INDUSTRIAL STORMWATER POLLUTION PREVENTION PLAN

THE FAMILY RANCH RECLAMATION PROJECT
INTERSTATE 470 AND NW PRYOR ROAD
LEE'S SUMMIT, JACKSON COUNTY, MISSOURI

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STORMWATER POLLUTION PREVENTION PLAN

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NOTE: All references to Environmental Protection Agency (EPA) Sections shall be in reference to the EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP), September 29, 2008 (Expired September 29, 2013, however the new permit has not been issued as of the development of this SWPPP).

ACRONYM AND ABBREVIATION LIST

AST – aboveground storage tank

BMP – best management practice

CERCLA – *Comprehensive Environmental Response, Compensation, and Liability Act*

CFR – *Code of Federal Regulations*

CWA – *Clean Water Act*

EPA – *Environmental Protection Agency*

EPCRA – *Emergency Planning and Community Right-to-Know Act*

FRRP – *The Family Ranch Reclamation Project*

MDNR – *Missouri Department of Natural Resources*

MSDS – *Material Safety Data Sheets*

MSGP – *EPA Multi-Sector General Permit*

MSOP – *Missouri State Operating Permit*

NPDES – *National Pollutant Discharge Elimination System*

POTW – *Publically Owned Treatment Works*

RCRA – *Resource Conservation and Recovery Act*

RQ – reportable quantity

SIC – standard industrial classification

SPCC – *Spill Prevention, Control, and Countermeasure*

SRAP – spill response action plan

SWPPP – *Storm Water Pollution Prevention Plan*

I. PURPOSE AND BACKGROUND

A. GENERAL PERMIT OVERVIEW

The General Permit's purpose is to fulfill requirements of the 1987 Amendments to the Clean Water Act (CWA) of 1972 which added regulations for stormwater discharges to waters of the United States. Section 402 of the CWA established the National Pollutant Discharge Elimination System (NPDES) which gave greater focus to industrial process waters and the potential for stormwater pollution.

The Environmental Protection Agency (EPA) has the regulative authority over the CWA and NPDES, however, in many cases the EPA has delegated partial authority of the NPDES requirements to individual states. For the State of Missouri, the NPDES requirements reside within the Missouri State Operating Permit (MSOP). The purpose of the MSOP is to regulate discharges of stormwater runoff from certain types of industrial activities subject to the NPDES requirements in order to:

- Protect the waters of the State;
- Improve surface water quality by reducing the pollutants contained in stormwater discharges; and
- Implement the Federal Water Pollution Control statutes and regulations.

The MSOP regulations require facilities with a stormwater discharge associated with industrial activity as defined by Code of Federal Regulation (CFR), 40 CFR 122.26(b)(14), to be permitted to regulate discharges of stormwater runoff from the facilities. The Family Ranch Reclamation Project (FRRP) has industrial activities defined as Category (iii) with Standard Industrial Classification (SIC) Code 1422 (Crushed and Broken Limestone). This industrial code is defined as an establishment primarily engaged in mining or quarrying crushed and broken limestone, including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa.

To obtain authorization to discharge stormwater under the MSOP, an application must be completed and submitted to MDNR. Coverage under the MSOP begins when MDNR authorizes the application by signing, dating, and sending a copy to the permittee. A copy of the current MSOP for FRRP is provided in **Appendix A**.

B. STORMWATER POLLUTION PREVENTION PLAN OVERVIEW

The NPDES requires the permittee to develop and implement a Stormwater Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to provide the design, implementation, management, and maintenance of Best Management Practices (BMPs) in order to reduce the amount of pollutants in stormwater discharges associated with the industrial activities at the facility. A SWPPP evaluates BMPs from each of three major classes: 1.) managerial / administrative BMPs, 2.) structural control BMPs, and 3.) non-structural control BMPs.

A SWPPP has to be developed to address the specific industrial activities and site characteristics occurring at the permitted location described in the MSOP. In addition,

the permittee shall fully implement and periodically review, and update as necessary, the provisions of their SWPPP.

The Table 1 below has been prepared to summarize the compliance requirements of the MSGP. Note: this table does not provide an all-inclusive list of regulatory compliance items; therefore, the permittee should read and refer to their MSOP, the MSGP, as well as the "Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators" (Document No. EPA 833-B-09-002) published by the EPA in February 2009.

Table 1

EPA Multi-Sector General Permit Section Description with Requirement/Task	
Chapter 2 – Stormwater Pollution Prevention Plan	
Part	
4.1	Routine Facility Inspections (Monthly) - Conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to stormwater, and of all stormwater control measures used
4.2	Visual Assessment of Stormwater Discharges (Quarterly) - Once each quarter for the entire permit term, you must collect a stormwater sample from each outfall (except as noted in Part 4.2.3) and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge.
4.3	Comprehensive Site Inspections (Annual) – The comprehensive site inspections must cover all areas of the facility affected by the requirements in this permit, including the areas identified in the SWPPP as potential pollutant sources (see Part 5.1.3) where industrial materials or activities are exposed to stormwater, any areas where control measures are used to comply with any effluent limits, and areas where spills and leaks have occurred in the past 3 years.
5.1.1	Stormwater Pollution Prevention Team – Specific individuals within the facility organization identified as members of the storm water pollution prevention team that are responsible for developing the SWPPP, assisting in its implementation, maintenance, and revisions.
5.1.2	Site Description and Map – Description of the nature of the industrial activities at the site and development of a site map to locate drainage areas, BMP locations, surface water bodies, significant material exposures, fueling stations, maintenance areas, storage tanks, storages areas, and other relevant locations.
5.1.3	Summary of Potential Pollutant Sources – Documentation of areas at the facility where industrial materials or activities are exposed to stormwater and from which allowable non-stormwater discharges are released. Include a list of the pollutants associated with the activities as well as
5.1.4	Description of Control Measures – Documentation of the location and type of control measures which are installed and implemented at the site.
5.1.5	Schedules and Procedures – Includes good housekeeping, maintenance, spill prevention and response procedures, and employee training.
5.1.6	Documentation to Support Eligibility Considerations Under Other Federal Laws – For instance, documentation supporting the determination of Endangered Species, Historic Properties, and NEPA Review.
5.1.7	Signature Requirements – See also Appendix B, Subsection 11.
Note:	The MSOP issued for the facility may require discharge monitoring at outfall locations. See MSOP for any additional requirements.

II. GENERAL FACILITY INFORMATION

Facility Name & Location:

The Family Ranch Reclamation Project
Interstate 470 and NW Pryor Road
Lee's Summit, Jackson County, Missouri
Section 35, Township 48N, Range 32W
(See **Appendix B**)

Facility Permits:

Missouri State Operating Permit No. MO-G491279
(See **Appendix A**)

Owner:

Mr. Flip Short
The Family Ranch, LLC
801 NW Commerce Drive
Lee's Summit, MO 64086
(816) 802-6800 Phone

Continuing Authority:

The Family Ranch, LLC
801 NW Commerce Drive
Lee's Summit, MO 64086

Facility Contact:

Kevin Thomas
Thomas Crushing LLC
(816) 540-9169

Consultant's Name & Address:

George Butler Associates, Inc.
9801 Renner Boulevard
Lenexa, Kansas 66219-9745
(913) 492-0400 - Main
(913) 577-8346 - Fax

Emergency Contacts:

Emergency 911
Lee's Summit Police Department 816-969-1700
Lee's Summit Fire Department 816-969-7360
EPA National Response Center 800-424-8802 (24-hours)
Missouri Emergency Response Commission 573-634-2436
MDNR Department of Environmental Quality 800-361-4827

A. FACILITY DESCRIPTION

The FRRP is located northwest of the intersection of Interstate 470 and NW Pryor Road in Lee's Summit, MO (See **Appendix B**). The purpose of the project is to reclaim limestone and other earthen material for various uses. The entire project area encompasses approximately 70 acres. Phase 1 of the reclamation process will utilize 15 acres of the project area.

This SWPPP shall be effective only for those areas shown as being included in the Phase 1 permitted area of the FRRP (See **Appendix B**).

FRRP Phase 1 encompasses 15 acres of watershed area with 1 outfall. This outfall contributes stormwater runoff within the following receiving water area:

Outfall 1 – Unnamed tributary to Little Blue River

III. SWPPP REQUIREMENTS

A. STORMWATER POLLUTION PREVENTION TEAM

According to EPA Section 5.1.1, staff members must be identified (by name or title) which comprise the facility's stormwater pollution prevention team as well as their individual responsibilities. Your stormwater pollution prevention team is responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the stormwater pollution prevention team must have access to either an electronic or paper copy of applicable portions of this permit and your SWPPP. The Stormwater Pollution Prevention Team and assigned responsibilities for this SWPPP is provided in **Appendix C.**

B. SITE MAP

According to EPA Section 5.1.2, the Site Map (see **Appendix B**) for the facility must include the following, if applicable:

- The size of the property in acres
- The location and extent of significant structures and impervious surfaces
- Directions of stormwater flow (use arrows)
- Locations of all existing structural control measures
- Locations of all receiving waters in the immediate vicinity of your facility
- Locations of all stormwater conveyances including ditches, pipes, and swales
- Locations of potential pollutant sources identified under Part 5.1.3.2
- Locations where significant spills or leaks identified under Part 5.1.3.3 have occurred
- Locations of all stormwater monitoring points;
- Locations of stormwater inlets and outfalls, with a unique identification code for

each outfall and an approximate outline of the areas draining to each outfall;
- Municipal separate storm sewer systems, where your stormwater discharges to them
- Locations and descriptions of all non-stormwater discharges identified under Part 2.1.2.10
- Locations of the following activities where such activities are exposed to precipitation:
    - Fueling stations
    - Vehicle and equipment maintenance and/or cleaning areas
    - Loading/unloading areas
    - Locations used for the treatment, storage, or disposal of wastes
    - Liquid storage tanks
    - Processing and storage areas
    - Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility
    - Transfer areas for substances in bulk
    - Machinery
    - Locations and sources of run-on to your site from adjacent property that contains significant quantities of pollutants

C. SUMMARY OF POTENTIAL POLLUTANT SOURCES

Areas of the facility where industrial materials or activities are exposed to stormwater and from which allowable non-stormwater discharges are released must be identified and documented. *Industrial materials or activities* include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. *Material handling activities* include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

- Activities in the area
- Pollutants
- Spills and leaks
- Non-stormwater discharges
- Salt Storage
- Sampling data

In compliance with EPA Section 5.1.3, the summary of potential pollutant sources both inside and outside of the facility buildings was conducted on February 3, 2014; however, no pollutant sources were at the facility at the time of the investigation. In addition, no areas of the project site is currently storing bulk materials (>5 gallons). If bulk storage should be required on the site in the future, this section shall be updated accordingly.

No signs of significant material exposure, leaks or spills were observed on the project site. If a reportable quantity (RQ) discharge occurs, the release will be reported and documented in accordance with EPA Section 2.1.2.4. and **Appendix E**.

The on-site inventory evaluation revealed no potential stormwater pollutant sources that are stored at the FRRP facility.

- Existing Best Management Practices (BMPs) at the above locations include:
  - Rock ditch check upgradient of Outfall 1.
  - Perimeter Mulch berms.
- Proposed BMP options include:
  - Mine floor holding basin with downgradient rock ditch checks.
  - Spill Response Action Plan signage will be posted where bulk materials are stored and used.

Detailed information on the identified potential pollutant sources, their locations, existing management practices and proposed BMP options to control these sources is summarized in **Appendix E**.

D. DESCRIPTION OF CONTROL MEASURES

You must document the location and type of control measures you have installed and implemented at your site to achieve the non-numeric effluent limits in EPA Section 2.1.2, and where applicable in EPA Section 8, the effluent limitations guidelines-based limits in EPA Section 2.1.3, Stormwater Discharges Associated With Industrial Activity 28 General Permit the water quality-based effluent limits in EPA Section 2.2, and any agreed-upon endangered species or NEPA-related requirements in EPA Sections 2.3 and 2.4, and describe how you addressed the control measure selection and design considerations in EPA Section 2.1.1. This documentation must describe how the control measures at your site address both the pollutant sources identified in EPA Section 5.1.3, and any stormwater run-on that commingles with any discharges covered under this permit.

E. SCHEDULES AND PROCEDURES

Control Measures encompass the stormwater management controls for the facility that address the following minimum components:

1. Good Housekeeping

Good housekeeping requires cleaning all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers (EPA Section 2.1.2.2).

The following are procedures that the facility will continue to perform as an effective good housekeeping program:

Operations

- Maintain operation and maintenance of machinery and processes.
- Schedule routine cleanup operations.
- Maintain well-organized work areas.
- Utilize dry sweeping compounds during shop cleanups instead of water and chemical cleansers.
- Recycle or properly dispose of all common maintenance fluids (Oil, anti-freeze, brake fluid, transmission fluid, hydraulic fluid, etc.)
- The SWPPP team will have regular inspections to ensure proper use, storage, and disposal of materials.
- Fertilizers and pesticides will be applied only in the minimum amounts recommended by the manufacturer during landscape activities.

Material Storage

- Maintain effective material storage practices.
- Maintain up-to-date material inventory.
- An effort will be made to store only enough product/materials to do facility operations.
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label clearly visible.
- All paints, lubricant, solvent, etc. containers will be tightly sealed and stored when not required for use.

Waste Disposal

- Collect and recycle used oil and antifreeze.
- Maintain regular trash pickup and use covered dumpsters.

- Whenever possible, all of a product will be used up before disposing of the container.
- Manufacturer's recommendations for proper use and disposal will be followed.
- Excess materials will not be dumped into the storm sewer system but will be properly disposed of according to manufacturer's instructions and State regulations.

2. Maintenance

All industrial equipment and systems must be regularly inspected, maintained, and repaired to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharged to receiving waters. Control measures that are used to achieve the effluent limits required by this permit in effective operating condition must also be maintained. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If you find that your control measures need to be replaced or repaired, you must make the necessary repairs or modifications as expeditiously as practicable (EPA Section 2.1.2.3).

3. Spill Prevention and Response Procedures

Spill prevention and response procedures requires the minimization of the potential for leaks, spills and other releases that may be exposed to stormwater and develop plans for effective response to such spills if or when they occur (See EPA Section 2.1.2.4 and **Appendix D**). At a minimum, you must implement:

- Procedures for plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur.
- Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling.
- Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your stormwater pollution prevention team (see EPA Section 5.1.1); and
- Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either

40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC, metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge.

4. Employee Training

Initial and subsequent annual employee training shall be performed to inform existing and new personnel responsible for implementing activities identified in the SWPPP or otherwise responsible for stormwater management, at all levels of responsibility, of the components and goals of the SWPPP according to EPA Section 2.1.2.9.

The employee training program will cover such topics as spill prevention and response, good housekeeping, and material management practices. The goals of the training program are to ensure that personnel understand the components and goals of the SWPPP and to create overall sensitivity to stormwater pollution prevention concerns. All pertinent new employees will be informed of potential environmental concerns with respect to chemical storage and spill measures and will have a refresher once a year to update them on changes to standard operating procedures. Log sheets of training attendees and dates are kept in **Appendix G**.

Beyond the regular new employee training, Pollution Prevention Team meetings will be held yearly to discuss:

Staff will be instructed on the following:

- Good housekeeping;
- Maintenance;
- Spill prevention and response procedures; and
- Materials handling and storage.

Good Housekeeping will include the following:

- Review and demonstrate basic cleanup procedures (spill kits);
- Clearly indicate proper disposal locations; and
- Be sure employees know where routine clean-up equipment is located.

Maintenance will include the following:

- Discussion of frequently overlooked maintenance areas;

- Testing of equipment for proper function; and
- Schedules.

Spill Prevention and Response Procedures will include the following:

- Clearly identify potential spill areas and drainage routes;
- Familiarize employees with potential spill events;
- Warning signs will be posted in spill areas with emergency contacts and telephone numbers;
- Train on spill clean-up procedures; and
- Discuss the locations of spill clean-up equipment.

Other Control Measure components which incorporate stormwater management controls for the facility:

5. Sediment and Erosion Control

During pertinent major construction activities which disturb more than one (1) acre of land, the Contractor shall obtain their own MSOP (MORA00000) for Construction Stormwater, prepare a project specific SWPPP, and provide adequate sediment and erosion control for construction related activities.

The following sediment and erosion control measures are established to assist the facility personnel in minimizing erosion in areas which due to topography, non-construction related operating activities, or other factors have a high potential for significant soil erosion according to EPA Section 2.1.2.5. At a minimum, the measures shall consider structural, vegetative, and/or stabilization measures to limit erosion. Include measures to minimize erosion related to the high volume of vehicle traffic and heavy equipment operating at the facility on a daily basis such as trucks, forklifts, cranes, etc.

Sediment consisting of soil particles is a major nonpoint pollutant source from areas where land disturbance activities have occurred. Stabilization practices are very effective at protecting exposed soil surfaces, thus reducing erosion and sediment-laden runoff from leaving the site. The use of structural practices is also effective at reducing erosive stormwater runoff during rainfall events, protecting exposed surfaces and preventing sediment from entering into the stormwater system.

The following are stabilization and structural practices, which will be utilized to achieve the control of erosion and sediment.

Stabilization Practices:

Permanent Seeding Stabilization – All disturbed areas shall be permanently

seeded with a grass mixture with the following seeding dates:

Species	Seeding Date Optimum and Acceptable											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Turf Fescue												
Tall Fescue												
Kentucky Bluegrass												
Perennial Ryegrass												
Buffalograss[1]												
Wheat/Rye[2]												
Oats[2,3]												

Optimum Seeding Times
Acceptable Seeding Times

[1] Can also be sprigged.

[2] Check with your local Noxious Weed Department before planting.

[3] Nurse crop only.

Seedbed Preparation – For broadcast seeding or drilling, loosen soil to depth of 3 inches. For no till drilling, loosen soil if it is compacted. Loosen compacted, hard or crusted soil surfaces with a disk, ripper, chisel, harrow or other tillage equipment. Avoid preparing the seedbed under excessively wet conditions. For establishment and long-term growth, apply a complete fertilizer at rates recommended by soil tests taken of topsoil after the borrowed topsoil has been graded on the project site.

Installation – For the best results use certified seed. Apply seed uniformly using a cyclone seeder, drop-type spreader, drill, cultipacker seeder or hydroseeder. When using a drill seeder, plant rye or other grains about 1 inch deep and plant grasses no more than ½ inch. A vegetative straw mulch cover shall be applied over the seed mixture to help germinate and establish plant cover, control weeds, and protect seed mixture against temperature extremes. Follow straw mulch preparation and application procedures described in Temporary Mulch Stabilization below.

Temporary Mulch Stabilization – During non-growing periods, a straw mulch cover shall be applied in unseeded areas to protect against erosion until temporary or permanent vegetation is established.

Site Preparation – Divert runoff water from areas above the site that will be mulched. Remove stumps, roots and other debris from the construction area. Grade areas as needed to permit the use of equipment for seeding, mulching and maintenance. Shape area so that it is relatively smooth.

Application – Spread straw mulch uniformly over the area with a power blower, hydroseeder, or by hand. No more than 25% of the ground surface should be visible after spreading. Apply straw mulch at a rate of 1.5 tons per acre as a seed cover or 2.5 tons per acre as a stand-alone cover. The straw should be dry, unchopped, unweathered; free of weed seeds and rot. In areas of steep slopes or high winds, or

in critical areas such as swales, mulching may need to be secured to the ground with a binder, netting, or tacking.

Structural Practices:

Holding Basin – A holding basin on the mine floor has been designed for the project site to prevent and reduce sediment laden waters from entering downstream areas. The holding basin shall be constructed and maintained to collect stormwater from the active mining areas. Water from the detention area shall be used in the mining processes and as dust suppression. Off-site discharges associated with the holding basin is not anticipated at this time; however, if off-site discharges do occur, the MSOP and SWPPP shall be amended immediately

Mulch Berms – Mulch filter berms are contoured runoff and erosion filtration methods usually used for steeper slopes with high erosive potential. The berm allows runoff water to penetrate it and continue to flow while filtering sediment and pollutants from the water. It also slows the flow down, allowing soil particles to settle out. Berms work well in many of the same areas as blankets but are the preferred method if the slope exceeds a 4:1 gradient. A mulch filter berm is a dike of mulch or a mulch/compost product placed perpendicular to sheet flow runoff to control erosion in disturbed areas and retain sediment. It can be used in place of a traditional sediment and erosion control tool such as a silt fence. The mulch filter berm, which is trapezoidal in cross section, provides a three-dimensional filter that retains sediment and other pollutants while allowing the cleaned water to flow through the berm.

Silt Fence - Silt fencing or equivalent (e.g. straw wattles) will be installed to maintain sediment onsite during land disturbance activities.

- Location - Fence should be built on a nearly level grade and at least 10 feet from the toe of the slope to provide a broad willow sediment pool. Install on the contour, where fence can intercept runoff as a sheet flow; not located crossing channels, waterways or other concentrated flow paths; not attached to existing trees.

- Spacing of Support Posts - 10 feet maximum for fence supported by wire; 6 feet maximum for high strength fabric without supportive wire backing. Support posts should be driven into the ground a minimum of 10 inches deep.

- Trench - Bottom 1 foot of fence must be buried minimum of 6 inches deep.

- Maintenance – Silt fencing will be inspected weekly for proper anchorage and leakage underneath. Should the fabric of the sediment fence collapse, tear, decompose, or become ineffective, replace it promptly. Silt fencing will be inspected after each storm event and repaired immediately, if needed. Built-up sediment will be removed from silt barriers when it has reached one-half of the height of the barrier. Sediment removal will include removal and disposal in a location where it will not erode into construction areas or watercourses.

Rock Ditch Check - Rock check dams shall be installed at the locations shown on the attached engineering plans and details to protect swales and ditches from

excessive erosion and to allow for temporary ponding of sediment laden stormwater.

- Location – The maximum spacing between the dams should be such that the toe of the upstream dam is at the same elevation as the top of the downstream dam.

- The maximum height of the dam shall be 3 feet.

- Removal – Unless permanent, check dams must be removed when their useful life has been completed. In the case of grass-lined ditches, check dams should be removed when the grass has matured sufficiently to protect the ditch or swale.

Stormwater Inlet Protection - During land disturbance activities, storm inlets near the disturbed areas will be protected with gravel filter bags, gutterbuddies, straw wattles or other approved materials and products to prevent sediment-laden runoff from entering the storm system.

- Maintenance – Inspect inlet protection controls during and after each storm event. Remove accumulated sediment as necessary. Sediment removal will include removal and disposal in a location where it will not erode into construction areas or watercourses.

Temporary Erosion Control Blankets - Temporary erosion control blankets will be installed on disturbed or exposed soil surfaces. The erosion control blanket will be installed to provide erosion control and promote vegetation establishment.

- Slope surface will be free of rocks, clods, sticks and grass.

- Mats should be installed vertically down slope. Mats will extend at least 5' beyond the top of the bank.

- Lay mats loosely and stake or staple for good contact with the soil. Mats will overlap by a minimum of 6 inches. Do not stretch blankets.

- Staking and stapling layout per manufacturer's specifications.

- Seeding and fertilizing will precede the installation of any erosion control blanket.

- Maintenance – Inspect temporary erosion control blanket and turf reinforcement mat after each storm event. Repair blankets and mats if necessary.

General Sediment and Erosion Control Practices

Below are general sediment and erosion control practices to be followed during land disturbance activities.

- Utilize erosion and sediments control measures such as, but not limited to, temporary and permanent seeding, mulching, hydromulch, sodding, tackifiers, filter berms, silt fence, ditch checks, temporary sediment traps, temporary sediment basins, storm drain inlet protection, geotextiles, or other means to

prevent sediment from reaching the public right-of-way, streams, or adjacent properties.

- Work within watercourses and drainage ways will be completed as quickly as possible once the work has been initiated, and the disturbed area revegetated or protected from erosion as soon as possible. Work within watercourses may not commence until all equipment and material necessary to complete the work have been delivered to the site.

- Disturbed areas within 50 feet of a defined watercourse must be graded, seeded, and mulched within 5 working days of the initial disturbance.

- If construction ceases in an area for more than 14 days, stabilization measures must be initiated as soon as practicable.

- The maximum time period for disturbed areas to be without vegetative cover will be minimized to the extent practical and in no case will exceed 14 days.

- Erosion and sediment control measures will be removed when all soil disturbing activities at the site have been completed and a uniform permanent vegetative cover with a density of 70 percent for the unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been employed.

6. Management of Runoff

The management of runoff shall describe and locate on a site map existing and/or proposed stormwater management practices (practices other than those which control the generation or source(s) of pollutants) to divert, infiltrate, reuse or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site according to EPA Section 2.1.2.6. The existing stormwater management practices to divert, infiltrate, re-use or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site (see **Appendix B**) include:

Existing runoff management practices currently utilized at the facility include:

- Rock ditch check
- Mulch Berms

Optional management practices which could be utilized to improve future stormwater runoff include:

- Construct stormwater holding basin on mine floor when mine ceiling is removed

- Reuse of collected stormwater for dust suppression

IV. INSPECTIONS

A. ROUTINE FACILITY INSPECTIONS (MONTHLY)

In accordance with MSOP Section C.7.d and EPA Section 4.1, conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to stormwater, and of all stormwater control measures used to comply with the effluent limits contained in this permit. Routine facility inspections must be conducted at least quarterly (i.e., once each calendar quarter) although in many instances, more frequent inspection (e.g., monthly) may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to stormwater. Perform these inspections during periods when the facility is in operation. You must specify the relevant inspection schedules in your SWPPP document as required in EPA Section 5.1.5. These routine inspections must be performed by qualified personnel (for definition see Appendix A) with at least one member of your stormwater pollution prevention team participating. At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is occurring.

Routine facility inspections will be performed to identify ineffective or deficient BMPs, good housekeeping procedures, preventative maintenance (i.e. Section IV (B)), and spill prevention and response procedures. The purpose of the inspection is to ensure that all of the elements of the plan are in place and working properly to prevent pollution of stormwater runoff from the facility. Potential pollutant source locations are identified in Section III.C of this SWPPP.

Personnel will track results of inspections to ensure follow-up, make necessary changes, and maintain records of all inspections on-site or in a readily accessible location for at least three years after the date of the inspection. The routine facility inspections will be reported using **Appendix K**.

B. VISUAL ASSESSMENT OF STORMWATER DISCHARGES (QUARTERLY)

Once each quarter for the entire permit term, collect a stormwater sample from each outfall and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the stormwater discharge.

The visual assessment must be made:

- Of a sample in a clean, clear glass, or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a

storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and you must document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge from your site; and

- For storm events, on discharges that occur at least 72 hours (3 days) from the previous discharge. The 72-hour (3-day) storm interval does not apply if you document that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period.

You must visually inspect the sample for the following water quality characteristics:

- Color;
- Odor;
- Clarity;
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and
- Other obvious indicators of stormwater pollution.

See **Appendix I – Visual Assessment of Stormwater Discharges**

- Visual examination reports will be maintained on-site and be made available for MDNR & EPA inspection upon request.

- The stormwater outfalls are identified in the Site Map (See **Appendix B**).

C. COMPREHENSIVE SITE INSPECTIONS (ANNUAL)

According to EPA Section 4.3, Comprehensive Site Inspections must be conducted by qualified personnel with at least one member of the stormwater pollution prevention team participating in the comprehensive site inspections. The Comprehensive Site Inspections must cover all areas of the facility affected by the requirements in this permit, including the areas identified in the SWPPP as potential pollutant sources where industrial materials or activities are exposed to stormwater, any areas where control measures are used to comply with any effluent limits, and areas where spills and leaks have occurred in the past 3 years. The inspections must also include a review of monitoring data collected in accordance with EPA Section 6.2. Inspectors must consider the results of the past year's visual and analytical monitoring when planning and conducting inspections. Inspectors must examine the following:

- Industrial materials, residue, or trash that may have or could come into contact with stormwater;

- Leaks or spills from industrial equipment, drums, tanks, and other containers;

- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit the site;

- Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and

- Control measures needing replacement, maintenance, or repair.

- Stormwater control measures required by this permit must be observed to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby downstream locations must be inspected.

The annual report form can be found in **Appendix H** and the permittee shall resolve any incident of non-compliance determined from the comprehensive site evaluation within 90 days.

V. OTHER FACILITY COMPLIANCE MATTERS

A. RECORD KEEPING AND INTERNAL REPORTING

A log to document a description of incidents (such as spills, or other discharges, actions taken and signature of inspector), employee training, and other information which may impact the quality and quantity of stormwater discharges needs to be developed and maintained according the EPA Section 7.5. See Section III.E. for reporting spills and employee training, Section IV.A. for conducting monthly routine facility inspections, Section IV.B. for conducting the Quarterly Visual Assessment of Stormwater Discharges, Section IV.C for conducting the Annual Comprehensive Site Inspection, Section V.B. for reporting non-stormwater discharges, and Section VI.A for SWPPP Implementation and Updates.

B. NON-STORMWATER DISCHARGES

The SWPPP must identify all unauthorized, non-stormwater (dry weather) discharges directed to surface water or groundwater according to EPA Section 2.1.2.10. These discharges include any process water discharges not directed to a Publically Owned Treatment Works (POTW) sanitary sewer and any other discharges not described under Part 1.2 of the MSOP as being specifically authorized by the permit.

There are no unauthorized non-stormwater discharges identified at this time. If future unauthorized non-stormwater discharges should occur, MDNR will be notified to inquire about how to address the discharge. Also, the discharge details will be documented in an internal report and logged on **Appendix F**.

The following are the non-stormwater discharges authorized under this permit, provided the non-stormwater component of your discharge is in compliance with Part 2.1.2.10:

- Discharges from fire-fighting activities;

- Fire hydrant flushings;

- Potable water, including water line flushings;

- Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- Irrigation drainage;
- Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- Routine external building washdown that does not use detergents;
- Uncontaminated ground water or spring water;
- Foundation or footing drains where flows are not contaminated with process materials; and
- Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility.

Prohibited non-stormwater discharges, which cannot be covered under EPA's General Permit include:

- Detergent water from vehicle washing
- Water from shop cleaning activities
- Hazardous substances or oil from an on-site spill or improper handling and disposal practices
- Process, domestic, or cooling waste-waters subject to an existing effluent guideline or required to obtain an NPDES permit for the wastewater discharge
- Discharges containing boiler blowdown
- Cooling tower overflow and blowdown
- Ammonia refrigeration purging

See the MSOP (**Appendix A**) and EPA Section 8.U.2.1 for further information regarding non-stormwater discharge coverage.

C. DISCHARGE MONITORING (QUARTERLY)

The facility is required to conduct stormwater and non-stormwater monitoring as part of their MSOP. Discharge monitoring reports shall be kept with this SWPPP in **Appendix J**.

Sampling and analysis of discharges shall occur quarterly for the following parameters: flow, total suspended solids, settleable solids, pH, and oil & grease. Stormwater samples shall be collected within the first 60 minutes of discharge occurring as a result of precipitation events of 0.1 inches or greater. Precipitation events include rainfall as well as run-off from the melting of frozen precipitation. For a more detailed and complete listing of sampling requirements see the MSOP (**Appendix A**).

The local, state, or federal agencies may change requirements of sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or other such evidence of on-site or off-site contamination from activities at the site. If such an action is needed the local, state, or federal agency will specify in writing any sampling requirements.

VI. SWPPP IMPLEMENTATION AND SIGNATURE REQUIREMENTS

A. SWPPP IMPLEMENTATION AND UPDATES

The SWPPP shall include a statement indicating the date the plan was completed and implemented and the date(s) of subsequent modifications to the SWPPP according to EPA Section 3.1 and 5.2. The SWPPP will be re-evaluated and modified in a timely manner, but in no case more than 90 days after:

- A change in design, construction, operation or maintenance that has a significant effect on the potential for the discharge of pollutants to the waters of the State; or
- the permittee's inspections (including the regular comprehensive site compliance evaluation required herein) indicate deficiencies in the SWPPP or any BMP; or
- A visual inspection of contributing areas or a visual inspection of the stormwater discharges or monitoring of the stormwater discharges indicate the plan appears to be ineffective in eliminating or significantly minimizing pollutants from sources identified in the plan.

This SWPPP was completed and implemented by FRRP on _____, 2014.

B. SIGNATURE REQUIREMENTS

All reports, certifications, or information either submitted to the permitted authority or required to be retained onsite shall be signed according to the requirements of EPA Appendix B, Subsection 11.

According to the Duty of Compliance section of the MSOP, only activities described in this permit are authorized. Compliance with the MSOP may not be considered a shield from compliance with any other local ordinance, State Regulation, or State Law.

C. SIGNATURES

I certify under penalty of law that this SWPPP 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, tor 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:_____

Printed Name:_____

Title:_____

Date:_____

APPENDICES

Sources:

- Missouri State Operating Permit MO-G491279
- EPA Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, September 29,2008 (Expired September 29, 2013, however the new permit has not been issued as of the development of this SWPPP)
- EPA document Storm Water Management for Industrial Activities (EPA 833-B-09-002, February 2009)

APPENDIX A

Missouri State Operating Permit

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director
www.dnr.mo.gov

May 30, 2014

The Family Ranch
801 NW Commerce Drive
Lee's Summit, MO 64086

Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing a General State Operating Permit for The Family Ranch Reclamation Project.

Please review the requirements of your permit. Monitoring reports that may be required by this permit must be submitted on a periodic basis. Copies of the necessary report forms, if required, are enclosed and should be mailed to your regional office. Please contact that office for additional forms.

This General Permit is both your federal discharge permit and your new state operating permit and replaces all previous state operating permits and letters of approval for the discharges described within. In all future correspondence regarding this permit, please refer to your general permit number as shown on page one of your permit.

If you were adversely affected by this decision, you may be entitled to an appeal before the administrative hearing commission pursuant to 10 CSR 20-1.020 and Sections 644.051.6 and 621.250, RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission. Contact information for the AHC is as follows: Administrative Hearing Commission, Truman State Office Building, Room 640, 301 W. High Street, P.O. Box 1557, Jefferson City, MO 65102, Phone: 573-751-2422, Fax: 573-751-5018.
Website: www.oa.mo.gov/ahc.

Please be aware that this facility may also be subject to any applicable county or other local ordinances or restrictions. Please note the expiration date of this permit. If your permit is issued within six months of the expiration date of the attached permit, this letter also serves as a notification to resubmit an application for renewal or termination.

If you have any questions concerning this permit, please do not hesitate to contact the Kansas City Regional Office at 500 NE Colbern Road, Lee's Summit, MO 64086-4710, 816-251-0700.

Sincerely,
KANSAS CITY REGIONAL OFFICE

Andrea D. Collier, P.E.
Regional Director

AC/tw

Enclosures

Jackson County
The Family Ranch Reclamation Project
MO-G491279

Please note the Department is issuing The Family Ranch Reclamation Project the general permit #MO-G491279 instead of permit #MO-G491274 due to technical issues with the permitting database. The two permits are completely, word for word identical except for the permit number. While permit #MO-G491274 was on public notice and in draft status, the permitting database was updated for a typographical error for the Master General Permit series MO-G49 and the unintended consequence was that the database would not allow the issuance of permits that were in draft status. The limit set within the database had milligrams per liter listed as the units for Settable Solids instead of milliliters per liter; this typographical error in the database did not affect the actual permit.

Please note the Department is issuing The Family Ranch Reclamation Project the general permit #MO-G491279 instead of permit #MO-G491274 due to technical issues with the permitting database. The two permits are completely, word for word identical except for the permit number. While permit #MO-G491274 was on public notice and in draft status, the permitting database was updated for a typographical error for the Master General Permit series MO-G49 and the unintended consequence was that the database would not allow the issuance of permits that were in draft status. The limit set within the database had milligrams per liter listed as the units for Settable Solids instead of milliliters per liter; this typographical error in the database did not affect the actual permit.

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

General Operating Permit

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No:	MO-G491279
Owner:	The Family Ranch
Address:	801 NW Commerce Drive Lee's Summit, MO 64086
Continuing Authority:	The Family Ranch 801 NW Commerce Drive Lee's Summit, MO 64086
Facility Name:	The Family Ranch Reclamation Project
Facility Address:	2001 NW Quarry Park Road Lee's Summit, MO 64081
Legal Description:	NE 1/4, SW 1/4, NE 1/4, Sec. 35, T48N, R32W, Jackson County
UTM Coordinates:	377143.000/4310496.000
Receiving Stream:	Tributary to Little Blue River (U)
First Classified Stream - ID#:	L. Blue R. (P) 303(d) 422.00
USGS# and Sub Watershed#:	10300101 - 0203

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein.

FACILITY DESCRIPTION All Outfalls SIC #1422

All Outfalls - All Outfalls (as listed in permit application) - SIC #1422 and SIC Major Group Codes 295x and 32xx.

Storm water and other specified discharges from limestone and other rock quarries, concrete, glass, and asphalt industries.

This permit authorizes only wastewater, including storm water, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System, it does not apply to other regulated areas. This permit may be appealed in accordance with RSMo Section 644.051.6 and 621.250, 10 CSR 20-6.020, and 10 CSR 20-1.020.

May 30, 2014
Issue Date

Sara Parker Pauley
Sara Parker Pauley, Director
Department of Natural Resources

October 05, 2016
Expiration Date

Andrea D. Collier, P.E.
Regional Director, Kansas City Regional Office

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Non-storm Water Discharges (Note 1)						
Flow	gpd	*		*	once/quarter**	24 hour estimate
Total Suspended Solids	mg/L	70		70	once/quarter**	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab
Oil and Grease	mg/L	15		10	once/quarter**	grab
pH – units	SU	***		***	once/quarter**	grab
Storm Water Discharges						
Flow	mgd	*		*	once/quarter **	24 hour estimate
Storm Water Sampling Report** (see Sampling Requirements)		*		*	once/quarter **	grab

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE OCTOBER 28, 2014. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.

** See table below for quarterly sampling.

Sample discharge at least once for the months of:	Report is due:
January, February, March (1st Quarter)	April 28
April, May, June (2nd Quarter)	July 28
July, August, September (3rd Quarter)	October 28
October, November, December (4th Quarter)	January 28

*** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.

Note 1 – Non-storm water discharges shall include wastewater generated from process-related activities such as truck washing, and all dry-weather discharges from processing plants and mine pit dewatering.

APPLICABILITY

1. This permit authorizes the following discharges from limestone and other rock quarries, concrete plants, concrete products industries, asphalt plants, glass products industries, and clay products industries (excluding clay pits and mining which are covered under MO-G84 permit) with primary Standard Industrial Code (SIC):

1422	CRUSHED AND BROKEN LIMESTONE
295x	ASPHALT PAVING
32xx	STONE, CLAY, GLASS, AND CONCRETE PRODUCTS

   (a) Storm water runoff
   (b) Quarry pit or mine de-watering
   (c) Vehicle and equipment wash water without added detergents, acids, caustics, solvents, or other additives.

2. This general operating permit **does not authorize** storm or non storm water discharges:

   (a) Within 300 feet of reservoirs or lakes used for public drinking water supplies (class L1)[1] or major reservoirs (class L2)[1],
   (b) Within 1,000 feet of biocriteria reference locations[1] or streams, lakes, or reservoirs identified as critical habitat for endangered species,
   (c) Within 300 feet of wetlands or waters that have been identified as losing streams[1],
   (d) Mining operations other than limestone and other rock quarries,
   (e) Quarries producing any products other than crushed rock, dimension rock, lime, asphalt, or concrete,
   (f) Sand and gravel washing operations (covered by MO-G50),
   (g) Clay pits or clay mining operations (covered by MO-G84), or
   (h) Any discharges other than those described under item 1 of this section

   [1] Identified or described in 10 CSR 20, Chapter 7, Water Quality. These regulations are available at many libraries and online at www.sos.mo.gov, or may be purchased from the Department of Natural Resources by calling the Water Protection Program.

3. Vehicle and equipment washing with detergents, acids, caustics, solvents, or other additives is authorized if the total volume of water used is less than 500 gallons per day and the wash water is not discharged. This means that the wash water with said additives must not enter settling basins or other treatment device, unless such devices are designed and operated to be no-discharge. It must soak into the ground, evaporate, or be contained in a tank on site. Wash water containing hazardous wastes must be disposed of in accordance with applicable hazardous waste regulations.

4. This permit does not authorize the mining activity, only water discharges that result from the activity. A permit authorizing mining activities must be obtained from the Land Reclamation Program.

5. This permit does not apply to facilities that would discharge within the watershed of Outstanding National Scenic and State Resource Waters and drainages thereto, as defined in 10 CSR 20-7.015(6).

6. Holders of current individual, site-specific permits who desire to apply for inclusion under this general permit should contact the department for application requirements and procedures.

7. The director may require any permittee authorized by a general permit to apply for and obtain an individual operating permit. Any interested person may petition the department to take action under this subsection. Cases where an individual operating permit may be required include, but are not limited to, the following:
   (a) The discharge(s) is a significant contributor of pollution which impairs the beneficial uses of the receiving stream;
   (b) The discharger is not in compliance with the conditions of the general operating permit;
   (c) A Water Quality Management Plan (or Total Maximum Daily Load) containing requirements applicable to these point sources is approved.

8. If at any time, the owner of the permitted facility should desire to apply for an individual permit, the owner may do so.

9. This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee.

10. Concrete and/or asphalt plants contained within the boundaries of a quarry may be included under one permit.

11. Facilities that are located within the watershed of the 303(d) listing of impaired waters will need to be evaluated, on a case-by-case basis, for inclusion under this general permit. Facilities that are found to be discharging the listed pollutant(s) of concern may be required to obtain a site-specific permit.

12. This permit does not authorize discharges of waste material, such as concrete and water from washing of concrete delivery trucks, into waters of the state. This permit does not authorize discharges to waters of the state from any location other than the outfalls described on page one of this permit. Waste concrete from delivery trucks shall be washed into a dedicated shallow depression or other device designed to capture the concrete and allow it to dry. Washing waste concrete into waters of the state or in a location where it is likely to enter waters of the state, such as a drainage ditch, is prohibited by State Law and Regulations (644.051 RSMo, 10 CSR 20-6.010).

SAMPLING REQUIREMENTS AND BENCHMARKS

1. Sampling and analysis of storm water discharges for Total Suspended Solids, Settleable Solids, pH and Oil & Grease shall occur quarterly. The department may also require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or evidence of off site impacts from activities at the facility. If such an action is needed, the department will specify in writing the sampling requirements, including such information as location and extent. It is a violation of this permit to fail to comply with said written notification to sample.

2. Storm water samples shall be collected within the first 60 minutes of discharge occurring as a result of precipitation events of 0.1 inches or greater. Precipitation events include rainfall as well as run-off from the melting of frozen precipitation.

3. This permit stipulates pollutant Benchmarks applicable to your discharge. The Benchmarks do not constitute direct numeric effluent limitations; a benchmark exceedance alone, therefore, is not a permit violation. Benchmark monitoring data are primarily for your use (and department's use as described in #1, above) to determine the overall effectiveness of your SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce that pollutant in your storm water discharge(s). Failure to improve BMPs and achieve compliance with the Benchmarks is a permit violation. Exceedances believed to be the result of legacy chemical uses at the facility are not exempted from this requirement. Permittees are encouraged to contact the Department to formulate a plan for investigation and clean-up if legacy chemical uses are suspected to be the cause of exceedances.

4. The following Benchmarks are considered necessary to protect water quality. The BMPs at the facility should be designed to meet these benchmarks during rainfall events up to the 1-in-10 year, 24 hour rain event.

Benchmarks Table

Parameter	Benchmark
Total Suspended Solids	100 mg/L
pH – Units	6.5 – 9.0 Standard Units
Oil & Grease	10 mg/L
Settleable Solids	1.0 mL/L/hr

5. Storm water samples shall be collected prior to or at the property boundary or before the discharge enters waters of the state on the property.

6. If data becomes available that indicates existing water quality will be protected by alternative Benchmarks specific to this industry, the department will propose to incorporate those Benchmarks into this permit as part of a permit modification. Such data must be approved by the department as appropriate and representative before it can be considered.

7. At no time shall any discharge result in a violation of Water Quality Standards (as described in Other Requirements #13). A facility will be required to obtain a site specific permit if the department determines that a site specific permit is necessary to protect water quality.

8. Non-storm water discharges are those caused by something other than storm water runoff and include mine pit dewatering, vehicle and equipment wash water and all dry-weather discharges from processing plants. This permit does not authorize the discharge of waters with added detergents, acids, caustics, solvents, or other additives, except as allowed under Applicability #3 above.

9. If a discharge does not occur during the quarter, the facility shall submit a report of no discharge to the department.

SAMPLING REQUIREMENTS AND BENCHMARKS cont.

10. If during the life of this permit, a limestone or other rock quarry becomes inactive, a stay of the quarterly storm water sampling requirement may occur provided the following requirements are met.

    a) The facility meets the definition of "inactive." Inactive Facility: A facility that does not produce product; conduct any operations required for production of product, such as site preparation, stripping, blasting, or loading/unloading of unprocessed materials; construct or deconstruct a plant; or, transfer purchased product during the quarter. A facility that does no more than maintain stockpiled rock and conduct routine maintenance of BMPs may be considered inactive.
    b) Notification of a facility becoming "inactive" shall be made in writing to the Department's Regional Office at least 15 days prior to the facility becoming inactive.
    c) The facility shall have met all requirements of this general permit prior to becoming "inactive."
    d) The facility shall continue to meet the quarterly storm water reporting requirements of this permit. This reporting requirement shall state that sampling has not occurred because the facility is "inactive."
    e) Quarterly storm water sampling requirements shall resume immediately upon the site being reactivated.
    f) The facility shall notify the Department's Regional Office at least 15 days prior to reactivation.
    g) SWPPP requirements shall be met at all times as expressed in this permit.
    h) BMPs must be actively maintained and documented in the facility SWPPP.
    i) A deficiency of a BMP noted via the SWPPP inspection requirements, will require the site to be reactivated thus resuming quarterly storm water sampling.

OTHER REQUIREMENTS

Note: These requirements do not supersede nor remove liability for compliance with county and other local ordinances.

1. **For New or Expanding Facilities**: A requirement of this general operating permit is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). New facilities applying for coverage under this general operating permit, or those seeking to expand, must develop a SWPPP document to be implemented upon permit issuance. Expansion, for the purpose of this permit, would be the addition of new outfalls for discharge at the facility. The addition of outfalls also requires modification of the permit. The SWPPP shall include an Alternative Analysis (AA) evaluation of the Best Management Practices (BMPs). This AA is a structured evaluation of BMPs that are reasonable and cost effective. The AA evaluation should include practices that are designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The chosen BMP will be the most reasonable and cost effective while ensuring that the highest statutory and regulatory requirements are achieved, and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why "no discharge" or "no exposure" is not a feasible alternative at the facility. This structured analysis of BMPs serves as the Antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(2).

   For both new and expanding facilities, the BMP chosen through the AA must be implemented and maintained at the facility. Failure to implement and maintain the chosen alternative is a general operating permit violation.

   The Pollutants of Concern for this general operating permit are listed in the Benchmark Table on Page 4 of this general operating permit. A demonstration may be made that the expansion will not result in an increase in the discharge of Pollutants of Concern.

   The SWPPP must include the following:
   (a) An assessment of all storm water discharges associated with the facility, including any materials stored onsite in sealed containers, deicing of surfaces, loading and unloading areas, etc. This must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities;
   (b) A listing of BMPs and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter storm water;
   (c) A schedule for implementing the BMPs, if necessary;
   (d) The SWPPP must include a schedule for monthly site inspections and a brief written report. The inspections must include observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken. The Department must be notified within fifteen (15) days by letter of any corrections of deficiencies. Deficiencies requiring minor repairs must be corrected within seven (7) days. Deficiency corrective actions that require additional time or installation of a treatment device shall be detailed in the written notification which shall include a timeline for the corrective actions. Installation of a treatment device, such as an oil water separator, may require a construction permit. Routine maintenance of BMPs shall be documented in the monthly inspection reports. Notification of BMP routine maintenance is not required. Inspection reports must be kept on site with the SWPPP. These must be made available to DNR personnel upon request.
   (e) A provision for designating an individual to be responsible for environmental matters; and

OTHER REQUIREMENTS (continued)

(f) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of areas having materials exposed to storm water. This may be satisfied by in-house training provided by facility staff. Proof of training shall be submitted to the Department upon request.

2. **For Existing Facilities**: The previous permit requirements related to storm water BMPs are similar to those included in the SWPPP requirements of this permit, existing facilities are required to develop a SWPPP document to be implemented upon permit issuance, of which must be continually maintained and implemented. The SWPPP must be kept onsite and should not be sent to the Department unless specifically requested. Permittees shall select, install, use, operate, and maintain the BMPs prescribed in the SWPPP in accordance with the concepts and methods described in the following document:

Developing Your Stormwater Pollution Prevention Plan, a Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.

The SWPPP must include the following:

(a) An assessment of all storm water discharges associated with the facility, including any materials stored onsite in sealed containers, deicing of surfaces, loading and unloading areas, etc. This must include a list of potential contaminants and an annual estimate of amounts that will be used in the described activities.

(b) A listing of BMPs and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter storm water.

(c) A schedule for implementing the BMPs, if necessary.

(d) The SWPPP must include a schedule for monthly site inspections and a brief written report. The inspections must include observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken. The Department must be notified within fifteen (15) days by letter of any corrections of deficiencies. Deficiencies requiring minor repairs must be corrected within seven (7) days. Deficiency corrective actions that require additional time or installation of a treatment device shall be detailed in the written notification which shall include a timeline for the corrective actions. Installation of a treatment device, such as an oil water separator, may require a construction permit. Routine maintenance of BMPs shall be documented in the monthly inspection reports. Notification of BMP routine maintenance is not required. Inspection reports must be kept on site with the SWPPP. These must be made available to DNR personnel upon request.

(e) A provision for designating an individual to be responsible for environmental matters.

(f) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of areas having materials exposed to storm water. This may be satisfied by in-house training provided by facility staff. Proof of training shall be submitted upon request of the Department.

3. The purpose of the SWPPP and the BMPs listed therein is to prevent pollutants from entering waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR20-2.010(56)] of waters of the state, or failed to achieve compliance with benchmarks. Corrective action means the facility took steps to eliminate the deficiency.

4. The following are minimum BMPs that must be implemented at all facilities:

(a) Collection facilities shall be provided onsite, and arrangements made for proper disposal of waste products which may be exposed to storm water.

(b) Permittee shall provide sediment and erosion control sufficient to prevent pollution to waters of the state and comply with the effluent limitations and other permit conditions. This may require the construction of properly designed sediment basins or other treatment structures. The permittee shall not allow mined material or overburden to enter waters of the state as necessary to meet effluent limitations and benchmark provided herein.

(c) All fueling facilities present onsite shall adhere to applicable federal and state regulations concerning underground storage, aboveground storage, and dispensers, including spill prevention, control and countermeasures.

(d) All chemicals and waste products (except fuels), and storage containers (such as drums cans, or cartons) shall be stored so that these materials are not exposed to storm water. Drums, barrels, tanks and similar containers that are sealed without operational taps or valves are not considered exposed to storm water. Commingled water may not be discharged under this permit. Spill prevention, control, countermeasures and/or management shall be provided sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.

(e) Good housekeeping practices shall be maintained on the site to keep solid waste from entry into waters of the state.

OTHER REQUIREMENTS (continued)

5. If vehicle or equipment washing/rinsing is conducted at the facility or other similar process wastewater is generated, permittee shall treat the resulting wastewater prior to discharge to waters of the state in order to meet the effluent limitations and other permit conditions. A construction permit must be obtained from the department prior to construction of any treatment structure or device.

6. If dumping or disposal of waste concrete, waste asphalt, waste clay or glass products, or waste rock is conducted at the facility, permittee shall prevent the material from entering waters of the state. Any resulting wastewater or leachate from these activities must be treated prior to discharge. Discharging these materials into waters of the state during off site activities is also prohibited.

7. Permittee shall prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment maintenance, or warehousing activities and thereby prevent the contamination of storm water from these substances.

8. Permittee shall designate an individual as responsible for environmental matters at the facility who will serve as a contact for the department. Permittee shall notify the department in writing of a personnel change for this position. One individual may be the contact for multiple facilities so long as that person can effectively communicate with the department on every facility.

9. Permittee shall maintain records of all pumped discharges that enter surface waters of the state. These records must include an estimate of the volume, the date and time(s), and the location of each discharge.

10. All outfalls must be clearly marked in the field or clearly identified on a map submitted to the department and kept on file at the mine/plant office. Outfall locations may be added or deleted by the permittee following notification to the department. Notification shall include a map identifying the added or deleted outfalls and will result in the modification of the permit.

11. Storm water discharge monitoring is not required of areas stabilized by a durable non-erosive surface, such as hauling roads that are completely covered with gravel. Monitoring or further improvements may be required if department staff determine that the improvements are not adequate to protect water quality.

12. This permit may be reopened and modified, or alternatively revoked and reissued, to:
    (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C), and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
        (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
        (2) Controls any pollutant not limited in the permit.
    (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test, or other information indicates changes are necessary to assure compliance with Missouri Water Quality Standards.
    (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's current 303(d) list.
    (d) The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

13. Water Quality Standards
    (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
    (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
        (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
        (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
        (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
        (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
        (5) There shall be no significant human health hazard from incidental contact with the water;
        (6) There shall be no acute toxicity to livestock or wildlife watering;
        (7)

(8) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
(9) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

TERMINATION OF PERMIT

If the activities covered by this permit have ceased and no significant materials (as defined by 10 CSR 20-6.200) remain on the property, the permittee may request termination of this permit. To request termination, the permittee must submit Form H – "Request for Termination of a General Permit."

PERMIT TRANSFER

This permit may be transferred to a new permittee by submitting an "Application for Transfer of Operating Permit" sigued by the transferor and transferee of the facility, aloug with the appropriate modification fee.

PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date.

DUTY OF COMPLIANCE

The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

PUBLIC NOTICE

As required by 10 CSR 20-6.020, permits proposed to be issued to newly constructed limestone or other rock quarries must undergo public notification in accordance with 10 CSR 20-6.020 prior to issuance. Public Notice of reissuance is required if the facility was found to be in significant noncompliance during the time of the previous permit 10 CSR 20-6.020(1)(C).

Missouri Department of Natural Resources
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-G490000

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

A Factsheet is not an enforceable part of an operating permit.

This Factsheet is for a Major ☐, Minor ☐, Industrial Facility ☐; Variance ☐;
Master General Permit ☒; General Permit Covered Facility ☒; and/or permit with widespread public interest ☐.

Part I – Facility Information

Facility Type: Industrial
Facility SIC Code(s): 1422, 295x, 32xx

Facility Description:
Facilities that are eligible for coverage under this master general permit are limestone and other rock quarries, concrete plants, concrete product industries, asphalt plants, glass product industries, and clay product industries.

Part III – Receiving Stream Information

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:
As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

Missouri or Mississippi River [10 CSR 20-7.015(2)]:	☒
Lake or Reservoir [10 CSR 20-7.015(3)]:	☒
Losing [10 CSR 20-7.015(4)]:	☒
Metropolitan No-Discharge [10 CSR 20-7.015(5)]:	☐
Special Stream [10 CSR 20-7.015(6)]:	☐
Subsurface Water [10 CSR 20-7.015(7)]:	☒
All Other Waters [10 CSR 20-7.015(8)]:	☒

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses."

PUBLIC NOTICE OF COVERAGE FOR AN INDIVIDUAL FACILITY
The need for an individual public notification process shall be determined and identified in the general permit. [10 CSR 20-6.020(1)(C)5.] Public Notice of **reissuance** of coverage is not required unless the facility has been found to be in significant noncompliance [10 CSR 20-6.020(1)(C)4.].

Applicable ☒;

Issuance of coverage to an individual facility under this Master General Permit **for the first time** shall be placed on Public Notice for 30 days in accordance with 10 CSR 20-6.020(1)(B) & (C).

Part IV – Rationale and Derivation of Effluent Limitations & Permit Conditions

ANTI-BACKSLIDING:
A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

☒ - All limits in this operating permit are at least as protective as those previously established; therefore, backsliding does not apply.

ANTIDEGRADATION:
Antidegradation policies are such to ensure protection of water quality for a particular water body where the water quality exceeds levels necessary to protect fish and wildlife propagation and recreation on and in the water. This also includes special protection of waters designated as outstanding natural resource waters. Antidegradation plans are adopted by each State to minimize adverse effects on water.

In accordance with Federal and State Regulations, 40 CFR § 131.12(a) and 10 CSR 20-7.031(2) respectively, all permitted discharges must undergo an antidegradation review in order to demonstrate:

(1) Existing instream uses are maintained and protected
(2) Social and Economic importance for degradation of waters
(3) Exceptional or outstanding waters are maintained and protected

In accordance with Missouri's Antidegradation Implementation Procedure (AIP), any discharge may assume significant degradation and complete an alternatives analysis to show the highest level of attainable effluent treatment. The conclusion of the analysis will show the highest level of attainable effluent treatment that is practicable, effective, reliable, and economically efficient. The following list of policies will be considered the alternative options for MOG490000:

1. water re-use opportunities (i.g. haul road watering and use of spray bars for dust suppression or irrigation)
2. grading of land area around site with vegetation buffer zones and structures to control velocity
3. chemical treatment (alum)
4. exposure control
5. detention basins
6. sand filter
7. retention basins
8. infiltration devices
9. land application

Items 1-5 have been determined to be a cost effective treatment technology. The following links provide costing information and application rates for Alum treatment. The other alternatives should be addressed in the SWPPP that is required to obtain the operating permit.
http://www.dnr.state.wi.us/org/water/fhp/papers/alum_brochure.pdf
http://www.indianafishfarming.com/images/stories/Workshops/Production/PondSystems/460fs%20-%20Pond%20Clay%20Turbidity.pdf

Missouri Antidegradation Rule and Implementation Procedure

(1) Section II Part A
The discharge will not be considered significant degradation if the activity will only result in temporary degradation. Consultation with the department and a detailed operating timeline will be necessary to determine whether or not this is a viable option. If temporary degradation is applicable the permittee will submit the following information:
(a) Length of time water quality will be lowered.
(b) % change in ambient conditions
(c) Parameters affected
(d) Potential for any residual long-term influences on existing uses.

(2) All other situations

Significant degradation will occur. Independent evaluation of the listed BMP's must be completed. BMP's must also be considered in conjunction as separate alternatives.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP):
In accordanee with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the eontrol of toxic pollutants and hazardous substances from ancillary industrial activities: (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Other guidance regarding the development and implementation of a SWPPP can be found at
http://dnr.mo.gov/env/wpp/stormwater/sw-industrial-permits.htm

BMP corrective action vs. maintenance:

Maintenance: Maintenance related to BMPs at a facility are activities done regularly to keep the BMPs in good condition and working order.

Corrective Action: Are activities that are done to correct a deficiency BMPs related to an exceedance of the established pollutant benchmarks, violations of the water quality standard, or violations of permit conditions.

Applicable ☒;
A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

WATER QUALITY STANDARDS:
Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):
Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation. Applications for coverage under Master General Permits in the watersheds of bodies of water with a TMDL are evaluated on a case by case basis.

Part V – Effluent Limits Determination

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

EFFLUENT LIMITATIONS TABLE:

Non-storm Water Discharges

PARAMETER	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MODIFIED	PREVIOUS PERMIT LIMITATIONS
FLOW	GPD	1	*		*	NO	*
TSS	MG/L	9	70		70	NO	70/70
PH	SU	1	6.5-9.0		6.5-9.0	YES	6.0-9.0/6.0-9.0
SETTLEABLE SOLIDS	mL/L/hr	9	1.5		1.0	YES	**
OIL & GREASE (MG/L)	MG/L	1/2	15		10	NO	15/10
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

* - Monitoring requirement only.
** - Parameter not previously established in previous state operating permit.

BENCHMARK TABLE:

Storm Water Discharges

PARAMETER	UNIT	BASIS FOR BENCHMARK	BENCHMARK	PREVIOUS PERMIT LIMITATIONS
TSS	MG/L	9	100	**
PH	SU	1	6.5-9.0	6.0-9.0/6.0-9.0
SETTLEABLE SOLIDS	mL/L/hr	9	1.0	1.5/1.0
OIL & GREASE (MG/L)	MG/L	9	10	15/10

* - Monitoring requirement only.
** - Parameter not previously established in previous state operating permit

Basis for Limitations Codes:

1. State or Federal Regulation/Law
2. Water Quality Standard (includes RPA)
3. Water Quality Based Effluent Limits
4. Lagoon Policy
5. Ammonia Policy
6. Dissolved Oxygen Policy
7. Antidegradation Policy
8. Water Quality Model
9. Best Professional Judgment
10. TMDL or Permit in lieu of TMDL
11. WET Test Policy
12. Antidegradation Review

DERIVATION AND DISCUSSION OF LIMITS:

- **Benchmarks.** Benchmarks for storm water discharges have been developed for this permit. Sampling of benchmark pollutants serves has a method of verification of storm water BMP effectiveness as required in the SWPPP.

- **Flow**. In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.

- **Total Suspended Solids Non Storm Water (TSS).** Effluent limitations for TSS for non-storm water discharges from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality. This limit is a best professional judgment limit consistent with limits in similar Missouri master general permits addressing processed water from mining sites.

- **Total Suspended Solids Benchmark Storm Water (TSS).** The benchmark for TSS is a best professional judgment value established to verify the effectiveness of storm water BMPs. This benchmark is consistent with EPA's Multi Sector General Permit which is utilized in other States to permit storm water and other specified discharges from limestone and other rock quarries, concrete, glass, and asphalt industries.

- **Settleable Solids Non Storm Water (SS).** Effluent limitations for settleable solids for non-storm water discharges have been included in this permit. This limit is achievable based on the technology available such as settling tanks or basins. This limit is consistent with limits in similar Missouri master general permits addressing processed water from mining sites.

- **Settleable Solids Benchmark Storm Water (SS).** The benchmark for SS is a best professional judgment value established to verify the effectiveness of storm water BMPs. During the drafting of the master general permit an analysis of settleable solids data submitted to the department during the years of 1990-2006 was conducted. It was determined that 1.0 mL/L/h represents the 87^{th} percentile of that data. Therefore is has been determined that 1.0 mL/L/h is an achievable benchmark representing available BMP technologies.

- **pH Non Storm Water and Storm Water**. 10 CSR 20-7.031(4)(E) requires a pH range of 6.5-9.0.

- **Oil & Grease Non Storm Water and Storm Water**. Conventional pollutant, effluent limitation for protection of aquatic life; 10 mg/L monthly average, 15 mg/L daily maximum.

- **Minimum Sampling and Reporting Frequency Requirements**. Sampling and reporting frequency requirements for non-storm water discharges have been retained from previous state operating permit. Storm water discharge sampling has been increase to quarterly; however numeric limitations have been removed and replaced with benchmarks to verify the effectiveness of the implemented BMPs.

Part VI – Administrative Requirements

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PUBLIC NOTICE:
On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

DATE OF FACT SHEET: 4-13-2011

COMPLETED BY:

CHRIS WIEBERG, ENVIRONMENTAL SPECIALIST
NPDES PERMITS UNIT
PERMITTING AND ENGINEERING SECTION
WATER PROTECTION PROGRAM
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STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
Revised
October 1, 1980

PART I - GENERAL CONDITIONS
SECTION A - MONITORING AND REPORTING

1. **Representative Sampling**
   a. Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfall(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
   b. Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the permit.

2. **Schedule of Compliance**
   No later than fourteen (14) calendar days following each date identified in the "Schedule of Compliance", the permittee shall submit to the respective Department Regional Office as required therein, either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or if there are no more scheduled requirements, when such noncompliance will be corrected. The Regional Office address is indicated in the cover letter transmitting he permit.

3. **Definitions**
   Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.

4. **Test Procedures**
   Test procedures for the analysis of pollutant shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7015.

5. **Recording of Results**
   a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
      (i) the date, exact place, and time of sampling or measurements;
      (ii) the individual(s) who performed the sampling or measurements;
      (iii) the date(s) analyses were performed;
      (iv) the individual(s) who performed the analyses;
      (v) the analytical techniques or methods used; and
      (vi) the results of such analyses.
   b. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or both.
   c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

6. **Additional Monitoring by Permittee**
   If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

7. **Records Retention**
   The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

SECTION B - MANAGEMENT REQUIREMENTS

1. **Change in Discharge**
   a. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.
   b. Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before each such changes, or, if they will not violate the effluent limitations specified in the permit, by notice to the Department at least thirty (30) days before such changes.

2. **Noncompliance Notification**
   a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions:
      (i) a description of the discharge and cause of noncompliance, and
      (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent `recurrence of the noncomplying discharge.
   b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

3. **Facilities Operation**
   Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.

4. **Adverse Impact**
   The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. **Bypassing**
   a. Any bypass or shut down of a wastewater treatment facility and tributary sewer system or any part of such a facility and sewer system that results in a violation of permit limits or conditions is prohibited except:
      (i) where unavoidable to prevent loss of life, personal injury, or severe property damages; and
      (ii) where unavoidable excessive storm drainage or runoff would catastrophically damage any facilities or processes necessary for compliance with the effluent limitations and conditions of this permit;
      (iii) where maintenance is necessary to ensure efficient operation and alternative measures have been taken to maintain effluent quality during the period of maintenance.
   b. The permittee shall notify the Department in writing of all bypasses or shut down that result in a violation of permit limits or conditions. This section does not excuse any person from liability, unless such relief is otherwise provided by the statute.

6. **Removed Substances**
   Solids, sludges, filter backwash, or any other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law, and a permanent record of the date and time, volume and methods of removal and disposal of such substances shall be maintained by the permittee.

7. **Power Failures**
   In order to maintain compliance with the effluent limitations and other provisions of this permit, the permittee shall either:
   a. in accordance with the "Schedule of Compliance", provide an alternative power source sufficient to operate the wastewater control facilities; or,
   b. if such alternative power source is not in existence, and no date for its implementation appears in the Compliance Schedule, halt or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

8. **Right of Entry**
   For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the Department, shall be allowed by the permittee, upon presentation of credentials and at reasonable times;
   a. to enter upon permittee's premises in which a point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of the permit;
   b. to have access to, or copy, any records required to be kept under terms and conditions of the permit;
   c. to inspect any monitoring equipment or method required in the permit;
   d. to inspect any collection, treatment, or discharge facility covered under the permit, and
   e. to sample any wastewater at any point in the collection system or treatment process.

9. **Permits Transferable**
   a. Subject to Section (3) of 10 CSR 20-6.010 an operating permit may be transferred upon submission to the Department of an application to transfer signed by a new owner. Until such time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department, within thirty (30) days of receipt of the application shall notify the new permittee of its intent to revoke and reissue or transfer the permit.

10. **Availability of Reports**
    Except for data determined to be confidential under Section 308 of the Act, and the Law and Missouri Clean Water Commission Regulation for Public Participation, Hearings and Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by statute, effluent data shall not be considered confidential. Knowingly making any false statement on any such report shall be subject to the imposition of criminal penalties as provided in Section 204.076 of the Law.

11. **Permit Modification**
    a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
       (i) violation of any terms or conditions of this permit or the Law;
       (ii) having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
       (iii) a change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge, or
       (iv) any reason set forth in the Law and Regulations.
    b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

12. **Permit Modification - Less Stringent Requirements**
    If any permit provisions are based on legal requirements which are lessened or removed, and should no other basis exist for such permit provisions, the permit shall be modified after notice and opportunity for a hearing.

13. **Civil and Criminal Liability**
    Except as authorized by statute and provided in permit conditions on "Bypassing" (Standard Condition B-5) and "Power Failures" (Standard Condition B-7) nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

14. **Oil and Hazardous Substance Liability**
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act, and the Law and Regulations. Oil and hazardous materials discharges must be reported in compliance with the requirements of the Federal Clean Water Act.

15. **State Laws**
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state statute or regulations.

16. **Property Rights**
    The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, no does it authorize any injury to private property or any invasion of personal rights, nor any infringement of or violation of federal, state or local laws or regulations.

17. **Duty to Reapply**
    If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit 180 days prior to expiration of this permit.

18. **Toxic Pollutants**
    If a toxic effluent standard, prohibition, or schedule of compliance is established, under Section 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of permittee's facility and such standard is more stringent than the limitations in the permit, then the more stringent standard, probibition, or schedule shall be incorporated into the permit as one of its conditions, upon notice to the permittee.

19. **Signatory Requirement**
    All reports, or information submitted to the Director shall he signed (see 40 CFR-122.6).

20. **Rights Not Affected**
    Nothing in this permit shall affect the permittee's right to appeal or seek a variance from applicable laws or regulations as allowed by law.

21. **Severability**
    The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

NOTICE

A customized Discharge Monitoring Report (DMR) form is attached for your use in submitting information to the Department. Please make copies of the DMR as needed to submit required discharge information to the appropriate regional office.

Sampling requirements may have changed from the previous permit. Please read and comply with all conditions and requirements of your permit.

If you have any questions, please call the Kansas City Regional Office at (816) 521-0700 for assistance.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
NPDES MONITORING REPORT FOR WASTEWATER AND/OR STORM WATER DISCHARGES

RETURN FORM TO: Kansas City Regional Office
500 NE Colbern Road
Kansas City, MO 64086

Facility Name	The Family Ranch Reclamation Project	Current Address: Owner ☐ Billing ☐	Address Change For: Owner ☐ Billing ☐
Permit Number	#MO-G491279		
County	Jackson County		
Facility Type	Limestone and other rock quarries, concrete, glass, and asphalt industries		

SIGNATURE AND TITLE OF AUTHORIZED INDIVIDUAL, IN ACCORDANCE WITH 10 CSR 20-6.010(2)(C)	DATE	PHONE NUMBER	E-MAIL ADDRESS (Optional)

COMMENTS:

This report covers the period of:

_____ to _____

PERMIT LIMITATIONS AND MONITORING REQUIREMENTS

	Outfall #001		Final Permit Limitations			Monitoring Requirement		
	Parameter	Units	Daily Maximum	Weekly Average	Monthly Average	Frequency	Sample Type	Due Date
Non-Storm Water (Note 1)	Flow	MGD	*		*	quarterly**	24 hr. estimate	The 28th day following the end of the quarter
	Total Suspended Solids	mg/L	70		70	quarterly**	grab	
	Settleable Solids	mL/L/hr	1.5		1.0	quarterly**	grab	
	Oil & Grease	mg/L	15		10	quarterly**	grab	
	pH	SU	***		***	quarterly**	grab	
Stormwater	Flow	MGD	*		*	quarterly**	24 hr. estimate	The 28th day following the end of the quarter
	Total Suspended Solids	mg/L	*		*	quarterly**	grab	
	Settleable Solids	mL/L/hr	*		*	quarterly**	grab	
	Oil & Grease	mg/L	*		*	quarterly**	grab	
	pH	SU	*		*	quarterly**	grab	

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY. THE FIRST REPORT IS DUE OCTOBER 28, 2014.

DMR SAMPLING SUMMARY

Outfall #001					
Parameter	Daily Minimum	Daily Maximum	Weekly Average	Monthly Average	Frequency of Analysis
Flow					
Total Suspended Solids					
Settleable Solids					
Oil & Grease					
pH					
Flow					
Total Suspended Solids					
Settleable Solids					
Oil & Grease					
pH					
Non-Stormwater No Discharge ☐			**Stormwater No Discharge** ☐		

IF A VIOLATION OCCURRED, PLEASE ATTACH THE FOLLOWING: AN EXPLANATION OF POSSIBLE CAUSE, EXACT DATE OF NON-COMPLIANCE, DATE ANTICIPATED TO RETURN TO COMPLIANCE, AND WHAT STEPS YOUR OPERATION WILL TAKE TO PREVENT A REOCCURRENCE OF THE VIOLATION.

* Monitoring requirement only.

** Sample discharge at least once for the months of: Jan, Feb, Mar-1st Quarter; Apr, May, Jun -2nd Quarter; Jul, Aug, Sep-3rd Quarter; Oct, Nov, Dec-4th Quarter

*** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.

THIS DMR EXPIRES ON:
October 5, 2016

Note 1 Non-storm water discharges shall include wastewater generated from process-related activities such as truck washing, and all dry-weather discharges from processing plants and mine pit dewatering.

Facility Name	The Family Ranch Reclamation Project
Permit Number	#MO-G491279
County	Jackson County

Data Page 1 of	1
Month:	
Year:	

Outfall #001	NON-STORM WATER DISCHARGES							This Report Covers the Period of:
DATE	Flow MGD	Total Suspended Solids mg/L	Settleable Solids mL/L/hr	Oil & Grease mg/L	pH SU			_____ to _____
1								For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information: (i) the date, exact place, and time of sampling or measurements; (ii) the individual(s) who performed the sampling or measurements; (iii) the date(s) analyses were performed; (iv) the individual(s) who performed the analyses; (v) the analytical techniques or methods used; and (vi) the results of such analyses.
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20								The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or both.
21								
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27								
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29								
30								
31								
TOTAL								
DAILY MINIMUM								
DAILY MAXIMUM								
WEEKLY AVERAGE								
MONTHLY AVERAGE								

Facility Name	The Family Ranch Reclamation Project
Permit Number	#MO-G491279
County	Jackson County

Data Page 1 of 1	
Month	
Year	

Outfall #001	STORMWATER DISCHARGES							This Report Covers the Period of:
DATE	Flow MGD	Total Suspended Solids mg/L	Settleable Solids mL/L/hr	Oil & Grease mg/L	pH SU			_____ to _____
1								For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information: (i) the date, exact place, and time of sampling or measurements; (ii) the individual(s) who performed the sampling or measurements; (iii) the date(s) analyses were performed; (iv) the individual(s) who performed the analyses; (v) the analytical techniques or methods used; and (vi) the results of such analyses.
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30								
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TOTAL								
DAILY MINIMUM								
DAILY MAXIMUM								
WEEKLY AVERAGE								
MONTHLY AVERAGE								

This Discharge Monitoring Report (DMR) includes information from the corresponding permit, however it does not supersede the authority of the permit.
The electronic version of the Discharge Monitoring Report is in a Microsoft® Excel® format. When using the electronic copy, please ensure that you use "Save As" to save the document. Consider labeling the electronic document according to the period of the report. (e.g. 2007MarchDMR or 20071stQuarterDMR) If you have multiple permitted sites, it is recommended that you create separate folders for each permitted site.
If you have any questions on your DMR that are not covered in these instructions, please consult your operating permit.
If you still have questions, please call your appropriate MDNR Regional Office for assistance.

Section A: Filling out the Discharge Monitoring Report.

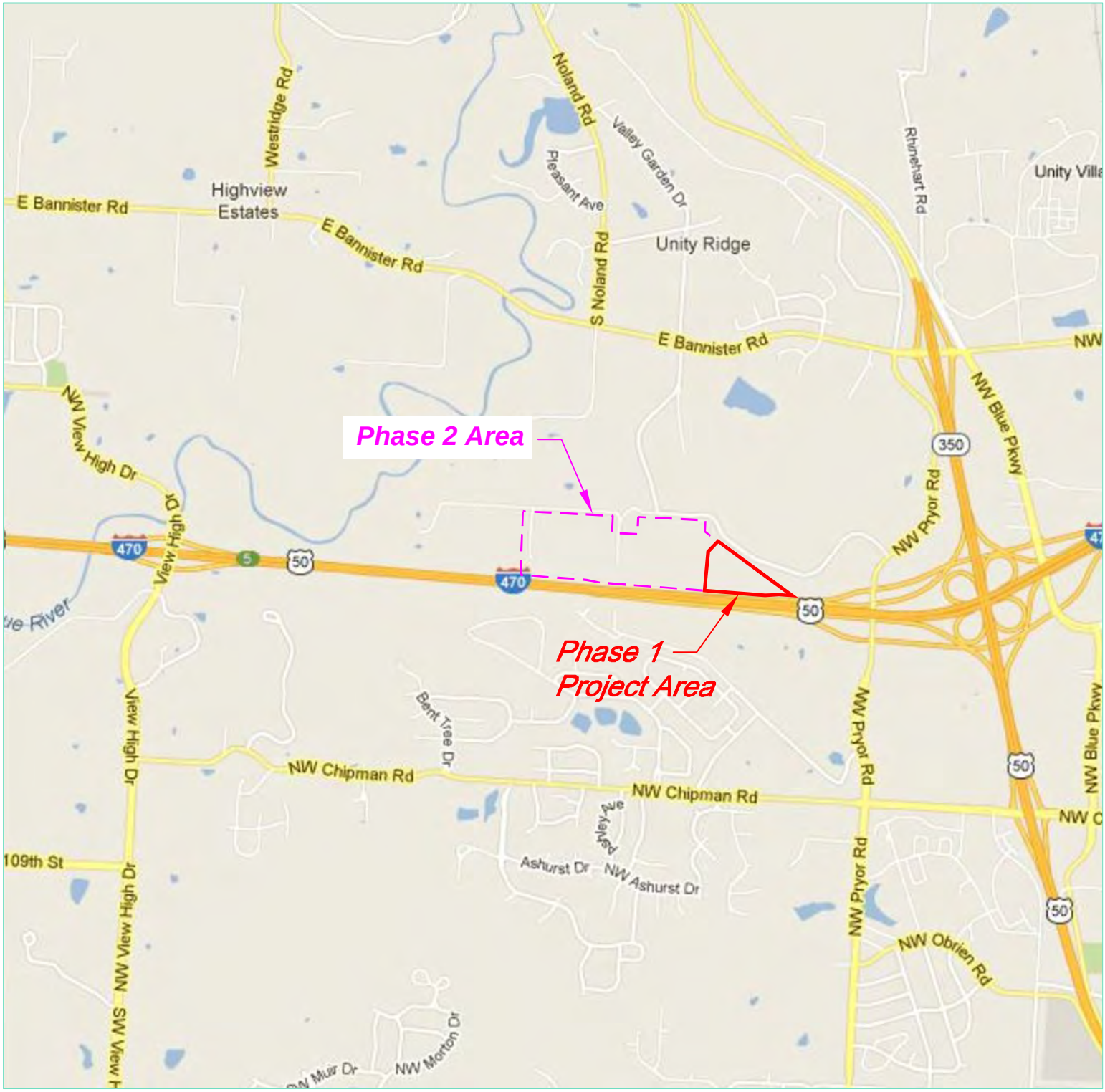
1 Enter your address in address box and check whether it is the Owner or Billing Address.
2 If an address change is required, enter the new address in the address change box and check whether it is the Owner or Billing Address.
3 The owner or owner's designee is to enter the phone number and e-mail address into the appropriate boxes. The report is not to be signed until it is ready to be submitted. See Section A, #7 below.
4 Enter the period that the DMR covers. (e.g. for June 1st to June 30th, 2007, insert 6/01/07 to 6/30/07.)
5 Enter data in appropriate areas on the data page. SEE SECTION B.
6 Once all data has been entered and calculations completed, please print off one copy to submit to the department and one for your records. Records shall be retained for a period of at least three (3) years from the date of the report. This period may be extended by request of the Department at any time.
7 Once the copies have been printed the owner or designee must sign the form and put in the date that the form was signed.
8 Mail one copy of the report to the appropriate DNR regional office as noted in your permit and listed on the DMR.
9 If only one sample was collected, the facility shall submit the DMR Page at a minimum.

Section B: Filling out the Data Page.

1 Enter data in appropriate columns.
2 If you are using the paper version of the DMR, please complete the appropriate calculations at the bottom of the page.
3 For any parameter that requires a weekly average, you must average all samples that fall within a calendar week (Sunday through Saturday). (e.g. If you have three samples between Sunday and Saturday, add the three values together and divide by 3) If you have multiple samples that lie in separate calendar weeks, do not average data from separate weeks together.
4 Enter the month and year in the space provided. The month and year are to be entered in numerical format. The year must have 4 digits. (e.g. August 2007, enter 8 for month and 2007 for Year) When printing from the electronic version, the drop down boxes for month and year will not be printed. In the electronic version, a weekly average will not be calculated if the month and year have not been selected from the drop down boxes.
5 Once the calculations have been completed, record them on the data page and transfer them to the appropriate places on the Summary Table.
6 If you are using the electronic version, the calculations will be completed automatically and transferred to the Summary Table.
7 Enter the period that the DMR covers. (e.g. for June 1st to June 30th, 2007, insert 6/01/07 to 6/30/07.)
8 Once all data has been entered and calculations completed, please print off one copy to submit to the department and one for your records. Records shall be retained for a period of at least three (3) years from the date of the report. This period may be extended by request of the Department at any time.
9 When you mail the DMR to the department, include the data page as part of the report if more than one sample is collected.

APPENDIX B

General Location Map & Site Map



Source: 2013 Google Maps – www.google.com/maps
Project Location: Section 35, Township 48N, Range 32W

LEGEND
- Phase 1 Project Area
- Future Phases

1"=2000'

GBA architects engineers

PROJECT NUMBER	LOCATION MAP	FIGURE
12720.01	The Family Ranch Reclamation Project NW Pryor Road and Interstate 470 Lee's Summit, Jackson Co., MO.	1
DATE 6-13-2014		

STAR EXCAVATION LLC.
THE FAMILY RANCH RECLAMATION PROJECT
LEE'S SUMMIT, MISSOURI

Star Excavation LLC.
The Family Ranch Reclamation Project
Original 2013 Permit:14.65 Acres
(Permit : #PRPWLD20130577)
Expanded 2015 Permit: 26.53 Acres
Total Area:41.18 Acres
Expanded 2021 Permit: 8.00 Acres
Total Area:49.18 Acres

General Notes:

1. Tree Locations and Sizes are Approximate and are for Reference Only.
2. Property dimensions and bearings shown were taken from an Alta/Acsm Land Title Survey prepared by Engineering Solutions, October 16th, 2012 and have not been checked by GBA.
3. Any construction stormwater discharges from the project site shall be treated with appropriate BMPs in accordance with the project SWPPP and Missouri State Operating Permit MO-G491279.
4. Oil / Gas wells are not present on site per Missouri Department of Natural Resources.
5. The contractor shall contact the City's Development Services Engineering Inspection to schedule a pre-construction meeting with an inspector prior to any land disturbance work at (816) 969-1200.
6. Suitable Bat Tree Review was performed on March 28th, 2022 by GBA.

FLOODPLAIN NOTE:

According to FEMA Flood Insurance Rate Map (FIRM) Community Panel No. 29095C0408G, effective Date 1/20/17, and Panel No. 29095C0416G, effective Date 1/20/17, the tract lies outside of the Areas Designated as Flood Hazard Areas.

UTILITY CONTACTS

Sanitary Sewers:
Mr. Jeff Thorn, PE
City of Lee's Summit Water Utilities
1200 SE Hamblen Road
Lee's Summit, MO 64063
(816) 969-1900
email: jeff.thorn@cityofLS.net

Mr. Jeff Shook
Little Blue Valley Sewer District
21101 East 78 Highway
Independence, MO 64057
(816) 285-1522
email: jshook@lbvsd.net

Water:
Mr. Jeff Thorn, PE
City of Lee's Summit Water Utilities
1200 SE Hamblen Road
Lee's Summit, MO 64063
(816) 969-1900
email: jeff.thorn@cityofLS.net

Electric Service:
Mr. Nathan Michael
Kansas City Power & Light
P.O. Box 418679
Kansas City, MO 64141
(816) 220-5210
Fax (816) 245-3623
email: Nathan.Michael@kcpl.com

Gas:
Mr. Donnie Richards
Missouri Gas Energy
7500 E 35th Terrace
Kansas City, MO 64129
(816) 472-9464
Fax (816) 472-3488
email: donnie.richards@sug.com

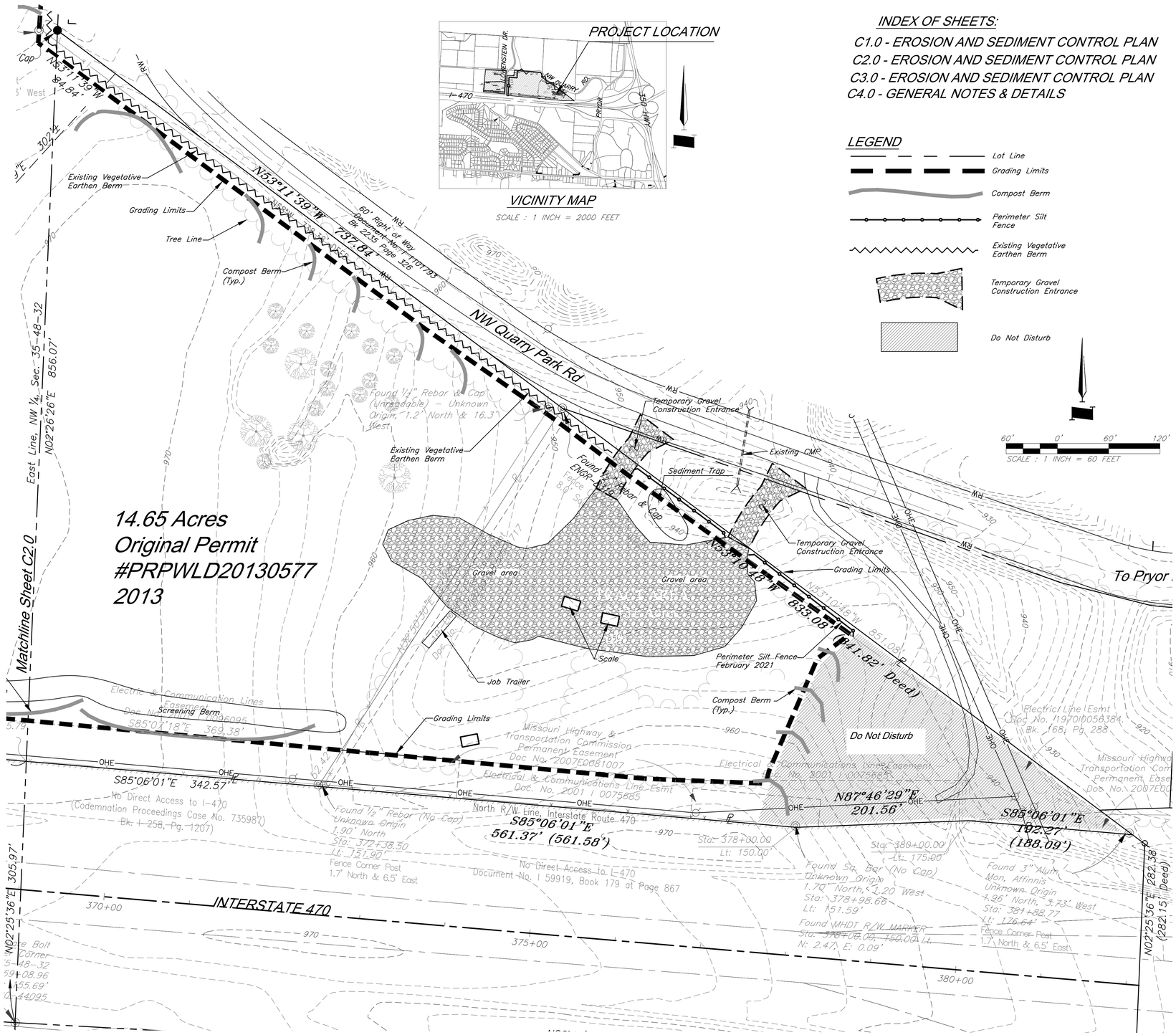
Cable Television:
Mr. Greg Thomas
Time Warner Cable
8221 W. 119th Street
Overland Park, KS 66213
(913) 643-1950
email: greg.thomas@twcable.com

Telephone:
Ms. Glenda Charles
AT&T
1425 Oak Street
Kansas City, MO 64106
(816) 365-1669
Fax (816) 275-1109
email: gc6954@att.com

Missouri One Call System 1-800-344-7483 (DIG-RITE)

DEVELOPED AND OWNED BY:
PARAGON STAR LLC 801 NORTHWEST
COMMERCE CENTER LEE'S SUMMIT,
MISSOURI 64086
PHONE: (816) 802-6801
CONTACT: Mr. Flip Short
EMAIL: fshort@legacytouch.com

PREPARED & SUBMITTED BY:
GEORGE BUTLER ASSOCIATES, INC.
9801 RENNER BOULEVARD
LENEXA, KANSAS 66219
PHONE: 913-492-0400
FAX: 913-577-8312
CONTACT: BRAD BURTON P.E.
EMAIL: BBURTON@GBATEAM.COM



GBA
architects
engineers
9801 Renner Boulevard
Lenexa, Kansas 66219
913.492.0400
www.gbateam.com

PROPOSED FACILITY FOR:
STAR EXCAVATION LLC.
THE FAMILY RANCH RECLAMATION PROJECT
I-470 & PRYOR ROAD
LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
JONATHAN HEALY
NUMBER PE-2013003126
5/17/22
PROFESSIONAL ENGINEER

REVISION
9-10-13 Added Details of Phase 1A Per Meeting with City.

PROJECT NUMBER
12720.01

DATE
03/21/13 10/08/21
09/10/13
10/22/15
02/04/21
08/16/21

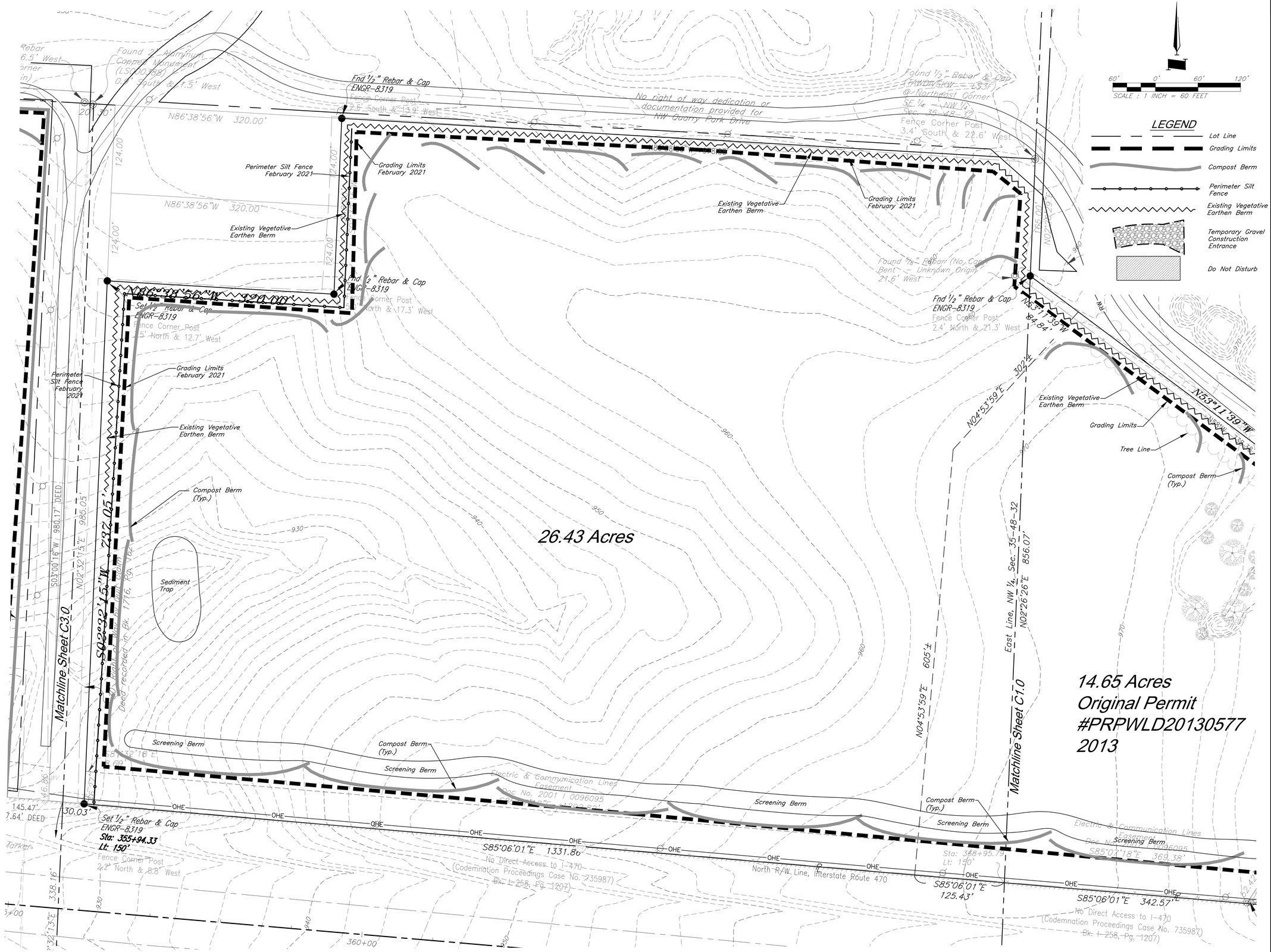
DESIGNED
DWC

DRAWN
DWC/JWM

REVIEWED
BDB

SHEET TITLE
EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER
C1.0



GBA
architects
engineers
9801 Renner Boulevard
Lenexa, Kansas 66219
913.492.0400
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PROPOSED FACILITY FOR:

STAR EXCAVATION LLC.

THE FAMILY RANCH RECLAMATION PROJECT

I-470 & PRYOR ROAD

LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
JONATHAN HEALY
NUMBER PE-2013003126
PROFESSIONAL ENGINEER
07/21/22

REVISION

9-10-13 Added Details of Phase 1A Per Meeting with City.

PROJECT NUMBER
12720.01

DATE
03/21/13
09/10/13
10/22/15
02/04/21
08/16/21

DESIGNED
DWC

DRAWN
DWC/JWM

REVIEWED
BDB

SHEET TITLE

EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER

C2.0

(Instr. No. 2003 I 0000996

No right of way dedication or documentation provided for N.W. Clifford Drive

S86°38'56"E 1329.30'

S86°38'56"E 1309.30'

Found 1-1/2" Rebar 1.2' North & 6.5' West of Property Corner (Unknown Origin)

Found 1/2" Rebar & Cap (ASC) @ Northwest Corner Southwest 1/4 – Northwest 1/4 Sec. 35-48-32

940

950

20'

Compost Berm (Typ.)

Perimeter compost berm

Proposed reclamation expansion area.
Order of expansion:
1. Clear vegetation.
2. Strip topsoil and clay material.
3. Berm clay material on perimeter of excavation area.
4. Begin mine excavation from surface elevation.

Stormwater to shall drain inward to mine area.

TRACT AREA
28.46± Acres
1,239,921.84± Sq. Ft.

Limits of permitted land disturbance area. Erosion control measures shall be extended in this area as work progresses west.

West Line, Northwest 1/4, Sec. 35-48-32

N02°37'26"E 923.46' DEED

Found 3" Bar 0.8' South & 1.9' West

Limits of existing excavation. Contours within limits of existing excavation have been modified with material excavation.

Grading Limits February 2021

Perimeter compost berm

Approx. mined elevation=896.00± Area drains inwards to open mine. Stormwater drains via infiltration and evaporation. Stormwater is not pumped.

930

18.00 Acres

920

910

Limits of existing excavation. Contours within limits of existing excavation have been modified with material excavation. Approximate elevation=896.00±.

Compost Berm (Typ.)

Screening Berm

Sta: 351+36.20
Lt: 282.50'

Drainage

Screening Berm

263.80'

16.25'

Electric & Communication Line Easement Bk. 300 Pg. 00075685

No Direct Access to I-470 (Condemnation Proceedings Case No. 13CK-CC00267)

N85°06'01"W 967.83'
N85°02'17"W 967.23' DEED

North R/W Line Interstate Route 470

Sta: 352+00.00
Lt: 175.00'

N77°58'31"W 201.56'
N77°54'47"W DEED

890

345+00

S85°06'01"E 1329.30'

350+00

910

920

355+00

338.16'

S2°13'E

LEGEND

- Area of Existing Excavation
- Lot Line
- Grading Limits
- Compost Berm
- Perimeter Silt Fence
- Temporary Gravel Construction Entrance
- Do Not Disturb

60' 0' 60' 120'
SCALE : 1 INCH = 60 FEET

Perimeter Silt Fence February 2021

Grading Limits February 2021

Existing Vegetative Earthen Berm

Compost Berm (Typ.)

Sediment Trap

Grading Limits February 2021

Perimeter compost berm

Matchline Sheet C2.0

S02°32'15"W 232.05'

Deed recorded in Bk. 1776, Pg. 182

S03°00'16"W 980.17' DEED

N02°32'15"E 985.05'

Screening Berm

N85°06'01"W 145.47'
N85°02'17"W 127.64' DEED

30.03'

OHE

Set 1/2" Rebar & Cap ENGR-8319
Sta: 355+94.33
Lt: 150'

Found MHTD R/W Marker Sta: 353+98.85 Lt: 151.76'

Fence Corner Post 2.2' North & 8.8' West

GBA
architects
engineers
9801 Renner Boulevard
Lenexa, Kansas 66219
913.492.0400
www.gbateam.com

PROPOSED FACILITY FOR:

STAR EXCAVATION LLC.
THE FAMILY RANCH RECLAMATION PROJECT

I-470 & PRYOR ROAD
LEE'S SUMMIT, MISSOURI

STATE OF MISSOURI
JONATHAN HEALY
NUMBER PE-2015003126
PROFESSIONAL ENGINEER
SIVTEE

REVISION

9-10-13 Added Details of Phase 1A Per Meeting with City.

5-18-22 Revised per City Comment

PROJECT NUMBER
12720.01

DATE
03/21/13
09/10/13
10/22/15
02/04/21
08/16/21
5/6/22

DESIGNED
DWC

DRAWN
DWC/JWM

REVIEWED
BDB

SHEET TITLE

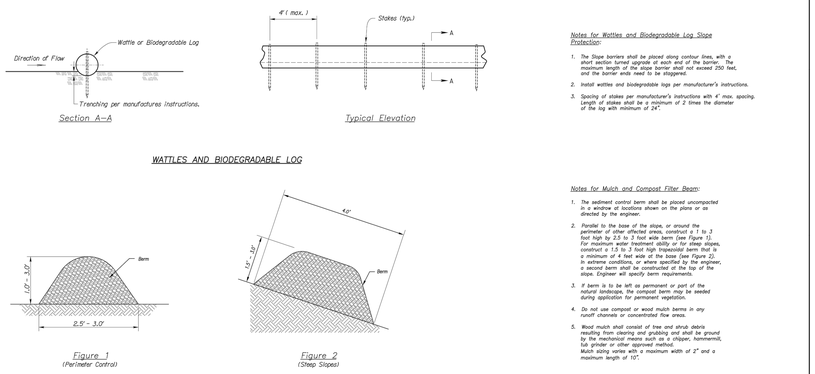
EROSION AND SEDIMENT CONTROL PLAN

SHEET NUMBER

C3.0

Sediment Control General Notes:

1. The construction covered by these plans shall conform to all applicable standards and specifications of the Lee's Summit design and construction manual.
2. Except where necessary to install erosion and sediment control devices, clearing activities shall not begin until all erosion and sediment control devices have been installed.
3. The contractor shall provide for control of surface erosion and sediment deposition during all phases of construction and until the owner accepts the work as complete. The contractor shall provide temporary seeding, berms, silt fence, sediment traps or other means to prevent sediment from reaching the public right-of-way, streams or adjacent property. In the event the prevention measures are not effective, the contractor shall remove any debris sediment and restore the right-of-way and adjacent property to it's original or better condition.
4. All land disturbances, including residential and commercial development projects, shall provide adequate erosion control to protect public streets, public storm sewer systems, adjacent property, streams, and surface waters from being polluted with sediment and silt.
5. Contractor shall keep the entire project site free of debris and trash at all times. contractor shall execute work using methods that minimize excessive noise or dust emissions. Contractor shall provide methods, means and facilities to prevent contamination of soil or water from discharge of potential construction site pollutants (i.e., diesel fuel, port-a-potty waste, paints, etc.)
6. Areas are not noted on the plan sheets for stockpiling of materials. Soil stockpiles shall be graded such that they do not exceed 3:1, mulch berms or another effectively equal best management practice (bmp) shall be installed completely around the down gradient perimeter of the soil stockpiles and the disturbed areas shall be seeded within 14 days once construction activities on them cease. Gravel material stockpiles shall have mulch berms or another effectively equal bmp installed completely around the down gradient perimeter of the gravel material stockpile.
7. Following stripping operations, the contractor shall remove existing topsoil and stockpile the material in an approved area. Stockpiles shall be stabilized by temporary seeding and mulch berms (see note 6).
8. Soil stabilizing erosion control measures as detailed in sections 2153 of APWA shall be implemented within 14 calendar days after construction activities have temporarily or permanently ceased on any portion of the project site.
9. Contractor must install and maintain the erosion and sediment control measures shown on these plans. If the engineer determines that the installation or the maintenance is inadequate, the contractor must immediately correct at his expense. If it is determined that additional erosion and sediment control measures are needed the contractor will be directed to install and maintain those measures.
10. All mulch berms shall be left in place following final stabilization of the project site.
11. Erosion control BMPs shall remain in place until the watershed treated by each BMP has been stabilized.



WATTLES AND BIODEGRADABLE LOG

Notes for Wattles and Biodegradable Log Slope Protection:

1. The Slope barriers shall be placed along contour lines, with a short section turned upgrade at each end of the barrier. The maximum length of the slope barrier shall not exceed 250 feet, and the barrier ends need to be staggered.
2. Install wattles and biodegradable logs per manufacturer's instructions.
3. Spacing of stakes per manufacturer's instructions with 4' max. spacing. Length of stakes shall be a minimum of 2 times the diameter of the log with minimum of 24".

Figure 1
(Perimeter Control)

Figure 2
(Steep Slopes)

Notes for Mulch and Compost Filter Beam:

1. The sediment control berm shall be placed uncompacted in a window at locations shown on the plans or as directed by the engineer.
2. Parallel to the base of the slope, or around the perimeter of other affected areas, construct a 1 to 1 foot high by 2.5 to 3 foot wide berm (see Figure 1). For maximum water treatment ability or for steep slopes, construct a 1.5 to 3 foot high trapezoidal berm that is a minimum of 4 feet wide at the base (see Figure 2). In extreme conditions, or where specified by the engineer, a second berm shall be constructed at the top of the slope. Engineer will specify berm requirements.
3. If berm is to be left as permanent or part of the natural landscape, the compost berm may be seeded during application for permanent vegetation.
4. Do not use compost or wood mulch berms in any runoff channels or concentrated flow areas.
5. Wood mulch shall consist of tree and shrub debris resulting from clearing and grubbing and shall be ground by the mechanical means such as a chipper, hammermill, tub grinder or other approved method. Mulch sizing varies with a maximum width of 2" and a maximum length of 10".

Maintenance for Mulch and Compost Filter Beam:

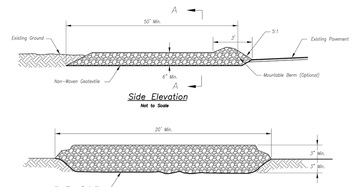
1. Berm shall be reshaped and material added as necessary to maintain function and dimensions.
2. Breaches in the berm shall be repaired promptly.

MULCH OR COMPOST FILTER BERMS

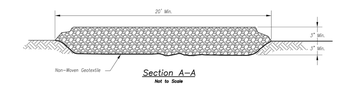
AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METRO CHAPTER
WATTLES/BIODEGRADABLE LOG AND MULCH/COMPOST FILTER BERM	STANDARD DRAWING NUMBER ESC-04
	ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

Plan View
Not to Scale



Side Elevation
Not to Scale



Section A–A
Not to Scale

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized adequately for the amount of concrete placed on site. The slopes leading out of the subsurface pit shall be 2:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for washed concrete.
3. Concrete washout, washed pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water-tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.

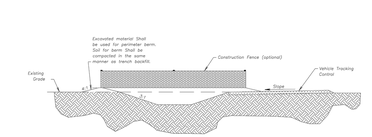
Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3H:1V side slopes across the foundation area perpendicular to the road from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of installation. Top dress with clean aggregate as needed.

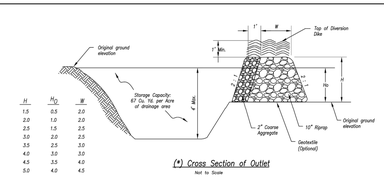
CONSTRUCTION ENTRANCE



CONCRETE WASHOUT

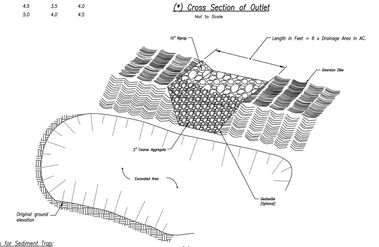
AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METRO CHAPTER
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT	STANDARD DRAWING NUMBER ESC-01
	ADOPTED: 10/24/2016

Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.



H	Ho	W
1.5	0.5	2.0
2.0	1.0	2.0
2.5	1.5	2.5
3.0	2.0	2.5
3.5	2.5	3.0
4.0	3.0	3.0
4.5	3.5	4.0
5.0	4.0	4.5

(*) Cross Section of Outlet
Not to Scale



(*) Perspective View of Outlet
Not to Scale

(*) – The perspective view and cross section are schematic in nature. Construction plans must provide specific site construction arrangements.

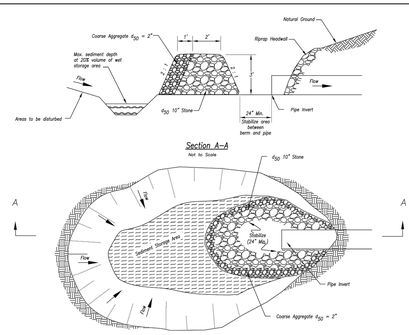
Notes for Sediment Trap:

1. The area under the embankment shall be cleared, grubbed, and stripped of any vegetation and root mat.
2. Fill material for the embankment shall be free of roots or other woody vegetation, organic material, large stones, and other objectionable material. The embankment should be compacted in 8-inch layers by traversing with construction equipment.
3. The earthen embankment shall be stabilized immediately after installation.
4. Construction operations shall be carried out to minimize erosion and water pollution.
5. The structure shall be removed and the area stabilized when the upslope drainage area has been stabilized.
6. All cut and fill slopes shall be 2H : 1V or flatter, except for excavated, wet storage areas which may be at a maximum 1H : 1V grade.

Maintenance for Sediment Trap:

1. Check sediment traps after periods of significant runoff.
2. Remove sediment and restore the trap to its original dimensions when sediment accumulates to 20% of the storage capacity.
3. Immediately repair any erosion damage to the embankment and outlet.
4. Keep outlet and pool area free of all trash and other debris.

SEDIMENT TRAP



Section A–A
Not to Scale

Plan View
Not to Scale

Notes for Sediment Trap at Culvert Opening:

1. The inlet protection device shall be constructed in a manner that will facilitate clean-out and disposal of trapped sediment and minimize interference with construction activities.
2. The inlet protection devices shall be constructed in such manner that any resultant ponding stormwater will not cause excessive inconvenience or damage to adjacent areas or structures.
3. Geometry of the design will be a horseshoe shape around the culvert inlet.
4. The toe of the riprap shall be no closer than 24" from the culvert opening to provide an acceptable emergency outlet for flows from larger storm events.
5. Storage requirements equivalent to that of temporary sediment trap.
6. 67 CY./Acre wet storage below base of stone.
7. 67 CY./Acre dry storage from base of stone to top of stone berm.

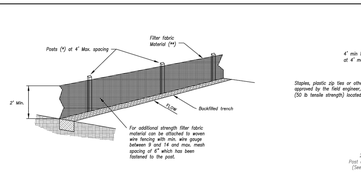
Maintenance for Sediment Trap at Culvert Opening:

1. Check sediment traps after periods of significant runoff.
2. Remove sediment and restore the trap to its original dimensions when sediment accumulates to 20% of the storage capacity.
3. Immediately repair any erosion damage to the embankment and outlet.
4. Keep outlet and pool area free of all trash and other debris.

SEDIMENT TRAP AT CULVERT OPENING

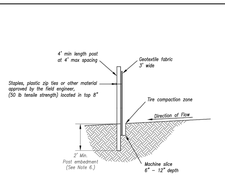
AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METRO CHAPTER
SEDIMENT TRAPS	STANDARD DRAWING NUMBER ESC-08
	ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.



(*) POSTS
- MIN. LENGTH 4'
- HARDWOOD 1 ¾" x 1 ¾"
- MILD SOUTHERN PINE 2 ¾" x 2 ¾"
- STEEL 1.33 LB/FT

(**) – Geotextile Fabric shall meet the requirements of AASHTO M288



SILT FENCE DETAILS
Not to Scale

Notes:

1. In order to contain water, the ends of the silt fence must be turned uphill (Figure A).
2. Long perimeter runs of silt fence must be limited to 100'. Runs should be broken up into several smaller segments to minimize water concentrations (Figure A).
3. Long slopes should be broken up with intermediate rows of silt fence to slow runoff velocities.
4. Attach fabric to upstream side of post.
5. Install posts a minimum of 2' into the ground.
6. Trenching will only be allowed for small or difficult installation, where slicing machine cannot be reasonably used.

Maintenance:

1. Remove and dispose of sediment deposits when the deposit approaches ½ the height of silt fence.
2. Repair as necessary to maintain function and structure.

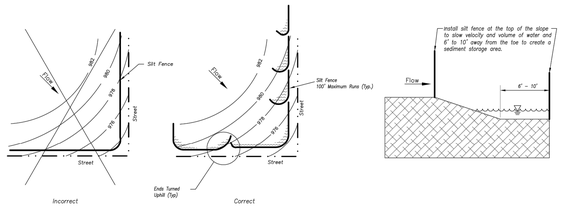
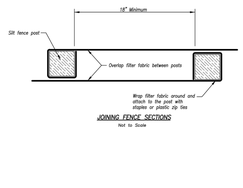


Figure A

SILT FENCE LAYOUT
Not to Scale



JOINING FENCE SECTIONS
Not to Scale

AMERICAN PUBLIC WORKS ASSOCIATION	KANSAS CITY METRO CHAPTER
SILT FENCE	STANDARD DRAWING NUMBER ESC-03
	ADOPTED: 10/24/2016

Modified from 2015 Overland Park Standard Details for Erosion and Sediment Control.

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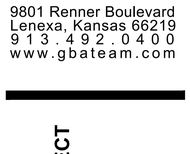
PROPOSED FACILITY FOR:
STAR EXCAVATION LLC.
THE FAMILY RANCH RECLAMATION PROJECT
I-470 & PRYOR ROAD
LEE'S SUMMIT, MISSOURI



REVISION

PROJECT NUMBER
12720.01

DATE
03/21/13
09/10/13
10/22/15
02/04/21
08/16/21

DESIGNED
DWC

DRAWN
DWC/JWM

REVIEWED
BDB

SHEET TITLE
EROSION AND SEDIMENT CONTROL GENERAL NOTES & DETAILS

SHEET NUMBER
C4.0

APPENDIX C

Stormwater Pollution Prevention Team

The Family Ranch Reclamation Project

EPA Section 5.1.1

STORMWATER POLLUTION PREVENTION TEAM	PERSON RESPONSIBLE	JOB TITLE
Pollution Prevention Team Leader		
Compliance with General Permit (all aspects)		
Communications with MDNR and Other Regulatory Agencies		
SWPPP Certification and Re-Certifications		
SWPPP Implementation		
SWPPP Updates and Modifications		
Oversight of all SWPPP Incidents and Internal Recordkeeping		
Annual Employee Training		
Annual Comprehensive Site Inspection and Report		
Quarterly Visual Assessment of Stormwater Discharges		
Quarterly Discharge Monitoring		
Monthly Routine Facility Inspections		
Implement and Maintain BMPs		
Good Housekeeping		
Spill Prevention and Response		
Sediment and Erosion Control (Grounds)		
Management of Runoff (Streets, Parking Lots, Grounds)		

APPENDIX D

Spill Response Action Plan

Spill Response Action Plan

Spill Prevention and Response Contacts:

Contact Kevin Thomas (Thomas Crushing, LLC) 816-540-9169

Small Spill, 1 – 5 gallons

1. Absorbent pads or other appropriate cleaning methods will be used to clean up spilled product.

Medium Spill, 5 – 100 gallons

2. Contact a Spill Prevention and Response member as listed above.
3. Absorbent pads / spill kit will be used to clean up spilled product, if possible.
4. Notify appropriate emergency contact below if there is an immediate danger to life or property.

Large Spill, 100+ gallons

1. Contact a Spill Prevention and Response member as listed above.
2. Contain material from entering storm sewer system, streams, or other surface waters, if possible.
3. Notify appropriate emergency contact below if there is an immediate danger to life or property.
4. Notify appropriate State or Federal agency.

Emergency Contacts:

Emergency 911
Lee's Summit Police Department 816-969-1700
Lee's Summit Fire Department 816-969-7360
EPA National Response Center 800-424-8802 (24-hours)
Missouri Emergency Response Commission 573-634-2436
MDNR Department of Environmental Quality 800-361-4827

APPENDIX E

Pollutant Sources, Control Measures, and New BMP Implementation

POLLUTANT SOURCES, CONTROL MEASURES, AND NEW BMP IMPLEMENTATION (EPA Section 5.1.3 and 5.1.4)	**Completed By:**_____ **Title:**_____ **Date:**_____

Instructions: List all building areas where chemicals are being stored, or lubricants are actively being used. Inspect and perform necessary maintenance on storm water management devices, test and maintain equipment to minimize breakdowns, or potential failures which could cause a discharge of pollutants. Identify stormwater pollutants sources as well as the existing management practices and note deficiencies. If deficiencies are noted, identify new BMP options which could help to eliminate stormwater pollutants and implement a schedule for those BMP options.

Building / Area	Stormwater Pollutant Sources	Existing Control Measures and Description of any Deficiencies (i.e handling, storage, containment, BMPs, etc.)	New BMP Options	Implementation Schedule
Outfall Area	Sediment	Rock Ditch Check	None	
Perimeter of Site	Sediment	Mulch Berms	None	

BRIEF INSPECTION COMMENTS:

SIGNATURE:_____ **DATE:**_____

APPENDIX F

Non-Stormwater Discharge Certification

NON-STORMWATER DISCHARGE CERTIFICATION (EPA Section 2.1.2.10)	Completed by:_____ Title:_____ Date:_____

Date of Discharge	Outfall(s) Directly Affected	Identify Potential Discharge Source

I hereby certify that all stormwater outfalls have been tested or evaluated for the presence of non-storm water discharges.

(See EPA 832-R-92-006 - Section 2.2.4 – Part IV.D.3.g.(1) for list of Authorized Discharges.)

DULY AUTHORIZED SIGNATURE_____
DATE_____

APPENDIX G

Training Log (Annual)

TRAINING LOG **(EPA Section 2.1.2.9)**	**Instructor:_____** **Date of Training:_____**

Name of Employee	**Signature**

I hereby certify that all employees listed above were present and received pertinent information regarding the protection of stormwater outfalls from potential onsite pollutants as described in the SWPPP.

INSTRUCTOR SIGNATURE_____
DATE_____

APPENDIX H

Comprehensive Site Inspection (Annual)

COMPREHENSIVE SITE INSPECTION (Annual) **(EPA Section 4.3)**	**Completed By:**_____ **Title:**_____ **Date:**_____

Comprehensive Site Inspections must be conducted by qualified personnel with at least one member of the stormwater pollution prevention team participating in the comprehensive site inspections. The Comprehensive Site Inspections must cover all areas of the facility affected by the requirements in this permit, including the areas identified in the SWPPP as potential pollutant sources where industrial materials or activities are exposed to stormwater, any areas where control measures are used to comply with any effluent limits, and areas where spills and leaks have occurred in the past 3 years. The inspections must also include a review of monitoring data collected in accordance with EPA Section 6.2.

COMPREHENSIVE SITE INSPECTION REPORT

Signature:_____

Date:_____

APPENDIX I

Visual Assessment of Stormwater Discharges (Quarterly)

Quarterly Visual Assessment of Stormwater Discharges

EPA Section 4.2

NOTE: Complete a visual examination form for each Outfall at the facility.

Facility Name: **The Family Ranch Reclamation Project**	
Inspector(s):	
Date:	Time: (am / pm)
Outfall Number:	

Nature of the Discharge:

☐ Rain runoff ☐ Snow melt

Visual examination of the discharge:

Quality of the Discharge	Present at Time of Examination	Description of Quality	Probable Source of Contamination	Unknown?
Color	☐ Yes ☐ No			☐
Odor	☐ Yes ☐ No			☐
Clarity	☐ Yes ☐ No			☐
Floating Solids	☐ Yes ☐ No			☐
Suspended Solids	☐ Yes ☐ No			☐
Quality of the Discharge	**Present at Time of Examination**	**Description of Quality**	**Probable Source of Contamination**	**Unknown?**
Foam	☐ Yes ☐ No			☐
Oil Sheen	☐ Yes ☐ No			☐
Other	☐ Yes ☐ No			☐
	☐ Yes ☐ No			☐
	☐ Yes ☐ No			☐

Additional Comments:

_____

_____

_____

_____ _____

Inspector **Date**

_____ _____

Inspector **Date**

APPENDIX J

Discharge Monitoring Reports (Quarterly)

APPENDIX K

Routine Facility Inspections (Monthly)

ROUTINE FACILITY INSPECTION
(Monthly)

(EPA Section 4.1)

Completed By:_____
Title:_____
Date:_____

Conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to stormwater, and of all stormwater control measures used to comply with the effluent limits contained in this permit. Routine facility inspections must be conducted at least monthly in areas of the facility with significant activities and materials exposed to stormwater. Perform these inspections during periods when the facility is in operation.

Area	Stored Materials	Quantity (units)	Likelihood of contact with storm water. If yes, describe reason.	Significant Spill, Leak, or other stormwater related issue	
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No
				☐ Yes	☐ No