

# SAGINAW COUNTY STORMWATER DISCHARGE PERMIT APPLICATION

<b>PROJECT NAME:</b>	
Property Tax Identification #:	
Site Plan Review Date:	
Date Applied:	
Deposit Amount Submitted:	
<b>NAME OF DEVELOPER/OWNER:</b>	<b>ENGINEER/ARCHITECT:</b>
Contact Person:	Contact Person:
Street Address:	Street Address:
City, State, Zip:	City, State, Zip:
Telephone:	Telephone:
Email:	Email:
<b>PROJECT LOCATION:</b>	
Street Address:	
Name of Subdivision/Plat:	
Drainage District:	
<b>STORMWATER DESIGN INFORMATION (*Calculations must be submitted for verification. Calculations must have clearly labeled headings, formulas, and units.)</b>	
<b>Type of Development (Circle):</b> <i>COMMERCIAL SITE, INDUSTRIAL SITE, RESIDENTIAL PLATTED, RESIDENTIAL CONDOMINIUM, OTHER</i>	
AREA OF DEVELOPMENT (acres):	
CONTRIBUTING DRAINAGE AREA (A) (acres):	
AREA OF EXISTING IMPERVIOUS SURFACE (acres):	
AREA OF PROPOSED IMPERVIOUS SURFACE (acres):	
ALLOWABLE 10-YR DISCHARGE RATE ( $Q_a$ ) (cfs):	
HEAD DIFFERENTIAL THROUGH 10-YR RESTRICTOR (ft.):	
ACTUAL 10-YR RESTRICTED DISCHARGE RATE ( $Q_r$ ) (cfs):	
TOTAL VOLUME OF 10-YR STORAGE REQUIRED ( $V_i$ ) (cu. ft.):	
TOTAL VOLUME OF 10-YR STORAGE PROVIDED (cu. ft.):	
10 YR DESIGN DETENTION HIGH WATER STORAGE ELEVATION (ft.):	
REQUIRED WATER QUALITY VOLUME ( $V_{wq}$ ) (cu. ft.):	
ALLOWABLE WATER QUALITY RELEASE RATE ( $Q_{fr}$ ) (cfs):	
DIAMETER OF PROPOSED WATER QUALITY RESTRICTOR (in.):	
ACTUAL WATER QUALITY RESTRICTED DISCHARGE RATE (actual $Q_{fr}$ ) (cfs):	
WATER QUALITY VOLUME HIGH WATER STORAGE ELEVATION (ft.):	
WATER QUALITY HOLDING TIME (hrs):	
EMERGENCY OVERFLOW CAPACITY REQUIRED (Q) (cfs):	
EMERGENCY OVERFLOW CAPACITY PROVIDED (cfs):	
EMERGENCY OVERFLOW ELEVATION (ft):	
OUTLET SIZE AND DESIGN FLOW CAPACITY (in., cfs):	
OUTLET INVERT ELEVATION:	
LOWEST FINISHED FLOOR ELEVATION:	
Latitude and Longitude of outfall to county drain or MS4	
AUTHORIZED SIGNATURE	DATE
<b>PLEASE COMPLETE THE DRAINAGE PLAN CHECKLIST TO ASSURE ALL INFORMATION IS PRESENT FOR REVIEW</b>	

## DRAINAGE PLAN CHECKLIST

In order for the Owner, Developer, or Builder to be in compliance with these guidelines he/she shall for review by the SCPWC Engineer or designee, two complete sets of the site drainage and grading plan, and two copies of the calculations for allowable discharge and on-site storage requirements, as prepared by a Registered Professional Engineer or Architect. A copy of the completed checklist will be sent with all submittals.

Each of the following items shall be included on the plan:

- \_\_\_\_\_ Total acres of site.
- \_\_\_\_\_ Total acres of watershed draining through the site outlet.
- \_\_\_\_\_ Drainage district lines including sub-district lines contributing to individual storm sewers and rear lot drainage systems.
- \_\_\_\_\_ Location of site including dimension to nearest intersection road or section line.
- \_\_\_\_\_ Existing ground elevations at maximum 50' centers, including shots on perimeter of site and 50' beyond or contour lines at 1 foot intervals extending 50 feet beyond the site limits.
- \_\_\_\_\_ Elevations of ground, edge of pavement, and buildings within 50' of site.
- \_\_\_\_\_ Top of curb, gutter, ditch line, and centerline of road elevation at maximum 50' intervals.
- \_\_\_\_\_ Existing storm catch basins, manholes, sewers, and culverts showing rim and invert elevation(s).
- \_\_\_\_\_ Proposed elevations showing parking lot grades and control and building elevations.
- \_\_\_\_\_ Lawn/landscape areas.
- \_\_\_\_\_ Location, size, length, slope, and type of proposed storm sewer and rear lot drains.
- \_\_\_\_\_ Rim and invert elevation(s) of proposed manholes and catch basins, including rear lot drainage.
- \_\_\_\_\_ Location of on-site storage showing contour line for the top of storage elevation.
- \_\_\_\_\_ Provide sufficient dimensions, cross-sections, profiles, tie downs, etc. to determine the location and size of proposed storm sewers and detention areas. This information will be used for verifying proposed detention volume calculations in grassed and paved areas.
- \_\_\_\_\_ Location of restrictor and proposed restrictor detail(s).
- \_\_\_\_\_ Location and elevation of the Emergency Overflow.
- \_\_\_\_\_ Latitude and Longitude of site's stormwater discharge point

**DRAINAGE PLAN - CHECKLIST (Continued)**

Each of the following items shall be included in the submitted calculations:

- \_\_\_\_\_ Drainage District and impervious factor (if applicable and already established for the location of the site).
- \_\_\_\_\_ Calculation of maximum allowable discharge (Obtain impervious factor from the SCPWC Engineer, if applicable).
- \_\_\_\_\_ Calculation of on-site storage required.
- \_\_\_\_\_ Calculation of storage volume provided.
- \_\_\_\_\_ Calculation of restrictor size.
- \_\_\_\_\_ Hydrologic & Hydraulic Calculations for sizing storm sewer systems, which will be maintained by a public agency.
- \_\_\_\_\_ Hydrologic and Hydraulic calculations showing there will be no adverse impacts upstream or downstream of the proposed development.

Beyond the Saginaw County Public Works Commissioner Stormwater Design Requirements, the Developer must submit applications for permits with all agencies that regulate stormwater within the area of development. These may include Michigan Department of Transportation, Michigan Department of Environment, Great Lakes, and Energy, Saginaw County Public Works Commissioner (SESC), or the Saginaw County Road Commission.