



Albemarle County

Legislation Text

File #: 23-114, **Version:** 1

AGENDA DATE: 1/11/2023

TITLE:

The Regents School - Private Central Sewerage System and Central Water Supply

SUBJECT/PROPOSAL/REQUEST: Proposed increase in the number of connections for a private central sewer system and a new central water supply for The Regents School.

ITEM TYPE: Regular Action Item

STAFF CONTACT(S): Richardson, Walker, Rosenberg, Herrick, Filardo, Pohl, Cox

PRESENTER (S): Emily Cox

LEGAL REVIEW: Yes

REVIEWED BY: Jeffrey B. Richardson

BACKGROUND: As required by County Code § 16-102, The Regents School ("School") has notified the Clerk of the Board of Supervisors of its intent to increase the number of connections to a private central sewerage system, previously approved to serve its proposed development, and to construct a new central water supply system (Attachment A). Under County Code §§ 16-104 and 16-105, the Board is to consider this proposal and either approve or deny this request.

On September 18, 2019, the Board approved Special Use Permit (SP201800011), with conditions, to allow construction and operation of the School on Parcels 07500-00-00-06600 and 07600-00-00-01700. The Board also approved a special exception in conjunction with SP201800011.

On December 2, 2020, the Board approved a shared central sewerage system to serve the properties of the School and the adjacent Trinity Presbyterian Church (Parcel 07600-00-00-017C0).

On September 21, 2021, the Board approved a modification to relocate the central system lift station to the School property on Parcel 07600-00-00-01700 to only serve the School. This plan showed a conceptual layout for the future expansion of School, and the system was sized to serve a maximum 468 students with 13 connections. The water system was shown to have the required meters under the Building Code for each building at that time and there was no central water system request.

The current request includes both a modification to the previously approved central sewerage system and a new request for a central water system. The only change to the approved central sewerage system is to increase the number of connections from 13 to 19 to accommodate the final design of the building locations. The central water system is a new request and includes a master water meter also serving 19 connections (Attachment B). The central sewerage system design is still based on the same maximum number of students (468) as originally approved with the Special Use Permit and outlined in a Condition Determination (Attachment C).

STRATEGIC PLAN: Thriving Development Areas - Attract quality employment, commercial, and high-density residential uses into development areas by providing services and infrastructure that encourage redevelopment and private investment while protecting the quality of neighborhoods.

DISCUSSION:

Central Sewerage System:

The current proposal includes a previously approved private central sewerage system consisting of a gravity main, sanitary sewer pumping station, and force main, all of which are needed to connect the proposed buildings to the public gravity sewer located along Fontaine Avenue. The previous approval included 13 connections, and the current proposal includes 19 connections. The property is within the County's Jurisdictional Area for public water and sewer, but a pump station is required because the parcel does not have the required slope to be served by a gravity sewer system. . The Albemarle County Service Authority (ACSA) has determined that there is not a cost-effective means to provide public sewer service to the School parcel, and does not envision that a public pump station in this location could ever serve a large enough population to justify the ongoing maintenance cost of a public system. Therefore, public sewer service is effectively not available to the property.

This proposal includes constructing a gravity collection system on The Regents School property to serve 19 buildings that discharges to a private pump station located on the same property (see Attachment B for the preliminary plan, profiles, and calculations). Section 16-101 of the County Code defines a "central sewerage system" as a system "designed to serve three (3) or more connections". Because each building is considered a separate connection and there are more than three connections, this system is considered a "central sewerage system." requiring Board consideration.

Staff does not recommend either of the following alternatives to allowing an increase in the number of connections to the central sewerage system under consideration:

- 1) Require the additional connections to be served by separate, onsite septic systems, each with its own distribution box and primary and reserve drainfield -- This alternative is considered inferior because of adjacent environmental features (Moore's Creek, which is an impaired perennial stream) and its higher probability of failure. Three individual onsite septic systems would be required for the additional six connections in order to be considered "by-right"; or
- 2) Utilize individual duplex pumps and wet wells to serve the additional six buildings/connections - Such an arrangement could be allowed "by-right," but is considered to have a higher failure potential by both staff and the applicant's consultant. Failure of any one of the systems could potentially impact the impaired perennial stream.

The County Engineer has reviewed this request for technical feasibility and conformity with the Comprehensive Plan and has no objections, noting that the system would be designed and constructed to public utility standards and would be regulated by the Department of Environmental Quality (DEQ). The system would be owned by a single entity, the School, which would result in clear maintenance responsibilities. The Comprehensive Plan discourages central systems in the Rural Area but does not contain guidance on central systems in the Development Areas.

Staff is of the opinion that allowing the additional six connections would not adversely affect the system performance, considering the design is based on the number of students and not the number of connections. The central system would be classified as a DEQ Class I system, which provides the highest level of safety and reliability.

Central Water Supply:

The previous proposals included a water supply system with multiple public water meters throughout the site to serve no more than two buildings each. This design was "by-right" since each meter served less than three connections and the system was not considered a central water supply.

The applicant is now proposing to install one public water meter (a master meter) to serve all 19 buildings. Beyond the master meter, the distribution system would be private and maintained by the Regents School. The private system would need to meet Building Code requirements and be inspected by County building inspectors prior to building occupancy. The property is within the County's Jurisdictional Area for public water and sewer, and the buildings would still be served by public water.

Section 16-101 of the County Code defines a "central water supply" as a system "designed to serve three (3) or more connections". Because each building is considered a separate connection and there are more than three connections, this system is considered a "central water supply" system, requiring Board consideration.

Alternatives to a central water supply system include:

- 1) Providing individual water meters for every two building connections with private laterals from each water meter to the buildings -- As presented by the applicant, this option would be cost prohibitive, considering that ACSA meter fees are calculated based on the number and size of the meters. Combining multiple water meters into a single meter is more affordable and feasible for the project.
- 2) Installing a water supply well or wells on the site to serve the buildings -- Because this parcel is located within the water and sewer jurisdictional area and public water service is available to the site, installing a well is not allowed unless obtaining public water service is not feasible. The applicant has determined that extending public water service to the site is feasible.

Staff reviews requests such as this for technical feasibility and for conformity with the Comprehensive Plan. The County Engineer has reviewed this request and has no objections, noting that the private system would be designed and constructed to Building Code requirements and that water to the site would still be provided by the ACSA.

Staff recommends approval with the following conditions:

1. The central sewerage system must be constructed in general accord with the Preliminary Central Sewage System Plan (Attachment B) and DEQ Reliability Classification Worksheet (Attachment D);
2. The central water supply must be constructed in general accord with the Preliminary Plan (Attachment B).
3. Final plans and specifications must be submitted with the final site plan and are subject to approval by the County Engineer prior to commencing construction of the sewerage system and water supply;
4. Prior to issuance of any certificate of occupancy for any building to be served by the sewerage system, the owner must provide a copy of the DEQ-issued operations permit for the lift station to the Building Official or County Engineer;
5. The owner of Parcel 07600-00-00-01700 assumes full responsibility for the operation and maintenance of the sewerage system and water supply; and
6. If requested by the County Engineer, the owner must document compliance with all State operation and maintenance requirements.

BUDGET IMPACT: There is no budget impact associated with this action.

RECOMMENDATION:

Staff recommends that the Board adopt the attached Resolution (Attachment E) approving the increase in the number of connections for the previously approved central sewerage system (gravity sewer, pump station and force main) and a new central water supply at The Regents School, subject to the conditions therein.

ATTACHMENTS:

- A - Owner's Request Letter
- B - Preliminary Central Sewerage System Plan
- C - Condition Determination
- D - DEQ Reliability Classification Worksheet

E - Resolution