

# Pender County Planning and Community Development

## Planning Division

805 S. Walker Street  
PO Box 1519  
Burgaw, NC 28425



Phone: 910-259-1202  
Fax: 910-259-1295  
[www.pendercountync.gov](http://www.pendercountync.gov)

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## Pluris Hampstead Wastewater Treatment Facility Plant Expansion Major Site Development Plan

**Case Number:** SDP 2024-387

**Application Type:** Major Site Development Plan

**Applicant:** Pluris Hampstead, LLC

**Owner:** Pluris Hampstead, LLC

**Location:** 9795 Sidbury Road

**Property ID #(s):** 3271-17-1644-0000

**Description:** Pluris Hampstead, LLC, applicant and owner, has submitted a major site development plan to expand the existing Pluris Hampstead Wastewater Treatment Facility.

**Current Zoning:** PD, Planned Development

### Technical Review Committee Meeting

May 2, 2024

### Board of County Commissioners/Planning Board Meeting

N/A

**Included:** Application & Site Plan

# **SDP 2024-387**

Application

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## Major Site Development Plan Submission

Applications will be considered for the Technical Review Committee hearing and reviewed by Staff only when deemed complete. The application will be regarded as incomplete until the following items are received by the Planning and Community Development Staff.

1. MLC **Pre-submittal Meeting**  
Date of Meeting 3/14/24
2. MLC **Signed Application**
3. MLC **Payment**  
\$250
4. MLC **Paper Plan Sets**  
Two (2) 24 x 36, Four (4) 11 x 17
5. MLC **Digital Submission**  
For all documents submitted in paper copy, bring a digital copy with paper submission. sent via email
6. MLC **Adjacent Property List**  
A list of names and addresses, as obtained from the county tax listings and tax abstract, to the owners of all properties located within 500-feet of the perimeter of the project bounds.
7. MLC **Adjacent Property Envelopes**  
The applicant shall provide a set of business envelopes addressed to each of the owners of all properties located within 500-feet of the perimeter of the project bounds and accompanied with the amount of postage required for first class postage.
8. MLC **Permits**  
Include any permits issued on the project including but not limited to: environmental, traffic, utility, or site specific conditions.
9. MLC **Site Plan Requirements**  
A prepared site plan in accordance with the Unified Development Ordinance standards Section 6.3, Pender County Collector Street Plan, Pender County Transportation Plan, other approved State of Federal Transportation Improvement Plan, or any other adopted plan in Pender County.  
(See Major Site Development Checklist)

I certify that all information presented in this application is accurate to the best of my knowledge.

Signature of Applicant

MLC

Date

3/2/24

Printed Name

MICHAEL C. GAGAN, P.S.

Staff Initials: \_\_\_\_\_

Date: \_\_\_\_\_

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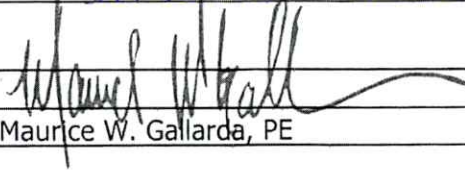
## MAJOR AND MINOR SITE DEVELOPMENT APPLICATION

THIS SECTION FOR OFFICE USE			
Date:	Permit Number:	Permit Fee:	Invoice Number:
*Zoning Approval ONLY: YES / NO		Final Zoning Compliance Approved: YES / NO / N/A	
Type of Site Development Plan:	<input type="checkbox"/> Major	<input type="checkbox"/> Minor	
<b>SECTION 1: GENERAL INFORMATION</b>			
Applicant's Name:	PLURIS HAMPSTEAD, LLC	Property Owner's Name:	SAME
Applicant's Address:	PO Box 297	Property Owner's Address:	SAME
City, State, & Zip	HAMPSTEAD NC 28443	City, State, & Zip	
Phone Number:	214-2203412	Phone Number:	
Email Address:	mgg@ardg@plurisusa.com	Email Address:	
Legal relationship of applicant to landowner:	SAME		
<b>SECTION 2: PROJECT INFORMATION</b>			
PIN (Property Id #):	3271-17-1644-000	Total property acreage:	28.77
Zoning:	PD	Acreage to be disturbed:	3.6
Water Provider:	PRIVATE WELL	Wastewater Provider:	PLURIS
Directions to Site:	FROM HWY 17 S. TURN LEFT ON SIDBURY THEN RIGHT ON HOGAN'S TRAIL (GRAVEL) PROPERTY IS 1 MILE FROM SIDBURY RD.		
Lot Size:	Sq Ft of Building: 3500	Building Height: 230'	
Setbacks	Front: 94'	Side: 373'	Rear: 850+
NAICS Code/Use:	221320		
Business Name:	PLURIS HAMPSTEAD, LLC		
Describe activities to be undertaken on project site:	EXPANSION OF WASTEWATER PLANT		
Ownership:	Number of Employees:	Number of Members:	Seating Capacity:
<input checked="" type="checkbox"/> Private <input type="checkbox"/> Public	6		

*\*If the applicant is not the owner of the property, a notarized letter from the property owner may be required*



\*Zoning approval is for the use being proposed ONLY, other department approvals may be required i.e. Fire Marshal, Environmental Health, Permitting, etc...

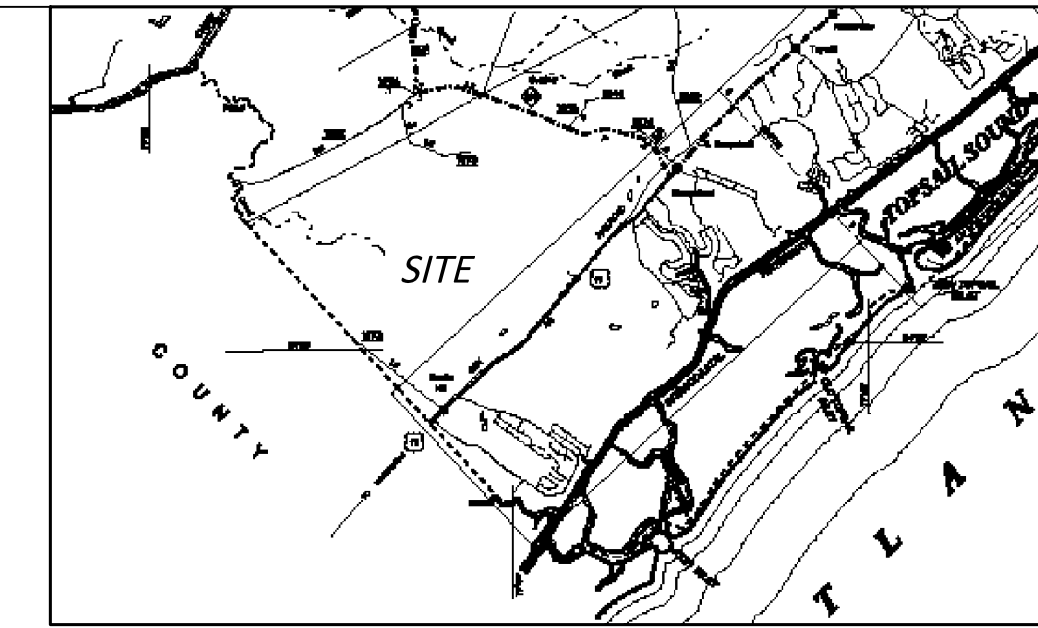
SECTION 4: ADDITIONAL COMMENTS			
THIS APPLICATION IS FOR AN EXPANSION OF THE PLURIS HAMPSTEAD W/WTF. SEE ATTACHED COVER LETTER.			
SECTION 5: SIGNATURES			
Applicant's Signature	SAME AS OWNER	Date:	
Applicant's Name Printed		Date:	
Owner's Signature		Date:	2/26/2024
Owner's Name Printed	Maurice W. Gallarda, PE	Date:	2/26/2024
Planning Staff:		Date:	

# SDP 2024-387

Site Plan

# PLURIS HAMPSTEAD WWTF PLANT EXPANSION

HAMPSTEAD, NC  
PENDER COUNTY



VICINITY MAP  
NTS

LINE LEGEND	
LINE TYPE	EXAMPLE
EX. PROPERTY LINE	---
LOT LINE	---
RIGHT OF WAY	--- ROW ---
ROAD CENTERLINE	---
EDGE OF PAVEMENT	---
BACK OF CURB	---
EXISTING TOPO	--- 30 ---
PROPOSED TOPO	--- 30 ---
LIMITS OF DISTURBANCE	--- LOD ---
SEDIMENT FENCE	--- SF ---
WETLANDS	--- WET ---
SS GRAVITY MAIN	=====
STORM DRAIN MAIN	=====
SS FORCE MAIN	--- FM ---
WATER LINE	--- W ---
SETBACK LINE	--- ---
ACCESS/UTILITY/DRAINAGE EASEMENT	-----

SYMBOL LEGEND	
SYMBOL	EXAMPLE
LOT NUMBER	①
FIRE HYDRANT ASSEMBLY	⚡
SS MANHOLE	⊙
STORM DRAIN MANHOLE	⊙
STORM DRAIN CURB INLET	┌┐
STORM DRAIN CATCH BASIN	■
BEARING AND DISTANCE	N 90°00'00" E 58.99'
SPOT ELEVATION	x???
SHEET FLOW ARROW	← -4.43%
INLET PROTECTION	■ IP
CHECK DAM	▲
ENERGY DISSIPATER	■ ED
SKIMMER BASIN	⌒
FLARED END SECTION	△
AIR RELIEF VALVE	⊕
GATE VALVE	⊕
CHECK VALVE	⊕
TEMPORARY BLOW OFF	⊕

**PROJECT NAME:** PLURIS HAMPSTEAD WWTF EXPANSION

**APPLICANT/OWNER:** PLURIS HAMPSTEAD, LLC  
PO BOX 237  
HAMPSTEAD, NC 28445  
(214) 220-9412  
MAURICE W. GALLARDA, PE  
MANAGING MEMBER  
MGALLARDA@PLURISUSA.COM

**NCPLS OF RECORD:** MICHAEL C. GALLANT, PE  
MICHAEL C. GALLANT, PE, PA  
PO BOX 4039  
SURF CITY, NC 28445  
(910) 448-1046  
GALLANTMC@YAHOO.COM

**DATUM:** NAD 83 NC STATE PLANE

**EXISTING USE:** WASTEWATER TREATMENT PLANT

**PROPOSED USE:** WASTEWATER TREATMENT PLANT

**PROPERTY PIN:** 3271-17-1644-0000

**PROPERTY ADDRESS:** 9795 Hogans Trail, Hampstead, NC 28443

**ZONING:** PD

**NAICS CODE:** 221320

**DEED REFERENCE:** 4099/91

**REQUIRED PERMITS:** ZONING APPROVAL PENDER COUNTY  
NPDES/NON-DISCHARGE PERMIT (MOD NC0089524)-NCDEQ  
SOIL EROSION AND SEDIMENT CONTROL - NCDEQ-DEMLR  
LOW DENSITY STORM WATER PLAN (MOD SW8 140715) - NCDEQ-DEMI

**BUILDING SETBACKS:** PER PLAN

**BUILDINGS TO BE CONSTRUCTED:** PROPOSED CONTROL BUILDING FOR NEW PLANT  
1840 SF, 1 STORY

**BRIEF PROJECT DESCRIPTION:** PROPOSED MECHANICS BUILDING  
1 STORY

**PROJECT START DATE:** APRIL 2024

**TARGET COMPLETION:** FALL OF 2025

**BRIEF PROJECT DESCRIPTION:** THIS PROJECT PROPOSES THE CONSTRUCTION OF A 500,000 GPD MBR WAST TREATMENT PLANT ON THE SAME TRACT AS THE EXISTING PLURIS HAMPSTEAD WWTF. THIS PLANT WILL UTILIZE THE EXISTING HIGH RATE INFILTRATION BASINS AND DISPOSAL INFRASTRUCTURE THAT THE EXISTING PLANT USE. THIS EXPANSION WILL BRING THE TOTAL TREATMENT CAPACITY OF THE FACILITY TO 1,000,000 GALLONS PER DAY.

Sheet List Table	
Sheet Number	Sheet Title
C0.0	MCG STANDARDS COVER SHEET - C1.0 COVER PAGE
C1.0	MCG PLURIS HAMPSTEAD PROJECT MASTER - PROCESS FLOW DIAGRAM
C1.1	HYDR PROFILE
C1.2	HYDR PROFILE
C1.3	Equipment Spread Sheet
C1.4	Equipment Spread Sheet
C2.0	OVERALL SP
C2.1	PLANT SP
C2.2	GRADING PLAN
C2.3	YARD PIPING
C2.4	PROFILE 1
C2.5	PROFILE 2
C2.6	PROFILE 3
C2.7	PROFILE 4
C2.8	YARD PIPING DETAILS
C3.0	TANK STRUCTURE PLAN
C3.1	TANK SECTION A
C3.2	REINFORCEMENT DETAILS
C3.3	3.3 CONCRETE NOTES
C3.4	CONTROL BUILDING PLAN
C3.5	CONTROL BUILDING SECTION-TYP WALL
C3.6	CONTROL BUILDING ELEVATIONS
C4.0	FINE SCREENS
C4.1	FINE SCREENS
C4.2	FINE SCREENS
C5.0	IR-FF RAS
C5.1	IR-FF RAS SA
C6.0	PRE AERATION PLAN
C6.1	PRE AERATION SECT
C7.0	MBR PLAN
C7.1	MBR SECTIONS
C8.0	WW LIFT STATION
C9.0	WAS-RESCREEN
C10.0	PROCESS CONTROL
C11.0	NCG01 PAGES
C11.1	SEEDING CHART AND EC STANDARD DETAILS
APP 1	APPENDIX 1 ENVIROMIX

**LATITUDE AND LONGITUDE:** LATITUDE: 34° 20' 34.70"  
LONGITUDE: -77° 46' 16.59"

**TOTAL PROJECT PROPERTY AREA:** 28.77 ACRES

**TOTAL AREA TO BE DISTURBED:** 3.6 ACRES

**TOTAL AREA IN USCOE WETLANDS:** 0 ACRES

**WETLANDS TO BE DISTURBED:** 0 ACRES

**TOTAL AREA IN SURFACE WATERS:** 0 ACRES

**RECEIVING STREAM INFORMATION:** NAME: UT OF ISLAND CREEK  
INDEX: 18-74-27 (ISLAND CREEK)  
CLASSIFICATION: C:SW

**FLOOD ZONE:** FIRM PANEL 3271 Effective date: 2/16/07 (3270327100)

**STORMWATER PROJECT DENSITY:** LOW DENSITY (>24% BUA)  
EX PERMIT SW8 140715

**FIRE DISTRICT AND MISC:** TOPSAIL TOWNSHIP/ SCOTTS HILL FIRE DISTRICT  
THIS PROPERTY IS NOT IN A VOLUNTARY AG DISTRICT (VAD)  
THIS PROPERTY DO NOT CONTAIN ANY AREAS ON THE NATIONAL REGISTER OF HISTORIC PLACES  
THIS PROPERTY DOES NOT FALL WITHIN A FLIGHT PATH OVERLAY AREA

NOTE: THERE ARE NO SURFACE WATERS, WETLANDS, REGULATORY FLOOD ZONES OR PROTECTED RIPARIAN BUFFERS ON THE PLANT SITE.

General Notes



Know what's below.  
Call before you dig.



SM  
NC FIRM C-1989 AL FIRM CA-4338-E  
NC REG NO. 25572 AL REG NO. 32178

PRELIMINARY PLAN  
NOT FOR CONSTRUCTION



2/23/24

No.	Revision/Issue	Date
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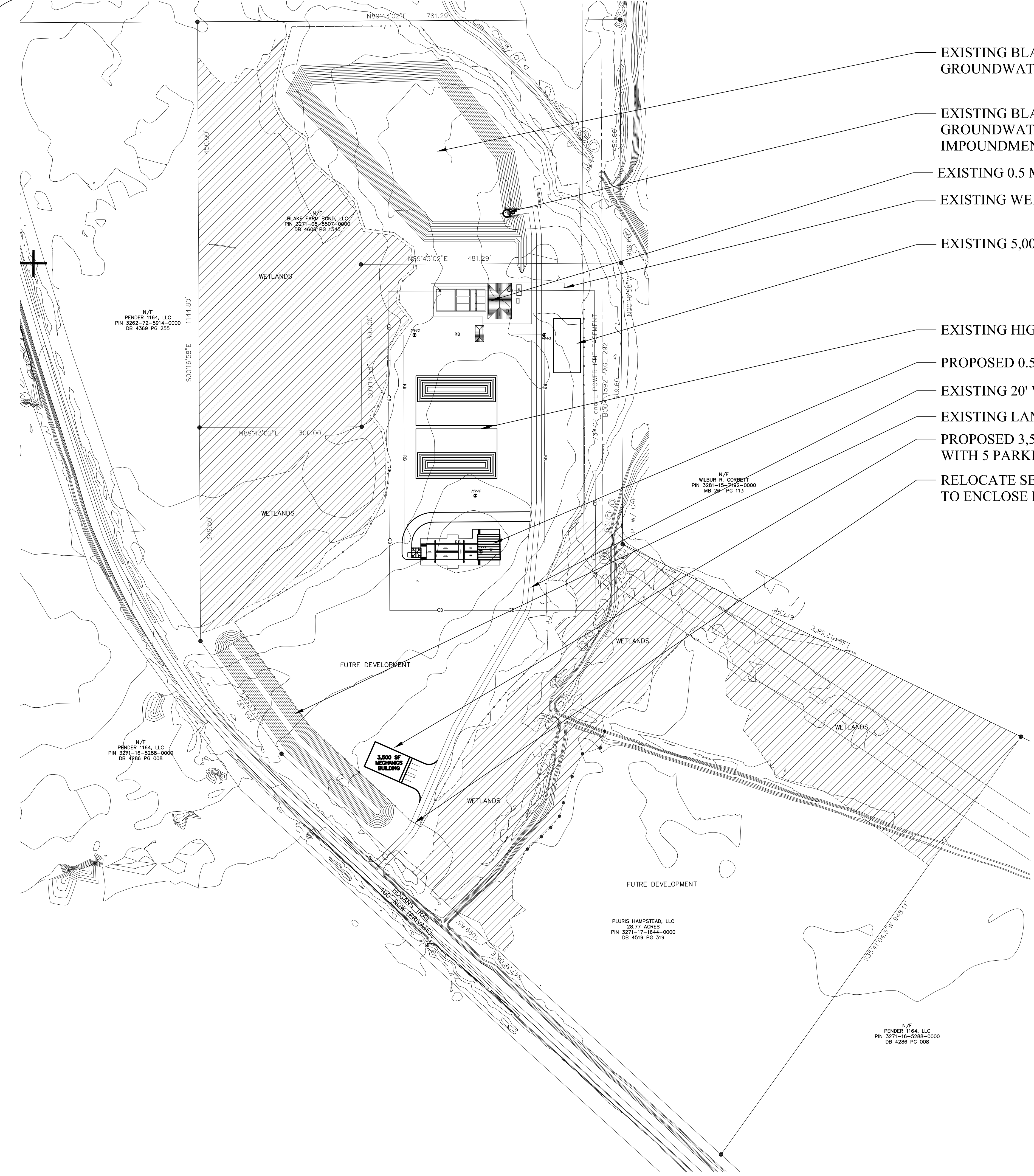
MICHAEL C. GALLANT, PE, PA  
PO BOX 4039  
SURF CITY, NC 28445  
910-448-1046  
gallantmc@yahoo.com  
NC FIRM#: C-1989

PROJECT:  
PLURIS HAMPSTEAD WWTF  
EXPANSION PLANT

CLIENT:  
PLURIS HAMPSTEAD, LLC  
HOGANS TRAIL  
HAMPSTEAD, NC 28443

Project	Sheet
Date	C0.0
Scale	1" = 50'

PROJECT INFORMATION



- EXISTING BLAKE FARM POND GROUNDWATER IMPOUNDMENT
- EXISTING BLAKE FARM POND GROUNDWATER IMPOUNDMENT PUMP STATION
- EXISTING 0.5 MGD PLURIS HAMPSTEAD WWTP
- EXISTING WELL (BATHROOM TOILET AND SINK SUPPLY)
- EXISTING 5,000 SF GREENHOUSE
- EXISTING HIGH RATE INFILTRATION BASINS
- PROPOSED 0.5 MGD PLURIS HAMPSTEAD WWTP
- EXISTING 20' WIDE GRAVEL DRIVEWAY
- EXISTING LANDSCAPE BERM
- PROPOSED 3,500 SF MECHANICS BUILDING WITH 5 PARKING SPACES AND GRAVEL PARKING LOT
- RELOCATE SECURITY GATE AND ADD FENCING TO ENCLOSE PROPOSED INFRASTRUCTURE

Pender County Planning and Zoning Project Narrative

Project Name: Pluris Hampstead WWTP Expansion  
 Owner: Pluris Hampstead, LLC

Project Description:

The purpose of this project is to increase sanitary sewer service capacity to the greater Hampstead area. This project proposes the addition of a 0.5 MGD Membrane Bioreactor Wastewater Treatment Plant and a 3,500 square foot Mechanics building with associated access drives and parking areas.

The set backs for the proposed buildings are as follows:

1,840 sf Wastewater Plant Control Building  
 Front = 450 ft, Rear = 500 ft, Side = 230 ft

3,500 sf Mechanics Building  
 Front = 94 ft, Rear = 850+ ft, Side = 373 ft

Both proposed buildings are to be 1 story, less than 30 feet tall. The Mechanics building will have five parking spaces (1 handicap accessible) and a gravel parking lot.

The site was originally developed with a landscape berm that will remain in place. This berm was planted with the appropriate required trees when originally developed.

The existing six-foot-high security fence will be relocated and added to so that the infrastructure is within a fenced area. The security gate will be moved toward the front of the property.

The area to be disturbed has a handful of pine trees, none of which meet the criteria for significant trees as outlined in the Pender County ordinances. The applicant will most likely remove no more than four of these existing trees. No significant trees will be impacted.

The applicant has an existing low density stormwater permit which will be modified to include the additional built upon area. An erosion control permit will also be required. These permits will be applied for within the next 30 days.

The applicant has already submitted applications and associated documentation to NCDEQ to expand the plant and the disposal capacity.

Copies of the stormwater and current NCDEQ Wastewater permits are attached.

No part of this development lies in a flood zone and no wetlands will be disturbed during this project.

This project seeks to increase the total treatment and disposal capacity of the plant to 1 MGD. This is well within the 3 MGD limit set in the original Special Use Permit.

MONITORING WELL DATA

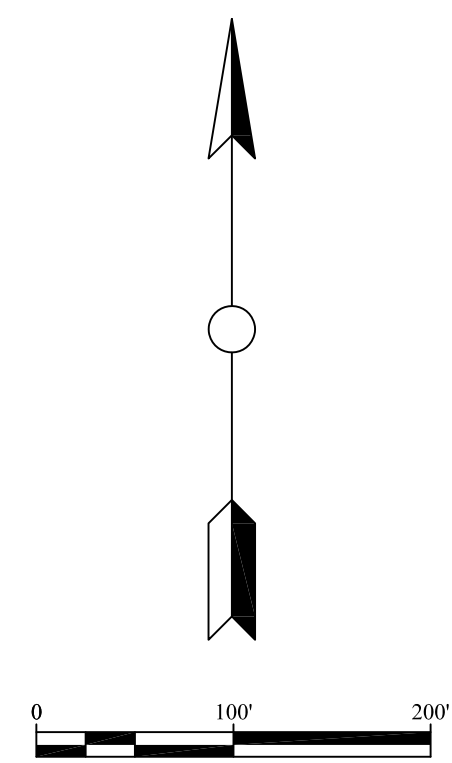
MW1 (ABANDONED AND REPLACED BY MW4)  
 TOP OF CASING ELE. 45.94  
 WATER LEVEL 10 FT BELOW TOP OF CASING

MW 2  
 TOP OF CASING ELE. 43.59  
 WATER LEVEL 6 FT BELOW TOP OF CASING

MW3  
 TOP OF CASING ELE. 44.37  
 WATER LEVEL 9 FT BELOW TOP OF CASING

DATA FROM SIGNED AND SEALED SURVEY BY  
 MICHAEL UNDERWOOD AND ASSOCIATES, PA  
 DATED FEB 16  
 DATUM NAD 83 (1986) (PUBLISHED)  
 WATER LEVELS TAKEN FROM WELL LOGS

MW 4  
 TOP OF CASING 4' ABOVE GRADE  
 WATER LEVEL 10 FEET BELOW GRADE  
 DATA FROM INSTALLATION RECORD



General Notes



SM  
 NC FIRM C-1989 AL FIRM CA-4338-E  
 NC REG NO. 25572 AL REG NO. 32178

**FINAL PLAN - NOT RELEASED FOR CONSTRUCTION**



2/26/24

No.	Revision/Issue	Date

**MICHAEL C. GALLANT, PE, PA**  
 PO BOX 4039  
 SURF CITY, NC 28445  
 910-448-1046  
 gallantmc@yahoo.com  
 NC FIRM#: C-1989

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 PLURIS HAMPSTEAD WWTP  
 EXPANSION PLANT

**CLIENT:**  
 PLURIS HAMPSTEAD, LLC  
 HOGANS TRAIL  
 HAMPSTEAD, NC 28443

Date 2/26/24	Sheet <b>C2.1</b>
Scale 1" = 100'	

SITE MAP - OVERALL SITE PLAN-PENDER COUNTY  
 PALNNING REVIEW