



08 February, 2024 Revised 25 March, 2024

Pine Knoll Shores
Public Services Building

Addendum 2

The following addendum supersedes previous information and does hereby become part of the contract documents:

- See attached specification ~~Division 2 section 31 2200 Grading~~ **deleted**, 31 2323 Fill and ~~32 9219 Seeding~~ **deleted** which was inadvertently left out of the original specifications.
- Contract time is revised to 210 consecutive calendar days in lieu of 180.
- ~~Generator and A.T.S. to be bid as an Add Alternate 1. See attached revised 'Form of Proposal'.~~
Deleted
- Overhead door 100C to receive motorized operator – **to be chain hoist**
Electric Motor Operation: Provide UL listed electric operator, size and type as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second. Operator shall meet UL325/2010 requirements for continuous monitoring of safety devices.
 - a. ~~Entrapment Protection: Required for momentary contact.~~
 - 1) ~~Electric sensing edge monitored to meet UL 325/2010.~~
 - b. ~~Operator Controls:~~
 - 1) ~~Push button operated control stations with open, close, and stop buttons.~~
 - 2) ~~Surface mounting.~~
 - 3) ~~Interior location. (near door)~~
- ~~Provide local electric disconnect for motorized operator to panel A spare breaker 20 amp.~~
Deleted
- ~~Chain hoist information (Global Industrial or equal)~~
Trolley: Model 241647 (2 ½ – 5 ½ beam width)
Chain Hoist: Model 241638
Trolley beam as required for chain hoist/trolley. **Deleted**
- Onsite water and electricity are available for Contractor's use.
- Onsite toilets are available for the Contractor's use.
- ~~Clarification, Existing Septic Field Removal: Remove drain field stone, drain lines, d-box and subgrade 24" in depth per attached CCHD Septic Permit in accordance with NC Environmental~~

Lee D. Dixon, Jr., AIA
Architect/Owner
252-241-1868

P.O. Box 363
Morehead City, NC 28557
Lee@coastalarchitecture.net



Health Standards. Compact subgrade and replace with suitable fill material to achieve final grade. **Owner to remove existing septic field.**

| Field Length (ft) | Field Width (ft) | Field Depth (ft) | Total (CF) | Total (CY) |
|----------------------------------|---------------------------------|---------------------------------|---------------------------|---------------------------|
| 100 | 30 | 2 | 6000 | 222.22 |

~~Unless otherwise specified by NC Environmental Health or Carteret County Health Dept. documentation for this process is not required by the Engineer or Town.— See also attached existing septic permit for your information.~~

- All excess soils are to be properly disposed of offsite.
- See attached SK-1 and SK-2 for site clarifications.

End of Addendum 2

**SECTION 31 2200
GRADING**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Removal of topsoil.
- B. Rough grading the site for site structures and parking lot..
- C. Finish grading.

1.02 RELATED REQUIREMENTS

- A. Section 31 2323 - Fill: Filling and compaction.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Topsoil: See Section 31 2323.
- B. Other Fill Materials: See Section 31 2323.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that survey bench mark and intended elevations for the Work are as indicated.

3.02 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Stake and flag locations of known utilities.
- C. Locate, identify, and protect from damage above- and below-grade utilities to remain.
- D. Protect site features to remain, including but not limited to bench marks, survey control points, existing structures, fences, sidewalks, paving, and curbs, from damage by grading equipment and vehicular traffic.
- E. Protect trees to remain by providing substantial fencing around entire tree at the outer tips of its branches; no grading is to be performed inside this line.
- F. Protect plants, lawns, rock outcroppings, and other features to remain as a portion of final landscaping.

3.03 ROUGH GRADING

- A. Remove topsoil from areas to be further excavated, re-landscaped, or re-graded, without mixing with foreign materials.
- B. Do not remove topsoil when wet.
- C. Remove subsoil from areas to be further excavated, re-landscaped, or re-graded.
- D. Do not remove wet subsoil, unless it is subsequently processed to obtain optimum moisture content.
- E. When excavating through roots, perform work by hand and cut roots with sharp axe.
- F. Stability: Replace damaged or displaced subsoil to same requirements as for specified fill.

3.04 SOIL REMOVAL

- A. Stockpile topsoil to be re-used on site; remove remainder from site.
- B. Stockpile subsoil to be re-used on site; remove remainder from site.
- C. Stockpiles: Use areas designated on site; pile depth not to exceed 8 feet; protect from erosion.

3.05 FINISH GRADING

- A. Before Finish Grading:
 - 1. Verify building and trench backfilling have been inspected.

- 2. Verify subgrade has been contoured and compacted.
- B. Remove debris, roots, branches, stones, in excess of 1/2 inch in size. Remove soil contaminated with petroleum products.
- C. Where topsoil is to be placed, scarify surface to depth of 3 inches.
- D. In areas where vehicles or equipment have compacted soil, scarify surface to depth of 3 inches.
- E. Place topsoil in areas where seeding are indicated.
- F. Place topsoil during dry weather.
- G. Remove roots, weeds, rocks, and foreign material while spreading.
- H. Near plants spread topsoil manually to prevent damage.
- I. Fine grade topsoil to eliminate uneven areas and low spots. Maintain profiles and contour of subgrade.
- J. Lightly compact placed topsoil.

3.06 REPAIR AND RESTORATION

- A. Existing Facilities, Utilities, and Site Features to Remain: If damaged due to this work, repair or replace to original condition.
- B. Other Existing Vegetation to Remain: If damaged due to this work, replace with vegetation of equivalent species and size.

3.07 CLEANING

- A. Remove unused stockpiled topsoil and subsoil. Grade stockpile area to prevent standing water.
- B. Leave site clean and raked, ready to receive landscaping.

END OF SECTION

SECTION 31 2323

FILL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Filling, backfilling, and compacting for paving and site structures.
- B. Filling holes, pits, and excavations generated as a result of removal (demolition) operations.

1.02 RELATED REQUIREMENTS

- A. Section 31 2200 - Grading: Site grading.

1.03 DEFINITIONS

- A. Finish Grade Elevations: Indicated on drawings.

1.04 REFERENCE STANDARDS

1.05 DELIVERY, STORAGE, AND HANDLING

- A. When necessary, store materials on site in advance of need.
- B. When fill materials need to be stored on site, locate stockpiles where indicated.
 - 1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
 - 2. Prevent contamination.
 - 3. Protect stockpiles from erosion and deterioration of materials.

PART 2 PRODUCTS

2.01 FILL MATERIALS

- A. General Fill - Fill Type 1: Imported borrow or on site subsoil complying with ASTM D 2487, Types SW, SP, SM, SC.
- B. General Fill - Fill Type 2: Subsoil excavated on-site.
- C. Structural Fill - Fill Type 3: Conforming to State of North Carolina Highway Department standard.
- D. Sand - Fill Type 4: Natural river or bank sand; free of silt, clay, loam, friable or soluble materials, and organic matter.

2.02 SOURCE QUALITY CONTROL

- A. If tests indicate materials do not meet specified requirements, change material and retest.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Identify required lines, levels, contours, and datum locations.
- B. See Section 31 2200 for additional requirements.

3.02 PREPARATION

- A. Scarify and proof roll subgrade surface to a depth of 6 inches to identify soft spots.
- B. Cut out soft areas of subgrade not capable of compaction in place. Backfill with general fill.
- C. Compact subgrade to density equal to or greater than requirements for subsequent fill material.
- D. Until ready to fill, maintain excavations and prevent loose soil from falling into excavation.

3.03 FILLING

- A. Fill to contours and elevations indicated using unfrozen materials.
- B. Employ a placement method that does not disturb or damage other work.
- C. Systematically fill to allow maximum time for natural settlement. Do not fill over porous, wet, frozen or spongy subgrade surfaces.
- D. Maintain optimum moisture content of fill materials to attain required compaction density.

- E. Slope grade away from building minimum 2 inches in 10 feet, unless noted otherwise. Make gradual grade changes. Blend slope into level areas.
- F. Correct areas that are over-excavated.
 - 1. Other areas: Use general fill, flush to required elevation, compacted to minimum 95 percent of maximum dry density.
- G. Compaction Density Unless Otherwise Specified or Indicated:
 - 1. Under paving and similar construction: 97 percent of maximum dry density.
- H. Reshape and re-compact fills subjected to vehicular traffic.

3.04 FILL AT SPECIFIC LOCATIONS

- A. Use general fill unless otherwise specified or indicated.
- B. Backfill for Undercut Areas: Sand Type 4.

3.05 TOLERANCES

- A. Top Surface of General Filling: Plus or minus 1 inch from required elevations.

3.06 CLEANING

- A. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.

END OF SECTION

SECTION 32 9219

SEEDING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preparation of subsoil.
- B. Placing topsoil.
- C. Seeding, mulching and fertilizer.
- D. Maintenance.

1.02 RELATED REQUIREMENTS

- A. Section 31 2200 - Grading: Preparation of subsoil and placement of topsoil in preparation for the work of this section.
- B. Section 31 2323 - Fill: Topsoil material.

1.03 DEFINITIONS

- A. Weeds: Include Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

1.04 REGULATORY REQUIREMENTS

- A. Comply with regulatory agencies for fertilizer and herbicide composition.
- B. Provide certificate of compliance from authority having jurisdiction indicating approval of seed mixture.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable. Deliver seed mixture in containers showing percentage of seed mix, year of production, net weight, date of packaging, and location of packaging.
- B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.06 MAINTENANCE SERVICE

- A. Furnish maintenance of seeded areas for three months from Date of Substantial Completion.
- B. Maintain seded areas immediattely after plaement until grass is well established and exhibits a vigorous growing condition.

PART 2 PRODUCTS

2.01 SEED MIXTURE

- A. Seed Mixture: All rates are in pounds per acre.
 - 1. March 1-August 31
 - a. 18 lbs. Creeping Red Fescue
 - b. 6 lbs. Indiangrass
 - c. 8 lbs. Little Bluestem
 - d. 4 lbs. Switchgrass
 - e. 25 lbs. Browntop Millet
 - f. 500 lbs. Fertilizer
 - g. 4000 lbs. Limestone
 - 2. Semptember 1 - February 28
 - a. 18 lbs. Creeping Red Fescue
 - b. 6 lbs. Indiangrass
 - c. 8 lbs. Little Bluestem
 - d. 4 lbs. Switchgrass

- e. 35 lbs. Rye Grain
- f. 500 lbs. Fertilizer
- g. 4000 lbs. Limestone

2.02 SOIL MATERIALS

- A. Respread from stockpile.

2.03 ACCESSORIES

- A. Mulching Material: Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- B. Fertilizer: recommended for grass, with fifty percent of the elements derived from organic sources; or proportion necessary to eliminate any deficiencies of topsoil, as indicated by analysis.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that prepared soil base is ready to receive the work of this Section.

3.02 PREPARATION

- A. Prepare subgrade in accordance with Section 31 2200.
- B. Place topsoil in accordance with Section 31 2200.

3.03 FERTILIZING

- A. Apply fertilizer in accordance with manufacturer's instructions.
- B. Apply after smooth raking of topsoil and prior to roller compaction.
- C. Do not apply fertilizer at same time or with same machine as will be used to apply seed.
- D. Mix thoroughly into upper 2 inches of topsoil.
- E. Lightly water to aid the dissipation of fertilizer.

3.04 SEEDING

- A. Apply seed evenly in two intersecting directions. Rake in lightly.
- B. Do not seed areas in excess of that which can be mulched on same day.
- C. Do not sow immediately following rain, when ground is too dry, or during windy periods.
- D. Immediately following seeding and compacting, apply mulch to a thickness of 1/8 inches. Maintain clear of shrubs and trees.
- E. Apply water with a fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.
- F. Following germination, immediately re-seed areas without germinated seeds that are larger than 4 by 4 inches.

3.05 HYDROSEEDING

- A. Apply seeded slurry with a hydraulic seeder at a rate of recommended rate lbs per 1000 sq ft evenly in two intersecting directions.
- B. Do not hydroseed area in excess of that which can be mulched on same day.
- C. Immediately following seeding, apply mulch to a thickness of 1/8 inches. Maintain clear of shrubs and trees.
- D. Apply water with a fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.
- E. Following germination, immediately re-seed areas without germinated seeds that are larger than 4 by 4 inches.

DELETED

3.06 MAINTENANCE

- A. Water to prevent grass and soil from drying out.
- B. Roll surface to remove minor depressions or irregularities.
- C. Immediately reseed areas that show bare spots.

END OF SECTION

SEE REVISED FORM OF PROPOSAL

WITNESS:

(Name of Firm or Corporation Making Bid)

By: _____

(Proprietorship or Partnership)

Title: _____
(Owner, Partner, or Corporate President or Vice President only)

ATTEST:

Address: _____

By: _____

Title: _____
(Corporate Secretary or Assistant Secretary Only)

License No.: _____
(Corporate Seal)

Addenda Received and Used in Computing Bids: (Initial as Appropriate)

Addendum No.1 _____

Addendum No.2 _____

Addendum No.3 _____

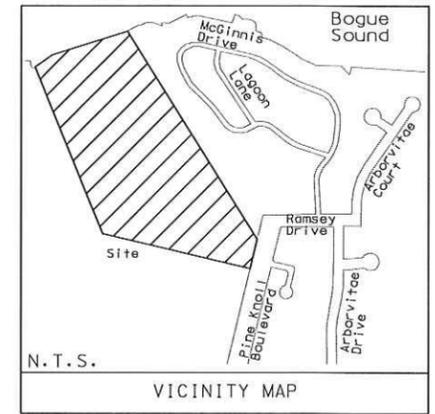
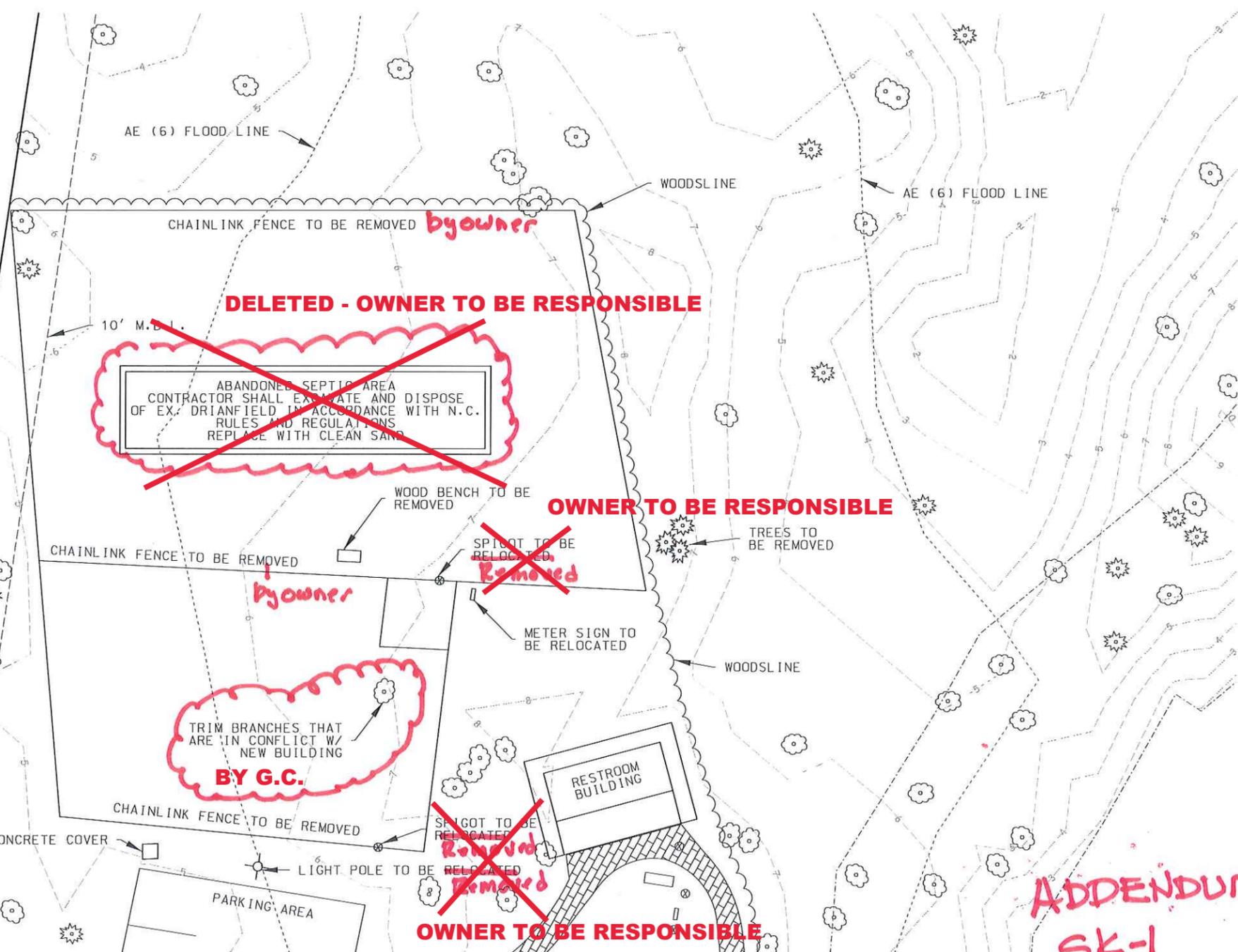
Addendum No.4 _____

End of Proposal Form



BEACONS REACH MASTER ASSO.
 PIN: 635514421783000
 DEED BOOK: 625 PG: 306

N 69° 42' 00" W 975.07' (TOTAL)



NOTES
 AREAS/ITEMS SHOWN IN RED ARE TO BE REMOVED/RELOCATED.
 ALL OTHER AREAS/ITEMS NOT SHOWN IN RED ARE TO REMAIN.

SITE DATA
 PROPERTY OWNER:
 TOWN OF PINE KNOLL SHORES
 PIN: 635514431489000
 DEED: BOOK: 364 PG: 466
 TRACT AREA = 25.68 AC
 TRACT IS LOCATED IN AN AE6 FLOOD ZONE.

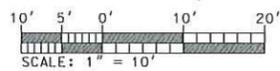
LEGEND

| | |
|--------------|-----------|
| EX. CONTOURS | --- 6 --- |
| TREES | ○ * |
| FENCE | -X-X- |
| WOODSLINE | ~ ~ ~ |

REVISIONS:

| No. | BY | DATE | DESCRIPTION |
|-----|----|------|-------------------|
| 1 | CC | 2/24 | SHIFT DRIVEWAY ON |
| | | | |
| | | | |

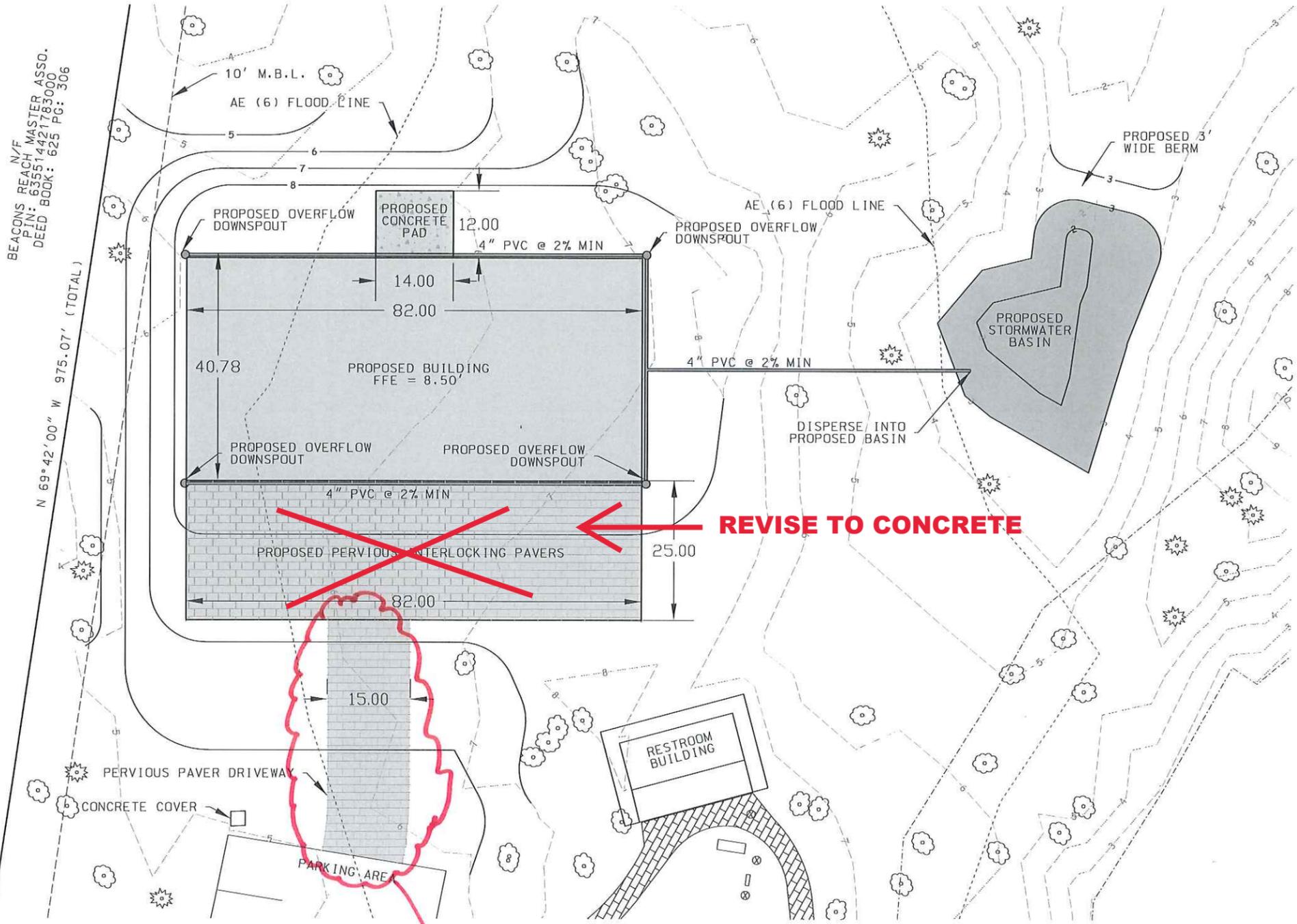
ADDENDUM 2
SK-1



EXISTING CONDITIONS AND DEMOLITION PLAN
TOWN OF PINE KNOLL SHORES
PUBLIC WORKS BUILDING
 PINE KNOLL SHORES TOWNSHIP CARTERET COUNTY NORTH CAROLINA
 CLIENT: TOWN OF PINE KNOLL SHORES SURVEYED: TIDEWATER
 ADDRESS: 311 SALTER PATH ROAD DRAWN: HPD
 PINE KNOLL SHORES, NC 28512 CHECKED: CMC
 PHONE: (910) 554-7653 APPROVED: CMC
THE CULLIPHER GROUP, P.A.
 ENGINEERING & SURVEYING SERVICES
 101A HIGHWAY 24 DATE: 11/15/2023
 MOREHEAD CITY, N.C. 28557 LICENSE NO. C-4482 SCALE: 1" = 10'
 (252) 773-0090
CHARLES M. CULLIPHER, P.E.

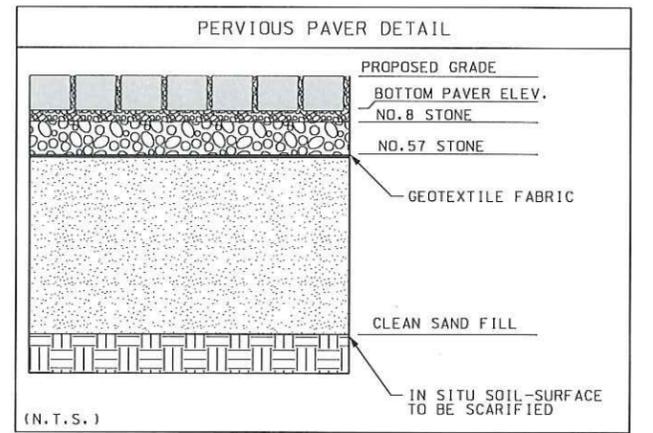


BEACONS REACH MASTER ASSO.
 PIN: 635514421783000
 DEED BOOK: 625 PG: 306

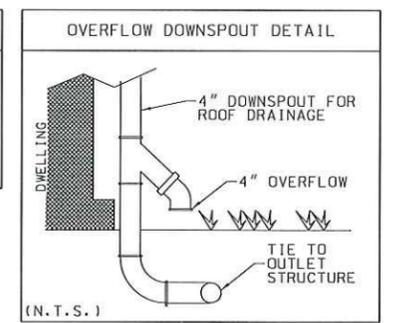


| TOWN OF PINE KNOLL SHORES IMPERVIOUS AREA AND RUNOFF CONTAINMENT CALCULATIONS | |
|---|--------------|
| TOTAL LOT AREA = | 1,118,621 SF |
| | 25.68 AC |
| ALLOWABLE PERCENTAGE OF IMPERVIOUS AREA = | 35% |
| ALLOWABLE IMPERVIOUS AREA = | 391,517 SF |
| PROPOSED IMPERVIOUS AREA = | 3,448 SF |
| PROPOSED IMPERVIOUS AREA (%) = | 0.3% |
| NOTE: DRIVEWAY AND DECKING SHALL BE MADE OF PERVIOUS MATERIAL | |
| RAINFALL CONTAINMENT REQUIREMENT = | 2.00 IN. |
| RUNOFF FROM PROPOSED IMPERVIOUS AREA CONTAINMENT REQUIREMENT = | 575 CF |
| BASIN PROVIDED VOLUME = | 737 CF |

| STORAGE CALCULATIONS | | | | | |
|----------------------|-----------------|---------|---------|------------|-----------|
| ELEVATION | SECTION | SA (SF) | AVG. SA | HT. (FT) | VOL. (CF) |
| 4 | TOP OF BASIN | 1169 | | | |
| | | | 736.5 | 1 | 736.5 |
| 3 | BOTTOM OF BASIN | 304 | | | |
| | | | 736.5 | TOTAL VOL. | 736.5 |

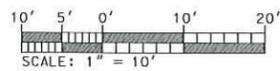


| LEGEND | |
|------------------|------|
| PERVIOUS PAVERS | |
| PROPOSED AREAS | |
| PROPOSED CONTOUR | -6- |
| EXISTING CONTOUR | -6-- |



| REVISIONS: | | | |
|------------|----|------|-------------------|
| No. | BY | DATE | DESCRIPTION |
| 1 | CC | 2/24 | SHIFT DRIVEWAY OK |

SHEET # 2 OF 2
 PROJECT #: PM1734-041
 DESIGN FILE #: PKS Public Works Building.dgn



ADDENDUM 2
SK-2



SITE GRADING DRAINAGE PLAN
TOWN OF PINE KNOLL SHORES PUBLIC WORKS BUILDING
 PINE KNOLL SHORES TOWNSHIP CARTERET COUNTY NORTH CAROLINA
 CLIENT: TOWN OF PINE KNOLL SHORES SURVEYED: TIDEWATER
 ADDRESS: 311 SALTER PATH ROAD DRAWN: HPD
 PINE KNOLL SHORES, NC 28512 CHECKED: CMC
 PHONE: (910) 554-7653 APPROVED: CMC
THE CULLIPHER GROUP, P.A.
 ENGINEERING & SURVEYING SERVICES
 151A HIGHWAY 24 DATE: 11/15/2023
 MOREHEAD CITY, N.C. 28557 SCALE: 1" = 10'
 (252) 773-0090 LICENSE NO. C-4482
CHARLES M. CULLIPHER, P.E.

**SYSTEM TYPE III
OPERATION PERMIT**

In accordance with the provisions of Article 11, Chapter 130-A of the General Statutes of North Carolina, an Operation Permit is issued on this date June 28, 1993 to:

Owner Town of Pine Knoll Shores
Mailing Address 100 Municipal Ct.
City, State Pine Knoll Shores, Atlantic Beach NC 28512
Business Phone 247-4353 Home Phone _____
Facility Location Pine Knoll Shores - Rosevelt Blvd.

Facility Description Municipal Complex, Assembly for 70 seats, police station, town offices

Design daily sewage flow 1200 gpd based on bedrooms / 70 seats
(beds, seats, people, etc.)
Engineer N/A Address _____

Contractor Robert Young Blvd Address Atlantic Beach
Atlantic Beach NC Phone 247-4326

Lessee or party responsible for operation, maintenance, and repair of this sewage system:
Name Owner Address _____
Phone _____

* It is the responsibility that all previous owners of this system assure the subsequent owners receive this permit and abide by all requirements and conditions.
* If any ownership changes occur, then it is required for the new owner/operator to come into the Carteret County Health Department and update the permit information.

- The routine maintenance requirements for this system are listed below:
- Check optic tank weekly for solids level
 - Assure clarifier is properly functioning
 - Check distribution boxes to assure equal distribution boxes

Maintenance and cleaning records shall be kept by the system owner and shall be available for review by the Carteret County Health Department during inspections of the system.

At such time that any part of the sewage treatment and disposal system falls into disrepair or the system is causing a health hazard, the owner/operator shall notify the Carteret County Health Department within forty-eight (48) hours and shall take immediate corrective action in the repair of the system as directed by the department.

Other conditions or requirements _____

Tri-Party Yes _____ No X
HOA formed Yes _____ No X
Easements deeded/recorded - Date N/A

* Assure documents are copied and attached with this permit.
This Operation Permit shall be attached to and shall be subject to all criteria, conditions, and provisions of Improvements Permit # 6114
dated June 28, 1993

Page 2
SYSTEM TYPE III
OPERATION PERMIT

This Operation Permit shall be valid as long as the sanitary sewage system is in compliance with Article 11 of G.S. Chapter 130A, Laws and Rules for Sanitary Sewage Collection, Treatment, and Disposal (15 NCAC 18A .1900), and all conditions of this permit, including the items specified below:

1. The sewage collection, treatment, and disposal system shall be operated and maintained at all times to prevent public health hazards, to prevent seepage or discharge of sewage or effluent to the surface of the ground or surface waters, and to prevent the direct discharge of effluent to the ground water.
2. If a grease trap is installed, it shall be inspected a minimum of 2 to 4 week intervals and pumped as needed, with records of maintenance and cleaning kept by the owner. The grease trap will be required to be pumped and cleaned more frequently during peak season or periods of high use.
3. This permit does not constitute a warranty and does not negate or supersede any zoning restriction or restricted covenants in the chain of title. It is the responsibility of the permittee to determine whether or not such restrictions apply.
4. A complete set of operation and maintenance manuals and up-to-date approved as-built plans for all equipment installed shall be maintained at the site served by this facility. The manuals will include recommendations to guide the owner/operator.
5. Each septic tank shall be inspected for sludge and scum build-up annually. Tanks shall be pumped when the sludge level exceeds a third of the liquid depth. The septic tank will be required to be pumped and cleaned more frequently during peak season or periods of high use.
6. This permit is transferable and is valid only with respect to the facilities described herein and the specified design flow. Prior to any expansions or revisions, a revised permit shall be obtained from the Carteret County Health Department.
7. **Ground Absorption System Maintenance** - A suitable cover shall be maintained on the nitrification field (drain field). Grassed areas shall be kept mowed, and wooded areas kept free of undergrowth. Clippings and other landscape debris shall be removed from the disposal area. No traffic or other equipment shall be allowed on the disposal fields, with the exception of mowing equipment. Vegetative cover shall be inspected prior to each growing season and repairs or reseeding accomplished sufficiently to assure that soil erosion will not occur in the area.
8. All associated drainage (surface and subsurface) shall be maintained. The drainage outlet shall also be properly maintained.
9. Maintenance records be kept on all maintenance of the septic system which include:
 - a. Inspection of sludge and scum grease levels
 - b. Hauler, date pumped, and disposal site
 - c. Replacement of mechanical components
 - d. Records of landscape maintenance and drainage
 - e. All other pertinent maintenance
10. No parking, paving, driving or structure shall be allowed on the disposal field with the exception of mowing equipment or equipment used for repairs.

*If all conditions of this permit are not met, then this permit is void.

The Carteret County Health Department reserves the right to make inspections of these sewage collection, treatment, and disposal facilities as necessary to assure compliance with the provisions of this Operations Permit and the North Carolina Laws and Rules for Sanitary Sewage Collection, Treatment, and Disposal.

Operations Permit Issued June 28 19 93
BY Troy C. Dees Troy C. Dees
Environmental Health Specialist

As the owner of the above sanitary sewage system, I agree to the conditions and requirements of this Operations Permit and will pass on to subsequent owners/operators

Signed Mary L. Kanyha, MAYOR OF PINE KIVOLL SHORES

ENVIRONMENTAL HEALTH DIVISION
CARTERET COUNTY HEALTH DEPARTMENT
BEAUFORT, NC 28516 (919) 728-8499

6114

CERTIFICATE OF COMPLETION:

Ground Absorption Sewage Disposal System G.S. 130A-337

Notice: This certificate of completion in no way binds the Environmental Health Division of Carteret County Health Department nor implies a guarantee that this system will function in all circumstances, but that the system is properly installed in accordance with applicable rules and Article 11, Chapter 130A of the North Carolina General Statutes.

- New Construction
- Repair
- Existing System

OWNER: Town of Pine Knoll Shores

SITE LOCATION: PKS - Town Hall

INSTALLER: Robert Youngblood

INSTALLATION INSPECTED BY: T. Adams

DATE: 6/21/93

ELECTRICAL INSPECTION BY: N/A

DATE: _____

LANDSCAPE INSPECTION BY: N/A

DATE: _____

CERTIFICATE OF COMPLETION DATE: 6/21/93

BY: [Signature]

*ADDITIONAL REQUIREMENTS ON BACK OF PERMIT

REMARKS: _____

A's
below

DIAGRAM OF INSTALLATION AS INSTALLED
(if different from Improvement Permit layout)

ADDITIONAL REQUIREMENTS FOR SYSTEM AND MAINTENANCE

- (1) Septic tank sludge accumulation shall be evaluated every three (3) years and pumped when sludge level is found to be 12" or greater in depth.
- (2) No construction of buildings, parking, paving or driveways shall be allowed over system or repair areas.
- (3) Water wells should not be constructed without site location approval from the Carteret County Health Department.
- (4) In event system fails, repairs must be permitted and installed within thirty (30) days.
- (5) Provide positive surface drainage over drainfield area, seed with perennial grass to prevent erosion, and keep area mowed. Divert water from roof gutters, driveway and other paved or hard surfaced areas away from drainfield area.
- (6) All ditches, swales, subsurface drainage, and outlets pertinent to the proper functioning of the septic system shall be maintained as required as long as the system is in use.
- (7) Garbage grinders are not recommended when a home is served by sub-surface sewage disposal. If a garbage grinder is used then it is recommended that the septic tank be pumped out annually to prevent the excessive accumulation of sludge.
- (8) Discharge from water softeners shall not be allowed into the system.
- (9) All other requirements of Section 1900 NCAC

**ENVIRONMENTAL HEALTH DIVISION
CARTERET COUNTY HEALTH DEPARTMENT
BEAUFORT, NC 28516 (919) 728-8499**

6114

G.S. 130A-336

IMPROVEMENT PERMIT

VALID FOR 60 MONTHS

Subject to revocation if site plans or if site is altered or intended use is changed.

DATE 5/26/93

ME CLASSIFICATION II

ELECTRICAL PERMIT REQUIRED: Yes () No ()

OPERATIONS PERMIT REQUIRED: Yes () No ()

- New Construction
- Repair
- Existing System

OWNER: Town of the Knoll Shores

ADDRESS: PO Box 757 100 Municipal Cr.

SYSTEM SHALL NOT BE INSTALLED UNDER WET CONDITIONS

Atlantic Beach NC 28517 PHONE: 247-4353

Trench bottom depth to be no deeper than 20" naturally occurring surface.

PROPERTY LOCATION: Town Hall

$$No \times 25 / \text{sq ft} = 400 + 70 \times 5 / \text{sq ft} = 350 \text{ (750 total)}$$

Municipal complex 13-38-1-1

SUBDIVISION: PKS - Town Hall

This system is designed for a maximum of 1200 gpd, currently design is only 750 gpd - there is an excess of 450 gpd extra capacity design flow built in.

LOT: _____ BLOCK: _____

TYPE STRUCTURE: Complex NO. BATHS: 3

NO. BEDROOMS: 16 NO. PEOPLE: 70

current 750

DESIGN FLOW: (1200) GARBAGE GRINDER: Yes () No ()

SEPTIC TANK: 2000 GAL. PUMP TANK: NA GAL.

NO. LINES: 4 WIDTH: 36"

TOTAL LENGTH: 100' FT. TOTAL: 1200 SQ. FT.

WATER SOURCE: Community

HORIZONTAL DISTANCE FROM WELL: > 100 FT.

SITE MODIFIED: Yes () No ()

DRAINAGE REQUIREMENTS: Provide positive surface drainage

EASEMENT REQUIRED Yes No

DRAINAGE MAINTENANCE REQ: Surface () Sub-surface ()

MAINTAIN MINIMUM 10' FROM WATER LINE

COMMENTS: Suggest low flow water fixtures

*Prior to any change in system layout, approval must be obtained from Health Department.

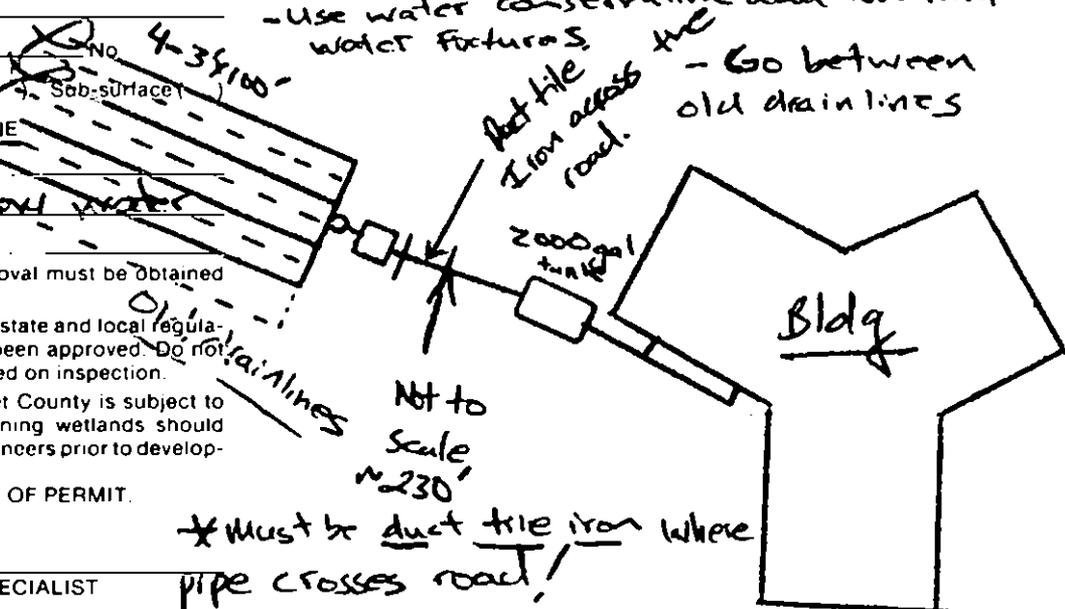
NOTICE: Construction must comply with all state and local regulations. Do not install well until well site has been approved. Do not cover any portion of the system until approved on inspection.

NOTICE: Beware, much property in Carteret County is subject to Wetland Regulations and properties containing wetlands should receive approval from U.S. Army Corp of Engineers prior to development.

**ADDITIONAL REQUIREMENTS ON BACK OF PERMIT. IMPROVEMENTS PERMIT BY

[Signature]
ENVIRONMENTAL HEALTH SPECIALIST

- Install drainlines as high as possible - no deeper than 20" deep
- Provide positive surface drainage
- Provide access for both ends of tank and D-box
- Use copper-sulfate every 6mos in D-box
- Use water conservation and low flow water fixtures
- Go between old drainlines



*Must be duct tile iron where pipe crosses road!

**ADDITIONAL REQUIREMENTS FOR PROPER INSTALLATION AND MAINTENANCE OF
SEWAGE COLLECTION, TREATMENT AND DISPOSAL SYSTEMS**

- (1) Septic tanks, pump tanks and distribution box shall be sealed to prevent infiltration of ground water.
 - a. After curing, tanks manufactured in two sections shall be joined and sealed at the joint by using a mastic, butyl rubber, or other pliable sealant that is waterproof, corrosion-resistant and approved for use in septic tanks.
 - b. Water tightness testing will be required on all septic tanks located within the 10 year flood zone. Septic tank walls shall be plastered along the joint with hydraulic cement, cement mortar, or approved waterproofing sealant before testing for water tightness.
 - c. All 2 section pump tanks shall be plastered along the joint with hydraulic cement, cement mortar, or other approved waterproofing sealant. **Water tightness testing** will be required on all 2 section pump tanks, prior to backfilling, if a soil wetness condition is present within five (5') feet of the top of the tank.
- (2) Mechanical or electrical components shall be above the 100 year flood level or otherwise protected against a 100 year flood. All electrical components require inspection and approval from the appropriate building inspector.
- (3) Provide positive surface drainage over drainfield area, seed with perennial grass to prevent erosion, and keep area mowed. Divert water from roof gutters, driveway and other paved or hard surfaced areas away from drainfield area.
- (4) All ditches, swales, subsurface drainage, and outlets pertinent to the proper functioning of the septic system shall be maintained as required as long as the system is in use.
- (5) Discharge from water softeners shall not be allowed into the system.
- (6) Garbage grinders are not recommended when a home is served by sub-surface sewage disposal. If a garbage grinder is used then it is recommended that the septic tank be pumped out annually to prevent the excessive accumulation of sludge.
- (7) Water wells should not be constructed without site location approval from the Carteret County Health Department.