/acre 10-10-10 fertilizer, and 400 gallons/acre asphalt emulsion tack rate.

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting

# MAINTENANCE

Refertilze if growth is not fully adequate. Reseed, refertilze and mulch immediately following erosion or other damage.

# PERMANENT SEEDING

Planting Dates	Grass Type	Ро	unds/
Aug. 15-Nov. 1	Tall Fescue		300
Nov, 1- Mar. 1	Tall Fescue		300
&	Abruzzi Rye		25
Mar. 1 - April 15	Tall Fescue		300
April 15 - June 30	Hulled Common		25
	Bermuda Grass		
July 1- Aug. 15	Tall Fescue		120
&	Browntop Millet		35
&	Sorghum-Sundan Hybrid	ds	30
Lime		4,0	000
Fertilizer	10-10-10	1,0	00
Mulch	Straw	4,0	000

# PERMITTING OF LAND DISTURBING ACTIVITY

IF THE SAME PERSON CONDUCTS THE LAND DISTURBING ACTIVITY & ANY RELATED BORROW OR WASTE ACTIVITY, THE RELATED BORROW OR WASTE ACTIVITY SHALL CONSTITUTE PART OF THE LAND-DISTURBING ACTIVITY UNLESS THE BORROW OR WASTE ACTIVITY IS REGULATED UNDER THE MINING ACT OF 1971, OR IS A LANDFILL REGULATED BY THE DIVISION OF WASTE MANAGEMENT. IF THE LAND-DISTURBING ACTIVITY AND ANY RELATED BORROW OR WASTE ACTIVITY ARE NOT CONDUCTED BY THE SAME PERSON, THEY SHALL BE CONSIDERED SEPARATE LAND-DISTURBING ACTIVITIES AND MUST BE PERMITTED EITHER THROUGH THE SEDIMENTATION POLLUTION CONTROL ACT AS A ONE-USE BORROW SITE OR THROUGH THE MINING ACT.

# SELF-INSPECTION REQUIREMENTS

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT PERSONS RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS BECAME EFFECTIVE OCTOBER 1, 2010. TO SIMPLIFY DOCUMENTATION

OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, A COMBINED FORM IS NOW AVAILABLE. THE NEW FORM WAS DEVELOPED TO SATISFY THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG

BEGINNING AUGUST 1, 2013, THE DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES IS RESPONSIBLE FOR ADMINISTERING BOTH THE SPCA AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG 010000. THE COMBINED FORM SHOULD MAKE IT EASIER TO COMPLY WITH SELF-INSPECTION REQUIREMENTS.

THE COMBINED SELF-MONITORING FORM IS AVAILABLE AS A PDF AND WORD DOCUMENT FROM THE LAND QUALITY WEBSITE:

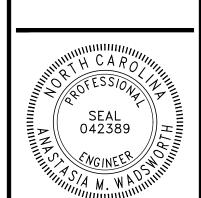
HTTPS://DEQ.NC.GOV/ABOUT/DIVISIONS/ENERGY-MINERAL-LAND-RESOURCES/EROSION-SEDIMENT-CONTROL/FORMS

'ARD

FINAL **DRAWING** 

NOT RELEASED FOR

CONSTRUCTION



PERMITTING

ISSUED FOR:

DATE: 1/26/2024 DESIGNED BY: DRAWN BY: CHECKED BY:

PROJECT NO.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

| EFFECTIVE: 04/01/19

- 2. CALL DEMLR AT THE FAYETTEVILLE REGIONAL OFFICE AT 910-433-3300 TO SCHEDULE A PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS PRIOR TO PROJECT ACTIVATION.
- 3. CONSTRUCTION ACTIVITIES THAT HAVE AN E&SC PLAN APPROVED ON OR AFTER APRIL 1, 2019 ARE REQUIRED TO FILL OUT AND SUBMIT AN ELECTRONIC NOTICE OF INTENT (E-NOT) FORM. ALL CONSTRUCTION
- ACTIVITIES ARE REQUIRED TO FOLLOW THE NEW NCG01 PERMIT REGARDLESS OF WHEN THEY ARE APPROVED. 4. EROSION AND SEDIMENT CONTROL (E&SC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR.
- 5. IN ADDITION TO THE REQUIREMENTS OF THIS PLAN AND OUTLINED IN THE PROJECT SPECIFICATIONS, THE CONTRACTOR SHALL ADHERE TO THE LATEST NCDEQ SEDIMENTATION AND EROSION CONTROL MANUAL FOR GUIDANCE ON CONSTRUCTION OF MEASURES REQUIRED BY THIS PLAN. CONTRACTOR SHALL ALSO ADHERE TO THE SELF INSPECTION AND SELF REPORTING AND NPDES AS REQUIRED UNDER THE
- SEDIMENTATION POLLUTION CONTROL ACT AND NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG 010000. SEE PLAN SHEET. 6. A RAIN GAUGE WILL BE INSTALLED ON THE SITE, AND A WRITTEN RECORD OF DAILY RAINFALL AMOUNTS SHALL BE RETAINED AND MADE AVAILABLE TO DIVISION OF WATER QUALITY UPON REQUEST. AN APPROVED COPY OF THE E&SC PLAN WITH PLACARD & APPROVAL LETTER, AN APPROVED COPY OF NPDES PERMIT WITH A MINIMUM OF 30 DAYS OF SELF-INSPECTION REPORTS ARE TO BE KEPT ON SITE UNTIL PROJECT CLOSURE.
- CONSTRUCTION PHASE 1
- 1. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED AT ANY AREAS USED FOR CONTRACTOR EQUIPMENT STAGING, MATERIALS LAYDOWN, SPOIL, OR WASTE AREAS.

2. INSTALL ALL PERIMETER CONTROLS, SEDIMENT BASINS, DIVERSION DITCHES WITH CHECK DAMS/WATTLES AND OUTLET PROTECTION AS INDICATED ON THE DRAWINGS.

- 3. ONCE THE TEMPORARY MEASURES HAVE BEEN INSTALLED, CONTACT THE STATE EROSION CONTROL FIELD ENGINEER REPRESENTATIVE TO REQUEST INSPECTION OF INSTALLED MEASURES PRIOR TO CONSTRUCTION OF BUILDINGS, PARKING SPACES AND INSTALLATION OF UTILITIES.
- 4. AFTER THE STATE HAS CONDUCTED AN INSPECTION AND PROVIDED AN AUTHORIZATION TO PROCEED, THE REMAINING WORK MAY BEGIN.
- GRADE DIVERSION DITCHES.
- CONSTRUCTION PHASE 2
- 1. ANY DEWATERING FOR ESC MAINTENANCE OR UTILITY/STORM TRENCHING TO BE DONE THROUGH A SILT BAG.
- 2. ALL DITCHES WILL BE LINED TO THE TOP OF BANK.
- 3. BEGIN MASS GRADING OF SITE ENSURING DRAINAGE TO DIVERSION DITCHES AND OR SKIMMER BASIN.
- BEGIN FINE GRADE.
- BEGIN GRAVEL PLACEMENT.
- 6. MAINTAIN EROSION CONTROL DEVICES AS NECESSARY DURING CONSTRUCTION OF THE BUILDING AND INSTALLATION OF UTILITIES. INSPECT DEVICES AFTER EVERY RAINFALL EVENT AND CLEAN BEHIND THE DEVICES WHEN HALF-FULL. REPAIR OR REPLACE ANY MEASURES NOT PERFORMING AS INTENDED.
- 7. COMPLY WITH THE GROUND STABILIZATION REQUIREMENTS AS PER PLANS AND SPECIFICATIONS. GROUND STABILIZATION WILL BE APPLIED WITHIN 14 CALENDAR DAYS FROM LAST LAND DISTURBING ACTIVITY. FOR STEEP SLOPES, THAT AREA MUST BE STABILIZED WITHIN 7 CALENDAR DAYS. FOR CRITICAL AREAS, GROUND STABILIZATION WILL BE APPLIED AT THE END OF THE DAY.
- 8. PERMANENT GROUNDCOVER IS REQUIRED FOR ALL DISTURBED AREAS WITHIN 90 CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOMENT. HOWEVER, NPDES GROUNDCOVER REQUIREMENTS TAKE PRECEDENCE.
- CONVERSION OF SKIMMER TO WETLAND
- 1. REMOVE SKIMMER DEVICE AND BAFFLES, FINE GRADE BASIN TO FINAL GRADE FOR THE STORMWATER WETLAND.
- 2. INSTALL PLANTINGS AND STABILIZE STORMWATER WETLAND.
- 3. REQUEST AN INSPECTION BY THE ENGINEER AND CONTACT THE STATE EROSION CONTROL FIELD ENGINEER REPRESENTATIVE TO REQUEST FINAL INSPECTION.
- 4. REMOVE ALL TEMPORARY MEASURES, AND RE-ESTABLISH GRADES. SEED AND MULCH PER PLANS AND SPECIFICATIONS.
- 5. WHEN THE PROJECT IS COMPLETE, THE PERMITTEE SHALL CONTACT DEMLR TO CLOSE OUT, VIA INSPECTION REPORT; THE PERMITTEE SHALL VISIT DEQ.NC.GOV /NCG01 TO SUBMIT AN ELECTRONIC NOTICE OF TERMINATION (E-NOT). A \$100 ANNUAL GENERAL PERMIT FEE WILL BE CHARGED UNTIL

THE E-NOT HAS BEEN FILLED OUT.

RIPRAP OUTLET PROTECTION

IN GENERAL, ONCE A RIPRAP INSTALLATION HAS BEEN PROPERLY DESIGNED AND INSTALLED IT REQUIRES VERY LITTLE MAINTENANCE. RIPRAP SHOULD BE INSPECTED PERIODICALLY FOR SCOUR OR DISLODGED STONES. CONTROL OF WEED AND BRUSH GROWTH MAY BE NEEDED IN SOME LOCATIONS.

# CONSTRUCTION ENTRANCE

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

# INLET PROTECTION

INSPECT ROCK PIPE INLET PROTECTION AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (½ INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING.

CHECK THE STRUCTURE FOR DAMAGE. ANY RIPRAP DISPLACED FROM THE STONE HORSESHOE MUST BE REPLACED IMMEDIATELY.

AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE ADJOINING AREAS AND PROVIDE PERMANENT GROUND COVER (SURFACE STABILIZATION).

# WATTLE/WATTLE BARRIER/COMPOST FILTER SOCK/SILT SOCK

INSPECT COMPOST SOCKS WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL EVENT (1/2 INCH OR GREATER). REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS. THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN. IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE. THE SOCK NEEDS TO BE REINSTALLED IF UNDERMINED OR DISLODGED. THE COMPOST SOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

SILT FENCE

INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

ROLLED EROSION CONTROLLED PRODUCTS

1. INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAIN FALL EVENT REPAIR IMMEDIATELY. 2. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT

OCCUR BENEATH THE RECP. 3. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE

GROUND SHALL BE REPAIRED AND STAPLED. 4. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE

FIXED AND THE ERODED AREA PROTECTED. 5. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS

ESTABLISHED.

DIVERSION DITCH

INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE

CONTACT PERSON RESPONSIBLE FOR MAINTENANCE:

CHRIS RAY (TOWN OF ZEBULON) 919-269-5285

NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.



# **DESCRIPTION**

produced mat of 100% agricultural straw with a functional longevity of up to 12 months. (NOTE: functional longevity may vary depending upon **Thickness** climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the straw evenly distributed over the entire area of the mat. The blanket shall be covered on the top side with a 100% biodegradable woven natural organic fiber net. The netting shall consist of machine directional strands formed from two intertwined yarns with across directional strands interwoven through the twisted machine strands (commonly referred to as a Leno weave) to form approximate 0.50 x 1.0 in. (1.27 x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread stitched along both outer edges (approxi-

The S75BN shall meet Type 2.C specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FP-03 Section 713.17

Material Content					
Matrix	100% straw fiber	0.5 lbs/sq yd (0.27 kg/sm)			
Netting	Top side only: Leno woven 100% biodegradable natural organic fiber	9.3 lbs/1000 sq ft (4.5 kg/100 sm)			
Thread Biodegradable					
Standard Roll Size					
Width	6.67 ft (2.0 m)				

Design Perm	issible Shear Stress	
Unvegetated Shear	1 60 psf (76 Da)	Ī

Unvegetated Shear Stress	1.60 psf (76 Pa)
Unvegetated Velocity	5.00 fps (1.52 m/s)

Green	
-Cynthiana Road	
-cyntinalia Ruau	



Specification Sheet – BioNet® S75BN™ Erosion Control Blanl	ke
--	----

The short-term single net erosion control blanket shall be a machinemately 2-5 inches [5-12.5 cm] from the edge) as an overlap guide for

Are	24	8U sq yd (66.9 sm)		
Design Permissible Shear Stress				
	vegetated Shear	1.60 psf (76 Pa)		

108 ft (32.92 m)

46.4 lbs (21.05 kg)

©2017, North Arr described or illust patents are pend Trademark rights information or m responsibility of t

American Green is a registered trademark. Certain products and/or applications strated herein are protected under one or more U.S. patents. Other U.S. nding, and certain foreign patents and patent applications may also exist. s also apply as indicated herein. Final determination of the suitability of any material for the use contemplated, and its manner of use, is the sole if the user. Printed in the U.S.A.

Index Property Test Method Typical

Water Absorbency

Slope Length (L)

≥ 50 ft (15.2 m)

≤ 0.50 ft (0.15 m)

≥ 2.0 ft (0.60 m)

20-50 ft

ASTM D6525

ASTM D1117

ASTM D6475

ASTM D1388

ASTM D6567

ASTM D6818

ASTM D6818

ASTM D6818

ASTM D6818

**ASTM D7322** 

Slope Design Data: C Factors

≤ 3:1

0.11

0.19

Roughness Coefficients - Unveg.

ECTC Guidelines 81.4%

ECTC Guidelines 15.7%

ECTC Guidelines Yes

(7.37 mm)

(310 g/sm)

440%

9.1%

146.4 lbs/ft

(2.17 kN/m)

109.2 lbs/ft

(1.62 kN/m)

N/A

N/A

N/A

14.3%

Slope Gradients (S) 3:1 − 2:1 ≥ 2:1

N/A

N/A

Manning's n

0.055

0.055-0.021

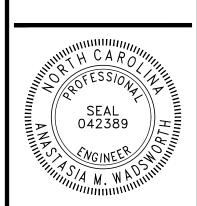
10.9%

EC\_RMX\_MPDS\_BS75BN\_6.13

YARD ANCE

**FINAL DRAWING NOT RELEASED FOF** 

CONSTRUCTION



ISSUED FOR:

PERMITTING

DATE: 1/26/2024 DESIGNED BY: DRAWN BY:

CHECKED BY: PROJECT NO .:

C-6.03