CONC. RUMBLE

WOVEN FABRIC

**PROFILE** 

CONSTRUCTION TRAFFIC WASH-OFF PAD

(MIRAFI 600X OR EQUAL)

STRIP (RFINF) OR

APPROVED

OTHER

ENTRENCHMENT

ENTIRE LENGTH

Table 6.3 Temporary Seeding Plant Materials and Minimum Seeding Rate\* ant Characteristics lbs. per 1,000 ft.2 lot cold tolerant, height up to Cold tolerant, height up to 3 2/2.5 feet, low pH tolerant Warm season annual, aggressive growth height up to May be added to mix, not heat tolerant, height up to 16 inches Warm season annual legume,

makes own nitrogen, tolerated

SOIL TEXTURE AIR-DRY DENSITY

St. Charles County

Erosion & Sediment Controls

Standard Drawings

**USDA SOIL** 

TEXTURE CHART

CLASSIFICATION (LBS PER CU FT)

02 - SILT

05 - CLAY LOAM

06 - SILT LOAM

08 - SILTY CLAY

09 - SANDY CLAY

lo - Loamy Sand

ROAD OR OTHER ——

PROVIDE WATER SUPPLY FOR WASHDOWN.

St. Charles County

**Erosion & Sediment Controls** 

Standard Drawings

CONSTRUCTION

TRAFFIC WASH-OFF

PAD

ESC-4

P-2-OFA2-133

**APRIL 2008** 

**EXISTING PAVED** 

SURFACE

- SANDY CLAY LOAM

2 - SILTY CLAY LOAM

7 - SANDY LOAM

\* In Areas receiving less than 30 inches of precipitation, use 75 percent of these rates. \*\* If there is any possibility the seeding will be required to control erosion for more than one year, then consider the addition of fescue or another permanent species as part of a mixture when seeding.

# Table 4.9 Seeding Pate

omegrass

Reed Canary

Hybrid Bermuda

eoats grama

ittle bluesten

diangrass

irdsfoot trefoil

White clover

IRve (cereal)

use with a grass in a mixture.

Wheat

nual lespedeza

Buffalograss

ommon Bermuda

Table 6.	.8 Seeding Rates		1. ONCE GRADED AREAS ARE CONSTRUCTED TO FINAL GRADES, PERMANENT STABILIZATION SHALL BE ESTABLISHED.
	C!	Missouri: Full Seeding Rate1	
Species		lbs./acre (PLS)2	THE CONTRACTOR SHALL RESTORE OFF-SITE AREAS DAMAGED BY CONSTRUCTION TO A CONDITION, EQUAL TO OR, BETTER THAN THE CONDITION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
on Gras	Perennial Ryegrass	150	A LILE PROGRAM CONTROL BURN CHAIL PENAANUN PUACE UNTU THE SITE HAS DEEN PERMANENTIN STARBUTER
	Canada wildrye	24	3. ALL EROSION CONTROL BMP's SHALL REMAIN IN PLACE UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED.
	Tall Fescue	150	4. ONCE THE SITE HAS REACH FINAL STABILIZATION, THE CONTRACTOR IS TO CLEAN AND REMOVE DEBRIS FROM BMP'S STORM WATER COLLECTION AREAS. BMP'S ARE THEN TO BE REMOVED.  MATERIALS STORED ON SITE:
	Crested Wheatgrass	16	
	Kentucky Bluegrass	120	

4

8 (grain)

1 bu./acre

1 bu./acre

. Note: Rates based on typical construction site conditions where

seedbed is normally less than ideal. Planned future use or specific

2. PLS or Pure Live Seed = the amount of seed guaranteed to grow.

3. Legumes alone will not provide adequate erosion protection:

site conditions may dictate an incrase or descrease in rates.

1.5 bu./acre

E SITE HAS REACH FINAL STABILIZATION, THE CONTRACTOR IS TO CLEAN AND REMOVE DEBRIS FROM BMP'S AND VATER COLLECTION AREAS. BMP'S ARE THEN TO BE REMOVED.

FINAL SITE STABILIZATION

 ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS. IF POSSIBLE, MATERIALS SHALL BE STORED UNDER A ROOF OR OTHER ENCLOSURE.

PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE MANUFACTURER'S LABEL. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF THE PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER. THE MANUFACTURER'S RECOMMENDATIONS FOR

THE PROPER USE AND DISPOSAL OF THEIR PRODUCTS SHALL BE FOLLOWED. THE CONSTRUCTION MANGER SHALL

. HAZARDOUS PRODUCTS SHALL BE KEPT IN RESEALABLE CONTAINERS. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED. ALL FEDERAL, STATE AND LOCAL REGULATIONS SHALL BE FOLLOWED WHEN DISPOSING OF ANY HAZARDOUS WASTE

### MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS:

LOCATED NEAR AREAS WHERE THEY WILL BE USED.

XXX MULICH WITH

St. Charles County

Standard Drawings

SURFACE

STABILIZATION CHART

P-2-OFA2-63

FOR SHEET FLOW

MAY 2005

Erosion & Sediment Controls

XXXX MECHANICAL

XXXXXX ANCHORING \

Ground Slope

SURFACE STABILIZATION CHART FOR SHEET FLOW

INSPECT THE ON-SITE MATERIALS DAILY TO ENSURE THE PROPER USE AND DISPOSAL.

SILT FENCING SHALL BE INSPECTED DAILY DURING PERIODS OF RAINFALL, IMMEDIATELY AFTER EACH SIGNIFICANT RAINFALL EVENT, AND WEEKLY DURING PERIODS OF NO RAINFALL. REPAIRS TO SILT FENCES SHALL BE DONE IMMEDIATELY. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN THE SEDIMENT REACHES ONE-HALF THE

. EARTHEN BERMS SHALL BE REGULARLY INSPECTED, AND INSPECTED AFTER EACH RAINFALL EVENT. REPAIRS TO EARTHEN BERMS SHALL BE MADE IMMEDIATELY. IF THE EARTHEN BERM SHOWS SIGNS OF EROSION, AND IT IS DETERMINED THAT MATERIAL MUST BE ADDED TO FIX THE BERM, THE MATERIAL SHALL BE PROPERLY PLACED, COMPACTED AND RESEEDED. THE BERM SHALL BE RESEEDED AND STABILIZED, AS NEEDED, TO MAINTAIN ITS SOUNDNESS WHETHER OR NOT THERE HAS BFFN ANY RAINFALL

THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSPECTED REGULARLY, AFTER EVERY RAINFALL EVENT, AND DURING HIGH VOLUMES OF TRAFFIC. REPAIRS TO THE CONSTRUCTION ENTRANCE SHALL BE MADE IMMEDIATELY. ALL SEDIMENTS, 10. PROVIDE CONTAINERS FOR THE DISPOSAL OF WASTE PAINTS, SOLVENTS, AND ALL OTHER MATERIALS, TRACKED ONTO PUBLIC ROADWAYS SHALL BE REMOVED IMMEDIATELY.

4. Drainage Swales Shall be inspected regularly and after every rainfall event. Repairs to Drainage Swales SHALL BE MADE IMMEDIATELY. IF THE FLOW CHANNEL AND/OR OUTLETS SHOW SIGNS OF DEFICIENCY, THE DAMAGED AREA(S) SHALL BE RESTABILIZED AND RESEEDED, AS NEEDED, TO PREVENT FURTHER DAMAGE.

IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BARRIER. 6. SELECT STOCKPILE LOCATION TO AVOID SLOPES AND NATURAL DRAINAGE WAYS, AVOIDING TRAFFIC ROUTES. ON

5. STRAW BALE BARRIERS SHALL BE INSPECTED ONCE A WEEK AND AFTER EVERY RAINFALL EVENT. REPAIRS SHALL BE MADE

7. INSPECT AND MAINTAIN ALL BMPS LOCATED DOWN HILL OF AREA BEING GRADED, AS INDICATED. ADDITIONAL BMPS SHOULD BE CONSTRUCTED IF IT IS OBSERVED THAT THE PROPOSED BMPS ARE NOT EFFECTIVELY LIMITING SEDIMENT TRANSPORT FROM THE SITE. TYPICAL BMPS THAT MIGHT BE UTILIZED INCLUDE, BUT ARE NOT LIMITED TO:

LARGE SITES, RE-SPREADING IS EASIER AND MORE ECONOMICAL WHERE TOPSOIL IS STOCKPILED IN SMALL PILES

SEDIMENT BARRIERS - USE SILT FENCES, STRAW BALE SEDIMENT TRAPS OR OTHER BARRIERS WHERE NECESSARY TO

### SPILL CONTROL OF POLLUTANTS

1. ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND SHALL RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.

2. CONCRETE TRUCKS SHALL ONLY WASH-OUT OR DISCHARGE SURPLUS CONCRETE, OR DRUM-WASH WATER, AT DEDICATED CONCRETE TRUCK WASH-OUT AREAS. NO EXCESS CONCRETE OR DRUM WASH WATER SHALL BE RELEASED

3. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. 4. ALL ASPHALTIC SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURERS

RECOMMENDATIONS. 5. FERTILIZERS SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE

APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC CONTAINER TO AVOID SPILLS.

6. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE RELAYED TO SITE PERSONNEL AND THEY SHALL BE MADE AWARE OF THE LOCATION OF THE CLEANUP SUPPLIES. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE STORED ON-SITE. IN CASE OF A SPILL, THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND CLEANUP PERSONNEL SHALL WEAR THE APPROPRIATE CLOTHING TO PREVENT INJURY FROM CONTACT WITH THE HAZARDOUS SUBSTANCE. SPILLS OF TOXIC AND HAZARDOUS MATERIAL, REGARDLESS OF THE SIZE OF THE SPILL, SHALL BE REPORTED TO THE APPROPRIATE STATE AND LOCAL GOVERNMENT AGENCIES IMMEDIATELY AFTER DISCOVERY.

# GENERAL EROSION AND SEDIMENTATION CONTROL NOTES:

- SILT FENCE (SF) 1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE LAND 1. SILT FENCE TO BE ADJUSTED AS NECESSARY FOR CONSTRUCTION ACTIVITY. DISTURBANCE PERMIT FOR THIS SITE PRIOR TO THE START OF CONSTRUCTION. A LAND DISTURBANCE PERMIT FROM THE MISSOURI DEPARTMENT OF NATURAL 2. UNLESS NOTED OTHERWISE, SILT FENCE SHALL BE A WOVEN GEOTEXTILE RESOURCES AND ST. CHARLES COUNTY WILL BE REQUIRED.
- 2. THE CONTRACTOR SHALL KEEP & MAINTAIN A COPY OF THE LAND DISTURBANCE PERMIT(S), EROSION CONTROL PLANS, AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AT THE PROJECT SITE DURING CONSTRUCTION.

MISSOURI AND KANSAS". THE DOCUMENT IS AVAILABLE FROM THE MISSOUR

3. ALL EROSION CONTROL MEASURES MUST MEET LOCAL REQUIREMENTS AND THE "PROTECTING WATER QUALITY, A FIELD GUIDE TO EROSION, SEDIMENT AND STORM WATER BEST MANAGEMENT PRACTICES FOR DEVELOPMENT SITES IN

DEPARTMENT OF NATURAL RESOURCES AND CAN BE DOWNLOADED FROM THE

- ONR WEBSITE AT HTTP:/WWW.DNR.MO.GOV/ENV/WPP/WPCP-GUIDE.HTM. 4. PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITIES, FROSION AND SEDIMENT CONTROL MEASURES AND APPLICABLE BMP'S SHALL BE INSTALLED.
- THE GENERAL CONTRACTOR SHALL HAVE ULTIMATE CONTROL OF THE SITE AND REQUIRE THAT ALL SUBCONTRACTORS, UTILITY COMPANIES, AND ANY PERSON PERFORMING LAND DISTURBING ACTIVITIES CONFORM TO THE REQUIREMENTS OF THE PERMITS ISSUED FOR THE SITE. THIS INCLUDES CONFORMANCE TO THE
- STORM WATER POLLUTION PLAN PREPARED & MAINTAINED FOR THE SITE. 6. THE CONTRACTOR IS RESPONSIBLE FOR MANAGING STORM WATER RUNOFF AND EROSION DURING THROUGHOUT CONSTRUCTION.
- THIS EROSION CONTROL PLAN HAS BEEN PREPARED AS A BEGINNING POINT AND SHOULD EVOLVE AS SITE CONDITIONS WARRANT. THE GENERAL CONTRACTOR SHALL IMPLEMENT ADDITIONAL BMP's AS DEEMED NECESSARY TO
- THE CONTRACTOR SHALL PROTECT & MAINTAIN EXISTING TREES AND VEGETATION AS NOTED ON THE PROJECT DRAWINGS. CONSTRUCTION MATERIAL STORAGE AND LAY-DOWN AREAS ARE TO BE AWAY

ADEQUATELY RETAIN SEDIMENT ON-SITE.

FROM DRAINAGE COURSES AND LOW AREAS.

- CLEANING COMPOUNDS, ETC.
- . PROVIDE TRASH CONTAINERS ONSITE AND PERFORM REGULAR SITE CLEAN UP FOR PROPER DISPOSAL OF SOLID WASTE. SOLID WASTE SHALL INCLUDE, BUT NOT BE LIMITED TO, SCRAP BUILDING MATERIALS, PRODUCT/MATERIAL PACKAGING, FOOD AND DRINK CONTAINERS.
- 12. THE CONTRACTOR SHALL INSTALL CONTAINMENT BERMS & DRIP PANS AT PETROLEUM PRODUCT & LIQUID STORAGE TANK AREAS.
- 13. THE CONTRACTOR SHALL PROVIDE CONCRETE WASH OUT AREAS. CONCRETE TRUCKS SHALL NOT DISCHARGE SURPLUS CONCRETE OR WASH WATER ON THE GROUND OR INTO DITCHES. CONCRETE WASH-OUT AREAS SHALL BE DESIGNED TO ENSURE CONCRETE PARTICLES WILL NOT BE RELEASED FROM THE CONSTRUCTION SITE.
- 14. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES IF CONDITIONS WARRANT. DUST CONTROL MAY INCLUDE WATERING/IRRIGATION, WIND BARRIERS, SPRAY ON ADHESIVES, TILLING, OR CHEMICAL TREATMENT, ANY CLEANUP TO ADJACENT PROPERTIES DUE TO INADEQUATE DUST CONTROL WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- 15. THE CONTRACTOR SHALL PROVIDE FOR SOLID WASTE/TRASH COLLECTION. THE CONSTRUCTION SITE SHALL BE KEPT CLEAN AND ORDERLY.
- 16. THE CONTRACTOR SHALL PROVIDE FOR SANITARY WASTE COLLECTION DURING CONSTRUCTION. PORTA POTTIES SHALL BE LOCATED BY THE CONTRACTOR AND NOTED ON THE DRAWINGS.

# CONSTRUCTION SWPPP LOG

1. THE CONTRACTOR SHALL DEVELOP A CONSTRUCTION SWPPP LOG AT THE START OF CONSTRUCTION. THE CONSTRUCTION SWPPP LOG SHALL INCLUDE INSTALLATION DATES OF BMP'S, MAINTENANCE RECORDS, RAINFALL RECORDS, AND ANY ITEM THAT ADDRESSES THE MANAGEMENT OF STORM WATER POLITION PREVENTION MEASURES AT THE PROJECT SITE

REFER TO THE SWPPP DOCUMENT/NARRATIVE FOR FORMS AND OTHER DETAILED INFORMATION REGARDING STORM WATER POLLUTION PREVENTION PRACTICES.

THE SWPPP LOG SHALL BE KEPT ON THE JOB SITE AND SHALL BE MADE AVAILABLE FOR REVIEW AT THE REQUEST OF APPLICABLE GOVERNING

4. BMP's SHALL BE INSPECTED ONCE A WEEK AND WITHIN 24 HRS OF RAIN EVENTS OF 1/4" OR GREATER. INSPECTIONS ARE TO BE DOCUMENTED IN THE SWPPP

LOG. REPAIR AND MAINTENANCE TO BMP'S SHALL BE DONE IMMEDIATELY. 5. THE CONTRACTOR SHALL SUBMIT AN INSPECTION REPORT WITHIN 72 HOURS AFTER EVERY STORM EVENT TO THE AUTHORITIES HAVING JURISDICTION IF PART OF THE PERMIT REQUIREMENTS.

6. THE CONTRACTOR SHALL ENSURE THE SITE CONFORMS TO THE REQUIREMENTS OF THE LAND DISTURBANCE PERMIT AND INSTALL ADDITIONAL BMP'S SHOULD SITE CONDITIONS WARRANT.

7. AFTER CONSTRUCTION, THE CONSTRUCTION SWPPP LOG SHALL BE RETAINED BY THE CONTRACTOR FOR A MINIMUM OF 3 YEARS. A COPY SHALL ALSO BE GIVEN

### **EROSION CONTROL INFORMATION & REFERENCES:**

FABRIC SUCH AS MIRAFI 100X OR EQUAL.

SHALL BE CLEANED AND REINSTALLED.

HAS BEEN CONSIDERED STABLE.

Soil Disturbance Activity or Condition

Perimeter controls around soil stockpiles

Stabilization or covering of inactive stockpiles

DEPARTMENT OF TRANSPORTATION.

SODDED/SEEDED AREAS.

CONSTRUCTION ENTRANCE (CE)

GENERAL CONTRACTOR.

CONSTRUCTION ENTRANCE/EXIT.

REQUIREMENTS.

6. SOD SHALL BE DROUGHT RESISTANT FESCUE.

ANY TYPES SHOWN OR ACCEPTABLE ALTERNATE.

SOD OR SEEDING, MULCHING AND FERTILIZING (SD) (SM

Soil disturbance has ceased in areas greater than 2,000 square feet

After construction of dikes, swales, diversions and other concentrated

When land disturbance is completed, permanent soil stabilization must

2. ALL TEMPORARY DIVERSION BERMS, DIVERSION DITCHES AND SOIL

STOCKPILE AREAS SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER

REFER TO THE SITE AND LANDSCAPING PLANS FOR LOCATIONS OF EACH.

. ALL AREAS DISTURBED DURING CONSTRUCTION, WHICH WILL NOT BE

PAVED, SHALL HAVE A MINIMUM OF 4" OF TOPSOIL INSTALLED.

4. GRASSED AREAS SHALL BE EITHER SODDED OR SEEDED AND MULCHED.

5. ALL RIGHT-OF-WAYS SHALL HAVE SOD INSTALLED. SOD SHALL MEET THE

7. TEMPORARY IRRIGATION MAY BE REQUIRED TO HELP ESTABLISH

9. FINAL STABILIZATION MUST MEET THE LAND DISTURBANCE PERMIT

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SODDED AND

SEEDED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.

. THE LOCATION OF A CONSTRUCTION ENTRANCE/EXIT HAS BEEN SHOWN

LOCATION, THE CONTRACTOR SHALL UPDATE THE EROSION CONTROL

. A PERMIT SIGN SHALL BE INSTALLED AT OR NEAR THE CONSTRUCTION

AS PART OF THE CONSTRUCTION ENTRANCE, THE CONTRACTOR SHALL

UNTO OFF-SITE ROADS SHALL BE CLEANED IMMEDIATELY.

ENTRANCE FOR POSTING RELEVANT CONSTRUCTION PERMITS FOR THE

INSTALL A VEHICLE WASH DOWN AREA. THE WASH DOWN AREA IS TO

PREVENT THE TRACKING OF MUD AND DEBRIS FROM THE PROJECT SITE.

5. LOCATION AND FINAL DIMENSIONS OF THE CONSTRUCTION ENTRANCE,

6. ALL CONSTRUCTION TRAFFIC LEAVING THE PROJECT SITE SHALL UTILIZE THE

TRACKING IS NOT PERMISSIBLE. ANY TRACKING OF MUD AND/OR DEBRIS

WASH DOWN AREA AND STAGING AREAS SHALL BE ESTABLISHED BY THE

ON THE FROSION CONTROL PLAN(S). THE CONTRACTOR SHALL INSTALL OR

ESTABLISH A DESIGNATED CONSTRUCTION ENTRANCE/EXIT AT THE START OF

CONSTRUCTION. IN THE EVENT THE ENTRANCE IS LOCATED IN A DIFFERENT

REQUIREMENTS OF THE LOCAL JURISDICTION AND/OR THE MISSOURI

When slopes are steeper than 3 horizontal to 1 vertical

When slopes are greater than 3% and longer than 150 feet

TRAP SEDIMENT.

3. REFER TO THE SILT FENCE DETAIL FOR INSTALLATION REQUIREMENTS.

4. SILT FENCES SHALL ONLY BE USE FOR STORM WATER SHEET FLOW

6. SILT FENCES SHALL BE INSPECTED REGULARLY FOR RIPS, TEARS, OR

7. WHEN SEDIMENT BUILDS UP TO ONE HALF THE HEIGHT OF THE FENCE IT

REFER TO THE INLET PROTECTION DETAILS FOR VARIOUS TYPES OF INLET

PROTECTION. THE CONTRACTOR SHALL HAVE THE OPTION OF UTILIZING

INLET PROTECTION DEVICES SHALL BE INSTALLED IMMEDIATELY AROUND

PROTECTION SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE SITE

. SEEDING, FERTILIZING AND MULCHING SHALL BE APPLIED AT THE RATES AND

TIMES SPECIFIED PER THE MUNICIPALITY'S SPECIFICATIONS. TEMPORARY

TOTAL DISTURBED SITE ACCORDING TO THE STABILIZATION SCHEDULE

SEEDING AND MILLCHING SHALL BE PLACED ON SEVENTY PERCENT OF THE

EACH INLET ONCE INLET CONSTRUCTION IS COMPLETED. INLET

DETERIORATION. DAMAGED FENCE SHALL BE REPLACED.

5. SILT FENCES SHALL FOLLOW CONTOURS AND UTILIZE "J" HOOKS TO HELP

- EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, 1988, SMOLEN, M.D., D.W. MILLER, L.C. WYATT, J. LICHTHARDT, AND A.L. LANIER, NORTH CAROLINA SEDIMENTATION CONTROL COMMISSION, NORTH CAROLINA DEPARTMENT OF ENVIRONMENT, HEALTH, AND NATURAL RESOURCES; AND DIVISION OF LAND RESOURCES
  - LAND QUALITY SECTION, RALEIGH, NC. COSTS OF URBAN NONPOINT SOURCE WATER POLLUTION CONTROL MEASURES, TECHNICAL REPORT #31, 1991, SOUTHEASTERN WISCONSIN REGIONAL PLANNING
  - COMMISSION (SWRPC), WAUKESHA, WI. STORMWATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES: DEVELOPING POLLUTION

5039 S National Avenue | Springfield, MO 65810 | 417.887.6595

OWNER

636.379.5590

CITY OF O'FALLON

O'FALLON, MO 63366

PROJECT TEAM

PREMIER DESIGN GROUP

100 MIDLAND PARK DRIVE

MAINTENANCE CONSULTANT

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WENTZVILLE, MO 63385

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**REVISIONS** 

DATE:02/02/2024

**SEAL** 

**PROFESSIONAL** 

DESCRIPTION

PROJECT NO.: 2207920 DRAWN BY: A. JONES

ENGINEERS AUTHENTICATION

STEVEN D. MARION P.E

O'FALLON PUBLIC WORKS FACILITY

REVIEWED BY: M. FOGARTY

MEP ENGINEER

**LENEXA, KS 66214** 

100 NORTH MAIN STREET

PREVENTION PLANS AND BEST MANAGEMENT PRACTICES (EPA 832-R-92-005), 1992, U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA) OFFICE OF WATER, WASHINGTON, DC.

PROTECTION AGENCY (USEPA), OFFICE OF WATER, WASHINGTON, DC.

- GUIDANCE SPECIFYING MANAGEMENT MEASURES FOR SOURCES OF NONPOINT POLLUTION IN COASTAL WATERS (EPA 840-B-92-002), 1993, U.S. ENVIRONMENTAL
- VIRGINIA EROSION & SEDIMENT CONTROL FIELD MANUAL, 2ND EDITION, 1995, VIRGINIA DEPARTMENT OF CONSERVATION (VDCR), DIVISION OF SOIL AND WATER CONSERVATION, RICHMOND, VA.

## CONSTRUCTION SEQUENCING ACTIVITIES:

- INSTALL PROJECT SIGN & POST PERMITS INSTALL SILT & CONSTRUCTION FENCING
- INSTALL INLET PROTECTION TO EXISTING STRUCTURES INSTALL CONSTRUCTION ENTRANCE / EXIT
- INSTALL VEHICULAR WASH DOWN AREA BEGIN EXCAVATION & SITE DEMOLITION
- BEGIN BUILDING FOOTINGS & FOUNDATIONS BEGIN UTILITY TRENCHING & EXCAVATION INSTALL BMP'S TO NEW STORM AND DRAINAGE FACILITIES
- PARKING & DRIVE AREA PAVING FINISHED GRADING & LANDSCAPING
- SEEDING & SOD WORK REMOVAL OF EROSION CONTROL AND OTHER BMP's

Required Stabilization

14 days

5 days

7 days

14 days

End of workday

30 days

- REFER TO THE EROSION CONTROL DETAIL SHEET & STORMWATER POLLUTION PREVENTION NARRATIVE FOR ADDITIONAL NOTES AND REQUIREMENTS THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE NPDES PERMIT ISSUED FOR THE SITE AND POST IT AT THE PROJECT SITE PRIOR TO ANY LAND DISTURBING ACTIVITIES. REFER TO SITE SIGN DETAIL ON THE EROSION CONTROL DETAIL SHEET.
- CONTRACTOR SHALL INSTALL BMP'S NOTED ON THE PLANS PRIOR TO BEGINNING ANY LAND DISTURBING, DEMOLITION, OR TREE REMOVAL ACTIVITIES 4. THE CONTRACTOR SHALL INSTALL CONSTRUCTION ENTRANCE/EXIT AND MAINTAIN THESE ENTRANCES DURING CONSTRUCTION.
- THE JOB SITE TRAILER, DUMPSTER, FUELING AREA, STORAGE & LAY-DOWN AREA SHALL BE LOCATED BY THE GENERAL CONTRACTOR AT THE START OF CONSTRUCTION. THESE ITEMS MUST BE NOTED BY THE CONTRACTOR ON THE SWPPP DRAWINGS.

ADDITIONAL CITY OF O'FALLON EROSION AND SEDIMENT CONTROL NOTES

### 6. SOIL STOCKPILES AND DEMOLITION DEBRIS STOCKPILES SHALL HAVE SILT FENCES INSTALLED IF LEFT ON SITE & UNDISTURBED AT THE END OF THE WORKDAY.

- a. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA.
- b. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL EROSION AND SILTATION INCLUDING, BUT NOT LIMITED TO, STAKED STRAW BALES AND/OR SILTATION FABRIC FENCES (POSSIBLE METHODS OF CONTROL ARE DETAILED IN THE PLAN).
- C. EROSION CONTROL SHALL COMMENCE WITH GRADING AND BE MAINTAINED THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BY THE OWNER AND/OR THE CITY OF
- DARDENNE PRAIRIE. d. THE CONTRACTOR'S RESPONSIBILITIES INCLUDE ALL DESIGN AND IMPLEMENTATION AS
- REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. e. THE OWNER AND/OR THE CITY OF DARDENNE PRAIRIE MAY, AT THEIR OPTION, DIRECT THE CONTRACTOR IN HIS METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. f. ANY DEPOSITING OF SILTS OR MUD ONTO NEW OR EXISTING PAVEMENT OR IN NEW OR EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN AND AFFECTED
- g. CHECK DAMS: IT IS RECOMMENDED TO INCORPORATE TEMPORARY CHECK DAMS INTO THE SWPPP IN AREAS OF CONCENTRATED FLOWS.

AREAS CLEANED TO THE SATISFACTION OF THE OWNER AND/OR THE CITY OF DARDENNE

### Check Dam Spacing

Ditch Slope	Check Dam Maximum Spacing (ft)		
(%)	Check Dam Only	Check Dam with Sediment Trap	
9	***	25	
8	***	30	
6	25	40	
5	30	50	
4	40	60	
3	50	80	
2	75		

# TREE PROTECTION NOTES:

- THE PROTECTION AREA AROUND TREES SHALL INCLUDE ALL LAND WITHIN THE CANOPY DRIP LINE. THIS AREA SHALL REMAIN FREE OF ALL GRADING AND FILLING ACTIVITIES.
- CONSTRUCTION SITE ACTIVITIES SUCH AS PARKING, MATERIAL STORAGE, SOIL STOCK PILING, AND CONCRETE WASH-OUT SHALL NOT BE PERMITTED WITHIN TREE PROTECTION AREAS.

THROUGHOUT CONSTRUCTION AND UNTIL THE PROTECTED AREA

- TREE PROTECTION AREAS SHALL BE CLEARLY IDENTIFIED PRIOR TO ANY LAND DISTURBANCE. METHODS THAT MAY BE USED INCLUDE SNOW FENCE, POLYETHYLENE, CHAIN LINK FENCE, OR CONSTRUCTION STAKES PLACED EVERY FIFTEEN (15) FEET. DESIGNATED AREAS SHALL REMAIN CLEARLY MARKED
- . SIGNS SHALL BE USED TO DESIGNATE TREE PROTECTION AREAS. SIGNS ARE TO BE POSTED VISIBLY ON ALL SIDES OF THE PRESERVATION AREA AND MUST BE VISIBLE THROUGHOUT THE DEVELOPMENT PROCESS. MINIMUM SIZE FOR THE SIGNS IS 24"x36" AND SHOULD STATE THE FOLLOWING: "TREE PROTECTION AREA -MACHINERY ACCESS AND DUMPING OR STORAGE OF MATERIALS

# PROJECT SITE INFORMATION

AND EQUIPMENT PROHIBITED.'

HAS BEEN INSPECTED.

NPDES PERMIT NUMBER ISSUED FOR THE SITE: CONTRACTOR CONTACT PERSON: SITE LOCATION: APPROXIMATELY 1000 FEET WEST FROM THE

INTERSECTION OF TR HUGHES BLVD AND OLD WEST TERRA L

LONGITUDE: 90°40'55.09"W LATITUDE: 38°48'19.26"N RECEIVING WATERS: BELLEAU CREEK

EXISTING SOIL: HARVESTER-URBAN LAND COMPLEX, 2 TO 9 PERCENT SLOPES WITH A SOIL RATING OF "C"

### POTENTIAL POLLUTANTS THAT MAY BE FOUND ON SITE DURING CONSTRUCTION

Material Trade Name	Chemical/Physical Description	Storm Water Pollutants
Erosion	Solid Particles	Soil, sediment
Fertilizer	Liquid or solid grains	Nitrogen, phosphorus
Pesticides (insecticides, fungicides, herbicides, rodenticides)	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbonates, arsenic
Asphalt	Black solid	Oil, petroleum distillates
Concrete	White solid	Limestone, sand
Plaster	White granules or powder	Calcium Sulphate, calcium carbonate, sulfuric acid
Glue, adhesives	White or yellow liquid	Polymers, epoxies
Paints	Various colored liquid	Metal oxides, Stoddard solvent, talc, calcium carbonate, arsenic
Curing compounds	Creamy white liquid	Naphtha
Wood preservatives	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper, chromium.
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease,

# SITE DATA

Ethylene glycol, propylene glycol,

heavy metals (copper, lead, zinc)

LOT AREA 23.65 ACRES TOTAL DISTURBED AREA ±9.51 ACRES EXISTING RUNOFF COEFFICIENT PROPOSED RUNOFF COEFFICIENT

**EROSION CONTROL DETAILS** 

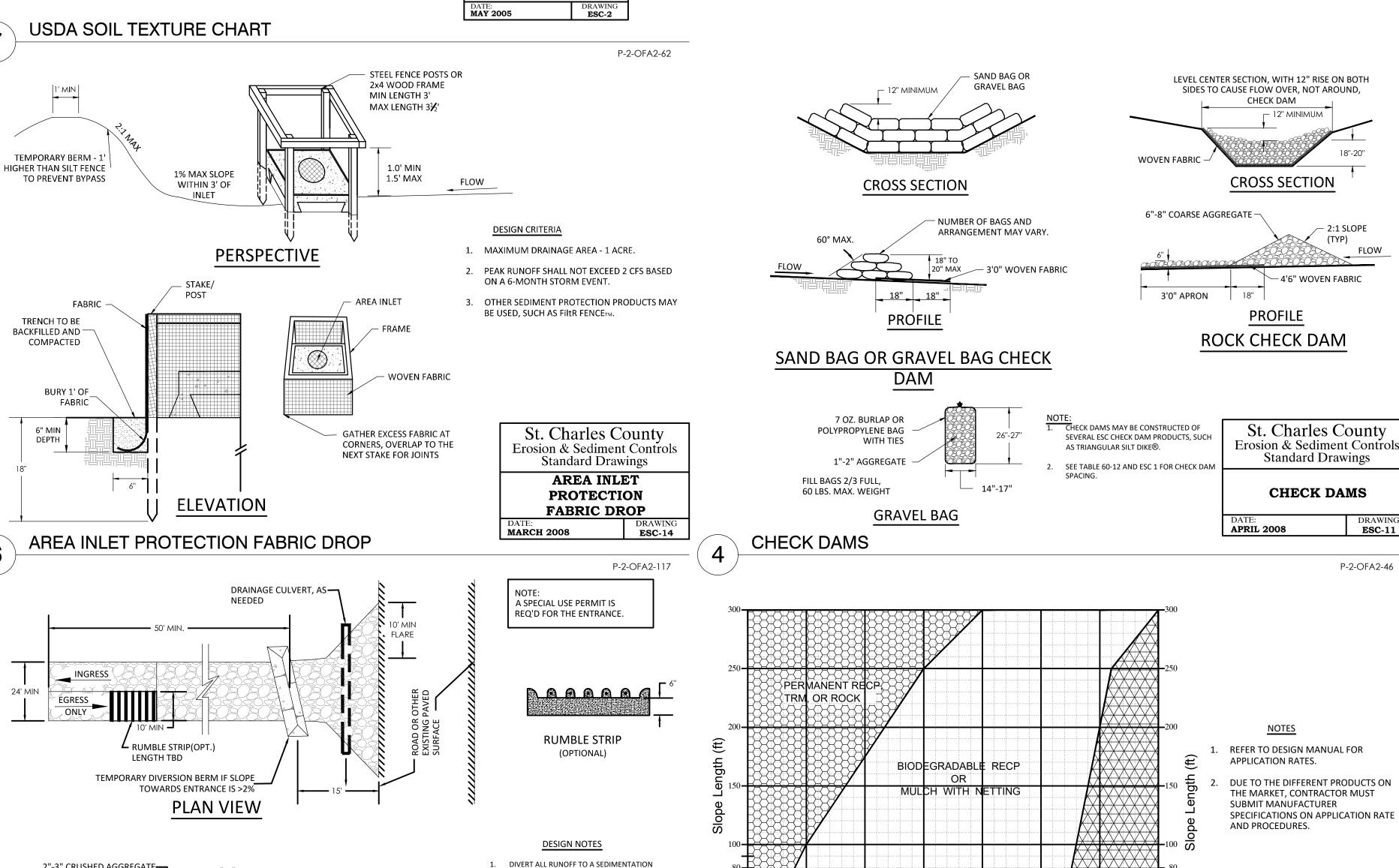
PROJECT TITLE

PROJECT ADDRESS:

O'FALLON, MO 63366

1101 OLD E TERRA LANE

ALL PROJECT SITES SHALL COMPLY WITH REQUIREMENTS OF THE "CLEAN WATER ACT" ESTABLISHED BY THE US ENVIRONMENTAL PROTECTION AGENCY. THE EPA'S NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM REQUIRES PERMITS TO BE ISSUED BY REGULATORY AGENCIES WHEN



WOVEN FABRIC (MIRAFI 100X OR 2X2 CONSTRUCTION **EQUAL) OVER WIRE** GRADE LUMBER, 4' 5' MAX W/O REINFORCED BACKING LONG MESH  $(12\frac{1}{2})$  GA, 6X6 - FASTEN WITH 3-50 LB, DIAGONAL CABLE TIES WITHIN TOP 8" OF INSTALL ALONG CONTOUR FABRIC OR 4-1" LONG STAPLES NO SLOPE 6" MIN -**ELEVATION** 1. SILT FENCE SHALL BE 30 INCHES HIGH. 2. SILT FENCE SHALL NOT BE USED FOR < 1% SLOPE IN FRONT OF BARRIER, 5' MIN ————</p> CONCENTRATED FLOWS. 3. GEOSYNTHETIC REINFORCED SILT FENCE BACKING MAY BE USED IN LIEU OF WIRE MESH. TRENCH TO BE BACKFILLED AND COMPACTED 6" MIN DEPTH WRAP GEOTEXTILE AROUND STAKES BEFORE DRIVING BURY 1' OF FABRIC ALONG BOTTOM AND EDGE OF TRENCH St. Charles County Erosion & Sediment Control Standard Drawings SILT FENCE NOTE: IF FABRIC IS INSTALLED BY EQUIPMENT DESIGNED TO SLICE INTO INSTALLATION JOINING SECTIONS OF THE GROUND, THE TRENCH IS NOT REQ'D. SHEET FLOW (ONLY) SILT FENCE

FENCE INSTALLATION 4' (MINIMUM) — SIGN TO BE CONSTRUCTED OF A RIGID MATERIAL, SUCH AS PLYWOOD OR OUTDOOR SIGN BOARD. SIGN MUST BE FROM DAMAGE DUE TO WEATHER (WIND, SUN, MOISTURE THE SWPPP INFORMATION SIGN MUST BE LOCATED IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL 2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES 3. CONTRACTOR SHALL POST OTHER STORMWATER

NEAR THE CONSTRUCTION EXIT OF THE SITE. SUCH THAT PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A

THROUGHOUT CONSTRUCTION AND UNTIL THE PERMIT

AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.

4. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY. 5. CONTRACTOR IS RESPONSIBLE FOR ENSURING

PERMIT SIGN DETAIL

STABILITY OF THE SWPPP INFORMATION SIGN.

P-2-OFA2-97

ESC-5

Antifreeze/coolant

P-2-OFA2-94

PROJECT SITES DISTURB 1 ACRE OR MORE.

Clear green/yellow liquid

NOT RELEASED FOR CONSTRUCTION