STORMWAIER

STORMWATER PERMIT APPLICATION
Merrillville Stormwater Utility • 7404 Broadway • Merrillville, IN 46410

	Phone: (219) 472-8668 • Fax: (219) 472-8670 (to be completed by Applicant)	
	ct Name:	
Gene File N	54·	
	lumber: Date Complete oplication Fee	
		Amt. \$
Service Committee	otice of Intent oleted Notice of Intent State Form #47487	
	Attached Page/Sheet#	
16 7 75 75	onstruction Plans ct narrative and supporting documents, including the following information:	rage/oneet#
A1	An index indicating the location, in the construction plans, of all information required by this subsection (can use this application form as index).	
A2	Description of the nature and purpose of the project.	
A3	A copy of a legal boundary survey for the site, performed in accordance with Rule 12 of Title 865 of the Indiana Administrative Code or any applicable and subsequently adopted rule or regulation for the subdivision limits, including all drainage easements and wetlands.	
A4	Soil properties, characteristics, limitations, and hazards associated with the project site and the measures that will be integrated into the project to overcome or minimize adverse soil conditions.	
A5	General construction sequence of how the project site will be built, including phases of construction.	
A6	14-Digit Watershed Hydrologic Unit Code.	
A7	A reduced plat or project site map showing the lot numbers, lot boundaries, easements, and road layout and names. The reduced map must be legible and submitted on a sheet or sheets no larger than eleven (11) inches by seventeen (17) inches for all phases or sections of the project site.	
A8	A general site plan exhibit with the proposed construction area superimposed on the city GIS map at a scale of 1"=100'. The exhibit should provide 2-foot contour information and include all roads and buildings within a minimum 500' radius beyond the project boundaries. All on-site elevations shall be given in North American Vertical Datum of 1988 (NAVD). The horizontal datum of topographic map shall be based on Indiana State Plane Coordinates, NAD83. The map will contain a notation indicating the noted datum information.	
A9	Identification of any other state or federal water quality permits that are required for construction activities associated with the owner's project site.	
A10	Proof of Errors and Omissions Insurance for the registered professional engineer or licensed Engineer showing a minimum amount of \$1,000,000 in coverage.	
A11	Vicinity map depicting the project site location in relationship to recognizable local landmarks, towns, and major roads, such as a USGS topographic quadrangle map, or county or municipal road map.	
An ex	isting project site layout that must include the following information:	
A12	Location, name, and normal water level of all wetlands, lakes, ponds, and water courses on, or adjacent to, the project site.	
A13	Location of all existing structures on the project site.	
A14	One hundred (100) year floodplains, floodway fringes, and floodways. Please note if none exists.	
A15	Soil map of the predominant soil types, as determined by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Soil Survey, or as determined by a soil scientist. Hydrologic classification for soils should be shown when hydrologic methods requiring soils information are used. A soil legend must be included with the soil map.	
A16	Identification and delineation of vegetative cover such as grass, weeds, brush, and	

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	trees on the project site.	
A17	Location of storm, sanitary, combined sewer, and septic tank systems and outfalls.	
A18	Land use of all adjacent properties.	
A19	Identification and delineation of sensitive areas.	
A20	Existing topography at a contour interval appropriate to indicate drainage patterns.	
A21	The location of regulated drains, farm drains, inlets and outfalls, if any of record.	
A22	Location of all existing cornerstones within the proposed development and a plan to protect and preserve them.	
Final	project site layout, including the following information:	
A23	Location of all proposed site improvements, including roads, utilities, lot delineation and identification, proposed structures, and common areas.	
A24	One hundred (100) year floodplains, floodway fringes, and floodways. Please note if none exists.	
A25	Proposed final topography, at a contour interval appropriate to indicate drainage patterns.	
A gra	ding plan, including the following information:	
A26	Delineation of all proposed land disturbing activities, including off-site activities that will provide services to the project site.	
A27	Location of all soil stockpiles and borrow areas.	
A28	Information regarding any off-site borrow, stockpile, or disposal areas that are associated with a project site, and under the control of the project site owner.	
A29	Existing and proposed topographic information.	
A dra	inage plan, including the following information:	
A30	An estimate of the peak discharge, based on the ten (10) year storm event, of the project site for post-construction conditions.	
A31	The proposed 100-year release rates determined for the site, showing the methodology used to calculate them and detailing considerations given to downstream restrictions (if any) that may affect the calculated allowable release rates.	
A32	Calculation showing peak runoff rate after development for the 100-year return period 24-hour storms do not exceed the respective allowable release runoff rates.	
A33	Location, size, and dimensions of all existing streams to be maintained, and new drainage systems such as culverts, bridges, storm sewers, conveyance channels, and 100-year overflow paths/ponding areas shown as hatched areas, along with the associated easements.	
A34	Locations where storm water may be directly discharged into groundwater, such as abandoned wells or sinkholes. Please note if none exists.	
A35	Locations of specific points where storm water discharge will leave the project site.	
A36	Name of all receiving waters. If the discharge is to a separate municipal storm sewer, identify the name of the municipal operator and the ultimate receiving water.	
A37	Location, size, and dimensions of features such as permanent retention or detention facilities, including existing or manmade wetlands, used for the purpose of storm water management. Include existing retention or detention facilities that will be maintained, enlarged, or otherwise altered and new ponds or basins to be built and the basis of their design.	
A38	The estimated depth and amount of storage required by design of the new ponds or basins.	
A39	One or more typical cross sections of all existing and proposed channels or other open drainage facilities carried to a point above the 100-year high water and showing the elevation of the existing land and the proposed changes, together with the high water elevations expected from the 100 year storm under the controlled conditions called for by this ordinance, and the relationship of structures, streets, and other facilities	
4. Sta	orm Water Drainage Technical Report	Page/Sheet#

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A summary report, including the following information:							
B1	The significant drainage problems associated with the project;						
B2	The analysis procedure used to evaluate these problems and to propose solutions;						
В3	Any assumptions or special conditions associated with the use of these procedures, especially the hydrologic or hydraulic methods;						
B4	The proposed design of the drainage control system; and						
B5	The results of the analysis of the proposed drainage control system showing that it does solve the project's drainage problems. Any hydrologic or hydraulic calculations or modeling results must be adequately cited and described in the summary description. If hydrologic or hydraulic models are used, the input and output files for all necessary runs must be included in the appendices. A map showing any drainage area subdivisions used in the analysis must accompany the report.						
A Hydrologic/Hydraulic Analysis, consistent with the methodologies and calculation included in the							
[techi	nical standards], and including the following information:	-					
В6	A hydraulic report detailing existing and proposed drainage patterns on the subject site. The report should include a description of present land use and proposed land use. Any off-site drainage entering the site should be addressed as well. This report should be comprehensive and detail all of the steps the engineer took during the design process.						
В7	All hydrologic and hydraulic computations should be included in the submittal. These calculations should include, but are not limited to: runoff curve numbers and runoff coefficients, runoff calculations, stage-discharge relationships, times-of-concentration and storage volumes.						
B8	Copies of all computer runs. These computer runs should include both the input and the outputs. Electronic copies of the computer runs with input files will expedite the review process and is required to be submitted.						
В9	A set of exhibits should be included showing the drainage sub-areas and a schematic detailing of how the computer models were set up.						
B10	A conclusion which summarizes the hydraulic design and details how this design satisfies this Ordinance.						
5. Sto	orm Water Pollution Prevention Plan for Construction Sites	Page/Sheet#					
C1	Location, dimensions, detailed specifications, and construction details of all temporary and permanent storm water quality measures.						
C2	Temporary stabilization plans and sequence of implementation.						
C3	Permanent stabilization plans and sequence of implementation.						
Temp	orary and permanent stabilization plans shall include the following	g:					
C4	Construction sequence describing the relationship between implementation of storm water quality measures and stages of construction activities.						
C5	A typical erosion and sediment control plan for individual lot development.						
C6	Self-monitoring program including plan and procedures.						
C7	A description of potential pollutant sources associated with the construction activities, which may reasonably be expected to add a significant amount of pollutants to storm water discharges.						

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C8	Material handling and storage associated with construction activity shall meet the spill prevention and spill response requirements in 327 IAC 2-6.1.					
С9	Name, address, telephone number, and list of qualifications of the trained individual in charge of the mandatory storm water pollution prevention self-monitoring program for the project site.					
6. Pc	6. Post-Construction Storm Water Pollution Prevention Plan Page/Sheet#					
D1	A description of potential pollutant sources from the proposed land use, which may reasonably be expected to add a significant amount of pollutants to storm water discharges.					
D2	Location, dimensions, detailed specifications, and construction details of all post-construction storm water quality measures.					
D3	A description of measures that will be installed to control pollutants in storm water discharges that will occur after construction activities have been completed. Such practices include infiltration of run-off, flow reduction by use of open vegetated swales and natural depressions, buffer strip and riparian zone preservation, filter strip creation, minimization of land disturbance and surface imperviousness, maximization of open space, and storm water retention and detention ponds.					
D4	A sequence describing when each post-construction storm water quality measure will be installed.					
D5	Storm water quality measures that will remove or minimize pollutants from storm water run-off.					
D6	Stormwater quality measures that will be implemented to prevent or minimize adverse impacts to stream and riparian habitat.					
D7	A narrative description of the maintenance guidelines for all post- construction storm water quality measures to facilitate their proper long term function. This narrative description shall be made available to future parties who will assume responsibility for the operation and maintenance of the post-construction storm water quality measures.					

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