

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED

PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR INTENDED USE CHANGED

OPERATIONS PERMIT

PERMIT # WRP-058449-2021 **APPLICATION DATE:** 04/27/2021 **BLDG. PERMIT#:** RBPR-058447-2021
PIN: 1812611556 **RECORDED:** Yes
TOWNSHIP: 14 - New Light **JURISDICTION:** Wake County **ZONING:** R-40W
APPLICANT: ICG Homes LLC **BUSINESS PHONE:** (919) 876-5802
Ryan Perry **HOME PHONE:**
4020 Wake Forest RD Suite 306 **MOBILE PHONE:** (919) 302-4493
HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE **EXISTING USE:**
SITE ADDRESS: 1221 PERRY BLUFF DR
SUBDIVISION: Prescott Manor **LOT:** 10 **ACRES:** 0.69
DIRECTIONS: Stony Hill Rd. to Prescott Manor Way to Perry Bluff Dr.

Systems defined as either type III-b, III-g with a pump, IV, V or VI, in accordance with the North Carolina administrative code 15A NCAC 18a .1961, table V as adopted by reference in the "Regulations Governing Wastewater Treatment Dispersal Systems in Wake County", requires Wake County Environmental Services to conduct periodic inspections of the system type pursuant to 15A NCAC 18a. 1961 (j). Fees for these inspections will be charged as per the approved Fee Schedule. In addition, all systems are to be operated and maintained as specified in 15A NCAC 18A .1961. This permit is based in part on information provided by the homeowner and/or his/her representative in the application submitted for this permit. The Environmental Health Specialist is not responsible for false or misleading information contained in the application. The environmental health specialist is also not responsible for concealed conditions on the property or for statements in this report that may have resulted from false or misleading statements provided to him/her in the application. Neither Wake County nor the Environmental Health Specialist warrants that the septic tank system will continue to function satisfactorily in the future or that the water supply will remain potable.

OPERATION PERMIT VALID FOR: No Expiration

INSTALLED BY: BRANTLEY, CORY - 1036 - IV

PROPRIETARY SYSTEM: EZ1203HG - EZFlow EZ 1203H Geo **PRETREATMENT SYSTEM:**

SYSTEM TYPE INSTALLED: III B

OPERATION PERMIT: **STATUS:** Issued

ISSUED BY: Marlana Brown

ISSUED DATE: 12/13/2021

SEPTIC TANK: David Brantley & Sons - STB-323 - 1250 gallons **DATE OF MANUFACTURE:** 08/21/2021 **FILTER:** GAG SIM/TECH - STF-110

GREASE TRAP: **DATE OF MANUFACTURE:** **FILTER:**

DOSING PUMP TANK: Brantley - PT-2124 - 1312 gal - 21.5 gal/in **DATE OF MANUFACTURE:** 09/14/2021 **FILTER:**

CC1: 999,809 **ETM1:** 0 **CC2:** **ETM2:**

RECIRCULATION TANK: **DATE OF MANUFACTURE:**

CC1: **ETM1:** **CC2:** **ETM2:**

SEPTIC TANK ELEVATION: 1.95

GREASE TRAP ELEVATION:

DOSING PUMP TANK ELEVATION: 2.95

RECIRCULATION TANK ELEVATION:

DISTRIBUTION DEVICE ELEVATION: 6

INSTALLED TRENCH DEPTH	INSTALLED AGGREGATE DEPTH	INSTALLED TRENCH LENGTH	INSTALLED TRENCH BOTTOM ELEVATION
23	12	90	9.85
23	12	100	9.95
23	12	120	11.08
23	12	110	12.08

ACTUAL PRESSURE HEAD: 2

ACTUAL FLOW RATE: 39

ACTUAL DOSE VOLUME: 204

SPECIFIC OPERATION REQUIREMENTS:

-4 bedroom, 480gpd
-Pump CPES-5-Champion

ISSUED BY:



DATE: 12/13/2021



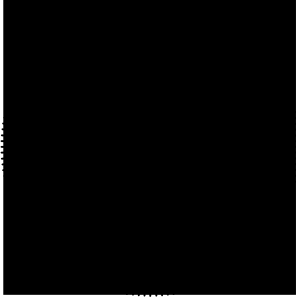
LOCATION MAP
1" = 1000'

NOTES:

- 1) The basis of North and all easements, right-of-ways, buffers, setbacks and adjoiners, etc., referenced from Book of Maps 2020, Pages 892-897 unless otherwise noted.
- 2) Surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence or any other facts that an accurate and current title search may disclose.
- 3) Contours shown referenced from Wake County GIS.

DRAWING INDEX

- C-01 SITE PLAN
- C-02 EROSION CONTROL PLAN
- C-03 QUAD & SOILS OVERLAYS
- D-03 thru D-14 EROSION DETAILS



Taylor
LAND CONSULTANTS, PLLC
License # P-0829
1600 Olive Chapel Rd., #140
Apex, NC 27502
(919) 801-1104

The purpose of this Plot Plan is to depict the proposed location of the house and drive on the subject property for building permit purposes only. No on-the-ground survey of the property boundaries has been performed by Taylor Land Consultants, PLLC. This is not a certified survey and cannot be used for any property conveyance or sale.

**SITE & EROSION CONTROL PLAN
LOT 10 - PRESCOTT MANOR
SUBDIVISION**
APRIL 20, 2021

SITE DATA

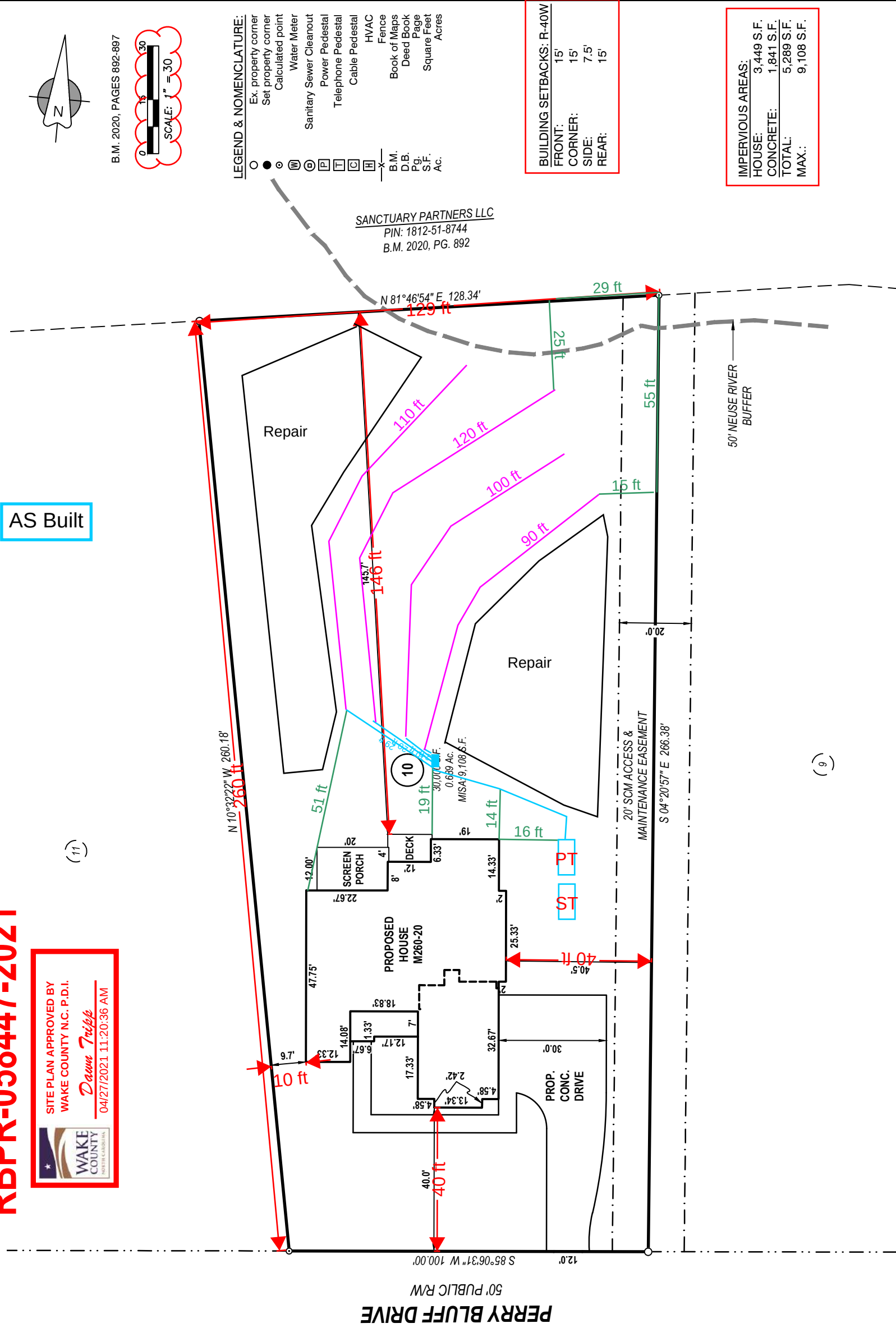
OWNER: SANCTUARY PARTNERS LLC.
ADDRESS: 1221 PERRY BLUFF DR
PIN: 1812-61-1556
SUBDIVISION: PRESCOTT MANOR
PLAT REF: BM 2020, PAGES 892-897
TOWNSHIP: NEW LIGHT

**SITE PLAN
C-01**

RBPR-058447-2021

SITE PLAN APPROVED BY
WAKE COUNTY N.C. P.D.I.
Dawn Triple
04/27/2021 11:20:36 AM

AS Built



BUILDING SETBACKS: R-40W	
FRONT:	15'
CORNER:	15'
SIDE:	7.5'
REAR:	15'

IMPERVIOUS AREAS:	
HOUSE:	3,449 S.F.
CONCRETE:	1,841 S.F.
TOTAL:	5,289 S.F.
MAX.:	9,108 S.F.

LEGEND & NOMENCLATURE:

- Ex. property corner
- Set property corner
- Calculated point
- ⊙ Water Meter
- ⊕ Sanitary Sewer Cleanout
- ⊖ Power Pedestal
- ⊗ Telephone Pedestal
- ⊘ Cable Pedestal
- ⊙ HVAC
- ⊖ Fence
- ⊗ Book of Maps
- ⊘ Deed Book
- ⊙ Page
- ⊖ Square Feet
- ⊗ Acres
- ⊘ B.M.
- ⊙ D.B.
- ⊖ Pg.
- ⊗ S.F.
- ⊘ Ac.

SANCTUARY PARTNERS LLC
PIN: 1812-51-8744
B.M. 2020, PG. 892

PERRY BLUFF DRIVE
50' PUBLIC RW

(11)

(9)



Environmental Services

TEL 919 856 7400
FAX 919 856 7407

Water Quality Division
336 Fayetteville St. • P.O. Box 550 • Raleigh, NC 27602

May 18, 2021

REQUIREMENTS TO COMPLETE YOUR PRESSURE MANIFOLD SYSTEM

NAME: ICG Homes LLC
ADDRESS: 4020 Wake Forest Rd Suite 306, Raleigh, NC 27609
Re: Wastewater Permit
SEPTIC PERMIT: WRP-058449-2021
PIN: 1812611556
Building Permit: RBPR-058447-2021
Property Description: Prescott Manor Lot 10, 0.69 Acres
Dear Sir/Madam:

Enclosed is your approved pressure manifold installation plan and the "Pressure Manifold Sewage Disposal System Maintenance Information Sheet".

To complete your permit:

System Installation - A contractor **CERTIFIED** by the State of North Carolina to at least a **LEVEL II** certification, and **REGISTERED** in Wake County, must be used to install your system.

A copy of the "Pressure Manifold Sewage Disposal System Maintenance Information Sheet" and a copy of the "Wake County Well and Septic System Owner's Guide", which contain information essential to the long-term performance of this wastewater disposal system, must be forwarded to the owner or user of the system, if other than yourself.

ANY PROPOSED MODIFICATION TO THE APPROVED PLANS MUST BE COORDINATED WITH YOUR SYSTEM DESIGNER

Please call (919) 856-7463 or email at bsmartin@wakegov.com if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Brett S Martin".

Brett S Martin, LSS, RS
Environmental Health Manager – Soil Scientist

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Raleigh, NC 27609

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Contractors shall install system on contour. See attached SITE PLAN for wastewater system design and well location. No underground utilities, water lines or sprinklers systems may be located in the original system, or permit areas. A septic tank filter with two risers for access is required. The wastewater system shall not be covered or placed into use until inspected by the Wake County Department of Environmental Services and Operations Permit issued. An Accepted Status System may be used in place of conventional system, if it can be placed in the permitted/authorized trench footprint (except reduction in line length and/or number as allowed for in approval) and the installation in accordance with the accepted system approval, without unauthorized product alteration. If permit required use of an Accepted Status System, substitution with another accepted status system may be made, as long as no changes are necessary in the location of each nitrifications line (including any increase in line length), trench depth or effluent distribution method. If changes are necessary, prior approval by this office is required before system installation. Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

CONSTRUCTION AUTHORIZATION PERMIT VALID FOR: Five Years**CONSTRUCTION AUTHORIZATION PERMIT: CA STATUS:** Issued**BY:** Brett Martin**DATE:** 05/18/2021**CA VALID FOR:** Five Years**DESIGN FLOW:** 480 GALLONS**BASEMENT:** No**BASEMENT FIXTURES:** No**SEPTIC TANK:** 1200 GALLONS**SEPTIC TANK FILTER:** Yes**DOSING PUMP TANK:** 1200 GALLONS**DOSING PUMP TANK FILTER:** No**GREASE TRAP:****GREASE TRAP FILTER:****RECIRCULATION PUMP TANK:****RECIRCULATION PUMP TANK FILTER:****PROPOSED SYSTEM:** 0.25 - 25% Reduction (Innovative or Accepted)**EXISTING SYSTEM:****DRAINFIELD SQ. FT:** 1,260**AGGREGATE DEPTH:** 12**MAX. TRENCH DEPTH:** 23 INCHES**DISTRIBUTION DEVICE:** PM - Pressure Manifold**TRENCH #:** 4**TRENCH LENGTH:****TRENCH WIDTH:** 36 INCHES**TOTAL TRENCH LENGTH:** 420 FEET

90,100,120,110 FEET

CENTER SPACING: 9 FEET**MINIMUM SOIL COVER:** 6 INCHES

PRETREATMENT:
SUBFIELDS #:
PUMP TDH: 12.54 FEET

APPROVAL #:
PUMP DESIGN FLOW: 39.81
ZONE VALVE: No

ASDMS REQUIRED: No
P.E. SIGN OFF/ASBUILT REQUIRED: No

LINE OF CREDIT REQUIRED: No

OPERATOR REQUIRED: No

TRIPARTY AGREEMENT REQUIRED: No

SPECIFIC CONSTRUCTION AUTHORIZATION REQUIREMENTS:

ACCEPTED STATUS SYSTEM REDUCTION HAS BEEN TAKEN FOR THE DESIGN OF THE INITIAL AND REPAIR SYSTEM FOR THIS 4 BEDROOM DWELLING. INITIAL SYSTEM IS A PRESSURE MANIFOLD SYSTEM PUMPING TO 4 UNEQUAL DRAINLINES WITH 23" TRENCH BOTTOM. REPAIR SYSTEM IS A PRESSURE MANIFOLD SYSTEM PUMPING TO 6 UNEQUAL DRAINLINES WITH 23" TRENCH BOTTOM. 1200 GALLON SEPTIC TANK AND 1200 GALLON PUMP TANKS ARE PROPOSED. FOUNDATION DRAIN ALLOWED. WHEN INSTALLING SYSTEM, MAINTAIN ALL REQUIRED SETBACKS. DO NOT DISTURB OR REMOVE ANY SOIL IN INITIAL OR REPAIR AREAS. MUST MAINTAIN REQUIRED EMERGENCY STORAGE IN THE PUMP TANK. A NEMA 4X CONTROL PANEL WITH TWO BREAKERS, TWO POWER SUPPLIES, ELAPSED TIME METER AND CYCLE COUNTER ARE REQUIRED. IF FLAGS ARE MISSING, CALL DESIGNER TO RE-FLAG.

THIS SYSTEM IS DESIGNED BY A CONSULTANT AND MUST BE INSTALLED PER THE APPROVED DESIGN, PLAN AND SPECIFICATIONS. ANY DEVIATION MUST BE APPROVED BY THE DESIGNER AND WAKE COUNTY ENVIRONMENTAL SERVICES PRIOR TO SYSTEM INSTALLATION. PLEASE CONTACT ENVIRONMENTAL SERVICES IF ANY QUESTIONS OR PROBLEMS ARISE PRIOR TO INSTALLATION. BRETT MARTIN 919-856-7463.

Issued By:

A handwritten signature in black ink, appearing to read "Brett Martin", is written over a light gray rectangular background.

Date: 05/18/2021

HOMEOWNER GUIDE FOR UTILIZATION AND MAINTENANCE OF ON-SITE WASTEWATER DISPOSAL SYSTEMS

What is an On-site Wastewater Disposal System?

There are a number of different types of on-site wastewater disposal systems each designed for a specific set of site conditions. However, there are several system components that are common to most systems. These include the following:

1. A septic tank - a concrete tank that is designed to receive wastewater from the house and to provide a degree of pretreatment for the waste, chiefly through removal of some of the solids in the waste. Note that these solids accumulate over time and necessitate periodic pumping of the septic tank. Currently septic tanks are equipped with two access risers (normally constructed of concrete), which are designed to be at least 6 inches above the ground surface to prevent surface and shallow groundwater from entering the septic tank and to provide access for maintenance. **Care must be taken not to damage or cover these risers so that water inflow / infiltration can be prevented and the tank can be accessed for maintenance.**
2. In some installations, a pump tank - a concrete tank, very similar to the septic tank, which contains a pump along with the associated controls / componentry. The pump tank and pump is designed to receive effluent from the septic tank, and pump the effluent to a disposal field located at a higher elevation and/or to a pressurized distribution network in the disposal field. **The pump tank also has an access riser which must be protected in a similar manner to that indicated for the septic tank.** Servicing of the pump tank components often necessitates the assistance of a professional such as a septic tank installer or Certified Subsurface System Operator. The latter is required for operation and maintenance of certain types of systems.
3. A disposal field - a series of subsurface trenches and lines that are designed to distribute the effluent into the soil and provide for the ultimate treatment and disposal of the effluent. There are numerous variations on the design of the disposal field, related chiefly to the type of system chosen, site constraints, etc. Dependent on the type of disposal system, you may have to maintain a contract with a Certified Subsurface System Operator for operation and maintenance of your wastewater disposal system.

Utilization of Your Wastewater Disposal System

In order to obtain the maximum efficiency and life expectancy from your system, the following simple procedures must be adhered to:

1. **Practice water conservation.** This can include many practical considerations such as not leaving the water running while you brush your teeth, not overfilling the tub, limiting time in the shower, not replacing low flow fixtures with those of higher flows, over rinsing dishes (allow the dishwasher to do its job), immediate repair of any leaking fixtures, running washing machines and dishwashers only when full, etc.

NOTE: Washing machines generate significant volumes of wastewater. As a result, laundry activities should be spread over the week as opposed to accumulating all of laundry until the weekend.

2. **Do not utilize your wastewater disposal system as a trash can by dumping nondegradables down your drains or toilet.** These include cigarette butts, sanitary products, grease, plastics, disposable diapers, etc. Avoid use of garbage disposals. Do not retrofit garbage disposals unless the system is specifically permitted for their use. Also, do not dump harmful chemicals down the drain. These include petroleum products, paint, paint thinner, pesticides, antifreeze, etc.

Maintenance of Your Wastewater Disposal System

Every wastewater disposal system requires maintenance in order to function properly. The specific maintenance required is related to the type of system. The following are general considerations that apply to all systems.

1. **Protect your wastewater disposal system components including the tanks, access risers, disposal field and associated components.** Do not drive or park on any portion of the system. The area over the disposal field should be left undisturbed with the grass cover being maintained as you would your lawn. Location of trees and shrubs on or in close proximity to the disposal field is not recommended since roots may clog or damage your drain lines. Additionally, great care must be exercised when considering the addition of any structure(s) to the site. The location of any appurtenances cannot encroach on the installation or repair areas for your system. It is not recommended that irrigation systems be located in proximity to the disposal system since their construction can cause system damage and/or result in additional hydraulic load on the disposal field.
2. **Protect the system from excess surface and shallow groundwater.** The land surface on and around the wastewater disposal system should be landscaped to shed rainfall and runoff and prevent ponding. Be sure that foundation drains, runoff from roofs and drives, etc. are diverted away from the disposal system.
3. **Regularly have the septic tank / pump tank pumped and cleaned by a permitted septage hauler.** Although the necessary frequency of pumping varies with the household and system, most tanks need **pumping at a frequency of 3-5 years** and at any time solids occupy one-fourth to one-third of the septic tank liquid depth.

Note that all septic tanks being currently installed incorporate an effluent filter within the outlet compartment of the septic tank. This filter is to be cleaned anytime the septic tank is pumped. If plumbing becomes sluggish, this filter should be checked. If filter service is found to be necessary, the tank is to be pumped, the filter cleaned and the filter reinstalled.

4. **Be alert to warning signs that your system may not be functioning properly.**
These include sewage surfacing over the disposal system, sewage backups / slow draining in the house, lush growth over the disposal system, sewage odors, etc.
5. **Do not make or allow repairs to your system unless all necessary permits are obtained from Wake County Department of Environmental Services.**
6. **Commercial additives for septic tank systems** - It has generally not been demonstrated that these additives enhance the function of septic systems or reduce the need for tank pumping and other necessary maintenance.
7. **Special maintenance considerations** - As already alluded to, some of the more complex wastewater disposal systems require that you retain / maintain the services of a Certified Wastewater System Operator in order to comply with Laws and Rules and maintain a valid operation permit for your system. In Wake County this maintenance requirement should be recorded with Register of Deeds if applicable.

Where Do I Obtain Information and Assistance?

If you are purchasing a new home, you should request a copy of your wastewater system permit from the builder / seller along with information regarding any special maintenance requirements. You may also obtain information and assistance from the **Wake County Department of Environmental Services**, 336 Fayetteville Street Mall, Raleigh, NC, Telephone (919) 856-7400. Additional information is also available on Wake County's [Septic and Wastewater Management](#) webpage.

BSM 3/9/21

NOTICE

PROTECTION OF WASTEWATER DISPOSAL AREAS

AREAS DESIGNATED FOR INSTALLATION AND REPAIR OF WASTEWATER DISPOSAL SYSTEMS ON WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES PERMITS MUST BE PROTECTED FROM ALL LAND DISTURBING ACTIVITIES.

PROHIBITED ACTIVITIES (NOT ASSOCIATED WITH THE INSTALLATION OF THE WASTEWATER DISPOSAL SYSTEM) INCLUDE BUT MAY NOT BE LIMITED TO:

- **CLEARING**
- **EXCAVATION**
- **FILLING**
- **GRADING**
- **STORAGE OF BUILDING MATERIALS**
- **VEHICLE OR EQUIPMENT TRAFFIC**

THE PERMITTEE IS ADVISED TO CLEARLY FLAG OR FENCE THESE AREAS DURING CONSTRUCTION TO PREVENT UNAUTHORIZED ACTIVITIES.

FAILURE TO PROTECT WASTEWATER DISPOSAL AREAS WILL LIKELY RESULT IN VOIDING OF PERMITS AND LOSS OF ABILITY TO UTILIZE THE SITE FOR THE DESIRED PURPOSE.

IF YOU HAVE A QUESTION REGARDING ANY OF THE AFOREMENTIONED ACTIVITIES, CALL WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES (856-7400) BEFORE YOU ACT.



Environmental Services

TEL 919 856 7400
FAX 919 743 4772

Water Quality Division
336 Fayetteville Street • Raleigh, NC 27602
www.wakegov.com

PRESSURE MANIFOLD SYSTEMS

A Pressure Manifold System is one of several types of septic systems approved for use in Wake County. The Pressure Manifold System, while somewhat more expensive to install, is a flexible and high-quality method of wastewater disposal. A pump doses a pressure distribution manifold that disperses the effluent evenly to each trench. Dosed systems are more common for larger flows. The manifold can be constructed with different size taps to accommodate different trench lengths. This allows for better utilization of the area on the lot. The pressure manifold can include valves or plugs that permit more control over trench loading or trench resting.

Experience and study have shown that pressure manifold systems require routine maintenance in order to function properly. Items 1, 4 and 6 are also recommended for conventional septic systems. The maintenance schedule frequency is as follows:

<u>System Component</u>	<u>Frequency</u>	<u>Maintenance</u>
1. Septic Tank	6-12 months 1-3 years	Check riser condition (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation. Check and clean septic tank filter. Pump septage when 1/3 to 1/4 of the liquid capacity of the tank is occupied by solids.
2. Pump or Dosing Tank	6-12 months	Check riser conditions (must be accessible from ground surface), excess in/exfiltration, entry of water at riser, and solids accumulation. Pump sludge accumulation as required and when septic tank is pumped. Check pump(s), controls, floats, electrical connections, and alarm for proper operation. Wash (hose) sludge accumulation from pump housing.
3. Supply lines (Manifold)	6-12 months	Check for settling, pipe exposure and leakage.
4. Ground Absorption Field	1-4 weeks 6-12 months	Maintain vegetative cover (mow grass and remove weeds and brush). Check for settling, erosion and surfacing of effluent. Check site drainage, eliminate low or settled areas and divert surface or shallow groundwater movement around fields.
5. Pressure Manifold	6-12 months	Flush sludge from pressure manifold (any discharge sludge and effluent is to be treated with a chlorine solution). Check and reset pressure head.
6. General	At all times	Prohibit vehicular or equipment traffic on ground absorption field. Prohibit tillage (gardening) or other soil disturbance over ground absorption field. Practice water conservation to reduce wastewater load on system. Do not permit entry of grease and non-domestic waste to system. Use of a garbage disposal is <u>prohibited</u> . Addition of chemical or biological additives has <u>not been demonstrated</u> to be necessary to maintain proper system function. Prevention of root intervention on lateral lines and trenches may be necessary on certain sites. Surface and groundwater diversion structures must be maintained.

A certified operator may be required.

RBPR-058447-2021

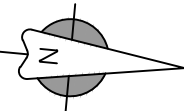


SITE PLAN APPROVED BY

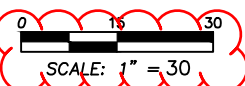
WAKE COUNTY N.C. P.D.I.

Dawn Tripp

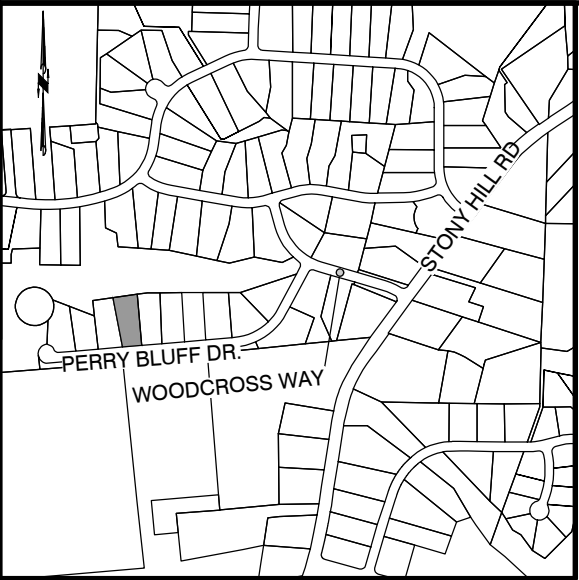
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B.M. 2020, PAGES 892-897



SCALE: 1" = 30'



LOCATION MAP
1" = 1000'

NOTES:

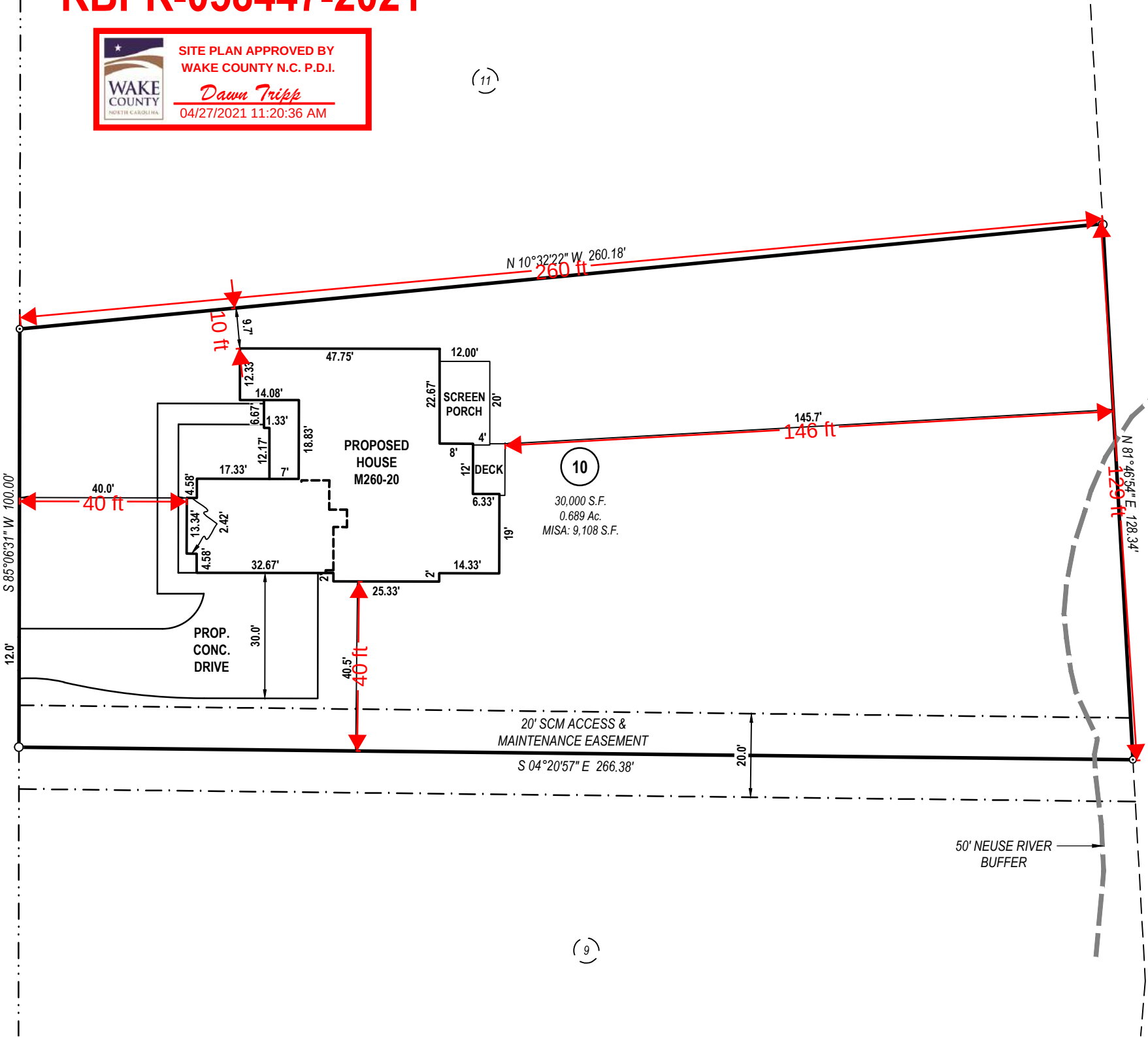
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PERRY BLUFF DRIVE
50' PUBLIC R/W



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TAYLOR

LAND CONSULTANTS, PLLC

License # P-0829

1600 Olive Chapel Rd., #140

Apex, NC 27502

(919) 801-1104

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SUBDIVISION
APRIL 20, 2021

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PLAT REF:	BM 2020, PAGES 892-897
TOWNSHIP:	NEW LIGHT

SITE PLAN
C-01

System: Pressure Manifold
 Lines: 4-7, (420')
 0.3 Soil LTAR

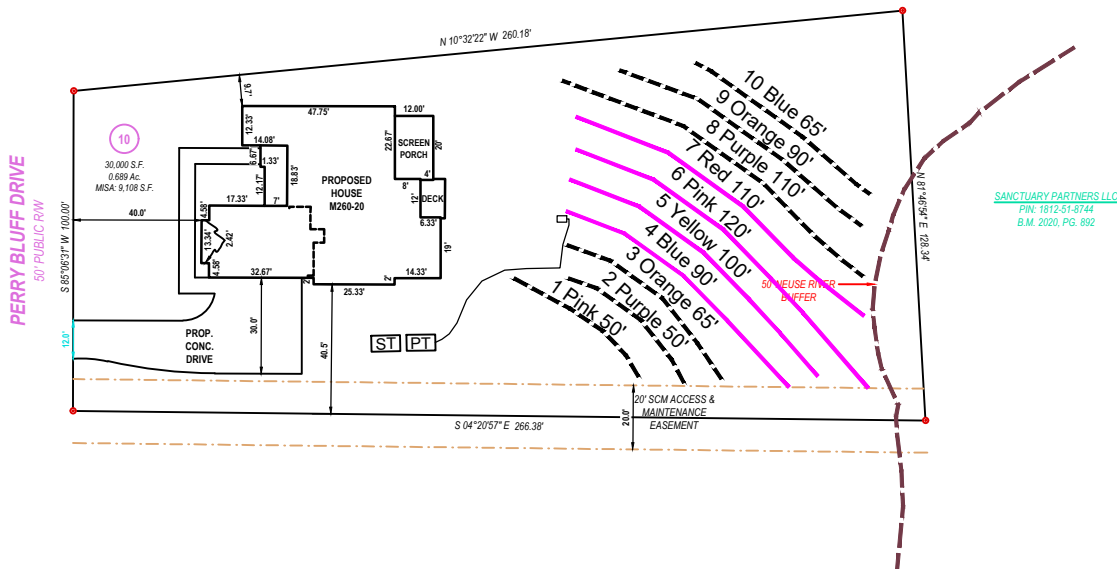
Accepted Status System

Repair: Pressure Manifold
 Lines: 1-3, 8-10, (430')
 0.3 Soil LTAR

Accepted Status System

4-Bedroom Septic Site Plan

System: 
 Repair: 



SANCTUARY PARTNERS LLC
 PIN: 1812-51-8741
 B.M. 2020, PG. 092

GRAPHIC SCALE
 1" = 60'



- *Keep Tanks and Drain lines 10' from property lines.
- *Not a Survey
- *Not a guarantee of a septic permit.
- *Keep supply lines >5' from property lines.
- *Some lines are flagged longer in the field than lengths indicated above.



Central Carolina Soil Consulting, PLLC
 1900 South Main Street, Suite 110
 Wake Forest, North Carolina 27587
 Phone (919)569-6704 Fax (919)569-6703

Septic Site Plan
 Lot 10 Prescott Manor Subdivision
 Wake County, North Carolina

Job# : 3767
 Drawn By : AH
 Date : 04/16/2021
 Revision:

CA Part C

Pressure Manifold
Septic System Design

for

Prescott Manor Lot 10
Raleigh, North Carolina

Designed by:

Aaron Holder
Central Carolina Soil Consulting, PLLC
Wake Forest, North Carolina



Department of Environmental Services
Wake County

Approved by

A handwritten signature in black ink, appearing to read "Brett S. Martin".

Date: 05/17/2021

Review of this document has been made only for conformance with the design concept of the project and approval shall not relieve the designer and/or contractor from responsibility for any errors therein or for furnishing the materials, and equipment of proper dimension, size, quantity, quality and all performance characteristics to meet the requirements and intent of the contract documents.

5/12/2021

Prescott Manor Lot 10
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Prescott Manor Lot 10
Contact Information

Client: ICG Homes
Attn: Ryan Perry
Street Address:

Phone: 919-291-0777
Email:

Designer: Central Carolina Soils Consulting
Attn: Jason Hall
Street Address: 1900 Main Street Suite 110
Wake Forest, NC 27587
Phone: 919-569-6704
Cell: 919-422-2827

Prescott Manor Lot 10
Layout/Design Specifications

Facility Type:	Single Family Home
# of Bedrooms:	4
Daily Flow:	480 gal/day
L.T.A.R.:	0.30 gal/day/sq.ft
Trench Depth:	per WCDES in
Trench Width:	36 in
Stone Depth:	Ezflow in
Manifold Length:	42 in
Manifold Diameter:	4 in sch 80pvc
Supply Line Length:	67 ft
Supply Line Diameter:	2 in sch 40pvc
Total Supply Line Volume:	11.66 gallons
Friction Loss + Fitting Loss:	5.14 ft includes 70' for fittings in tank and 25% for line fittings
Design Head:	2 ft
Elevation Head:	5.40 ft
Total Head:	12.54 ft
Dose Volume:	205.00 gals
% of Pipe Vol.	.75
Drawdown:	10.4 in @ 19.65 gal/in
Pump Run Time:	5.1 Mins
Control Panel:	SJE Rhombus Model112 control panel (or approved equivalent)
Pump:	Zoeller 98 Flow-Mate (or approved equivalent)
Septic Tank Effluent Filter:	Zoeller 170-0144 residential effluent filter (or approved equivalent)
Septic Tank:	Brantley 1,250 Gallon ST 323
Pump Tank:	Brantley 1,200 Gallon PT 463

Prescott Manor Lot 10 TAP CHART

Bench Mark		Elevation Head							5.40
Pump tank elev.		2.00	97.00 <th>Pump elev.</th> <td>91.60</td> <th colspan="3">Manifold elev.</th> <td>94.70</td>	Pump elev.	91.60	Manifold elev.			94.70
line	color	rod read	Elevation	length	hole size	flow/tap	gal/day	trench area	LINE LTAR
4	Blue	6.30	93.70	90	1/2in SCH 40	7.11	85.73	270	0.3175
5	Yellow	7.30	92.70	100	3/4in SCH 80	10.1	121.78	300	0.4059
6	Pink	8.20	91.80	120	3/4in SCH 40	12.5	150.72	360	0.4187
7	Red	9.3	90.70	110	3/4in SCH 80	10.1	121.78	330	0.3690
		total	feet =	420	gal/min =	39.81	LTAR =		0.3000
							LTAR + %5		0.3150
% of Dose Vol.		75	Des. Flow		480	(ltar W/ INOV)		0.4000	
Dose Volume		205.00	Pump Run=		12.06	(ltar W/ INOV + 5%)		0.4200	
Dose Pump Time		5.10	Tank Gal/IN		19.65				
Drawdown in Inches		10.40							

Prescott Manor Lot 10 Repair TAP CHART

Bench Mark		Elevation Head							5.40
Pump tank elev.		2.00	97.00 <th>Pump elev.</th> <td>91.60</td> <th colspan="3">Manifold elev.</th> <td>97.10</td>	Pump elev.	91.60	Manifold elev.			97.10
line	color	rod read		length	hole size	flow/tap	gal/day	trench area	LINE LTAR
1	Pink	3.90	96.10	50	1/2in SCH 80	5.48	55.05	150	0.3670
2	Purple	4.70	95.30	50	1/2in SCH 80	5.48	55.05	150	0.3670
3	Orange	5.40	94.60	65	1/2in SCH 40	7.11	71.43	195	0.3663
8	Purple	10.30	89.70	110	3/4in SCH 40	12.5	125.58	330	0.3805
9	Orange	11.40	88.60	90	3/4in SCH 80	10.1	101.47	270	0.3758
10	Blue	12.40	87.60	65	1/2in SCH 40	7.11	71.43	195	0.3663
		total	feet =	430	gal/min =	47.78	LTAR =		0.3000
							LTAR + %5		0.3150
% of Dose Vol.		75		Des. Flow	480	(ltar W/ INOV)			0.4000
Dose Volume		209.63		Pump Run=	10.05	(ltar W/ INOV + 5%)			0.4200
Dose Pump Time		4.39		Tank Gal/IN	19.65				
Drawdown in Inches		10.67							

System: Pressure Manifold
 Lines: 4-7, (420')
 0.3 Soil LTAR

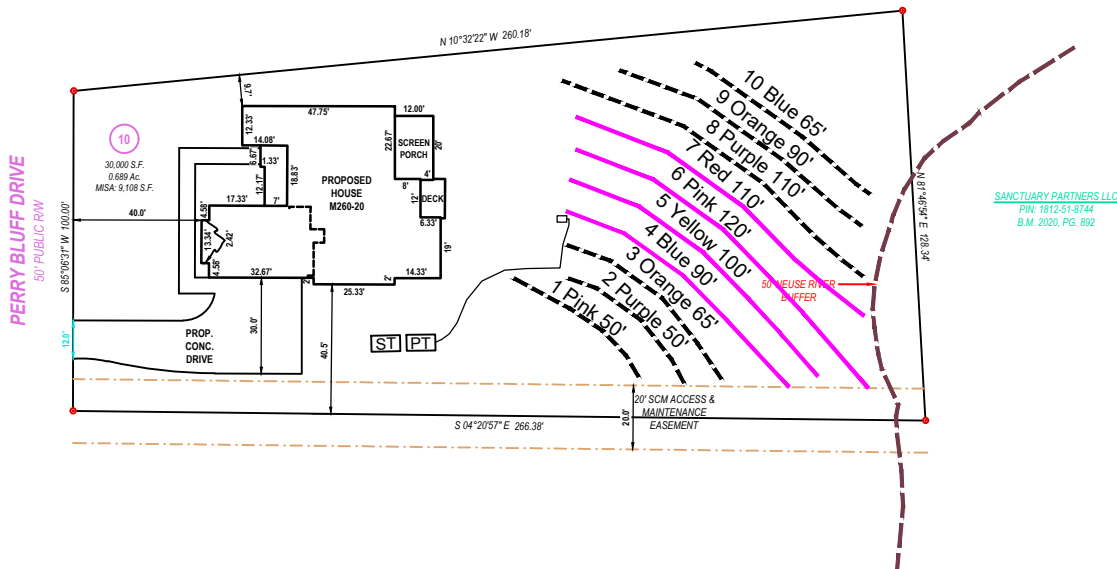
Accepted Status System

Repair: Pressure Manifold
 Lines: 1-3, 8-10, (430')
 0.3 Soil LTAR

Accepted Status System

4-Bedroom Septic Site Plan

System: 
 Repair: 



SANCTUARY PARTNERS LLC
 PIN: 1812-51-8741
 B.M. 2020, PG. 092

GRAPHIC SCALE
 1" = 60'



- *Keep Tanks and Drain lines 10' from property lines.
- *Not a Survey
- *Not a guarantee of a septic permit.
- *Keep supply lines >5' from property lines.
- *Some lines are flagged longer in the field than lengths indicated above.



Central Carolina Soil Consulting, PLLC
 1900 South Main Street, Suite 110
 Wake Forest, North Carolina 27587
 Phone (919)569-6704 Fax (919)569-6703

Septic Site Plan
 Lot 10 Prescott Manor Subdivision
 Wake County, North Carolina

Job# : 3767
 Drawn By : AH
 Date : 04/16/2021
 Revision:

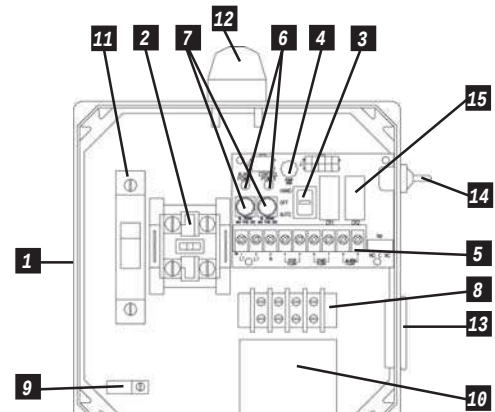
MODEL 112 Control Panel

Single phase, simplex motor contactor control.

The Model 112 control panel provides a reliable means of controlling one 120, 208, or 240 VAC single phase pump in pump chambers, sump pump basins, irrigation systems and lift stations. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system.

PANEL COMPONENTS

1. **Enclosure** measures 8 x 8 x 4 inches (20.32 X 20.32 X 10.16 cm). Choice of NEMA 1 (steel for indoor use), or NEMA 4X (ultraviolet stabilized thermoplastic with removable flanges for outdoor or indoor use).
* Options selected may increase enclosure size and change component layout.
2. **Magnetic Motor Contactor** controls pump by switching electrical lines.
3. **HOA Switch** for manual pump control (mounted on circuit board).
4. **Green Pump Run Indicator Light** (mounted on circuit board).
5. **Float Switch Terminal Block** (mounted on circuit board).
6. **Alarm and Control Fuses** (mounted on circuit board).
7. **Alarm and Control Power Indicators** (mounted on circuit board).
8. **Pump Input Power and Pump Connection Terminal Block**
9. **Ground Lug**
10. **Terminal Block Installation Label**
11. **Circuit Breaker** (optional) provides pump disconnect and branch circuit protection.



Model Shown 1121W914X

STANDARD ALARM PACKAGE

12. **Red Alarm Beacon** provides 360° visual check of alarm condition.
Note: NEMA 1 style utilizes a door mounted indicator in lieu of a beacon.
13. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
Note: NEMA 1 style utilizes an internally mounted buzzer in lieu of horn.
14. **Exterior Alarm Test/Normal/Silence Switch** allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition has been cleared.
15. **Horn Silence Relay** (mounted on circuit board).

NOTE: other options available.

FEATURES

- Entire control system (panel and switches) is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes three 20' Sensor Float® control switches
- Complete with step-by-step installation instructions
- Three-year limited warranty



SJE
Rhombus
CONTROLS

PO Box 1708, Detroit Lakes, MN 56502

1-888-DIAL-SJE • 1-218-847-1317

1-218-847-4617 Fax

email: sje@sjerhombus.com

www.sjerhombus.com

SEE BACKSIDE FOR COMPLETE LISTING OF AVAILABLE OPTIONS.

112

1

W

1

2

4

H

3A, 8A, 8C, 15A

MODEL 112**ALARMPACKAGE**

0 = select options or no alarm package

1 = alarm package (includes test/normal/silence switch, fuse, red light, horn & float)

ENCLOSURE RATING

I = Indoor, NEMA 1 (metal)

W = Weatherproof, NEMA 4X (engineered thermoplastic)

STARTING DEVICE

1 = magnetic motor contactor 120/208/240V

9 = magnetic motor contactor 120V only

PUMP FULL LOAD AMPS

0 = 0-7 FLA

1 = 7-15 FLA

2 = 15-20 FLA

3 = 20-30 FLA

PUMP DISCONNECTS

0 = no pump disconnect

1 = pull-out with safety deadfront in a 10"x8" enclosure

4 = circuit breaker 120V (select STARTING DEVICE option 9 above)

120/208/240V (select STARTING DEVICE option 1 above)

FLOAT SWITCH APPLICATION

H or L = pump down or pump up

X = no floats

WITH alarm package

WITHOUT alarm package

OPTIONS *Listed below*

ENCLOSURE UPSIZE - If you selected 3 or more of the ★ options, or one ★★ option, a one-time enclosure upsize fee would apply.

If additional features are required, call the factory for a quote on either a SJE-Rhombus Pro-Line or Engineered Custom control panel.**CODE DESCRIPTION**

- ☐ 1A Red beacon only / no audio
(must select 1E if floats included)
- ☐ 1C Horn only / no visual
(must select 1E if floats included)
- ☐ 1E Alarm float
- ☒ 3A Alarm flasher
- ☐ ★ 3B Manual alarm reset
- ☐ ★ 4A Low level cutout
(select option 4D if floats included)
- ☐ ★ 4B Red low-level indicator & alarm
(must select 4A also)
- ☐ 4D Low-level float
- ☐ ★ 5A Thermal cutout/heat sensor auto
reset (for pumps w/thermal switch leads)
- ☐ ★★ 5E Seal failure circuit & red indicator (2 wire)
- ☐ 6A Auxiliary alarm contact, form C type
- ☒ ★ 8A Elapsed time meter
- ☒ ★ 8C Event (cycle) counter
- ☐ ★★ 9_A Pump overload
specify amperage after number 9 followed by letter "A".
Example: 912A = 12 amp pump.
- ★★ ☐ 0-25 FLA
- ★★ ☐ 25-30 FLA
- ☐ 10E Lockable latch - NEMA 4X
- ☐ 10E Lockable latch - NEMA 1
- ☐ ★ 10F Lightning arrester
- ☐ ★ 10K Anti-condensation heater

CODE DESCRIPTION

- ☐ 11C NEMA 1 alarm panel *must select option 6A*
- ☐ 11D NEMA 4X alarm panel *must select option 6A*
- ☐ ★★ 14B Main disconnect (rotary style, mounted through door)
non-fused
- ★★ ☐ 0-20 FLA (total of both pumps)
- ★★ ☐ 20-30 FLA (total of both pumps)
- ☒ 15A Control / alarm circuit breaker
Does not include the circuit board as in standard.
- ☐ 16A 10' cord in lieu of 20' (per float)
- ☐ 16B 15' cord in lieu of 20' (per float)
- ☐ 16C 30' cord in lieu of 20' (per float)
- ☐ 16D 40' cord in lieu of 20' (per float)
- ☐ 17A SJE SignalMaster® / mounting strap ● (per float)
- ☐ 17B SJE SignalMaster® / externally weighted ● (per float)
- ☐ 17C Sensor Float® / internally weighted ▲ (per float)
- ☐ 17D Sensor Float® / externally weighted ▲ (per float)
- ☐ 17E Sensor Float® Mini / pipe clamp ▲ (per float)
- ☐ 17F Sensor Float® Mini / externally weighted ▲ (per float)
- ☐ 19T TOA (Test/Off/Automatic) switch and pump run light through
door mounted
- ☐ 19U HOA (Hand/Off/Automatic) switch and pump run light through
door mounted
- ☐ 19X Door mounted pump run indicator
- ☐ 21A SJE PumpMaster® in lieu of on/off switches ●
- ☐ 21B SJE PumpMaster® Plus in lieu of on/off switches ●
- ☐ 21C Super Single® in lieu of on/off switches ▲
- ☐ 21D Double Float® in lieu of on/off switches ▲
- Mechanically-activated ▲ Mercury-activated

SAMPLE**MODEL**

112

1

W

9

1

4

H

3A 8A

Alarm Package

Enclosure Rating

Starting Device

Pump Full Load Amps

Pump Disconnect

Float Switch Application

Options: Flasher, Elapsed Time Meter

"QUALITY PUMPS SINCE 1939"

SECTION: 2.20.035

FM0973

1101

Supersedes

0700

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



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PUMP CO.



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visit our web site:
<http://www.zoeller.com>

COMPARE THESE FEATURES

- Non-clogging engineered plastic vortex impeller design.
- Corrosion resistant powder coated epoxy finish.
- Durable cast construction. Cast switch case, motor and pump housing and base. No sheet metal parts to rust or corrode.
- Castings - All cast iron class 25-30 25000# tensile strength.
- Bearings - Upper & lower oil fed cast iron.
- Stainless steel screws, guard, handle and arm and seal assembly.
- Float operated submersible (NEMA 6) 2-pole mechanical switch.
- Oil-filled motor—hermetically sealed.
- Permanent split capacitor motor.
- Entire unit pressure tested after assembly.
- Automatic reset thermal overload protection.
- Carbon and ceramic shaft seal.
- Watertight neoprene "□" ring between motor and pump housing.
- Maximum temperature for effluent or dewatering 130° F. - 54° C.
- 60 Hz, 1725 RPM.
- Passes ½ inch solids (sphere).
- No screens to clog.
- Standard cord length 15' (UL listed).
- 1½" NPT Discharge (1½" X 2" PVC Adapter included with BN & BE Models).
- On point - 9½"
- Off point - 3"
- Major width - 10 1/8"
- Height - 12"

SIMPLEX AND DUPLEX SYSTEMS AVAILABLE

PACKAGED SYSTEMS AVAILABLE

Note: The sizing of effluent systems normally requires variable level float(s) controls and properly sized basins to achieve required pumping cycles or dosing timers with nonautomatic pumps.



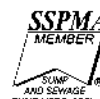
98 Cast Iron Series "FLOW-MATE"

(FOR PUMP PREFIX IDENTIFICATION SEE NEWS & VIEWS 0052)

FOR SEPTIC TANK
LOW PRESSURE PIPE (LPP)
AND ENHANCED FLOW STEP SYSTEMS



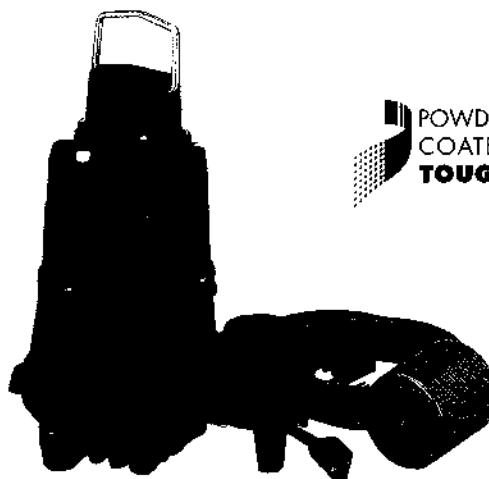
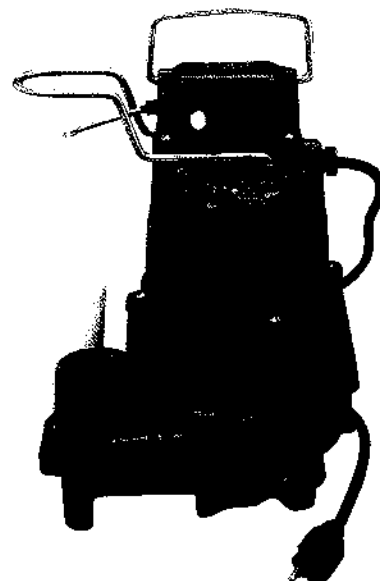
EFFLUENT
OR DEWATERING PUMP
SUBMERSIBLE
1½" NPT DISCHARGE



MODELS AVAILABLE

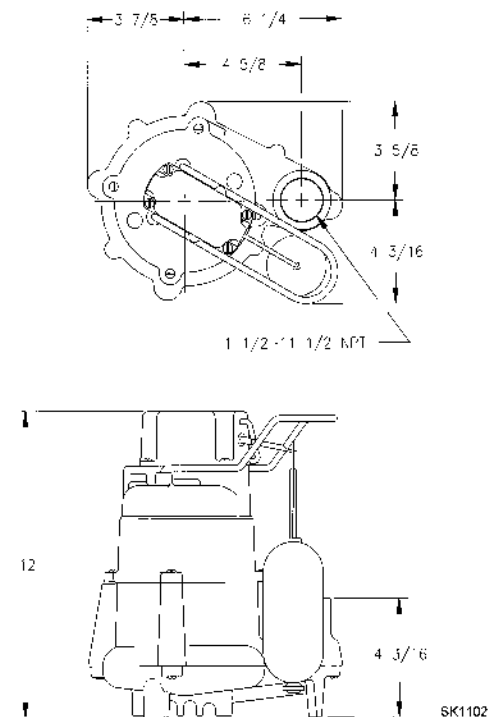
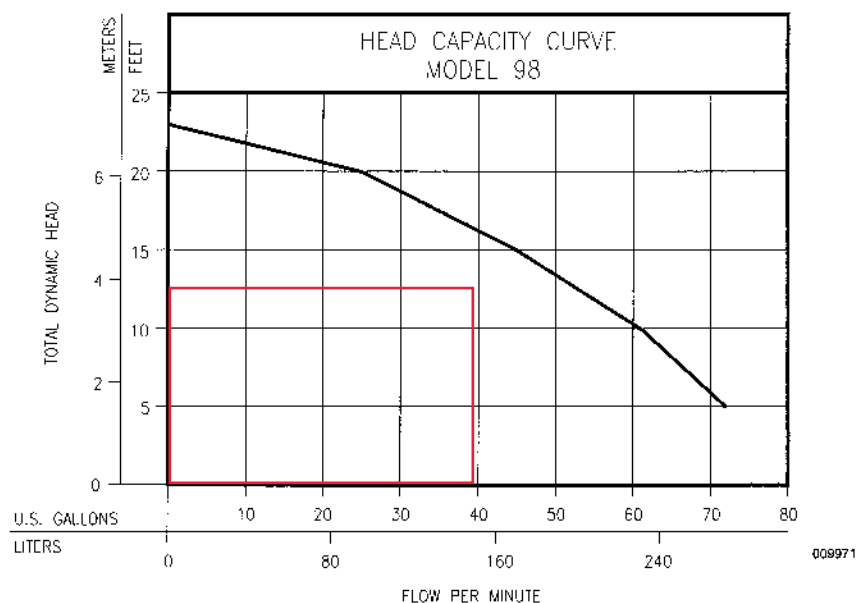
- Automatic or Nonautomatic
- ½ H.P., 1 Ph., 115V or 230V
- Available with Piggyback Variable Level Float Switch.

MODEL 98



MODEL BN98

POWDER
COATED
TOUGH™



CONSULT FACTORY FOR SPECIAL APPLICATIONS

- Electrical alternators, for duplex systems, are available and supplied with an alarm.
- Mechanical alternators, for duplex systems, are available with or without alarm switches.
- Variable level float switches are available for controlling single and three phase systems.
- Double piggyback variable level float switches are available for variable level long cycle controls.

Standard all models - Weight 39 lbs. - 1/2 H.P.

98 Series				Control Selection		
Model	Volts-Ph	Mode	Amps	Simplex	Duplex	
M98	115	1	Auto	9.4	1	—
N98	115	1	Non	9.4	2	3 or 4 & 5
D98	230	1	Auto	4.7	1	—
E98	230	1	Non	4.7	2	3 or 4 & 5

SELECTION GUIDE

1. Integral float operated 2-pole mechanical switch, no external control required.
2. Single piggyback variable level float switch or double piggyback variable level float switch. Refer to FM0477.
3. Mechanical alternator 10-0072 or 10-0075.
4. See FM0712, for correct model of Electrical Alternator.
5. Control switch 10-0225 used as a control activator, specify duplex (3) or (4) float system.

For information on additional Zoeller products refer to catalog on Piggyback Variable Level Switches, FM0477; Electrical Alternator, FM0486; Mechanical Alternator, FM0495; Sump/Sewage Basins, FM0487; Single Phase Simplex Pump Control, FM1596; Alarm Systems, FM0732.

CAUTION

All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electric Code (NEC) and the Occupational Safety and Health Act (OSHA).

RESERVE POWERED DESIGN

For unusual conditions a reserve safety factor is engineered into the design of every Zoeller pump.



<http://www.zoeller.com>

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Manufacturers of . . .

"QUALITY PUMPS SINCE 1899"

QUALITY PUMPS SINCE 1939™

All information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



ZOELLER
PUMP CO.



SECTION: 3.20.065

FM1775

1101

Supersedes

0501

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ZOELLER ON-SITE WASTEWATER PRODUCTS

INTRODUCING ZOELLER SEPTIC SYSTEM FILTERS

Zoeller "WW" Residential Effluent Filter P/N 170-0078



The Zoeller "WW" residential filter gives your septic system protection like no other. Zoeller Company's patented design keeps your lateral fields safe with twice the filtration area of most residential filters. All of the filtration area is submerged, making the filter 100% effective. The best feature of the WW filter is that the sleeve section of the filter remains in the outlet tee when the main filter is removed for servicing. This will guarantee no solids larger than 1/16" reach the lateral fields during servicing. The Zoeller "WW" filter is ultimate protection.

Improve the performance of your septic system: The number one reason that septic systems fail is because the lateral field becomes clogged. By preventing solids larger than 1/16" from exiting to your drain field, the lifetime of your system can be greatly increased.

Only the clearest effluent to leave the tank: Located in the sanitary tee, this filter extends beneath the scum layer, above the sludge layer, and withdraws effluent from the clear water zone of the tank.

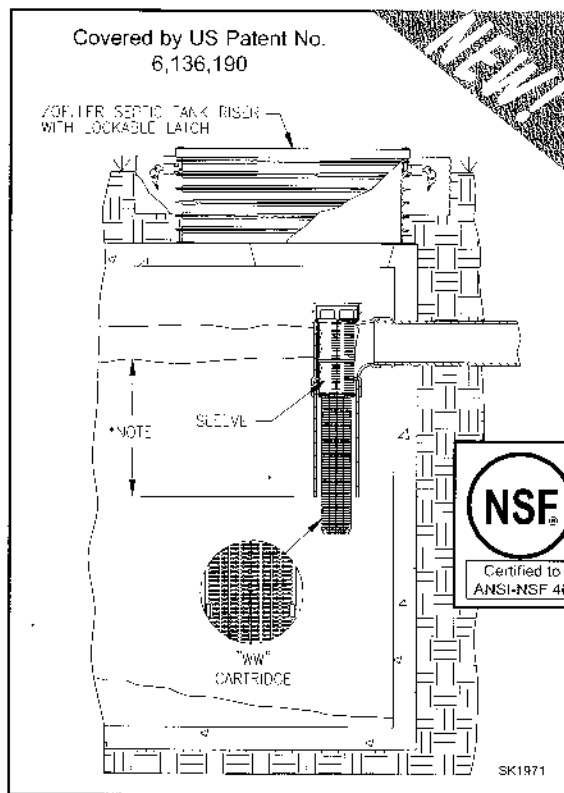


Also available
with sanitary
tee and filter
complete.

170-0144

Lowers maintenance costs: The filter must be serviced on a periodic basis to maintain peak performance. Under normal circumstances, the filter requires servicing when the septic tank is pumped. However, site specific circumstances may require more frequent service. A Zoeller Riser & Lid will make septic tank and filter maintenance an easy task.

Allows any responsible management entity to monitor the condition of the tank: During routine maintenance, the tank should be inspected to be sure unnecessary particulate is not getting into your tank (i.e. fruit peelings, cigarette filters, feminine hygiene materials, etc.). Check your local plumbing codes to determine how often your tank should be pumped. If sludge buildup becomes apparent on the bottom of your tank, then a more frequent pumping interval is suggested.



*NOTE: State and local plumbing codes may require a specific liquid penetration. For example, 25% - 45% into the liquid depth or 9" off the tank bottom.



P/N 013244

Distributed by:

ZOELLER
PUMP CO.

Zoeller Residential Septic Tank Effluent Filter Specifications

- Single family homes.
- 122 Linear Feet of 1/16" filtration.
- 1000 gpd.

All materials are noncorrosive in the septic tank environment. Sleeve is PVC, primary filter is polypropylene, Zoeller connection element is neoprene.

Installation or retrofit: The Zoeller Septic System Filter fits inside any 4" sanitary tee. Slide the filter cartridge into the filter sleeve. Lock the cartridge and sleeve together by holding the sleeve stationary and rotating the cartridge clockwise. Slide the assembled cartridge and sleeve into the sanitary tee at the tank's outlet. Ensure the sleeve latch is pointing toward the outlet of the septic tank before filter placement into the tee. The drain field is now protected from solids greater than 1/16".

Extension handle: Zoeller's effluent filter can be easily retrofitted with an extension handle. Attach a 1/2" PVC pipe to the top of the filter with properly installed stainless steel clamps. Cut off to appropriate length below the lid. A 1/2" PVC pipe can be added to the pipe for added leverage and control.

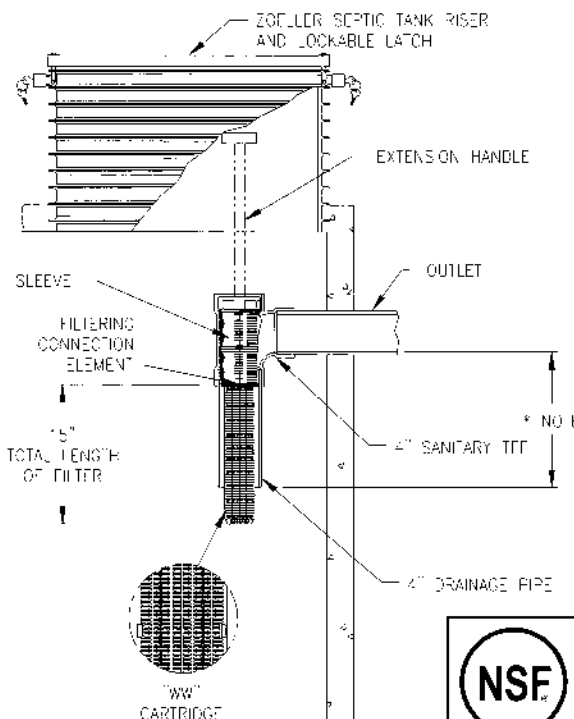
Maintenance: The filter cartridge can be maintained by rotating the cartridge counterclockwise and removing for cleaning. The sleeve should remain in the sanitary tee while cleaning the cartridge. To clean the cartridge, hold cartridge over septic tank opening and thoroughly flush with hose until clean, washing filtered trash back into septic tank. After cleaning the cartridge, it is imperative that the sleeve be cleaned inside and out, by reinserting the cartridge; turning it clockwise in the sleeve and removing the sleeve from the sanitary tee. The Zoeller filter should be cleaned each time the septic tank is pumped or when the need is indicated by slow flows from the house. More frequent cleanings will not hurt the filter and could even improve the performance of your septic tank. For installations that exceed the design flow rate of the filter, more frequent cleanings may be required or manifold more than one sanitary tee to accept more than one filter.

Cleaning, repair, and replacement: Follow the install and maintenance instructions above. For replacement components, call (800) 928-PUMP.

Warranty: Every Zoeller filter is guaranteed to be free from defects in materials and workmanship for the lifetime of the homeowner/purchaser. Free repair or replacement, excluding labor, will be made on return of the filter prepaid to the factory. This warranty is limited to product proven to be free from abuse or improper installation.

***NOTE:** State and local plumbing codes may require a specific liquid penetration. For example, 25% - 45% into the liquid depth or 9" off the tank bottom.

Covered by US Patent No.
6,136,190



SK1972

ALL ZOELLER ON-SITE WASTEWATER PRODUCTS MUST BE INSTALLED IN ACCORDANCE WITH LOCAL AND/OR STATE PLUMBING AND/OR HEALTH DEPARTMENT CODES.



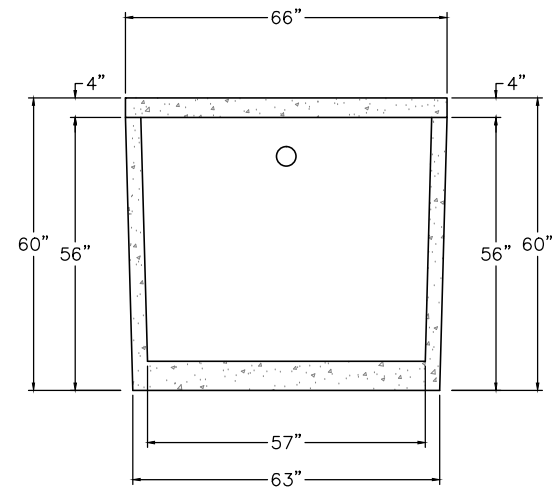
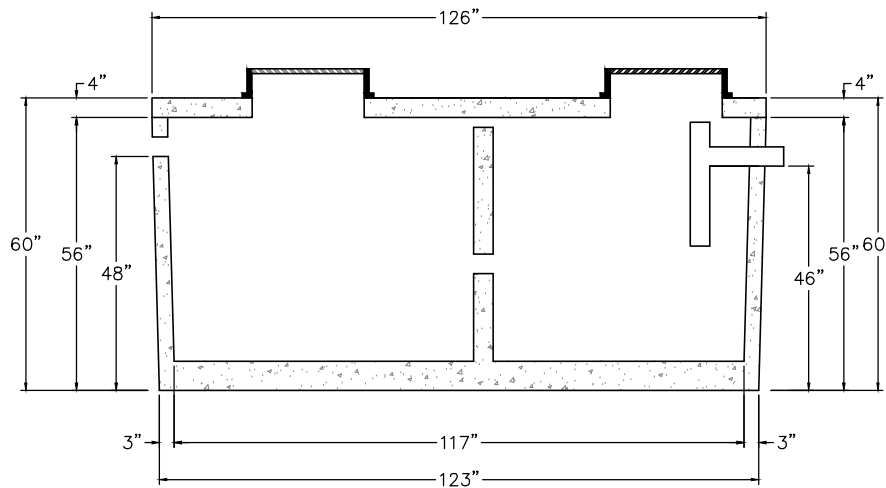
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FAX (502) 774-3624

Manufacturers of . . .

"QUALITY PUMPS SINCE 1939"



1,250 ST 323
NTS

NON TRAFFIC BEARING

DAVID BRANTLEY & SONS
37 Pine Ridge Rd.
Zebulon, NC 27597
Office 252-478-3721
Fax 919-573-0443
1nsta1ler@gmail.com

PREPARED FOR : David Brantley & Sons
37 Pine Ridge Rd.
Zebulon, NC 27597

DATE : April 11, 2014

CONTACT:
CORY BRANTLEY

REVISION NO.
Original Submitted

Revision 1

Revision 2

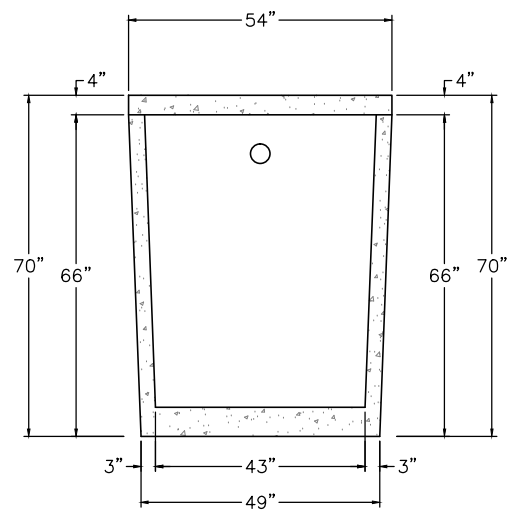
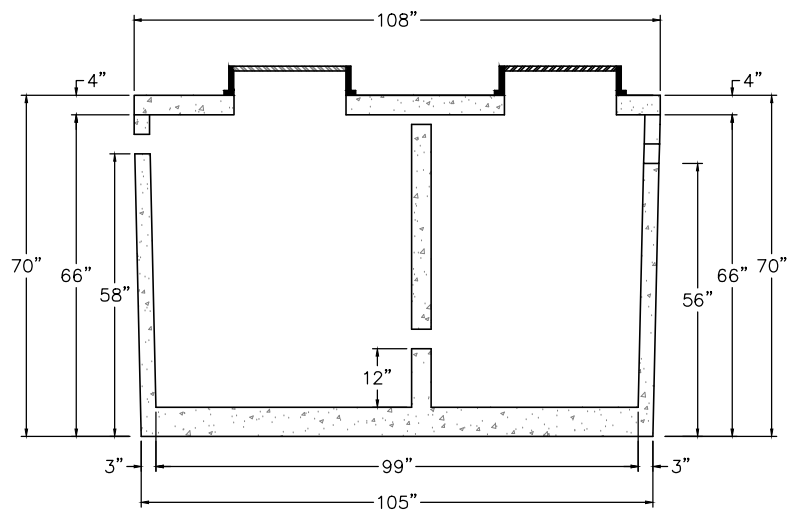
Revision 3

Master Set

DATE
April 11, 2014

BRANTLEY TASK MODEL
1,250 ST 323

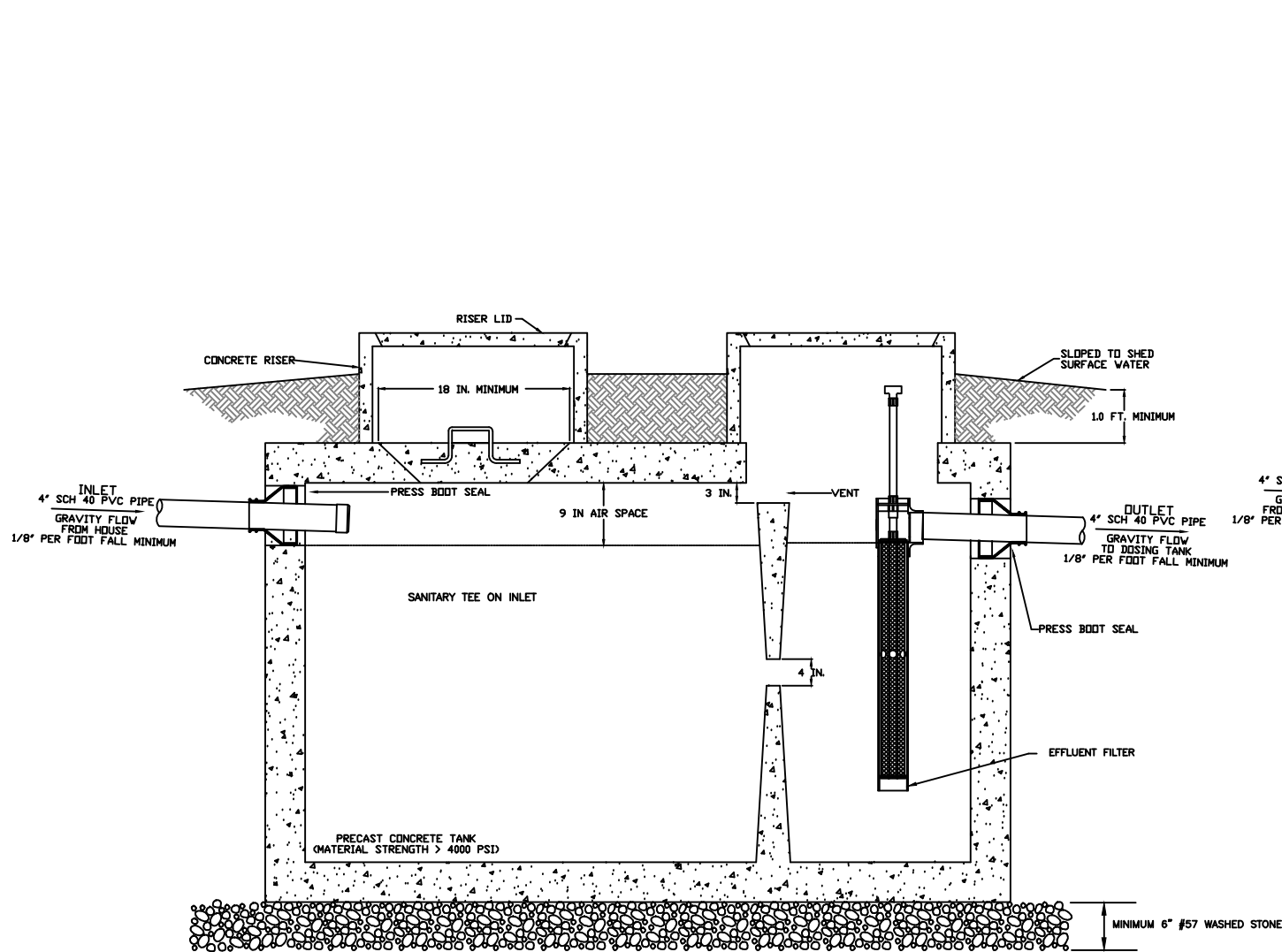
SHEET NUMBER
1 of 1



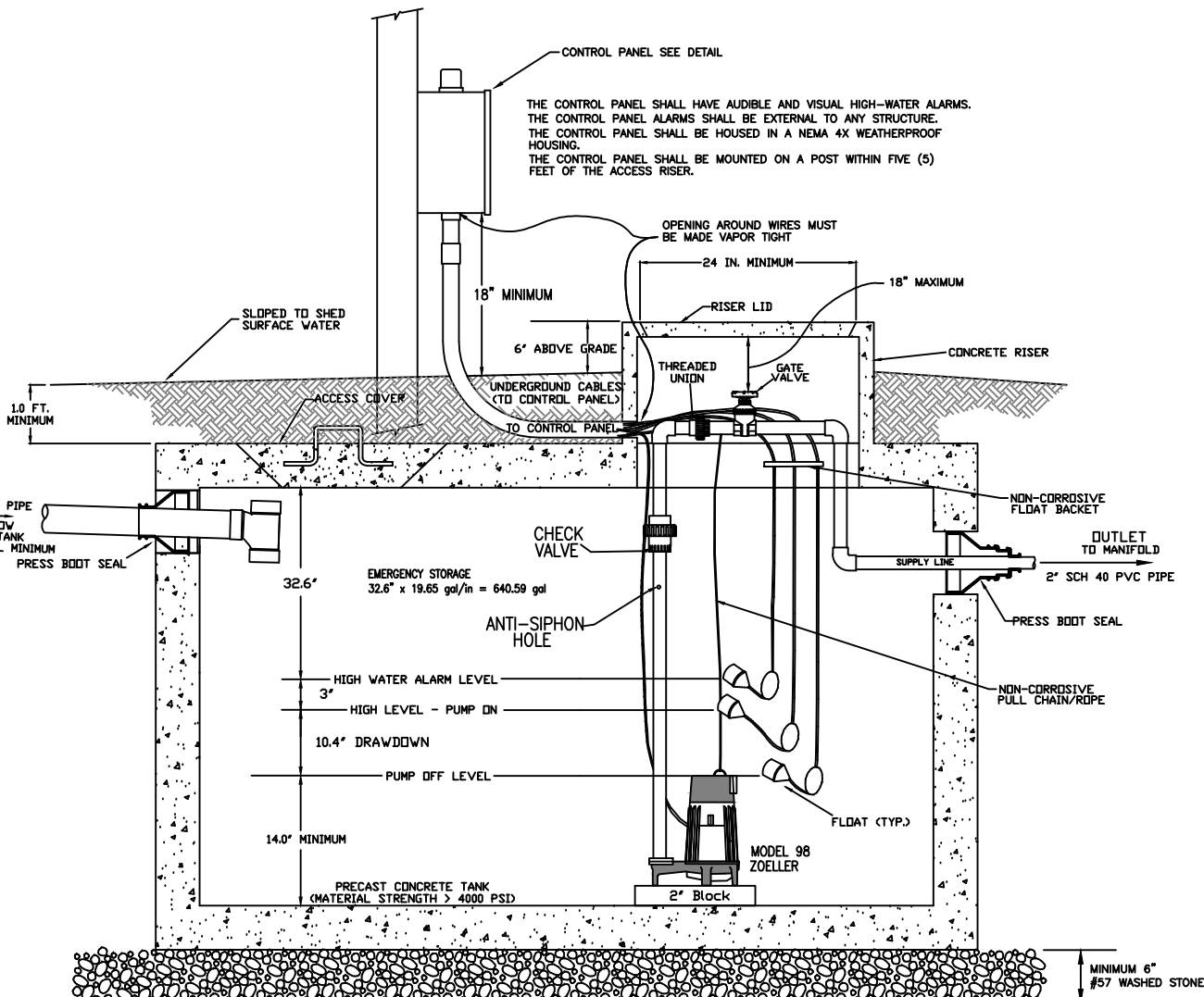
1,200 PT 463
NTS

NON TRAFFIC BEARING

BRANTLEY TASK MODEL 1,200 PT 463		DATE April 11, 2014
SHEET NUMBER 1 of 1		
REVISION NO. Original Submitted		
Revision 1		
Revision 2		
Revision 3		
Master Set		
PREPARED FOR : David Brantley & Sons 37 Pine Ridge Rd. Zebulon, NC 27597		
DATE : April 11, 2014		
CONTACT: CORY BRANTLEY		
1st installer@gmail.com		



1250 GAL SEPTIC TANK SCHEMATIC
NOT TO SCALE



1200 GAL PUMP TANK SCHEMATIC
NOT TO SCALE

- NOTES
1. ALL TANKS SHALL BE LEAK TESTED SUCH THAT EXFILTRATION OCCURS AT A RATE WHICH DOES NOT EXCEED TEN GALLONS PER TWENTY-FOUR HOURS PER 1,000 GALLONS OF TANK CAPACITY
 2. ALL TANKS SHALL REST ON A BED OF #57 WASHED GRAVEL. THE MINIMUM THICKNESS OF THE GRAVEL BED IS 6 INCHES.
 3. ALL TANKS MUST BE APPROVED FOR USE BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL HEALTH (DEH).
 4. INVERTS SHOWN ARE APPROXIMATE. THE INSTALLER SHALL FIELD CONFIRM PRIOR TO CONSTRUCTION.
 5. ALL HARDWARE INSTALLED INSIDE OF TANKS SHALL BE OF STAINLESS STEEL.
 6. TANK DIMENSIONS VARY BY MANUFACTURER.
 7. DRAWDOWN WILL VARY WITH TANK DIMENSIONS.
 8. NO ELECTRICAL SPLICES SHALL BE MADE INSIDE THE PUMP TANK.

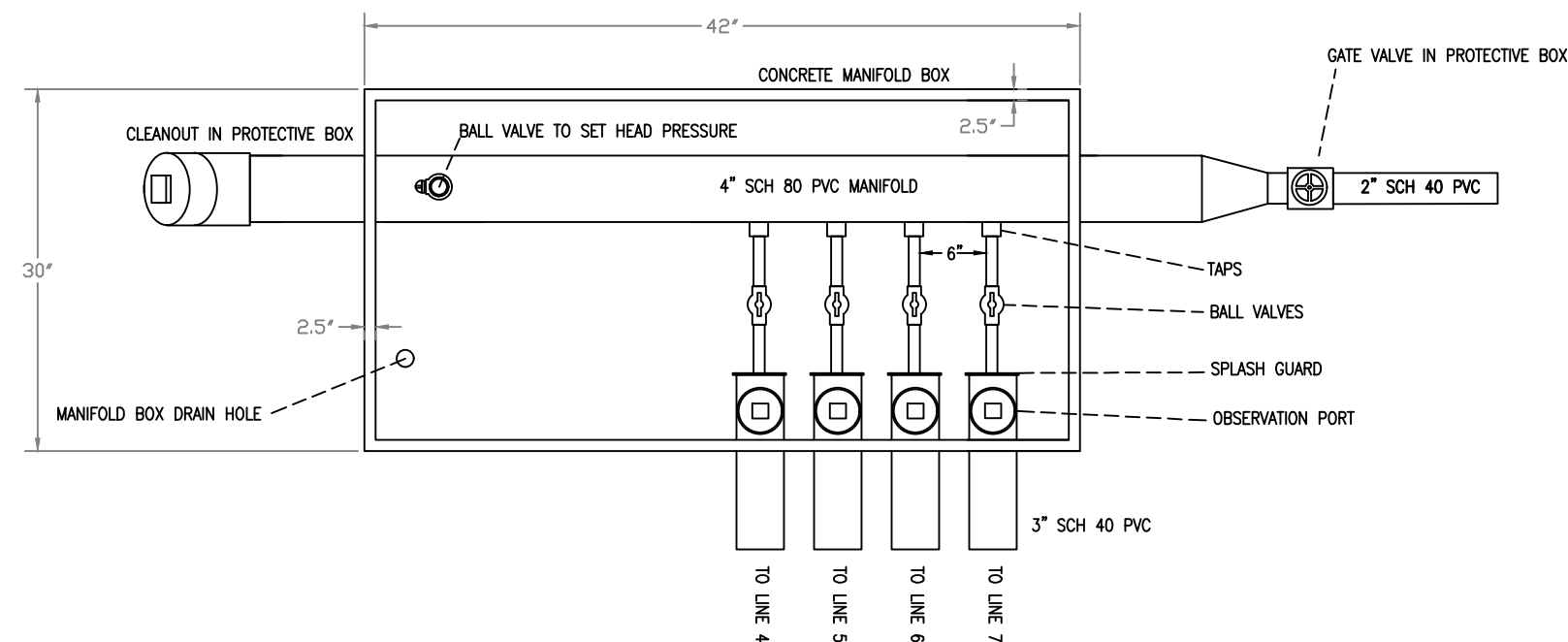


Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

Septic and Pump Tank Details
Prescott Manor S/D, Lot 10
Wake County, North Carolina

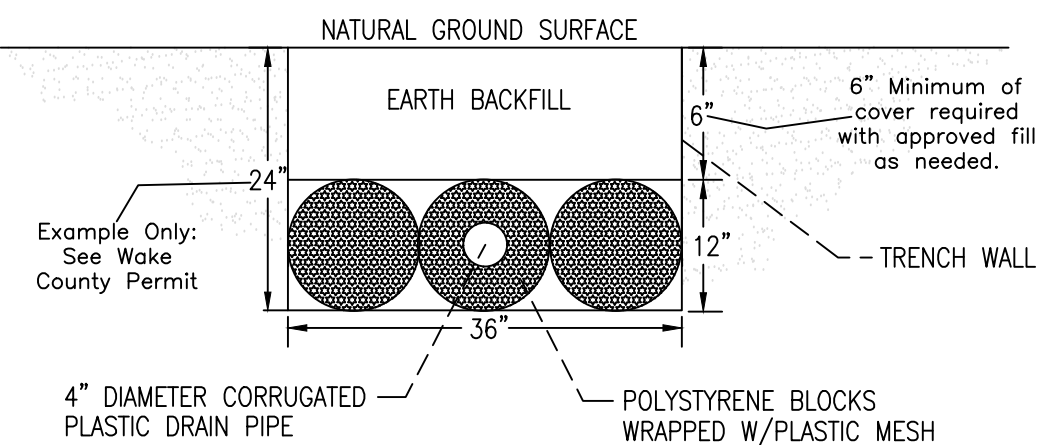
Job# : 3767
Drawn By : AH
Date : 05/12/2021
Revision : 00/00/0000

PRESSURE MANIFOLD DETAILS TOP VIEW

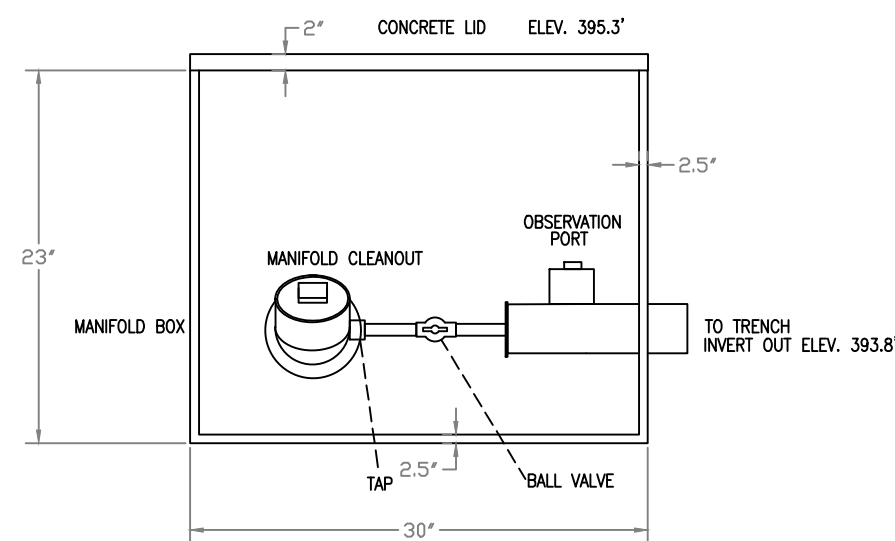


EZ-FLOW DETAILS

Example only: Installed trench bottom should match design.



PRESSURE MANIFOLD DETAILS END VIEW



TAP SCHEDULE	
LINE #	TAP
4	1/2" SCH 40
5	3/4" SCH 80
6	3/4" SCH 40
7	3/4" SCH 80

NOTE :

- EZ-FLOW INSTALLATION SHALL MEET THE REQUIREMENTS INCLUDED IN ITS INNOVATIVE APPROVAL
- TRENCH BOTTOM SHALL BE AT LEAST 12" FROM ANY RESTRICTIVE SOIL LAYER
- END CAP SHALL BE PROVIDED AT END OF ALL CORRUGATED PLASTIC PIPE LINES AND TRENCH BOTTOMS SHALL BE LEVEL
- THIS IS A GENERIC TRENCH PROFILE SEE COUNTY PERMIT FOR TRENCH DEPTH.

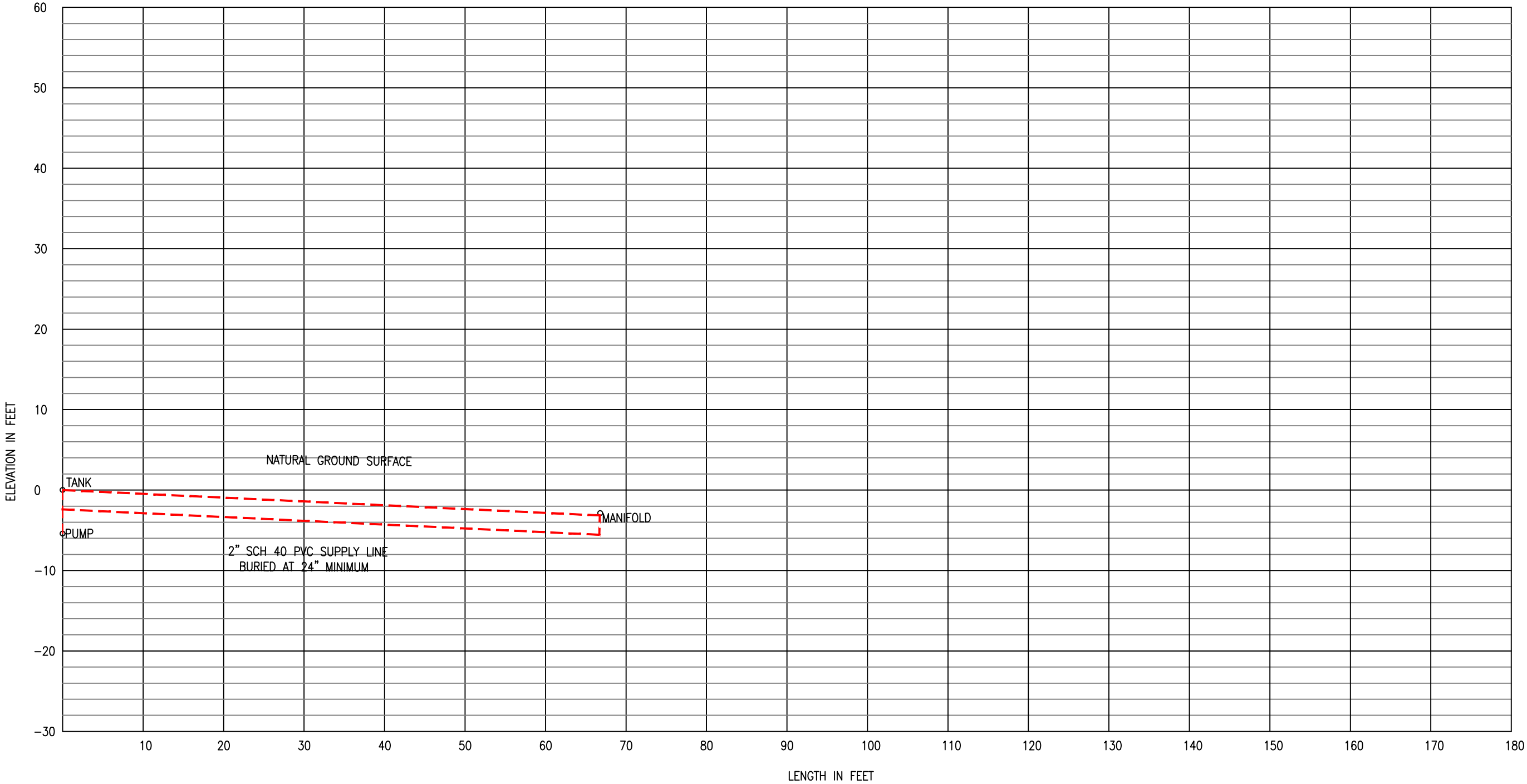


Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

Manifold and Trench Details
Prescott Manor S/D, Lot 10
Wake County, North Carolina

Job# : 3767
Drawn By : AH
Date : 05/12/2021
Revision : 00/00/0000

SUPPLY LINE
HYDRAULIC PROFILE



Central Carolina Soil Consulting, PLLC
1900 South Main Street, Suite 110
Wake Forest, North Carolina 27587
Phone (919)569-6704 Fax (919)569-6703

Hydraulic Profile
Prescott Manor S/D, Lot 10
Wake County, North Carolina

Job# : 3767
Drawn By : AH
Date : 05/12/2021
Revision : 00/00/0000

WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES WASTEWATER PERMIT

NO PERMIT(S) FOR CONSTRUCTION, LOCATION OR RELOCATION ACTIVITY SHALL BE ISSUED UNTIL AN AUTHORIZATION FOR WASTEWATER SYSTEM CONSTRUCTION AUTHORIZATION HAS BEEN ISSUED

PERMIT VOID IF NOT IN COMPLIANCE WITH ZONING REGULATIONS AND/OR IF SITE IS ALTERED OR INTENDED USE CHANGED

IMPROVEMENT PERMIT

PERMIT #: WRP-058449-2021

APPLICATION DATE: 04/27/2021

BLDG. PERMIT #: RBPR-058447-2021

PIN: 1812611556

RECORDED: Yes

TOWNSHIP: 14 - New Light

JURISDICTION: Wake County

ZONING: R-40W

APPLICANT: ICG Homes LLC

4020 Wake Forest RD Suite 306

BUSINESS PHONE: (919) 876-5802

HOME PHONE:

MOBILE PHONE: (919) 302-4493

HD USE: 101A CONVENTIONAL ONE-FAMILY HOUSE

EXISTING USE:

SITE ADDRESS: 1221 PERRY BLUFF DR

SUBDIVISION: Prescott Manor

LOT: 10

ACRES: 0.69

DIRECTIONS: Stony Hill Rd. to Prescott Manor Way to Perry Bluff Dr.

Permit is subject to revocation if the Site Plan or Plat changes or the intended use changes.

*Maximum depth of line is calculated using the downhill side of the trench and includes slope correction.

IP VALID FOR: Five Years AS PER GS 130A-335 (f)

DESIGNED BY: Bobby Weaver

SYSTEM LAYOUT: Private Sector

SITE CLASSIFICATION: Provisionally Suitable

IP STATUS: Issued

BY: Bobby Weaver

DATE: 05/12/2021

NUMBER OF BEDROOMS: 4

OR TOTAL NUMBER OF OCCUPANTS: 8

PERMITTED DESIGN FLOW: 480 GPD

BASEMENT: No

BASEMENT PLUMBING: No

WASTEWATER STRENGTH: Domestic

SYSTEM TYPE: III B

LTAR: 0.300

EXISTING SYSTEM UTILIZED:

PRETREATMENT STRENGTH REQUIRED:

EASEMENT FOR WW SYSTEM ASSOCIATED WITH PARCEL:

MAXIMUM TRENCH DEPTH: 23 INCHES

PUMP REQUIRED: Yes

SPECIFIC SYSTEM REQUIREMENTS: System Designed for a 4 bedroom home, with 480 gals per day

Future Repair is a type III B system with a trench depth of 23" and a .3 LTAR

Site serviced by a municipal water

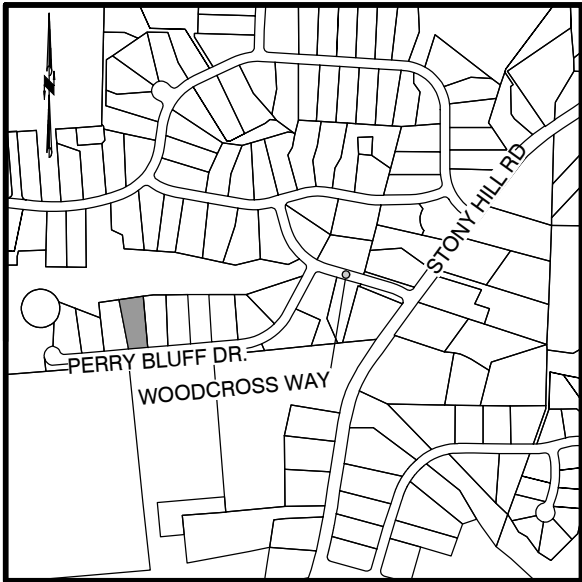
No cutting, grading, alterations, or utilities in septic area.

Maintain all setbacks

ISSUED BY:

Robert Weaver

DATE: 05/12/2021



LOCATION MAP
1" = 1000'

NOTES:

- 1) The basis of North and all easements, right-of-way's, buffers, setbacks and adjoiners, etc., referenced from Book of Maps 2020, Pages 892-897 unless otherwise noted.
- 2) Surveyor has made no investigation or independent search for easements of record, encumbrances, restrictive covenants, ownership title evidence or any other facts that an accurate and current title search may disclose.
- 3) Contours shown referenced from Wake County GIS.

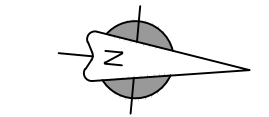
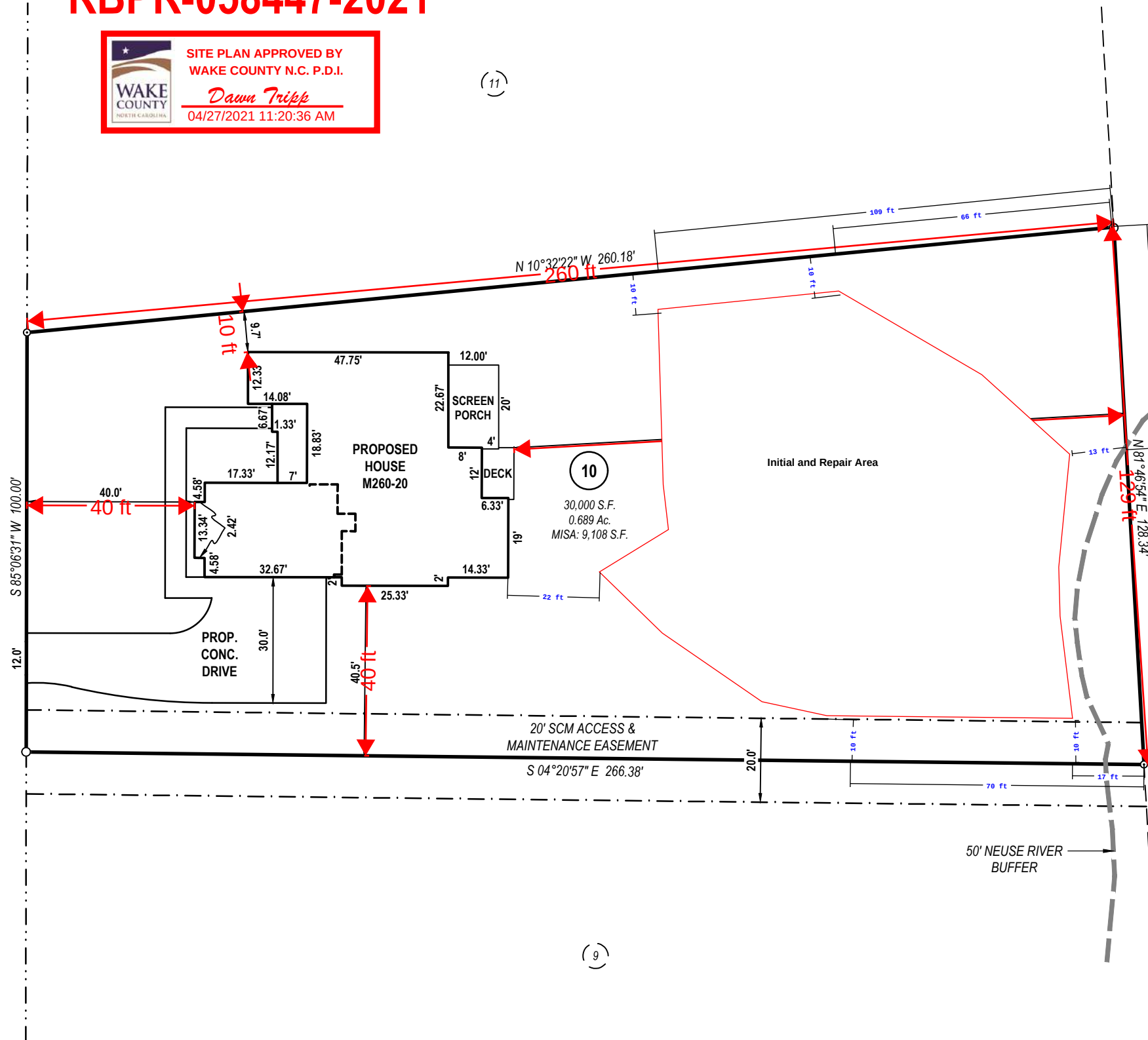
DRAWING INDEX

C-01	SITE PLAN
C-02	EROSION CONTROL PLAN
C-03	QUAD & SOILS OVERLAYS
D-03 thru D-14	EROSION DETAILS

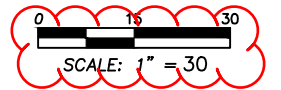
RBPR-058447-2021



PERRY BLUFF DRIVE
50' PUBLIC R/W



B.M. 2020, PAGES 892-897



LEGEND & NOMENCLATURE:

○	Ex. property corner
●	Set property corner
○	Calculated point
⊙	Water Meter
⊕	Sanitary Sewer Cleanout
⊖	Power Pedestal
⊗	Telephone Pedestal
⊘	Cable Pedestal
⊙	HVAC
⊙	Fence
⊙	Book of Maps
⊙	D.B. Deed Book
⊙	Pg. Page
⊙	S.F. Square Feet
⊙	Ac. Acres

BUILDING SETBACKS: R-40W	
FRONT:	15'
CORNER:	15'
SIDE:	7.5'
REAR:	15'

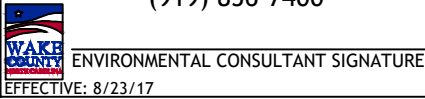
IMPERVIOUS AREAS:	
HOUSE:	3,449 S.F.
CONCRETE:	1,841 S.F.
TOTAL:	5,289 S.F.
MAX.:	9,108 S.F.

SITE DATA

OWNER:	SANCTUARY PARTNERS LLC.
ADDRESS:	1221 PERRY BLUFF DR
PIN:	1812-61-1556
SUBDIVISION:	PRESCOTT MANOR
PLAT REF:	BM 2020, PAGES 892-897
TOWNSHIP:	NEW LIGHT

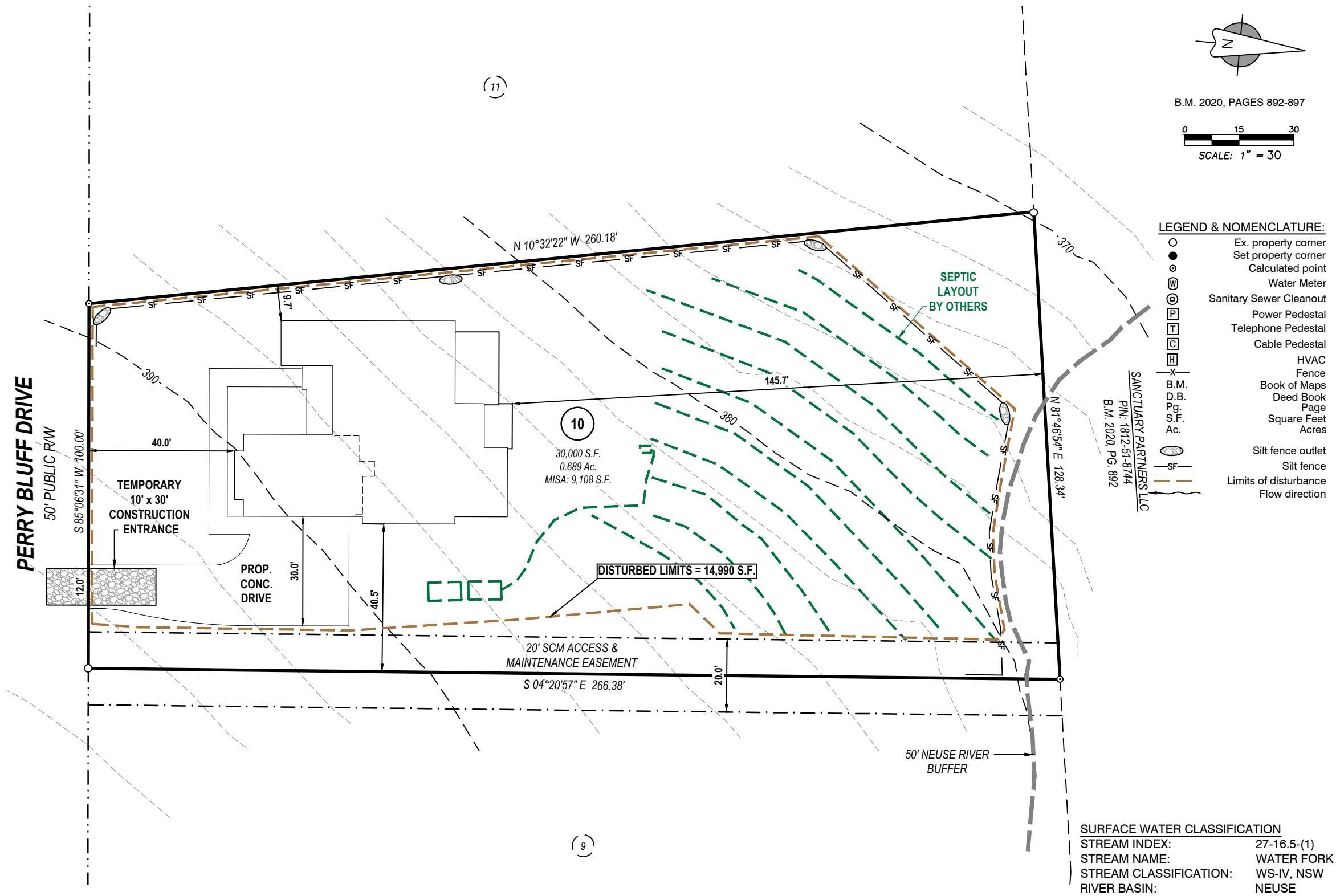
EROSION AND SEDIMENT CONTROL

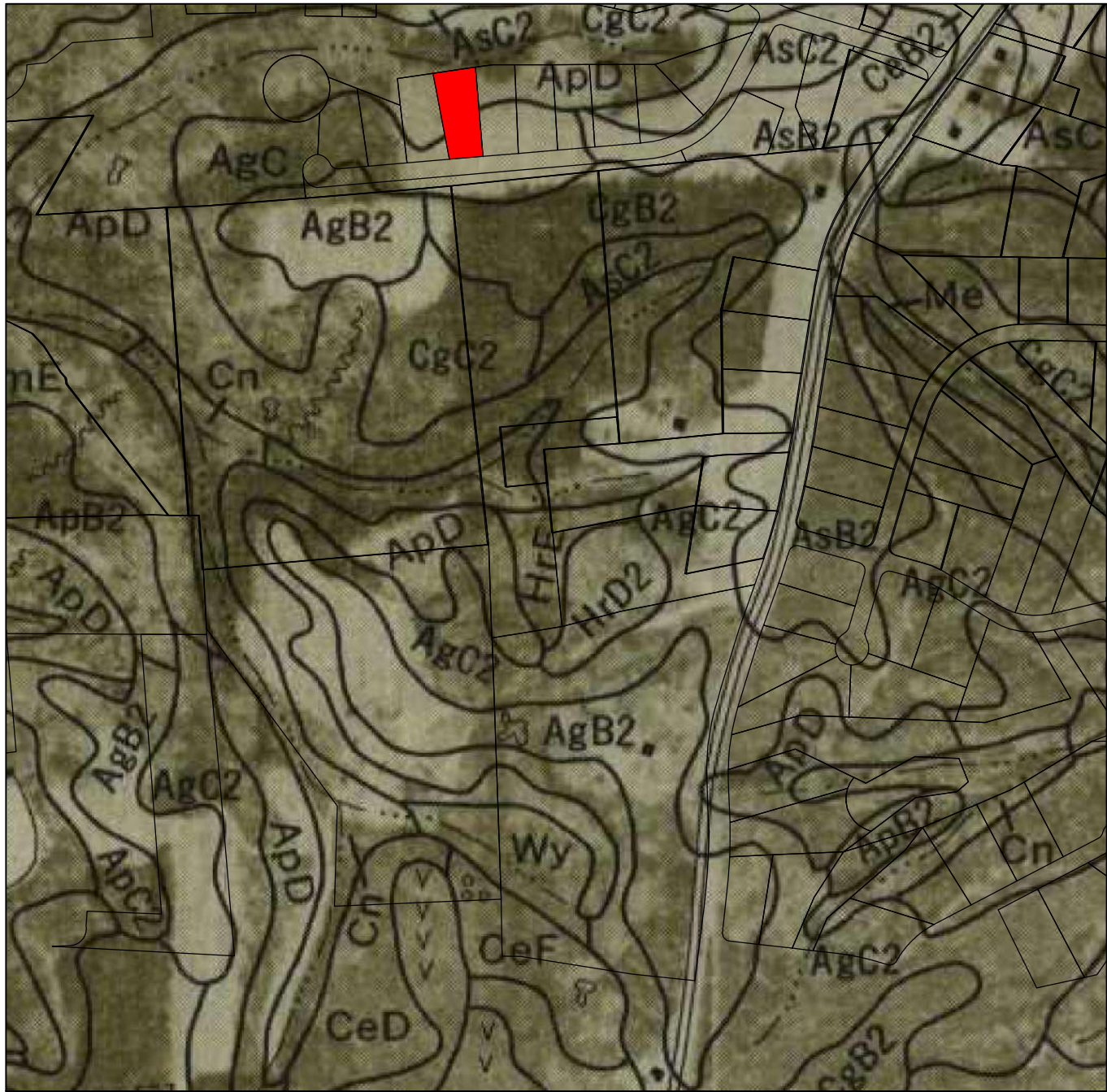
APPROVED PLAN
DATE _____
PERMIT NO. S- _____
Wake County Environmental Services
Sedimentation & Erosion Control
(919) 856-7400



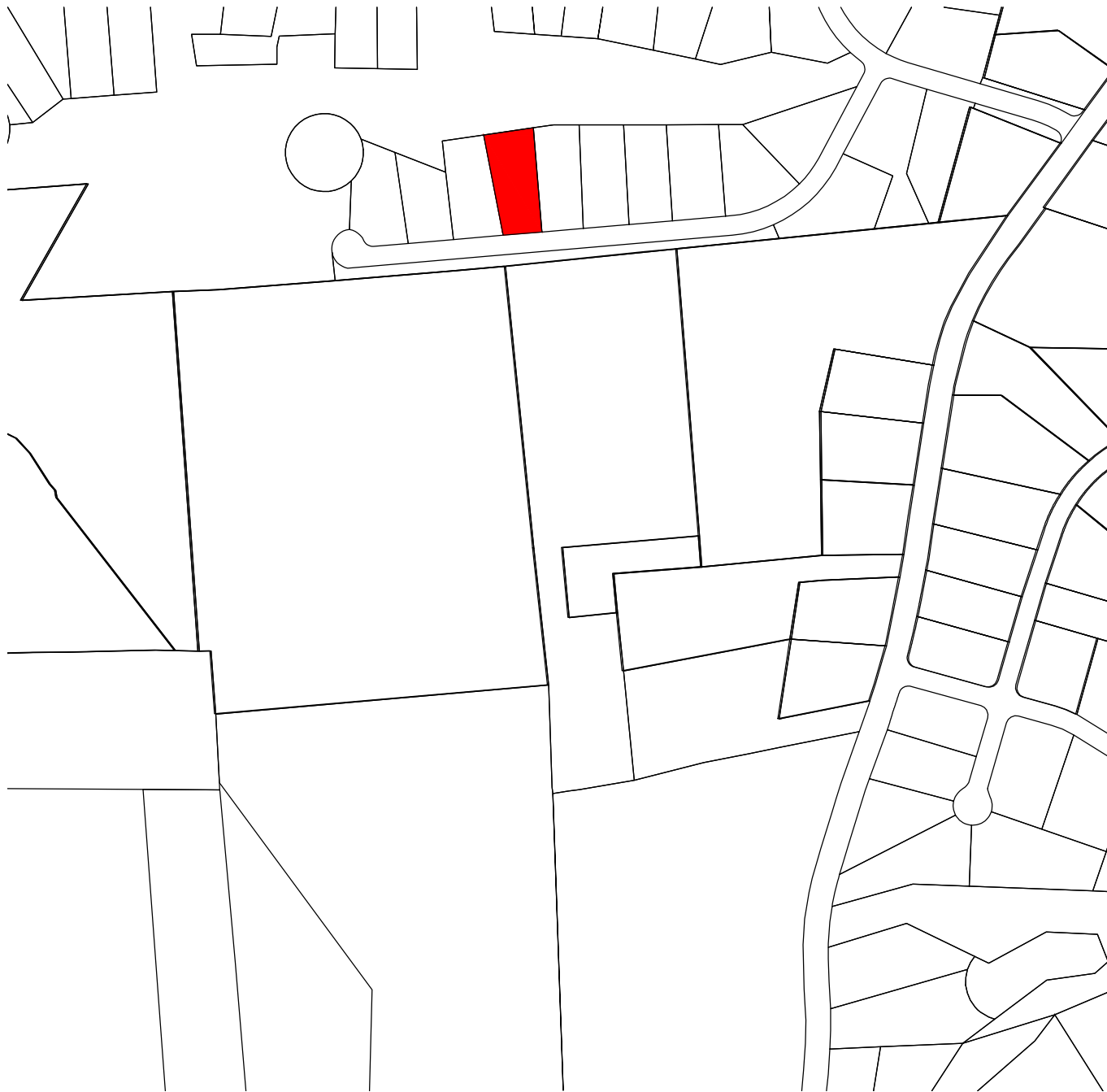
TYPICAL CONSTRUCTION SEQUENCE FOR SINGLE FAMILY LOTS SEDIMENT AND EROSION CONTROL

- 1. Wake County reserves the right to require a site specific erosion control plan to be prepared and submitted for the 30-day review cycle.
- 2. As of April 1, 2019 applicants must apply online for NCG-01 Permit coverage from NCDEQ. This requirement is in addition to the Wake County land disturbance permit.
- 3. Obtain all necessary permits and certificates. Download standard sediment and erosion control plan for single family lots from www.wakegov.com.
- 4. Install tree protection fence if required. Install gravel construction entrance, silt fence, silt fence outlets and additional measures as needed. Clear only as necessary to install devices. Provide groundcover for all disturbed areas.
- 5. Call Environmental Consultant for an onsite inspection by the Environmental Consultant to obtain a Certificate of Compliance.
- 6. Begin construction, building, clearing and grubbing. Maintain erosion control devices as needed.
- 7. Stabilize site as areas are brought up to finish grade with vegetation, paving, ditch linings, etc. Provide groundcover for denuded areas per NPDES Ground Stabilization Timeframes.
- 8. When construction is complete, and all areas are permanently stabilized and erosion control measures are removed, call Environmental Consultant for an inspection.
- 9. Obtain a Certificate of Completion.

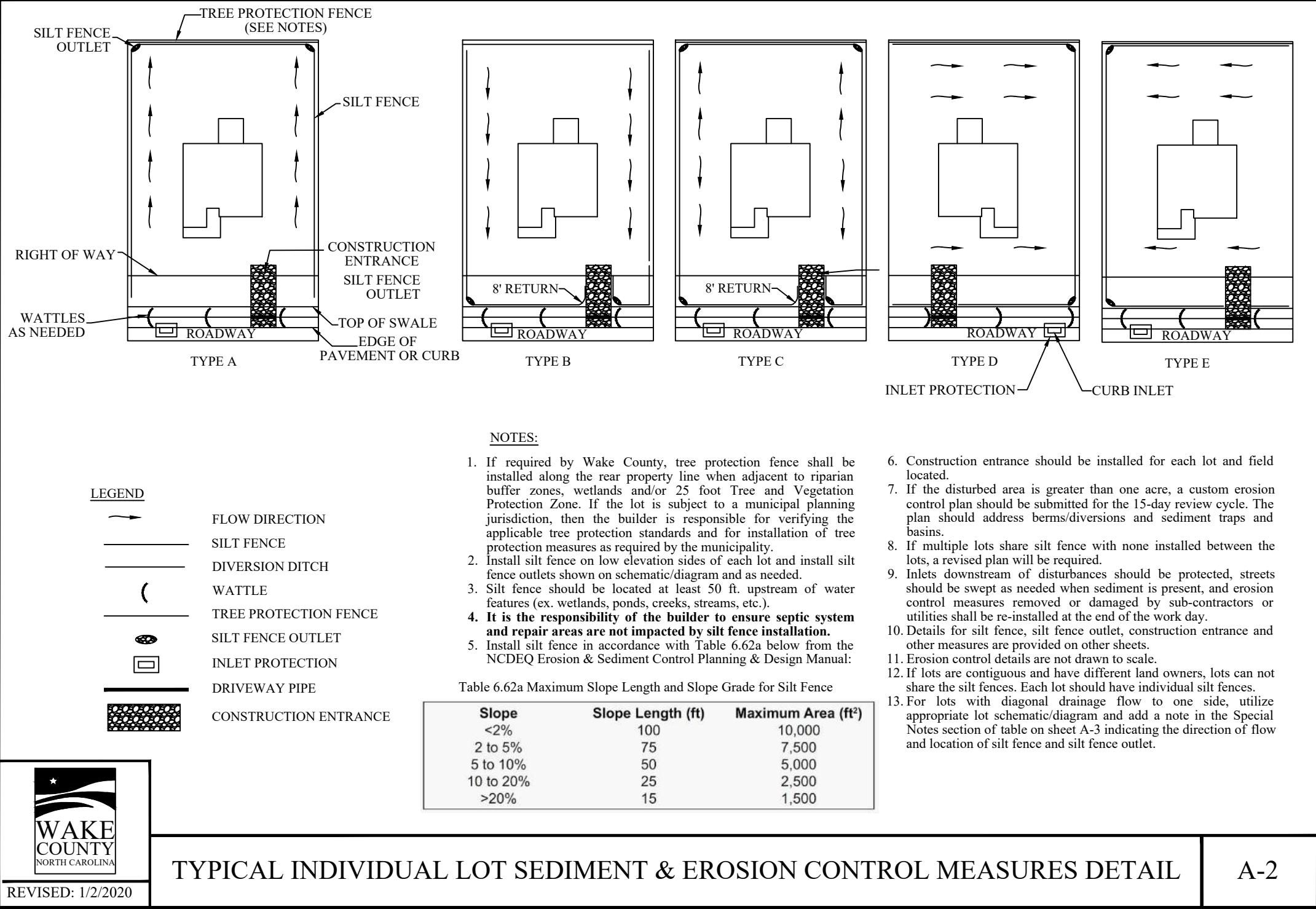


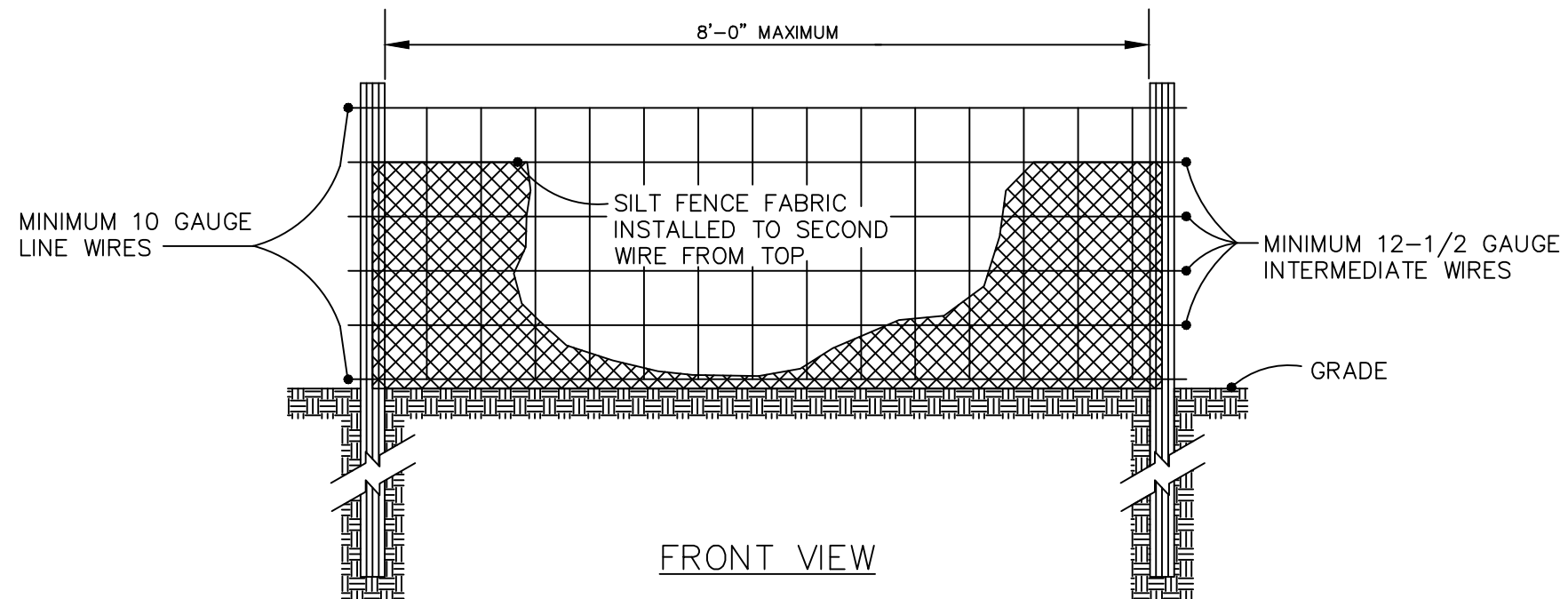


USGS QUAD MAP OVERLAY
NOT TO SCALE



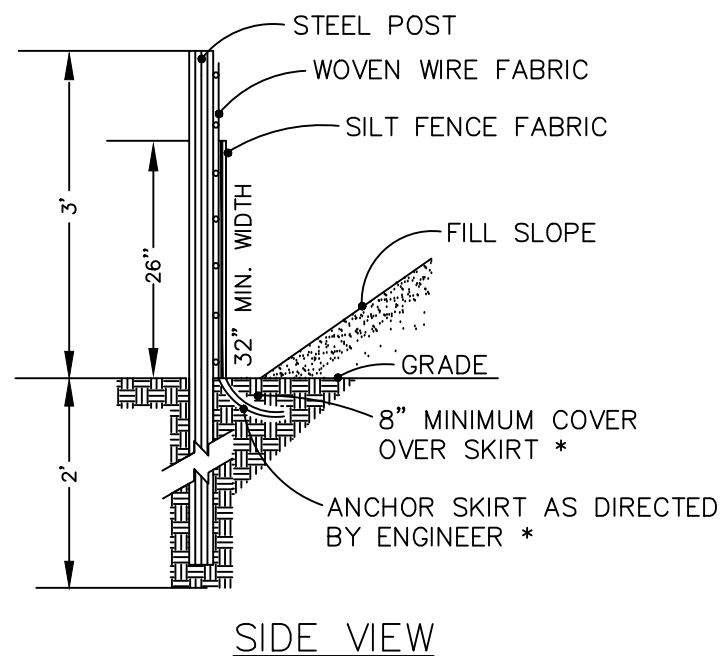
NRCS SOILS MAP OVERLAY
NOT TO SCALE





NOTES:

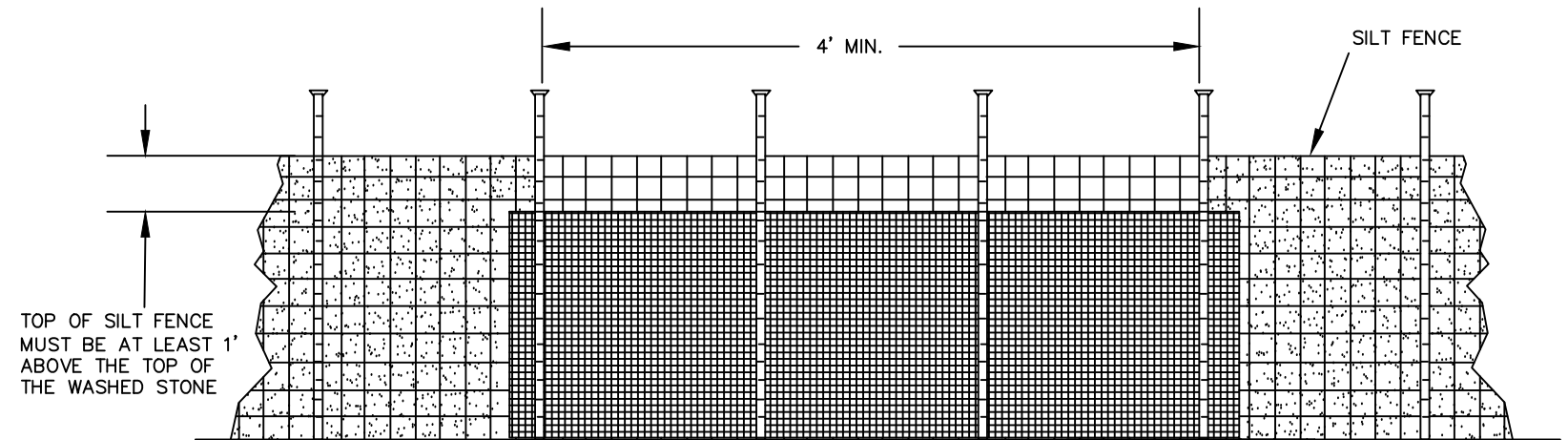
1. Use silt fence only when drainage area does not exceed 1/4 acre and never in areas of concentrated flow.
2. Remove deposited sediment when 50% capacity is reached and as needed to provide storage volume for the next rain event and to remove hydraulic pressure on the silt fence.
3. Inspect silt fence weekly and after each 1" rain event.



EFFECTIVE: 01/31/08

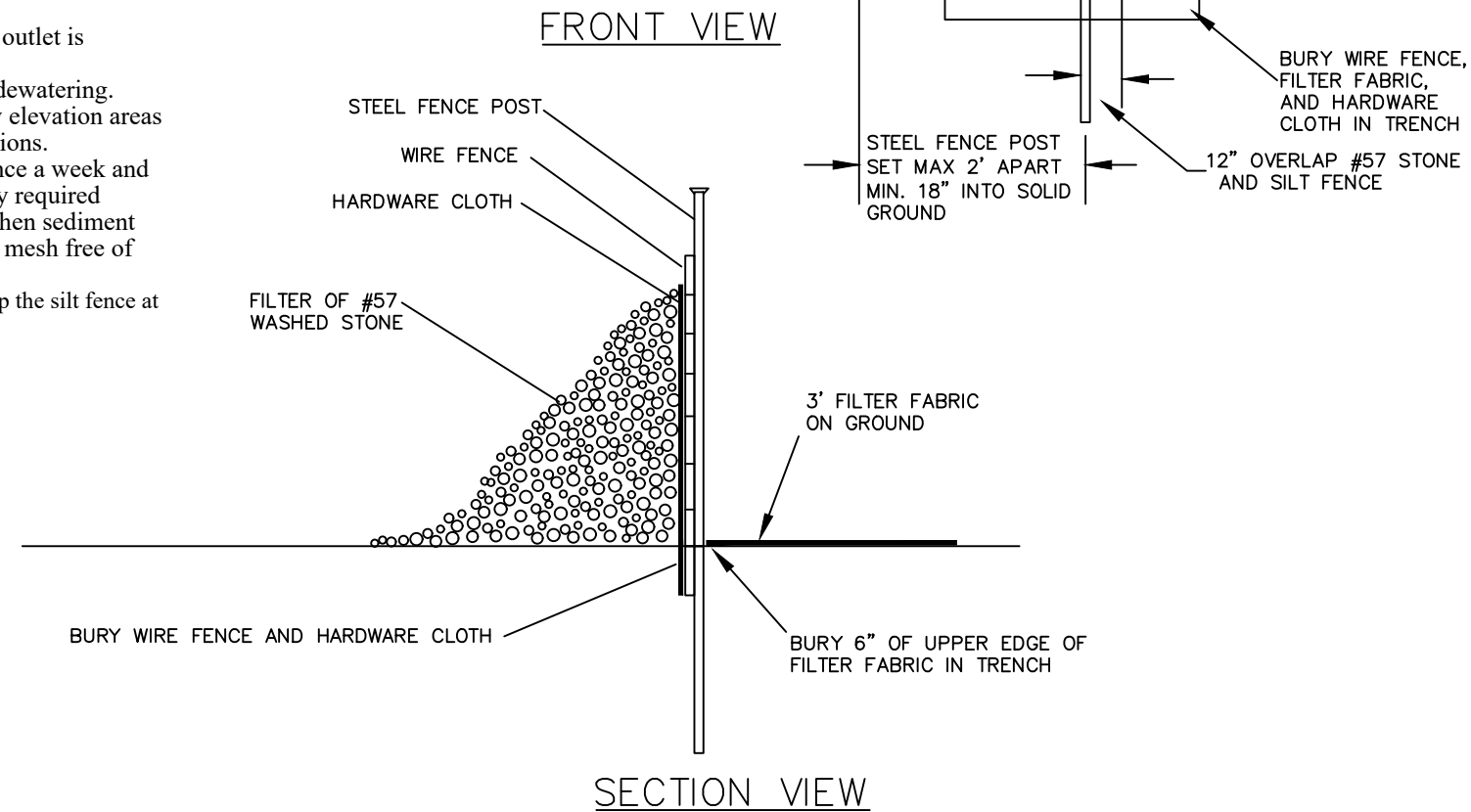
STANDARD TEMPORARY SILT FENCE DETAIL

A-4



NOTES:

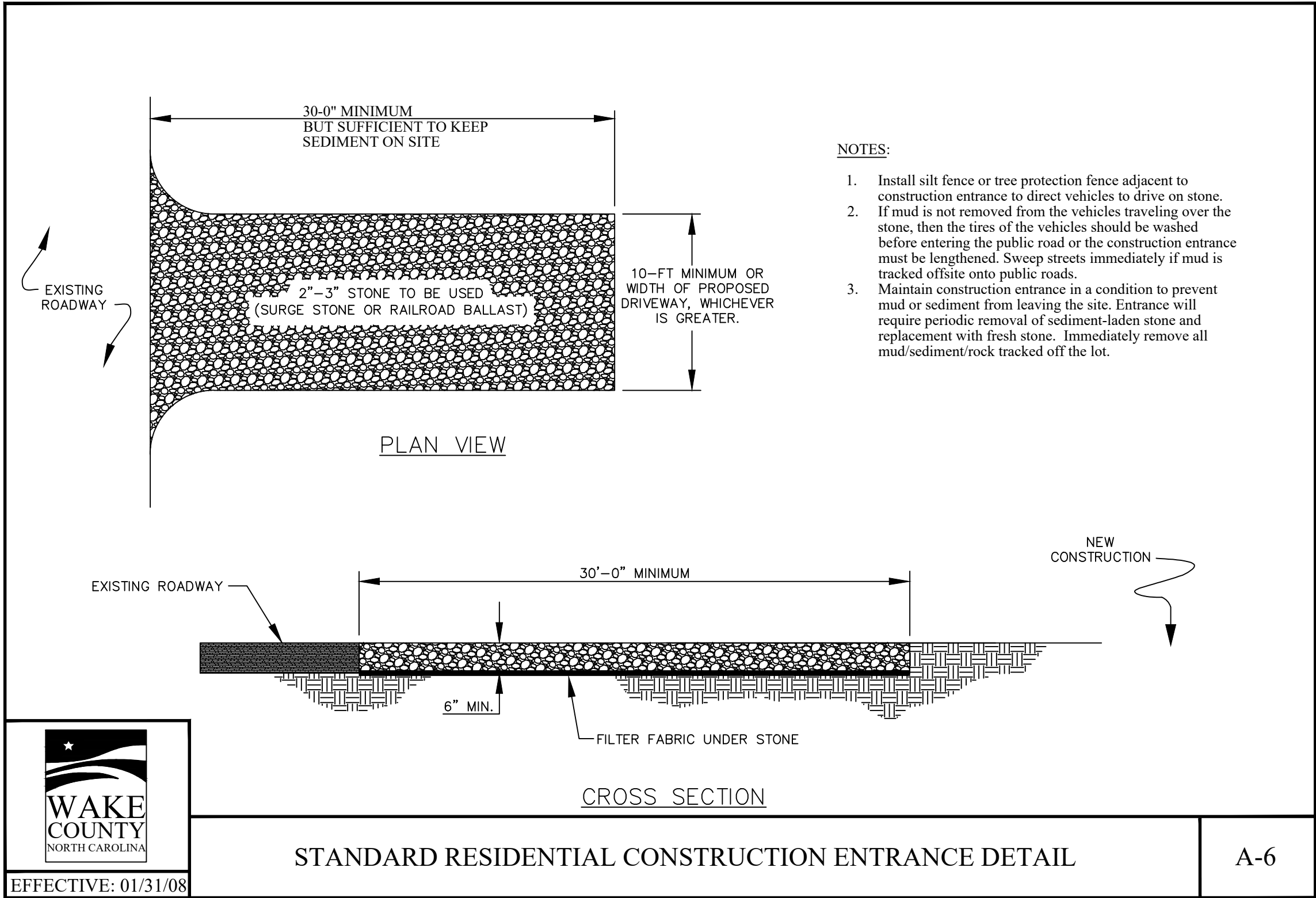
1. Remove sediment when half of stone outlet is covered.
2. Replace stone as needed to facilitate dewatering.
3. Stone outlets should be placed on low elevation areas of silt fence and based on field conditions.
4. Per NCG-01, inspect outlet at least once a week and after each 1" rain event. Complete any required repairs immediately. Freshen stone when sediment accumulation exceeds 6 inches. Keep mesh free of debris to provide adequate flow.
5. Hardware cloth and gravel should overlap the silt fence at least 12 inches.

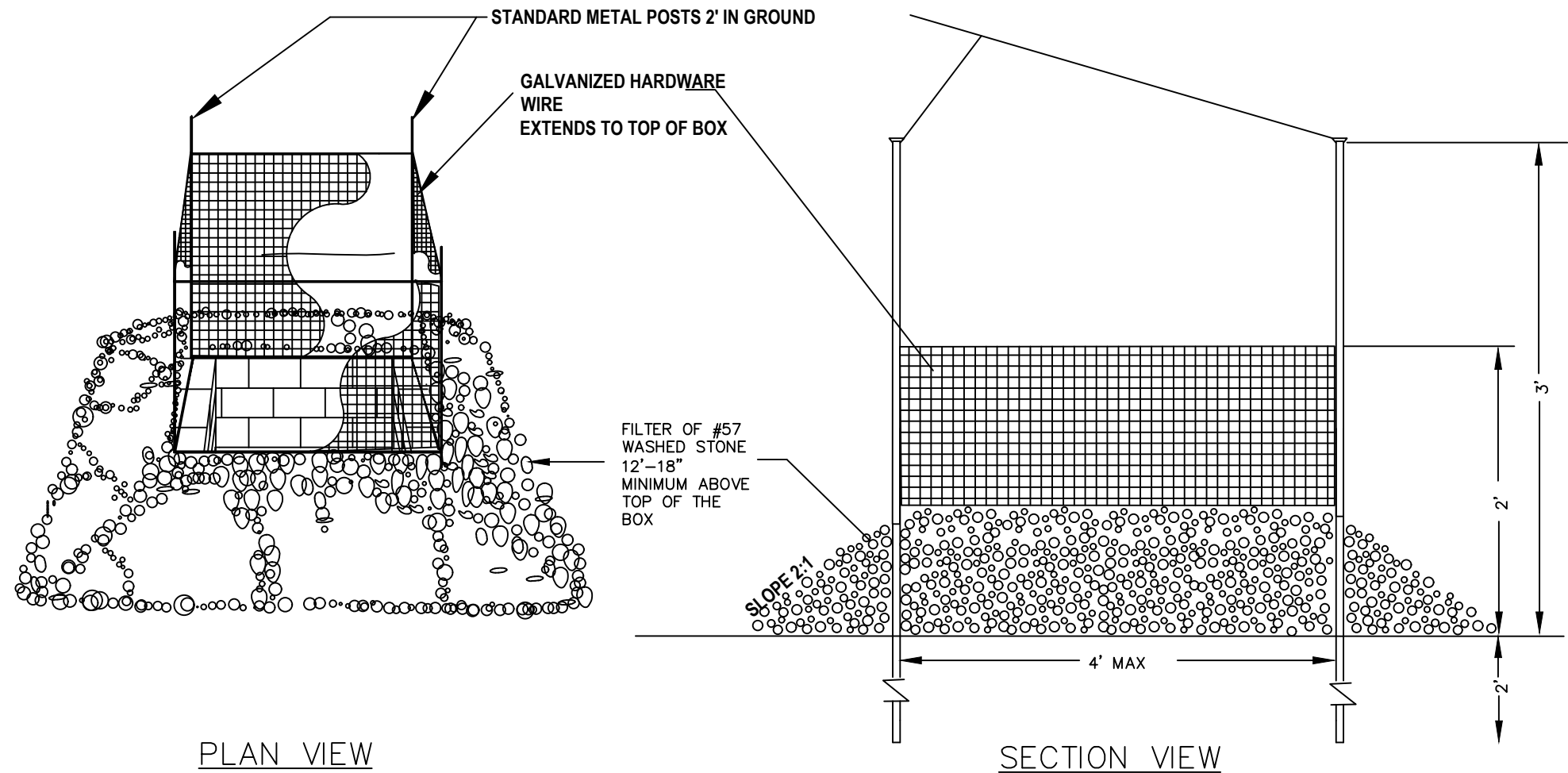


EFFECTIVE: 01/31/08

STANDARD TEMPORARY SILT FENCE OUTLET DETAIL

A-5





NOTES:

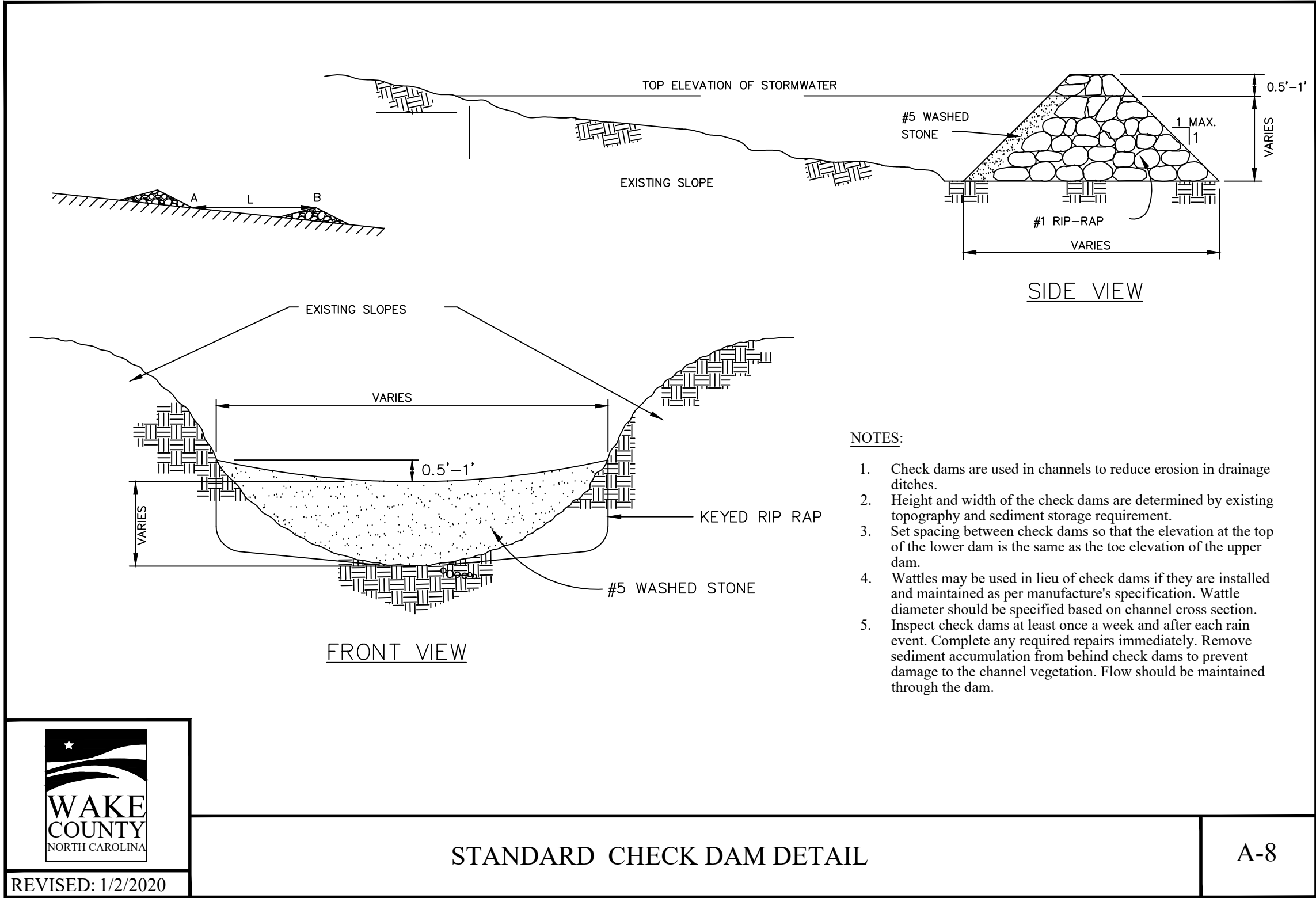
Inlet protection will require periodic removal of sediment-laden stone and replacement with fresh stone. Inspect periodically and replace stone as needed. Keep mesh free of debris to provide adequate flow.

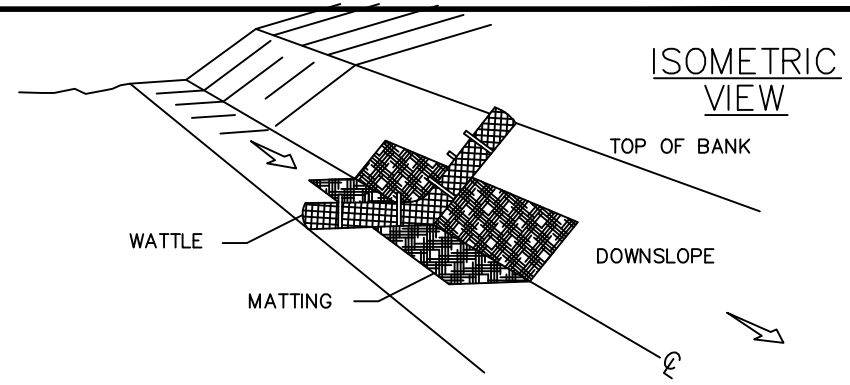
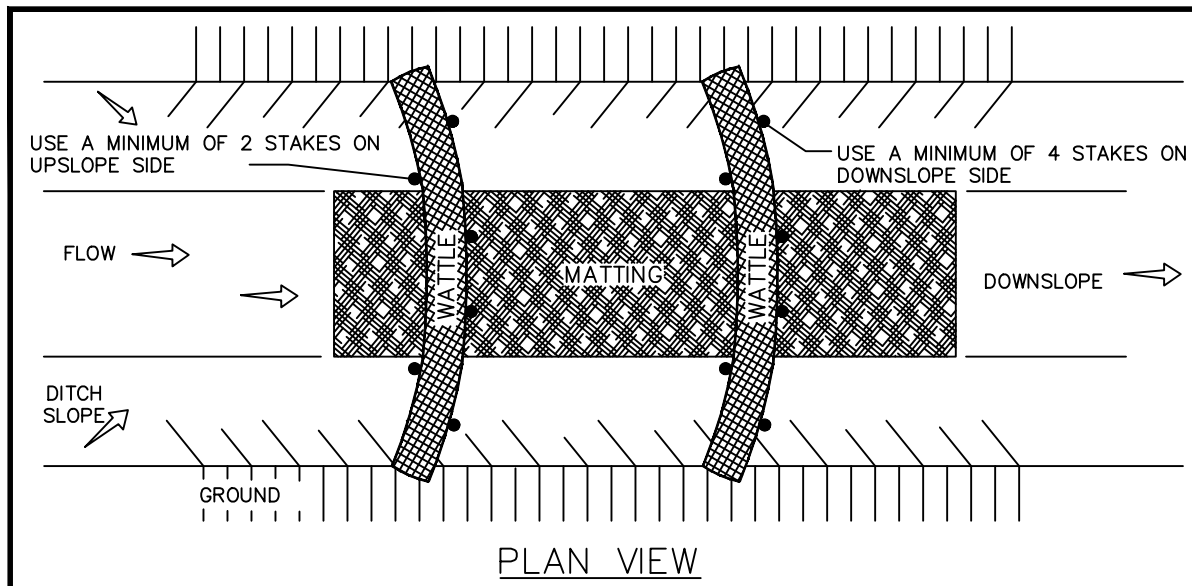


REVISED: 1/2/2020

STANDARD INLET PROTECTION DETAIL

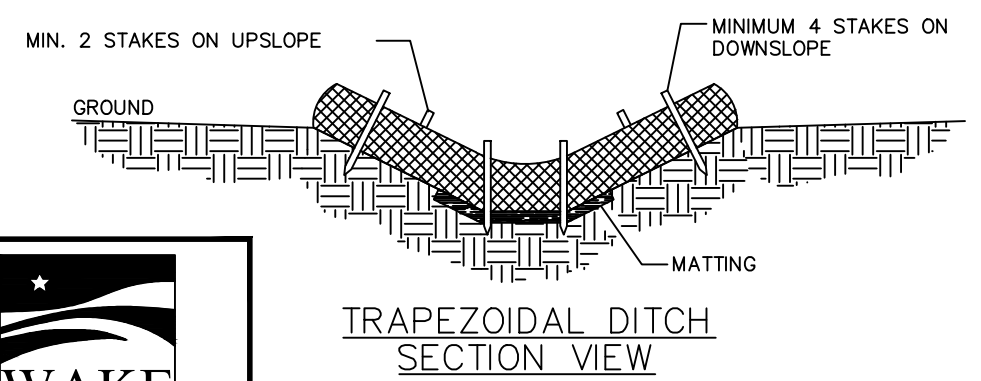
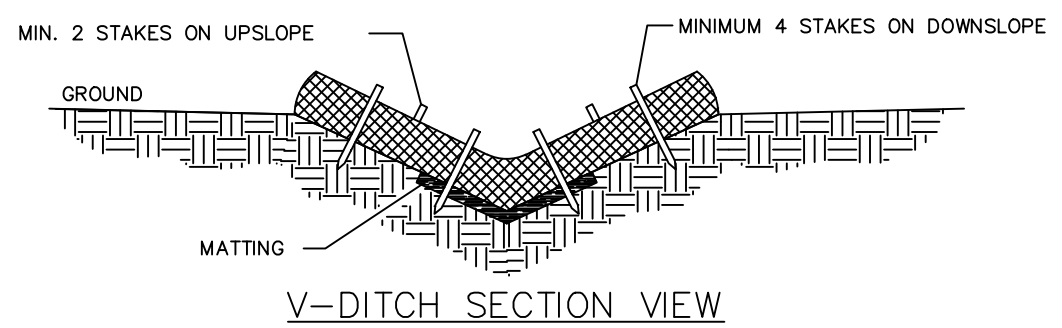
A-7



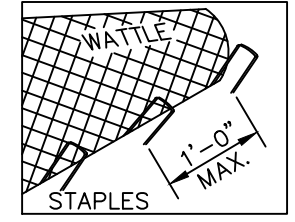


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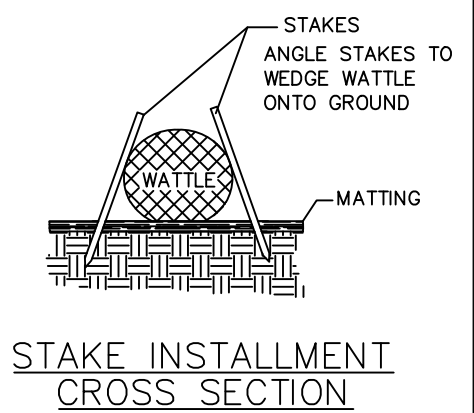
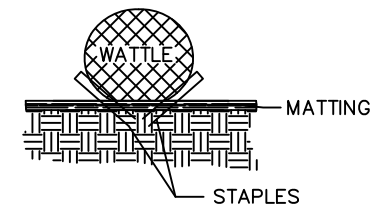
1. Use a minimum 12-inch diameter excelsior wattle.
2. Use 24-inch long wooden stakes with a 2"x2" nominal cross section.
3. Install wattle(s) to a height on slope so flow will not wash around wattle and scour slopes, or as directed.
4. Install a minimum of two upslope stakes and four downslope stakes at an angle to wedge wattle to ground at bottom of ditch.
5. Provide staples made of 0.125-inch diameter steel wire formed into a u-shape not less than 12 inches in length.
6. Install staples approximately every 1 linear foot on both sides of wattles and at each end to secure it to the soil.
7. After installation of staples, check any gaps between wattles and ground with matting.



WEAVE STAPLES THROUGH MESH CASING OF WATTLE



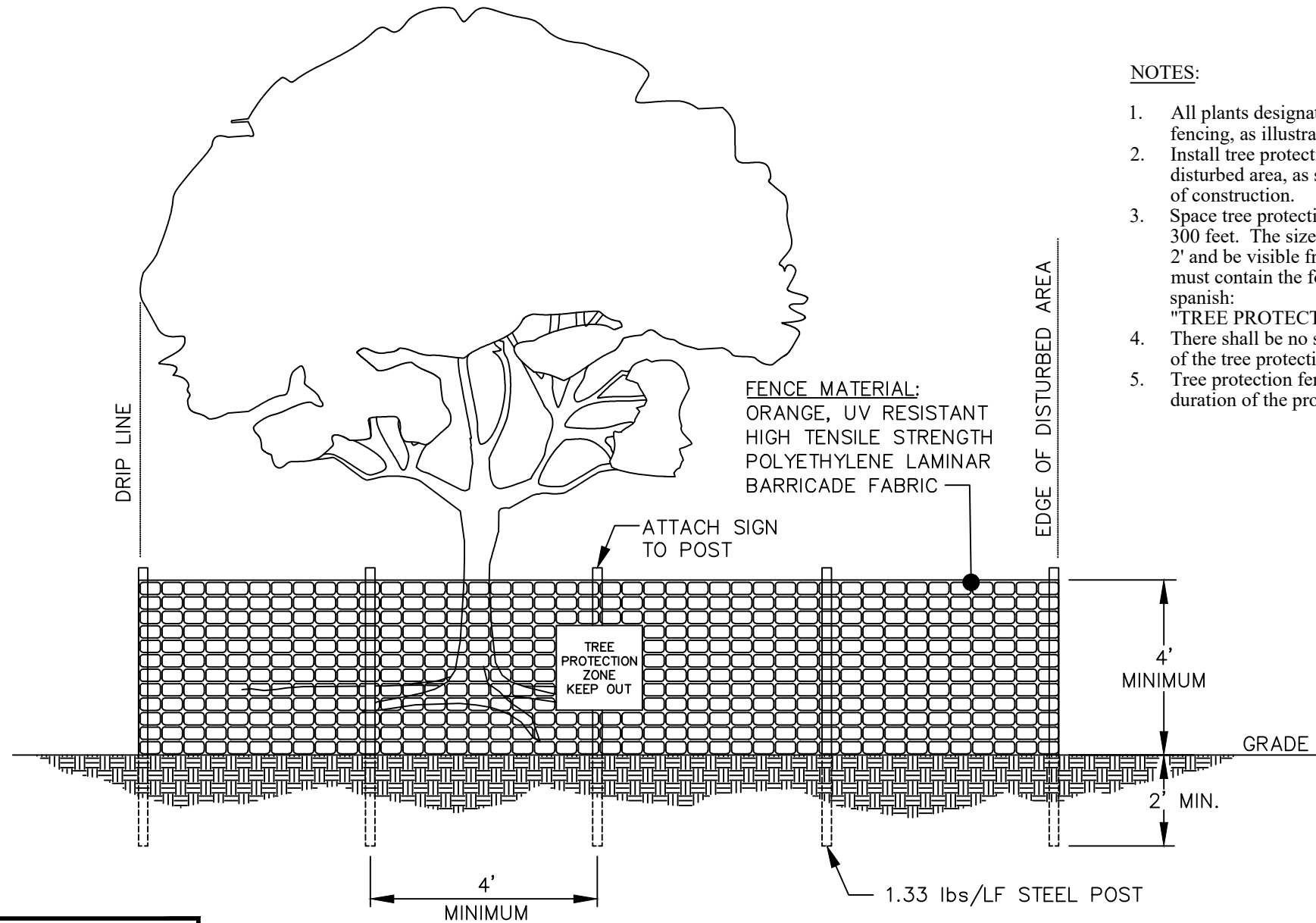
STAPLE INSTALLMENT SECTIONS



REVISED: 1/2/2020

STANDARD WATTLE DETAIL

A-9



NOTES:

1. All plants designated to be saved shall be protected by fencing, as illustrated.
2. Install tree protection fence at tree drip line or at edge of disturbed area, as shown on plans, prior to commencement of construction.
3. Space tree protection zone signs a minimum of one every 300 feet. The size of each sign must be a minimum of 2' x 2' and be visible from both sides of the fence. The sign must contain the following language in both english & spanish: "TREE PROTECTION ZONE, KEEP OUT".
4. There shall be no storage of material within the boundaries of the tree protection fencing.
5. Tree protection fencing shall be maintained throughout the duration of the project.



REVISED: 1/2/2020

STANDARD TREE PROTECTION FENCE DETAIL

A-11

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
- Temporary grass seed covered with straw or other mulches and tackifiers - Hydroseeding - Roller erosion control products with or without temporary grass seed - Appropriately applied straw or other mulch - Plastic sheeting	- Permanent grass seed covered with straw or other mulches and tackifiers - Geotextile fabrics such as permanent soil reinforcement matting - Hydroseeding - Shrubs or other permanent plantings covered with mulch - Uniform and evenly distributed ground cover sufficient to restrain erosion - Structural methods such as concrete, asphalt or retaining walls - Roller erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

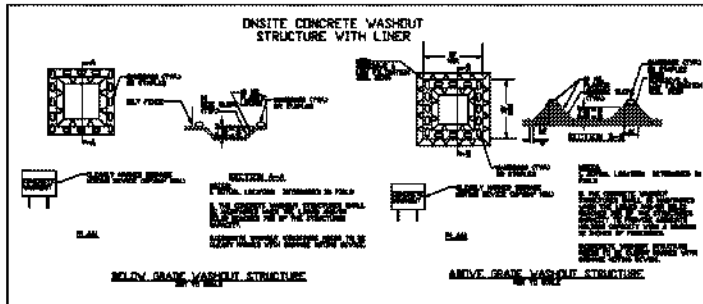
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

Temporary seeding recommendations for late Winter/Early Spring	Temporary seeding recommendations for Summer	Temporary seeding recommendations for Fall														
Seeding Mixture	Seeding Mixture	Seeding Mixture														
<table><tr><td>Species</td><td>Rate (Lb/acre)</td></tr><tr><td>Rye Grain (green)</td><td>120</td></tr><tr><td>Annual lespedeza (Kobe in Piedmont and Costal Plain)</td><td>50</td></tr></table>	Species	Rate (Lb/acre)	Rye Grain (green)	120	Annual lespedeza (Kobe in Piedmont and Costal Plain)	50	<table><tr><td>Species</td><td>Rate (Lb/acre)</td></tr><tr><td>German millet</td><td>40</td></tr></table>	Species	Rate (Lb/acre)	German millet	40	<table><tr><td>Species</td><td>Rate (Lb/acre)</td></tr><tr><td>Rye Grain</td><td>120</td></tr></table>	Species	Rate (Lb/acre)	Rye Grain	120
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Species	Rate (Lb/acre)															
Rye Grain	120															
Omit annual lespedeza when duration of temporary cover is not to extend beyond June.	Seeding dates: Piedmont- May 1 -Aug 15 Coastal Plain- April 15- Aug 31	Seeding dates: Piedmont- Aug 15 - Dec 31 Coastal Plain- Aug 31 - Dec 31														
Seeding dates: Piedmont and Coastal Plain- January 1 - May 1	Soil Amendments: Follow recommendations of soil tests or apply 2 tons/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.	Soil Amendments: Follow recommendations of soil tests or apply 2 tons/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.														
Soil Amendments: Follow recommendations of soil tests or apply 2 tons/acre ground agricultural limestone and 1,000 lb/acre 10-10-10 fertilizer.	Mulch: Apply 4,000/lb/acre straw. Anchor straw by asphalt tack, netting or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulching anchoring tool.	Mulch: Apply 4,000/lb/acre straw. Anchor straw by asphalt tack, netting or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulching anchoring tool.														
Mulch: Apply 4,000/lb/acre straw. Anchor straw by asphalt tack, netting or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulching anchoring tool.	Maintenance: Re-fertilize if growth is not fully adequate. Reseed, re-fertilize and mulch immediately following erosion and other damage.	Maintenance: Repair and maintain damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Costal Plain) in late February or early March.														
Maintenance: Re-fertilize if growth is not fully adequate. Reseed, re-fertilize and mulch immediately following erosion and other damage.																

PERMANENT SEEDING REQUIREMENTS FOR SHOULDERS, SIDE DITCHES, SLOPES (MAX. 3:1)		
Date	Type	Planting Rate
Aug 15 - Nov 1	Tall Fescue	300 lbs/acre
Nov 1 - Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Tall Fescue	300 lbs/acre
Apr 15 - Jun 30	Hulled Common Bermudagrass	25 lbs/acre
Jul 1 - Aug 15	Tall Fescue AND Browntop Millet or Sorghum-Sudan Hybrids***	125 lbs/acre (Tall Fescue); 35 lbs/acre Browntop Millet); 30 lbs/acre (Sorghum-Sudan Hybrids)

Seedbed Preparation: - Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available. - Rip the entire area to six inches deep. - Remove all loose rock, roots and other obstructions, leaving surface reasonable smooth and uniform. - Apply agricultural lime, fertilizer and superphosphate uniformly and mix with soil (see mixture below). - Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared four to six inches deep. - Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or cultipack after seeding. - Mulch immediately after seeding and anchor mulch. - Inspect all seeded areas and make necessary repairs or reseeds within the planting season, if possible. If stand should be more than 60% damaged, re-establish following the original lime, fertilizer and seeding rates. Mixture: Agricultural Limestone - 2 tons/acre (3 tons/acre in clay soils) Fertilizer - 1,000 lbs/acre - 10-10-10 Superphosphate - 500 lbs/acre - 20% analysis Mulch - 2 tons/acre - small grain straw Anchor - Asphalt emulsion at 300 gallons/acre



WAKE COUNTY
NORTH CAROLINA

REVISED: 1/2/2020

SEEDING REQUIREMENTS

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NOTES:

- 1. Construction details provided in this standard plan are NOT drawn to scale.
- 2. These details are for lots with less than one acre of land disturbance.
- 3. If the land disturbance on a single lot is greater than one acre, a custom plan should be submitted for the 30-day review cycle that addresses berms/diversions and sediment storage traps and basins.
- 4. This document is a guideline to control sediment onsite for single family lots with a disturbed area of less than one acre. Additional sediment control measures may be needed on a site-by-site basis.
- 5. Additional information on specification and installation guidelines can be obtained from the State Erosion and Sedimentation Control Design Manual.
<https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control>

REFERENCES:

City of Raleigh, Stormwater, Standard Details
(<https://www.raleighnc.gov/business/content/PlanDev/Articles/DevServ/DrawingsStandardDetailsIndex.html>)

Delaware Erosion and Sediment Control Handbook

NCDEQ, Division of Energy, Mineral and Land Resources, Mooresville
Regional Office, Typical Lot by Lot Sediment and Erosion Control Plan.

NCDEQ Sediment and Erosion Control Design Manual, May 2013.
(<https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permit-guidance/erosion-sediment-control-planning-design-manual>)

Town of Cary, Standard Detail Drawings
(<https://www.townofcary.org/business-development/developing-in-cary/standard-detail-drawings-2017>)

Wake County, Sediment Control Details
(<http://www.wakegov.com/water/stormwater/erosion/Pages/erosionspecs.a`spx>)

The Nau Company, Standard Single Lot Erosion Control Template
(www.thenauco.com)

NCDOT, Roadside Environmental Unit, 2018 Roadway Standard
Drawings, Division 16 Erosion Control and Roadside Development



REVISED: 1/2/2020

OTHER NOTES, REFERENCES AND ACKNOWLEDGEMENTS

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Redaction Log

Reason	Page (# of occurrences)	Description
no reason	3 (1) 12 (1) 33 (1)	---