



April 15, 2024

VIA EMAIL ONLY

Mr. Aaron Szeto
Attorney at Law
Sosnowski Szeto, LLP
6753 Vistagreen Way
Suite 300
Rockford, IL 61107

Re: *Poplar Grove Airport*
Review of Special Use Permit Application
McM Number P0031-7-21-00132

Dear Attorney Szeto,

As you know, McMahon Associates, Inc. represents the Village of Poplar Grove as its Village Engineer. Please allow this letter to follow up our meeting of April 2, 2024 with the Airport, and to acknowledge receipt of Attorney Hintzche's email of 4/12/24 with a map of the sanitary sewer and water facilities at the airport. This will further acknowledge receipt of a Stormwater Management Report prepared by Arc Design Resources in July 2005. Based on the documents provided and information gathered at the 4/2 meeting, we have revised our recommendations for Village consideration, and please note that we are trying to avoid duplicating comments made by other reviewers:

1. The site is serviced by stormwater detention facilities, and the applicant has provided the above captioned stormwater management report. In our April 2nd meeting the applicant indicated that Arc Design (specifically Mr. Ryan Swanson, P.E.) was in the process of updating the site plan/report to account for the proposed development and therefore we did not complete an "in depth" review of the 2005 report. We do want to note that there have been instances of flooding of the condominiums within Bel Air Estates, namely in the vicinity of Beech Bay and Lindbergh. The flooding was investigated, and during the investigation it was found that there was a large ditch along the south side of Beech Bay that had been filled in and replaced with storm sewer. The ditch had a much greater capacity than the storm sewer which is the primary cause of the flooding. After reviewing the report that finding still appears to be true today. We recommend that the applicant update the drainage report as needed, and that Village work with the applicant and verify that the pond is functioning as the designer intended.
2. We continue to recommend the applicant should verify that a change in the status of the airport would not preclude the existing residential uses. If so, the SUP should be conditioned such that the current status be maintained. Based on conversations with the Airport and Village Attorney in 2021, it is our general understanding that there are public and private airports; and that Poplar Grove is a private airport. During our meeting of 4/2 it was clearly understood that the current ownership desires to maintain the status of a private airport. In 2021, the Village Attorney's office was provided a list of airports to contact that were reported to have apartments constructed within hangar buildings similar to that at the Poplar Grove Airport. When the Attorney's Office contacted the airports, it was found that none had apartments within the hangars due to FAA regulations prohibiting the practice, and our recollection is that those airports were public. We are certainly not experts in the various funding mechanisms for the Airport industry. That said, our concern is that if the current (or future) owner(s) of the Airport were to accept funding from sources that prohibit the residential uses, that in turn could effectively force the existing residents out of their homes through no action of their own.
3. The Soil and Water Conservation District did not understand that new buildings are anticipated for the property. The NRI should be updated accordingly.
4. In September of 2021, the applicant provided an email to the Village indicating that *"The Hangar Owners receive a "Bill of Sale" as evident they own the hangar unit. The Land Lease gives them*

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the rights to the land its situated on and the use of the airport. When a hangar is resold, the lan lease is assigned to the new owner and a Bill of Sale is given by the seller to the buyer." In October of 2021, the applicant's Attorney appeared before the Board of the Trustees and indicated that the hangars were not owned by the airport. This led to concern that hangars had been sold without the creation of a plat as provided by the Plat Act. Our office recommended that the Village retain the services of an Illinois licensed surveyor as our office does not currently employ such a person, and Mr. John Malberg, PLS was retained who generally confirmed our collective understanding of the Plat Act.

During our meeting of April 2nd, the applicant advised that the "buy/sell" language used in the past was incorrect, that the hangars are indeed owned by the airport and are leased to the individuals who then occupy the hangars. The individuals who lease the hangers are allowed to make modifications to the hangars with the permission of the airport, but at the end of the lease term or when they choose to leave (whichever comes first) those individuals simply leave without being compensated for the improvements made to the hanger. During our meeting of April 2nd, the comparison was made to that of a commercial lease, where the practice of improving leased space at the cost of the lessee is quite common. In order to avoid any future confusion regarding ownership we recommend that the SUP be conditioned to reflect the practice of leasing the units, and specifically prohibiting the sale of hangars without the creation of a condominium plat.

5. Any new facilities with residential units shall connect the Village's sanitary sewer system. The applicant has provided a map (copy attached) that shows the airport's intent to connect to the sanitary sewer system.
6. The map shows that the two (2) hangar buildings that were constructed along Orth Road are serviced by sanitary sewer, and it appears that other buildings have also been connected to the sanitary system as well. It further appears that IEPA permits should have been obtained prior to constructing and/or connecting the buildings. Per IEPA's website *"The state construction / operating permit program is based in the state Environmental Protection Act and the regulations developed by the Illinois Pollution Control Board. Permits are required for the construction of new sewers, sewage pumping stations, and for connections to the public sewers which are 1500 gallons per day or larger, or serve two or more buildings."* We recommend that the applicant contact IEPA to determine how to obtain retroactive permit(s) for the site, and we further recommend that the Village cooperatively work with both the applicant and IEPA to obtain any needed permits.
7. The applicant will need to furnish a site plan prepared by professional engineer licensed in the state of Illinois for any new development. The site plan will need to provide the following information for the sanitary sewer and potable water systems:
 - a. The locations, sizes, slopes, pipe materials, manholes, depths, etc. of the sanitary sewer collection system(s) on the property.
 - i. We recommend that the Village require this information regardless of any new site plans. The Village should have a thorough understanding of the collection system as it discharges to the Village's system, and the information is relatively easy and inexpensive to obtain.
 - b. The locations, sizes, pipe materials, valves, hydrants, etc. of the water distribution system, and wells on the property.
8. By code, monitoring manholes should be provided at each hangar. However, at this time we are able to recommend that a single monitoring manhole be installed, and its location will be determined upon receipt and review of the sanitary sewer collection system drawings. It is likely that one of the existing manholes meets the criteria for a monitoring manhole, and the Village should work with the applicants engineer through the site plan process to determine if an existing manhole may be used. The reason for recommendation for a single manhole is based on our field observations of the hangars to date (i.e., we did not observe signs of "dumping"), input from the Village's operation staff, and the opinion of the operations staff that the SWWTP is not experiencing operational issues commonly associated with the discharge of prohibited substances.

- a. The Village should reserve the right to install, at the Owner's expense, monitoring manholes at each hangar in the future if effluent leaving the Airport site tests positive for any substance prohibited by code.
9. While not directly applicable to the SUP, there are agreements between the Village and Airport for the construction of the WWTPs, and those agreements should be reviewed to determine the status of sanitary sewer service to the property in general.
10. The Airport property is currently serviced by three wells, one generally servicing the area along Orth Road, one generally servicing the area around the museum, and one generally servicing the southern end of the property. Section 6-2-2-1 of Village Code requires connection to public water, and in hindsight the hangars along Orth Road should have been connected to public water at the time of construction. Public water is currently located immediately adjacent to the Airport along Orth Road, however, it should be recognized that the Airport is a large property and extending public water from Orth Road to the southern end of the property would be a large project. Our recommendations are as follows:
 - a. Any new facilities shall connect to public water as required by code.
 - b. The existing wells at the north end of the site may remain in service until:
 - i. They require substantial maintenance (i.e., pump replacement, motor replacement) or the well(s) are no longer capable of providing a reliable supply. At such time, connection of the existing uses to the public water supply shall be made. The well(s) shall continue to be operated in accordance with the State and County requirements.
 - ii. A connection is made to the public water supply system.
 - c. The existing well at the south end of the site may also remain in service until the end of its useful life. If public water is not within 500' of the well at the time of failure a new well sized to service existing uses only may be constructed. Note that this will most likely require the Boone County Health Department to grant a variance as technically public water is within 200' of the property line.

Please do not hesitate to contact me at (815) 636-9590 with any questions, or if I may be of further assistance.

Yours very truly,

McMAHON



Christopher D. Dopkins, P.E.
Associate Village Engineer

Cc: File

LEGEND:

 Non-Commercial Buildings	 WATER SUPPLY	 SEWER PIPES
 Airport Owned	 WATER SERVICE	 SEWER CLEANOUT
	 WATER HYDRANT	 MANHOLE COVER

