

MSR108369

cas



February 8, 2021

Chief, Environmental Permits Division
Mississippi Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, MS 39225

Letter No.: 01-3260
Re: Hatten Manor Subdivision
Harrison County, MS

Greetings:

On behalf of Shallow Run Developments, LLC, we are submitting the following items for Hatten Manor Subdivision for your review and approval:

1. MDEQ Large Construction Notice of Intent (LCNOI)
2. Storm Water Pollution Prevention Plan, Rev. A, with the following drawings submitted in a separate file:
 - 01 3260-TS Rev A – Title Sheet
 - 02 3260-PL Rev A – Street and Lot Plan
 - 03 3260-GDPL Rev A – Grading and Drainage Plan and SWPPP
 - 14 3260-DET-1 Rev A – Details
 - 15 3260-DET-2 Rev A – Details

Please do not hesitate to call if you have any questions or need additional information.

Sincerely,

KNESAL ENGINEERING SERVICES, INC.

William E. Knesal, Jr. Digitally signed by William E. Knesal, Jr.
Date: 2021.02.08 19:41:28 -06'00'

William E. Knesal, Jr., P.E.
President

Attachments



MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

**MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY (MDEQ)
Large Construction Storm Water General Permit
NPDES Permit MSR10**

LARGE CONSTRUCTION FORMS PACKAGE

- LARGE CONSTRUCTION NOTICE OF INTENT (LCNOI) FORM..... 2
- PRIME CONTRACTOR CERTIFICATION FORM..... 7
- REGISTRATION FORM FOR RESIDENTIAL LOT COVERAGE..... 8
- SITE INSPECTION AND CERTIFICATION FORM..... 12
- MAJOR MODIFICATION FORM..... 13
- REQUEST FOR TRANSFER OF PERMIT, GENERAL PERMIT COVERAGE
AND/OR NAME CHANGE 14
- INSPECTION SUSPENSION FORM..... 16
- REQUEST FOR TERMINATION OF COVERAGE 17

These standard forms are used to apply for permit coverage under the Large Construction Storm Water General Permit and for submittals and record keeping required by permit conditions after coverage has been granted. The forms are on our website at www.deq.state.ms.us/MDEQ.nsf/page/epd_epdgeneral. Required information can be completed on screen, printed and signed.



MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

LARGE CONSTRUCTION NOTICE OF INTENT (LCNOI) FOR COVERAGE UNDER THE LARGE CONSTRUCTION STORM WATER GENERAL NPDES PERMIT

INSTRUCTIONS

The Large Construction Notice of Intent (LCNOI) is for coverage under the Large Construction General Permit for land disturbing activities of five (5) acres or greater; or for land disturbing activities, which are part of a larger common plan of development or sale that are initially less than five (5) acres but will ultimately disturb five (5) or more acres. Applicant must be the owner or operator. For construction activities, the operator is typically the prime contractor. The owner(s) of the property and the prime contractor associated with regulated construction activity on the property have joint and severable responsibility for compliance with the Large Construction Storm Water General Permit MSR10.

If the company seeking coverage is a corporation, a limited liability company, a partnership, or a business trust, attach proof of its registration with the Mississippi Secretary of State and/or its Certificate of Good Standing. This registration or Certificate of Good Standing must be dated within twelve (12) months of the date of the submittal of this coverage form. Coverage will be issued in the company name as it is registered with the Mississippi Secretary of State.

Completed LCNOIs should be filed at least thirty (30) days prior to the commencement of construction. Discharge of storm water from large construction activities without written notification of coverage is a violation of state law.

Submittals with this LCNOI must include:

- A site-specific Storm Water Pollution Prevention Plan (SWPPP) developed in accordance with ACT5 of the General Permit
- A detailed site-specific scaled drawing showing the property layout and the features outlined in ACT5 of the General Permit
- A United States Geological Survey (USGS) quadrangle map or photocopy, extending at least one-half mile beyond the facility property boundaries with the site location and outfalls outlined or highlighted. The name of the quadrangle map must be shown on all copies. Quadrangle maps can be obtained from the MDEQ, Office of Geology at 601-961-5523.

Additional submittals may include the following, if applicable:

- Appropriate Section 404 documentation from U.S. Army Corps of Engineers
- Appropriate documentation concerning future disposal of sanitary sewage and sewage collection system construction
- Appropriate documentation from the MDEQ Office of Land & Water concerning dam construction and low flow requirements
- Approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties

ALL QUESTIONS MUST BE ANSWERED (Answer "NA" if the question is not applicable)

APPLICANT IS THE: OWNER PRIME CONTRACTOR

OWNER CONTACT INFORMATION

OWNER CONTACT PERSON: Robert J. Knesal
 OWNER COMPANY LEGAL NAME: Shallow Run Developments, LLC
 OWNER STREET OR P.O. BOX: 111 Lundgren Lane
 OWNER CITY: Gulfport STATE: MS ZIP: 39507
 OWNER PHONE #: (228) 860-5318 OWNER EMAIL: bobbyknes@aol.com

PRIME CONTRACTOR CONTACT INFORMATION

PRIME CONTRACTOR CONTACT PERSON: _____
 PRIME CONTRACTOR COMPANY LEGAL NAME: _____
 PRIME CONTRACTOR STREET OR P.O. BOX: _____
 PRIME CONTRACTOR CITY: _____ STATE: _____ ZIP: _____
 PRIME CONTRACTOR PHONE #: (____) _____ PRIME CONTRACTOR EMAIL: _____

FACILITY SITE INFORMATION

FACILITY SITE NAME: Hatten Manor
 FACILITY SITE ADDRESS (If the physical address is not available, please indicate the nearest named road. For linear projects indicate the beginning of the project and identify all counties the project traverses.)
 STREET: North of North Swan Road and Whippoorwill Road
 CITY: Gulfport STATE: MS COUNTY: Harrison ZIP: 39503
 FACILITY SITE TRIBAL LAND ID (N/A If not applicable): _____
 LATITUDE: 30 degrees 30 minutes 00.7 seconds LONGITUDE: 89 degrees 04 minutes 42.2 seconds
 LAT & LONG DATA SOURCE (GPS (Please GPS Project Entrance/Start Point) or Map Interpolation): Map Interpolation
 TOTAL ACREAGE THAT WILL BE DISTURBED ¹: 33.7
 IS THIS PART OF A LARGER COMMON PLAN OF DEVELOPMENT? YES NO
 IF YES, NAME OF LARGER COMMON PLAN OF DEVELOPMENT: _____
 AND PERMIT COVERAGE NUMBER: MSR10 _____
 ESTIMATED CONSTRUCTION PROJECT START DATE: 2021-06-01
 YYYYY-MM-DD
 ESTIMATED CONSTRUCTION PROJECT END DATE: 2022-06-30
 YYYYY-MM-DD
 DESCRIPTION OF CONSTRUCTION ACTIVITY: Construction of a residential subdivision
 PROPOSED DESCRIPTION OF PROPERTY USE AFTER CONSTRUCTION HAS BEEN COMPLETED:
Single family housing
 SIC Code _____ NAICS Code _____

NEAREST NAMED RECEIVING STREAM: Little Biloxi River

IS RECEIVING STREAM ON MISSISSIPPI'S 303(d) LIST OF IMPAIRED WATER BODIES? (The 303(d) list of impaired waters and TMDL stream segments may be found on MDEQ's web site: http://www.deq.state.ms.us/MDEQ.nsf/page/TWB_Total_Maximum_Daily_Load_Section) YES NO

HAS A TMDL BEEN ESTABLISHED FOR THE RECEIVING STREAM SEGMENT? YES NO

ARE THERE RECREATIONAL STREAMS, PRIVATE/PUBLIC PONDS OR LAKES WITHIN ½ MILE DOWNSTREAM OF PROJECT BOUNDARY THAT MAY BE IMPACTED BY THE CONSTRUCTION ACTIVITY? YES NO

EXISTING DATA DESCRIBING THE SOIL (for linear projects please describe in SWPPP):
McLaurin, Poarch, and Saucier fine sandy loams

WILL FLOCCULANTS BE USED TO TREAT TURBIDITY IN STORM WATER? YES NO

IF YES, INDICATE THE TYPE OF FLOCCULANT. ANIONIC POLYACRYLAMIDE (PAM)
 OTHER _____

IF YES, DOES THE SWPPP DESCRIBE THE METHOD OF INTRODUCTION, THE LOCATION OF INTRODUCTION AND THE LOCATION OF WHERE FLOCCULATED MATERIAL WILL SETTLE? YES NO

¹Acreage for subdivision development includes areas disturbed by construction of roads, utilities and drainage. Additionally, a housesite of at least 10,000 ft² per lot (entire lot, if smaller) shall be included in calculating acreage disturbed.

DOCUMENTATION OF COMPLIANCE WITH OTHER REGULATIONS/REQUIREMENTS
COVERAGE UNDER THIS PERMIT WILL NOT BE GRANTED UNTIL ALL OTHER REQUIRED
MDEQ PERMITS AND APPROVALS ARE SATISFACTORILY ADDRESSED

IS LCNOI FOR A FACILITY THAT WILL REQUIRE OTHER PERMITS? YES NO

IF YES, CHECK ALL THAT APPLY: AIR HAZARDOUS WASTE PRETREATMENT
 WATER STATE OPERATING INDIVIDUAL NPDES OTHER: 404

IS THE PROJECT REROUTING, FILLING OR CROSSING A WATER CONVEYANCE OF ANY KIND? (If yes, contact the U.S. Army Corps of Engineers' Regulatory Branch for permitting requirements.) YES NO

IF THE PROJECT REQUIRES A CORPS OF ENGINEER SECTION 404 PERMIT, PROVIDE APPROPRIATE DOCUMENTATION THAT:

- The project has been approved by individual permit, or
- The work will be covered by a nationwide permit and NO NOTIFICATION to the Corps is required, or
- The work will be covered by a nationwide or general permit and NOTIFICATION to the Corps is required

IS A LAKE REQUIRING THE CONSTRUCTION OF A DAM BEING PROPOSED? YES NO
(If yes, provide appropriate approval documentation from MDEQ Office of Land and Water, Dam Safety.)

IF THE PROJECT IS A SUBDIVISION OR A COMMERCIAL DEVELOPMENT, HOW WILL SANITARY SEWAGE BE DISPOSED? Check one of the following and attach the pertinent documents.

- Existing Municipal or Commercial System. Please attach plans and specifications for the collection system and the associated "Information Regarding Proposed Wastewater Projects" form or approval from County Utility Authority in Hancock, Harrison, Jackson, Pearl River and Stone Counties. If the plans and specifications can not be provided at the time of LCNOI submittal, MDEQ will accept written acknowledgement from official(s) responsible for wastewater collection and treatment that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow.
- Collection and Treatment System will be Constructed. Please attach a copy of the cover of the NPDES discharge permit from MDEQ or indicate the date the application was submitted to MDEQ (Date: _____.)
- Individual Onsite Wastewater Disposal Systems for Subdivisions Less than 35 Lots. Please attach a copy of the Letter of General Acceptance from the Mississippi State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.
- Individual Onsite Wastewater Disposal Systems for Subdivisions Greater than 35 Lots. A determination of the feasibility of installing a central sewage collection and treatment system must be made by MDEQ. A copy of the response from MDEQ concerning the feasibility study must be attached. If a central collection and wastewater system is not feasible, then please attach a copy of the Letter of General Acceptance from the State Department of Health or certification from a registered professional engineer that the platted lots should support individual onsite wastewater disposal systems.

INDICATE ANY LOCAL STORM WATER ORDINANCE WITH WHICH THE PROJECT MUST COMPLY:

Harrison County Drainage Management Site Plan Ordinance

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 gathered and evaluated 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.


Signature of Applicant¹ (owner or prime contractor)

1/26/21
Date Signed

Robert J. Knesal
Printed Name¹

Managing Member
Title

¹This application shall be signed as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.

For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official

Please submit the LCNOI form to:

Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

PRIME CONTRACTOR CERTIFICATION

LARGE CONSTRUCTION GENERAL PERMIT

Coverage No. MSR10 _____ County _____

(Fill in your Certificate of Coverage Number and County)



MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

By completing and submitting this form to MDEQ, the prime contractor is certifying that (1) they have operational control over the erosion and sediment control specifications (including the ability to make modifications to such specifications) or (2) they have day-to-day operational control of those activities at the site necessary to ensure compliance with the SWPPP and applicable permit conditions.

The owner(s) of the property and the prime contractor associated with regulated construction activity on the property have joint and severable responsibility for compliance with the permit. Notwithstanding any permit condition to the contrary, the coverage recipient and any person who causes pollution of waters of the state or places waste in a location where they are likely to cause pollution of any waters of the state shall remain responsible under applicable federal and state laws and regulations and applicable permits.

PRIME CONTRACTOR INFORMATION

PRIME CONTRACTOR CONTACT PERSON: _____ PHONE NUMBER: (____) _____

PRIME CONTRACTOR COMPANY: _____

PRIME CONTRACTOR STREET (P.O. BOX): _____

PRIME CONTRACTOR CITY: _____ STATE: _____ ZIP: _____

E-MAIL ADDRESS: _____

OWNER INFORMATION

OWNER CONTACT PERSON: _____ PHONE NUMBER: (____) _____

OWNER COMPANY NAME: _____

PROJECT INFORMATION

PROJECT NAME: _____

DESCRIPTION OF CONSTRUCTION ACTIVITY: _____

PHYSICAL SITE ADDRESS (If the physical address is not available indicate the nearest named road. For linear projects, indicate the beginning of the project and identify all counties the project traverses.)

STREET: _____

CITY: _____ COUNTY: _____

I certify that I am the prime contractor for this project and will comply with all the requirements in the above referenced general NPDES permit. I further 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 gathered and evaluated 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.

Prime Contractor Signature¹

Date Signed

Robert J. Knesal

Printed Name¹

Title

¹This application shall be signed as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.
- For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official.

This Prime Contractors Certification form shall be submitted to:

Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Keep a Copy at the Construction Site and Also Submit this Page to:
 Chief, Environmental Permits Division
 MS Department of Environmental Quality, Office of Pollution Control
 P.O. Box 2261
 Jackson, Mississippi 39225-2261



Registration Form for Residential Lot Coverage under Mississippi's Large Construction Storm Water General Permit INSTRUCTIONS

Coverage recipients for residential subdivision construction that do not retain responsibility for permit compliance for individual lots are to furnish this Registration to buyers of individual lots at the time of purchase. In addition, the attached Requirements for Individual Lots in Residential Subdivisions, the Site Inspection and Certification Form and the Large Construction Storm Water General Permit shall also be given to buyers of individual lots at the time of purchase. This form is providing notification to buyers of lots in residential developments, that being part of a "larger common plan of development or sale," coverage is required under Mississippi's Large Construction Storm Water General Permit. To comply with the permit, **the Registration Form must be submitted to MDEQ** at the address listed above and a Storm Water Pollution Prevention Plan (SWPPP) must be developed and implemented to reduce pollutants in storm water discharges during construction activity. **The SWPPP is not required to be submitted to MDEQ.** A copy of the SWPPP and Registration Form must be kept at the construction site or locally available (i.e., able to be produced within an hour of being requested by a state or local inspector). See the following attachments for information on SWPPP development. In addition, **a copy of the completed Registration Form(s) must be retained by the developer and submitted to the MDEQ when requesting termination of permit coverage.** If the buyer or homebuilder sells the lot before a house is built, they must provide this form to the new owner. All questions must be answered. Answer "NA" if the question is not applicable. For further information, contact MDEQ at 601/961-5171 or access our website address: www.deq.state.ms.us/MDEQ.nsf/page/epd_epdgeneral.

ORIGINAL COVERAGE RECIPIENT NAME: _____ COMPANY NAME: _____ STREET OR P.O. BOX: _____ CITY: _____ STATE: _____ ZIP: _____ PHONE # (INCLUDE AREA CODE): _____	BUYER / HOMEBUILDER: _____ COMPANY NAME (IF APPROPRIATE): _____ STREET OR P.O. BOX: _____ CITY: _____ STATE: _____ ZIP: _____ BUYER PHONE # (INCLUDE AREA CODE): _____
---	---

RESIDENTIAL SUBDIVISION NAME: _____

LARGE CONSTRUCTION STORM WATER PERMIT COVERAGE NUMBER: MSR10: _____ 860-5318 _____

LOT NUMBER(s) (attach an additional sheet if necessary): _____ **LOT SIZE(s):** _____

PHYSICAL SITE ADDRESS (IF NOT AVAILABLE INDICATE THE NEAREST NAMED ROAD):

STREET: _____

CITY: _____ **COUNTY:** _____ **ZIP:** _____

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 gathered and evaluated the information submitted. Based on my inquiry of the persons 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. As a buyer / homebuilder, I further certify that I have read and understand the terms and conditions of Mississippi's Large Construction Storm Water General Permit and that I am responsible for installing and maintaining the appropriate pollution control measures for the purchased lot(s) identified.

_____ Original Coverage Recipient Signature¹	33.7 _____ Date Signed
_____ Printed Name	_____ Title
_____ Buyer / Homebuilder Signature¹	_____ Date Signed
_____ Printed Name	_____ Title

¹This application shall be signed according to ACT11, T-7 of the Large Construction General Permit.

REQUIREMENTS FOR LOTS IN RESIDENTIAL SUBDIVISION WHICH ARE COVERED BY THE LARGE CONSTRUCTION STORM WATER GENERAL PERMIT

As a homebuilder on a lot that is part of a regulated subdivision, you are also regulated under the State's storm water regulations and are required to take steps to keep soil and sediment from leaving the lot. When rain falls on exposed soil it can wash away valuable topsoil. It also carries sediment, nutrients and other pollutants into streets, gutters and ditches, where it then travels to lakes, rivers, streams or wetlands. Polluted runoff can cause excessive growth of aquatic weeds and algae and reduce recreational opportunities such as swimming and fishing. Sediment laden runoff can also destroy fish habitat reducing productive fishing opportunities. In addition, sediment-laden runoff can also clog pipes, ditches, streams and basins resulting in increased flooding and maintenance cost. Therefore, the homebuilder is required to minimize off-site damage from soil erosion, sediment leaving the construction site, and poor "housekeeping" practices. This requirement must be accomplished by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Some examples of individual lot SWPPPs are attached for your convenience. Sketch the controls on a copy of your site plan. Narrative notes on the site plan may also be used in addition to the erosion control symbols.

In developing and implementing the SWPPP, controls must be used from each control group (vegetative, structural, housekeeping) to prevent erosion and sediment and other pollutants from leaving the site. Commonly used controls include:

Vegetative Controls

Temporary vegetation includes annual grasses that sprout quickly such as annual rye, browntop millet, oats, and winter wheat. These grow quickly with little care and can protect the soil from rainfall and act as a filter. They will not provide permanent cover. Permanent cover must be established as indicated below. When a disturbed area will be left undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented immediately.

Mulching is the placement of hay grass, woodchips, straw, or synthetic material on the soil to provide temporary cover to protect the soil from rain. Mulching may be the only option during the winter when seeding or sodding is not possible. Mulch must stay in place to be effective. Netting, stakes or chemical binders are used to anchor some types of mulch. Be sure to reinstall washed-out mulch and anchor if necessary until permanent cover is established.

Permanent stabilization is the establishment of a permanent vegetative cover on disturbed areas using either sod, perennial seed, trees or shrubs. When a disturbed area will be left undisturbed for fourteen (14) days or more, the appropriate temporary or permanent vegetative practices shall be implemented immediately. Silt fences, and other temporary measures must be removed following permanent stabilization.

Vegetative buffer zones are undisturbed or planted vegetated areas that are between construction activities and water bodies.

Structural Controls

Silt fences are temporary sediment barriers made of filter fabric buried at the bottom, stretched, and supported by stakes. The silt fence slows runoff and allows it to puddle or pond, so soil and sediment can settle out before leaving the site. The bottom eight to twelve inches of fence must either be sliced in or buried in a trench about four to six inches deep by four to six inches wide. **Silt fences that are not buried are improperly installed. They have no useful function, are a waste of money, and may result in enforcement action.** Stakes must be on the downstream side of the fence and spaced about 3 feet apart. Silt fence must not be installed across streams, ditches, waterways, or other concentrated flow areas. Place fences on the contour or perpendicular to the slope of the hill so that water and sediment will pond behind the fence. **Turn ends uphill** to prevent water going around the end. Install on the downslope, downhill, downstream, or low side of your lot. Keep the fence/barrier in place until grass is established.

Slope drains are piping or lined channels that carry storm water downslope without erosion. A good example would be a downspout extender. Extenders may be used to protect temporarily stabilized areas from roof runoff. Extenders can direct water from roof gutters to paved or grassed areas. Remove extenders following permanent stabilization.

Construction entrance/exits are stone stabilized site entrances which reduce sediment tracked onto public roads. Apply gravel or crushed rock to the driveway area and restrict traffic to this one route. Use 3 to 6 inch gravel over a geotextile fabric. At the end of each day sweep or scrape up any soil tracked onto the street. Limit "standard" vehicle access (including workers' vehicles) to only streets and roads, keep vehicles off of future yard areas; limit tracking of mud onto streets by requiring any required vehicles to use designated access drives. Streets are conduits for storm water, it is important to keep mud and sediment off the streets.

Stockpiles of sand or soil should be covered with plastic or tarps at the end of each workday, or surrounded with silt fence or haybales. Do not locate a stockpile near a street, storm drain inlet, or ditch.

Erosion control blankets or mats are machine-produced mats of straw or other fibers held together with netting that provide temporary or permanent stabilization in critical areas, such as slopes or channels, so that vegetation may be established.

Storm Drain Inlets on the lot must be protected by surrounding or covering with a filter material until final stabilization has been achieved.

Additional Controls: The above controls are the more common practices used at small construction sites. There are a number of other controls, techniques and manufactured product available. A few examples include hydro seeding, diversion berms, silt dikes and fiber logs. Even something as simple as a tarp or plastic may provide temporary cover for small exposed areas. You may wish to contact an erosion and sediment control specialist, local building official, or MDEQ for further information. In addition, MDEQ has several guidance manuals that may be of assistance and the internet has abundant guidance on construction BMPs.

Housekeeping Controls: Pollutants that may enter storm water from construction sites because of poor housekeeping include oils, grease, paints, gasoline, solvents, litter, debris, and sanitary waste. Good housekeeping practices include:

- Frequent cleaning of trash and debris, providing waste receptacles at convenient locations and providing regular collection of waste;
- Directing concrete trucks to the subdivision's designated wash-off area(s) or back to the Ready-Mix facility;
- Providing protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials; and
- Providing adequately maintained sanitary facilities.

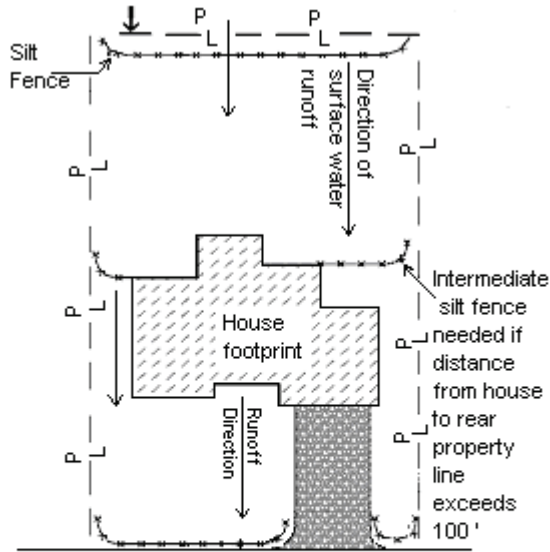
In addition, you should be aware that State air regulations prohibit the open burning of residential solid waste.

Inspection Requirements. Homebuilders shall inspect all erosion controls as often as is necessary, but no less than weekly, to ensure that appropriate erosion and sediment controls have been properly constructed and maintained to prevent erosion and sediment from leaving the site and determine if additional or alternative control measures are required. The inspection results shall be recorded on the Site Inspection and Certification Form contained in the Large Construction Forms Package. MDEQ strongly recommends that homebuilders perform "walk through" inspections daily. It is a responsibility of the homebuilder to install additional and/or alternative erosion and sediment controls when existing controls prove to be ineffective in preventing sediment from leaving the site.

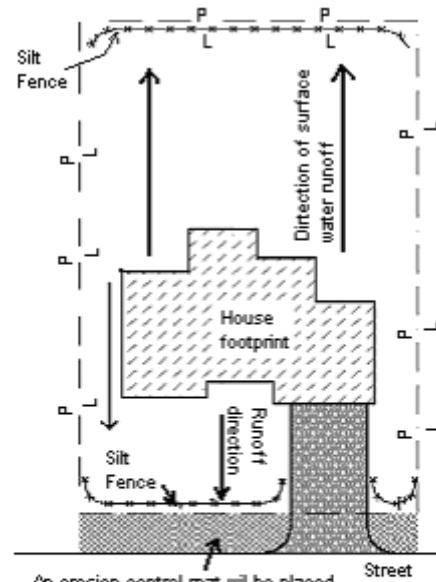
Retention of Records. All records, reports, forms and information resulting from activities required by this permit shall be retained for a period of at least three years from the date of the document origin.

Duty to Comply. Lot owners must comply with the applicable permit conditions. See Activities 3, 5, 6, 7, 10 and 11 in the Large Construction Storm Water General Permit for applicable conditions. Any noncompliance with the applicable permit conditions and aforementioned conditions including sediment leaving the lot constitutes a violation of the Mississippi Water Pollution Control Law and is grounds for enforcement action. It shall not be an acceptable defense that controls were not installed because subsequent activities would require their replacement or cause their destruction.

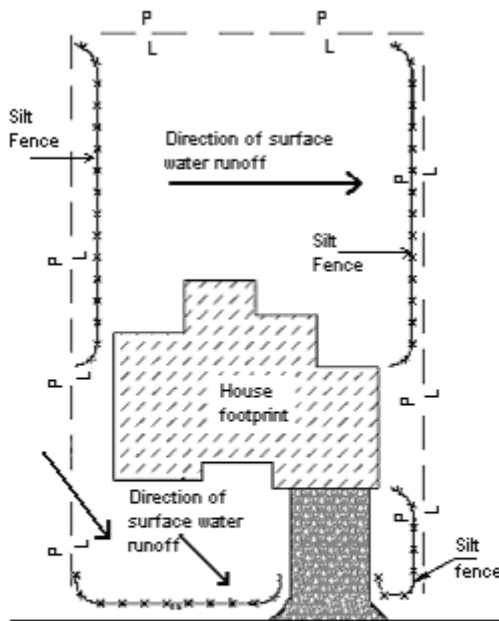
EXAMPLE INDIVIDUAL LOT EROSION AND SEDIMENT CONTROL PLANS



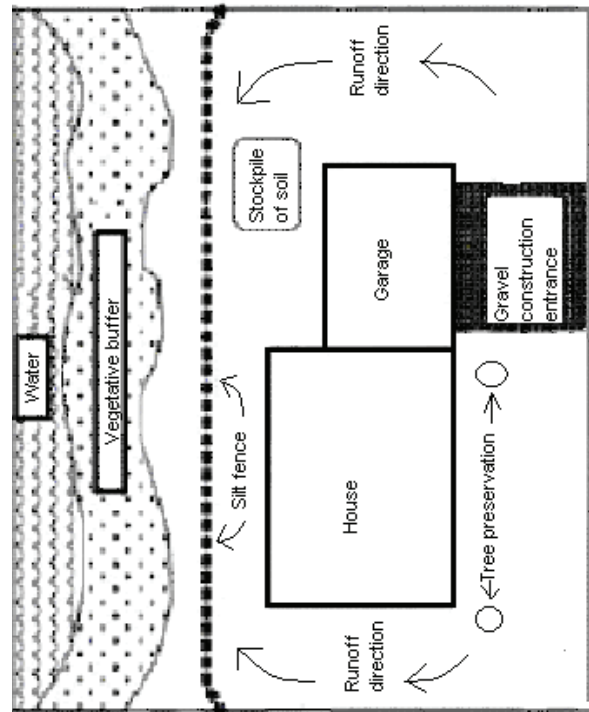
- Street
- Silt Fence
- Gravel construction entrance
- ← Runoff direction
- P Property Line
- L



- An erosion control mat will be placed at this critical area (steep slope) in order to establish grass
- Silt fence
 - Gravel construction entrance
 - ← Direction of surface water runoff
 - Erosion control mat
 - P Property Line
 - L



- Silt fence
- Gravel construction entrance
- ← Direction of surface water runoff
- P Property Line
- L



All disturbed areas will be temporarily seeded with ryegrass. After final grade has been reached, all disturbed areas will be sodded with bermuda grass.

**Keep a Copy Available at the Permitted Facility or Locally Available
Submit the Inspection Reports Only if Requested by the Mississippi Department of Environmental Quality (MDEQ)**

**LARGE CONSTRUCTION GENERAL PERMIT
SITE INSPECTION AND CERTIFICATION FORM
COVERAGE NUMBER (MSR10 _ _ _ _)**



INSTRUCTIONS

Results of construction storm water inspections required by ACT6 of this permit shall be recorded on this report form and kept with the Storm Water Pollution Prevention Plan (SWPPP) in accordance with the inspection documentation provisions of ACT9 of the this permit. Inspections shall be performed at least weekly for a minimum of four inspections per month. The coverage number must be listed at the top of all Inspection and Certification Forms.

COVERAGE RECIPIENT INFORMATION

OWNER/PRIME CONTRATOR NAME: _____

PROJECT NAME: _____

PROJECT STREET ADDRESS: _____

PROJECT CITY: _____ PROJECT COUNTY: _____

OWNER/PRIME CONTRACTOR MAILING ADDRESS: _____

MAILING CITY: _____ STATE: _____ ZIP: _____

CONTACT PERSON: _____ CONTACT PHONE NUMBER: (_____) _____

EMAIL ADDRESS: _____

INSPECTION DOCUMENTATION

DATE (mo/day/yr)	TIME (hr:min AM/PM)	ANY DEFICIENCIES? (CHECK IF YES)	INSPECTOR(S)
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	

Deficiencies Noted During any Inspection (give date(s); attach additional sheets if necessary): _____

Corrective Action Taken or Planned (give date(s); attach additional sheets if necessary): _____

Based upon this inspection, which I or personnel under my direct supervision conducted, I certify that all erosion and sediment controls have been implemented and maintained, except for those deficiencies noted above, in accordance with the Storm Water Pollution Prevention Plan (SWPPP) and sound engineering practices as required by the above referenced permit. I further certify that the LCNOI and SWPPP information is up to date.

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 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 fines and imprisonment for knowing violations.

Authorized Signature

Printed Name

Date

Managing Member

Title

**MAJOR MODIFICATION FORM
FOR LARGE CONSTRUCTION GENERAL PERMIT**
Coverage No. MSR10 _____ County _____



INSTRUCTIONS

Coverage recipients shall notify the Mississippi Department of Environmental Quality at least 30 days in advance of the following activities (check all that apply). This form should be submitted with a modified Storm Water Pollution Prevention Plan (SWPPP), updated USGS topographic map, Corps of Engineers Section 404 documentation and wastewater collection and treatment information, as appropriate.

SWPPP details have been developed and are ready for MDEQ review for subsequent phases of an existing, covered project.

"Footprint" identified in the original LCNOI is proposed to be enlarged.

This form must be signed by the current coverage recipient under Mississippi's Large Construction General Permit. A different developer of new phases of existing subdivisions must apply for separate permit coverage through the submittal of a new complete LCNOI package. Coverage recipients are authorized to discharge storm water associated with proposed expansions of existing subdivisions or subsequent phases, under the conditions of the General Permit, only upon receipt of written notification of approval by MDEQ. All other modifications, such as changes of erosion and sediment controls used, must be in accordance with ACT6, S-1 (6) and S-2 (7) of the General Permit.

ALL INFORMATION MUST BE COMPLETED (indicate "N/A" where not applicable)

COVERAGE RECIPIENT INFORMATION

COVERAGE RECIPIENT CONTACT NAME: _____ TEL # (____) _____

COMPANY NAME: _____

STREET OR P.O. BOX: _____

CITY: _____ STATE: _____ ZIP: _____ E-MAIL: _____

PROJECT INFORMATION

PROJECT NAME: _____

CITY: _____

ADDITIONAL ACREAGE TO BE DISTURBED: _____ TOTAL PROJECT ACREAGE: _____

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 gathered and evaluated 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.

Signature (must be signed by coverage recipient)

Date

Printed Name

Title

Please submit this form to:

Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Environmental Permits for Industrial Facilities

Request for Transfer of Permit, General Permit Coverage and/or Name Change

Instructions: For Ownership Change-Complete all Items on Page 1 (except Item VIII) and Page 2 (reverse side).
 For Name Change Only-Complete Items I, II, V, VI, VII, VIII, and Page 2 (reverse side).

Note-This form should be submitted to MDEQ when a transferal date is finalized but prior to the actual transfer.

<p>Item I.</p> <p>Facility Name: _____</p> <p>Location: (Do Not Use P.O. Box)</p> <p style="padding-left: 40px;">Street: _____</p> <p style="padding-left: 40px;">City: _____ State: <u>MS</u> Zip: _____</p> <p>County: _____</p> <p>Telephone: (_____) _____</p>	<p>Item II.</p> <p>Responsible official after transfer or name change:</p> <p>Name: _____</p> <p>Title: _____</p> <p>Mailing Address:</p> <p style="padding-left: 40px;">Street/P.O. Box: _____</p> <p style="padding-left: 40px;">City: _____ State: _____ Zip: _____</p> <p>Telephone (_____) _____</p>				
<p>Item III.</p> <p>Previous Permittee¹: _____</p> <p>Mailing Address:</p> <p style="padding-left: 40px;">Street/P.O. Box: _____</p> <p style="padding-left: 40px;">City: _____ State: _____ Zip: _____</p> <p>Telephone: (_____) _____</p>	<p>Item IV.</p> <p>New Permittee¹: _____</p> <p>Mailing Address:</p> <p style="padding-left: 40px;">Street/P.O. Box: _____</p> <p style="padding-left: 40px;">City: _____ State: _____ Zip: _____</p> <p>Telephone: (_____) _____</p>				
<p>Item V.</p> <p>Industrial Activity SIC Code: _____</p> <p>Brief Description:</p>	<p>Item VI.</p> <p>Will Facility Operations Change? Yes _____ No _____</p> <p>If yes, the appropriate applications and permits may require modification prior to change.</p>				
<p>Item VII.</p> <p>Will Facility Name Change? Yes _____ No _____</p> <p>If Yes, Provide New Name for Permit Coverage.</p> <p>New Name: _____</p>	<p>Item VIII.</p> <p>Signature for Name Change</p> <p>Print Name: _____</p> <p>Authorized Signature²: _____</p> <p>Title: _____ Date: _____</p>				
<p>Item IX.</p> <p>We the undersigned request transfer of permit(s) and/or permit coverage(s) listed on the backside of this form.</p> <p>From: _____</p> <p>To: _____ Acquisition Date: _____</p> <p>By signature below, the recipient certifies that: 1) they are aware of the requirements of the permit(s), 2) the applicant can demonstrate to the Permit Board it has the financial resources and operational expertise and 3) agrees to accept responsibility and liability for the permit(s) listed on the back of this document. By signature below, the previous permittee is requesting that the permit(s) and/or permit coverage(s) be transferred to the recipient. The transfer of the permit(s) or permit coverage(s) will be by written notification from the Office of Pollution Control (OPC). The OPC may require submittal of information regarding financial capability and past compliance history of the recipient.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <p>_____ Print New Permittee¹ Name</p> <p>_____ New Authorized Signature²</p> <p>_____ Title</p> </td> <td style="width: 50%; border: none;"> <p>_____ Print Previous Permittee¹ Name</p> <p>_____ Previous Authorized Signature²</p> <p>_____ Title</p> </td> </tr> <tr> <td style="width: 50%; border: none;"> <p>_____ Date</p> </td> <td style="width: 50%; border: none;"> <p>_____ Date</p> </td> </tr> </table>		<p>_____ Print New Permittee¹ Name</p> <p>_____ New Authorized Signature²</p> <p>_____ Title</p>	<p>_____ Print Previous Permittee¹ Name</p> <p>_____ Previous Authorized Signature²</p> <p>_____ Title</p>	<p>_____ Date</p>	<p>_____ Date</p>
<p>_____ Print New Permittee¹ Name</p> <p>_____ New Authorized Signature²</p> <p>_____ Title</p>	<p>_____ Print Previous Permittee¹ Name</p> <p>_____ Previous Authorized Signature²</p> <p>_____ Title</p>				
<p>_____ Date</p>	<p>_____ Date</p>				

¹A Permittee is a company or individual that has been issued an individual permit or coverage under a general permit.

²Authorized Signature must be owner or in the case of a corporation, a corporate officer as defined in Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2. and 11 Miss. Admin. Code Pt. 6, Ch. 1.

Mississippi Department of Environmental Quality/Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225
(601) 961-5171

<p>Item X. Storm Water</p> <p>(Check One)</p> <p><input type="checkbox"/> A Storm Water Pollution Prevention Plan (SWPPP) is not required for the site.</p> <p><input type="checkbox"/> The recipient certifies that they have received a copy of the Office of Pollution Control approved SWPPP from the original owner.</p> <p><input type="checkbox"/> The recipient is submitting a new SWPPP, which is attached to this form.</p> <p><input type="checkbox"/> A copy of the SWPPP cannot be obtained from the original owner.</p>	<p>Item XI. Hazardous Waste ID Number</p> <p>EPA ID No. _____</p> <p>(Check One)</p> <p><input type="checkbox"/> An EPA Hazardous Waste ID Number is not required for the site.</p> <p><input type="checkbox"/> The site's EPA ID Number is listed above and a Notification of Regulated Waste Activity Form is attached.</p>
--	---

Item XII. Permit(s) and/or Coverage(s) to be Transferred

<p>Permit Type: _____</p> <p>Permit/Coverage No.: _____</p> <p>Permit Issuance Date: _____</p> <p>Date of General Permit Coverage: _____</p> <p>Permit Expiration Date: _____</p>	<p>Permit Type: _____</p> <p>Permit/Coverage No.: _____</p> <p>Permit Issuance Date: _____</p> <p>Date of General Permit Coverage: _____</p> <p>Permit Expiration Date: _____</p>
---	---

<p>Permit Type: _____</p> <p>Permit/Coverage No.: _____</p> <p>Permit Issuance Date: _____</p> <p>Date of General Permit Coverage: _____</p> <p>Permit Expiration Date: _____</p>	<p>Permit Type: _____</p> <p>Permit/Coverage No.: _____</p> <p>Permit Issuance Date: _____</p> <p>Date of General Permit Coverage: _____</p> <p>Permit Expiration Date: _____</p>
---	---

<p>Permit Type: _____</p> <p>Permit/Coverage No.: _____</p> <p>Permit Issuance Date: _____</p> <p>Date of General Permit Coverage: _____</p> <p>Permit Expiration Date: _____</p>	<p>Permit Type: _____</p> <p>Permit/Coverage No.: _____</p> <p>Permit Issuance Date: _____</p> <p>Date of General Permit Coverage: _____</p> <p>Permit Expiration Date: _____</p>
---	---

<p>Permit Type: _____</p> <p>Permit/Coverage No.: _____</p> <p>Permit Issuance Date: _____</p> <p>Date of General Permit Coverage: _____</p> <p>Permit Expiration Date: _____</p>	<p>OTHER INFORMATION:</p>
---	---------------------------

INSPECTION SUSPENSION FORM

UNDER LARGE CONSTRUCTION STORM WATER GENERAL NPDES PERMIT MSR10



MISSISSIPPI DEPARTMENT OF
ENVIRONMENTAL QUALITY

INSTRUCTIONS

Coverage recipients under Mississippi's Large Construction Storm Water General Permit may temporarily suspend required weekly inspections of erosion and sediment controls and monthly record keeping by submission of this form. Inspections may be suspended only when land disturbing activities have ceased, no further land disturbing activities are planned for a period of at least six (6) months, the site is stable with no active erosion, and vegetative cover has been established (see ACT9, S-1). The coverage recipient is responsible for all permit conditions during the suspension period and nothing in this condition shall limit the rights of MDEQ to take enforcement or other actions against the coverage recipient. Once land disturbing activities resume MDEQ must be notified and all inspections and record keeping required by the permit must also resume. Color photographs, representative of the construction site, must be submitted with this inspection form.

COVERAGE RECIPIENT INFORMATION

COVERAGE RECIPIENT CONTACT PERSON: _____

COMPANY NAME: _____

STREET OR P.O. BOX: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE # (INCLUDE AREA CODE): _____ E-MAIL: _____

PROJECT INFORMATION

CONSTRUCTION STORM WATER GENERAL PERMIT COVERAGE NUMBER: **MSR10** _____

PROJECT NAME: _____

CITY: _____ COUNTY: _____

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 gathered and evaluated 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. **I further certify that: land disturbing activities have ceased, no further land disturbing activities are planned for a period of at least six (6) months, the site is stable with no active erosion, and vegetative cover has been established.**

Signature (must be signed by coverage recipient)

Date Signed

Printed Name

Title

Please submit this form to:

Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

Request for Termination (RFT) of Coverage



LARGE CONSTRUCTION GENERAL PERMIT
Coverage No. MSR10 _____ **County** _____
(Fill in your Certificate of Coverage Number and County)

This form must be submitted within thirty (30) days of achieving final stabilization (see ACT10, S-1 of general permit). Failure to submit this form is a violation of permit conditions.

The signatory of this form must be the owner or operator (prime contractor) who is the current coverage recipient (rather than the project manager or environmental consultant).

(Please Print or Type)

Project Name: _____

Physical Site Street Address (if not available, indicate nearest named road): _____

City: _____ **County:** _____ **Zip:** _____

Coverage Recipient Company Name: _____

Street Address / P.O. Box: _____

City: _____ **State:** _____ **Zip:** _____

Coverage Recipient Contact Name and Position: _____ **Tel. #:** (____) _____

Has another owner(s) or operator(s) assumed control over all areas of the site that have not reached final stabilization?

RESIDENTIAL SUBDIVISIONS:

- YES. A copy of the Registration Form for Residential Lot Coverage for each lot or out parcel that has been sold and a site map, indicating which lots have been sold, are attached.**
- NO. Coverage may not be terminated until all areas have reached final stabilization.**

COMMERCIAL DEVELOPMENT:

- YES. A copy of the site map, indicating which out-parcels have been sold, is attached.**
- NO. Coverage may not be terminated until all areas have reached final stabilization.**

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 gathered and evaluated 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 fines and imprisonment for knowing violations. I understand that by submitting this Request for Termination and receiving written confirmation, I will no longer be authorized to discharge storm water associated with construction activity under this general permit. Discharging pollutants associated with construction activity to waters of the State without proper permit coverage is a violation of state law. I also understand that the submittal of this Request for Termination does not release an owner or operator from liability for any violations of this permit or the Clean Water Act.

Authorized Name (Print) Telephone Signature Date Signed

¹This application shall be signed according to the General Permit, ACT11, T-7 as follows:

- For a corporation, by a responsible corporate officer.
- For a partnership, by a general partner.
- For a sole proprietorship, by the proprietor.
- For a municipal, state or other public facility, by principal executive officer, mayor, or ranking elected official.

After signing please mail to: Chief, Environmental Permits Division
MS Department of Environmental Quality, Office of Pollution Control
P.O. Box 2261
Jackson, Mississippi 39225

STORM WATER POLLUTION PREVENTION PLAN

for

HATTEN MANOR

In

HARRISON COUNTY, MS

SECTION 22, TOWNSHIP 6 SOUTH, RANGE 11 WEST

HARRISON COUNTY, MISSISSIPPI

KNESAL ENGINEERING SERVICES, INC.

PROJECT NO. 3260

REV, A, JANUARY 28, 2021

NARRATIVE

I. PROJECT DESCRIPTION

The purpose of the project is to develop 127 single family residential lots on a 42.77-acre parcel of land in Section 22, Township 6 South, Range 11 West, Harrison County, Mississippi, within Harrison County, MS. (See the attached Vicinity Map.)

II. SITE DESCRIPTION

A. Before Construction - The parcel is currently undeveloped, bounded by undeveloped land to the North and East, Low Density Residences to the West, and Hatten Farms Subdivision to the South. Approximately the west $\frac{3}{4}$ of the site slopes northward through grassed and wooded vegetation at an average slope of about 5%, while the east $\frac{1}{4}$ slopes at about 5% into a small interior low area which drains to the northeast corner of the property. Small portions of the site slope southward from the southwest corner and eastward from the southeast section.

B. After Construction – The development will increase the impervious area by approximately 11.9 acres.

III. EROSION AND SEDIMENT CONTROLS

A. General

The intent of the construction BMPs are to prevent the transport of sediments off of the site. Therefore, though inlet protection may be designated on the drawings, the contractor will have the option of selecting the most advantageous methods for controlling the transport at the source, or by over-excavating and/or re-excavating ditches and detention areas periodically, and to the design elevations at the end of the project, and thereby forego the use of other BMPs such as inlet controls.

Until permanent seeding is in place, the contractor will remain responsible for installation of temporary BMPs if required to adapt to his construction operations.

To minimize surface disturbance for the contractor to repair and stabilize, this SWPPP provides an erosion tube BMP (attached) for the contractor to consider as an alternative to silt fencing based on overall economics.

Where water will accumulate along the base of any perimeter control BMP running down a slope, the Contractor will need to select and install methods he finds effective at appropriate intervals to intercept the flow to prevent channelization along the base of the BMP, and to reinforce it if necessary where water is impounded. The drawings include an image of a J-hook configuration as one option.

The areas draining to the outfall BMPs discussed below are shown on the attached SWPPP Drainage Area Exhibit. The treatment volume calculations are shown in the attached Impervious Areas and Storage Quantities table. The available storage volumes of the detention basins and ponds exceed the required volumes.

- B. The north portion of the property slopes northward to an existing slough which drains northeastward beyond the north property line. The slough is between approximately 30' to 100' from the rear lot lines. Three detention basins will be placed along the north edge of the development to receive the drainage outfalls from curb inlets.

The peak flow will discharge across the north edges of these basins by means of vegetated lip level spreaders and continue downslope as sheet flow through natural vegetation. The length of the vegetated lips will allow for a very shallow flow depth at peak flow. Natural vegetation will grow along the edges of the basins and induce additional storage and filtration.

The stored volumes in these basins, as well as in the northeast basin, will be drained by lengths of small-diameter sock pipe which will discharge to a low ground point.

- C. Location-Specific: The drainage area is approximately 43.6 acres, which includes approximately 0.9 acres from the existing roadway to which the proposed entrance road will connect, and approximately 5.2 acres (~12% of the drainage area) will not be developed. (The sum of percentages of drainage area does not equal 100% due to rounding.)
1. Northwest: Approximately 15% of the drainage area will either outfall or sheet flow to a swale and then to a detention basin. An additional approximate 2% (the middle and rear portions of 3-1/2 lots, lots 21-24) is home sites which are lower than the proposed street, and the lot area will continue to sheet flow into an existing low area which drains offsite. This sheet flow will not include runoff from the infrastructure construction (within the right-of-way).
 2. North Central: Approximately 6% of the drainage area will flow to curb inlets and discharge into the North Central detention basin. An additional approximate 2% (the middle and rear portions of 3-1/2 lots, lots 21-24) is home sites which are lower than the proposed street, and the lot area will continue to sheet flow into an existing low area which drains offsite. This sheet flow will not include runoff from the infrastructure construction (within the right-of-way).
 3. North: Approximately 14% of the drainage area will flow to curb inlets and discharge into the North detention basin. An additional approximate 4% (the middle and rear portions of 7 lots, lots 25-31) is home sites which are lower than the proposed street, and the lot area will continue to sheet flow into an existing low area which drains offsite. This sheet flow will not include runoff from the infrastructure construction (within the right-of-way).
 4. East and Northeast: Approximately 9% of the drainage area will outfall to a detention pond, and approximately 6% will sheet flow northward and eastward to the pond. The pond will outfall into an existing drainageway at the northeast corner of the property. Outlet control BMPs will be employed at the pond outfall.
 5. Southeast: Approximately 25% of the drainage area will outfall to a detention pond, which will outfall into a pipe and then into a ditch which will outfall into the aforementioned pond at the northeast corner of the site. Outlet control BMPs will be employed at the outfall into the pond. An approximate additional 1% is the detention pond site. An approximate additional 3% is the middle and rear portions of 8 lots which are significantly lower than the proposed street. Portions of 2 of the lots will sheet flow to the detention pond, and portions of 6 lots will continue to sheet flow offsite. This sheet flow will not include runoff from the infrastructure construction (within the right-of-way).
 6. Southwest: Approximately 2% of the drainage area (the middle and rear portions of approximately 3-1/2 lots, lots 9-13) is lower than the proposed street, and the lot area will continue to sheet flow offsite. This sheet flow will not include runoff from the infrastructure construction (within the right-of-way).

IV. ALLOWABLE NON-STORM WATER DISCHARGES

- A. Discharges from actual fire-fighting activities
- B. Fire hydrant flushing
- C. Water used to control dust
- D. Potable water sources including uncontaminated water line flushing
- E. Routine external building wash down that does not use detergents
- F. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used
- G. Uncontaminated air conditioning or compressor condensate
- H. Uncontaminated ground water or spring water
- I. Foundation or footing drains where flows are not contaminated with process materials such as solvents
- J. Uncontaminated excavation dewatering
- K. Landscape irrigation
- L. Water used to wash vehicles, wheel wash water and other wash waters where detergents are not used, if treated in a sediment basin or alternative control that provides equivalent or better treatment before discharge.

V. PROHIBITED NON-STORM WATER DISCHARGES

- A. Wastewater from washout of concrete.
- B. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials
- C. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance
- D. Soaps or solvents used in vehicle and equipment washing
- E. Wastewater from sanitary facilities, including portable toilets
- F. Dewatering activities, including discharges from dewatering of trenches and excavations unless managed by BMPs.
- G. Wastewater from equipment and vehicle washing, wheel wash water, and other wash waters, unless treated in a sediment basin or alternative control that provides equivalent or better treatment before discharge.

VI. CONSTRUCTION SEQUENCE

- A. Obtain plan approval and other applicable permits.
- B. Conduct a Preconstruction Conference with the contractor to review the Construction and Permanent Storm Water Management Plan. Provide (if not already included with the plans and specifications) all BMP specifications and instructions to the contractor for the proper application of each of these measures.
- C. Phasing - Schedule or sequence construction activities to concentrate work in certain areas so as to minimize the amount of soil that is exposed at one time. No more than 10 acres shall be disturbed and unstabilized at one time.
- D. Flag the work area and mark the area to remain undisturbed. This is to include providing and maintaining any buffers designated on the drawings. If none is designated on the drawings, provide and maintain at least a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.
- E. Install Perimeter control as shown on the Grading and Drainage Plan and SWPPP (the "GDPL" sheets) and/or the Plan-Profile (the "PLPR" sheets).

- F. Install the Construction Entrance/Exit to the project in accordance with its specification and in the locations as shown on the plans.
- G. Complete site clearing and grubbing.
- H. Topsoil should be stockpiled and used in areas that will be re-vegetated. When final grade is reached, topsoil should be distributed to at least 2 inches deep on 3:1 slopes and 4 inches on flatter slopes.
- I. Use of heavy equipment in areas to be re-vegetated should be avoided, to avoid compaction of the upper soils. If compaction cannot be avoided, the top 4 inches of the soil bed should be tilled before re-vegetation. Any necessary fertilizer or other soil amendments should be added during the tiling process.
- J. Excavate swales and ditches (if any) as shown on the plan/profile sheets, per a sequence consistent with the contractor's operations. Provide temporary seeding and mulch in all such areas.
- K. Complete the construction of the site utilities, site drainage facilities, and all roadways.
- L. Inspect and correct all stormwater management facilities as designated herein under INSPECTIONS AND REPAIRS.
- M. After all permanent vegetation has stabilized, remove all perimeter control (except for any designated to remain).
- N. Before acceptance by the county, the contractor shall remove any sediment from inlets, ditches/swales, and detention ponds, as to provide the full design shape and volume.
- O. Complete the vegetation of all remaining grounds, such that at Final Completion of the construction, all disturbed areas are vegetated and subsequently maintained for acceptance per the specifications.

VII. STABILIZATION REQUIRED IF WORK TEMPORARILY OR PERMANENTLY CEASES

Vegetative soil stabilization-measures must be initiated whenever any clearing, grading, grubbing, excavating or other land disturbing activities have temporarily or permanently ceased on any portion of the site and will not resume for a period of fourteen 14 calendar days or more. The appropriate temporary or permanent vegetative practices (typically seeding, sodding, and mulching) shall be initiated immediately. For purposes of this permit, "immediately" is interpreted to mean no later than the next work day.

VIII. INSPECTIONS AND REPAIRS

- A. Inspect the lake outfall, the ditch along the west edge of the site, the detention area on the east edge of the site, all erosion and sediment controls, and other SWPPP requirements
 - 1. at least weekly
 - 2. after any rain event which produces a discharge, and
 - 3. as often as is necessary to ensure that appropriate erosion and sediment controls have been properly constructed and maintained and to determine if additional or alternative control measures are required.
- B. Any poorly functioning erosion controls or sediment controls, non-compliant discharges, or any other deficiencies observed during the inspections required under this permit shall be corrected as soon as possible, but not to exceed 24 hours of the inspection unless prevented by unsafe weather conditions as documented on the inspection form.
- C. Inspections shall be performed by qualified personnel (see Definitions), who shall use a copy of the Site Inspection and Certification form provided in the Large Construction Forms Package (or equivalent form). Before conducting the site inspection, the inspector should review Chapter 4,

Inspector's Checklist and Troubleshooting Chart found in MDEQ's Field Manual for Erosion and Sediment Control on Construction Sites in Mississippi.

- D. MDEQ strongly recommends that coverage recipients perform a "walk through" inspection of the construction site daily to ensure controls are in place and will function properly.

IX. BEST MANAGEMENT PRACTICES (BMPs)

- A. Below is a list of Best Management Practices that can be used to prevent the contamination of storm water. The BMPs selected for this project and their location is indicated on the attached site plan. The locations shown are not exclusive; additional BMPs may be required that are not shown on the plan. All BMPs shall conform to the specifications of the Mississippi SWPPP Guidance Manual.

Diversions: Use diversions to direct runoff into sediment traps, and to minimize erosion during the construction phase.

Perimeter control: Perimeter controls are used below disturbed areas to filter sediment from runoff. They may be placed in minor swales or ditches where the maximum contributing drainage area is no more than two acres and are not to be installed in live streams. The controls must be maintained and the sediment removed when deposits reach one-third to one-half the height. All sediment deposits shall be properly disposed. After the control is no longer needed, the area shall be graded, seeded, and mulched.

Sediment Basins: Sediment basins are used to contain runoff stormwater sediments and prevent the sediments from leaving the subject site. As noted herein under GENERAL and on the drawings, the detention ponds may be utilized as a sediment basin. The basins must be installed before major site grading and shall be maintained until final stabilization of the site. Accumulated sediment shall be removed when the capacity has been reduced by one-third to one-half, and the sediments shall be disposed of properly.

Brush Barriers: Brush barriers can also be used to trap sediment from sheet flow from smaller drainage areas. They can form simply by stockpiling brush and small trees in the path of flow.

Buffer Zones: Buffer zones of undisturbed areas will be maintained where possible to aid in the storm water filtration process, and also minimize noise and dust. Their size will vary, depending on available area.

Construction Entrance/Exit: Graveled areas located at each construction entrance where vehicles enter and leave the project site will provide a buffer for the deposition of mud and sediment. This will minimize pollution onto public roads or other off-site paved areas.

Dust Control: Dust will be controlled as much as possible during construction by temporary seeding and spraying with water. The construction accesses shall be stabilized and monitored during high traffic times. to minimize the dust on construction roads.

Seeding, Sodding, and Mulching: These vegetative practices should be fertilized at one half the initial rates at the beginning of the second growing season. Eroded areas should be shaped, smoothed, and replanted at this time. Where practical, grassed areas should be clipped once annually. Mulching will be used at the time of permanent seeding. See the Mississippi SWPPP Guidance Manual for seeding, mulching, and fertilizing rates.

Concrete Washout Facilities: Concrete washout shall be permitted only at designated locations, away from natural drains or streams, and concrete washout shall not be treated in a sediment basin or upstream of a level spreader. When possible, washouts should be performed

at the concrete plant. Although washouts will most likely occur on site, truck backwashing is prohibited. Backwashing must be done at the concrete plant.

Fueling and Vehicle Maintenance Locations: Fueling and vehicle maintenance areas shall use BMPs for industrial activities to ensure that pollutants do not impact the storm water runoff. Impervious dikes and berms shall be used to contain potential spills. Drums and containers for holding and transporting contaminated materials should be on site.

On-Site Burning: If allowed by the local county or municipality and Mississippi air emission regulations, open burning will be limited to land-clearing debris from construction and will be performed in accordance said emission regulations. These regulations prohibit burning within 150 feet of a permanent residence, but permits mechanically-aided burning at a distance of 150-1500 feet from a permanent residence, and conventional burning at a distance of over 1500 feet from a permanent residence.

- B. **Spill Prevention and Response Procedures:** If any fuel storage tanks are present on site a dike should be constructed around them in order to contain any accidental spillage. The name and number of a competent hazardous waste disposal contractor shall be posted in the office for use in the event of a spill. The site shall be kept free from the accumulation of solid waste and other good housekeeping procedures implemented.
 - C. **Operation and Maintenance:** The best management practices once implemented must be maintained to ensure that satisfactory operation continues. The sediment traps and diversions should routinely have excess sediment removed when the capacity has been reduced by one-third to one-half. This may be required following each major storm event. This material should be stockpiled and protected from possible re-entry into the storm water until it can be used. Diversions require frequent inspection to ensure that traffic has not worn them down or that funneling waters have not washed them out. Vegetative growth on diversions must be checked frequently and action taken if the growth rate is not satisfactory.
 - D. **Record Keeping:** Records shall be retained for three years of all maintenance activities, spills, and inspections, including a description of the quality and quantity of storm water.
 - E. **Employee Training:** A staff meeting shall be held for the purpose of discussing the Storm Water Pollution Prevention Plans components and goals.
- X. Housekeeping Practices During Construction
- A. Sweep or remove sediment and other debris that has been tracked from the site or deposited from the site onto streets and other paved surfaces;
 - B. Remove sediment or other pollutants that have accumulated in or near any sediment control measures when the capacity has been reduced by one-third to one-half, storm water conveyance channels, storm drain inlets, or water course conveyance within the construction site.
 - C. Remove accumulated sediment that has been trapped by sediment control measures at the site, in accordance with applicable maintenance requirements covered under this permit.
 - D. Equipment maintenance and repair shall be not accomplished on the construction site. Those activities shall be accomplished elsewhere in areas designed and equipped for equipment maintenance and repair activities.
 - E. The washout and cleaning of concrete chutes shall not be accomplished on the construction site. Those activities shall be accomplished elsewhere in areas properly suited to prevent pollution from washout.
 - F. Appropriate numbers of waste receptacles shall be located in close proximity to areas where waste is accumulated. Waste receptacles shall be emptied and maintained on regular basis.

- G. Appropriate numbers of properly protected waste receptacles for chemicals, solvents, and pipe lubricants shall be located in close proximity to areas where such waste is accumulated. Waste receptacles shall be emptied and maintained on regular basis. Also, as designated on the drawings, a protected storage area of at least 20' x 20' will be provided for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents, and other potentially toxic materials kept on site.
- H. Appropriate numbers of sanitary facilities shall be located in close proximity to areas where construction employees are working. Sanitary facilities shall be emptied and maintained on regular basis.
- I. All BMPs shall be inspected, repaired, and maintained as specified elsewhere herein.

XI. Maintenance Plan

Maintenance activities shall be performed on the erosion and sediment controls as follows:

System	Maintenance Requirements	Maintenance Frequency
Perimeter Controls	Inspect for and repair any channelization along the base of the control. To prevent its reoccurrence, install measures to interrupt the flow along the base of the fence such as J-hooks of perimeter control materials, small berms, brush barriers, etc., which will induce the formation of one version of level spreader.	Weekly or after a rain that produces a discharge
Stormwater Basins	Inspect for and repair erosion and remove trash/debris. Inspect for an accumulation of sediment volume of approximately one-third to one-half of the design volume, and excavate to design elevations.	Weekly or after a rain that produces a discharge
Outfall Structure	Confirm that structure has not become blocked or is in need of repair.	Weekly or after a rain that produces a discharge
Open Channels	Inspect for and repair erosion and remove trash/debris.	Weekly or after a rain that produces a discharge
Vegetated Areas Designated to Be Allowed to Grow Unimpeded	Inspect for any gaps in the stand of vegetation, repair any erosion, and install construction barrier grid and/or temporary perimeter control as needed to allow the re-establishment of permanent vegetation.	Weekly

For drawings and/or further descriptions of vegetative and structural controls mentioned above, see the plans and specifications for this project, and the Mississippi SWPPP Guidance Manual if additional information is needed.

ATTACHMENTS:

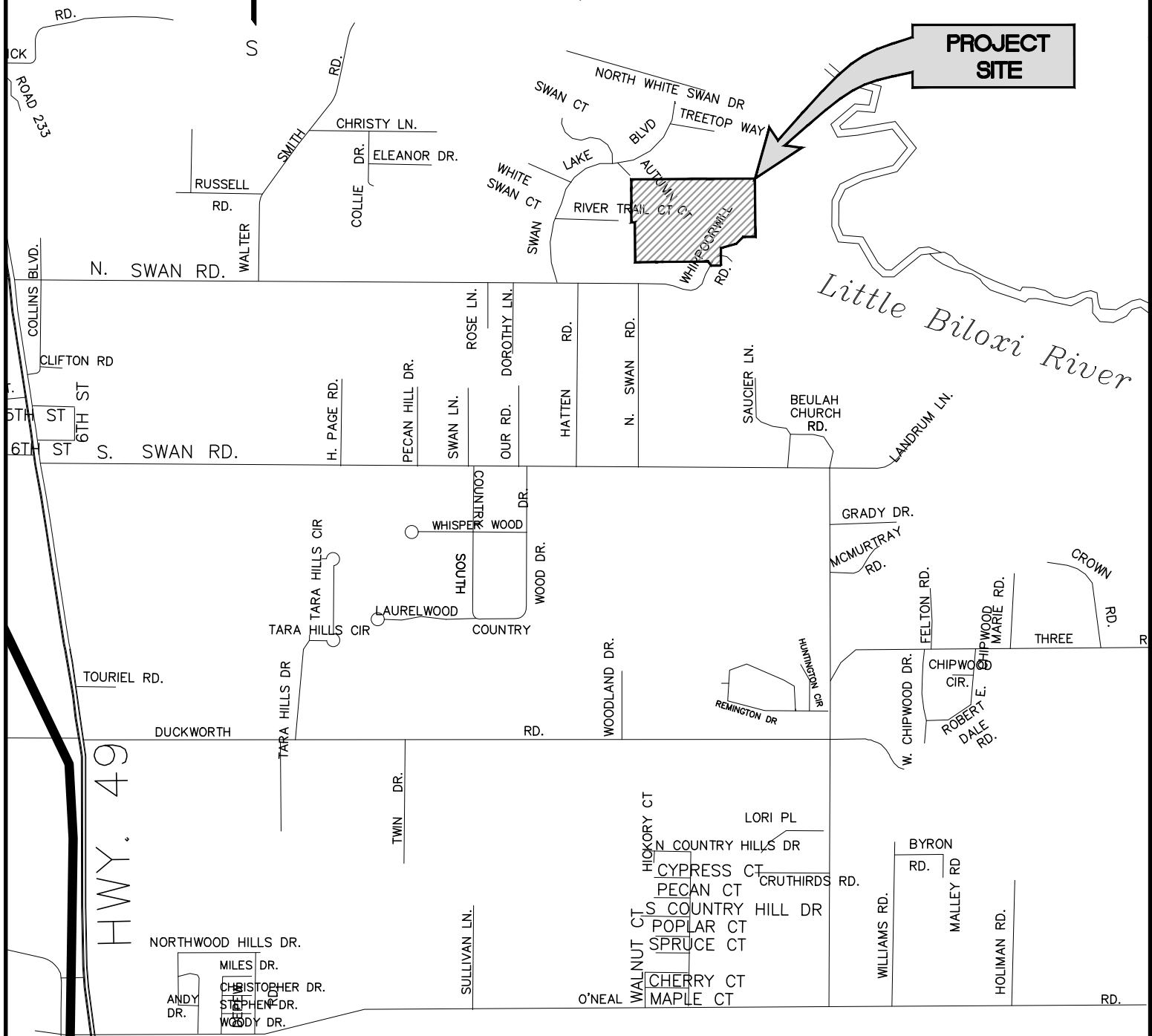
- Vicinity Map
- SWPPP Drainage Area Exhibit
- Impervious Area Storage Quantity Calculations
- Erosion Tube BMP
- Construction Drawings (attached separately)

Hatten Manor

Subdivision
NORTH SWAN ROAD
GULFPORT, MISSISSIPPI



PROJECT SITE

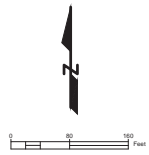
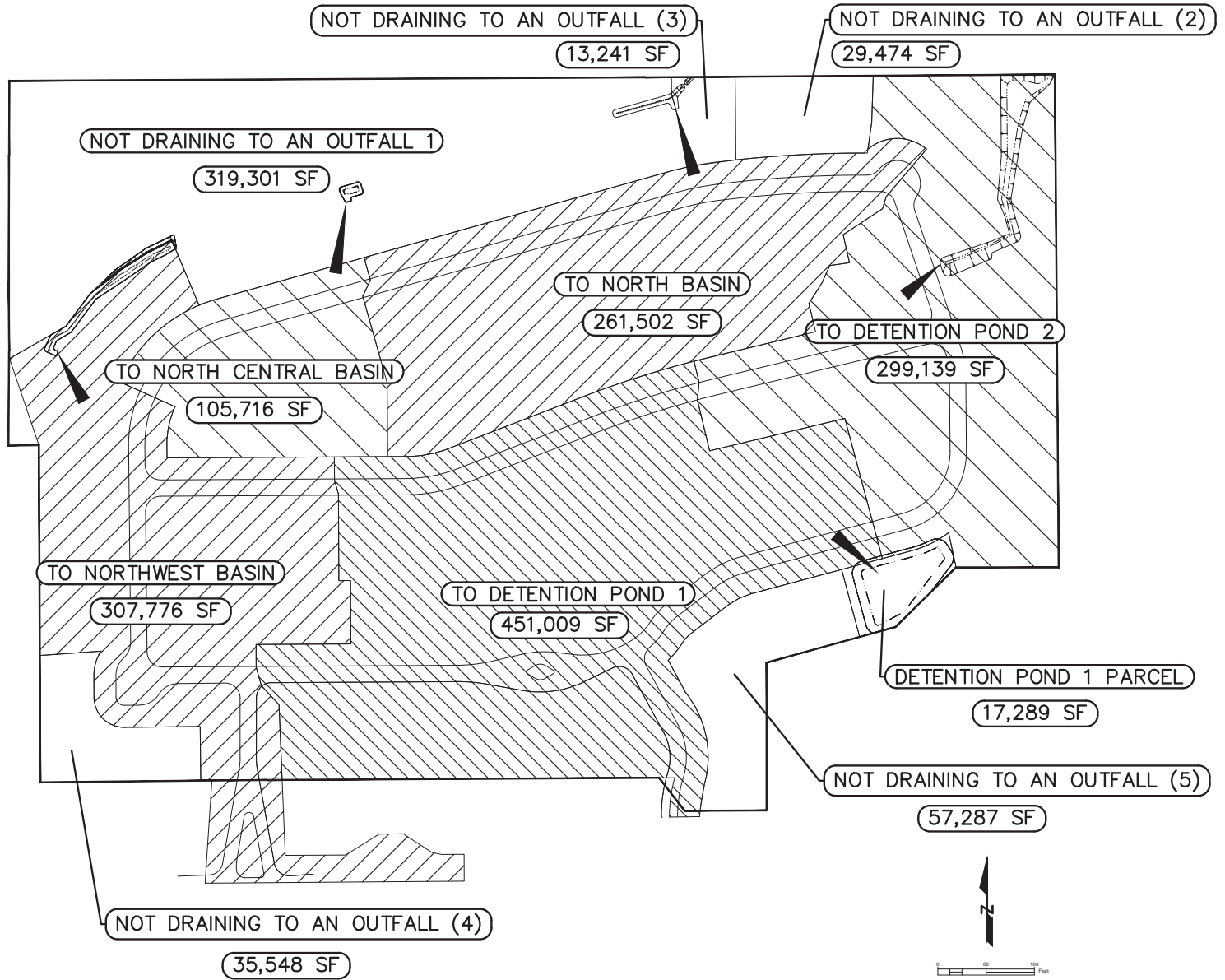


VICINITY MAP

-2000 0 2000 4000 6000



SCALE IN FEET



DESIGNED BY:	WEX
DRAWN BY:	WEX 2021-01-29
CHECKED BY:	
DATE:	2021-01-29
REVISED:	
ORIGINAL DES. DATE:	
DRAWING ISSUE DATE:	
ISSUED FOR APPROVAL:	
APPROVED FOR COST:	

SHEET TITLE
SWPPP
 DRAINAGE AREA EXHIBIT

PROJECT NAME
HATTEN MANOR SUBDIVISION

P.L.C. 80% B/L 3
 01/29/2021
 PHONE: 252-867-9100
 info@kvesa-engineering.com



DRAWING NO.:	3260
SWPPP-EXH	
REV.:	0
SHEET	1 of 1
PROJECT NO.:	3260

HATTEN MANOR SUBDIVISION
KES PROJECT NO. 3260
IMPERVIOUS AREAS AND STORAGE QUANTITIES
JANUARY 29, 2021

NORTHWEST BASIN								
	Impervious	Runoff	Required	Bottom	W.S. Area	Storage	Storage	% of
	SF	Depth	Storage	Area	(from CAD)	Depth	Provided at 2'	Req'd
		Inches	CF	SF	SF	Ft.	Deep	
							CF	
Roads	52,500							
Sidewalks	3,700							
	<u>56,200</u>	0.5	2,340	450	2,310	2.00	2,760	118%

NORTH CENTRAL BASIN								
	Impervious	Runoff	Required	Bottom	W.S. Area	Storage	Storage	% of
	SF	Depth	Storage	Area	(from CAD)	Depth	Provided at 2'	Req'd
		Inches	CF	SF	SF	Ft.	Deep	
							CF	
Roads	11,200							
Sidewalks	2,700							
	<u>13,900</u>	0.5	580	140	450	2.00	590	102%

NORTH BASIN								
	Impervious	Runoff	Required	Bottom	W.S. Area	Storage	Storage	% of
	SF	Depth	Storage	Area	(from CAD)	Depth	Provided at 2'	Req'd
		Inches	CF	SF	SF	Ft.	Deep	
							CF	
Roads	24,400							
Sidewalks	6,100							
	<u>30,500</u>	0.5	1,270	90	1,240	2.00	1,330	105%

DETENTION POND 1 (SOUTHEAST)								
	Impervious	Runoff	Required	Bottom	W.S. Area	Storage	Storage	% of
	SF	Depth	Storage	Area	(from CAD)	Depth	Provided at 3'	Req'd
		Inches	CF	SF	SF	Ft.	Deep	
							CF	
Roads	45,500							
Sidewalks	15,300							
	<u>60,800</u>	0.5	2,530	9,170	9,480	3.00	27,970	1106%

DETENTION POND 2 (NORTHEAST)								
	Impervious	Runoff	Required	Bottom	W.S. Area	Storage	Storage	% of
	SF	Depth	Storage	Area	(from CAD)	Depth	Provided at 3'	Req'd
		Inches	CF	SF	SF	Ft.	Deep	
							CF	
Roads	30,527							
Sidewalks	7,900							
	<u>38,427</u>	0.5	1,600	4,600	12,669	3.00	25,910	1619%

BMP

Erosion Tubes

Erosion tubes are elongated tubes of woven geotextile filled with a media of sufficient weight that they do not require embedment in the ground in typical applications.

When and Where to Use It

In perimeter control, in drainage conveyance swales, around inlets, and along contours on slopes.

Materials

- Produced by a Manufacturer experienced in erosion tube manufacturing.
- Utilizes outer netting that consists of seamless, UV-stabilized synthetic material. Fabric permeability shall be at least 0.05 cm/sec per AS D 4491. Strength retained relative to UV exposure shall be at least 70% when tested per AS D 4355 for 500 hours.
- Curled excelsior wood, or natural coconut rolled erosion control products (RECPs) that are rolled up to create a erosion tube are not allowed under this specification.
- Straw, straw fiber, straw bales, pine needles, and leaf mulch are not allowed under this specification.

Installation

1. Place erosion tubes at the top, on the face, or at the toe of slopes to intercept runoff, reduce flow velocity, releasing the runoff as sheet flow, and provide reduction/removal of suspended solids from the runoff.
2. Install along the ground contour, at the toe of slopes, at an angle to the contour to direct flow as a diversion berm, around inlet structures, in a ditch as a check dam to help reduce suspended solids loading and retain sediment, or as a general filter for any disturbed soil area.
3. No trenching is required for installation of erosion tubes.
4. Prepare the bed for tube installation by removing any large debris including rocks, soil clods, and woody vegetation (>1 inch in size). Erosion tubes can also be placed over paved surfaces including concrete and asphalt with no surface preparation required.
5. Rake bed area with a hand rake or by drag harrow.
6. All surfaces shall be uniformly and well-compacted for maximum seating and stability of the tubes in place.
7. Do not place tube directly over rills and gullies until area has been hand excavated and raked to provide a level bedding surface in order for the tubes to seat uniformly with no bridging effects that would allow flow to bypass under the bag.
8. For locations where tubes will be placed in concentrated flows (such as check dams, inlet protection) and for perimeter controls at primary discharge locations, bed the tubes in a jute mesh or a device provided by the tube manufacturer.
9. If more than one erosion tube is placed in a row, install the tubes by firmly butting the sewn end against tied end of the Tubes together to form a butt joint. No wraps are required around the joint locations.

10. Tubes shall be installed where the handles will be positioned at the very top of the bag.
11. Place anchoring posts for check dam applications behind (downstream of) the tubes.
12. Posts shall be metal T-posts weighing at least 1.25 lbs/ft steel in 5 to 7 ft. lengths rolled from high carbon steel. Post shall be either hot dipped galvanized or coated with a weather-resistant paint. Post shall have a metal anchor plate.
13. Do not drive the post through the erosion tubes. In check dam application, install the tubes by bedding them in a jute cradle and placing them in contact with (e.g., butted against) the anchoring post.
14. Embed T-posts at least 2 ft on most moderately sloped applications. Embed posts at least 3 ft. into ground on slopes greater than 25%.



Inspection and Maintenance

- Follow the schedule contained in the SWPPP.
- Inspect erosion tubes after installation for gaps under the erosion tubes and for gaps between the joints of adjacent ends of erosion tubes.
- Repair all rills, gullies, and undercutting near erosion tubes.
- Remove all sediment deposits that impair the filtration capability of erosion tubes when the sediment reaches 1/2 of the erosion tube.
- Remove and/or replace installed erosion tubes as required to adapt to changing construction site conditions.
- Remove erosion tubes from the site when the functional longevity is exceeded as determined by the Engineer, Inspector or Manufacturer's Representative.

Preventive Measures and Troubleshooting Guide

Field Condition	Common Solutions
Too much sediment has accumulated.	Remove accumulated sediment to recover holding capacity. Remove accumulated sediment from the upstream side of the erosion tube when the sediment has reached a height of approximately one-third the original height of the tube (measured at the center).
There is insufficient ponding area.	Space erosion tubes farther apart or increase the erosion tube diameter.
Erosion tube washes away.	Use larger erosion tubes. Decrease post spacing, and add more posts. Install posts on both the upstream and downstream sides of the erosion tube. Decrease erosion tube spacing by adding more erosion tube check dams.
Other application used instead of erosion tubes	Do not use straw bales or silt fence as erosion tube check alternatives. In some situation rock check dams may be used as a erosion tube alternative.
Wrong type of materials or wrong type of erosion tube utilized.	Straw, pine needle and leaf mulch-filled erosion tubes are not permitted. Curled excelsior wood, or natural coconut rolled erosion control products (RECPs) that are rolled up to create a erosion tube are <u>not</u> permitted. Do not use straw bales or silt fence for checks.