

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)**

MSR10 \_\_\_\_\_

(NUMBER TO BE ASSIGNED BY STATE)

APPLICANT IS THE:  OWNER  PRIME CONTRACTOR

**OWNER CONTACT INFORMATION**

OWNER CONTACT PERSON: Kevin Hahn  
OWNER COMPANY LEGAL NAME: Southern States Utility Trailer Sales, Inc.  
OWNER STREET OR P.O. BOX: 550 U.S. Frontage Road  
OWNER CITY: Richland STATE: MS ZIP: 39218  
OWNER PHONE #: (601) 613-1660 OWNER EMAIL: khahn@ssutility.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: New Building and Site Expansion  
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: 550 U.S. Frontage Road  
CITY: Richland STATE: MS COUNTY: Rankin ZIP: 39218  
FACILITY SITE TRIBAL LAND ID (N/A if not applicable): NA  
LATITUDE: 32 degrees 14 minutes 17 seconds LONGITUDE: 90 degrees 9 minutes 50 seconds  
LAT & LONG DATA SOURCE (GPS (Please GPS Project Entrance/Start Point) or Map Interpolation): \_\_\_\_\_  
TOTAL ACREAGE THAT WILL BE DISTURBED <sup>1</sup>: +/- 7.2  
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: 2020-08-01  
YYYY-MM-DD  
ESTIMATED CONSTRUCTION PROJECT END DATE: 2021-08-01  
YYYY-MM-DD  
DESCRIPTION OF CONSTRUCTION ACTIVITY: Building construction, grading, and utility installation.  
PROPOSED DESCRIPTION OF PROPERTY USE AFTER CONSTRUCTION HAS BEEN COMPLETED:  
Truck Trailer Storage  
SIC Code \_\_\_\_\_ NAICS Code \_\_\_\_\_

NEAREST NAMED RECEIVING STREAM: Richland Creek

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](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 1/2 MILE DOWNSTREAM OF PROJECT BOUNDRY THAT MAY BE IMPACTED BY THE CONSTRUCTION ACTIVITY? YES  NO

EXISTING DATA DESCRIBING THE SOIL (for linear projects please describe in SWPPP):  
SWPPP Attached

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

<sup>1</sup>Acreage for subdivision development includes areas disturbed by construction of roads, utilities and drainage. Additionally, a housesite of at least 10,000 ft<sup>2</sup> 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: \_\_\_\_\_

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.

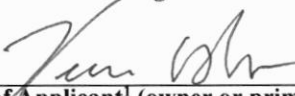
INDICATE ANY LOCAL STORM WATER ORDINANCE WITH WHICH THE PROJECT MUST COMPLY:

City of Richland

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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 Applicant<sup>1</sup> (owner or prime contractor)

7/23/20  
\_\_\_\_\_  
Date Signed

KEVIN HAHN  
\_\_\_\_\_  
Printed Name<sup>1</sup>

CFO  
\_\_\_\_\_  
Title

- <sup>1</sup>This 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

# Storm Water Pollution Prevention Plan

For

## **SOUTHERN STATES UTILITY TRAILER SALES, INC.**

Located in  
Richland, Mississippi

Prepared By:

### **BENCHMARK ENGINEERING & SURVEYING, LLC**

101 Highpointe Court, Suite B  
Brandon, MS 39042  
Office 601-591-1077

660 Katherine Drive, Suite 302  
Flowood, MS 39232  
Office 601-627-7780

[www.benchmarkms.net](http://www.benchmarkms.net)

## **Site Information**

Southern States Utility Trailer Sales is working on a site expansion that will include a new building along with more trailer parking. The site is located in Richland, MS just South of Southern State's existing location. The total disturbed area is +/- 7.2 acres. The existing topography of the land consists of flat, slow sloping wetlands with elevations ranging around 267'/268' and a base flood elevation of 272'. In this case it is simply not feasible to fill areas with enough material in order for some kind of retention/detention to be implemented. In order to treat and contain the post construction storm water runoff, grassed swales are being implemented. Approximately 2,314 linear feet of grassed swale will be used. According to the Geotechnical report provided by Burns Cooley Dennis, Inc. for the site, the ground surface was found to be underlain with silty clays. According to the Soil Survey, the soils primarily consist of Tippo silt loam, with some Gillsburg silt loam and Guyton Silt Loam. All three of these soil types have a slow surface runoff, a low shrink-swell potential, and a slight erosion hazard.

## **Vegetative Controls**

Topsoil will be stockpiled on site for future use in landscaping. All cut slopes will be at or below a 3:1 slope and 3:1 cut slopes will be disked prior to seeding. Any disturbed areas that will be left undisturbed for fourteen or more days will be seeded with temporary seeding immediately. After final grading, all disturbed areas that are thought to remain undisturbed for fourteen or more days will be seeded with permanent seeding or landscaped per the landscaping plans immediately. The temporary seeding species will be determined by the time of year it is to be installed. Disturbed areas that are to be re-vegetated shall avoid soil compaction.

## **Structural Controls**

Upslope waters will be diverted around disturbed areas if at all possible. Rip-rap will be placed at all new culvert inlet/outlet locations. Silt fence will be installed along the toe of all slopes where work will disturb upstream areas. Additional fencing will be added as necessary to control sediment per the phase of the construction. Wattles or other approved inlet protection devices will be installed at all upstream ends of storm drain pipes. Wattles will be installed in the centerline of graded ditches until such time as they can be removed.

## **Housekeeping Practices**

An equipment/materials staging area will be constructed at a location determined by the contractor only if the Contractor has a need for this area. Such area shall be surrounded with silt fencing. A suitable container for trash will be provided. Portable sanitary facilities will be provided for the construction workers. A concrete washout area will be provided at a location determined by the contractor. All major equipment maintenance and repair will be done offsite. In the event that minor equipment maintenance and repair is required onsite, it will be performed in the equipment/materials staging area. Refueling of equipment will take place in the equipment/materials staging area. Portable sanitary facilities will be inspected weekly and emptied or replaced as needed. The equipment/materials staging area will be inspected weekly and after storm events; perimeter controls, containment structures and covers will be repaired or replaced as needed.

## **Post Construction/Storm Water Management Measures**

Hay bales, wattles or rip-rap will be placed at concentrated storm water discharge points to prevent erosion from high velocities until permanent ground cover is established. Permanent rip-rap will be placed at concentrated storm water discharge points at locations shown on the plans to prevent erosion from high runoff velocities. Silt fence will be placed as shown on the plans as a minimum and additionally as necessary to impede silt laden runoff from leaving the site. A permanent ditch liner will be placed in the graded ditch that drains to the retention basin as shown on the plans.

## **Implementation Sequence**

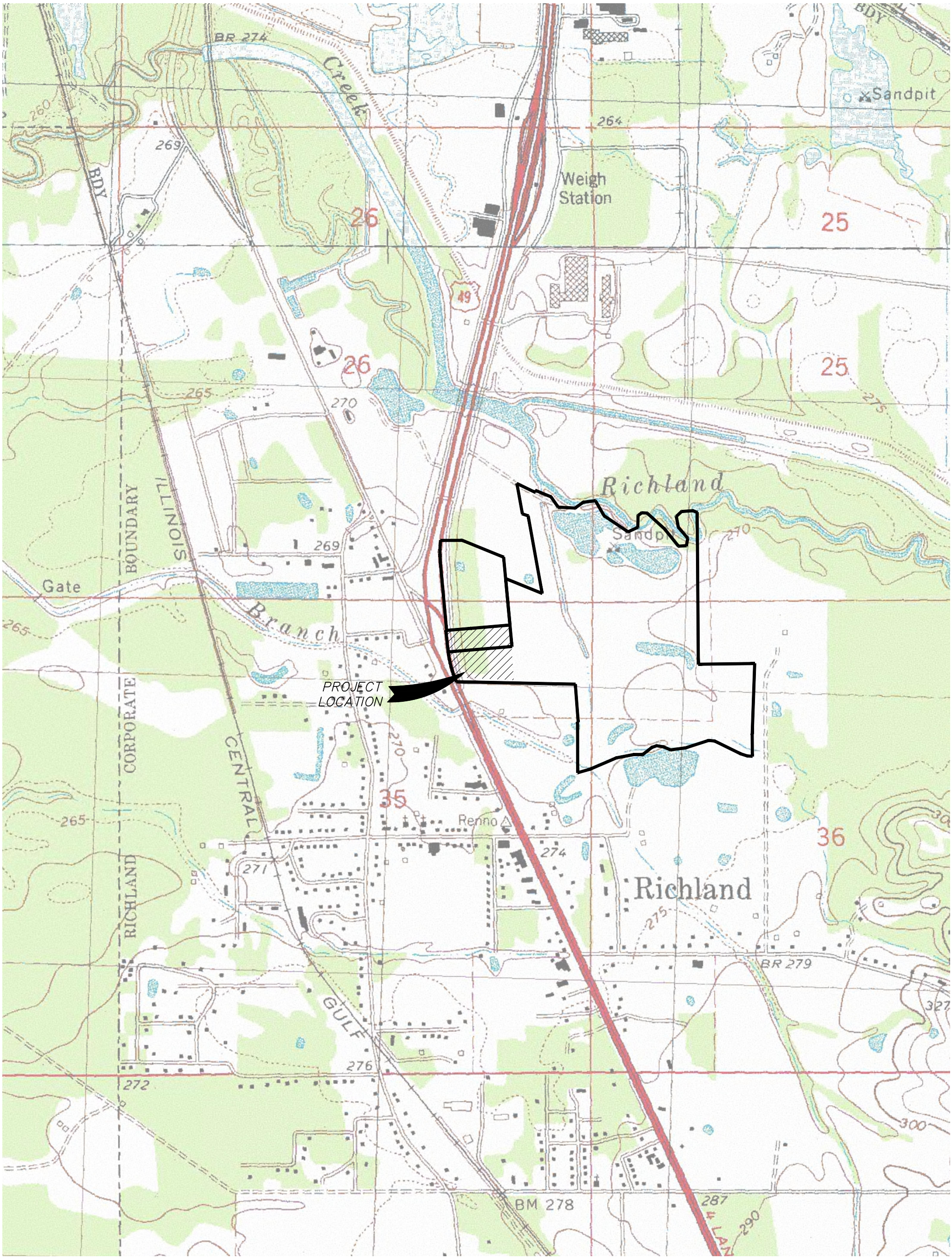
1. Install sanitary facilities and trash containers.
2. Set up equipment and materials staging area if needed by the contractor for project.
3. Begin demolition operations.
4. Install silt fencing along the downstream boundary of any areas that will be disturbed.
5. Begin grading operations to get the project site to rough grade. Place additional temporary measures as required during the grading operations to control runoff.
6. Begin installing site improvements such as storm drain, water & sewer lines, etc.
7. Complete building pad and begin paving operations.
8. Fine grade the remainder of the disturbed areas of the site.
9. Stabilize the project site with solid sod and permanent seed & mulch, see plans for sod/seeding limits, and install any other permanent erosion control measures that may not be in place.



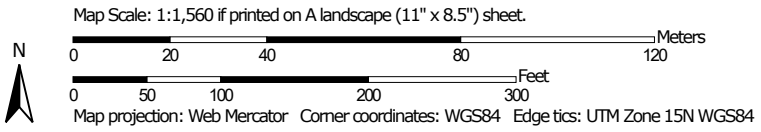
10. Remove all temporary erosion control measures in drainage basins once improvements req'd. In these plans has been completed and areas disturbed during installation of such has been stabilized within said basin with 90% vegetative cover.

### **Maintenance Plan**

Check all disturbed areas, erosion and sediment controls after each rainfall that produces a discharge, but not less than once per week. Make needed repairs within 24 hours or as soon as conditions allow. Remove sediment from the silt fences when accumulated sediment has reached 50% capacity. Replace non-functional silt fence. Maintain all vegetated areas to provide proper ground cover – reseed, fertilize and mulch. Remove all temporary erosion control measures in drainage basin once improvements required in the construction plans have been completed and areas disturbed during installation of such has been stabilized within said basin with 90% vegetative cover.




Soil Map—Rankin County, Mississippi  
(Southern States Soil Survey)




Soil Map—Rankin County, Mississippi  
(Southern States Soil Survey)

### MAP LEGEND

**Area of Interest (AOI)**

 Area of Interest (AOI)

**Soils**

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

**Special Point Features**



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

**Water Features**



Streams and Canals

**Transportation**



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

**Background**



Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Rankin County, Mississippi

Survey Area Data: Version 16, Jun 3, 2020

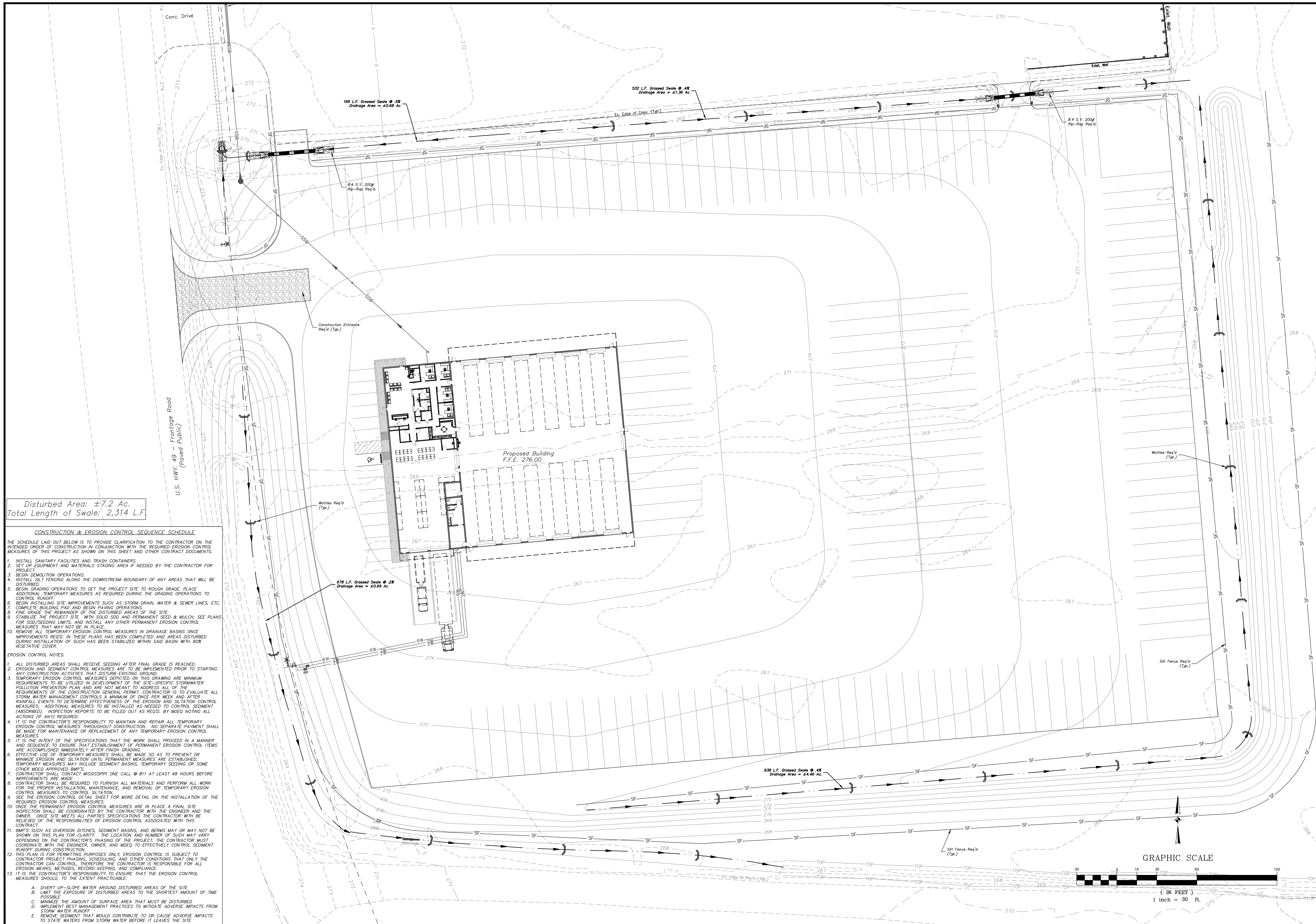
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 3, 2018—Jan 21, 2019

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

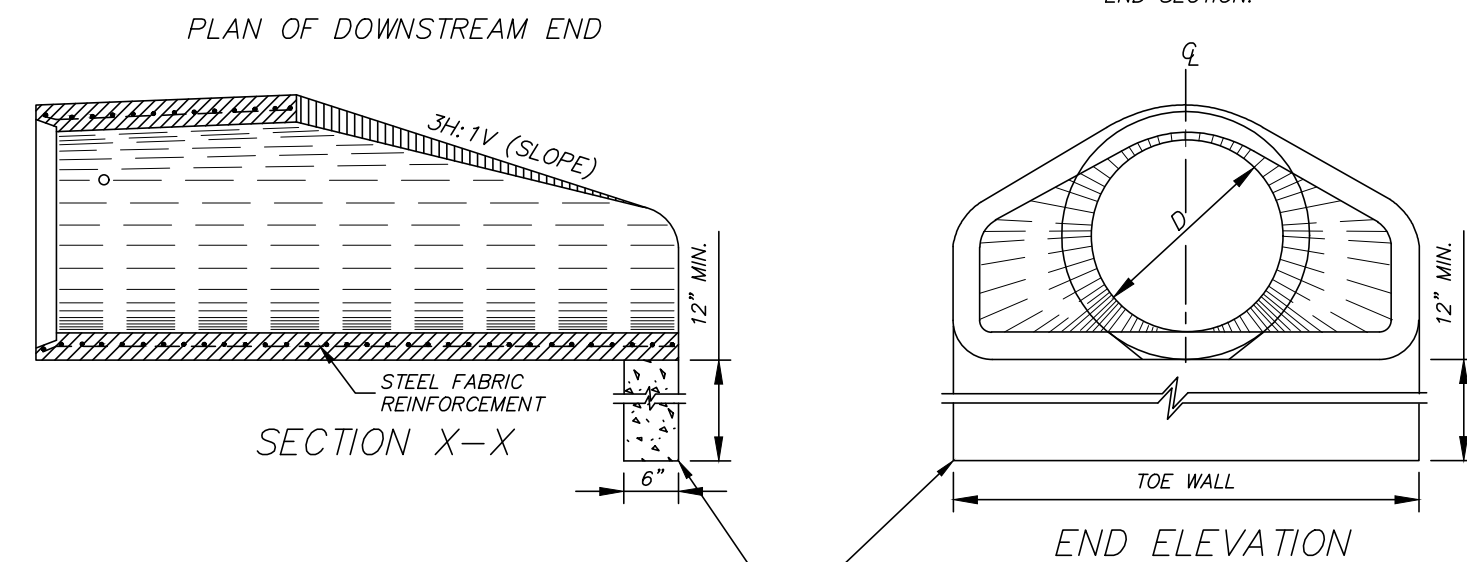
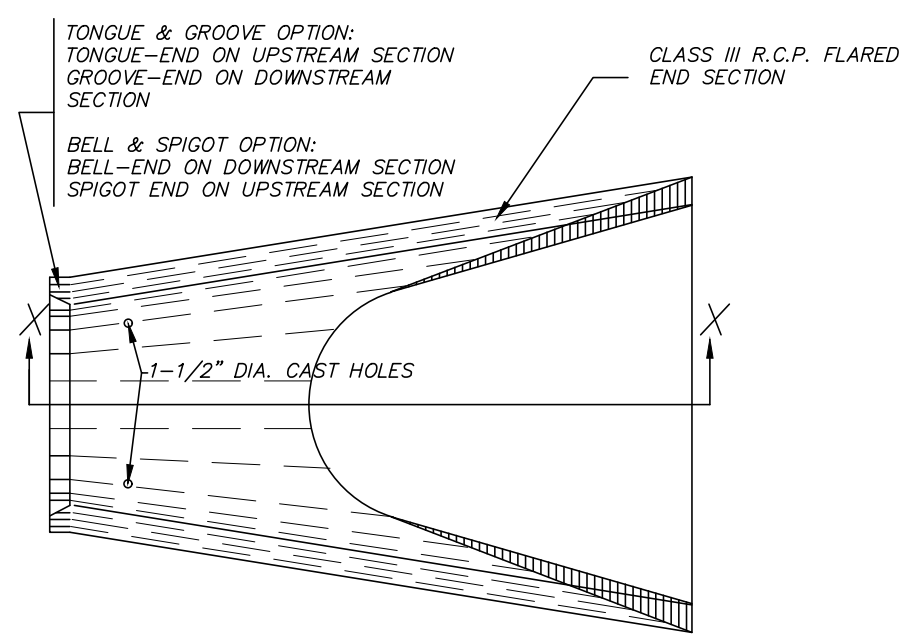
## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
5	Gillsburg silt loam, 0 to 2 percent slopes, occasionally flooded	0.2	1.5%
22A	Tippo silt loam, 0 to 2 percent slopes, occasionally flooded	9.6	94.4%
23	Guyton silt loam, 0 to 1 percent slopes, occasionally flooded	0.4	4.1%
<b>Totals for Area of Interest</b>		<b>10.2</b>	<b>100.0%</b>



Disturbed Area: ±7.2 Ac.  
 Total Length of Swale: 2,314 L.F.

- CONSTRUCTION & EROSION CONTROL SEQUENCE SCHEDULE**
- THE SCHEDULE LAID OUT BELOW IS TO PROVIDE CLARIFICATION TO THE CONTRACTOR ON THE INTENDED ORDER OF CONSTRUCTION IN CONJUNCTION WITH THE REQUIRED EROSION CONTROL MEASURES OF THIS PROJECT AS SHOWN ON THIS SHEET AND OTHER CONTRACT DOCUMENTS.
1. INSTALL SANITARY FACILITIES AND TRASH CONTAINERS.
  2. SET UP EQUIPMENT AND MATERIALS STAGING AREA IF NEEDED BY THE CONTRACTOR FOR PROJECT.
  3. BEGIN DEMOLITION OPERATIONS.
  4. INSTALL SILT FENCING ALONG THE DOWNSTREAM BOUNDARY OF ANY AREAS THAT WILL BE DISTURBED.
  5. BEGIN GRADING OPERATIONS TO GET THE PROJECT SITE TO ROUGH GRADE. PLACE ADDITIONAL TEMPORARY MEASURES AS REQUIRED DURING THE GRADING OPERATIONS TO CONTROL RUNOFF.
  6. BEGIN INSTALLING SITE IMPROVEMENTS SUCH AS STORM DRAIN, WATER & SEWER LINES, ETC. COMPLETE BUILDING PAD AND BEGIN PAVING OPERATIONS.
  7. FINE GRADE THE REMAINDER OF THE DISTURBED AREAS OF THE SITE.
  8. STABILIZE THE PROJECT SITE WITH SOLID SOIL AND PERMANENT SEED & MULCH. SEE PLANS FOR SOIL SEEDING LIMITS, AND INSTALL ANY OTHER PERMANENT EROSION CONTROL MEASURES THAT MAY NOT BE IN PLACE.
  9. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES IN DRAINAGE BASINS ONCE IMPROVEMENTS REQ'D. THESE PLANS HAS BEEN COMPLETED AND AREAS DISTURBED DURING INSTALLATION OF SUCH HAS BEEN STABILIZED WITHIN SAID BASIN WITH 90% VEGETATIVE COVER.
- EROSION CONTROL NOTES:**
1. ALL DISTURBED AREAS SHALL RECEIVE SEEDING AFTER FINAL GRADE IS REACHED.
  2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES THAT DISTURB EXISTING GROUND.
  3. TEMPORARY EROSION CONTROL MEASURES DEPICTED ON THIS DRAWING ARE MINIMUM REQUIREMENTS TO BE UTILIZED IN DEVELOPMENT OF THE SITE-SPECIFIC STORMWATER POLLUTION PREVENTION PLAN AND ARE NOT MEANT TO ADDRESS ALL OF THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT. CONTRACTOR IS TO EVALUATE ALL STORM WATER MANAGEMENT CONTROLS A MINIMUM OF ONCE PER WEEK AND AFTER RAINFALL EVENTS TO DETERMINE EFFECTIVENESS OF THE EROSION AND SILTATION CONTROL MEASURES. ADDITIONAL MEASURES TO BE INSTALLED AS NEEDED TO CONTROL SEDIMENT (ABSORBED). INSPECTION REPORTS TO BE FILLED OUT AS REQ'D. BY MDEQ NOTING ALL ACTIONS (IF ANY) REQUIRED.
  4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AND REPAIR ALL TEMPORARY EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MAINTENANCE OR REPLACEMENT OF ANY TEMPORARY EROSION CONTROL MEASURES.
  5. IT IS THE INTENT OF THE SPECIFICATIONS THAT THE WORK SHALL PROCEED IN A MANNER AND SEQUENCE TO ENSURE THAT ESTABLISHMENT OF PERMANENT EROSION CONTROL ITEMS ARE ACCOMPLISHED IMMEDIATELY AFTER FINISH GRADING.
  6. EFFECTIVE USE OF TEMPORARY MEASURES SHALL BE MADE SO AS TO PREVENT OR MINIMIZE EROSION AND SILTATION UNTIL PERMANENT MEASURES ARE ESTABLISHED. TEMPORARY MEASURES MAY INCLUDE SEDIMENT BASINS, TEMPORARY SEEDING OR SOME OTHER MDEQ APPROVED BMP'S.
  7. CONTRACTOR SHALL CONTACT MISSISSIPPI ONE CALL @ 811 AT LEAST 48 HOURS BEFORE IMPROVEMENTS ARE MADE.
  8. CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES TO CONTROL SILTATION.
  9. SEE THE EROSION CONTROL DETAIL SHEET FOR MORE DETAIL ON THE INSTALLATION OF THE REQUIRED EROSION CONTROL MEASURES.
  10. ONCE THE PERMANENT EROSION CONTROL MEASURES ARE IN PLACE A FINAL SITE INSPECTION SHALL BE COORDINATED BY THE CONTRACTOR WITH THE ENGINEER AND THE OWNER. ONCE SITE MEETS ALL PARTIES SPECIFICATIONS THE CONTRACTOR WILL BE RELIEVED OF THE RESPONSIBILITIES OF EROSION CONTROL ASSOCIATED WITH THIS CONTRACT.
  11. BMP'S SUCH AS DIVERSION DITCHES, SEDIMENT BASINS, AND BERMS MAY OR MAY NOT BE SHOWN ON THIS PLAN FOR CLARITY. THE LOCATION AND NUMBER OF SUCH MAY VARY DEPENDING ON THE CONTRACTOR'S PHASING OF THE PROJECT. THE CONTRACTOR MUST COORDINATE WITH THE ENGINEER, OWNER, AND MDEQ TO EFFECTIVELY CONTROL SEDIMENT RUNOFF DURING CONSTRUCTION.
  12. THIS PLAN IS FOR PERMITTING PURPOSES ONLY. EROSION CONTROL IS SUBJECT TO CONTRACTOR PROJECT PHASING, SCHEDULING, AND OTHER CONDITIONS THAT ONLY THE CONTRACTOR CAN CONTROL. THEREFORE THE CONTRACTOR IS RESPONSIBLE FOR ALL EROSION MEANS, METHODS, RECORD KEEPING, AND COMPLIANCE.
  13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EROSION CONTROL MEASURES SHOULD, TO THE EXTENT PRACTICABLE:
    - A. DIVERT UP-SLOPE WATER AROUND DISTURBED AREAS OF THE SITE.
    - B. LIMIT THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST AMOUNT OF TIME POSSIBLE.
    - C. MINIMIZE THE AMOUNT OF SURFACE AREA THAT MUST BE DISTURBED.
    - D. IMPLEMENT BEST MANAGEMENT PRACTICES TO MITIGATE ADVERSE IMPACTS FROM STORM WATER RUNOFF.
    - E. REMOVE SEDIMENT THAT WOULD CONTRIBUTE TO OR CAUSE ADVERSE IMPACTS TO STATE WATERS FROM STORM WATER BEFORE IT LEAVES THE SITE.

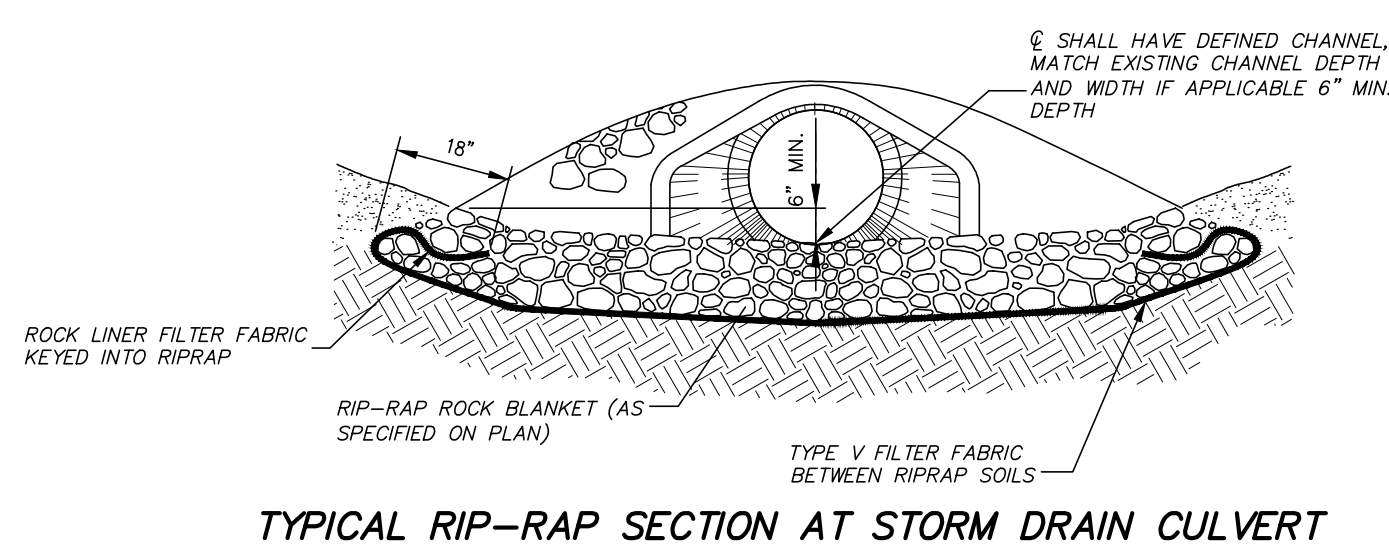


**CONCRETE FLARED END SECTION**  
N.T.S.

**CONCRETE FLARED END SECTION NOTES:**

- ALL FLARED END SECTIONS SHALL BE PRECAST STRUCTURES MADE IN ACCORDANCE WITH THE REQUIREMENTS OF MDOT STANDARD DETAIL WORKING NUMBER FE-1, SHEET 328 FOR CLASS III CONCRETE ROUND PIPE AND WORKING NUMBER FE-1A, SHEET 329 FOR CLASS III CONCRETE ARCH PIPE.
- ALL LIFT HOLES SHALL BE SEALED WITH NON-SHRINK GROUT PER MDOT SPECIFICATIONS FOR SEALING CONCRETE PIPE.
- TOE WALL REQUIRED ON ALL FLARED END SECTIONS AND SHALL RUN FULL WIDTH OF FLARED END SECTION.

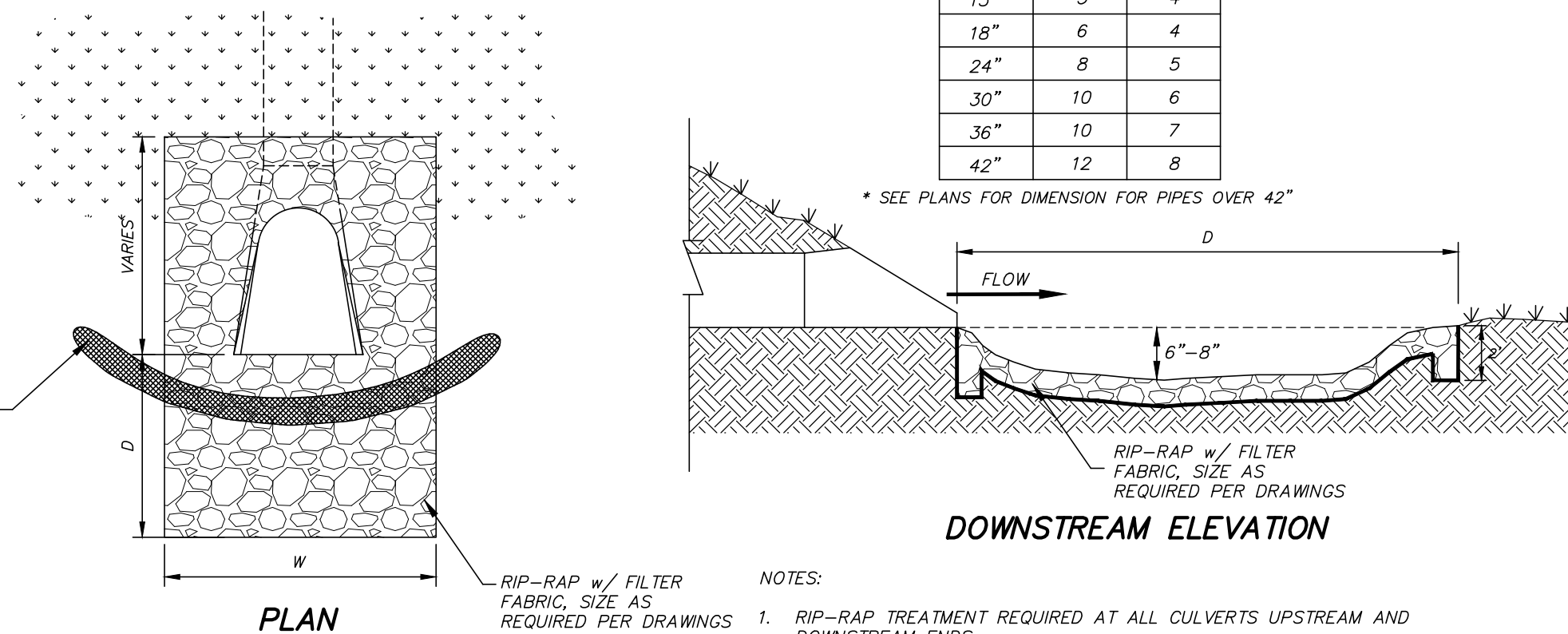
TOE WALL REQUIRED ON ALL FLARED END SECTIONS. SHALL BE ABSORBED IN FLARED END SECTION ITEM FOR EACH INDIVIDUAL PIPE SIZE.



**TYPICAL RIP-RAP SECTION AT STORM DRAIN CULVERT**

TYPICAL RIP-RAP TREATMENT DIMENSIONS		
PIPE	D	W
15"	5	4
18"	6	4
24"	8	5
30"	10	6
36"	10	7
42"	12	8

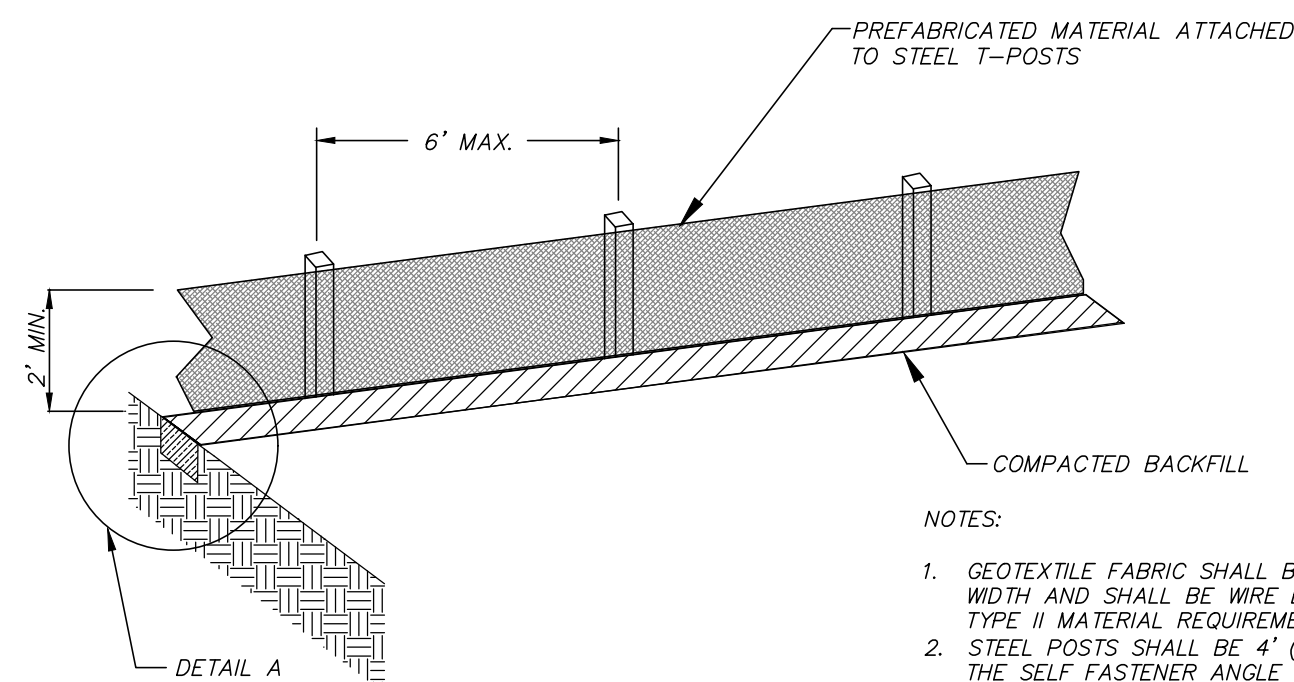
\* SEE PLANS FOR DIMENSION FOR PIPES OVER 42"



**NOTES:**

- RIP-RAP TREATMENT REQUIRED AT ALL CULVERTS UPSTREAM AND DOWNSTREAM ENDS.
- RIP-RAP TREATMENT ON UPSTREAM AND DOWNSTREAM ENDS SHALL TOTALLY SURROUND CULVERT TO A MINIMUM OF 12" ABOVE THE TOP OF THE PIPE.
- SEE CHART FOR DIMENSIONS FOR D & W UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
- EROSION CONTROL BLANKETS OR OTHER MEANS FOR PROTECTION MAY BE USED WITH APPROVAL OF ENGINEER.
- RIP-RAP WILL BE PAID FOR BY THE SQUARE YARD.
- RIP-RAP DIMENSIONS SHOWN ON THE SCHEDULE ARE TYPICAL AND MAY BE ADJUSTED BY ENGINEER AT NO COST TO THE OWNER.

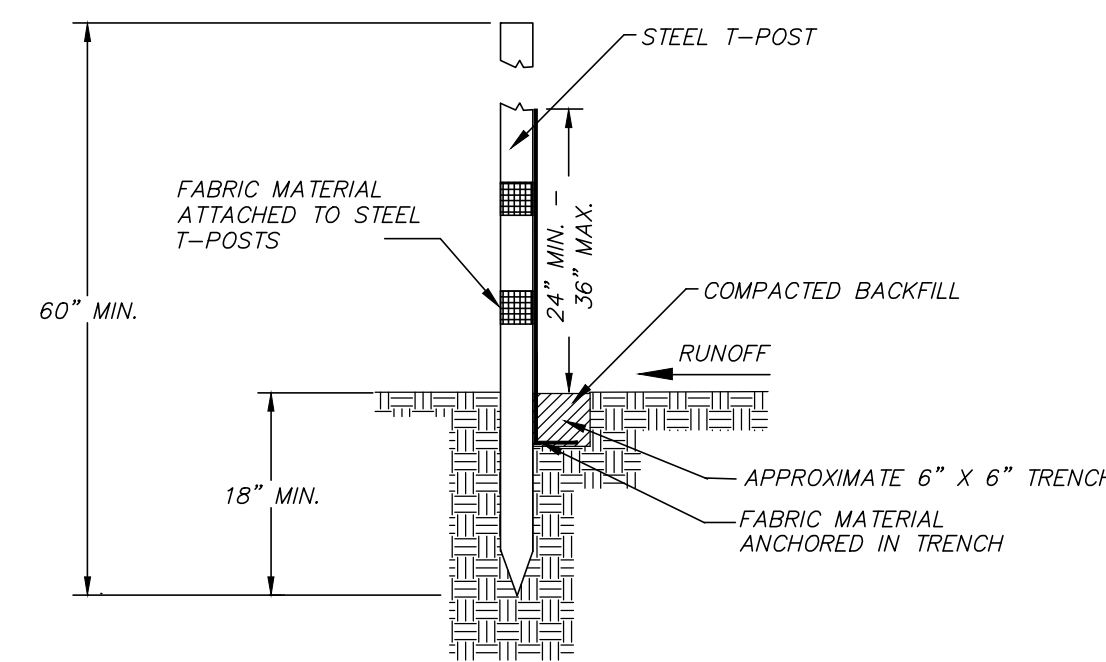
**CULVERT RIP-RAP OUTLET PROTECTION**



**SILT FENCE DETAIL**

**NOTES:**

- GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE WIRE BACKED OR MEET MDOT TYPE II MATERIAL REQUIREMENTS.
- STEEL POSTS SHALL BE 4" (MIN.) IN HEIGHT AND OF THE SELF FASTENER ANGLE STEEL TYPE.
- FENCE SHALL BE FASTENED WITH NOT LESS THAN 9 GAGE STAPLES 1" LONG FOR WOODEN POSTS AND 3/4" FOR WOODEN STAKES.
- ALLOW A 6" OVERLAP OF FABRIC AT JOINTS.



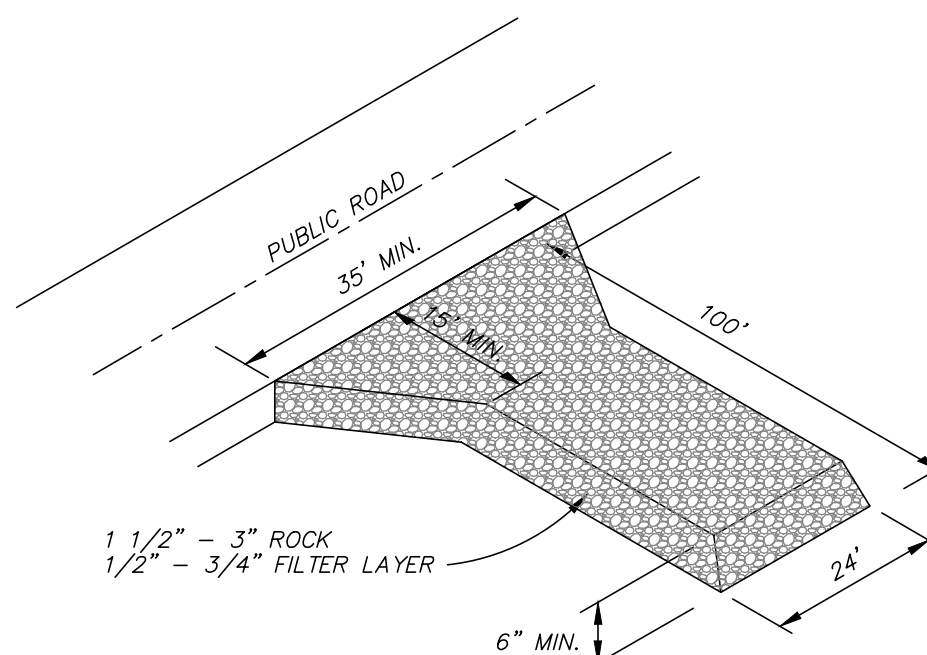
**SILT FENCE DETAILS**

Species	Seeding Rate/Ac	Planting Time	Desired pH Range	Fertilization Rate/Ac	Method of Establishing
Common Bermuda	15 lbs. alone 10 lbs. mixture	Mar 1 - July 15 Sept 1 - Nov 30	6.0 - 7.0	600 lbs. 13-13-13	Seed
Bahia	40 lbs. alone 30 lbs. mixture	Mar 1 - July 15 Sept 1 - Nov 30	6.0 - 7.0	600 lbs. 13-13-13	Seed
Fescue	40 lbs. alone 30 lbs. mixture	Sept 1 - Nov 30	6.0 - 7.0	600 lbs. 13-13-13	Seed
Sericea Lespedeza	40 lbs. alone	Mar 1 - July 15 Sept 1 - Nov 30	6.0 - 7.0	400 lbs. 6-24-24	Seed
*Wheat	90 lbs.	Sept 1 - Nov 30	6.0 - 7.0	600 lbs. 13-13-13	Seed
*Ryegrass	30 lbs.	Sept 1 - Nov 30	6.0 - 7.0	600 lbs. 13-13-13	Seed
*White Clover	5 lbs.	Sept 1 - Nov 30	6.0 - 7.0	400 lbs. 6-24-24	Seed
*Crimson Clover	15 lbs.	Sept 1 - Nov 30	6.0 - 7.0	400 lbs. 6-24-24	Seed
*Hairy Vetch	30 lbs.	Sept 1 - Nov 30	6.0 - 7.0	400 lbs. 6-24-24	Seed
*Browtop Millet	40 lbs. alone 15 lbs. mixture	Apr 1 - Aug 30	6.0 - 7.0	600 lbs. 13-13-13	Seed
*ANNUAL					

**NOTES:**

- FOR PERMANENT SEEDING, ANNUALS CAN ONLY BE USED IN A MIXTURE WITH PERENNIALS.
- SPECIES THAT ARE TO BE SPREAD AS SOLID SOD ARE NOT LISTED (i.e. ST. AUGUSTINE, CENTIPEDE, CARPET GRASS, & ZOYSIA)
- DURING THE MONTHS OF DECEMBER THROUGH FEBRUARY MULCHING IS THE ONLY OPTION ALLOWED.

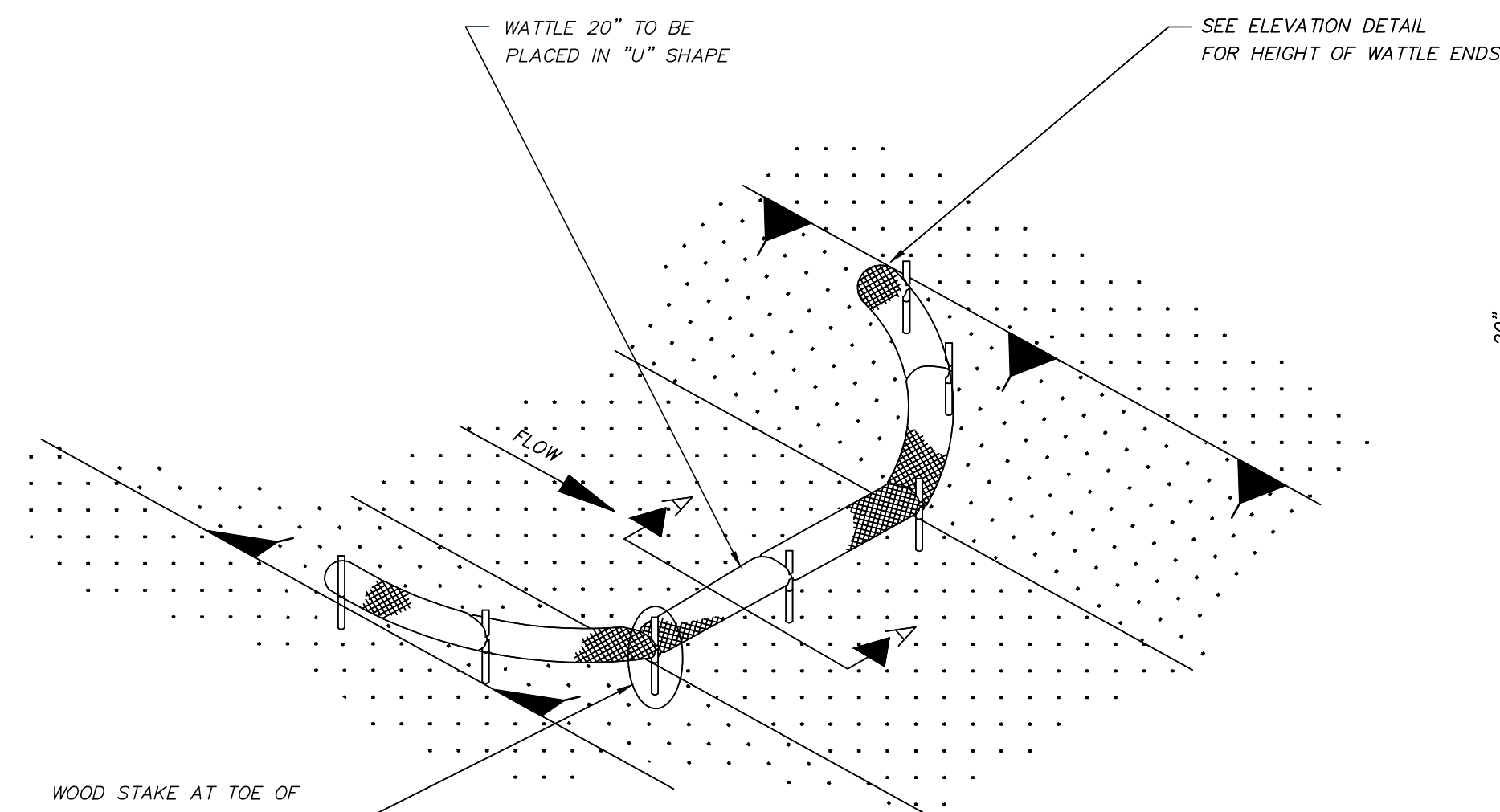
**GENERAL RECOMMENDATIONS FOR TEMPORARY/PERMANENT SEEDING**



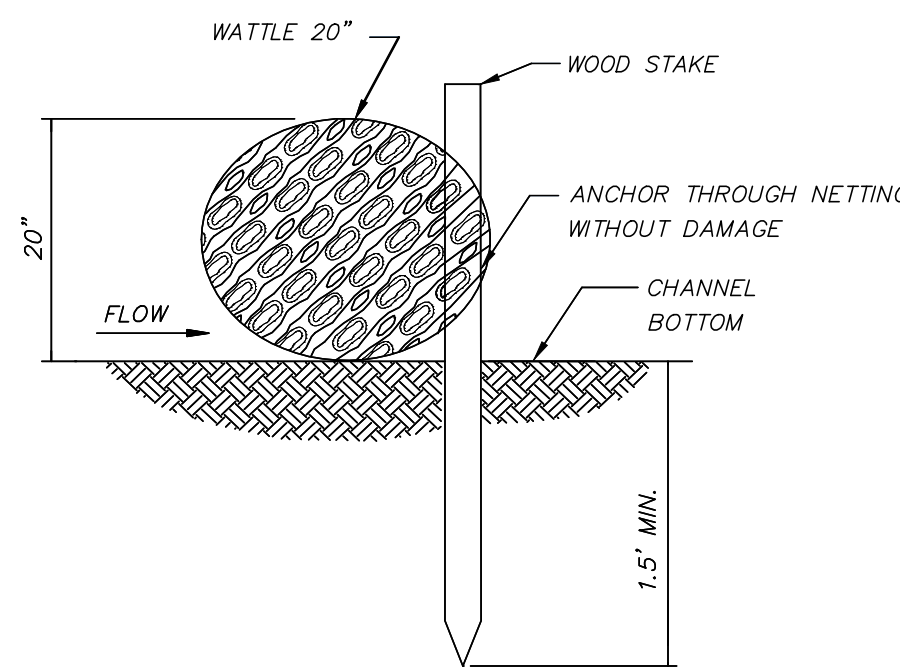
**NOTES:**

- VEHICLE TRACKING MAT SHALL BE LOCATED AT EVERY ENTRANCE/EXIT TO THE CONSTRUCTION SITE.
- VEHICLE TRACKING MAT SHALL BE MAINTAINED BY CONTRACTOR AS NEEDED TO PREVENT ANY MATERIAL FROM BEING TRACKED ONTO CITY STREET.
- SEDIMENT AND OTHER MATERIAL SPILLED, DROPPED OR TRACKED ONTO CITY STREET SHALL BE IMMEDIATELY REMOVED BY CONTRACTOR.
- DIMENSIONS SHOWN ABOVE ARE TYPICAL IF CONDITIONS ALLOW. ANY REVISIONS TO DIMENSIONS SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.

**TEMPORARY CONSTRUCTION ENTRANCE DETAIL**



**DETAIL (DITCH CHECK)**



**SECTION A-A**

**NOTES:**

- MINIMUM RECOMMENDED PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK IS 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON ECD-4
- ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
- TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
- WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.

**WATTLE DITCH CHECK SELECTION GUIDELINES**

WATTLE DITCH CHECKS ARE APPROPRIATE FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.

**WATTLE DITCH CHECK**