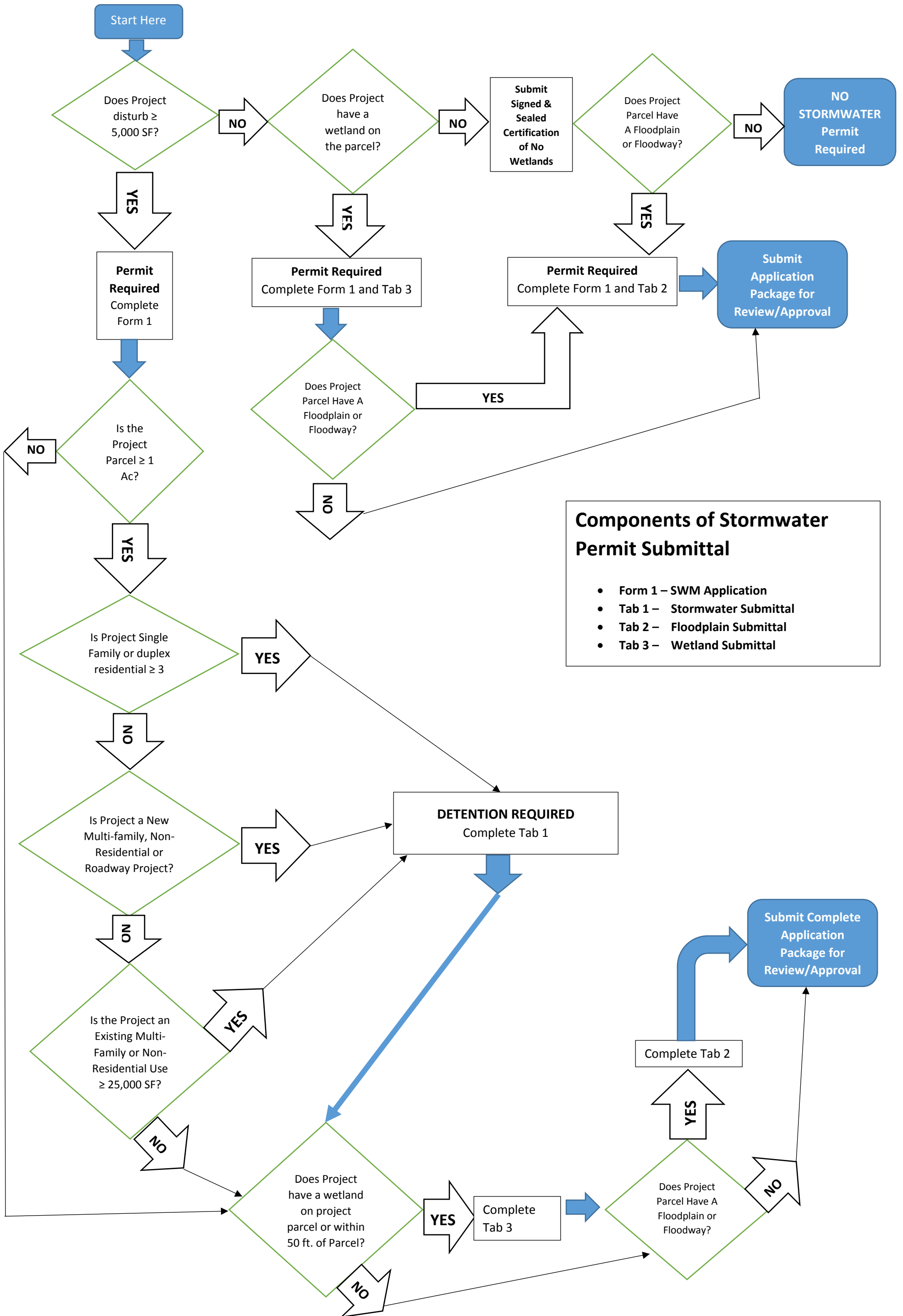


CITY OF AURORA STORMWATER MANAGEMENT PERMIT APPLICATION TYPICAL PERMIT SUBMITTAL FLOWCHART



Components of Stormwater Permit Submittal

- Form 1 – SWM Application
- Tab 1 – Stormwater Submittal
- Tab 2 – Floodplain Submittal
- Tab 3 – Wetland Submittal



Project Information Sheet

NOTICE: *ALL* INFORMATION IN THIS BOX (*EXCEPT AS NOTED*) MUST BE FILLED IN FOR YOUR APPLICATION TO BE ACCEPTED !

SITE INFORMATION (Required For Commercial Submissions Only)

PARCEL No: _____

LEGAL SUBDIVISION: _____

UNIT: _____ LOT: _____

DEVELOPER / OWNER INFORMATION

COMPANY: _____

CONTACT: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ FAX: _____

E-MAIL (If Any): _____

PROJECT ENGINEER

COMPANY: _____

CONTACT: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ FAX: _____

E-MAIL (If Any): _____

OFFICIAL USE ONLY

PROJECT NAME: _____ PROJECT No. _____ DATE: _____

C.O.A PROJECT ENGINEER: _____ PROJECT ADDRESS: _____

**City of Aurora Stormwater Management Permit Application
44. E. Downer Place Aurora, IL 60507**

Please Complete the Sections Below

Name of Applicant/Owner	Name of Design Engineer
Name:	Name:
Company:	Company:
Address:	Address:
City & State & Zip	City & State & Zip:
Telephone #: Fax #	Telephone #: Fax #
Email Address:	Email Address:

Type of development. Please check the following activities that apply.

- Residential
 Commercial
 Public Roadway
 Wetland Impact
 Floodplain Impact
 Others (5,000 SF of disturbance)/Mass Grading ONLY.

Name of Project: _____ Project Location: _____ (Pin #, Subdivision Name, Lot #, Address)	
Total Property/ Site area (acre): _____ Proposed Disturbed Area (acre): _____ Existing Impervious Area (acre): _____ Proposed Impervious Areas ((acre): _____	
Flood Hazard and Wetland (check if exist on site): <input type="checkbox"/> Property out of SFHA & No Wetland <input type="checkbox"/> Property in Special Flood Hazard Area (SFHA) <input type="checkbox"/> Wetland on site and/or within 50' from property. <input type="checkbox"/> Portion of Property in Regulated Floodway Firm Panel #: _____	Addition Permits: <input type="checkbox"/> IEPA NPDES (Notice of Intent) Required, site 1 ac or more <input type="checkbox"/> IDNR-Endangered Species (EcoCat) <input type="checkbox"/> USACOE Permit <input type="checkbox"/> IHPA <input type="checkbox"/> Kane County Soil and Water Conservation District (Soil Erosion and Sediment Control) <input type="checkbox"/> Others

I hereby certify that all information presented in this application is true and accurate to the best of my knowledge. I have read and understand the City of Aurora Stormwater Ordinance (modification of Kane County Ordinance) and fully intend to comply with those provisions.

Signature of Developer/Owner: _____ Date: _____

I certify that the plan/documents submittal for the above referenced development have been prepared under the supervision of a professional engineer or certified wetland specialist as appropriate and in accordance with the latest Kane County Stormwater Management Ordinance.

Signature of Licensed Professional Engineer: _____ Date: _____

Signature of Certified Wetland Specialist: _____ Date: _____

The following are required with your initial submittal for stormwater and engineering review:

1. Highlight the appropriate path on the submittal flowchart and submit with stormwater management report.
2. Two stormwater permit applications with stormwater report (signed and sealed) with the below items included.
3. Two complete sets of signed and sealed engineering plan per City of Aurora Standard Specification.
4. Complete and submit copy of results of IHPA verification and IDNR Threatened & Endangered Species Consultation (EcoCat).
5. Soil Erosion and Sediment Control permit from Kane Dupage SWCD will be required.
6. If disturbance exceed 1 acre or was part of an overall approved development, an IEPA Notice of Intent (NOI) will be required.

City of Aurora Standard Specification for Improvements:

<https://www.aurora-il.org/engineering/standardspecs/index.php>

Kane County Stormwater Ordinance and Technical Manual:

<http://www.countyofkane.org/FDER/Pages/environmentalResources/waterResources/stormwater.aspx>

OFFICE USE ONLY
Application date received by the City: _____
City Project #: _____
City Review Engineer: _____

Tab 1- Stormwater Submittal

Minimum Requirement	Documents Provided						
<p>Provide narrative description of the existing and proposed site conditions. Note any offsite tributary and any depressional area. Provide existing and proposed tributary areas/drainage exhibits with routing schematic showing location of structures and reaches numbered according to input data.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p>Site Runoff and Storage Volume Calculations (Detention Design) Use ISWS, Bulletin 70 Appendix A for Aurora Station for Design Rainfall Data https://www.aurora-il.org/engineering/standardspecs/sectionfour.php#sec4A</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p>Provide calculation to determine the existing condition release rate. If the existing condition release rate is less than 0.1 cfs/acre, the existing condition release rate should be used for design.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p>Storage volume comparison using Event Hydrograph Routing Method and City Modified Rational Method.</p> <p>Provide event hydrograph routing method for basin storage volume, assuming that the release rate for the basin, such that the peak discharge from the basin is 0.1 cfs/ace for hydrologically disturbed area.</p> <p>Provide storage volume calculation base on the City of Aurora Modified Rational Method.</p> <p>City of Aurora Modified Rational Method: https://www.aurora-il.org/documents/engineering/exhibits/exhibit_IV01.pdf</p> <p>Method that generates the highest volume shall be used.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p>Critical Duration Analysis Provide existing and proposed condition models. The model shall both be a critical duration analysis, each duration staring at 30 min. to 240 hrs, utilizing the City rainfall data. Demonstrate no increase in peak discharges from the site, nor changes in existing conveyance of offsite flow.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					

<p><u>Retention</u> Provide retention volume calculation. See Kane County Stormwater Technical Manual for retention design. (Retention volume = impervious area x 0.75 inches)</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p>Provide summary table showing the comparison of the required/proposed storage volume, existing and proposed release rate (existing and proposed critical duration).</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>Provide Blocked Restrictor Analysis</u></p> <p>1. Assume the primary restrictor is blocked and the stormwater basin is empty at the beginning of the storm. The total discharge from the site cannot be greater than the existing conditions 100 yr. peak discharge, considering all tributary area to the basin.</p> <p>2. Run analysis to show that the discharge that would occur from the combination of the overflow and primary restrictor do not exceed the existing condition 100 yr rate. This analysis shall be done for all cases where existing offsite tributary area and depression area exist on site.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>If Offsite Tributary and Onsite Depression Area</u> Provide documentation of the procedures/assumptions used to calculate on-site depression storage volume. See Kane County Technical Manual for reference.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>Blackberry Creek & Indian Creek Watershed</u> For project that is located within these two watersheds, the required stormwater storage volume shall be (110%) of the volume required. The overflow weir shall be set to provide an additional 10% of the storage volume.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>Overflow Structure and Restrictor</u> Overflow weir shall be designed to convey the proposed critical duration 100 yr. peak flow entering the basin.</p> <p><u>Restrictor</u> Size for required release rate. Evaluate effect of backwater (tail water conditions downstream) on the outlet structure.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					

<p><u>Storm Sewer Design</u> Provide storm sewer sizing to convey the stormwater runoff. The design rainfall events should be the 10-yr return frequency and shall use ISWS Bulletin 70, Appendix A, Aurora Station. Provide Tributary Area Map, Runoff Coefficient, Time of Concentration used.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>Overland Flood Route</u> Provide 100-yr overland flood route calculations. The lowest opening should be 1' above the calculated HWL for tributary area less than 20 acre. For tributary area more than 20 acres, the lowest opening should be 2' above the calculated HWL. Indicate/show cross- sections and note HWL on the engineering plan sheet.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>Long Term Management</u> The property owner is responsible for the maintenance of the stormwater drainage system. The establishment of a Special Service Area (SSA) shall be required. Application for the SSA can be obtained from the City Legal Dept. or City of Aurora Engineering Division.</p>	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					

Tab 2- Special Flood Hazard Area/Floodplain Submittal

Minimum Requirements	Documents Provided						
Identify and provide floodplain limits using the best available information. Best available information may include studies and reports published by FEMA, USACOE, IDNR, USGS and ISWS. Site specific floodplain study may be required to determine the base flood elevation (BFE).	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
Where no regulatory floodplain (floodway) is shown on the FEMA DFIRM, hydrologic and hydraulic study for site specific may be required. For upstream tributary of 640 acres (1 square mile), the study must be submitted to IDNR/OWR for review and approval. For upstream tributary less than 640 acres, the report shall be submitted to the City for review. Provide summary of 100 yr. flood elevation and discharge for existing and proposed condition.	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<u>Compensatory Storage Volume</u> <ul style="list-style-type: none"> ▪ Compensatory storage is required when portion of the floodplain is filled, occupied by a structure or a change in channel hydraulic reduces the existing available floodplain storage. The compensatory volume should be 1.5 time the volume of floodplain storage lost. 	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<u>Building Protection for structure LOCATED IN the SFHA</u> <ul style="list-style-type: none"> ▪ Lowest FLOOR, including basement, of new or substantially improved building must be elevation above the floodplain protection elevation (FPE) (which is 2' above the BFE). 	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<u>Building Protection for property/structure LOCATED OUTSIDE the SFHA</u> <ul style="list-style-type: none"> ▪ Lowest OPENING shall be built above the FPE, unless the structure is within backwater of the Fox River, which required 3' above the FPE. 	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
A Letter of Map Change (Letter of Map Revision/Letter of Map Amendment) shall be required for all proposed changes to the regulatory floodplain. Copy of all supporting documents to FEMA for this request shall be submitted to the City.	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<u>Bridge and Culvert</u> <ul style="list-style-type: none"> ▪ Permits involving new crossing or modification to existing structure will required hydraulic models. Permit from IDNR/OWR will be required. 	<table border="1"> <tr> <td>Yes</td> <td>No</td> <td>N/A</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					

TAB 3- WETLAND SUBMITTAL

Minimum Requirements	Documents Provided						
<p>Provide a statement of opinion by a Qualified Wetland Review Specialist as to the presence of wetlands on or near the site. This requirement may be waived if the Qualified Engineer Review Specialist determines in writing that it is obvious from the nature of the development or redevelopment that wetland cannot be located on or near the site.</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Yes</td> <td style="padding: 2px;">No</td> <td style="padding: 2px;">N/A</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p>Wetland delineation are required for all development which have on site Waters of the US or are adjacent to wetland, isolated wetlands or farmed wetland. Specific information on existing current delineation of wetland may be available from Corps of Engineer Chicago District. Wetland delineation and report should follow 1987 Corps of Engineer Wetland Delineation Manual.</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Yes</td> <td style="padding: 2px;">No</td> <td style="padding: 2px;">N/A</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p>Identify location, extent, area and quality of on-site wetlands. Off-site wetland must be evaluated to a distance of 50' beyond the property line. Provide exhibit showing delineated wetland.</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Yes</td> <td style="padding: 2px;">No</td> <td style="padding: 2px;">N/A</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>Permits</u></p> <ul style="list-style-type: none"> ▪ Submit for USACCOE for Jurisdictional Determination (JD) of existing wetland on site (if application) ▪ Submittal to the USACOE for permit application for wetland impact and proposed mitigation (if applicable) ▪ Submittal to Kane County for permit for non-JD wetland impact and proposed mitigation (if applicable) 	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Yes</td> <td style="padding: 2px;">No</td> <td style="padding: 2px;">N/A</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					
<p><u>Buffer and Planting Plan</u></p> <ul style="list-style-type: none"> ▪ Buffer width are to be a minimum of 50' wide unless they are determined using section 418(a) (3) or 418 (a) (3) (b) of the Kane County Stormwater Ordinance. ▪ Buffer width required as part of the Corps permit shall supersede the widths described in the Ordinance, unless the width under the Ordinance is greater. ▪ Provide and show on engineering plan, planting plan for the buffer area. Native vegetation, with deep-rooted vegetation should be considered. 	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 2px;">Yes</td> <td style="padding: 2px;">No</td> <td style="padding: 2px;">N/A</td> </tr> <tr> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> <td style="width: 30px; height: 20px;"></td> </tr> </table>	Yes	No	N/A			
Yes	No	N/A					