

**PLURIS HAMPSTEAD WWTF SITE PLAN NOTES
PROJECT INFORMATION SECTION**

APPLICANT:

PLURIS HAMPSTEAD, LLC
2100 MCKINNEY AVE
SUITE 1550
DALLAS, TX 75201
PH. 214.220.3412

PROPERTY OWNERS:

TRACT 1
PLURIS HAMPSTEAD, LLC
2100 MCKINNEY AVE
SUITE 1550
DALLAS, TX 75201
PH. 214.220.3412

TRACT 2
PENDER 1164, LLC
1202 EASTWOOD RD
WILMINGTON, NC 28403
PH. 910.799.8755

PROFESSIONAL ENGINEERING FIRM:

MICHAEL C. GALLANT, PE, PA
PO BOX 4039
SURF CITY, NC 28445
910.448.1046

SURVEY AND TOPOGRAPHICAL INFORMATION PROVIDED BY:

MICHAEL UNDERWOOD AND ASSOCIATES, PA
102 CINEMA DRIVE, SUITE A
WILMINGTON, NC 28403

MCKIM AND CREED
243 N FRONT ST
WILMINGTON, NC 28401

TOPOGRAPHIC INFORMATION:
SPECTRUM NC, LLC
NAVD 88 DATUM

OTHER SURVEY DATA PROVIDED BY:
GEOINOVATIONS AND DANFORD AND ASSOCIATES LAND SURVEYING, PC

GEOTECHNICAL INFORMATION PROVIDED BY:

S & ME, INC.
3006 HALL WATERS DRIVE, SUITE 100
WILMINGTON, NC 28405-8786

HYDROGEOLOGY AND SOIL SCIENCE SERVICES PROVIDED BY:

APPLIED RESOURCE MANAGEMENT, PC
PO BOX 882
257 TRANSFER STATION ROAD
HAMPSTEAD, NC 28443

PROPERTY DATA:

TRACT 1 SIZE: 28.77 ACRES, ZONED -PD
WETLANDS ON TRACT: 8.40 ACRES
AREA TO BE DISTURBED: 6.91 ACRES
USCOE WETLANDS TO BE DISTURBED: 0 ACRES

TRACT 2 SIZE: 10.14 ACRES, ZONED -PD
WETLANDS ON TRACT: 4.74 ACRES
AREA TO BE DISTURBED: 2.94 ACRES
USCOE WETLANDS TO BE DISTURBED: 0 ACRES

TOTAL AREA OF BOTH TRACTS: 38.91 ACRES
TOTAL WETLANDS ON BOTH TRACTS: 13.14 ACRES

PROPERTY PIN: 3271-25-1909-000
PROPERTY ADDRESS: ISLAND CREEK RD
PROPERTY DESCRIPTION: 500 AC PB 40 / 75 JACK STOCKS DIV.
NAICS CODE: 221320

REQUIRED PERMITS:

SPECIAL USE PERMIT - PENDER COUNTY
WASTE WATER TREATMENT FACILITY - NCDENR
SOIL EROSION AND SEDIMENT CONTROL - NCDENR-DLR
LOW DENSITY STORM WATER PLAN - NCDENR-DLR

STORM WATER DATA:

RECEIVING STREAM: ISLAND CREEK
RECEIVING STREAM INDEX: 18-74-27
STREAM CLASSIFICATION: C:SW

PROPOSED IMPERVIOUS AREAS
ROADS: 25,423 SF
STRUCTURES: 2,604 SF
SIDEWALKS: 3,274 SF
TOTAL PROPOSED IMPERVIOUS AREA: 31,301 SF
TOTAL AREA (BOTH TRACTS): 1,694,152.25 SF
THE SITE UTILIZES A LOW DENSITY STORM WATER SYSTEM

PERCENT PROPOSED IMPERVIOUS AREA: 1.8%

PROJECT PHASING:

FIRST PHASE - 250,000 GALLONS PER DAY OF TREATMENT AND DISPOSAL CAPACITY
SECOND PHASE - 250,000 GALLONS PER DAY OF TREATMENT AND DISPOSAL CAPACITY
TOTAL BOTH PHASES - 500,000 GALLONS PER DAY (ADF) OF TREATMENT AND DISPOSAL CAPACITY

CURRENT ZONING: PD

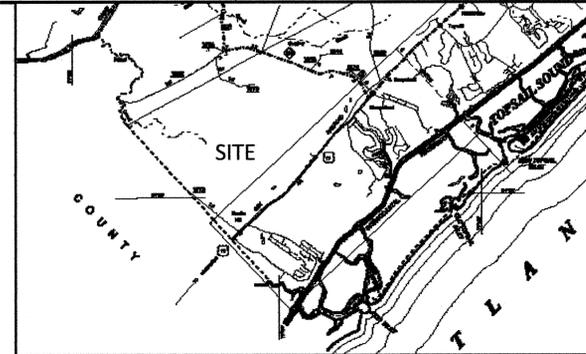
ACCESS:

ACCESS IS PLANNED BY CONNECTION TO HOAGS TRAIL, CURRENTLY A
SOIL ROAD TO BE IMPROVED PER THE SUBDIVISION MASTER PLAN.
THE SITE WILL BE ACCESSED BY AN 18 FOOT WIDE ALL WEATHER ROAD (GRAVEL).

Pender County Special Use Permit Conditions
Special Use Permit Granted December 9, 2013

- County review of expanded service areas shall be required to demonstrate consistency with the goals and priorities of the comprehensive plan. A consistency determination shall be issued by the Planning and Community Development Department prior to application being made to the State Utilities Commission. This may be in the form of staff approval of a specific project or Board (Planning Board/Board of County Commissioners) approval, dependent upon review criteria outlined in the Pender County Unified Development Ordinance (as amended).
- The sewage treatment facility and associated infrastructure shall be built in accordance with all applicable local, state, and federal regulations. The treatment facility and associated infrastructure shall be designed and constructed for the conversion of the system to public ownership, operation and maintenance only if the system is offered to and accepted by the County.
- Service areas requested by the applicant to the Public Utilities Commission should be non-exclusive service areas to allow for Pender County Utilities to provide service along the applicant's force main locations. Pender County Utilities (PCU) will not attempt to provide sewer service to the existing customer base and/or service areas of the provider unless requested to do so by the provider and PCU service is available and is willing to accept said customers and/or service areas.
- An annual report depicting service areas and connections shall be provided to the county by the first of each calendar year. The report shall include basic information regarding the system and its operations, including reports from the State governing authority. Digital files shall also be provided showing the force mains, lift stations, and collection system in its entirety.
- No junk, debris, trash or inoperable vehicles, recycled or salvaged materials shall be stored on the site outside a completely enclosed building.
- No project activity shall commence on the site including clearing and grading until a Final Zoning Permit has been issued.
- No permanent personnel occupancy on-site will be allowed.
- All operations must follow federal, state, and local standards, regulations, ordinances, permits, statutes, and/or laws.

PLURIS HAMPSTEAD WWTF 0.25 MGD MEMBRANE BIO REACTOR WASTE WATER TREATMENT PLANT WITH BIOLOGICAL NUTRIENT REMOVAL AND HIGH RATE INFILTRATION DISPOSAL HAMPSTEAD, PENDER COUNTY NORTH CAROLINA



VICINITY MAP
NTS

SETBACK FROM	REQUIRED SETBACK (FEET)	SETBACK FROM INFILTRATION SYSTEM (FEET)	SETBACK FROM TREATMENT/STORAGE UNIT (FEET)
RESIDENCES, PLACES OF PUBLIC ASSEMBLY UNDER SEPARATE OWNERSHIP NOT PART OF THE PROJECT	400	NA	NA
RESIDENCES, PLACES OF PUBLIC ASSEMBLY OWNED BY PERMITEE AND PART OF THE PROJECT	200	NA	
PRIVATE OR PUBLIC WATER SUPPLY SOURCE	100	214	146
SURFACE WATERS AND WETLANDS	50 (ISA NCAC 02T 0706 -c)	61	54
GROUND WATER LOWERING DITCHES	50 (ISA NCAC 02T 0706 -c)	NA	
SUBSURFACE GROUNDWATER LOWERING SYSTEMS	50 (ISA NCAC 02T 0706 -c)	50	
SURFACE WATER DIVERSIONS	50	NA	
ANY WELL EXCEPT MONITORING WELLS	100	214	146
ANY PROPERTY LINE	200	150'	40'
TOP OF SLOPE OF CUTS OF MORE THAN 2 FEET	100	NA	
ANY WATER LINE FROM A DISPOSAL SYSTEM	10	180	
ANY SWIMMING POOL	100	NA	
PUBLIC RIGHT OF WAY	50	500'	
NITRIFICATION FIELD	20	NA	
BUILDING FOUNDATIONS	15	NA	
IMPOUNDED PUBLIC WATER SUPPLIES	500	NA	
PUBLIC GROUNDWATER SUPPLY LESS THAN 50' DEEP	500	NA	

*VARIANCE REQUESTED FOR DISPOSAL SYSTEM CLOSER THAN 200' FROM COMMON PROPERTY LINE BETWEEN TRACT 1 AND TRACT 2.

SITE FENCING:

THE SITE WILL BE FENCED WITH A 7' HIGH CHAIN LINK SECURITY FENCE AND HAVE A LOCKING SECURITY GATE AT THE ENTRANCE.

PROPOSED USE:

THE TRACT IS TO BE DEVELOPED AS A WASTE WATER TREATMENT FACILITY. THE FACILITY IS TO PRODUCE EXCELLENT QUALITY EFFLUENT AND DISPOSE OF IT UTILIZING (2) TWO HIGH RATE INFILTRATION BASINS. THE TRACT IS SIZED TO PROVIDE FOR FUTURE EXPANSION OF THE FACILITY TO ACCOMMODATE THE NEEDS OF THE GREATER HAMPSTEAD AREA. THE FIRST PHASE OF CONSTRUCTION WOULD ALLOW FOR 250,000 GALLONS PER DAY OF TREATMENT. THE SECOND PHASE OF TREATMENT WOULD INCREASE THE CAPACITY BY AN ADDITIONAL 250,000 GALLONS PER DAY.

BUFFERS AND LANDSCAPING:

HOAGS TRAIL FRONTAGE

PER THE PLAN THE ROAD FRONTAGE WILL HAVE A 30' WIDE "A" BUFFER AS DESIGNATED BY THE PENDER COUNTY UDO. AREAS ON THE FRONTAGE THAT ARE NOT DISTURBED WILL BE ALLOWED TO TAKE ADVANTAGE OF THE EXISTING TREES AND SHRUBS. ALL DISTURBED AREAS WILL BE PLANTED WITH 1 CANOPY TREE, 2 UNDERSTORY TREES AND GRASSED PER SECTION 8.2.6 OF THE PENDER COUNTY UDO.

SIDE AND REAR PROPERTY LINES

ALL SIDE AND REAR PROPERTY LINES SHALL HAVE A 25' WIDE BUFFER "C" AS DESIGNATED BY THE PENDER COUNTY UDO. ALL UNDISTURBED AREAS WILL BE ALLOWED TO TAKE ADVANTAGE OF EXISTING VEGETATION. THIS PLAN DOES NOT CALL FOR DISTURBANCE IN THESE AREAS. IN THE CASE THAT THESE AREAS ARE DISTURBED A BUFFER INCLUDING A 6' HIGH EVERGREEN HEDGE AND TWO UNDERSTORY TREES PER SECTION 8.2.6 OF THE PENDER COUNTY UDO.

SET BACKS:

SEE THE TABLE FOR ALL REQUIRED SETBACKS. NOTE THAT THE NCDENR REGULATIONS REQUIRE SETBACKS IN EXCESS OF THE PD MASTER PLAN. ANY STRUCTURES NOT IMPACTED BY THOSE REGULATIONS THAT ARE PLANNED FOR FUTURE EXPANSION WILL MEET THE MASTER PLAN SETBACKS.

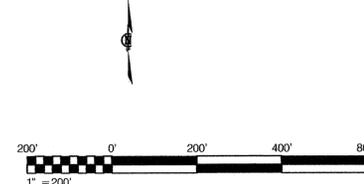
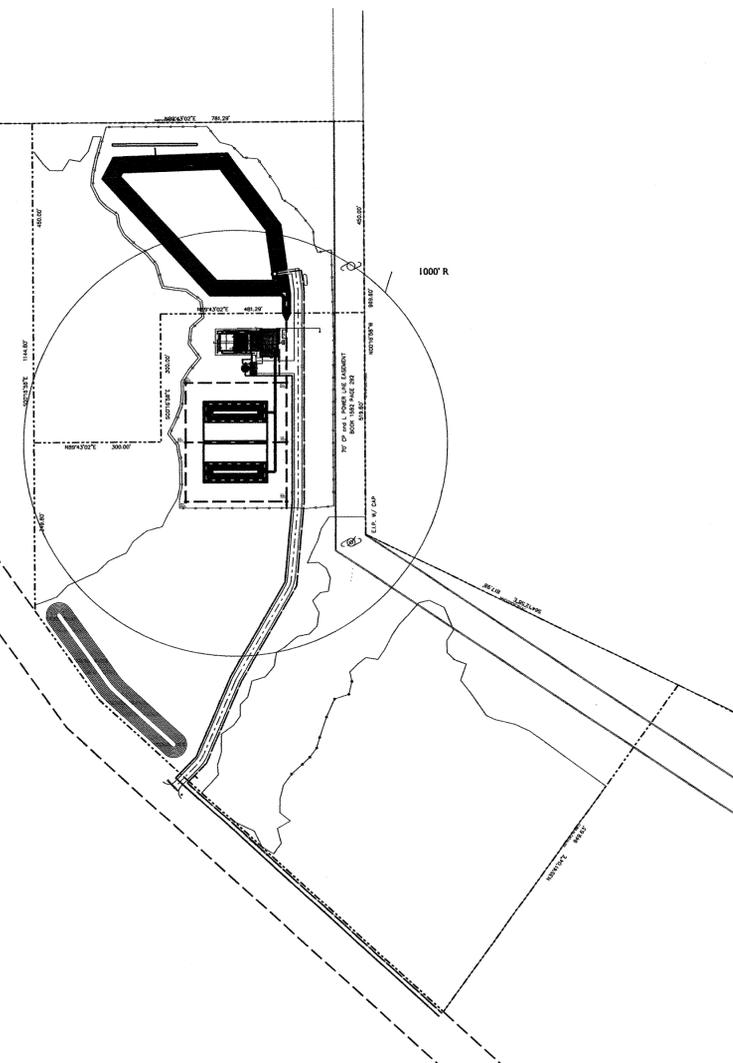
WATER AND SEWER SERVICE:

THE PROPERTY SHALL HAVE A PRIVATE WELL SYSTEM INITIALLY. WHEN MUNICIPAL WATER IS AVAILABLE THE FACILITY WILL SEEK SERVICE FROM THE PROVIDER. THE PROVIDER FOR WATER WILL BE SCOTTS HILL WATER AND SEWER DISTRICT (PO BOX 995, 605 FREMONT ST, BURGAW, NC, 28425, PH. 910.259.1570).

CALCULATIONS SECTION

PARKING:

3 SPACES PROVIDED (2 EMPLOYEES) ENCLOSED BUILDING AREA = 2688 SF
SINGLE STORY BLDG W 15.5' ROOF PEAK HEIGHT
UDO REQUIRES 1 SPACE PER 1000 SF OF ENCLOSED BUILDING
TYPICAL SPACE DIMENSIONS ARE 9' WIDE BY 18' DEEP



SP I

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SUITE 1550
DALLAS, TX 75201

NOTE: ANY PLAN THAT DOES NOT BEAR AN ENGINEER'S SEAL, SIGNATURE AND DATE IS A PRELIMINARY PLAN AND NOT RELEASED FOR CONSTRUCTION



Michael C. Gallant PE, PA
Engineering / Consulting / Design

GALLANTMC@YAHOO.COM
PO BOX 4039 SURF CITY, NC 28445
910.448.1046



C-1989

APPROVED BY THE PENDER COUNTY UNIFIED DEVELOPMENT ADMINISTRATOR

SIGNATURE OF ADMINISTRATOR: _____

APPROVAL DATE: _____

SITE PLAN VALID FOR (2) TWO YEARS FROM APPROVAL DATE