TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
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: Carother Farms - Phase 3, Sections 2 & 3			***NPDES Tracking Number: TNR***
Street Address or Location: Carothers Rd./Grace Point Ln., Nolensville, TN 37135			Construction Start Date: 10/2017
			Estimated End Date: 10/2018
Site Description: proposed subdivision of approx. 88 residential lots			Latitude (dd.dddd): 35.9844
			Longitude (-dd.dddd): -86.6230
County(ies): Davidson	MS4 (if applicable): N/A		Acres Disturbed: 27.3
Check box if a SWPPP is attached : ☑	Check box if a site location map is attached: ☑		Total Acres: 31.8
Check the appropriate box(s) if there are streams and/or wetlands on or adjacent to the construction site:			Streams ☑ Wetlands ☐
Has a jurisdictional determination been made by the USACE or EPA identifying waters of the United States?: Yes ☐ No ☑			
Note: if yes, attach the jurisdictional determination			
If an Aquatic Resource Alteration Permit (ARAP) has been obtained for this site, what is the permit number? NR(S)			
Receiving waters: Unnamed Tributaries of the East Branch Hurricane Creek			

Site Owner/Developer (Primary Permittee): (Provide person, company, or entity that has operational or design control over construction plans and specifications): Regent Homes, LLC

For corporate entities only, provide correct Tennessee Secretary of State (SOS) Control Number: 000458433
(an incorrect SOS control number may delay NOI processing)

Site Owner or Developer Contact Name: (signs the certification below) David McGowan		Title or Position: President	
Mailing Address: 6901 Lenox Village Dr., Unit 107		City: Nashville	State: TN Zip: 37211
Phone: (615) 333-9000	Fax: (615) 332-3366	E-mail: David.McGowan@regenthomes-tn.com	

Optional Contact:		Title or Position:	
Mailing Address:		City:	State: Zip:
Phone: ( )	Fax: ( )	E-mail:	

Owner/Developer(s) Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee)

I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Owner/Developer Name (print/type): David McGowan, President	Signature:	Date: 9/22/17
Owner/Developer Name (print/type):	Signature:	Date:

Contractor Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Secondary Permittee)

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. As specified in Tennessee Code Annotated Section 39-16- 702(a)(4), this declaration is made under penalty of perjury.

Contractor name, address, and SOS control number (if applicable):	Signature:	Date:

OFFICIAL STATE USE ONLY

Received Date: 9-29-17	Reviewer:	Field Office: 04	Permit Tracking Number: TNR 242073	Exceptional TN Water:
Fee(s): 3000.	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable Parameters:	Notice of Coverage Date:

USGS TOPOGRAPHIC MAP

0 500 1000
SCALE FEET

SOURCE: Topographic Map - Nolensville (1957), Smyrna (1998) Tennessee Quadrangles

REGENT HOMES, LLC
NASHVILLE, TENNESSEE

Stormwater Pollution Prevention Plan

Carothers Crossing UDO
Phase 3, Sections 2-3
Davidson County, Tennessee

Drawn By:	Checked By:
NP	HE

Project No.
178430202

Figure 1

Storm Water Pollution Prevention Plan

Tennessee Department of Environment and Conservation
General NPDES Permit for Discharges of Storm Water Associated with Construction Activities
Permit No. TNR100000
Part 3.5. Storm Water Pollution Prevention Plan (SWPPP)

REGENT HOMES, LLC
CAROTHERS FARMS - PHASE 3, SECTIONS 2 & 3

Prepared for:

Regent Homes, LLC

September 2017

Prepared by:

STANTEC CONSULTING SERVICES INC.

Stantec

601 Grassmere Park Road, Suite 22
Nashville, TN 37211
(615) 885-1144
Stantec Project No. 178430202

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SITE / OWNER INFORMATION

Project Name: **Carothers Farms - Phase 3, Sections 2 & 3**

Site Location (County): Davidson County, Tennessee

Owner/Primary Permittee: Regent Homes, LLC

Owner/Primary Permittee Address & Phone:
David McGowan
President
Regent Homes, LLC
PO Box 196300
Nashville, TN 37219-6300
615-862-5050

General Contractor (Operator): TBD

General Contractor Address & Phone: TBD

Description of Proposed Project: This project will involve construction of a residential subdivision with ±88 lots in Nolensville, Davidson County, Tennessee

Standard that EPSC Measures Meet: 5-year / 24 hour Storm Event

Discharges to Waters Impaired by Siltation or Habitat Alteration:	**Yes**	Is project located within a watershed which maintains an approved TMDL for siltation or habitat alteration? If so, include the 8-digit Hydrologic Unit Code (HUC) to the right.	No
Discharges to Exceptional Tennessee Waters:	**No**	Is project located within a sub-watershed which has a Waste Load Allocation (WLA? If so, include the 12-digit HUC (or 4-digit sub-watershed code).	No
Discharges to MS4:	**No**	Does project have a direct discharge to a 303(d) listed stream for siltation or habitat alteration? If so, list stream name to the right.	No

1.0 INTRODUCTION

Carothers Farms – Phase 3, Sections 2 & 3 is comprised of ±31.8 acres and is located east of the intersection of Battle Road and Carothers Road, along Grace Point Lane in Nolensville, Davidson County, Tennessee. Section 2 (±14.1 acres) lies to the north of Grace Point Lane, while Section 3 (±17.7 acres) is south of Grace Point Lane. The site is currently undeveloped, except for various private dirt and gravel roads and several abandoned building pads and farm structures. The project will include ±88 residential lots, as well as associated roadways, utilities, and stormwater treatment and detention facilities.

This SWPPP has been developed and prepared in accordance with current engineering practices. This SWPPP identifies potential sources of pollution that one would reasonably expect to affect the quality of storm water discharges from this construction site. The SWPPP describes the implementation practices that will be used to effectively reduce pollutants in storm water associated with construction activities at this site. It has been designed to comply with the terms and conditions of the Tennessee General Permit No. TNR100000 (Discharges of Storm Water Associated with Construction Activities).

In accordance with Part 3.5 of the Tennessee Department of Environment and Conservation's (TDEC) General National Pollutant Discharge Elimination System (NPDES) Permit TNR100000 (Permit), the components of the Storm Water Pollution Prevention Plan (SWPPP) for this site have been included herein.

2.0 SITE DESCRIPTION

a) A description of all the construction activities at the site (not just grading and street construction).

Construction activities will consist of minor demolition work (abandoned building pads), grading, and construction for ±88 residential lots, as well as associated roadways, utilities (water, sanitary sewer, and storm sewer), and stormwater treatment and detention facilities (bioretention and dry detention ponds).

b) The intended sequence of major activities that disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.).

The general sequence of major activities above will be replaced by a "Plan of Operation" provided by the Contractor prior to the start of Work. This "Plan of Operation" will indicate the Contractor's intended sequence of construction activities at the site. It shall be attached to and included as part of the SWPPP.

It is anticipated that the contractor will begin with demolition and rough grading activities and proceed with construction in an order to be determined by the owner and contractor, who will provide a sequence of construction.

c) Estimates of the total area of the site, and total area that is expected to be disturbed by excavation, grading, filling, or other construction activities.

Total Project Area: ±31.8 acres

Total Disturbed Area: ±27.3 acres

d) A description of the topography of the site including an estimation of the percent slope and the variation in percent slope found on site (such estimation on a basis of a drainage area serving each outfall).

Section 2

The property is primarily undeveloped. Existing vegetation consists of primarily brush, with isolated stands of trees. Most of the site drains via overland flow from west-to-east, eventually discharging to the existing creek channel (an unnamed tributary of the East Branch Hurricane Creek) along the northeast boundary of this Section.

A smaller area along the southern edge of the site drains to Carothers Rd./Grace Point Lane, where runoff is collected via the existing curb inlets and storm system in the roadway, which were previously constructed with Phase 3, Section 1. These flows are conveyed to an existing underground proprietary stormwater treatment unit (also constructed with Section 1). Discharge from this unit is then conveyed via the existing stormwater collection system to an existing regional dry detention/retention pond built with Phase 2.

Section 3

The property is mostly undeveloped. Existing vegetation consists of primarily brush, with isolated stands of trees. The western half of the site drains via overland flow from west-to-east and north-to-south, concentrating at an existing creek channel running southward through the middle of the site before discharging to a larger eastward-flowing creek (an unnamed tributary of the East Branch Hurricane Creek) along the southern boundary of this section. The eastern portion of the site drains primarily northwest-to-southeast, via overland flow and/or an existing creek channel, before discharging to the larger creek mentioned above.

e) ***Any data describing the soil (data may be referenced or summarized) and how the soil type will dictate the needed control measures and the expected quality of any discharge from the site.***

INFORMATION TAKEN FROM THE LOCAL SOIL SURVEY: The project is located in Davidson County, Tennessee. According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, on-site soils consist of the following soil types and associated Soil Conservation Services (SCS) Hydrologic Group classifications:

Section 2

- 62.5% Hampshire silt loam (HmD), 12-20% slopes; SCS Hydrologic Group C
- 26.5% Mimosa silt loam (MmC), 5-12% slopes, eroded; SCS Hydrologic Group C
- 6.2% Stiversville loam (StC), 3-12% slopes; SCS Hydrologic Group A
- 4.8% Water* (*This area corresponds to an old man-made farming pond that has not been maintained since farming operations on the property were abandoned).

Section 3

- 30.6% Hampshire silt loam (HmC), 5-12% slopes; SCS Hydrologic Group C
- 63.1% Hampshire silt loam (HmD), 12-20% slopes; SCS Hydrologic Group C
- 6.3% Mimosa silt loam (MmC), 5-12% slopes, eroded; SCS Hydrologic Group C

The quality of discharge from properly implemented and maintained EPSC measures is expected to be sufficient to comply with the terms and conditions of this permit.

f) ***An estimate of the runoff curve number of the site after construction activities are completed and how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream.***

Section 2

Stormwater detention is already provided for the southern portion of the site via the existing dry detention/retention pond previously permitted and built with Phase 2 and is conveyed to the pond via existing storm sewer facilities permitted and constructed with Phase 3, Section 1. Therefore, only the northern portion of the site was analyzed for detention and erosion control purposes.

The pre-construction runoff curve number (RCN) for Section 2 was estimated using the above soils information and is depicted in Table 1.

Table 1. Runoff Curve Number for Existing Conditions (Section 2)

Area Type	Area (acres)	Area (%)	Runoff Curve Number
Undeveloped (Forest C Soils)	10.25	100.0%	73

A post-construction weighted RCN was estimated for the Section 2 developed areas and is depicted in Table 2.

Table 2. Runoff Curve Number for Proposed Conditions (Section 2)

Area Type	Area (acres)	Area (%)	Runoff Curve Number
Developed - Impervious	5.37	52.4%	98
Developed – Pervious (Turf C Soils)	2.89	28.2%	79
Undeveloped (Forest C Soils)	1.99	19.4%	73
Total	10.25	100.0%	89

Per an SCS method analysis of the post-development conditions, stormwater runoff will be increased as compared to existing conditions. Therefore, stormwater detention has been provided to reduce peak flows to at or below pre-development conditions, per Metropolitan Government of Nashville & Davidson County (Metro) regulations.

An extended dry detention pond is proposed in the northeast corner of the site. Detained flows will then be discharged from the pond to the existing creek channel to match current flow patterns.

A summary of pre- and post-development discharge for Section 2 is shown in Table 3.

Table 3. Pre-/Post-Development Runoff Peak Flow Summary (Section 2)

Storm Event	Existing (cfs)	Proposed (cfs)	Difference (cfs)	Pond WSEL (ft)
2-YR	22.3	12.2	-10.1	718.91
10-YR	38.6	17.6	-21.0	721.19
25-YR	49.5	41.6	-7.9	721.63
100-YR	61.7	61.5	-0.2	721.90

Section 3

The pre-construction RCN for Section 3 was estimated using the above soils information and is depicted in Table 4.

Table 4. Runoff Curve Number for Existing Conditions (Section 3)

Area Type	Area (acres)	Area (%)	Runoff Curve Number
Undeveloped (Forest C Soils)	17.70	100.0%	73

A post-construction weighted RCN was estimated for the Section 3 developed areas and is depicted in Table 5.

Table 5. Runoff Curve Number for Proposed Conditions (Section 3)

Area Type	Area (acres)	Area (%)	Runoff Curve Number
Developed - Impervious	7.41	41.9%	98
Developed – Pervious (Turf C Soils)	4.00	22.6%	79
Undeveloped (Forest C Soils)	6.28	35.5%	73
Total	17.70	100.0%	85

Per an SCS method analysis of the post-development conditions, stormwater runoff will be increased as compared to existing conditions. Therefore, stormwater detention will be required.

Two (2) detention ponds are proposed – one in the open space at the center of the site and one at the eastern edge of the section. Detained flows will then be discharged from these ponds to the existing creek channels to match current flow patterns.

A summary of pre- and post-development discharge for Section 3is shown in Table 6.

Table 6. Pre-/Post-Development Runoff Peak Flow Summary (Section 3)

Storm Event	Existing (cfs)	Proposed (cfs)	Difference (cfs)	Central Pond WSEL (ft)	Eastern Pond WSEL (ft)
2-YR	23.9	21.3	-2.6	706.76	701.01
10-YR	45.6	34.3	-11.4	707.53	702.20
25-YR	60.6	48.8	-11.9	707.81	702.83
100-YR	77.9	67.1	-10.9	708.00	703.21

In addition to the detention measures described above, riprap will be placed at the outlet end of all stormwater discharge pipes to dissipate the energy of runoff.

g) An erosion prevention and sediment control plan of the site with proposed construction area clearly outlined. The map should indicate the boundaries of the permitted area; drainage patterns and approximate slopes anticipated after major grading activities; areas of soil disturbance; an outline of areas which are not to be disturbed; the location of major structural and nonstructural controls identified in the SWPPP; the location of areas where stabilization practices are expected to occur; surface waters, including wetlands and sinkholes; designation of runoff receiving waters or MS4; and careful identification on the site map of outfall points intended for coverage under the general permit for storm water discharges from the site.

1) Please see the attached EPSC Plan (Appendix A) and USGS map (Figure 1) for the EPSC plan, construction boundaries, and drainage patterns.

2) According to the construction plans, the typical sections on the Phase 3 streets will include curb and gutter with sidewalks. Some limited areas of fill slopes along the north and south sides of Phase 3 will have three horizontal to one vertical (3H: 1V) side slopes.

3) The majority of the areas that will have soil disturbance are roadways and graded lots. Silt fence, check dams, and riprap outlet protection have been located along the edges and within these areas to protect receiving waters.

4) No areas of significant size within the proposed construction limits are to be left undisturbed.

5) The location of major structural and non-structural erosion controls are located on the erosion and sediment control plans in Appendix A. For details not provided on the erosion and sediment control plans, refer to the Metro Stormwater Management Manual.

6) Stabilization with erosion control measures will occur in selected areas. Seeding, mulch, sod, erosion control blankets, and silt fence will be used to stabilize slopes. Temporary check dams will be used in ditches and swales along the roadway to reduce the storm water velocities so that sediments will be removed prior to traveling off-site. Inlet protection will be installed at designated inlets of drainage structures so that sediments will be removed prior to traveling off-site.

7) Site runoff will either flow overland or be collected into drainage ditches/swales. The site runoff will ultimately discharge to the East Branch Hurricane Creek and its unnamed tributaries. These streams are listed on the Tennessee Department of Environment's 303(d) list as receiving water impaired by siltation.

8) This project does discharge into waters impaired by siltation and/or habitat alteration, high quality waters, an MS4, or waters with an approved TMDL.

9) This project has 4 outfall points. The outfall points are depicted on Figure 1 and the erosion control plan in Appendix A. Table 3 lists the locations of impacted drainage features that could transport pollutants off-site and their associated outfall point numbers.

Table 3. Outfall Information

Outfall Point No.	Drainage Location	Description	Impacted Drainage Feature	Estimated % Slope Within Outfall Drainage Area
1	Section 2 Bypass Ditch See Topo Map	Existing Stream	Unnamed Tributary to East Branch Hurricane Creek	7.0
2	Section 2 Pond Outfall See Topo Map	Existing Stream	Unnamed Tributary to East Branch Hurricane Creek	6.5
3	Section 3 Cen. Pond Outfall See Topo Map	Existing Stream	Unnamed Tributary to East Branch Hurricane Creek	4.5
4	Section 3 East Pond Outfall See Topo Map	Existing Stream	Unnamed Tributary to East Branch Hurricane Creek	5.5

h) A description of any discharge associated with industrial activity other than construction storm water that originates on site and the location of that activity and its permit number.

There are no discharges associated with industrial activities affecting the project site.

i) Identification of any stream or wetland on or adjacent to the project, a description of any anticipated alteration of these waters and the permit number or tracking number of the Aquatic Resources Alteration Permit or Section 401 Certification issued for the alteration.

The adjacent streams to this project are unnamed tributaries of East Branch Hurricane Creek to the north and east of Section 2 and to the south and east of Section 3. No alteration of these streams is anticipated.

No wetlands are present on or adjacent to the project.

j) The name of the receiving water(s) and approximate size and location of affected wetland acreage at the site.

The receiving waters are as follows:

- Unnamed tributaries to East Branch Hurricane Creek

This project will not affect any wetland areas.

k) Identify and outline buffer zones established to protect waters of the state located within boundaries of the project.

Buffer Zones are established in accordance with TNR100000 and are shown on the EPSC Plan sheets. In general, 60-foot average width construction buffer (with a minimum of 25-feet) will be maintained between construction disturbance activities and the top of banks of impaired streams

l) For projects which will be subdivided, the developer/owner must describe how he will prevent erosion and/or control any sediment from portions of the property that will be sold prior to the completion of construction.

N/A – The intent for this project is that all residential lots and homes be constructed by the same owner and contractor per this permit. Therefore construction of any lots will be complete prior to sale to another entity.

However, if any portions of the project that were to be sold prior to completion of construction, they would be located within the drainage area of the sediment basins. Therefore, the stormwater system inlet protection and sediment basins will control sediment discharges.

m) Projects of more than 50 acres, the construction phases must be described.

N/A - This project does not require more than 50 acres of disturbed area.

n) If only a portion of the total acreage of the construction site is to be disturbed, then the protections employed to limit the disturbance must be discussed (e.g. caution fence, stream side buffer zones, etc.).

There are no significant portions of the site that are to be left undisturbed other than the stream buffer areas. These buffer zones will be delineated by tree-protection or silt fencing.

o) The name and number of the previously permitted Municipal Separate Storm Sewer to which the project discharges.

This project does not discharge into a municipal separate storm sewer system (MS4) with coverage under the current CGP.

3.0 EROSION PREVENTION AND SEDIMENT CONTROLS

The goal of this SWPPP is to maintain and protect the natural, physical, and biological characteristics and functions (e.g., no significant changes in the hydrological regime or pollutant input) of the receiving water by minimizing the dislodging and suspension of soil in runoff and by retaining mobilized sediment on-site.

3.1 Preconstruction and During Construction

Preconstruction planning should be used to sequence major grading activities to minimize the exposure time of graded or denuded areas. The erosion prevention and sediment control measures and/or plans shall be modified as necessary so that they are effective at all times throughout the course of the project. The Operator will be responsible for the implementation and execution of all storm water runoff controls. Preconstruction ground cover will not be destroyed, removed, or disturbed more than 15 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed. Temporary erosion control measures may be removed at the beginning of the workday, but will be replaced at the end of the day. The structural controls to be used on this project and their placement are identified on the erosion prevention and sediment control plans in Appendix A.

3.2 Stabilization, Structural, and Non-Structural Controls

Storm water runoff controls for the proposed project will consist of the structural control measures themselves and the maintenance and inspection practices discussed later in this SWPPP. They have been designed to retain sediment on the project site. The following paragraphs describe the sequence of major construction activities that are planned for the site and the general stabilization and structural practices that will be associated with each activity. They also identify the party responsible for implementing the SWPPP.

3.2.1 Clearing and Grubbing

General Requirements: Clearing and grubbing will be limited to existing landscape aeras. Topsoil and landscape media may be retained onsite if desired or disposed of at a permitted site. Erosion prevention and sediment control structures must be in place and functional before clearing, grubbing, excavation, grading, cutting or filling occurs, except as such work may be necessary to install erosion prevention and sediment control measures. Project plans, proposal contract, and standard details referenced in the project plans provide additional information regarding requirements for erosion prevention and sediment control and protection of waters of the State and the United States.

Stabilization: permanent stabilization practices at site-specific locations are detailed on the erosion prevention and sediment control plans in Appendix A. Stabilization practices rely primarily on providing impervious areas (buildings, drives, and sidewalks) and on landscape islands. Temporary seeding is not anticipated for this project, however if construction must be delayed for greater than 15 days, seeding will be accomplished by using seed groups adapted for germination and growth during the subject season. Delay in planting cover vegetation until winter months (December – March) should be avoided, if possible.

Structural Practices: Structural practices include a sedimentation basin, installation sock tubes, inlet protection and construction of rock check dams in drainage ditches if necessary. These items will be installed prior to and during clearing operations.

Responsible Party: The site Operator will be responsible for the implementation, maintenance, and inspection of the SWPPP structural practices during this construction activity.

3.2.2 Grading and Excavation

General Requirements: Project plans, proposal contract, and standard details referenced in the project plans provide additional information regarding requirements for erosion prevention and sediment control and protection of waters of the State and the United States.

Stabilization Practices: Stabilization measures shall be initiated as soon as practicable on portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 15 days after the construction activity on that portion of the site has temporarily or permanently ceased, except in the following two situations: 1) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy conditions, stabilization measures shall be initiated as soon as practicable; or 2) where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 15 working days, temporary stabilization measures do not have to be initiated on that portion of the site. Temporary or permanent stabilization will be completed within 15 days of final grading or earth-moving activities; areas with steep slopes (≥ 35%) need to be stabilized within 7 days. Permanent or Temporary seeding will be accomplished by using seed groups adapted for germination and growth during the subject season. Delay in planting cover vegetation until winter months (December – March) should be avoided, if possible.

Structural Practices: Structural practices include a sedimentation basin, installation sock tubes, inlet protection and construction of rock check dams in drainage ditches if necessary.

During EPSC Plan - Phase 2, the new storm pipe system will be established and require protection.

Responsible Party: The site Operator will be responsible for the implementation, maintenance, and inspection of the SWPPP structural practices during this construction activity.

3.2.3 Final Stabilization

General Requirements: Project plans, proposal contract, and standard details referenced in the project plans provide additional information regarding requirements for erosion and siltation control and protection of waters of the State and the United States.

Stabilization Practices: Permanent stabilization will include the landscape islands and impervious area in this urban environment.

Structural Practices: All permanent structural practices have been completed at this point of the project. After final stabilization has been achieved, all temporary measures will be removed to prevent them from becoming pollutants.

Responsible Party: The site Operator will be responsible for the implementation, maintenance, and inspection of the SWPPP structural practices during this construction activity.

3.3 Post-Construction

The Owner does not anticipate any project-derived pollutants will occur after construction operations have been completed. Although maintenance and operation of the storm water management measures is not required by the permit, after discharges associated with

construction activities have been eliminated from the site, the Owner will provide for routine maintenance of facilities.

3.3.1 Pollutant Controls

Procedures will include debris removal from drainage structures and trash removal and disposal from the installed facilities. Maintenance of the conveyance pipes and structures will be the responsibility of the Owner.

4.0 STORM WATER MANAGEMENT

4.1 Required Records

The operator will maintain at the site the following records of construction activities:

a) The dates when major grading activities occur;

b) The dates when construction activities temporarily or permanently cease on a portion of the site;

c) The dates when stabilization measures are initiated;

d) Records of inspections and corrective measures, including photographs of representative items requiring correction and the corrective action taken for it; and

e) Detailed records of rainfall events including dates, amounts of rainfall, and the approximate duration or starting and ending times.

4.2 Rainfall Monitoring Plan

Erosion prevention and sediment control measures and devices are utilized to minimize the dislodging and suspension of soil in runoff and to retain mobilized sediment on-site. Storm water runoff is directly proportional to the intensity and duration of a given rainfall event. Rainfall monitoring is necessary in order to estimate the effectiveness of erosion prevention and sediment control measures and devices at the construction site. The intent of the plan is to provide a means to record the volume of rainfall and the time period in which it fell in order to estimate the intensity of the rainfall event. Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.

4.2.1 Equipment

If an on-site rain gauge is used, the following requirements shall be met. At a minimum, a fence post type rain gauge will be used to measure rainfall. The standard fence post rain gauge shall be a wedge-shaped gauge that measures up to six (6) inches (150mm) of rainfall (e.g. Tru-Chek® Direct-Reading Rain Gauge). An English scale should be provided on one face, with a metric scale on the other face. Graduation shall be permanently molded in durable weather-resistant plastic. The minimum graduations shall be 0.01inch (0.1 mm). An aluminum bracket with screws may be used for mounting the gauge on a wooden support.

4.2.2 Location

The rain gauge will be located at or along the project site, in an open area such that the measurement will not be influenced by outside factors (i.e. overhangs, gutters, trees, etc.). At least one rain gauge will be located within each linear mile (as measured along the centerline of the primary alignment) of the project where clearing, grubbing, excavation, grading, cutting or filling is being actively performed, or exposed soil has not yet been permanently stabilized.

4.2.3 Methods

The rain gauge or reference site data shall be checked after every rainfall event occurring on the project site. Detailed records of the rainfall event(s) including dates, amounts of rainfall, and the approximate duration or starting and ending times shall be maintained.

4.3 Maintenance

Maintenance activities will be undertaken to ensure that vegetation, erosion and sediment control measures, and other protective measures identified in the site Erosion Prevention and Sediment Control Plans are kept in good and effective operating condition. Maintenance needs identified in inspections or by other means shall be accomplished before the next storm event, but in no case more than 7 days after the need is identified. The need for maintenance will be determined through the inspection procedures listed below and will include, but not be limited to, the following practices:

a) Observation of control measures to determine compliance with the manufacturer's specifications and good engineering practices for installation and use of the control;

b) Removal of off-site sediment accumulations from the project site that have not reached a sinkhole and/or stream such that off-site impacts are minimized (Note: Sediment accumulations from the project site that have reached sinkholes and/or streams must not be removed until after consultation with TDEC);

c) Removal of sediment from silt fence, and other sediment controls when the storage capacity has been reduced by 50 percent; and

d) Pickup or otherwise prevention of litter, construction debris, and construction chemicals from becoming a pollutant source prior to anticipated storm events.

In addition to the practices listed above, the project will be inspected as required by this SWPPP to ensure the maintenance and effectiveness of the erosion prevention and sediment control measures.

4.4 Inspection

The inspection schedule and documentation procedures have been designed to ensure that vegetation, erosion, sediment control measures, and other protective measures identified in the SWPPP are kept in good and effective operating condition. If the site description and pollution prevention measures in the SWPPP need to be revised based on the results of the inspection, those revisions will be completed as appropriate, but no later than 7 calendar days following the inspection identifying the need.

4.4.1 Schedule

Our review of the Tennessee Department of Environment and Conservation's 2014 303(d) List indicates that the project **will not** discharge to bodies of water listed for siltation or habitat alteration, and **will not** discharge to waters with an approved TMDL or into Exceptional Tennessee Waters. The schedule for Erosion Prevention and Sediment Control inspections will be as follows:

a) a Site Assessment must be performed within the first 30 days of construction for each outfall (per Section 3.1.2 of TN General Permit TNR100000).

b) At least twice per calendar week, at least 72 hours apart, during any construction and thereafter until the site is fully constructed and all disturbed areas not paved, concreted, or covered by stone are permanently stabilized with a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent.

4.4.2 Documentation Requirements

Inspections will be documented in writing and include the following:

a) Scope of the inspection;

b) Name(s) and title or qualifications of personnel making the inspection;

c) The date(s) of the inspection;

d) Major observations relating to the implementation of the SWPPP, including the location(s) of discharges of sediment or other pollutants from the site and of any control devices that failed to operate as designated or proved inadequate for a particular location; and

e) Actions taken to replace, modify, or repair any control measures identified as inadequate or in disrepair during inspections.

All inspections shall be documented on the Construction Storm Water Inspection Certification form provided in Appendix C of this SWPPP.

4.4.3 Areas to be Inspected

Qualified personnel will inspect disturbed areas of the construction site that have not been finally stabilized for evidence of, or the potential for, pollutants to enter the drainage system. These areas include, but are not limited to, the following:

a) Disturbed areas and areas used for storage of materials that are exposed to precipitation;

b) Erosion prevention and sediment control measures identified in the SWPPP;

c) Outfall points (where discharges leave the site or enter waters of the State). Where outfall locations are inaccessible, the nearest possible downstream locations shall be inspected;

d) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking; and

e) Fueling station(s) on-site (if applicable – See Section 5.3).

These inspection requirements do not apply to definable areas of the site that have met the final stabilization requirement and have been noted in the SWPPP.

4.4.4 Repairs, Modifications, and Revisions

Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next storm event, but in no case more than 7 days after the need is identified.

4.4.5 Inspector Training and Certification

Inspectors performing the required twice weekly inspections must have an active certification by completing the "Fundamentals of Erosion Prevention and Sediment Control Level I" course. A copy of the certification or training record for inspector certification must be kept on site with the SWPPP.

5.0 OTHER ITEMS REQUIRING CONTROL

5.1 Construction Materials

Construction materials that are anticipated to be present at this construction site include:

- Lumber
- Concrete
- Traffic Control Devices
- Concrete and Corrugated Metal Pipe
- Mineral Aggregates
- Earth
- Asphalt
- Traffic Striping Materials
- Rock
- Guardrail
- Curing Compound
- Paint

Stockpiled erodible construction materials will be secured by control measures down gradient of the stockpiles.

The Operator may keep several portable storage units on the project site to store construction equipment.

5.2 Waste Materials

Waste material (earth, rock, asphalt, concrete, etc.) not required for the construction of the project shall be disposed of by the Operator. The Operator will be required to obtain any and all necessary permits including, but not limited to, NPDES, Aquatic Resource Alteration Permit(s), Corps of Engineers Section 404 permits, and TVA Section 26A permits to dispose of waste material.

5.3 Other Materials

Other materials not used for construction, but needed for construction at the proposed site must also be controlled to prevent pollution of the receiving waters. These items include, but are not limited to, the storage and dispensing of the following:

- Fertilizers and Lime
- Diesel and Gas
- Machinery Lubricants (oil and grease)
- Cleaning Solvents

Soils at fueling stations should be checked daily for signs of spillage or staining of the soil. Any fixed fueling station/tank storage shall have a containment system to prevent runoff by potential spills or tank rupture. Machinery should be serviced or repaired to prevent leaks of fluids.

The Operator will be responsible for compliance with all applicable Environmental Protection Agency (EPA) and USDOT guidelines regarding equipment-related fluids as well as all National Fire Protection Association regulations regarding flammable liquids. No construction materials or equipment are expected to produce pollutant runoff.

5.4 Non-Storm Water Discharges

The following non-storm water discharges have potential for occurring from the site during the construction period:

a) Groundwater may be intercepted during the construction of this project. While these locations are yet unknown, the SWPPP will be modified to incorporate these areas should they arise;

b) The use of wash waters to clean and remove construction generated soils from roadways. (where there have been no spills or leaks of toxic or hazardous materials);

c) Dust suppression water used on haul routes and exposed soils;

d) Water used to wash vehicles (where detergents are not used and detention and/or filtering are provided before the water leaves the site).

All non-storm water discharges will be directed to stable discharge reduction structures prior to leaving the site outfall. Wash down or waste discharge of concrete trucks will not be permitted on-site unless a proper settlement area has been constructed in accordance with both state and federal regulations.

6.0 REQUIREMENTS FOR PLANS AND REPORTS

6.1 Keeping SWPPP Current

The Owner will amend the SWPPP when any of the following conditions apply:

a) Whenever there is a change in the scope of the project that would be expected to have a significant effect on the discharge of pollutants to the waters of the State and which has not otherwise been addressed in the SWPPP;

b) Whenever inspections or investigations by site Operators, local, state, or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from construction activity sources, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity;

c) When any new Operator and/or sub-Operator is assigned or relieved of their responsibility to implement a portion of the SWPPP; and

d) When the SWPPP must be modified to prevent a negative impact to legally protected state or federally listed or proposed threatened or endangered aquatic fauna.

6.2 Making Plans Accessible

The operator will retain a copy of this SWPPP (including a copy of the permit language and all reports) at the construction site (or other local location accessible to TDEC and the public) from the date construction commences to the date of final stabilization. The Operator (who will have operations control over daily pollution prevention plan implementation) will have a copy of the SWPPP available at the location where work is occurring on-site for the use of operators and those identified as having responsibilities under the SWPPP whenever they are on the construction site.

Prior to the initiation of land disturbing activities and until the site has met the final stabilization criteria, the Operator will post a notice near the main entrance of the construction site with the following information

a) A copy of the Notice of Coverage (NOC) with the NPDES permit number for the project;

b) The name, telephone number, and address of a local Metro-Government of Nashville & Davidson County contact person;

c) A brief description of the project; and

d) The location of the SWPPP (especially important if the site is inactive or does not have an on-site location at which to store the SWPPP).

If posting this information near a main entrance is infeasible due to safety concerns, the notice shall be posted in a local building and maintained in a legible condition. The notice must be placed in a publicly accessible location where construction is actively underway and moved as necessary. The Owner understands that this permit does not provide the public with any right to trespass or require that the Owner allow members of the public to access a construction site for any reason, including inspection of a site.

6.3 Notice of Termination

When all storm water discharges from construction activities that are authorized by the permit are eliminated by final stabilization, the Owner will submit a Notice of Termination

(NOT) that is signed in accordance with the permit. For the purposes of the certification required by the NOT, the elimination of storm water discharges associated with the construction activity is understood to mean the following:

a) That all disturbed soils at the portion of the construction site where the Operator had control have been finally stabilized;

b) Temporary erosion and sediment control measures have been or will be removed at an appropriate time to ensure final stabilization is maintained; or

c) That all storm water discharges associated with construction activities from the identified site that are authorized by an NPDES general permit have otherwise been eliminated from the portion of the construction site where the Operator had control.

The NOT will be submitted on the Tennessee Department of Environment and Conservation's NOT form provided in Appendix D of this SWPPP.

6.4 Retention of Records

The Owner will retain copies of the SWPPP, all reports required by the permit, and records of all data used to complete the Notice of Intent for the project for a period of at least three (3) years from the date the NOT was filed. The Owner is aware the period may be extended by written request of the Director.

7.0 CERTIFICATIONS

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 designated 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."

OWNER – Regent Homes, LLC

Signed: _____ 9/22/17

David McGowan, President — Date

CONTRACTOR'S CERTIFICATION

"I certify under penalty of law that 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 for submitting false information, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements."

General Contractor: _____

Signed: _____ _____

Date

General Contractor: _____

Signed: _____ _____

Date

General Contractor: _____

Signed: _____ _____

Date

General Contractor: _____

Signed: _____ _____

Date

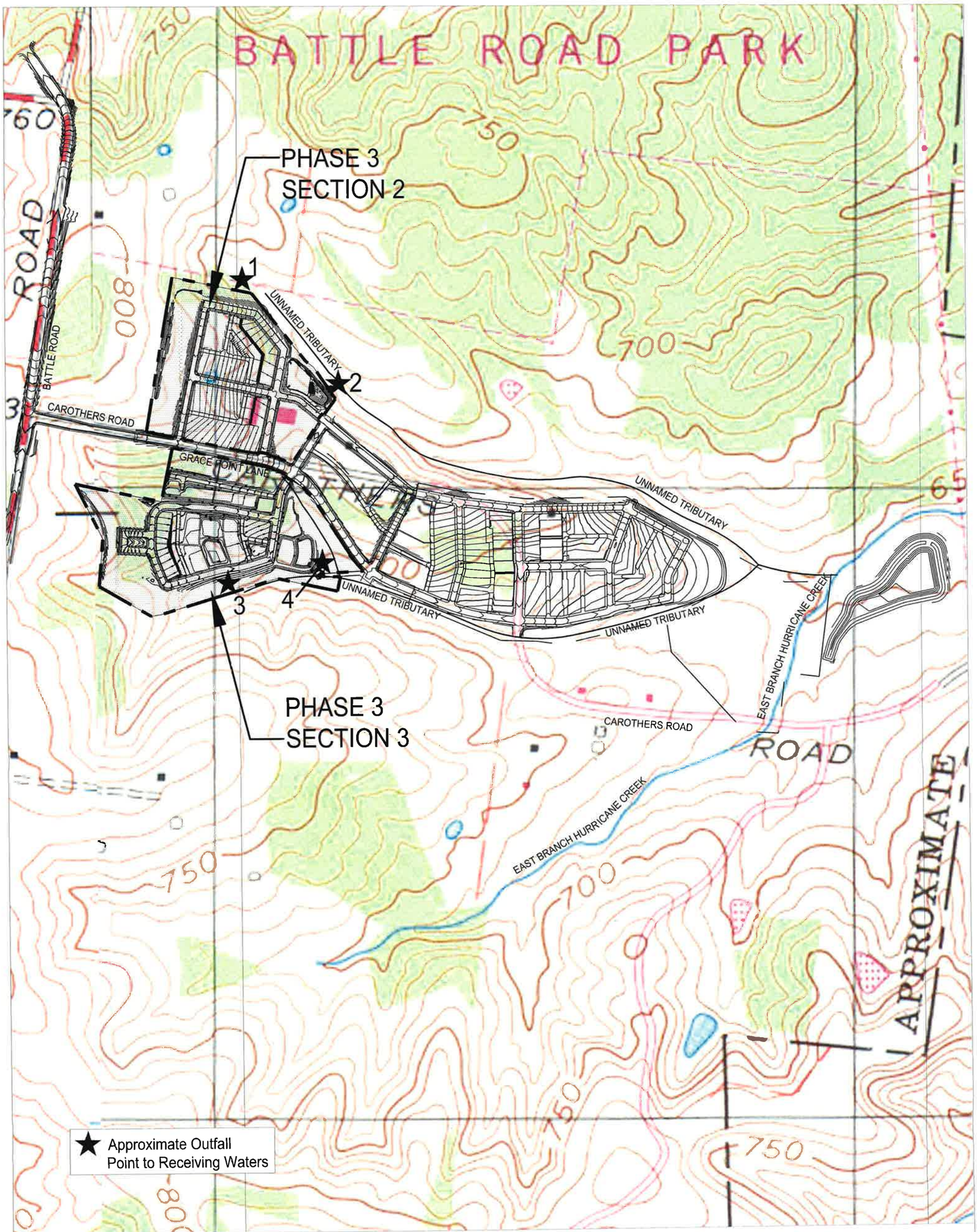
ENGINEER'S CERTIFICATION

I, Heath Elder, PE, certify that this SWPPP and accompanying drawings were prepared under my responsible charge.

Signature	TN License No.	Date
Heath Elder	110128	9/22/16

Figure 1

USGS Topographic Maps



USGS TOPOGRAPHIC MAP

N

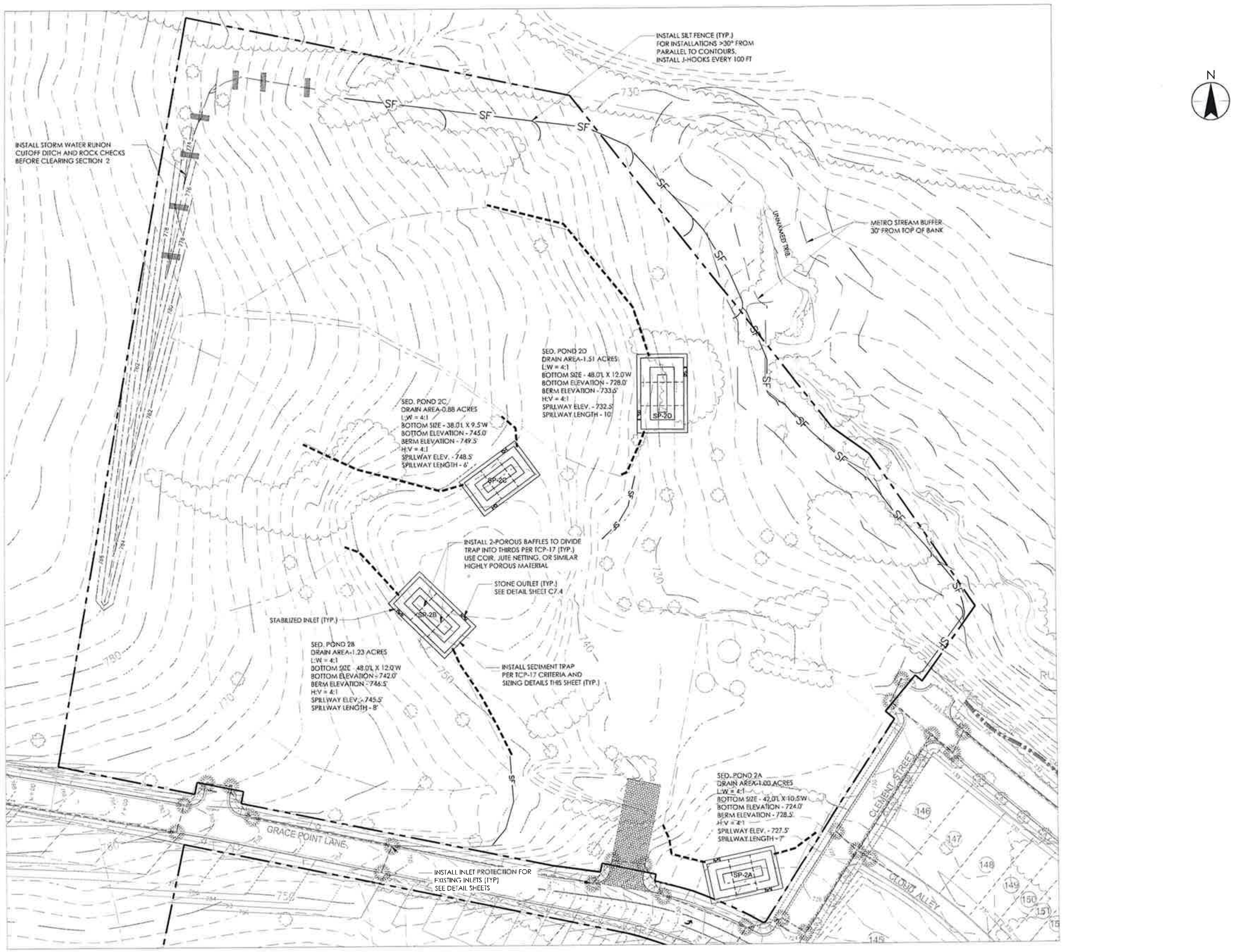
0 500 1000
SCALE FEET

SOURCE: Topographic Map - Nolensville (1957), Smyrna (1998) Tennessee Quadrangles

REGENT HOMES, LLC NASHVILLE, TENNESSEE	Stormwater Pollution Prevention Plan Carothers Crossing UDO Phase 3, Sections 2-3 Davidson County, Tennessee	Drawn By: NP	Checked By: HE
		Project No. 178430202	
		Figure 1	

Appendix A

Erosion Prevention and Sediment Control (EPSC) Plans



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NOTE:

CONTRACTOR SHALL PROVIDE AN AREA FOR CONRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH CP-10 AND CP-13 RESPECTIVELY IN THE METRO STORMWATER MANAGMENT MANUAL - VOLUME 4 - BEST MANAGEMENT PRACTICES - MARCH 2000. COORDINATE LOCATION WITH METRO NPDES PERSONNEL AT PRE-CON MEETING

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Legend

- R/W LINE
- LAND LOT LINE
- BUILDING SETBACK
- P.U.D.E.
- STORM SEWER
- SANITARY SEWER
- WATER MAIN
- PROPOSED SANITARY MANHOLE
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- FENCE LINE
- STREAM BUFFER
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- EX-CONTOUR - MAJOR
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- CONTOUR - MAJOR
- DIVERSION BERM/SWALE (TCP-22-4)
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- HEAVY DUTY SILT FENCE W/STEEL POSTS AND WIRE MESH REINFORCEMENT PER TDOT STD
- INLET PROTECTION (TCP-24)
- ROCK CHECK DAM (TCP-12)
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I, ____, ________, ____, CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (#XXXX), HAVE REVIEWED THIS PLAN FOR SUFFICIENT ONSITE TEMPORARY EROSION AND SEDIMENT CONTROL PROVISIONS.

SIGNATURE

Revision	By	Appd	YY.MM.DD

File Name: 178430202-104EC.DWG	HF	HE	HE	17.09.19
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

HEATH C. ELDER · REGISTERED ENGINEER · AGRICULTURE · COMMERCE · No. 110128 · STATE OF TENNESSEE

09/18/2017

Client/Project

Regent HOMES

CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title

SECTION 2 SWPPP (EPSC) - PHASE I

Project No.	Scale
178430202	

Drawing No.	Sheet	Revision
C4.1		-

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File Name: 07023C-104EC.DWG	NP	HE	HE	17.09.19
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

HEATH C. ELDER REGISTERED ENGINEER AGRICULTURE COMMERCE No. 110128 STATE OF TENNESSEE

09/18/2017

Client/Project

Regent HOMES

CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title

SECTION 2 SWPPP (EPSC) - PHASE II

Project No.	Scale	
178430202		
Drawing No.	Sheet	Revision
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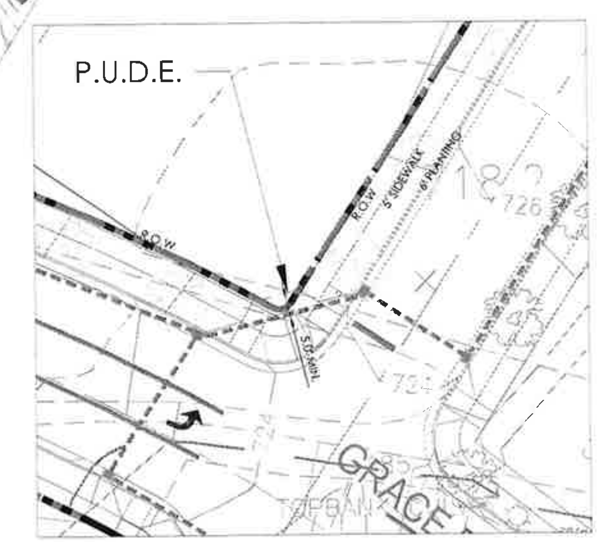

P.U.D.E. DETAIL-TYP.

THIS DETAIL APPLIES AT THE FOLLOWING STORM PIPE LINE LOCATIONS:
A18-A17; A16-A15; A13-A12; A11-A10; A9.1-A9; C8.2-C8.1; C8.1.1-C8.1; D1-D2

In accordance with the Metro Stormwater Management Manual, Volume 1, Section 3.9, As-Built Certifications, MWS Stormwater Division must approve the following as-builts prior to issuance of the Use & Occupancy Permit:

- Underground detention and water quality infrastructure
- Above ground detention and water quality infrastructure
- Public storm sewer infrastructure
- Cut & fill in the floodplain
- Sink hole alterations

THIS PROPERTY IS NOT LOCATED WITHIN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD BOUNDARY AND FLOODPLAIN MAP COMMUNITY PANEL NO. 47149C0101E DATED MAY 18, 1998 AND 47037C0451F PANEL NOT PRINTED.

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- SANITARY SEWER
- WATER MAIN
- OVERHEAD POWER
- CURB & GUTTER
- FENCE LINE
- STREAM BUFFER
- EX CONTOUR - MINOR
- EX-CONTOUR - MAJOR
- CONTOUR - MINOR
- CONTOUR - MAJOR
- PROPOSED WATER VALVE IN BOX
- PROPOSED HYDRANT & VALVE ASSEMBLY
- PROPOSED SANITARY MANHOLE
- SINK HOLE — SH#7

NOI NUMBER : TNR143936

GRADING CERTIFICATION NOTE

1. THE PROJECT ASSOCIATED WITH THESE SUBMITTED PLANS IS COVERED UNDER TENNESSEE GENERAL STORM WATER PERMIT TNR100000.

MAY 30, 2007
SIGNATURE DATE
CIRCLE ONE: (DEVELOPER) (PROJECT ENGINEER) (OTHER)

IF AN NOI HAS BEEN SUBMITTED TO THE STATE FOR THIS PROJECT, ITS ASSIGNED PERMIT NUMBER CAN BE ACQUIRED BY CALLING THE TENNESSEE DIVISION OF WATER POLLUTION CONTROL AT 532-0087 OR 532-0643)

NOTE: PLANS MAY BE SUBMITTED WITHOUT THE ABOVE PERMIT NUMBER. HOWEVER, NO GRADING PERMIT SHALL BE RELEASED UNTIL THE PROJECT'S STATE GENERAL STORM WATER PERMIT NUMBER IS SUBMITTED.

IF YOU INTEND TO SUBMIT THE PERMIT NUMBER AT A LATER DATE, PLEASE CHECK HERE ________

2. I HEREBY CERTIFY THAT THIS PROJECT DOES NOT REQUIRE COVERAGE UNDER A TENNESSEE GENERAL STORM WATER PERMIT.

SIGNATURE DATE
CIRCLE ONE: (DEVELOPER) (PROJECT ENGINEER) (OTHER)

NOTE: PROJECTS OF ONE OR MORE ACRES REQUIRE PERMIT COVERAGE. ALSO, PROJECTS OF LESS THAN ONE ACRE THAT ARE PART OF A TOTAL DEVELOPMENT PROJECT OF ONE OR MORE ACRES REQUIRE PERMIT COVERAGE.

IF YOU ARE UNSURE WHETHER YOUR PARTICULAR PROJECT REQUIRES COVERAGE UNDER A TENNESSEE GENERAL STORM WATER PERMIT, PLEASE CALL THE TENNESSEE DIVISION OF WATER POLLUTION CONTROL AT 959-7271

Revision	By	Appd	YY.MM.DD

File Name: 07023C-301GP.DWG	NP	HE	HE	17.09.19
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Permit-Seal

HEATH C. ELDER
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 110128
STATE OF TENNESSEE
09/18/2017

Client/Project

Regent HOMES

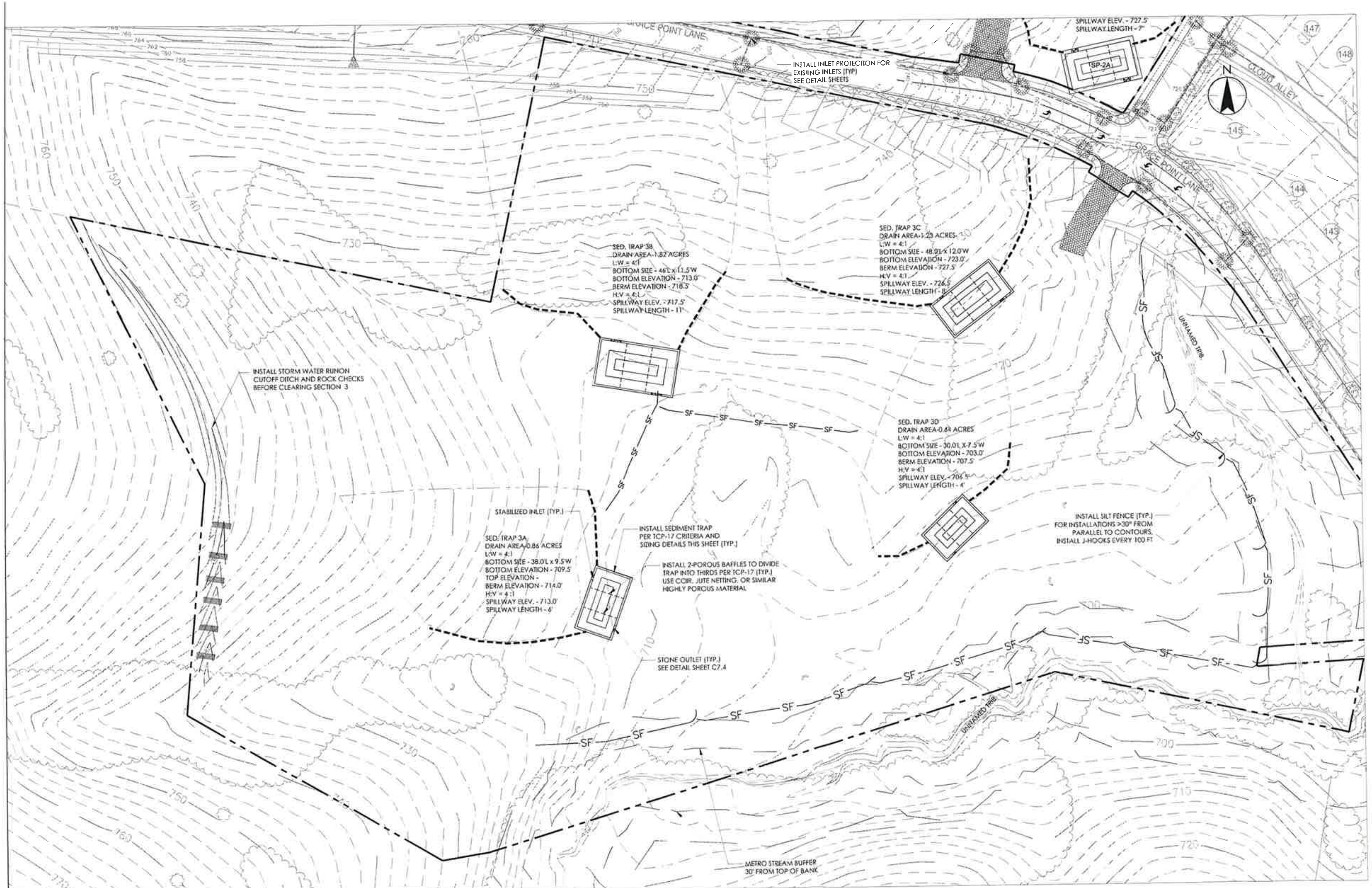
CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title

SECTION 2 GRADING & DRAINAGE PLAN (EPSC PH III)

Project No.	Scale
178430202	1" = 50' (0, 50, 75, 100)

Drawing No.	Sheet	Revision
C3.1		-



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SIGNATURE

Revision | By | Appd | YY.MM.DD

File Name: 07025C-104EC.DWG | NF | HE | HE | 17.09.19
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Permit-Seal

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No. 110128
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09/18/2017

Client/Project

Regent HOMES

CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title

SECTION 3 SWPPP (EPSC) - PHASE I

Project No.	Scale
178430202	

Drawing No.	Sheet	Revision
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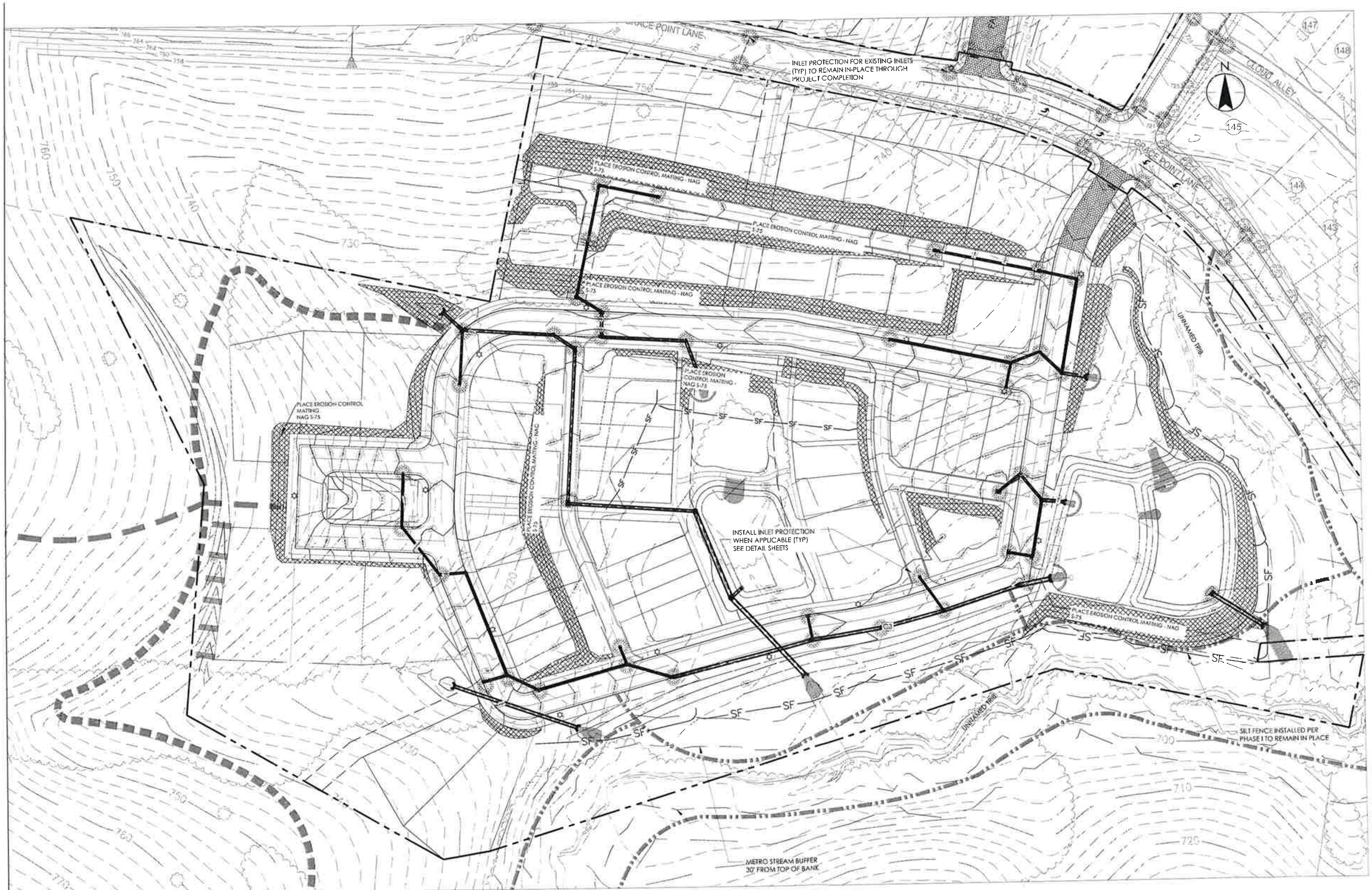

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SIGNATURE

Revision	By	Appd	YY.MM.DD

File Name: 07023C-1048C.DWG	NP	HE	HE	17.09.19
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

HEATH C. ELDER REGISTERED ENGINEER AGRICULTURE COMMERCE No. 110128 STATE OF TENNESSEE

09/18/2017

Client/Project

Regent HOMES

CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title

SECTION 3 SWPPP (EPSC) - PHASE II

Project No.	Scale
178430202	

Drawing No.	Sheet	Revision
C4.4		-

In accordance with the Metro Stormwater Management Manual, Volume 1, Section 3.9, As-Built Certifications, MWS Stormwater Division must approve the following as-builts prior to issuance of the Use & Occupancy Permit:

- Underground detention and water quality infrastructure
- Above ground detention and water quality infrastructure
- Public storm sewer infrastructure
- Cut & fill in the floodplain
- Sink hole alterations

Stantec

Stantec Consulting Services Inc.
601 Grassmere Park Road, Suite 22
Nashville TN
Tel. 615.885.1144
www.stantec.com

Legend

- PHASE LINE
- R/W LINE
- LAND LOT LINE
- BUILDING SETBACK
- P.U.D.E.
- STORM SEWER
- SANITARY SEWER
- WATER MAIN
- OVERHEAD POWER
- CURB & GUTTER
- FENCE LINE
- STREAM BUFFER
- EX CONTOUR - MINOR
- EX-CONTOUR - MAJOR
- CONTOUR - MINOR
- CONTOUR - MAJOR

- PROPOSED WATER VALVE IN BOX
- PROPOSED HYDRANT & VALVE ASSEMBLY
- PROPOSED SANITARY MANHOLE

SINK HOLE — SH#7

NOI NUMBER : TNR143936

GRADING CERTIFICATION NOTE

1. THE PROJECT ASSOCIATED WITH THESE SUBMITTED PLANS IS COVERED UNDER TENNESSEE GENERAL STORM WATER PERMIT TNR100000

MAY 30, 2007

SIGNATURE DATE

CIRCLE ONE: (DEVELOPER) (PROJECT ENGINEER) (OTHER) ____

IF AN NOI HAS BEEN SUBMITTED TO THE STATE FOR THIS PROJECT, ITS ASSIGNED PERMIT NUMBER CAN BE ACQUIRED BY CALLING THE TENNESSEE DIVISION OF WATER POLLUTION CONTROL AT [illegible]

NOTE: PLANS MAY BE SUBMITTED WITHOUT THE ABOVE PERMIT NUMBER, HOWEVER, NO GRADING PERMIT SHALL BE RELEASED UNTIL THE PROJECT'S STATE GENERAL STORM WATER PERMIT NUMBER IS SUBMITTED.

IF YOU INTEND TO SUBMIT THE PERMIT NUMBER AT A LATER DATE, PLEASE CHECK HERE ____

2. I HEREBY CERTIFY THAT THIS PROJECT DOES NOT REQUIRE COVERAGE UNDER A TENNESSEE GENERAL STORM WATER PERMIT.

SIGNATURE DATE

CIRCLE ONE: (DEVELOPER) (PROJECT ENGINEER) (OTHER) ____

NOTE: PROJECTS OF ONE OR MORE ACRES REQUIRE PERMIT COVERAGE. ALSO, PROJECTS OF LESS THAN ONE ACRE THAT ARE PART OF A TOTAL DEVELOPMENT PROJECT OF ONE OR MORE ACRES REQUIRE PERMIT COVERAGE.

IF YOU ARE UNSURE WHETHER YOUR PARTICULAR PROJECT REQUIRES COVERAGE UNDER A TENNESSEE GENERAL STORM WATER PERMIT, PLEASE CALL THE TENNESSEE DIVISION OF WATER POLLUTION CONTROL AT 650-7273)

Revision	By	Appd	YY.MM.DD

File Name: 07023C-301GP.DWG	NP	HE	HE	17.09.19
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

HEATH C. ELDER · REGISTERED ENGINEER · AGRICULTURE · COMMERCE · No. 110128 · STATE OF TENNESSEE

09/18/2017

Client/Project

Regent HOMES

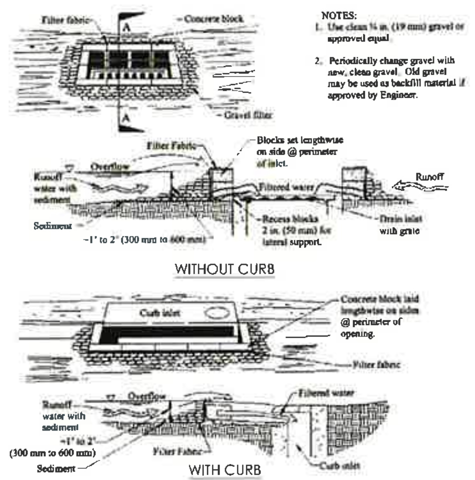
CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title

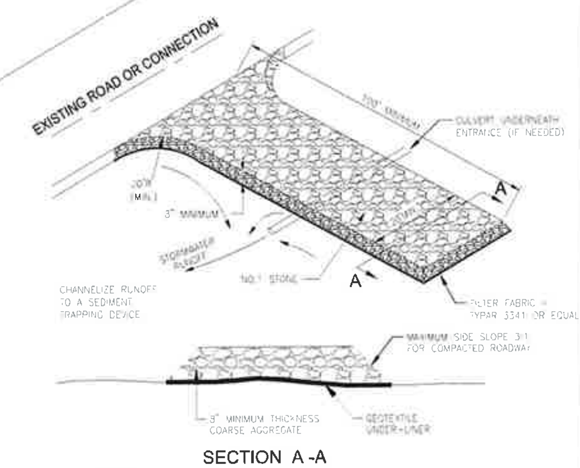
SECTION 3 GRADING & DRAINAGE PLAN (EPSC PH III)

Project No.	Scale
178430202	1"=50'

Drawing No.	Sheet	Revision
C3.2		-



CATCH BASIN / INLET PROTECTION (TCP-24)

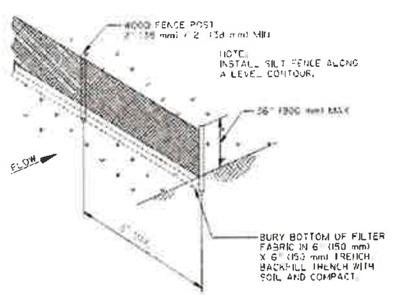


SECTION A-A

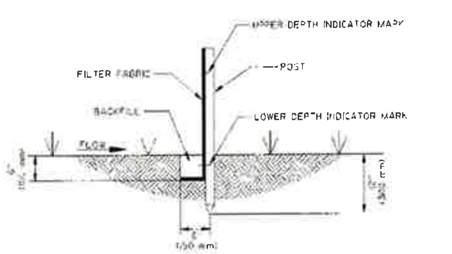
NOTES:

1. CONSTRUCTION ENTRANCE SHALL BE LOCATED WHERE TRAFFIC WILL BE ENTERING OR EXITING THE CONSTRUCTION SITE.
2. CONSTRUCTION ENTRANCE SHALL BE PROPERLY MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OR SEDIMENT ONTO PUBLIC ROADS/STREETS. PERIODIC TOP DRESSING AND ADDITIONAL STONE IS REQUIRED TO MAINTAIN ENTRANCE IN GOOD WORKING CONDITION.
3. ALL SEDIMENTS SPILLED, WASHED OR TRACKED ONTO PUBLIC ROADWAY SHALL BE CLEANED AND REMOVED IMMEDIATELY.
4. WIDTH SHALL BE INCREASED AS NEEDED TO ACCOMMODATE ANTICIPATED TRAFFIC.

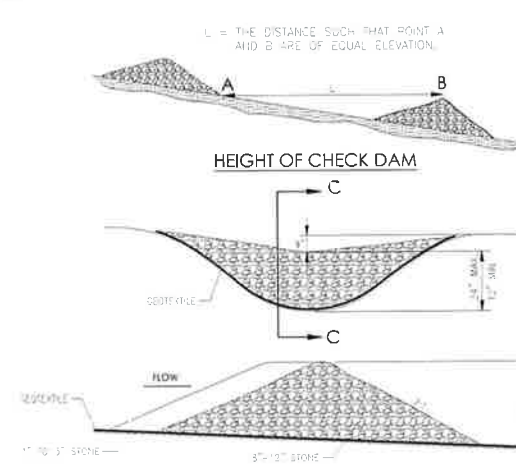
CONSTRUCTION EXIT (TCP-03)



TYPICAL PREFABRICATED SILT FENCE INSTALLATION



SILT FENCE DETAIL (TCP-13)



- CHECK DAM SHALL BE KEYED INTO SURFACE 6" MINIMUM.
- STONE AND ROCK SHALL BE CLEAN AND FINES.
- GEOTEXTILE MAY BE USED AS AN ADDITIONAL UPSTREAM FILTER. KEY AND BED GEOTEXTILE.

CHECK DAM (TCP-12)

ACTIVITY: Sediment Traps | TCP – 17

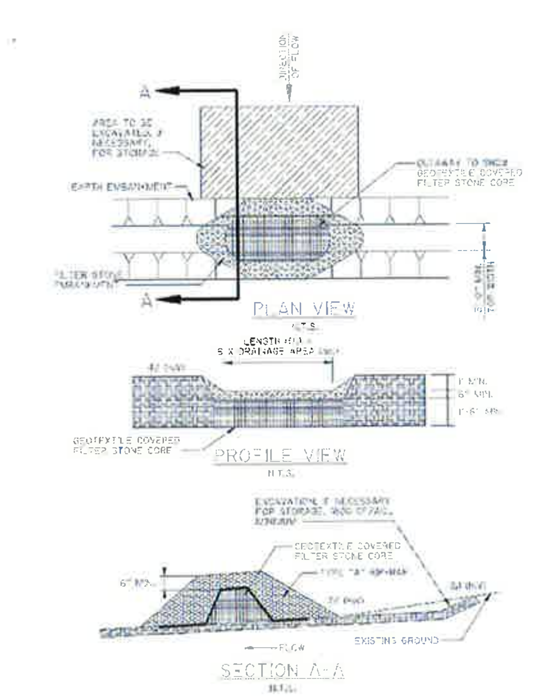


Figure TCP-17-3
Sediment Trap with Stone Outlet

Volume 4:
Stormwater Best Management Practices – Temp. Construction Management Practices **TCP-17-8** **September 2013**

TEMPORARY SEDIMENT TRAP (TCP-17)

EROSION CONTROL NOTES

1. PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 10 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
2. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
3. ANY STREAM CROSSINGS BY VEHICLES AND/OR EQUIPMENT DURING CLEARING OPERATIONS SHALL BE MADE IN COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE GENERAL ARAP PERMIT FOR ROAD CROSSINGS. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. NOS. EC-STR-25 AND/OR EC-STR-31 UNLESS SPECIFICALLY ADDRESSED IN THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.
4. ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED CONCURRENTLY WITH CLEARING OPERATIONS, AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.
6. CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS AND SHALL BE PHASED FOR PROJECTS THAT HAVE OVER 50 ACRES OF SOIL DISTURBANCE. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE ARE ALLOWED AT ANY TIME DURING THE CONSTRUCTION PROJECT UNLESS APPROVED IN WRITING BY THE ENVIRONMENTAL DIVISION. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES OVER TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ON ALL PROJECTS.
7. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION, REPAIR, AND MAINTENANCE OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS AND SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EROSION PREVENTION AND SEDIMENT CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
8. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID.
9. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
10. SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/ U.S. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. SILT FENCE, SILT FENCE WITH BACKING, AND/OR ENHANCED SILT FENCE MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED. NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
11. INSTREAM EROSION PREVENTION AND SEDIMENT CONTROL DEVICES ARE NOT APPROVED.
12. SLURRY WATER PUMPED FROM WORK AREAS AND EXCAVATIONS MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED SLURRY WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION AND SEDIMENT TRANSPORT.
13. CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO DETAIN RUNOFF AND TRAP SEDIMENT. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS.
14. PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE TEMPORARILY CEASE AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 15 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE, NON-ERODING SURFACE, SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE.
15. THE CONTRACTOR SHALL INSTALL A RAIN GAUGE. THE CONTRACTOR SHALL MAINTAIN THE GAUGE IN GOOD WORKING CONDITION. THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS AT EACH RAIN GAUGE INCLUDING DATES, AMOUNTS OF RAINFALL, AND THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES) ON THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES ARE TO BE INCLUDED IN THE BID PRICE.
16. INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE DONE BEFORE ANTICIPATED STORM EVENTS (OR SERIES OF STORM EVENTS SUCH AS INTERMITTENT SHOWERS OVER ONE OR MORE DAYS), DURING OR WITHIN TWENTY-FOUR (24) HOURS AFTER THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER, AND AT LEAST TWICE PER SEVEN CALENDAR DAYS AT LEAST 72 HOURS APART. AN ANTICIPATED STORM EVENT IS WHEN THERE IS A 50% OR GREATER CHANCE OF RAINFALL ACCORDING TO A DOCUMENTED LOCAL OR NATIONAL SOURCE (I.E. NOAA, WEATHER.COM, LOCAL NEWSPAPER).
17. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
18. UPON CONCLUSION OF THE INSPECTIONS, EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICABLE WITHIN THIS TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.
19. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN ON-SITE (OR AT A NEARBY OFFICE) AND SHALL PLACE COPIES OF ANY PROJECT-RELATED PERMITS ON THE PROJECT BULLETIN BOARD.
20. THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP AND/OR SECTION 404 PERMIT(S). ANY ADDITIONAL PERMITS REQUIRED BY THE CONSTRUCTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.
21. ONLY CLEAN ROCK MAY BE PLACED DIRECTLY INTO WATERS OF THE STATE/U.S. AS INDICATED ON THE PLANS AND PERMITS. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER FILL MATERIALS TO BE DISCHARGED BELOW ORDINARY HIGH WATER MUST BE FREE OF FINES, SEDIMENT, SOIL, POLLUTANTS, CONTAMINANTS, TOXIC MATERIALS, ASPHALT, TRASH, AND/OR OTHER WASTE MATERIALS.
22. THE WIDTH OF THE FILL ASSOCIATED WITH WATER BODY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.
23. EXCAVATION AND FILL ACTIVITIES SHALL BE SEPARATED FROM FLOWING WATERS. ALL SURFACE WATER FLOWING TOWARD THE EXCAVATION OR FILL WORK SHALL BE DIVERTED THROUGH USE OF COFFERDAMS, BERMS, AND/OR TEMPORARY CHANNELS. TEMPORARY DIVERSION CHANNELS SHALL BE USED TO DIVERT THE NORMAL STREAM PATH FLOW FROM AN ERODIBLE AREA UNTIL SUCH AREAS CAN BE STABILIZED. TEMPORARY DIVERSION CHANNELS MUST BE PROTECTED BY NON-ERODIBLE MATERIAL AND LINED TO THE EXPECTED HIGH WATER LEVEL. COFFERDAMS MUST BE CONSTRUCTED OF SANDBAGS, CLEAN ROCK, STEEL SHEETING OR OTHER NON-ERODIBLE MATERIAL. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS.
24. NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE MODIFIED TO INCLUDE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA (OR SPECIES PROPOSED FOR SUCH PROTECTION).
25. NO STREAM SHALL BE USED AS TRANSPORTATION ROUTES FOR HEAVY EQUIPMENT UNLESS THE STREAM IS A COMMERCIALLY NAVIGABLE WATERWAY AND BARGES ARE USED.
26. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION THAT CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.
27. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN PROACTIVE METHODS TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS FROM ENTERING WATERS OF THE STATE/U.S.
28. THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.
29. BORROW AND WASTE DISPOSAL AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.
30. HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EROSION PREVENTION AND SEDIMENT CONTROL PLANS AND/OR PROJECT PERMIT(S).
31. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP, USACE SECTION 404/401, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.
32. WETLANDS AREAS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS AND/OR PROJECT PERMIT(S).
33. ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED AND THE PERMIT OR PERMITS ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. THE ENGINEER SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
34. FOR AN OUTFALL IN A DRAINAGE AREA OF A TOTAL OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 2-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. IF AT ANY TIME THIS OCCURS ON THE CONSTRUCTION SITE, ENVIRONMENTAL AND DESIGN DIVISIONS SHALL REVIEW AND APPROVE ALL REVISIONS TO THIS PORTION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.
35. FOR PROJECTS THAT DISCHARGE INTO HIGH QUALITY WATERS OR WATERS IMPAIRED BY SILTATION, AN OUTFALL IN A DRAINAGE AREA OF A TOTAL OF 5 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. ENVIRONMENTAL AND DESIGN DIVISIONS SHALL REVIEW AND APPROVE ALL REVISIONS TO THIS PORTION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT.
36. FOR PROJECTS THAT DISCHARGE INTO HIGH QUALITY WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 25 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE STORM WATER POLLUTION PREVENTION PLAN. ENVIRONMENTAL AND DESIGN DIVISIONS SHALL REVIEW AND APPROVE ALL REVISIONS TO THIS PORTION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. THIS REQUIREMENT DOES NOT APPLY TO ANY VALID ARAP OR EQUIVALENT PERMITS ISSUED BY FEDERAL AUTHORITIES.
37. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATIONS BEGIN, AND MUST BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY. ALL EPSC MEASURES AS WELL AS BUFFER ZONES AND OTHER PROTECTIVE MEASURES IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE KEPT IN GOOD AND EFFECTIVE OPERATION CONDITION.
38. THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EROSION PREVENTION AND SEDIMENT CONTROL INSPECTION RECORDS AND RAINFALL/GAUGE RECORDS.
39. ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING THE LOCATION OF THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE.
40. IF A CHANGE IN SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENGINEER SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED.
41. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE UPDATED BY CONSTRUCTION PERSONNEL WHENEVER EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTIONS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.
42. IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
43. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE SHOWN IN THE EPSC PLANS, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
44. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTORS SHALL SUCCESSFULLY COMPLETE THE "FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" COURSE OR EQUIVALENT COURSE FOR INDIVIDUALS INVOLVED IN LAND DISTURBING ACTIVITIES WHICH PROVIDES A WORKING KNOWLEDGE OF EPSC MEASURES. DOCUMENTATION OF ALL PROJECT EPSC INSPECTOR CERTIFICATIONS SHALL BE KEPT ON SITE.
45. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF HIS OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT (EPSC) CONTROL MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EROSION PREVENTION AND SEDIMENT CONTROL DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP), TO PROVIDE ACCEPTABLE EROSION PREVENTION AND SEDIMENT CONTROLS (EPSC) DURING ALL STAGES OF CONSTRUCTION.
46. THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY MAINTAIN FUNCTIONALITY AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.
47. THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:
    a. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EROSION PREVENTION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
    b. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
    c. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES (EPSC) ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
    d. NO GRADING, EXCAVATION, CUTTING, FILLING OR OTHER EARTHWORK WORK SHALL BE STARTED BEFORE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
48. TEMPORARY OR PERMANENT SOIL STABILIZATION SHALL BE ACCOMPLISHED WITHIN 15 DAYS AFTER FINAL GRADING OR OTHER EARTHWORK. PERMANENT SOIL STABILIZATION SHALL REPLACE TEMPORARY STABILIZATION AS SOON AS PRACTICABLE.
49. EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE AMOUNT OF TOTAL AREA OF EXPOSED SOIL.
50. REFER TO THE EROSION CONTROL PLAN, SHEET C4.1 AND C4.2, FOR NOTES REGARDING SEASONAL WORK LIMITATION(S) OR LIMITATION(S) ON THE TOTAL AREA OF EXPOSED SOIL.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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Legend

Revision	By	Appd.	YY.MM.DD

File Name: 07023-153C-507CON.DWG	NP	HE	HE	17.09.18
	Dwn.	Chkd.	Dsgn.	YY.MM.DD

Permit-Seal

HEATH C. ELDER — REGISTERED ENGINEER — AGRICULTURE — COMMERCE — No. 110128 — STATE OF TENNESSEE
09/18/2017

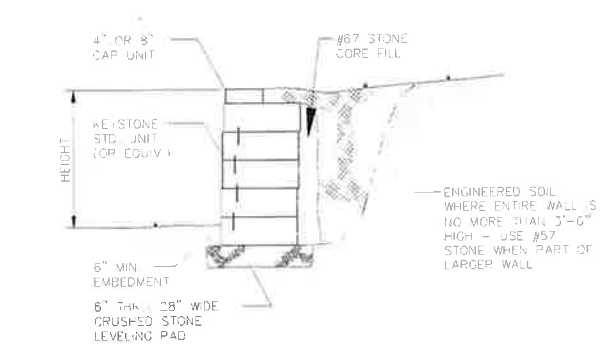
Client/Project

Regent HOMES

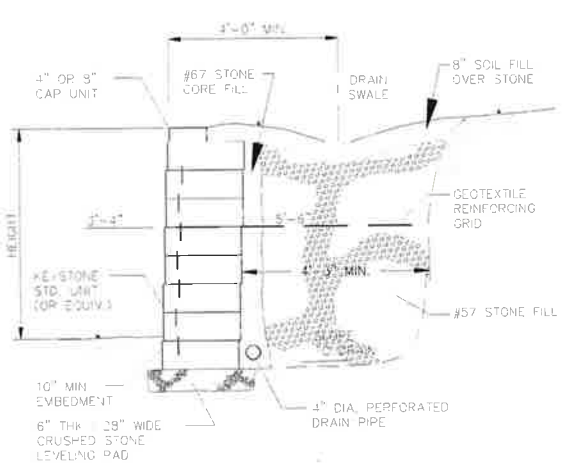
CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title
CONSTRUCTION NOTES & DETAILS

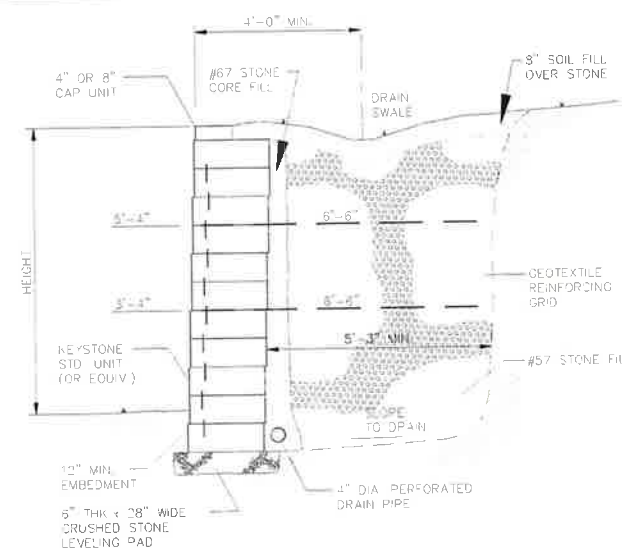
Project No.	Scale	
178430202		
Drawing No.	**Sheet**	**Revision**
C7.4		-



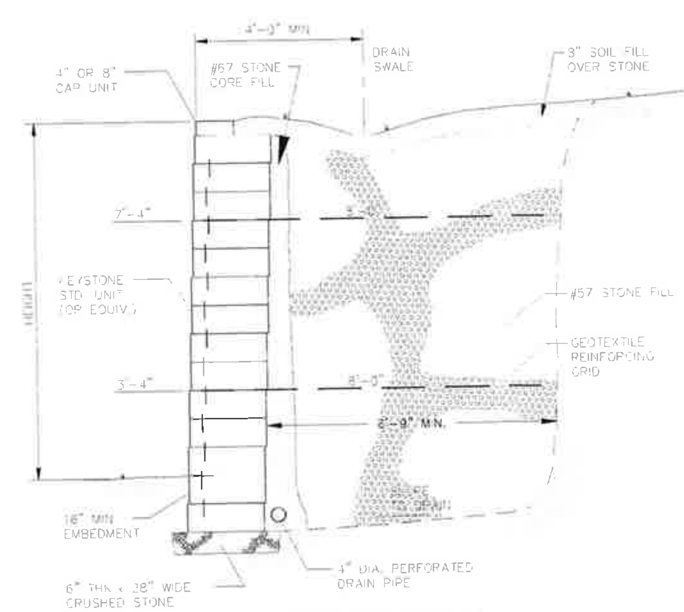
HEIGHT: 6" TO 3'-4"



HEIGHT: 3'-4" TO 5'-0"



HEIGHT: 5'-0" TO 6'-8"

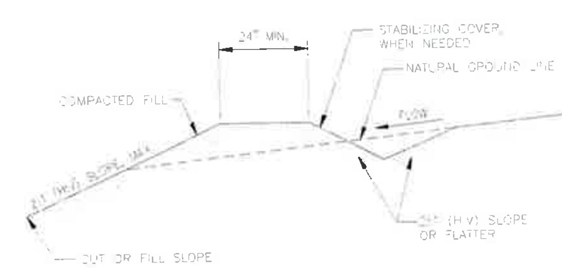


HEIGHT: 6'-8" TO 8'-6"

SEGMENTAL WALL NOTES:

1. HIGH-SIDE EDGE OF TOP OF SEGMENTAL WALL TO BE LOCATED 7.5 FEET FROM BACK OF CURB.
2. TOP OF SEGMENTAL WALL TO BE 0.7' FEET ABOVE ADJACENT ROADWAY CENTERLINE ELEVATION.
3. OWNER TO SELECT BLOCK COLOR AND TEXTURAL FROM STANDARD AVAILABLE OFFERINGS.
4. CONTRACTOR TO PROVIDE DESIGN/BUILD SERVICES FOR RETAINING WALL INCLUDING DESIGN DRAWINGS SEALED BY PROFESSIONAL ENGINEER REGISTERED IN STATE OF TENNESSEE.

SEGMENTAL RETAINING WALLS

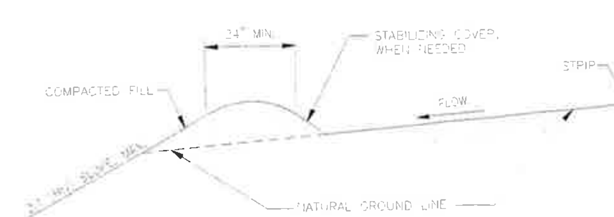


DIVERSION BERM / SWALE

N.T.S.

NOTES:

1. STABILIZE INLET, OUTLETS AND SLOPES.
2. PROPERLY COMPACT THE SUBGRADE



DIVERSION BERM

N.T.S.

DIVERSION BERM AND BERM/SWALE

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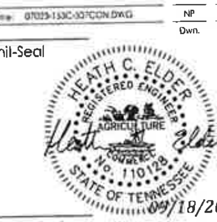
Dwn. | Chkd. | Dsgn. | YY.MM.DD

Permit-Seal



09/18/2017

Client/Project

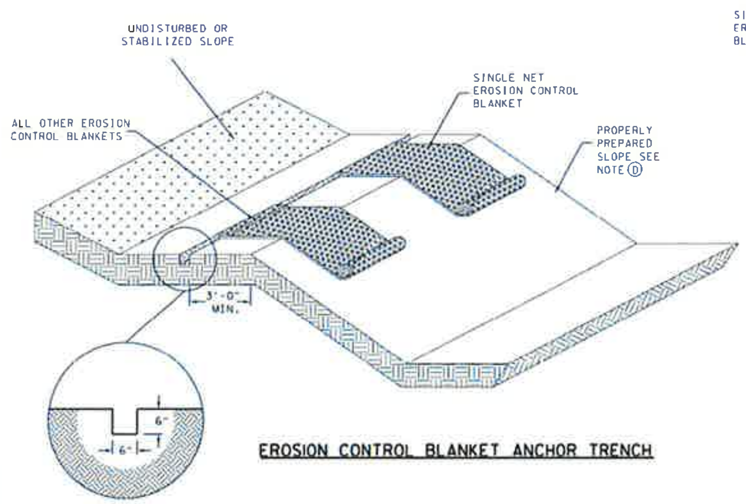
Regent HOMES

CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title

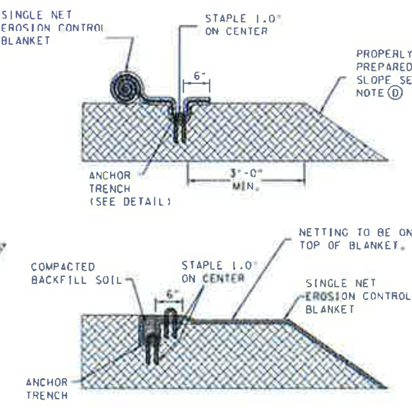
CONSTRUCTION NOTES & DETAILS

Project No.	Scale	
178430202		
Drawing No.	Sheet	Revision
C7.5		-

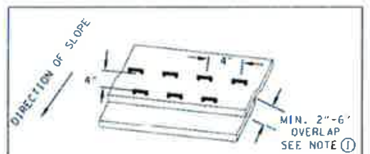


EROSION CONTROL BLANKET ANCHOR TRENCH

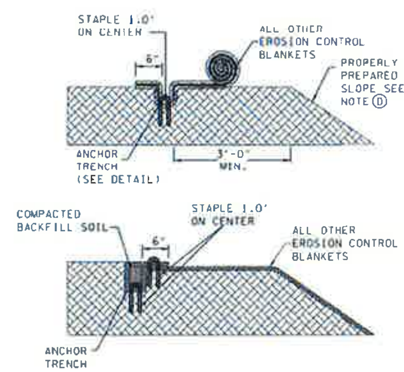
TRENCH DETAIL



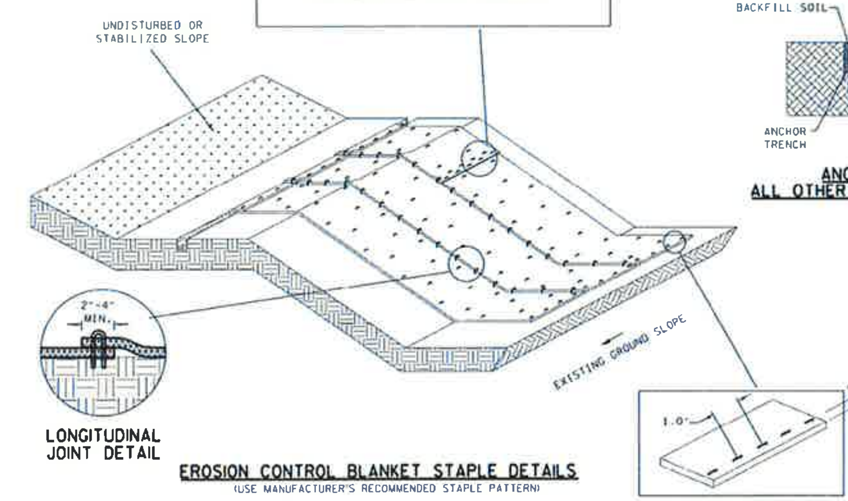
ANCHOR TRENCH DETAILS
SINGLE NET EROSION CONTROL BLANKETS



HORIZONTAL JOINT DETAIL



ANCHOR TRENCH DETAILS
ALL OTHER EROSION CONTROL BLANKETS



LONGITUDINAL JOINT DETAIL

EROSION CONTROL BLANKET STAPLE DETAILS
(USE MANUFACTURER'S RECOMMENDED STAPLE PATTERN)

EROSION CONTROL PLAN LEGEND: EROSION CONTROL BLANKET

EROSION CONTROL BLANKET SLOPE INSTALLATION GENERAL NOTES

(A) EROSION CONTROL BLANKETS ARE INTENDED TO BE USED AS AN IMMEDIATE MULCH COVER FOR DISTURBED SLOPES THAT HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED.

(B) EROSION CONTROL BLANKETS MAY ALSO BE USED AS CHANNEL LINERS WHERE THE ANTICIPATED MAXIMUM SHEAR STRESS IS LOW. REFER TO EC-STR-36 FOR INSTALLATION DETAILS.

(C) EROSION CONTROL BLANKETS SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS. WHEN NOT AVAILABLE, INSTALL ACCORDING TO NOTES D THRU J.

(D) STEP ONE: SITE PREPARATION
THE SITE SHOULD BE FINE GRADED TO A SMOOTH PROFILE AND RELATIVELY FREE FROM ALL WEEDS, CLODS, STONES, ROOTS, STICKS, RIVULETS, GULLIES, CRUSTING AND CAKING. FILL ANY VOIDS AND MAKE SURE THE SLOPE IS COMPACTED PROPERLY.

(E) STEP TWO: SEEDING
SEEDING WITHOUT MULCH SHOULD BE APPLIED TO THE AREA TO BE VEGETATED.

(F) STEP THREE: PREPARE THE ANCHOR TRENCH
AT THE TOP OF THE SLOPE EXCAVATE AN ANCHOR TRENCH 6 INCHES DEEP BY 6 INCHES WIDE. THE EROSION CONTROL BLANKET WILL BE ANCHORED INTO THE TRENCH BY STAPLES. ALLOW A MINIMUM OF 3 FEET FROM THE CREST OF THE SLOPE TO THE ANCHOR TRENCH.

(G) STEP FOUR: SECURE THE EROSION CONTROL BLANKET IN THE ANCHOR TRENCH
BEGIN EROSION CONTROL BLANKET PLACEMENT 30 INCHES ABOVE THE ANCHOR TRENCH. RUN THE EROSION CONTROL BLANKET INTO THE ANCHOR TRENCH. ANCHOR THE EROSION CONTROL BLANKET WITH STAPLES ONE FOOT ON CENTER IN THE ANCHOR TRENCH. BE SURE TO DRIVE STAPLES OR STAKES FLUSH WITH THE SOIL SURFACE. BACKFILL THE ANCHOR TRENCH AND COMPACT THE SOIL. PLACE SEED OVER THE COMPACTED SOIL. COVER THE COMPACTED SOIL WITH THE REMAINING 12 INCHES OF THE TERMINAL END OF THE EROSION CONTROL BLANKET. STAPLE OR STAKE TERMINAL END DOWN SLOPE OF THE ANCHOR TRENCH ON ONE FOOT CENTERS.

(H) STEP FIVE: EROSION CONTROL BLANKET DEPLOYMENT
STARTING AT THE CREST OF THE SLOPE, ROLL THE EROSION CONTROL BLANKET DOWN THE SLOPE IN A CONTROLLED MANNER. APPROXIMATELY EVERY 20-25 FEET PULL THE EROSION CONTROL BLANKET TO TAKE OUT ANY EXCESS SLACK. THE GOAL IS TO HAVE THE EROSION CONTROL BLANKET CONTOUR AND INITIATE CONTACT WITH THE SOIL.

(I) STEP SIX: STAPLE OR STAKE THE EROSION CONTROL BLANKET
SECURE THE OVERLAP OR THE EDGES WITH STAPLES. THE TYPICAL INSTALLATION WILL REQUIRE ONE STAPLE PLACED AT THREE TO FIVE FEET INTERVALS ALONG THE VERTICAL LENGTH OF THE EROSION CONTROL BLANKET. STAPLES SHOULD BE STAGGERED EVERY 18 TO 24 INCHES HORIZONTALLY ACROSS THE EROSION CONTROL BLANKET. IF THE EROSION CONTROL BLANKET NEEDS TO BE SPLICED IN THE MIDDLE OF A SLOPE BE SURE THE EROSION CONTROL BLANKET IS 'SHINGLED' WITH UP-SLOPE EROSION CONTROL BLANKET OVERLAPPING THE DOWN-SLOPE EROSION CONTROL BLANKET. THERE SHOULD BE A MINIMUM OF 4-INCHES OF OVERLAP IN A SPLICE. USE A STAPLE CHECK SLOT TO SECURE THE OVERLAP. A STAPLE CHECK SLOT IS MADE BY PLACING A ROW OF STAPLES 4-INCHES ON CENTER AND THEN PLACING A SECOND ROW OF STAPLES 4-INCHES ON CENTER, STAGGERED FROM THE FIRST ROW.

(J) STEP SEVEN: SECURING THE EROSION CONTROL BLANKET AT THE TOE OF SLOPE
ROLL THE EROSION CONTROL BLANKET 24-INCHES PAST THE TOE OF THE SLOPE. STAPLE OR STAKE TERMINAL END OF THE EROSION CONTROL BLANKET ON ONE FOOT CENTERS.

(K) ONLY EROSION CONTROL BLANKETS LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED.

(L) EROSION CONTROL BLANKETS FOR SLOPE INSTALLATION SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBERS:

801-02	SEEDING (WITHOUT MULCH) PER UNIT
801-02.01	CROWN VETCH MIXTURE (WITHOUT MULCH) PER UNIT
801-02.08	TEMPORARY SEEDING (WITHOUT MULCH) PER UNIT
805-12.01	EROSION CONTROL BLANKET (TYPE I) PER SQUARE YARD
805-12.02	EROSION CONTROL BLANKET (TYPE II) PER SQUARE YARD
805-12.03	EROSION CONTROL BLANKET (TYPE III) PER SQUARE YARD
805-12.04	EROSION CONTROL BLANKET (TYPE IV) PER SQUARE YARD

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF EROSION CONTROL BLANKETS.

REV. 12-18-95: CHANGED DRAWING NO. FROM ESC-STR-34 TO EC-STR-34.

REV. 1-22-03: LAPPED LONGITUDINAL SEAM IN ISOMETRIC VIEW. REMOVED ITEM 805-12.01 FROM GENERAL NOTE (G) SINCE TYPE I BLANKETS ARE NO LONGER USED.

REV. 1-19-05: CHANGED GENERAL NOTE (B). CHANGED PLAN VIEW AND LONGITUDINAL SEAM VEIW.

REV. 4-1-08: REDREW REVISED GENERAL NOTES, ADDED STANDARD SYMBOL, REVISED INSTALLATION DETAILS.

REV. 8-1-12: MINOR EDITS TO DRAWING AND GENERAL NOTES.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL BLANKET FOR SLOPE INSTALLATION

10-26-92 | EC-STR-34

Stantec

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Dwn | Chkd | Dsgn | YY.MM.DD

Permit-Seal

HEATH C. ELDER REGISTERED ENGINEER AGRICULTURE COMMERCE NO. 110128 STATE OF TENNESSEE

09/18/2017

Client/Project

Regent HOMES

CAROTHERS FARMS
PHASE 3
NOLENSVILLE, TENNESSEE

Title
CONSTRUCTION NOTES & DETAILS

Project No. 178430202 | Scale

Drawing No. C7.6 | Sheet | Revision -

Appendix B

Soils Information

Hydrologic Soil Group—Davidson County, Tennessee
(Phase 3 - Section 2)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Davidson County, Tennessee
Survey Area Data: Version 14, Sep 12, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Davidson County, Tennessee (TN037)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
HmD	Hampshire silt loam, 12 to 20 percent slopes	C	8.7	62.5%
MmC	Mimosa silt loam, 5 to 12 percent slopes, eroded	C	3.7	26.5%
StC	Stiversville loam, 3 to 12 percent slopes	A	0.9	6.2%
W	Water		0.7	4.8%
Totals for Area of Interest			**13.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Hydrologic Soil Group—Davidson County, Tennessee
(Phase 3 Section 3)

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

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- Streams and Canals

Transportation

- Rails
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- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

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Please rely on the bar scale on each map sheet for map measurements.

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Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Davidson County, Tennessee
Survey Area Data: Version 14, Sep 12, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Davidson County, Tennessee (TN037)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
HmC	Hampshire silt loam, 5 to 12 percent slopes	C	6.4	30.6%
HmD	Hampshire silt loam, 12 to 20 percent slopes	C	13.1	63.1%
MmC	Mimosa silt loam, 5 to 12 percent slopes, eroded	C	1.3	6.3%
Totals for Area of Interest			**20.8**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

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Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher