INTERGOVERNMENTAL AGREEMENT TO FUND A JOINT STORMWATER MANAGEMENT CONSTRUCTION & IMPROVEMENT PROGRAM WITHIN WATERSHEDS DRAINING TO THE UNIVERSITY OF WISCONSIN – MADISON ARBORETUM

THIS INTERGOVERNMENTAL AGREEMENT, hereinafter referred to as "this Agreement", made and entered into by, between and among Wisconsin State Department of Transportation, the Cities of Madison and Fitchburg; the Town of Madison; and the University of Wisconsin-Madison; hereinafter collectively referred to as the "Municipalities".

WITNESSETH:

WHEREAS, stormwater runoff from the Municipalities drains within various subwatersheds with ultimate discharge to lands known as the University of Wisconsin-Madison Arboretum; hereinafter referred to as the "Arboretum", and,

WHEREAS, the Municipalities share various sub-watersheds with one another and contribute storm water runoff to varying degrees within some or all of these sub-watersheds; and,

WHEREAS, the Municipalities agree that a joint comprehensive approach to the management of stormwater runoff within these shared sub-watersheds is desirable; and,

WHEREAS, the Municipalities agree that responsibility for stormwater management can be determined and assigned as a percentage for any given sub-watershed, as further detailed in this Agreement; and,

WHEREAS, the Municipalities agree, pursuant to sec. 66.0301, Wis. Stats, that the University of Wisconsin - Madison and the City of Madison shall administer various components of a Stormwater Management Construction and Improvement Program to the mutual benefit of the Municipalities and on their behalf consistent with the work elements and components of this Agreement.

NOW, THEREFORE in consideration of the above premises and the covenants of the parties hereinafter set forth, the receipt and sufficiency of which is hereby acknowledged by each party for itself, the Municipalities agree as follows:

1. COST SHARING ALLOCATION

a. The Municipalities shall participate in the funding of the various components of the Improvement Plan, on a project-by-project basis. Funding contributions are hereby established on a percentage basis, as identified on attached Exhibit 1. For all projects, the University of Wisconsin - Madison shall pay an agreed fixed percentage. The Municipalities other than the University of Wisconsin - Madison, shall pay a percentage of the respective project cost based on contributing area of drainage, less the University of Wisconsin - Madison fixed percentage. TSS treatment credit, under NR151.13(2), for each facility shall be assigned according

to the volume of runoff contributed by each municipality discharging to each respective facility.

- b. Town of Madison percentage contributions shall be further reduced by prorating the life of the facility being constructed, to the remainder of the time of existence for the Town. The Cities of Madison and Fitchburg shall pick up the remainder of the prorated cost (if any), based upon the ultimate boundary of each respective City when the Town ceases to exist. For the purposes of this Agreement, the life of all facilities shall be deemed to be 20 years.
- c. The attached Exhibit 1 includes estimated costs and probable schedule for each project. Actual costs may be more or less than estimated and the applicable project percentage contribution shall govern for final actual cost allocation. The administering Municipality will keep all Municipalities informed of updated estimates and scheduling changes, prior to entering into design or construction contracts.
- d. If the administering Municipality or any Municipality wishes to finance a project in whole, to expedite the schedule of construction, the remaining participating Municipalities agree to reimburse the financing Municipality within their next budget year, but no later than within 2 years of award of the project. The City of Madison's cost participation is limited to \$500,000 for any given year. If said City funds are unused for any given year, they can be carried over for one year.
- e. Notwithstanding the above, the administering Municipality shall invoice the other Municipalities as project costs are incurred and as convenient.
- f. The administering Municipality shall attempt to secure funding grants where feasible for any of the projects. When grants are used to partially fund any project, those grant funds are to be counted first, prior to cost allocation of the remainder project costs to the Municipalities based on the applicable project percentage contributions.
- g. All public information and contacts regarding specific projects shall be through the administering Municipality.
- h. Maintenance shall be the responsibility of all parties. Routine and minor maintenance and inspections shall be the responsibility of the owner of the land on which the storm water facility resides. Major maintenance and reconstruction of the facilities shall be paid for by all Municipalities on a percentage basis as defined by the applicable after-grant funding percentages for the original construction of each respective facility. The owner of the land on which the stormwater facility resides shall be responsible for scheduling major maintenance and reconstruction and notifying participating parties of scope and costs prior to coordinating said major maintenance and / or reconstruction.

2. COMPONENTS OF THE STORMWATER MANAGEMENT CONSTRUCTION and IMPROVEMENT PROGRAM

A) Manitou Way / Secret Pond

The Manitou Way-Secret Pond drainage way was constructed during the 1960's (trench) and 1980's (pond) to manage storm water runoff entering the Arboretum from the Nakoma and Odana sub-watersheds. This outfall receives high volume flows during semiannual rain events, and carries about 35% of all the runoff entering the Arboretum each year. The Manitou Way outfall trench is severely eroded, and the pond is filled with accumulated sediment. High runoff flows are scouring the pond basin, carrying sediment into the West Wingra Marsh and Lake Wingra.

This project replaces Secret Pond with a new pond located at the Manitou Way outfall. A terraced conveyance between the Manitou Way outfall and West Wingra Marsh shall replace the existing trench. The lower sides and bottom of the conveyance will be planted with native grassy species, with native woody shrubs along the upper terrace. Plantings for the conveyance will be selected by the Arboretum, and designed as an experiment to evaluate species suitability for this use. The result is intended to be elimination of erosion, and safe conveyance of high volume flows. See Exhibit 2A for a mapped depiction of the project.

The University of Wisconsin – Madison, shall be the administering Municipality.

B. Curtis Pond

Excavated in the 1980's, this wet detention pond and berm sit perched above Curtis Prairie. Runoff from the northern Grady Tract, western Arbor Hills Neighborhood, and the South Beltline Highway is conveyed via a broken flume to Curtis Pond. A thousand cubic yards of native soil from beneath the flume has accumulated in the pond, limiting its capacity for containing storm flows and removing nutrients. The single pond outfall discharges excessive flows to Curtis Prairie, creating an erosional trench, contributing to ponding above fire lanes, and supporting the spread of invasive species (e.g. reed canary grass, etc.).

Curtis Pond will be rehabilitated. Evaluation of construction alternatives is underway. If feasible, its location will be moved south adjacent to the highway, eliminating the concrete flume and allowing the prairie to be restored at the old pond site. WI-DOT has closed street drains that had emptied onto the Grady Tract. The Arboretum has proposed creating biofiltration and soil stabilization restoration in the Grady Tract to reduce erosion. See Exhibit 2B for a mapped depiction of the project.

The University of Wisconsin – Madison, shall be the administering Municipality.

C. Coyote Pond

This small pond to the south of the McKay Center may have been the site of a spring or seep, before a storm drain was routed to it. Today, runoff from Landmark Place and a short section of the Beltline Highway carrying high chloride runoff and suspended solids and has scoured a pond out of the wetland.

Evaluation of construction alternatives for Coyote Pond is underway. Runoff management

options include constructing an infiltration basin adjacent to the highway, to intercept flows, or conveying flows west to the Curtis Pond system. WI-DOT has constructed a sediment forebay at Landmark Place to provide pre-treatment and spill containment. See Exhibit 2C for a mapped depiction of the project.

The University of Wisconsin – Madison, shall be the administering Municipality.

D. Johannsen Pond

Runoff originating in Arbor Hills and the South Beltline Highway is conveyed to this erosion control pond via a concrete flume, while runoff from the adjacent Todd Dr. commercial/industrial area is conveyed directly to the Pond through a storm drain. This pond lacks detention capacity, and serves as a forebay to the Teal Pond Wetlands. Consequently, runoff with minimal treatment is entering the wetlands causing scouring and depositing sediment, prior to being conveyed to Lake Wingra. Accumulation of urban pollutants threatens species diversity in the pond.

Johannsen Pond will be dredged and rehabilitated with new control structures. A 4 acre wetland / infiltration basin will be placed adjacent to the existing flume to take flows from the highway outfall via a forebay designed to provide spill protection and winter runoff bypass. Waste Management Corp. will upgrade treatment of runoff from its W. Badger Rd. tipping yard. See Exhibit 2D for a mapped depiction of the project.

The University of Wisconsin – Madison, shall be the administering Municipality.

E. Pond #4 @ Fish Hatchery Road

The Southeast Marsh currently serves as a wet detention basin for an average 225 acre feet of annual runoff from the Arbor Hills and Lincoln neighborhoods, and the South Beltline Highway. A dike, and two undersized flood control ponds built in the mid 1980's by the Town of Madison, are meant to slow the flow of runoff entering Schmidt Lagoon, alleviating flooding in the Carver-Martin Neighborhood and reducing scouring in Gardner Marsh. One of these control ponds, Pond # 4, breached its containment berm and is now a dry basin contributing accumulated sediment to the Marsh.

Pond #4 will be re-constructed as a 6 acre wet detention pond, with effluent dispersed into the SE Marsh. See Exhibit 2E for a mapped depiction of the project.

The University of Wisconsin – Madison, shall be the administering Municipality.

F. Pond #3 @ W. Badger Road

As stated above, the Southeast Marsh currently serves as a wet detention basin for an average 225 acre feet of annual runoff from the Arbor Hills and Lincoln neighborhoods, and the South Beltline Highway. A dike, and two undersized flood control ponds built in the mid 1980's by the Town of Madison, are meant to slow the flow of runoff entering Schmidt Lagoon, alleviating flooding in the Carver-Martin Neighborhood and reducing scouring in Gardner Marsh. The second of these control ponds, Pond #3, is nearly filled with sediment from upgradient erosion, and has a deteriorated outlet structure with outflows channelizing the marsh.

Pond #3 will be dredged and rehabilitated with new outlet structures. The inlet will be stabilized to prevent future erosion. See Exhibit 2F for a mapped depiction of the project.

The City of Madison, in consultation with the UW-Arboretum, shall be the administering Municipality.

G. Greene Prairie Restoration

On the southwest Grady Tract boundary, 380 acre feet of stormwater runoff from the Allied-Dunn Neighborhood, Orchard Ridge Neighborhood, Bel-Mar Neighborhood, Dunn's Marsh and Harlan Hills, discharges onto lower Greene Prairie, and is conveyed to Knollwood Conservation Park. Untreated runoff from Allied-Dunn, with high peak flows carrying sediment, fluctuating water levels and winter chloride, are modifying the prairie ecology, and supporting the spread of invasive species (eg. reed canary grass, etc.).

Project H, described below, will redirect the Seminole Highway storm sewer outfall away from it's current direct discharge into the Greene Prairie.

Following this work, the University of Wisconsin – Madison will conduct further restoration activities within the Greene Prairie, which may include constructing a meander or other grading activities along with vegetation management. See Exhibit 2G for a mapped depiction of the project.

The University of Wisconsin – Madison, shall be the administering Municipality.

H. Seminole Highway Stormwater Diversion

Currently, storm water from portions of the Bel-Mar Neighborhood and Dunn Neighborhood flows south on Seminole Highway and discharges at the north side of the Union Pacific Railroad right-of-way (future Cannonball Trail). Without peak flow control or sediment reduction, this stormwater floods portions of the Greene Prairie (a prairie restoration in the Grady Tract of the Arboretum started by Henry C. Greene in the 1940's). The purpose of this project is to reroute this storm water away from Greene Prairie to reduce sediment deposition and erosion. The storm water shall be redirected into Dunn's Marsh following treatment in a new, upstream 0.46-acre storm water settling pond. The pond is estimated to reduce the particulate solids loading by 47.9%.

The treatment pond's normal water level is set at elevation 941.00 and the pond bottom at an elevation of 934.00, providing seven (7) feet of dead storage. HydroCAD rainfall models indicate that the pond will store water up to a 2-year rain event, or 2.90 inches of rain in a 24-hour period. However, if rainfalls are greater than this, the pond is designed to overflow at an emergency spillway on the south side of the pond, via sheet flow to an unnamed tributary of Nine Springs Creek.

The storm pipe relocation and pond construction is intended to reduce undesirable sediment deposition to both Dunn's Marsh and Greene Prairie and reduce the erosive velocities and peak flows to downstream waterways.

The City of Fitchburg and City of Madison will continue to investigate additional measures to manage water quality and quantity issues resulting from stormwater discharges into and out of Dunn's Marsh and from the Harlan Hills development in Fitchburg. See Exhibit 2H for a mapped depiction of the project.

The City of Madison has been the administering Municipality for this project which has been completed in advance of this agreement.

I. Ho-Nee-Um Pond

Two storm drains discharge into Lake Wingra in this area: Ho-Nee-Um Pond has an existing 24 inch storm outfall, receiving runoff from the Dudgeon-Monroe Neighborhood and Monroe Street. Just Northeast of Ho-Nee-Um Pond, the Pickford St. outfall (3 foot x 2.5 foot storm box) discharges runoff from the Westmorland, Sunset Village and Dudgeon-Monroe neighborhoods, with occasional overflows into Ho-Nee-Um Pond. Storm water entering Lake Wingra at these outfalls is mostly untreated. Consequently, the deposition of street sand and large particles has created islands in Lake Wingra and Ho-Nee-Um Pond.

The Ho-Nee-Um Pond storm outfall will be relocated to Arbor Drive. Funding for this portion of the project is from the University of Wisconsin – Madison and the City of Madison. Additionally, the City may upgrade and / or relocate the larger storm outfall from Pickford Street, solely at its cost – or add additional surface treatment on Arboretum lands if acceptable to UW. The University of Wisconsin - Madison agrees to work cooperatively and to grant an easement for construction or new alignment thru Arboretum lands. The project shall also remove the accumulated sediment in Lake Wingra and Ho-Nee-Um Pond due to the present outfall. See Exhibit 2J for a mapped depiction of the project.

The City of Madison shall be the administering municipality for the dredging, Pickford Street outfall and Ho-Nee-Um Pond outfall relocation components.

- 3. The term of this Agreement is 20 years.
- 4. This Agreement shall be binding on all the municipal parties hereto, their respective assigns and successors and cannot be varied or waived by any oral representations or promises unless the same be in written form and signed by the duly authorized agent or agents who executed this Agreement or their legal successors.
- 5. This Agreement may be amended or extended at any time upon agreement of the parties.
- 6. During the term of this Agreement, each Municipality agrees to abide by its own Affirmative Action Plan and in doing so shall not discriminate in the employment or training of any person by reason of race, religion, marital status, age, color, sex, handicap, national origin, or ancestry, income level, or source of income, arrest record or conviction record, less than honorable discharge, physical appearance, sexual orientation, political beliefs, or student status.

- 7. This Agreement constitutes the entire agreement of the municipal parties and supercedes any and all negotiations leading hereto.
- 8. This Agreement is intended to be an agreement solely between the municipal parties hereto and for their benefit only. No part of this Agreement shall be construed to add to, supplement, amend, abridge or repeal existing rights, benefits or privileges of any third party or parties, including but not limited to employees of any of the parties.

IN WITNESS WHEREOF, each Municipality, by its respective duly authorized agents, have set their seals.

FOR THE CITY OF MADISON

A WISCONSIN MUNICIPAL CORPORATION

David J. Cieslewicz, MAYOR

Maribeth Witzel-Behl CITY CLERK

COUNTERSIGNED:

Dean Brasser, CITY COMPTROLLER

APPROVED AS TO FORM:

Michael P. May, CITY ATTORNEY

FOR THE CITY OF FITCHBURG

A WISCONSIN MUNICIPAL CORPORATION

Thomas Clauder, MAYOR

Linda Cory, CITY CLERK

FOR THE TOWN OF MADISON

A WISCONSIN MUNICIPALITY

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James Campbell, TOWN CHAIR

Renee M. Schwass, TOWN CLERK

FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

Joseph S. Olson, P.E Director – Southwest Region Wisconsin Department of Transportation

FOR THE UNIVERSITY OF WISCONSIN-MADISON

Darrell Bazzell, VICE CHANCELLOR UNIVERSITY ADMINISTRATION

11/17/08

DATE

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