



Illinois Department of Natural Resources

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Pat Quinn, Governor
Marc Miller, Director

January 5, 2015

Mr. Gary Salavitch
Director of Engineering
Transportation & Engineering Division
Department of Development Services
Village of Hoffman Estates
1900 Hassell Road
Hoffman Estates, IL 60169

**RE: ADESA Auto Auction Development, Hoffman Estates, Cook County
Endangered Species Consultation Program
EcoCAT Review #1505951**

Dear Mr. Salavitch,

The Department has received a submission from Haeger Engineering to initiate consultation between the Department and the Village pursuant to the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The proposed action is likely to adversely affect the **Class 3 Special Resource Ground Water** which supplies the **Trout Park Nature Preserve** adjacent to the Fox River. The Nature Preserve covers a portion of the **Trout Park Illinois Natural Areas Inventory Site**, and supports three State-listed plant species: the endangered **Purple-Flowering Raspberry**, *Rubus odoratus*; the threatened **Dwarf Raspberry**, *Rubus pubescens*; and the threatened **Forked Aster**, *Aster furcatus*. Most importantly, the Nature Preserve protects a very rare (in Illinois) rich forested fen natural community which is utterly dependent on high-quality ground water discharges. The **Yellow-Headed Blackbird**, indicated by EcoCAT, does not, in fact, use habitat in the vicinity of the proposed action, and may be disregarded.

The ground water recharge zone for Trout Park has been mapped by the Illinois Geological Survey and designated as a Special Resource Ground Water by the Illinois EPA pursuant to the *Illinois Ground Water Protection Act* [415 ILCS 55]. The entire project area for the proposed action lies within the Class 3 Special Resource Ground Water recharge zone for Trout Park. Such a designation imposes Class 1 water quality standards for the recharge zone.

The proposed action will result in nearly 100% impervious area over the project area, so that nearly all incident precipitation will be discharged as storm water into the adjacent abandoned quarry. The study prepared for the storm water report by Kimley-Horn Associates notes that the quarry water surface

elevation is virtually constant, indicating that water is eliminated from the quarry through evaporation and infiltration. The Department believes the majority of water is eliminated through infiltration into the ground water. It is very likely the floor of the quarry is also the lower confining layer of the aquifer which feeds Trout Park.

The project entails more than 4,000 outdoor parking spaces for vehicles in varying states of repair awaiting inspection and disposition through the auction process, posing a significant risk of varying automotive fluids, heavy metals, and Polycyclic Aromatic Hydrocarbons (PAHs) being washed from the site and into the quarry, through which they may contribute to ground water contamination. The hydrologic relationship between the proposed action site and the Nature Preserve warrants the imposition of water quality criteria, above and beyond elements normally required for storm water.

The Kimley-Horn study remarks that the storm water facility design for the project includes the use of bio-swales before runoff enters the detention basin and quarry. This is appropriate but may be insufficient.

Organic matter is highly efficient in removing the types of pollutants likely to be generated at the proposed facility. Routing the runoff through one or more rain gardens prior to discharge into the detention basin will be very helpful in reducing the amount of pollutants reaching the basin.

Wetlands are also efficient passive means of dealing with such pollutants. The detention basin should be designed in such a way as to maximize the distance storm water must flow before reaching the quarry and to the extent feasible should resemble wetlands with high levels of plant materials. A fine example of this type of construction can be seen at the City of Elgin's WWTP on Raymond Drive adjacent to Tyler Creek, which protects State-listed threatened Slippershell Mussels in the stream.

Pollution of a Special Resource Ground Water can subject the responsible party to civil liability and, where the object of protection is a dedicated Illinois Nature Preserve, as in this case, pollution may result in both civil and criminal penalties pursuant to the *Illinois Natural Areas Preservation Act*. A party which may bear potential liability is well-advised to monitor the quality and quantity of its discharges in order to demonstrate pollution has not occurred, or, if it has, to characterize the nature and extent of such pollution to quantify damages. Such a program may address the quality of both surface and ground waters.

The Department offers the following recommendations:

Recommendation #1: The Village should consider requiring the applicant to provide one or more rain gardens to cleanse run-off before it reaches the detention basin.

Recommendation #2: The Village should consider requiring the applicant to design and construct the on-site detention basin to maximize the distance water must flow through the basin by the use of internal baffles, and should route the flow through one or more cells which mimic natural marshes.

Recommendation #3: The Village should consider, consistent with its powers and authorities, requiring the applicant to institute a surface and ground water monitoring program of such intensity and for a

sufficient period to demonstrate the efficacy of the water treatment measures in avoiding pollution of the aquifer supplying Trout Park Nature Preserve.

Consultation on the part of the Department is closed, unless the Village desires additional information or advice related to this proposal. In accordance with 17 Ill. Adm. Code 1075.40(h), the Village must notify the Department of its decision regarding these recommendations, whether it will:

- Proceed with the action as originally proposed;
- Require the action to be modified per Department recommendations (please specify which measures if not all will be required); or
- Forgo the action.

This consultation is valid for two years unless new information becomes available which was not previously considered; or the proposed action is substantially modified; or additional species, essential habitats, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above-listed conditions develop, a new consultation is necessary.

The natural resource review primarily reflects the information existing in the Illinois Natural Heritage Database at the time of this consultation, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments.

If additional protected resources are encountered during the project's implementation, the applicant must comply with the applicable statutes and regulations. Also, note that closing consultation does not imply IDNR's authorization or endorsement of the proposed action. Please contact me if you have questions regarding this review.

Sincerely,



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cc: Phil Ceratto, Haeger Engineering
Valerie Njapa, Illinois Nature Preserves Commission