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TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION 10.7.2020



Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

	•			•	
Site or Project Name: Fa	armington Woods - F	Phase 10		ES Tracking ber: TNR	
Street Address Tax Map 45 / Parcel 12.00 - Farmington Drive Construction Start Date: 06/01/2020			06/01/2020		
or Location:	45 / Parcer 12.00 -	ramington Drive	Estir	nated End Date:	12/01/2021
Site Phase 10 Subdivision Development			Latit	ude (dd.dddd):	36.2500
Description:	Subdivision Develop	ment	Long	gitude (-dd.dddd):	-86.3241
County(ies): Wilson Cou	intv	MS4 Jurisdiction	ebanon	es Disturbed:	15.20 +/-
7() !!!!!!!!!!		(if applicable):	Tota	I Acres:	21.19 +/-
If wetlands are located on-	site and may be impa	cted, attach wetlands de	adjacent to the construction lineation report. his site, what is the permit r	_	Wetlands
Receiving waters: Barton	n's Creek				
Attach the SWPPP with th	ie NOI: SWPPP A	Attached 🔽	Attach a site location map:	Map Attached	
over construction plans an	d specifications): Fai	rmington Woods, LLC essee Secretary of State	or entity that has operation (SOS) Control Number: 0		
			T 5 (11		
Site Owner or Developer C	Contact Name: (Individi	ual responsible for site)	Title or Position: (the party	who signs the certi	fication below)
Richard C. Hayes			Managing Partner		7
Mailing Address: P.O. Box	x 309		City: Lebanon	State: TN	Zip: 37088
Phone: (615) 336-8479	Fax: (615)	543-6039	E-mail: rick@farmington	nwoodsllc.com	
Optional Contact: Krame	r Tuggles, P.E.		Title or Position: Consult	ing Engineer	
Mailing Address: 109 Per	nnsylvania Ave.		City: Lebanon	State: TN	Zip: 37087
Phone: (615) 444-2996	Fax: (615)	444-2961	E-mail: rktuggle@warre	nandassociates.n	et
Owner/Developer Certific	cation: (must be signed	by president, vice-presid	ent or equivalent, or ranking	elected official) (Prim	nary Permittee)
best of my knowledge and be	elief, true, accurate, and	complete. I am aware that	y me, or under my direction or s there are significant penalties on 39-16-792(a)(4), this declara	for submitting false inf	formation, including the
Owner/Developer Name: (print/type) Richard C.	Hayes	Signature: Jaun	Date	1/31/20
Contractor(s) Certificatio	n: (must be signed by	president, vice-presiden	it or equivalent, or ranking e	elected official) (Sec	ondary Permittee)
owner/developer identified abo accurate. I am aware that this I my activities on-site are thereb	ove and/or my inquiry of the NOI, if approved, makes to be regulated. I am aware to the second secon	ne person directly responsible the above-described construct that there are significant pen	nd the SWPPP referenced above for assembling this NOI and stion activity subject to NPDES palties, including the possibility of the Code Annotated Section 39-	SWPPP, I believe the intermit number TNR100 fine and imprisonmen	nformation submitted is 1000, and that certain of t for knowing violations,
Contractor name, address	, and SOS control nun	nber (if applicable):	Signature./	Date	p:
Richard C. Hayes - 0004	174166		Kil Jam	. 8/	31/20
Contractor name, address, and SOS control number (if applicable): Signature: Date:					
OFFICIAL STATE USE OF	NI V				
	Reviewer:	Field Office: 04	Permit Tracking 24459	5 Exceptiona	al TN Water:
Fae(s): 1000	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable Parame		Coverage Date:
Fee(s): 1000.	A L Aqualio Fibra/Fauria.	505 Corporate Status.	vvaters with oriavaliable Parame	ters.	overage Date.

FARMIN	GTON WOODS, LLC P.O. BOX 309	Acet #: Dhare	10	
LEB/	ANON, TN 37088 0309	Invoice: 1DEC	Review	8538
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TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

7243 Division

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Oato Do	Date Beceived	Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for Construction General Permit Activities (CGP)	(SWPPP) Checklist for Constructio	tion General Po	rmit Activities (CGP) MS4 Inrisdiction:
Reviewer:	er:	# of Disturbed Acres:	Aito/Droingt Name.		
Unavail	able Wa	Unavailable Waters: Yes \(\brace \) No \(\brace \) Exceptional Waters: Yes \(\brace \) No \(\brace \) T & E Spec	scies: Yes \(\Bar\)	A JD: Yes	□ No □ T& E Species: Yes □ No □ USACE/EPA JD: Yes □ No □ Fee Collected: Yes □ No □
This cl	hecklist p	This checklist pertains to the current CGP and is used during the NOI review process to help determine whether the submittal provides enough information to grant a Notice of Coverage under	p determine whether the submittal pro	ovides enough in	ormation to grant a Notice of Coverage unde
		the permit. This checklist does not specifically address every condition of the permit or preclude the Division from asking for additional information.	in of the permit or preclude the Divisio	on from asking fo	additional information.
Yes	Yes No			Yes No	

Yes	N _o		Yes No	
		Correct		
		Proper	Proper signature for the owner/developer provided Contract Contrac	-
		Receivi	listed	en and is correct
		ARAP F	ARAP #(s):	trol # (if applicable)
		Approp	Appropriate portion of USGS topo map provided showing the boundaries of the construction County(ies):	
Yes	No	N/A	SWPPP Requirements	# CGP pg #
×			For comprehensive SWPPPs - All foreseeable construction-related activities are addressed [1.4.2] - PG, 4	-
X			Plans and specs for structural control measures have been prepared and stamped by Professional Engineer or Landscape Architect [3.1.1] 🗵	.1] B 14
		X	Includes engineering design of sediment basin/controls for projects 10 acres or greater (5 acres if impaired/exceptional waters) [3.1.1]	14
×			Includes Quality Assurance Site Assessment requirement criteria if applicable [3.1.2] - RR, 1	41
×			Signed by the operator(s) [3.3.1] - Nol	15
×			Includes multi-phase sheets: <5 ac. – 2-phase plan min.; ≥5 ac. – 3-phase plan min. [3.5.2] → PG, 4	18
X			Depicts disturbance limits, buffer zones, watershed drainage patterns, and drainage area serving each outfall [3.5.1; 4.1.1] - B	17, 26
X			Includes a description of all construction activities (not just grading and street construction) [3.5.1.a] - PG, 4	17
X			Includes a description sequence of major activities (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.) [3.5.1.b] – 🤻	71 - 4- 17
X			Includes estimates of the total site area versus the total area of the site to be disturbed [3.5.1.c] - PG,4	17
X			Includes a complete inventory of aquatic resources (including any stream, sinkhole or wetland) on or adjacent to the project [3.5.1.i]	5 17
X			Includes a description of appropriate erosion prevention and sediment controls (EPSCs) and the general timing of implementation [3.5.2]	-6 18
×			Specifies which permittee is responsible for implementation of which EPSC [3.5.2] - 5	18
X			Specifies removal of trapped sediment from sediment controls at or before 50% design capacity [3.5.3.1.e] - 5	19
×			Specifies EPSCs will be implemented before earth-moving begins [3.5.3.1.1] - 4-	20
X			Specifies stabilization within 14 days (7 days for ≥35% slopes) on site areas where construction has temporarily/permanently ceased [3.5.3.2]	.3.2] 6 21
X			Specifies inspections of outfalls/EPSC measures at least twice weekly and at least 72 hours apart [3.5.8.2.a] $ extstylessimp 7$	24
×			Specifies that vegetation, EPSCs & other protective measures are repaired, replaced, or modified within 7 days [3.5.7] [3.5.8.2.f] 🏻 – 🖰	24, 25
×			Depicts the proposed location of all major structural/nonstructural controls and all proposed stabilization practices [3.5.1.g] [3.5.3.3]	B 18
X			Identifies all outfall locations intended for coverage under the CGP [3.5.1.g] - $oldsymbol{\mathbb{G}}$	17
X			Includes the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site [3.5.1.j] $- $ $\leq /$	No. 17
		X	Identifies construction phasing for activities that will disturb >50 acres [3.5.1.m] [3.5.3.1.k]	17, 20
×			EPSCs have been designed to control the rainfall and runoff from a 2-year, 24-hour return interval storm [3.5.3.3] - 5	21
		X	Specifies sediment basins for construction sites with drainage areas >10 acres [3.5.3.3]	21
X			Specifies a 30' natural riparian buffer zone adjacent to all streams, lakes, wetlands on/adjacent to the construction site [4.1.2]	26
		X	Specifies a 15' natural riparian buffer zone adjacent to wet weather conveyances identified as WOTUS by the USACE or EPA [4.1.2] [5.4.2]	.2] 26, 32

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for Construction General Permit Activities (CGP)

Yes	Yes No	N/A	Additional SWPPP Requirements for Discharges into Impaired or Exceptional TN Waters	CGP pg #
		X	Specifies that EPSCs proposed for the site have been designed to control storm runoff generated by a 5-year, 24-hour storm event [5.4.1.a]	30
		×	Specifies sediment basins for construction sites with drainage areas >5 acres that discharge to impaired or exceptional waters [5.4.1.f]	31
		×	Specifies a 60' natural riparian buffer zone adjacent to all impaired or exceptional waters on/adjacent to the construction site [5.4.2]	32
14			SWPPP Requirements for Permanent (Post-Development) Stormwater Management	CGP pg #
×			Specifies velocity dissipation devices at discharge locations and along the length of any outfall channel [3.5.4]	22
×			Includes technical basis used to select velocity dissipation devices where flows exceed predevelopment levels (3.5.4)	23

Identification indicators of possible streams or wetlands utilizing site information and resources include:

- Contour and stream indicators on USGS TOPO maps
- Drainage area to a defined conveyance (20 acres east TN/40 middle TN/75 west TN),
- Aerial photography identifying a sinuous tree line or grouping of remaining forest in an agricultural setting
 - Springhouse/box
- Comparable nearby drainage that has previously been determined to have a stream

- Onsite or adjacent ponds or impoundments
- Check EFO HD GIS for previous determinations NRCS soil maps or Web Soil Survey: 9. 7. 8
- (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)
 - Wetlands on National Wetlands Inventory:
 - (http://www.fws.gov/wetlands/data/mapper.HTML) 6

If sufficient indicators exist, a stream determination may need to be performed. Stream determinations must be performed by a Qualified Hydrologic Professional: (http://tnhdt.org/)

Comments

Storm Water Pollution Prevention Plan

For Farmington Woods Phase 10

Prepared for:

Farmington Woods, LLC P.O. Box 309 Lebanon, Tennessee 37088



File Number: 640-19 September 2020



Fax: 615-444-2961



TABLE OF CONTENTS

NOI	
Certification and Signature Page	1
Owner's Certification	1
Engineer's Certification of Storm Water Pollution Prevention Plan	2
Site and Owner Information:	3
Introduction and Purpose:	3
Location and Site Maps:	3
Project Description:	3
Site Plans	4
EPSC Plans	4
Description of Construction Activity	4
Anticipated sequence of major construction Activities:	^Z
Estimates of the total area that is expected to undergo excavation or grading:	^Z
Estimates of the increase in impervious area after the construction is completed and of the volume of runoff associated with a one-inch storm:	
Description of Fill Material:	
Receiving Waters:	
Non-Storm Water Discharge:	5
Construction Management Techniques and Maintenance of Sediment and Erosion Controls:	
Vegetative Controls:	6
Structural Controls:	6
Permanent Stabilization Measures	6
Discharge Quality	б
Reporting and Recordkeeping	6
Scope and Schedule of Inspections of EPSC Measures and Outfall Points	
Quality Assurance Site Assessment	7
Construction Erosion/Sediment Control Measures	8
Permanent Erosion and Sediment Controls to be Established by Contractor	
Special Considerations	11

Attachments:

Attachment A Location Maps

Attachment B EPSC Plans (3 Stages)

Attachment C, Notice of Termination (NOT)

Attachment D Construction Storm Water Inspection Report



CERTIFICATION AND SIGNATURE PAGE

NPDES Permit No.:

TNR100000

Project:

Farmington Woods

Phase 10

Lebanon, Tennessee

General Contractor:

Not Identified at time of submission

Grading Contractor:

Not Identified at time of submission

Owner's Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Name:	Richard Hayes	
√ Signature:	La Say	Date: 8/31/20

Contractor's Certification

I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations and for failure to comply with these permit requirements.

Name: Richard Hay	<u>/es</u>		
Signature:	Hayr_	Date:	8/31/20
Company Name	Farmington Woods, LLC		
Address	P.O. Box 309		
Address	Lebanon, TN 37088		
Phone Number			



Engineer's Certification of Storm Water Pollution Prevention Plan

I certify that this Storm Water Pollution Plan for the prevention and minimization of all sources of pollution in storm water runoff has been prepared utilizing effective Best Management Practices (or BMP's) from the following documents:

- 1. <u>The Storm Water Management for Construction Activities- Developing Pollution Prevention Plans and Best Management Practices</u> document, as amended, as adopted by the EPA.
- 2. <u>The Tennessee Erosion & Sediment Control Handbook</u>, Tennessee Department of Environment and Conservation, Fourth Edition, August 2012

If the plan is properly implemented and maintained by the permittee, discharges of pollutants can reasonably be expected to be effectively minimized to the maximum extent practicable according to permit requirements. The applicant has been advised that appropriate pollution abatement/ prevention facilities and structural and non-structural BMP's or approved equivalent BMP's as described in the proposed plan must be fully implemented and regularly maintained as needed at the site in accordance with good sediment and erosion practices and Tennessee Department of Environment and Conservation requirements.



Warren and Associates Engineering, PLLC 109 Pennsylvania Avenue Lebanon, Tennessee 37087



Storm Water Pollution Prevention Plan

Site and Owner Information:

Site Location: Tax Map 45 / Parcel 12.00

Lebanon, Wilson County, Tennessee

Owner Name & Contact: Farmington Woods, LLC

ATTN: Rick Hayes

P.O. Box 309

Lebanon, TN 37088

Introduction and Purpose:

This plan is designed to comply with the requirements of the Tennessee NPDES General Permit Number TNR100000 for Storm Water Discharges from Construction Activities to be issued for this site by the Tennessee Department of Environment and Conservation (TDEC). The plan's approach is to minimize the amount of material displaced by erosion and maximize the removal of this material before it leaves the permitted site.

This Storm Water Pollution Prevention Plan (SWPPP) has been prepared in accordance with good engineering practices. The plan identifies potential sources of pollution, which would reasonably be expected to affect the quality of storm water discharges from the construction site. The plan describes and ensures the implementation of practices which will be used to reduce the pollutants in storm water discharges associated with construction activity at the construction site and to assure compliance with the terms and conditions of the General Permit. This construction project is covered by this site-specific plan which is complimented by the construction drawings to minimize erosion of soil and the discharge of other pollutants into waters of the State. The Owner and the Contractor have signed the plan, stating that the plan is workable, and when implemented, will meet discharge quality requirements of the State of Tennessee. This plan will be kept on-site and will be made available to the Division of Water Pollution Control inspector upon request.

Location and Site Maps:

The proposed project is located in the Farmington Woods subdivision area (Latitude 36.2500°N, Longitude -86.3241°W) in Lebanon, Wilson County, Tennessee. The proposed project area is located on the Lebanon 7.5-minute series Quadrangle Map. Refer to Attachment A for topographic and aerial location maps.

Project Description:

This proposed project can be described as Phase 10 of the Farmington Woods Subdivision. Said Phase will consist of 36 residential lots and associated infrastructure.

Total Site: 21.19 Acres
 Total Disturbed Area: 15.2 +/- Acres



Site Plans

Copies of the plans are attached, which indicate the following:

- Location of the proposed subdivision infrastructure; and
- Utility/Contractor will install appropriate temporary erosion and sediment control measures. The
 work site will be stabilized as work progresses to reduce erosion and sediment migration from the
 project site.

EPSC Plans

The total area of disturbance for the subject residential subdivision project is more than 5 acres; therefore, three (3) Stages of EPSC Plans are required.

- C1.00 Existing and Initial E.P.S.C. Plan.
- C1.01 Interim E.P.S.C. Plan.
- C1.02 Final E.P.S.C. Plan.

Description of Construction Activity

The general scope of work for this project consists of the following:

- Erecting temporary erosion and sediment control measures as shown on the erosion control plan;
- Installation of infrastructure; and
- Stabilization of disturbed area.

Anticipated sequence of major construction Activities:

- 1. Construction and erection of temporary EPSC measures;
- 2. Construction/Installation of infrastructure; and
- 3. Stabilization of disturbed area.

Estimates of the total area that is expected to undergo excavation or grading:

The total estimated acreage of the disturbed area (excavation, grading, and other construction activity) is approximately 15.2 +/- acres.

Estimates of the increase in impervious area after the construction is completed and of the volume of runoff associated with a one-inch storm:

- 1. One permanent detention basin was constructed for previous phases of this development, and this detention was over-sized to help address other surrounding areas where detention was not utilized. A detention waiver was granted previously for phases 8 and 9.
- 2. This site lies within an approximate 43 square mile (27,500 acres) drainage basin which drains to Barton's Creek. This subject phase 10 is located at the bottom of this large drainage basin and makes up less than 0.08% of the overall basin. In addition, the 100- year floodplain, floodway, and Barton's Creek are all physically located on this site. Therefore, it is our professional opinion that it is possible that by not providing detention for this site, the peak flow from this development located at the bottom of the basin would be able to drain/release downstream before the peak from the larger watershed's theoretical hydrograph made its way to this point which would be a more favorable situation than compounding the peak flow by detaining the discharge from this development in addition to the larger tributary watershed at the tail end of the peak hydrograph.
- 3. Temporary erosion prevention and sediment control measures will be incorporated and design to meet TDEC requirements for the issuance of a notice of coverage. These design approaches will include a variety of better management practices and storm control measures to provide



the appropriate protection of sediment migration to Barton's Creek during construction activities.

4. The proposal storm network (pipes, structures, swales and ditches) are intended to be designed in accordance with City of Lebanon subdivision regulations to provide appropriate collection and conveyance of storm water runoff.

Description of Fill Material:

Generally, clean fill material will be used. Other materials, such as shot rock, crushed stone, or clean top soil may be imported as needed in certain areas.

Receiving Waters:

The receiving water for this site is Barton's Creek.

Details of the proposed erosion control measures are provided as a supplement to this document. There is no apparent affected wetland acreage or streams located at the site.

Non-Storm Water Discharge:

It is not anticipated that there will not be any discharge associated with industrial activity other than construction storm water that originates on-site during this project. Any fuels or chemicals used by the Contractor will be stored in a contained area and no spillage will be allowed. Portable toilet facilities will be properly sited and maintained if required.

Construction Management Techniques and Maintenance of Sediment and Erosion Controls:

<u>Sediment and erosion control measures have been designed to control rainfall for a two (2) year, 24-hour storm event.</u> The schedule for implementing and the locations for placing each sediment and erosion control measure will follow along with the construction progress to ensure the most efficient and effective utilization of the materials.

Clearing and grubbing will be held to the minimum necessary for grading and equipment operation, and construction will be sequenced to minimize the exposure time of cleared surface area.

Erosion and sediment control measures will be installed as soon as is practical after cleaning operations begin and will be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workday but will be replaced at the end of the workday.

All control measures will be checked, and repaired as necessary, weekly in dry periods and within 24 hours after any rainfall of 0.5 inches within a 24-hour period. During prolonged rainfall, daily checks and any needed repairs will be made. Records of checks and repairs will be maintained.

All Sediment and debris shall be removed from the control measures as necessary, (but at least when design capacity of the sediment controls has been reduced by 50%).

The Contractor will designate a specific individual to be responsible for erosion and sediment controls on the site. This designated person will be responsible for the weekly, and as necessary, inspections of the control devices. Solid materials, including building materials, will be prevented from discharging through storm water. Also, off-site vehicle tracking of sediments and the generation of dust will be minimized.



Portions of the site where construction activities have either permanently or temporarily ceased, stabilization shall be completed within 14 days (7 days for slopes greater than 35%).

Vegetative Controls:

Pre-construction vegetative ground cover will not be destroyed, removed or disturbed more than 20 calendar days prior to grading or earth moving. To the extent feasible, appropriate cover will be applied as soon as is practical on areas that will remain unfinished for more than 30 calendar days. Examples of cover are grass, sod, straw, mulch, fabric mats, etc. Permanent soil stabilization with perennial vegetation will be applied as soon as practicable after final grading.

Structural Controls:

The use of silt fences, check dams, stone filter rings, berms, channels, or other EPSC measures, as necessary will divert flows from exposed soils, store flows or limit runoff and discharge of pollutants from exposed areas on the site. Erosion and sediment control measures will be designed according to the size and slope of disturbed areas or drainage areas, to detain runoff and trap sediment. Structural controls shall not be placed in streams or wetlands except as authorized by section 404 and/or ARAP permit.

Permanent Stabilization Measures

The contractor is to stabilize all areas disturbed by the proposed construction of this project by the use of temporary seeding/mulching, installation of erosion control matting, or any other measures seen necessary by the engineer or erosion control specialist. All disturbed areas are to be restored to similar conditions which existed prior to construction.

Discharge Quality

Construction and implementation of control measures will be installed to ensure that there will be no distinctly visible floating scum, oil or other matter, which would cause objectionable color contrast in the receiving stream. The storm water discharge will result in no materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.

Reporting and Recordkeeping

Records and information resulting from monitoring activities will be retained for a minimum of three years. A copy of this plan including a copy of the permit language will be retained at the construction site from the date construction commences to the date of final stabilization. Also, a rain gauge will be installed near the site for rainfall observations.

The <u>Contractor</u> will maintain the following documentation on the job site in a construction trailer, or if a trailer is not available, in an enclosed container near the construction entrance or project signage.:

- A copy of the Notice of Coverage (NOC) and Notice of Intent (NOI);
- The name and telephone number of a local contact person;
- A copy of the Storm Water Pollution Prevention Plan (SWPPP) and EPSC Plans;
- And a brief description of the project.



Scope and Schedule of Inspections of EPSC Measures and Outfall Points

Inspections shall be done:

- At least twice every calendar week;
- Before anticipated storm events (or series of storm events such as intermittent showers over one or more days) and within 24 hours after the end of a storm event of 0.5 inches or greater; and
- At least 72 hours apart.

Where sites have been finally or temporarily stabilized, or runoff is unlikely due to winter conditions (e.g. site covered with snow, ice, or frozen ground), such inspection will be conducted once per month. Inspections, and associated necessary repairs, done 60 hours before a rain event constitute compliance with "before anticipated storm events," and inspections and repairs on a Friday meet the requirement for rain events over the weekend.

Qualified personnel will inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site.

Disturbed areas and areas used for storage of materials that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan will be observed to ensure that they are operating correctly.

ESPC measures, vegetation and all other specified controls are to be repaired/modified within 7 days of inspection prescription.

Locations where vehicles enter or exit the site shall be inspected for evidence of off-site tracking of sediment.

Quality Assurance Site Assessment

The site assessment shall be performed at each outfall involving drainage area of 10 or more acres (or 5 acres, if draining to impaired/exceptional waters) within a month of construction commencement. The site assessment shall be conducted by qualified individuals with at least one of the following qualifications:

- 1. Licensed Professional Engineer or Landscape Architect
- 2. Level II Graduate of the TDEC "Design Principles for EPSC for Construction Sites Course"

The site assessments shall be conducted to verify the installation, performance, and functionality of the EPSC measures described in this Storm Water Pollution Prevention Plan (SWPPP). The site assessment should be conducted with the inspector and should include a review and update (if necessary) of the SWPPP. The observations made during the assessment should be documented and said documentation should be kept with the SWPPP at the construction site. The documentation must include the printed name and signature of the individual performing the site assessment along with the date the assessment was conducted.

The site assessment can take the place of one of the twice weekly inspections. The division may require additional site assessments to be performed if deemed necessary. The site will be monitored twice weekly to inspect EPSC measures. Any items deemed insufficient or impaired will be corrected within seven (7) days.



Construction Erosion/Sediment Control Measures

Erosion and sediment control measures shall be implemented prior to any earth moving activities. <u>All pertinent EPSC BMP's have been designed to control runoff from a 2-year, 24-hour rain event</u>. The contractor shall be responsible for coordinating the implementation of all EPSC measures, or as further directed by the local governing agency.

A stabilized construction entrance will be used to reduce vehicle tracking of sediments. Public roads adjacent to the site will be swept as required, but not less than once every two weeks to remove any excess mud, dirt or rock tracked off site from construction vehicles. Dump trucks hauling material to and from the site will be covered with an appropriate cover. The contractor will limit access points onto the site to reduce the tracking of material off of the site.

<u>Stabilized Construction Entrance Description</u>: A thick crushed stone pad will be the only entrance and exit from the construction site. The pad shall consist of 1.5" to 3.5" crushed rock placed on a geotextile under liner. Temporary grading around the pad will insure positive drainage around the pad. Temporary reseeding will be applied along the sides for 10' to 15'. The pad will be periodically top dressed when the stone begins to be choked off with sediment.

Special care will be exercised to prevent siltation of the existing stormwater drainage channel identified on the plan. Construction sequencing shall maintain the channel flow during all phases of construction.

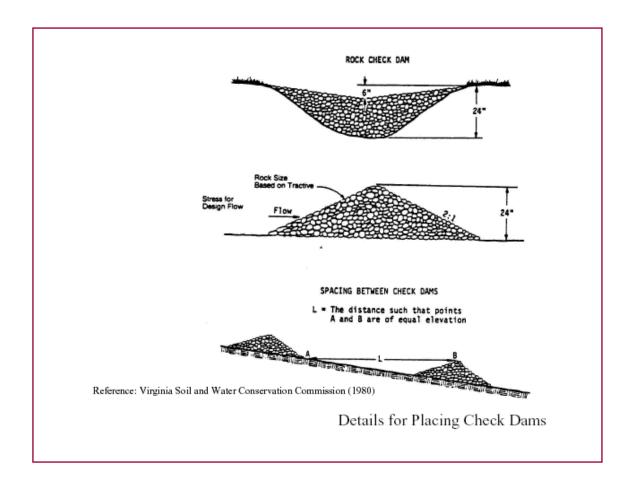
<u>Perimeter Siltation Fencing:</u> Siltation fencing will be installed around the down slope perimeter of the disturbed area and according to the following procedure:

Install posts at the spacing indicated, and at an angle between 2 degrees and 20 degrees towards the potential silt load area Secure filter fabric to the post and wire fabric using stapes, wire, or hog rings. Imbed the filter fabric into the ground as indicated. Splice filter fabric at the support pole using a 6-inch overlay and security seal. Top of the filter fabric shall have a 1-inch tuck or a reinforced top end section. Posts shall be 2 inch by 2-inch wood posts, minimum 3-inch diameter wood, or 1.33 pound per linear foot steel posts. Wire Fabric shall be ASTM A-185, 6 by 6, minimum 14 gage. Filter Fabric shall be a woven or nonwoven polypropylene, nylon, or polyester containing stabilizers and/or inhibitors to make the fabric resistant to deterioration from ultraviolet light. Filter cloth shall be of the type recommended by its manufacturer for the intended application.

Erosion control blanket lined channels and steep slope - Erosion control blankets will be installed in drainage channels and slopes 3:1 or greater at the completion of rough grading. Erosion control blanket shall be Jute, excelsior, straw, or paper matting that has not been bleached or dyed, provided in minimum 4-foot widths. Staples for anchoring the matting shall be minimum 11 gage wire, formed into a "U" shape with a minimum throat width of 1-inch minimum length of 6 inches after forming. Place matting in the direction of the flow of water. The up-channel matting end shall be placed in a narrow trench a minimum of 5 inches deep. Where one roll of matting ends and a second roll begins, the end of the upper roll shall be brought over the buried end of the second roll to provide a 6-inch overlap. Where matting widths are laid side by side, the overlap between matting shall be 4 inches. Provide check slots every 50 feet longitudinally in the matting construct check slots by providing a narrow trench 5 inches deep and folding the matting down into the trench down into the trench, across the bottom of the trench, and then back up the trench to the existing ground. Backfill and compact the trench using the excavated material from the trench. Staple matting ends, junctions, and check slots at 10 inches on center. Staple matting outer edges overlaps and the center of each matting strip at 3 feet on center. Install exceisior matting with the woven fabric on top.



<u>Gravel Dam and Silt Trap:</u> Install Gravel check dams at the downstream ends of storm water velocity channels to capture silt. Check dams to be implemented such that the flow line weir is at a lower elevation that the edges to prevent scouring. Contractor to inspect and maintain check dams regularly for scouring around edges and at toe.



<u>Topsoil Stockpile Erosion Control:</u> Stockpiled topsoil will be seeded after stockpiling operations. A siltation fence will be constructed around the down slope perimeter to prevent unfiltered storm water run off.

<u>Temporary Seeding:</u> Within 7 days after attaining the grading increment specified herein, provide seed, fertilizer, and mulch on graded areas when any of the following conditions occur:

- 1. Grading operations stop for an anticipated duration of 30 days or more.
- 2. Provide on the slopes of cuts and fill slopes for every 5-foot increment of vertical height of the cut or fill.
- 3. When it is impossible or impractical to bring an area to finish grade so that permanent seeding operations can be performed without serious disturbance from additional grading.



- 4. When an immediate cover is required to minimize erosion, or when erosion has occurred.
- 5. Provide on erosion control devises constructed using soil materials.

Seeding Operations: Loosen subgrade to a minimum depth of 4 inches. Uniformly apply the seed, fertilizer, and mulch at the specified rates. Roll the seeded area after applying seed and fertilizer. Do not seed or fertilize when the landscape architect determines conditions are unfavorable. Provide water to promote turf growth.

Seed: Provide certified seed type and quantity (pounds per acre) as follows:

Seed Type	May 1 – September 1	September 1 – May 1
Annual Rye	50	100
Kentucky 31 Fescue	100	150

Fertilizer: Apply 10-10-10 fertilizer at the rate of 1000 pounds per acre.

Mulch: Spread hay or straw mulch at the rate of 1.5 tons per acre and anchor by crimping mulch

with a disc. Provide in an air-dried condition for placement with commercial mulch blowing

equipment.

Permanent Erosion and Sediment Controls to be Established by Contractor

Channel Lining: At the completion of the finished grading operations, all channels will be lined with sod or a channel lining as described above. The contractor will ensure a permanent stand of grass has been established in the flow line of the storm water channels and maintain the channel until relieved by the owner.

Vegetative Cover: At the completion of the finished grading operations all disturbed areas not covered by the proposed sewer line extension areas will be seeded as described above and maintained by the contractor until relieved by the owner.

Non-storm water discharges:

The following non-storm water discharges are anticipated and covered by this plan:

- 1. Dewatering of work areas of collected storm and ground water.
- 2. Water used to wash dust and soil from vehicles.
- 3. Water used to control dust.
- 4. Potable water sources including waterline flushing, routine external building washdowns which does not include detergents.
- 5. Foundation and footing drains where flows are not contaminated with process materials.

The following non-storm water discharges are not covered by this plan:

Hazardous Waste: Hazardous materials handling shall be in accordance with local or State regulation and the manufacturer's recommendations.

Sanitary Waste: All sanitary waste will be collected from portable units by a service provider.



Description of construction and waste materials expected to be stored on-site:

- 1. Concrete
- Fertilizers
- 3. Petroleum Based Products
- 4. Diesel Fuel

Special Considerations

• Other Permits or Certifications
None at this time.

Post-construction Ongoing Measures

Post-construction measures for stormwater management include seeding and grassing of exposed areas, along with maintenance of grass swales.

Construction and Waste Materials Storage

It is anticipated that small amounts of fuel/lubricants may be stored for short periods of time at the site. If such materials are stored in sufficient quantities, small earthen berms or straw bale berms may be utilized to reduce the potential for pollutants to leave the site form such materials.

• Storm water Sources from Areas other than Construction

Storm water from areas outside of construction areas will be managed in much the same way as the present; that is, through grassy, vegetated swales.

• State or Federal Listed Threatened or Endangered Aquatic Fauna None known at this time.

Waters that have an Approved TMDL Not applicable to this site.



Plan Revisions

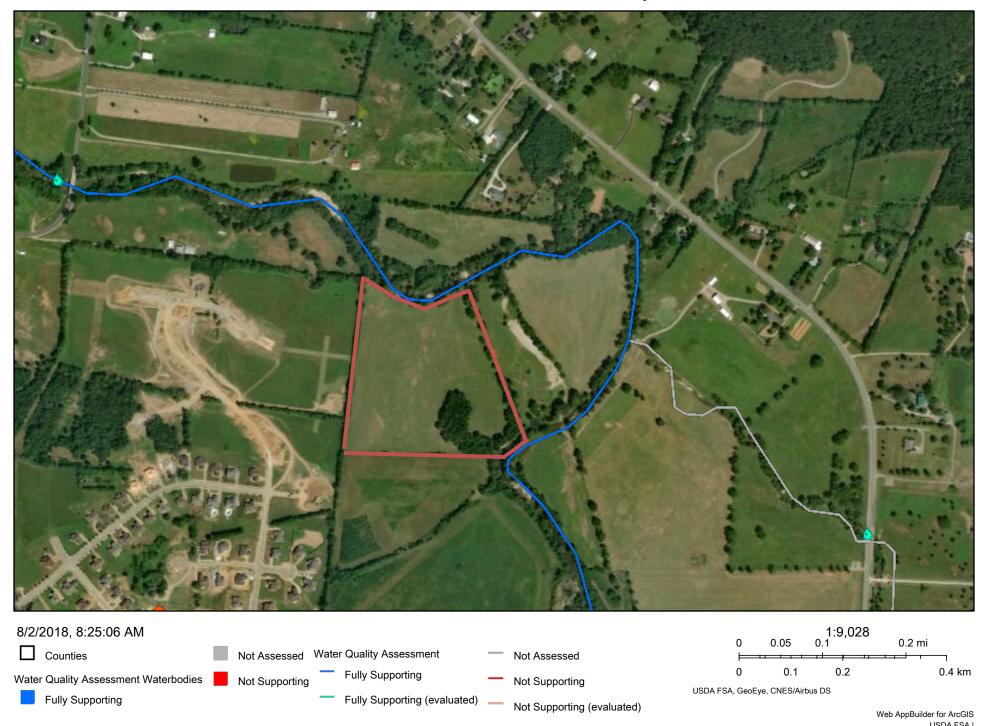
This plan shall be updated as necessary to ensure that the discharge requirements of the permit are being met. Revisions are to be recorded in the following places.

Revision Date	Revisions
<u>.</u>	

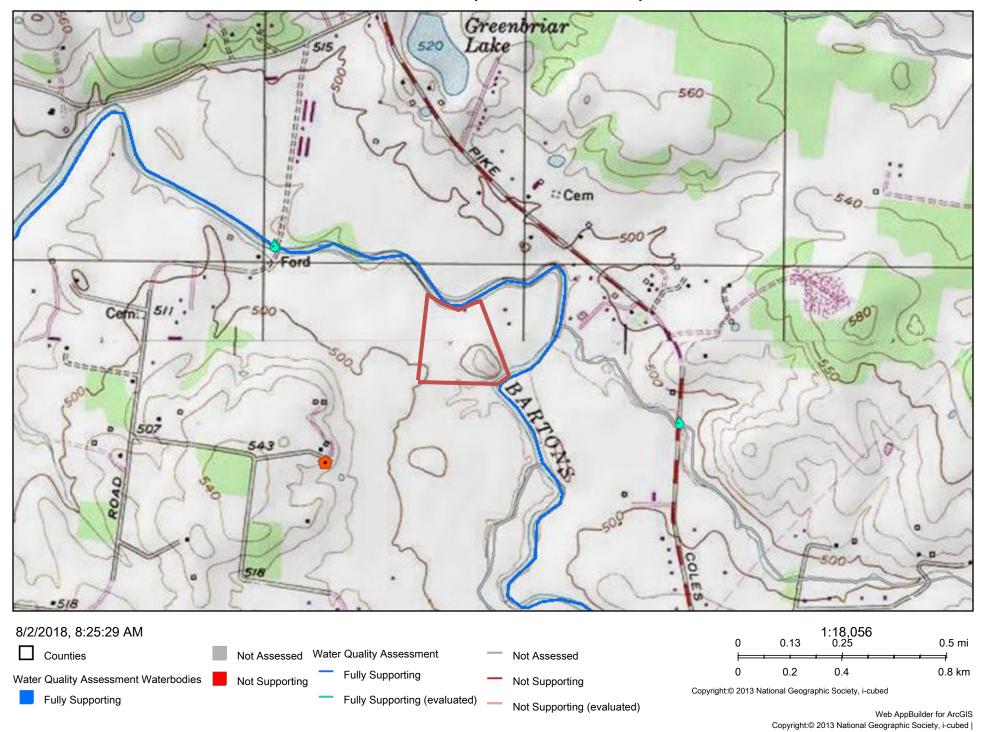


ATTACHMENT A LOCATION MAPS

Farm 10 - Aerial Location Map



Farm 10 - Topo Location Map



PISH AUS SERVICE SERVICE

U.S. Fish and Wildlife Service

National Wetlands Inventory

Phase 10 - Farmington Woods



August 2, 2018

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

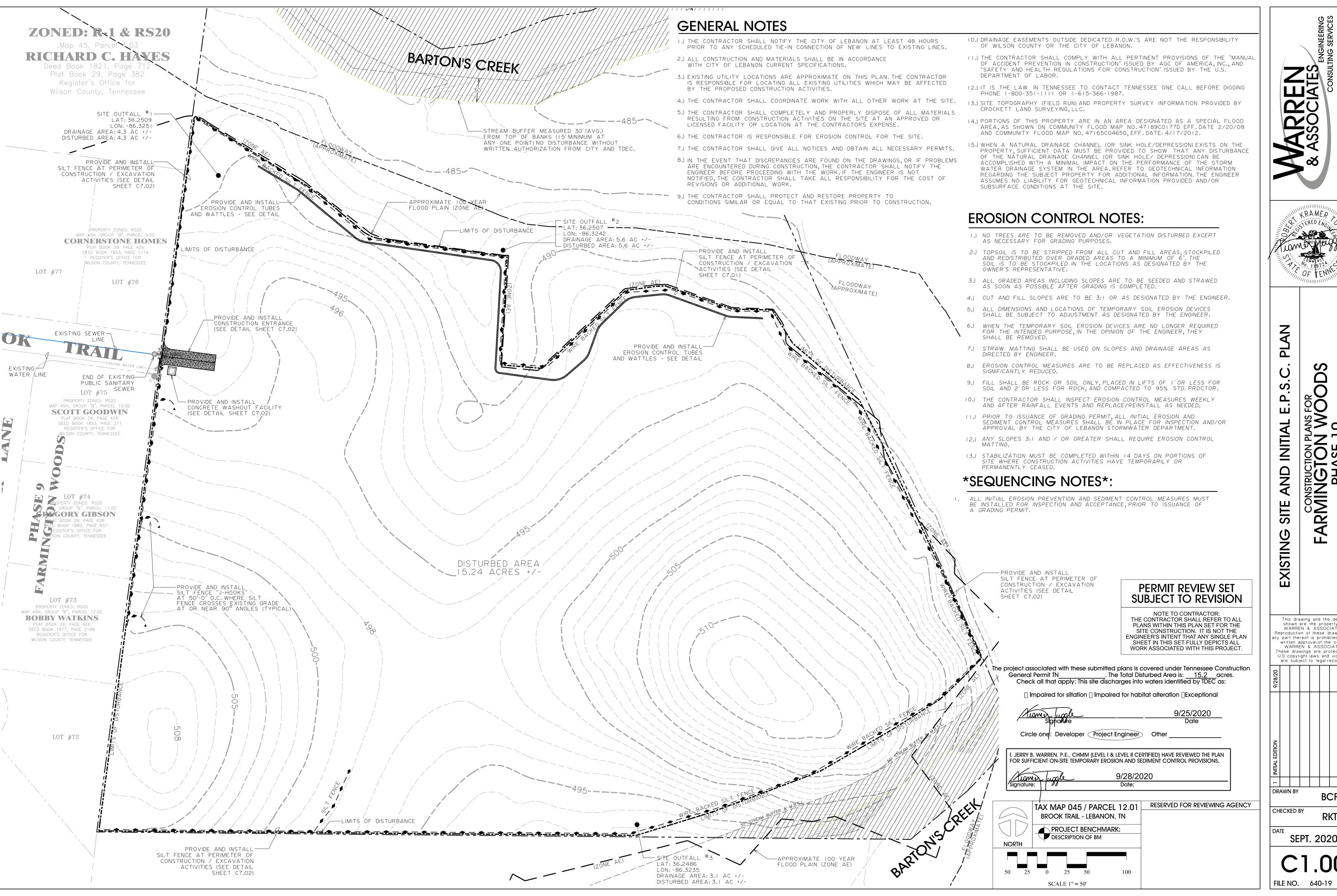
Riverine

Otne

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



ATTACHMENT B: EPSC PLANS

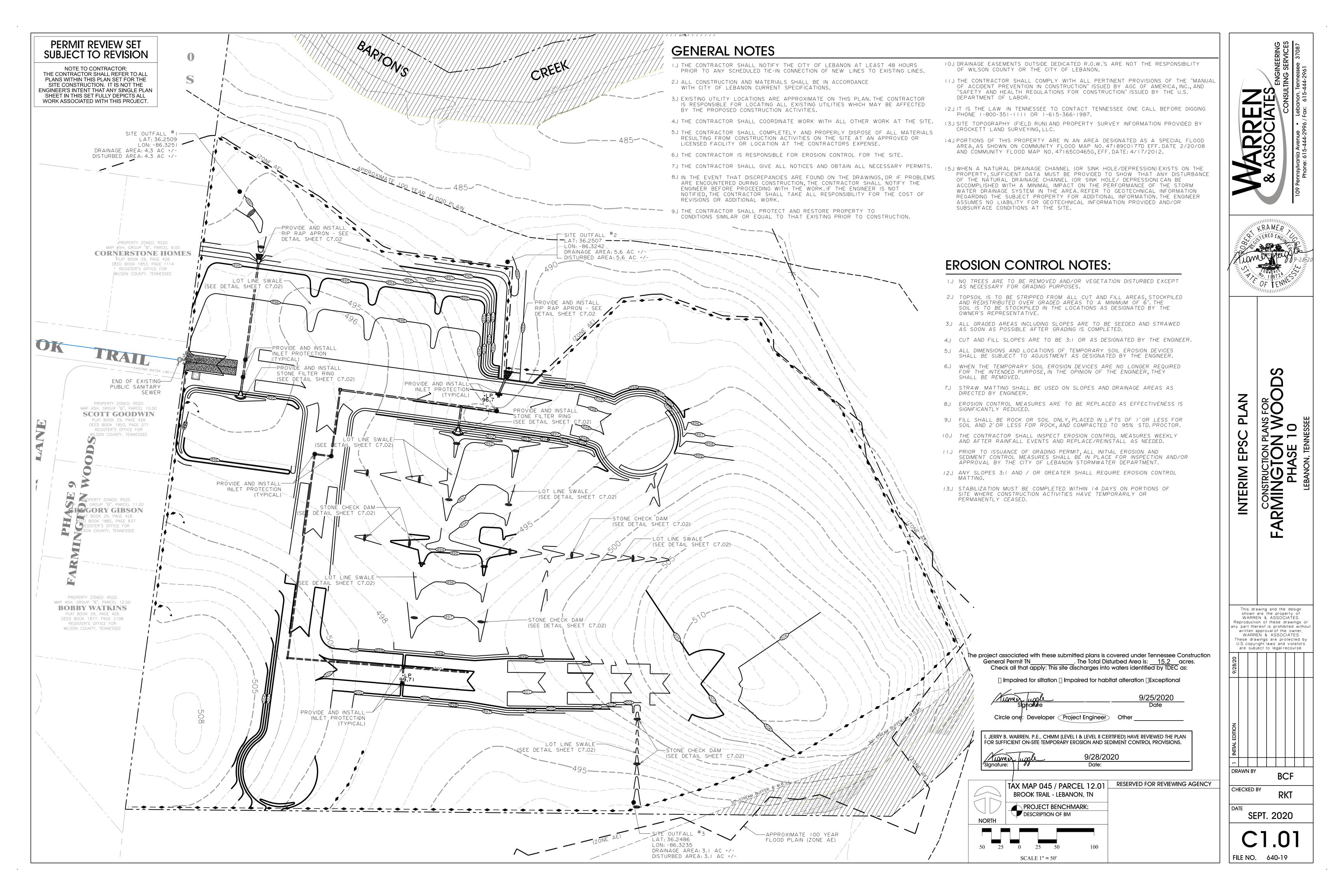


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SEPT. 2020



PERMIT REVIEW SET SUBJECT TO REVISION

NOTE TO CONTRACTOR: THE CONTRACTOR SHALL REFER TO ALL PLANS WITHIN THIS PLAN SET FOR THE SITE CONSTRUCTION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET FULLY DEPICTS ALL WORK ASSOCIATED WITH THIS PROJECT.

EROSION CONTROL NOTES:

OWNER'S REPRESENTATIVE.

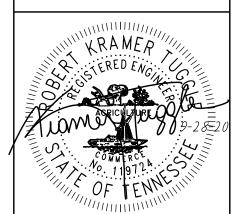
- I.) NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES.
- 2.) TOPSOIL IS TO BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS TO A MINIMUM OF 6". THE SOIL IS TO BE STOCKPILED IN THE LOCATIONS AS DESIGNATED BY THE
- 3.) ALL GRADED AREAS INCLUDING SLOPES ARE TO BE SEEDED AND STRAWED AS SOON AS POSSIBLE AFTER GRADING IS COMPLETED.
- 4.) CUT AND FILL SLOPES ARE TO BE 3:1 OR AS DESIGNATED BY THE ENGINEER.
- 5.) ALL DIMENSIONS AND LOCATIONS OF TEMPORARY SOIL EROSION DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE ENGINEER.
- 6.) WHEN THE TEMPORARY SOIL EROSION DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE, IN THE OPINION OF THE ENGINEER, THEY SHALL BE REMOVED.
- 7.) STRAW MATTING SHALL BE USED ON SLOPES AND DRAINAGE AREAS AS DIRECTED BY ENGINEER.
- 8, EROSION CONTROL MEASURES ARE TO BE REPLACED AS EFFECTIVENESS IS SIGNIFICANTLY REDUCED.
- 9.) FILL SHALL BE ROCK OR SOIL ONLY, PLACED IN LIFTS OF 1'OR LESS FOR SOIL AND 2'OR LESS FOR ROCK, AND COMPACTED TO 95% STD. PROCTOR.
- 10.) THE CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER RAINFALL EVENTS AND REPLACE/REINSTALL AS NEEDED.
- II.) PRIOR TO ISSUANCE OF GRADING PERMIT, ALL INITIAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE FOR INSPECTION AND/OR APPROVAL BY THE CITY OF LEBANON STORMWATER DEPARTMENT.
- 12.) ANY SLOPES 3:1 AND / OR GREATER SHALL REQUIRE EROSION CONTROL
- 13.) STABILIZATION MUST BE COMPLETED WITHIN 14 DAYS ON PORTIONS OF SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR

PERMANENTLY CEASED.

GENERAL NOTES

- I.) THE CONTRACTOR SHALL NOTIFY THE CITY OF LEBANON AT LEAST 48 HOURS PRIOR TO ANY SCHEDULED TIE-IN CONNECTION OF NEW LINES TO EXISTING LINES.
- 2.) ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF LEBANON CURRENT SPECIFICATIONS.
- 3.) EXISTING UTILITY LOCATIONS ARE APPROXIMATE ON THIS PLAN. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES WHICH MAY BE AFFECTED BY THE PROPOSED CONSTRUCTION ACTIVITIES.
- 4.) THE CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER WORK AT THE SITE. 5.) THE CONTRACTOR SHALL COMPLETELY AND PROPERLY DISPOSE OF ALL MATERIALS
- RESULTING FROM CONSTRUCTION ACTIVITIES ON THE SITE AT AN APPROVED OR LICENSED FACILITY OR LOCATION AT THE CONTRACTORS EXPENSE.
- 6.) THE CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL FOR THE SITE.
- 7.) THE CONTRACTOR SHALL GIVE ALL NOTICES AND OBTAIN ALL NECESSARY PERMITS.
- 8.) IN THE EVENT THAT DISCREPANCIES ARE FOUND ON THE DRAWINGS, OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. IF THE ENGINEER IS NOT NOTIFIED, THE CONTRACTOR SHALL TAKE ALL RESPONSIBILITY FOR THE COST OF

- IO.) DRAINAGE EASEMENTS OUTSIDE DEDICATED R.O.W.'S ARE NOT THE RESPONSIBILITY OF WILSON COUNTY OR THE CITY OF LEBANON.
- II.) THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY AGC OF AMERICA, INC., AND "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" ISSUED BY THE U.S. DEPARTMENT OF LABOR.
- 12.) IT IS THE LAW IN TENNESSEE TO CONTACT TENNESSEE ONE CALL BEFORE DIGGING PHONE I-800-351-1111 OR 1-615-366-1987.
- 13.) SITE TOPOGRAPHY (FIELD RUN) AND PROPERTY SURVEY INFORMATION PROVIDED BY CROCKETT LAND SURVEYING, LLC.
- 14.) PORTIONS OF THIS PROPERTY ARE IN AN AREA DESIGNATED AS A SPECIAL FLOOD AREA, AS SHOWN ON COMMUNITY FLOOD MAP NO. 47189C0177D EFF. DATE 2/20/08 AND COMMUNITY FLOOD MAP NO. 47165C0465G, EFF. DATE: 4/17/2012.
- 15.) WHEN A NATURAL DRAINAGE CHANNEL (OR SINK HOLE/DEPRESSION) EXISTS ON THE PROPERTY, SUFFICIENT DATA MUST BE PROVIDED TO SHOW THAT ANY DISTURBANCE OF THE NATURAL DRAINAGE CHANNEL (OR SINK HOLE/ DEPRESSION) CAN BE ACCOMPLISHED WITH A MINIMAL IMPACT ON THE PERFORMANCE OF THE STORM WATER DRAINAGE SYSTEM IN THE AREA.REFER TO GEOTECHNICAL INFORMATION REGARDING THE SUBJECT PROPERTY FOR ADDITIONAL INFORMATION. THE ENGINEER ASSUMES NO LIABILITY FOR GEOTECHNICAL INFORMATION PROVIDED AND/OR SUBSURFACE CONDITIONS AT THE SITE.



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