



October 26, 2023

Currituck County Planning Department  
Currituck Historic Courthouse  
153 Courthouse Road, Suite 110  
Currituck, NC, 27929

ATTN: Jennie Turner, Senior Planner

**RE: Parcel Y - Response to Technical Review Committee Comments**

Dear Jennie:

We have reviewed your letter dated October 12<sup>th</sup>, 2023 and have addressed the items as follows:

Comments prepared by Planning, Jennie Turner

1. The Update plan to include all site addresses provided by GIS.

*Response: Note #3 on sheet C201 has been updated with the addresses indicated by Harry Lee.*

2. Provide HVAC locations and any other ground-based utility location.

*Response: HVAC units have been added to the north side of the building.*

3. How will the proposed dumpster location be accessible to large trash vehicle? Dumpster must be screened on all sides. Dumpster screening must be opaque.

*Response: The dumpster location has been sited to allow for a front load waste collection truck dumpster from an angle after pulling into the parking lot. The dumpster pad has a wood screen fence (detail on sheet C203) surrounding it and a gate has been added to the front.*

4. Remove 10'x70' sight triangle and show 20'x20' sight triangle.

*Response: 10'x70' sight triangle has been replaced with the 20' x 20' sight triangle.*

5. Provide Building Pad and FFE.

*Response: The building FFE (11.80) is shown on C201 & C301. A note has also been added to coordinate the building pad elevation with building plans based upon the finished floor elevation.*

6. The proposed use is retail, there are outdoor tables shown, please provide additional detail on proposed use.

*Response: The proposed use is retail. Outdoor tables have been removed from the architectural plan.*

7. Is it feasible to extend the multi-use path to tie into the existing crosswalk north of NC12/Sunset Blvd crossing?

*Response: The location of existing power pole and guywires, pedestrian crosswalk signal and underground utilities will not allow for a 10' wide pathway connection.*

8. Front sidewalk to building should be minimum 5' wide

*Response: The width of the front sidewalk connection to the multiuse path has been increased to 5'.*

9. Please note vehicular landscaping plants in a similar manner to the other shrubs and trees noted on the plan.

*Response: Symbols have been added to the vehicular landscaping buffer.*

10. Please check landscaping plants provided. ex: building façade shrubs, 12 are noted 10 are shown. Please show all proposed plantings.

*Response: Two additional plants have been added to the building façade.*

11. Please show all proposed plantings.

*Response: All intended plant locations have been shown on C202.*

12. Is a freestanding sign proposed? If so, provide location.

*Response: The location of the freestanding sign has been added for sheet C201.*

13. Describe specifically the three features from UDO Section 5.8.3.C that are proposed and met with architectural design for each elevation visible from NC12: North, East & South.

*Response: (provided by Mark Kasten)*

*I believe since the north and south elevations are less than 50', they are not required to meet Section 5.8.3.C.*

*The east façade meets the following three sections:*

*a) The use of projections or recesses in the building façade wall with a depth of 18 inches from the primary façade plane and a minimum width of 10 feet;*

*The north store portion of the building has been setback 18" to meet this requirement.*

*b) Façade color changes following the same dimensional standards as the offset standards in (a) above; Building color changes meeting (b) are indicated on the revised drawing.*

c) *Roofline changes, coupled with correspondingly aligned wall offset facade material changes, including changes in the roof planes or changes in the height of a parapet wall (such as extending the top of pilasters above the top of the parapet wall);  
This change is met as the building changes from one story to two story.*

14. Please provide color selections for facades in compliance with UDO Section 5.8.3.C.

*Response: (provided by Mark Kasten)  
See attached rendering for proposed colors.*

15. Please amend note #9: 2 upper story dwellings are permitted subject to the amended sketch plan for Buck Island.

*Response: Note #9 on sheet C201 has been amended as requested*

16. Provide signed NCDOT driveway access permit application and encroachment agreement.

*Response: The signed NCDOT driveway access permit application and encroachment agreements are attached.*

17. Ensure drive aisle adjacent to parking spaces 1 & 2 maintains required 24' width.

*Response: The drive aisle terminates at spaces 1 & 2 and 24' as well as a turn-around space is available immediately behind them.*

18. Ensure pipe connecting basins does not impact the existing heritage tree root system.

*Response: A note has been added to field adjust the pipe if tree roots present a conflict.*

19. Please provide information on the existing exposed cables along the top of the existing berm within the site (labeled UGE). The proposed site grading indicates a cut of this berm by approximately 1' at the exposed cable.

*Response: Dominion Power was notified of the exposed cable in early July and indicated they would correct the situation. I have placed a note on C301 directing the contractor to coordinate with Dominion Power to verify adequate cover is maintained on the cables.*

20. Although not required by ordinance, please consider bicycle parking.

*Response: A bike rack has been added along the front of the site adjacent to walkway connection to the multiuse path.*

21. Please label existing retaining wall around live oak.

*Response: The existing retaining wall has been labeled on sheet C201.*

22. Extend the silt fence in this area of the berm grading along the north side of the site to include all the proposed site grading.

*Response: The silt fence has been extended on sheet C302*

Comments prepared by Stormwater Review, (McAdams, Stormwater Consultant)

C301 GRADING AND DRAINAGE PLAN

1. Show where infiltration basins overland relief will occur as no outlet structure or weir is shown. Where water flows onto neighboring properties, it should not impact structures.

*Response: The drain basin adjacent to infiltration basin #1 provides overflow for runoff in excess of the basin capacity. An overflow location has been added to infiltration basin #2. This has been placed at the location of current sheet flow patterns, which is towards the pond to the northwest. There are no structures in the strip of land at this location, which consists of a vacant NCDOT R/W.*

2. Infiltration basin #2 does not properly tie into grade and once properly graded out will produce fill within the no-fill setback of the property line.

*Response: Slight modifications have been made to clarify the grading of infiltration basin #2 (including overflow). Grading in the setback primarily consists of excavation rather than fill. Limited increase of grade in small instances are possible and the result of properly establishing the berm needed to maintain stormwater on site.*

3. Infiltration basin #1 also creates fill within the no-fill setback of the property line.

*Response: Grading in the setback primarily consists of excavation rather than fill. Limited increase of grade in small instances are possible and the result of properly establishing the berm needed to maintain stormwater on site.*

4. 6" HDPE pipe shown on plans is assumed to be an equalizing pipe. Does this pipe sit at the bottom of the basins?

*Response: The HDPE pipe has been increased to a 10" and includes a 12" Drain basin at the edge of basin #1 that will provide an overflow, directing excess runoff to basin #2.*

SIMPLE METHOD RUNOFF CALCULATIONS

5. Provide further calculations of proposed site weighted curve number calculation.

*Response: The post developed CN of 63 is based upon 40% coverage and is interpolated between values published in the NRCS TR-55 manual. Table 2-2a lists the following:*

*CN value of 61 for a site with 38% coverage (group A soils)*

*CN value of 77 for a site with 65% coverage (group A soils)*

*Interpolating between those 38% 65% cover to determine CN at 40% coverage is as follows:*

$$CN = [ (( 77 - 61 ) / 27 ) \times ( 40 - 38 ) ] + 61 = 62.2 \text{ (rounded up to 63)}$$

6. Correct calculations to state that 4 and 5 inches are not design runoff but the design storm rainfall depth.

*Response: The calculation table has been clarified.*

#### RATIONAL METHOD PEAK FLOW (FORM SW-003)

7. Proposed condition TC is too short. Acceptable minimum TC is 5 minutes.

*Response: I have adjusted form SW-003 to 5 minutes.*

8. 2-year, 24-hour rainfall depth used in TC path calculations should stay the same for both pre and post calculations.

*Response: The 2-yr 24-hr rainfall depth of 4 inches was used in TC calculations as specified on sheet 2-19 in the Currituck County Stormwater Design Manual.*

9. Please include an exhibit of the TC path onsite in the existing and proposed condition (it's length and slope should match the information provided on the form).

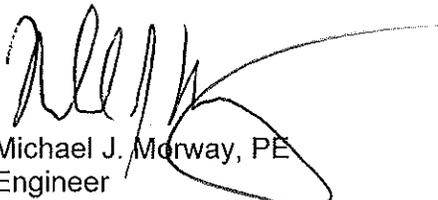
*Response: This has been added to the stormwater report*

Included with this package you will find documents that have been revised as well as additional documents that have been requested. This includes:

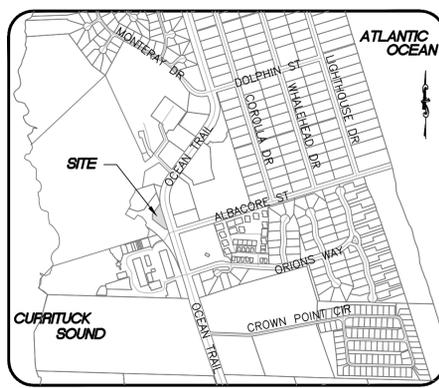
- Site Plan Drawings (3 copies)
  - C201 - Site Plan (revised 10/25/2023)
  - C202 - Buffering and Lighting Plan (revised 10/25/2023)
  - C202 - Site Plan Details (dated 10/25/2023)
  - C301 - Grading and Drainage Plan (revised 10/25/2023)
  - C302 – Demolition and E&S Control Plan (revised 9/12/2023)
  - C401 – Utility Plan and Details (revised 10/25/2023)
  - A1 - Building Elevations
- Stormwater Management Report (revised 10/25/2023 – 2 copies)
- NCDOT Applications signed by owner
  - Street and Driveway Access Permit Application
  - Right-of-Way Encroachment Agreement

If you have any questions pertaining to this project, please do not hesitate to contact me.

Sincerely,

  
Michael J. Morway, PE  
Engineer

cc: File 08599B  
Golasa Holdings LLC



VICINITY MAP  
NTS

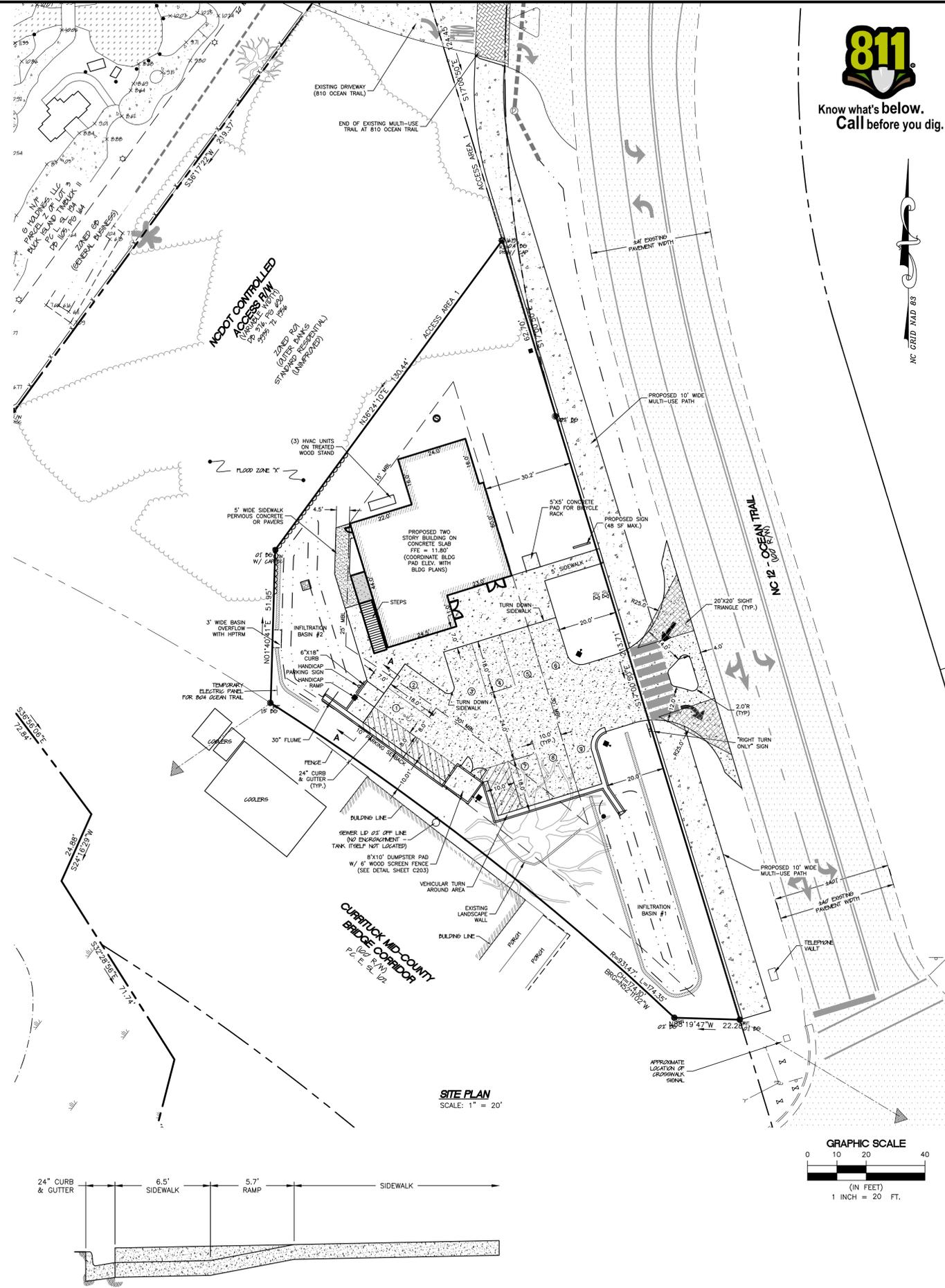
**SITE PLAN NOTES:**

- OWNER/DEVELOPER: GOLASA HOLDINGS, LLC  
PO BOX 120  
KITTY HAWK, NC 27949
- THE OWNER INTENDS TO CONSTRUCT 2-STORY STRUCTURE WITH APPROXIMATELY 2,221 SF OF RETAIL SPACE ON THE FIRST FLOOR AND TWO (2) 2-BEDROOM APARTMENTS ON THE SECOND FLOOR.
- THE PROPERTY IS PARCEL Y - THIRD DIVISION OF LOT 3, TIMBUCK II PHASE - BUCK ISLAND, D.B. 1026, PG 598, D.B. 1668, PG. 569 CURRITUCK COUNTY PARCEL ID 116D000003B0000 CURRITUCK COUNTY PIN#: 9935-73-2011  
PROPERTY ADDRESSES:  
FIRST FLOOR RETAIL: 804 OCEAN TRAIL, COROLLA  
SECOND FLOOR APARTMENTS: 804-A & 804-B OCEAN TRAIL, COROLLA
- THE SITE IS LOCATED IN FIRM ZONE "X", FIRM MAP NUMBER 3720993500K, EFFECTIVE DATE DECEMBER 21, 2018. (SUBJECT TO CHANGE BY FEMA)
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES UNLESS OTHERWISE SPECIFIED. ELEVATIONS SHOWN ARE HEREON PER NAVD88.
- AREAS SHOWN ARE BY COORDINATE METHOD.
- EXISTING SITE FEATURES AND SURVEY INFORMATION PROVIDED BY SEABOARD SURVEYING & PLANNING, INC. SURVEY DATED DECEMBER 22, 2016. EXISTING TOPOGRAPHY OBTAINED FROM NOAA 2019 AND COMPARED TO SURVEY DATA OBTAINED ALONG OCEAN TRAIL BY ALBEMARLE & ASSOCIATES, LTD. IN 2011. ELEVATIONS BASED UPON NAVD 1988.
- THERE ARE NO DELINEATED WETLANDS ON THE PROJECT SITE.
- THE PROPERTY IS ZONED SFO WITH A PUD OVERLAY DESIGNATED AS GB. RETAIL SALES ESTABLISHMENTS IS AN ALLOWABLE USE WITHIN THE GB DISTRICT STANDARDS. TWO UPPER STORY DWELLING UNITS ARE PERMITTED SUBJECT TO THE AMENDED SKETCH PLAN FOR BUCK ISLAND. ALL ADJACENT PROPERTIES ARE ZONED WITH THE SAME CLASSIFICATION.
- MINIMUM BUILDING SETBACKS:  
FRONT - 30'  
REAR - 25'  
SIDE - 15'  
30' ALONG MID COUNTY BRIDGE CORRIDOR PER P.C. E, SL. 102.
- TOTAL PROPERTY AREA = 19,378 SF  
AREA TO BE DISTURBED = 27,767 SF (0.64 ACRES)  
(INCLUDES WORK ALONG OCEAN TRAIL)
- COVERAGE IS AS FOLLOWS:  
EXISTING (PER 2016 SURVEY)  
BUILDING/DECK 991.05 SF  
CONCRETE 314.93 SF  
GRAVEL 7,009.79 SF  
TOTAL 8,315.77 SF (42.91%)  
ALL EXISTING FEATURES TO BE REMOVED  
PROPOSED  
BUILDING/STEPS 2,349.02 SF  
PARKING 4,028.43 SF  
CONCRETE SIDEWALK 1,191.94 SF  
PERVIOUS SIDEWALK 142.01 SF  
DUMPSTER PAD 80.00 SF  
HVAC STAND 27.00 SF  
TOTAL 7,818.40 SF (40.35%)  
ALLOWABLE COVERAGE 12,595.7 SF (65.0%)
- PARKING REQUIREMENTS:  
RETAIL, GROUND FLOOR: (1 SPACE / 300 SF) \* (2,221 SF) = 7.4 SPACES  
DWELLING, UPPER FLOOR: (0.5 SPACE / DU) \* (2 DU) = 1.0 SPACE  
TOTAL REQUIRED PARKING SPACES: 8.4 SPACES  
TOTAL PROVIDED SPACES: 9 SPACES
- STORMWATER MANAGEMENT WILL BE ACCOMMODATED THROUGH INFILTRATION BASINS DESIGNED IN ACCORDANCE WITH CURRITUCK COUNTY REQUIREMENTS.
- THE NRCS SOILS MAP FOR CURRITUCK COUNTY HAS MAPPED THE SOILS ON THIS SITE TO BE NEWHAN-COROLLA COMPLEX AND OSIER FINE SAND.
- LIGHTS WILL BE DOMINION POWER BASIC SHOEBOX LED (8318 LUMENS / 150 WATT EQUIVALENT) WITH TYPE 4 DISTRIBUTION MOUNTED AT 25' ABOVE GRADE. LIGHTS FOR THIS SITE WILL BE PLACED IN ACCORDANCE WITH CURRITUCK COUNTY REQUIREMENTS.
- ALL SIGNS SHALL BE ERRECTED, ALTERED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS IN THE CURRITUCK COUNTY CODE OF ORDINANCES.
- SILT FENCE TO BE INSTALLED ON SITE AS SHOWN ON EROSION CONTROL/GRADING PLAN.
- ALL DISTURBED AREAS SHALL BE STABILIZED WITH A COASTAL VEGETATION MIX.
- THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL BUFFERING. ALL REQUIRED LANDSCAPING AND BUFFER AREAS SHALL BE MAINTAINED IN GOOD CONDITION SO AS TO PRESENT A HEALTHY AND ORDERLY APPEARANCE AND SHALL BE KEPT FREE FROM REFUSE AND DEBRIS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE REPLACEMENT OF PLANTS DAMAGED BY INSECTS, DISEASE, VEHICULAR TRAFFIC, AND VANDALISM.
- ALL NEW UTILITIES ARE TO BE PLACED UNDERGROUND.
- TRASH COLLECTION WILL BE VIA ON-SITE DUMPSTER.
- WASTEWATER WILL BE CONNECTED TO THE CAROLINA WATER SERVICE WASTEWATER SYSTEM.

**PRELIMINARY ONLY  
NOT FOR  
CONSTRUCTION**

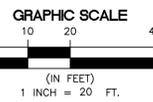
**LEGEND**

	IRON ROD FOUND		PROPOSED DRAINAGE PIPE
	PK NAIL FOUND		PROPOSED DITCH/SWALE
	RIGHT OF WAY		PROPOSED DRAIN BASIN
	PROPERTY BOUNDARY		EXISTING SANITARY STRUCTURE
	EXISTING POWER POLE		EXISTING SANITARY VALVE
	EXISTING GUY WIRE		PROPOSED SANITARY STRUCTURE
	UNDERGROUND ELECTRIC		OVERHEAD ELECTRIC
	UNDERGROUND TELEPHONE LINE		EXISTING FORCEMAIN
	EXISTING COMMUNICATIONS LINE		EXISTING FIRE HYDRANT
	EXISTING TELEPHONE PEDESTAL		EXISTING WATER METER
	EXISTING FIBER OPTIC REFERENCE		EXISTING WATER VALVE
	PROPOSED LIGHT POLES		PROPOSED WATER METER
	EXISTING CONTOURS		EXISTING WATERLINE
	EXISTING SPOT ELEVATIONS		PROPOSED WATERLINE
	PROPOSED SPOT ELEVATIONS		EXISTING GRAVEL
	EXISTING TREELINE		EXISTING CONCRETE
	PROPOSED TREELINE		EXISTING ASPHALT PAVEMENT
	EXISTING FENCE		PROPOSED CONCRETE
	PROPOSED FENCE		SILT FENCE
	HANDICAP PARKING		LIMITS OF DISTURBANCE
	SIGNAGE		
	PARKING LOT TRAFFIC FLOW PAVEMENT MARKINGS		



**SITE PLAN**  
SCALE: 1" = 20'

**SECTION A-A**  
NTS



GRAPHIC SCALE  
(IN FEET)  
1 INCH = 20 FT.



**Albemarle & Associates, Ltd.**  
Engineering - Environmental - Land Planning

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Cert. of Licensure No. C-1027  
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NO.	DATE	DESCRIPTION	BY	FOR
1	03/23/2023	PRELIMINARY SITE PLAN	JLM	FOR REVIEW

**SITE PLAN**  
**GOLASA HOLDINGS, LLC**  
**804 OCEAN TRAIL**  
POPULAR BRANCH TOWNSHIP CURRITUCK COUNTY NORTH CAROLINA  
COROLLA

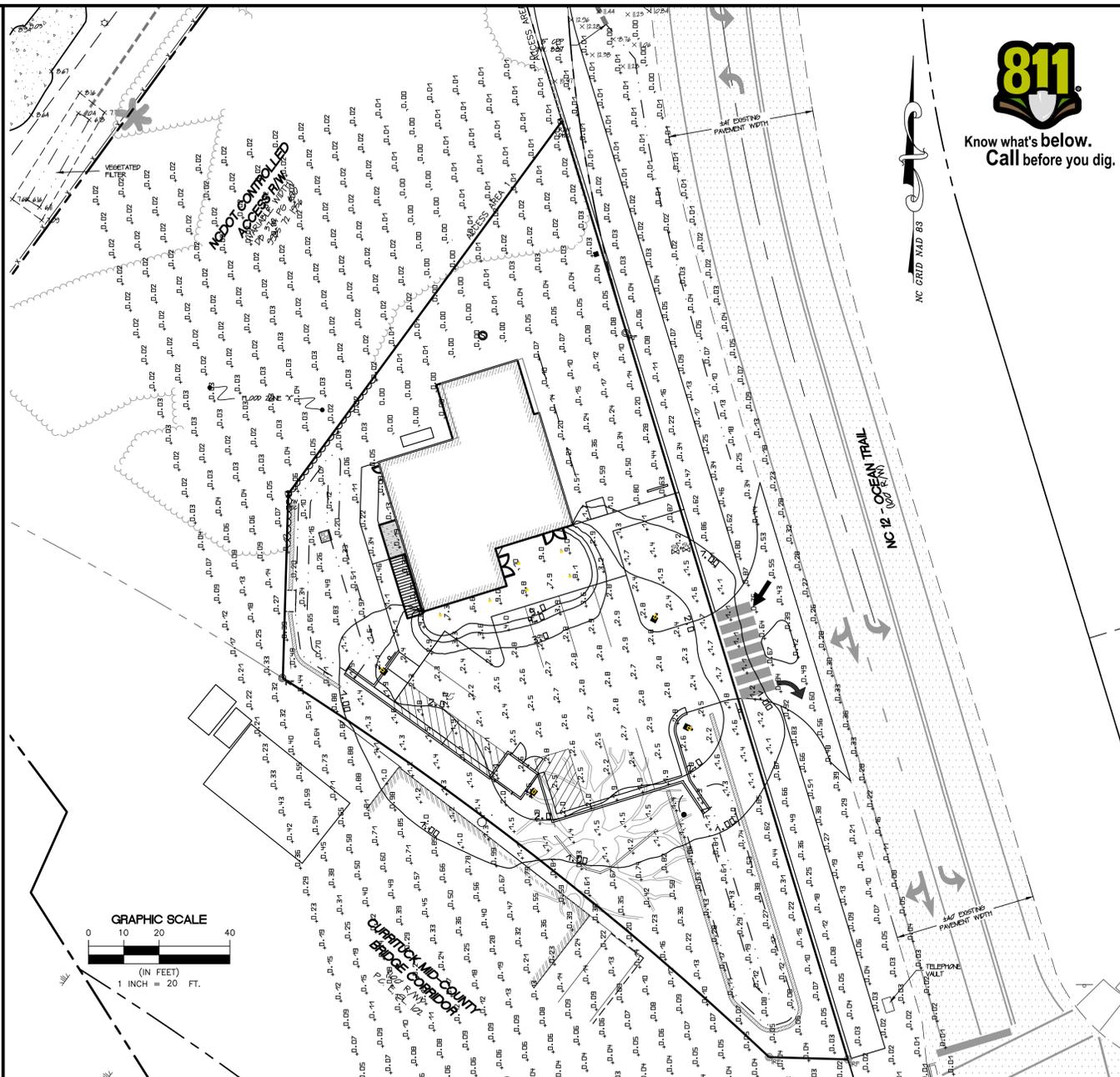
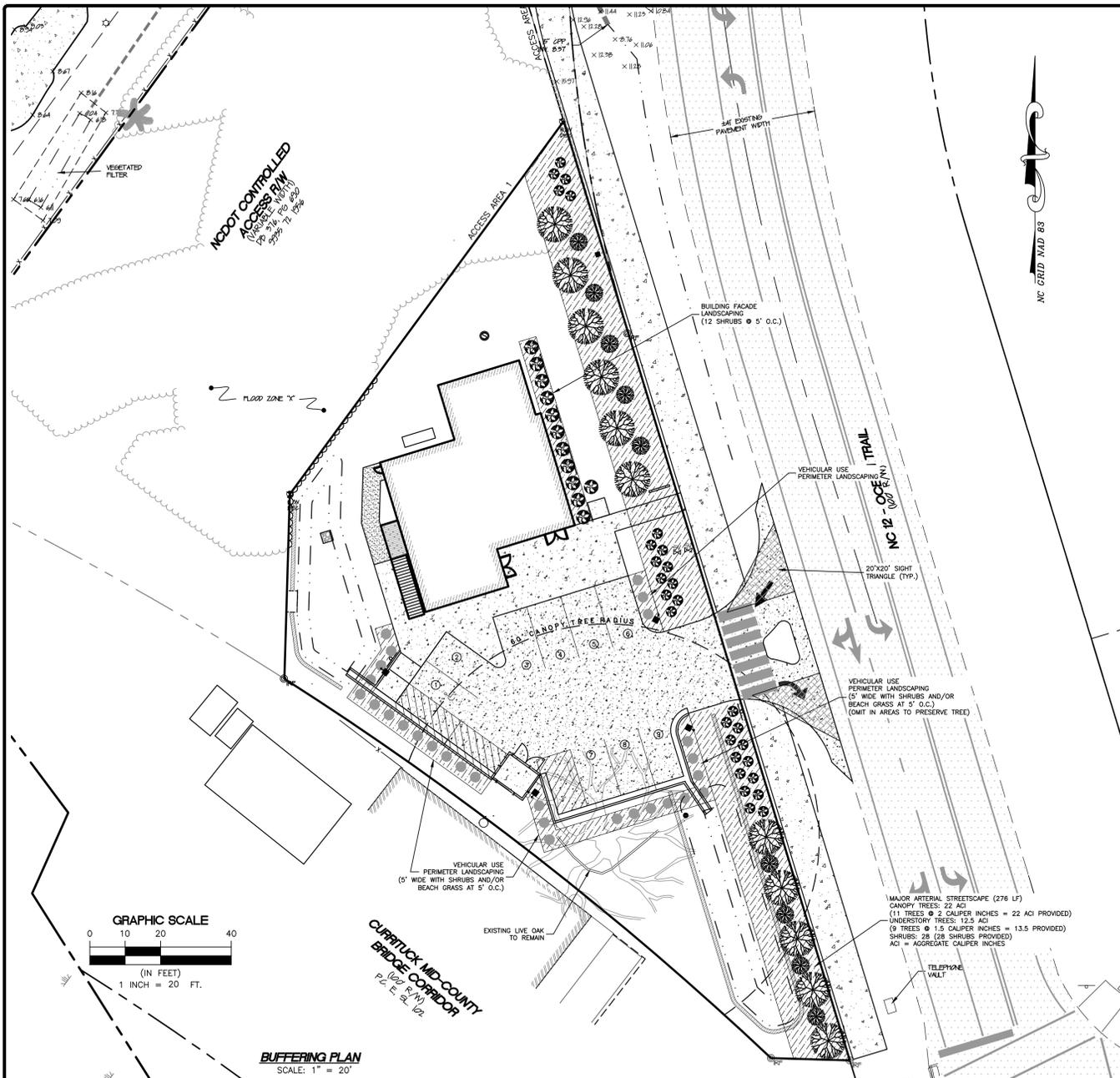
DATE:	09/12/2023
SURVEYED:	SEE NOTES
DESIGNED:	MJM
DRAWN:	RCA
CHECKED:	MJM
FILE:	08599A

SCALE:  
**1" = 20'**  
**C201**  
PROJ. NO. 08599A

SEE SHEET C202 FOR BUFFERING AND LIGHTING PLAN  
SEE SHEET C203 FOR SITE PLAN DETAILS  
SEE SHEET C301 GRADING AND DRAINAGE PLAN  
SEE SHEET C302 FOR DEMOLITION AND EROSION CONTROL PLAN  
SEE SHEET C401 FOR UTILITY PLAN AND DETAILS

K:\Active Projects\08599A - Parcel Y, Timbuck II\08599A - Site Plan.dwg - 10/25/2023 4:09:32 PM, ALBEMARLE & ASSOCIATES, LTD. C-1027

K:\Active Projects\08599 - Parcel Y, Trmck Inc\08599A - Site Plan.dwg, 10/25/2023, 4:10:55 PM, ALBEMARLE & ASSOCIATES, LTD., C-1027



**Albemarle & Associates, Ltd.**  
 Engineering - Environmental - Land Planning

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 KILL DEVI HILLS, NC 27148  
 Phone: (252) 441-2113  
 www.AlbemarleAssociates.com  
 Cert. of Licensure No. C-1027

NO.	DATE	DESCRIPTION	BY	REVISIONS
1	10/25/2023	PRELIMINARY	JK	

**LANDSCAPE INSTALLATION NOTES:**

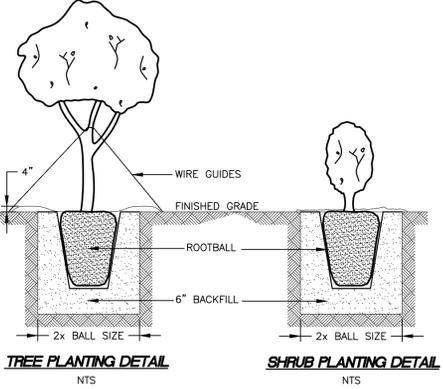
**PREPARATION:**  
 TREE AND SHRUB LOCATIONS AND AREAS AND SECURE LANDSCAPE DESIGNERS APPROVAL BEFORE START OF PLANTING WORK. MAKE MINOR ADJUSTMENTS AS MAY BE REQUESTED. FINE GRADE LAWN AREAS TO A SMOOTH, EVEN SURFACE WITH LOOSE, UNIFORM FINE TEXTURE. ROLL, RAKE AND DRAG LAWN AREAS, REMOVE RIDGES AND FILL DEPRESSIONS, AS REQUIRED TO MEET FINAL GRADE. LIMIT FINE GRADING TO AREAS THAT CAN BE PLANTED IMMEDIATELY AFTER GRADING.

**EXCAVATION FOR TREES AND SHRUBS:**  
 EXCAVATE PITS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION. FOR BALLED AND BURLAPPED, AND POTTED (B&B TREES AND SHRUBS), MAKE EXCAVATIONS AT LEAST HALF AGAIN AS WIDE AS THE ROOT BALL DIAMETER AND EQUAL TO THE ROOT BALL DEPTH, PLUS ALLOWING FOR SETTING OF ROOT BALL ON A LAYER OF COMPACTED BACKFILL.

**PLANTING TREES AND SHRUBS:**  
 SET BALLED AND BURLAPPED AND POTTED STOCK ON LAYER OF COMPACTED PLANTING SOIL MIXTURE, PLUMB AND IN THE CENTER OF THE PIT OR TRENCH, WITH THE TOP OF THE ROOT BALL AT THE SAME ELEVATION AS ADJACENT FINISHED LANDSCAPE GRADES. WHEN SET, PLACE ADDITIONAL BACKFILL AROUND BASE AND SIDES OF ROOT BALL, AND WORK EACH LAYER TO ELIMINATE VOIDS AND AIR POCKETS. WHEN EXCAVATION IS APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. WATER AGAIN AFTER PLACING FINAL LAYER OF BACKFILL. MULCH PITS, TRENCHES AND PLANTED AREAS. PROVIDE NOT LESS THAN 3" THICKNESS OF MULCH AND FINISH LEVEL WITH ADJACENT GRADE.

**SEEDING NEW LAWNS:**  
 DO NOT USE WET SEED OR SEED WHICH IS SLIGHTLY MOLDY OR OTHERWISE DAMAGED IN TRANSIT OR STORAGE. SOW SEED USING A DROP SPREADER OR SEEDING MACHINE. DO NOT SEED WHEN WIND VELOCITY EXCEEDS 5 MPH UNLESS USING A DROP SPREADER. DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING EQUAL QUANTITIES IN 2 DIRECTIONS AT RIGHT ANGLES TO EACH OTHER. SOW NOT LESS THAN THE QUANTITY OF SEED SPECIFIED OR SCHEDULED BY THE SEED MANUFACTURER OR SUPPLIER FOR THE TYPE OF SEED BEING SOWN. RAKE SEED LIGHTLY INTO TOP 1/8" OF SOIL, ROLL LIGHTLY AND WATER WITH A FINE SPRAY. LAY TURF STARTING IN THE CENTER AND WORKING TOWARDS THE SIDES. TURF SHALL BE LAID PARALLEL TO THE LONGEST EDGE OF FINISHED AREA AND SHALL BE LAID WITH STAGGERED SEAMS. EDGE TURF AFTER INSTALLATION IS COMPLETED. WATER THOROUGHLY.

**CLEAN-UP AND PROTECTION:**  
 DURING LANDSCAPE WORK, KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION. PROTECT LANDSCAPE WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS BY OTHER CONTRACTORS AND TRADES AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED.



- SHRUBS (BUILDING FACADE)  
 COASTAL AZALEA (Rhododendron Atlanticum)  
 INDIAN HAWTHORN (Rhopilepis Indica)
- SHRUBS (VEHICULAR USE AREA)  
 JAPANESE PITTOSPORUM (Pittosporum Tobira)  
 COASTAL AZALEA (Rhododendron Atlanticum)
- UNDERSTORY TREES
- CANOPY TREES  
 RED MAPLE (Acer Rebrum)  
 RIVER BIRCH (Betula Nigra)

**SITE LANDSCAPING COMPLIANCE NOTES:**

- SITE LANDSCAPING**
  - BUILDING FACADE LANDSCAPING:**
    - 1 SHRUB PER EACH 5 FEET OF BUILDING FACADE FACING A STREET. REQUIRED = (60 LF) x (1 SHRUB / 5 LF) = 12 SHRUBS PROVIDED = 12 SHRUBS
    - CANOPY TREE LANDSCAPING:**
      - 2 CALIPER INCHES PER ACRE REQUIRED = (2 CALIPER INCHES/ACRE) \* 0.44 AC = 1 ACI PROVIDED = 2.0 ACI CANOPY TREE
  - VEHICULAR USE AREA LANDSCAPING**
    - SCREENING:**
      - REQUIRED = 3' MINIMUM HEIGHT PROVIDED = SHRUBS AND/OR BEACH GRASS AT 5' O.C.
    - CANOPY TREES:**
      - REQUIRED = SHALL BE PLANTED WITHIN 60' OF ALL PARKING SPACES, PROVIDED = ALL PARKING SPACES ARE WITHIN 60' OF A CANOPY TREE
  - MAJOR ARTERIAL STREETSCAPE**
    - 8 AGGREGATE CALIPER INCHES CANOPY TREES / 100 FT REQUIRED = (276 LF) x (8 ACI / 100 LF) = 22 ACI PROVIDED = 11 TREES OF 2.0 CALIPER INCHES = 22 ACI
    - 4.5 AGGREGATE CALIPER INCHES UNDERSTORY TREES / 100 FT REQUIRED = (276 LF) x (4.5 ACI / 100 LF) = 12.5 ACI PROVIDED = 10 TREES OF 1.5 CALIPER INCHES = 15 ACI
    - 10 SHRUBS / 100 LF REQUIRED = (276 LF) x (10 SHRUBS/100 LF) = 28 SHRUBS PROVIDED = 28 SHRUBS
  - SHRUBS SHALL BE 3 GALLON CONTAINERS AND 36" IN HEIGHT WITHIN 3 YEARS OF PLANTING.
  - BUILDING FACADE SHRUBS SHALL BE PLANTED WITHIN 15' OF BUILDING FACADE. HALF OF BUILDING FACADE SHRUBS SHALL BE EVERGREEN.
  - CANOPY TREES SHALL BE 2.0" CALIPER (MINIMUM) AT TIME OF PLANTING. UNDERSTORY TREES SHALL BE 1.5" CALIPER (MINIMUM) AT TIME OF PLANTING.

**LIGHTING PHOTOMETRIC PLAN**

SCALE: 1" = 20'  
 (SPOTS SHOWN ARE FOOT CANDLES AT GROUND LEVEL)

Index	Manufacturer	Article name	Item number	Fitting	Luminous flux	Light loss factor	Connected load	Quantity
1	Not yet a DALI member	Autobahn Small P203 Package Roadway Type IV 3000K 60W	ATB0 P203 R4 3K 60W	1x	8318 lm	0.80	60 W	4
2	Not yet a DALI member	SMALL SURFACE MOUNT CANOPY FIXTURE WITH DIFFUSE LENS (1) 3000K LED MODULE WITH (14) LEDSDXDMXXFRXW6 LD PER MODULE AND (1) INVENTRONICS ELECTRONIC DRIVER	SS0LED101017X	1x 11-3000K	1462 lm	0.80	16.1 W	6

#	Name	Parameter	Min	Max	Average	Mean/Min	Max/Min
1	Overall Site	Perpendicular Illuminance (Adaptive)	0.000 fc	11.3 fc	0.60 fc	-	-
		Luminance (Adaptive)	0.000 cd/m²	7.73 cd/m²	0.41 cd/m²	-	-

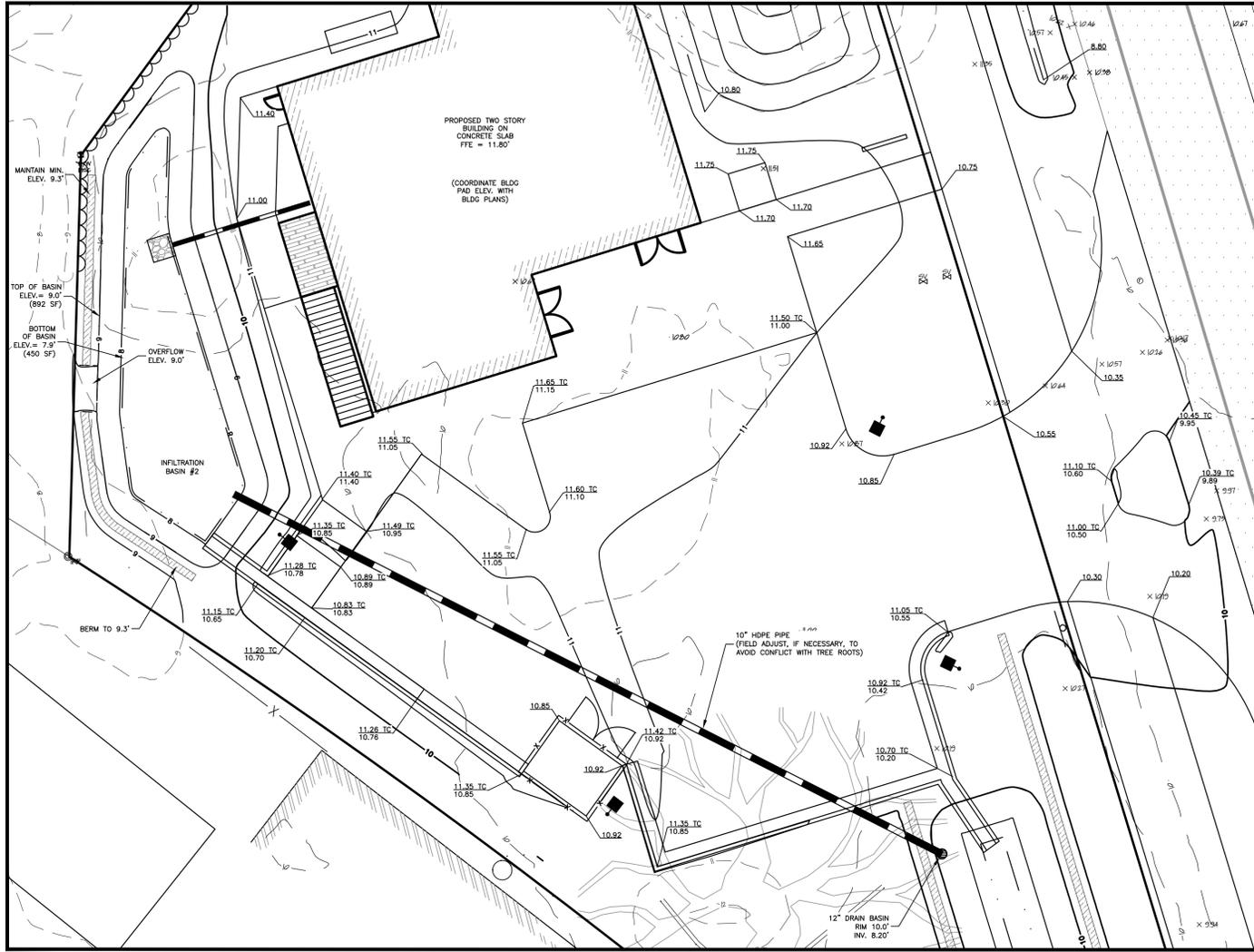
**PRELIMINARY ONLY**  
**NOT FOR CONSTRUCTION**

**BUFFERING AND LIGHTING PLAN**  
**GOLASA HOLDINGS, LLC**  
**804 OCEAN TRAIL**  
 POPLAR BRANCH TOWNSHIP CURRITUCK COUNTY NORTH CAROLINA  
 COROLLA

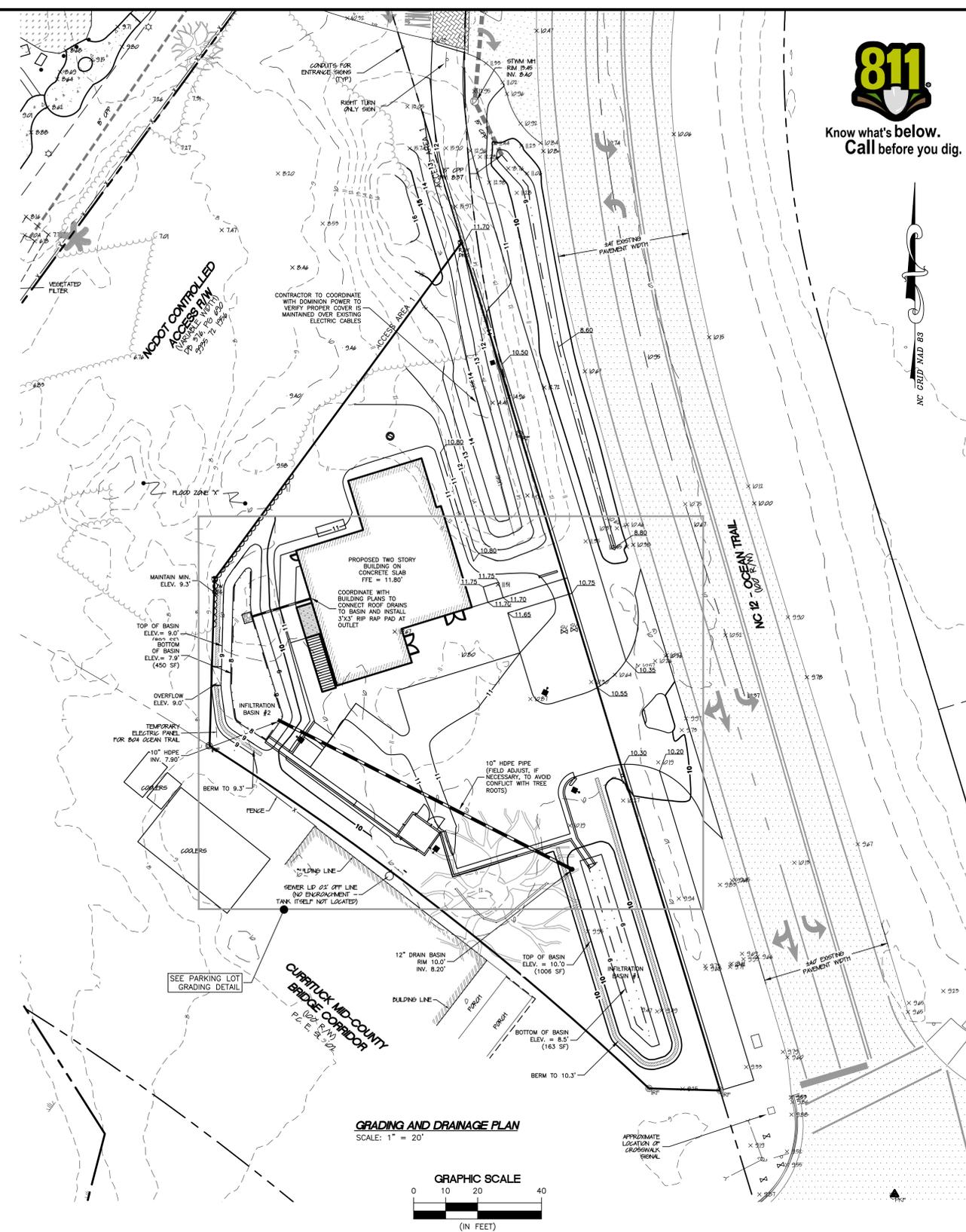
DATE: 09/12/2023  
 SURVEYED: SEE NOTES  
 DESIGNED: MJM  
 DRAWN: FCA  
 CHECKED: MJM  
 FILE: 08599A

SCALE: 1" = 20'  
**C202**  
 PROJ. NO. 08599A

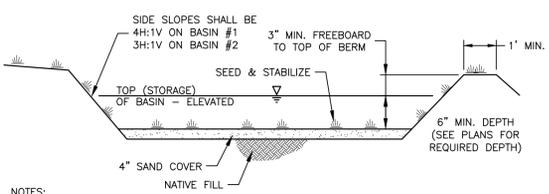
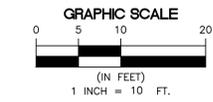




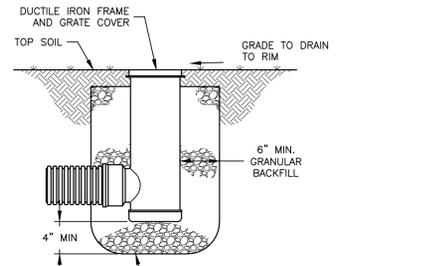
**PARKING LOT GRADING DETAIL**  
SCALE: 1" = 10'



**GRADING AND DRAINAGE PLAN**  
SCALE: 1" = 20'



**INFILTRATION BASIN**  
NTS



**DRAIN BASIN DETAIL**  
NTS

- NOTES:**
1. BASIN GRADING SHALL BE PERFORMED AND PROTECTED, LIMITING COMPACTION FROM CONSTRUCTION EQUIPMENT AND OTHER SOURCES AS MUCH AS POSSIBLE.
  2. UPON COMPLETION OF BASIN GRADING, THE LIMITS SHALL BE PROTECTED FROM RUNOFF OF SILT AND OTHER MATERIAL.
  3. IN THE EVENT RUNOFF TO BASIN IS NOT PREVENTED, THE ENTIRE BASIN SHALL BE TILLED TO RESTORE INFILTRATIVE CAPABILITIES.
  4. STABILIZATION OF BASIN SHALL BE PERFORMED AS SOON AS POSSIBLE. IF BASIN BECOMES FLOODED PRIOR TO ESTABLISHMENT OF GRASS, IT SHALL BE RE-SEEDED UNTIL GRASS IS ESTABLISHED.
  5. DO NOT PLACE SOD ALONG BOTTOM OF BASIN UNLESS APPROVED BY THE ENGINEER.

- GRADING NOTES:**
1. ALL CONSTRUCTION TRAFFIC SHALL UTILIZE THE CONSTRUCTION ENTRANCE AS DESIGNATED.
  2. PRIOR TO COMMENCEMENT OF ANY LAND DISTURBING ACTIVITIES, ALL EROSION AND SEDIMENTATION CONTROL MEASURES IDENTIFIED ON THIS PLAN SHALL BE INSTALLED IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
  3. THE CONTRACTOR SHALL ENSURE THAT AREAS OUTSIDE OF THE LIMITS OF LAND DISTURBANCE AS WELL AS TREES SPECIFICALLY NOTED FOR PROTECTION ARE NOT ADVERSELY IMPACTED BY ANY CLEARING ACTIVITIES.
  4. PRIOR TO FILLING THE SITE, THE CONTRACTOR SHALL STRIP AND STOCKPILE TOPSOIL IN ACCORDANCE WITH GEOTECHNICAL REPORTS AT THE LOCATION INDICATED. AREAS WHICH ARE TO BE FILLED SHALL BE RAISED IN COMPACTED SEQUENTIAL LIFTS NOT TO EXCEED 8 INCHES IN DEPTH. FILL MATERIAL SHALL BE CLEAN, WELL GRADED SAND. FILL LOCATED BENEATH PAVEMENT SHALL BE COMPACTED PER GEOTECHNICAL REPORT. TOPSOIL STOCKPILED CAN BE USED ON SITE FOR RESURFACING UPON COMPLETION OF FILL AND USED WITHIN STORMWATER TREATMENT AREA.
  5. LIMITS OF SLOPES AND GRADING SHALL BE IN ACCORDANCE WITH THE LIMITS SHOWN HEREON.
  6. EXISTING SITE FEATURES AND SURVEY INFORMATION PROVIDED BY SEABOARD SURVEYING & PLANNING, INC. SURVEY DATED DECEMBER 22, 2016. EXISTING TOPOGRAPHY OBTAINED FROM NOAA 2019 AND COMPARED TO SURVEY DATA OBTAINED ALONG OCEAN TRAIL BY ALBEMARLE & ASSOCIATES, LTD. IN 2011. ELEVATIONS BASED UPON NAVD 1988.

- DRAINAGE NOTES:**
1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT NC ONE CALL (811) TO LOCATE UNDERGROUND UTILITIES.
  2. ALL STORM SEWERS SHALL BE PLACED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. STORM SEWERS SHALL BE SMOOTH INTERIOR, DOUBLE WALLED HDPE WITH GASKETED CONNECTIONS UNLESS OTHERWISE NOTED.



REVISIONS	
NO.	DESCRIPTION

**GRADING & DRAINAGE PLAN**  
**GOLASA HOLDINGS, LLC**  
**804 OCEAN TRAIL**  
 CURRITUCK COUNTY  
 POPLAR BRANCH TOWNSHIP  
 NORTH CAROLINA  
 COROLLA

DATE:	09/12/2023
SURVEYED:	SEE NOTES
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08599A

SCALE:  
**AS SHOWN**  
**C301**  
 PROJ. NO. 08599A

**PRELIMINARY ONLY**  
**NOT FOR**  
**CONSTRUCTION**

**I. NARRATIVE:**

GOLASA HOLDINGS, LLC INTENDS TO CONSTRUCT A TWO STORY STRUCTURE WITH RETAIL SPACE BELOW AND (2) APARTMENTS ABOVE. THE CONSTRUCTION WILL INCLUDE NEW DRIVEWAY AND PARKING AREA, STORMWATER MANAGEMENT BASINS, UTILITY CONNECTIONS AND OTHER SITE IMPROVEMENTS. THE SITE IS LOCATED ON 0.45 ACRES LOCATED AT 804 OCEAN TRAIL IN COROLLA, NC. APPROXIMATELY 0.50 ACRES OF THE SITE ARE TO BE DISTURBED. CONSTRUCTION IS SCHEDULED TO BEGIN IN THE FALL OF 2023.

THE SITE IS LEVEL SANDY SOILS. MUCH OF THE SITE IS CURRENTLY COVERED IN GRAVEL AS WELL AS DECKING AND A SMALL STRUCTURE THAT REMAIN.

DISTURBED AREAS ARE TO BE STABILIZED WITH TEMPORARY/PERMANENT VEGETATION ACCORDING TO THE SEQUENCE OF CONSTRUCTION.

**II. SOILS DESCRIPTION:**

SOIL TYPES AS MAPPED IN THE SOIL SURVEY OF (COUNTY) COUNTY:

- NEWHAN-COROLLA COMPLEX (Nhc)
- OUSIER FINE (Os)

**III. CONSTRUCTION SEQUENCE:**

- OBTAIN SITE PLAN APPROVAL
- OBTAIN ALL NECESSARY ENVIRONMENTAL PERMITS
- FLAG OR STAKE WORK LIMITS
- HOLD PRE-CONSTRUCTION MEETING

**PHASE ONE:**

- INSTALL SILT FENCING
- UTILIZE EXISTING DRIVEWAY AS INITIAL CONSTRUCTION ENTRANCE. MAINTAIN DRIVEWAY IN SWEEP CONDITION SO PREVENT SOIL FROM BEING TRACKED ONTO THE ROADWAY
- INSTALL TREE PROTECTION AT LIVE OAK
- CLEAR LOT OF EXISTING VEGETATION AS SHOWN
- PLACE FILL MATERIALS AND ROUGH GRADE NEW STORMWATER BASINS
- COMMENCE CONSTRUCTION OF NEW STRUCTURE AND SEWAGE PUMP STATION
- CONSTRUCT NEW PAVEMENT
- CLEANOUT SEDIMENT OUT IF STORMWATER BASINS AND FINE GRADE
- SEED, FERTILIZE AND WATER DISTURBED AREA TO STABILIZE

**IV. SEDIMENTATION AND EROSION CONTROL NOTES:**

- PRECONSTRUCTION CONFERENCE:**  
PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL WALK THE SITE WITH THE OWNER'S REPRESENTATIVE AND A REPRESENTATIVE OF THE MUNICIPALITY (IF REQUIRED) IN ORDER TO IDENTIFY AND MARK SPECIFIC ELEMENTS WHICH ARE TO BE PROTECTED. TREES SHALL BE PROTECTED IN ACCORDANCE WITH THE NORTH CAROLINA EROSION AND SEDIMENTATION CONTROL HANDBOOK.
- INSTALLATION OF EROSION CONTROL MEASURES:**  
PRIOR TO COMMENCEMENT OF ANY LAND DISTURBING ACTIVITIES, ALL EROSION AND SEDIMENTATION CONTROL MEASURES IDENTIFIED ON THIS PLAN SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS AND ALL PERMIT CONDITIONS.
- UTILITIES:**  
PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL HAVE THE APPROPRIATE UNDERGROUND UTILITIES LOCATED. CONTACT NCEM11 AT 811 OR 800-632-4345. UTILITIES SHOWN ARE TAKEN FROM EXISTING RECORDS, FIELD OBSERVATIONS AND/OR UTILITY LOCATING SERVICE AND ARE NOT GUARANTEED TO BE ACCURATE OR COMPLETE.
- ACCESS TO SITE:**  
ALL CONSTRUCTION TRAFFIC SHALL UTILIZE THE CONSTRUCTION ENTRANCE AS DESIGNATED ON THIS PLAN.
- LIMITS OF DISTURBANCE:**  
THE CONTRACTOR SHALL ENSURE THAT AREAS OUTSIDE OF THE LIMITS OF LAND DISTURBING AS WELL AS EXISTING IMPROVEMENTS SPECIALLY NOTED TO REMAIN ARE NOT ADVERSELY IMPACTED BY ANY CLEARING ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT OF ITEMS DAMAGED OUTSIDE THE LIMITS OF DISTURBANCE OR OTHERWISE NOTED TO REMAIN.
- STABILIZATION:**  
EXPOSED SWALES, DITCHES, DICES OR OTHER SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH A TEMPORARY OR PERMANENT GROUND COVER WITHIN 7 CALENDAR DAYS. ALL OTHER EXPOSED EARTHEN AREAS SHALL BE STABILIZED WITH A TEMPORARY OR PERMANENT GROUND COVER WITHIN 14 CALENDAR DAYS OF THE COMPLETION OF ANY PHASE OF GRADING.
- INSPECTIONS REQUIRED:**  
SOIL EROSION AND SEDIMENTATION CONTROLS SHALL BE INSPECTED, MAINTAINED AND REPAIRED AS NECESSARY BY THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN COMPLETED SELF-INSPECTION / MONITORING FORMS (COMPLETED WEEKLY WITH DAILY RAINFALL TOTALS) THROUGHOUT THE PROJECT. THE SITE SHALL ALSO BE INSPECTED AFTER ANY RAINFALL EVENT EQUAL OR GREATER THAN 0.5 INCHES OVER A 24 HOUR PERIOD.
- CORRECTIVE MEASURES:**  
ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION UNTIL WORK IS COMPLETE AND ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED. IF EXCESSIVE WIND EROSION OR STORM WATER RUNOFF DEVELOPS DURING TIME OF CONSTRUCTION IN ANY LOCATION ON THE PROJECT SITE, ADDITIONAL SAND OR SILT FENCE SHALL BE INSTALLED AS DIRECTED BY ENGINEER, SEE SAND OR SILT FENCE DETAIL.
- DEBRIS REMOVAL:**  
ALL CLEARING DEBRIS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF IN A LAWFUL MANNER. NO BURNING OF DEBRIS ON SITE IS PERMITTED. NO ON-SITE BURNING IS PERMITTED UNLESS OTHERWISE APPROVED BY THE LOCAL FIRE MARSHALL, MUNICIPAL AGENCY OF JURISDICTION AND THE OWNER.
- EXCAVATION AND EMBANKMENT:**  
ANY OFF-SITE MATERIAL BROUGHT ONTO TO THE SITE TO BE USED FOR GRADING FILL SHALL BE OBTAINED FROM A PERMITTED BORROW PIT. FILL SHALL CONFORM TO PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT. NO BORROW IS PERMITTED FROM THE SITE.
- EXISTING INFORMATION:**  
EXISTING SITE FEATURES AND SURVEY INFORMATION PROVIDED BY SEABOARD SURVEYING & PLANNING, INC. SURVEY DATED DECEMBER 22, 2016. EXISTING TOPOGRAPHY OBTAINED FROM NOAA 2019 AND COMPARED TO SURVEY DATA OBTAINED ALONG OCEAN TRAIL BY ALBEMARLE & ASSOCIATES, LTD. IN 2011. ELEVATIONS BASED UPON NAVD 1988.

**V. DEMOLITION NOTES**

ALL EXISTING IMPROVEMENTS SHOWN WITHIN THE LIMITS OF DISTURBANCE SHALL BE REMOVED UNLESS SPECIFICALLY NOTED TO REMAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER DISPOSAL TO AN OFFSITE LOCATION PROVIDED BY THE CONTRACTOR.

CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO CAREFULLY REMOVE ALL ITEMS SHOWN TO BE RELOCATED. PRIOR TO REMOVAL, ANY CONDITIONS THAT PREVENT SUCH REMOVAL OR EXISTING DAMAGE TO THE ITEMS SHALL BE REPORTED TO THE OWNER IMMEDIATELY. CONTRACTOR WILL BE RESPONSIBLE FOR ITEMS DAMAGED DURING THE PROJECT.

**WARNING:**

LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN HAS BEEN TAKEN FROM RECORD DRAWINGS. EXACT LOCATION OF THESE UTILITIES IS UNKNOWN. LOCATION OF OTHER UNDERGROUND UTILITIES IS UNKNOWN AND HAS NOT BEEN SHOWN ON THESE DRAWINGS. ALL UNDERGROUND UTILITIES ENCOUNTERED SHALL IMMEDIATELY BE REPORTED TO THE OWNER.

**SEEDING SCHEDULE**

**APRIL 1 - MAY 31 PERMANENT SEEDING**

SPECIES	RATE
K-31 FESCUE	3 LB/1000 SF
COMMON BERMUDAGRASS	1 LB/1000 SF
WINTER RYE GRAIN	3 LB/1000 SF

NOTE: DELETE RYE GRAIN IF OVERSEEDING ESTABLISHED RYE OR FESCUE. DELETE FESCUE IF OVERSEEDING ESTABLISHED FESCUE.

**MAY 15 - JULY 31 PERMANENT SEEDING**

SPECIES	RATE
K-31 FESCUE	3 LB/1000 SF
COMMON BERMUDAGRASS	1 LB/1000 SF
GERMAN MILLET	3 LB/1000 SF

NOTE: DELETE MILLET IF OVERSEEDING ESTABLISHED MILLET OR FESCUE. DELETE FESCUE IF OVERSEEDING ESTABLISHED FESCUE.

**AUGUST 15 - APRIL 1 TEMPORARY SEEDING**

SPECIES	RATE
K-31 FESCUE	3 LB/1000 SF
WINTER RYE GRAIN	5 LB/1000 SF

**SOIL AMENDMENTS**  
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 500 LB PER ACRE OF 10-10-10 FERTILIZER.

**MULCH**

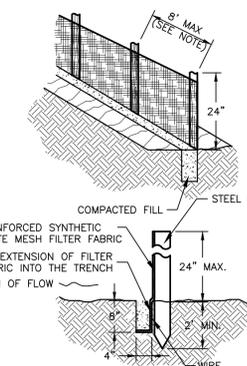
USE JUTE, EXCELSIOR MATTING OR OTHER EFFECTIVE CHANNEL LINING MATERIAL TO COVER BOTTOM AND SIDES OF SWALES. ANCHOR MATTING PER MANUFACTURERS RECOMMENDATIONS. HYDROSEEDING IS ALSO AN ACCEPTABLE METHOD OF TEMPORARY STABILIZATION.

**MAINTENANCE**

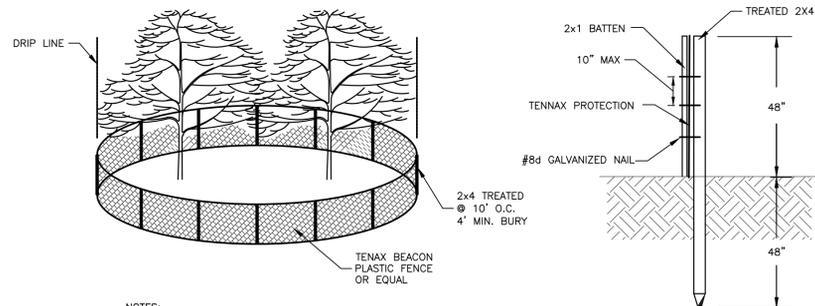
A MINIMUM OF 3 WEEKS IS REQUIRED TO FOR ESTABLISHMENT. INSPECT AND REPAIR MULCH FREQUENTLY. FERTILIZE THE FOLLOWING SPRING WITH 50 LB/ ACRE NITROGEN.

**SITE STABILIZATION REQUIREMENTS**

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETER AND HOW ZONES)

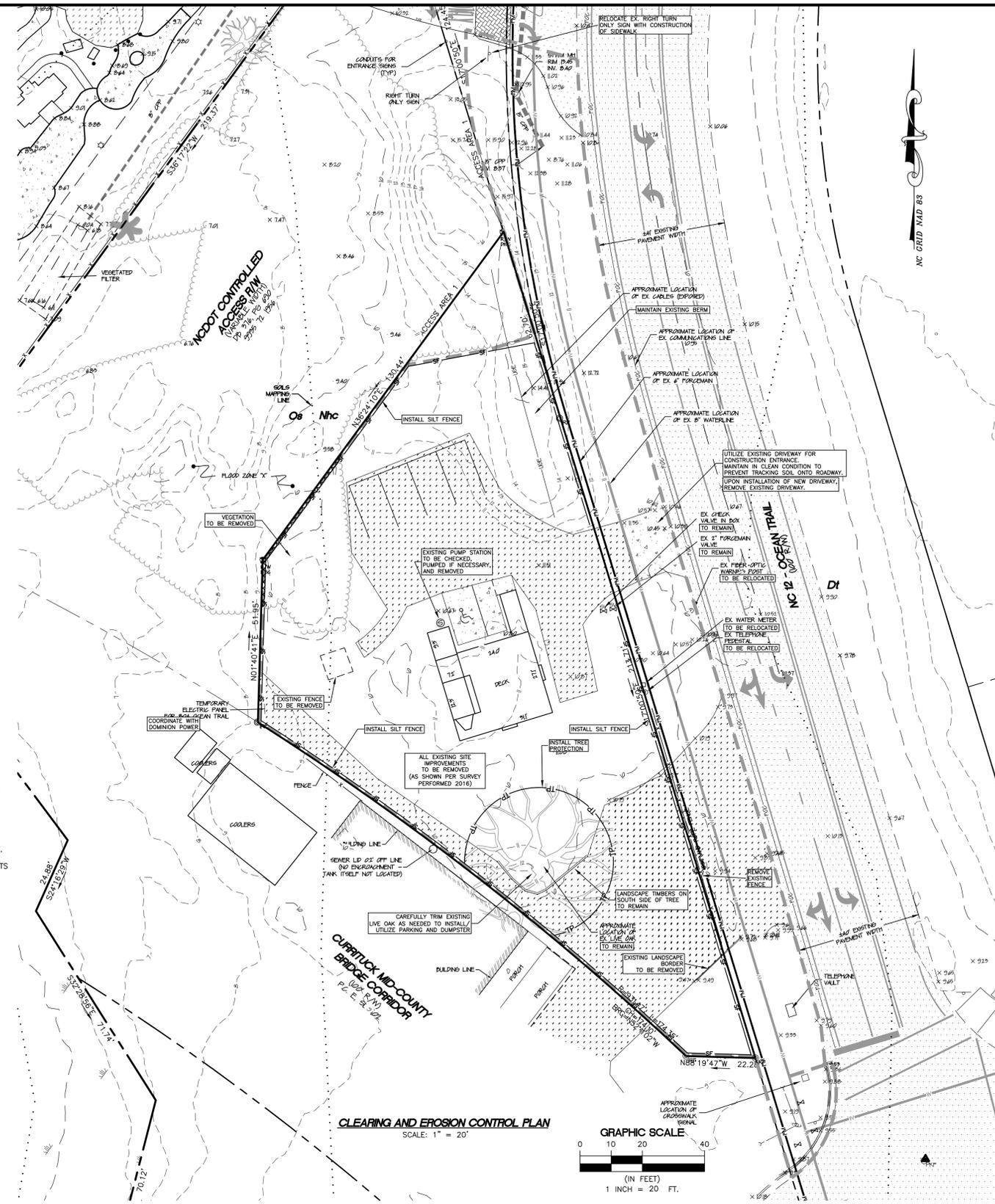


- NOTES:
1. 8' POST SPACING FOR NON-WIRE REINFORCED FENCE. 8' POST SPACING PERMITTED IF FENCE CONTAINS REINFORCING WIRE.
  2. 4' MINIMUM OVERLAP REQUIRED (ATTACHED AT POSTS) WHEN JOINING SECTIONS OF SILT FENCE.
  3. SILT FENCE SHALL BE ATTACHED TO STEEL POSTS USING A MINIMUM OF 3 WIRE OR PLASTIC TIES.



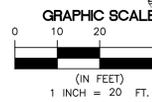
- NOTES:
1. IN SPITE OF PRECAUTIONS, SOME DAMAGE TO PROTECTED TREES MAY OCCUR. IN SUCH CASES, REPAIR ANY DAMAGE TO THE CROWN, TRUNK OR ROOT SYSTEM IMMEDIATELY.
  2. REPAIR ROOTS BY COVERING DAMAGED ROOTS WITH MOIST TOPSOIL OVER EXPOSED ROOTS.
  3. REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREAS. TAPER THE CUT TO PROVIDE DRAINAGE, AND PAINT WITH TREE PAINT.
  4. CUT OFF ALL DAMAGED TREE LIMBS ABOVE THE TREE COLLAR AT THE TRUNK OR MAIN BRANCH. USE THREE SEPARATE CUTS TO AVOID PEELING BARK FROM HEALTHY AREAS OF THE TREE.
  5. BARRIER SHOULD BE INSTALLED OUTSIDE THE DRIP LINE OF TREE BRANCHES AS FAR AS PRACTICAL.

**TREE PROTECTION DETAIL**



**CLEARING AND EROSION CONTROL PLAN**

SCALE: 1" = 20'



**Albemarle & Associates, LTD.**  
Engineering - Environmental - Land Planning

Albemarle & Associates, Ltd.  
1000 S. Main Street  
P.O. Box 998  
Kill Devil Hills, NC 27849  
Phone: (252) 441-2113  
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Cent. of Licensure No. C-1027  
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**STATE OF NORTH CAROLINA**  
Professional Engineer  
SEAL  
02572  
JAMES L. MORRIS, P.E.

NO.	DATE	DESCRIPTION	BY	FOR
1	03/23/2023	PER. TECHNICAL REVIEW COMMENTS		

**DEMOLITION AND EROSION CONTROL PLAN**  
**GOLASA HOLDINGS, LLC**  
**804 OCEAN TRAIL**  
COROLLA POPLAR BRANCH TOWNSHIP CURRITUCK COUNTY NORTH CAROLINA

DATE:	09/12/2023
SURVEYED:	SEE NOTES
DESIGNED:	MJM
DRAWN:	KCA
CHECKED:	MJM
FILE:	08599A

SCALE:  
**1" = 20'**  
**C302**  
PROJ. NO. 08599A

**PRELIMINARY ONLY**  
**NOT FOR**  
**CONSTRUCTION**

K:\Active Projects\08599 - Parcel Y, Trimbuck IN\08599B - Site Plan.dwg, 10/25/2023, 4:11:55 PM, ALBEMARLE & ASSOCIATES, LTD., C-1027





5 East Elevation  
1/8" = 1'-0"



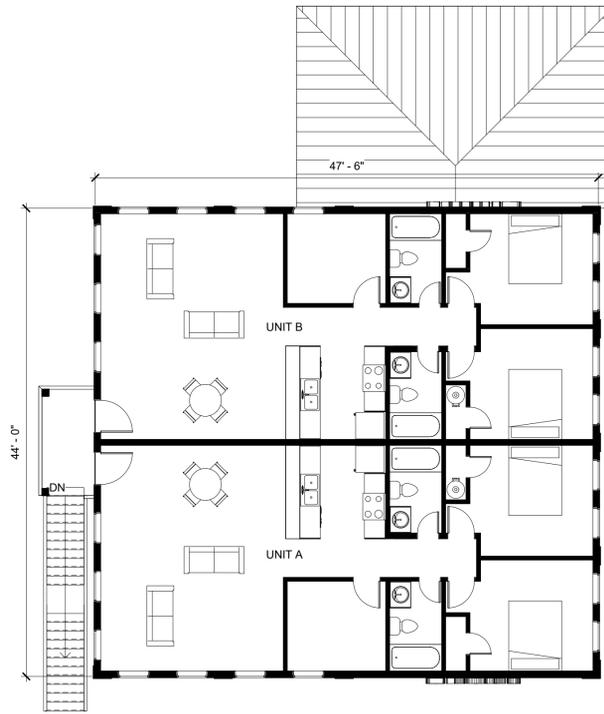
1 South Elevation  
1/8" = 1'-0"



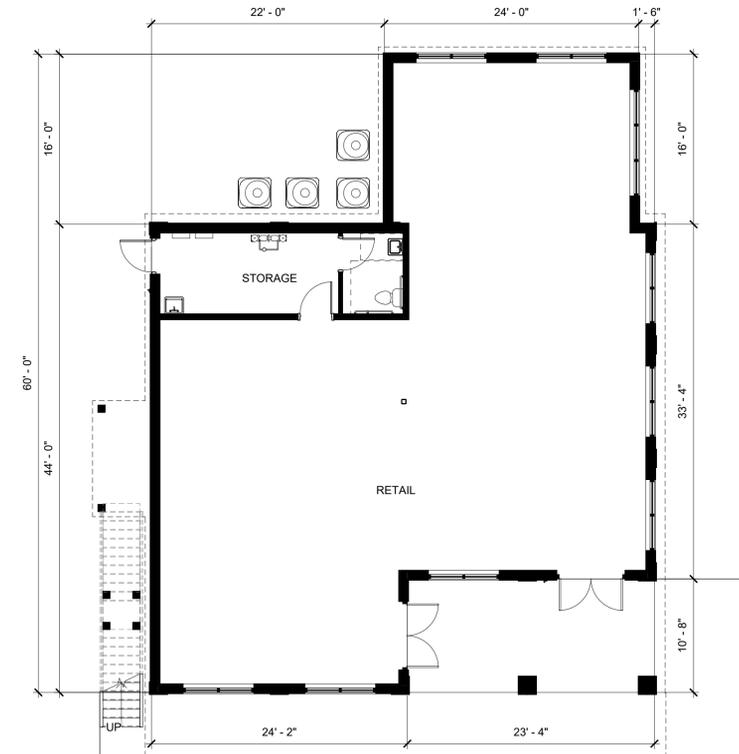
6 North Elevation  
1/8" = 1'-0"



7 West Elevation  
1/8" = 1'-0"



3 Second Floor Plan  
1/8" = 1'-0"



2 First Floor Plan  
1/8" = 1'-0"



4 Rendering  
12" = 1'-0"

Project: **804 Retail Shops**  
Project No: **22084**  
Location: **804 Ocean Trail  
Corolla, NC**  
Title: **Preliminary**  
Date: **August 11, 2023**  
Scale: **As indicated**

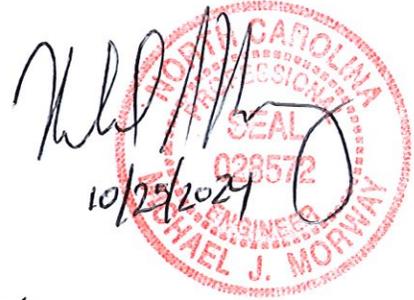
The designer shall not be responsible for any error, omission, defect or deficiency in the contract documents ("error") prepared by the designer or its consultants which in any way impacts the schedule of the project, results in a lack of coordination among the contract documents, delays the completion of the project or which in any other way causes any damage or loss to the owner, contractor, subcontractors, or other entity involved in the project, unless: (i) designer is promptly notified of such error, in any event within 14 days of the date such error was discovered or could reasonably have been discovered; and (ii) designer is given opportunity at the time of discovery to address such error, and, if appropriate, take such steps as are necessary to correct and resolve it. Failure to comply with the provisions of this paragraph shall constitute a waiver of any claim for damages, or a right to offset against designer by owner, contractor or others and shall in no event cause or allow a reduction in the fees otherwise due designer for services provided on the project.



Revisions:

No.	Description	Date

Designed: Designer  
Drawn: Author  
Reviewed: Checker  
Cad File: **A1**



804 Ocean Trail  
Golasa Holdings, LLC  
Stormwater Management Report

June 21, 2023  
(revised October 25<sup>th</sup>, 2023)

**Existing Conditions:** Golasa Holdings, LLC has recently purchased a 0.45 acre site in the village of Corolla in Currituck County. The site was formerly a coffee stand and contains gravel and concrete parking areas, portions of wooden deck and a small wooden structure and utility connections. There are no stormwater management areas on the site. The triangular site is bounded on all three sides by NCDOT rights-of-way. The east right-of-way (NC-12) is the only one that contained a public roadway. The southwest right-of-way contains a market with parking and storage areas. The northwest right-of-way is wooded. The Natural Resource Conservation Service Soil Survey for Currituck County has mapped the soils on the site to consist primarily of Newhan Corolla Complex and there is a trace of Osier fine sand on the western edge. The majority of the site is 10 – 12 feet above sea level (NAVD 1988). The property is within a flood zone X.

**Proposed Development:** Golasa Holdings, LLC intends to redevelop the site to include a 2-story structure that will contain retail space on the first floor with two apartments above. The site will contain a parking and dumpster area and stormwater management areas (infiltration basins). A sewage lift station will be provided with connection to the Carolina Water Service sewage forcemain that is located along NC-12.

**Stormwater Management:** Stormwater management for the project has been designed to meet the requirements of the Currituck County Stormwater Manual as a Major Stormwater Plan, which requires the storage of the increase of runoff from the site under the proposed development condition for a 5-yr / 24 hour rainfall event as compared to the runoff resulting from a 2-yr / 24-hour event area under a wooded condition. The calculations utilize the "Simple Volume Calculations for Small Sites (Under 10 Acres)" as outlined in the manual. This calculates the design storage volume to be 2,405 cf.

Runoff from the site as proposed is designed to sheet flow across parking surfaces directly to two infiltration basins located on the south and west sides of the site. Runoff from the structure, which utilizes a flat roof, will be captured and conveyed via pipe to the basins. A soil boring in the vicinity of Basin #1 (south basin) found soil mottles at an elevation of approximately 6.5' above msl, although very little wetness was found through the depth of the 5' deep boring (to elevation of 5.5' msl). Several borings were attempted in the vicinity of the west basin but resulting in the fine dry sand continually

collapsing. Given the relative close proximity of the two basins, it can be assumed that the estimated seasonally high water table would be consistent between the two basins.

Basin #1 has been designed with a storage elevation of 10' above msl and the bottom of open basin storage is at 8.5' msl. There is a drain basin with a rim elevation of 10.0 proposed at the edge of the basin near the inlet that will provide an overflow in the event the hydraulic level in the basin exceeds the design storage elevation that will collect overflow and rout it to basin #2. Basin #2 (west basin) has been designed with a storage elevation of 9.0 above msl and the bottom of the open basin storage is at 7.9 msl. An overflow has been included along the northwest side of basin #2 that will provide an overflow in the event the hydraulic level in the basin exceeds the design storage elevation. The overflow discharges to the northwest which naturally receives runoff and allows flow to an adjacent pond. Together the basins provide a total of 2,442 cf of storage (102% of the required value).

Includes within this stormwater management report are:

- Design calculations for the runoff increase for the 0.45 acre lot as comparing the 5-yr / 24-hr event in the proposed development condition versus the runoff resulting from a 2-yr / 24-hour event in an undeveloped and wooded condition (performed in accordance with section 2.4.4 of the Currituck County Stormwater Manual).
- Design calculations for storage volume within stormwater management infiltration basins #1 & #2
- SW-003 (Rational Method Peak Flow – revised 10/24/2023)
- Soils boring log
- Soils Map for the NRCS Soils Survey for Currituck County
- Tc routing sketch for pre/post developed conditions for rational method

**804 OCEAN TRAIL  
STORMWATER MANAGEMENT CALCULATIONS  
DESIGN STORM**

Project Name : 804 Ocean Trail

Project Area Description - Entire Project Site						
Basin Information						
Receiving Stream Name	Sanders Bay					
Receiving Stream Class & Index Number	30-1-11 (SC)					
Drainage Area	19,378	SF				
Existing Impervious Area	0	SF				
Proposed Impervious Area	7,673	SF				
% Impervious Area (total)	39.6%					
Impervious Surface Area			<i>existing</i>	<i>existing (to remain)</i>	<i>proposed (additional)</i>	
On-site Buildings or Lot BUA	2,349	SF	0	0	2,349	
On-site Streets	0	SF	0	0	0	
On-site Parking	4,028	SF	0	0	4,028	
On-site Sidewalks	1,192	SF	0	0	1,192	
Other on-site (HVAC & dumpster pad)	104	SF	0	0	104	
Future	0	SF	0	0	0	
Off-site	0	SF	0	0	0	
Total:		7,673	SF	0	0	7,673

Runoff Calculations (Simple Method per Section 2.4.4 of the Currituck County Stormwater Manual)					
	Pre (2 yr - 24 hr)	Post (5 yr - 24 hr)			
Design Rainfall Event (in)	4	5			
Total Area (sf)	19,378	19,378			
Coverage	0.0%	39.6%			
CN	30	63			
S	23.33	5.87			
Q	0.0196	1.5089	inches	Runoff Depth	
Vr	0.0007	0.0559	acre-feet	Runoff Volume	
Vs		89.07	cy	Required Storage Volume	
		2,405	cf		

**804 OCEAN TRAIL  
STORMWATER MANAGEMENT CALCULATIONS  
INFILTRATION BASIN DESIGN**

Project	<u>804 Ocean Trail</u>
Drainage Area	<u>Site</u>

<b><u>Infiltration Basin #1</u></b>		
	elevation (msl)	area (sf)
Storage Elevation:	10.0	1,006
Bottom of basin:	8.5	163
ESHWT Elev.:	6.5	(msl)
Permeability:	10.0	(in/hr)
Void Space:	20%	
Available Storage Volume:	877	(cf)
Interstitial Storage Volume:	529	(cf)

<b><u>Infiltration Basin #2</u></b>		
	elevation (msl)	area (sf)
Storage Elevation:	9.0	892
Bottom of basin:	7.9	450
ESHWT Elev.:	6.5	(msl)
Permeability:	10.0	(in/hr)
Void Space:	20%	
Available Storage Volume:	738	(cf)
Interstitial Storage Volume:	298	(cf)

**Required Storage Volume:      2,405              0**

Total Open Storage Volume:	1,615	
Total Interstitial Storage Volume:	<u>827</u>	
<b>Total Storage Volume:</b>	<b>2,442</b>	102%



# Rational Method Peak Flow Form SW-003

## Project Information

Project Location: 804 Ocean Trail, Corolla, NC

Parcel Identification Number(s): 116D000003B0000

Drainage area: 0.45 ac

Average Slope: 1.3 %

Maximum Slope Length: 137 ft

## Calculations

\*The Rational Method may only be used where development will impact less than 10 acres

<b>Time of Concentration (Tc)</b> (Use additional sheets if necessary)			
	<b>Pre-</b>	<b>Post-</b>	
<u>Sheet Flow</u>			
Manning's roughness, n (Table 2-4)	0.1	0.013	
2-year, 24-hour Rainfall, P	4.0	4.0	in
Slope, S	0.013	0.014	ft/ft
Length of Sheet Flow, L (<=300 feet)	137	70	ft
<b>Total Time for Sheet Flow</b>	<b>7.2</b>	<b>1.0</b>	<b>min</b>
<u>Shallow Concentrated Flow</u>			
	n/a	n/a	
Surface Paved (P) or Unpaved (U)			
Length of flow, L			ft
Slope, S			ft/ft
Average Velocity, V (Table 2-3)			ft/min
<b>Total Time for Shallow Concentrated Flow</b>	<b>n/a</b>	<b>n/a</b>	<b>min</b>
<u>Channel Flow</u>			
	n/a	n/a	
Pipe (P) or Channel (C)			
If pipe: Diameter, D			in
If channel: Bottom Width, w			ft
If channel: side slope 1 (__:1)			
If channel: side slope 2 (__:1)			
Cross sectional flow area, A			sq ft
Wetted perimeter, Wp			ft
Hydraulic radius, R = A/Wp			ft

Time of Concentration (Tc) (Use additional sheets if necessary)			
	Pre-	Post-	
Channel slope, S			ft/ft
Manning's roughness, n (Table 2-4)			
Channel velocity			ft/sec
Length of Flow, L			ft/sec
<b>Total Time for Channel Flow</b>	n/a	n/a	min
<b>Total Time of Concentration, Tc</b>	5.2	0.8	min

Pre-development Conditions			
Land Use Description	C	Area (acres)	C*A
Woods	0.2	0.45	0.09
<b>Total</b>			

Intensity for 2-year, 24-hour storm (Table 2-5)      0.156      in/hr

Pre-development peak flow, Q = CiA      0.014      cfs

Post-development Conditions			
Land Use Description	C	Area (acres)	C*A
Impervious Area (41% coverage)	0.95	0.18 ac	0.17
Open Space (59%)	0.25	0.27 ac	0.07
<b>Totals</b>		0.45 ac	0.24

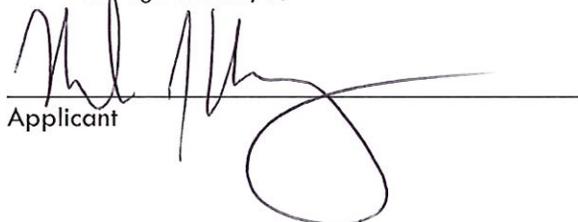
Area-weighted C:      0.54

Intensity for 10-year, 24-hour storm (Table 2-5)      0.239      in/hr

Post-development peak flow, Q = CiA      0.057      cfs

**Minimum Storage Volume Required – Refer to Section 2.4.4 for Volume Calculations**

Storage Volume, V<sub>s</sub>      2,405      ft<sup>3</sup>

  
Applicant

10/24/2023  
Date

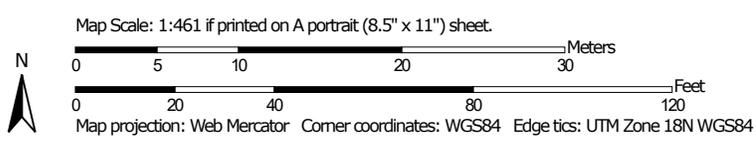
**Golasa Holdings, LLC  
804 Ocean Trail  
Soil Boring Log**

Soil Boring	
Depth	B-1
0" to 6"	tan fine sand
6" to 12"	tan fine sand
12" to 18"	tan fine sand
18" to 24"	tan fine sand
24" to 30"	tan fine sand
30" to 36"	tan fine sand
36" to 42"	tan fine sand
42" to 48"	tan fine sand
48" to 54"	tan fine sand (slight mottling & slightly moist)
54" to 60"	tan fine sand (slight mottling & slightly moist)
Soil Type	Newhan - Corolla Complex
Date of Boring	6/16/23
Ex. Ground Elevation (ft. above MSL)	10.5
Depth to ESHWT (in)	48
ESHWT Elevation	6.5
Depth to Water table (in)	60
Estimated Water table Elevation (ft)	5.5

Soil Map—Currituck County, North Carolina

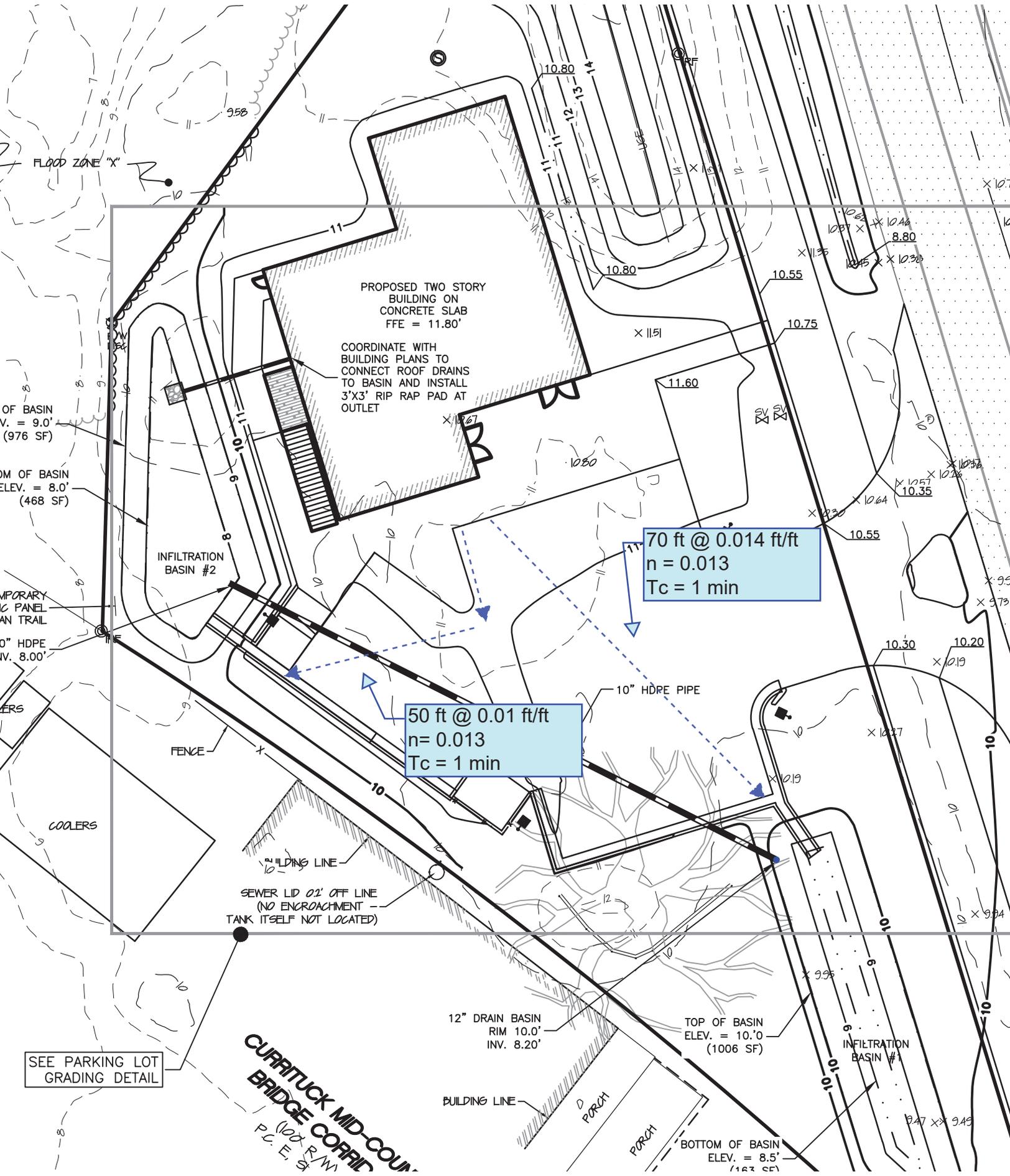


Soil Map may not be valid at this scale.



## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
NhC	Newhan-Corolla complex, 0 to 10 percent slopes	0.5	93.0%
Os	Osier fine sand	0.0	7.0%
<b>Totals for Area of Interest</b>		<b>0.5</b>	<b>100.0%</b>



PROPOSED TWO STORY  
BUILDING ON  
CONCRETE SLAB  
FFE = 11.80'

COORDINATE WITH  
BUILDING PLANS TO  
CONNECT ROOF DRAINS  
TO BASIN AND INSTALL  
3'X3' RIP RAP PAD AT  
OUTLET

70 ft @ 0.014 ft/ft  
n = 0.013  
Tc = 1 min

50 ft @ 0.01 ft/ft  
n = 0.013  
Tc = 1 min

INFILTRATION  
BASIN #2

OF BASIN  
V. = 9.0'  
(976 SF)

OM OF BASIN  
ELEV. = 8.0'  
(468 SF)

MPORARY  
C. PANEL  
AN TRAIL

0" HDPE  
V. = 8.00'

ERS

COOLERS

FENCE

BUILDING LINE

SEWER LID 0.2' OFF LINE  
(NO ENCROACHMENT -  
TANK ITSELF NOT LOCATED)

SEE PARKING LOT  
GRADING DETAIL

**CURRITUCK MID-COURT  
BRIDGE CORRIDOR**  
(100' R/W)  
P.C. E. ST

12" DRAIN BASIN  
RIM 10.0'  
INV. 8.20'

TOP OF BASIN  
ELEV. = 10.0'  
(1006 SF)

INFILTRATION  
BASIN #1

BUILDING LINE

PORCH

PORCH

BOTTOM OF BASIN  
ELEV. = 8.5'  
(163 SF)

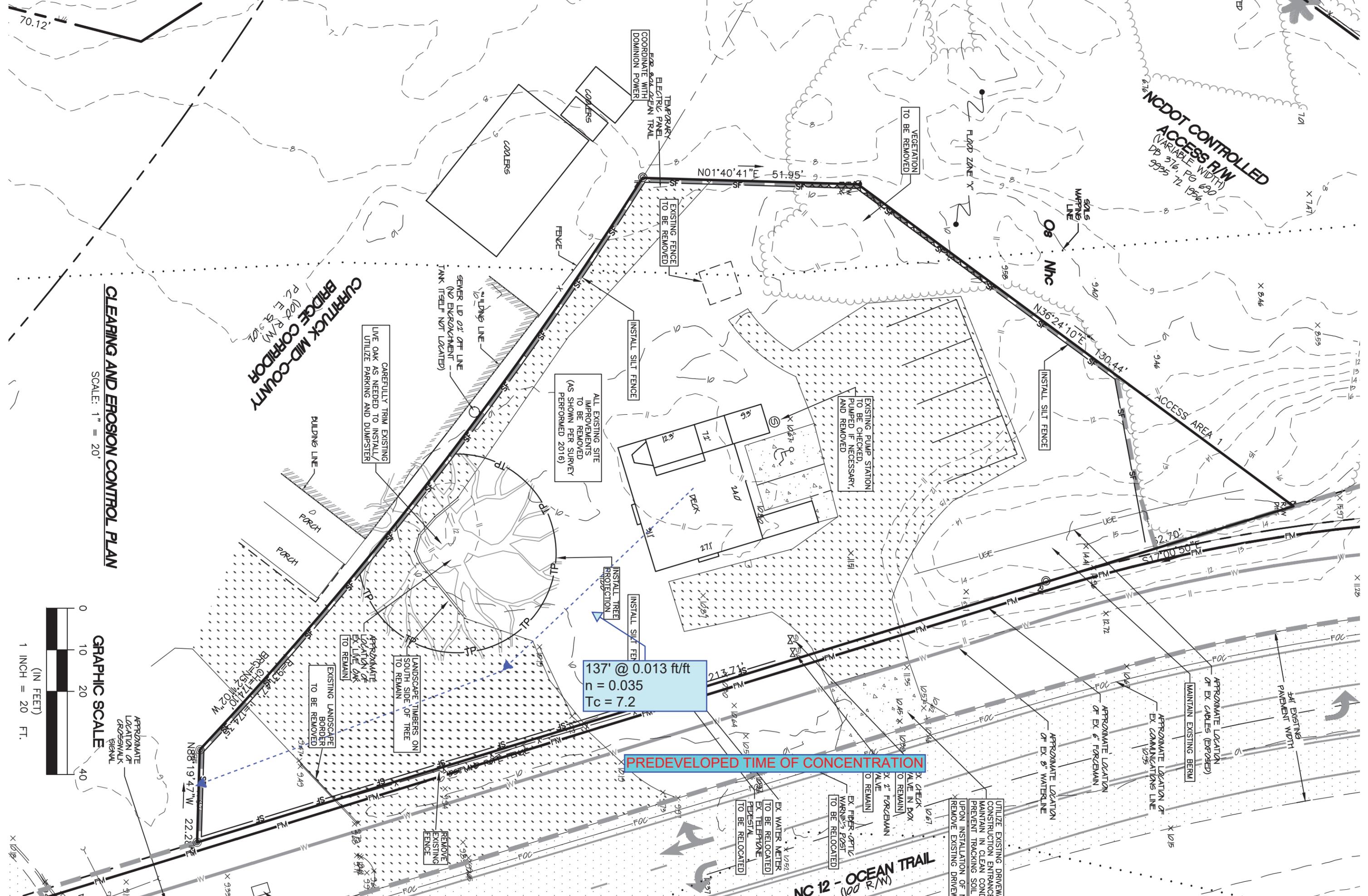
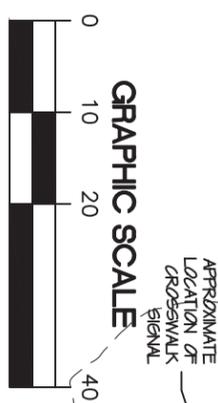
9.47 X 9.49

NCDOT CONTROLLED  
ACCESS RAW  
(VARIABLE WIDTH)  
DB 376, PG 630  
9935 72 156

# CLEARING AND EROSION CONTROL PLAN

SCALE: 1" = 20'

## CURRITUCK MID-COUNTY BRIDGE CORRIDOR



137' @ 0.013 ft/ft  
 $n = 0.035$   
 $T_c = 7.2$

PREDEVELOPED TIME OF CONCENTRATION

NC 12 - OCEAN TRAIL  
(60 R/W)

UTILIZE EXISTING DRIVEWAY  
CONSTRUCTION ENTRANCE  
MAINTAIN IN CLEAN CONDI  
PREVENT TRACKING OF SOIL  
UPON INSTALLATION OF NEW  
REMOVE EXISTING DRIVEWAY

EX WATER METER  
TO BE RELOCATED  
EX TELEPHONE  
REPEATER  
TO BE RELOCATED

EX CHECK  
VALVE IN BOX  
TO REMAIN  
EX 2" FOREMAN  
VALVE  
TO REMAIN  
EX FIBER OPTIC  
WARNING POST  
TO BE RELOCATED

SEWER LID 22" OFF LINE  
(NO ENCROACHMENT -  
TANK ITSELF NOT LOCATED)

ALL EXISTING SITE  
IMPROVEMENTS  
TO BE REMOVED  
(AS SHOWN PER SURVEY  
PERFORMED 2016)

CAREFULLY TRIM EXISTING  
LIVE OAK AS NEEDED TO INSTALL/  
UTILIZE PARKING AND DUMPSTER

TEMPORARY  
ELECTRIC PANEL  
FOR SOLAR PANEL TRAIL  
DOMINION POWER

VEGETATION  
TO BE REMOVED

INSTALL SILT FENCE

INSTALL SILT FENCE

INSTALL SILT FENCE

INSTALL TREE  
PROTECTION

EXISTING LANDSCAPE  
BORDER  
TO BE REMOVED

LANDSCAPE TIMBERS ON  
SOUTH SIDE OF TREE  
TO REMAIN

APPROXIMATE  
LOCATION OF  
EX-LIVE OAK  
TO REMAIN

APPROXIMATE LOCATION  
OF EX-CABLES (EXPOSED)

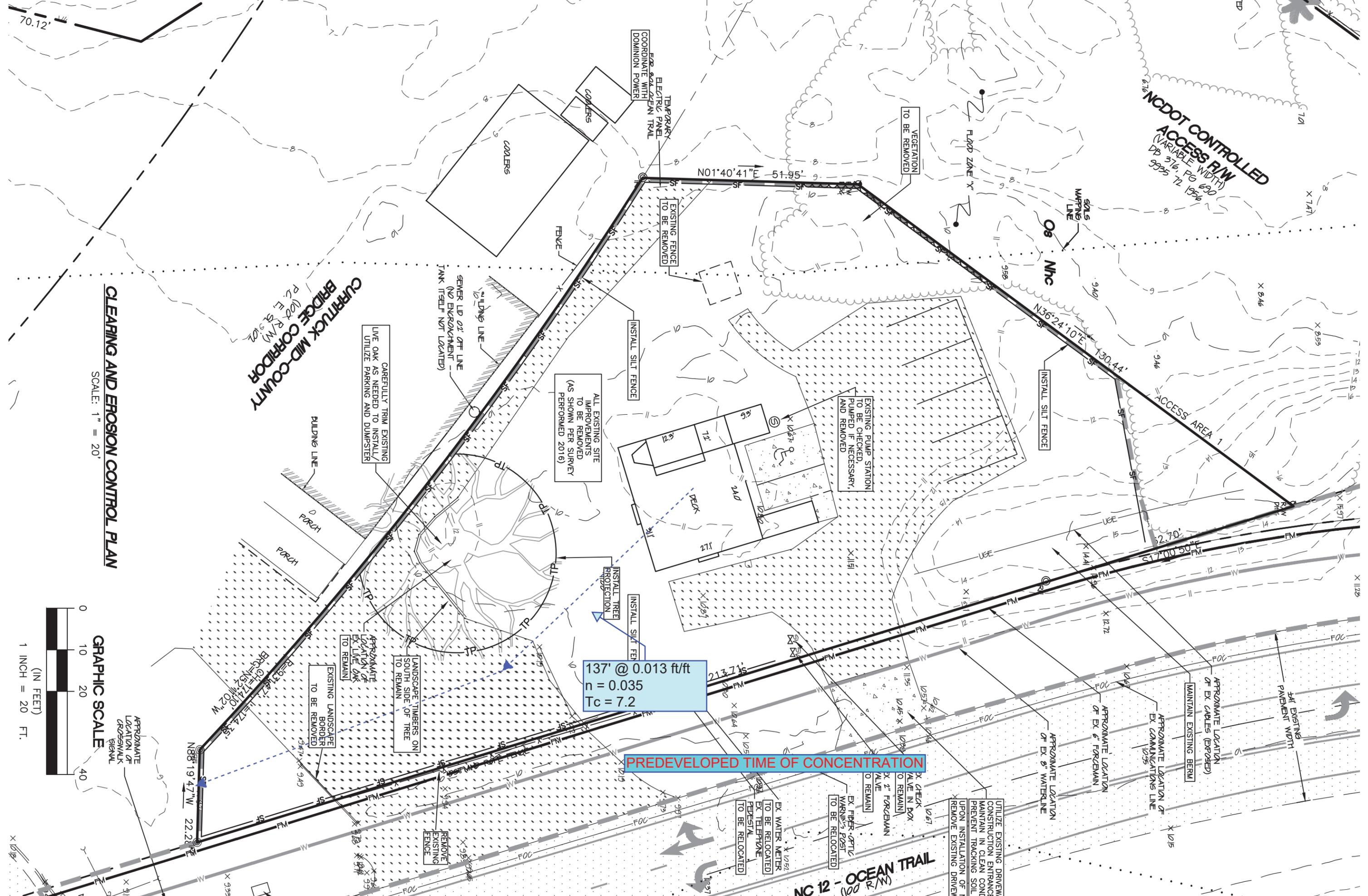
APPROXIMATE LOCATION OF  
EX-COMMUNICATIONS LINE

APPROXIMATE LOCATION  
OF EX-8" FOREMAN

APPROXIMATE LOCATION  
OF EX-8" WATERLINE

EXISTING  
PAVEMENT WIDTH

MAINTAIN EXISTING BERM





**SIGNATURES OF APPLICANT**

PROPERTY OWNER (APPLICANT)  
COMPANY Golasa Holdings, LLC  
SIGNATURE *Israe Golasa*  
ADDRESS 2229 S. Croatan Hwy, Nags Head, NC, 27959  
Phone No. 2524800009

WITNESS  
NAME *Wendy Ray*  
SIGNATURE *Wendy Ray*  
ADDRESS *PO Box 152*  
*Powells Point, NC 27960*

AUTHORIZED AGENT  
COMPANY Albemarle & Associates, Ltd  
SIGNATURE \_\_\_\_\_  
ADDRESS PO Box 2989, Kill Devil Hills, NC, 27948  
Phone No. 2524412113

WITNESS  
NAME \_\_\_\_\_  
SIGNATURE \_\_\_\_\_  
ADDRESS \_\_\_\_\_

**APPROVALS**

APPLICATION RECEIVED BY DISTRICT ENGINEER

\_\_\_\_\_  
SIGNATURE DATE

APPLICATION APPROVED BY LOCAL GOVERNMENTAL AUTHORITY (when required)

\_\_\_\_\_  
SIGNATURE TITLE DATE

APPLICATION APPROVED BY NCDOT

\_\_\_\_\_  
SIGNATURE TITLE DATE

INSPECTION BY NCDOT

\_\_\_\_\_  
SIGNATURE TITLE DATE

COMMENTS:

DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY ENCROACHMENT AGREEMENT FOR NON-UTILITY ENCROACHMENTS ON PRIMARY AND SECONDARY HIGHWAYS

-AND-

Golasa Holdings, LLC

THIS AGREEMENT, made and entered into this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the Department of Transportation, party of the first part; and Golasa Holdings, LLC party of the second part,

WITNESSETH

THAT WHEREAS, the party of the second part desires to encroach on the right of way of the public road designated as Route(s) NC-12, located on the west side of NC-12, just north of the intersection of NC-12 and Albecore St (SR-1402)

with the construction and/or erection of: approximately 340 lf of 10' wide multi-use path per Currituck County requirements and the relocation of the existing driveway for the redevelopment of 804 Ocean Trail in Corolla.

WHEREAS, it is to the material advantage of the party of the second part to effect this encroachment, and the party of the first part in the exercise of authority conferred upon it by statute, is willing to permit the encroachment within the limits of the right of way as indicated, subject to the conditions of this agreement;

NOW, THEREFORE, IT IS AGREED that the party of the first part hereby grants to the party of the second part the right and privilege to make this encroachment as shown on attached plan sheet(s), specifications and special provisions which are made a part hereof upon the following conditions, to wit:

That the said party of the second part binds and obligates himself to install and maintain the encroaching facility in such safe and proper condition that it will not interfere with or endanger travel upon said highway, nor obstruct nor interfere with the proper maintenance thereof, to reimburse the party of the first part for the cost incurred for any repairs or maintenance to its roadways and structures necessary due to the installation and existence of the facilities of the party of the second part, and if at any time the party of the first part shall require the removal of or changes in the location of the said facilities, that the said party of the second part binds himself, his successors and assigns, to promptly remove or alter the said facilities, in order to conform to the said requirement, without any cost to the party of the first part.

That the party of the second part agrees to provide during construction and any subsequent maintenance proper signs, signal lights, flagmen and other warning devices for the protection of traffic in conformance with the latest Manual on Uniform Traffic Control Devices for Streets and Highways and Amendments or Supplements thereto. Information as to the above rules and regulations may be obtained from the Division Engineer of the party of the first part.

That the party of the second part hereby agrees to indemnify and save harmless the party of the first part from all damages and claims for damage that may arise by reason of the installation and maintenance of this encroachment.

It is clearly understood by the party of the second part that the party of the first part will assume no responsibility for any damage that may be caused to such facilities, within the highway rights of way limits, in carrying out its construction and maintenance operations.

That the party of the second part agrees to restore all areas disturbed during installation and maintenance to the satisfaction of the Division Engineer of the party of the first part. The party of the second part agrees to exercise every reasonable precaution during construction and maintenance to prevent eroding of soil; silting or pollution of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces or other property; or pollution of the air. There shall be compliance with applicable rules and regulations of the North Carolina Division of Environmental Management, North Carolina Sedimentation Control Commission, and with ordinances and regulations of various counties, municipalities and other official agencies relating to pollution prevention and control. When any installation or maintenance operation disturbs the ground surface and existing ground cover, the party of the second part agrees to remove and replace the sod or otherwise reestablish the grass cover to meet the satisfaction of the Division Engineer of the party of the first part.

That the party of the second part agrees to assume the actual cost of any inspection of the work considered to be necessary by the Division Engineer of the party of the first part.

That the party of the second part agrees to have available at the encroaching site, at all times during construction, a copy of this agreement showing evidence of approval by the party of the first part. The party of the first part reserves the right to stop all work unless evidence of approval can be shown.

R/W (161A) : Party of the Second Part certifies that this agreement is true and accurate copy of the form R/W (161A) incorporating all revisions to date.

IN WITNESS WHEREOF, each of the parties to this agreement has caused the same to be executed the day and year first above written.

DEPARTMENT OF TRANSPORTATION

BY: \_\_\_\_\_

DIVISION ENGINEER

ATTEST OR WITNESS:

\_\_\_\_\_  
*Wendy Ray*  
\_\_\_\_\_  
*Wendy Ray*  
\_\_\_\_\_

\_\_\_\_\_  
*Israel Golasa*

\_\_\_\_\_  
*Israel Golasa*  
\_\_\_\_\_

\_\_\_\_\_  
Second Party

### INSTRUCTIONS

When the applicant is a corporation or a municipality, this agreement must have the corporate seal and be attested by the corporation secretary or by the empowered city official, unless a waiver of corporate seal and attestation by the secretary or by the empowered City official is on file in the Raleigh office of the State Utilities Manager. In the space provided in this agreement for execution, the name of the corporation or municipality shall be typed above the name, and title of all persons signing the agreement should be typed directly below their signature.

When the applicant is not a corporation, then his signature must be witnessed by one person. The address should be included in this agreement and the names of all persons signing the agreement should be typed directly below their signature.

This agreement must be accompanied, in the form of an attachment, by plans or drawings showing the following applicable information:

1. All roadways and ramps.
2. Right of way lines and where applicable, the control of access lines.
3. Location of the proposed encroachment.
4. Length and type of encroachment.
5. Location by highway survey station number. If station number cannot be obtained, location should be shown by distance from some identifiable point, such as a bridge, road, intersection, etc. (To assist in preparation of the encroachment plan, the Department's roadway plans may be seen at the various Highway Division Offices, or at the Raleigh office.)
6. Drainage structures or bridges if affected by encroachment.
7. Typical section indicating the pavement design and width, and the slopes, widths and details for either a curb and gutter or a shoulder and ditch section, whichever is applicable.
8. Horizontal alignment indicating general curve data, where applicable.
9. Vertical alignment indicated by percent grade, P.I. station and vertical curve length, where applicable.
10. Amount of material to be removed and/or placed on NCDOT right of way, if applicable.
11. Cross-sections of all grading operations, indicating slope ratio and reference by station where applicable.
12. All pertinent drainage structures proposed. Include all hydraulic data, pipe sizes, structure details and other related information.
13. Erosion and sediment control.
14. Any special provisions or specifications as to the performance of the work or the method of construction that may be required by the Department must be shown on a separate sheet attached to encroachment agreement provided that such information cannot be shown on