STORM WATER POLLUTION PREVENTION PLAN

A. PURPOSE:

The purpose of the Storm Water Pollution Prevention Plan (SWPPP) shall meet the following objections:

- Prevent erosion where construction activities shall occur.
- Prevent pollutants from mixing with storm water.
- Prevent pollutants from being discharged by trapping them on—site, before they can affect the receiving waters.
- B. PROJECT DESCRIPTION:

The project is located in the Belleau Creek watershed in O'Fallon, Missouri. The project is disturbes approximately 1.50 acres.

The project activities consist of clearing and excavating the site to construct a new Heaven Scent Doughnuts. The site will be protected with the various erosion protection measures listed below:

 Silt Fences: All storm water inlet structures shall be protected with silt fences. These fences will be constructed using straw bales in a circular pattern around any inlet device.

The entire perimeter of the project that allows storm water to exit will also have silt fences installed. These fences shall be composed of either straw bales or a fabric material. Details of these devices are depicted on the construction plans prepared by Bax Engineering Company, Inc. and attached.

- Sediment Traps: Sediment traps will be excavated around all curb inlets and grated inlets. Woven geotextile fabric inlet protection will be utilized to ensure that no sediment enters the storm sewer system. A detail of this practice is included with this report.
- 3. Stabilized Construction Entrance: A stabilized construction entrance will be installed at the site entrance to prevent sediment from being tracked onto public roads. The entrance shall consist of 2"-3" washed stone 6" thick. A detail of the construction entrance is included with the plans as well as this report.
- Revegetation: The site will consist of varying ground slopes upon completion of the grading activities and the slope prone to erosion will be seeded and strawed to stabilize the slope and prevent erosion.

## . MAINTENANCE AND INSPECTION:

Regular Maintenance: Weekly inspections of the project will include: (a) The repair of any sediment (silt) fence and/or staked straw bale barriers not well shaped or out of place; (b) The removal of any accumulated trash and/or debris: (c) The clearing of debris, weeds and wild growth and the removal of vegetation where necessary to allow the silt basin to perform effectively; and (d) The remove of any externally deposited waste materials.

Periodic Inspections: Following each rain of more than 0.50 inch in 24 hours, the site will be inspected, and any necessary maintenance will be provided for a period of one year following the completion of the above remediation measures. Summaries of the maintenance and the inspections will be maintained and shall be kept available from the owner. An inspection report shall be filed and kept on site for every inspection. The report shall detail the findings of the inspection and if any action was required. The inspection for needs to include, name of the site, name of the inspector, permit number, date of inspection, major observations and actions taken to correct problems and the signature of the inspector. The inspection reports need to be kept on file by the permitte for three years after the project is completed.

The field inspections will be conducted in a systematic manner to minimize the possibility of any significant feature being overlooked. A detailed checklist will be developed and followed for the examination. Particular attention will be given to detecting evidence of erosion, slope instability, undue settlement, displacement, and tilting. Photographs and drawings will be used freely to record conditions in order to minimize descriptions. The field inspection will include appropriate features and items, including potential hazards to human life or property.

The condition of the slopes and vegetative cover will be evaluated and examined for erosion. The basins will be examined for excessive sedimentation and increase in sediment loads, which will reduce the basins capacity.

Measures will be taken to promote the growth of vegetation and repair of damage caused by erosion and sedimentation. The inspection will also provide recommendations for measures that need to be undertaken immediately, based on the experience and judgment of the inspector. Necessary follow up inspections will be made as necessary to verify that any maintenance, alteration, or repair measures are accomplished by methods acceptable by standard engineering

## SEDIMENTATION CALCULATIONS FOR TRAPS AT NOTED STRUCTURES:

TRAP "A" 0.24 ACRES OF DRAINAGE x 1800 CU.FT./ACRE = 432 CU.FT. OF REQUIRED STORAGE. SIZE OF TRAP IS 2' DEPTH x 11.6' WIDE x 25' LENGTH = 580 CU.FT. OF SEDIMENT STORAGE PROVIDED. Clean out at elevation = 604.35

TRAP "B" 0.77 ACRES OF DRAINAGE x 1800 CU.FT./ACRE = 1386 CU.FT. OF REQUIRED STORAGE. SIZE OF TRAP IS 2' DEPTH x 25' WIDE x 28' LENGTH = 1,400 CU.FT. OF SEDIMENT STORAGE PROVIDED. Clean out at elevation = 601.20

## STORM WATER POLLUTION PREVENTION PLAN SITE NOTES

1. A Preconstruction conference will be scheduled with the Director of Development Review prior to the start of construction activities, including installation of the temporary construction entrance. The permittee will be responsible for notifying all contractors and other entities including utility crews that will perform work at the site to be in attendance.

2. The contractor shall install perimeter siltation control (silt fencing) and install the construction entrance.

- 3. Site then shall be cleared and stripped.
- 4. Contractor shall install additional silt fencing, sediment traps and diversion berms as needed in order to control siltation on site.
- 5. Contractor shall install permanent storm sewer system and protect inlets with appropriate siltation control devices.
- 6. Contractor shall create temporary drainage swales and diversion berms/swales as needed to direct site water to the catch basins.
- 7. Contractor shall maintain all siltation control devices.
- 8. Contractor shall finish grade all areas as soon as practical and establish permanent vegetation and/or install erosion control matting as shown.

9. During construction of building and pavement, the contractor shall maintain all drainage and erosion control structures as needed.

10. Contractor shall finish grade and install any final erosion control measures as project is completed as well as all permanent landscaping.

11. Contractor to notify the City of O'Fallon 2 days prior to start up of any site

