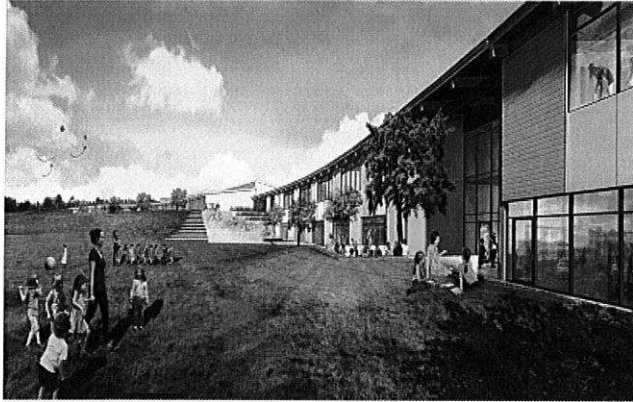


Exterior Rendering of Play Area



Schedule

- | | |
|----------------------------|---------------|
| • Construction Documents | January 2018 |
| • Bidding | February 2018 |
| • Construction Begins | March 2018 |
| • School Open for Students | August 2019 |

The Board of Commissioners and Board of Education are excited about the full size gym. It will be amazing and a great community asset.

Chairman Edney asked that an area be graded for a baseball field. He also questioned the need for a concession stand in the gym.

Commissioner Hawkins made the motion that the Board accept the Edneyville Elementary School design and direct staff to begin the project. All voted in favor and the motion carried.

SEWER OPTIONS FOR EDNEYVILLE ELEMENTARY

Marcus Jones stated during the Board's April 3, 2017 meeting, staff was directed to study the on-site sewer option for the proposed Edneyville Elementary. The study has been completed by Brooks Engineering, a sub consultant for Clark Nexsen, and confirms that an on-site system is possible. This on-site option is proposed to be a drip irrigation system. In addition to the on-site option, there are three other options: a "package plant," pressurized public sewer, and gravity public sewer. The presentation highlights these options and also lists some funding opportunities.

Staff is requesting direction from the Board regarding which sewer option to serve the new Edneyville Elementary school. To maintain the project's schedule, a decision on sewer service is needed this month.

Sewer Options for Edneyville Elementary

Presentation Outline:

1. On-Site Sewer Option
2. "Package Plant" Option
3. Public Sewer Option, Pressurized
4. Public Sewer Option, Gravity
5. Cost Summary
6. WGLA Engineering Summary
7. Funding

On-site Sewer Option:

- Brooks Engineering, Clark Nexsen sub consultant, determined that the school can be served by an on-site wastewater and disposal system utilizing a drip irrigation process.
- A drip irrigation system is contained completely within the school property. It receives the wastewater

- The estimated cost for the system is **\$705,000**. Annual operation and maintenance costs (O&M) will be approximately **\$35,000**.

A hand-drawn sketch map of a site layout, oriented vertically. The map shows several rectangular buildings and a large open area. Labels with leader lines point to various features:

- TOP LEFT:** A small rectangular area labeled "REPAIRS SHED".
- TOP RIGHT:** A rectangular area labeled "CHIEF ROAD".
- MIDDLE RIGHT:** A rectangular area labeled "MOTOR OIL SHED".
- LOWER MIDDLE RIGHT:** A rectangular area labeled "COILING ROOM BLDG".
- LOWER RIGHT (top):** A rectangular area labeled "MOTOR OIL SHED".
- LOWER RIGHT (middle):** A rectangular area labeled "LUB. OIL SHED".
- LOWER RIGHT (bottom):** A rectangular area labeled "MOTOR OIL SHED".
- LOWER LEFT:** A large, irregularly shaped area labeled "MOTOR OIL SHED".
- LOWER CENTER:** A circular area labeled "MOTOR OIL SHED".

The map is drawn with dashed lines for boundaries and solid lines for structures. A north arrow is located in the top left corner of the page.

- Area A is primary discharge area

- Area B and C are repair areas
- Area between A and existing school is site for proposed school which leaves little to no room for future expansion.

- A package plant is a separate treatment facility on-site with an off-site discharge into a receiving stream (likely Clear Creek).
- Requires treatment plant, pump station and force main to the discharge location. Easements for the force main will be required.
- Permit time will delay the schedule at least one year.
- Likely DEQ will not look favorably on an application for a discharging system, see email from DWR.
- The estimated cost for the system is \$950,000 with annual O&M at \$35,000

- The pressurized public sewer option would locate a pump station on the school site. The pump station would receive the school's wastewater and pump it into a pressurized force main. The force main would carry wastewater to the City's sewer system near North Henderson High School.
- The force main route would be along US64 and approximately 3.5 miles.
- The system could be maintained by the County or turned over to the City utility system. Verbal commitment from City to accept system.
- The estimated cost for the system is **\$1,500,000** and annual user fees will be **\$19,000**. Note, if the County maintains there will be an additional \$10,000 annual O&M costs.

- Gravity sewer is possible with the topography between the school site and the City sewer system near NHS.
- The line would generally run adjacent to Clear Creek and a tributary to the school site at a length of almost 5 miles, see next slide for tentative location.
- Will delay school project by at least one year.
- The estimated cost for the system is **\$4,500,000** with annual users fees of **\$19,000**. If the County maintains the system there will be an additional \$10,000 in annual O&M costs.

Proposed Gravity Sewer Layout



Summary of Sewer Costs:

System	Estimated Capital Cost	Estimated O&M Cost (yearly)
-On-site system	\$705,000.00	\$35,000.00
-Discharge system	\$950,000.00	\$35,000.00
-Pump Station to Hendersonville	\$1,500,000.00	\$19,000.00 (user fees) \$10,000.00 (O&M)
-Gravity Sewer to Hendersonville	\$4,500,000.00	\$19,000.00 (user fees) \$5,000.00 (O&M)

WGLA Engineering Summary of Options:

In conclusion, the on-site and discharging systems are less costly during the initial construction, but the systems require long term maintenance and monitoring which result in higher operation and maintenance costs. The discharging system and the gravity sewer option will also take longer to put into service than the other two options considered.

Funding:

- Project currently has \$500,000 allocated for sewer.
- NC Commerce grant for up to \$1,000,000 is available for public sewer options. Staff has started application process.
- Possible contribution from Hendersonville Utilities for a public sewer option.
- Possible contribution from the Justice Academy sewer fund to share in cost of a public sewer option.

Commissioner Lapsley asked if there is a possibility of participation to help with cost.

County Manager Steve Wyatt stated he would bring options back to the Board. The City could own, the County could own, or a joint enterprise.

Commissioner Lapsley is not in favor of the drip system because it is high risk. He is okay with the discharge system but the life of the system is substantially shorter with a certain level of pollution. He is not really in favor of the pump station. The gravity system is long term and most reliable, but most expensive. He suggested trying every way possible to do the gravity system. Go out into the community to see who wants to connect and will help with funding. Look at possible grants.

Commissioner Lapsley is bothered by the fact that the County does a major expansion of a sewer system and in turn give it to the City. We need to sit down with the City and figure something out.

Commissioner Hawkins questioned the timeframe for a gravity system, and what we could do in the interim

if it take 3-4 years.

Commissioner Lapsley feels the population of the school will stay very close. The Board could explore the options in the next 60-90 days and then go with a pump system using the existing system for those 90 days.

Commisisoner Lapsley made the motion that the Board approves the gravity concept and direct staff to hold discussions with the City and report back to the Board in 30 days. All voted in favor and the motion carried.

MEMORANDUM OF UNDERSTANDING AND CONSERVATION EASEMENT

John Mitchell stated at the April 4th 2016 meeting of the Board of Commissioners, the Board agreed to endorse Carolina Mountain Land Conservancy's PARTF application to secure land for a proposed park adjacent to the Green River. The name of the proposed park is the Chief and Calla Bell Trail Park. CMLC is now operating as Conserving Carolina.

At that meeting, the Board directed staff to draft a Memorandum of Understanding that specifically addressed the construction and maintenance of the park with Conserving Carolina.

Staff negotiated an MOU, and a Conservation Easement (CE) between Conserving Carolina and Henderson County that outlines park development, responsibilities and meets Clean Water Management Trust Fund requirements. The MOU includes language requested by the Board which places the responsibility for construction and maintenance with Conserving Carolina.

Kieran Roe, Executive Director of Conserving Carolina, stated the park is primarily nature trails, highlighting Henderson County Camps, as well as 20th Century Engineering Models, the Duke Energy Flume, and the Saluda Grade Railroad. There is no cost to the County for the land acquisition or development of the park. Conserving Carolina has raised the money and will maintain the park.

Russ Burrell stated he has looked over the MOU. There is some upfront cost to the County, but it will be paid back. The application will be made and the property will be conveyed to the County. The first grant will begin the trail. The County will commit to no funding.

Commissioner Hawkins is concerned about the actual number of acres of the park. The number has moved quite a bit.

Kieran Roe stated the final number is 68 acres.

Commissioner Hawkins continues to be against this "Maze" and feels it should be a state park.

Russ Burrell explained that as long as the conservation easement is maintained, the County can walk away from this project at any time.

Commissioner Lapsley made the motion that the Board accepts the Memorandum of Understanding and Conservation Agreement with Conserving Carolina and direct staff to move forward with the project. The motion passed 4-1 with Commissioner Hawkins voting nay.

UPDATE FOR HIGH SCHOOL ARTIFICIAL TURF PROJECT

Marcus Jones stated at the April 3, 2017 meeting, the Board approved a contract to install artificial turf at the following Henderson County High Schools: East, North and West. This agenda item is to update the Board on the progress of the project.

- East Henderson High School:
 - Turf installed pending installation of markings and infill, and paving "D Zones"
 - On schedule to complete by August 15 contract completion date
- West Henderson High School: Complete
- North Henderson High School: Complete
- Track Rehabilitation is pending for all three HS and will be scheduled by the schools during the Fall semester