Storm Water Pollution Prevention Initiative
SWPPI

Village of Vicksburg
Kalamazoo County, Michigan

August 1, 2012

Prein&Newhof

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1. Total Maximum Daily Load (TMDL)

The Village is not currently discharging to a body of water that has a TMDL. The Village discharges to Sunset Lake and Portage River of the St. Joseph River Watershed. If a TMDL is developed for these water bodies, this plan will be edited. There are also no discharges over 36 inches in diameter in the Vicksburg storm system. The Village of Vicksburg's storm system includes the Vicksburg Community Schools as they were nested under the Village's watershed based permit in September 2010.

2. Public Education Plan (PEP)

An updated PEP was integrated into the SWPPI in July 2012. The PEP with associated tables is included as Appendix I of this plan. The primary events where free public education material is made available to the public include the Vicksburg Hearty Hustle (May), Vicksburg Old Car Festival (June), and Art Hop Days (August). Additional stormwater educational information is made available year round at the Village's office.

3. Illicit Discharge Elimination Plan (IDEP)

An updated IDEP was integrated into the SWPPI in July 2012. The IDEP with associated tables and forms is included in Appendix II of this plan.

a) Stormwater Ordinance

An ordinance was adopted by the Village Board on June 21, 2010 (Ordinance No. 261). This ordinance is included in Appendix III.

b) Program to Find and Eliminate Illicit Discharges

As stated in the IDEP, at least once per 5-year permit cycle all of the discharge points are observed during dry weather to determine if there is the potential for an illicit discharge. A form is completed for each discharge point and a photo is taken. This was last completed in 2012. The forms and pictures are available at the Village of Vicksburg Hall and at the DPW office.

c) Staff Training

Staff training is completed once per 5-year permit cycle and when a new employee is hired. This staff training includes a video developed by Wayne County. Other training materials available from the MDEQ website may be added in future training.

d) Method for Determining Effectiveness

Methods for determining the effectiveness of the IDEP tasks are listed in Table 2 in Appendix V and discussed below in Section 6. It is difficult to show effectiveness in the Village because the storm system is not very extensive. That is, there are few opportunities for illicit connections and the Village has a separate sanitary sewer system. The predominant land use is residential with some retail and light commercial. To date, very few illicit connections were identified by staff or reported and the ones that were have been corrected.

4. Post-Construction Storm Water Control

Site plans within the Village of Vicksburg are reviewed by the planning commission. As a general rule, the municipality requires site plan review for all but single family residential buildings. The review includes appropriate storm water Best Management Practice's (BMP's) such as: on-site management (no additional runoff standard); isolation of storm water from pollutants; secondary containment when required; and protection of central environmental resource areas, and long term operations and maintenance along with the requirements of the Performance Standards adopted by the Village. The applicant, in his plan submittals for Site Plan Approval, shall demonstrate compliance with these performance standards and shall be responsible for evaluating the elected best management practices.

The Village's Performance Standards apply to all new and redeveloped sites with projects that disturb one (1) acre or more, including projects less than one (1) acre that are part of a larger common plan of development or sale that would disturb one (1) acre or more. These requirements also apply to all public and private sites within the Village, regardless of whether the stormwater outlet(s) from the site discharge to a designated county drain, Village storm sewer system, waters of the state or any other types of conveyance.

These Performance Standard's requirements also apply to sites under the control of public agencies such as schools, Federal and State governmental facilities, Kalamazoo County Road Commission, Village of Vicksburg, a designated County Drain, and other entities that might not otherwise be subject to site plan review procedures and requirements as set forth in other sections of the Village's codified ordinances. When the Village is notified of a project or potential project by an agency within the Village limits that does not require site plan review, the Village will provide the agency written communications and a copy of the Village's Performance Standards and also request reviewing the proposed plans to provide input for the agency to implement such Standards.

Complaints of storm water or local flooding issues are responded to promptly by enforcing storm water ordinances and commitments made during site plan approval.

Problematic retention, detention, and infiltrative areas are reviewed after rainfall events to ensure infiltration. The Village currently owns eleven (11) infiltration areas, generally located in the west and northwest side of the Village.

As mentioned earlier, an ordinance was adopted by the Village Board on June 21, 2010 (Ordinance No. 261). This ordinance is included in Appendix III. The ordinance refers to "Performance Standards" (also found in Appendix III) which is a separate document (Resolution 6-1-10-1, adopted June 7, 2010) that can be easily updated based on the needs of the community and requirements of the NPDES Permit and includes the following:

a) Minimum Treatment Volume Standard

The document provides a "performance standard" for the minimum treatment volume standard.

b) Channel Protection

The "performance standard" also defines the channel protection criteria.

c) Operation and Maintenance for Water Quality Treatment

The document defines enforcement mechanisms for the Village to use to ensure operation and maintenance is continued for installed BMP's.

5. Construction Storm Water Runoff Control

The Village is the local Soil Erosion and Sedimentation Control (SESC) Enforcing Agency. During the site plan review developer's plans are reviewed for SESC requirements and provided permits where appropriate. In addition, Vicksburg also notifies the county SESC agent if the Village notices any issues that need to be addressed by the County SESC staff.

6. Pollution Prevention and Good Housekeeping Activities for Municipal Operations

The Village of Vicksburg owns and maintains public roads, sanitary sewer, storm sewer, and water main. The storm sewer system has several active storm sewer outlets and various leaching basins that make up Vicksburg's storm water system. The Village owns and operates a Municipal Building with a co-located police station. The municipal water tower is located behind the Municipal Building. The Village also operates a Department of Public Works (DPW) maintenance building, parking lots, a public beach, a golf course and several parks. Most of these locations discharge storm water either into the storm sewers in the street or on site retention basins except the golf course. Angels Crossing golf course was purchased by the Village from the bank during the winter of 2009. This golf course discharges towards wetlands and has been added to the Village Storm Sewer Map, which is included in Appendix IV of this plan. Outfalls W, X, Y, Z, AA and BB have been added to the map, which are located in the golf course and associated neighborhood.

The Village does not apply fertilizer or pesticides to any Village-owned lawn except for this golf course, which they comply with Public Act 299 of 2010 that restrict the application of fertilizers with available phosphate. In summary, PA 299 does the following:

- Prohibits the application of any fertilizer that is labeled as containing available phosphate (P_2O_5) to turf, unless an exception applies.
- Allows, as general exceptions, the application of a phosphate fertilizer to turf in any of the following circumstances: (1) when a test conducted within the preceding three years by a laboratory that follows recognized national standards has shown a need for it; (2) when the turf is in its first growing season; or (3)

when the fertilizer is finished sewage sludge, organic manure, or manipulated manure, and it is applied at a rate of not more than 0.25 pounds of phosphorus per 1,000 square feet.

- Allows the application of phosphate fertilizer to a golf course in any of the following circumstances: (1) the golf course has been certified after its staff have completed an approved training course (2) a test has shown the need for it and the fertilizer is applied at an allowed rate (3) the turf is in its first growing season and the fertilizer is applied at an allowed rate.
- Prohibits the application of any fertilizer on turf located within 15 feet of surface water, unless there is a vegetative buffer between the turf and surface water, or certain equipment.

Vicksburg Community School became nested within the Village of Vicksburg's watershed based permit in 2010 and therefore the Village of Vicksburg has added the Vicksburg Community School's storm water discharges to their overall storm sewer system. Storm water runoff from Vicksburg High School, Vicksburg Middle School, Administration Building and the Bus Garage is collected and run through a Stormwater Treatment Unit, STU, (oil/water separators or Aquaswirls). After passing thru a STU, storm water is discharged into the County Drain, which their discharge locations have been added to the Village of Vicksburg system (VCS1-VCS10). Stormwater from Sunset Lake Elementary discharges directly in the Village of Vicksburg storm sewer down N. Boulevard; therefore, is not added as a new discharge point. Tobey and Indian Lake Elementary are not located in the Village; storm water from these two sites is infiltrated on site so will not add to the Village of Vicksburg discharges.

Vicksburg Community Schools provides compliance actions similar to the Village and included but not limited to, staff training, public education, outfall discharge point observation, compliance with the Village's performance standards, vehicle maintenance and fueling practices. All necessary compliance associated with school property and school activities are completed by Vicksburg Community School's staff. Vicksburg Community Schools will take a lead role in educational efforts and have education information available to staff, students, and parents. Vicksburg Community School's staff will be included in all training efforts made by the Village of Vicksburg.

During the winter the Village applies salt to the sidewalks and roads when necessary. After a heavy snow fall, snow is collected from the downtown area and hauled to the former paper mill site where the snow melts and leaches directly into the soil. All

Village vehicles are washed in a bay where the water drains into a floor drain that is connected to the sanitary sewer system. A private facility is also occasionally used that drains directly to the sanitary sewer.

The Village collects leaves during the fall months and disposes of the leaves on a vacant lot in town. The leaves are then tilled and composted naturally.

The Village contracts for street sweeping from the spring through fall as necessary. All collections are disposed of through the private contractor. As the Village is responsible for ensuring contractors use proper disposal methods, the Village uses bid specification or contract language and requests documentation upon completion

The Village has discontinued its official participation in the Kalamazoo Household Hazardous Waste collection; however, literature is available at Village office related to this program and residents are still allowed to use the program.

The Village of Vicksburg DPW maintenance building and Storage Yard is located on North Main Street. Storm sewer are located in North Main Street, however the storm water from the Storage Yard does not discharge to these storm sewers. Only half of the DPW building, a portion of the driveway and the front lawn of this property would drain to the storm sewers. Two leaching basins are located in the storage yard to collect storm water and the remaining runoff is carried by overland flow under/through a fence and collects in the Grand Trunk Railroad right-of-way located south of the property where it infiltrates. The Village DPW maintains the yard and associated activities in conformance to common sense related to pollution prevention and good housekeeping, like grounds keeping and preventing "tracking" out from the yard. A map showing the aerial photograph of this property with the drainage patterns and leaching basins indicated is included in Appendix VI.

The Village has completed the mapping of their sanitary sewer system and the vast majority of their storm sewers. Typically within the Village, sanitary sewers are at an elevation below the storm sewer system; therefor seepage of sanitary sewage to storm systems is not likely. In areas where they are in close proximity and at similar elevation, the Village, by the use of video and/or dry weather screen evaluates if seepage is occurring when funding is available in the budget.

Appendix V presents Table 1 thru 4 showing the overall storm water pollution prevention activities of the Permittee and is presented in four parts:

1. Public Education Program Elements (see PEP Plan);
2. Illicit Discharge Elimination Program Elements (see IDEP Plan);
3. Pollution Prevention Program Elements (i.e. MS4 owner/operator best management practices (BMP) for system operation and maintenance); and
4. Post-Construction Controls

7. Program Assessment

Assessing progress in storm water pollution prevention takes place in three separate contexts. The first context is an evaluation and measure of the SWPPI tasks as presented in the tabular descriptions in Appendix V. In general, progress with respect to implementation of the SWPPI elements will be evaluated yearly, in accordance with the reporting to the State of Michigan required by the MS4 permit program.

The second context for assessing progress will be the regular review and update of the WMP and is collaboratively reviewed by the Kalamazoo Area Storm Water Work Group (KASWWG).

The third context for assessing progress is the periodic, quantitative surface water quality monitoring and assessment completed (typically every five years) by the Michigan Department of Environmental Quality in accordance with its reporting requirements under Section 303(d) and 305(b) of the federal Water Pollution Control Act.

These referenced comprehensive water quality monitoring and assessment programs are completed through the following agency programs:

- MDEQ/SWAS (Michigan Department of Environmental Quality/Surface Water Assessment Section) water quality monitoring
- MDEQ/SWAS fish communities evaluation
- MDEQ/SWAS macroinvertebrate communities evaluation
- MDEQ/SWAS habitat evaluation of embeddedness and bottom deposition
- USGS/MDEQ stream flow monitoring and gauging
- Health Bureau of Kalamazoo County (e-coli monitoring of public swimming beaches)

Many of the above referenced data sets are publicly available through the STORET data repository of the United States Geological Service (USGS)

8. Implementation Schedule

Many of the PEP and IDEP tasks have already been initiated and are completed on a routine basis. Changes since the 2011 Annual Report and the previous SWPPI submittal in 2010 are the adoption of the Stormwater Ordinance and nesting of the Village of Vicksburg's School System.

The Village is in the process of currently implementing the following and intends to have the items complete prior to December 2013:

- Incorporating school district discharge points into the IDEP dry weather screening schedule
- Implementing appropriate pollution prevention and good housekeeping activities for the school district
- Implementing appropriate public education activities for the school district's target audiences

Appendix I PEP

Public Education Plan

Michigan General Permit Number MIG61000

Certificate of Coverage Number: MIG610330

Municipality/Agency: Village of Vicksburg

Address: 126 N. Kalamazoo Avenue, Vicksburg, MI 49097-1299

Contact Person: Matthew Crawford **Telephone:** (269) 649-1919

Title: Village Manager **Date:** 7-17-2012

Signature of Permittee Representative:

INTRODUCTION

Background

The State of Michigan's National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Regulations allows compliance through a regional watershed-based initiative. This Public Education Plan (PEP) takes advantage of the watershed-based permit structure by combining available resources found in the five watersheds in Kalamazoo County (Kalamazoo River Mainstem 3, Portage & Arcadia Creeks, Augusta & Gull Creeks, Rocky River, and Portage River) to more efficiently reach a greater audience. The PEP prepared for the participating communities will educate and empower the public about ways they can reduce stormwater pollution. Outreach activities will reach diverse audiences with a variety of viewpoints and concerns. Successful implementation of the PEP should result in partnerships with local agencies and organizations and use educational materials and strategies that are familiar and relevant to the area residents.

The unique purpose of the public education portion of the NPDES Phase II permit is to increase the awareness of watershed residents about how their everyday activities contribute pollutants to their community's water resources. Most citizens recognize the recreational and aesthetic benefits they receive from water, and most even recognize that water quality degradation is a serious concern in the Great Lakes Region. However, most people have not made the connection that the majority of this pollution can be generated from their normal everyday actions and not simply from large commercial and industrial sources.

This PEP will be performed in conjunction, cooperation, and coordination with the other water quality educational efforts within the watershed, such as MS4 permit holders, partners within the Kalamazoo Area Stormwater Working Group (KASWG), Wellhead Protection Programs, and the TMDL Implementation Committee. It is recognized that some existing educational components were designed to address groundwater, certain watersheds, stretches of streams, particular audiences, to convey a specific message, or to implement a particular type of educational strategy or technique.

However, many of the on-going educational efforts share certain general water quality messages and strategies that are relevant to the stormwater program.

Former and On-going Water Quality Related Education Efforts

The following is a brief summary of the primary programs/projects that have an educational plan/or strategies already prepared or in progress that directly affect the Village of Vicksburg.

Portage River Watershed Management Plan

This watershed management planning process was initiated as part of the Michigan Municipal Separate Storm Sewer System (MS4) storm water permitting process. In Phase II of the National Pollutant Discharge Elimination System (NPDES) storm water program, municipalities with separate storm water sewer systems (MS4s) in urbanized areas (as defined by the Census Bureau) are required to obtain a storm water discharge permit. Permittees in this process include Kalamazoo County, Kalamazoo County Drain Commission, Kalamazoo County Road Commission, Brady Township, Comstock Township, Pavilion Township, Schoolcraft Township, Texas Township, the Village of Vicksburg and the City of Portage. The Portage River Watershed Management Plan was prepared by the Kalamazoo Conservation District, November 2006.

The Portage River Watershed encompasses approximately 125,539 acres, or 196 square miles in Kalamazoo and St. Joseph Counties in southwestern Michigan. In Kalamazoo County, the watershed covers portions of Charleston, Texas, Pavilion, Climax, Prairie Ronde, Schoolcraft, Brady and Wakeshma Townships. In St. Joseph County, it includes portions of Park, Mendon, and Lockport Townships. The watershed also encompasses portions of the City of Portage, the City of Three Rivers, and the Village of Vicksburg. The Portage River Watershed is a subwatershed of the St. Joseph River Watershed (Figure 2) which drains 4,685 square miles of southern Michigan and northern Indiana and enters Lake Michigan in the City of St. Joseph. The Portage River flows into the St. Joseph River in the City of Three Rivers.

A variety of goals and objectives for the Portage River Watershed were identified through steering committee meetings, stakeholder input, and a review of other watershed management plans in the area. These goals are meant to address the threatened designated uses in the watershed (navigation, warmwater fishery, other indigenous aquatic life and wildlife, partial body contact recreation and total body contact recreation). These goals are as follows:

1. Improve and protect designated uses by reducing the amount of **sediment** entering the system
2. Improve and protect designated uses by reducing the amount of **nutrients** entering the system
3. Improve and protect water quality by preventing or reducing the amount of **pesticides** entering surface water
4. Improve or maintain current **hydrology** in order to protect water quality
5. Prevent **E. coli/ bacteria** from entering the system
6. Reduce the amount of **oils, grease, etc**. reaching surface water

Wellhead Protection Programs

The Village of Vicksburg is currently in the process of developing its Wellhead Protection Programs (WHPP), and intends to have very active public education and outreach programs. Recognizing the interaction of surface water and groundwater in the region, efforts will be made to seek additional educational opportunities through the WHPP and utilize similar events to promote public education.

Kalamazoo Area Stormwater Working Group

The Kalamazoo Area Stormwater Working Group (KASWG) has met for several years in anticipation of the Phase II Storm Water regulatory requirement for MS4's. The KASWG is a collaborative, ad hoc body, working to assist members in understanding the MS4 program and reduce to the maximum extent practicable any duplication of effort. The KASWG has and will continue to coordinate many of the on-going water quality educational and outreach efforts that are mentioned above. It is has been proposed that KASWG serve as the lead storm water educational coordinating group. Recently the KASWG primary focus has been of the "Home Show" to collaboratively educate the public on storm water awareness.

PEP Educational Components

The following six educational components are PEP requirements of the MS4 program**:**

1. Educate the general public about personal watershed stewardship.
2. Educate residents concerning the ultimate stormwater discharge locations and the potential impacts of pollution from the separate stormwater drainage system.
3. Encourage the public reporting of the presence of illicit discharges or improper disposal of materials into the community's separate stormwater drainage systems.
4. Educate residents concerning personal actions that can impact the watershed, such as cleaning materials, procedures for residential or community organization car washing, application and disposal of pesticides and fertilizers, and regulations for small business and residential waste haulers.
5. Educate the citizens in the community of the availability, location, and requirements of facilities for disposal or drop-off of household hazardous waste, travel trailer sanitary wastes, chemicals, grass clippings, leaf litter, animal wastes and motor vehicle fluids.
6. Educate the citizens about the management of riparian lands and the importance of stream buffers.

VILLAGE OF VICKSBURG PEP TASK ELEMENTS

The Village of Vicksburg's planned educational activities are specified in Table 1, Appendix V. More specifically, these are the educational tasks to be undertaken by the Village of Vicksburg as a component of its Certificate of Coverage.

Table 1, Appendix V of the SWPPI is intended to illustrate the relationship between the 6 components listed above and the desired messages, delivery mechanisms, evaluation methods,

measurable goals, and an associated timetable for implementation. It is recognized that results of the PEP are difficult to measure and are somewhat subjective. It is debatable what is more significant in measuring the success of a PEP - aspects of quantity, quality, or a combination of the two; it is likely that it is dependent on the specific action item. Tons and type of trash collected and/or the number and type of people that participated in the process could measure the success of stream cleanup efforts. Furthermore, it is easy to measure the number of new signs or catch basin markings installed but it does not address the quality aspect of the marking design process, location selection process, or even perhaps a creative financing strategy to fund the cost of implementation. The measurable goals in Table 1, Appendix V of the SWPPI were selected to balance both the quantity and quality aspects of success of the subject action items.

Forms in Appendix VI of the SWPPI are the educational activities tracking sheet that the Village uses to better track and coordinate these diverse but coordinated efforts.

SUMMARY

The Village of Vicksburg will increase public education by the following:

1. Participate in the Kalamazoo Stormwater Work Group
2. Publish a Spring Newsletter containing storm water information
3. Publish a Fall Newsletter containing storm water information
4. Provide literature and information at the Vicksburg Hearty Hustle
5. Provide literature and information at the Vicksburg Car Show
6. Provide literature and information at the Art Hop Days
7. Provide literature and information at the Village Hall Lobby
8. Coordinate educational opportunities with Vicksburg Community Schools
9. Provide information on the Village's website
10. Continue to support and provide Employee Training
11. Have literature available regarding Kalamazoo's Household Hazardous Waste Recycling

A successful Public Education Plan should not only be designed to meet a regulatory obligation but be dynamic and flexible enough to adjust to numerous and diverse audiences, and new opportunities for outreach. True success of a PEP results in a positive change in human behavior. Behavior includes a wide range of activities, such as how the general public disposes of its household waste or how an industry handles its stormwater.

This PEP strives to recognize and extend on-going educational efforts regarding water resources protection. It strives to learn from their successes as well as those activities that yielded limited results. It is a principle of this PEP to coordinate with current educational programs, to optimize opportunities to reach targeted audiences via planned events, organizational contacts, and to share staff expertise, equipment and materials.

Appendix II IDEP

Illicit Discharge Elimination Plan (IDEP)

Individual jurisdictions have responsibility for program implementation for the municipal separate storm sewer system (MS4) structures under its ownership.

Review and Establishment of Legal Enforcement Authority

This activity involved reviewing current legal authority and enforcement procedures of the Village to assure that it has adopted policy language necessary to fulfill its requirements under the Phase II program, and under the proposed work elements of the Watershed-Based, Urban Storm Water NPDES Permit Application. The Village has integrated a storm water policy, found in Appendix III, to implement and enforce the Phase II program.

Outfall Identification

Initial identification of outfalls within the jurisdiction of the Village has been conducted. Identification had been done through review of maps, plots, printouts, files, NPDES permits, municipal records, other agencies and field inspections. This review indicates that known public storm drains, county drains and drainage swales are primarily three types of systems. These include systems built to service Village and county roads and bridges, constructed as part of a plat development, or established for agricultural drainage.

Vicksburg made an effort approximately 9 years ago to locate all public utilities (storm and sanitary sewer) in their system by hiring a contractor to jet or clean the lines and manholes. At that time the Village did discover outfalls that they were unaware of and developed the map that was part of their current permit. Since then they made a hand drawn map of the storm system, which was drawn into GIS in 2008 and included with the permit application (which was repealed). The Village was confident that all outfalls have been discovered within the Village Limits at that time; however, continued investigation and mapping of all storm sewers and structures within the Village is ongoing by Village staff.

Angels Crossing golf course was purchased by the Village from the bank during the winter of 2009. This golf course discharges towards wetlands and has been added to the Village Storm Sewer Map, which was included in Appendix IV.

The Vicksburg Public Schools have been added to Vicksburg permit as a nested jurisdiction in 2010 and updates to the map have been completed to include the school's property and outfalls. Vicksburg Community Schools have their outfalls labeled VCS1 – VCS10. Storm water runoff from Vicksburg High School, Vicksburg Middle School, Administration Building and the Bus Garage is collected and run through a Storm Treatment Unit, STU, (oil/water separators or Aquaswirls). After passing thru a STU, storm water is discharged into the County Drain. Stormwater from Sunset Lake Elementary discharges directly in the Village of Vicksburg storm sewer down N. Boulevard; therefore, is not added as a new discharge point. Tobey and Indian Lake Elementary are not located in the Village; storm water from these two sites is infiltrated on site so will not add to the Village of Vicksburg discharges.

Outfall Screening Program

The Village has utilized its own employees, equipment and materials as much as possible and practical to perform Outfall Screening. The screening program identifies indicators of illicit and/or environmentally damaging discharges at storm drain outfalls. If screening indicators persist thorough follow-up evaluations (see attached Screening/Investigation SOP), then an illicit discharge will be presumed.

The screening process prioritized the initial dry weather flow screening locations among the various Drainage Service Areas (DSA). Screening shall be prioritized by land use and facility type (see table below). Land use will include DSA acreage, water quality information, and complaints or other history.

Facility Prioritization Table
Priority 1 — manufacturing; industrial sites; sites of concern (e.g. abandoned industrial sites).
Priority 2 — commercial facilities; manufactured home communities; agriculture.
Priority 3 — institutional facilities; service agencies; schools; on-site sewage disposal systems; government owned facilities; camp grounds.
Priority 4 — residential; parks; and vacant parcels (exclusive of site of concern).

Investigation of Illicit Discharges (contracted services)

Should outfall screening, sampling, citizen complaints or other mechanisms lead to discovery of suspected illicit discharge by the Village, then an illicit discharge investigation will be initiated. Due to limited staffing, equipment, etc., a detailed investigation will likely entail contracted services. These services shall be generally conducted in accordance with the Standard Operating Procedures (including forms) that are attached [i.e. based upon the City of Kalamazoo investigative model].

Public Sanitary Sewer Operation & Maintenance

Public sewer in the Village is operated and maintained by the Village. Standard operating procedures are designed to prevent the release of sanitary wastes to the environment. Inflow and Infiltration (I&I) of sanitary waste is significantly addressed by the routine installation of storm sewer above the sanitary sewer. By maintaining a vertical separation, the chance of cross-contamination is greatly reduced. I&I are further reduced by on-going practices described below.

New service connections to the system are visually inspected. All new public sewer installation is inspected on-site and full-time during construction. Prior to acceptance, new sewers are air tested, deflection tested and video taped. Furthermore, in response to known or suspected trouble areas, sanitary sewer mains are typically video inspected. Infrastructure inspection and service records are maintained.

Cracked sanitary or storm water main can also be discovered by utility personnel by noticing a change in the physical integrity or flow characteristics within the infrastructure systems. In all of these situations the noted concerns shall be investigated in a timely manner and any failings repaired. Strategies for discovery include those discussed herein, visual and olfactory observations, and citizen complaints, etc. Incident tracking, field investigations, sampling and testing, and repair/resolution will be documented using standard forms (see attached).

Indirect Connections (Dumping, Spills and Surface Sources)

Illegal dumping directly or indirectly into storm catch basins and inlets, and spills collected by drain catch basins and inlets, are typically discovered by either visual and/or olfactory observations, and are subsequently reported by citizens or municipal agents and field crews. An on-going effort to educate the citizens about water quality issues is critical to the success of decreasing illegal dumping into the storm water catch basins/inlets, and is included in the public education plan.

Public Sanitary Sewer / On-Site Sewage Disposal Systems (Kalamazoo County Human Services Department)

A map of the sanitary sewer service area has been prepared so that areas where sanitary service is available are defined (Generally the entire Village limits). In accordance with the Public Health Code, where public sanitary sewer service is available, the County Environmental Health, through coordination with municipal building officials, will refuse to permit installation of on-site sewage disposal systems.

As the on-site disposal system enforcing agency, County Environmental Health will continue to investigate sewage disposal system failures when received via complaint or inquiry, and will enforce correction.

Public Agency 'Customer Interactions' and Training

Because of soil erosion concerns, construction sites and related activities are recognized as major potential contributors to storm water pollution. Soil erosion control enforcement in the Village of Vicksburg along with soil erosion control permitting and inspection has been delegated to the Village of Vicksburg Staff, Street/DPW Director. The Village of Vicksburg staff also will call the Kalamazoo County Soil Erosion agent with any SESC concerns. The Kalamazoo County Road Commission issues permits and monitors activities within its right-of-way outside the village limits. Work by utilities, contractors and other parties must comply with KCRC, KCDC and the Village of Vicksburg policies, including erosion control and site stabilization.

Additionally, the intent is to have Public Employees and Contractors educated regarding IDEP. Specifically the Village intends to have employee training, which may consist of DVD, off-site workshop, in-house training, or new employee orientation. The schedule for this training would be the existing employees to be trained once per 5-year permit cycle, and new employees to have one (1) training within 1-year of employment. This would also include Vicksburg Community School employees related to facilities or facility management. Contractors would be provided training materials and information in bid documents and/or preconstruction meetings and would be as needed when new contractors are hired.

Complaints & Incident Response Procedures

A procedure has been developed to respond to public complaints, or other reports of suspected improper connection or illicit discharges. At a minimum, the procedures include an administrative record keeping mechanism to assure full and proper resolution to the maximum extent practicable. Steps will include (1) documenting/recording the complaint or suspicion, (2) investigation, (3) source identification (4) voluntary and/or enforced corrective action, and (5) administrative tracking of steps 1 through 4 to assure remedy and closure.

A tracking system is important because locating and correcting a known or suspected discharge may not be immediately achievable. Full and prompt resolution of a reported incident may be problematic due to the episodic nature of some releases, or due to the difficulty in locating the source within an extensive and complex drainage service area. Therefore, the incident procedure will include a DSA-based reporting system focused upon tracking both short- and long-term resolution of known and suspected concerns.

The overall goals of the tracking system are generally identified as being (a) confirmation of a concern, (b) location and identification of the source, (c) assurance that appropriate corrective action has been taken, and (d) on-going IDEP program prioritization for long-term resolution.

Screening Evaluation & Annual Program Prioritization

The screening results and the incident reports will be collectively reviewed by the Village as part of an annual storm water program evaluation and prioritization effort. The purpose of this review will be to identify and prioritize proactive initiatives in areas of known concerns. This review will be based upon the outfall screening forms and the incident response forms. GIS tools will be used to the maximum extent practicable in linking recorded incidents to drainage infrastructures and geographic locations. Program prioritization decisions will be made among all the component activities of the storm water management program.

IDEP Tasks and Deliverables

The preceding discussion outlines the activities of the Village initiatives and the task and deliverables are found on Table 2 in Appendix 5.

STANDARD OPERATION PROCEDURES
For
OUTFALL SCREENING &
INVESTIGATION OF ILLICIT DISCHARGES*

I. Definitions

The following are key terms and their definitions for municipal separate storm sewer systems (MS4) and procedures to perform outfall screening and the investigation of illicit discharges:

> Illicit discharge: Any discharge (or seepage) to the separate storm water drainage system that is not composed entirely of storm water or uncontaminated groundwater.
>
> Illicit connection: A physical connection to the separate storm water drainage system that 1) primarily conveys illicit discharges into the system and/or 2) is not authorized or permitted by the local authority (where a local authority requires such authorization or permit).
>
> Point source: An outfall from a drainage system to waters of the state, or a point where a storm water drainage system discharges into a system operated by another public body.

II. Outfall Screening

The primary method to confirm the *presence of illicit discharges* will be to perform a physical inspection (screening) of the outfalls. All outfalls will initially be categorized as either having a dry weather flow or not. Figure 1: Flow Chart for Outfall Field Evaluation is designed to provide procedural guidance to upstream field investigations. A collection of Field Observations Forms (Attachment) has been prepared to record information such as weather conditions, discharge characteristics (presence and rate of dry weather flow), visual and olfactory observations of discharge characteristics (odor, color, turbidity, and floatable matter). Physical characteristics along the land/water interface will also be noted, including deposits, stains, and vegetative type and stress adjacent to the outfall, and structure condition. The form will be used to record both field and laboratory water quality results. If a dry weather flow does not exist and there is no evidence of an illicit discharge, that outfall will be revisited two additional times before the end of the initial permit period (i.e. April 1, 2008). Outfalls shall be screened at least once every five years thereafter.

If a dry weather flow exists, the discharge water will be tested for parameters such as temperature, pH, specific conductivity or total dissolved solids, total chlorine, and fluoride using appropriate field sampling/indicator kits. Each outfall will also be sampled for laboratory

* This Model SOP for the Investigation of Illicit Discharges was developed by the Kalamazoo Area Storm Water Working Group and is based upon a preliminary draft and model forms provided by the City of Kalamazoo.

analysis of fluoride and phosphorus for field confirmation and the TMDL, respectively. Additional sampling for laboratory analysis will be used only if other methods are unsuccessful in determining the source of the discharge. Additional laboratory parameters will be selected on a case-to-case basis based on the indicators best indicative of the most likely source sin the area but may include surfactants/detergents, phenols, ammonia/ammonium, toxicity, and E-coli. The following describes proposed general strategies for various initial flow situations.

Dry Weather flow Indicating Groundwater

If a dry weather flow exists and initial field visual indications, olfactory observations, and field analysis indicate the lack of negative discharge characteristics discussed above, the source will initially be field investigated as being from the public water supply system or natural untreated groundwater. Since groundwater services 100 percent of the source of the Public Water Supply System and fluoride is an additive, a sample will be collected to determine if fluoride levels exist within the common range of the water system: 0.7 to 1.0 mg/L (ppm). If it is, the reason will be determined and recorded, such as from a temporary scheduled activity such as the routine flushing of the water mains, landscape irrigation runoff, dechlorinated swimming pool discharges, emergency fire fighting, or a broken water main, etc. If the fluoride levels are within the typical range of area groundwater of 0.2 to 0.3 mg/L (ppm), the possibility of in-flow/infiltration of the storm water infrastructure, pumped groundwater/dewatering activities, etc. will be investigated, categorized, and recorded. If the investigation indicates that the source is not solely groundwater, the strategy described below will be followed.

Dry Weather Flow Not Indicating Groundwater

If a dry weather flow exists and it exhibits unnatural and/or negative characteristics such as odor, color, sheen, staining, floatables and other deposits, vegetative stress or excessive growth, etc., or the discharge was determined not to be from the public water supply system or natural untreated groundwater, then further discharge samples will be collected for analysis to help indicate the type and origin of the flow. To the extent practicable, screening techniques shall be undertaken at the nearest upstream manhole. If indications of a dry weather flow, illicit discharge persist, then in like manner the screening shall continue upstream to determine the section of storm main from which the illicit discharge originates. Results will be recorded on the Field Investigation Form.

III. Investigation of Illicit Discharge(s).

When outfall screening techniques indicate the existence of a potential illicit discharge, additional administrative and field investigations shall be undertaken to identify and locate the suspected source. Field Investigation Forms shall be reviewed and collected samples (if any) analyzed to help indicate the type and origin of the flow. Land use familiarity and storm sewer records will be reviewed for known connections in the upstream vicinity of the apparent segment or point of origin. Property and facility ownership will be reviewed. If potential sources are not apparent, additional field investigation shall be initiated to further refine the

location of the segment (if still undetermined) of the storm main from which the suspected illicit discharge is originating.

Source Investigation.

Screening and sampling techniques will be repeated until the apparent storm sewer segment or point of origin of the illicit discharge is reasonably ascertained. Results of these activities will be recorded on the Field Investigation Form. Names and addresses of facilities/residences along the storm main segment between the "wet" and "dry" manholes will be recorded on the Source Investigation Form. MS4 System Records will be reviewed for third-party connection listings in the upstream vicinity of the apparent segment or point of origin. Property and facility ownership will be determined. If potential sources are not apparent, the suspected segment of the storm main will be televised.

Televising the storm main will be used to visually observe and note illicit connections, pipe condition, and create a permanent record of conditions at a specific time. Conditions such as heavily stained pipe, grease build-up on pipe walls, food scraps, toilet and other paper products, soapsuds, chemicals, paint, and other waste products will be looked for and recorded. If illicit connections are still not apparent, the search for illicit connections using other strategies such as sampling for additional parameters for laboratory analysis, televising of additional storm main, smoke testing, etc. will be performed as deemed appropriate. Laboratory analysis parameters will be selected on the basis of area land use and the presence/non-presence of septic systems, and may include surfactants/detergents, phenols, ammonia/ammonium, E-coli, and toxicity screening tests.

If there is a high level of confidence regarding the source(s) of the illicit discharge based on results from this approach, the property and/or facility owner will be contacted to arrange for testing at and near the suspected illicit connection origin, as discussed in the following section.

Correspondence and Site Inspections

All contacts and correspondence will be recorded on a Contact & Correspondence Form. The property/business owners of suspected illicit connection sources would be notified by certified letter that an investigation of illicit discharges is ongoing in their vicinity, and their facility is required to be inspected on a specific date and time. An explanation of the project and inspection and testing procedures will be provided and they will be requested to contact the municipal agent if another date and time are necessary. Other sources of information regarding the property may be researched in preparation for the site inspection, including inspection reports associated with Occupancy Permits, Building Permits, Industrial Pretreatment Program inspections and will be requested to increase their observation and reporting of poor housekeeping and suspicious plumbing connections.

An inspection will target evidence of illicit connections, illegal dumping, or poor housekeeping practices that could be a source of illicit discharges. A Facility Inspection Form will be completed to document the results of the inspection. Once an inspection has been made, an-

other letter will be sent informing them of the results, including a list of any necessary corrective actions/observed violations and/or recommendations for improved best management practices. They will be given 60 days to correct any listed illicit connections and improve poor house-keeping practices as necessary. The property owner and/or facility owner is responsible for the elimination of all illicit connections/discharges and the subsequent contacting of appropriate municipal agents to arrange for a follow-up inspection.

If violations had been found and the illicit connections and poor best management practices are reportedly eliminated and improved, respectively, a follow-up letter will be sent or a phone call will be made by the municipal agent to schedule a confirmatory inspection. After the inspections are completed and the facility is found in compliance, a final letter will be sent as a notification of compliance and appreciation. If the property/business owners do not eliminate the illicit connections as directed, a notification of non-compliance letter discussing the initiation of the legal process to complete the necessary work, citing existing code or the future IDEP Ordinance, when completed.

Testing Procedures

Generally, color dye will serve as the primary investigative means to investigate suspected illicit connections. Use of colored dyes shall be performed in accordance with MDEQ guidance and directives. Prior to use, the types of dyes will be approved by MDEQ. In addition, the municipal agent will notify MDEQ prior to dye use in case calls regarding visual observance of color discharges to the Public Emergency Assistance System (PEAS) occur.

Until such time that the Storm Water Work Group adopts a Standard Operating Procedure (SOP) for Dye, the Wayne County Department of Environmental Watershed Management Division, Dye Testing Procedures will be considered as a general guide.

Arrangements will be made for property and facility access as necessary. A crew of two or more will perform the dye inspections after a review is performed of the municipal storm water system adjacent to the subject site and a reasonable understanding of the facility plumbing configuration is achieved. If smoke testing is determined as a necessary means for source identification, the municipal agent will utilize practices consistent with industry standards. The municipal agent will contact MDEQ prior to dye or smoke testing and a reasonable effort will be made to contact all property and facility owners that may witness the effects of the testing.

Colored dye will be placed in selected plumbing fixtures at the suspected source location and downstream sanitary and storm water manholes will be monitored for the presence of dye. If dye is observed in the sanitary manhole(s) but not in the storm water system under adequate viewing conditions, it will initially be assumed that the source(s) of the illicit discharge is elsewhere and the investigation will continue. If no dye is observed in the sanitary or storm systems, another investigative method such as televising or smoke testing, etc. will be implemented to locate the illicit connection or additional dye applications may be attempted.

If dye is observed in the storm water system, a source of the illicit discharge will be considered confirmed. Subsequently, the property owner and facility owner will be formally notified directing them to eliminate the illicit connection within 60 days and to contact the city when completed to arrange for a confirmatory inspection. If dry weather flows are no longer visible after confirmation of the illicit connection elimination, it will be assumed that the illicit connection has been corrected unless evidence to the contrary exists. If dry weather flows continues, other potential sources will be investigated.

Suspected Intermittent Illicit Flows

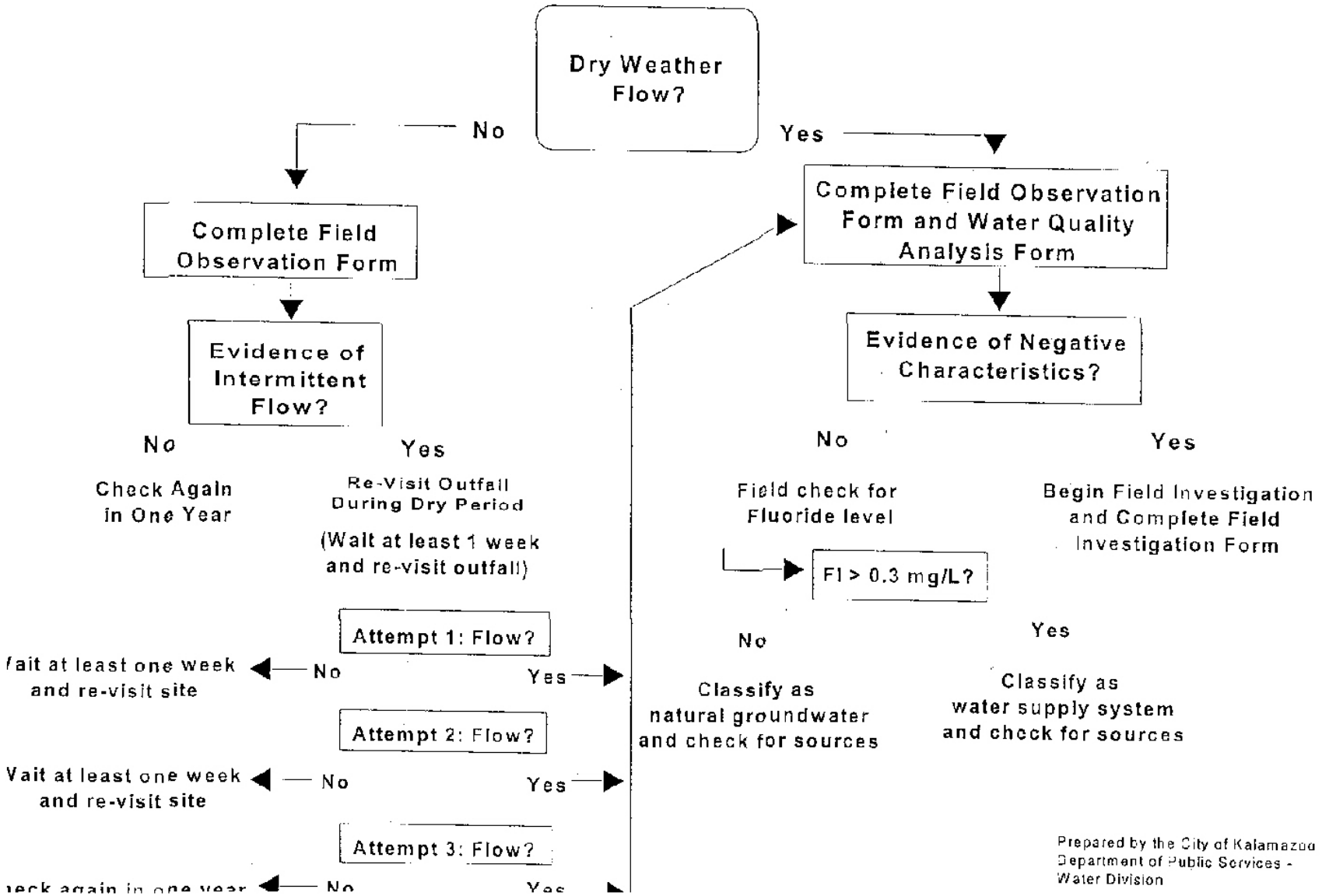
If dry weather flows were not observed at the outfall but evidence of deposits, stains, unusual vegetative type and stress, and odor adjacent to the outfall exist, an intermittent flow investigation will be initiate (Figure 1). Up to three subsequent visits will be made within one year (at least one week apart) during a dry period to document and sample a discharge. The investigative sequence of events and methodology will be similar to that with the dry weather flow but may also include wet weather sampling if the intermittent flows are not observed. Intermittent flows will be second in priority to dry weather flows.

Forms and Diagrams*

- Decision Tree – Suspected Illicit Discharge
- Outfall Evaluation/Field Observation Form
- Water Quality Analysis Form
- Field Investigation Form (Upstream Manhole Reconniassance)
- Field Investigation Form (Potential Sources)
- Source Investigation Form
- Facility Inspection Form
- Contact and Correspondence Form
- Phone Conversation Log
- General Comment Form

* These Model forms and diagrams (preliminary drafts) of the Kalamazoo Area Storm Water Working Group were provided by the City of Kalamazoo.

FIGURE 1
FLOW CHART FOR OUTFALL FIELD EVALUATION



Prepared by the City of Kalamazoo
Department of Public Services -
Water Division

THE CITY OF Kalamazoo

OUTFALL EVALUATION
FIELD OBSERVATION FORM

Outfall ID: _____ **Discharge Water Body:** _____

Date: _____ **Time:** _____ **Inspector(s):** _____

WEATHER

Temperature(°F) : _____ ☐ Clear ☐ Partly Cloudy

☐ Overcast ☐ Rain ☐ Snow

DISCHARGE CHARACTERISTICS

Flow Rate

☐ Dry, no water present ☐ Trace, insufficient to quantify ☐ Intermittent

☐ Measurable, Gallons per minute = _____ Method Used _____

Odor

☐ In flow ☐ At structure ☐ within 6 feet of structure

☐ None ☐ Gasoline ☐ Oil ☐ Solvent ☐ Sewage ☐ Sulfur/Rotten Egg

☐ Rancid/Sour ☐ Other _____

Color

☐ In flow ☐ At structure ☐ within 6 feet of structure

☐ Clear ☐ Yellow ☐ Green ☐ Red ☐ Gray ☐ Black

☐ Light Brown ☐ Medium Brown ☐ Dark Brown ☐ Other _____

Turbidity/Clarity

☐ In flow ☐ At Structure ☐ within 6 feet of structure

☐ Clear ☐ Slightly Cloudy ☐ Moderately Cloudy ☐ Highly Cloudy ☐ Opaque

Floatables

☐ In flow ☐ At structure ☐ within 6 feet of structure

☐ None ☐ Trash ☐ Sewage ☐ Oily Sheen ☐ Scum ☐ Other _____

PHYSICAL CHARACTERISTICS

Deposits/Stains

☐ In flow ☐ At structure ☐ within 6 feet of structure

☐ None ☐ Sediment ☐ Oily ☐ Grease ☐ Crystalline Powder

☐ Fragments ☐ Other _____

Vegetation

☐ In flow ☐ At structure ☐ within 6 feet of structure

☐ None ☐ Normal ☐ Excessive ☐ Algae ☐ Other _____

Structural

☐ In flow ☐ At structure ☐ within 6 feet of structure

☐ Normal ☐ Cracking ☐ Settlement ☐ Corrosion ☐ Other _____

COMMENTS

_____

_____

(SEE BACK FOR WATER QUALITY ANALYSIS FORM)

THE CITY OF Kalamazoo

OUTFALL EVALUATION
WATER QUALITY ANALYSIS FORM

Outfall ID: _____ **Discharge Water Body:** _____

Data: _____ **Time:** _____ **Inspector(s):** _____

DISCHARGE CHARACTERISTICS

Field Analysis (required for every sample)

Temperature (°F): _____ **pH:** _____

Specific Conductivity (micromhos): _____ **OR Total Dissolved Solids (ppm):** _____

Total Chlorine (ppm): _____ **Flouride (mg/L):** _____

Laboratory Analysis

Only required for Flouride and Phosphorus unless approved by supervisor.
Record result and place Laboratory Analytical Reports in appropriate outfall file.

Flouride (mg/L): _____ **Total Phosphorus (ug/L):** _____

Surfactants/Detergents: _____ **Phenols:** _____ **Ammonia/Ammonium:** _____

Toxicity Screening: _____ **E-Coli:** _____

Other: _____

Note: If outfall is underwater or not safe to access, obtain sample from first available upstream manhole using an in-line sampling device ("sampling stick").

ILLICIT DISCHARGE ELIMINATION PLAN
FIELD INVESTIGATION FORM

THE CITY OF Kalamazoo

Outfall ID with Dry Weather Flow: ____________________

Date: __________ **Time:** ________ **Inspector(s):** ____________________

Upstream Manhole Reconaissance

Start with immediate upstream manhole on primary storm main and work consecutively upstream. Indicate manholes inspected on field map(s).

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

If yes, continue to next up-gradient manhole.
If no, check field maps for connections within subject storm main segment between outfall and first upstream "dry"manhole. Proceed up-gradient manhole reconaissance in each secondary storm main segment, repeating same procedure until the main segment contributing the flow is identified. List two manhole I.D.'s defining segment and indicate on field map.

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

Manhole I.D.: ______________ Dry Weather Flow? ☐ Yes ☐ No

over

THE CITY OF Kalamazoo

ILLICIT DISCHARGE ELIMINATION PLAN
SOURCE INVESTIGATION FORM

Outfall ID with Dry Weather Flow: _____

Investigator(s): _____

Pipe Segment To Investigate

"Wet" Manhole ID: _____ **"Dry" Manhole ID:** _____

Pipe Segment ID: _____

Sources To Be Investigated

List facilities/residences and associated addresses along storm main segment between "wet" and "dry"manholes, starting with most downstream and proceeding upstream:

1. Name _____ Address: _____
2. Name _____ Address: _____
3. Name _____ Address: _____
4. Name _____ Address: _____
5. Name _____ Address: _____
6. Name _____ Address: _____
7. Name _____ Address: _____
8. Name _____ Address: _____
9. Name _____ Address: _____
10. Name _____ Address: _____
11. Name _____ Address: _____
12. Name _____ Address: _____
13. Name _____ Address: _____
14. Name _____ Address: _____
15. Name _____ Address: _____

THE CITY OF Kalamazoo

DISCHARGE TO STORM SEWER
FIELD INVESTIGATION FORM

Storm Sewer Structure Entry Point ID: _____

Downstream Outfall ID: _____

Inspector(s): _____ **Date:** _____ **Time:** _____

Observations

Observed Conditions: _____

Results

Action Taken: _____

Followup Needed: _____

Comments

Environmental Services 10/03

THE CITY OF Kalamazoo

ILLICIT DISCHARGE ELIMINATION PLAN
FACILITY INSPECTION FORM

Outfall ID with Dry Weather Flow: _____

Date: _____ **Time:** _____ **Inspector(s):** _____

FACILITY INFORMATION

Name of Facility: _____ Address: _____

Facility Contact: _____ Phone Number: _____

ILLICIT DISCHARGE TESTING

Type of Test: ☐ Dye ☐ Smoke ☐ Other _____

Test Results

☐ Proper Connection - The fixtures tested in this establishment have been found to be properly connected to the sanitary sewer system. No problems were noticed at time of inspection.

☐ Incomplete/unfinished (state reason): _____

☐ Unsuccessful attempt (state reason): _____

☐ Violation/Illicit Connection/Improper discharge:

- ☐ Illicit Connection
- ☐ Improper Discharge
- ☐ Poor Housekeeping

List All Fixtures Tested: _____

_____

_____

_____

Comments: _____

_____

_____

THE CITY OF Kalamazoo

ILLICIT DISCHARGE ELIMINATION PLAN
CONTACT & CORRESPONDENCE FORM

Outfall ID with Dry Weather Flow: _____

Inspector(s): _____ **Date:** _____

Contact/Correspondence (check type):

☐ Phone Log (describe or attach separate log)

Contact: _____

Discussion: _____

☐ Letters (attach)

- ☐ Notification of Inspection/Testing Schedule
- ☐ Notification of Inspection Follow-up Results/Necessary Corrective Actions
- ☐ Notification of Illicit Connection Elimination Confirmation Inspection Schedule
- ☐ Notification of Compliance/Appreciation
- ☐ Notification of Non-Compliance/Legal Procedures
- ☐ Other (Describe):

Owner/Operator: _____

Address: _____

City: _____ Zip Code: _____

Regarding Business: _____

Address: _____

City: _____ Zip Code: _____

THE CITY OF Kalamazoo

ILLICIT DISCHARGE ELIMINATION PLAN
PHONE CONVERSATION LOG

Date: _____ **Time:** _____

City Representative: _____

Person Talked With

Name: _____ Title: _____

Address: _____ Organization: _____

Phone Number(s): _____ _____

Illicit Discharge or Connection

Location: _____

Description of Discharge: _____

_____

Illicit discharge or connection observation: _____ _____
(Date) (Time)

Other notes: _____

Message Referral

Message referred to: _____ on _____
(City Representative) (Date & Time)

How was referral made? (check all that apply)

☐ Phone Conversation ☐ Phone Message ☐ Email ☐ In Person

Provide copy of log to appropriate City contact

Confirmation of Phone Log Receipt: _____ _____
(signature) (Date)

Action taken or to be taken: _____

_____

_____

(To be filed in outfall file)

Environmental Services 10/03

THE CITY OF Kalamazoo

ILLICIT DISCHARGE ELIMINATION PLAN
GENERAL COMMENT FORM

Outfall I.D. with Dry Weather Flow: _____

Inspector(s): _____ **Date:** _____

Comments:

Appendix III Stormwater Ordinance and Performance Standards for Stormwater Management

VILLAGE OF VICKSBURG

ORDINANCE NO. 261

Adopted: June 21, 2010
Effective: 30 days after publication after adoption

An ordinance to amend the Village Stormwater Ordinance to establish standards for stormwater protection in certain areas of the Village; to provide for variances, remedies for violation and procedures for enforcement; to repeal all ordinances in conflict herewith and to provide for severability and an effective date.

THE VILLAGE OF VICKSBURG ORDAINS:

SECTION I

AMENDMENT TO VILLAGE STORMWATER ORDINANCE

STORMWATER WATER QUALITY PROTECTION.

I. Intent and Purpose.

II. Definitions.

III. Responsibility for administration.

IV. Discharge prohibitions.

V. Compliance with other permits.

VI. Monitoring of discharges.

VII. Requirement to prevent, control, and reduce stormwater pollutants by the use of best management practices.

VIII. Notification of spills.

IX. Records, reports, sampling and analysis.

X. Enforcement.

XI. Appeal of notice of violation.

XII. Suspension of access to the stormwater system.

XIII. Abatement activities by the Village.

XIV. Injunctive relief.

XV. Violations deemed a public nuisance.

XVI. Civil Infraction.

XVII. Remedies not exclusive.

SECTION II

SEVERABILITY

SECTION III

EFFECTIVE DATE AND REPEAL OF CONFLICTING ORDINANCES

CERTIFICATE

I, Matthew L. Crawford, Village Manager/Village Clerk of the Village of Vicksburg, Kalamazoo County, Michigan do hereby certify that Trustee Jack Westendorp moved the adoption of Ordinance #261, and that Trustee Bud Hoekstra seconded said motion.

I further certify that the following Trustees voted for adoption of said Ordinance #261 by a roll call vote: Bill Brumleve, Bud Hoekstra, Christina Klok, Ray Vliek, Jack Westendorp, and President Dan Pryson. Absent: Trustee Kyle Dury.

AYES: 6 NAYS: 0 ABSENT: 1

Matthew L. Crawford
Village Manager/Clerk

VILLAGE OF VICKSBURG
ORDINANCE NO. 261

Published July 17, 2010

ADOPTED: JUNE 21, 2010
EFFECTIVE: 30 DAYS AFTER PUBLICATION AFTER ADOPTION

An ordinance to amend the Village Stormwater Ordinance to establish standards for stormwater protection in certain areas of the Village; to provide for variances, remedies for violation and procedures for enforcement; to repeal all ordinances in conflict herewith and to provide for severability and an effective date.

THE VILLAGE OF VICKSBURG ORDAINS:

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IX. Records, reports, sampling and analysis.
X. Enforcement.
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XII. Suspension of access to the stormwater system.
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XIV. Injunctive relief.
XV. Violations deemed a public nuisance.
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XVII. Remedies not exclusive.

SECTION II
SEVERABILITY

SECTION III
EFFECTIVE DATE AND REPEAL OF CONFLICTING ORDINANCES

CERTIFICATE

I, Matthew L. Crawford, Village Manager/Village Clerk of the Village of Vicksburg, Kalamazoo County, Michigan do hereby certify that Trustee Jack Westendorp moved the adoption of Ordinance #261, and that Trustee Bud Hoekstra seconded said motion.

I further certify that the following Trustees voted for adoption of said Ordinance #261 by a roll call vote: Bill Brumleve, Bud Hoekstra, Christina Klok, Ray Vliek, Jack Westendorp, and President Dan Pryson. Absent: Trustee Kyle Dury.
AYES: 6 NAYS: 0 ABSENT: 1

Matthew L. Crawford
Village Manager/Clerk

3780477-01

Village of Vicksburg
RESOLUTION 6-1-10-1

Resolution Adopting Performance Standards for Stormwater Management

WHEREAS, land changes and development can alter the hydraulic pathway of rainfall and snow melt among interception, evapotransporation, groundwater infiltration and surface water runoff; and

WHEREAS, the cumulative effect of increasing land-cover imperviousness (roadways, roofing, parking lots, etc.) results in greater concentrations of stormwater volumes and rates of flows which can increase the risk of flooding, stream bank instability, sediment transport and sediment deposition; and

WHEREAS, human activities when exposed to natural precipitation can cause waterborne transport of pollutants such as lawn chemicals, roadway salts, motor oils, trash, soils and chemicals of all kinds to be carried into our lakes, streams, groundwater and drinking water supplies; and

WHEREAS, the implementation of best management practices (BMP's) to remove pollutants and mimic natural hydrology have proven to be effective in reducing the harmful impacts of land change and development; and

WHEREAS, the Federal Clean Water Act (CWA) establishes a national goal for waters of the United States to achieve fishable and swimable quality standards through a permit system for discharges to waters of the state; and

WHEREAS, under the CWA the Village of Vicksburg is designated a municipal stormwater discharge permittee with specific obligations it must perform in the management of certain stormwater runoff within its jurisdictional boundaries and has enacted a Stormwater Ordinance for this purpose.

NOW, THEREFORE, to manage stormwater within the Village for the purpose of protecting public health, safety and welfare, the following performance standards are adopted.

Performance Standards

A. Applicability. The requirements of these Performance Standards shall apply to all new and redeveloped sites with projects that disturb one (1) acre or more, including projects less than one (1) acre that are part of a larger common plan of development or sale that would disturb one (1) acre or more.

These requirements shall apply to all public and private sites within the Village, regardless of whether the stormwater outlet(s) from the site discharge to a designated county drain, village storm sewer system, waters of the state or any other types of conveyance. These requirements shall also apply to sites under the control of public agencies such as schools, Federal and State governmental

facilities, and other entities that might not otherwise be subject to site plan review procedures and requirements as set forth in other sections of the Village's codified ordinances.

The applicant, in his plan submittals, shall demonstrate compliance with these performance standards and shall be responsible for evaluating the elected best management practices for review in accordance with the Village Stormwater Ordinance.

B. Minimum Treatment Volume. A minimum treatment volume is established to provide pollutant removal (pre-treatment) for prevalent precipitation events. The minimum treatment volume standard shall be either; one inch of runoff from the entire site or the calculated site runoff from the 90 percent annual non-exceedance storm, which is one inch for the Village. Use of the US Geological Service (USGS) runoff curve number method is the preferred means to calculate site runoff.

Treatment methods shall be designed on a site-specific basis to achieve a minimum of 80 percent removal of total suspended solids (TSS), as compared with uncontrolled runoff, or discharge concentrations of TSS not to exceed 80 milligrams per liter (mg/l).

A minimum treatment volume standard is not required where site conditions are such that TSS concentrations in storm water discharges will not exceed 80 mg/l.

C. Channel Protection Criteria. Channel protection criteria is established to protect stream channel bed and banks from excessive flows. The channel protection criteria is to maintain post-development site runoff volume and peak flow rate at or below existing levels for all storms up to the 2-year, 24-hour event. "Existing levels" means the runoff flow volume and rate for the last land use prior to the planned new development or redevelopment.

An acceptable source of rainfall data for calculating runoff volume and peak flow rate is: Rainfall Frequency Atlas of the Midwest, Huff & Angel, NOAA Midwest Climate Center and Illinois State Water Survey, 1992. Methods for estimating pre- and post-development runoff shall follow the USGS runoff curve number method.

Curve number evaluation is described in a document titled "Computing Food Discharges for Small Ungauged Watersheds", July 2003, which can be found at *www.michigan.gov/deqstormwater* under "Municipal Program/MS4 Permit Guidance" (go to "Storm Water Control Resources" and select "Guidance for Calculating Runoff Volume and Peak Flow Rate").

D. Riparian Buffers. A riparian buffer shall be provided for lands adjacent to streams and rivers and wetlands which are contagious to these natural features. Riparian buffers shall also be required for noncontgious wetlands if the full extent of the wetland as a natural feature is five (5) acres or greater.

The riparian buffer shall serve as a natural conservation area, where the principle best management practice is vegetative filtering and the conservation of trees, shrubs and herbaceous vegetation. The riparian buffer is a stormwater management measure to control soil loss and reduce water quality degradation caused by nutrients, animal wastes, toxics, sediment and runoff.

The riparian buffer shall begin at the edge of the stream bank of the active channel or the wetland boundary. The riparian buffer shall be composed of two distinct management zones in order

to proscribe both permitted and restricted uses that provide progressive best management practices for stormwater quality protection.

(1) Zone 1 – Stream Side Protection. Zone 1 begins at the edge of the stream bank or wetland and extends 15 feet upgradient and perpendicular to the protected natural feature. Zone 1 shall contain undisturbed natural vegetation. Allowable uses within this zone are restricted to flood control structures, utility right of ways, foot paths, and road crossings where permitted. Highly restricted vegetative trimmings and removal of woody brush/trees is allowed to provide a limited viewshed of the protected natural feature.

(2) Zone 2 – Outer Zone. The Outer Zone (Zone 2) begins at the outer limit of the Stream Side Protection Zone (Zone 1) and extends 10 feet. Allowable uses within the Outer Zone are biking or hiking paths, approved storm water management facilities, approved recreational facilities, and removal of mature tree cover. Shrub and herbaceous ground cover are to be protected from disturbance.

(3) Permitted Activities. The following actions are permitted within Zones 1 and 2, provided the activity is undertaken in accordance with recognized best management practices. Other regulatory restrictions may apply, such as actions that may require separate federal, state or local permit or permit-by-rule provisions.

(a) Stream restoration projects conducted with advice and guidance of the county conservation district.

(b) Removal of individual trees that are in danger of falling, causing damage to structures, or causing blockage of the stream.

(c) Timber cutting techniques approved by state agencies, under advice and guidance, for purposes of forest management due to pest infestation, disease or threat from fire.

(d) Riparian buffers are intended to grow into their vegetative target state naturally, however active methods to enhance successional process, reforestation or to ensure preservation and propagation of the buffer are allowed.

(4) The width of each Zone may need to be increased if steep slopes are within close proximity of the protected natural feature. Guidelines of the US Geological Service may be used to determine the required equivalent length of vegetative filter capacity needed for slopes in excess of 15%.

(5) Encouragement of voluntary measures. Lands adjacent to the outer edge of the Outer Zone (Zone 2) are hereby defined as riparian lands. Riparian property owners have a unique and critical role in protecting water quality, preserving critical natural features and accommodating wildlife whose survival depends upon water features and conservation corridors. For example, some studies suggest that riparian buffers of 150 feet may be required for certain Michigan threatened species to successfully move between larger conservation areas and maintain healthy breeding populations. Therefore, it is a policy of the Village to educate, outreach and otherwise assist riparian land owners in the implantation of additional voluntary stormwater best management practices.

E. Operation and Maintenance. All structural and vegetative best management practices installed as a performance standard for stormwater management shall include a plan for maintaining maximum performance through long-term operation and maintenance (O&M). The plan shall include a schedule for O&M procedures and recordkeeping provisions such as periodic inspections.

F. Records Retention. Inspections and other records pertaining to the O&M of best management practices for stormwater water quality protection shall be maintained by the property owner and retained for a minimum of five years.

FURTHERMORE, to invest authority to oversee these performance standards and carryout the powers defined in the Village Stormwater Ordinance, the Village does hereby designate Kenneth Schippers, DPW Director as the Stormwater Protection Administrator.

FURTHERMORE, to provide guidance and resolve disputes as defined in the Village Stormwater Ordinance, the Village does hereby appoint the following individuals to serve on a Stormwater Protection Board of Appeals:

1) Kenneth Schippers
2) Matthew Crawford

A motion was made by Trustee Christina Klok, seconded by Trustee Ray Vliek, to adopt the foregoing Resolution.

Upon a roll call vote, the following voted "Ayes" seven (7):

Trustees: Bill Brumleve, Kyle Dury, Bud Hoekstra, Christina Klok, Ray Vliek, Jack Westendorp, and President Dan Pryson.

The following voted "Nay": None

The following "Abstained: None

The Village President declared that the Resolution has been adopted.

Matthew L. Crawford,
Village Clerk

CERTIFICATE

The foregoing is a true and complete copy of the ordinance adopted by the Village Board of the Village of Vicksburg at a regular meeting held on June 7th 2010. Public notice was given and the meeting was conducted in full compliance with the Open Meetings Act, (PA 267, 1976).

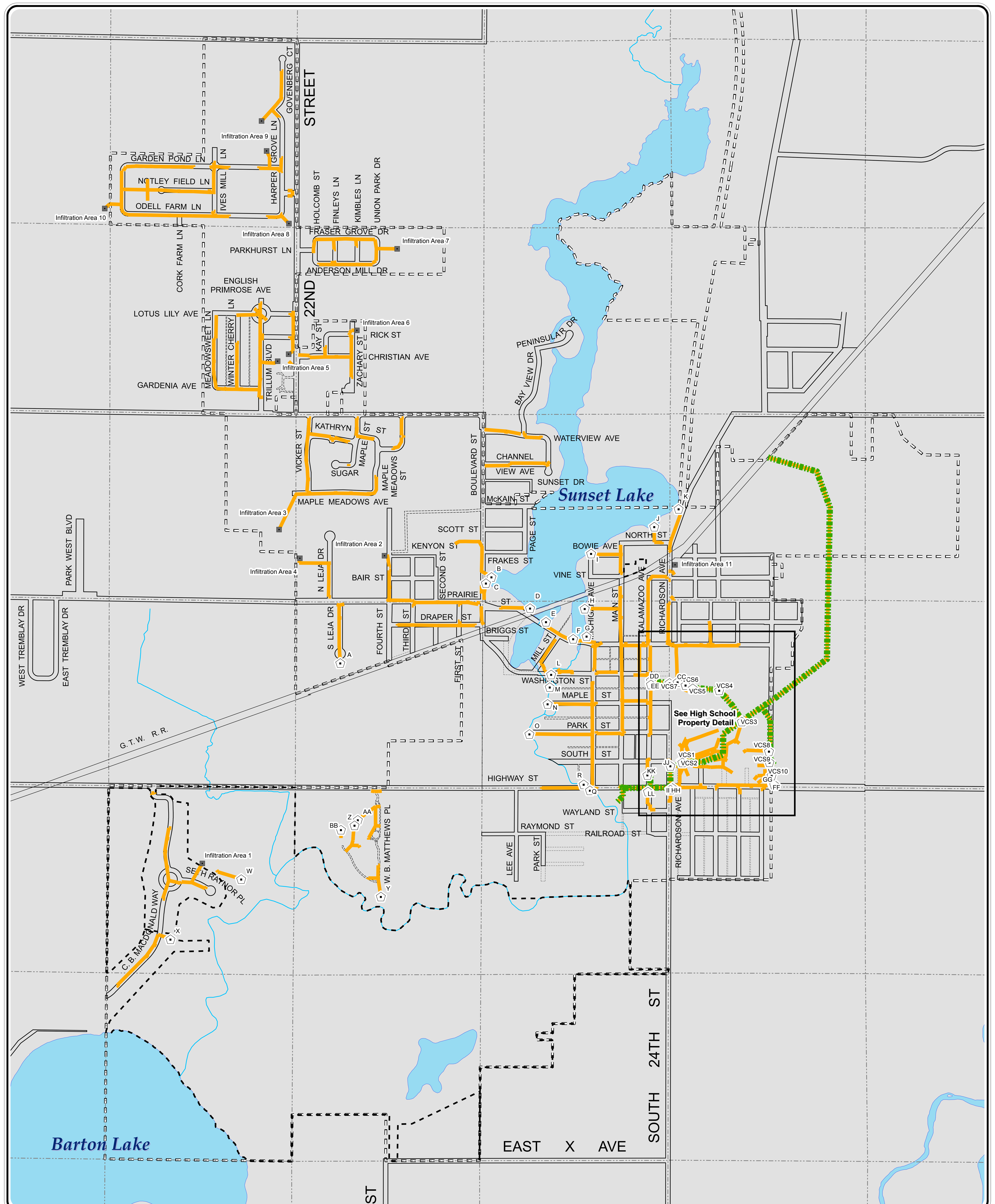
Appendix IV Storm System Map

Village Of Vicksburg

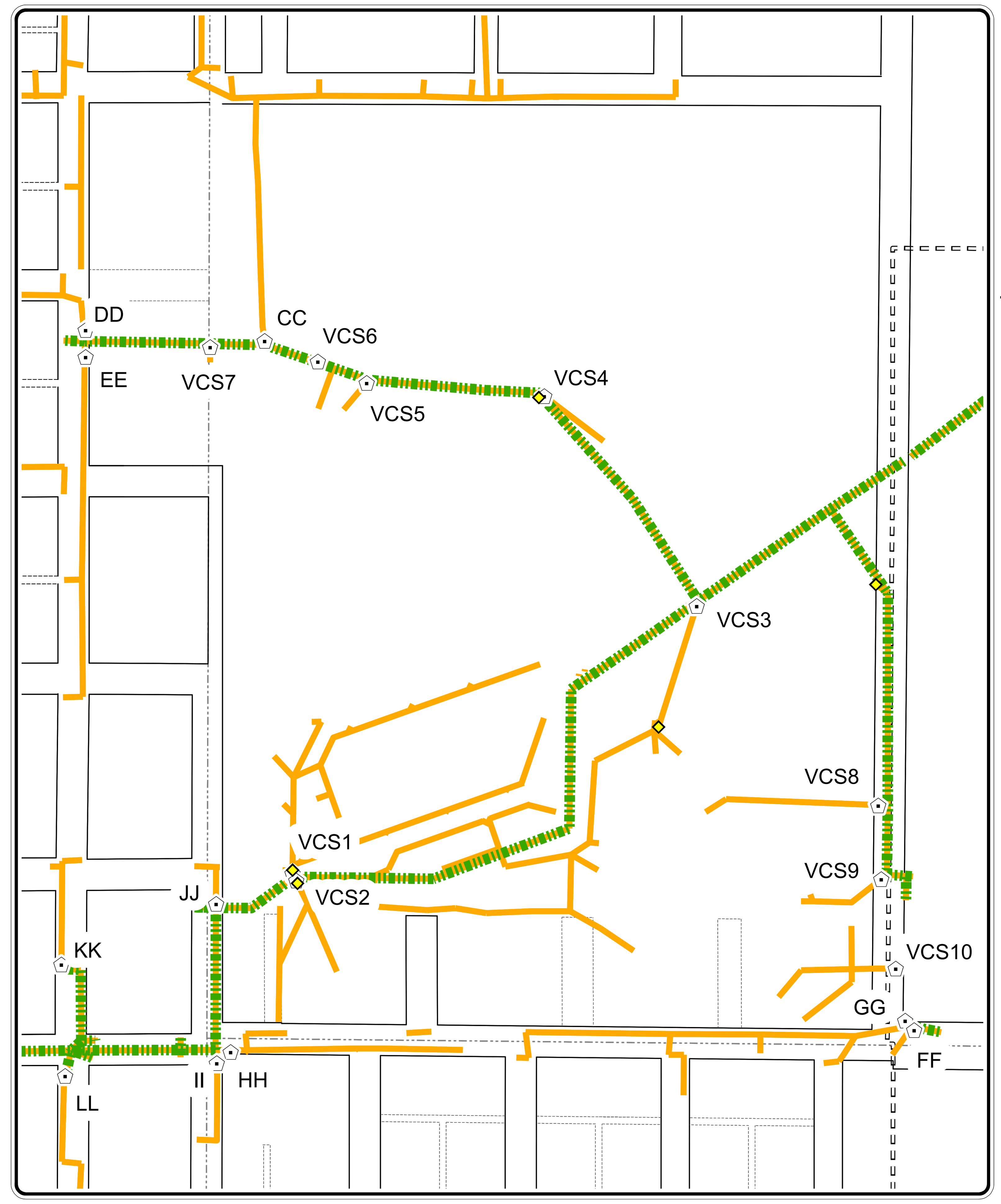
Kalamazoo County, Michigan

Appendix IV Watershed Boundaries, Storm Sewers and Outfalls

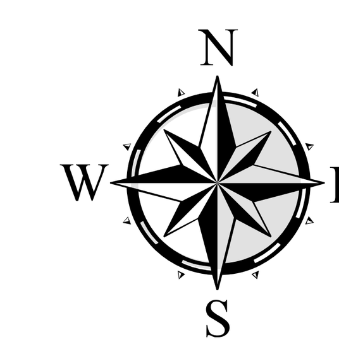
Published - July 2008
Revised-December 2008
Revised - April 2010
Revised-May 2012


GARDEN POND LN
NOTLEY FIELD LN
ODELL FARM LN
Infiltration Area 10
Infiltration Area 9
Infiltration Area 8
Infiltration Area 7
Infiltration Area 6
Infiltration Area 5
Infiltration Area 4
Infiltration Area 3
Infiltration Area 2
Infiltration Area 1
Infiltration Area 11
22ND STREET
FRASER GROVE DR
ANDERSON MILL DR
PARKHURST LN
ENGLISH PRIMROSE AVE
LOTUS LILY AVE
GARDENIA AVE
RICK ST
CHRISTIAN AVE
KATHRYN
SUGAR
MAPLE MEADOWS AVE
WATERVIEW AVE
CHANNEL
VIEW AVE
SUNSET DR
Sunset Lake
PENINSULAR DR
BAY VIEW DR
SCOTT ST
KENYON ST
FRAKES ST
BAIR ST
PRAIRIE
DRAPER ST
BRIGGS ST
BOWIE AVE
NORTH ST
VINE ST
WASHINGTON ST
MAPLE ST
PARK ST
SOUTH ST
HIGHWAY ST
WAYLAND ST
RAYMOND ST
RAILROAD ST
See High School Property Detail
G.T.W. R.R.
PARK WEST BLVD
EAST TREMBLAY DR
WEST TREMBLAY DR
W. B. MATTHEWS PL
C. B. MACDONALD WAY
Barton Lake
EAST X AVE
SOUTH 24TH ST

Overall Village



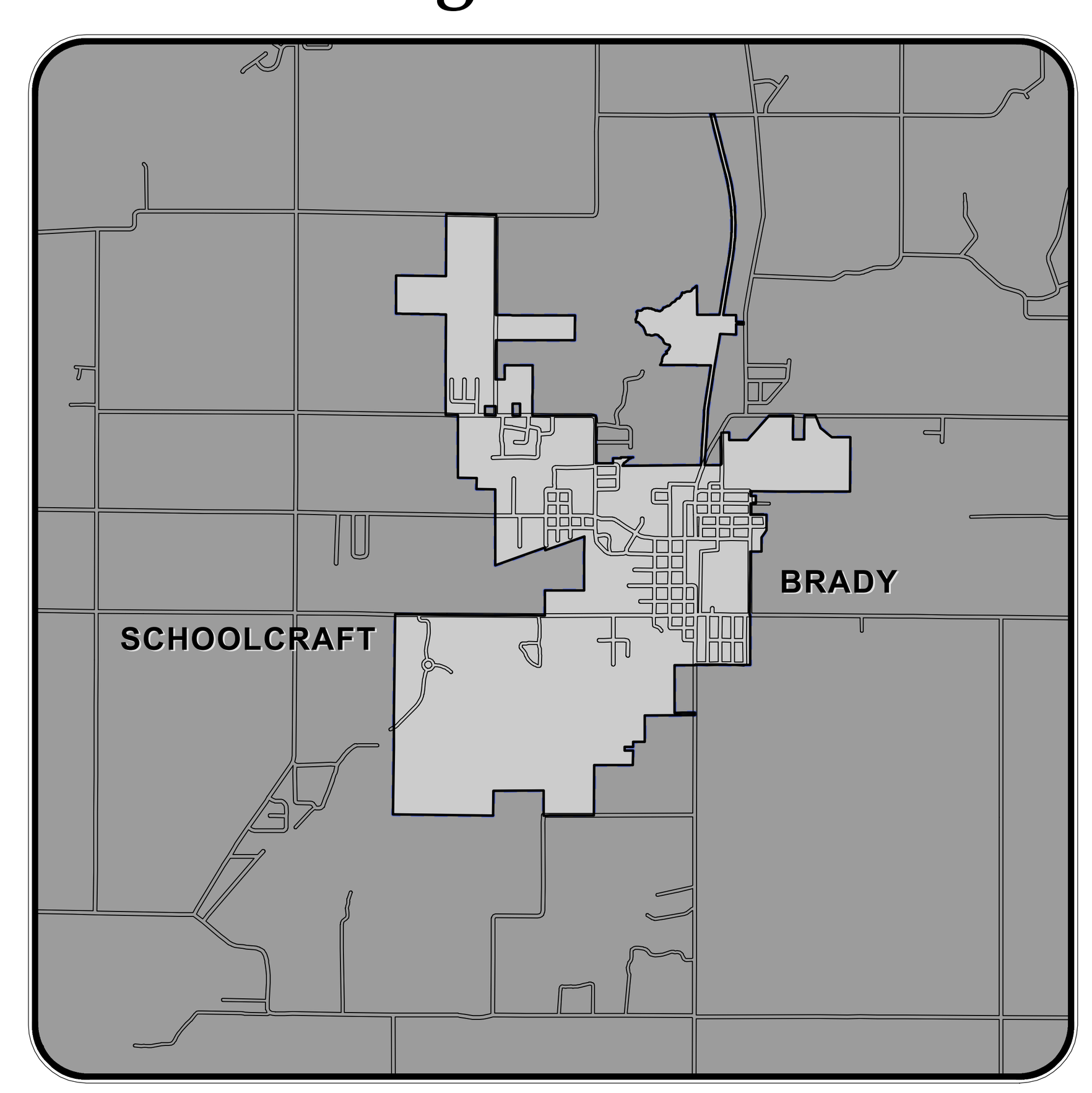
Vicksburg Community Schools
High School Property



Legend

- STU or Oil Grit Sperators
- outfall
- Outfall Infiltration Area
- County Drain
- Storm Main
- Portage River Watershed Boundary

Location Map
& Village Boundaries



Prein&Newhof

Appendix V SWPPI Tables

Table 1 – PUBLIC EDUCATION PROGRAM (PEP)

STORM WATER POLLUTION PREVENTION INIATIVE (SWPPI)
PROGRAM ELEMENTS, TASKS AND DELIVERABLES

	PUBLIC EDUCATION PROGRAM ELEMENTS					
PEP Objective	**Task**	**Delivery Mechanism / Methodology**	**Time Table**	**Evaluation/ Measured Element**	**Content of Message(s) and Supplemental Message**	**Measurable Goals**
1	Watershed Stewardship Awareness	A representative of the Village of Vicksburg and/or Vicksburg Community School participates in the Kalamazoo Stormwater Work Group and activities set up thru the KASWWG (i.e. home show).	As Needed	Meeting Attendance and participation in KASWWG activities	Definition of a Watershed; Identification of Watershed Lived In (Work In); Purpose of Protecting the Watershed; Ways people affect the watershed	Representative present at 50% or more of KASWWG meetings. Participation by volunteering manpower, materials, or financial contributions to KASWWG educational activities (i.e. home show)
		Village Newsletter	Spring & Fall	One article per issue addressing various PEP topics 3000 residents		Both the spring and fall newsletter have an article each devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
		Display tables with free information at Vicksburg Hearty Hustle, Vicksburg Car Show, Art Hop Days	Annually	List of events and their dates, list of educational pieces provided, number of people visiting the table or attending the event		Storm water educational information/material is distributed at 2 events per year and a minimum of 2 free stormwater education pieces are available at each event.
2	Storm Water Discharge Awareness	The Village of Vicksburg website is www.vicksburgmi.org	Annually	Article on the website	Storm sewers discharges to water bodies; Storm sewers (unlike wastewater) are untreated; Storm water carries pollutants; Adverse impacts of storm water discharges; Local storm sewer drainage system	Place 1 article per year on website and place a minimum of one third party links Place spring/fall newsletter article on website.
		Village Newsletter	Spring & Fall	One article per issue addressing various PEP topics 3000 residents		Both the spring and fall newsletter have an article each devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
		Display tables with free information at Vicksburg Hearty Hustle, Vicksburg Car Show, Art Hop Days	Annually	List of events and their dates, list of educational pieces provided, number of people visiting the table or attending the event		Storm water educational information/material is distributed at 2 events per year and a minimum of 2 free stormwater education pieces are available at each event.
		VCS staff meeting	Annually	Number of janitorial, food and bus staff at meeting		Discuss at staff meeting once per year.
3	Illicit Discharge Awareness & Reporting	The Village of Vicksburg website is www.vicksburgmi.org	Annually	List contact information to report illicit discharge. Number of calls received for illicit discharges	What is an illicit discharge; Why and how-to report illicit discharges; Water Quality impacts of illicit discharges and improper waste disposal; Consequences and penalties of illicit discharges	Contact information provided on website
		Train Village Police, Fire and Public Services employees and School Facility personnel to be on the lookout for violations.	Annually	Number of trainings		Hold 1 training per year.
		Village Newsletter.	Spring & Fall	One article per issue addressing various PEP topics 3000 residents		Both the spring and fall newsletter have an article each devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
		Display tables with free information at Vicksburg Hearty Hustle, Vicksburg Car Show, Art Hop Days	Annually	List of events and their dates, list of educational pieces provided, number of people visiting the table or attending the event		Storm water educational information/material is distributed at 2 events per year and a minimum of 2 free stormwater education pieces are available at each event.
		VCS bulletin boards and displays and publications	Annually	Static Display at Bus Garage Literature available at general information tables and displays Article published in “The Red and White”		Display at bus garage. Literature available at school properties. Place one article per year devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.

	PUBLIC EDUCATION PROGRAM ELEMENTS					
PEP Objective	**Task**	**Delivery Mechanism / Methodology**	**Time Table**	**Evaluation/ Measured Element**	**Content of Message(s) and Supplemental Message**	**Measurable Goals**
4	Promotion of Best Management Practices (BMP's) to reduce contaminates discharging to storm sewer or Water of the State	BMP literature, guides and brochures	Annually	Distribution of materials at Village Hall	Proper use of lawn chemicals and pesticides; Preservation of riparian buffers; Proper septic system maintenance; Management of yard and pet waste; Low-impact landscaping Rain gardens	Number of guides, brochures distributed.
		Village Newsletter	Spring & Fall	One article per issue addressing various PEP topics 3000 residents		Both the spring and fall newsletter have an article each devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
		Display tables with free information at Vicksburg Hearty Hustle, Vicksburg Car Show, Art Hop Days	Annually	List of events and their dates, list of educational pieces provided, number of people visiting the table or attending the event		Storm water educational information/material is distributed at 2 events per year and a minimum of 2 free stormwater education pieces are available at each event.
		VCS bulletin boards and displays and publications	Annually	Literature available at general information tables and displays Article published in "The Red and White"		Literature available at school properties. Place one article per year devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
5	Promotion of Proper Waste Management	Kalamazoo Household Hazardous Waste Disposal Program literature available at Village Hall	Annually	Distribution of materials at Village Hall	Awareness and identification of household hazardous waste; Identification HHW disposal service locations Improper waste disposal impacts water quality; Available alternatives	Number of guides / brochures distributed.
		Village Newsletter.	Spring & Fall	One article per issue addressing various PEP topics 3000 residents		Both the spring and fall newsletter have an article each devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
		Display tables with free information at Vicksburg Hearty Hustle, Vicksburg Car Show, Art Hop Days	Annually	List of events and their dates, list of educational pieces provided, number of people visiting the table or attending the event		Storm water educational information/material is distributed at 2 events per year and a minimum of 2 free stormwater education pieces are available at each event.
		VCS bulletin boards and displays and publications	Annually	Literature available at general information tables and displays Article published in "The Red and White"		Literature available at school properties. Place one article per year devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
6	Riparian Land Stewardship	Contacts and outreach to Sunset Lake associations and property owners along Portage Creek	As needed	Mailings and/or presentations	Proper maintenance of septic tanks; Proper management of lawn chemicals and pesticides; Low impact landscaping; Riparian buffers; Proper disposal of yard and pet waste; Shoreline stabilization; Conservation easements	The Village Staff provides 1 mailing or presentation at an association meeting per 5-year permit cycle
		Village Newsletter.	Spring & Fall	One article per issue addressing various PEP topics 3000 residents		Both the spring and fall newsletter have an article each devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.
		Display tables with free information at Vicksburg Hearty Hustle, Vicksburg Car Show, Art Hop Days	Annually	List of events and their dates, list of educational pieces provided, number of people visiting the table or attending the event		Storm water educational information/material is distributed at 2 events per year and a minimum of 2 free stormwater education pieces are available at each event.
		VCS bulletin boards and displays and publications	Annually	Literature available at general information tables and displays Article published in "The Red and White"		Literature available at school properties. Place one article per year devoted to stormwater education and all PEP topics are covered over the 5-year permit cycle.

Table 2 - ILLICIT DISCHARGE ELIMINATION PROGRAM ELEMENTS (IDEP)

STORM WATER POLLUTION PREVENTION INITIATIVE (SWPPI)
PROGRAM ELEMENTS, TASKS AND DELIVERABLES

II. ILLICIT DISCHARGE ELIMINATION PROGRAM ELEMENTS					
Task	**Methodology**	**Time Table**		**Evaluation/ Measured Element**	**Measurable Goals**
		Implementation	**Evaluation**		
Outfall (point source) dry-weather screening	Initial outfall screening of school discharges	Completion by Fall 2013	Annually	Outfall screening records	Completion by 2013 and then include in overall re-screening rotation, 100% known outfall screened per permit cycle (i.e. a maximum interval of 5 years between investigations (re-screening)
	Periodic outfall re-screening	Ongoing	Annually	Outfall screening records	100% known outfall screened per permit cycle (i.e. a maximum interval of 5 years between investigations (re-screening)
Illicit discharge investigation and elimination	Elimination of identified illicit discharges	Ongoing	Annually	Contact forms and correspondence records	100% violation notices submitted to responsible party within 10 days (responsible parties to be notified within 24 hours if the illicit discharge is significant)
				Notification of non-compliance and/or demand letters	Failure of the responsible party to initiate corrective actions within 60 days shall cause a 2nd notification to be sent; to be followed by formal citation and/or other appropriate enforcement actions
				Conformation of corrective action	100% of conformation inspection completed within 30 days following notification of corrections having been completed by the responsible party
					100% of conformation inspections are found to have adequately corrected the known deficiency
Public sanitary sewer seepage	Inspections and video taping of sanitary sewer structures and storm sewer mains.	As-Needed Based on complaints and/or inspection results	Annually	Inspection and maintenance records	100% resolution of any complaint or findings based on inspection results.
Administrative procedures	Update MS4 system mapping as additional discharge points are discovered or constructed	Ongoing	Annually	Mapped MS4 system	Annual updates and/or revisions
	Screeners training On-street personnel training Office/contact personnel training	Existing employees – trained 1 per Permit Cycle New Employees – Trained during 1 year of employment	Annually	Training attendance records	All applicable staff trained according to the training schedule

Table 3 – POLLUTION PREVENTION & GOOD HOUSEKEEPING - MS4 OWNER/OPERATOR BMP's (Operation & Maintenance Program Elements)

STORM WATER POLLUTION PREVENTION INITIATIVE (SWPPI)
PROGRAM ELEMENTS, TASKS AND DELIVERABLES

POLLUTION PREVENTION & GOOD HOUSEKEEPING FOR MUNICIPAL OPERATION - MS4 OWNER/OPERATOR BMP's (Operation & Maintenance Program Elements)

Task	Methodology	Time Table		Evaluation/ Measured Element	Measurable Goals
		Implementation	Evaluation		
(a) maintenance activities, maintenance schedules, and inspection procedures for storm water structural controls to reduce pollutants (including floatables) in discharges from our permitted separate storm water drainage system					
Evaluate storm water structural controls, Village owned infiltration areas / retention ponds, and Storm Treatment Units.	Visually observe catch basin's sediment traps to assess if maintenance is required.	Approximately 1/5 of all catch basins annually	Annually	Number of Catch Basins Observed	All catch basins observed every 5 years
	Visually observe infiltration areas/ retention ponds to verify they are functioning as intended. Cleaning needs and any significant erosion or infrastructure wear or damage is reported to the Village's DPW Supervisor or VCS Facility Manager for follow up	Annually – All infiltration areas / retention ponds	Annually	Infiltration Areas / retention ponds are visually inspected while they are mowed several times per year.	All infiltration areas / retention ponds are observed annually
	Visually observe Stormwater Treatment Units (STUs) to assess if maintenance is required. Cleaning needs is reported to the VCS Facility Manager for follow up.	Annually – All Stormwater Treatment Units (STUs)	Annually	Stormwater Treatment Units (STUs) are visually inspected	All Stormwater Treatment Units (STUs) are observed annually
Maintenance of storm water structural controls.	Removal of sedimentation and floatables from catch basin sedimentation traps via contracted service.	As-Needed	Annually	Depth of sediment exceeds 1/3 of sump depth	100% of catch basins found to contain excessive sedimentation to be cleaned within 6 months.
	Restore erosion issues within infiltration areas	As-Needed	At time of Mowing	Case-by-case, based on visual observation during mowing of areas	100% of the Village's infiltration areas / retention ponds are stabilized and show no signs of significant erosion.
	Remove sedimentation from pond bottoms	As-Needed	Annually	Infiltration areas have stopped working properly. Sedimentation is covering 50% of the outfall pipe. Sedimentation exceeds 12 inches.	100% of the Village's infiltration areas / retention ponds are working properly and outfall pipe into the ponds are unobstructed.
	Removal of sedimentation and floatables from Stormwater Treatment Units (STUs) via contracted service.	As-Needed Based on yearly inspection	Annually	Sedimentation or floatables exceeds the manufacturer's recommendation for the Stormwater Treatment Units (STUs). STUs have not been cleaned within the last 3 years.	All sedimentation and floatables have been removed from the Stormwater Treatment Units (STUs) within the last 3 years (maximum duration) or has had all sedimentation and floatables removed when STU's capacity exceeds the manufacturer's recommendation.

POLLUTION PREVENTION & GOOD HOUSEKEEPING FOR MUNICIPAL OPERATION - MS4 OWNER/OPERATOR BMP's (Operation & Maintenance Program Elements)					
Task	**Methodology**	**Time Table**		**Evaluation/ Measured Element**	**Measurable Goals**
		Implementation	**Evaluation**		
(b) controls for reducing or eliminating the discharges of pollutants from streets, roads, highways and parking lots, and maintenance garages					
Ensure that pollutants are not disposed into surface waters	DPW procedures for pavement sweeping. Street sweeping is done throughout the Village's curbed streets as needed, with sweepings taken to a landfill. Certain areas are swept more frequently, as needed. Debris is placed directly into a dump truck, with no dewatering.	On-going	Annually	records of receipts from the landfill; Track amount if sedimentation collected and the frequency of streets sweeping	Achieving the recommended street sweeping frequency to minimize debris from entering surface water (i.e. once per year village-wide, more frequency in targeted areas)
	DPW procedures for - snow and ice removal operations. Salt trucks are calibrated based on weather conditions. The preferred practice is to avoid discharge of plowed snow into waters of the state, due to the associated pollutants. The Village stockpiles snow within the grass areas at the former Mill site.	On-going	Annually	Salt trucks are calibrated based on weather conditions. The amount of salt used is tracked only on an annual basis.	100% of Staff Conformance to procedures
	Maintenance vehicles and School Bus washing	On-going	Annually	Vehicles wash in wash bay with floor drain connected to sanitary sewer	100% of vehicles washed occur at in approved washing site.
	Maintenance vehicles and School Bus maintenance	On-going	Annually	Vehicles maintained in workshop type bay or shop with floor drain connected to sanitary sewer	100% of vehicles repaired / maintained at approved site.
	Fueling of maintenance vehicles and equipment	On-going	Annually	Vehicles and equipment are fueled at a public fueling station. All employees are instructed to stay by and monitor their vehicles when fueling	No fuel spills entered the storm system
	Fueling of school buses	On-going	Annually	School buses are fueled at school fueling area and/or via mobile fuel tanker truck. Bus drivers and/or fuel tanker operator visual observe the fueling operation. Bus drivers and/or fuel tanker operator knows where fuel spill kits are located and how to use them.	No fuel spills entered the storm system
	DPW yard is maintained and no tracking of sedimentation is found on the roadway area	On-going	Annually	No sedimentation is found on driveway area. Sedimentation to be swept to prevent tracking onto roadway.	No tracking of sedimentation occurs from DPW yard
	<u>Administrative Procedures</u> Screeners training On-street personnel training Office/contact personnel training	Existing employees – trained 1 per Permit Cycle New Employees – Trained during 1 year of employment	Annually	Training attendance records	All applicable staff trained according to the training schedule

POLLUTION PREVENTION & GOOD HOUSEKEEPING FOR MUNICIPAL OPERATION - MS4 OWNER/OPERATOR BMP's (Operation & Maintenance Program Elements)					
Task	**Methodology**	**Time Table**		**Evaluation/ Measured Element**	**Measurable Goals**
		Implementation	**Evaluation**		
(c) procedures for the proper disposal of operation and maintenance waste from the permitted separate storm water drainage system (dredge spoil, accumulated sediments, floatables, and other debris)					
Ensure that pollutants are not disposed into surface waters	Collected catch basin sediments shall be contracted to a responsible party. Sediments and water shall be tested and disposed of properly in a licensed Type II municipal landfill unless contaminated then sediment shall be disposed of properly.	On-going	Annually	Collected/ tabulated data Cleaning the inside of the catch basin is done as needed, and is performed by a contractor. Records in the form of waste manifests, which contain the volume of waste and disposal location.	100% of sedimentation tested and disposed of properly
	Street Sweeping debris is disposed of properly in a licensed Type II municipal landfill by contracted service provider.	As-Needed	Annually	Village contracts out with outside services with contract language or specifications for how to properly dispose of materials.	Documentation that all debris was properly disposed.
	Dredged material and/or accumulated sediments found within retention ponds / infiltration areas is stabilized on site adjacent to infiltration areas	As-Needed	Annually	90% of sediment is removed for infiltration / pond areas and 100% properly stabilized on site within 14 days.	Infiltration areas / retention ponds function properly and all material from dredging operation is stabilized.
(d) ways to ensure that new flood management projects assess the impacts on the water quality of the receiving waters and, whenever possible, examine existing projects for incorporation of additional water quality protection devices or practices					
Properly design, engineer and permit new flood management projects.	Permittee initiated flood control projects will include provisions to reduce pollutants to water bodies to maximize extent practicable by including such criteria in all RFP's for flood control engineering services.	On-going through site plan review	Annually	Track and compare the number of flood control projects that include water quality criteria vs. the total number of flood control projects.	Utilizing new technologies to reduce pollutants in storm water
	Examine existing water quantity structures for incorporation of additional water quality protection devices or practices.	Consider when such structures are scheduled for major repair or replacement	Annually	New technologies are considered when planning for major repair or replacement of existing structures.	All major repaired or replacement of existing storm quantity water structures, consider potential incorporation of new technology for water quality features.
(e) Implementation of controls to reduce the discharge of pollutants related to application of pesticides, herbicides, and fertilizers applied in our permitted jurisdiction.					
Proper use of lawn chemicals and pesticides.	Use a phosphorus-free fertilizer on Village parks, lawn areas, VCS property, and other areas. The Village currently does not use pesticides within their community.	On-going	Annually	If the Village or VCS applies fertilizer, what type of fertilizer was used.	All areas that the Village or VCS apply fertilizer, a phosphorus-free fertilizer are used.
	Use fertilizer in compliance with PA 299 of 2010 at the Village owned golf course. Pesticides applications are done in accordance to the Michigan Department of Agriculture and Rural Development (MDARD) at the Village owned golf course	On-going	Annually	Application of phosphate fertilizer only in following circumstances: (1) the golf course has been certified after its staff have completed an approved training course (2) a test has shown the need for it and the fertilizer is applied at an allowed rate (3) the turf is in its first growing season and the fertilizer is applied at an allowed rate. Prohibits the application of any fertilizer on turf located within 15 feet of surface water, unless there is a vegetative buffer between the turf and surface water, or certain equipment.	Compliance with PA 299 of 2010. Compliance with MDARD. A golf course person is licensed by the State of Michigan for pesticides. Angels Crossin golf course is certified by the Michigan Turfgrass Environmental Stewardship Program

Table 4 – POST CONSTRUCTION

STORM WATER POLLUTION PREVENTION INITIATIVE (SWPPI)
PROGRAM ELEMENTS, TASKS AND DELIVERABLES

POST CONSTRUCTION					
Task	**Methodology**	**Time Table**		**Evaluation/ Measured Element**	**Measurable Goals**
		Implementation	**Evaluation**		
Site Appropriate BMP's	Site plans for all new and redeveloped sites with projects that disturb one (1) acre or more, including projects less than one (1) acre that are part of a larger common plan of development or sale that would disturb one (1) acre or more shall be reviewed by the planning commission. Review shall include appropriate storm water BMP's such as: on-site management (no additional runoff standard); isolation of storm water from pollutants; secondary containment when required; and protection of central environmental resource areas, and long term operations and maintenance along with the requirements of the Performance Standards adopted by the Village.	On-going	On-going	Site plans are reviewed and conform to applicable Performance Standards, such as, minimum treatment volume, channel protection, riparian buffers operation and maintenance	All site plans reviewed and conform to applicable Performance Standards.
Long-term operation and maintenance and enforcement	Respond to complaints of storm water or local flooding issues promptly by enforcing storm water ordinances, performance standards, and commitments made during site plan approval.	On-going	On-going	Number of complaints	Number of complaints vs. number of complaints resolved
	Informal observation of private problematic retention and detention ponds after rainfall events to ensure infiltration.	On-going	On-going	Number of ponds that are not functioning properly	Fewer ponds that are not functioning properly
	Site plans provide O&M procedures related to site specific Stormwater Treatment Units (STUs) and/or BMPs.	On-going	On-going	Information provided on site plan and installed per Village approval.	100% site plan conformance
	Site plans provide provisions such as periodic inspections related to Stormwater Treatment Units (STUs) and/or BMPs.	On-going	On-going	Information provided on site plan and inspected per Village approval.	BMPs installed per plan and inspection records available upon request.
	Record Retention – Inspections and other records pertaining to O&M of best management practices are maintained by the property owner and retained for a minimum of five years	On-going	On-going	5 years of records available	Records available from property owner upon request

Table 5 – PERMITTEE SPECIFIC WMP BASED SWPPI ELEMENTS

Implementation Task	Commitment*	Evaluation Method OR Explanation for WL, NA, or CS
II; A1: Continue implementation of the MS4 Public Education Plan and Public Participation Plan.	O	Number of events; number of participants; pre-/post-results can be used to evaluate learning.
II; A2: Promote periodic surface water cleanups and water quality/habitat improvement projects.	WL	Lack of resources, promote efforts made by others
II; A3: Evaluate, develop or improve stormwater management and natural features setback ordinances, regulations or policies.	O	Updated or completed ordinances, regulations, policies
II; A4: Support or improve soil erosion prevention programs.	CS	Done by the Kalamazoo County SESC Agent
II; A5: Develop and maintain stormwater asset inventory programs.	L	Complete inventory, GIS mapping
II; A6: Maintain BMPs and maintenance programs.	O	Complete inventory
II; A7: Document, promote and maintain a spill response program	O	Program documentation; related response activities.
II; A8: Inventory and stabilize eroding stream banks where appropriate.	O	Document lineal footage of stream bank stabilized
II; A9: Promote and educate for the implementation of BMPs by landowners, contractors and municipalities.	O	Distribution of materials; site inspection visits; program presentation; number of attendees
II; A10: Support farmland preservation and encourage agricultural BMPs.	NA	No agricultural land in the Village of Vicksburg
II; A11: Support/encourage riparian buffers and no-mow zones encouraging native species.	WL	Lack of resources, will make educational materials available
II; A12: Implement BMP's during reconstruction or maintenance activities at road/stream crossings.	NA	Done by the Kalamazoo County Road Commission
II; A13: Inspect and correct, as needed, storm sewer and culvert locations for blockage, erosion, and failures.	O	Number of sites restored, monitoring results.
II; A14: Implement IDEP.	O	Number of site reviews and dry weather screenings; number of illicit discharges removed.
II; A15: Develop/maintain/enforce wellhead protection plans and other groundwater protection programs.	O	Compliance with protection programs.
II; A16: Support cooperative hydrologic groundwater monitoring programs and studies (e.g., USGS).	O	Communities pass resolution and/or incorporate support for groundwater programs into local plans.
II; A17: Encourage and promotes natural features/resources inventories.	NA	Lack of resources, will supports efforts made by others
II; A18: Encourage restoration and rehabilitation projects using native species and invasive species removals/controls.	O	Sites are identified and prioritized; number of sites restored; monitoring results.
II; A19: Identify existing and potential public recreational areas in the M3C watershed and participate in regional public pedestrian and river trail way planning.	WL	Lack of resources, will support efforts made by others
II; A20: Participate in SWWG meetings and other water resource-related meetings.	O	Documentation of efforts.

* KR3WMP: Kalamazoo River Mainstem 3 Watershed Management Plan

O: Ongoing S: Short-term L: Long-term

WL: Wish List (This action was not committed to in the WMP)

NA: Not Applicable (This action was not committed to in the WMP)

CS: County Standard (This action was not committed to in the WMP)

Note: The reference numbers in table 2 are not consecutive in order to simplify the development of the SWPPI plans for each township/small city/village in Kalamazoo County. Missing reference numbers indicate a task that does not apply to the permittee and has been removed.

Appendix VI Storage Yard Drainage Map

Village of Vicksburg

Northeast Corner of N. Main Street
and Grand Trunk Railroad
Kalamazoo County, Michigan

Vicksburg Storage Yard Drainage Map

May 2012
2070047

N
W E
S

Feet
0 20 40 80

Scale: 1" = 40'

Legend

- Storm Main
- Leaching Basin
- Drainage Arrows
- Portion of Site Draining to MS4

Prein&Newhof
Phone: 269-372-1158

Appendix VII Agreement between Village of Vicksburg and Vicksburg Community Schools

VCS

Vicksburg Community Schools

Traditions In Excellence

September 7, 2010

Ms. Chris Bauer
Michigan Dept. of Natural Resources & Envr.
Kalamazoo District Office
7953 Adobe Rd.
Kalamazoo, MI 49009

RE: Vicksburg Community Schools Storm Water Phase II

Dear Ms. Bauer:

The Vicksburg Community Schools (VCS) would like to request termination of the Administrative Consent Order requesting that VCS obtain coverage under the Municipal Storm Water Program. VCS has prepared an agreement with the Village of Vicksburg (VOV) to be nested under their watershed based permit with Certificate of Coverage No. MIG610330. An unsigned copy of this agreement is attached; the agreement will be signed by both the VCS and VOV after the next VOV Council Meeting on September 20, 2010.

VOV will add VCS storm water discharges to their system, include a SWPPP for the VCS bus garage as necessary, and rely on VCS's educational expertise to assist in expanding their efforts. Storm water runoff from Vicksburg High School, Vicksburg Middle School, Administration Building and the Bus Garage is collected and run through oil/water separators (Aquaswirls). After passing through the Aquaswirls, storm water is discharged into the County Drain, which will be an added discharge to the VOV system. Storm water from Sunset Lake Elementary discharges directly into the VOV storm sewer down N. Boulevard; therefore, will not be an added discharge point. Tobey and Indian Lake Elementary are not located in the Village; storm water from these two sites is infiltrated on site so will not add to the VOV discharges. VCS will develop a SWPPP for their bus garage site and provide it to the VOV to include in their SWPPI. All necessary monitoring for the SWPPP will likely be completed by VCS staff. VCS will take a lead role in educational efforts and have education information available to staff, students, and parents. VCS staff will be included in all training efforts made by the VOV.

Once the agreement has been signed by both the VCS and VOV a copy will be mailed to the MDNRE. If any changes are requested by the VOV Board, they will be highlighted or indicated in a cover letter. Please contact us with any further questions.

Sincerely,

Stephen M. Goss
Assistant Superintendent

Enclosure

cc: Matt Crawford, Village of Vicksburg
Helen Davis, Prein&Newhof

301 South Kalamazoo PO Box 158 Vicksburg, Michigan 49097-0158 269 321-1000 fax: 269 321-1055

THIS AGREEMENT is made and entered into as of the 1st day of September, 2010, by the Village of Vicksburg (VOV), and Vicksburg Community Schools (VCS).

IT IS AGREED THAT:

The VOV and VCS are subject to the requirements of the Phase II Storm Water Regulations (the "Phase II Regulations"), 33 USC 1251, et seq., published by the United States Environmental Protection Agency ("EPA") in the Federal Register on December 8, 1999; and

The Phase I Regulations of the existing National Pollutant Discharge Elimination System (NPDES) storm water program were published in the Federal Register on November 16, 1990 and the Phase II Regulation expands the existing program to address storm water discharges from small public separate storm drainage systems and construction sites that disturb one to five acres. The VOV is subject to Phase II because it is specifically identified in the list of "Incorporated Places and Counties Proposed To Be Automatically Designated Under the Storm Water Phase II Proposed Rule." The VCS is regulated as it is a public facility with separate storm drainage that lies within an urbanized area and the facility's separate storm drainage meets the concept of a "system" as described in the Federal regulation; and

The VOV has obtained coverage under for a Michigan Department of Environmental Quality National Pollutant Discharge Elimination System Wastewater Discharge General Permit for Storm Water Discharges from Municipal Separate Storm Sewer Systems (MS4s) Subject to Watershed Plan Requirements (MIG610000). Under the VOVs permit as allowed in Part I, Section A.2. of the General Permit the VOV is also applying to cover the VCS facilities which lies within the jurisdictional limits of VOVand others VCS properties within the designated watershed of the permit.

The Phase II Regulations and the General Permit impose certain requirements on the VOV and VCS that must be satisfied; and

The VOV Council has approved the VOV to provide coverage for VCS under the General Permit to enable the VOV and the VCS to comply with the requirements of the Phase II Regulations, the General Permit and to engage in other storm water management activities related thereto; and

The VOV and the VCS agreed to cooperate and actively participate in the activities necessary to enable the VOV and the VCS to comply with the Phase II Regulations and the General Permit; and

The VOV and the VCS are authorized to enter into an Agreement for a term up to but not beyond the expiration date of the VOVs Certificate of Coverage (COC) issued under the General Permit; and

In order to provide permit coverage, it is necessary that the VOV and the VCS enter into this Agreement.

THEREFORE, in consideration of the premises and the covenants of each other, the parties hereto agree as follows:

General Permit Compliance

VOV

The VOV agrees to:

1. Prepare and submit the permit application and required attachments.
2. Be responsible for the general administration of the permit related compliance program including maintenance of records, permit compliance tracking, and submittal of required plans, reports, and related correspondence.
3. Provide access to all correspondence and records related to the permit to the VCS.
4. Advise the VCS of any permit compliance issues or actions.
5. Hold meetings with the VCS at least quarterly to provide updates on compliance and storm water management related issues.
6. Be responsible to the primary implementation of minimum measures, Storm Water Pollution Prevention Initiative (SWPPI), Watershed Management Plan (WMP), etc., within the VOV and VCS.
7. Attend and actively participate in watershed planning efforts.
8. Represent the VCS in watershed planning efforts.
9. Engage such consultants, assistants, attorneys, employees, and resources as may be necessary to provide the services necessary to maintain compliance with the permit.

VCS

The VCS agrees to:

1. Provide needed information to the VOV, including drawings, plans, reviews, reports, and notices of problems/spills/violations necessary to apply for and maintain compliance with the permit.
2. Provide a written description of the BMPs used to achieve the assigned action items and goals of the SWPPI and the measures used to determine success.
3. Name a storm water management contact person.
4. Develop a Storm Water Pollution Prevention Plan (SWPPP) as necessary for Fleet Maintenance and Storage Yard facilities as required in the Phase II Regulations and the General Permit.
5. Provide to the VOV, documentation of compliance with the permit, the minimum measures, the SWPPI, SWPPP, WMP, and this agreement.
6. Approve and agree that the VCS shall provide such information and facility access hereunder as are necessary to assist the VOV in complying with the permit application requirements, the Phase II Regulations, the General Permit, the Certificate of Coverage (COC), and in other related storm water management activities.
7. Participate in subwatershed planning and implementation activities, as requested.

Illicit Discharge Elimination Plan (IDEP)

VOV

The VOV agrees to:

1. Develop the IDEP with VCS input and submit the IDEP to the MDEQ as required in the COC.
2. Implement the approved IDEP at the VCS, maintain records, and inform the VCS of any problems found or necessary actions required.
3. Get approval to enter the VCS for the purposes of IDEP implementation.
4. Provide training to VCS staff to enable the VCS to recognize and address illicit connections and discharges.
5. Provide IDEP training to VCS staff to enable the VCS to implement the approved IDEP at their facility. The VCS agrees to provide the VOV with a written report of all findings, observations and results.
6. Inform the VCS of any complaints that may be received regarding storm water at any VCS facility and respond to the complaints as appropriate.

VCS

The VCS agrees to:

1. Provide information to the VOV on the separate storm conveyances and on-site sewage disposal systems (OSDS) at the VCS for the development of the IDEP.
2. Allow VOV access to the VCS for the purposes of IDEP implementation.
3. Reimburse the VOV for costs of service for IDEP implementation at the rates which will be mutually agreed to.
4. Comply with VOV ordinances as they relate to the approved IDEP.
5. Comply with the approved IDEP.
6. Develop policies and procedures that parallel VOV ordinance on illicit connections and discharges that will allow the VCS to implement the approved IDEP.
7. Obtain training for maintenance staff on illicit connection and discharge recognition, OSDS, and proper storage, use and disposal of lawn and facility maintenance chemicals, fuels, cleaners, oils, greases and any other materials that pose a potential threat to surface waters.
8. Obtain training for VCS staff to allow them to implement the approved IDEP on facility property.
9. Implement the approved IDEP on facility property and provide records of efforts, including location and number of observations, sample analysis and detailed information on illicit connections and discharges that were discovered.
10. Provide a written description of the BMPs used to achieve goals and assignments of the IDEP and the measures used to determine success.
11. Respond to any complaints received regarding storm water at the facility and inform the VOV of the details of the complaint and its resolution.

Public Education Plan (PEP)

VOV

The VOV agrees to:

1. Develop PEP with VCS input and submit the PEP to the MDNRE as required in the COC.
2. Implement the approved PEP and include the VCS in education efforts and activities as appropriate.
3. Utilize the VCS's expertise in education to off-set costs associated with permit application and compliance.

VCS

The VCS agrees to:

1. Reimburse the VOV for costs associated with PEP development and implementation as mutually agreed to.
2. Participate fully in PEP development and implementation and utilize its expertise, contacts and resources to provide watershed and environmental education as described in the approved PEP. The education will be provided to the citizens, business owners, visitors to and employees of VOV, and to the visitors to and employees and students of the VCS,
3. Provide education on the PEP topics required by the General Permit to all staff and students
4. Provide a written description of the BMPs used to achieve goals and assignments of the PEP and the measures used to determine success.

Public Participation Plan (PPP)

VOV

The VOV agrees to:

1. Jointly with the watershed partners, develop a PPP with VCS input and submit the PPP to the MDNRE as required in the COC.
2. Implement the approved plan and include the VCS in the storm water management citizens' advisory committee.

VCS

The VCS agrees to:

1. Assist in the effort to involve the public, including VCS staff and students in the planning and implementation of storm water management.
2. Participate as a member of the PIPP citizens' advisory committee.
3. Provide a written description of the BMPs used to achieve goals and assignments of the PPP and the measures used to determine success.

COST SHARE

VOV

The VOV agrees to:

1. Accept the VCS assistance in actions to comply with the permit and implement storm water management VOV wide, in lieu of funds not otherwise specified. The assistance is to include manpower and resources to:
    - **a.** Prepare a permit application
    - **b.** Prepare and implement minimum measure programs**.**
2. Perform all functions necessary to comply with the permit within the VOV and VCS and bill the VCS on a cost per service basis. Amounts are to be mutually agreed upon prior to incurring any costs.
3. Accept responsibility for the costs of addressing noncompliance issues that are unrelated to the actions of the VCS.

VCS

The VCS agrees to:

1. The VCS agrees to pay VOV its share of the regulatory agency permit application fee promptly upon receipt of an invoice for the same from the VOV, but no later than 30 days after receipt.
2. Reimburse the VOV for costs of service for the development, implementation and administration of the storm water management program at rates to be mutually agreed upon prior to commencement of work.
3. Reimburse the VOV for all costs that are incurred in addressing noncompliance issues that are solely the result of the actions of the VCS.

INTER-AGENCY AGREEMENT
FOR COVERAGE UNDER THE PHASE II NPDES PERMIT

General Agreement

1. In the event that any one or more of the provisions of this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provisions hereof, but this Agreement shall be constructed as if such invalid, illegal, or unenforceable provision had never been contained herein.

2. The Agreement shall become effective after approval by the governing bodies of the VOV and Nested and execution by the authorized officials of the parties; shall terminate on the expiration date of the General Permit Certificate of Coverage unless extended by the parties in writing; may be executed in several counterparts; and shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

3. If the VOV or the VCS are unable or unwilling to comply with the Agreement, the Agreement can be terminated by any party with a thirty (30) day written notice. If the Agreement is terminated the VOV will notify in writing, the VCS that they will have to apply for a permit and the MDNRE of the termination of the agreement.

4. Modifications, amendments or waivers of any provisions of this Agreement may be made only by the written mutual consent of the parties.

5. The parties, as required by law, shall not discriminate against a person to be served, an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges or employment, or a matter directly or indirectly related to employment because of race, color, religion, national origin, age, sex, disability that is unrelated to the individuals ability to perform the duties of a particular job or position, height, weight, marital status, political affiliation or beliefs.

   The parties shall adhere to all applicable Federal, State and local laws, ordinances, rules and regulations prohibiting discrimination, including, but not limited to, the following:

   A. The Elliott-Larsen Civil Rights Act, 1976 PA 453, as amended.
   B. The Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended.
   C. Section 504 of the Federal Rehabilitation Act of 1973, P.L. 93-112, 87 Stat 394, as amended, and promulgated thereunder
   D. The Americans with Disabilities Act of 1990, P.L. 101-336, 104 Stat 328 (42 USCA S12101 et seq), as amended, and regulations promulgated thereunder.

INTER-AGENCY AGREEMENT
FOR COVERAGE UNDER THE PHASE II NPDES PERMIT

IN WITNESS WHEREOF, The parties hereto have caused this Agreement to be executed and delivered by their respective duly authorized officers, all as of the day and year first above written.

Witnesseth:

_____ By: _____

_____ Its: _____

_____ By: _____

_____ Its: _____

_____ By: _____

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_____ By: _____

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