STORM WATER POLLUTION PREVENTION PLAN SIGMUND PLACE ST. PAUL, MISSOURI

PREPARED BY: TRUMPET LAND SERVICES L.L.C. 412 MAIN STREET FESTUS, MISSOURI 63028 (636) 973-4700 (OFFICE)

SITE OWNER SIGMUND BROTHERS DEVELOPMENT, LLC 1265 LYDIA LANE ST. PAUL, MISSOURI 63366 (314) 280-6031

CONSTRUCTION SCHEDULE OF BMP'S:

- Install construction entrance, parking and washdown area. Construction parking area to be utilized as designated equipment, maintenance, and fuel area.
- 2. Prior to clearing, siltation fences are to be installed at the perimeter of the land disturbance as shown (some clearing may be required where siltation fence is installed).
- 3. Install BMP's during ongoing clearing operations as shown on plan.

<u>SEEDING SCHEDULE:</u>

Vegetation shall be established on exposed soil after a phase of clearing has been completed, or areas where no activity will occur for 30 days. See seeding rates this sheet.

ESTIMATED SCHEDULE OF OPERATIONS:

Proposed start of operation - MAY 2007 Approximate durations of: Install construction parking and washdown area - 3 days Install perimeter silt fence - 1 week Clearing - 1 WK. Install BMP's during clearing operations - 2 days Seeding for all disturbed areas - 1 week

Note: Schedule durations are subject to change due to weather conditions. Some operations will have overlapping time frames.

ROUTINE INSPECTIONS & MAINTENANCE:

BMP'S & site are to be inspected on a regular schedule (once per week minimum) and within 24 hours of a major rain event (one-half inch of rain or more).

CONTAINMENT FAILURE PLAN:

- In the event of any loss of contained sediment:
- 1. Repair any damaged siltation fences.
- 2. Clean up any necessary silted areas.
- 3. Restore any necessary silted areas.
- 4. Provide documentation of actions & mandatory reporting to Jefferson County Planning

THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED FOR SITE DEVELOPMENT CONSTRUCTION ACTIVITIES. THE INTENT OF THIS PLAN IS TO CONTROL STORM WATER DISCHARGES AND CERTAIN NON-STORM WATER DISCHARGES THAT MAY BE ASSOCIATED WITH THE CONSTRUCTION ACTIVITIES. EACH OF THE FOLLOWING DISCHARGES ARE AUTHORIZED BY THE CONSTRUCTION GENERAL PERMIT THAT ARE SPECIFIED HEREIN AND MADE PART OF THIS SWPPP:

- 1. WATERS USED TO WASH VEHICLES OR CONTROL DUST
- 2. WATERLINE FLUSHINGS 3. FIRE HYDRANT FLUSHINGS
- 4. GROUND WATER PUMPING FROM TRENCHES AND DETENTION BASIN
- 5. IRRIGATION DRAINAGE
- 6. ROUTINE PAVEMENT WASHDOWNS WHERE SPILLS OR LEAKS OR TOXIC HAZARDOUS MATERIALS HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED)
- 7. ROUTINE EXTERNAL BUILDING WASHDOWNS WHICH DO NOT USE DETERGENTS 8. AIR CONDITIONING CONDENSATES
- 9. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS

IF THE CONTRACTOR ANTICIPATES OR EXPERIENCES ANY OTHER NON-STORM WATER DISCHARGES, HE SHALL CONTACT THE ENGINEER TO DISCUSS THE NEED FOR CONTROL MEASURES AND POSSIBLE REVISIONS TO THIS SWPPP.

COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

ALL CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH APPLICABLE REQUIREMENTS OF FEDERAL, STATE, COUNTY AND JEFFERSON COUNTY REGULATIONS REGARDING STORM WATER POLLUTION

PROJECT DESCRIPTION

THIS PROJECT IS LOCATED IN THE CITY OF ST. PAUL, ST. CHARLES COUNTY, MISSOURI. STORM WATER FROM THIS SITE DISCHARGES INTO AN UNNAMED TRIBUTARY OF THE PERUQUE CREEK. THE TOTAL SITE AREA IS 15.00 ACRES. IT IS ANTICIPATED THAT 10.75 ACRES WILL BE DISTURBED DURING THE CONSTRUCTION ACTIVITIES. THE PI FACTOR OF THE SITE AFTER CONSTRUCTION IS COMPLETE IS ESTIMATED AS 1.90 PER CITY OF ST. PAUL DRAINAGE DESIGN CRITERIA.

INTERIM GRADING SHALL CONSIST OF ROUGH GRADING WITHIN THE PROPERTY BOUNDARY. NO GRADING SHALL TAKE PLACE WITHIN STATE RIGHT OF WAY WITHOUT THE WRITTEN PERMIT AND APPROVALS FROM THE MISSOURI DEPARTMENT OF TRANSPORTATION.

SEQUENCE OF MAJOR ACTIVITIES

- 1. INSTALL SILT FENCE AS INDICATED ON THE PLAN.
- 2. STRIP AND STOCKPILE TOPSOIL
- 3. PERFORM MASS GRADING.
- 4. INSTALL TEMPORARY SEDIMENT BASIN. 5. INSTALL UTILITY LINES.
- 6. INSTALL TEMPORARY SEDIMENT TRAPS AROUND INLETS.
- 5. INSTALL PAVING 6. CONSTRUCT BUILDINGS.
- 7. PROVIDE PERMANENT GROUND COVER AND LANDSCAPING.
- 8. CONVERT TEMPORARY SEDIMENT BASIN TO DETENTION OUTFALL STRUCTURE.

DESCRIPTION OF BEST MANAGEMENT PRACTICES

EROSION CONTROL FENCING (TEMPORARY) FENCING SHALL BE PLACED AS SHOWN ON THIS SWPPP. THE FENCING SHALL BE MIRAFI "ENVIROFENCE" OR APPROVED EQUIVALENT. TEMPORARY EROSION CONTROL FENCING SHALL BE PLACED PRIOR TO BEGINNING GRADING OPERATIONS. EROSION CONTROL FENCING SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

DISTURBED AREAS

DISTURBED AREAS WHERE CONSTRUCTION HAS PERMANENTLY OR TEMPORARILY CEASED MUST BE STABILIZED WITH GRASS OR EROSION MAT WITHIN 14 DAYS OF THE LAST DISTURBANCE. AREAS THAT WILL BE REDISTURBED WITHIN 21 DAYS NEED NOT BE STABILIZED.

SEEDING MIXTURES AND RATES, TYPES OF SOD, METHOD OF SEEDBED PREPARATION, EXPECTED SEEDING DATES, TYPE AND RATE OF LIME AND FERTILIZER APPLICATION, AND KIND AND QUANTITY OF MULCHING FOR BOTH TEMPORARY AND PERMANENT VEGETATIVE CONTROL MEASURES SHALL BE ACCORDING TO ST. LOUIS COUNTY BMP MANUAL.

> VEGETATION ESTABLISHMENT For Urban Development Sites APPENDIX A

SEEDING RATES:

PERMANENT:

Tall Fescue - 30 lbs./ac.

Smooth Brome — 20 lbs./ac. Combined — Fescue @ 15 lbs./ac. AND Brome @ 10 lbs./ac.

TEMPORARY: Wheat or Rye - 150 lbs./ac. (3.5 lbs. per sq. ft.) 120 lbs./ac. (2.75 lbs. per sq. ft.) Oats -

SEEDING PERIODS:

Fescue or Brome - March 1 to June 1 August 1 to October 1

Wheat or Rye - March 15 to November 1 March 15 to September 15 Oats -

MULCH RATES:

100 lbs. per 1000 sq. ft. (4,356 lbs. per ac.)

FERTILIZER RATES:

Nitrogen 30 lbs./ac. Phosphate 30 lbs./ac. 30 lbs./ac. Potassium 600 lbs./ac. ENM* Lime

* ENM = effective neutralizing material as per State evaluation of quarried rock.

TEMPORARY AND PERMANENT NONSTRUCTURAL BMPS

ALL TREE MASSES TO REMAIN SHALL BE MARKED AND/OR PROTECTED. THE GRADING CONTRACTOR IS ENCOURAGED TO RECORD BOTH THE EXISTING CONDITIONS AND THE CONDITIONS IMMEDIATELY UPON COMPLETION OF GRADING IN ORDER TO AVOID POTENTIAL DISPUTES.

EROSION CONTROL MEASURES SHALL BE ACTIVELY MAINTAINED UNTIL FINAL STABILIZATION OF THE DISTURBED AREA IS ACHIEVED, IF EROSION CONTROL MEASURES ARE REMOVED FOR CONSTRUCTION OR ACCESS PURPOSES, CONTRACTOR SHALL REPLACE ALL ITEMS AT THE END OF EACH DAY.

EROSION CONTROL MEASURES REQUIRE MAINTENANCE, CLEANING AND REPLACEMENT AS NECESSARY. EROSION CONTROL MEASURES WILL BE INSPECTED BY THE CONTRACTOR AT LEAST ONCE EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A RAINFALL 1/2" OR GREATER. INSPECTIONS SHALL INCLUDE, BUT ARE NOT LIMITED TO, OBSERVATIONS FOR THE FOLLOWING DEFICIENCIES:

LOOSE OR TORN FABRIC UNSTABLE SILT FENCE POSTS UNDERMINING OR FAILURES OF SILT FENCE ERODED AREAS BARE SPOTS IN SEEDED AREAS INADEQUATE CONDITION OF PARKING AND ENTRANCE SURFACES

EXCAVATED TRENCHES AND UTILITY SPOILS SHALL BE BACKFILLED OR STOCKPILED AT THE END OF

STOCKPILED MATERIALS SHALL BE SURROUNDED BY SILT FENCE OR HAY BALES. ALTERNATE: A WATER-REPELLENT TARP OR PLASTIC COVER MAY BE USED TO COVER SMALL STOCKPILED AREAS. ADDITIONAL SITE MANAGEMENT BMPS.

SOLID NON-HAZARDOUS CONSTRUCTION WASTE SHALL BE DISPOSED OF IN TRASH DUMPSTERS OR APPROVED EQUIVALENT IN A LOCATION APPROVED BY THE OWNER. POTENTIALLY SOLUBLE OR LEACHABLE SOLID WASTE SHALL BE STORED OFF THE GROUND AND IN COVERED LEAK-PROOF CONTAINERS. SOLID WASTE SHALL BE PROPERLY DISPOSED OF OFF-SITE ON A REGULAR BASIS.

HAZARDOUS WASTE SHALL BE SEGREGATED FROM NON-HAZARDOUS CONSTRUCTION SITE DEBRIS. LIQUID OR SEMI-HAZARDOUS WASTE SHALL BE STORED IN APPROPRIATE CONTAINERS (CLOSED DRUMS OR SIMILAR), AND SHALL BE KEPT UNDER COVER. GRANULAR, SOLUBLE, OR LEACHABLE HAZARDOUS WASTE MATERIALS SHALL BE STORED OFF THE GROUND AND IN COVERED LEAK-PROOF CONTAINERS. THE OWNER SHALL PROPERLY APPROVE ANY HAZARDOUS WASTE STORAGE AREA

HAZARDOUS WASTE SHALL BE PROPERLY DISPOSED OF OFF-SITE ON A REGULAR BASIS BY A REPUTABLE LICENSED HAZARDOUS WASTE HAULER.

NOTE: IT IS NOT THE INTENT OF THIS SWPPP. TO SUPERSEDE OR REPLACE NORMAL SITE ASSESSMENT AND REMEDIATION PROCEDURES CONCERNING HAZARDOUS MATERIALS. SIGNIFICANT SPILLS AND/OR CONTAMINATION WARRANT IMMEDIATE RESPONSE BY TRAINED PROFESSIONALS. SUSPECTED JOB SITE CONTAMINATION SHOULD BE IMMEDIATELY REPORTED TO REGULATORY AUTHORITIES AND PROTECTIVE ACTIONS TAKEN.

FRESH CONCRETE WASTE AND CONCRETE EQUIPMENT WASHDOWNS SHALL BE CONTAINED IN AN AREA APPROVED BY THE OWNER. CONTRACTOR SHALL ENSURE THAT ADEQUATE VEGETATIVE BUFFER IS PRESENT AROUND CONCRETE DISPOSAL AREAS.

ALL WASTE MATERIALS SHALL BE STORED AWAY FROM DRAINAGE DITCHES, SWALES AND DRAINAGE STRUCTURES. WHERE APPROPRIATE, CONTAINMENT BERMS SHALL BE PLACED AROUND WASTE

CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO CONTROL DUST GENERATED DURING

CONTRACTOR SHALL CONSTRUCT APPROPRIATE ENTRYWAYS TO PROHIBIT THE TRACKING OF DIRT AND

EQUIPMENT MAINTENANCE, REPAIR AND WASHDOWNS SHALL BE PERFORMED OFF-SITE OR IN LOCATIONS APPROVED BY THE OWNER.

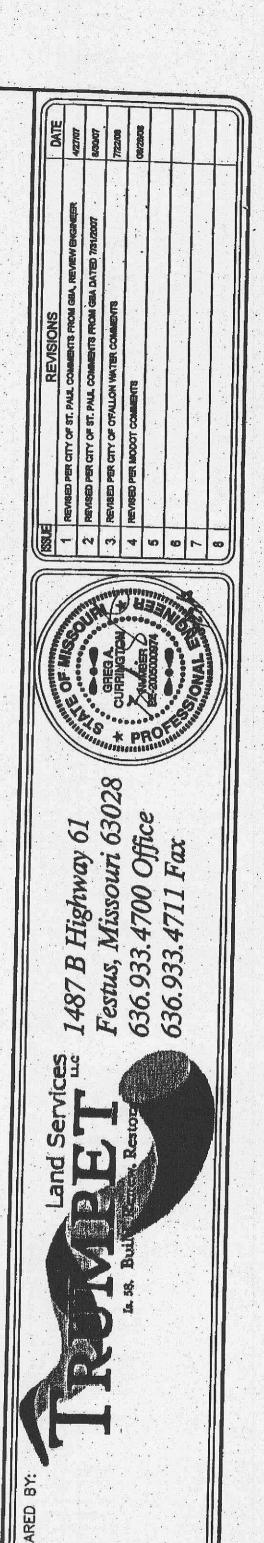
A COPY OF THIS SWPPP SHALL BE KEPT ON-SITE FOR THE ENTIRE CONSTRUCTION PERIOD.

PERMANENT STORM WATER MANAGEMENT

THIS DEVELOPMENT WILL BE SERVED BY A STORMWATER SYSTEM CONSISTING OF REINFORCED CONCRETE PIPE (RCP) STREET INLETS AND AREA INLETS TO COLLECT STORMWATER.

THE OWNER AND HIS CONTRACTORS WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORM SEWER SYSTEM UNTIL THE DATE OF THE PERMIT TERMINATION.

CONTRACTOR TO PROVIDE WATER SUPPLY AND HOSE FOR WASH DOWN STATION.



NOTES EVELOPMENT LA PLACE SHEET 03/29/07 DRAWN BY:

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