BOARD OF ADJUSTMENT

CAMERON TABOR
Chairman

THERESA DOZIER
Vice-Chairman

Currituck County
Board of Adjustment Agenda
Historic Currituck County Courthouse
January 9, 2014, 7:00 p.m.

BOARD OF ADJUSTMENT

C SHAY BALLANCE
DONNA MCCLOUD
MICHAEL PAINTER
DAVID PALMER
VIVIAN SIMPSON

7:00 p.m. **CALL TO ORDER**

Item 1 **ROLL CALL**

Item 2 **ELECTION OF OFFICERS**
- Chairman
- Vice-Chairman

Item 3
A. Approval of Agenda
B. Ask for Disqualifications
C. Announce Quorum Being Met

Item 4 **Approval of September 13, 2013 minutes**

OLD BUSINESS:

NEW BUSINESS:

Item 5 **BOA 13-08 DAVID & CATHERINE ZATLOUKAL:** Variance request to allow for property to be filled higher than the maximum permitted by the Unified Development Ordinance (UDO), and to not implement adequate stormwater practices as required. The property is located at 680 Wild Cherry Court, The Currituck Club, in Corolla.

Item 6 **ANNOUCEMENTS**

Item 7 **ADJOINMENT**

CURRITUCK COUNTY
BOARD OF ADJUSTMENT REGULAR MEETING
September 12, 2013

REGULAR MEETING
The Currituck County Board of Adjustment met on September 12, 2013 at 7:00 p.m. in the Historic Currituck County Courthouse. The following members were present: David Palmer, Cameron Tabor, Donna McCloud, C. Shay Balance, Michael Painter, and Theresa Dozier. Vivian Simpson was not present. Brad Schuler, Planner; Stacey Smith, Code Enforcement Officer/Board of Adjustment Clerk; and Ben Gallop, Board of Adjustment Attorney; were also present.

Mr. Tabor called the meeting to order and announced a quorum have been met with four regular members and two alternate members.

Mr. Tabor asked if there were any changes to the agenda.

Brad Schuler stated that the applicant withdrew Item 2.

Item 1: Approval of July 11, 2013 Minutes

David Painter motioned to approve the August 8, 2013 minutes with no changes. Theresa Dozier 2nd the motion and the motion passed unanimously.

ANNOUCEMENTS

Mr. Schuler went over a recent bill that updated language in the General Statues in reference to Board of Adjustment cases and procedures.

ADJOURNMENT

There being no further business to discuss, Theresa Dozier motioned for adjournment.
Donna McCloud 2nd the motion and the motion passed unanimously. The meeting adjourned at 8:03 pm

Respectfully Submitted,

Stacey Smith

Stacey Smith
Code Enforcement Officer/BOA Clerk

Minutes are not official until approved by the board.

DRAFT

Currituck County
Planning and Community Development Department
Planning and Zoning Division
153 Courthouse Road, Suite 110
Currituck, North Carolina 27929
252-232-3055 FAX 252-232-3026

To: Board of Adjustment

From: Brad Schuler, Planner I

Date: December 31, 2013

Subject: BOA 13- Zatloukal - Variance

David & Catherine Zatloukal are requesting a variance to allow for property to be filled higher than the maximum permitted by the Unified Development Ordinance (UDO), and to not implement adequate stormwater practices as required. The property is located at 680 Wild Cherry Court, The Currituck Club, in Corolla.

Section 7.3.4.C, Fill and Other Land Disturbance Requirements, states:

"3. *A lot shall be not be filled or graded higher than the average adjacent grade of the first 30 feet of adjoining property. Through approval of an alternative stormwater plan in accordance with Section 7.3.5.B.3, Additional Fill or Land Disturbance Activities, the following exceptions are permitted:*

(c) *In the Outer Banks Stormwater Management Zone when fill is required to raise the lot elevation to the regulatory flood protection elevation, not to exceed a maximum of three feet."*

Section 7.3.5, Alternative Stormwater Plans, further states:

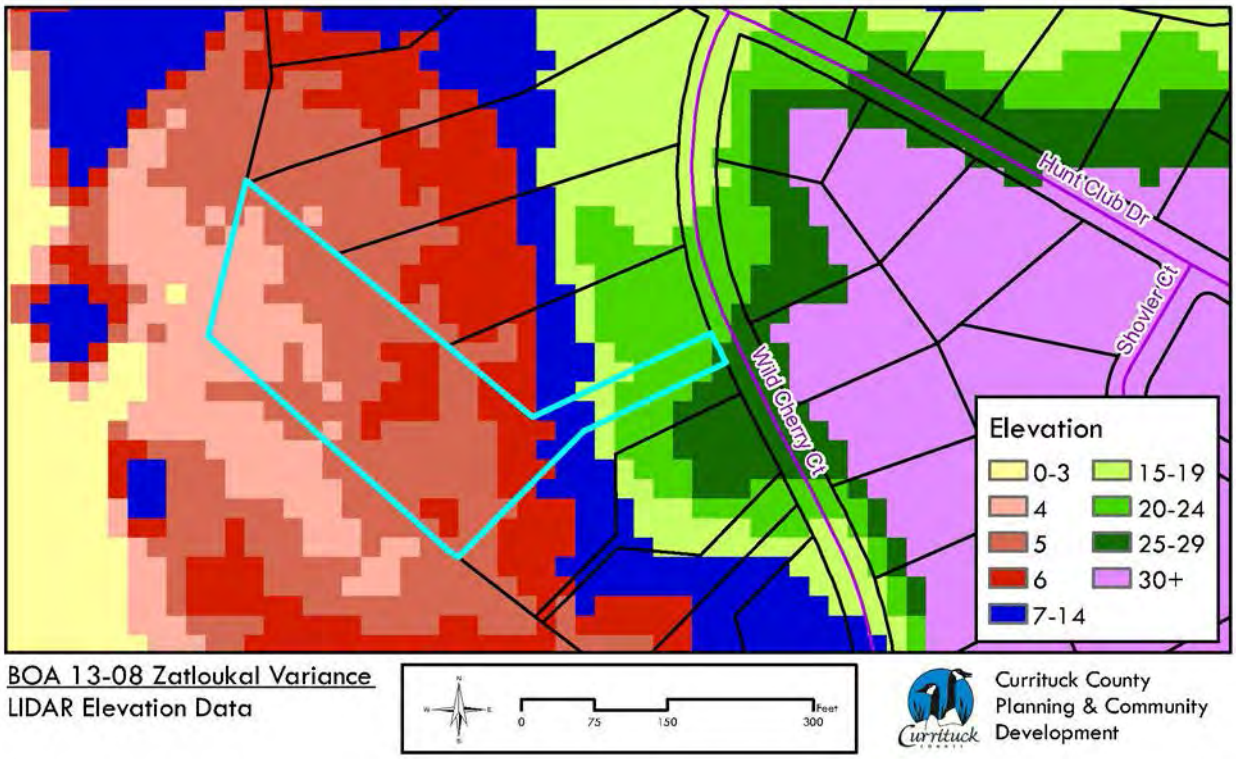
"B. *Allowable Deviations*

(3) *A lot may be filled or graded higher than the average adjacent grade of the first 30 feet of adjoining property or to improve drainage for performance of stormwater management devices, provided adequate stormwater practices are implemented to capture and infiltrate stormwater runoff from all impervious surfaces from the first four inches of rain from any rainfall event."*

Background

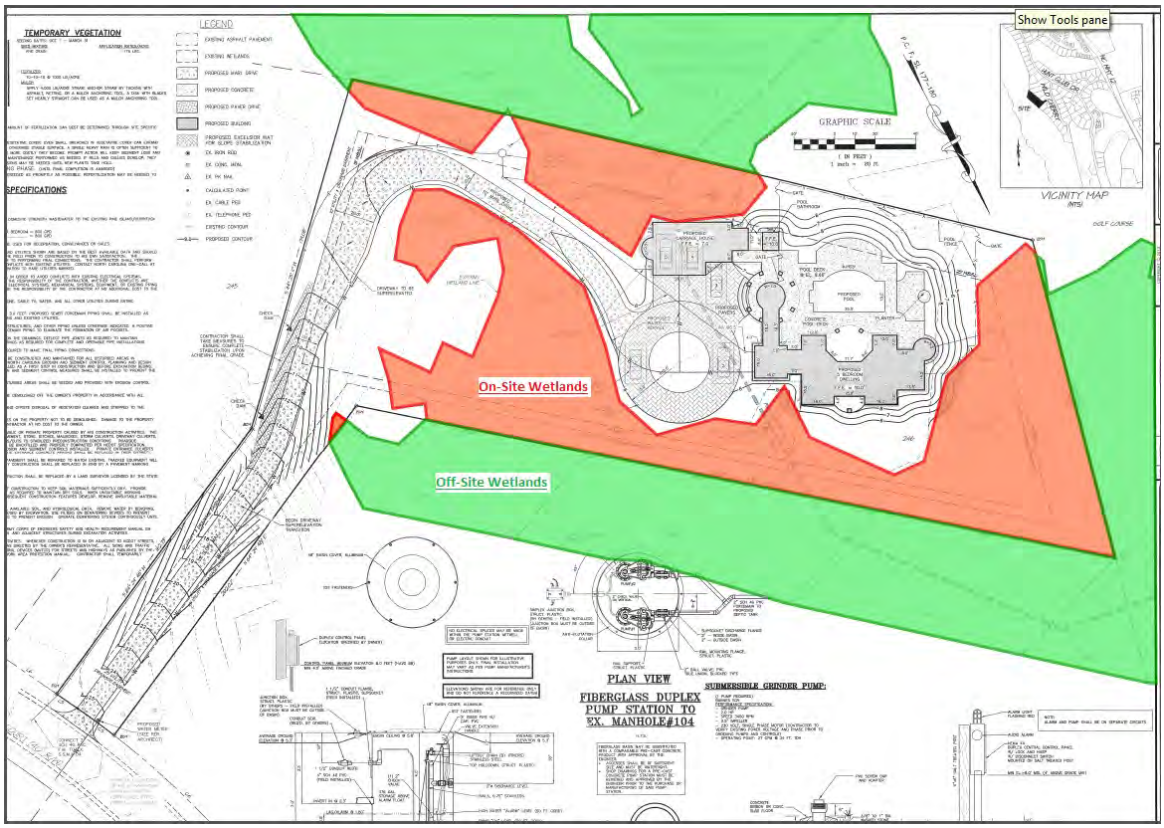
The buildable area of the Zatloukals' property is much lower than the surrounding lots. The existing grade at the proposed house foot print is approximately 5 to 6 feet (above mean sea level). The lot to the southeast contains a single family dwelling at an elevation of 9.5', and the vacant lots to the east contain buildable areas of around 20' in elevation.

Below is a map showing LIDAR elevations of the area. LIDAR, similar to radar, uses light to measure to elevations. The data shown in the map was obtained in the mid-2000s and shows approximate elevations.



BOA 13-08 Zatloukal Variance
LIDAR Elevation Data

There are also a good portion of wetlands in and around the property. Specifically, the property contains 26,111 square feet of wetlands, or 40% of the lot area. In the buildable area (the area not containing the "pole" or "pan handle" of the property), the percentage of wetlands is approximately 45%. Below is a site plan highlighting the wetlands in and around the property:



Finally, the proposed single family dwelling is located within the AE flood zone with a Base Flood Elevation (BFE) of 5' and a regulatory flood elevation of 6'. The UDO allows for the lot to be filled to 6' through an alternative stormwater plan. The alternative stormwater plan would require adequate stormwater practices be implemented to capture and infiltrate stormwater runoff from all impervious surfaces from the first four inches of rain from any rainfall event.

Please note the application and memo from the county engineer incorrectly state AE 6' and regulatory flood elevation of 7'.

Zatloukals' Request

The Zatloukals' are requesting a variance from Section 7.3.4, Stormwater Management Standards, and Section 7.3.5, Alternative Stormwater Plans, to allow for the property to filled higher than the 6' maximum the UDO allows, and to do so without providing adequate stormwater practices. The proposed fill would establish a finished floor elevation (FFE) of the dwelling to be at 10'.

The application states that the existing conditions, very low surroundings, and amount of wetlands within the buildable area warrant raising the FFE further to prevent potential flooding. Also, the applicant's engineer, Michael Strader, states that the existing wetlands serve as a recharge area and flood mitigation measure, and that they already provide for stromwater management and treatment of runoff naturally. Therefore, grading of infiltration basins to treat a four inch rain event would be unnecessary land disturbance.

Variance Criteria

The purpose of a variance is to allow certain deviations from the dimensional standards of the UDO (such as height, yard setback, lot coverage, or similar numerical standards) when the landowner demonstrates that, owing to special circumstances or conditions beyond the landowner's control (such as topographical conditions, narrowness, shallowness, or shape of a specific parcel of land), a literal application of the standards would result in undue and unique hardship to the landowner and the deviation would not be contrary to the public interest.

A variance shall be approved on a finding the applicant demonstrates all of the following standards are met:

(1) The alleged hardship is suffered by the applicant as a result of the application of this Ordinance;
(2) The hardship relates to the applicant's land, such as location, size, or topography, rather than personal circumstances;
(3) The hardship is unique, or nearly so, rather than one shared by many surrounding properties;
(4) The hardship is not the result of the applicant's own actions; and
(5) The variance will not authorize the initiation of a nonconforming use of land.

The following factors do not constitute sufficient grounds for approval of a variance:

(1) A request for a particular use that is expressly, or by inference, prohibited in the zoning district;
(2) Hardships resulting from factors other than application of standards of this Ordinance;

(3) The fact that land or a structure may be utilized more profitably or be more marketable with a variance;

(4) The citing of other nonconforming or conforming uses of land or structures in the same or other zoning districts; or

(5) Financial hardship.

Staff Recommendation

Below are staff's suggested findings and recommendation.

(1) The alleged hardship is suffered by the applicant as a result of the application of this Ordinance;
Suggested finding: The alleged hardship is suffered by the applicant **is** a result of the application of this Ordinance. The UDO allows for the property to be filled to a maximum of 6' provided adequate stormwater practices are implemented.

(2) The hardship relates to the applicant's land, such as location, size, or topography, rather than personal circumstances;
Suggested finding: The hardship **does** relate to the applicant's land, specifically with the location/amount of wetlands, and low grade compared to surrounding properties.

(3) The hardship is unique, or nearly so, rather than one shared by many surrounding properties;
Suggested finding: The hardship **is** unique, or nearly so, rather than one shard by many surrounding properties. The amount/location of wetlands, and low grade of the property compared to the surrounding lots is unique.

(4) The hardship is not the result of the applicant's own actions; and
Suggested finding: The hardship is **not** the result of the applicant's own actions. The applicant has not knowingly or unknowingly violated the ordinance.

(6) The variance will not authorize the initiation of a nonconforming use of land.
Suggested finding: The variance will **not** authorize the initiation of a nonconforming use of land.

The County Engineer, Eric Weatherly, also reviewed the variance application and provided his comments in an attached memo. Mr. Weatherly finds the variance application acceptable based on the following conclusions:

1. The proposed fill will not have a flooding impact to the neighbors with possible exception of the fairway to the south. The lost to the east is greater than 100' from the proposed fill in question and is at the same relative elevation as the proposed lot fill. All other neighbors are much higher than the proposed fill.
2. Requiring the lot to manage a 4" rain event to capture runoff from the fill will not provide any benefits. Runoff from the fill area will drain to existing wetlands which serve as a recharge area and flood mitigation measure. I would not recommend disturbance to these areas. Any runoff from the lot is directed across the driveway toward the fairway to the south.
3. The engineers have made modifications to the proposed driveway to prevent runoff from the driveway onto the neighbor and erosion control measures were added to provide additional stabilization due to concerns of the steep grades.

Staff is recommending **approval** of this application with the following conditions:

1. The property may be filled to establish a building pad at a maximum elevation of 9.5' (NAVD 1988).
2. The site must be built in accordance with the plans included in the variance application. Minor deviations may be permitted by staff that do not substantially modify the amount of fill, impervious surface, or stormwater/erosion control measures.

The County submits the following attachments:

- Attachment 1: Variance application including:
    a. Attachment 2: 36" x 24" site plan of the proposed development.
    b. Attachment 3: Elevations of the proposed single-family dwelling.
- Attachment 4: Memo from Eric Weatherly, County Engineer.
- Attachment 5: Sections 7.3.4, Stormwater Management Standards, & 7.3.5, Alternative Stormwater Plans, of the UDO.

Quible

Quible & Associates, P.C.

ENGINEERING • ENVIRONMENTAL SCIENCES • PLANNING • SURVEYING

SINCE 1959

P.O. Drawer 870
Kitty Hawk, NC 27949
Phone: 252-261-3300
Fax: 252-261-1260
Web: quible.com

December 2, 2013

Mr. Jason Litteral, CFM
Currituck County Planning and Community Development
P.O. Box 73
Currituck, NC 27927

Re: **Lot 246, Phase 3, The Currituck Club**
Variance Request Application
Corolla, Currituck County, North Carolina

Dear Mr. Litteral:

On behalf of David S. and Catherine R. Zatloukal, Quible & Associates, P.C. hereby submit for your review the enclosed application package for the Lot 246, Phase 3, The Currituck Club Request of Variance with respect to the proposed amount of fill on the property. Enclosed in this package, please find the following:

- Ten (10) copies of each:
  - Variance Application
  - 24"x36" Full Size Site Plans
  - 11"x17" Size Exterior Elevations
- One (1) copy of each:
  - Variance Application Fee in the amount of $150 made payable to "Currituck County"
  - CD containing pdf copy of the Request of Variance Application Package

Please allow this transmittal letter to serve as a narrative summarizing the nature of this request.

Summary:

David and Catherine Zatloukal own Lot 246 in Phase 3 of The Currituck Club located at 680 Wild Cherry Ct and are planning on building their residence on the subject lot. The Zatloukals have obtained a lot survey, a preliminary site plan, wetland delineation, exterior building elevations, and house plans as part of their planning process and are securing a Nationwide 18 Permit. A copy of the site plan and exterior building elevations are enclosed for reference in addition to the Variance Application.

The only land separating the Zatloukals' from the sound is the golf course fairway, the proposed building pad is almost completely surrounded by wetlands, and the adjacent properties are much higher in elevation. The golf course adjoins Lot 246 on two sides (South and East), undeveloped vacant Lots 247 through 250 adjoin Lot 246 along the northern property line, and Lot 245 adjoins along the western property line. The proposed building pad has existing elevation of around 5 to

6 feet. The proposed driveway connects to Wild Cherry Court at an elevation of approximately 25 feet. While the rear of Lots 247 through 250 consists of low lying wetlands, the buildable areas are likely above 20 feet in elevation. Lot 245 contains a structure likely above the elevation of 10 feet.

The Unified Development Ordinance (UDO) does allow some fill for the minimum finished floor elevation (FFE) to be constructed above the FEMA FIRM Zone Elevation, or Base Flood Elevation (BFE). This particular lot falls within the FIRM Zone AE(6.0') and therefore requires a minimum FFE of 7.0 feet. Due to the existing hydraulic conditions surrounding the buildable area and the existing average grade within the proposed building footprint, it would be prudent to elevate any structure constructed on this property. High seasonal water table and stormwater runoff from the surrounding drainage area create the potential for ponding over much of Lot 246. The building foundation has been designed to allow for a minimum FFE above potential flood elevations. It would be best to prevent the possibility of flooding by allowing the proper amount of fill prior to construction. The potential for flooding of Lot 246 will only increase as the adjacent undeveloped lots are allowed lot coverage in the future.

The Applicants are requesting a variance from Section 7.3.4.C.(3)(c) of the UDO to allow enough fill to achieve a FFE of 10.0 feet in order to provide adequate elevation above potential flooding. The Applicants are able to meet all other County dimensional requirements, including but not limited to total height. The allowance of this variance does not adversely impact any adjoining properties, would be in the best interest of public safety and well-being, and meets the spirit of the Ordinance.

Please review the enclosed documentation and request placement on the next available Board agenda if appropriate.

Please do not hesitate to contact me at 252.261.3300, or mstrader@quible.com, if you have any questions, comments or requests for additional information.

Sincerely,

Quible & Associates, P.C.

Michael W. Strader, Jr., P.E.

encl.: as stated
cc: David & Catherine Zatloukal

Variance
Application

OFFICIAL USE ONLY:
Case Number: _____
Date Filed: _____
Gate Keeper: _____

Contact Information

APPLICANT:
Name: David S. & Catherine R. Zatloukal
Address: 12112 Damson Dr.
Gaithersburg, MD 20878
Telephone: (301) 535-1219
Fax Number: _____
E-Mail Address: cathy@5thgenwireless.com

PROPERTY OWNER:
Name: David S. & Catherine R. Zatloukal
Address: 12112 Damson Dr.
Gaithersburg, MD 20878
Telephone: (301) 535-1219
Fax Number: _____
E-Mail Address: cathy@5thgenwireless.com

LEGAL RELATIONSHIP OF APPLICANT TO PROPERTY OWNER: Same

Property Information

Physical Street Address: 680 Wild Cherry Ct.
Location: Lot 246 The Currituck Club
Parcel Identification Number(s): 117A00002460000

Request

I, Catherine Zatloukal, hereby request a variance from Section(s) 7.3.4.C.(3)(c) of the Unified Development Ordinance.

Provide a narrative of why the variance is needed and what circumstances have lead to the need for a variance:

The existing grade at the proposed house footprint is between 5' and 6'. The FIRM Zone for the proposed structure is AE (6.0'). Therefore, the minimum finished floor elevation (FFE) needs to be at least 7' per FEMA Regulations (BFE + 1'). The existing conditions, very low surroundings, and amount of wetlands within the buildable area of the lot warrant raising the FFE further to prevent potential flooding. The adjoining properties and associated structures have much higher grades and there is the potential that stormwater runoff could create ponding on Lot 246.
The building foundation has been designed based upon subsurface investigation and geotechnical engineering and requires fill up to the design FFE. The existing conditions, low topography surrounded by high grades, and BFE have led to the need for a variance. A FFE of 10' is requested to provide adequate elevation above potential flooding with the intent to meet the requirements set forth in the Ordinance.

Attachment 1

Relevant Factors for Issuance of a Variance

A variance may be granted by the Board of Adjustment if it concludes that strict enforcement of the ordinance would result in practical difficulties or unnecessary hardships for the applicant and that, by granting the variance, the spirit of the ordinance will be observed, public safety and welfare secured, and substantial justice done. It may reach these conclusions if it makes detailed written findings that:

A. The alleged hardship is suffered by the applicant as a result of the application of the Ordinance. *(Variances can not be granted if the hardship is the result of restrictions other than those of the ordinance; restrictive covenants are an example).*

The application of the Ordinance does not allow fill in excess of 7' based upon Section 7.3.4.C.(3)(c) since the Regulatory flood protection elevation is 7'. Strict compliance with the Ordinance would only allow a FFE of 7' and considering the surrounding topography, could result in the flooding of the principal structure. The County height requirement and the Restrictive Covenants set forth by the Development can be met based upon the design plan. Application of the Ordinance increases the risk for flood damage.

B. The hardship relates to the applicant's land, such as location, size, or topography, rather than personal circumstances. *(Hardships suffered by the applicant should be the result of factors directly related the applicant's land and not ordinance requirements).*

The hardship originates from the existing conditions of the land. The extreme low elevation and amount of wetlands is compounded by the higher grades of the surrounded properties. The buildable area of the adjacent lot 245 is above 10' and the buildable area of lots 247, 248, and 249 is around 20'. The rear of lots 247, 248, and 249 is separated from lot 246 by a large expanse of low elevation wetlands.

C. The hardship is unique, or nearly so, rather than one shared by many surrounding properties. (*Hardships suffered by the applicant in common with neighbors does not justify a variance, the proper remedy is not a variance, but rather an amendment of the ordinance. Courts have held that a board's granting a variance based on such factors amounts to an attempted usurpation of legislative power).*

This appears to be a very isolated incident. Many of the surrounding lots have already been built upon. This site is very unique in that the wetlands encompass nearly the entire buildable area before the existing elevation increases to the west where the wetlands separate and the golf course fairway separates the property from the Sound.

D. The hardship is not the result of the applicant's own actions. *(Where a property owner has either knowlingly or unknowingly violated the ordinance by erecting a forbidden structure, he/she cannot cite expenses as a hardship, otherwise no one would ever comply with the ordinance. Similarly, when a person buys property and certain restrictions exist, he/she cannot be said to suffer hardship if those restrictions are enforced; such hardship would be self imposed).*

The Applicant has not, and will not, commence with any construction activities and is requesting approval of said variance prior to proceeding.

Attachment 1

E. The variance will not authorize the initiation of a nonconforming use of land. *(State facts and arguments to show that the variance requested represents the least possible deviation from the letter of the ordinance that will allow a reasonable use of the land and that the use of the property, if the variance is granted will not create a new nonconformity).*

The variance, if approved, would allow for reasonable use of the land and not create new nonconformities.

I, the undersigned, do certify that all of the information presented in this application is accurate to the best of my knowledge, information, and belief.

Further, I hereby authorize county officials to enter my property for purposes of determining zoning compliance. All information submitted and required as part of this application process shall become public record.

_____ 12-16-13

Property Owner(s)/Applicant* Date

***NOTE: Form must be signed by the owner(s) of record, contract purchaser(s), or other person(s) having a recognized property interest. If there are multiple property owners/applicants a signature is required for each.**

Owner Verification

If the person who is requesting the Board of Adjustment to take action on a particular piece of property is not the owner of the property, or under contract to purchase, then the actual owner of the land must complete this section. If the owner is the appellant/application please do not complete this section.

Dear Sir or Madame:

I am the owner of the property located at _____.
I hereby authorize _____
to appear with my consent before the Board of Adjustment in order to request a variance at the above location. I understand that a variance, if granted, is permanent and runs with the land. I authorize you to advertise and present this matter in my name as the owner of the property.

If you have any questions, you may contact me at the following at the address, phone number, or email address listed on this application.

Respectfully yours,

_____

Owner Date

Sworn to and subscribed before me, this the _____ day of _____, 20___.

_____

Notary Public

My commission expires: _____

Attachment 1

PERMANENT VEGETATION

SEEDING DATES: APRIL 1 – SEPT 30

SEED MIXTURE	APPLICATION RATES/ACRE
BAHIA	50 LBS.
COMMON BERMUDA (UNHULLED)	50 LBS.
GERMAN MILLETT	15 LBS.
FESCUE	20 LBS.

FERTILIZER
26–13–13 @ 500 LB/ACRE

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

TEMPORARY VEGETATION

SEEDING DATES: OCT. 1 – MARCH 31

SEED MIXTURE	APPLICATION RATES/ACRE
RYE GRAIN	175 LBS.

FERTILIZER
10–10–10 @ 1000 LB/ACRE

MULCH
APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

GENERAL:
–FERTILIZER RATES SHOWN ARE GENERAL RECOMMENDATIONS; FREQUENCY AND AMOUNT OF FERTILIZATION CAN BEST BE DETERMINED THROUGH SITE SPECIFIC SOIL TESTING.
–MAINTENANCE:
SATISFACTORY STABILIZATION AND EROSION CONTROL REQUIRES A COMPLETE VEGETATIVE COVER. EVEN SMALL BREACHES IN VEGETATIVE COVER CAN EXPAND RAPIDLY AND, IF LEFT UNATTENDED, CAN ALLOW SERIOUS SOIL LOSS FROM AN OTHERWISE STABLE SURFACE. A SINGLE HEAVY RAIN IS OFTEN SUFFICIENT TO GREATLY ENLARGE BARE SPOTS, AND THE LONGER REPAIRS ARE DELAYED, THE MORE COSTLY THEY BECOME. PROMPT ACTION WILL KEEP SEDIMENT LOSS AND REPAIR COST DOWN. NEW SEEDLINGS SHOULD BE INSPECTED FREQUENTLY AND MAINTENANCE PERFORMED AS NEEDED. IF RILLS AND GULLIES DEVELOP, THEY MUST BE FILLED IN, RE-SEEDED, AND MULCHED AS SOON AS POSSIBLE. DIVERSIONS MAY BE NEEDED UNTIL NEW PLANTS TAKE HOLD.

MAINTENANCE REQUIREMENTS EXTEND BEYOND THE SEEDING PHASE. (UNTIL FINAL COMPLETION IS AWARDED)
WEAK OR DAMAGED SPOTS MUST BE RELIMED, FERTILIZED, MULCHED, AND RESEEDED AS PROMPTLY AS POSSIBLE. REFERTILIZATION MAY BE NEEDED TO MAINTAIN PRODUCTIVE STANDS.

SEEDING SPECIFICATIONS

GENERAL NOTES:

1. EXISTING WASTEWATER SYSTEM DESIGN PARAMETERS:

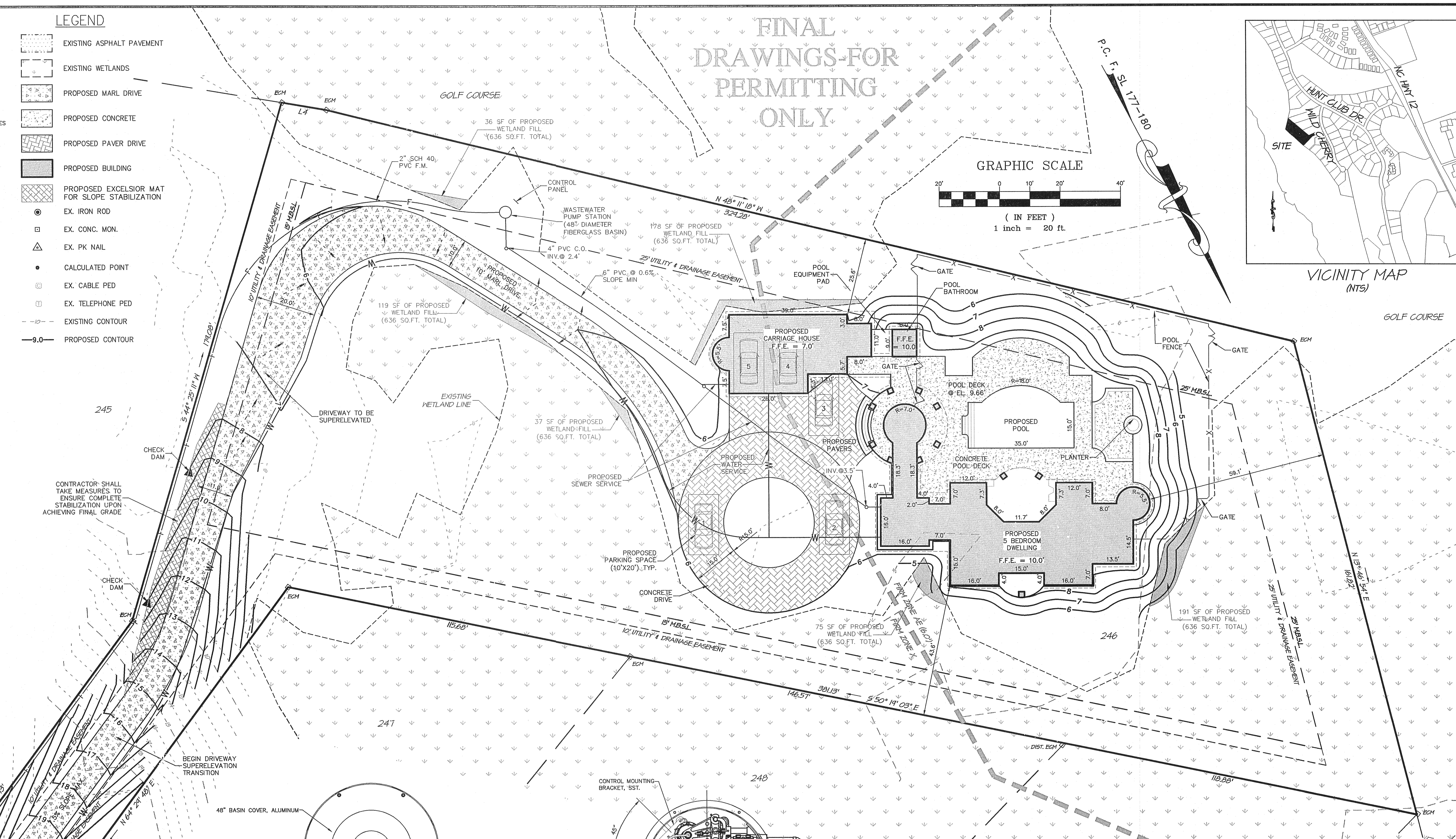
   THIS PLAN PROPOSES THE INSTALLATION OF A 4'ø PUMP STATION TO TRANSFER DOMESTIC STRENGTH WASTEWATER TO THE EXISTING PINE ISLAND/CURRITUCK L.L.C. WWTP.

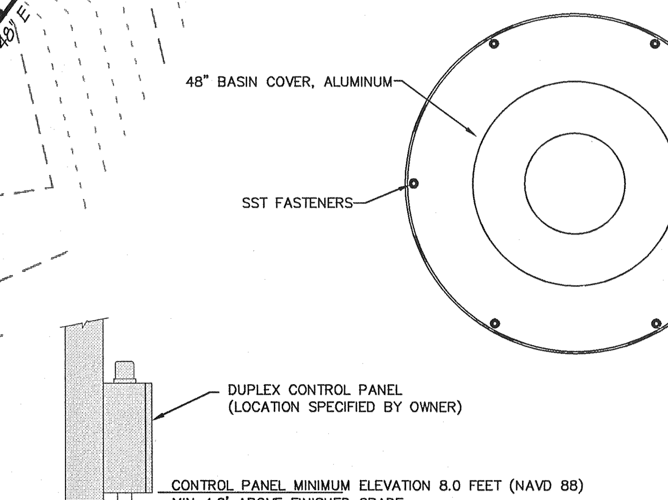
   DESIGN FLOW: EACH UNIT = 5 BEDROOMS @ 120 GALLONS PER DAY (GPD) PER BEDROOM = 600 GPD
   TOTAL DESIGN FLOW FOR 5 BEDROOMS .... = 600 GPD

2. THIS PLAN SHALL NOT BE CONSIDERED A BOUNDARY SURVEY. THIS SHALL NOT BE USED FOR RECORDATION, CONVEYANCES OR SALES.
3. THE LOCATION, DIMENSIONS, AND ELEVATION OF EXISTING STRUCTURES, PIPING, AND UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE DATA AND SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL VERIFY ALL DATA IN THE FIELD PRIOR TO CONSTRUCTION TO HIS OWN SATISFACTION. THE DIAMETERS OF EXISTING PIPING ARE APPROXIMATE AND SHALL BE VERIFIED PRIOR TO PERFORMING FINAL CONNECTIONS. THE CONTRACTOR SHALL PERFORM ANY TEST PIT WORK OR PROVIDE LOCATION SERVICES AS REQUIRED TO AVOID CONFLICTS WITH EXISTING UTILITIES. CONTACT NORTH CAROLINA ONE-CALL AT TELEPHONE NO. 1-800-632-4949, 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION TO HAVE UTILITIES MARKED.
4. CHANGES IN NEW PIPING OR STRUCTURES FROM THAT SHOWN ON THE DRAWINGS, IN ORDER TO AVOID CONFLICTS WITH EXISTING ELECTRICAL SYSTEMS, MECHANICAL SYSTEMS, EQUIPMENT, STRUCTURES, OR EXISTING PIPING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHETHER THE CONFLICTS ARE SHOWN OR ARE DISCOVERED IN THE FIELD. LIKEWISE, ALTERATIONS TO EXISTING ELECTRICAL SYSTEMS, MECHANICAL SYSTEMS, EQUIPMENT, OR EXISTING PIPING IN ORDER TO ACCOMMODATE NEW PIPING, STRUCTURES AND EQUIPMENT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE OWNER AND THE ENGINEER MUST APPROVE ALL SUCH CHANGES.
5. MAINTAIN AND PROTECT ALL OVERHEAD AND UNDERGROUND ELECTRICAL, TELEPHONE, CABLE TV, WATER, AND ALL OTHER UTILITIES DURING ENTIRE CONSTRUCTION PERIOD.
6. ALL PROPOSED SEWER FORCEMAIN PIPING SHALL MAINTAIN A MINIMUM COVER OF 3.0 FEET. PROPOSED SEWER FORCEMAIN PIPING SHALL BE INSTALLED AS REQUIRED TO ALLOW FOR MINIMUM 18" VERTICAL SEPARATION BETWEEN NEW PIPING AND EXISTING UTILITIES.
7. PROVIDE A MINIMUM OF 18 INCHES CLEARANCE BETWEEN PIPING AND FOOTINGS, STRUCTURES, AND OTHER PIPING UNLESS OTHERWISE INDICATED. A POSITIVE GRADE SHALL BE MAINTAINED FOR THE VERTICAL ALIGNMENT OF ALL SEWER FORCEMAIN PIPING TO ELIMINATE THE FORMATION OF AIR POCKETS.
8. HORIZONTAL DISTANCE IS INDICATED FOR ALL PROPOSED PIPE LENGTHS SHOWN ON THE DRAWINGS. DEFLECT PIPE JOINTS AS REQUIRED TO MAINTAIN FORCEMAIN ALIGNMENTS SHOWN. THE CONTRACTOR SHALL PROVIDE ALL PIPE FITTINGS AS REQUIRED FOR COMPLETE AND OPERABLE PIPE INSTALLATIONS.
9. CONTRACTOR SHALL PROVIDE ALL CONNECTING PIPES AND TRANSITION PIECES REQUIRED TO MAKE FINAL PIPING CONNECTIONS.
10. VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE CONSTRUCTED AND MAINTAINED FOR ALL DISTURBED AREAS IN ACCORDANCE WITH ALL LOCAL REQUIREMENTS AND THE LATEST EDITION OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL. ALL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE INSTALLED AS A FIRST STEP IN CONSTRUCTION AND BEFORE EXCAVATION BEGINS. SILT FENCE, CULVERT INLET PROTECTION, INLET PROTECTION, AND OTHER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED TO PREVENT THE MOVEMENT OF SEDIMENT DOWNSTREAM.
11. CONSTRUCTION LIMITS SHALL INCLUDE ALL DISTURBED AREAS. ALL GRASSED DISTURBED AREAS SHALL BE SEEDED AND PROVIDED WITH EROSION CONTROL DURING AND AT THE END OF CONSTRUCTION.
12. UNLESS OTHERWISE NOTED, REMOVE AND DISPOSE OF ALL ITEMS INDICATED TO BE DEMOLISHED OFF THE OWNER'S PROPERTY IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
13. DEMOLITION SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND OFFSITE DISPOSAL OF VEGETATION CLEARED AND STRIPPED TO THE EXTENT NECESSARY FOR THE INSTALLATION OF NEW IMPROVEMENTS.
14. THE CONTRACTOR SHALL PROTECT ALL PROPERTY AND STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED. DAMAGE TO THE PROPERTY DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO COST TO THE OWNER.
15. THE CONTRACTOR SHALL BE FULLY LIABLE FOR REPAIR OF ANY DAMAGES ON PUBLIC OR PRIVATE PROPERTY CAUSED BY HIS CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REPLACE ALL DISTURBED SURFACES IN KIND, INCLUDING PAVEMENT, STONE, DITCHES, MAILBOXES, STORM CULVERTS, DRIVEWAY CULVERTS, ETC. CONTRACTOR SHALL REPLACE ROADSIDE SHOULDERS, DITCHES, FILL SLOPES/CUTS TO STABILIZED PRECONSTRUCTION CONDITIONS. ROADSIDE LANDSCAPING SHALL BE PROTECTED AS MUCH AS POSSIBLE. CULVERTS SHALL BE BACKFILLED AND PROPERLY COMPACTED PER NCDOT SPECIFICATION. CULVERT ENDS SHALL BE GRADED WITH POSITIVE DRAINAGE WITH SUFFICIENT EROSION AND SEDIMENT CONTROLS INSTALLED. PRIVATE ENTRANCE CULVERTS SHALL BE MAINTAINED FOR POSITIVE ROADSIDE DRAINAGE. ANY IMPACTED PRIVATE ENTRANCE CONCRETE APRONS SHALL BE REPLACED IN THEIR ENTIRETY.
16. THE CONTRACTOR SHALL PROTECT EXISTING PAVED SURFACES. ANY DAMAGED PAVEMENT SHALL BE REPAIRED TO MATCH EXISTING. TRACKED EQUIPMENT WILL NOT BE ALLOWED ON PAVED SURFACES. ANY PAVEMENT MARKINGS DAMAGED BY CONSTRUCTION SHALL BE REPLACED IN KIND BY A PAVEMENT MARKING CONTRACTOR FROM THE NCDOT PRE-QUALIFICATION LIST.
17. ALL PROPERTY PINS, AND RIGHT OF WAY MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A LAND SURVEYOR LICENSED BY THE STATE OF NORTH CAROLINA.
18. SURFACE DRAINAGE: COMPLETELY DRAIN CONSTRUCTION SITE DURING PERIODS OF CONSTRUCTION TO KEEP SOIL MATERIALS SUFFICIENTLY DRY. PROVIDE TEMPORARY DITCHES, SWALES, AND OTHER DRAINAGE FEATURES AND EQUIPMENT AS REQUIRED TO MAINTAIN DRY SOILS. WHEN UNSUITABLE WORKING PLATFORMS FOR EQUIPMENT OPERATION AND UNSUITABLE SOIL SUPPORT FOR SUBSEQUENT CONSTRUCTION FEATURES DEVELOP, REMOVE UNSUITABLE MATERIAL AND PROVIDE NEW SOIL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.
19. SUBSURFACE DRAINAGE: CONSIDER SITE SURFACE AND SUBSURFACE CONDITIONS, AVAILABLE SOIL, AND HYDROLOGICAL DATA. REMOVE WATER BY BENCHING, SUMP PUMPING, OR OTHER METHODS TO PREVENT SOFTENING OF SURFACES EXPOSED BY EXCAVATION, USE FILTERS ON DEWATERING DEVICES TO PREVENT REMOVAL OF FINES FROM SOIL, PROVIDE EROSION CONTROL AT OUTLET OR PIPING TO PREVENT EROSION. OPERATE DEWATERING SYSTEM CONTINUOUSLY UNTIL CONSTRUCTION WORK BELOW EXISTING WATER LEVELS IS COMPLETE.
20. CONSTRUCT EXCAVATION SUPPORT SYSTEMS AS REQUIRED BY OSHA AND U.S. ARMY CORPS OF ENGINEERS SAFETY AND HEALTH REQUIREMENT MANUAL EM 385-1-1, SECTION 25 AS A THROUGH E TO ADEQUATELY SUPPORT EXISTING SOIL AND ADJACENT STRUCTURES DURING EXCAVATION ACTIVITIES.
21. MAINTAIN TRAFFIC TO ALL PROPERTIES AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. WHENEVER CONSTRUCTION IS IN OR ADJACENT TO NCDOT STREETS, THE CONTRACT SHALL PROVIDE SIGNS, DRUMS, AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL SIGNS AND TRAFFIC CONTROL SHALL CONFORM TO THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS AS PUBLISHED BY THE U.S. DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, AND THE WORK AREA PROTECTION MANUAL. CONTRACTOR SHALL TEMPORARILY RELOCATE TRAFFIC RELATED SIGNAGE DURING CONSTRUCTION.

NOTE:
THE DATA GIVEN ON THESE PLANS IS BELIEVED TO BE ACCURATE, BUT THE ACCURACY IS NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL LEVELS, LOCATIONS, TYPES, AND DIMENSIONS OF THE EXISTING UTILITIES PRIOR TO CONSTRUCTION. IF A DISCREPANCY IS FOUND, WORK SHALL CEASE AND THE ENGINEER NOTIFIED. WORK MAY CONTINUE UPON ENGINEERS NOTICE TO PROCEED.

BEFORE YOU DIG ! CALL TOLL FREE 1-800-632-4949 NORTH CAROLINA ONE CALL

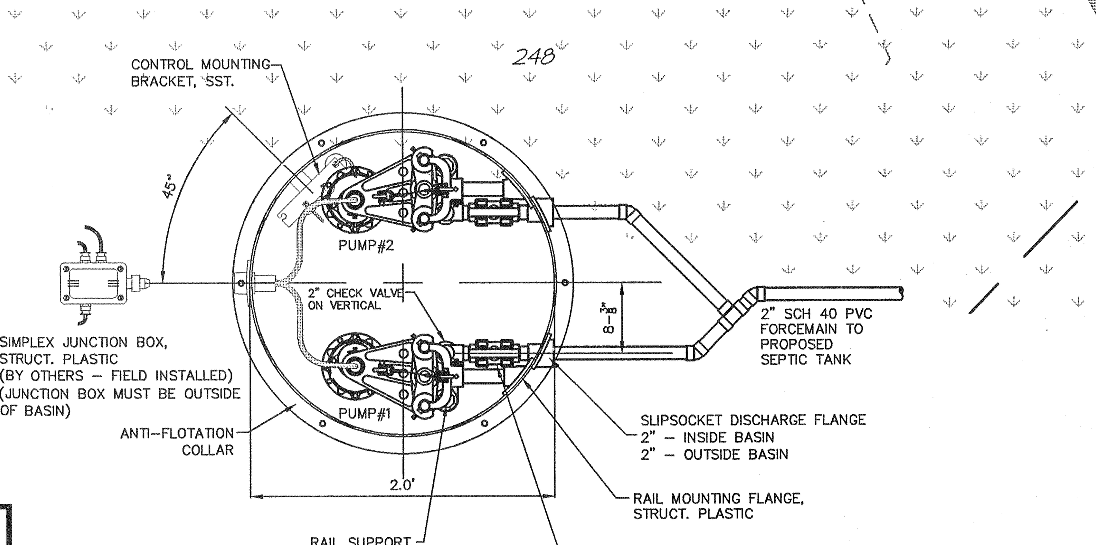




NO ELECTRICAL SPLICES MAY BE MADE WITHIN THE PUMP STATION WETWELL OR ELECTRIC CONDUIT

PUMP LAYOUT SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. FINAL INSTALLATION MAY VARY AS PER PUMP MANUFACTURER'S INSTRUCTIONS.

ELEVATIONS SHOWN ARE FOR REFERENCE ONLY AND DO NOT REFERENCE A RECOGNIZED DATUM



PLAN VIEW

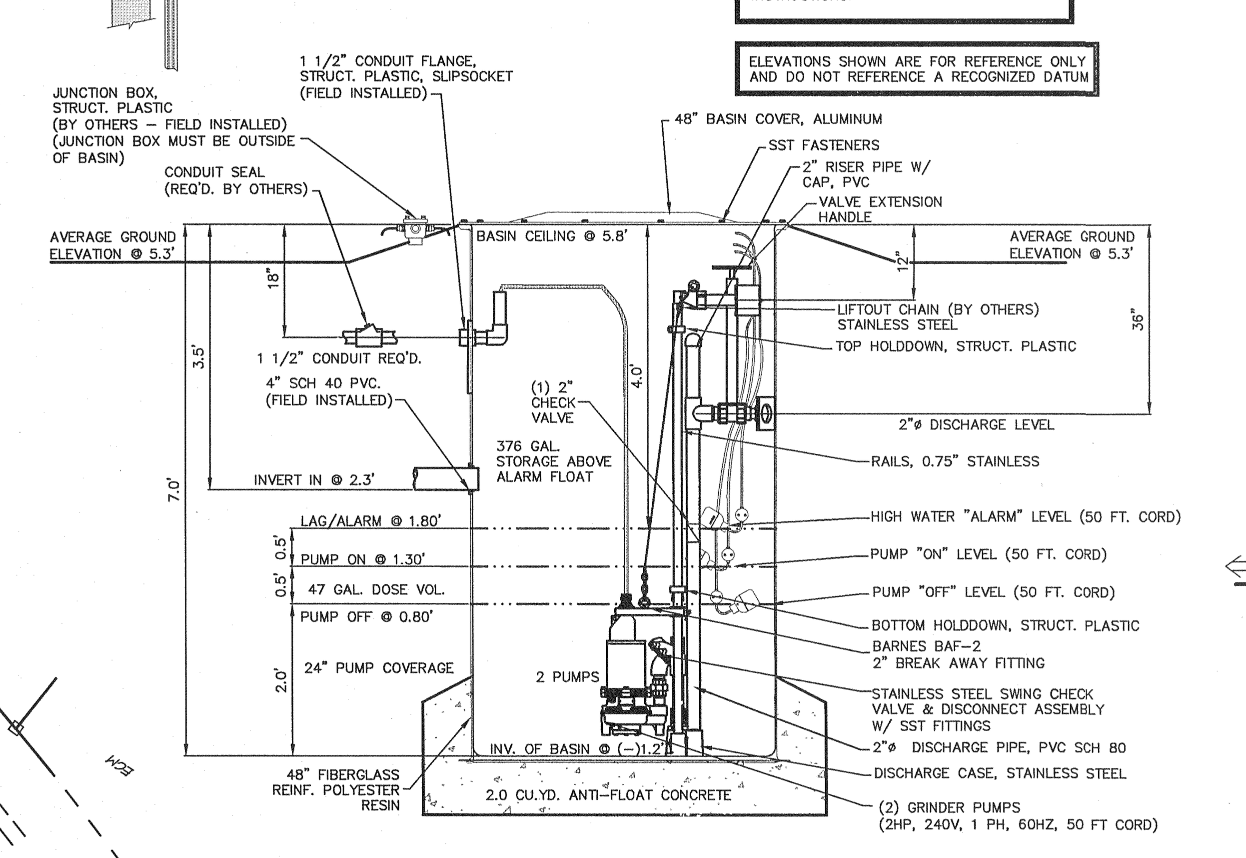
FIBERGLASS DUPLEX PUMP STATION TO EX. MANHOLE#104

N.T.S.

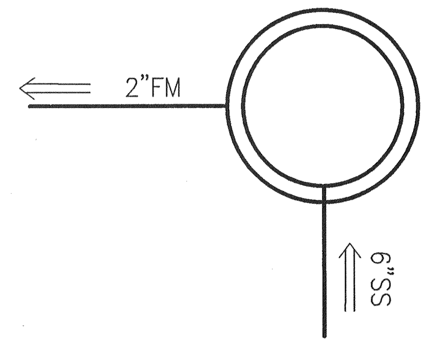
FIBERGLASS BASIN MAY BE SUBSTITUTED WITH A COMPARABLE PRE-CAST CONCRETE PRODUCT WITH APPROVAL BY THE ENGINEER.
- ACCESSES SHALL BE OF SUFFICIENT SIZE AND MUST BE WATERTIGHT.
- SHOP DRAWINGS FOR A PRE-CAST CONCRETE PUMP STATION MUST BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO THE PURCHASE OR MANUFACTURING OF SAID PUMP STATION.

SUBMERSIBLE GRINDER PUMP:

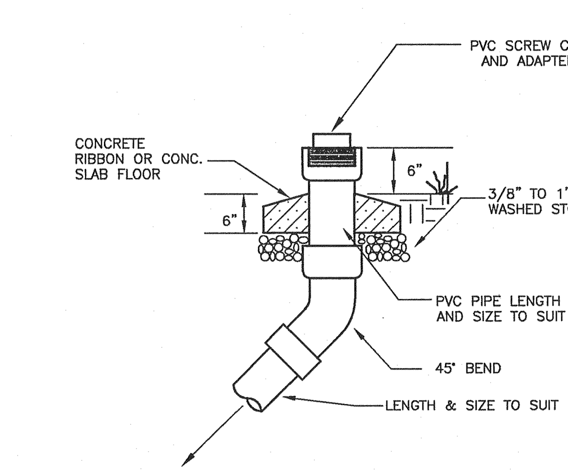
(1 PUMP REQUIRED)
BARNES SGV
PERFORMANCE SPECIFICATION:
– GRINDER PUMP
– 2.0 HP
– SPEED 3450 RPM
– 3.5" IMPELLER
– 230 VOLT, SINGLE PHASE MOTOR (CONTRACTOR TO VERIFY EXISTING POWER VOLTAGE AND PHASE PRIOR TO ORDERING PUMPS AND CONTROLS)
– OPERATING POINT: 27 GPM @ 34 FT. TDH



SECTION VIEW

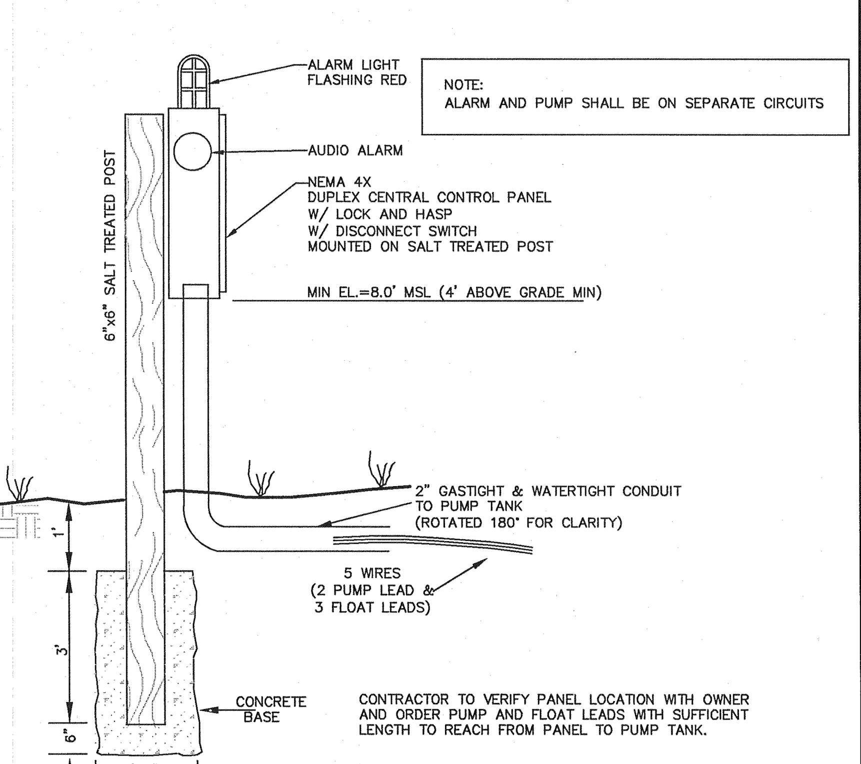


PUMP STATION S.S. INLET ANGLES



TYPICAL SEWER CLEAN-OUT

N.T.S.



CONTROL PANEL MOUNTING

N.T.S.

NOTES:

1. OWNER: DAVID & CATHERINE ZATLOUKAL
   12112 DAMSON DR.
   GAITHERSBURG, MD 20878
2. ENGINEER: QUIBLE & ASSOCIATES, P.C.
   P.O. DRAWER 870
   KITTY HAWK, NC 27949
3. PIN NUMBER: 117A00002460000
4. PROPERTY ADDRESS: 680 WILD CHERRY COURT
5. RECORDED REFERENCE: P.C. F, SL. 177–180
6. PROPERTY IS LOCATED IN F.I.R.M. ZONES AS SHOWN
   PANEL #: 3720993400J DATED: 12/16/05.
   ZONES SUBJECT TO CHANGE BY F.E.M.A.
6. PARCEL AREA: 65,313 SF (1.50 ACRES)
   UPLAND: 39,202 SF (0.90 ACRES)
   WETLAND: 26,111 SF (0.60 ACRES)
7. SITE ZONING: SFO, SINGLE FAMILY OUTERBANKS
8. WASTEWATER:
   5 BEDROOMS (PUMP STATION TO CONVEY TO CENTRAL SEWER SYSTEM)
9. COVERAGE:

   PROPOSED IMPERVIOUS COVERAGE:

BUILDINGS, POOL AND DECKS	7,254.8 SQ.FT.
PAVER PARKING	867.3 SQ.FT.
CIRCULAR CONCRETE DRIVE	2,120.6 SQ.FT.
MARL DRIVE	4,742.4 SQ.FT.
TOTAL =	14,985.1 SQ.FT.

   PERCENT COVERAGE = (14,985.1 SQ.FT./65,313 SQ.FT.) x 100 = 22.9% (30% ALLOWABLE)
10. MEAN ROOF HEIGHT NOT TO EXCEED 38' (AS PER CURRITUCK UDO SECTION 10.3.6)
11. SETBACKS SHOWN ARE AS PER CURRITUCK COUNTY AND MUST BE VERIFIED. THEY DO NOT REFLECT ANY RESTRICTIVE COVENANTS THAT MAY EXISTS.
12. USACE WETLAND FILL PERMITTING TO BE PROVIDED UNDER SEPARATE COVER

O:\2012\P12058\DRAWINGS\P12058-SITEPLAN-NAT18.dwg 12/20/2013 12:32 PM TStokely

Quible & Associates, P.C. SINCE 1959
ENGINEERING * CONSULTING * PLANNING
ENVIRONMENTAL SCIENCES * SURVEYING
NC License#: C-0208
PO Drawer 870, Kitty Hawk, NC 27949
Phone: (252) 261-3300 Fax: (252) 261-1260
E-Mail: administrator@quible.com

NORTH CAROLINA PROFESSIONAL SEAL 037813 ENGINEER MICHAEL W. STRADER, JR.
CERTIFICATION

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NO.	DATE	REVISIONS
1	10-21-13	ADD FENCE GATES & REV. GRADING
2	12-20-13	REVISE DRIVEWAY LOCATION & GRADING

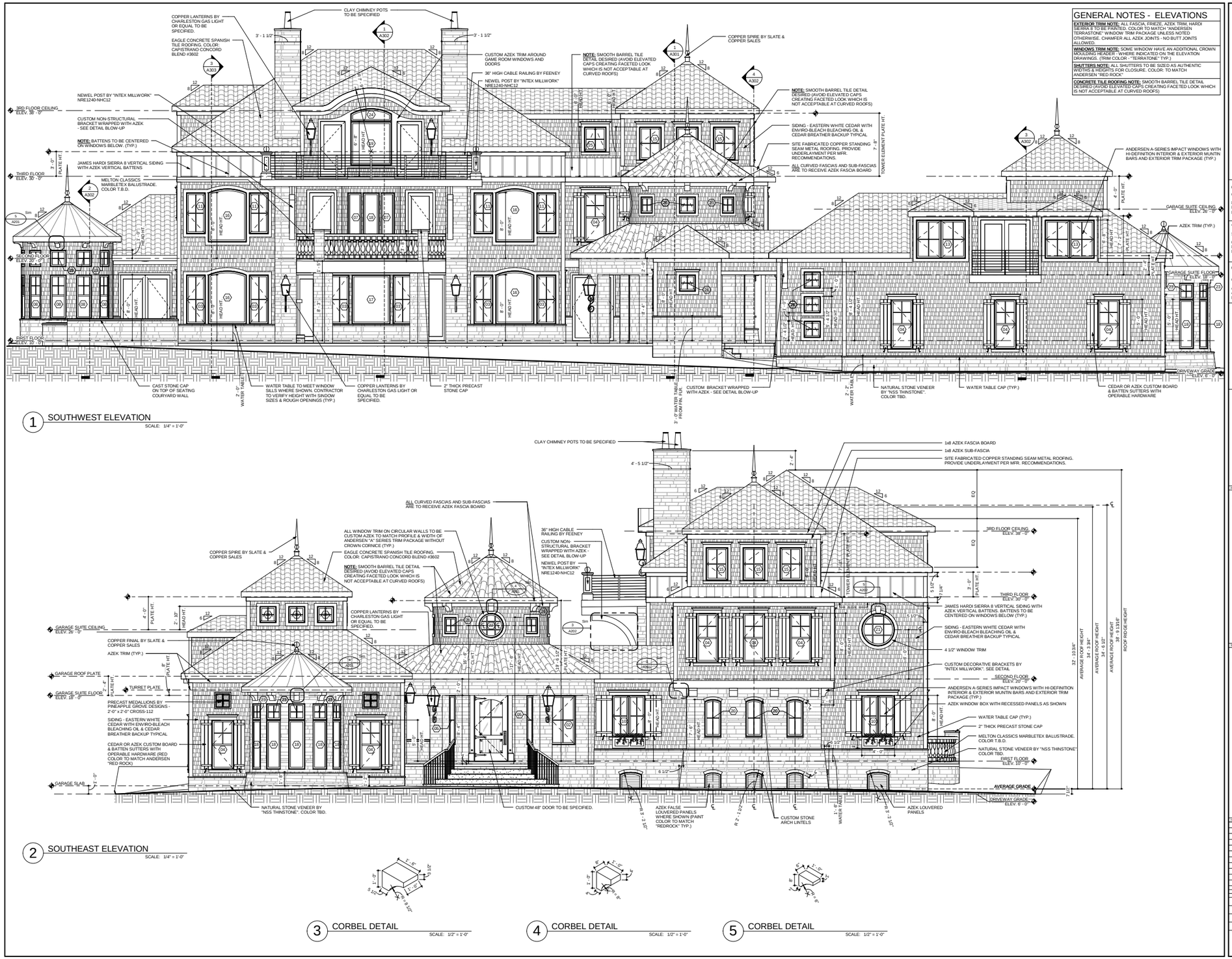
SITE PLAN & PUMP STATION DETAILS

LOT 246, PHASE 3, THE CURRITUCK CLUB
DAVID & CATHERINE ZATLOUKAL

POPLAR BRANCH TOWNSHIP CURRITUCK COUNTY NORTH CAROLINA

COMMISSION NO.	P12058
DESIGNED BY	TAS
DRAWN BY	TAS
CHECKED BY	MWS
ISSUE DATE	10-1-13

SHEET NO. 1 OF 1 SHEETS



1 SOUTHWEST ELEVATION
SCALE: 1/4" = 1'-0"

2 SOUTHEAST ELEVATION
SCALE: 1/4" = 1'-0"

3 CORBEL DETAIL
SCALE: 1/2" = 1'-0"

4 CORBEL DETAIL
SCALE: 1/2" = 1'-0"

5 CORBEL DETAIL
SCALE: 1/2" = 1'-0"

GENERAL NOTES - ELEVATIONS

EXTERIOR TRIM NOTE: ALL FASCIA, FRIEZE, AZEK TRIM, HARDI SIERRA 8 TO BE PAINTED. COLOR TO MATCH "ANDERSEN TERRASTONE" WINDOW TRIM PACKAGE UNLESS NOTED OTHERWISE. CHAMFER ALL AZEK JOINTS - NO BUTT JOINTS ALLOWED.

WINDOWS TRIM NOTE: SOME WINDOW HAVE AN ADDITIONAL CROWN MOULDING HEADER - WHERE INDICATED ON THE ELEVATION DRAWINGS. (TRIM COLOR - "TERRATONE" TYP.)

SHUTTERS NOTE: ALL SHUTTERS TO BE SIZED AS AUTHENTIC WIDTHS & HEIGHTS FOR CLOSURE. COLOR: TO MATCH ANDERSEN "RED ROCK"

CONCRETE TILE ROOFING NOTE: SMOOTH BARREL TILE DETAIL DESIRED (AVOID ELEVATED CAPS CREATING FACETED LOOK WHICH IS NOT ACCEPTABLE AT CURVED ROOFS)

BECKER MORGAN GROUP
ARCHITECTURE ENGINEERING

Dover, DE
309 S Governors Ave
Dover, DE 19904
302.734.7950

Salisbury, MD
312 West Main St, Suite 300
Salisbury, MD 21801
410.546.9100

Wilmington, NC
3205 Randall Parkway, Suite 211
Wilmington, NC 28403
910.341.7600

www.beckermorgan.com

QUIBLE & ASSOCIATES, P.C.
CIVIL ENGINEERS
8 JUNIPER TRAIL | P.O. DRAWER 870
KITTY HAWK, NC 27949
PH: 252.261.3300 | FAX: 252.261.1260

THOMAS A FRANCHI, PE
STRUCTURAL ENGINEER
6053 MARTINS POINT ROAD
KITTY HAWK, NC 27949-3920
PH: 252.261.0164 | FAX: 252.261.3703

CONTRACTOR
GENERAL CONTRACTOR
ADDRESS
ADDRESS
PH: XXX.XXX.XXXX | FAX: XXX.XXX.XXXX

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PROJECT TITLE

ZATLOUKAL RESIDENCE

680 WILD CHERRY COURT
COROLLA, NC 27927

DESIGN DEVELOPMENT DRAWINGS

ISSUED FOR OWNER REVIEW
NOT FOR CONSTRUCTION
NOT FOR PERMITS

SHEET TITLE

EXTERIOR ELEVATIONS

ISSUE BLOCK

Num	Date	Description
3	06.18.2013	DD Set, Owner Review, Builder Pricing
2	06.10.2013	DD Plans for Owner Review
1	06.07.2013	DD Plans for Owner Review

Revision Schedule

PROJECT NO:	2013057.00
DATE:	Issue Date
SCALE:	As indicated
DRAWN BY: DJD	PROJ MGR. CLP

A201

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Plot Date: 10.22.2013

Attachment 3

GENERAL NOTES - ELEVATIONS

EXTERIOR TRIM NOTE: ALL FASCIA, FRIEZE, AZEK TRIM, HARDI SIERRA 8 TO BE PAINTED. COLOR TO MATCH "ANDERSEN TERRASTONE" WINDOW TRIM PACKAGE UNLESS NOTED OTHERWISE. CHAMFER ALL AZEK JOINTS - NO BUTT JOINTS ALLOWED.

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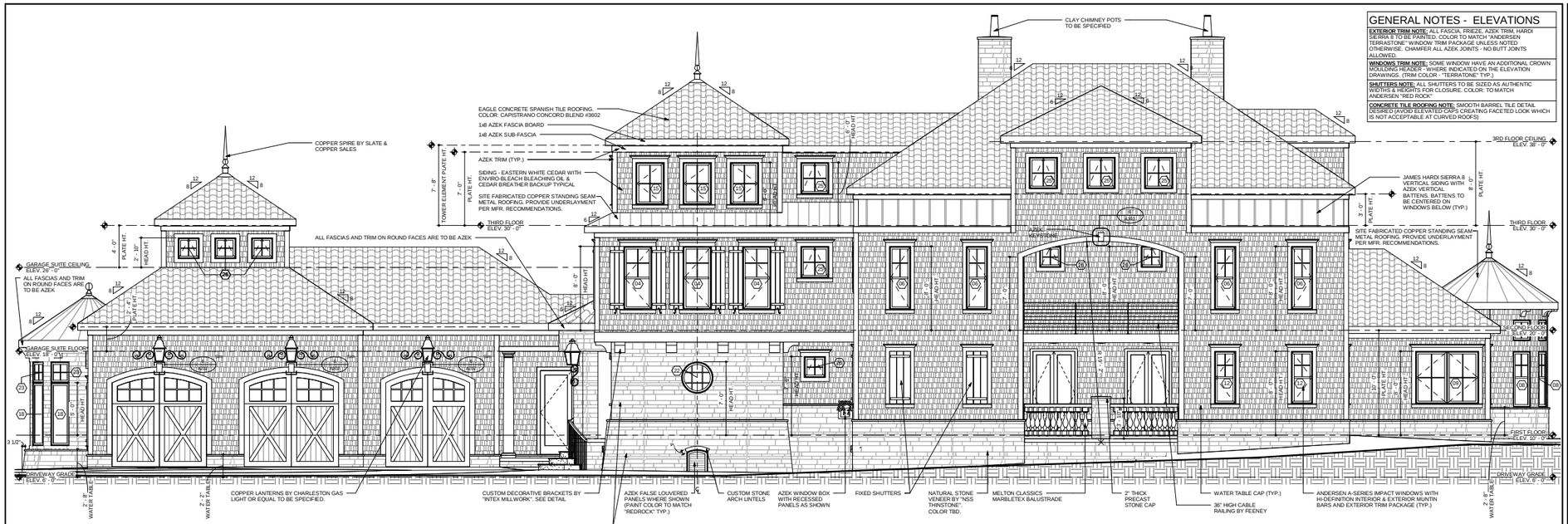
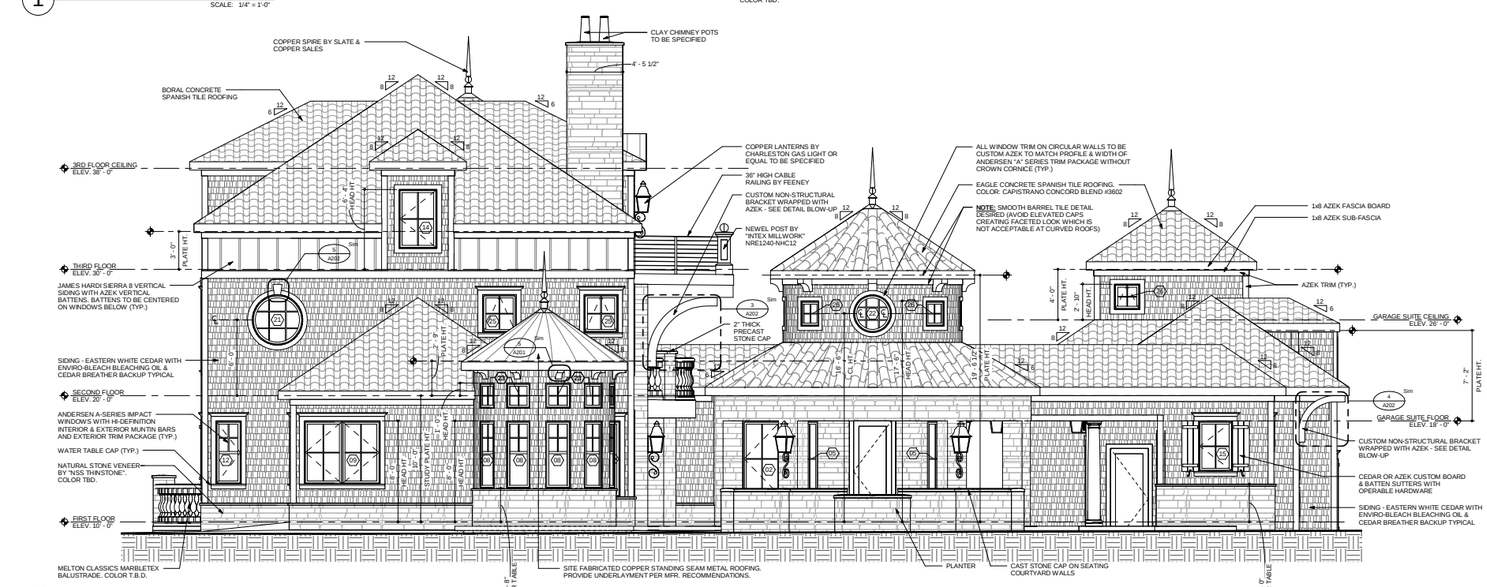
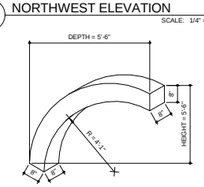


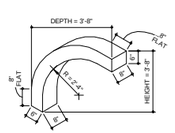
1 NORTHEAST ELEVATION
SCALE: 1/4" = 1'-0"



2 NORTHWEST ELEVATION
SCALE: 1/4" = 1'-0"



3 PARTY DECK BRACKET DETAIL
SCALE: 1/2" = 1'-0"



4 GARAGE BRACKET DETAIL
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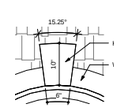
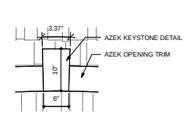


5 KEYSTONE DETAIL
SCALE: 1" = 1'-0"



6 KEYSTONE DETAIL
SCALE: 1" = 1'-0"

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Dover, DE
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Salisbury, MD
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Revision Schedule

PROJECT NO:	2013057.00
DATE:	Issue Date
SCALE:	As indicated
DRAWN BY: DJD	PROJ MGR. CLP

A202

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Plot Date: 10/21/2013 10:02:00 AM

Attachment 3

Currituck County

Eric T. Weatherly, P.E.
County Engineer

153 Courthouse Road, Suite 302
Currituck, North Carolina 27929
252-232-6035
FAX 252-232-3298
Eric.Weatherly@CurrituckCountyNC.Gov

MEMORANDUM

Date: December 23, 2013

To: Jason Litteral, CFM
Planning and Community Development

From: Eric T. Weatherly

RE: Lot 246 The Currituck Club
Response to Variance Request Application for Additional Lot Fill

---

Background:

I have reviewed the above referenced Variance Application and Site Plan sealed on 12/2/13 and revised Site Plan sealed on 12/20/13 submitted by Quible and Associates. The purpose of the variance is to request additional fill on the lot above what is allowed in the UDO and Stormwater Manual.

The existing grades of the lot at the house pad are approximately 5' – 6'. The FEMA Zone of the lot is AE (6.0'). The regulatory flood protection elevation for the finished floor elevation (FFE) is 7'. According to the site plan, proposed elevations for the circular driveway and garage area is approximately 6' with a garage FFE of 7' and building pad elevation for the house is approximately 9' with a house FFE of 10'.

Applicable County Regulations on Fill:

The following sections of the UDO apply to the requested fill variance:

- 7.3.4. Stormwater Management Standards, A. (5) (8) – the building pad shall be above the 100 year regulatory flood protection elevation.
- 7.3.4. Stormwater Management Standards, C. (3) – a lot shall not be filled higher than the average adjacent grade of the first 30' of the adjacent lots except: (c) – to raise the lot to the regulatory flood protection elevation or (e) – when the fill is at least 100' from all lot lines.
- 7.3.5. Alternative Stormwater Plans B. (3) – a lot may be graded higher than the adjacent lot, provided stormwater protection is implemented to capture the first four inches of rain from any rainfall event.

Requested Fill Variance:

The UDO allows fill on this lot up to an elevation of 6' for the house pad and 7' for the FFE. Quible and Associates are recommending 9' for the house pad and 10' for the FFE.

Analysis of Request:

I have reviewed the variance requests and engineer's site plan. I visited the site on December 12, 2013. The following issues were analyzed.

- Elevations
    - The lot is a natural low area surrounded by wetlands on the lot
    - The lots to the north have higher elevations than the fill
    - The proposed fill will be higher than the golf course fairway to the south
    - The existing house to the east is at an elevation of approximately 9.5'. The lot property line to the east is greater than 100' from house pad fill area.
- In strict accordance to the UDO, fill would not be allowed on this lot because the fill would be higher than BFE 6' and fill is proposed higher than adjoining properties (golf course fairway).
- If fill is allowed, what impact will it have on the neighbors?
- If fill is allowed, will implementation of section 7.3.5 (capture 4" rain event) offer additional relief?
- Address any drainage issues the proposed driveway will have on the neighbor to the east.

Recommendation:

I recommend approval of the variance. Approval is based on the following conclusions.

- The proposed fill will not have a flooding impact to the neighbors with possible exception of the fairway to the south. The lot to the east is greater than 100' from the fill in question and is at the same relative elevation as the proposed lot fill. All other neighbors are much higher than the proposed fill.
- Requiring the lot to manage a 4" rain event to capture runoff from the fill will not provide any benefits. Runoff from the fill area will drain to existing wetlands which serve as a recharge area and a flood mitigation measure. I would not recommend disturbance to these areas. Any runoff from the lot is directed across the driveway toward the fairway to the south.
- The engineers have made modifications to the proposed driveway to prevent runoff from the driveway onto the neighbor and erosion control measures were added to provide additional stabilization due to concerns of the steep grades.

(2) Outer Banks Stormwater Management Zone

(a) Minor site plans, excluding single-family detached dwellings on lots resulting in more than 10,000 square feet of total impervious surface; or

(b) Development or expansion on a nonresidential, multi-family, or mixed-use lot by less than 5,000 square feet of impervious surface or resulting in less than 10 percent total lot coverage. This exemption does not include multiple, incremental expansions that result in a reduction of stormwater management standards.

7.3.3. Stormwater Plan

To ensure compliance with the standards of this section, a stormwater plan demonstrating how stormwater will be managed on a development site shall be included with any application for site plan, subdivision, or zoning compliance permit, as appropriate. The Currituck County Stormwater Manual includes additional information and plan requirements for persons submitting applications for development review under the standards of this section.

7.3.4. Stormwater Management Standards

A. Drainage Requirements

(1) To the maximum extent practicable, all development shall conform to the natural contours of the land and natural and pre-existing man-made drainage ways shall remain undisturbed.

(2) To the maximum extent practicable, lot boundaries shall be made to coincide with natural and pre-existing man-made drainage ways within subdivisions to avoid the creation of lots that can be built upon only by altering such drainage ways.

(3) No surface water may be channeled or directed into a sanitary sewer.

(4) Whenever practicable, the drainage system of a development shall coordinate with and connect to the drainage systems or drainage ways on surrounding properties or streets.

(5) All developments shall be constructed and maintained so that adjacent lands are not unreasonably burdened with surface waters as a result of such developments. More specifically:

(a) No development may be constructed or maintained so that such development unreasonably impedes the natural flow of water from higher adjacent properties across such development, thereby unreasonably causing substantial damage to such higher adjacent properties; and,

(b) No development may be constructed or maintained so that surface waters from such development are unreasonably collected and channeled onto lower adjacent properties at such locations or at such volumes as to cause substantial damage to such lower adjacent properties.

(6) Existing ditches located totally or partially within a development and utilized for drainage or stormwater management shall be cleaned to remove drainage impediments.

(7) All subdivisions shall provide side lot line swales with a minimum average depth of 12 inches and side slopes not to exceed 3:1 (three feet horizontal run for every one foot vertical rise), unless the County Engineer approves an equivalent drainage alternative.

(8) Major subdivisions and major site plans shall provide minimum building pad elevations required to prevent flooding from the 24-hour storm event with a 10-year recurrence interval. The finished floor elevation for all principal structures shall be 18 inches above the minimum building pad elevation or above the 100-year regulatory flood protection elevation, whichever is greater, and shall be depicted on construction drawings and final plats.

(9) Finished floor elevations shall be at least six inches above septic system fill.

(10) Development subject to these standards shall provide maintenance access drainage easements in accordance with Section 6.2.3.B, Utility Easements and the following standards:

(a) Twenty-five-foot-wide easements measured from top of embankment shall be provided along both sides of waterway conveyance systems that drain more than five acres.

(b) Fifty-foot-wide easements measured from top of embankment shall be provided along both sides of the following waterway conveyance systems:

(i) Hog Bridge Ditch;
(ii) Guinea Mill;
(iii) Upper Guinea Mill;
(iv) Lateral "A";
(v) Lateral "B";
(vi) Lateral "C";
(vii) Haywood Ditch;
(viii) Rowland Creek Canal;
(ix) Eagle Creek Canal (also known as Western Canal); and
(x) Shingle Landing Creek Canal.

B. Stormwater Detention Requirements

(1) In the Outer Banks Stormwater Management Zone, minor subdivisions or single-family detached dwellings on lots resulting in more than 10,000 square feet of total impervious surface shall implement adequate stormwater practices to capture and infiltrate stormwater runoff from all impervious surfaces from the first four inches of rain from any rainfall event.

(2) Major subdivisions subject to these standards shall implement adequate stormwater practices to reduce the post-development peak discharge from the 24-hour storm event with a 10-year recurrence interval down to the pre-development discharge rate from the 24-hour storm event with a 2-year

recurrence interval based on pre-development conditions from a wooded site with Type A hydrologic soils.

(3) All other development subject to these standards shall implement adequate stormwater practices to reduce the post-development peak discharge from the 24-hour storm event with a 5-year recurrence interval down to the pre-development discharge rate from the 24-hour storm event with a 2-year recurrence interval based on pre-development conditions from a wooded site with Type A hydrologic soils.

C. Fill and Other Land Disturbance Requirements

(1) Unless stated otherwise in this Ordinance, the provisions of this section shall apply to any land disturbance activity regardless of the size of the disturbed area, or when filling or grading above any adjacent grade is proposed.

(2) Fill and land disturbing activities, excluding clearing, grubbing and landscaping, shall not be permitted within ten feet from any lot line with the exception of drainage and stormwater improvements as approved by the County Engineer, underground utilities, and exemptions or encroachments as allowed in Section 10.3.4, Required Setbacks. Improvements permitted within this area are allowed as long as they do not impede the flow of stormwater.

(3) A lot shall not be filled or graded higher than the average adjacent grade of the first 30 feet of adjoining property. Through approval of an alternative stormwater plan in accordance with Section 7.3.5.B.3, Additional Fill or Land Disturbance Activities, the following exceptions are permitted:

(a) When Albemarle Regional Health Services (ARHS) determines that fill is necessary for a septic system to function properly. The maximum fill area shall be limited to the septic system and drainfield areas and shall not exceed 24 inches. An additional 12 inches of fill above the septic system and drainfield may be allowed for the house pad to ensure adequate flow from the building to the septic system.

(b) In the Mainland Stormwater Management Zone when fill is required to raise the lot elevation to the regulatory flood protection elevation.

(c) In the Outer Banks Stormwater Management Zone when fill is required to raise the lot elevation to the regulatory flood protection elevation, not to exceed a maximum of three feet.

(d) When fill is essential to meet the required building pad elevation as shown on approved construction drawings or stormwater plans.

(e) When fill is located at least 100 feet from all lot lines (an alternative stormwater plan shall not be required).

(4) All fill shall be established at a slope not to exceed 3:1 (three feet horizontal run for every one foot vertical rise). The toe of the slope shall meet the ten-foot setback requirement from all lot lines. A permanent ground cover, sufficient to prevent erosion, must be established on all fill slopes as follows:

(a) Prior to issuance of the certificate of occupancy for construction projects; or

(b) For projects where land disturbance activity has ceased for more than six months, whichever occurs first.

(5) Bulkheads or retaining walls shall not be allowed as a method to stabilize or contain fill, except for the purposes of shoreline protection, septic repair, and as otherwise permitted by the County Engineer. This shall not include retaining walls used to stabilize or contain existing natural grade when a driveway or walkway is cut into a lot at an elevation lower than existing natural grade.

(6) Any lot subject to filling shall install erosion and sediment control measures to prevent sediment from leaving the site. The erosion and sediment control measures shall be implemented on the site prior to the commencement of land disturbing activities and shall be continuously maintained during the land disturbance phase of development.

(7) A fill permit issued by the North Carolina Division of Water Quality shall be required to fill any 401 wetlands.

(8) A fill permit issued by the U.S. Army Corp of Engineers shall be required to fill any 404 wetlands.

D. Maintenance Requirements

(1) The subdivider or developer shall be responsible for the maintenance of stormwater management devices until maintenance responsibility is transferred to a landowner, homeowners or property owners association.

(2) Stormwater management devices shall be maintained in accordance with the standards of this section, the Currituck County Stormwater Manual, and approved stormwater plans.

(3) The landowner, homeowners or property owners association shall perform routine maintenance inspections of stormwater management devices using the Inspection Checklist included in the Currituck County Stormwater Manual.

(a) Stormwater management devices that receive runoff from less than five acres shall be inspected at least once every three years.

(b) Stormwater management devices that receive runoff from more than five acres shall be inspected annually by a registered engineer, licensed surveyor or landscape architect.

(4) The Planning Director may request copies of inspection checklists or conduct inspections of stormwater management devices in accordance with Section 9.5.3, Inspections. Failure to maintain stormwater management devices is a violation of this Ordinance subject to the remedies and penalties in Chapter 9: Enforcement.

7.3.5. Alternative Stormwater Plans

A. General

The County Engineer is authorized to approve an alternative stormwater plan for development that proposes to deviate from the standards of this section. The alternative plan shall certify that the proposed development provides equal or better performance as required by these standards and will not create flooding or nuisance conditions on adjacent lots. The Currituck County Stormwater Manual includes additional information and plan requirements for persons submitting alternative stormwater plans for review under the standards of this section.

B. Allowable Deviations

(1) Increased Lot Coverage

A maximum 15 percent increase in lot coverage may be allowed for single-family detached and duplex dwellings on lots in subdivisions that have a state permitted and functional stormwater management system that specifies allowable lot coverage, or for a single-family detached or duplex dwelling on an individual lot that implements adequate stormwater practices to capture and infiltrate stormwater runoff from all impervious surfaces from the first four inches of rain from any rainfall event.

(2) Reduced Stormwater Detention Requirements

Development subject to the standards in Section 7.3.3.B may reduce the design capacity of required stormwater management devices provided:

(a) An Alternative Stormwater Runoff Storage Analysis demonstrates the on-site soils have adequate storage capacity to capture and infiltrate stormwater runoff from all impervious surfaces; or

(b) An Alternative Downstream Drainage Capacity Analysis demonstrates the downstrates the downstream drainage capacity exceeds the pre-development discharge rate from the 24-hour storm event with a 2-year recurrence interval based on pre-development conditions from a wooded site with Type A hydrologic soils.

(3) Additional Fill or Land Disturbance Activities

A lot may be filled or graded higher than the average adjacent grade of the first 30 feet of adjoining property or to improve drainage for performance of stormwater management devices, provided adequate stormwater practices are implemented to capture and infiltrate stormwater runoff from all impervious surfaces from the first four inches of rain from any rainfall event.

(4) Low Impact Development

The use of low impact development techniques, including but not limited to pervious pavements, cisterns, green roofs, and bio-retention islands may be used to reduce stormwater detention requirements or lower impervious surface percentages.