

ORDINANCE # 442

AN ORDINANCE ESTABLISHING STORM WATER RETENTION REQUIREMENTS FOR THE IMPROVEMENT OF LANDS FOR NEW CONSTRUCTION INCLUDING THE PAVEMENT, SURFACING OR RECONSTRUCTION OF PARKING LOTS

WHEREAS, the Board of Trustees of the Village of South Pekin deem it to be in the best interest of the public to establish storm water retention requirements for the improvement of lands in the Village of South Pekin, including the pavement, surfacing or reconstruction of parking lots or other such business lots.

NOW, THEREFORE BE IT ORDAINED by the President and Board of Trustees of the Village of South Pekin, Illinois:

- SECTION 1. It shall be the responsibility of the owner, his agent or his contractor to assure that any new development of previously undeveloped land and any improvement of land shall meet all storm water retention requirements as set forth in the Section 3 below. "New Development" does not include the building of one individual residential house.
- SECTION 2. In particular, but not by way of limitation, it shall be the responsibility of the owner, his agent or his contractor to assure that any new construction and any improvement of land shall meet all storm water retention requirement as set forth in Section 3 below.
- SECTION 3. Storm water retention requirements shall be established by the City Engineer based on the Rational Method for estimating peak runoff rate for a specified design storm. The allowable runoff rate before development, Q_a , and the peak runoff rate after development, Q_p , shall be determined. The required storage volume shall be the difference in runoff rates ($Q_p - Q_a$) times the duration of the design storm. The owner, his agent, or his contractor shall propose a storm water retention facility which provides the required storage volume and which restricts the rate of storm water discharge from the allowable runoff rate, Q_a . Developments which are larger, complex or extra sensitive to drainage considerations may require more sophisticated analysis. The municipality maintains the right to determine adequacy of storm water detention.
- SECTION 4. All storm water retention facilities or devices shall be designed in a manner to minimize the need for maintenance and reduce the chance of failure. Storm water easements and covenants shall be provided by the property owner for access for facility inspection and maintenance. All final design of facilities shall be approved by the Village engineer prior to building permits being issued.
- SECTION 5. All storm water facilities shall be routinely maintained according to IEPA requirements, and as provided in the permit. The person(s) or organization(s) responsible for the maintenance of the facilities shall be designated in the plan, and shall either be the property owner or a homeowner's association. With regard to non-routine maintenance, (such as infrequent but expensive activities as pond dredging or major repairs to the facilities) the same shall be performed on an as-need basis based on information gathered during regular inspections by landowner and/or the Village at the cost to the landowner or homeowner's association. If either routine or non-routine maintenance is not completed

in a timely manner by the land owner or homeowner's association then the same may be completed by the Village at the owner's expense.

SECTION 6. The person(s) or organization(s) responsible for maintenance shall inspect storm water facilities on a regular basis, as outlined in the plan, but not less than one time per year. Authorized Village representatives may enter at reasonable times to conduct on-site inspections or maintenance. Land owners and/or organization(s) responsible for said inspections shall file with the Village inspection and maintenance reports at least one time per year.

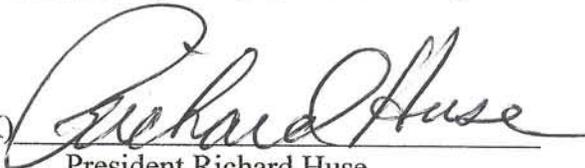
SECTION 7. It shall be the responsibility of the owner to obtain from the City Engineer prior to the construction of a new development or improvement of land use written approval certifying that the storm water retention facility meets requirements. No building permit shall issue for construction of any improvement of land for new construction until such certification has been obtained from the city engineer.

SECTION 8. The violation of any of the terms of the ordinance shall constitute an offense punishable by a fine of not less than fifty dollars (\$50.00) nor more than five hundred (\$500.00), with each day the violation remains uncorrected constituting a separate offense. Such fin is in addition to any other remedy provided by law.

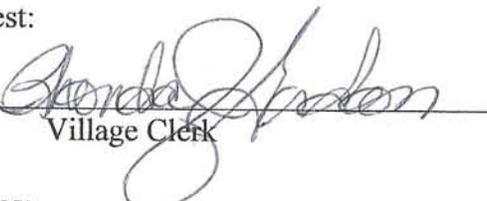
SECTION 9. This ordinance shall be in full force and effect 10 days after its final passage and adoption. All prior ordinances and parts of ordinances in conflict with this ordinance are hereby repealed.

SECTION 10. The attached Method of Computing Storm Water Retention is made a part of this Ordinance.

PASSED AND ADOPTED this 19th day of June, 2006, by the following vote.

(X) 
President Richard Huse

Attest:

(X) 
Village Clerk

Votes:

Ayes: 5

Nayes: 0

Present: 5

METHOD OF COMPUTING

STORM WATER RETENTION AND ALLOWABLE DISCHARGE RATE

Rational Method:

$$Q = C.I.A$$

Q = Resultant runoff rate in cubic feet per secon (c.f.s)

C = Coefficient of runoff: before development (agriculture) = 0.25

grass = .30

rooftops and paved areas - .95

r-1 residential = 0.50

I = Intensity of rainfall = 4"/hr. for 15-min. duration for design storm

A = Area in acres

1. Determine area of entire site (in acres), A
2. Determine area of paved ground and rooftops (in acres), A1
3. Determine area of grass (in acres), A2
4. Determine allowable runoff rate, Qa, as follows:

$$Q_a = 0.35 \times 4 \times A \text{ (c.f.s.)}$$

5. To find if retention is needed, compute the following:

A. $Q_1 = .95 \times 4 \times A_1$

B. $Q_2 = .30 \times 4 \times A_2$

C. $Q_p = Q_1 \div Q_2$ (Runoff rate after development) c.f.s.

If Q_p is greater than Q_a , retention is required.

6. Determine required retention: volume, V, as follows:

$$V = (Q_p - Q_a) \times 15 \text{ minutes} \times 60 \text{ seconds/minute (cubic feet)}$$