

**AGREEMENT FOR
STORM WATER SYSTEM MAINTENANCE**

This Agreement is made on June 1st, by Jenoptik Automotive North America, LLC, a Michigan limited liability company, of 1544 W. Hamlin Road, Rochester Hills, MI 48309, ("Owner"), and the CITY OF ROCHESTER HILLS (the "City"), whose address is 1000 Rochester Hills Drive, Rochester Hills, MI 48309.

WHEREAS, Owner owns and proposes to develop the Property described in attached Exhibit A; and

WHEREAS, the proposed development of the Property will alter the natural flow of surface and storm water drainage; and

WHEREAS, Owner has proposed, and the City has approved, a storm water drainage and detention system (the "System") comprised of storm water detention and water quality treatment facilities, storm sewer pipe, catch basins, manholes, and swales for the Property as described and depicted in the Storm Water System Plan attached as Exhibit B; and

WHEREAS, the parties will benefit from the proper operation, use and maintenance of the System and enter into this agreement to provide for the same.

THEREFORE, the parties agree:

1. Use of the System:

Components of the System, including any and all water conveyance, detention and water quality treatment facilities, storm sewer pipe, catch basins, manholes, and swales, shall be used solely for the purpose of conveying, detaining and treating storm and surface drainage on the property until such time as: (i) The City determines and notifies Owner or Owner's successors, grantees or assigns, in writing, that it is no longer necessary to convey, detain or treat the storm and surface drainage; and (ii) An adequate alternative for conveying, detaining and treating storm and surface drainage has been provided which is acceptable to the City and which includes the granting of any easements to the City or third parties as may be required or necessary for the alternative drainage system.

2. Maintenance:

A. Owner shall be responsible for the proper maintenance, repair and replacement of the System and all parts thereof as detailed in the Maintenance Plan attached as Exhibit C.

B. Proper maintenance of the System shall include, but is not limited to: (i) Removing accumulated sediment, trash and debris; (ii) Maintaining storm sewer and structures; (iii) Controlling the effects of erosion; (iv) Inspection of storm sewer structures and pipes for structural integrity; (v) Inspection and cleaning of the storm sewer and catch basins upstream from the detention system; and (vi) Any other maintenance that is reasonable and necessary to facilitate and continue the proper operation and use of the System.

3. Action by City:

If, at any time, Owner or Owner's successors, grantees or assigns neglect or fail to properly maintain the System or any part thereof, the City may notify Owner or Owner's successors, grantees or assigns. The notice shall be in writing and shall list and describe maintenance deficiencies and demand that they be corrected within thirty (30) days.

The notice shall further specify a date and place for a hearing to be held at least fourteen (14) days after the date of the notice before the City Council, or such other board or official as the City Council may designate. At the hearing, the City Council (or other designated board or official) may affirm or modify the list and description of maintenance deficiencies and, for good cause shown, may extend the time for the deficiencies to be corrected.

Thereafter, if the maintenance deficiencies are not corrected within the time allowed, the City may undertake the necessary corrective actions, and the City may maintain the System for up to one (1) year. Such maintenance of the System by the City shall not be construed to be a trespass or a taking of the Property, nor shall the City's actions vest in the public any right to enter or use the Property. Thereafter, if Owner or Owner's successors, grantees or assigns do not properly maintain the System, the City may, after providing similar written notice, schedule and hold another hearing to determine whether the City should maintain the System for another year, and subject to a similar notice, hearing and determination in subsequent years.

In the event the City determines an emergency condition caused by or relating to the System threatens the public health, safety or general welfare, the City shall have the right to immediately and without notice enter the Property and undertake appropriate corrective action.

4. Charges:

The City shall charge to the current owner of the Property the cost of maintenance or other corrective action undertaken by the City under this agreement, plus a ten percent (10%) administrative fee. If not timely paid, the City may place the charges on the City's tax roll, which charges shall be a lien on the real property

and shall be collectable and enforceable in the same manner general property taxes are collected and enforced.

5. **Notice:**

Any notices required under this agreement shall be sent by certified mail to the address for each party set forth below, or to such other addresses as such party may notify the other parties in writing:

To Jenoptik Automotive North America, LLC: 1544 W. Hamlin Road
Rochester Hills, MI 48309

To the City: City Clerk
City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309

6. **Successors and Assigns:**

This agreement shall bind and inure to the benefit of the parties and their respective successors, grantees and assigns. The benefits, burdens, rights, obligations and responsibilities hereunder shall run with the land and shall bind all current and future owners of the Property and any divisions thereof.

7. **Recording of Agreement:**

This agreement shall be recorded at the Oakland County Register of Deeds.

JENOPTIK AUTOMOTIVE NORTH AMERICA, LLC
A Michigan Limited Liability Company

By: [Signature]
Andreas Blind, VP Sales, Services & Marketing

CITY OF ROCHESTER HILLS

By: _____
Bryan Barnett, Mayor

By: _____
Tina Barton, Clerk

STATE OF MICHIGAN
COUNTY OF Oakland

This agreement was acknowledged before me on June 1, 2016, by Andreas Blind, VP Sales, Services & Marketing of Jenoptik Automotive North America, LLC, a Michigan Limited Liability Company, on behalf of the Company.

[Signature]
Notary public
Oakland County, Michigan
My commission expires: July 1, 2022

STATE OF MICHIGAN
COUNTY OF OAKLAND

This agreement was acknowledged before me on _____, by Bryan Barnett, Mayor, and Tina Barton, Clerk, of the City of Rochester Hills, on behalf of the City.

Drafted By:
Rachel Smith
PEA, Inc.
2430 Rochester Ct., Suite 100
Troy, MI 48083

_____, Notary public
_____, County, Michigan
My commission expires: _____

When Recorded Return to:
City Clerk
City of Rochester Hills
1000 Rochester Hills Drive
Rochester Hills, MI 48309

John Stevan
Approved 6/16/16

EXHIBIT "A"

LEGAL DESCRIPTION:

(Per HRC Land Title Survey, Job #2016-0014, Dated 2-16-16)

Parcel 1 (15-21-376-011)

Land in the City of Rochester Hills, Oakland County, Michigan,
described as follows:

A parcel of land being part of the Southwest 1/4 of Section 21, Town 3 North, Range 11 East, City of Rochester Hills (Avon Township), Oakland County, Michigan, described as follows:
Commencing at the Southwest corner of Section 21; thence N86°50'00"E along the South line of Section 21, 1875.96 feet and N03°10'00"W 60.00 feet to the Point of Beginning;
thence N03°10'00"W 765.11 feet; thence along a curve to the left 551.65 feet, said curve having a radius of 5685.71 feet, a chord bearing N43°19'52"E 551.43 feet; thence N40°33'06"E 43.40 feet; thence S03°10'00"E a distance of 1164.08 feet to the North right-of-way line of Hamlin Road (Variable right-of-way width); thence along said right-of-way line the next 3 callouts: 1) S86°50'00"W 11.01 feet; 2) S03°10'00"E 12.00 feet; 3) S86°50'00"W 419.01 feet to the Point of Beginning. Said description contains 414,182 square feet, or 9.508 acres, more or less.

*Mike Taunt
Approved 6/18/16*



PEA, Inc.

2430 Rochester Ct, Ste 100
Troy, MI 48083-1872
t: 248.689.9090
f: 248.689.1044
www.peainc.com

STORM WATER SYSTEM PLAN
JENOPTIK AUTOMOTIVE NORTH AMERICA, LLC
1544 W. HAMLIN ROAD
ROCHESTER HILLS, MI 48309

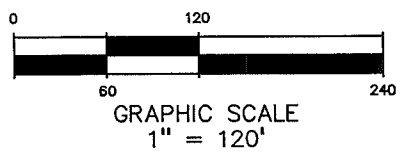
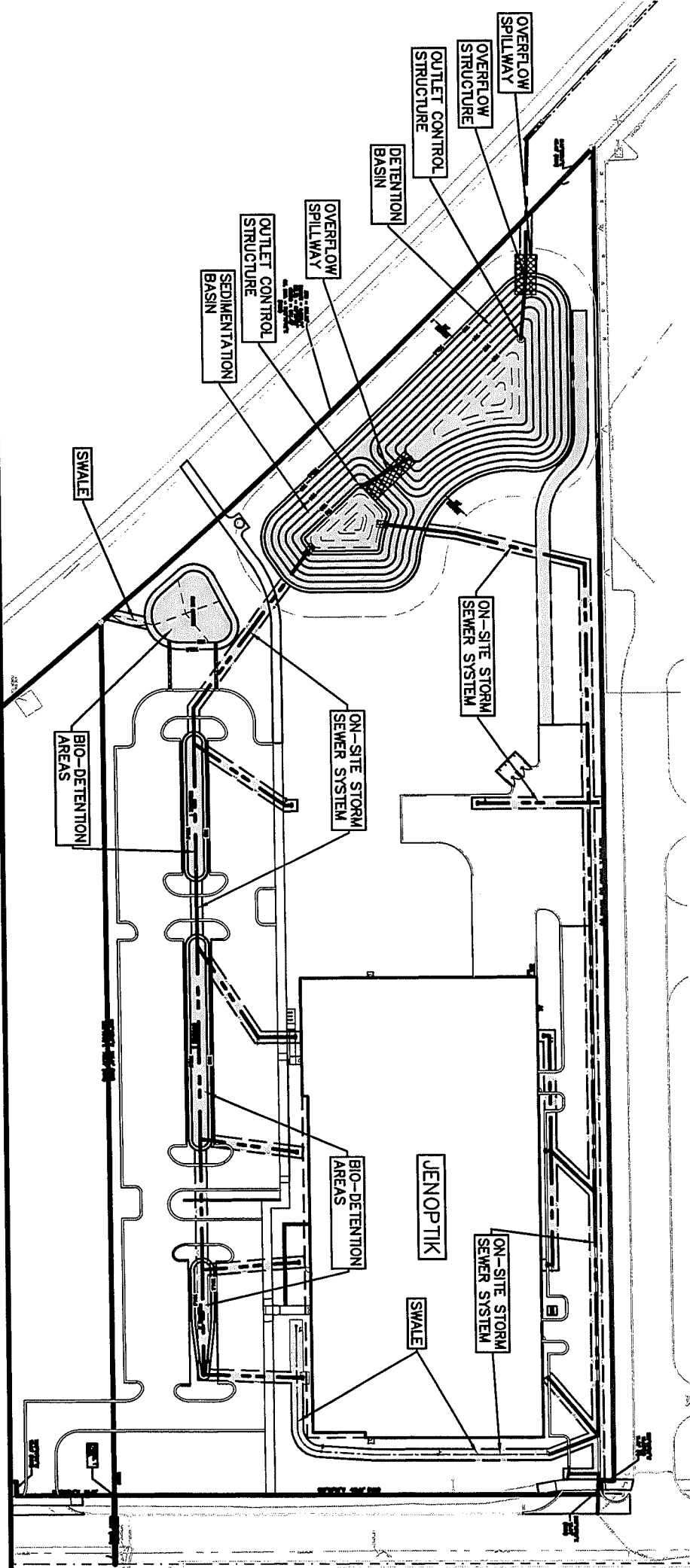
SCALE: NTS

JOB No: 2016-029

DATE: 4-15-16

DWG. No: 1 of 1

EXHIBIT "B"



LOCATION MAP - NOT TO SCALE

JENOPTIK AUTOMOTIVE
NORTH AMERICA, LLC
STORM SEWER
SYSTEM MAINTENANCE
RESPONSIBILITY



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STORM WATER SYSTEM PLAN
JENOPTIK AUTOMOTIVE NORTH AMERICA, LLC
1544 W. HAMLIN ROAD
ROCHESTER HILLS, MI 48309

SCALE: 1" = 120'
DATE: 4-15-16

JOB No: 2016-029
DWG. No: 1 of 1

EXHIBIT 'C'

OPERATIONS AND MAINTENANCE MANUAL

**JENOPTIK
STORMWATER MAINTENANCE PLAN
ROCHESTER HILLS, MICHIGAN**

**PROPERTY OWNER:
JENOPTIK AUTOMOTIVE NORTH AMERICA, LLC
1544 W. HAMLIN ROAD
ROCHESTER HILLS, MI, 48309
Phone: (248) 537-1434
Contact: Mr. Andreas Blind**

Prepared by:
PEA, Inc
2430 Rochester Court, Suite #100
Troy, Michigan, 48083-1872
Phone: (248) 689-9090
Contact: Rachel Smith, PE, LEED AP, CFM

May 24, 2016

OPERATION AND MAINTENANCE MANUAL

INTRODUCTION:

This manual identifies the ownership, operation and maintenance responsibilities for all stormwater management systems including the sedimentation and detention basins, underground storm sewer system, and bio-detention areas as incorporated into and detailed on the approved Construction Plans as prepared by PEA, Inc. In order to comply with the local best management practices (BMP) and requirements, this manual should serve as a minimum performance standard. This manual should be retained intact and read in its entirety by all parties responsible for the operations and maintenance of the on-site BMP's.

OWNER:

Mr. Andreas Blind
VP Sales, Services & Marketing
Jenoptik Automotive North America, LLC
1544 W. Hamlin Road
Rochester Hills, Michigan, 48309
Phone: (248) 537-1434

PROPERTY INFORMATION:

This Operations and Maintenance Manual covers the storm water systems located at the following subject property:

LEGAL DESCRIPTION:

(see Exhibit 'A' of the Storm Water Maintenance Agreement)

STORMWATER MAINTENANCE EXHIBIT:

Exhibit 'B' of the Storm Water Maintenance Agreement is the Storm Water System Plan which provides a clear presentation of all components of the storm water system. This system is subject to the long-term operation and maintenance responsibilities detailed in this manual. The system includes:

- Storm sewer pipes
- Storm sewer structures (manholes, inlets, catch basins etc.)
- Sedimentation Basin
- Detention Basin
- Bio-detention areas (bioswales and rain garden)
- Swales
- Overflow Spillways
- Riprap
- Buffer Strips

INSPECTIONS:

The frequency of system inspections outlined in the manual and attached exhibits should be considered the minimum, if no events warrant additional inspections. The frequency of inspections should be fine-tuned over time as system specific conditions are better known and the rate at which certain maintenance operations need to be performed is better understood. Maintenance Inspection Checklists are provided for each of the BMP's in this system. Inspections should be performed by personnel responsible for maintenance and may need to be certified for confined space entry, depending on the component being inspected. Operation of the detention basin, sediment basin, and outlet control structures may need to be inspected by a practicing civil engineer familiar with their operation.

Records of all routine inspections and any work performed on the system for maintenance, repair or replacement should be maintained by the owner and kept for a minimum of ten (10) years. A copy of all records should be provided to the City of Rochester Hills Engineering Division. The records should include this manual, all inspection sheets, approved construction plans and as-built documents, a maintenance log of work performed to the system(s) and contact information for the system inspector, civil engineer, landscape architect, geotechnical engineer and contractor involved with the system.

STORM WATER SYSTEMS MAINTENANCE:

Regular inspection and maintenance of BMP's are necessary if these facilities are to consistently perform up to expectations. Stormwater systems are expected to perform quality and quantity control functions as long as the land use they serve exists. Failure to maintain these systems can create the following adverse impacts:

- Increased pollutants to surrounding surface water features
- Potential loss of life or property resulting from catastrophic failure of the facility
- Aesthetic or nuisance conditions, such as mosquitoes or reduced property values due to a degraded facility appearance.

Most of these impacts can be avoided through proper and timely inspection and maintenance. A major concern associated with these impacts is the general public's expectations related to the quality of life provided, in part, by construction of these systems. Inadequate maintenance means the general public may have a false sense of security. The most common cause of stormwater system failure is the lack of adequate and proper operation, inspection, maintenance and management.

Good design and construction can reduce subsequent maintenance needs and costs, but they can not eliminate the need for maintenance altogether. Maintenance requires a long term commitment of time, money, personnel and equipment. Monitoring the overall performance of the stormwater management system is a major aspect of any maintenance program.

The maintenance responsibilities for these systems lie with the current property owner and transfer with the property in perpetuity. If maintenance of the system is not performed, the City of Rochester Hills reserves the right to enter the property and perform all necessary work at the property owners' cost. Refer to the *Agreement for Storm Water System Maintenance* for additional details.

General Maintenance Items:

Parking Lot Sweeping:

Routine sweeping of all paved surfaces provides a more attractive appearance and removes accumulations of sediment and trash that tend to migrate into stormwater management systems during rainfall events. Parking lot sweeping should be performed quarterly or as necessary to limit sediment and trash build-up.

Grass Mowing and Maintenance:

Mowing requirements at a facility should be designed to the specific site conditions, grass types and seasonal variations in climate. Requirements for grasses in bioswales will vary see the applicable section below. Grassed areas require periodic fertilizing, de-thatching and soil conditioning in order to maintain healthy growth. Provisions will need to be made to reseed and reestablish grass cover in areas damaged by sediment accumulation, stormwater flow, erosion or other causes. Dead turf will need to be replaced after being discovered. Inspection of the grass areas and other landscaping features should be made annually.

Trash and Debris Removal:

Removal of trash and debris from all areas of the property should be performed monthly. Removal of these items will prevent damage to vegetated areas and eliminate their potential to inhibit the operation of any of the stormwater management systems. Sediment, debris and trash that are removed and collected should be disposed of according to local, State and Federal regulations at suitable disposal and/or recycling centers.

Stormwater System Maintenance Items:

The following narratives give an overview of the maintenance requirements of the different components of the stormwater system. The inspection checklists attached to this report offer a more complete listing of what should be inspected, when inspection should occur and the likely frequency of maintenance activities.

Storm Sewer and Structures:

Catch basins, inlets, manholes and sewer pipes should be inspected to check for sediment accumulation and clogging, floatable debris, dead vegetation etc. The structures and sewers should also be observed during a wet weather event to ensure their proper operation. Accumulated sediment and debris should be removed on an annual basis or as needed based on observed conditions. Structural repairs or maintenance should occur as needed based on observed conditions such as cracks, spalling, joint failure, leakage, misalignment or settlement of structures. A civil engineer should be retained if problems are thought to exist.

Swales:

The swales should be kept free of trash, debris or any other foreign matter that would inhibit drainage. The swale yard drain structures should be checked for structural integrity as mentioned above for the storm sewer structures, and any visible signs of erosion or flow bypassing the structure.

Bioswales and Rain Garden:

The bioswales and rain garden should be kept free of dead leaves and vegetation, trash, debris or any other foreign matter that would inhibit infiltration of runoff. The outlet control structures should be checked for structural integrity as mentioned above for the storm sewer structures, and any visible signs of erosion or flow bypassing the structures. The bioswales and rain gardens will trap sediment under normal conditions, so the amount of sediment should be monitored over time, and removed when the accumulated depth reaches 3"-4" total. The planted vegetation within the bioswales and rain garden should conform to that shown on the construction plans, and any invasive species should be removed. Regular lawn fertilizing and mowing should not occur within the bioswales or rain garden at all. Mowing should cease at the top of bank for the bioswales and rain garden. The operation of the bioswales and rain garden including the outlet control structures should be observed during a wet weather event to ensure the proper functioning of the systems. A civil engineer should be retained if problems are thought to exist. The vegetation should be inspected for healthy growth by a landscape architect if the inspection personnel are not familiar with the specific plantings inside the bioretention areas.

Detention Basin Outlet Control Structures and Overflow Structure:

Both the outlet control and overflow structures and connecting pipes should be inspected for sediment accumulation, floatable debris, trash and any other foreign matter that may impede flow or restrict the devices from working properly. The stone jacket surrounding the outlet control structure should be inspected for sediment build up, and the holes at the base of the outlet control structure should be inspected to make sure they do not become blocked. The grates of the two structures should be inspected for structural integrity and build up of debris. The outlet control system should be inspected during a wet weather event to ensure

all components are functioning properly. A civil engineer should be retained if problems are thought to exist.

Maintenance will include the removal of any debris, trash or sediment from the structures and/or pipe, cleaning of the stone jacket on the outlet control structure and removal of debris from the structure grates. The stone jacket may need replacement if cleaning does not adequately remove sediment build-up.

Detention Basin and Sedimentation Basin:

The inlet pipes to the basins should be inspected for structural integrity (pipes cracked, broken, spalled) and that the grates are free from debris. The area around and immediately downstream of the inlet pipes should be inspected for sediment build-up, erosion and the riprap should be inspected for integrity and sedimentation. Maintenance of the inlet pipes would include removal of any sediment build-up and debris, repair or replacement of any components that are in need of attention and to restore any areas that have eroded.

The basins should be inspected for healthy grass growth, side slope erosion, and excessive sedimentation in both basins. The overflow spillway between the basins should be inspected for sedimentation, erosion and overall integrity. The sedimentation basin should trap sediment when working as designed and as such will need regular inspection and removal of sediment once the total sediment depth is 6"-12" or if sediment re-suspension is observed during a rain event. The basins should be inspected during a wet weather event to ensure all aspects of the basin are functioning correctly. A civil engineer should be retained if problems are thought to exist or if the inspection personnel are not familiar with the operating conditions of the basins.

The planted vegetation within the basins should conform to that shown on the construction plans, and any invasive species should be removed. The vegetation should be inspected for healthy growth by a landscape architect if the inspection personnel are not familiar with the specific plantings inside the basins.

Any resident complaints regarding the basins' aesthetics or operation should be investigated during inspections and wet weather operations.

The following pages include inspection checklists for the various devices and components listed above.

EXHIBIT "C"

STORMWATER MANAGEMENT SYSTEM – PERMANENT MAINTENANCE

DATE/TIME OF INSPECTION: _____

INSPECTOR: _____

**STORMWATER MANAGEMENT SYSTEM
MAINTENANCE TASKS AND SCHEDULE**

POST CONSTRUCTION

MAINTENANCE ACTIVITIES MONITORING/INSPECTION	SYSTEM COMPONENTS	Catch Basins, Inlets, Manholes, and Outlet Control Structures	Storm Sewer Pipes	Rip Rap	Swale	Buffer Strips	Biodetention Areas	Detention Basin	Sedimentation Basin	Overflow Spillways	FREQUENCY	COMMENTS
Inspect for Sediment Accumulation		X	X		X	X	X	X	X	X	Annually	
Inspect for Floatables, dead vegetation and debris		X	X	X	X	X	X	X	X	X	Annually	
Inspect for erosion				X	X	X	X	X	X	X	Annually	
Inspect all components during wet weather and compare to as-built plans		X	X					X	X	X	Annually	
Inspect inside of structures and pipes for cracks, spalling, joint failure, settlement, sagging and misalignment.		X	X								Annually	
Inspect for invasive plant species							X	X	X		Annually	
PREVENTATIVE MAINTENANCE											Annually or as needed	
Remove accumulated sediment		X	X	X	X	X	X	X	X	X	Annually or as needed	
Remove floatables, dead vegetation and debris		X	X	X	X	X	X	X	X	X	Annually or as needed	
Professional application of herbicide for invasive species that may be present						X	X	X	X		Annually or as needed	
Repair erosion and/or reseed bare areas				X	X	X		X	X	X	Annually or as needed	
REMEDIAL ACTIONS												
Repair/stabilize areas of erosion				X	X	X	X	X	X	X	As Needed	
Structural Repairs		X	X							X	As Needed	
Make adjustments/repairs to ensure proper functioning		X	X	X	X	X	X	X	X	X	As Needed	
Excavate and reshape Sed. Basin after major sediment removal (once sediment accumulates to 6"-12" or re-suspension of sediment is observed) *								X	X		As Needed	

* A civil engineer should be retained to observe basin operation


SUMMARY:

INSPECTORS REMARKS: _____

OVERALL CONDITION OF FACILITY: _____

RECOMMENDED ACTIONS NEEDED: _____

DATES ANY MAINTENANCE MUST BE COMPLETED BY: _____



PEA, Inc.

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Troy, MI 48083-1872
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STORM WATER SYSTEM PLAN JENOPTIK AUTOMOTIVE NORTH AMERICA, LLC 1544 W. HAMLIN ROAD ROCHESTER HILLS, MI 48309	SCALE: NTS	JOB No: 2016-029
	DATE: 4-15-16	DWG. No: 1 of 1