

April 26, 2023

Mr. Jason Litteral, CFM
Currituck County
Planning & Community Development
153 Courthouse Road, Suite 110
Currituck, North Carolina 27929

Re: Major Site Plan Application
Currituck Industrial Park, Lot 38
Powells Point, Currituck County, North Carolina

Mr. Litteral,

On behalf of Island Septic, Inc., Quible & Associates, P.C. hereby submits for your review the enclosed Major Site Plan application package for the subject referenced project located at 110 Greyson Loop, Powells Point, Currituck County.

The following documents are included and shall be considered part of this submittal package:

1. A review fee of \$688 (6,875 sf x \$0.10 per sf = 687.5 = \$688) made payable to "Currituck County"
2. Three (3) copies of the signed Major Site Plan Application with Major Site Plan Submittal Checklist;
3. Three (3) copies of the lighting specification cut sheets;
4. Three (3) copies of the Architectural Elevations & Floor Plan;
5. Three (3) copies of the Site Plan, including Landscaping;
6. Three (3) copies of the Site Narrative;
7. Three (3) copies of the signed SW-002 Form;
8. Three (3) copies of the NCRRS Fire Flow Calculations;
9. One (1) CD containing digital copies of all the documents and plans.

At your earliest convenience, please review and do not hesitate to contact me at (252) 491-8147 or ndashti@quible.com should you have any questions or require any additional information. Thank you for your attention to this project.

Sincerely,
Quible & Associates, P.C.



Nadeen Dashti, E. I.

Encl.: as stated
Cc: Island Septic, Inc.
File

WPA Series

LED Wall Pack Specifications

Project _____

Date _____ Type _____



Features

- 120-277 VAC
- L70 rated 50,000 hour lifetime
- IP65 rated water resistance
- 0-10 V dimming
- Full cutoff design
- Adjustable angle for precise aiming

Construction

Manufactured with a durable aluminum housing and polycarbonate lens.

Application

Easily replaces inefficient metal-halide fixtures such as those found in warehouses, parking lots and garages, gas stations, and other commercial and industrial spaces. These are also a great solution for entryways and other areas where good lighting is essential for security.

Output Equivalencies

WPA-xK12-W	50 W metal-halide
WPA-xK35-W	175W metal-halide
WPA-xK75-W	320 W metal-halide
WPA-xK120-W	400 W metal-halide

Warranty

Five (5) Year Warranty

Certifications and Compliances

These lights are UL Listed in compliance with UL 1598 (IFAM) and are listed as DLC Premium.



T 866.811.5550
 F 314.972.6202
 email: commercial-sales@superbrightleds.com
 www.superbrightleds.com/cat/industrial-led-lighting/

Available Models¹

3000K

- WPA-30K12-W
- WPA-30K35-W
- WPA-30K75-W
- WPA-30K120-W

5000K

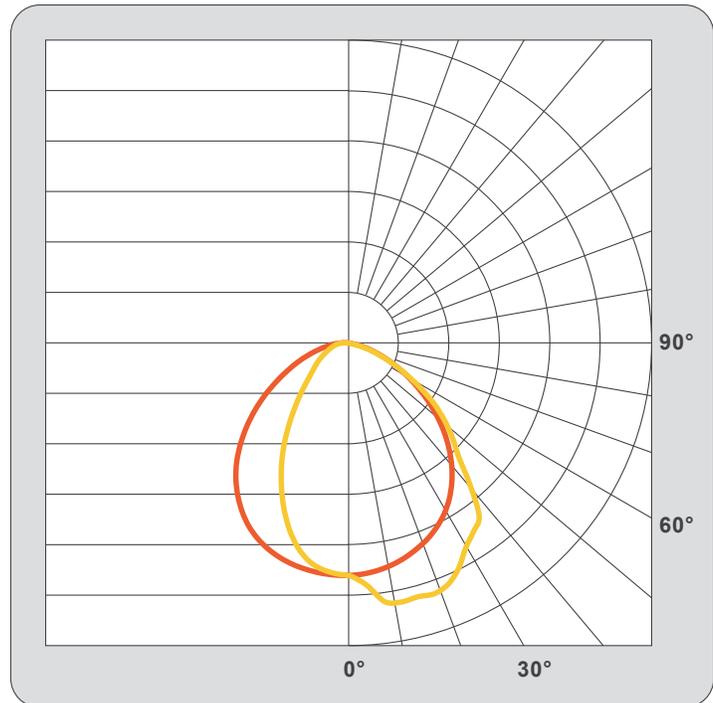
- WPA-50K12-W
- WPA-50K35-W
- WPA-50K75-W
- WPA-50K120-W

Part Number Breakdown

Example: WPA-50K75-W

Family	Color Temperature	Wattage
WPA	30K [3000K] or 50K [5000K]	12-W [12 W]
		35-W [35 W]
		75-W [75 W]
		120-W [120 W]

Photometrics - Beam Angle



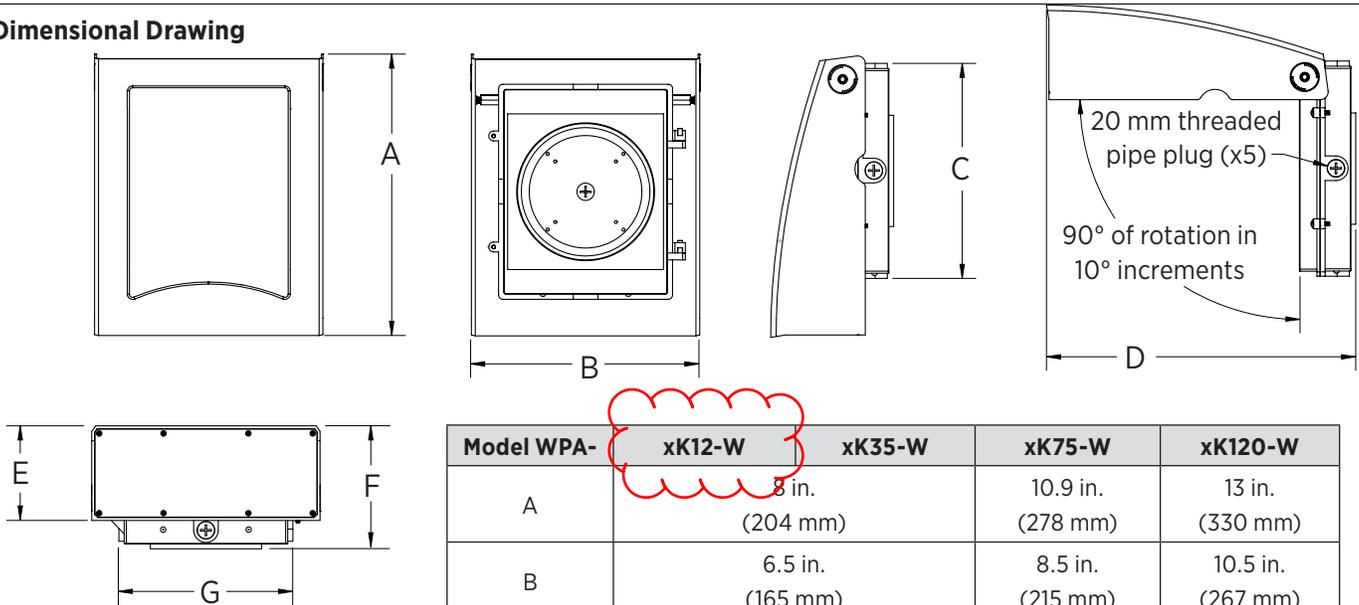
Additional model-specific photometric data available on site or upon request.

¹Contact customer service if interested in options other than those listed.

WPA Series

LED Wall Pack Specifications

Dimensional Drawing



Model WPA-	xK12-W	xK35-W	xK75-W	xK120-W
A	8 in. (204 mm)		10.9 in. (278 mm)	13 in. (330 mm)
B	6.5 in. (165 mm)		8.5 in. (215 mm)	10.5 in. (267 mm)
C	5.9 in. (150 mm)		8.2 in. (207 mm)	9.9 in. (251 mm)
D	8.9 in. (226 mm)		12.1 in. (306 mm)	14.2 in. (361 mm)
E	3.2 in. (81 mm)		4 in. (100 mm)	4.4 in. (110 mm)
F	4.1 in. (98 mm)		4.6 in. (114 mm)	5.1 in. (130 mm)
G	4.3 in. (108 mm)		6 in. (151 mm)	8 in. (202 mm)

Specifications

Model	WPA-xK12-W	WPA-xK35-W	WPA-xK75-W	WPA-xK120-W
Intensity	1,560 lm	4,550 lm	9,750 lm	15,600 lm
Operating Voltage	120-277 VAC			
Power Consumption	12 W	35 W	75 W	120 W
Current Draw	0.1 A @120 VAC	0.29 A @120 VAC	0.63 A @120 VAC	1 A @120 VAC
Efficacy	130 lm/W			
Color Temperature	3000K or 5000K (as ordered)			
Beam Angle	100° x 75° (NEMA 6 x NEMA 5)			
CRI	70+			
Dimming	0-10 V			
IP Rating	IP65			
Ambient Operating Temperature	-40°-122° F (-40°-50° C)			
Product Weight	3.2 lb (1.5 kg)		5 lb (2.3 kg)	7 lb (3.2 kg)
Rated Life (L70)	50,000 hours			

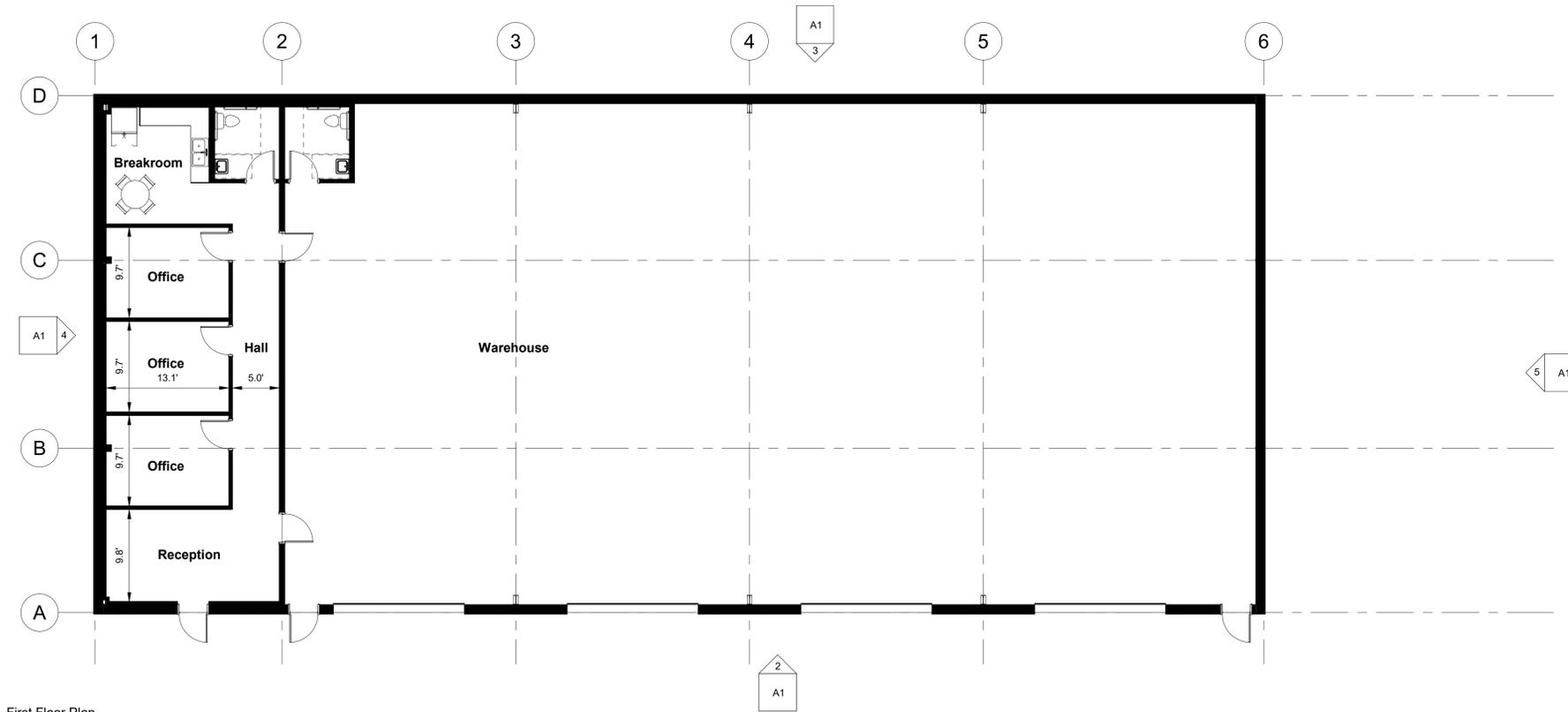
T 866.811.5550

F 314.972.6202

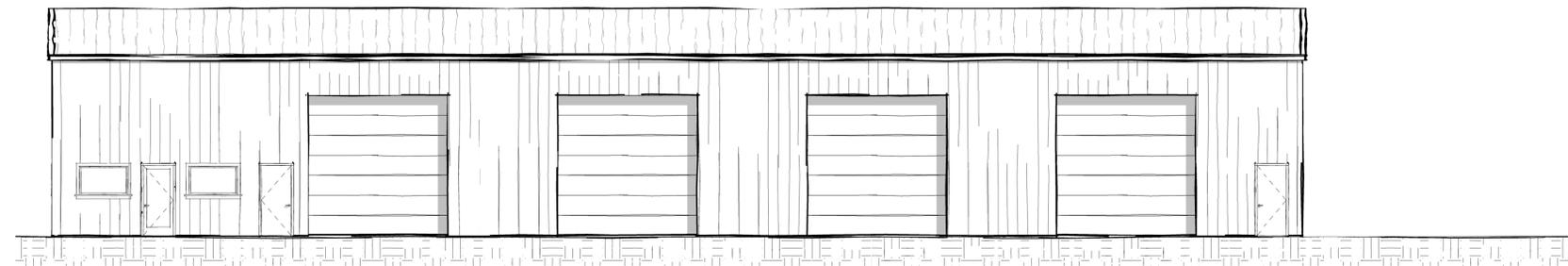
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/cat/industrial-led-lighting/

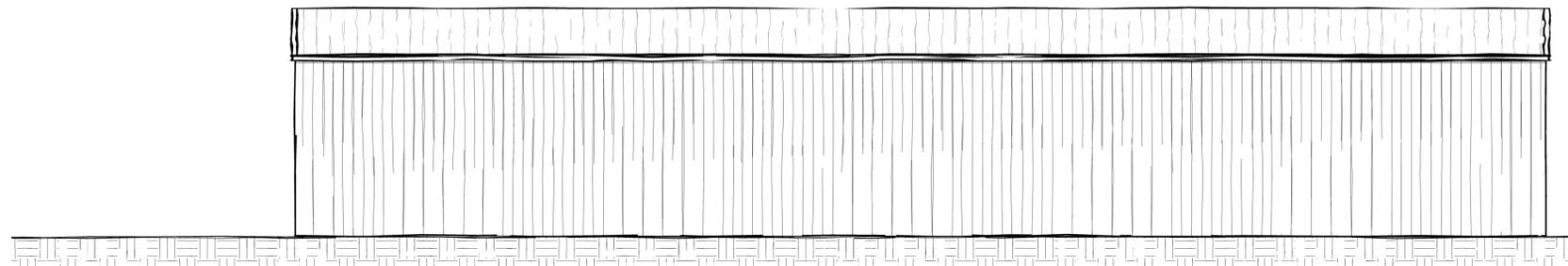




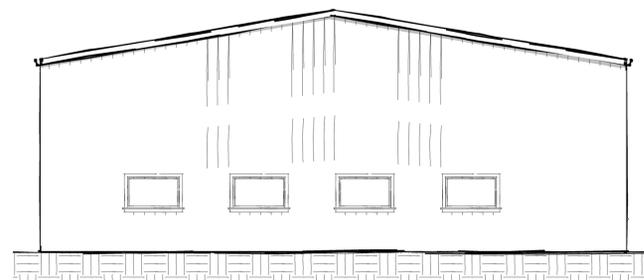
① First Floor Plan
1/8" = 1'-0"



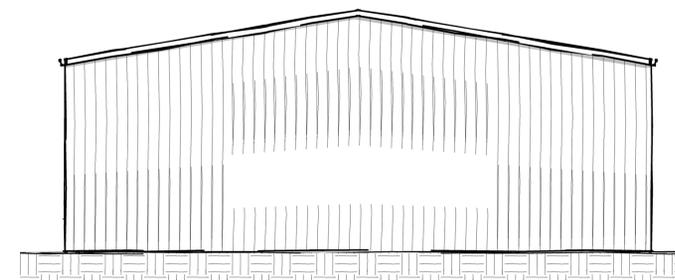
② South Elevation
1/8" = 1'-0"



③ North Elevation
1/8" = 1'-0"



④ West Elevation
1/8" = 1'-0"



⑤ East Elevation
1/8" = 1'-0"

Project: **Island Septic**

Project No: **23012**

Location: **110 Greyson Loop**

Powells Point, NC

Title: **Preliminary**

Date: **April 21, 2023**

Scale: **1/8" = 1'-0"**

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.

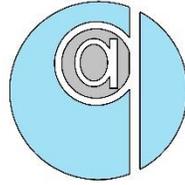


Revisions:

No.	Description	Date

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

A1



SITE PLAN NARRATIVE
110 Greyson Loop – Powells Point
Currituck County, North Carolina

Prepared for:
Island Septic, Inc.
5003 The Woods Rd
Kitty Hawk, NC 27949

Prepared by:
Quible & Associates, P.C.
PO Drawer 870
Kitty Hawk, NC 27949

April 26, 2023
P22207

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Overview

The subject property is located at 110 Greyson Loop, Powells Point, NC in Currituck County. The site development proposes the construction of a 6,875 sq. ft. Contractor Services building. The project development will include the associated parking and drainage improvements for the development of the 1.25 acre lot. The site is zoned Light Industrial (LI) and a Contractor Services building is a permitted use for this zoning.

Access

The proposed building will be accessed from Greyson Loop, a private right-of-way. At the entrance to the development and Greyson Loop, 20 ft by 20 ft. sight triangles are provided on the plan sheets to demonstrate visibility at the proposed intersection. This will allow for fire apparatus to come within 150' of all portions of the structure. The proposed pavement section is capable of withstanding 75,000 lbs and one existing fire hydrant is within 400' of the proposed site along Greyson Loop.

A temporary loading space is all that is required per Currituck County UDO, Section 5.1.8. as the building is less than 7,500 sq.ft., single story, and for industrial use. A 12'x30' temporary loading area has been shown on the plan.

Parking

The number of proposed parking spaces for the site development is eight. The proposed building is 6,875 sq. ft. Parking requirements are calculated using a similar use warehouse (storage). Calculations are based on 1 space per 2,500 sq ft. for storage area and 1 space per 300 sf for office space. Seven parking spaces are required for the contractor services building and eight have been provided (including 1 ADA accessible parking space).

Security lighting will be provided at the building as required, but additional parking lot lighting is not proposed.

Stormwater Management Plan

A regional stormwater management facility, Stormwater Area 'C', is located east of lot 38 on Greyson Loop. Therefore, onsite stormwater and stormwater permitting are not required. This development is proposed to have 58.46% of impervious coverage within the existing lot. The regional stormwater facility is designed to store, control, and treat the stormwater runoff from all surfaces generated by the one and one-half inch of rainfall.

Utilities

A water service is proposed to connect to the existing water meter within Greyson Loop. The hydrant at 109 Greyson Loop has a recorded fire flow of 1,146 at 20 psi residual pressure (per Currituck County GIS). The building will be designed for the Needed Fire Flow to be within the Available Fire Flow. Changes to the existing waterline within the private right-of-way is not proposed, therefore, a permit to construct from NC DEQ Public Water Supply is not required. The proposed water service shall be installed per Currituck County standard water specifications and details.

The proposed on-site wastewater is proposed to handle 150 gallons per day. This anticipated amount is based on 6 employees at 25 gpd/employee. An onsite evaluation has been

conducted with Albemarle Regional Health Services to determine acceptable site characteristics.

Buffers and Site Vegetation

All properties surrounding the subject parcel are zoned Light Industrial, therefore site buffers are not required adjacent to these properties. Site Landscaping and Vehicular Landscaping are provided on the plans, along with a Type D buffer adjacent to the proposed dumpster enclosure. The vehicular landscape buffer around the proposed parking lot will provide a minimum of 2" ACI canopy tree and 1 shrub per 5 ft. The Site Landscape buffer will provide 2 caliper inches of canopy tree per acre and 1 shrub per 5 ft.



Major Stormwater Plan Form SW-002

Review Process

Contact Information

Currituck County
Planning and Community Development
153 Courthouse Road, Suite 110
Currituck, NC 27929

Phone: 252.232.3055
Fax: 252.232.3026

Website: <http://www.co.currituck.nc.us/planning-community-development.cfm>

Currituck County
Engineering Department
153 Courthouse Road, Suite 302
Currituck, NC 27929

Phone: 252.232.6035

General

Major stormwater plan approval is required for:

- Major subdivisions.
- Major site plans - development or expansion on a nonresidential, multi-family, or mixed use lot by 5,000 square feet or more of impervious coverage or resulting in 10% or more total impervious coverage.

Step 1: Application Submittal

The applicant must submit a complete application packet consisting of the following:

- Completed Currituck County Minor Stormwater Plan Form SW-002 (unless submitting a major subdivision or major site plan).
- Completed Rational Method Form SW-003 or NRCS Method Form SW-004.
- Stormwater management plan drawn to scale. The plan shall include the items listed in the major stormwater plan design standards checklist.
- Alternative stormwater runoff storage analysis and/or downstream drainage capacity analysis, if applicable.
- NCDENR permit applications, if applicable.
- Number of Copies Submitted:
 - 3 Copies of required plans
 - 3 Hard copies of ALL documents
 - 1 PDF digital copy (ex. Compact Disk – e-mail not acceptable) of all plans AND documents.

On receiving an application, staff shall determine whether the application is complete or incomplete. A complete application contains all the information and materials listed above, and is in sufficient detail to evaluate and determine whether it complies with appropriate review standards. An application for major stormwater plan must be submitted and approved prior altering an existing drainage system, performing any land disturbing activity or, before construction documents are approved.

Step 2: Staff Review and Action

Once an application is determined complete staff shall approve, approve subject to conditions or disapprove the application.



Major Stormwater Plan Form SW-002

OFFICIAL USE ONLY:

Permit Number: _____

Date Filed: _____

Date Approved: _____

Contact Information

APPLICANT:

Name: Island Septic, Inc.

Address: 5003 The Woods Rd
Kitty Hawk, NC 27949

Telephone: 252-489-3366

E-Mail Address: jonyounts@gmail.com

PROPERTY OWNER:

Name: Same as Applicant

Address: _____

Telephone: _____

E-Mail Address: _____

Property Information

Physical Street Address: 110 Greyson Loop, Powells Point NC, 27966

Parcel Identification Number(s): 123E00000380000

FEMA Flood Zone Designation: X

Request

Project Description: Contractor Services

Total land disturbance activity: 43,350 SF sf Calculated volume of BMPs: _____ sf

Maximum lot coverage: 35,392.5 SF sf Proposed lot coverage: 31,831 sf

TYPE OF REQUEST

- Major subdivision (10-year, 24-hour rate)
- Major site plan (5-year, 24-hour rate)

METHOD USED TO CALCULATE PEAK DISCHARGE

- Rational Method
- NRCS Method (TR-55 and TR-20)
- Simple volume calculation for small sites (less than 10 acres)
- Alternative stormwater runoff storage analysis
- Downstream drainage capacity analysis

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



Property Owner(s)/Applicant

April 18, 2023

Date

Major Stormwater Plan Design Standards Checklist

The table below depicts the design standards of the major stormwater plan application. Please make sure to include all applicable listed items to ensure all appropriate standards are reviewed.

Major Stormwater Plan Design Standards Checklist

Date Received: _____

Project Name: Lot 38, Currituck Industrial Park

Applicant/Property Owner: Island Septic, Inc.

Minor Stormwater Plan Design Standards Checklist		
General		
1	Property owner name and address.	✓
2	Site address and parcel identification number.	✓
3	North arrow and scale to be 1" = 100' or larger.	✓
Site Features		
4	Scaled drawing showing existing and proposed site features: Property lines with dimensions, acreage, streets, easements, structures (dimensions and square footage), fences, bulkheads, septic area (active and repair), utilities, vehicular use areas, driveways, and sidewalks.	✓
5	Approximate location of all designated Areas of Environmental Concern (AEC) or other such areas which are environmentally sensitive on the property, such as Maritime Forest, CAMA, 404, or 401 wetlands as defined by the appropriate agency.	N/A
6	Existing and proposed ground elevations shown in one foot intervals. All elevation changes within the past six months shall be shown on the plan.	✓
8	Limits of all proposed fill, including the toe of fill slope and purpose of fill.	N/A
9	Square footage of all existing and proposed impervious areas (structures, sidewalks, walkways, vehicular use areas regardless of surface material), including a description of surface materials.	✓
10	Existing and proposed drainage patterns, including direction of flow.	✓
11	Location, capacity, design plans (detention, retention, infiltration), and design discharge of existing and proposed stormwater management features.	✓
12	Elevation of the seasonal high water level as determined by a licensed soil scientist.	✓
13	Plant selection.	✓
Permits and Other Documentation		
14	NCDENR stormwater permit application (if 10,000sf or more of built upon area).	✓
15	NCDENR erosion and sedimentation control permit application (if one acre or more of land disturbance).	✓
16	NCDENR coastal area management act permit application, if applicable.	✓
17	Stormwater management narrative with supporting calculations.	✓
18	Rational Method Form SW-003 or NRCS Method Form SW-004	✓
19	Alternative stormwater runoff storage analysis and/or downstream drainage capacity analysis, if applicable	✓
20	Design spreadsheets for all BMPs (<i>Appendix F – Currituck County Stormwater Manual</i>).	✓
21	Detailed maintenance plan for all proposed BMPs.	✓

Certificate

22 The major stormwater plan shall contain the following certificate:

I, Nadeen Dashedi, owner/(Agent) hereby certify the information included on this and attached pages is true and correct to the best of my knowledge.

On the plan entitled Island Septic Facilities, stormwater drainage improvements shall be installed according to these plans and specifications and approved by Currituck County. Yearly inspections are required as part of the stormwater plan. The owner is responsible for all maintenance required. Currituck County assumes no responsibility for the design, maintenance, or performance of the stormwater improvements.

Date: 04/26/2023 Owner (Agent): ~~NA~~ Nadeen

Major Stormwater Plan Submittal Checklist

Staff will use the following checklist to determine the completeness of your application. Please make sure all of the listed items are included. Staff shall not process an application for further review until it is determined to be complete.

Major Stormwater Plan Form SW-002 Submittal Checklist

Date Received: _____

Project Name: Lot 38, Currituck Industrial Park

Applicant/Property Owner: Island Septic, Inc.

Major Stormwater Plan Form SW-002 Submittal Checklist

1	Completed Major Stormwater Plan Form SW-002	7
2	Completed Rational Method Form SW-003 or NRCS Method Form SW-004	N/A
3	Stormwater plan	7
4	NCDENR permit applications, if applicable	N/A
5	3 copies of plans	7
6	3 hard copies of ALL documents	7
7	1 PDF digital copy of all plans AND documents (ex. Compact Disk – e-mail not acceptable)	7

Comments

FIRE & RESCUE			Page 1/3																					
ISO Fire Flow Worksheet																								
Needed Fire Flow Work Sheet (ISO formulas)			NFF = (Ci)(Oi)(Xi+Pi) C=18F(Ai)^0.5																					
Address:	110 Greyson Loop, Powells Point, NC																							
Project Name:	Island Septic	Occupancy Type:	contractor																					
Construction Type:	Metal	Number of Stories:	1																					
<p>STEP 1 Take the area, which is 100% sq. ft. of the first floor plus the following percentage of the total area of the other floors.</p> <p>First Floor Area in Sq. Ft 6875 Sq. Ft. @ 100%</p> <p>Additional Floors Enter total area in sq. ft for all other floors 1100</p> <p>Total Area Entire Building 7425</p>																								
<p>STEP 2</p> <p>F = Coefficient related to the class of construction as determined by using the construction type found in SBCCI</p> <table border="1" style="width: 100%; border-collapse: collapse; margin: 10px 0;"> <thead> <tr> <th style="text-align: left;">Construction Type</th> <th style="text-align: center;">Class</th> <th style="text-align: center;">F Value</th> </tr> </thead> <tbody> <tr><td>Frame</td><td style="text-align: center;">1</td><td style="text-align: center;">1.5</td></tr> <tr><td>Joist Masonry</td><td style="text-align: center;">2</td><td style="text-align: center;">1</td></tr> <tr><td>Non-combustible</td><td style="text-align: center;">3</td><td style="text-align: center;">0.8</td></tr> <tr><td>Heavy Timber</td><td style="text-align: center;">4</td><td style="text-align: center;">0.8</td></tr> <tr><td>Modified fire resistance</td><td style="text-align: center;">5</td><td style="text-align: center;">0.6</td></tr> <tr><td>Fire resistive</td><td style="text-align: center;">6</td><td style="text-align: center;">0.6</td></tr> </tbody> </table> <p>Construction Class 3</p> <p>Square Root of the Area x F x 18 1250 = C Value</p>				Construction Type	Class	F Value	Frame	1	1.5	Joist Masonry	2	1	Non-combustible	3	0.8	Heavy Timber	4	0.8	Modified fire resistance	5	0.6	Fire resistive	6	0.6
Construction Type	Class	F Value																						
Frame	1	1.5																						
Joist Masonry	2	1																						
Non-combustible	3	0.8																						
Heavy Timber	4	0.8																						
Modified fire resistance	5	0.6																						
Fire resistive	6	0.6																						

ISO Fire Flow Worksheet

Needed Fire Flow Work Sheet (ISO formulas)

STEP 3	Multiply result of rounded off GPM by the Occupancy Factor (Oi)	Occupancy Factor
	Noncombustible (C-1) = No active fuel loads such as storage of asbestos, clay, glass, marble, stone, or metal products.	0.75
	Limited - Combustible (C-2) = Limited fuel loads such as airports, apartments, art studios, auto repair, auto showroom, aviaries, banks, barber shops, beauty shops, churches, clubs, cold storage warehouses, day care center, educational occupancies, gas stations, green houses, health clubs, hospitals, jails, libraries, medical labs, motels, museums, nursing homes, offices, radio stations, recreation centers, and rooming houses.	0.85
	Combustible (C-3) = Moderate fuel loads such as auto part stores, auto repair training center, bakery, bookstores, bowling centers, casinos, commercial laundries, contractor equipment storage, dry cleaners with no flammable fluids, leather processing, municipal storage buildings, nursery sales stores, pavilions, pet shops, photographic supplies, printers, restaurants, shoe repair, supermarkets, theaters, vacant buildings, and most wholesale & retail sales occupancies.	1.0
	Free-Burning (C-4) = Active fuel loads such as aircraft hangers, cabinet making, combustible metals, dry cleaners using flammable fluids, feed stores, furniture stores, kennels, lumber, packaging and crating, paper products manufacturing, petroleum bulk distribution centers, tire manufacturers, tire recapping or retreading, wax products, and wood working shops.	1.15
	Rapid-Burning (C-5) = Contents that burn with great intensity, spontaneously ignite, have flammable or explosive vapors, or large quantities of dust such as ammunition, feed mills, fireworks, flammable compressed gases, flammable liquids, flour mills, highly flammable solids, matches, mattress factories, nitrocellulose-based products, rag storage, upholstery shops, & waste paper storage.	1.25
	Occupancy Class Selected (1 thru 5) 2	
	GPM x Oi 1062.5	

ISO Fire Flow Worksheet

Needed Fire Flow Work Sheet (ISO formulas)

STEP 4

Now consider the exposure factor (Xi) - (Separation between buildings)

Distance (feet to the exposed building)	Xi	>3 stories
0-10	0.22	0.47
11-30	0.18	0.43
31-60	0.13	0.38
61-100	0.09	0.34

Distance, in feet, to the exposed building

Xi (from table)

Multiply GPM from step 4 by (1+Xi)

Total From Step 4

STEP 5

Approved Fire Sprinkler System? (Y or N)

Take fire flow from step 5 and multiply by sprinkler credit of 0.25

Sprinkler credit

Now subtract sprinkler credit from fire flow in step 4

NEEDED FIRE FLOW

WATER SYSTEM AVAILABLE FIRE FLOW AT 20 PSI RESIDUAL
PRESSURE = 1146 GPM + 250 GPM APPARATUS = 1396 GPM AFF
1250 GPM NFF < 1396 GPM AFF

ALBEMARLE REGIONAL HEALTH SERVICES

391989

Applicant:

Quible & Associates
PO Drawer 870
Kitty Hawk, NC 27949

Owner:

Island Septic Inc
5003 The Woods Rd
Kitty Hawk, NC 27949

Site Location:

110 Greyson Loop
Powells Point, NC 27965

GPD: 150 **LTAR:** 0.600 **Classification:** Provisionally Suitable

If unsuitable, the site may be reclassified to provisionally suitable with the following modification(s):

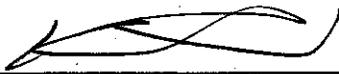
To obtain an Authorization to Construct:

- * Pay permit fee of \$225

Comments:

Trench bottom shall be set no deeper than 30 inches below grade to ensure separation between soil wetness condition and septic system.

EHS:



Carver, Kevin

Date: 03/29/2023

THIS APPROVAL WILL BECOME VOID AFTER 12 MONTHS AND A NEW APPLICATION WILL BE NECESSARY.

Bertie (252) 794-5303 Camden (252) 338-4460 Chowan (252) 482-1199 Currituck (252) 232-6603
Gates (252) 357-1380 Pasquotank (252) 338-4490 Perquimans (252) 426-2100