TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Water Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, TN 37243
1-888-891-8332 (TDEC)

Memphis Environmental Field Office

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

Site or Project Name: Gateway Global Logistics Center, Fayette County	**Existing NPDES Tracking Number: TNR**
Street Address or Location: 0.5 miles west of Knox Road, south of proposed N. Industrial Road	Start date: January 15, 2016
	Estimated end date: October 1, 2016
Site Activity Description: Construction of a commercial warehouse	Latitude (dd.dddd): 34.996675
	Longitude (dd.dddd): -89.576713
County(ies): Fayette / MS4 Jurisdiction:	Acres Disturbed: 77.94
	Total Acres: 83.79

Does a topographic map show dotted or solid blue lines ■ and/or wetlands ☐ on or adjacent to the construction site?
If wetlands are located on-site and may be impacted, attach wetlands delineation report.
If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? ARAP permit No.:

Receiving waters: Tributaries to the Wolf River

Attach the SWPPP with the NOI ■ SWPPP Attached | Attach a site location map ■ Map Attached

Site Owner/Developer Entity (*Primary Permittee*): (person, company, or legal entity that has operational or design control over construction plans and specifications): Alston Construction, Inc.

Site Owner/Developer Signatory (V.P. level/higher - signs certification below): (individual responsible for site): William Hancock, Jr.		Signatory's Title or Position (V.P. level/higher - signs certification below): Sr. Vice President	
Mailing Address: 1600 Division St, Suite 520		City: Nashville	State: TN / Zip: 37203
Phone: (615) 385-6785	Fax: (615) 385-9856	E-mail: whancock@alstonco.com	
Optional Contact: Alston Construction, Inc., Chad Lindsay		Title or Position: Sr. Project Manager	
Mailing Address: 7521 Hwy 72		City: Byhalia	State: MS / Zip: 38661
Phone: ( ) 901-331-5782	Fax: ( )	E-mail: clindsay@alstonco.com	

Owner or Developer 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 or Developer Name; (print or type) William Hancock, Jr. | Signature: [signature] | Date: 1/4/16

Contractor(s) 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.

Contractor company name (print or type): Alston Construction, Inc.

Contractor signatory (print/type): (V.P. level or higher) William Hancock, Jr., Sr. Vice President		Signature: [signature]	Date: 1/4/16
Mailing Address: 1600 Division St, Suite 520		City: Nashville	State: TN / Zip: 37203
Phone: (615) 385-6785	Fax: (615 385-9856	E-mail: whancock@alstonco.com	

Other Contractor company name (print or type):			
Other Contractor signatory (print/type): (V.P. level or higher)		Signature:	Date:
Mailing Address:		City:	State: / Zip:
Phone: ( )	Fax: ( )	E-mail:	

OFFICIAL STATE USE ONLY

Received Date: 1/13/16	Reviewer: CMW	Field Office: MEFO	Permit Number TNR 154169	Exceptional TN Water: NO
Fee(s): 6000	T & E Aquatic Flora and Fauna: 1.5 mi - NO		Impaired Receiving Stream: NO	Notice of Coverage Date: Feb 3, 2016

(Continued on reverse)

CONSTRUCTION
STORM WATER POLLUTION PREVENTION PLAN

Gateway Global Logistics Center
Fayette County Site
Piperton Hills Industrial Road
Rossville, Tennessee

Pickering Job Number:
24291.07

Prepared for:

Alston Construction Co.
7521 Highway 72
Byhalia, MS 38611

Prepared by:

Pickering Firm, Inc.
6775 Lenox Center Court, Suite 300
Memphis, Tennessee 38115
(901) 726-0810
www.pickeringfirm.com

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Owner Certification Page

Name of Construction Project: Gateway Global Logistics Center – Fayette County Site
Location of Project: Piperton Hills Industrial Road
Rossville, Tennessee

Operator responsible for Storm Water Pollution Prevention during the construction of the Gateway Global Logistics Center – Fayette County Site:

Alston Construction Co.
7521 Highway 72
Byhalia, MS 38611

MANAGEMENT CERTIFICATION

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

Plan Reviewed and Accepted by:

Signature | Sr Vice President (Title) | 6/11/16 (Date)
(must be signed by President, V.P. or equivalent)

Alston Construction
Company

General Contractor Certification Page

Name of Construction Project: Gateway Global Logistics Center – Fayette County Site
Location of Project: Piperton Hills Industrial Road
Rossville, Tennessee

Operator responsible for Storm Water Pollution Prevention during the construction of the Gateway Global Logistics Center – Fayette County Site:

Alston Construction Co.
7521 Highway 72
Byhalia, MS 38611

GENERAL CONTRACTOR CERTIFICATION

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

Plan Reviewed and Accepted by:

Signature	Title	Date
	SR VICE PRESIDENT	6/11/16

(must be signed by President, V.P. or equivalent)

ALSTON CONSTRUCTION
Company

Subcontractor Certification Page

Name of Construction Project: Gateway Global Logistics Center – Fayette County Site
Location of Project: Piperton Hills Industrial Road
Rossville, Tennessee

Operator responsible for Storm Water Pollution Prevention during the construction of the Gateway Global Logistics Center – Fayette County Site:

Alston Construction Co.
7521 Highway 72
Byhalia, MS 38611

SUBCONTRACTOR CERTIFICATION

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

Plan Reviewed and Accepted by:

Signature	President	1-17-16
	Title	Date

(must be signed by President, V.P. or equivalent)

Yancey Brothers Construction LLC.
Company

Preparer Certification

Based on my inquiry of the construction site owner/developer, I believe the information submitted is accurate. I am aware that the NOI and SWPPP, if approved, make the above-described construction activity subject to NPDES permit number TNR100000, and construction activities on-site are thereby regulated.

Cara L. Martin, P.E.

REVISIONS RECORD

This document will be revised occasionally to reflect new team members, telephone number changes, changes to the content of the Storm Water Pollution Prevention Plan (SWPPP), and other modifications. This page and the date in the header at the top of each page allow the plan holders to maintain a current, up-to-date version of the SWPPP. When a section is modified, deleted, or replaced, the plan holder should indicate the date of the revision on the affected pages as well as updating the listing below.

REVISION NUMBER	REVISION DATE	SECTIONS AFFECTED	REASON FOR UPDATE

1.0 INTRODUCTION

The Gateway Global Logistics Center – Fayette County Project consists of approximately 84 acres of land. The Project includes the construction of a 1,500,000 square foot warehouse and distribution center under the authority of the National Pollutant Discharge Elimination System (NPDES), the Tennessee Department of Environment and Conservation's (TDEC) Construction General Permit (CGP) TNR100000 for Discharges of Storm Water Associated with Construction Activities.

This Storm Water Pollution Prevention Plan (SWPPP) has been prepared for Alston Construction Co. in accordance with the CGP (Attachment A). This SWPPP includes the following figures in Attachment B: a site location map, an aerial photograph, and a soil map. The site's Erosion Prevention and Sediment Control Plans (EPSCPs) are included as Attachment C. The following factors have been considered in the development of this SWPPP:

- Because the receiving stream, an upper un-named tributary to the Wolf River, is not impaired, the erosion prevention and sediment controls for the site have been designed for the 2-year/24-hour storm event. In addition, a sediment basin is required for any on-site outfall that has a drainage area of 5 or more acres including disturbed and undisturbed acreage.
- A copy of the SWPPP and the CGP must be kept onsite during construction activities.

1.1 Summary of Permit Requirements

Table 1-1 summarizes the permit requirements.

Discharges Covered	Permit Number / Tracking Number		Permit Required Activities
Storm Water Associated with Construction Activity			
Storm Water Under Construction General Permit (CGP): 50 acres or less disturbed at any one time	TNR100000/ Not yet obtained		Contractor must conduct all activities in compliance with the CGP, including but not limited to:
		☑	sign NOI and SWPPP, keep SWPPP on site, and update SWPPP as needed;
		☑	hire a qualified person to conduct biweekly erosion prevention and sediment control inspections (72 hours apart, attempt to obtain during rainfall if during work hours), have the primary permittee sign the inspection report in a timely manner, and keep site inspector's certification on site;
		☑	make corrections to site before next rain event but in no case more than 7 days after the need is identified;
		☑	update SWPPP within 7 days of correction to site;
		☑	document biweekly inspections on TDEC form and maintain inspection file and SWPPP at the construction site
		☑	a quality assurance site assessment of erosion prevention and sediment controls must be conducted by a P.E. or other qualified individual at each outfall involving drainage totaling 5 acres or more within a month of construction commencing at each portion of the site that drains the 5 or more acres
		☑	stabilize soils (temporary or permanent) 14 days after construction ceases;
		☑	post a copy of the notice of permit coverage, contact information, project description and location of the SWPPP at the construction site;
		☑	install and maintain a rain gauge at the site;
		☑	maintain a form on-site that tracks the acreage of disturbed area each day

1.2 Allowable Discharges

- Allowable stormwater discharges from support activities associated with a permitted construction site are authorized by the general permit as indicated in Section 1.2.2. of the CGP.
- Allowable non-storm water discharges from active construction sites are authorized by the general permit as indicated in Section 1.2.3. of the CGP.

2.0 SITE DESCRIPTION/OWNER INFORMATION

Alston Construction is constructing a warehouse and distribution center in Rossville, Fayette County, Tennessee. The construction activities proposed for coverage by this SWPPP will occur at the project site which will be owned and operated by Panattoni Development Company. The overall site is 84-acres and located on Piperton Hills Industrial Road, within the Gateway Global Logistics Center. The Project site is bounded on all sides by vacant land. Project coordinates are Latitude 34.996675 N and Longitude -89.576713 W. The location of the subject property is shown in Attachment B.

The Initial Phase of development will consist of approximately 43 acres to be disturbed for the construction of the permanent diversion ditch and sediment basins. The SWPPP and the EPSCPs have been prepared to incorporate best management practices (BMPs) in accordance with the CGP.

The Interim Phase of development will consist of approximately 48 acres to be graded for the remainder of the building construction and infrastructure features such as parking and drives, utility services, and storm water management components.

The existing site consists of vacant land with rolling terrain covered with vegetation and grasses. The existing site drains overland to the north, east, and west to upper un-named tributaries to the Wolf River.

2.1 Sequence of Construction/Major Soil Disturbing Activities

Construction activities at the Project site will be completed in phases. This SWPPP covers both Phases 1 and 2. At no time will greater than 50 acres be disturbed. In accordance with Section 3.5.3.1.k. of the GCP, areas of the completed phase must be stabilized within 14 days. No more than 50 acres of active soil disturbance is allowed at any time during the construction project. Following bank and outfall stabilization, sediment basin areas will not be counted as disturbed areas.

The EPSCPs in Attachment C includes six sheets to show and describe the measures that are summarized below.

Initial Phase
45.6 acres Disturbed (50 acres maximum at any one time)
Sequence of Construction

A. General
1. Establish on-site location of SWPPP and other records.
2. Install and maintain rain gauge.
3. Post sign at outfall points: SW1, SW2, SW3, and SW4.
4. Install stabilized construction egress points with optional equipment & vehicle washdown.
5. Install perimeter silt fence.
6. Construct and stabilize access roads including temporary culvert crossings as necessary throughout the site within initial phase disturbed area.

7. If soil stockpile areas are provided, install silt fence around the stockpile areas and note location of stockpiles in on-site EPSCPs. Maintain silt fence around soil stockpile areas.
8. Stabilize areas as soon as possible after reaching final grade to ensure the total disturbed area does not exceed 50 acres at any one time.

B. Sediment Basin Construction
1. Construct and stabilize sediment basins SB-01, SB-02, and SB-03. Sediment Basin grading shall be performed in the dry. Maintain a berm along the sediment basin to prevent up-gradient runoff from entering the basin. Use excavated soils for fill in the building pad and paved areas within the limits of the initial phase disturbed area.
2. Stabilize the sediment basin slopes with temporary vegetation or BioCover SS. All seeding shall be maintained to obtain a full stand of grass. Permanent stabilization will be required after the winter months.
3. Install riser outlet, riprap outlet protection, and emergency spillway.
4. Maintain BioCover SS and/or temporary seeding throughout the project and re-apply BioCover SS or temporary seeding as necessary.
5. Dewatering valve to be closed in normal operations. There shall be no discharge from the sediment basin up to the 2-year, 24-hour storm event. Chemical treatment may be required for sediment removal, prior to opening the dewatering valve.
6. As an alternative, utilize polyacrylamides around the perimeter of the sediment pond (as wide a perimeter as possible), in swales and on highly erodible areas before each rain event to help settle suspended soil particles in runoff water prior to discharge from sediment basins. Polyacrylamides applied directly to the sediment basin require the use of a mechanical agitator, such as a motor boat, to perform properly.

C. Permanent Diversion Ditch Construction
1. Install Sediment Traps [ST] for areas less than 5-acres draining toward the permanent diversion ditch [DI]. Sediment traps to be removed as tributary drainage areas are diverted to sediment basins.
2. Construct and stabilize the permanent diversion ditch [DI]. The diversion ditch [DI] shall be constructed in the dry. Maintain a berm along the diversion ditch [DI] to prevent up-gradient runoff from entering the ditch, until after the ditch is fully stabilized with woven geotextile fabric [GE] or approved equal. Begin diversion ditch [DI] excavation at the downstream of the ditch to allow for positive runoff or provide temporary pumping to dewater the ditch. Equip ditch with temporary outlet structure or treat and pump to undisturbed area or outfall if needed.
3. Stabilize soils per final phase plan when permanent vegetation can be established.

D. Building Pad and Site Grading
1. Utilize excavated soils to construct building pads and parking areas.
2. As areas are brought to grade, stabilize with soil cement within 14 days. Steep slopes (>35%) and sediment basin slopes shall be stabilized within 7 days.
3. After areas are stabilized with soil cement, building and parking lot construction will begin.
4. Install permanent storm drainage structures and inlet protection devices.

Interim Phase
48 acres Disturbed (50 acres maximum at any one time)
Sequence of Construction

A. General
1. Maintain on-site location of SWPPP and other records.
2. Maintain rain gauge.

3. Maintain signs at all outfall points: SW1, SW2, SW3, and SW4.
4. Maintain stabilized construction egress points with equipment & vehicle washdown.
5. Maintain perimeter silt fence.
6. Maintain access roads including temporary culvert crossings.
7. If soil stockpile areas are provided, install silt fence around the stockpile areas and note location of stockpiles in on-site EPSCPs. Maintain silt fence around soil stockpile areas.
8. Maintain sediment basins 1, 2, and 3 and sediment traps installed during the Initial Phase, which will include dewatering and mucking out as needed.
9. Stabilize areas as soon as possible after reaching final grade to ensure the total disturbed area does not exceed 50 acres at any one time.
10. Maintain inlet protection devices installed in the Initial Phase.

B. Sediment Basin Construction
1. Construct and stabilize sediment basin SB-04. Sediment Basin grading shall be performed in the dry. Maintain a berm along the sediment basin to prevent up-gradient runoff from entering the basin. Use excavated soils for fill in the building pad and paved areas within the limits of the interim phase disturbed area.
2. Stabilize the sediment basin slopes with temporary vegetation or BioCover SS. All seeding shall be maintained to obtain a full stand of grass. Permanent stabilization will be required after the winter months.
3. Install riser outlet, riprap outlet protection, and emergency spillway.
4. Maintain BioCover SS and/or temporary seeding throughout the project and re-apply BioCover SS or temporary seeding as necessary.
5. Dewatering valve to be closed in normal operations. There shall be no discharge from the sediment basin up to the 2-year, 24-hour storm event. Chemical treatment may be required for sediment removal, prior to opening the dewatering valve.
6. As an alternative, utilize polyacrylamides around the perimeter of the sediment pond (as wide a perimeter as possible), in swales and on highly erodible areas before each rain event to help settle suspended soil particles in runoff water prior to discharge from sediment basins. Polyacrylamides applied directly to the sediment basin require the use of a mechanical agitator, such as a motor boat, to perform properly.
7. After temporary diversion ditches to SB-01 and SB-04 are constructed, sediment traps installed in the Initial Phase may be removed.
8. As the drainage area entering SB-01 is reduced and re-directed to SB-04, the size of SB-01 can be reduced as shown on the interim phase plan.
9. After drainage areas entering SB-01 and SB-04 are fully stabilized, SB-01 and SB-04 shall be removed and stabilized per the final phase plan.

C. Permanent Diversion Ditch Construction
1. Stabilize soils per final phase plan when permanent vegetation can be established.

D. Building Pad and Site Grading
1. Utilize excavated soils to construct building pads and parking areas.
2. As areas are brought to grade, stabilize with soil cement within 14 days. Steep slopes (>35%) and sediment basin slopes shall be stabilized within 7 days.
3. After areas are stabilized with soil cement, building and parking lot construction will begin.
4. Install permanent storm drainage structures and inlet protection devices.

Phase 2 - Final
50 acres maximum disturbed at any one time

Sequence of Construction

A. General
1. Perform final grading phase cleanout of the sediment basins.
2. As tributary area reach final stabilization, modify outlet structures to permanent detention specifications.
3. Stabilize soils per final phase plan no more than 14 days after construction of the area has ceased. Steep slopes (>35%) and sediment basin slopes shall be stabilized within 7 days.
4. Until stabilization is achieved and if necessary, dewatering through a filter bag or chemical treatment of the sediment basins may be required.
5. Remove all temporary controls including perimeter silt fence and inlet protection devices.

2.2 Topography

The site boundaries are shown on the Mount Pleasant, MS-TN U.S. Geologic Survey topographic map (See Attachment B). The existing elevation of the high point is approximately 419' above mean sea level (AMSL); the existing elevation of the low point is approximately 377' AMSL. The site drains generally from the south to the north, east, and west with a rolling terrain at 1% to 20% slopes.

2.3 Soils Data

According to the U.S. Department of Agriculture (USDA) Soil Conservation Service (SCS) web soil map for Shelby County, Tennessee, the Project site is underlain by Calloway Silt Loam (CaB), Collins Silt Loam (Cu), Grenada Silt Loam (GaB2, GaB3, GaC3, GaD3), Grenada Gullied Land Complex (GgD), Gullied Land (Gn and Gs), Henry Silt Loam (He), and Lexington-Rustin Complex (LeD3). (See Attachment B.)

Because the soils on the site are susceptible to erosion, careful management is needed to prevent soil erosion. The use of BMPs such as diversion ditches, sedimentation basin with dewatering system, flocculants, temporary silt fencing, stabilized construction exits, and temporary vegetative measures may be required.

2.4 Runoff Management after Project Completion

Upon completion, all on-site storm water will be conveyed in vegetated ditches and storm drainage system so that future erosion potential is minimized. The runoff coefficient will increase due to the increased amount of impervious area. Storm water runoff from the entire site will be conveyed through four outfalls: SW1, SW2, SW3, and SW4.

Temporary or permanent stabilization must be completed within 14 days after construction activity has temporarily or permanently ceased. Permanent measures shall replace temporary measures during the growing season for permanent seeding. Fertilization will be conducted according to soil test results and mulch will be applied as needed. All areas disturbed by construction and not receiving soil cement, aggregate, or other stabilization shall be stabilized with "BioCover SS", a mulch mixture that provides up to four months of stabilization, or temporary seeding as necessary. All slopes 3:1 or greater and ditch bottoms shall be stabilized with temporary seed mixture until the permanent vegetation can be established.

2.5 Erosion Control Plans

The EPSCPs for the Project site are included in Attachment C. The plans include the following sheets outlining existing contours and resulting drainage patterns, proposed grading areas and phases of construction, proposed drainage channels and channel improvements, proposed erosion control structures, and proposed erosion control flow patterns:

- C-100 Existing Conditions Plan

- C-130 Grading and Drainage Plan
- C-150 Erosion Prevention and Sediment Control Plan - Initial Phase
- C-150A Erosion Prevention and Sediment Control Plan - Initial Phase- West Side
- C-150B Erosion Prevention and Sediment Control Plan - Initial Phase- East Side
- C-151 Erosion Prevention and Sediment Control Plan - Interim Phase
- C-151A Erosion Prevention and Sediment Control Plan - Interim Phase- West Side
- C-151B Erosion Prevention and Sediment Control Plan - Interim Phase- East Side
- C-152 Erosion Prevention and Sediment Control Plan - Final Stabilization
- C-540 Erosion Control Details
- C-541 Sediment Basin Details

Storm water discharges from construction activity on the site should have no objectionable color contrast to the receiving stream. Permitted discharges from the site are outlined in Section 1.2 of the CGP.

2.6 Streams and Wetlands

The site contains Waters of the State, which are to be undisturbed and protected during construction of the project.

2.7 Receiving Waters

Storm water from the property discharges to upper un-named tributaries to the Wolf River. Ponds 1 & 4 will discharge to an existing pond upstream of an un-named tributary of the Wolf River. The storm water travels from the project site an approximate 5 miles to the Wolf River located north of the site.

The tributaries are not on the State of Tennessee's 303(d) list of impaired waters due to siltation.

- Because the receiving streams are not impaired for siltation, the erosion prevention and sediment controls have been designed for the 2-year/24-hour storm event.

2.8 Buffer Zones to Protect Waters of the State

The Project site is adjacent to Waters of the State; therefore, 30 ft (average width) buffer zones, with a minimum of 15 ft., will be provided to protect Waters of the State.

2.9 Storm Water Runoff Controls/Sediment and Erosion 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. 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. Storm water runoff controls for the proposed project will consist of the structural control measures and the maintenance and inspection practices discussed later in this SWPPP. The runoff controls have been designed to retain sediment on the project site. Erosion and sediment control structures must be in place and functional before earthmoving activities begin. The general contractor will be responsible for the implementation and execution of all storm water runoff controls. Pre-construction ground cover will not be destroyed, removed, or disturbed more than 15 calendar days prior to grading or earthmoving unless temporary cover is installed. Temporary erosion and sediment 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 attached EPSCPs in Attachment C. BMPs to be implemented in conjunction with rough grading include, but are not limited to, the use of stabilizing mulches and vegetation, silt fencing, diversion ditches, and temporary sediment basins.

3.0 VEGETATIVE PRACTICES

The contractor will be responsible for the implementation, maintenance, and inspection of the SWPPP vegetative practices during the construction activity. The structural practices that will be used include the following, which will be installed according to the EPSCP and the Tennessee Erosion and Sediment Control Handbook:

- BF Buffer Zone
- TS Disturbed Area Stabilization with Temporary Vegetation
- PS Disturbed Area Stabilization with Permanent Vegetation
- PAM Polyacrylamide - Any chemicals used on-site must be in accordance with manufacturer's recommendations.
- BioCover SS Soil Stabilization - Any chemicals used on-site must be in accordance with manufacturer's recommendations.

Site layout and stabilization practices are outlined in the EPSCP in Attachment C. Erosion prevention and sediment control structures must be in place and functional before clearing, excavation, grading, or filling occur except as such work may be necessary to install erosion prevention and sediment control measures. Temporary or permanent stabilization must be completed no later than 14 days after construction activity has temporarily or permanently ceased. Permanent measures shall replace temporary measures during the building phase of construction. Fertilization will be conducted according to soil test results and mulch will be applied as needed. All areas disturbed by construction and not receiving aggregate stabilization shall be stabilized with "BioCover SS", a mulch mixture that provides up to four months of stabilization, or temporary seeding as necessary. All slopes 3:1 or greater shall be stabilized with temporary seed mixture until a time when permanent vegetation can be established. Diversion Ditch bottoms shall be stabilized with temporary or permanent seeding or woven geotextile fabric, installed per manufacturer's recommendations. Areas graded to finished grade will be stabilized with temporary or permanent seeding. If temporary seeding or other temporary stabilization measures are provided, the contractor shall re-seed with permanent vegetation per the chart below.

Temporary Seeding

Seeding Dates	Grass Seed	Percentages
January 1 to May 1	Italian Rye	33%
	Korean Lespedeza	33%
	Summer Oats	34%
May 1 to July 15	Sudan-Sorghum	100%
May 1 to July 15	Starr Millet	100%
July 15 to January 1	Balboa Rye	67%
	Italian Rye	33%

Permanent Seeding

Seeding Dates	Grass Seed	Percentages
April 15 to August 15	Bermudagrass (hulled)	70%
	Annual Lespedeza	30%

For any permanent seeding at times other than those listed, the contractor shall submit a seed mixture for approval by the engineer. Alternate seed mixtures for permanent and temporary vegetation may be submitted for approval by the engineer.

Steep slopes (35% or greater) shall be temporarily stabilized not later than 7 days after construction activity on the slope has temporarily or permanently ceased.

Any seed placed will be watered, inspected, and replaced as needed. All seeding must be maintained to obtain a full stand of grass. All slopes will be inspected for sufficient vegetative growth and shall be free from rills and gullies. Any necessary repairs will be made prior to the completion of the rough grading phase of construction.

Silt fencing will be installed around soil stockpiles and where necessary to prevent high-velocity flow and severe erosion. Initial, interim and final grading erosion control and storm water management practices at site-specific locations are further detailed in the attached EPSCPs in Attachment C.

Outfalls from sediment basins will be protected with rip-rap stone. The slopes of the sediment pond will be stabilized with BioCover SS soil stabilization or with temporary vegetation.

3.1 Structural Practices

The contractor will be responsible for the implementation, maintenance, and inspection of the SWPPP structural practices during the construction activity. The structural practices that will be used include the following, which will be installed according to the EPSCPs and the Tennessee Erosion and Sediment Control Handbook:

- CE Construction Exit
- DW Dewatering Structure with Sediment Filter Bag
- DI Diversion Ditch
- GE Geotextile
- PS-AG Disturbed Area Stabilization with Aggregate
- PS-SC Permanent Stabilization with Soil Cement
- SB Sedimentation Basin
- SF Silt Fence
- SD Slope Drain
- IP Storm Drain Inlet Protection
- OP Storm Drain Outlet Protection
- TSC Temporary Culvert Crossing

3.1.1. Sediment Pond Requirements

Because the receiving waters are not impaired, the erosion prevention and sediment controls for the site have been designed for the 2-year/24-hour storm event. In addition, sediment basins are required for any on-site outfall that has a drainage area of 5 or more acres (disturbed or undisturbed). Should the plan fail to prevent silt discharges to the receiving stream, TDEC must be sent a letter of explanation. The contractor will have 7 days to correct the situation or they will be required to cease work.

The sediment ponds at the facility were designed to be batch treated and will be constructed to provide storage for the entire calculated volume of runoff from a 2-year/24-hour storm. The sediment pond volume is calculated based upon both disturbed and undisturbed areas draining to the sediment basin. Sediment ponds were designed to fully contain the 2-year/24-hour storm while passing the storm events exceeding the 2-year through the riser and over the emergency spillway. All sediment basin riser and emergency spillway discharge structures will convey up to the 100-year/24-hour event without overtopping the bank. Site constraints prevent the additional 20% recommended storage volume; however, the basins have been designed to hold some additional capacity above the 2-yr, 24-hour storm event. Additionally, the primary permittee and contractor are aware that additional chemical treatment may be required because the basins are unable to hold the recommended design storm + 20% volume capacity. The pond dimensions will be staked in the field to ensure they will be constructed per the design plans.

Sediment storage expected from the disturbed areas must be included and a marker must be installed indicating the required cleanout elevation. The wet storage area as shown on the ESPCPs is based upon 37cy per acre of drainage area entering the sediment basin. Sediment shall be removed when the design capacity has been reduced by 50%. Additional wet storage may be provided, if necessary.

If the on-site soils settle out, a 72-hour or longer drawdown may be utilized for draining the sediment basins. The site discharge must not have objectionable color. Dewatering through a filter bag or chemical treatment of the sediment basin may be required. The dewatering valve is to be closed in normal operations. There shall be no discharge from the sediment basin up to the 2-year, 24-hour storm event. Chemical treatment may be required for sediment removal, prior to opening the dewatering valve. Any chemicals used on-site must be in accordance with manufacturer's recommendations.

Polyacrylamides may be used around the perimeter of the sediment pond (as wide a perimeter as possible), in swales and on highly erodible areas before each rain event to help settle suspended soil particles in runoff water prior to discharge from sediment basins. The sediment basins may be treated with powdered anionic polyacrylamide product (SOILFLOCTM 1000 or approved equal) to help settle suspended soil particles in runoff water prior to discharge from sediment basins.

3.2 Drainage Calculations

SB-01 – Initial Phase

TOTAL OFFSITE & ONSITE DRAINAGE AREA (ACRES):	36.49
DESIGN STORM EVENT DEPTH (in.):	4.01
CN USED TO DETERMINE BASIN VOLUME:	93
WET STORAGE VOLUME:	48,165
DESIGN STORM (2-YR) STORAGE VOLUME:	475,955
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED:	475,955
25-YEAR, 24-HOUR STORM ELEVATION:	392.72
PERMANENT POOL LEVEL / WET STORAGE ELEVATION:	388.00
DESIGN STORM (2-YR) STORAGE ELEVATION:	391.76
BOTTOM OF BASIN ELEVATION:	385.00
PRINCIPAL SPILLWAY ELEVATION:	392.40
OUTFALL PIPE DISCHARGE ELEVATION:	388.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL:	387.00
EMERGENCY SPILLWAY ELEVATION:	393.00
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY:	50-yr
EMERGENCY SPILLWAY SIDESLOPE:	3:1
EMERGENCY SPILLWAY WIDTH:	30’
TOP OF EMBANKMENT ELEVATION:	394.00
FLOCCULATE AND DEWATER ELEVATION:	391.76

SB-02

TOTAL OFFSITE & ONSITE DRAINAGE AREA (ACRES):	14.89
DESIGN STORM EVENT DEPTH (in.):	4.01
CN USED TO DETERMINE BASIN VOLUME:	92
WET STORAGE VOLUME:	17,945
DESIGN STORM (2-YR) STORAGE VOLUME:	186,445
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED:	186,445
25-YEAR, 24-HOUR STORM ELEVATION:	383.30
PERMANENT POOL LEVEL / WET STORAGE ELEVATION:	378.00
DESIGN STORM (2-YR) STORAGE ELEVATION:	382.85
BOTTOM OF BASIN ELEVATION:	375.00
PRINCIPAL SPILLWAY ELEVATION:	382.85
OUTFALL PIPE DISCHARGE ELEVATION:	379.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL:	378.00
EMERGENCY SPILLWAY ELEVATION:	383.35
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY:	25-yr
EMERGENCY SPILLWAY SIDESLOPE:	3:1
EMERGENCY SPILLWAY WIDTH:	30’
TOP OF EMBANKMENT ELEVATION:	384.00
FLOCCULATE AND DEWATER ELEVATION:	382.85

SB-03

TOTAL OFFSITE & ONSITE DRAINAGE AREA (ACRES):	12.67
DESIGN STORM EVENT DEPTH (in.):	4.01
CN USED TO DETERMINE BASIN VOLUME:	93
WET STORAGE VOLUME:	13776
DESIGN STORM (2-YR) STORAGE VOLUME:	162,272
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED:	162,272
25-YEAR, 24-HOUR STORM ELEVATION:	398.51
PERMANENT POOL LEVEL / WET STORAGE ELEVATION:	387.00
DESIGN STORM (2-YR) STORAGE ELEVATION:	398.01
BOTTOM OF BASIN ELEVATION:	381.00
PRINCIPAL SPILLWAY ELEVATION:	398.05
OUTFALL PIPE DISCHARGE ELEVATION:	388.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL:	386.00
EMERGENCY SPILLWAY ELEVATION:	398.55
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY:	25-yr
EMERGENCY SPILLWAY SIDESLOPE:	3:1
EMERGENCY SPILLWAY WIDTH:	40’
TOP OF EMBANKMENT ELEVATION:	399.00
FLOCCULATE AND DEWATER ELEVATION:	398.01

SB-04

TOTAL OFFSITE & ONSITE DRAINAGE AREA (ACRES):	20.61
DESIGN STORM EVENT DEPTH (in.):	4.01
CN USED TO DETERMINE BASIN VOLUME:	93
WET STORAGE VOLUME:	41,698
DESIGN STORM (2-YR) STORAGE VOLUME:	322,893
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED:	322,893
25-YEAR, 24-HOUR STORM ELEVATION:	401.10
PERMANENT POOL LEVEL / WET STORAGE ELEVATION:	398.00
DESIGN STORM (2-YR) STORAGE ELEVATION:	400.61
BOTTOM OF BASIN ELEVATION:	395.00
PRINCIPAL SPILLWAY ELEVATION:	400.75
OUTFALL PIPE DISCHARGE ELEVATION:	398.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL:	397.50
EMERGENCY SPILLWAY ELEVATION:	401.50
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY:	100-yr
EMERGENCY SPILLWAY SIDESLOPE:	3:1
EMERGENCY SPILLWAY WIDTH:	20’
TOP OF EMBANKMENT ELEVATION:	402.00
FLOCCULATE AND DEWATER ELEVATION:	400.61

SB-01 – Interim Phase

TOTAL OFFSITE & ONSITE DRAINAGE AREA (ACRES):	20.79
DESIGN STORM EVENT DEPTH (in.):	4.01
CN USED TO DETERMINE BASIN VOLUME:	93
WET STORAGE VOLUME:	48,165
DESIGN STORM (2-YR) STORAGE VOLUME:	299,514
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED:	299,514
25-YEAR, 24-HOUR STORM ELEVATION:	392.79
PERMANENT POOL LEVEL / WET STORAGE ELEVATION:	388.00
DESIGN STORM (2-YR) STORAGE ELEVATION:	392.17
BOTTOM OF BASIN ELEVATION:	385.00
PRINCIPAL SPILLWAY ELEVATION:	392.40
OUTFALL PIPE DISCHARGE ELEVATION:	388.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL:	387.00
EMERGENCY SPILLWAY ELEVATION:	393.00
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY:	50-yr
EMERGENCY SPILLWAY SIDESLOPE:	3:1
EMERGENCY SPILLWAY WIDTH:	30’
TOP OF EMBANKMENT ELEVATION:	394.00
FLOCCULATE AND DEWATER ELEVATION:	392.17

3.3 General BMP Guidance

The following BMPs will be installed and maintained in accordance with the Tennessee Erosion Control Handbook.

- Dust Control Measures
- Stabilized Construction Access
- Construction Road Stabilization
- Temporary Silt Fence
- Surface Application of Polyacrylamides
- Soil Stabilizing Mulches
- Seeding
- Sediment Basin
- Diversions and Downdrains
- Temporary Inlet Protection
- Outlet Protection

4.0 STORMWATER MANAGEMENT

The Project site will contain a storm drainage conveyance system that discharges into the ponds. The sediment basins SB-02 and SB-03 and the permanent diversion ditch will be converted to detention basins after the site is stabilized. SB-02 will discharge to outfall SW2, SB-03 will discharge to outfall SW3, and the diversion ditch will discharge to outfall SW4. All outfalls will ultimately drain to upper un-named tributaries to the Wolf River.

5.0 OTHER ITEMS NEEDING CONTROL

5.1 Solid Materials Placed in Waters of the State

During this project, no solid materials, including building materials, will be placed in Waters of the State except by permit.

5.2 Stabilized Construction Access and Dust Control

Offsite tracking of sediments and the generation of dust shall be minimized and prevented if possible. At locations where vehicles and equipment exit the site onto paved roads, a gravel construction exit will be provided to minimize offsite tracking of sediment. All construction exits will be installed in accordance with BMP guidelines and monitored daily for effectiveness. Mud, dirt, or rock tracked from the site onto paved roadways shall be cleaned up on a daily basis and the bmp will be adjusted or added to as determined necessary.

5.3 Solid Waste

All waste materials will be properly collected, stored, recycled, and/or disposed in accordance with all local and state solid waste management regulations. All trash generated at the site will be collected and hauled to an approved Resource Conservation and Recovery Act Subtitle D landfill. All personnel will be instructed regarding the correct procedure for waste disposal, and the site construction supervisor will be responsible for seeing that these procedures are closely followed.

Concrete that is delivered to the site but remains unused shall be transported offsite by the concrete vendor (i.e., in no case shall excess waste concrete be disposed of on the ground at the construction site).

Concrete trucks should only be allowed to washout in locations where discharge is directed to a lined concrete washout pit. It is not permissible to discharge concrete wash directly into sediment basins, streams or storm drains or to areas with potential for runoff directly into streams and/or storm drains.

5.4 Sanitary Waste

Portable sanitary units will be provided for use by all workers throughout the life of the construction project. The units will not be closer than 100 feet to any stream, tributary, or wetland. All sanitary waste will be regularly collected from the portable units by a licensed sanitary waste management contractor.

5.5 Spill Prevention

Various material product containers will be onsite during construction. Appropriate measures to ensure spill prevention will include the following:

- Provide storage in a neat, orderly manner.
- Provide storage under a roof if possible.
- Follow manufacturer's recommendations for proper use and disposal of all materials.
- Direct the construction superintendents/engineers/foremen to conduct daily inspections for proper use and disposal of materials.
- Maintain good housekeeping practices.

5.6 Petroleum Products

Vehicles and construction equipment shall be serviced by a mobile truck. All onsite vehicles and equipment shall be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Materials and equipment for spill cleanup shall be kept onsite, and all spills or leaks shall be cleaned up immediately upon discovery. Should it be determined that any petroleum products be permanently stored on site then containment will be provided and all applicable regulations including part 112 of 40 CFR, which might require preparation and implementation of a Spill Prevention, Control, and Countermeasures (SPCC) Plan.

5.7 Construction and Waste Materials Stored Onsite

Any construction materials that are stored onsite will be confined to areas not subject to flooding or overland flows sufficient to carry the materials into waters of the state. Materials will be secured in a manner preventing removal by reasonable force of wind or water. Excavated soil, particularly topsoil, may be stockpiled onsite at various points. These stockpiles will be in areas that are not subject to high volumes of overland storm water flow. Stockpiles of soil expected to remain for an extended period of time will be surrounded by straw bales, silt fence, or straw wattles or stabilized with vegetation. Straw bales will only be used in conjunction with other BMPs. Construction equipment will remain onsite during construction operations. Equipment left onsite shall be parked in a safe manner. Waste material resulting from normal construction activity shall be gathered and removed or stored in containers daily.

Hazardous Waste Streams

RCRA regulated waste streams generated on the job site are typically hazardous because they have a flash point below 140° F and exhibit the characteristic of ignitability. These waste streams may include the following:

- Spent aerosol paints, solvents and lubricants
- Unusable or off-spec non-latex paint, coatings, sealants and hardeners
- Unusable PVC pipe cement
- Spent paint thinner or brush cleaner

- Contaminated or off-spec diesel and gasoline

These wastes will be managed as follows:

Spent Aerosols

1. Empty aerosols shall be placed in a designated waste container by the end of every shift. These containers shall be clearly marked and placed at convenient locations throughout the project site.
2. Drums or containers of spent aerosols must be closed at all times except when adding or removing cans.
3. Cans collected in the accumulation containers will periodically be removed and transported to the satellite storage area where the cans will be punctured into a tightly closed drum located in a secondary containment.

Unusable Coatings, Sealants, Hardeners & PVC Cement

These products may become unusable due to exposure to air, expiration or improper mixing. Products requiring disposal will be collected and placed intact into 55-gallon drums. The product containers must be closed tightly and labeled with the original manufacturer's label. The outer drum will be labeled and stored in a secondary containment.

Spent Paint Thinner

Paint thinner and solvents used for brush and sprayer cleaning may be generated by the project painting sub-contractor. This waste must be stored in a 55-gallon steel drum that is sealed at all times to prevent the release of hazardous vapors. The drum must be labeled as "Hazardous Waste" at the time accumulation begins and stored on secondary containment.

Contaminated or Off-Spec Gasoline or Diesel

Diesel or gasoline generated from leaks or spills will be transferred into 55-gallon drums, totes or tanks. Containers will be tightly sealed and labeled and stored on secondary containment.

Hazardous Waste Storage Areas

All drums shall be placed on secondary containment, and 3 feet of aisle spacing between rows of drums shall be provided. The waste storage area shall be covered to prevent drum deterioration from exposure to the elements and the accumulation of rain water.

Container Closure

Containers holding hazardous waste must always be closed during storage, except when waste is added or removed. In addition, containers must not be handled, opened, or stored in a manner that may cause them to leak.

5.8 Storm Water Sources from Other Areas

The flow from off-site drainage areas is conveyed via the relocated stream; therefore off-site stormwater will not flow across disturbed soil.

5.9 State or Federal Endangered Species

The site lies within the limits of Fayette County, Tennessee. State and Federal endangered species include the Indian bat (myotis sodalist). The Indiana Bat's summer habitat consists of upland forests, woodlots and well developed wooded riparian zones. Caves and abandoned mines serve as hibernacula. Due to the absence of this habitat, it is not anticipated that an Indiana Bat will be found on this site.

6.0 APPROVED LOCAL GOVERNMENT REQUIREMENTS

The site currently is in the corporate limits of the Town of Rossville.

7.0 MAINTENANCE

Erosion prevention and sediment control measures will be maintained in good and effective operating condition. Maintenance needs identified by inspections or other means shall be addressed before the next storm event, but in no case more than 7 days after the need is identified.

Temporary Seeding and Planting
Inspect frequently to verify that vegetation is growing. Reseed areas to prevent sheet and rill erosion. Spot seed in small areas.

Permanent Seeding and Planting
Inspect frequently to verify that vegetation is growing. Reseed areas to prevent sheet and rill erosion. Spot seed in small areas.

Soil Binders
Install product per manufacturer's specification. Apply stabilizers/tackifiers with sufficient drying time before rainfall (typically 24 hours). Select a product that is best suited for the area installed considering longevity, curing time, resistance to abrasion, and compatibility with existing vegetation. Soil binders must be maintained by reapplying in high traffic areas, after storm events, or after being in-place for an extended period.

Mulches
Inspect along with other regularly scheduled erosion and sediment control inspections. Any areas that have washed out due to high storm water flows should be reconsidered for different BMP use, or at least retreated. Re-treat areas that have been disturbed by blowing wind. Maintenance needs identified in inspections or by other means shall be accomplished before the next storm event if possible, but in no case more than seven days after the need is identified.

Silt Fence
Silt fence fabric should be placed on the uphill side of the posts, enabling the posts to support the fabric from upstream water pressure. The bottom of the fabric of the fence should be trenched into the ground, or else water and sediment can flow under the sediment fence. The silt fence should be placed on the contour, or else a "flume" will be created where flow and sediment can concentrate. A failure is likely to occur at such a concentration point, and the flume will release concentrated flow and sediment down the face of the slope. Silt fence is designed for sheet flow only, and should never be placed over concentrated flows, such as channels or streams. Silt fence is designed for relatively small drainage areas, and should not be placed at the bottom of a large drainage area that will overwhelm the silt fence in the first storm event.

Silt fences should be cleaned of accumulated sediment after each major storm, or when deposition is 1/2 of the barrier height. Breaks or overtopped areas should be replaced or repaired immediately. Fences should be repaired and the accumulated sediment dispersed to a stable area. Sediment fence should be removed when the area being protected is fully stabilized and prior to termination of permit coverage.

Storm Drain Inlet Protection
Inlet filters for storm drains should be inspected and cleaned after each significant storm event and repaired promptly. Sediment shall be removed after each significant storm event and deposited in a stable area where it will not be subject to erosion. If the inlet protection device becomes clogged with sediment it must be carefully removed from the inlet and either cleaned or replaced.

Temporary Sediment Basin
Temporary and permanent sediment basins shall be cleaned of accumulated sediment after every significant storm event, or when design capacity has been reduced by 50%. Refer to the EPSCPs sediment basin schematic details for the elevation of the sediment cleanout point. Removed sediment shall be properly disposed of in a stable area that is not susceptible to erosion.

Entrance/ Exit Tracking Controls
Stabilized gravel construction entrances shall be inspected for the transport of sediment onto public rights-of-way, and any tracked sediment shall be removed immediately by vacuum sweeping and not washed off by water trucks. If tracking is an ongoing problem, a wheel wash facility should be added to the site.

Entrance/ Exit Tire Wash
Inspect frequently and remove accumulated sediment from tire wash.

8.0 INSPECTIONS
Inspections of erosion controls will be performed to ensure proper maintenance and effectiveness of the devices.

8.1 Inspector Training and Certification
Inspections will be conducted by personnel who have successfully completed the "Fundamentals of Erosion Prevention and Sediment Control" Level 1 course. A copy of the inspector's certification or training record will be kept onsite.

8.2 Schedule of Inspections
Inspections must be performed at least twice every calendar week. Inspections must be performed at least 72 hours apart. Attempt to conduct inspection during rainfall if during work hours. Where sites or portion(s) of construction sites have been temporarily stabilized or where runoff is unlikely due to winter conditions (e.g., site covered with snow or ice), or due to extreme drought, such inspection only has to be conducted once per month until thawing or precipitation results in runoff or construction activity resumes. Inspections requirements do not apply to definable areas that have been finally stabilized. Written notification of the intent to change the inspection frequency and the justification for such request must be submitted to the local Environmental Field Office.

8.3 Inspection Items
Qualified personnel will inspect disturbed areas of the construction site that have not been finally stabilized, areas used for materials and equipment storage that are exposed to precipitation, structural control measures, and the location where vehicles enter and exit the site. Disturbed areas and storage areas that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants (sediment) entering the drainage system. Erosion prevention and sediment control measures identified in the SWPPP will be observed to ensure they are functioning correctly. The locations where vehicles enter and exit the site will be inspected for evidence of offsite sediment tracking.

8.4 Schedule for Corrections

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

Based on the results of the inspection, the SWPPP will be modified as appropriate, but in no case later than 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.

8.5 Inspection Documentation

Inspections will be documented and certified twice weekly on the form provided in Appendix C of the CGP (at the back of Attachment A of this SWPPP). Inspection documentation will be maintained onsite and made available upon request. Inspection reports must be submitted to TDEC within 10 days of the request. Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

Subsequent operator(s) (primary permittees) who have obtained coverage under this permit must conduct twice weekly inspections, unless their portion(s) of the site has been temporarily stabilized, or runoff is unlikely due to winter conditions or due to extreme drought. The primary permittee is no longer required to conduct inspections of portions of the site that are covered by a subsequent primary permittee.

8.6 Quality Assurance Site Assessment

Quality assurance of erosion prevention and sediment controls must be done by performing site assessments. The initial site assessment must be conducted at each outfall draining 5 or more acres within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. The initial site assessment must be performed by individuals with one of the following qualifications:

- a licensed professional engineer or landscape architect
- a Certified Professional in Erosion and Sediment Control (CPESC)
- a person that successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course

As a minimum, the site assessment must be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. The site assessment should be performed with the on-site inspector who regularly conducts inspections, and should include a review and update (if applicable) of the SWPPP. Modifications of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations must be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 and the rules of the Tennessee Board of Architectural and Engineering Examiners.

The site assessment findings shall be documented and the documentation kept with the SWPPP at the site. At a minimum, the documentation must contain information included in the twice-weekly inspection form provided in Appendix C of the CGP (Attachment A of this SWPPP). The documentation must contain the printed name and signature of the individual performing the site assessment and the following certification:

"I certify under penalty of law that this report and all attachments are, 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."

The site assessment can take the place of one of the twice-weekly inspections. Additional site assessment(s) may be required if TDEC observes site conditions that have potential of causing pollution to the waters of the state.

8.7 Recordkeeping

A rain gauge is required to be installed on site. Rainfall records and twice-weekly inspection reports must be kept on site. In addition, the following information must be maintained on or near the site:

- twice-weekly inspection reports
- documentation of the quality assurance site assessments
- a copy of the on-site inspector's Fundamentals of Erosion Prevention and Sediment Control Level 1 certification
- dates when major grading activities occur
- dates when construction activities temporarily or permanently cease
- the dates when stabilization measures are initiated
- The SWPPP and inspection records will be maintained at the construction site from the start of construction activities until the date of termination of permit coverage. The SWPPP will be available onsite to all selected general contractors for reference whenever they are on the construction site.
- Copies of the SWPPP and inspection records will be maintained for 3 years.

9.0 POLLUTION PREVENTION MEASURES FOR NON-STORM-WATER DISCHARGES

The anticipated non-storm-water discharges from the site are:

- Dewatering of work areas of collected storm water and ground water
- Water used to wash dust or soil off vehicles (detergent will not be used and filtering will be provided before water leaves the site)
- Water used to control dust
- Uncontaminated groundwater or spring water foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.)

These non-storm-water discharges are allowed by CGP as long as they are free of sediment or other solids, do not cause erosion of soil or the stream bank, and do not result in sediment impacts to the receiving stream.

10.0 DOCUMENTATION OF PERMIT ELIGIBILITY RELATED TO TMDL

Upper un-named tributaries to the Wolf River, the receiving waters for storm water runoff from the Project site, are not on the State of Tennessee's 303(d) list of impaired waters.

11.0 NOTICE OF TERMINATION (NOT)

After final stabilization, the Contractor will ensure that storm water discharges associated with the construction activity are eliminated and will submit a Notice of Termination form. The elimination of storm water discharges associated with the construction activity is understood to mean the following:

- All disturbed soils at the portion of the construction site where the selected general contractor had control have been finally stabilized; and
- Temporary erosion and sediment control measures have been or will be removed at an appropriate time to ensure final stabilization is maintained; and
- 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 selected general contractor had control.

Attachment A
General NPDES Permit for Discharges of Storm Water
Associated with Construction Activities

Attachment B
Figures

Attachment C
Erosion Prevention and Sediment Control Plans

GENERAL NOTES:

1. THE CONTRACTOR SHALL REMOVE ALL UNDERGROUND UTILITIES AND ANY OTHER ITEMS IN ACCORDANCE WITH THE TDEC AND THE TECHNICAL SPECIFICATIONS. THE CONTRACTOR SHALL STRICTLY FOLLOW ALL CITY, STATE, AND FEDERAL GUIDELINES FOR REMOVAL AND DISPOSAL OF THESE FACILITIES.
2. ANY EXISTING UTILITIES WITHIN 10' OF THE BUILDING FOOTPRINT SHALL BE COMPLETELY REMOVED AND DISPOSED OF PER LOCAL REGULATIONS.
3. PRIOR TO COMMENCING ANY UTILITY WORK, CONTRACTOR SHALL NOTIFY ANY SURROUNDING PROPERTY OWNERS WHO MAY EXPERIENCE A DISRUPTION IN SERVICE.
4. WHEN REMOVING UTILITIES, CONTRACTOR SHALL GROUT AND SEAL ANY STRUCTURES THAT ARE TO REMAIN PER LOCAL REGULATIONS.
5. UTILITIES SHOWN ARE LOCATED BY FIELD SURVEY AND RECORD DRAWINGS. ADDITIONAL UNDERGROUND UTILITIES MAY BE ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY INACTIVE STRUCTURES & ALERT THE ENGINEER OF ANY ACTIVE, UNMAPPED STRUCTURES.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION OF UTILITY DEMOLITION & RELOCATION.
7. CONTRACTOR SHALL NOT INTERRUPT DRAINAGE FROM ADJACENT PROPERTIES AND PUBLIC RIGHT-OF-WAYS.

FLOOD NOTE

THIS IS TO CERTIFY THAT BY GRAPHIC DETERMINATION THE SUBJECT PROPERTY IS NOT IN A SPECIAL FLOOD HAZARD AREA (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD. SUBJECT PROPERTY IS SHOWN IN A "ZONE X" (NO SHADING ON FEMA MAP); AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN ACCORDING TO THE FEMA/FIRM MAP NUMBER 47047C0415C WITH AN EFFECTIVE DATE OF NOVEMBER 5, 2008.

PROJECT BENCHMARK

REBAR WITH YELLOW CAP ON LAKE LEVEE LOCATED AS SHOWN
TSCP=262306.18 FT N
896321.47 FT E
ELEV = 389.86 (NAVD 88)

NORFOLK SOUTHERN ACCESS ROAD (PRIVATE)

SITE TBM

SANITARY SEWER EASEMENT

PIPERTON HILLS INDUSTRIAL ROAD (BY OTHERS)

PIPERTON ROSSVILLE

30' STREAM BUFFER

15' STREAM BUFFER

STREAM TOP OF BANK

R=5300.00'
L=542.10''
Δ=58°36'13"
CHD=S58°56'11"E
518.77'

R=530.00'
L=275.73''
Δ=29°48'30"
CHD=N76°51'28"E
272.63'

R=470.00'
L=249.25''
Δ=30°23'07"
CHD=N77°08'47"E
246.34'

S88°14'12"W
539.68''

JOAN WALTERS
(DB 334-PG 10)

EXISTING TREES TO BE REMOVED (TYP).

DRAINAGE RIDGE LINE (TYP)

TENNESSEE-FAYETTE CO
MISSISSIPPI-MARSHALL CO

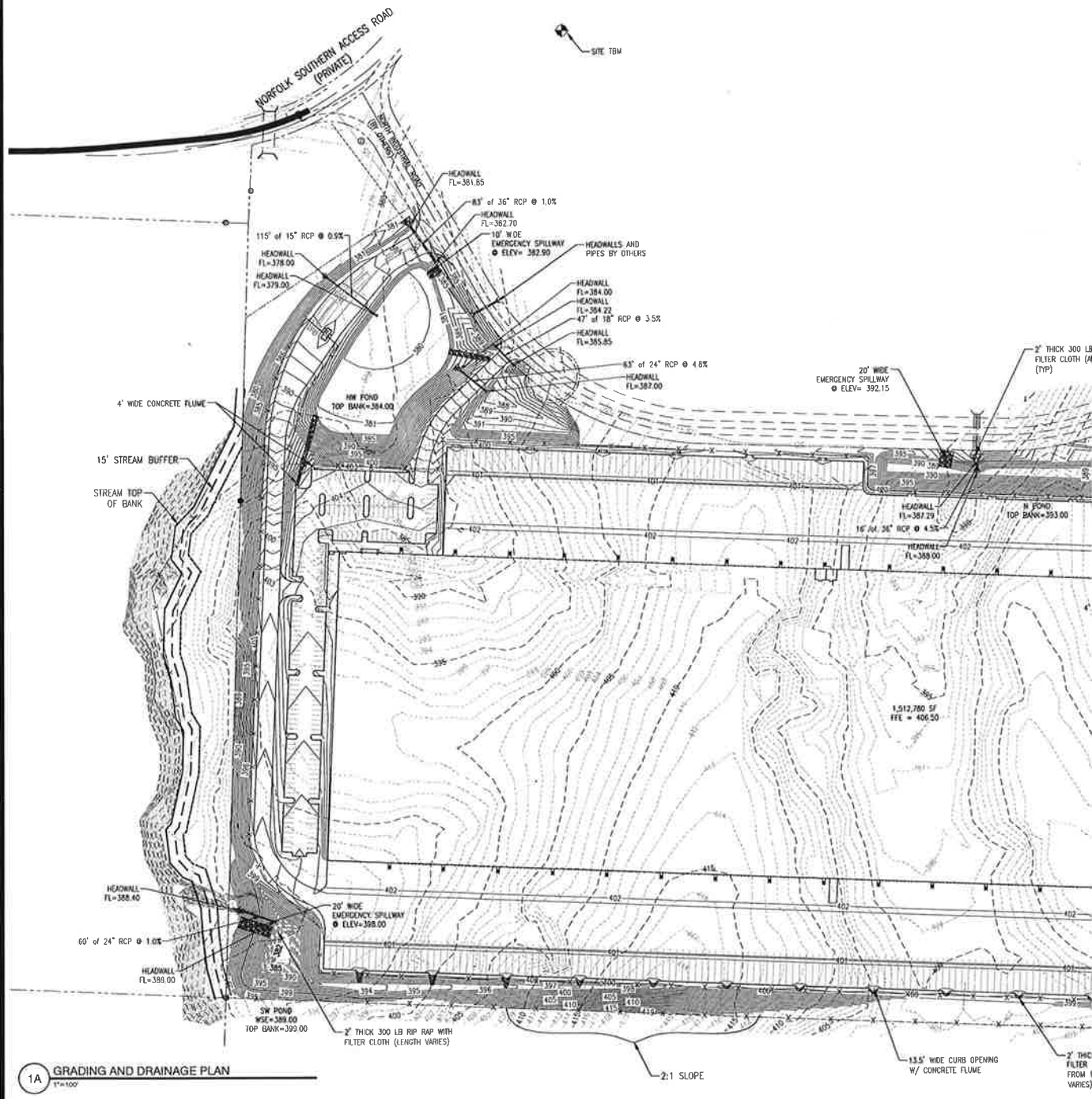
OFFSITE AREA: 1.94 Ac.

SECTION
SECTION

MATTIE WOODEN & MARVA HOUS
(DB 331-PG 733)

1A EXISTING CONDITIONS PLAN
1"=100'

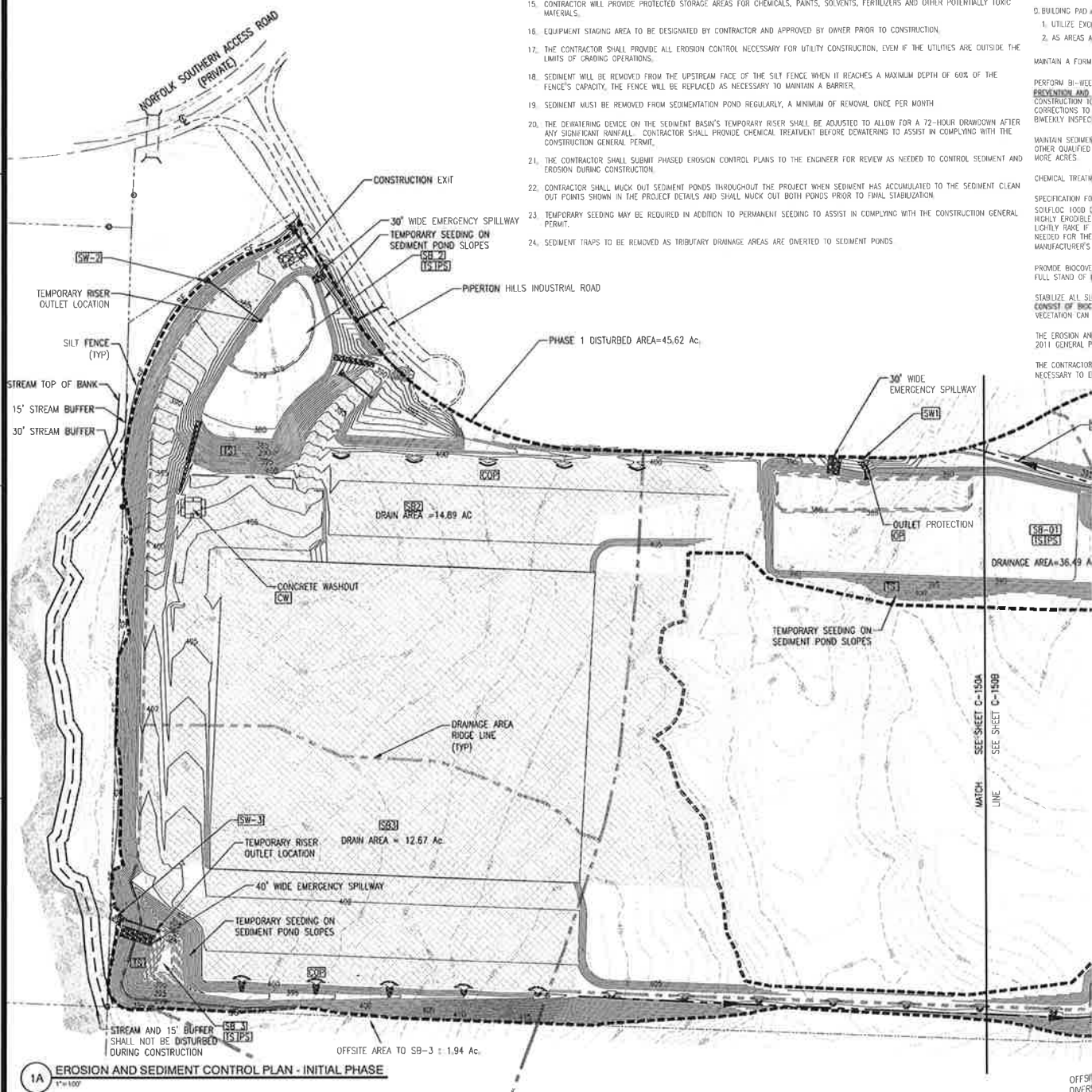
K:\24291.07\CAD\PLANS\C-100 EXISTING CONDITIONS PLAN.DWG – February 1, 2016



1A GRADING AND DRAINAGE PLAN
1"=100'

EROSION AND SEDIMENTATION CONTROL NOTES:

1. ALL NEWLY CUT AND/OR FILLED AREAS LACKING ADEQUATE VEGETATION SHALL BE SEEDED, FERTILIZED, MULCHED AS REQUIRED TO EFFECTIVELY PREVENT SOIL EROSION.
2. SILT FENCES, HAY BALES, AND OTHER BEST MANAGEMENT PRACTICES SHALL BE USED AS SHOWN AND AS DIRECTED BY THE ENGINEER TO CONTROL SOIL EROSION.
3. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION BY THE PLACEMENT OF SILT FENCES, SEDIMENT INLET TRAPS, HAY BALES, AND OTHER BEST MANAGEMENT PRACTICES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTROLS SHOWN ON THE PLAN ARE THE MINIMUM REQUIRED AND THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE TDEC STORM WATER CONSTRUCTION GENERAL PERMIT FOR ALL EROSION CONTROL DURING CONSTRUCTION ACTIVITIES.
5. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION CONTROL DEVICES AND REPORTING ANY MAINTENANCE AS REQUIRED BY THE TDEC STORM WATER CONSTRUCTION GENERAL PERMIT DURING CONSTRUCTION ACTIVITIES.
6. PROVISIONS SHALL BE MADE TO PROTECT DOWNSTREAM WATERCOURSES (I.E., STORM SEWER SYSTEMS, DITCHES, WETLANDS, ETC.) FROM SEDIMENT RUNOFF DEVELOPED FROM THE CONSTRUCTION PROCESS. PROVISIONS INCLUDE, BUT ARE NOT LIMITED TO, STRUCTURAL CONTROLS SUCH AS SILT FENCING, GEOTEXTILE FABRIC PROTECTION OF STORM SEWERS, HAY BALES, DIKES AND SANDBAG BERMS; AND/OR VEGETATION CONTROLS SUCH AS SEEDING OR EXISTING VEGETATIVE BUFFER STRIPS (MINIMUM 25 FEET WIDE).
7. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL INSTALL EROSION AND SEDIMENTATION CONTROLS AT LOCATIONS SHOWN ON PLANS.
8. ABSOLUTELY NO DIRT, MUD, DUST OR SEDIMENT SHALL MOVE INTO ANY STORM DRAIN APPURTENANCES AND PUBLIC STREETS.
9. CONTRACTOR SHALL PERFORM DAILY STREET CLEANING ON ROADS AND STREETS ADJACENT TO THE PROJECT WHICH ARE USED AS ACCESS ROUTES FOR CONSTRUCTION TRAFFIC IF DIRT AND MUD ARE NOT ADEQUATELY REMOVED FROM VEHICLES AT THE CONSTRUCTION EXIT, WASHING OF STREETS IS PROHIBITED.
10. LOCATE FUEL/MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. USE A MINIMUM 80 MIL POLYETHYLENE LINER UNDER ABOVE GROUND STORAGE TANKS. USE 2 FOOT HIGH BERMS AROUND FUEL STORAGE AREAS.
11. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL ENVIRONMENTAL LAWS.
12. CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF FUELS, MATERIALS AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
13. CONTRACTOR SHALL INSPECT ALL STRUCTURAL CONTROLS WITHIN 24 HOURS AFTER ANY STORM EVENT (THAT MEETS OR EXCEEDS 0.5 INCHES OF RAINFALL IN A 24 HOUR PERIOD). DURING PROLONGED RAINFALL EVENTS, CONTRACTOR SHALL INSPECT STRUCTURAL CONTROLS ON A DAILY BASIS. AT A MINIMUM, STRUCTURAL CONTROLS SHOULD BE INSPECTED TWICE EVERY CALENDAR WEEK AT LEAST 72 HOURS APART. A QUALIFIED REPRESENTATIVE OF THE CONTRACTOR, AS APPROVED BY THE OWNER, SHALL PROVIDE THESE INSPECTIONS. SHOULD CONTROLS BECOME INEFFECTIVE, NECESSARY REPAIRS SHALL BE PERFORMED TO RETURN THE INTEGRITY OF THE STRUCTURAL CONTROLS.
14. CONTRACTOR SHALL MAINTAIN, REPAIR AND/OR REPLACE DAMAGED EROSION AND SEDIMENTATION CONTROL SYSTEMS THROUGHOUT THE DURATION OF THE CONTRACT.
15. CONTRACTOR WILL PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS AND OTHER POTENTIALLY TOXIC MATERIALS.
16. EQUIPMENT STAGING AREA TO BE DESIGNATED BY CONTRACTOR AND APPROVED BY OWNER PRIOR TO CONSTRUCTION.
17. THE CONTRACTOR SHALL PROVIDE ALL EROSION CONTROL NECESSARY FOR UTILITY CONSTRUCTION, EVEN IF THE UTILITIES ARE OUTSIDE THE LIMITS OF GRADING OPERATIONS.
18. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM FACE OF THE SILT FENCE WHEN IT REACHES A MAXIMUM DEPTH OF 60% OF THE FENCE'S CAPACITY. THE FENCE WILL BE REPLACED AS NECESSARY TO MAINTAIN A BARRIER.
19. SEDIMENT MUST BE REMOVED FROM SEDIMENTATION POND REGULARLY, A MINIMUM OF REMOVAL ONCE PER MONTH
20. THE DEWATERING DEVICE ON THE SEDIMENT BASIN'S TEMPORARY RISER SHALL BE ADJUSTED TO ALLOW FOR A 72-HOUR DRAWDOWN AFTER ANY SIGNIFICANT RAINFALL. CONTRACTOR SHALL PROVIDE CHEMICAL TREATMENT BEFORE DEWATERING TO ASSIST IN COMPLYING WITH THE CONSTRUCTION GENERAL PERMIT.
21. THE CONTRACTOR SHALL SUBMIT PHASED EROSION CONTROL PLANS TO THE ENGINEER FOR REVIEW AS NEEDED TO CONTROL SEDIMENT AND EROSION DURING CONSTRUCTION.
22. CONTRACTOR SHALL MUCK OUT SEDIMENT PONDS THROUGHOUT THE PROJECT WHEN SEDIMENT HAS ACCUMULATED TO THE SEDIMENT CLEAN OUT POINTS SHOWN IN THE PROJECT DETAILS AND SHALL MUCK OUT BOTH PONDS PRIOR TO FINAL STABILIZATION.
23. TEMPORARY SEEDING MAY BE REQUIRED IN ADDITION TO PERMANENT SEEDING TO ASSIST IN COMPLYING WITH THE CONSTRUCTION GENERAL PERMIT.
24. SEDIMENT TRAPS TO BE REMOVED AS TRIBUTARY DRAINAGE AREAS ARE DIVERTED TO SEDIMENT PONDS.



1A EROSION AND SEDIMENT CONTROL PLAN - INITIAL PHASE
1"=100'

EROSION AND S
INITIAL PHASE

SITE DISTURBANCE

A. GENERAL
1. ESTABLISH OF
2. INSTALL AND
3. POST SIGNS
4. INSTALL STAB
5. INSTALL PERI
6. CONSTRUCT A
7. INSTALL SILT
8. STABILIZE DIS

B. SEDIMENT BASIN
1. CONSTRUCT A UP-GRADIENT
2. STABILIZE TH BE REQUIRED
3. INSTALL RISE
4. MAINTAIN BIO
5. IF THE ON-S HOUR DRAW THROUGH A
6. DEWATERING REQUIRED FO
7. AS AN ALTER EVENT TO HE

C. PERMANENT DIV
1. INSTALL SEDI
2. CONSTRUCT UP-GRADIEN THE DOWNSI TO UNDISTUR
3. STABILIZE SO

D. BUILDING PAD
1. UTILIZE EXC
2. AS AREAS A

MAINTAIN A FORM

PERFORM BI-WEE PREVENTION AND CONSTRUCTION T CORRECTIONS TO BIWEEKLY INSPEC

MAINTAIN SEDIMEN OTHER QUALIFIED MORE ACRES.

CHEMICAL TREATM

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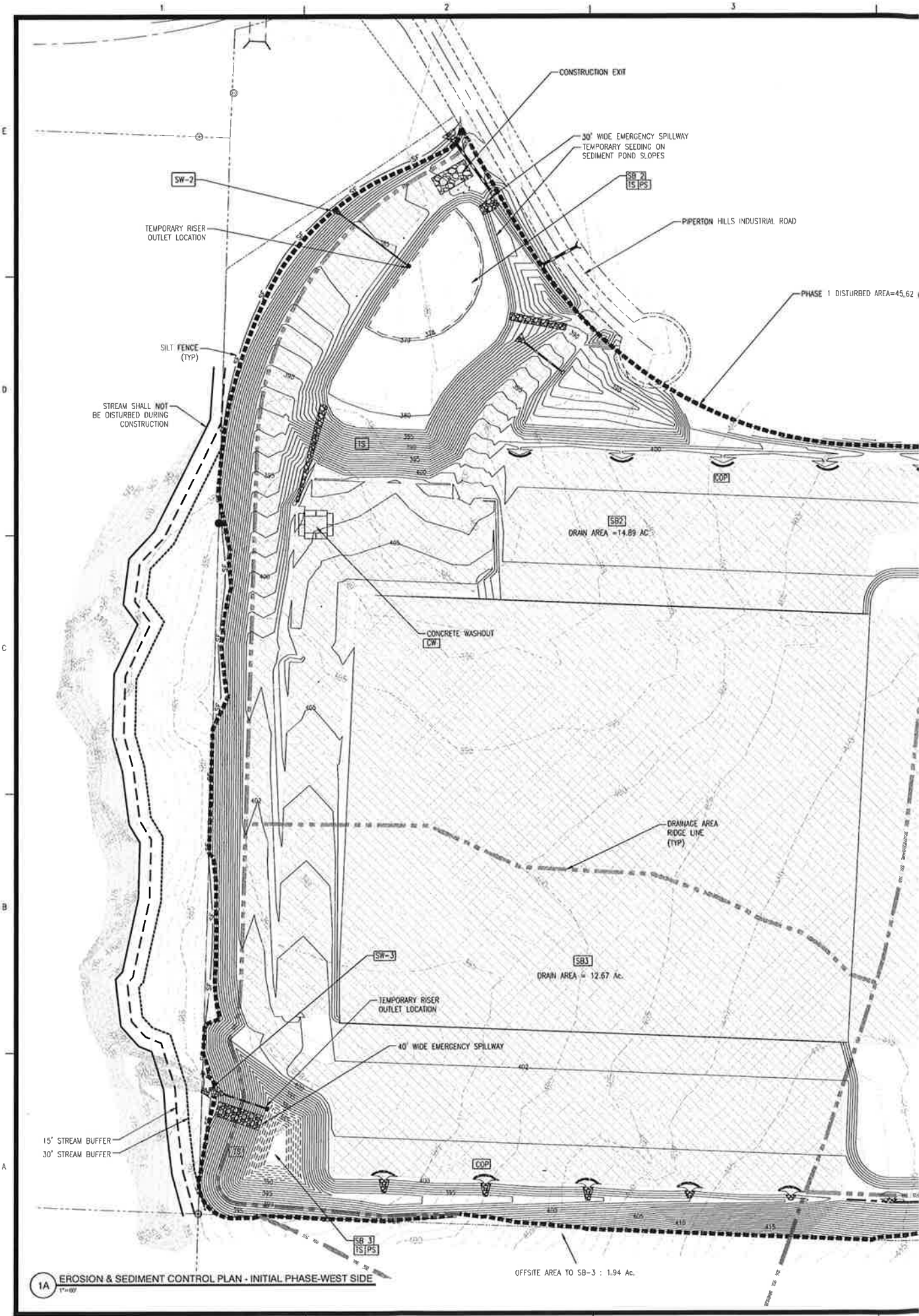
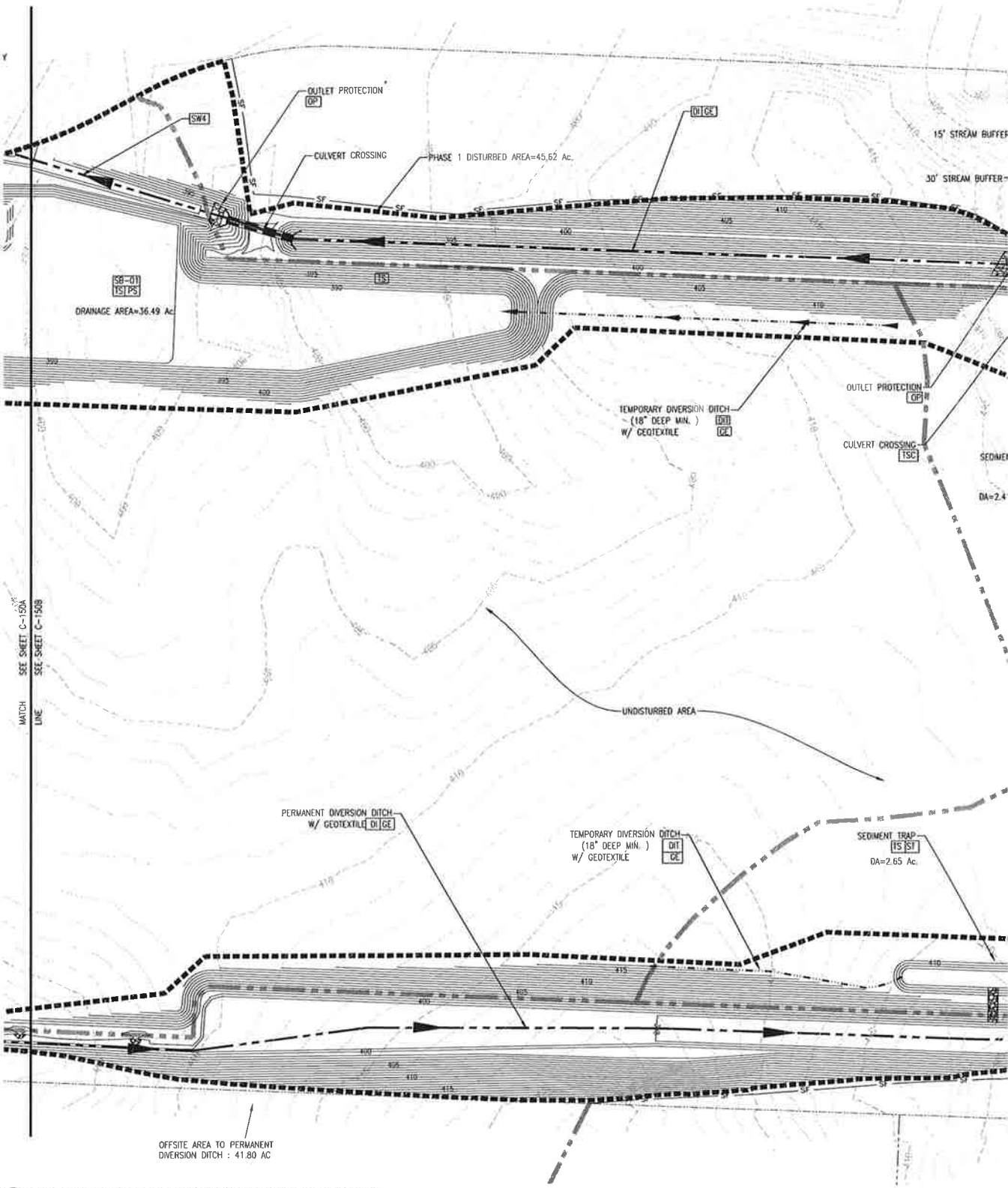


1A EROSION & SEDIMENT CONTROL PLAN - INITIAL PHASE-WEST SIDE
1"=60'



1A EROSION & SEDIMENT CONTROL PLAN - INITIAL PHASE-EAST SIDE
1"=60'

EROSION AND SEDIMENTATION CONTROL PHASING NARRATIVE:
INTERIM PHASE

SITE DISTURBANCE CONSISTS OF 50 ACRES MAX. AT ANY ONE TIME

A. GENERAL

1. MAINTAIN ON-SITE LOCATION OF SWPPP AND OTHER RECORDS.
2. MAINTAIN RAIN GAUGE.
3. MAINTAIN SIGNS AT ALL OUTFALL POINTS: SW1, SW2, SW3, AND SW4.
4. MAINTAIN STABILIZED CONSTRUCTION EGRESS POINT WITH EQUIPMENT & VEHICLE WASHDOWN.
5. MAINTAIN PERIMETER SILT FENCE.
6. MAINTAIN ACCESS ROADS INCLUDING TEMPORARY CULVERT CROSSINGS.
7. MAINTAIN SILT FENCE AROUND SOIL STOCKPILE AREAS.

B. SEDIMENT BASIN CONSTRUCTION

1. CONSTRUCT AND STABILIZE SEDIMENT BASIN SB-04. SEDIMENT BASIN GRADING SHALL BE PERFORMED IN THE DRY. MAINTAIN A BERM ALONG THE SEDIMENT BASIN TO PREVENT UP-GRADIENT RUNOFF FROM ENTERING THE BASIN. USE EXCAVATED SOILS FOR FILL IN BUILDING PADS WITHIN LIMITS OF INTERIM PHASE DISTURBED AREA.
2. STABILIZE THE SEDIMENT BASIN SLOPES WITH TEMPORARY SEEDING [TS] OR BIOCOVER SS. ALL SEEDING SHALL BE MAINTAINED TO OBTAIN A FULL STAND OF GRASS. PERMANENT STABILIZATION [PS] WILL BE REQUIRED AFTER THE WINTER MONTHS.
3. INSTALL RISER OUTLET, RIPRAP OUTLET PROTECTION [OP], AND EMERGENCY SPILLWAY.
4. MAINTAIN BIOCOVER SS AND/OR TEMPORARY SEEDING [TS] THROUGHOUT PROJECT AND RE-APPLY BIOCOVER SS OR TEMPORARY SEEDING [TS] AS NECESSARY.
5. IF THE ON-SITE SOILS SETTLE OUT, A 72-HOUR OR LONGER DRAWDOWN MAY BE UTILIZED FOR DRAINING THE SEDIMENT BASIN. THE SITE DISCHARGE MUST NOT HAVE OBJECTIONABLE COLOR. IF 72 HOUR DRAW DOWN TIME IS NOT SUFFICIENT TO ENSURE THERE IS NO OBJECTIONABLE COLOR IN DISCHARGE, IT IS THE CONTRACTOR'S OPTION TO EXTEND DRAW DOWN TIME, PUMP THE DISCHARGE THROUGH A FILTER BAG OR UTILIZE POLYACRYLAMIDES.
6. DEWATERING VALVE TO BE CLOSED IN NORMAL OPERATIONS. THERE SHALL BE NO DISCHARGE FROM THE SEDIMENT BASIN UP TO THE 2-YEAR, 24-HOUR STORM EVENT. CHEMICAL TREATMENT MAY BE REQUIRED FOR SEDIMENT REMOVAL PRIOR TO OPENING THE DEWATERING VALVE.
7. AS AN ALTERNATIVE, UTILIZE POLYACRYLAMIDES [PAM] AROUND THE PERIMETER OF THE SEDIMENT PONDS (AS WIDE A PERIMETER AS POSSIBLE), IN SWALES AND ON HIGHLY ERODIBLE AREAS BEFORE EACH RAIN EVENT TO HELP SETTLE SUSPENDED SOIL PARTICLES IN RUNOFF WATER PRIOR TO DISCHARGE FROM SEDIMENT BASINS.
8. AS THE DRAINAGE AREA ENTERING SB-01 IS REDUCED AND RE-DIRECTED TO SB-04, THE SIZE OF SB-01 CAN BE REDUCED AS SHOWN ON THE INTERIM PHASE PLAN.
9. AFTER DRAINAGE AREAS ENTERING SB-01 AND SB-04 ARE FULLY STABILIZED, SB-01 AND SB-04 SHALL BE REMOVED AND STABILIZED PER THE FINAL PHASE PLAN.

C. PERMANENT DIVERSION DITCH CONSTRUCTION

1. STABILIZE SOILS PER FINAL PHASE PLAN WHEN PERMANENT VEGETATION CAN BE ESTABLISHED.

D. BUILDING PAD CONSTRUCTION

1. UTILIZE EXCAVATED SOILS TO CONSTRUCT BUILDING PADS AND PARKING AREAS.
2. AS AREAS ARE BROUGHT TO GRADE, STABILIZE WITH SOIL CEMENT WITHIN 14 DAYS.

MAINTAIN A FORM ON-SITE THAT TRACKS ACREAGE (

PERFORM BI-WEEKLY EROSION PREVENTION AND SE
ACTIVE CERTIFICATION FROM THE FUNDAMENTALS OF
INSPECTOR'S CERTIFICATIONS ON SITE. SITE INSPECTI
CONSTRUCTION TO PERFORM A QUALITY ASSURANCE
INITIAL INSPECTION REPORT AT THE SITE. MAKE ANY
CASE MORE THAN 7 DAYS AFTER THE NEED IS IDEN
BIWEEKLY INSPECTIONS ON TOCC FORM AND MAINTAI
REPORTS BY THE 15TH OF THE NEXT MONTH, IF RE

MAINTAIN SEDIMENT BASINS IN ACCORDANCE WITH TH
PREVENTION AND SEDIMENT CONTROLS MUST BE CO
DRAINAGE TOTALING 5 OR MORE ACRES WITHIN A MO
THE 5 OR MORE ACRES.

CHEMICAL TREATMENT OF SEDIMENT BASINS WILL BE

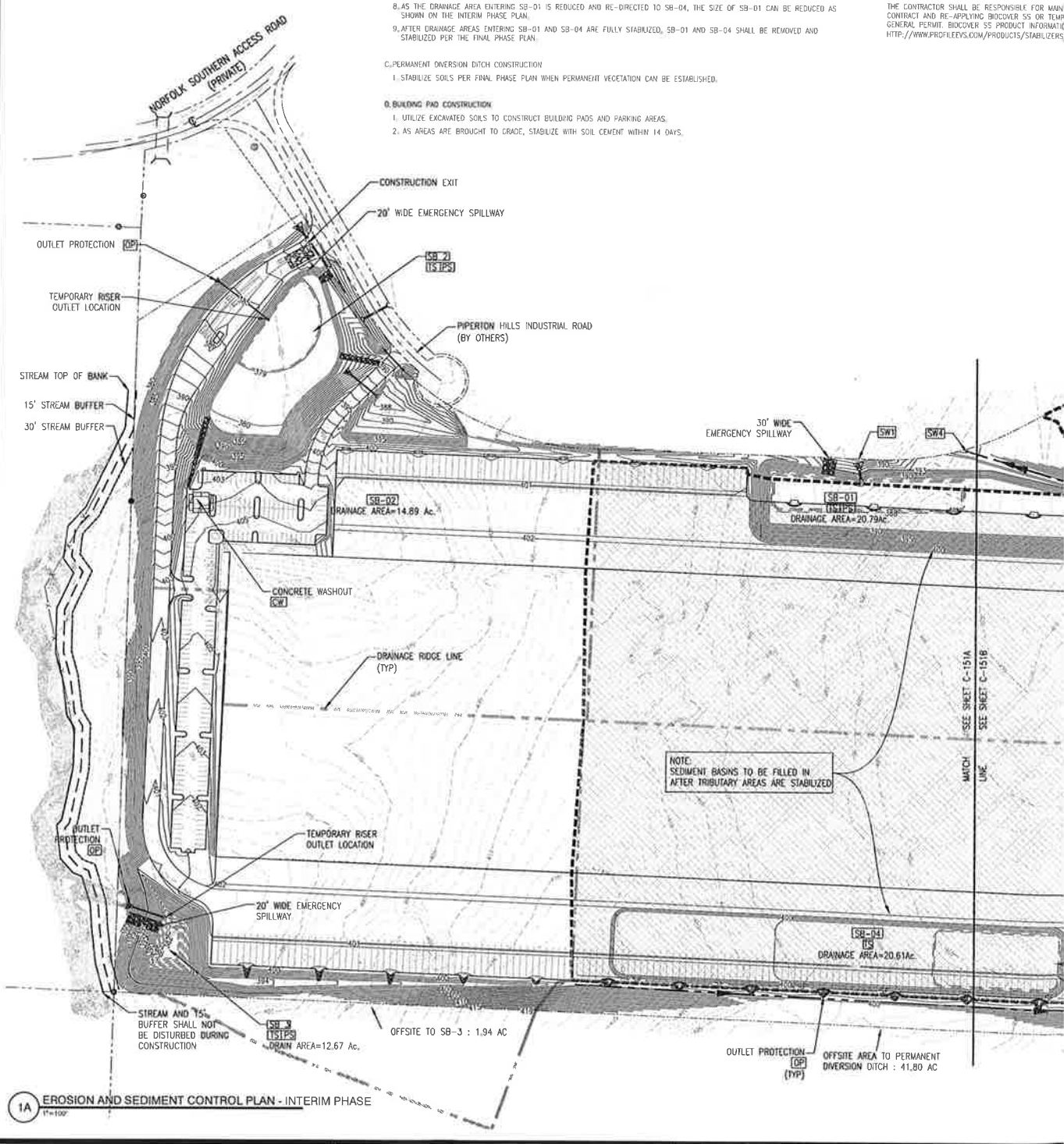
SPECIFICATION FOR SURFACE APPLICATION OF POLYA
SOILFLOC 1000 OR SIMILAR POWDERED ANIONIC POL
SEDIMENT POND (AS WIDE A PERIMETER AS POSSIBL
HELP SETTLE SUSPENDED SOIL PARTICLES IN RUNOF
CRUSTED SOILS, LIGHTLY RAKE IF NEEDED. APPLYING
MECHANICAL AGITATOR, SUCH AS A BOAT MOTOR, IS
SOIL. APPLICATION RATES, METHODS, AND CONCENTRA
CONFORM TO MANUFACTURER'S GUIDELINES FOR APP

PROVIDE BIOCOVER SS, TEMPORARY AND/OR PERMAN
DISTURBED AT ANY ONE TIME. ALL SEEDING SHALL B

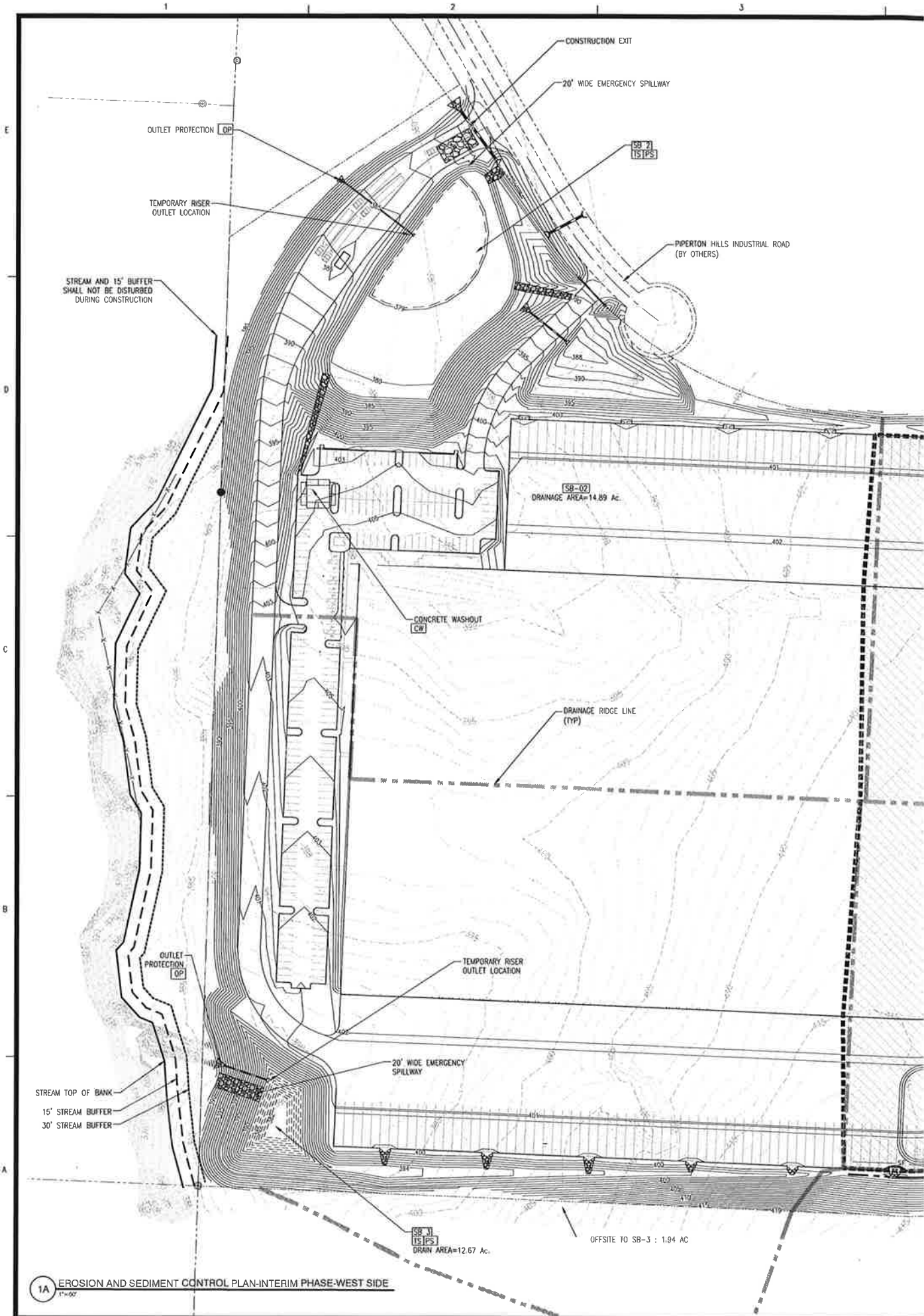
STABILIZE ALL SLOPES SLOPES 3:1 OR STEEPER WIT
CONSIST OF SEED OR APPROVED EQUAL. TEMPORARY
TEMPORARY SEEDING. IF TEMPORARY STABILIZATION W
UNTIL PERMANENT VEGETATION CAN BE ESTABLISHED.

THE EROSION AND CONTROL PLANS ARE THE MINIMU
CONTROL MEASURES AS NECESSARY TO ENSURE COM

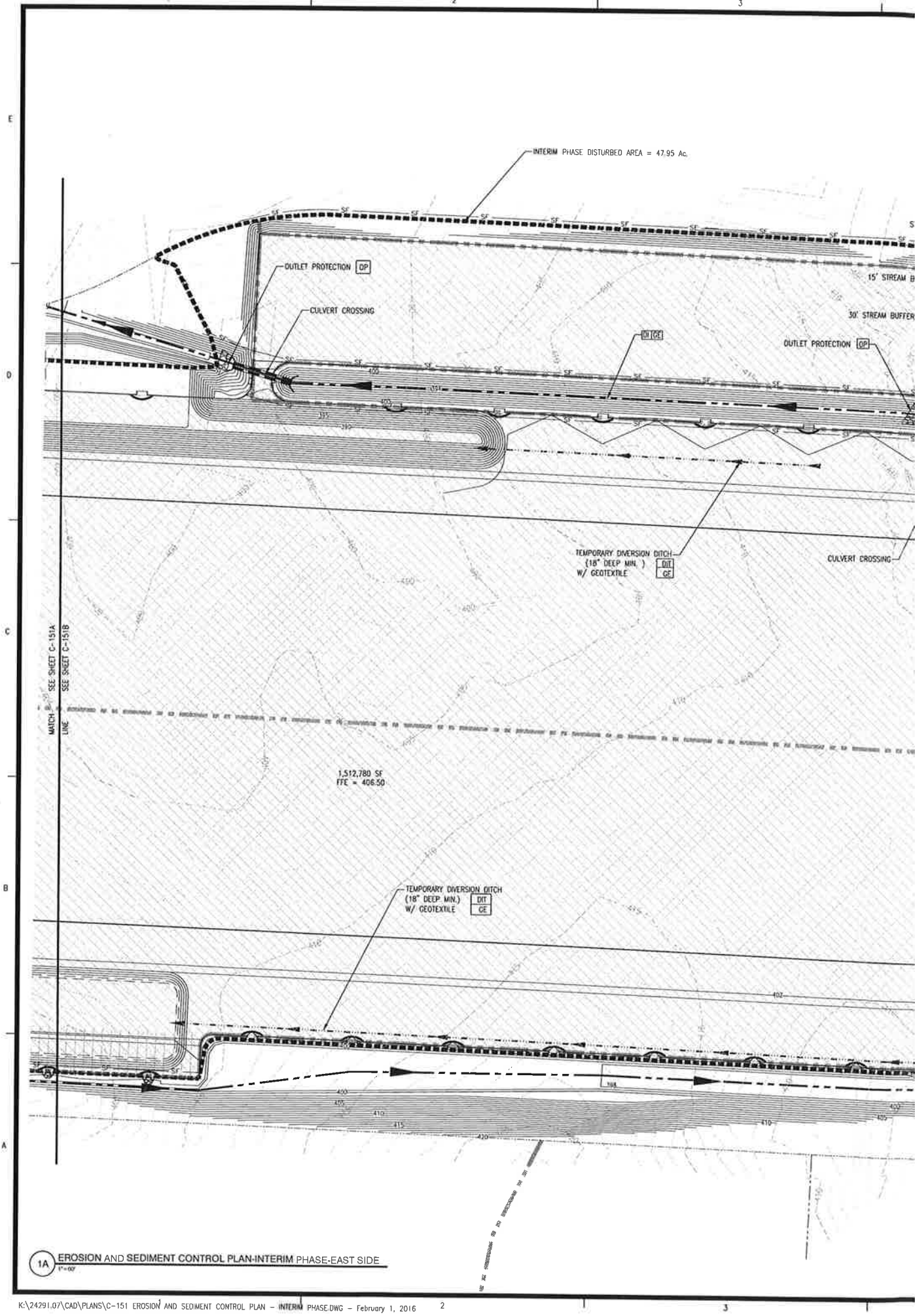
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAIN
CONTRACT AND RE-APPLYING BIOCOVER SS OR TEMP
GENERAL PERMIT. BIOCOVER SS PRODUCT INFORMATIO
HTTP://WWW.PROFILEEVS.COM/PRODUCTS/STABILIZERS



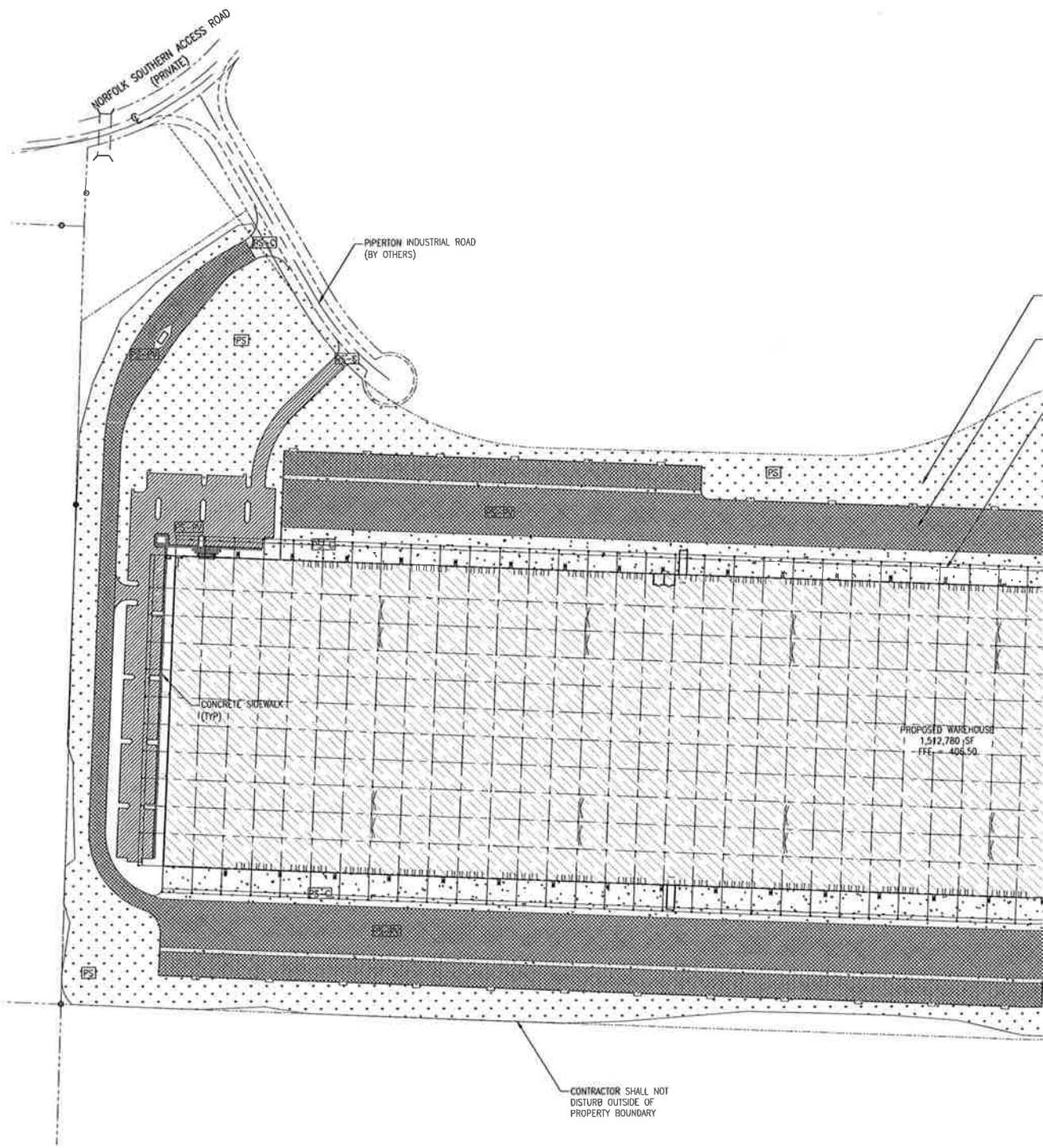
1A EROSION AND SEDIMENT CONTROL PLAN - INTERIM PHASE
1"=100'



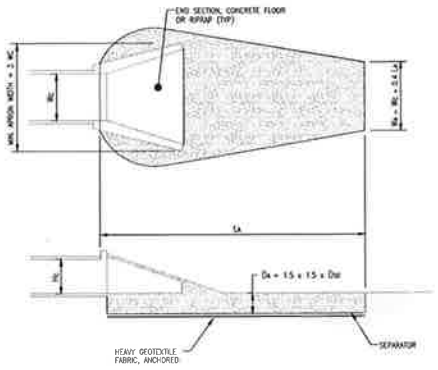
1A EROSION AND SEDIMENT CONTROL PLAN-INTERIM PHASE-WEST SIDE
1"=60'



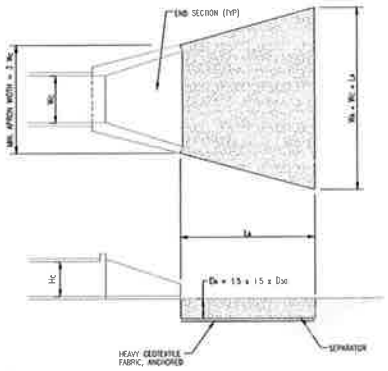
1A EROSION AND SEDIMENT CONTROL PLAN-INTERIM PHASE-EAST SIDE
1"=60'



1A EROSION AND SEDIMENT CONTROL PLAN-FINAL STABILIZATION
1"=100'



TAILWATER > 0.5 Hc AND ASSUMING FULL CULVERT FLOW (HIGH TAILWATER CONDITIONS)

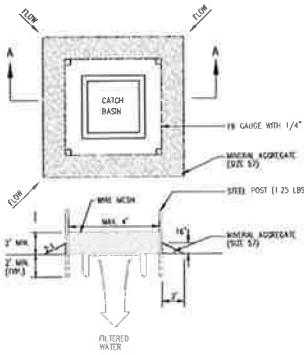


TAILWATER < 0.5 Hc AND ASSUMING FULL CULVERT FLOW (LOW TAILWATER CONDITIONS)

EROSION CONTROL PLAN LEGEND OP

Hc = HEIGHT OF CULVERT
Wc = WIDTH OF CULVERT
La = LENGTH OF RIP-RAP APRON
Wa = WIDTH OF RIP-RAP APRON AT END
D50 = MEDIAN RIP-RAP SIZE
DMAX = MAXIMUM SIZE OF RIP-RAP = 1.5 D50
Da = DEPTH OF RIP-RAP APRON = 1.5 DMAX
SEPARATOR = GEOTEXTILE UNDERLAYMENT OR GRAVEL FILTER BLANKET

1C OUTLET PROTECTION
NOT TO SCALE
OP

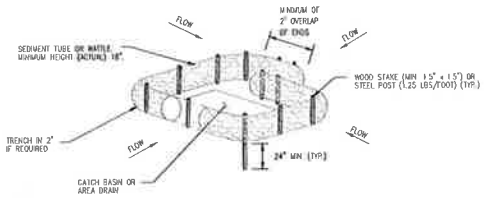


SECTION A-A

HARDWARE CLOTH AND GRAVEL INLET PROTECTION

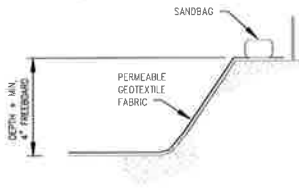
EROSION CONTROL PLAN LEGEND

EXCAVATED INLET PROTECTION
ROCK RING INLET PROTECTION
HARDWARE CLOTH AND GRAVEL INLET PROTECTION
BLOCK AND GRAVEL INLET PROTECTION

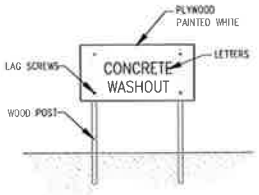


CATCH BASIN PROTECTION (TYPE D)

2C INLET PROTECTION
NOT TO SCALE
IP



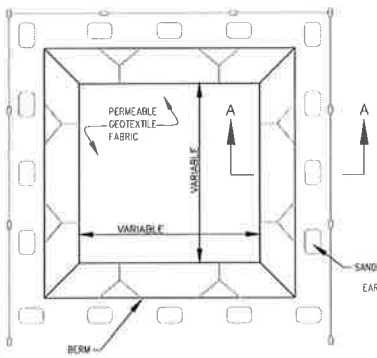
SECTION A-A
NOT TO SCALE



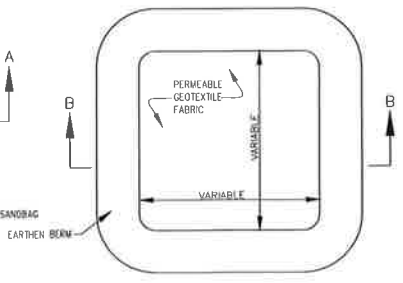
CONCRETE WASHOUT SIGN
(OR EQUIVALENT)

SECTION B-B
NOT TO SCALE

NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. SIGNAGE IDENTIFYING THE CONCRETE WASHOUT AREA SHALL BE INSTALLED WITHIN 5FT.OF THE WASHOUT FACILITY.

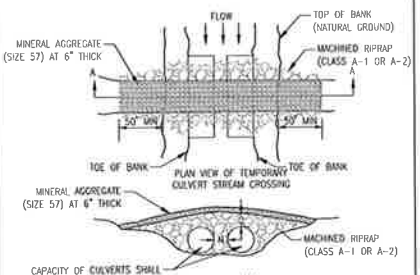


PLAN VIEW
NOT TO SCALE
TYPE "BELOW GRADE"



PLAN VIEW
NOT TO SCALE
TYPE "ABOVE GRADE" WITH EATHERN BERMS

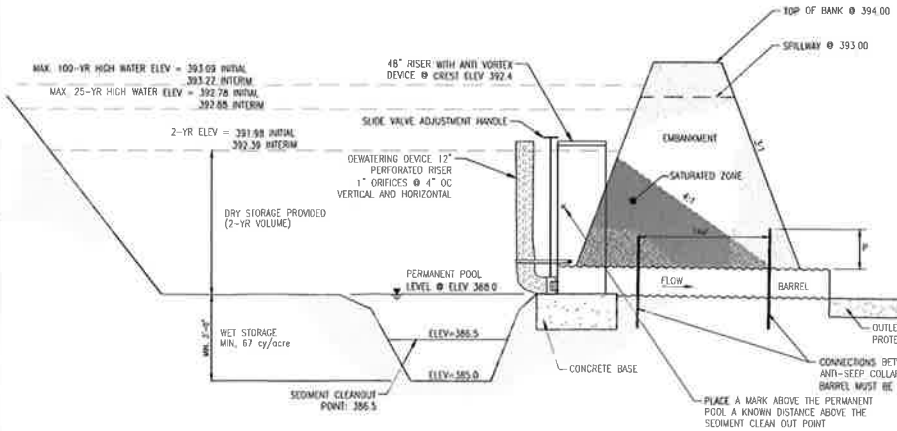
1A CONCRETE WASHOUT
CW



C = ½ DIAMETER OF PIPE OR 18" WHICHEVER IS GREATER
N = ½ DIAMETER OF PIPE OR 12" WHICHEVER IS GREATER

2A TEMPORARY CULVERT CROSSING
NOT TO SCALE
TSC

3A SILT FE
NOT TO SC

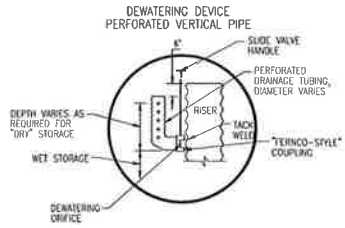


SEDIMENT BASIN SB-01 INITIAL PHASE			
Stage (ft)	Elev. (ft)	Storage (cuft)	Discharge (cfs)
0.0	385.0	0	0.00
1.0	386.0	6,176	0.00
2.0	387.0	25,924	0.00
3.0	388.0	48,165	0.00
4.0	389.0	105,958	0.00
5.0	390.0	224,505	0.00
6.0	391.0	364,722	0.00
7.0	392.0	511,714	0.00
8.0	393.0	671,483	19.25
9.0	394.0	843,107	111.47

Maximum Drainage Area =36.49 Ac.
Riser Crest Elevation = 392.40
Storage to Riser Crest =515,521 cuft
Crest of 30' Wide Emergency Spillway = 393.00
Top of Bank = 394.00
48" Riser w/ 24" Outlet Pipe
2 Year Peak Inflow to Pond = 103.55 cfs
Max. 2 Year W.S.E. = 391.76
2 Year Peak Discharge = 0 cfs
Max. 25 Year W.S.E. = 392.72
25 Year Peak Discharge = 7.64 cfs
Max. 100 Year W.S.E. = 393.09
100 Year Peak Discharge = 26.11 cfs

SEDIMENT BASIN SB-01 INTERIM PHASE			
Stage (ft)	Elev. (ft)	Storage (cuft)	Discharge (cfs)
0.0	385.0	0	0.00
1.0	386.0	6,176	0.00
2.0	387.0	25,924	0.00
3.0	388.0	48,165	0.00
4.0	389.0	96,030	9.00
5.0	390.0	145,175	0.00
6.0	391.0	212,392	0.00
7.0	392.0	285,901	0.00
8.0	393.0	365,794	19.25
9.0	394.0	452,137	111.47

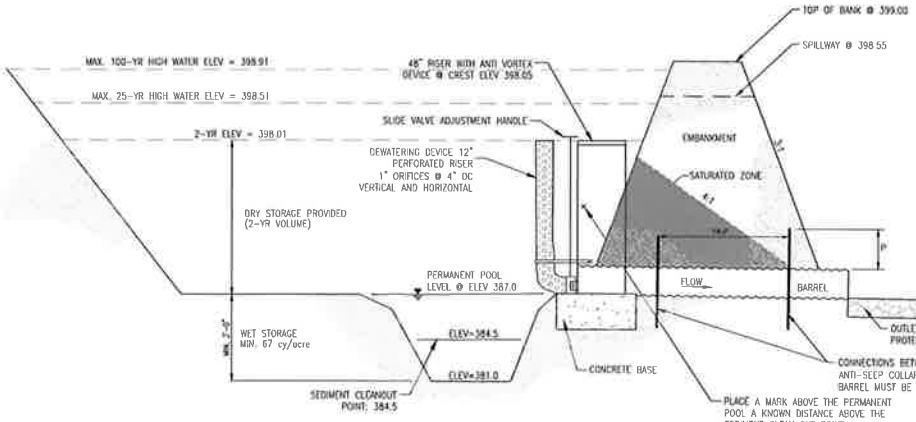
Maximum Drainage Area =20.79 Ac.
Riser Crest Elevation = 392.40
Storage to Riser Crest =317,853 cuft
Crest of 30' Wide Emergency Spillway = 393.00
Top of Bank = 394.00
48" Riser w/ 24" Outlet Pipe
2 Year Peak Inflow to Pond = 91.96 cfs
Max. 2 Year W.S.E. = 392.17
2 Year Peak Discharge = 0 cfs
Max. 25 Year W.S.E. = 392.79
25 Year Peak Discharge = 10.23 cfs
Max. 100 Year W.S.E. = 393.27
100 Year Peak Discharge = 40.44 cfs



SEDIMENT BASIN SB-01
NOT TO SCALE

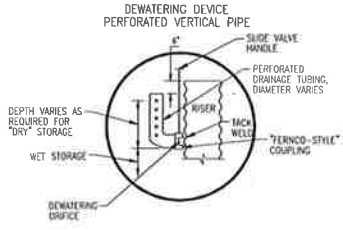
TOTAL OUTFALL & ONSITE DRAINAGE AREA (ACRES)	36.49
DESIGN STORM EVENT DEPTH (in.)	4.80
CN USED TO DETERMINE BASIN VOLUME	84
WET STORAGE VOLUME	88,847
DESIGN STORM (2-YR) STORAGE VOLUME	427,555
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED	427,555
25-YEAR, 24-HOUR STORM ELEVATION	392.72
PERMANENT POOL LEVEL / WET STORAGE ELEVATION	388.00
DESIGN STORM (2-YR) STORAGE ELEVATION	391.76
BOTTOM OF BASIN ELEVATION	385.00
PRINCIPAL SPILLWAY ELEVATION	392.40
OUTFALL PIPE DISCHARGE ELEVATION	388.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL	382.00
EMERGENCY SPILLWAY ELEVATION	393.00
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY	39.64
EMERGENCY SPILLWAY SIDESLOPE	3:1
EMERGENCY SPILLWAY WIDTH	30'
TOP OF EMBANKMENT ELEVATION	394.00
FLOCCULATE AND DEWATER ELEVATION	391.76

TOTAL OFFSITE & ONSITE DRAINAGE AREA (ACRES)	20.79
DESIGN STORM EVENT DEPTH (in.)	4.80
CN USED TO DETERMINE BASIN VOLUME	84
WET STORAGE VOLUME	67,176
DESIGN STORM (2-YR) STORAGE VOLUME	243,372
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED	243,372
25-YEAR, 24-HOUR STORM ELEVATION	392.79
PERMANENT POOL LEVEL / WET STORAGE ELEVATION	388.00
DESIGN STORM (2-YR) STORAGE ELEVATION	391.98
BOTTOM OF BASIN ELEVATION	385.00
PRINCIPAL SPILLWAY ELEVATION	392.40
OUTFALL PIPE DISCHARGE ELEVATION	388.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL	382.00
EMERGENCY SPILLWAY ELEVATION	393.00
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY	39.64
EMERGENCY SPILLWAY SIDESLOPE	3:1
EMERGENCY SPILLWAY WIDTH	30'
TOP OF EMBANKMENT ELEVATION	394.00
FLOCCULATE AND DEWATER ELEVATION	391.98



SEDIMENT BASIN SB-03			
Stage (ft)	Elev. (ft)	Storage (cuft)	Discharge (cfs)
0.0	381.0	0	0.00
1.0	382.0	395	0.00
2.0	383.0	1,828	0.00
3.0	384.0	3,836	0.00
4.0	385.0	6,405	0.00
5.0	386.0	9,722	0.00
6.0	387.0	13,776	0.00
7.0	388.0	18,704	0.00
8.0	389.0	24,572	0.00
9.0	390.0	31,468	0.00
10.0	391.0	39,489	0.00
11.0	392.0	48,739	0.00
12.0	393.0	59,331	0.00
13.0	394.0	72,063	0.00
14.0	395.0	88,134	0.00
15.0	396.0	108,178	0.00
16.0	397.0	132,605	0.00
17.0	398.0	161,970	0.00
18.0	399.0	197,033	68.94

Maximum Drainage Area =12.67 Ac.
Riser Crest Elevation = 398.05
Storage to Riser Crest =162,272 cuft
Crest of 40' Wide Emergency Spillway = 398.55
Top of Bank = 399.00
48" Riser w/ 24" Outlet Pipe
2 Year Peak Inflow to Pond = 45.52 cfs
Max. 2 Year W.S.E. = 398.01
2 Year Peak Discharge = 0 cfs
Max. 25 Year W.S.E. = 398.51
25 Year Peak Discharge = 13.30 cfs
Max. 100 Year W.S.E. = 398.91
100 Year Peak Discharge = 84.07 cfs



SEDIMENT BASIN SB-03
NOT TO SCALE

TOTAL OFFSITE & ONSITE DRAINAGE AREA (ACRES)	12.67
DESIGN STORM EVENT DEPTH (in.)	4.80
CN USED TO DETERMINE BASIN VOLUME	84
WET STORAGE VOLUME	43,776
DESIGN STORM (2-YR) STORAGE VOLUME	162,272
VOLUME OF WATER IN BASIN WHEN FLOCCULANT MUST BE APPLIED	162,272
25-YEAR, 24-HOUR STORM ELEVATION	398.51
PERMANENT POOL LEVEL / WET STORAGE ELEVATION	387.00
DESIGN STORM (2-YR) STORAGE ELEVATION	398.01
BOTTOM OF BASIN ELEVATION	381.00
PRINCIPAL SPILLWAY ELEVATION	398.05
OUTFALL PIPE DISCHARGE ELEVATION	388.00
ELEVATION OF THE RECEIVING MEDIUM DOWNSTREAM OF THE OUTFALL	382.00
EMERGENCY SPILLWAY ELEVATION	398.55
DESIGN STORM ABOVE WHICH THE BASIN WILL DISCHARGE VIA THE EMERGENCY SPILLWAY	25.94
EMERGENCY SPILLWAY SIDESLOPE	3:1
EMERGENCY SPILLWAY WIDTH	40'
TOP OF EMBANKMENT ELEVATION	399.00
FLOCCULATE AND DEWATER ELEVATION	398.01

1A SEDIMENT BASIN DETAILS
1"=100'