KING AND QUEEN COUNTY VIRGINIA

Founded 1691

Board of Supervisors Meeting

Monday, May 12, 2025
Regular Monthly Meeting 7:00 P.M.

242 Allen's Circle
King and Queen Court House, Virginia 23085
First Floor Courtroom

AGENDA

1. Call to Order, Invocation, & Pledge of Allegiance to the Flag of the United States
2. Approval and Signing of Minutes
3. Approval and Signing of the Warrants and Appropriations
4. Public Comment Period
5. Public Hearing - VDOT Secondary Six Year Road Plan
6. Public Hearing – SP24-04, Mattaponi Sand and Gravel, LLC
7. Consideration of ZA24-02, Data Centers and Solar Facilities (continued from April 14)
8. Quarterly Reports
9. Adopt Calendar Year 2025 Tax Rates
10. Adopt FY2026 Budget
11. Appointments and Reappointments
12. County Administrator's Comments
13. Board of Supervisors Comments
14. Adjourn to regular meeting on **June 9, 2025, at 7:00 p.m**., 242 Allen's Circle, King and Queen Court House, Virginia, First Floor Courtroom.

AGENDA: May 12, 2025 Regular Meeting

ITEM #1:

Call to Order, Invocation and Pledge of Allegiance to the Flag of the United States of America

ACTION REQUESTED:

None Required

ATTACHMENTS:

None

AGENDA: May 12, 2025 Regular Meeting

ITEM #2:

Approval and signing Minutes

ACTION REQUESTED:

Approval of the March 11, 2025, March 17, 2025, March 24, 2025, March 31, 2025 and April 14, 2025 minutes of the Board of Supervisors.

ATTACHMENTS:

- Draft March 11, 2025 minutes
- Draft March 17, 2025 minutes
- Draft March 24, 2025 minutes
- Draft March 31, 2025 minutes
- Draft April 14, 2025 minutes

King and Queen County
Board of Supervisors Meeting
Tuesday, March 11, 2025

6:00 p.m.

Joint Meeting with the School Board
King and Queen Women's Club Building
208 Allen's Circle, King and Queen Court House, Virginia

Minutes of the Meeting

CALL TO ORDER AND ROLL CALL

Chairman Mark Berry called the meeting to order. Roll call was taken with all members being present.

The Board of Supervisors met with the School Board for a joint meeting to discuss the master site plan for the property purchased adjacent to Central High School and the new school construction project.

INTRODUCTORY REMARKS AND REVIEW OF WORK GROUP MEETINGS TO DATE – CHAIRMAN MARK BERRY

Mr. Berry advised that the Board of Supervisors has selected Grimm + Parker as the A & E firm for the master site plan based on the recommendation from the project work group. The firm has already begun work on the plan. They have been to the site as well as the high school and Lawson Marriott Elementary School.

DISCUSSION OF MASTER SITE PALN PROJECT AND STATUS

Representatives from Grimm + Parker have toured LMES with the Quentin Mascari, Capital Projects Manager and Dr. Carol Carter. They reviewed with staff the wants, needs and best practices. The school division will place any updates on their website to help get the word out to keep the community advised on the status of the project. Consociate Media is preparing a press release and there will be updates made to the project landing page on the county website.

REVIEW OF PROJECT GOALS, TIMELINE AND NEXT STEPS

Members from both Boards made suggestions of other things to be included on the site plan other that the new school. Suggestions included a bus garage, green space (park, trails, etc.) and new athletic fields. If anyone has other ideas, please submit them to a member of the work group. It is still the goal to have students in the new school by the fall of 2027. This is a very short timeline and will require that the project continue to move at a faster pace. There was also discussion regarding the construction of the school and making sure that it will allow for future

expansion, not just built to meet the needs of today. It was also mentioned that inclusion of Pre-K students is necessary since those numbers do not appear in the ADM figures.

REVIEW OF PRESS RELEASE AND DISCUSSION OF PUBLIC INFORMATION Q&A

Copies of the draft press release and Q&As were distributed. After review and suggested changes were made it was the consensus to have the press released as a joint release from the Board of Supervisors and the School Board. It will be placed on the project landing page on the county website, a link on the school website and pushed out through the Regroup and social media. A one-page flyer will also be distributed showing the progress and timeline of the project.

ESTABLISH FUTURE MEETING EXPECTATIONS

There was general discussion regarding the expectations of both Boards moving forward. As the work group continues to meet and keep the project moving forward it was the consensus to have the boards meeting jointly on a quarterly basis with the next meeting tentatively set for June 16th.

IT IS ORDERED THAT THIS BOARD BE ADJOURNED

A motion was made by Ms. Billups and seconded by Ms. Norman to adjourn the meeting at 7:05 p.m. Motion was approved unanimously.

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Chairman

_____
Clerk of the Board

King and Queen County
Board of Supervisors Meeting
Monday, March 17, 2025

6:00 P.M.

Work Session Meeting
King and Queen County Courts and Administration Building
2nd Floor Conference Room A and B

Minutes of the Meeting

CALL TO ORDER AND ROLL CALL

Chairman Mark Berry called the meeting to order. A roll call was taken with all members being present.

APPROVAL OF HUB33 LEASE AMENDMENT/ADDRESS CHANGE

Ms. Seay advised that Sentara has requested the lease be amended to reflect the proper mailing address since it has been determined that the proper mailing address for the facility is Mattaponi, not Shacklefords. No action is required on the lease with the MPPDC.

A motion was made by Ms. Alsop and seconded by Ms. Norman to approve the lease amendment with Sentara for Suite 300 at Hub33 to correct the mailing address.

AYES: J.L. SIMPKINS, M. R. BERRY, M.H. NORMAN, C.R. BILLUPS, ALSOP
NAYS: NONE
ABSTAIN: NONE

CLOSED MEETING

A motion was made by Mr. Simpkins and seconded by Ms. Billups to enter into closed meeting pursuant to **Va. Code § 2.2-3711(A)(5)** for discussion concerning the expansion of an existing business where no previous announcement has been made of the business' interest in expanding its facilities in the community, the subject being the potential expansion of a business located in the Stevensville Magisterial District and pursuant to **Va. Code § 2.2-3711(A)(29)** for the discussion of the award of a public contract involving the expenditure of public funds, and discussion of the terms or scope of such contract, where discussion in an open session would adversely affect the bargaining position or negotiating strategy of the public body for the consideration of proposals for a space needs assessment contract.

AYES: J.L. SIMPKINS, M. R. BERRY, M.H. NORMAN, C.R. BILLUPS, ALSOP
NAYS: NONE
ABSTAIN: NONE

A motion was made by Ms. Billups and seconded by Mr. Simpkins that each member of the King and Queen County Board of Supervisors certify that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed, or considered by the King and Queen County Board of Supervisors, and (iii) no action was taken in the closed meeting.

AYES: J.L. SIMPKINS, M. R. BERRY, M.H. NORMAN, C.R. BILLUPS, ALSOP
NAYS: NONE
ABSTAIN: NONE

APPROVAL OF SPACE NEEDS ASSESSMENT CONTRACT

This item was deferred for future discussion.

BUDGET DISCUSSION

Discussion of the FY2026 budget included the following items brought forth by the Board and Staff:

- Bay Transit – Mr. Berry requested clarification on how the shared bus with King William and West Point currently functions. In addition, information on how the dedicated bus would function was requested. Examples being, would it be allowed to leave the county, how are rides served and how the current micro-transit area in the lower end of the county would help facilitate better service delivery in other areas of the county.
- E911 – Mr. Berry requested clarification on the increased cost of the 911 phone lines. Staff advised that several years ago the state contracted with AT&T for 911 services they advised that at some point counties would be required to cover the full cost of this service. This change occurred in the middle of FY25, so the cost increase reflects the new monthly recurring charge for a whole year.
- Ms. Norman noted that since the Compensation Board has approved full funding for the additional position in Circuit Court, if the county agreed to pay for the benefits then we would get a full-time position for approximately $20,000.
- Ms. Norman asked for clarification on whether or not the Sheriff's request for positions included associated costs such as training and uniforms. She also asked for additional information on how long it took for an untrained officer to complete the necessary training to be ready for duty.
- It was questioned why the admin fee and capital reserve were included for the Regional Animal Shelter when the agreement was not amended to include those items. Staff advised that the admin fee has always been charged and since it was added in the request from last year, the fee has been charged to that line item even though it did not increase. The capital reserve line item was left in the event that the Board wanted to begin putting aside funds for either improvements at the regional shelter or possibly building a new shelter.
- Board members asked for more information on the need for the addition of a full-time IT technician.

- Board members questioned items within the Rescue Services and Emergency Services budgets. Specific items being the increase in stipends, the addition of $30,000 for volunteer support, and the additional positions. Staff present were unable to answer the questions so the Board asked for Greg Hunter to come to a meeting to discuss.
- Staff recommended removing funding for Thrive Virginia because they have recently announced that they are closing the CARE Center and they funds were requested to support that facility.
- After general discussion and input from the Sheriff, it was the consensus to reduce funding for Legal Aid to $1,000.
- Ms. Ammons provided an update on the need to again increase the local share for the CSA program. The case load has continued to increase throughout FY25 and does not show signs of decreasing.
- Ms. Billups expressed her concern that the Sheriff's request for additional deputies is not included in the recommendation. She feels that it is not safe to have only one officer on duty at any time.
- Ms. Alsop noted that the Board approved two additional dispatchers in FY24 in order to have more coverage there, maybe it is time to look at the same for deputies.

IT IS ORDERED THAT THIS BOARD BE ADJOURNED

A motion was made by Ms. Billups and seconded by Ms. Norman to adjourn the meeting at 9:40 p.m.

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Chairman

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Clerk of the Board

King and Queen County
Board of Supervisors Meeting
Monday, March 24, 2025

6:00 P.M.

Work Session Meeting
King and Queen County Courts and Administration Building
2nd Floor Conference Room A and B

Minutes of the Meeting

CALL TO ORDER AND ROLL CALL

Chairman Mark Berry called the meeting to order. A roll call was taken with member Sherrin Alsop being absent.

APPROVAL OF WARRANTS

A motion was made by Mr. Simpkins and seconded by Ms. Norman to approve the March 24, 2024 warrants.

AYES: J.L. SIMPKINS, M. R. BERRY, M.H. NORMAN, C.R. BILLUPS
NAYS: NONE
ABSENT: S. C. ALSOP

APPROVAL OF WATER DAMAGE INVOICES/KQES MODULAR BUILDINGS

This item was tabled for additional information.

SPACE NEEDS STUDY CONTRACT

Ms. Seay advised that she has received three quotes for the space needs study that was discussed at the Board's retreat in November. Staff have reviewed the quotes, and the lowest estimate is from ZMM for $22,500. She has reviewed the contract and is requesting the Board's approval to move forward.

Board members expressed concern on doing a study now when they are not sure that they will utilize the results in the near future. The data would be outdated before any additional space could be provided to accommodate any of the needs expressed by departments.

A motion was made by Ms. Billups and seconded by Ms. Norman to table approval of the space needs study to a later date.
AYES: J.L. SIMPKINS, M. R. BERRY, M.H. NORMAN, C.R. BILLUPS
NAYS: NONE

ABSENT: S. C. ALSOP

DISCUSSION OF REQUEST FOR CONVEYANCE OF SCHOOL REAL PROPERTY

Several Board members have expressed that citizens are inquiring about what will happen to the old KQES building. There have been discussions about the demolition of the parts of the facility that experience flooding and have water damage. The remaining portions are worth saving and are structurally sound according to the reports received from the first architect on the school project. It was noted that if no one takes care of the building it will continue to deteriorate now that it is vacant. The school division is keeping the electricity and HVAC going in the building, but only minimal maintenance is being done. If portions of the building are still in good condition, it could be used for the benefit of the community.

It was the consensus of the Board to have the Building Official go look at the facility and report on its overall condition. It was also decided to place on the agenda for the joint meeting with the school board a request to transfer the building to the county.

DISCUSSION OF REGIONAL PUBLIC SAFETY SERVICE DELIVERY

Emergency Services Chief Greg Hunter advised the Board that he provided a presentation to the Middle Peninsula County Administrators and Town Managers on the possibility of regionalization of public safety dispatch and emergency medical response. They subsequently asked him to make a formal presentation at the next MPPDC meeting. He provided this presentation to the Board for them to know in advance what was being presented to the other counties in the region.

CLOSED MEETING

A motion was made by Ms. Billups and seconded by Ms. Norman to enter into closed session pursuant to Va. Code § 2.2-3711 (A)(1) for discussion of compensation of individual employees in multiple departments.

AYES: J.L. SIMPKINS, M. R. BERRY, M.H. NORMAN, C.R. BILLUPS
NAYS: NONE
ABSENT: S. C. ALSOP

A motion was made by Ms. Billups and seconded by Mr. Simpkins that each member of the King and Queen County Board of Supervisors certify that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed, or considered by the King and Queen County Board of Supervisors, and (iii) no action was taken in the closed meeting.

AYES: J.L. SIMPKINS, M. R. BERRY, M.H. NORMAN, C.R. BILLUPS
NAYS: NONE
ABSENT: S. C. ALSOP

BUDGET DISCUSSION

Discussion of the FY2026 budget included the following items brought forth by the Board and Staff:

- Ms. Seay asked if the Board wanted her to prepare a budget presentation for the public hearing. It was the consensus that this was not necessary.
- Emergency Services Chief Greg Hunter provided a budget presentation on behalf of the Emergency Services, Rescue Services, E911 and Radio Communications budgets. He asked Tammy Mason to speak on behalf of the volunteers from Mattaponi Rescue that are now under the County volunteer system.
- Mr. Berry questioned the request to increase the part-time labor pool by $50,000.
- Mr. Berry questioned the increased cost of the staffing software.
- Ms. Billups asked for clarification on David Lankford's status (fulltime EMT and part-time IT)

After discussion related to the budget overall it was the consensus of the Board that they needed to have another workshop before setting the budget and tax rates for public hearing. It was decided to have another workshop on March 31st at 6:00 p.m.

IT IS ORDERED THAT THIS BOARD BE ADJOURNED

A motion was made by Ms. Billups and seconded by Ms. Norman to adjourn the meeting at 9:35 p.m.

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Chairman

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Clerk of the Board

King and Queen County
Board of Supervisors Meeting
Monday, March 31, 2025

6:00 P.M.

Work Session Meeting
King and Queen County Courts and Administration Building
2nd Floor Conference Room A and B

Minutes of the Meeting

CALL TO ORDER AND ROLL CALL

Chairman Mark Berry called the meeting to order. A roll call was taken with member Sherrin Alsop being absent.

UPDATE REGARDING MAINTENANCE DEPARTMENT WATER TESTING

Ms. Seay advised that the county has been notified by the Office of Drinking Water that due to failed water sampling the chlorination system that was installed for a temporary basis after a main water line break needs to be either removed or turned on all the time. This will result in additional permitting and testing requirements. Staff feels that we will be able to absorb the additional cost with savings in other areas.

UPDATE TO PROVIDE ADDITIONAL INFORMATION – UPCOMING ZONING TEXT AMENDMENT PROPOSAL

Ms. Seay provided information to the Board on the upcoming text amendment relating to solar and data facilities. She noted that the amendment would revert the zoning ordinance back to how it was previously, which allowed solar facilities in Agricultural zoning by conditional use. She feels that there may have been a misconception that conditional use permit applications have to be approved as long as all conditions are met but this isn't accurate. The Board does have the ability to deny a conditional use permit application.

DISCUSSION OF COURT REPORTING EQUIPMENT AND COURTROOM FACILITIES NEEDS

Staff, including the Sheriff, Clerk of Circuit Court and Commonwealth Attorney briefed the Board on the situation that is occurring in the courts system. There is a significant increase in all three courts (Circuit, General District and Juvenile & Domestic). In addition, the Circuit Court judge is now holding court in the courtroom in the Administration Building rather than in the Circuit Court building due to issues with the facility. This means that there have been several days that all three courts are in session at the same time. In addition, the last court reporter available in the region will be retiring at the end of June. The Circuit Court Clerk has researched

and found vendors that are approved by the Supreme Court to give quotes on installation of equipment in both courtrooms.

After discussion it was the consensus of the Board to have estimates of costs related to improvement in the courtroom as well as the court reporting equipment at their April 14th meeting.

DISCUSSION OF PROPOSED BUDGET AND TAX RATES

Discussion of the FY2026 budget included the following items brought forth by the Board and Staff:

- The Board would like to have at least one new deputy position included in the budget.
- The budget should include at least one new patrol vehicle.
- They approve of keeping the new full-time IT position in the budget.
- The board supports the separation of the Victim Witness position from King William.
- The board asked that staff run the experience ratio tool on the potential HR Director position.
- Reduce the $30,000 for EMS volunteer support to $10,000.

After discussion related to the budget overall it was the consensus of the Board to advertise only a .02 real estate tax rate increase and to advertise the budget including the items as discussed tonight.

IT IS ORDERED THAT THIS BOARD BE ADJOURNED

A motion was made by Ms. Billups and seconded by Ms. Norman to adjourn the meeting at 9:15 p.m.

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Chairman

_____
Clerk of the Board

King and Queen County
Board of Supervisors Regular Meeting

Monday, April 14, 2025
7:00 P.M.

King and Queen County Courts and Administration Building
General District Courtroom

"Minutes of the Meeting"

CALL TO ORDER, INVOCATION AND PLEDGE OF ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA

Mr. Berry called the meeting to order noting that all members were present.

Chairman Berry provided the invocation, followed by the Pledge of Allegiance to the Flag of the United States.

APPROVAL AND SIGNING OF THE FEBRUARY 18, 2025, FEBRUARY 24, 2025 AND MARCH 10, 2025 MINUTES

A motion was made by Mr. Simpkins and seconded by Ms. Billups approving , February 18, 2025 minutes of the Board.

AYES: S.C. ALSOP, J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS
NAYS: NONE
ABSTAIN: M.H. NORMAN

A motion was made by Ms. Billups and seconded by Mr. Simpkins to approve the February 24, 2025 minutes of the Board.

AYES: S.C. ALSOP, J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, M.H. NORMAN
NAYS: NONE

A motion was made by Ms. Billups and seconded by Ms. Norman to approve the March 10, 2025 minutes of the Board.

AYES: S.C. ALSOP, J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, M.H. NORMAN
NAYS: NONE

APPROVAL AND SIGNING OF WARRANTS AND APPROPRIATIONS

A motion as made by Ms. Alsop and seconded by Ms. Norman approving the April 2025 County warrants and payroll.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

A motion was made by Mr. Simpkins and seconded by Ms. Billups to approve the final local appropriation to the School Fund in the amount of $570,000.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

A motion was may by Ms. Billups and seconded by Ms. Norman to appropriate the January 2025 revenue to the School Fund in the amount of $885,497.35.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

A motion was made by Mr. Simpkins and seconded by Ms. Billups to approve the use of budgeted grant match funds in the amount of $10,000 for the outdoor classroom project at the library.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

A motion was made by Ms. Billups and seconded by Ms. Norman to approve reimbursement to the school division in the amount of $4,646.31 for water damage to the interior of the KQES modular buildings due to roof leaks. It was noted to have staff contact the county insurance carrier to see if there is coverage for these costs.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

PUBLIC COMMENT PERIOD

Robert Bland, Buena Vista District – Mr. Bland provided an update from the Three Rivers Soil and Water Conservation District activities over the last year. He also advised that he has spoken to staff regarding a recycling event for farming and logging equipment tires. The conservation district has funds that it can contribute to such an event and could also assist with coordination of the event as well.

Bonnie Byrd McDonald – Ms. McDonald state that she is a resident of Arkansas but owns property in the Little Plymouth area. She spoke in favor of getting King and Queen Elementary School repaired and having the students moved back into that facility.

QUARTERLY REPORTS

Quarterly reports were received from the following department heads and agencies:

1. Hattie Robinson, Clerk of Circuit Court
2. Meredith Adkins, Commonwealth Attorney
3. Rob Balderson, Sheriff
4. Monty Willaford, Emergency Services
5. VDOT – report was provided in advance
6. Quentin Mascari, Building Inspections

SET PUBLIC HEARING DATE – SP24-04 – MATTAPONI SAND AND GRAVEL LLC

A motion was made by Ms. Alsop and seconded by Ms. Billups to set Monday, May 12, 2025 as the date for public hearings on SP24-04.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

PUBLIC HEARING – ZA24-02

Public Hearing – ZA24-02 – Article 4, Table 4.1, Permitted Uses – Energy Generation Facilities by Natural Resources and Data Processing Centers

Mr. Berry asked the Director of Community Development to provide background information and proof of publication.

Ms. Sprouse advised that the public notice ran in both the Tidewater Review and Rappahannock Times for two consecutive weeks. A courtesy copy was also provided in the Country Courier. Ms. Sprouse provided background information on why the zoning ordinance was changed several years ago to require rezoning to Industrial zoning by conditional use permit for large scale solar facility projects. The Walnut Solar project was going through the approval process at that time and staff recommended the change to place a "pause" on projects until the approval and possibly the construction of that project was complete or well underway in order to have better understanding of the impact of these large-scale projects on the county. By changing the zoning ordinance back to approval in Agricultural zoning by conditional use permit, it will still allow for approval or not where and when appropriate, not based on whether someone likes or does not like or does not want a project.

Mr. Berry opened the public hearing.

Ann Marie Voight, Stevensville District – Ms. Voight appreciated Ms. Sprouse's explanation of the text amendment but she is not in favor of anything that will allow solar or data center projects. They are noisy and in the case of data centers they require a lot of electricity. She feels that Industrial zoning is appropriate and correct zoning for both types of projects.

Sam Hart, Bunea Vista District – Mr. Hart stated that his family has been farming the same land for more than 150 years. He feels that solar projects should stay in Industrial zoned areas. Opening of agricultural land for solar is wrong, 97% of the county is zoned agricultural and could be covered by solar panels. He does not feel that the gates should be opened for this type of development, and that having to rezone for it may slow it down and be an accurate description

of what will be happening on the property. There is much more money for the landowners in solar facilities and farmers in the community cannot compete with the going rate for leases. The approved solar farm is giving landowners $11,000/acre. This is an issue not only for farmers but for the timber industry as well. He understands that the county needs money to operate but solar development will change the land in a negative way and it will likely never be able to be used for anything else.

Peter Cinq Mars, Shanghai District – Mr. Cinq Mars asked the Board to reject the Planning Commission recommendation and send it back to them for further review. The currently approved facility is creating issues that need to be assessed before approving more projects. The proposed uses are incompatible with agricultural uses and open the county up to costly lawsuits like ones in other counties. He presented seven reasons why the Board should not make this zoning change now:

1. Inappropriate use of agricultural land
2. Circumvention of proper land use planning
3. Economic impact concerns
4. Environmental review inadequacies
5. Precedent setting problems
6. Impact on neighboring properties
7. Procedural and legal vulnerabilities

He also asked that before doing their deliberations that the board please review the information he has provided on https://kingandqueensmartdevelopment.com.

Charles Maloney, Buena Vista District – He is opposed to the text amendment for the same reasons that have already been spoken. If the Board has any doubt that these projects are anything other than Industrial then they need to drive down Pear Tree Road and Buena Vista Road. Particularly the pond on Buena Vista Road where the water is normally beautiful and clear it is now brown and has flowed across the road during recent rains. This has only happened once before and that was during a hurricane and the water receded quickly. There has been lots of vegetation removed and it is very sad to see this happening. He is not completely opposed to solar but feels the county needs to look at what has happened with the existing project before making decisions. The county needs economic development but needs to be very careful as it moves ahead.

Robert Shackleford, Newtown District – He is opposed to the amendment. There is no way that these projects can be considered agricultural in nature. The impervious cover they create are more like large warehouses. The board needs to look at neighboring counties and the issues they have had with projects as well as the issues with the current project. They are an industrial use that does not belong in the middle of God's country. Pleas ponder the comments made before making a decision.

Martha Hart, Buena Vista District – She shares the concerns raised by the speakers before her. A conditional use permit can be a slippery slope in development. She also shares the concern regarding the damage to the pond on Buena Vista Road and its surrounding wetlands. Pleas consider the comments made and study further before making a decision. If a project looks industrial, is should be zoned that way. Companies coming here think we are country bumpkins

they can take advantage of. She is delighted to see citizens come out and voice their opinions and asks the Board to keep the county clean.

There being no further comments, the public hearing was closed.

Mr. Berry asked for discussion from the Board.

Ms. Alsop voice concern about spot zoning related to the current requirement for Industrial zoning for these projects but is also concerned about the conditional use permit process. She has received a lot of calls on this matter and is still trying to understand the best direction. The Board changed the zoning ordinance to require the rezoning for these projects to "buy time" to better understand the impact of these large-scale projects. She also stated that the state is not doing their part. They pass down mandates like the Clean Energy Act without thinking of the impact on counties. She hopes that the citizens who spoke out tonight will help the county if needed to hold the state accountable for issues like these.

Mr. Simpkins agreed with Ms. Alsop's comments. The Board "dropped the ball" so to speak by not using the time bought by the change to educate themselves on how to move forward. He feels that more time is needed to study the issues.

Ms. Billups agreed with both Ms. Alsop and Mr. Simpkins and that if they need more time, with their greater experience, then she certainly needs time to catch up. She thanked the citizens from the Buena Vista District for showing up and sharing their thoughts.

Ms. Norman thanked everyone for the information and opinions. She feels that the board needs more time to review before deciding. The last thing the county needs and wants is to have issues like what happened with the large project in Essex County.

Mr. Berry stated that this is a very complicated and complex matter. One thought to consider is that the board cannot mandate downzoning once a property is zoned Industrial. Even if a project is finished or doesn't happen, the zoning classification would still exist. He rode through the Walnut Solar project area to see the pond mentioned and it was indeed very brown with sediment. He also had the opportunity to see a pond in Lancaster County near a project that was the same way. It is ironic that the project developers are not fixing these problems. He is an advocate of property owner rights but when they negatively impact neighbors and the community it needs to be looked at. It is his feeling that all Board members agree that they don't need to be rushed and it is an issue not to be taken lightly. The Board has up to a year to decide. They can even have another public hearing and public input meetings if needed. He also expressed concern over recent proposed legislation that would bypass county authority to approve solar facilities. He also feels that companies come because we are small and will take things that are not appealing to other counties because of need.

No action taken; this item will be carried over to a future meeting.

COURT REPORTING EQUIPMENT AND SPACE UTILIZATION STUDY

Ms. Seay advised that after the discussion at the last workshop the estimates provided were obtained by Ms. Robinson to accommodate the lack of court reporters in the area and address the needs of the courts using both courtrooms. It was noted that the estimates are only for the court reporting equipment and not the renovations needed to the courtroom to adequately accommodate Circuit Court.

A motion was made by Ms. Billups and seconded by Ms. Norman to approve the purchase and installation of the court reporting equipment at a cost not to exceed $90,000.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

Further discussion related to the relocation of Circuit Court into the Administration Building due to security and ADA compliance issues with the entire circuit court building. Staff requested that the Board revisit the space utilization study to see if ideas that have been brought forth by staff would be feasible and to get cost estimates on construction of new space and renovation of repurposed space.

A motion was made by Ms. Norman and seconded by Ms. Billups to approve the contract for the space utilization study to include the addition of budget estimates on any improvements.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

APPOINTMENTS AND REAPPOINTMENTS TO BOARDS AND COMMISSIONS

A motion was made by Ms. Alsop and seconded by Ms. Billups to appoint Stephen Hendrickson to the Planning Commission as the Newtown representative for a term expiring July 10, 2027.

AYES: J.L. SIMPKINS, M.R. BERRY, C.R. BILLUPS, S.C. ALSOP, M.H. NORMAN
NAYS: NONE

COUNTY ADMINISTRATOR'S COMMENTS

Ms. Seay provided the following comments:

- Advised that she has received a request from the West Point Rotary Club to do a community service project at the Mattaponi Pier. The project is proposed as supplying water safety equipment. It was the consensus of the Board to approve it if they advise what they will do prior to beginning the project.
- Asked if the Board would like to have representatives from Davenport come back for a review of financial matters. It was suggested that it be after the budget is finalized, either the July or August workshop meeting.

BOARD MEMBER COMMENTS

Ms. Alsop had the following comments:

- Advised that it is good to be back, she is feeling much healthier now. She also thanked the Board for covering for her and looking out for the Newtown District in her absence.
- Stated that the Board needs a plan regarding the solar text amendment. Also, the Board needs to keep up with what the state is doing to change legislation that could take away the Board's authority on approval of them.
- Wished everyone a safe trip home, thanks for coming and hope they come out again next month.

Mr. Simpkins had the following comments:

- Thanked the citizens for coming and for their input on the text amendment. The Board needs to study things and get them right. Hopefully it will result in a happy outcome for everyone.
- Noted that the county cannot be compared to VA Beach and Chesterfield when it comes to salaries and crime rates. Unfortunately, smaller counties may always be a training ground for larger ones, it is that way in business as well. Someone is always chasing salaries. He noted that the state comparative report shows that we are in the top 5 in terms of pay for Sheriff deputies in our region. He can remember when Sheriff Longest the Sheriff and there was just him and one deputy.
- Related to the budget, there are many issues and the Board will do what they can with what we have.
- Wished everyone a safe trip home and hope to see everyone next time.

Ms. Billups had the following comments:

- Thanked everyone for coming.
- Stated that it was a long meeting but every minute was valuable.
- Thanked the citizens from the Buena Vista District again for coming out and speaking up.
- Wished everyone a safe trip home and watch out for deer.

Ms. Norman had the following comments:

- Thanked everyone for coming and speaking. The comments are heard and valued.
- She is very concerned about the "muddy pond" that was mentioned several times by folks speaking about the Walnut Solar project.
- Thanked county staff for all their work.
- Wished everyone a safe trip home.

Mr. Berry had the following comments:

- Thanked everyone for their participation in the meeting tonight, it is an example of the democratic process in action. The zoning text amendment issue warrants a great deal of consideration before a decision is made.
- Commented that there are a lot of needs in the budget and that most of the revenue comes from real estate and personal property taxes. The county needs smart growth and to bring the right businesses. The Board is cognizant of the needs and impacts on citizens. There has been .11 increase in the real estate tax rate over the last few years. That is significant and there are even more needs to be met.

- Reminded everyone that all Board meetings are public and to please come out and participate.
- Thanked everyone for the thoughts and prayers when his mother passed away last week, they are appreciated from the bottom of his heart.

IT IS ORDERED THAT THE BOARD BE ADJOURNED:

A motion was made by Ms. Billups and seconded by Ms. Alsop to adjourn the meeting at 10:15 p.m.

_____

Chairman

_____

Clerk of the Board

AGENDA: ***May 12, 2025 Regular Meeting***

ITEM #3:

Approval and signing of Warrants and Appropriations

ACTION REQUESTED:

1. Approval of County warrants & payroll for the month of May
2. Request from School Division for use of School Capital Projects Funds – Roof repairs at CHS and LMES - $367,740
3. Request to pay second batch of May warrants (no workshop meeting due to Memorial Day)

ATTACHMENTS:

- County Warrants (Payroll and Accounts Payable)
- Memo with attachments from School Superintendent

Part-time Employee Payroll Run

Payroll: Wednesday, May 14, 2025

County		
	Hunter, Greg	$4,048.75
	Willaford, Harold	$1,949.25
	Harvey, Doris	$329.04
	Norman, Susan	$1,405.95
	Hendrickson, Stephen	$2,000.00
	Barrow, Kathy	$242.73
	Evko, Kelly	$4,000.00
Circuit Court		
	Gray, Alexis	$2,489.00
Sheriff's Department		
	Balderson, Natalie	$1,030.00
	Bullington, Willow	$5,000.00
	Burton, Melvin	$1,950.00
	Douglas, Milton	$3,375.00
	Hayes, Drake	$2,125.00
	Holmes, Randy	$2,350.00
	Laufer, Sandra	$2,040.00
	Shackleford, Donald	$3,150.00
	Trent, Darryl	$1,762.50
Overtime/Sheriff's Deparment		
	Calrk, Jon-Eric	$280.77
	Davis, Sandra	$380.19
	Mills, Jonathan	$265.14
	Pittman, Deana	$96.58
	Rowe, Vladimir	$120.33
Rescue Services		
	Beasley, Michael	$1,161.60
	Bouchyard, Shaun	$2,682.24
	Brantley, Brian	$973.44
	Cassity, Stuart	$730.08
	Floyd, Tyler	$485.76
	Huffman, Michael	$1,520.64
	Meriwether, Jack	$2,897.50
	Monroe, Aaron	$998.98
	Wylde, Callie	$703.04
		$52,543.51

Fulltime Payroll - May 2025

Board of Supervisors	
Carolyn Billups	$416.67
Marie Norman	$416.67
Mark Berry	$416.67
Lawrence Simpkins	$416.67
Sherrin Alsop	$416.67
County Administrator/County Attorney	
Vivian Seay	$18,750.00
Commissioner of the Revenue	
Kelly Lumpkin	$7,133.84
Brenda Robinson	$4,574.25
Ivonnlynn Ellis	$3,104.08
Finance	
Tina Ammons	$7,742.42
Resa Wilson	$3,379.90
Treasurer	
Stephanie Sears	$6,526.85
Mali Klausen	$3,834.00
Tammy Gibbs	$3,043.22
Registrar	
Diane Klausen	$6,526.85
Kristy Creech	$5,280.00
Davis, Emma-Wade	$3,104.08
Clerk of Circuit Court	
Hattie Robinson	$8,315.27
Patricia Reed	$4,336.75
Vicotria Davis	$3,367.50
Commonwealth Attorney	
Meredith Adkins	$12,725.79
Makaylah Ambrose	$4,343.58
Sheriff	
Rob Balderson	$10,182.24
Scott Edleman	$4,630.00
Brian Coke	$4,463.33
Ernie Schefflien	$5,791.43
Paul Hope	$4,875.00
Christopher Wilkins	$4,463.33
Mitchell Wilson	$5,879.58
Phillip Cusick	$5,321.67
Jonathon Mills	$4,713.33
John Parker	$4,630.00

Hickory Burns	$4,546.67
Skylar Blowe	$4,463.33
Deputy	vacant
Jon-Eric Clark	$4,635.00
Brian Burr	$5,150.00
Vladimir Rowe	$4,635.00
Emilee Bashaw	$4,463.33
Kevin Bowen	$4,666.67
Nicole Pittman	$4,463.33
Animal Control Officer	vacant
Sandra Davis	$4,624.99
Tammy Warren	$3,750.00
Shirley Hill	$4,403.93
Dispatcher	vacant
Alexis Davis	$3,750.00
Janeisha Ashlock-Moseley	$3,583.33
Brittney Wash	$3,583.33
Zachary Carkin	$3,583.33
Dispatcher	vacant
Vickie Draine	$4,720.83

Rescue Services

David Lankford	$6,170.80
Kevin Mounts	$6,209.52
Josh Schrum	$5,103.78
Robert Coggsdale	$5,872.20
Kyle Cohenour	$4,001.88
Phillip Jewell	$5,710.88
Gary Breen	$4,972.60
William Sisson	$3,885.32
Jacob Hoffmaster	$4,777.88
Aerrin Ryan	$4,534.64
Christopher Field	$4,810.80
Matthew Anton	$3,885.32
Laura Heller	$5,068.85
EMT	vacant
EMT	vacant
Danielle Gray	$4,777.88
Angelia Hazzard	$4,402.56
Wesley May	$4,402.56
David Yeaney	$4,777.88
EMT	vacant
Joshua Lucas	$4,402.56
Donald Butler	$4,402.56
EMT	vacant

Building Inspections

Quentin Mascari	$6,561.25
Kathy Barrow	$3,619.56

General Properties	
Michael Barrow	$5,250.75
Blake Lankford	$2,666.67
Community Programming & Tourism	
Erin Lazar	$5,899.00
Jesse Kelley	$5,690.75
Zoning/Community Development	
Donna Sprouse	$6,812.42
Josh Rellick	$4,054.01
	$364,869.60

FUND # - 100 DEPT # - 011010 *** Board of Supervisors ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** Board of Supervisors ***				
CIVIC PLUS LLC	Codification	ADMIN SUPPORT FEE	333481	6/01/2025	288.75
					288.75 *
RAPPAHANNOCK TIMES	Advertising	TAX RATE AD	CL04092505	4/16/2025	295.92
RAPPAHANNOCK TIMES	Advertising	FY26 BUDGET AD	CL04092506	4/16/2025	486.00
COUNTRY COURIER	Advertising	BOS PUBLIC HEAR AD	18083	3/26/2025	150.00
COUNTRY COURIER	Advertising	FY26 BUDGET AD & TAX	18119	4/09/2025	940.00
COUNTRY COURIER	Advertising	PUBLIC HEARING AD	18137	4/23/2025	120.00
					1,991.92 *
				TOTAL	2,280.67

FUND # - 100 DEPT # - 012100 *** County Administrator ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** County Administrator ***				
SEAY, VIVIAN R.	Milage - Allowances	MILEAGE REIMBURSE	04/28/2025	4/28/2025	151.20
					151.20 *
SOUTHSIDE SENTINEL	Books & Subscriptions	SUBSCRIPTION RENEWAL	04/28/2025	4/28/2025	35.00
					35.00 *
				TOTAL	186.20

FUND # - 100 DEPT # - 012220 *** HUMAN RESOURCES ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
KING & QUEEN COUNTY	OFFICE SUPPLIES & MATERIALS	500 STYLUS PENS	1	4/04/2025	373.79
					373.79 *
				TOTAL	373.79

FUND # - 100 DEPT # - 012310 *** Commissioner of Revenue ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** Commissioner of Revenue ***				
WAMPLER - EANES	Contracted Services	2024 BUILDING PERMIT	BP02-2025	5/01/2025	5,700.00
					5,700.00 *
PITNEY BOWES	Maintenance Service Contracts	POSTAGE METER LEASE	3320571386	3/30/2025	416.01
					416.01 *
PITNEY BOWES BANK INC	Postal Services	COR POSTAGE	04/14/2025	4/14/2025	1,500.00
					1,500.00 *
LUMPKIN, KELLY N.	Convention & Education	REIMBURSEMENT	04/29/2025	4/29/2025	310.90
					310.90 *
				TOTAL	7,926.91

FUND # - 100 DEPT # - 012400 *** Finance ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** Finance ***					
MCLEMORE, PATRICK	Education & Training	LUNCHES FOR RETREAT	04/16/2025	4/16/2025	144.00	
ROBERTS, ELIZABETH	Education & Training	CPMT/ FAPT RETREAT	05/01/2025	5/01/2025	55.22	
					199.22	*
OFFICE DEPOT	Office Supplies	DYMO LT REFILLS	415790327001	4/18/2025	5.70	
OFFICE DEPOT	Office Supplies	BATTERIES	415806852001	4/18/2025	1.45-	
					4.25	*
				TOTAL	203.47	

FUND # - 100 DEPT # - 012410 *** Treasurer ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$	
	*** Treasurer ***					
PITNEY BOWES	Maintenance Service Contracts	TREASURER POST METER	1027379442	4/30/2025	580.00	
					580.00	*
TRUIST BANK	Convention & Education	TREASURER ANNUAL CON	04/20/2025	4/20/2025	.00	
TRUIST BANK	Convention & Education	TREASURER ANNUAL CON	04/20/2025	4/20/2025	650.00	
					650.00	*
				TOTAL	1,230.00	

FUND # - 100 DEPT # - 012510 *** Information Technology ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$	
RICOH USA, INC.	COPIER LEASES	COPIER LEASES	9033081304	4/12/2025	1,737.33	
					1,737.33	*
				TOTAL	1,737.33	

FUND # - 100 DEPT # - 013100 *** Electoral Board ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
B.W. MURRAY & CO. INC.	IT Security Assessment	IT ASSESSMENT	2331	4/20/2025	629.73	
					629.73	*
AMAZON CAPITAL SERVICES	Election Supplies	SUPPLIES REGISTRAR	1PGL-9D46-6VJ3	4/24/2025	57.79	
					57.79	*
				TOTAL	687.52	

FUND # - 100 DEPT # - 021100 *** Circuit Court ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** Circuit Court ***				
ANDERSON, SHANNON B.	Compensation of Jurors	JUROR PAYMNT	000000101250408	4/08/2025	50.00
LACKEY, MICHAEL	Compensation of Jurors	JUROR PAYMNT	000000147250408	4/08/2025	50.00
SEARS, JAMES D.	Compensation of Jurors	JUROR PAYMNT	000000148250408	4/08/2025	50.00
CALHOUN, PAMELA	Compensation of Jurors	JUROR PAYMNT	000000149250408	4/08/2025	50.00
DUKE, KELSEY GRACE	Compensation of Jurors	JUROR PAYMNT	000000150250408	4/08/2025	50.00
OTTO, WILLIAM IVAN	Compensation of Jurors	JUROR PAYMNT	000000151250408	4/08/2025	50.00
ALEXANDER, MICHELLE D.	Compensation of Jurors	JUROR PAYMNT	000000152250424	4/24/2025	50.00
ALTMAN, SANDER J.	Compensation of Jurors	JUROR PAYMNT	000000153250424	4/24/2025	100.00
AMMONS, ALEXANDRA N.	Compensation of Jurors	JUROR PAYMNT	000000154250424	4/24/2025	50.00
AMORIM, CASSIDY W.	Compensation of Jurors	JUROR PAYMNT	000000155250424	4/24/2025	50.00
BRAY, MARSHALL S.	Compensation of Jurors	JUROR PAYMNT	000000156250424	4/24/2025	50.00
CADE, TERRILYNNE B.	Compensation of Jurors	JUROR PAYMNT	000000157250424	4/24/2025	100.00
CALVANI, JEFFERY J.	Compensation of Jurors	JUROR PAYMNT	000000158250424	4/24/2025	100.00
CHRISTIANSEN, BRIAN K.	Compensation of Jurors	JUROR PAYMNT	000000159250424	4/24/2025	50.00
DONNELLY, OLIVIA C.	Compensation of Jurors	JUROR PAYMNT	000000160250424	4/24/2025	50.00
FOGG, KATE H.	Compensation of Jurors	JUROR PAYMNT	000000161250424	4/24/2025	50.00
GRAY, ELLEN J.	Compensation of Jurors	JUROR PAYMNT	000000162250424	4/24/2025	50.00
GREGG, OLIVIA N.	Compensation of Jurors	JUROR PAYMNT	000000163250424	4/24/2025	50.00
HALLBERG, SARA M.	Compensation of Jurors	JUROR PAYMNT	000000164250424	4/24/2025	50.00
HARRIS SR., BRUCE W.	Compensation of Jurors	JUROR PAYMNT	000000165250424	4/24/2025	50.00
HELLER, JAMES R.	Compensation of Jurors	JUROR PAYMNT	000000166250424	4/24/2025	50.00
HIRNER JR., CARL J.	Compensation of Jurors	JUROR PAYMNT	000000167250424	4/24/2025	50.00
JARVIS, DONNA P.	Compensation of Jurors	JUROR PAYMNT	000000168250424	4/24/2025	50.00
JESSIE, RICKY E.	Compensation of Jurors	JUROR PAYMNT	000000169250424	4/24/2025	100.00
KELLY, DENEEN C.	Compensation of Jurors	JUROR PAYMNT	000000170250424	4/24/2025	50.00
KELLY, JERMAUL K.	Compensation of Jurors	JUROR PAYMNT	000000171250424	4/24/2025	50.00
KING, ZIYANNA T.	Compensation of Jurors	JUROR PAYMNT	000000172250424	4/24/2025	50.00
LANE, REBECCA C.	Compensation of Jurors	JUROR PAYMNT	000000173250424	4/24/2025	50.00
LEARY, JAMES E.	Compensation of Jurors	JUROR PAYMNT	000000174250424	4/24/2025	50.00
LEGGETT, RICHARD C.	Compensation of Jurors	JUROR PAYMNT	000000175250424	4/24/2025	50.00
LESSON, SARAH B.	Compensation of Jurors	JUROR PAYMNT	000000176250424	4/24/2025	50.00
LONGEST, CARI L.	Compensation of Jurors	JUROR PAYMNT	000000177250424	4/24/2025	50.00
MERCIA, CHRISTINA M.	Compensation of Jurors	JUROR PAYMNT	000000178250424	4/24/2025	50.00
OSTANT, RONALD J.	Compensation of Jurors	JUROR PAYMNT	000000179250424	4/24/2025	50.00
PORCH, MICHAEL H.	Compensation of Jurors	JUROR PAYMNT	000000180250424	4/24/2025	50.00
PORTER III, EDWARD	Compensation of Jurors	JUROR PAYMNT	000000181250424	4/24/2025	100.00
REDD, TERRANCE B.	Compensation of Jurors	JUROR PAYMNT	000000182250424	4/24/2025	100.00
ROOK, JESSE C.	Compensation of Jurors	JUROR PAYMNT	000000183250424	4/24/2025	50.00
SETTLE, BRYANT K.	Compensation of Jurors	JUROR PAYMNT	000000184250424	4/24/2025	50.00
SMITH, JAMES W.	Compensation of Jurors	JUROR PAYMNT	000000185250424	4/24/2025	50.00
SMITH, RYAN S.	Compensation of Jurors	JUROR PAYMNT	000000186250424	4/24/2025	50.00
SMITH, WILLIAM D.	Compensation of Jurors	JUROR PAYMNT	000000187250424	4/24/2025	100.00
SPEIGHT, TRACY M.	Compensation of Jurors	JUROR PAYMNT	000000188250424	4/24/2025	50.00
ST. MARTIN, DAVID B.	Compensation of Jurors	JUROR PAYMNT	000000189250424	4/24/2025	100.00
THOMPSON, JOAN M.	Compensation of Jurors	JUROR PAYMNT	000000190250424	4/24/2025	100.00
TINSLEY, LAKESHIA R.	Compensation of Jurors	JUROR PAYMNT	000000191250424	4/24/2025	50.00

FUND # - 100 DEPT # - 021100 *** Circuit Court ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
TURNER, STEPHANIE W.	Compensation of Jurors	JUROR PAYMNT	000000192250424	4/24/2025	50.00
VIVERETTE, ROBERT S.	Compensation of Jurors	JUROR PAYMNT	000000193250424	4/24/2025	100.00
WARE II, TONY A.	Compensation of Jurors	JUROR PAYMNT	000000194250424	4/24/2025	50.00
WARRINGTON JR., THOMAS J.	Compensation of Jurors	JUROR PAYMNT	000000195250424	4/24/2025	100.00
WASHINGTON, PAULA L.	Compensation of Jurors	JUROR PAYMNT	000000196250424	4/24/2025	50.00
WATSON, SABRINA R.	Compensation of Jurors	JUROR PAYMNT	000000197250424	4/24/2025	50.00
WILKINSON, GAIL A.	Compensation of Jurors	JUROR PAYMNT	000000198250424	4/24/2025	50.00
WORMLEY, MICAH- VINCENT O.	Compensation of Jurors	JUROR PAYMNT	000000199250424	4/24/2025	100.00
WORSHAM, CALEIGH A.	Compensation of Jurors	JUROR PAYMNT	000000200250424	4/24/2025	50.00
					3,350.00 *
TRUIST BANK	Juror Lunches	JURY FOOD AND LUNCHE	04/20/2025	4/20/2025	128.26
					128.26 *
				TOTAL	3,478.26

FUND # - 100 DEPT # - 021200 *** General District Court ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** General District Court ***				
RICOH USA, INC.	Lease/Rent of Equipment	GDC COPIER LEASE	40413799	4/11/2025	98.23
					98.23 *
TREASURER OF VIRGINIA	Furniture & Fixtures	VIDEO DOCKET SYSTEM	25-KINVD-0983	4/15/2025	1,805.00
					1,805.00 *
FREEMAN, PAUL	Court Appointed Attorney	GT2400184900	8820491	4/18/2025	330.00
					330.00 *
				TOTAL	2,233.23

FUND # - 100 DEPT # - 021600 *** Clerk of Circuit Court ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** Clerk of Circuit Court ***					
ELAVON	Telecommunications	MARCH MERCHANT FEES	CA5090101787	3/31/2025	38.70	
ELAVON	Telecommunications	MARCH MERCHANT FEES	CA5090102012	3/31/2025	49.80	
					88.50	*
REED, PATRICIA	Mileage	MILEAGE REIMBURSE	04/30/2025	4/30/2025	71.40	
THOMAS, VICTORIA N.	Mileage	REIMBURSEMENT	04/29/2025	4/29/2025	157.36	
					228.76	*
VA COURT CLERKS ASSOC.	Convention & Education	ROBINSON TRAINING	05/01/2025	5/01/2025	300.00	
TRUIST BANK	Convention & Education	THOMAS VCCA CLASS ST	04/20/2025	4/20/2025	456.24	
THOMAS, VICTORIA N.	Convention & Education	REIMBURSEMENT	04/29/2025	4/29/2025	34.82	
					791.06	*
C & F BANK	Office Supplies	300 DEPOSIT SLIPS	04/18/2025	4/18/2025	187.86	
SHRED-IT USA, LLC	Office Supplies	SHREDDING CIR CRT	8010405092	3/31/2025	95.56	
ABC CHECK PRINTING	Office Supplies	CIR CRT CHECKS	44224	4/02/2025	104.55	
					387.97	*
				TOTAL	1,496.29	

FUND # - 100 DEPT # - 031200 *** Sheriff ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** Sheriff ***					
SHRED-IT USA, LLC	Maintenance Service Contracts	SHREDDING SHERIFFS	8010513653	4/18/2025	133.82	
					133.82	*
VERIZON WIRELESS	Telecommunications	WIRELESS DEVICES	6111411914	4/19/2025	1,162.88	
					1,162.88	*
FBI- NCCA	Dues & Association Membership	2025 DUES MEMBERSHIP	2025	4/08/2025	50.00	
					50.00	*
AMAZON CAPITAL SERVICES	Office Supplies	BATTERIES SHERIFFS	1KC9-CN31-HCFV	4/15/2025	2.33	
AMAZON CAPITAL SERVICES	Office Supplies	OFFICE SUPPLIES	17HY-6X9C-6VNV	4/14/2025	384.11	
					386.44	*
VIRGINIA PENINSULA PUBLIC	Vehicle Maintenance & Repair	MAR 25 SHERIFF VEHIC	32278	4/10/2025	1,937.50	
					1,937.50	*
MANSFIELD OIL COMPANY	Vehicle & Equipment Fuel	FUEL	SQLCD-1065281	4/02/2025	3,512.38	
MANSFIELD OIL COMPANY	Vehicle & Equipment Fuel	FUEL	SQLCD-1069936	4/17/2025	3,011.26	
					6,523.64	*
WEST POINT FORD	Vehicle & Equipment Supplies	HVAC MOTOR- VPPSA	19056	1/24/2025	34.72	
WEST POINT FORD	Vehicle & Equipment Supplies	VEHICLE MAINT	19431	3/18/2025	125.38	
WEST POINT FORD	Vehicle & Equipment Supplies	VEHICLE MAINTENANCE	19509	3/26/2025	96.85	
WEST POINT FORD	Vehicle & Equipment Supplies	GASKET CREDIT	19509-R1	3/26/2025	19.11-	
WEST POINT FORD	Vehicle & Equipment Supplies	GASKET	19522	3/26/2025	22.36	
WEST POINT FORD	Vehicle & Equipment Supplies	WIRE ASSEMBLY	19549	3/28/2025	26.88	
WEST POINT FORD	Vehicle & Equipment Supplies	SOLENOID	19554	3/28/2025	53.95	
WEST POINT FORD	Vehicle & Equipment Supplies	BRACKET	19609	4/07/2025	210.08	
WEST POINT FORD	Vehicle & Equipment Supplies	SPARK PLUG & GASKET	19660	4/11/2025	59.61	
PORT RICHMOND AUTO PARTS	Vehicle & Equipment Supplies	SERPENTINE BELT	489685	4/17/2025	121.53	
PORT RICHMOND AUTO PARTS	Vehicle & Equipment Supplies	OIL AND FILTER	489769	4/18/2025	42.47	
WILLIAMSBURG FORD	Vehicle & Equipment Supplies	REPROGRAM KEYS	699937	4/09/2025	185.00	
					959.72	*
AMAZON CAPITAL SERVICES	Police Supplies	BATTERIES SHERIFFS	1KC9-CN31-HCFV	4/15/2025	8.99	
					8.99	*
GALL'S LLC	Uniforms & Wearing Apparel	UNIFORM POLO	030741612	3/14/2025	67.07	
GALL'S LLC	Uniforms & Wearing Apparel	UNIFORMS SHERIFFS	030818459	3/22/2025	168.01	
GALL'S LLC	Uniforms & Wearing Apparel	UNIFORMS SHERIFFS	030914529	4/01/2025	123.33	
DEPT OF MOTOR VEHICLES	Uniforms & Wearing Apparel	SPECIAL ID CARDS	202509000325	3/31/2025	10.00	
WITMER PUBLIC SAFETY	Uniforms & Wearing Apparel	UNIFORMS	INV652387	3/24/2025	794.00	
WITMER PUBLIC SAFETY	Uniforms & Wearing Apparel	UNIFORMS	INV666745	4/16/2025	2,680.00	
					3,842.41	*
				TOTAL	15,005.40	

FUND # - 100 DEPT # - 031400 *** E911 ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** E911 ***				
AT&T	E911 PHONE LINES	E911	0964650016	4/16/2025	3,455.87
					3,455.87 *
				TOTAL	3,455.87

FUND # - 100 DEPT # - 032302 *** Rescue Services ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** Rescue Services ***					
ARC3 GASES	Oxygen Tank Leases	ANNUAL CYLINDER LEAS	11797134	4/10/2025	4,366.00	
					4,366.00	*
OFFICE DEPOT	Office Supplies	BATTERIES	415806852001	4/18/2025	105.36	
HORNS MIDDLESEX ACE HARDWA	Office Supplies	EMS OPERATION SUPPLY	59375/2	4/24/2025	102.54	
					207.90	*
ZOLL MEDICAL CORPORATION	Medical Supplies	MEDICAL SUPPLIES	4182715	4/15/2025	755.44	
ARC3 GASES	Medical Supplies	SHACKLEFORDS OXYGEN	0011806311	4/16/2025	248.09	
LIFE-ASSIST,INC	Medical Supplies	PHARMACY AND SUPPLY	1589871	4/15/2025	486.08	
					1,489.61	*
VIRGINIA PENINSULA PUBLIC	Vehicle Maintenance	FEB 25 EMS VEH MAINT	32200	3/19/2025	425.00	
VIRGINIA PENINSULA PUBLIC	Vehicle Maintenance	MAR 25 EMS VEH MAINT	32277	4/10/2025	350.00	
PORT RICHMOND AUTO PARTS	Vehicle Maintenance	AC PRESSURE SWITCH	487230	3/14/2025	107.05	
PORT RICHMOND AUTO PARTS	Vehicle Maintenance	SUPPLIES	488604	4/02/2025	91.95	
WILLIAMSBURG FORD	Vehicle Maintenance	INSPECTIONS F450	699111	3/31/2025	185.00	
COLONY TIRE CORPORATION	Vehicle Maintenance	TIRES	133-243486	4/23/2025	877.92	
					2,036.92	*
MANSFIELD OIL COMPANY	Vehicle Fuel	FUEL	SQLCD-1070057	4/17/2025	1,326.40	
					1,326.40	*
ZOLL MEDICAL CORPORATION	Equipment	MEDICAL EQUIP MAINT	4174708	4/04/2025	936.44	
CODE BLUE RESOURCES	Equipment	BATTERIES	2312	4/22/2025	872.20	
					1,808.64	*
SAFEWARE, INC.	REGULATED MEDICAL SUPPLY/PHARM	RETURN PELICAN BOX	10218523	4/21/2025	272.17-	
SAFEWARE, INC.	REGULATED MEDICAL SUPPLY/PHARM	PELICAN EMS BOX	30279942	3/28/2025	313.00	
LIFE-ASSIST,INC	REGULATED MEDICAL SUPPLY/PHARM	PHARMACY AND SUPPLY	1589871	4/15/2025	1,297.49	
LIFE-ASSIST,INC	REGULATED MEDICAL SUPPLY/PHARM	PHARMACY DRUGS	1590469	4/16/2025	3.55	
LIFE-ASSIST,INC	REGULATED MEDICAL SUPPLY/PHARM	PHARMACY DRUGS	1590522	4/16/2025	580.53	
LIFE-ASSIST,INC	REGULATED MEDICAL SUPPLY/PHARM	PHARMACY DRUGS	1592822	4/24/2025	499.40	
LIFE-ASSIST,INC	REGULATED MEDICAL SUPPLY/PHARM	PHARMACY DRUGS	1592823	4/24/2025	567.65	
					2,989.45	*
				TOTAL	14,224.92	

FUND # - 100 DEPT # - 032400 *** Radio Communications ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
SBA TOWERS, INC.	Tower Rent - Shacklefords Site	TOWER RENT	IN30637623	5/01/2025	8,370.63
					8,370.63 *
SPECTRASITE	Tower Rent - Canterbury Site	TOWER RENT	4872131	3/29/2025	6,028.79
					6,028.79 *
				TOTAL	14,399.42

FUND # - 100 DEPT # - 034500 *** Building Inspections ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** Building Inspections ***					
OFFICE DEPOT	Office Supplies	BATTERIES	415806852001	4/18/2025	13.17	
TRUIST BANK	Office Supplies	MASCARI BUSINESS CAR	04/20/2025	4/20/2025	23.15	
AMAZON CAPITAL SERVICES	Office Supplies	BELL & SUPPLIES	1KLH-6N4Q-JYKD	4/15/2025	9.88	
					46.20	*
				TOTAL	46.20	

FUND # - 100 DEPT # - 035100 *** Animal Control ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** Animal Control ***				
VERIZON WIRELESS	Telecommunications	WIRELESS DEVICES	6111411914	4/19/2025	80.02
					80.02 *
SEREDNI TIRE & AUTO CENTE	Vehicle Supplies	ACO TIRES	20380	4/28/2025	537.04
					537.04 *
REGIONAL ANIMAL SHELTER	Spay/Neuter Funds from DMV	ANIMAL PLATE SALES	04/14/2025	4/14/2025	9.50
					9.50 *
				TOTAL	626.56

FUND # - 100 DEPT # - 035500 *** Emergency Services ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$	
	*** Emergency Services ***					
GREENLINE SERVICE CORP.	Equipment - Emergency Services	CHAIN SAWS & BLOWERS	225558	4/15/2025	2,879.94	
					2,879.94	*
				TOTAL	2,879.94	

FUND # - 100 DEPT # - 043200 *** General Properties ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** General Properties ***					
JAMES RIVER AIR	Repairs & Maintenance	REPAIR VFD ADMIN	S389853	4/15/2025	5,071.92	
LOCKE SUPPLY CO.	Repairs & Maintenance	PLUMBING SUPPLY ADMI	55274727-00	4/22/2025	239.83	
					5,311.75	*
SYDNOR HYDRO, INC.	Water System Testing	WATER SAMPLE TESTING	8667	4/30/2025	655.50	
					655.50	*
DOMINION ENERGY VIRGINIA	Electrical Services	LIGHTING ACCOUNT	2539892311 4/25	4/25/2025	130.21	
DOMINION ENERGY VIRGINIA	Electrical Services	5-B	8305983002 4/25	4/21/2025	75.79	
					206.00	*
HD SUPPLY	Janitorial Supplies	JANITORIAL SUPPLIES	859077539	4/08/2025	56.62	
HD SUPPLY	Janitorial Supplies	HUB 33 JANITORIAL	859077547	4/08/2025	11.20	
HD SUPPLY	Janitorial Supplies	JANITORIAL SUPPLIES	859319915	4/09/2025	62.16	
HD SUPPLY	Janitorial Supplies	JANITORIAL SUPPLIES	860662808	4/17/2025	50.16	
HD SUPPLY	Janitorial Supplies	JANITORIAL SUPPLIES	860662816	4/17/2025	213.15	
AMAZON CAPITAL SERVICES	Janitorial Supplies	BELL & SUPPLIES	1KLH-6N4Q-JYKD	4/15/2025	39.95	
					433.24	*
DEERE AND COMPANY	GROUNDS EQUIPMENT	NEW LAWNMOWER COUNTY	117745157	4/16/2025	11,553.08	
					11,553.08	*
OFFICE DEPOT	Building Supplies	BATTERIES	415806852001	4/18/2025	26.34	
AMAZON CAPITAL SERVICES	Building Supplies	BELL & SUPPLIES	1KLH-6N4Q-JYKD	4/15/2025	11.99	
					38.33	*
				TOTAL	18,197.90	

FUND # - 100 DEPT # - 043300 *** Marriott School Facility ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** Marriott School Facility ***					
DOMINION ENERGY VIRGINIA	Electrical Service	MARRIOTT	4314102924 4/25	4/21/2025	102.39	
					102.39	*
				TOTAL	102.39	

FUND # - 100 DEPT # - 043400 *** Station 8/Shacklefords ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** Station 8/Shacklefords ***				
HORNS MIDDLESEX ACE HARDWA	Maintenance	RECEPTACLE STA 8	59231/2	4/16/2025	5.48
					5.48 *
				TOTAL	5.48

FUND # - 100 DEPT # - 043500 *** Station 2/Marriott School ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$	
	*** Station 2/Marriott School ***					
DOMINION ENERGY VIRGINIA	ELECTRICAL SERVICE	STATION 2 MARRIOTT	7823700310 4/25	4/21/2025	89.99	
					89.99	*
				TOTAL	89.99	

FUND # - 100 DEPT # - 043600 *** GENERAL PROPERTIES - HUB33 ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
RICOH USA, INC.	COPIER LEASE - MPPDC	COPIER LEASES	9033081304	4/12/2025	233.05
					233.05 *
RICOH USA, INC.	COPIER LEASE - SUITE 200	COPIER LEASES	9033081304	4/12/2025	79.22
					79.22 *
				TOTAL	312.27

FUND # - 100 DEPT # - 071100 *** COMMUNITY PROGRAMMING ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** COMMUNITY PROGRAMMING ***					
AMAZON CAPITAL SERVICES	PROGRAM SUPPLIES	USBS AND MOUSES	16YH-NNNY-4VYG	4/29/2025	106.47	
FAT FINCH FLOWER FARM	PROGRAM SUPPLIES	FLOWER ARRANGING PRO	543704	4/26/2025	200.00	
BULLARD, JOHN	PROGRAM SUPPLIES	CONCERT AT LIBRARY	04/28/2025	4/28/2025	1,200.00	
					1,506.47	*
CONSOCIATE MEDIA, LLC	VTC MARKETING GRANT	MARKETING & COMMUNIC	6066	4/16/2025	2,800.00	
					2,800.00	*
				TOTAL	4,306.47	

FUND # - 100 DEPT # - 073200 *** Public Library ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
	*** Public Library ***					
DOMINION ENERGY VIRGINIA	Electrical Services	LIBRARY	2571861216 4/25	4/21/2025	111.87	
DOMINION ENERGY VIRGINIA	Electrical Services	LIBRARY	2967503158 4/25	4/21/2025	188.03	
					299.90	*
AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	CREDIT KIDS DESK	1J97-K9TM-4FGC	4/25/2025	129.99-	
AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	LIBRARY SUPPLIES	1KLH-6N4Q-7QCP	4/14/2025	730.71	
AMAZON CAPITAL SERVICES	OFFICE SUPPLIES	LIBRARY SUPPLIES	1QX1-WM1V-KK3M	4/15/2025	41.15	
					641.87	*
AMAZON CAPITAL SERVICES	LIBRARY SUPPLIES	LIBRARY BOOK	1P11-YWFV-F11F	4/14/2025	3.99	
					3.99	*
AWE ACQUISITION, INC	RPR/RPLC COMPUTER EQUIPMENT	KIDS COMPUTER	KAQ25001-1	4/25/2025	3,680.00	
					3,680.00	*
AMAZON CAPITAL SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOK	1DWG-L4LX-JXHN	4/15/2025	38.51	
AMAZON CAPITAL SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOK	1P11-YWFV-F11F	4/14/2025	25.59	
AMAZON CAPITAL SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	1RCK-KXQY-H7JY	4/15/2025	85.49	
AMAZON CAPITAL SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOK	1TVP-C6DD-NQ3C	4/15/2025	9.63	
AMAZON CAPITAL SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	1T6Y-6P6Y-PMRG	4/13/2025	32.41	
AMAZON CAPITAL SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOK	1XJF-Y3VD-LVTC	4/08/2025	197.88	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87610338	4/14/2025	6.79	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87610339	4/14/2025	20.95	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87610340	4/14/2025	34.98	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87610341	4/14/2025	17.86	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87610342	4/14/2025	100.99	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87610343	4/14/2025	19.85	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87731929	4/21/2025	18.09	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87731930	4/21/2025	18.10	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87731931	1/21/2025	16.44	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87731932	4/21/2025	14.93	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87731933	4/21/2025	15.39	
INGRAM LIBRARY SERVICES	BOOKS/LIBRARY COLLECTION	LIBRARY BOOKS	87731934	4/21/2025	391.38	
NEWSBANK, INC	BOOKS/LIBRARY COLLECTION	ANNUAL SUBSCRIPTION	RT2005616	4/23/2025	673.00	
					1,738.26	*
RICOH USA, INC.	COPIER LEASE	COPIER LEASE LIBRARY	40290860	3/14/2025	92.28	
					92.28	*
				TOTAL	6,456.30	

FUND # - 100 DEPT # - 081100 *** Planning Commission ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** Planning Commission ***				
RAPPAHANNOCK TIMES	Advertising	PUBLIC HEARING AD PC	CL04162503	4/23/2025	177.66
					177.66 *
				TOTAL	177.66

FUND # - 100 DEPT # - 081201 *** Tourism Development ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
TRUIST BANK	PUBLICITY/MARKETING	TABLE CLOTHS	04/20/2025	4/20/2025	287.29	
					287.29	*
CONSOCIATE MEDIA, LLC	VTC MICROBUSINESS GRANT	VTC MICROBUSINESS	6044	4/06/2025	1,250.00	
CONSOCIATE MEDIA, LLC	VTC MICROBUSINESS GRANT	VTC MICROBUSINESS	6065	4/16/2025	1,250.00	
					2,500.00	*
				TOTAL	2,787.29	

FUND # - 100 DEPT # - 081402 *** Zoning Administrator ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
	*** Zoning Administrator ***				
BARBOUR PRINTING SERVICES	Office Supplies	E&S INSPECTION FORMS	0497-25	4/08/2025	400.00
					400.00 *
				TOTAL	400.00

FUND # - 100 DEPT # - 091400 *** Contingency Fund ***

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$	
	*** Contingency Fund ***					
TRUIST BANK	Miscellaneous Contingencies	HUB 33 GRAND OPEN SU 04/20/2025		4/20/2025	534.44	
					534.44	*
				TOTAL	534.44	
				FUND TOTAL	105,842.17	

FUND # - 210 EXPENDITURES - COURT SECURITY FUND DEPT # - 031200

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
GALL'S LLC	UNIFORMS COURT SECURITY	UNIFORMS SHERIFFS	030914186	4/01/2025	123.33	
DEPT OF MOTOR VEHICLES	UNIFORMS COURT SECURITY	SPECIAL ID CARDS	202509000325	3/31/2025	10.00	
WITMER PUBLIC SAFETY	UNIFORMS COURT SECURITY	UNIFORMS	INV652387	3/24/2025	397.00	
WITMER PUBLIC SAFETY	UNIFORMS COURT SECURITY	UNIFORMS	INV666745	4/16/2025	1,340.00	
					1,870.33	*
				TOTAL	1,870.33	
				FUND TOTAL	1,870.33	

FUND # - 301 DEPT # - 094100

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY	$$
ATLANTIC COMMUNICATIONS	Sheriff's Dept. Vehicles	EMERGENCY EQUIP INST	225232-1	4/07/2025	2,085.00	
ATLANTIC COMMUNICATIONS	Sheriff's Dept. Vehicles	EMERGENCY EQUIP INST	225232-2	4/07/2025	2,085.00	
ATLANTIC COMMUNICATIONS	Sheriff's Dept. Vehicles	EMERGENCY EQUIP INST	225232-3	4/07/2025	2,085.00	
					6,255.00	*
EVANS CONSTRUCTION, INC	Circuit Court Repairs	CIR CRT & MODULAR	5588- ROOF	5/01/2025	109,490.00	
					109,490.00	*
EVANS CONSTRUCTION, INC	ROOF REPAIR/KQES MODULAR BUILD	CIR CRT & MODULAR	5588- ROOF	5/01/2025	16,852.00	
					16,852.00	*
				TOTAL	132,597.00	
				FUND TOTAL	132,597.00	

FUND # - 352 EXPENDITURES DEPT # - 095100

VENDOR NAME	CHARGE TO	DESCRIPTION	INVOICE#	INVOICE DATE	$$ PAY $$
KING & QUEEN CO. SCHOOLS	KQES CONSTRUCTION	REPAIRS TO MODULARS	04/14/2025	4/14/2025	4,646.31
GRIMM & PARKER ARCHITECTS	KQES CONSTRUCTION	KQES PROJECT	1	4/17/2025	77,989.07
					82,635.38 *
				TOTAL	82,635.38
				FUND TOTAL	82,635.38
				TOTAL DUE	322,944.88

Approved at meeting of _____ ____on_____.

Signed _____ _____ _____
Title Date

King and Queen County Public Schools

P.O. Box 97 • King and Queen Courthouse, Virginia 23085
Phone: (804)785-5981 or (804)769-5007 Fax: (804)785-5686 or (804)769-5007

TO: **SUPT: SY25-003**

Mr. Mark Berry, Board of Supervisors Chair
Mrs. Carolyn Billups, Board of Supervisors Vice-Chair
Ms. Sherrin Alsop, Board of Supervisor member
Mrs. Marie Norman, Board of Supervisors member
Mr. Lawrence Simpkins, Board of Supervisor member
Ms. Vivian Seay, County Administrator

FROM: Carol B. Carter, Ed. D., Superintendent of Schools CBC

DATE: May 5, 2025

SUBJECT: Roof Repair at Central High School (CHS) and Lawson Marriott Elementary School (LMES)

This memorandum speaks to the estimates being provided according to the pricing established under the Master Intergovernmental Cooperative Purchasing Agreement (MICPA) with Racine County, WI and OMNIA Partners, Public Sector (U.S. Communities). Garland/DBS, Inc. administered an information competitive process for obtaining quotes for the project with the hopes of providing a lower market-adjusted price whenever possible.

The scope of the work was for Lawson Marriott Elementary School – Section D – Restoration and 3 Metal Roof Sections (N, O, Z) – Restoration at Central High School.

The proposed recommendation from Steve Morgan, Director of Maintenance for KQCPS is Raintree Services. For LMES, Raintree Services is the lower priced quote of $204,999 and for CHS they are the second lowest, but Mr. Morgan is very impressed with the quality of their work and their customer service.

KQCPS is requesting $367,740 from the School Capital Fund for the repairs on the roofs for CHS and LMES. Thank you for your consideration.

Garland/DBS, Inc.
3800 East 91st Street
Cleveland, OH 44105
Phone: (800) 762-8225
Fax: (216) 883-2055

ROOFING MATERIAL AND SERVICES PROPOSAL

King and Queen County Schools
King and Queen High and Lawson Elementary
17024 The Trail
King and Queen Court House, Virginia 23085

Date Submitted: 04/24/2025
Proposal #: 25-VA-250367
MICPA # PW1925
VIRGINIA General Contractor License #: 2705134748

Purchase orders to be made out to: Garland/DBS, Inc.

Please Note: The following budget/estimate is being provided according to the pricing established under the Master Intergovernmental Cooperative Purchasing Agreement (MICPA) with Racine County, WI and OMNIA Partners, Public Sector (U.S. Communities). Garland/DBS, Inc. administered an informal competitive process for obtaining quotes for the project with the hopes of providing a lower market-adjusted price whenever possible.

Scope of Work: LAWSON ELEMENTARY SECTION D SCOPE OF WORK - RESTORATION

- Total SF – 8,500
- Clean, Power sweep/ wet vac existing gravel off down to membrane/felts.
- Repair any existing ridges, splits, blisters, alligatoring spots, and tears on modified membrane where necessary. Cut out and replace/ seal with 2 ply modified membrane of similar thickness with primer, mastic, membrane. Flashing Bond mastic and mesh will be used on all field repairs. Torch repairs are acceptable as well.
- All areas of wet insulation identified by IR scan will be removed and replaced with similar materials. Decking to be inspected for damage and repaired as needed. Include Approximately 300 square feet of modified membrane, insulation and cover board to be replaced. Additional work will be done on a cost/SF basis. Contractor will provide number for this. Scan results will follow prior to commencement of work.
- Replace all interior flashing with new 2-ply material. New term bar and slip to be installed.
- Strip in new modified membrane along entire perimeter.

•All units will receive new flashing and new metal skirt around them.
•All pitch pockets will be cleaned out and will receive new 2 part pourable sealer
•All counter-flashing will be checked and resealed as necessary.
•Entire filed of roof will be primed with Garla-prime 2k at a rate of .5 gallons per square. Let dry for an hour before and no longer than 24 hours before applying coating
•Cool Sil Eliminator will be installed a rate of 8 gallons per square.
•Cool Sil Top Coat to be installed at a rate of 2.0 gallons per square.
•New gutters and downspouts will be installed where existing are in place.
•Follow all manufacturer means of applications, details and drawings.
•Manufacturer is to provide 15-year warranty and installing contractor is to provide 2-year workmanship warranty.
•Contractor is to follow all OSHA regulations and guidelines. Safety flags shall be put up around entire perimeter of roof surface.

Scope of Work: HIGH SCHOOL – 3 METAL ROOF SECTIONS (N, O, Z) - RESTORATION

• Total SF – 14,600 SF
• Power-wash entire roof surface using 10% mix of Simple Green Cleaner/Water toremove all contaminants. Allow roof to dry completely. Remove all previously coatedareas.
• Wire brush to remove all areas of rust. Prime the areas using Rust-Go Primer at 1/4gal. /sq.
•Replace loose or missing fasteners using oversize fastener and neoprene washer.
•Coat all fasteners using Tuff Stuff MS.
• Install new pipe boots around existing penetrations old boots are present.
• Install unibond fleece back tape over all seams, coping joint seams and around allunits prior to coating.
• Remove existing metal counter flashing at metal wall panel and replaced with newmetal flashing that drains properly.
• All cracks and seams more than 1/64" wide and less than 1/8" wide must be filledand sealed with CPR Seam Sealer BG at .67 gallons per square.
• CPR Base Coat is then applied at 1.5 gallon per square on metal roof in one coat,and 1/2 gallon per square on sidewalls. It is applied as easily as any heavy bodiedpaint. Allow the CPR Base Coat to dry for 24 hours before application of the CPRTop Coat.
• CPR Top Coat is then applied at 1.5 gallons per square on metal roof, and 1 gallonper square on any wall panels. (If sprayed, make sure proper building protection isapplied for risk of overspray).
• All gutters to be coated as well, following same coverage rates. All gutters to bechecked and repaired as needed prior to coating.
•Follow all manufacturer means of applications, details and drawings.
• Throughout the duration of the project, a representative from the manufacturer willprovide job site inspections 3 times per week to ensure strict accordance with thedesign and bidding documents.
• Manufacturer is to provide 10-year warranty and installing contractor is to provide 2-year workmanship warranty.
• Contractor is to follow all OSHA regulations and guidelines. Safety flags shall be putup around entire perimeter of roof surface.

Lawson Elementary

Proposal Price Based Upon Market Experience:		**$ 204,999**

Garland/DBS Price Based Upon Local Market Competition:

1 Raintree Services	**$**	**204,999**
2 Whitley Service Roofing	$	239,157
3 Simpson Unlimited	$	272,141
4 Teamcraft Roofing	$	279,953

High School

Proposal Price Based Upon Market Experience:		**$ 162,741**

Garland/DBS Price Based Upon Local Market Competition:

1 Whitley Service Roofing	**$**	**162,741**
2 Raintree Services	$	186,431
3 Teamcraft Roofing	$	211,248
4 Simpson Unlimited	$	302,617

Potential issues that could arise during the construction phase of the project will be addressed via unit pricing for additional work beyond the scope of the specifications. This could range anywhere from wet insulation, to the replacement of deteriorated wood nailers.

Please Note – The construction industry is experiencing unprecedented global pricing and availability pressures for many key building components. Specifically, the roofing industry is currently experiencing long lead times and significant price increases with roofing insulation and roofing fasteners. Therefore, this proposal can only be held for 30 days. DBS greatly values your business, and we are working diligently with our long-term suppliers to minimize price increases and project delays which could effect your project. Thank you for your understanding and cooperation.

Clarifications/Exclusions:

1. Permits are excluded. If permits are required this will be addressed via change order.
2. Plumbing, Mechanical, Electrical work is excluded.
3. Masonry work is included to which it obtains to the scope of work.
4. Interior Temporary protection is excluded.
5. Any work not exclusively described in the above proposal scope of work is excluded.

If you have any questions regarding this proposal, please do not hesitate to call me at my number listed below.

Respectfully Submitted,

Jarod Miller

Jarod Miller
Garland/DBS, Inc.
(216) 430-3606

AGENDA: May 12, 2025 Regular Meeting

ITEM #4:

Public Comment

ACTION REQUESTED:

The Board will receive comments from the public for items NOT on the agenda. Please ask anyone speaking to state their name, the district they are from and to please limit comments to 5 minutes.

ATTACHMENTS:

None

AGENDA: May 12, 2025 Regular Meeting

ITEM #5:

Public Hearing – VDOT Secondary Six Year Plan FY26 to FY31

ACTION:

The Board of Supervisors will hold a public hearing on the VDOT Secondary Six Year Plan FY26 to FY31.

Lee McKnight, Residency Administrator will provide information regarding the plan.

Open public hearing, ask anyone wishing to speak to state their name and the district in which they live. Please limit comments to three minutes.

After all comments, close public hearing for action by the Board.

ATTACHMENTS:

- Information from VDOT on eligible roads an funding and draft resolution.

Secondary System
King & Queen County
Construction Program
Estimated Allocations

Fund	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	Total
TeleFee	$13,980	$13,980	$13,980	$13,980	$13,980	$13,980	$83,880
District Grant - Unpaved	$65,556	$65,556	$65,556	$65,556	$90,308	$90,302	$442,834
Total	$79,536	$79,536	$79,536	$79,536	$104,288	$104,282	$526,714

Board Approval Date:

Residency Administrator Date

County Administrator Date

Updated **Tuesday, April 1, 2025**

KING & QUEEN COUNTY -- SSYP FY2026 THRU FY2031

DRAFT DOCUMENT FOR KING & QUEEN COUNTY - VDOT INTERNAL USE

PRIORITY	124214	Rte. 617 - Exol Road - Rural Rustic			Advertised						CN START: 03/25/2025
1	ESTIMATE	Fund Source	Allocation Code	Previous	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	TOTAL
		Telecommunnications	6030606	$111,474	$0	$0	$0	$0	$0	$0	$111,474
		HB2 DG: Unpaved	6071700	$203,573	$0	$0	$0	$0	$0	$0	$203,573
Last Estimate Date											
2/13/2025	$315,047	Total	ALLOCATIONS	$315,047	$0	$0	$0	$0	$0	$0	$315,047
		As of April 01, 2025	EXPENDED	$12,155							$12,155
			AVAILABLE	$302,892	$0	$0	$0	$0	$0	$0	$302,892

PRIORITY	124215	Rte. 618 - Shilo Road - Rural Rustic			No Dates Set Yet						CN Start: 11/17/2026
2	ESTIMATE	Fund Source		Previous	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	TOTAL
		Telecommunnications	6030606	$35,896	$13,980	$0	$0	$0	$0	$0	$49,876
		HB2 DG: Unpaved	6071700	$32,096	$65,556	$0	$0	$0	$0	$0	$97,652
2/14/2025	$147,528	Total	ALLOCATIONS	$67,992	$79,536	$0	$0	$0	$0	$0	$147,528
		As of April 01, 2025	EXPENDED	$0							$0
			AVAILABLE	$67,992	$79,536	$0	$0	$0	$0	$0	$147,528

PRIORITY	124216	Rte. 611 - Tastine Road - Rural Rustic			No Dates Set Yet						CN Start: 9/29/2027
3	ESTIMATE	Fund Source		Previous	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	TOTAL
		Telecommunnications	6030606	$0	$0	$13,980	$13,034	$0	$0	$0	$27,014
		HB2 DG: Unpaved	6071700	$0	$0	$65,556	$54,958	$0	$0	$0	$120,514
2/14/2025	$147,528	Total	ALLOCATIONS	$0	$0	$79,536	$67,992	$0	$0	$0	$147,528
		As of April 01, 2025	EXPENDED	$0							$0
			AVAILABLE	$0	$0	$79,536	$67,992	$0	$0	$0	$147,528

PRIORITY	124217	Rte. 633 - Bewdley Lane - Rural Rustic				No Dates Set Yet				CN Start: 11/06/2028
4	ESTIMATE	Fund Source		Previous	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	TOTAL
		Telecommunnications	6030606	$0	$0	$0	$946	$13,980	$7,311	$0	$22,237
		HB2 DG: Unpaved	6071700	$0	$0	$0	$10,598	$65,556	$1,120	$0	$77,274
2/14/2025	$99,511	Total	ALLOCATIONS	$0	$0	$0	$11,544	$79,536	$8,431	$0	$99,511
		As of April 01, 2025	EXPENDED	$0							$0
			AVAILABLE	$0	$0	$0	$11,544	$79,536	$8,431	$0	$99,511

PRIORITY	99949	COUNTYWIDE ENGINEERING & SURVEY				MONITORING FUNDS				MONITORING FUNDS		
9999	ESTIMATE	Fund Source		Previous	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	TOTAL	Expended	Prev Balance
		Telecommunications	6030606	$17,026	$0	$0	$0	$0	$6,669	$13,980	$37,675	$3,874	$13,152
		HB1887 - DGP	6071700	$0	$0	$0	$0	$0	$89,188	$90,302	$179,490	$0	$179,490
		Total	ALLOCATIONS	$17,026	$0	$0	$0	$0	$95,857	$104,282	$217,165		
		As of April 01, 2025	EXPENDED	$3,874							$3,874		
			AVAILABLE	$20,900	$0	$0	$0	$0	$95,857	$104,282	$213,291		

At a regular meeting of the Board of Supervisors of King and Queen County, held at the King and Queen County Courthouse Building on May 12, 2025, at 7:00 pm.

Present were:

On motion by _____, seconded by _____ and carried:

WHEREAS, Sections 33.2-331 of the 1950 Code of Virginia, as amended, provides the opportunity for each county to work with the Virginia Department of Transportation in developing a Secondary Six-Year Road Plan,

WHEREAS, this Board had previously agreed to assist in the preparation of this Plan, in accordance with the Virginia Department of Transportation policies and procedures, and participated in a public hearing on the proposed Plan (2026 through 2031) as well as the Construction Priority List (FY2026) on May 12, 2025 after duly advertised so that all citizens of the County had the opportunity to participate in said hearing and to make comments and recommendations concerning the proposed Plan and Priority List.

WHEREAS, the Residency Administrator of the Virginia Department of Transportation, appeared before the board and recommended approval of the Six-Year Plan and budget for Secondary Roads (2026 through 2031) and the Construction Priority List (FY2026) for King and Queen County,

NOW, THEREFORE, BE IT RESOLVED that since said Plan and budget appears to be in the best interests of the Secondary Road System in King and Queen County and of the citizens residing on the Secondary System, said Secondary Six-Year Plan (2026 through 2031) and Construction Priority List (FY2026) are hereby approved as presented at the public hearing.

A COPY,

TESTE:

_____

County Administrator

AGENDA: May 12, 2025 Regular Meeting

ITEM #6:

Public Hearing:

SP24-04, Mattaponi Sand and Gravel, LLC

We will now hold a public hearing on SP24-04.

I ask the Director of Community Development to provide proof of publication and background information on the site plan request.

I now open the public hearing, citizens wishing to make comments on the proposed site plan, please come forward, state your name and the district you reside in.

Once the hearing is closed, action will be needed to either accept or not accept the recommendation for approval of SP24-04 by the Planning Commission.

ATTACHMENTS:

- Memo from Director of Community Development including site plan application and related information.

King and Queen County

Founded 1691 in Virginia

Office of the Zoning Administrator
P.O. Box 177 • King and Queen Court House, Virginia 23085
Phone: (804) 785-5985 • Fax: (804) 785-5999

MEMORANDUM

TO: King & Queen County Board of Supervisors
Vivian Seay, County Administrator/County Attorney

FROM: Donna Sprouse, Director of Community Development

DATE: May 6, 2025

RE: Planning Commission's Recommendation – SP24-04 – Mattaponi Sand & Gravel LLC

During the May 5, 2025 Planning Commission meeting, the Planning Commission held a public hearing to consider the following...

- **SP24-04 – Mattaponi Sand & Gravel LLC – Level 3 Site Plan**

  Request for approval of a level 3 site plan to operation a surface mine on property located at the intersection of Spring Cottage Road and Eastern View Road, further identified as County Tax Map No. 1632-78R-680. Conditional Use Permit (CUP) approval was previously granted by the King & Queen County Board of Supervisors on December 9, 2002.

A motion was made by Mr. Wilson to recommend approval of SP24-04 as presented, seconded by Mr. Fleming.

Voting For: Richardson, Massey, Fleming, Wilson, Coleman, Jackson, Bradley
Voting Against: None
Abstain: Hendrickson

April 6, 2025

LEVEL 3 SITE PLAN
SP24-04

Mattaponi Sand & Gravel, LLC – Applicant/Owner
Jonathan Blair Wilson, P.E. – Agent
Tax Map 1632-78R-680

PROOF OF PUBLICATION

Public notice ran in both the Tidewater Review and Rappahannock Times for 2 consecutive weeks (April 23rd & April 30th). A courtesy copy was published in the Country Courier in their April 23rd edition. Adjoining property owners were notified via certified return receipt mail of the public hearing.

BACKGROUND

The Planning and Zoning Department received a land development application on November 25, 2024 from Jonathan Blair Wilson, P.E., on behalf of Mattaponi Sand & Gravel, LLC, requesting the approval of a Level 3 Site Plan to allow for a surface mine.

GENERAL INFORMATION

LOCATION

The property is located at the intersection of Spring Cottage Road and Eastern View Road, in the Newtown Magisterial District. The property is identified as County Tax Map Parcel No. 1632-78R-680.

PROPOSAL

The applicant is requesting approval of a level 3 final site plan for a surface mining operation. The mining operation will extract sand with no processing, other than that required to facilitate the hauling of material.

ZONING ORDINANCE

According to Article 4, Permitted Uses, Table 4.1, Permitted Use Table, Surface Mining on at least 5 acres; no processing, is allowed in the Agricultural Zoning District with the approval of a conditional use permit. Special Conditions are as follows: (a) a minimum lot size of five (5) acres shall be required; (b) no such activity shall take place within a required yard; (c) there shall be no processing or manufacturing on the premises other than such activity as may be necessary to facilitate the hauling of materials, specifically, the screening, sifting, separation and washing of the extracted resource on the site of extraction by manual or mechanical means; (d) a plan shall be submitted showing the original and proposed final grades of areas to be disturbed and the means to be taken to facilitate drainage and to avoid erosion and sedimentation; and (e) the area of such use

shall have direct access to roads suitably paved and improved to accommodate truck traffic generated by the use.

ZONING

The acreage of the subject parcel is 186.27 acres. The property is zoned Agricultural (181.27 acres) and Industrial (5 acres). A portion of the property is located within the floodplain (Zone A) with the majority of the parcel located outside of the floodplain (Zone X).

PUBLIC AGENCY COMMENTS

STORMWATER & EROSION

Stormwater and Erosion and Sediment Control is regulated by Department of Energy (DOE) formally Department Mines Mineral and Energy (DMME). Environmental Codes Compliance Officer, Joshua Rellick reviewed the site plan and determined that it satisfies the regulations under the purview of his office (CBPA Requirements).

HEALTH DEPARTMENT

Environmental Health Specialist, Brandy Colgin, has issued a permit for a new septic system and well for the scale house/office trailer. (copy attached)

TRANSPORTATION

VDOT has issued approval of the site plan as it relates to the entrance design for the proposed project. Prior to start of operations/construction, a VDOT entrance permit must be obtained, inspected and approved by Virginia Department of Transportation. (copy attached)

SUMMARY/STAFFS FINDINGS & RECOMMENDATION

CONDITIONS

The King & Queen County Board of Supervisors, during their December 9, 2002 meeting, held a public hearing to consider Conditional Use Permit CU02-08 for a surface mining use. A motion was made and a vote taken by the Board of Supervisors to approved Conditional Use Permit CU02-08 with the following conditions:

1. 25% or more of the site will be undisturbed and left for buffering including the following:
    A. 300' setback from Rt. 628
    B. 50' setback from all property lines

C. 300' setback/buffer from the Garnett property line continuing the full length of that property line (650 feet approximately)
D. No impacts to wetlands or RPA

2. Hours of Operation:
   7 a.m.- 6 p.m. Monday thru Friday – with no loaded trucks leaving the site until after morning school bus routing.
   7 a.m. – 12 p.m. Saturday

3. Maximum of 50 loads of material per day during peak demand periods usually June – September. Normal operations would be [a] maximum [of] 30 loads per day.

4. Paved construction/commercial entrance to VDOT standards and stoned back 300' from Route 628 to control dust and debris at highway.

5. Any fuel tanks on site will have self-containment systems with roofs.

6. Sewage disposal facilities will consist of portable toilets unless or until a scale house is constructed.

7. The phasing and buffering of this operation are represented on the attached site plans and will be honored.

8. Drainage issues, Erosion and Sedimentation, and site reclamation will be bonded and overseen as part of the Department of Mines, Minerals and Energy'[s] own permitting process.

9. Fill material can be sold to independent contractors subject to hours of operation and availability of material.

During the same meeting, a public hearing was held by the Board of Supervisors to rezone a portion of tax map 1623-78R-680, 5 acres from Agricultural to Industrial. A motion was made and a vote taken to approve RZ02-02 with the following proffered conditions:

1. The 5 acres to be rezoned is for sand and gravel processing only and the owner will within 12 months of project completion make application to rezone this area back to whatever the adjoining zoning district is at the time. The screening plant will be completely disassembled and removed from the site upon completion.

2. Sprinkler systems will be used to minimize dust.

Mattaponi Sand and Gravel, LLC wishes to utilize the existing approved conditional use permit, as approved during the December 9, 2002 public hearing. This application is a request for final site plan approval based on those previous approved conditions.

After conducting site plan review and receiving approvals from all reviewing agencies and departments, staff recommends approval of the level 3 site plan contingent upon obtaining all federal, state, and local approvals/permits prior to start of operation/construction.

During the Planning Commission's public hearing, held May 5, 2025, a motion was made by Mr. Wilson to recommend approval of site plan SP24-04 as presented, seconded by Mr. Fleming.

Voting For: Richardson, Massey, Fleming, Wilson, Coleman, Jackson, Bradley

Voting Against: None

Abstain: Hendrickson

SP24-04

King & Queen County Land Development Application

Planning & Zoning Department
P.O. Box 177
King & Queen Courthouse, VA 23085
Phone: (804) 785-5975 or (804) 769-5000
Fax: (804) 785-5999 or (804) 769-5070

Please print in ink or use a typewriter

Applicant: Mattaponi Sand & Gravel LLC

Applicant's Address: P.O. Box 2000, Gambrills, MD 21054

Applicant's Phone: (443) 871-3440

Agent (Contact Person): Jonathan Blair Wilson, P.E.

Agent's Address: P.O. Box 51, Urbanna, VA 23175

Current Property Owner: Same as applicant

Owner's Address: _____

Owner's Phone: _____

Correspondence to be sent to: X Applicant _____ Owner X Agent _____ Other _____

Tax Map Number: 1632-78R-680 Magisterial District: Newtown

General Project Location: Intersection of SR 628 and SR 639

Size of Request: 186.27 acres

*Are Proffer's being offered along with this Application: YES _____ or NO X . If so please attach.

Check Appropriate Request:

Zoning Administrator
_____: Site Plan (Level 1)
_____: 1-2 Lot Subdivision Request
_____: Family Subdivision Review
_____: Boundary Line Adjustment
_____: Plat Approval

Planning Commission
_____: Site Plan (Level 2)
_____: Chesapeake Bay Exception
_____: Other
_____: Final Plat Review for Minor & Major Subdivision

Planning Commission & Board of Supervisors
_____: Rezoning
_____: Conditional Use Permit
_____: Zoning Ordinance Text Amendment
_____: Subdivision Ordinance Text Amendment
X : Site Plan (Level 3)
_____: Other
_____: Preliminary Plat Review for Minor & Major Subdivision

Board of Zoning Appeals
_____: Administrative Appeal
_____: Variance
_____: Special Exception
_____: Other

King & Queen County Land Development Application

Complete As Applicable:

Name of Subdivision, Development, or Proposal: Mattaponi Sand & Gravel Mine Site

Proposal/Request: Level 3 Site Plan Approval for a surface mining operation conforming with CU02-08.

Reason for Request: Required by county code of ordinances.

Applicant: The information provided is accurate to the best of my knowledge. I acknowledge that any percolation tests, topographic studies, or other requirements of the Health Official or the Zoning Administrator will be carried out at my expense. I understand that the County may deny, approve, or conditionally approve that for which I am applying. I certify that all property corners have been clearly staked and flagged.

Applicant's Signature: _____ **Date:** 11/14/24

Owner: I have read this completed application, understand its content, and freely consent to it's filing. If this application is for the purpose of subdivision, further subdivision of this property will require a new application and approval by the Board of Supervisors. Furthermore, I grant permission to the Zoning Administrator and the other County Officials to enter the property and make such investigations and tests as they deem necessary.

Owner's Signature: _____ **Date:** 11/14/24

NARRATIVE REPORT

Project Description:
Mattaponi Sand & Gravel, LLC is the owner of record of King and Queen County Tax Parcel 1632-78R-680 and seeks approval for a Level 3 Site Plan from the King and Queen County Board of Supervisors to conduct mineral mining on the 186.27 acre parcel in accordance with the Code of King and Queen County and the Conditional Use Permit CU02-08 as approved by the King and Queen County Board of Supervisors on December 9, 2002. The parcel is zoned Agricultural District (181.27 acres) and Industrial District (5.00 acres). Mineral mining is permitted in the Agricultural District and in the Industrial District.

It is anticipated that the Virginia Department of Energy, Division of Mineral Mining (VDE DMM) will issue a mining permit to Mattaponi Sand & Gravel LLC to conduct surface mining of mineral soils on Tax Parcel 1632-78R-680, subsequent to the issuance of a Virginia Department of Transportation Land Use Permit for the new commercial entrance proposed with the project to access State Route 628, Spring Cottage Road.

Mattaponi Sand & Gravel LLC intends on constructing a wash plant for sorting, grading and classifying raw mined materials, and constructing mining operation supporting infrastructure consisting of an administrative office with restroom facilities for employees and visitors, a water supply well for domestic use, and weigh scales on the property. A sediment basin with a wet retention pool will be constructed adjacent to the wash plant. The sediment basin will provide a suitable source and volume of water to enable the wash plant to sort and complete gradation of the mined materials with a wet sieve process. Water will be pumped from the sediment basin wet retention pool up to the wash plant. Wash water from the sieve operation will be returned to the sediment basin for recycling and reuse.

Sanitary facilities to serve the mine employees, mine inspectors and mine visitors will be the restroom that will be located in the administrative office to be constructed on Tax Parcel 1632-78R-680. Water supply and septic drainfield facilities servicing the administrative office on Tax Parcel 1632-78R-680 will permitted and constructed according to Virginia Sewage Handling and Disposal Regulations.

Buffers and Setbacks:
The surface mining operations will be obscured from public view with the maintenance of the Conditional Use Permit CU02-08 300-foot and 50-foot required undisturbed buffers, and the maintenance of the Resource Protection Area (RPA) and RPA 100-foot width buffer. These buffers are currently forested and will be maintained in their current natural conditions. Photographs of the current forested buffers as viewed from State Route 628 are included at the end of this Narrative Report.

Traffic Generation:
The Mattaponi Sand & Gravel mine site is expected to employ a maximum crew of 8 persons to operate and maintain mining equipment and perform administrative duties on the property. The maximum number of trucks that may export material from the site each day is 50 as stipulated

with the Conditional Use Permit CU02-08. Therefore the maximum number of empty trucks that will enter the site each day will be 50, and the maximum number of loaded trucks that will exit the site each day is 50.

Vehicular trip generation for the site is expected as follows:

TRIP GENERATION 11/13/2024

Mattaponi Sand & Gravel, LLC

Tax Parcel 1632-78R-680 ENTRANCE SPRING COTTAGE ROAD, S.R. 628

Land Use	Intensity	Daily Trips	AM or PM Peak Hour Volumes		
Sand & Gravel Surface Mine	n/a		Total	Enter	Exit
ITE Code (not applicable)		132	15	8	7

Calculations:	Trucks per day
Operational days	52 weeks per year X 6 haul days per week = 312 haul days/year
Anticipated mining life	10 years x 312 haul days/year = 3120 haul days
Peak Annual Tonnage	390000 tons/year
Average Vehicle Load	25 tons per vehicle
Average Tonnage per day	390000 tons/year /312 haul days/year =1250 tons/day
Trips per day (loaded)	1250 tons/day/25 tons/vehicle =50 VPD Max. per CU02-08
	50 VPD x 2 = 100
Total Average Trip Ends	VPD (50 empty in + 50 loaded out)
Employees	8 employees
Total Average Trip Ends	4 trip ends/employee x 8 employees = 32 VPD
Combined PEAK Total ATE	132 (traveling North or South along SR 628)
AM or PM PHV	132 x 11% = 15
Enter/Exit Split	53/47 8 entering/7 exiting
PHV right turns is 50-percent of 8 entering vehicles per hour	4

Hours of Operation:
7:00 AM to 6:00 PM Monday through Friday with no loaded trucks leaving the site until after King and Queen County Public Schools morning bus routes are completed, and 7:00 AM to 12:00 PM on Saturday. The mine site will be closed on Sunday.

Outdoor Lighting:
No permanent outdoor lighting is being proposed with the mine site with the exception of lighting shown for the office area parking and that which is required by the building code for ingress and egress doors to the office.

Outdoor Speakers/Paging System:
No outdoor speaker or paging systems are proposed with the project.

Utilities:
Power service to the building and wash plant will be coordinated with the utility service provider.

Buildings and Structures:
Buildings and structures are shown on the site plan. Dimensions from the office building to front, left side, right side and rear property lines are identified on Sheet C20 of the site plan.

Sanitary Facilities:
Restrooms for employees and visitors will be provided in the administrative office. Sewage disposal will be with an on-site septic drainfield system.

Water Supply:
Water supply will be provided with a new Class IIIB groundwater supply well.

Dust Control:
Airborne sediments will be controlled according to Virginia Department of Energy Mineral Mining standards. During periods of dry weather, wetting of the haul roads using a sprinkler or similar spray discharge system mounted on a water tank truck will be employed as necessary to suppress and control dust.

Storm Runoff and Erosion Control:
Adequate provisions for controlling storm runoff, erosion and sedimentation from the surface mining operation have been included on the site plan for the project. The Virginia Department of Energy permit for the surface mining requires when surface mining in an area has been completed that the area be reclaimed. The reclamation plan for this site is to establish native ground cover vegetation, other approved grasses, or to implement the Forestry Reclamation Approach according to the Virginia Department of Energy Mine Operator's Manual. The reclamation grading plan promotes sheet flow to the project's permanent sediment basin. The sediment basin provides for a permanent wet retention pool to assist with the sedimentation process and attenuate peak storm event rates of discharge prior to release of site runoff through a stable rip rap stone outlet level spreader apron to the existing 100-foot Resource Protection Area

forested buffer. The permanent pond and level spreader outlet is designed for the project combined with the forested natural buffers to minimize storm runoff velocities and provide for water quality enhancement using natural sedimentation and filtration processes.

Chesapeake Bay Preservation Area:
The mine site has been designed to keep all mining and land disturbance landward of designated Resource Protection Areas (RPA) and RPA buffers.

The mine site mining and reclamation plan converts the property's silvicultural/forestry land use to an impoundment facility (excavated surface mine) where all surface runoff is retained within the mine limits. Final reclamation of the mined property will revert the land use back to a forestry or meadow land cover condition where pre-development and post-development runoff volumes, velocities and pollutant generation are expected to be equal.

Project Site Conditions:
The project site topography ranges from mild to severe. Stormwater runoff from the site is currently conveyed by overland flows generally in a west direction to the Mattaponi River. The Mattaponi River is non-tidal along this section of the river.

The property contains both Chesapeake Bay Preservation Area Resource Protection Areas (RPA) and Resource Management Areas (RMA). Non-tidal wetlands are located within the boundaries of the project. The limits of the non-tidal wetlands were field identified and flagged by George M. Junkin, Certified Wetlands Delineator #93MD0510034B. Flagged wetland limits were survey located by Bay Design Group. The U.S. Army Corps of Engineers has not issued a Jurisdictional Determination and confirmation of the surveyed wetland limits as of the date of the preparation of this report. No regulated non-tidal wetlands will be disturbed with the mining and reclamation activities on the project.

Project site conditions are identified on the Plan of Development.

Property Owner:
Mattaponi Sand & Gravel LLC

Adjacent Property:
Adjacent property ownership is identified on the project plans.

Offsite Areas:
There are no offsite areas associated with this project.

Soils:
Soils in existence prior to proposed surface mining are identified on Sheet C3 of the Level 3 Site Plan. The predominate soil is Tarboro sand, which is a hydrologic group "A" soil.

Critical Erosion Areas:
Critical erosion areas that must be protected to the maximum extent practical include the existing

roadside drainage channels, streams, non-tidal wetlands, and the adjacent properties. No other areas are considered to be critical.

Erosion and Sediment Control Measures:
The mining operations and erosion and sediment control measures to be implemented on the project site are regulated by the Virginia Department of Energy. Virginia Department of Energy staff conduct periodic inspections of all mine facilities to ensure the performance and adequacy of erosion and sediment control measures to protect areas located outside of the active mining pit areas. Temporary erosion and sediment control measures to be employed during reclamation grading operations include silt fencing, diversion dikes, culvert inlet protection, sediment basins, and dust control. Permanent erosion and sediment control measures to be implemented with the project reclamation include rip rap stone outlet protection and slope stabilization, permanent sediment basins, level spreaders, permanent seeding, mulching, erosion blankets and matting, and the establishment of vegetative cover over disturbed soil surfaces. All erosion and sediment control practices shall be in accordance with the standards and specifications as prescribed in the Virginia Department of Energy Mine Operator's Manual and as supplemented by the 1992 Virginia Erosion and Sediment Control Handbook.

Structural Practices & Vegetative Practices Proposed:
3.02 Construction Entrance
3.05 Silt Fence
3.08 Culvert Inlet Protection
3.09 Diversion Dike
3.13 Sediment Trap
3.14 Sediment Basin
3.18 Outlet Protection
3.19 Rip Rap
3.30 Topsoiling
3.31 Temporary Seeding (as required)
3.32 Permanent Seeding
3.35 Mulching
3.36 Soil Stabilization Blankets and Matting
3.39 Dust Control (as required)

Management Strategies:
See the project site plan. All sediments shall be confined within the project limits. Surface runoff will be directed to stabilized and adequate storm drainage channels or discharged in the form of sheet flow to forested buffers.

Permanent Stabilization:
All denuded areas will be stabilized with native ground cover vegetation as identified on the plans or with other approved groundcovers according to the Virginia Department of Energy Mine Operator's Manual.

Stormwater Management & Drainage Calculations:

In summary, the minimal percentage of site impervious area, revegetation and proposed reclamation of mined areas, and flow attenuation through the permanent pond with discharges in the form of sheet flow to the extensive forested buffers surrounding the mine site are expected to result in no increase is runoff from the project site. Additionally, the total project area of 127.56 acres of land disturbance is significantly less than 1-percent of the total contributing Mattaponi River watershed area at the point where the site contributes flow to the Mattaponi River. The significant difference in size of the offsite contributing drainage area to the onsite development area results in no change to the watershed hydrology, and no change to the total runoff volume, peak discharge rate or velocity of flow in the receiving channel being the Mattaponi River.

The Virginia Department of Energy regulates surface mining operations for compliance with Virginia stormwater management and erosion and sediment control regulations.

Maintenance:

Temporary erosion and sediment control measures are to be inspected at the end of each workday, and after each rainfall. Damaged or inoperative control measures should be replaced and/or repaired immediately. Sediment accumulations shall be removed and disposed of in approved spoil areas to ensure satisfactory performance of the drainage system. Permanent erosion and sediment control measures consisting of permanent vegetation, rip rap stone outlet protection and slope protection should be inspected on an annual basis and after storm events with rainfall intensity of 2.8 inches per hour or greater. Damaged areas or measures should be repaired.

Mattaponi Sand & Gravel

OPERATIONAL PLAN
for Mattaponi Sand & Gravel Mine Site

MAPS

A general location map showing sensitive features within 1000 feet of the Mattaponi Sand & Gravel property boundaries and mining site is shown in Appendix A and is part of this operational plan.

SIGNS

A 4-foot by 4-foot sign shall be posted at the mining site adjacent to the principal access road. The sign shall be mounted on a metal or wood post with a mounting height at least 4-feet above ground level. The name of the permittee and the Virginia Department of Energy permit number shall be identified on the sign in a clear and legible format with font sizing appropriate for size of the sign and distance from the edge of the principal access road.

MARKING PERMIT BOUNDARY

The permit boundary of the mine site and plant shall be clearly marked with identifiable markings when mine related disturbing activities are within 100' of the permit boundary. The permit boundary will be marked using a combination of witness stakes in open areas consisting of metal fence posts, 1-inch diameter white PVC Sch40 pipe posts, fiberglass boundary posts, or similar permanent delineation materials. In wooded areas, the permit boundary will be marked by painting and flagging of trees at the permit boundary.

ROADS

The entrance to the mine site will require a Virginia Department of Transportation (VDOT) Land Use Permit for a new commercial entrance conforming to the current VDOT Road Design Manual Appendix F standards. The new commercial entrance will have a minimum paved width of 30-feet with 50-foot radii conforming to VDOT requirements. The new entrance will be surfaced with asphalt or concrete extending from the existing Spring Cottage Road, State Route 628 edge of pavement interior to the project site a minimum distance of 100-feet

(Haul Road STA 1+00). Beyond the new VDOT commercial entrance, the access road will be 30 feet in width and surfaced with VDOT No. 21A aggregate material between Haul Road STA 1+00 to 3+50, with the remainder of the Haul Road surfaced with a combination of sand and gravel to create an all-weather travel surface. Internal service roads will be installed as needed by the mine operator. Internal service roads will be a minimum width of 15-feet. All access roads will be properly maintained to ensure that mud and debris are not tracked onto public roads. All access roads and service roads will be properly maintained to control dust. Maintenance of the road system shall consist of inspecting, repairing and cleaning of roadways, ditches and culverts as necessary. Internal service roads and principal access roads shall be planned to minimize the impact of traffic, dust, and vehicle noise on areas outside the mining site.

Road surfaces and ditches will be stabilized with rock or other suitable paving material or vegetated in the case of ditches. When a road is abandoned, steps shall be taken immediately to minimize erosion and establish vegetative cover. These steps will involve scarifying the road to a depth of 12 inches and seeding to meet the post mining land use requirements. The haul roads may be left un-reclaimed with the landowner's approval following the completion of mining. Sediment control shall be provided for roads to minimize sediment that leaves the permitted and disturbed area. If necessary, culverts with a minimum diameter of 12 inches, but adequate to carry storm runoff, will be installed at intervals to prevent overloading of ditches. Where necessary, the inlet end shall be protected by a headwall of a suitable material and the outlet end shall discharge onto an apron of rock riprap or concrete. Runoff will not be allowed to flow over an unprotected fill slope.

DRAINAGEWAYS

No impacts to natural drainageways will be allowed. There are no plans to mine near any intermittent or perennial streams.

100-foot Chesapeake Bay Preservation Area Resource Protection Area buffer shall be maintained. No mining or disturbance of the RPA buffers is permitted.

A 50-foot buffer zone of undisturbed vegetation or undisturbed forest will be provided and maintained between the mining operation and any stream, not otherwise protected by the RPA buffer requirements, or by King and Queen County Conditional Use Permit CU02-08 300-foot and 50-foot undisturbed buffers. Buffer zones will be maintained in addition to proper sediment control.

SCREENING

The Mattaponi Sand & Gravel mine site shall be effectively screened from public view using one or a combination of methods consistent with the following:

1. King and Queen County Conditional Use Permit CU02-08 undisturbed buffers consisting of a 300-foot natural undisturbed forested area within the property boundaries as measured from the State Route 628 public right-of-way and as measured from the property boundary with the now or formerly Garnett property, and a 50-foot natural undisturbed forested area within the property adjacent to all other exterior property boundary lines;
2. Maintenance and use of natural topography;
3. Constructed earth berms, where determined to be necessary; and
4. Planting of trees, where determined to be necessary.

Trees specifically planted for screening purposes shall be evergreen species of adequate height and suitable to the area. Plantings shall be spaced to accommodate the mature size of the species. Plantings shall be provided in at least two (2) rows with trees staggered along the rows as the Virginia Department of Energy minimum requirement.

Constructed earth berms for screening purposes shall be sloped at 3H: 1V. All berms shall be seeded to prevent soil erosion. The toe of berms shall not be constructed within 25-feet of adjacent property boundaries without written permission from the adjoining property owner. Silt fence shall be installed along the toe of berms on the exterior facing side. Screening berms are to be removed and berm materials are to be used during the reclamation of the mining site at the completion of mining operations.

TOPSOIL AND OVERBURDEN STORAGE

Temporary erosion and sediment control measures shall be installed prior to any land disturbance associated with site preparation or mining activities. Erosion and sediment control measures shall conform to the Virginia Department of Energy Mineral Mine Operator's Manual and/or the Virginia Erosion and Sediment Control Handbook. Topsoil and overburden will be removed and stockpiled or used to create diversion berms around the perimeter of the site. All constructed berms will have a top width of at least 4 feet and shall not exceed 5-feet in height as measured from the existing natural ground elevation. Berm side slopes will be 3H:1V or less and will be compacted and vegetated. Topsoil shall not be removed from the permitted mining site without prior approval from the Virginia Department of Energy. Diversion berms will be inspected on a regular basis and maintained as necessary. Berms shall not be constructed within 25 feet of adjacent property boundaries without written permission from the adjoining

property owner. Tree roots and limbs generated on-site may be stockpiled within the permit area.

As areas are completed, the berms will be utilized during reclamation activities to obtain final grade and promote vegetative cover.

MINING METHOD

Mining operations shall be conducted to ensure that all sediment generated from the mining activities at the site will be directed into the mine pit. Grading and surface drainage facilities shall be implemented to minimize soil erosion, adequately control runoff and direct such runoff to stable outlets. Temporary and permanent erosion and sediment control measures shall be implemented as necessary to confine all sediment to the permitted active mine site. Perimeter buffers shall be maintained to further enhance the project site's erosion control program.

Mining will be conducted using dragline equipment, front-end loaders, dozers, off-road dump trucks, pans, excavators and other equipment necessary to remove topsoil and overburden, prepare the site for mining, mineral extraction operations, and during reclamation of mining site.

The mining is expected to extend to an average depth of approximately 20 to 38-feet below the existing ground elevation. Overburden soils are expected to range from 1 to 6 feet below the existing ground surface, with mineable minerals located beneath the overburden soils.

Wooded areas located within the permitted mine limits will be cleared and grubbed. Individual mine cells will be designated by the mine operator and mining will proceed on a cell by cell basis. Areas cleared or disturbed outside of active mining cells will be stabilized with temporary or permanent seeding.

Active mining will commence on individual cells with the removal and stockpiling of overburden soils from the active mining cell area. Mineral extraction will be accomplished in a single lift, with mine pit walls extending from the depth of the overburden soils to the depth of the pit floor (depth varies) below the existing ground surface. The sand and gravel material within the mineral extraction zone will be removed so the pit wall remains stable. No activity will be permitted on the pit floor below or near areas actively being mined. Overburden material will be stripped back at least 10 feet from the top edge of the mineral extraction layer at the pit wall to create a bench at the top of the excavation. Benching the overburden soil away from the top of the pit wall will assist in decreasing overburden soil pressure acting on the face of the pit

wall. The overburden soil will be sloped away from the bench at the active pit area back to natural ground with a slope equivalent to the angle of repose of the overburden soil. All slopes within the mineral extraction zone and overburden layers will be maintained at the angle of repose of the various strata or flatter during mining operations. Final slopes will be graded to 3H:1V with reclamation activities being conducted on a cell by cell basis.

DRAINAGE CONTROL

Mining operations will be conducted to direct all surface runoff into the mine pit area. The mine pit will be excavated to depths approximately 20 to 38-feet below the surrounding adjacent grade, or depths as shown on the Plan of Development. However, the mine operator may extend the depth of extraction to the full extent of the mineral bearing strata, which may be greater than 38-feet. All surface runoff *within areas of active mining* will be contained within the mine pit. The pit will contain at least 0.125 acre-feet of volumetric storage for sediment control. Temporary sediment basins will be constructed as necessary and will include minimum normal pool depths of 3-feet measured from the sediment basin floor. The normal pool depth may be regulated with weir outlets, or with float level controls and dewatering pumping. Dewatering effluent will be clear, non-turbid and free of sediment. Dewatering effluent will be discharged, if necessary, to secondary sediment trapping devices such as dewatering pits or silt bags prior to final release through stabilized outlets.

METAL AND DEBRIS

All metal, lumber and debris generated on site will be stored in one location within the permitted area for use in repair of equipment, or to be sold at a later date. No metal will be left on the site after mining is complete. Any off-site generated metal waste will be promptly removed from the mine site. There will be no landfilling activities on the permitted area.

ACID MATERIAL

All acid-generating spoil materials will be segregated and buried to a minimum depth of four feet.

OFF-SITE MATERIALS / HAZARDOUS WASTE

No off-site materials or hazardous waste will be transported to the Mattaponi Sand & Gravel Mine Site.

No trash and/or debris will be allowed to accumulate on-site. All on-site generated waste such as used petroleum products, contaminated fuel, used anti-

freeze, used batteries, used cleaning solvents, etc. will be properly stored until disposed of at an approved off-site facility.

GROUNDWATER

Shallow seasonal perched ground water may be encountered during mineral extraction. Dewatering of the mine pit shall be conducted in accordance with the Mine Operator's Manual.

Soil evaluation test pits advanced by the Owner indicate no seasonal water table to depths of 20-feet below the existing ground surface, consistent with the maximum depth of the test pit excavations. Mineral extraction may extend to depths of approximately 38-feet below the ground surface, or 18-feet below the test pit excavations, where the depth to the seasonal high water table may be encountered. Dewatering of the mine pit may be necessary during pit excavation operations. Dewatering required to control groundwater seepage in the active mine pit will be conducted to direct pumping effluent to an appropriately sized dewatering structure, sediment trap or basin. Dewatering structures may consist of portable sediment tanks, filter boxes, silt bags or straw bale/silt fence pits conforming to Virginia Erosion and Sediment Control Handbook Standard 3.26. Sediment trapping and dewatering structure outlets will be sized to dissipate pump discharge velocity and ensure that effluent is released from the dewatering structure or sediment trap at velocities that are non-erosive to the receiving drainage channel, stream or forested buffer prior to ultimate discharge into the Mattaponi River.

Mining operations and excavation below the shallow near surface aquifer will not impact the groundwater supply wells in the vicinity of the mine site. There are two (2) expected domestic water supply wells within 1000-feet of the Mattaponi Sand & Gravel Mine Site. The wells are located on properties situated at 1381 Spring Cottage Road and 1878 Spring Cottage Road approximately 200-feet south and 670-east of the designated mine limit.

No impact on groundwater resources are expected to result from the mining operations or from temporary dewatering of the mine pit. The mine site is located adjacent to tributary streams that discharge to the Mattaponi River. Seasonal rainfall, and the tributary streams will effectively recharge the shallow aquifer and will maintain the hydrologic balance of the shallow aquifer.

PETROLEUM AND OTHER SOURCES OF CONTAMINATION

Any above ground fuel storage tanks shall be double walled vessels or tanks shall be constructed with concrete containment dikes to prevent petroleum leakage and contamination. Fueling of mining excavation equipment will be conducted using portable storage containers or fueling trucks. Fueling will be accomplished to

minimize potential for petroleum spills and leakage. Any fuel that accidentally leaks onto the ground will be immediately cleaned up and the contaminated material will be removed from the site.

A Plan for Minimization of Adverse Effects on Water Quality will be implemented on this project to prevent the potential of petroleum products from entering the groundwater system. The following precautions will be taken:

1. *All major mobile equipment repairs will be made off the mine site at service provider shops.*
2. *Minor repairs made to mobile equipment will be made at least 200 feet from any ponds.*
3. *Fluids from repairs will be collected and disposed of properly offsite at an appropriate offsite disposal site.*
4. *A petroleum spill kit and spill kit materials will be available to clean up any accidental spills. Any soil contaminated by an accidental spill will be removed from the site and disposed of in an approved Virginia DEQ approved landfill facility or sent to an appropriate mitigation facility.*
5. *Fuel storage on site will be limited to a single 1,000 gallon tank. This tank shall be a double walled containment vessel. The fuel tank will be located at least 200 feet from any pond.*

SIMULTANEOUS RECLAMATION

The mine site will be reclaimed in general conformance with the Level 3 Site Plan dated November 13, 2024 and revised through February 17, 2025.

Once mining is complete in an individual cell area, the pit walls within the individual cell will be sloped to 3H:1V and the pit floor will be shaped and graded to conform with the final reclamation grading plan. All areas above the normal pool level of any permanent pond will be limed, fertilized, mulched, and seeded with the approved permanent vegetation mix.

Any area within the mine site where mining has not been completed but has been dormant and no land disturbance for a period of one year, will be sloped 3H:1V and the pit floor will be graded level. The dormant area above the normal pool level will be seeded with temporary cover vegetation, as directed by the Virginia Department of Energy.

Any area within the mine site where mining has not been completed but has been dormant and no land disturbance for a period of two years, will be sloped 3H:1V and the pit floor will be graded level. The dormant area above the normal pool level will be limed, fertilized, mulched, and seeded with the approved permanent vegetation mix, as directed by the Virginia Department of Energy.

RE-VEGETATION

No plant species considered a highly invasive species by the Commonwealth of Virginia will be planted on the mine site.

The soil will be tested before seeding. 1000 lbs/acre of 10-10-10 fertilizer or its equivalent will be used, if so recommended by the soil test, on all areas to be seeded. Two tons of agricultural lime will also be used, if needed as shown by the soil test, on all the areas receiving fertilizer and permanent seeding.

The temporary seed mixture will consist of 50 lbs/acre of annual rye except for foxtail millet, which will be planted at the same rate in the summer months.

The permanent seed mixture and seeding rate will be:

As specified on Sheet C8 of the above referenced Level 3 Site Plan.

CLOSURE OF ROADS OR OPENINGS

Upon abandonment of the mine, the operator shall effectively close or fence all roads, openings, and pits where hazardous conditions exist. Warning signs shall be posted. If fencing is necessary, the fence shall be 4-feet high woven wire with two strands of barbed wire on top. Intermittently worked mines shall also be closed or barricaded and posted with warning signs to prevent access to roads and hazardous areas.

King and Queen County

Founded 1691 in Virginia

Paul F. Koll, Zoning Administrator
P. O. Box 177 • King and Queen Courthouse, Virginia 23085
Phone: (804) 785-5985 • (804) 769-5011
Fax (804) 785-5999 • (804) 769-5070

December 10, 2002

Charles J. Kerns, Vice President
Chesapeake Forest Products Company, LLC
P. O. Box 311
West Point, VA. 23181

Re: CU02-08 Conditional Use Permit **Approved**
Surface Mining of Sand & Gravel
Spring Cottage Tract, Tax Map# 1623-78R-680

Dear Mr. Kerns,

The King & Queen County Board of Supervisors along with the Planning Commission held a joint public hearing on Monday, December 9, 2002 at the King & Queen County Administration Building in King & Queen Courthouse, Virginia. After review and public comment the Board of Supervisors did receive the Planning Commission's recommendation for approval. A motion was made and a vote taken by the Board of Supervisors to approve conditional use permit CU02-08 with the following conditions;

1. 25% or more of the site will be undisturbed and left for buffering including the following;
   A. 300' setback from Rt. 628
   B. 50' setback from all property lines
   C. 300' setback/buffer from the Garnett property line continuing the full length of that property line (650 feet approximately)
   D. No impact to wetlands or RPA

2. Hours of Operation;
   7 a.m. – 6 p.m. Monday thru Friday- with no loaded trucks leaving the site until after morning school bus routing.
   7 a.m. - 12 p.m. Saturday

3. Maximum of 50 loads of material per day during peak demand periods usually June – September. Normal operations would be maximum 30 loads per day.

4. Paved Construction/commercial entrance to VDOT standards and stoned back 300 from Rt. 628 to control dust and debris at highway.

5. Any fuel tanks on site will have self-containment systems with roofs.

6. Sewage disposal facilities will consist of portable toilets unless or until a scale house is constructed.

7. The phasing and buffering of this operation are represented on the attached site plans and will be honored.

8. Drainage issues, Erosion & Sedimentation, and site reclamation will be bonded and overseen as part of the Department of Mines, Minerals and Energy' own permitting process.

9. Fill material can be sold to independent contractors subject to hours of operation and availability of material.

Should you have any questions or if this office can be of any assistance please contact us at the above numbers.

Sincerely,

Paul F. Koll
Zoning Administrator

Cc: Andrea G. Erard, Assistant County Attorney

King and Queen County

Founded 1691 in Virginia

Paul F. Koll, Zoning Administrator
P. O. Box 177 • King and Queen Courthouse, Virginia 23085
Phone: (804) 785-5985 • (804) 769-5011
Fax (804) 785-5999 • (804) 769-5070

December 10, 2002

Charles J. Kerns, Vice President
Chesapeake Forest Products Company, LLC
P.O. Box 311
West Point, VA. 23181

Re: RZ02-02 Rezoning to "I" Industrial **Approved**
A Five (5) Acre Site on Tax Map # 1623-78R-680
Spring Cottage Proposed Sand & Gravel Mining Operation

Dear Mr. Kerns,

The Board of Supervisors along with the Planning Commission held a joint public hearing Monday, December 9, 2002 at 7:15 P.M. at the King & Queen County Administration Building in King & Queen Courthouse, Virginia. After review and public comment the Board of Supervisors did receive the Planning Commission's recommendation for approval. A motion was made and a vote taken by the Board of Supervisors to approve RZ02-02 with the following proffered conditions;

1. The 5 acres to be rezoned is for sand and gravel processing only and the owner will within 12 months of project completion make application to rezone this area back to whatever the adjoining zoning district is at the time, The screening plant will be completely disassembled and removed from the site upon completion.
2. Sprinkler systems will be used to minimize dust.

Should you have any questions or if this office can be of any further assistance please contact us at the above telephone numbers.

Sincerely,

Paul F. Koll
Zoning Administrator

Cc: Andrea G. Erard, Assistant County Attorney

VDH VIRGINIA DEPARTMENT OF HEALTH

King & Queen County Health Department
167 Courthouse Landing Road
King & Queen Courthouse, VA 23085
(804) 785-6154

PE Construction Permit 32.1-163.6

March 12, 2025

Sewage Disposal System Construction Permit - Va. Code § 32.1-163.6

****Revised

RE: Mattaponi Sand & Gravel LLC
P.O. Box 2000
Gambrills ,MD 21054

Property Address: 0000 Spring Cottage Road
Newtown, 23126
Tax Map/GPIN: 1632-78R-680 / HDID# 149-24-092
County: KING AND QUEEN/097
Permit ID: 097-STS-110917 Reserve: 100% reserve area provided
System Capacity: Non-Residential, 450 Gallons per day
Occupancy Limit: 8 Employees and 50 Transient material delivery drivers (450)gpd

Dear Mattaponi Sand and Gravel LLC,

This letter and the attached drawings, specifications and calculations dated 02/20/2025 constitute your permit to install a sewage disposal system, and private well if applicable, on the property referenced above. Your application for a permit was submitted pursuant to § 32.1-163.6 of the Code of Virginia, which requires the Virginia Department of Health (VDH) to accept designs for onsite sewage systems from individuals licensed as Professional Engineers (PEs). This law allows PEs to design onsite sewage systems that do not fully comply with the Sewage Handling and Disposal Regulations (12 VAC 5-610-10 et seq.) and requires VDH to accept such designs provided they comply with standard engineering practices, performance requirements set by the Board of Health, and certain horizontal setback requirements necessary to protect public health and the environment. VDH hereby recognizes that the design submitted by Jonathan Wilson, P.E. complies with the requirements of the Code of Virginia and the applicable regulations and grants permission to install the system as designed in the area shown on the attached plans and specifications.

If modifications or revisions are necessary between now and when the system is constructed, please contact the PE who designed the system upon which this permit is based. Should revisions be necessary during construction, your contractor should consult with the PE. The PE is authorized to make minor adjustments in the location or design of the system provided that adequate documentation is provided to the King & Queen County Health Department.

The PE that submitted the design for this permit is required by the Sewage Handling and Disposal Regulations to conduct a final inspection of this sewage system when it is installed and to submit an inspection report and completion statement to the King & Queen County Health Department. The sewage system may not be placed into operation until you have obtained an Operation Permit from the King & Queen County Health Department.

This Construction Permit is null and void if site and soil conditions are changed from those shown on your application or if conditions are changed from those shown on the attached plans and specifications. VDH may revoke or modify any permit if, at a later date, it finds that the system would threaten public health or the environment.

This permit approval has been issued in accordance with applicable regulations based on the information and materials provided at the time of application. There may be other local, state, or federal laws or regulations that apply to the proposed construction of this onsite sewage system. The owner is responsible at all times for complying with all applicable local, state, and federal laws and regulations. This construction permit is transferrable until expired or deemed null and void. A permit transfer form may be found on the VDH website at http://www.vdh.virginia.gov/environmental-health/gmp-2015-01-forms/ .

If you have any questions, please contact me.

This permit expires 09/12/2026.

Sincerely,

Brandy Colgin

CC: Jonathan Wilson, P.E.

Well and Sewage Contractors: Please notify Health Department and OSE or PE 48 hours prior to installation to arrange for inspection

WHAT YOU WILL NEED TO GET YOUR SEPTIC SYSTEM OPERATION PERMIT

Your system must have a satisfactory inspection at the time of installation. This will be done by your PE. Your PE must submit a copy of the inspection results, complete with an as-built diagram, to the Health Department.

Please ensure that your contractor turns in a Completion Statement to the local Health Department after installation.

If your permit is for an alternative system, you must sign, have notarized, and record the attached Notice of Recordation in your locality's land records. Please bring proof of this recordation to the local Health Department

If you have a conditional permit then you must sign, have notarized, and record the permit in your locality's land records. Please bring proof of this recordation to the Health Department.

IF YOUR PERMIT IS FOR BOTH A SEPTIC SYSTEM AND WELL YOU WILL ALSO NEED

Your well must have satisfactory inspection results after installation. Please give the Health Department several days notice to schedule this inspection before your Operation Permit will be requested.

The Health Department must receive a copy of your water sample test result being negative/satisfactory for coliform bacteria. You are responsible for performing this test and ensuring the results are received at the Health Department

Please ensure that your Well Driller submits a Uniform Water Well Completion Statement or GW-2 to the Health Department, including documentation of a proper well abandonment if required by permit

Allow 5 business days after the last piece of documentation is received for the Operation Permit to be issued. To avoid delays, clearly label each piece of documentation with the property Tax Map/GPIN number and HDID number shown above and on your construction permit. Please note that due to the individual circumstances of your permit there may be additional required items not covered by this checklist.

If you have any questions about any of the items on this list, please do not hesitate to contact the King & Queen County Health Department.

097-ESO-1099[illegible]

Commonwealth of Virginia

Application for: ☑ Sewage System ☑ Water Supply

VDH Use only
Health Department ID# [illegible]
Due Date

Owner Mattaponi Sand & Gravel LLC — Phone 443-871-3440
Mailing Address P.O. Box 2000 — Phone
Gambrills, MD 21054 — Fax
Agent Jonathan Blair Wilson, P.E. — Phone 804-513-9564
Mailing Address P.O. Box 1269 — Phone
West Point, VA 23181 — Fax
Site Address Spring Cottage Road
Newtown, VA — Email kmurray@chaneyenterprises.com

Directions to Property: SR 14 north to SR 721 north, left SR 639 west, Site is at ITX SR 639 w/ SR 628

Subdivision ______ Section ______ Block ______ Lot ______

Tax Map 1632-78R-680 Other Property Identification ______ Dimension/Acreage of Property 186.

Sewage System

Type of Approval: Applicants for new construction are advised to apply for a certification letter to determine if land is suitable for a sewage system and to apply for a construction permit (valid for 18 months) **only when ready to build.**

○ Certification Letter ◉ Construction Permit ○ Voluntary Upgrade ○ Repair Permit ○ Minor Modification

Proposed Use:

Single Family Home (**Number of Bedrooms** ____) Multi-Family Dwelling (**Total Number of Bedrooms** ____)

Other (describe) Office w/8 employees and up to 50 transient material delivery drivers (450 gpd)

Basement? ○ Yes ◉ No Walk-out Basement? ○ Yes ◉ No Fixtures in Basement ○ Yes ◉ No

Conditional permit desired? ○ Yes ◉ No If yes, which conditions do you want?

☐ Reduced water flow ☐ Limited Occupancy ☐ Intermittent or seasonal use ☐ Temporary use not to exceed 1 year

Do you wish to apply for a betterment loan eligibility letter? ○ Yes ◉ No *There is a $50 fee for determination of eligibility.

Water Supply

Will the water supply be ○ Public or ◉ Private? Is the water supply ○ Existing or ◉ Proposed?

If proposed, is this a replacement well? ○ Yes ◉ No If yes, will the old well be abandoned? ○ Yes ○ No

Will any buildings within 50' of the proposed well be termite treated? ○ Yes ◉ No

Well Type (e.g. domestic use, agricultural, irrigation, etc.) domestic Class IIIB

All Applicants

Is this property intended to serve as your (owners) principal place of residence? ○ Yes ◉ No

All applications must be accompanied by private sector evaluations and designs, unless a petition for VDH services is approved. Is a Petition for Service form attached? ○ Yes ○ No

In order for VDH to process your application for a sewage system you must attached a plat of the property and a site sketch. For water supplies, a plat of the property is recommended and a site sketch is required. The site sketch should show your property lines, actual and/or proposed buildings and the desired location of your well and/or sewage system. When the site evaluation is conducted the property lines, building location and the proposed well and sewage sites must be clearly marked and the property sufficiently visible to see the topography. I give permission to the Virginia Department of Health to enter onto the property described during normal business hours for the purpose of processing this application and to perform quality assurance checks of evaluations and designs certified by a private sector Onsite Soil Evaluator or Professional Engineer as necessary until the sewage disposal system and/or private water supply has been constructed and approved.

[signature] — REVISED 2-20-25

Signature of Owner/ Agent — Date

This form contains personal information subject to disclosure under the Freedom of Information Act. Revised 7/1/2019

JNY-ETR-119-10917

OSE/PE Report For:

☒ Construction Permit ☐ Repair Permit ☐ Voluntary Upgrade Permit ☐ Certification Letter ☐ Subdivision Approval

Property Location:

911 Address: Spring Cottage Road City: Newtown

Lot _____ Section _____ Subdivision _____

GPIN or Tax Map # 1632-78R-680 Health Dept ID # _____

Latitude 37.858097 Longitude -77.136392

Applicant or Client Mailing Address:

Name: Mattaponi Sand & Gravel LLC

Street: P.O. Box 2000

City: Gambrills State MD Zip Code 21054

Prepared by:

OSE Name David R. Miles License # 1940001111

Address P.O. Box 2270

City Kilmarnock State VA Zip Code 22482

PE Name Jonathan Blair Wilson License # 019961

Address P.O. Box 1269

City West Point State VA Zip Code 23181

Date of Report 11-5-24 Date of Revision #1 02-20-25

OSE/PE Job # WE-0238-25 Date of Revision #2 _____

Contents/Index of this report (e.g., Site Evaluation Summary, Soil Profile Descriptions, Site Sketch, Abbreviated Design, etc.)

Application

System Specifications

AOSE Soil Evaluation Report

Plans and Details

Certification Statement

I hereby certify that the evaluations and/or designs contained herein were conducted in accordance with the *applicable provisions of the* Sewage Handling and Disposal Regulations (12 VAC5-610), the Private Well Regulations (12 VAC5-630), *the* Regulations for Alternative Onsite Sewage Systems (12VAC5-613) and all other applicable laws, regulations and policies implemented by the Virginia Department of Health. I further certify that I currently possess any professional license required by the laws and regulations of the Commonwealth that have been duly issued by the applicable agency charged with licensure to perform the work contained herein. The potential for both conventional and alternative onsite sewage systems has been discussed with the owner/applicant.

☐ The work attached to this cover page has been conducted under an exemption to the practice of engineering, specifically the exemption in Code of Virginia Section 54.1-402.A.11

I recommend that a (select one): construction permit ☒ certification letter ☐ subdivision approval ☐ be (select one) Issued ☒ repair permit ☐ voluntary upgrade ☐ Denied ☐

OSE/PE Signature _____ Date Rev 02-20-25

System Specifications

VDH Use Only
HDIN: _____

Application Information

Name: Mattaponi Sand & Gravel LLC
Address: P.O. Box 2000
Phone: 443-871-3440
Gambrills, MD 21054

Location Information

Tax Map/GPIN #: 1632-78R-680
Property Address: Spring Cottage Road
Subdivision: _____ Section: _____ Block: _____ Lot: _____
Directions: SR 14 north, SR 721 north, left SR 639 to intersection with SR 628, west side of ITX

General Information

Property Type (e.g. residential): Industrial
Number of Bedrooms: _____
Daily Flow: 450 gpd
Conditions: _____
Notes: _____

Sewer Line

Diameter: 4 in. Material: PVC (or equivalent) Notes: _____

Pretreatment Unit(s)

Treatment Level: TL-1
Septic Tank Capacity: 1000 gallons
Number of Septic Tanks 1
Size of Septic Tank(s) 1000 gallons

Per the Sewage Handling and Disposal Regulations, check which option(s) chosen:

☐ Septic tank with inspection port ☒ Septic tank with effluent filter ☐ Reduced maintenance septic tank

Secondary treatment device(s), if applicable: _____

Notes: _____

Conveyance Line

Conveyance Method: Gravity
If pumping, include pump specifications sheet.
Material: PVC Sch40 Diameter: 4-inch
Notes: _____

Distribution Method and Header Lines

Distribution Method: Gravity
No. of boxes: 1 No. of outlets: 4
Surge or splitter box required: ☒ Yes ☐ No
Header Line Material: 4" PVC Sch40

Percolation Lines/Absorption Area

Dispersal Method (e.g. laterals, pad, mound): laterals

If using pressure dispersal (e.g. drip), include pressure dispersal specifications sheet.

No. of laterals/pads: 4 Length of lateral(s)/pad(s): 75 ft. Width of lateral(s)/pad(s): 36 in.
Center to center spacing: 9 ft. Installation depth: 24 in. Aggregate depth: 12 in.
Size/Type of Aggregate: VDOT No. 57 agg. or washed gravel Lateral/pad slope: 2-4 in. per 100 ft.
Reserve Area Provided: 100 % Notes: _____

Please Note: _____

Well Specifications

VDH Use Only
HDIN:

Applicant Information

Name: Mattaponi Sand & Gravel LLC
Address: P.O. Box 2000
Phone: 443-871-3440
Gambrills, MD 21054

Location Information

Tax Map/GPIN #: 1632-78R-680
Property Address: Spring Cottage Road
Subdivision: _____ Section: _____ Block: _____ Lot: _____
Directions: SR 14 north to SR 721 north to left onto SR 639 to intersection with SR 628, property west of ITX.

General Information

Well Purpose (select all that apply): ☒ Domestic Drinking Water ☐ Agricultural
☐ Irrigation ☐ Industrial/Commercial ☐ Geothermal
Well Class: IIIB
Minimum Casing Depth: 50 ft.
Estimated Water Usage: 450 GPD
Minimum Grout Depth: 50 ft.

Horizontal Setbacks

Distance from Building Sewer: 104.00 ft.
Distance from Pretreatment Unit(s): 115.10 ft.
Distance from Conveyance System: 124.08 ft.
Distance from Absorption Area: 493.84 ft.
Distance from Property Line: 159.50 ft.
Distance from foundations: 55.52 ft.
Distance from other source(s) of contamination: _____ ft.
List other source(s): _____

Note: _____

Site and Soil Evaluation Report

VDH Use Only
HDIN: _____

General Information

Date: 8/21/2024 King & Queen County Health Department

Owner: Bay Design Group; ATTN: Gordon L. Jones, L.S. Phone: 804-229-0015

Owner Address: P.O. Box 51 Urbanna, VA 23175

Property Address: Intersection Of Eastern View Road & Spring Cottage Road

Tax Map/GPIN #: _____

Subdivision: _____ Section: _____ Block: _____ Lot: _____

Soil Information Summary

1. Position in landscape satisfactory: ☒ Yes ☐ No Describe landscape position: Cleared/Sloping
2. Slope: 5-6 %
3. Depth to rock/impervious strata: Max. _____ in. Min. _____ in. ☒ Not observed
4. Free Water Present: ☐ Yes ☒ No Range in inches: _____
5. Depth to seasonal water table (gray mottling or gray color): 42-48+ inches ☐ Not observed
6. Soil percolation rate estimated: ☒ Yes ☐ No Estimated rate: 35 min/in at 24 inches depth

   Texture Group: ☐ I ☒ II ☐ III ☐ IV
7. Percolation test performed: ☐ Yes ☒ No If yes, provide additional data on percolation test results.

Name and title of evaluator: David R. Miles, CPSS, OSE

Signature: David R. Miles

☒ Site approved: Gravel Trenches Only! 4x75's (describe dispersal area, e.g. absorption trenches) dispersing TL-1 (proposed level of treatment at time of evaluation) to be placed at 24 (inches) depth at site designated on permit. Site provides a total of 900 square feet of absorption area for primary and reserve (if applicable). 450 gpd x 191 SF/100 GALLONS = 859.5 SF REQUIRED

☐ Site disapproved: *Reasons for rejection (check all that apply)*

1. ☐ Position in landscape subject to flooding or periodic saturation.
2. ☐ Insufficient depth of suitable soil over hard rock.
3. ☐ Insufficient depth of suitable soil to seasonal water table.
4. ☐ Rates of absorption too slow.
5. ☐ Insufficient area of acceptable soil for required absorption area, and/or reserve area.
6. ☐ Proposed system too close to well.
7. ☐ Other (specify) _____

Date of Evaluation: 8/20/2024 Profile Description

SOIL EVALUATION REPORT

Property ID: _____

Where the local health department conducts the soil evaluation the location of profile holes may be shown on the schematic drawing on the construction permit or the sketch submitted with the application. If soil evaluations are conducted by a private Onsite Soil Evaluator or Professional Engineer, location of profile holes and sketch of the area investigated including all structural features (i.e. sewage disposal systems, wells, etc.) within 100 feet of the site and reserve site shall be shown on the reverse side of this page or prepared on a separate page and attached to this form.

☐ See application sketch ☐ See Construction Permit ☒ See sketch on reverse side or page attached to this form.

Hole #	Horizon	Depth (Inches)	Description of color, texture, etc.	Texture Group
1	A	0-06	10YR 4/3 SL Coarse	IIA
	AE	06-20	10YR 7/3 SL Coarse	IIA
	E	20-24	10YR 6/4 SL Coarse	IIA
	Bt1	24-30	10YR 6/6 SL-SCLL	IIA-IIB
	C	30-42	10YR 6/4-6/6 SL Coarse	IIA
	C	42-48	10YR 7/3 SL w/ Gravel Damp	IIA
2	A	0-06	10YR 4/3 SL Coarse	IIA
	C	06-24	10YR 7/3-8/3 SL Coarse	IIA
	Bt1	24-30	10YR 5/6 SCLM	IIB
	C	30-48	10YR 7/4 SL Coarse Damp @42" Deep	IIA
3	A	0-06	10YR 4/3 LS Coarse	I
	C	06-20	10YR 7/4 LS Coarse	I
	C	20-42	10YR 7/4 LS Coarse w/ Gravel	I
	C	42-48	10YR 8/1-8/2 Sand Coarse W/ Pea Gravel	I

REMARKS: 2" of rain night before!

7/69 12

BAY DESIGN GROUP

To: King and Queen County Health Department

From: Jonathan Blair Wilson, P.E. (804) 513-9564 phone

CC: File 24023

Date: 11/14/2024

Re: Mattaponi Sand & Gravel – Tax Parcel 1623-78R-680, King and Queen County, Virginia

---

Mattaponi Sand & Gravel LLC intends on operating a sand and gravel surface mining operation on Assessor's Tax Parcel 1623-78R-680 in King and Queen County, Virginia. The facility will operate with eight (8) employees and is expected to accommodate the export of a maximum of 50 trucks of material from the site each workday. Wastewater effluent from the facility will have waste concentrations that are less than typical residential strength waste. The following is provided for your consideration:

Design Basis: Similar to Factories and Office Buildings 25 gpd/employee; and

Interstate Rest Areas 5 gpd/person

Units	Use	Employees/Persons	Comments
1	Office/scales	8	Design Flow =1200 gpd
1	Rest Areas	50 (transient truck drivers)	Design Flow =250 gpd
			Total Flow = 450 gpd

The wastewater characterization and disposal facility design is based on Table 5.1 of the current Sewage Handling and Disposal Regulations.

Discharge Facility	Design Unit Per person	Flow (gpd)	BOD (#/day)	S.S. (#/day)	Flow Duration (hour)
Office/Factories		25	0.05	0.05	12
Rest Areas		5	0.01	0.01	24

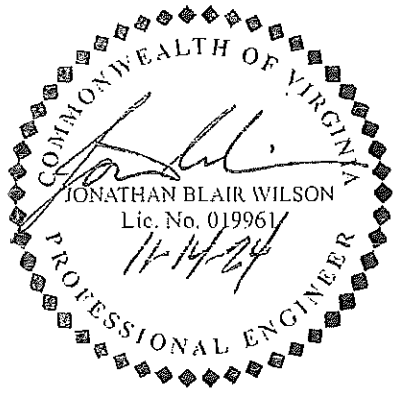
For comparison (for waste strength)

Discharge Facility	Design Unit Per person	Flow (gpd)	BOD (#/day)	S.S. (#/day)	Flow Duration (hour)
Residential Dwelling		75	0.20	0.20	24

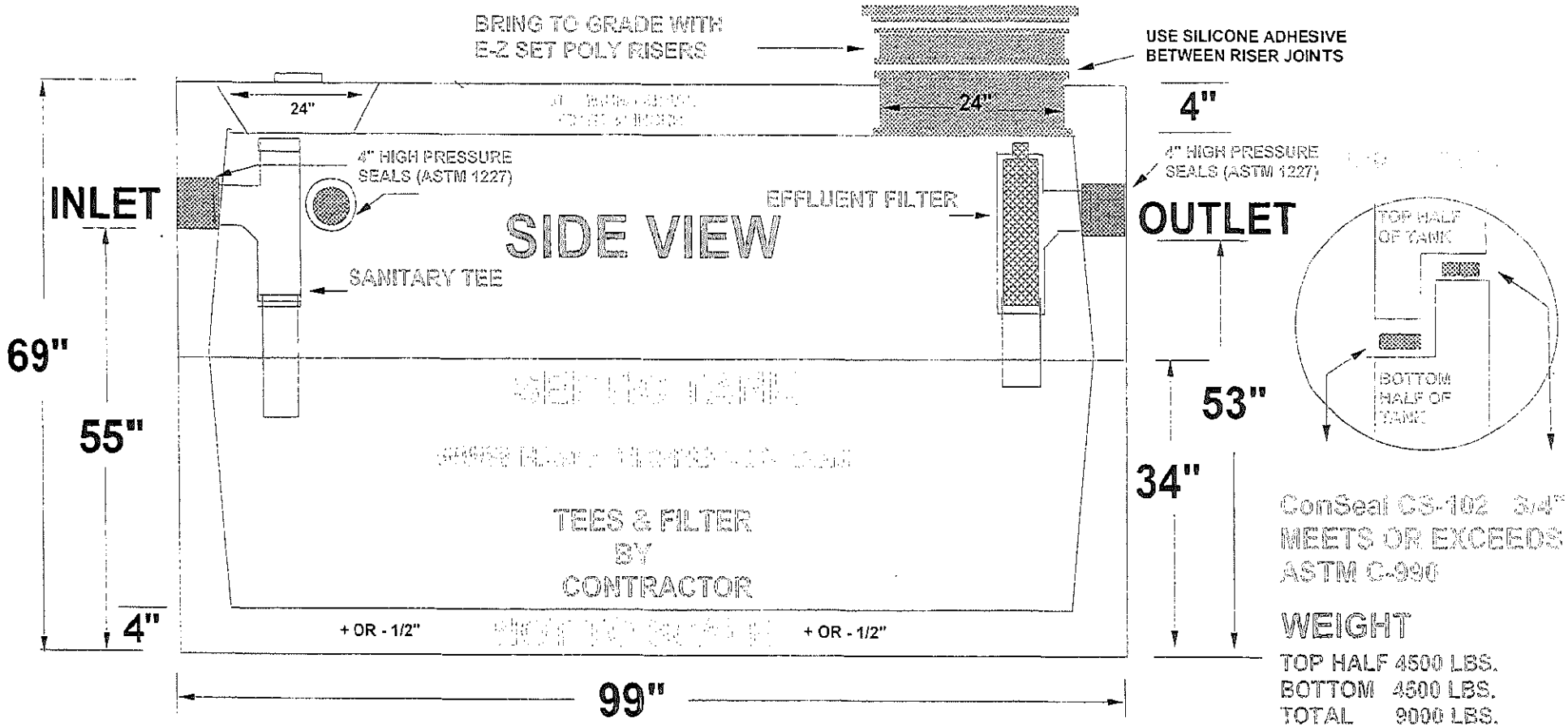
Waste Concentration:

Offices/Factories	BOD:	(0.05 #/day/person)/(25 gal./person/day) = 0.0020 #/gal.
	S.S.:	(0.05 #/day/person)/(25 gal./person/day) = 0.0020 #/gal.
Rest Areas	BOD:	(0.01 #/day/person)/(5 gal./person/day) = 0.0020 #/gal.
	S.S.:	(0.01 #/day/person)/(5 gal./person/day) = 0.0020 #/gal.
Residential Dwelling	BOD:	(0.20 #/day/person)/(75 gal./person/day) = 0.0027 #/gal.
	S.S.:	(0.20 #/day/person)/(75 gal./person/day) = 0.0027 #/gal.

Therefore with respect to effluent waste strength concentrations the facility will have waste strengths that are less than typical residential strength waste.



1000 GALLON MID SEAM SEPTIC TANK
POLY RISER FOR FILTER ACCESS

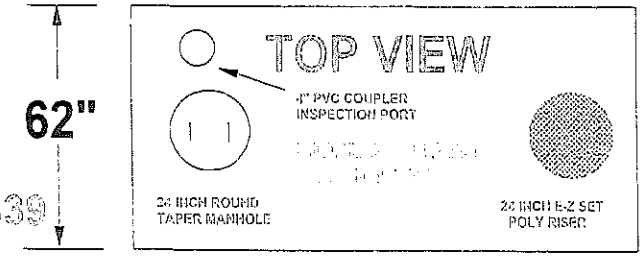


ConSeal CS-102 3/4"
MEETS OR EXCEEDS
ASTM C-990

WEIGHT

TOP HALF 4500 LBS.
BOTTOM 4500 LBS.
TOTAL 9000 LBS.

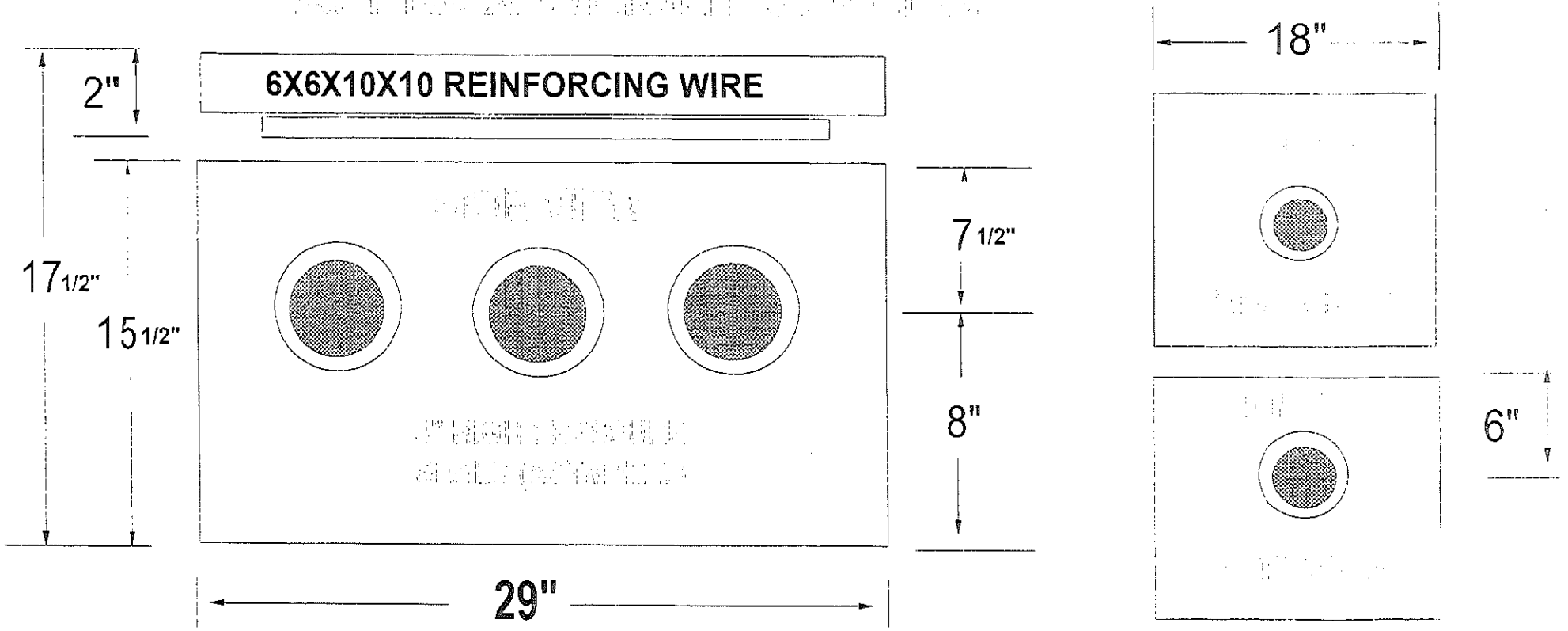
INLETS & OUTLETS HAVE 4 INCH HIGH PRESSURE PIPE SEALS MEETS OR EXCEEDS ASTM 1227 (10 PSI) NO RUST POLY HANDLES



6X6X10X10 REINFORCING WIRE
5000 + PSI CONCRETE WITH FIBER FOR SECONDARY REINFORCMENT

(804) 798-2336 FAX (804) 798-2339

8 HOLE DISTRIBUTION BOX WITH PRESSURE SEALS



5000 P.S.I. CONCRETE
WITH FIBER

WALLS ARE 2"

TOP & BOTTOM ARE

"Quality Pumps Since 1939"

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

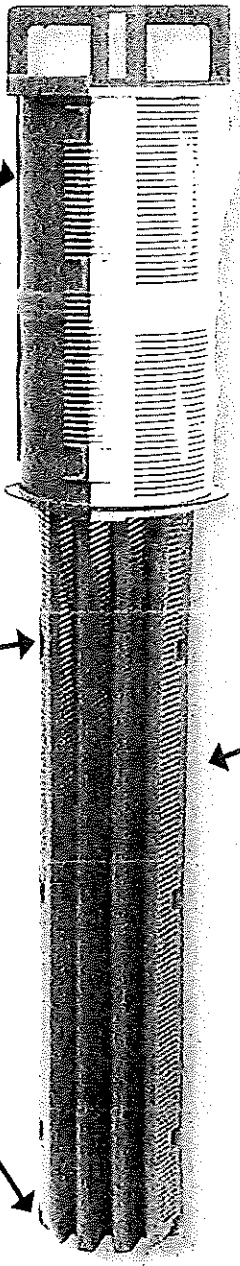
SECTION: 3.20.065
FM1775
0507
Supersedes
0705

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

visit our web site:
www.zoeller.com

ZOELLER ON-SITE WASTEWATER PRODUCTS

"WW" Residential Effluent Filter P/N 170-0078



BY-PASS PROTECTION
Sleeve remains in the outlet tee when the main filter is removed for servicing. Solids are prevented from leaving the tank.

GASKETED SEAL
Rubber gasket ensures that all effluent passes through the filter, not around it. Provides protection in all commonly found 4" outlet tees.

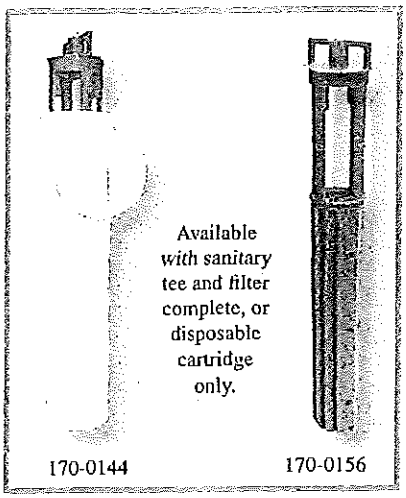
DEEP PLEATED CONSTRUCTION
Design adds more effective filter area than any other 4" filter on the market. Pleats retain solids to aid in servicing.

CLEAR ZONE ACCESS
Once installed in the tee, filter pulls effluent from only the "clear zone" of the tank.

TWIST LOCK MECHANISM
Inner cartridge is held firmly in place, but can be easily removed for servicing.

LOCKING TAP
Zoeller invented the locking tap to prevent the filter from floating out and keep the by-pass sleeve in place when servicing.

SUPERIOR FILTRATION
All 132 linear feet of 1/16" filtration is located below the water line, making the filter 100% effective.



NSF Certified to ANSI-NSF 46

Covered by US Patent Nos.
6,136,190; 6,331,247; 6,495,040.

P/N 013244

14/2

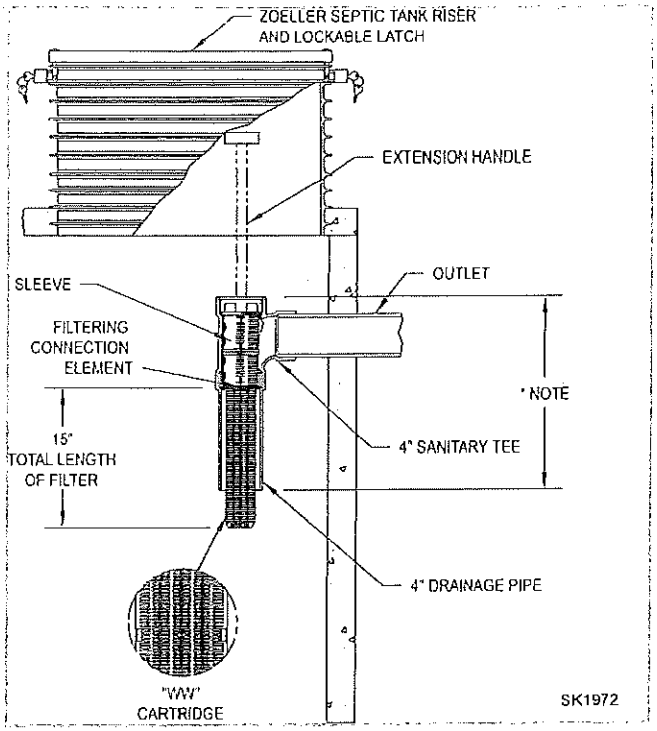
Zoeller Residential Septic Tank Effluent Filter Specifications

Application: Single family homes.

Filter area: 132 Linear Feet of 1/16" filtration.

Flow Rate: 1,000 gpd.

Material: All materials are noncorrosive in the septic tank environment. Sleeve is PVC, primary filter is polypropylene, and filter connection element is neoprene.



NOTE: State and local plumbing codes may require a specific liquid penetration. For example, 25%-45% into the liquid depth or 9" off the tank bottom.

Easy to install or retrofit: The Zoeller Septic System Filter fits inside any 4" sanitary tee. Slide the filter cartridge into the filter sleeve. Slide the assembled cartridge and sleeve into the sanitary tee at the tank's outlet. Ensure the sleeve latch is pointing toward the outlet of the septic tank before filter placement into the tee. The drain field is now protected from solids greater than 1/16".

Adding an extension handle: A 1/2" PVC pipe can be attached to the top of the filter with a stainless steel screw. Cut off to appropriate length below the lid.

Easy to maintain: The filter can be maintained by rotating the cartridge counterclockwise and removing for cleaning. The sleeve should remain in the sanitary tee while cleaning the cartridge. To clean, hold cartridge over septic tank opening and rinse with hose until clean, washing filtered trash back into septic tank. After cleaning the cartridge the sleeve should be cleaned inside and out. Reinsert the cartridge, turn it clockwise in the sleeve, locking in place. Remove the filter and sleeve assembly from the sanitary tee. The Zoeller filter should be cleaned each time the septic tank is pumped or when the need is indicated by slow flows from the house. More frequent cleanings will not hurt the filter and could even improve the performance of your septic tank. For installations that exceed the design flow rate of the filter, more frequent cleanings may be required. Two or more filters may be connected with a manifold for higher flow applications.

Troubleshooting, repair, and replacement: Follow the install and maintenance instructions above. For replacement components, call 1-800-928-PUMP.

Lifetime Warranty: Every Zoeller filter is guaranteed to be free from defects in materials and workmanship for the lifetime of the homeowner/purchaser. Free repair or replacement, excluding labor, will be made on return of the filter prepaid to the factory. This warranty is limited to product proven to be free from abuse or improper installation.

ALL ZOELLER ON-SITE PRODUCTS MUST BE INSTALLED IN ACCORDANCE WITH PLUMBING AND HEALTH DEPARTMENT CODES.

Distributed By:

ZOELLER PUMP CO.

1-800-928-PUMP
www.zoeller.com

Sprouse, Donna (KQCO)

From: Rellick, Joshua (KQCO)
Sent: Monday, March 10, 2025 1:09 PM
To: Sprouse, Donna (KQCO)
Subject: SP24-04, Mattaponi Sand & Gravell LLC – Level 3 Site Plan Review

Dear Donna,

I have reviewed the site plan for SP24-04, Mattaponi Sand & Gravell LLC – Level 3 Site Plan Review, dated February 20th, 2025. I find that it satisfies the regulations under the purview of the Environmental Codes Compliance Office. I have no further comments.

Josh Rellick
Environmental Codes Compliance Officer
King and Queen County
242 Allens Circle, Suite L
P.O. Box 177
King and Queen CH, VA 23085
(804)-785-5975 x2, option 2
esofficer@kingandqueenco.net

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
87 Deacon Road
Fredericksburg, Virginia 22405

Stephen C. Brich, P.E.
COMMISSIONER

March 4, 2025

King & Queen County
Attn: Ms. Donna Sprouse

Re: Mattaponi Sand & Gravel
2nd Site Plan Review
King & Queen County, Rtes. 628 & 639

Dear Ms. Sprouse:

This office has reviewed the referenced plans with a license stamp date of 2-20-25 per the minimum standards as received on 2-27-25, and we have noted that the previous comments have been addressed. Therefore, the Department has no objections to the approval of this plan. If there are any questions concerning this review, contact Chad Brooks at (804) 761-2148.

Sincerely,

Robert Butler

Robert Butler, P.E.
Assistant Resident Engineer-Land Use

Cc: Bay Design Group, Blair Wilson, P.E.
VDOT, Lee McKnight

MATTAPONI SAND & GRAVEL MINE SITE

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VIRGINIA

GENERAL NOTES

1. OWNER: MATTAPONI SAND & GRAVEL LLC.
   c/o KYLE MURRAY
   P.O. BOX 2000
   GAMBRILLS, MD 21054
   (443) 871-3440
2. DEVELOPER: MATTAPONI SAND & GRAVEL LLC.
   c/o KYLE MURRAY
   P.O. BOX 2000
   GAMBRILLS, MD 21054
   (443) 871-3440
3. THE LAND DELINEATED HEREON IS LOCATED ON COUNTY TAX MAP 1632-78R-680.
4. SITE IS ZONED: A (AGRICULTURAL, 181.27 AC.+/-) & I (INDUSTRIAL, 5.00 AC. +/-).
5. VERTICAL DATUM: NAVD 88.
6. THIS PARCEL LIES IN ZONE X, AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, ZONE A, AREA DETERMINED TO HAVE NO BASE FLOOD ELEVATION, AS DEFINED ON THE NATIONAL FLOOD INSURANCE RATE MAP PANEL NO. 51097 C 0075 C, DATED OCTOBER 21, 2021. THE ZONE LINES SHOWN ARE APPROXIMATE AND SCALED FROM SAID MAP.
7. PARCEL AREA TOTAL: 186.27± AC.
8. MINING PERMIT LIMIT AREA: 161.08± AC. (INCLUDES 300' AND 50' UNDISTURBED BUFFERS, EXCLUDES RPA AND 100' RPA BUFFER)
9. AREA OF UNDISTURBED BUFFERS: 55.82 AC. (INCLUDES 300' AND 50' UNDISTURBED BUFFERS, RPA AND 100' RPA BUFFER, 29% OF TOTAL PARCEL AREA)
10. APPLICABLE CONDITIONAL USE AREA: 186.27 ± AC.
11. TOTAL AREA OF NON-RESIDENTIAL USE: 186.27± AC.
12. TOTAL AREA OF RESIDENTIAL USE: 0.00 AC.
13. TOTAL AREA OF LAND DISTURBANCE: 127.56± AC. (CLEARING LIMIT=AREA OF MINING OPERATIONS, 69% OF PARCEL)
14. RESOURCE PROTECTION AREA: 25.19 AC.; NONE WITHIN 161.08 AC. MINE PERMIT LIMIT
15. RESOURCE MANAGEMENT AREA: 28.08 AC.
16. AREA OF SLOPES GREATER THAN 20-PERCENT: 2.11 AC. WITHIN 161.08 AC. MINE PERMIT LIMIT
17. AREA OF WETLANDS: 19.15 AC.; NONE WITHIN 161.08 AC. MINE PERMIT LIMIT
18. THERE ARE NO TIDAL OR NON-TIDAL WETLANDS IMPACTED BY THE PLANNED MINING OPERATIONS.

PROJECT DESCRIPTION

THE PURPOSE OF THIS LEVEL 3 SITE PLAN IS TO OBTAIN REGULATORY APPROVALS FOR SURFACE MINING OPERATIONS ON TAX PARCEL 1632-78R-680 IN ACCORDANCE WITH CONDITIONAL USE PERMIT CU02-08 APPROVED BY THE KING AND QUEEN COUNTY BOARD OF SUPERVISORS ON DECEMBER 9, 2002.

THE AREA OF MINING OPERATIONS AND MINERAL SOIL EXTRACTION ON THE MATTAPONI SAND & GRAVEL MINE SITE WILL BE LOCATED OUTSIDE OF DESIGNATED CHESAPEAKE BAY PRESERVATION AREA RESOURCE PROTECTION AREAS AND CU02-08 REQUIRED UNDISTURBED PERIMETER BUFFERS. FINAL SITE RECLAMATION GRADING WILL DIRECT STORM RUNOFF FROM THE MINING AREA TO THE PROJECT'S PERMANENT SEDIMENT BASIN FACILITY. THE PROJECT WILL BE SUBJECT TO THE CONDITIONS OF CONDITIONAL USE PERMIT CU02-08.

THE NEW OFFICE WILL BE SERVED BY A PRIVATE CLASS IIIB WATER SUPPLY WELL AND A PRIVATE ON-SITE SEPTIC DRAINFIELD SYSTEM DESIGNED TO ACCOMMODATE SEWAGE FLOWS OF UP TO 450 GALLONS PER DAY. EMPLOYMENT AT THE FACILITY IS EXPECTED TO INCLUDE UP TO 8-FULL TIME EMPLOYEES. PARKING FOR EMPLOYEES AND VISITORS WILL BE LOCATED ADJACENT TO THE OFFICE. THE PARKING AREA WILL INCLUDE 9-REGULAR 10'x20' 90-DEGREE PASSENGER VEHICLE PARKING STALLS AND 1-ADA 10'x20' PARKING STALL WITH A 9'x20' ADA ACCESS AISLE. ADA ACCESS TO THE OFFICE WILL BE ADA COMPLIANT. ILLUMINATION OF THE SITE WILL BE LIMITED TO THAT WHICH IS REQUIRED BY THE BUILDING CODE FOR INGRESS AND EGRESS, AND MINIMAL ILLUMINATION OF THE OFFICE PARKING AREA AS REQUIRED FOR PUBLIC SAFETY.

KEYNOTES:

1. New VDOT WP-2 Mill and Overlay, 2" mill depth with 2" VDOT SM-9.5A bituminous asphalt overlay.
2. New VDOT CG-13 Commercial Entrance, 50' entrance radii with 50' pavement tapers, 14' offset from existing edge of pavement on SR 628, no curb. Provide minimum 6' shoulder surfaced with permanent grass cover. Match existing grade at edge of existing SR 628 pavement.
3. New Infiltration Basin No. 1 excavated to bottom elevation 44.78, 3-foot minimum storage depth, outlet crest elevation 47.78 matches existing SR 628 roadside ditch invert elevation. Basin bottom 32' (W) x 64'(L); 5:1 side slopes to elevation 47.78, 3:1 side slopes above elevation 47.78. Provide 2" thick surface layer of washed No. 3 to No. 5 gravel over basin bottom and 5:1 side slopes.
4. New Infiltration Basin No. 2 excavated to bottom elevation 44.50, 3-foot minimum storage depth, outlet crest elevation 47.50 at upstream end of outlet channel (Kenote 6 below). Basin bottom 32' (W) x 64'(L); 5:1 side slopes to elevation 47.50, 3:1 side slopes above elevation 47.78. Provide 2" thick surface layer of washed No. 3 to No. 5 gravel over basin bottom and 5:1 side slopes.
5. New Infiltration Basin No. 1 Outlet - Exit Channel, see detail Sheet C8, 4' bottom width trapezoidal channel, slope is flat at elevation 47.78 to match existing SR 628 roadside ditch invert elevation.
6. New Infiltration Basin No. 2 Outlet - Exit Channel, see detail Sheet C8, 4' bottom width trapezoidal channel, slope is 0.0106 ft/ft for 32' length from basin outlet at crest elevation 47.50 to match existing SR 628 roadside ditch invert elevation of 47.16.
7. End new VDOT CG-13 concrete haul road surface (or alternate bituminous asphalt surface) and begin new haul road surfacing with VDOT No. 21A aggregate, STA 1+00.
8. End temporary stone construction entrance, end of new haul road surfacing with VDOT No. 21A aggregate, and begin new haul road surfacing with on-site mined sand and gravel surfacing, STA 3+50.
9. New entrance security gate as selected by the Owner.
10. New Mine Site Identification sign as required by Virginia Department of Energy, Mineral Mining Division. Sign to be erected to conform with King and Queen County Code of Ordinances, Part II Unified Land Use Regulations, Article 16 - Signs. Sign shall be placed at least ten (10) feet interior to the site from the SR 628 right-of-way and at least 40-feet from either side property line. The site identification sign shall not exceed 10-square feet in surface area and shall not exceed 6-feet in height as measured from existing or finished grade at the base of the sign.
11. New ADA van accessible parking stall with access aisle, concrete surfaced. See section details on Sheet C8.
12. New ADA sign with additional towing penalty placard.
13. New precast concrete wheel stop, 6" (H) x 72" (L)
    affixed with (2) No. 6 deformed steel bar dowels embedded 24" below wheel stop and driven flush with the top of the wheel stop.
14. New parking area lighting with photocell control. Fixture to be Streetworks USSL LED fixture model number USSL A01 D U T3 SA BK or equal mounted at a height of 20-feet on a Cooper Lighting Square Straight Steel pole model number SSS 4A20S or equal.
15. New trash receptacle enclosure on 4' (W) x 8'(L) x 4" (T) gravel pad. Screened on 3 sides with an access gate.
16. New 500 gallon above ground diesel fuel tank, double wall on skids. Install pipe post bollards Type B to protect tank from vehicular intrusion. Above ground fuel storage tank including materials of construction, location and protection measures shall comply with applicable provisions of the NFPA 30 Flammable and Combustible Liquids Code, UL142, UL2080, UL2085, API Standard 650, local, state and federal codes. The fuel storage tank proposed on this site is regulated by the Virginia Department of Energy, and is not subject to regulation by the Virginia Department of Environmental Quality per 9VAC25-91-30. If it is determined that the locality can regulate the tank for secondary spill containment or require a roof covering, then such secondary spill containment system and/or roof covering system design and installation shall be coordinated with the County Emergency Services Coordinator and Building Official.
17. New 12' - 4" PVC SCH40 DWV building sanitary lateral at 0.0104 f/ft installed with a 4" sanitary cleanout, INV=57.00+/-.
18. New Hanover Precast (or equal) mid seam 1000 gallon septic tank, with effluent filter. INV (in)=56.88, INV (out)=56.71
19. New 392'-4" PVC SCH40 DWV sanitary lateral with 4" PVC SCH40 cleanouts at intervals not to exceed 75'. Install pipeline at minimum grade of 0.0104 ft/ft. Provide cleanouts with cast-iron frame and cover.
20. New Hanover Precast (or equal) 8-hole concrete distribution box with flow equalization weirs.
21. New primary septic drainfield. Install (4) 75' (L) x 36" (W) trenches with an installation depth of 24-inches. Trenches to be spaced 9-feet on center.
22. Reserve septic drainfield area, 30' (W) x 75' (L). No storage of materials, equipment or vehicles permitted within the reserve area.
23. New 66'+/- 1" PVC SCH40 waterline (SWJ) from new well to scale office. Install with 24" minimum depth of cover and affix 10 ga. plastic coated copper tracer wire to new pipeline. Terminate copper tracer wire in Snake Pit tracer wire termination boxes with one box adjacent to the building and the other adjacent to the new well.

VICINITY MAP SCALE: 1"= 2000 FT

INDEX

CONDITIONAL USE PERMIT (CU02-08) CONDITIONS APPROVED BY KING & QUEEN COUNTY BOARD OF SUPERVISORS ON DECEMBER 9, 2002

1. 25% OR MORE OF THE SITE WILL BE UNDISTURBED AND LEFT FOR BUFFERING INCLUDING THE FOLLOWING;
   A. 300' SETBACK FROM ROUTE 628.
   B. 50' SETBACK FROM ALL PROPERTY LINES.
   C. 300' SETBACK/BUFFER FROM THE GARNETT PROPERTY LINE CONTINUING THE FULL LENGTH OF THAT PROPERTY LINE.
   D. NO IMPACT TO WETLANDS OR RPA
2. HOURS OF OPERATION;
   A. 7AM-6PM MONDAY THROUGH FRIDAY WITH NO LOADED TRUCKS LEAVING THE SITE UNTIL AFTER MORNING SCHOOL BUS ROUTING.
   B. 7AM-12PM SATURDAY
3. MAXIMUM OF 50 LOADS OF MATERIAL PER DAY DURING PEAK DEMAND PERIODS USUALLY JUNE-SEPTEMBER. NORMAL OPERATIONS WOULD BE MAXIMUM 30 LOADS PER DAY.
4. PAVED CONSTRUCTION/COMMERCIAL ENTRANCE TO VDOT STANDARDS AND STONED BACK 300-FEET FROM ROUTE 628 TO CONTROL DUST AND DEBRIS AT HIGHWAY.
5. ANY FUEL TANKS ON-SITE WILL HAVE SELF-CONTAINMENT SYSTEMS WITH ROOFS.
6. SEWAGE DISPOSAL FACILITIES WILL CONSIST OF PORTABLE TOILETS UNLESS OR UNTIL A SCALE HOUSE IS CONSTRUCTED.
7. THE PHASING AND BUFFERING OF THIS OPERATION ARE REPRESENTED ON THE ATTACHED SITE PLANS AND WILL BE HONORED.
8. DRAINAGE ISSUES, EROSION & SEDIMENTATION, AND SITE RECLAMATION WILL BE BONDED AND OVERSEEN AS PART OF THE DEPARTMENT OF MINES, MINERALS, AND ENERGY'S OWN PERMITTING PROCESS.
9. FILL MATERIAL CAN BE SOLD TO INDEPENDENT CONTRACTORS SUBJECT TO HOURS OF OPERATION AND AVAILABILITY OF MATERIAL.

LEGEND

- IRON ROD FOUND (IRF) OR IRON PIPE FOUND (IPF)
- CONCRETE MONUMENT FOUND (CMF)
- IRON ROD OR PIPE SET
- CONCRETE MONUMENT SET
- POWER POLE (PP)
- TELEPHONE JUNCTION BOX (TJB)
- SIGN POST (SP)
- MAIL BOX (MB)
- N/F NOW OR FORMERLY
- R/W RIGHT-OF-WAY
- EXISTING WOODLINE
- —10— EXISTING CONTOUR
- —10— PROPOSED CONTOUR
- —C—C— LIMIT OF CUT
- —F—F— LIMIT OF FILL
- MINE LIMIT
- CLEARING LIMIT
- USDA SOIL LINE
- [XX] USDA SOIL TYPES
- (CE) STONE CONSTRUCTION ENTRANCE, VEC 3.02
- (CRS) CONSTRUCITON ROAD STABILIZATION, VEC 3.03
- (SF) SILT FENCE, VEC 3.05
- (IP) INLET PROTECTION, VEC 3.07
- (CIP) CULVERT INLET PROTECTION, VEC 3.08
- (DD) TEMPORARY DIVERSION DIKE, VEC 3.09
- (RWD) RIGHT-OF-WAY DIVERSION, VEC 3.11
- (ST) SEDIMENT TRAP, VEC 3.13
- (SB) SEDIMENT BASIN, VEC 3.14
- (OP) OUTLET PROTECTION, VEC 3.18
- (RR) RIPRAP, VEC 3.19
- (CD) ROCK CHECK DAM, VEC 3.20
- (LS) LEVEL SPREADER, VEC 3.21
- (PS) PERMANENT SEEDING, VEC 3.32
- (MU) MULCHING, VEC 3.35
- (B/M) BLANKET/MATTING, VEC 3.36
- (TP) TREE PROTECTION, VEC 3.38

See Virginia Department of Energy Mineral Mine Operator's Manual 2024 for temporary erosion and sediment control details applicable to this project, and equivalent to the temporary erosion and sediment control measures identified on the plans and adjacent legend based on the Virginia Erosion and Sediment Control Handbook (VEC).

FINAL SITE PLAN

SP____APPROVED FOR CONSTRUCTION

VIRGINIA DEPARTMENT OF TRANSPORTATION	DATE
VIRGINIA DEPARTMENT OF HEALTH	DATE
COUNTY ENVIRONMENTAL COMPLIANCE OFFICER	DATE
COUNTY ZONING ADMINISTRATOR	DATE

JOB NO. WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering
P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
jblairwilson@gmail.com

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

COVER SHEET

SHEET NO: C1

JOB NO. WE-0238-25

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	3564.34'	637.47'	636.63'	S27°43'15"E	10°14'50"
C2	483.62'	225.81'	223.77'	S09°13'14"E	26°45'11"

THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM PLAT IN P.C. 2 SLIDE 165–J

STATE PLANE GRID
VA SOUTH ZONE

STATEMENT OF PROPERTY OWNERSHIP:
Parcel No. 1632-78R-680
The property shown hereon was conveyed to Mattaponi Sand & Gravel, LLC by LANTEC LLC by Deed Book 202, Page 514 as recorded in the Clerk's Office of the Circuit Court of King and Queen County, Virginia.

APPLICANT'S INTEREST IN SUBJECT PROPERTY:
The Applicant, Mattaponi Sand & Gravel, LLC desires to obtain approvals from King and Queen County, Virginia for a Level 3 Site Plan to conduct a surface mining operation on the subject property in accordance with Virginia Department of Energy permitting requirements for mineral surface mining.

TAX MAP
1632–78R–680C
N/F
LANTEC, LLC
D.B. 201 @ PG. 336
P.C. 2 SLIDE 165–J
ZONED: A
(AGRICULTURAL)

TAX MAP
1632–78R–680A1
N/F
RODNEY NORTH & DONNA H. DESROCHERS
INSTRUMENT No. 220633
P.C. 2 SLIDE 172–E
ZONED: A (AGRICULTURAL)
2024 SPRING COTTAGE ROAD

TAX MAP
1632–78R–680A2
N/F
DAVID O. & MARSHA J. GOHSMAN
D.B. 210 @ PG. 18
P.C. 2 SLIDE 173–E
ZONED: A (AGRICULTURAL)
1878 SPRING COTTAGE ROAD

TAX MAP
1632–78R–680B
N/F
TREVOR HATFIELD & LINDSEY WARNER
INSTRUMENT No 230626
P.C. 2 SLIDE 171–L
ZONED: A (AGRICULTURAL)
1367 EASTERN VIEW ROAD

TAX MAP
1632–78R–680
186.27 AC.±
ZONED: A (AGRICULTURAL)
and I (INDUSTRIAL)

TAX MAP
1632–78R–594
N/F
ROBERT DOUGLAS BROWN
ZONED: A (AGRICULTURAL)

TAX MAP
1632–79R–604
N/F
JAMES M. FOGG FARMS, INC.
D.B. 90 @ PG. 54
P.B. 2 @ PG. 40C
ZONED: A (AGRICULTURAL)

TAX MAP
1632–79R–604A
N/F
STEPHEN ADAM SCHOOLS
INSTRUMENT No. 180577
ZONED: A (AGRICULTURAL)
1381 SPRING COTTAGE ROAD

50' UNDISTURBED BUFFER

300' UNDISTURBED BUFFER
(WITH ALLOWANCE FOR HAUL ROAD ENTRANCE)

300' UNDISTURBED BUFFER

50' UNDISTURBED BUFFER

ZONED:
I (INDUSTRIAL)
5.00 AC.

EDGE OF WETLANDS
AS DELINEATED BY
GEORGE M. JUNKIN,
CERTIFIED WETLANDS DELINEATOR
(WDCP 93MD0510034B)
ON FEBRUARY 14, 2024
Flags WF#1 to WF#65

WETLANDS

"MATTAPONI RIVER"
KING WILLIAM COUNTY
FLOOD
EBB

IRF W/CAP
IRF
TALL IPF
TBF

N62°12'06"E ~ 553.62'
S32°50'40"E 406.45'
24.16'
N05°15'17"W 427.06'
N32°11'08"E 420.60'
N60°35'18"E 493.78'
S83°48'02"E ~ 604.44'
N70°25'50"E ~ 833.68'
174.89' 520.36' 165.00' 439.44'
138.43'
N59°39'53"E 193.91'
N55°35'02"E ~ 935'±
403.22'
371.46'
108.54'
51.77'
N05°52'07"E 180.69'
N43°53'40"E 221.41'
N66°57'40"E 169.75'
N22°09'37"E 182.13'
N07°47'48"W 308.30'
1116.71'
S89°41'03"W ~ 3127.51'
1025.05' 984.69' 1.06' 916.02' 3.48'
N89°52'44"W ~ 1495.06'
575.56'
S22°35'50"E 849.11'
S04°09'21"W 511.69'
S00°23'33"W 567.65'

STATE ROUTE 628
75' R/W
SPRING COTTAGE ROAD
C1
C2

WF#65 WF#63 WF#53 WF#34 WF#23 WF#40 WF#8 WF#1

Property Owner's within 1000-feet of Tax Parcel 1632-78R-680

Parcel ID	Owner Name	Owner Address	Owner City/St/Zip	Zoning	Deed Book/Page	Plat Book/Page	Instrument No.
32 78R 594	BROWN ROBERT DOUGLAS	1149 THE FORGE ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0000 0	0	0 0
32 78R 594C	BROWN ROBERT DOUGLAS	1149 THE FORGE ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0000 0	0	0 0
32 78R 606J	BROWN CARL W	372 THE FORGE ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0193 441	0185 541	07 0 1670
32 78R 619	BROWN CARL W	372 THE FORGE ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0193 441	7800 305	07 0 1670
32 78R 680A	JONES LESLIE W & SOBCZAK MADELINE N	2022 SPRING COTTAGE ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0211 30	2 172	0 0
32 78R 680A1	NORTH RODNEY S & DESROCHERS DONNA H	2024 SPRING COTTAGE ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0210 325	2 172	22 0 633
32 78R 680A2	GOHSMAN DAVID O & MARSHA J	1878 SPRING COTTAGE ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0210 18	2 172	0 0
32 78R 680B	HATFIELD TREVOR & WARNER LINDSEY	1367 EASTERN VIEW ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0213 295	2 171	23 0 626
32 78R 680C	LANTEC LLC	6179 SUMMERVILLE DRIVE	GLOUCESTER VA 23061	AGRICULTURE	201 336	2 165	0 0
32 78R 680D	VIRGINIA FOREST RESOURCES LLC	P O BOX 129	WEST POINT VA 23181	AGRICULTURE	213 295	2 171	18 0 170
32 78R 682	FINES JAMES F ET ALS C/O JAMES F FINES	14195 COUNTRY CLUB COURT	ASHLAND VA 23005	AGRICULTURE	0000 0	07 1807	06 0 429
32 79R 604	FOGG JAMES M FARMS INC	8299 NEWTOWN ROAD	ST STEPHENS CH VA 23148	AGRICULTURE	0000 0	0	0 0
32 79R 604A	SCHOOLS STEPHEN ADAM	1417 PROVIDENCE RD	CENTER CROSS VA 22437	AGRICULTURE	0225 405	0	18 0 577

200 0 200 400 600
Scale: 1" = 200'

JOB NO.
WE–0238–25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
jblairwilson@gmail.com

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

BOUNDARY AND WETLAND LOCATION

SHEET NO:

C2

JOB NO.
WE–0238–25

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	3564.34'	637.47'	636.63'	S27°43'15"E	10°14'50"
C2	483.62'	225.81'	223.77'	S09°13'14"E	26°45'11"

THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM PLAT IN P.C. 2 SLIDE 165-J

STATE PLANE GRID
VA SOUTH ZONE

N

LEGEND:

- RPA BUFFER LIMIT
- RMA LIMIT
- FLOOD ZONE DELINEATION LINE
- WETLAND LIMIT (FIELD SURVEYED)

Soil Legend

Designation	Name	Hydrologic Group	SWT Depth (in)	Ksat (in/hr)	Hydric (Y/N)	Erosion Factor K
5D	Emporia-Slagle-Rumford Complex, 6-15% Slopes	A-B-C	18->80	0.01-5.95	No	0.28
7A	Kinston-Bibb Soils, 0-2% Occasionally Flooded	B/D	0-12	0.57-1.98	Yes	0.24
14C	Rumford Loamy Sand, 6-10% Slopes	A	>80	1.98-5.95	No	0.17
18B	Tarboro Sand, 0-2% Slopes, Rarely Flooded	A	>80	5.95-19.98	No	0.10
19A	Tetotum Fine Sandy Loam, 0-2% Slopes, Rarely Flooded	C	18-30	0.57-1.98	No	0.28

TAX MAP
1632-78R-680C
N/F
LANTEC, LLC
D.B. 201 @ PG. 336
P.C. 2 SLIDE 165-J
ZONED: A
(AGRICULTURAL)

TAX MAP
1632-78R-680A1
N/F
RODNEY NORTH & DONNA H. DESROCHERS
INSTRUMENT No. 220633
P.C. 2 SLIDE 172-E
ZONED: A (AGRICULTURAL)
2024 SPRING COTTAGE ROAD

TAX MAP
1632-78R-680A2
N/F
DAVID O. & MARSHA J. GOHSMAN
D.B. 210 @ PG. 18
P.C. 2 SLIDE 173-E
ZONED: A (AGRICULTURAL)
1878 SPRING COTTAGE ROAD

STATE ROUTE 628
75' R/W
SPRING COTTAGE ROAD

50' UNDISTURBED BUFFER

100' RPA BUFFER LIMIT

RMA LIMIT

5D

19A

7A

FLOOD ZONE "X"
AREAS OF MINIMAL FLOOD HAZARD

ZONING LINE PER PC. 2, SLIDE 165-J

ZONED: I (INDUSTRIAL) 5.00 AC.±

FLOOD LIMIT

300' UNDISTURBED BUFFER
(WITH ALLOWANCE FOR HAUL ROAD ENTRANCE)

TAX MAP
1632-78R-680B
N/F
TREVOR HATFIELD & LINDSEY WARNER
INSTRUMENT No 230626
P.C. 2 SLIDE 171-L
ZONED: A (AGRICULTURAL)
1367 EASTERN VIEW ROAD

WF#65
WF#63
WF#53
WF#54
WF#22
WF#40
WF#8
WF#1

100' RPA BUFFER LIMIT

EDGE OF WETLANDS AS DELINEATED BY GEORGE M. JUNKIN, CERTIFIED WETLANDS DELINEATOR (WDCP 93MD0510034B) ON FEBRUARY 14, 2024 Flags WF#1 to WF#65

TAX MAP
1632-78R-680
186.27 AC.±
ZONED: A (AGRICULTURAL)
and I (INDUSTRIAL)

18B

WETLANDS

FLOOD ZONE "A"
AREAS W/O BASE FLOOD ELEVATION

RMA LIMIT

300' UNDISTURBED BUFFER

50' UNDISTURBED BUFFER

14C

KING WILLIAM COUNTY

"MATTAPONI RIVER"

FLOOD

EBB

TAX MAP
1632-79R-604
N/F
JAMES M. FOGG FARMS, INC.
D.B. 90 @ PG. 54
P.B. 2 @ PG. 40C
ZONED: A (AGRICULTURAL)

TAX MAP
1632-79R-604A
N/F
STEPHEN ADAM SCHOOLS
INSTRUMENT No. 180577
ZONED: A (AGRICULTURAL)
1381 SPRING COTTAGE ROAD

TAX MAP
1632-78R-594
N/F
ROBERT DOUGLAS BROWN
ZONED: A (AGRICULTURAL)

Slope Report (Area within Mine Permit Limit 161.08 acres) Tue Nov 12 11:39:16 2024

Surface File: C:\Users\blair.wilson\Documents\24023 Mattaponi Sand OUT 10-17-24\CAD\ENG\24023aerial w field merge road and df 9-5-24.tin
Average Slope: 3.2%
Minimum Slope: 0.0% at 11879700.0,3839340.0
Maximum Slope: 129.9% at 11879772.0,3839359.7

Zone Range	Horizontal Surface Area S.F.	Acres	Slope Surface Area S.F.	Acres	% of Total	Average Slope
<20.00%	6,925,030.0	158.977	6,930,918.9	159.112	98.7	2.9%
20.00-40.00%	90,335.8	2.074	93,800.9	2.153	1.3	26.6%
40.00-80.00%	1,397.3	0.032	1,651.4	0.038	0.0	62.9%
80.00% >	102.4	0.002	137.9	0.003	0.0	90.0%
Total	7,016,865.5	161.085	7,026,509.1	161.306		

200 0 200 400 600
Scale: 1" = 200'

JOB NO.
WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

P.O. Box 1269
West Point, VA 23181-1269
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jblairwilson@gmail.com

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

ENVIRONMENTAL INVENTORY

SHEET NO:

C3

JOB NO.
WE-0238-25

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	3564.34'	637.47'	636.63'	S27°43'15"E	10°14'50"
C2	483.62'	225.81'	223.77'	S09°13'14"E	26°45'11"

THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM PLAT IN P.C. 2 SLIDE 165-J

STATE PLANE GRID
VA SOUTH ZONE

N

LEGEND:

- RPA BUFFER LIMIT
- RMA LIMIT
- WETLAND LIMIT (FIELD SURVEYED)
- MINE PERMIT LIMIT (AREA =7,016,758 S.F. or 161.08 Acres)
- CLEARING LIMIT (AREA=5,556,514 S.F. or 127.56 Acres
- UNDISTURBED BUFFERS (AREA=2,431,519 S.F, or 55.82 Acres; 29% of total site)

TAX MAP
1632-78R-680C
N/F
LANTEC, LLC
D.B. 201 @ PG. 336
P.C. 2 SLIDE 165-J
ZONED: A
(AGRICULTURAL)

TAX MAP
1632-78R-680A1
N/F
RODNEY NORTH & DONNA H. DESROCHERS
INSTRUMENT No. 220633
P.C. 2 SLIDE 172-E
ZONED: A (AGRICULTURAL)
2024 SPRING COTTAGE ROAD

TAX MAP
1632-78R-680A2
N/F
DAVID O. & MARSHA J. GOHSMAN
D.B. 210 @ PG. 18
P.C. 2 SLIDE 173-E
ZONED: A (AGRICULTURAL)
1878 SPRING COTTAGE ROAD

STATE ROUTE 628
SPRING COTTAGE ROAD
75' R/W

50' UNDISTURBED BUFFER

100' RPA BUFFER LIMIT

300' UNDISTURBED BUFFER
(WITH ALLOWANCE FOR HAUL ROAD ENTRANCE)

TAX MAP
1632-78R-680B
N/F
TREVOR HATFIELD & LINDSEY WARNER
INSTRUMENT No 230626
P.C. 2 SLIDE 171-L
ZONED: A (AGRICULTURAL)
1367 EASTERN VIEW ROAD

KING WILLIAM COUNTY

ZONED:
I (INDUSTRIAL)
5.00 AC.

TAX MAP
1632-78R-680
186.27 AC.±
ZONED: A (AGRICULTURAL)
and I (INDUSTRIAL)

100' RPA BUFFER LIMIT

CLEARING LIMIT

MINE PERMIT LIMIT

300' UNDISTURBED BUFFER

50' UNDISTURBED BUFFER

"MATTAPONI RIVER"
FLOOD
EBB

TAX MAP
1632-79R-604
N/F
JAMES M. FOGG FARMS, INC.
D.B. 90 @ PG. 54
P.B. 2 @ PG. 40C
ZONED: A (AGRICULTURAL)

TAX MAP
1632-79R-604A
N/F
STEPHEN ADAM SCHOOLS
INSTRUMENT No. 180577
ZONED: A (AGRICULTURAL)
1381 SPRING COTTAGE ROAD

TAX MAP
1632-78R-594
N/F
ROBERT DOUGLAS BROWN
ZONED: A (AGRICULTURAL)

200 0 200 400 600
Scale: 1" = 200'

JOB NO.
WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

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COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

MINE LIMITS

SHEET NO:

C4

JOB NO.
WE-0238-25

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	3564.34'	637.47'	636.63'	S27°43'15"E	10°14'50"
C2	483.62'	225.81'	223.77'	S09°13'14"E	26°45'11"

THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM PLAT IN P.C. 2 SLIDE 165-J

STATE PLANE GRID
VA SOUTH ZONE

N

LEGEND:

RPA BUFFER LIMIT

RMA LIMIT

WETLAND LIMIT (FIELD SURVEYED)

TAX MAP
1632-78R-680C
N/F
LANTEC, LLC
D.B. 201 @ PG. 336
P.C. 2 SLIDE 165-J
ZONED: A
(AGRICULTURAL)

TAX MAP
1632-78R-680A1
N/F
RODNEY NORTH & DONNA H.
DESROCHERS
INSTRUMENT No. 220633
P.C. 2 SLIDE 172-E
ZONED: A (AGRICULTURAL)
2024 SPRING COTTAGE ROAD

TAX MAP
1632-78R-680A2
N/F
DAVID O. & MARSHA J.
GOHSMAN
D.B. 210 @ PG. 18
P.C. 2 SLIDE 173-E
ZONED: A (AGRICULTURAL)
1878 SPRING COTTAGE ROAD

STATE ROUTE 628
SPRING COTTAGE ROAD

100' RPA
BUFFER
LIMIT

RMA
LIMIT

TAX MAP
1632-78R-680B
N/F
TREVOR HATFIELD &
LINDSEY WARNER
INSTRUMENT No 230626
P.C. 2 SLIDE 171-L
ZONED: A (AGRICULTURAL)
1367 EASTERN VIEW ROAD

KING WILLIAM COUNTY

ZONED:
I (INDUSTRIAL)
5.00± AC.

100' RPA
BUFFER
LIMIT

TAX MAP
1632-78R-680
186.27 AC.±
ZONED: A (AGRICULTURAL)
and I (INDUSTRIAL)

RMA
LIMIT

"MATTAPONI RIVER"

FLOOD
EBB

TAX MAP
1632-78R-594
N/F
ROBERT DOUGLAS BROWN
ZONED: A (AGRICULTURAL)

TAX MAP
1632-79R-604
N/F
JAMES M. FOGG FARMS, INC.
D.B. 90 @ PG. 54
P.B. 2 @ PG. 40C
ZONED: A (AGRICULTURAL)

TAX MAP
1632-79R-604A
N/F
STEPHEN ADAM SCHOOLS
INSTRUMENT No. 180577
ZONED: A (AGRICULTURAL)
1381 SPRING COTTAGE ROAD

Slope Report (Area within Mine Permit Limit 161.08 acres) Tue Nov 12 11:39:16 2024

Surface File: C:\Users\blair.wilson\Documents\24023 Mattaponi Sand OUT 10-17-24\CAD\ENG\24023aerial w field merge road and df 9-5-24.tin
Average Slope: 3.2%
Minimum Slope: 0.0% at 11879700.0,3839340.0
Maximum Slope: 129.9% at 11879772.0,3839359.7

Zone Range	Horizontal Surface Area S.F.	Acres	Slope Surface Area S.F.	Acres	% of Total	Average Slope
<20.00%	6,925,030.0	158.977	6,930,918.9	159.112	98.7	2.9%
20.00-40.00%	90,335.8	2.074	93,800.9	2.153	1.3	26.6%
40.00-80.00%	1,397.3	0.032	1,651.4	0.038	0.0	62.9%
80.00% >	102.4	0.002	137.9	0.003	0.0	90.0%
Total	7,016,865.5	161.085	7,026,509.1	161.306		

200 0 200 400 600
Scale: 1" = 200'

JOB NO.
WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

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COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

EXISTING CONDITIONS

SHEET NO:

C5

JOB NO.
WE-0238-25

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	3564.34'	637.47'	636.63'	S27°43'15"E	10°14'50"
C2	483.62'	225.81'	223.77'	S09°13'14"E	26°45'11"

THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM PLAT IN P.C. 2 SLIDE 165-J

STATE PLANE GRID
VA SOUTH ZONE

N

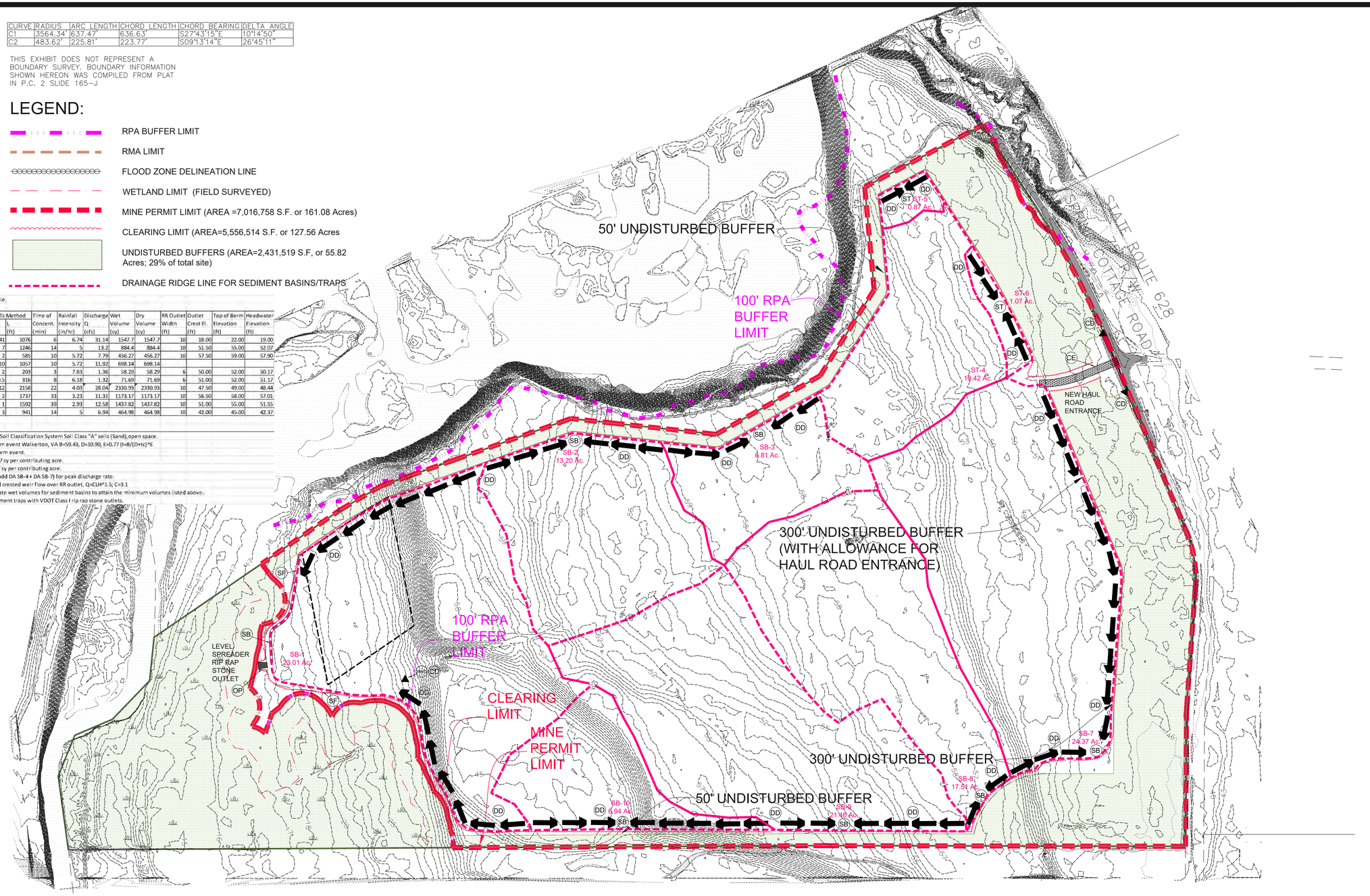
LEGEND:

- RPA BUFFER LIMIT
- RMA LIMIT
- FLOOD ZONE DELINEATION LINE
- WETLAND LIMIT (FIELD SURVEYED)
- MINE PERMIT LIMIT (AREA =7,016,758 S.F. or 161.08 Acres)
- CLEARING LIMIT (AREA=5,556,514 S.F. or 127.56 Acres
- UNDISTURBED BUFFERS (AREA=2,431,519 S.F, or 55.82 Acres; 29% of total site)
- DRAINAGE RIDGE LINE FOR SEDIMENT BASINS/TRAPS

Sediment Basin and Sediment Trap Table

Basin or Trap No.	Drainage Area (ac)	Runoff Coef. C	Kirpich Tc Method H (ft)	L (ft)	Time of Concent. (min)	Rainfall Intensity (in/hr)	Discharge Q (cfs)	Wet Volume (cy)	Dry Volume (cy)	RR Outlet Width (ft)	Outlet Crest El. (ft)	Top of Berm Elevation (ft)	Headwater Elevation (ft)
1	23.1	0.2	41	1076	6	6.74	31.14	1547.7	1547.7	10	18.00	22.00	19.00
2	13.2	0.2	7	1246	14	5	13.2	884.4	884.4	10	51.50	55.00	52.07
3	6.81	0.2	2	585	10	5.72	7.79	456.27	456.27	10	57.50	59.00	57.90
4	10.42	0.2	10	1057	10	5.72	11.92	698.14	698.14				
5	0.87	0.2	2	203	3	7.83	1.36	58.29	58.29	6	50.00	52.00	50.17
6	1.07	0.2	0.5	316	8	6.18	1.32	71.69	71.69	6	51.00	52.00	51.17
7	24.37	0.2	12	2158	22	4.03	28.04	2330.93	2330.93	10	47.50	49.00	48.44
8	17.51	0.2	2	1737	33	3.23	11.31	1173.17	1173.17	10	56.50	58.00	57.01
9	21.46	0.2	1	1592	39	2.93	12.58	1437.82	1437.82	10	51.00	55.00	51.55
10	6.94	0.2	3	941	14	5	6.94	464.98	464.98	10	42.00	45.00	42.37

Notes:
1. Runoff Coefficient based on Unified Soil Classification System Soil Class "A" soils (Sand), open space.
2. Rainfall Intensity 10-year design storm event Walkerton, VA B=59.43, D=10.90, E=0.77 (I=B/(D+tc)^E
3. Peak discharge for 10-year design storm event.
4. Wet Volume minimum required is 67 cy per contributing acre.
5. Dry Volume minimum required is 67 cy per contributing acre.
6. Basin 7 included flow from Basin 4 (add DA SB-4 + DA SB-7) for peak discharge rate.
7. Headwater elevation based on broad crested weir flow over RR outlet, Q=CLH^1.5; C=3.1
8. Mine Operator is expected to excavate wet volumes for sediment basins to attain the minimum volumes listed above.
9. Construct all sediment basin as sediment traps with VDOT Class I rip rap stone outlets.



200 0 200 400 600
Scale: 1" = 200'

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Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

CLEARING PLAN

SHEET NO: C6

JOB NO. WE-0238-25

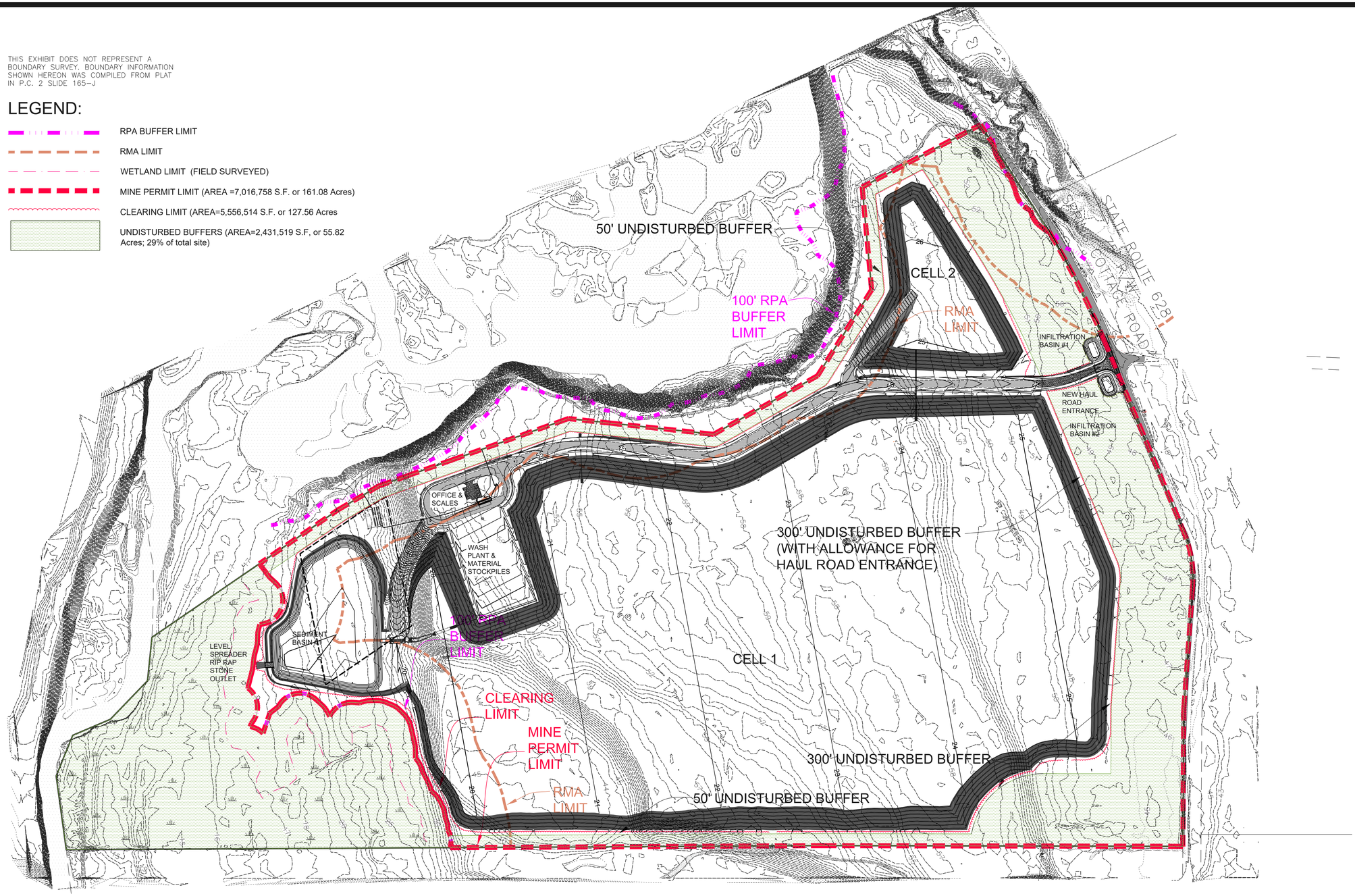
STATE PLANE GRID
VA SOUTH ZONE

N

THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM PLAT IN P.C. 2 SLIDE 165–J

LEGEND:

- RPA BUFFER LIMIT
- RMA LIMIT
- WETLAND LIMIT (FIELD SURVEYED)
- MINE PERMIT LIMIT (AREA =7,016,758 S.F. or 161.08 Acres)
- CLEARING LIMIT (AREA=5,556,514 S.F. or 127.56 Acres
- UNDISTURBED BUFFERS (AREA=2,431,519 S.F, or 55.82 Acres; 29% of total site)



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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

RECLAMATION GRADING PLAN

SHEET NO:

C7

JOB NO.
WE–0238–25

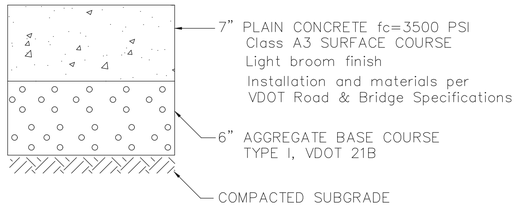
GENERAL NOTES

1. All mining operations and construction shall conform to the Virginia Department of Energy Division of Mineral Mining Mine Operator's Manual. Additional standards and specifications that may be applicable to this project include the Virginia Department of Transportation Road and Bridge Standards, and Road and Bridge Specifications; and the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992. Where conflicting requirements are encountered, VDE DMM requirements shall apply.
2. Mining, reclamation and other land disturbing activities shall be limited to the areas authorized by VDE DMM and as shown on this plan.
3. Elevations shown hereon are based on N.G.S. Elevation Datum (1988).
4. This plan does not guarantee the existence or location of underground utilities. The underground utilities shown hereon were established using above ground structures (valves, meters, manholes, etc.), paint marking provided by others for the underground service lines, and/or utility plans provided by others. Prior to any excavation or construction, the operator shall uncover, by test pitting, all utilities which are indicated on the plans, which have been marked by "Miss Utility", or as marked by private subsurface utility marking companies as being in the area of excavation. The operator shall take vertical and horizontal measurements adequate to determine if any conflict will occur. If any potential conflict is found, in addition to known conflicts as indicated on the plans where utility relocation has been specified, then the operator shall notify the Engineer and the Owner prior to beginning any excavation, demolition or construction.

GENERAL EROSION AND SEDIMENT CONTROL NOTES FOR MINING AND RECLAMATION ACTIVITIES

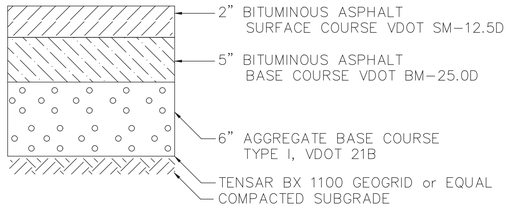
All erosion and sediment control practices shall be in accordance with Virginia Department of Energy Mine Operator's Manual, and with the Virginia Erosion and Sediment Control Handbook where applicable. All mining, reclamation and land disturbing activities shall be conducted to prevent the transport of waterborne and airborne sediment from entering onto adjacent properties or into state waters. The following erosion control practices shall be incorporated on the mining site and shall be applicable to mining , reclamation and other land disturbing activities conducted within the project limits:

1. All temporary or permanent erosion and sediment control practices necessary for retaining sediments on the mine site shall be installed and tree protection fencing shall be erected at the locations as specified on the approved plans prior to any land clearing, grubbing, grading or earth moving activities.
2. Land clearing shall be limited to areas of workable size.
3. Periodic site inspections will be made of the erosion and sediment control measures to determine their condition and performance. Should any adjustments or repairs need to be made, the operator shall respond immediately in making necessary repair, adjustment and/or replacement. Any sediment which has been transported beyond the mine limits shall be removed and/or stabilized as directed by the VDE DMM.
4. Clearing and grubbing debris shall be disposed of in accordance with local, state or federal law, as applicable.
5. Topsoil and overburden stockpiles shall be placed in the location(s) shown on these plans and/or as directed by the operator.
6. Construction entrance (CE) stone pad(s) shall be installed concurrently with the initiation of clearing and grubbing operations. Where construction vehicle access routes intersect paved roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a public road surface, the road shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner.
7. Culvert Inlet protection (CIP) practices are to be installed at culvert inlets to prevent sediments from entering the structure.
8. Dewatering shall be accomplished by filtering or passing effluent through an approved sediment trapping device prior to being discharged. All pumped effluent shall be discharged in a manner that prevents erosion and does not result in adverse impacts to flowing streams, channels or off-site properties.
9. All temporary or permanent earthen structures such as dams, dikes and diversion shall be stabilized (seeded) immediately after their construction. Stone outlet(s) shall be provided where shown on the plans.
10. Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed at beginning of mining earthwork operations and shall be made functional before upslope land disturbance takes place. The basin(s) are to be kept clear of debris and sediments shall be cleaned out periodically during mining and reclamation activities.
11. Permanent or temporary soil stabilization shall be applied to denuded areas according to VDE DMM Mine Operator's Manual requirements.
11. Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.
12. Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.
13. When a live watercourse must be crossed by mining vehicles more than twice in any six-month period, a temporary stream crossing constructed of nonerodible material shall be provided.
14. All applicable federal, state and local regulations pertaining to mining in or crossing live watercourses shall be met.
15. Maintenance of all erosion and sediment control practices shall be scheduled on a weekly basis and after each rainfall producing runoff. Necessary repair, adjustment and/or replacement shall be performed immediately. Rainy seasons or wet periods will be of particular concern and the project shall be inspected daily.
16. Airborne sediments (dust) shall be controlled in accordance with Section 3.39 of the 1992 edition of the Virginia Erosion and Sediment Control Handbook.



NEW HAUL ROAD ENTRANCE STA 0+00 to STA 1+00
VDOT CG-13 CONCRETE PAVEMENT SECTION

N.T.S.

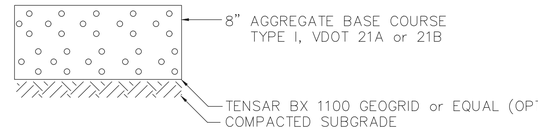


NEW HAUL ROAD ENTRANCE STA 0+00 to STA 1+00
ALTERNATE BITUMINOUS ASPHALT PAVEMENT SECTION

N.T.S.

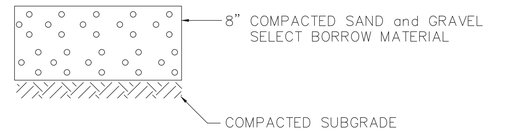
ON-SITE PARKING AREA AT SCALE OFFICE:

1. ADA parking space, adjacent ADA access aisle and walkway to be constructed using New Haul Road Entrance STA 0+00 to STA 1+00 7" thick concrete pavement section detail specifications.
2. Parking area at scale office to be constructed using On-Site Haul Road STA 1+00 to STA 3+50 All-Weather Surface Pavement Section detail specifications.



ON-SITE HAUL ROAD STA 1+00 to STA 3+50
ALL-WEATHER SURFACE PAVEMENT SECTION

N.T.S.



ON-SITE HAUL ROAD STA 3+50 to TERMINATION
ALL-WEATHER SURFACE PAVEMENT SECTION

N.T.S.

MINE RECLAMATION:

Mine site reclamation shall be in accordance with the Virginia Department of Energy Mineral Mining Operator's Manual. The site shall be reclaimed using techniques and specifications included in the manual, including but not limited to Section 3.12 Establishing Vegetation and Section 3.17 Forestry Reclamation Approach.

CONSERVATION AREA
DO NOT DISTURB

CONSERVATION AREA SIGNS, 6"x8" ALUMINUM PLACARD MOUNTED TO 2" SQUARE GALVANIZED STEEL SIGN POST OR 4" x 4" P.T. TIMBER POST. FOREST GREEN LETTERING TO BE 0.6" ARIAL FONT, PLACED ON A WHITE BACKGROUND. PLACE SIGNS AT 500-FOOT INTERVALS ALONG UNDISTURBED BUFFER AND RESOURCE PROTECTION AREA LIMITS . PLACE 1-1/2" PVC SCH40 PIPE WITNESS POSTS AT 100-FOOT INTERVALS BETWEEN CONSERVATION SIGN POSTS ALONG RPA AND UNDISTURBED BUFFER LIMITS. SIGNS TO BE MOUNTED WITH BOTTOM OF THE PLACARD AT 48" ABOVE GRADE. SIGN POSTS TO HAVE A 30" MINIMUM EMBEDMENT DEPTH.

UNDISTURBED BUFFERS:

1. Minimum 300-foot width and 50-foot width buffer areas shall remain undisturbed along the property limits as specified with Conditional Use Permit CU02-08 approved December 9, 2002. These undisturbed buffers shall remain in their current vegetated condition, except as required to construct the VDOT approved commercial entrance to the property from Spring Cottage Road, State Route 628, mine site access haul road and drainage improvements.
2. Chesapeake Bay Preservation Area Resource Protection Area (RPA) 100-foot width buffers shall also remain undisturbed on this project.

PERMANENT SEEDING:

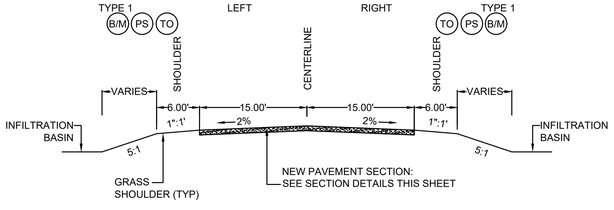
NATIVE GRASS MIX

35%	Schizachyrium scoparium	Little Bluestem
25%	Elymus virginicus	Virginia Wild Rye
18%	Sorghastrum nutans	Indiangrass
15%	Andropogon gerqurdii	Big Bluestem, "Niagara"
6%	Panicum virgatum	Switchgrass, "Shelter"
1%	Agrostis perennans	Autumn Bentgrass

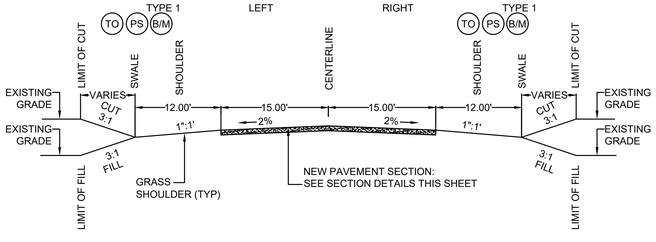
SEEDING RATE SHALL BE 10-15 LBS/ACRE.

Fertilizer: Application shall be based on soil test results
Lime: Application shall be based on soil test results
See DE Mineral Mining Operator's Manual for other acceptable permanent seeding and ground cover establishment methods and materials.

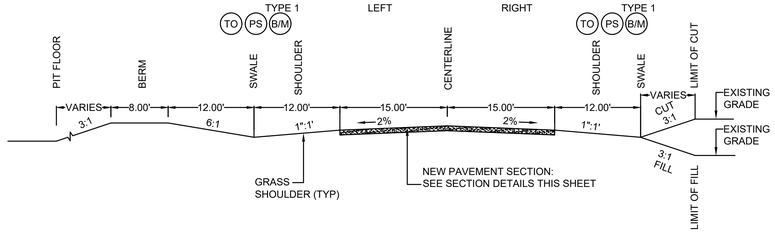
NEW HAUL ROAD STA 0+00 TO STA 1+00



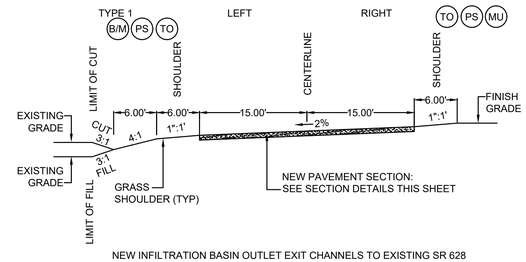
NEW HAUL ROAD STA 1+00 TO STA 3+50



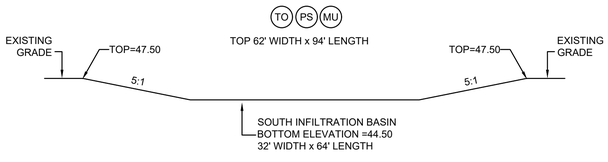
NEW HAUL ROAD STA 3+50 TO STA 26+59.46



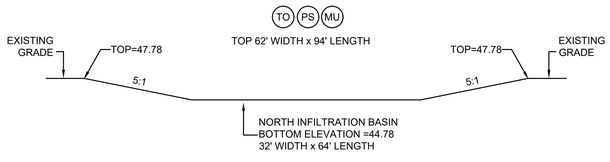
NEW HAUL ROAD STA 26+59.46 TO STA 34+58



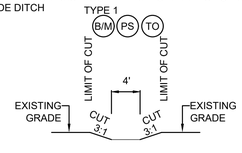
SOUTH INFILTRATION BASIN SECTION DETAIL

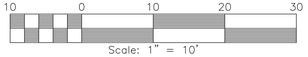


NORTH INFILTRATION BASIN SECTION DETAIL



NEW INFILTRATION BASIN OUTLET EXIT CHANNELS TO EXISTING SR 628 ROADSIDE DITCH





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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

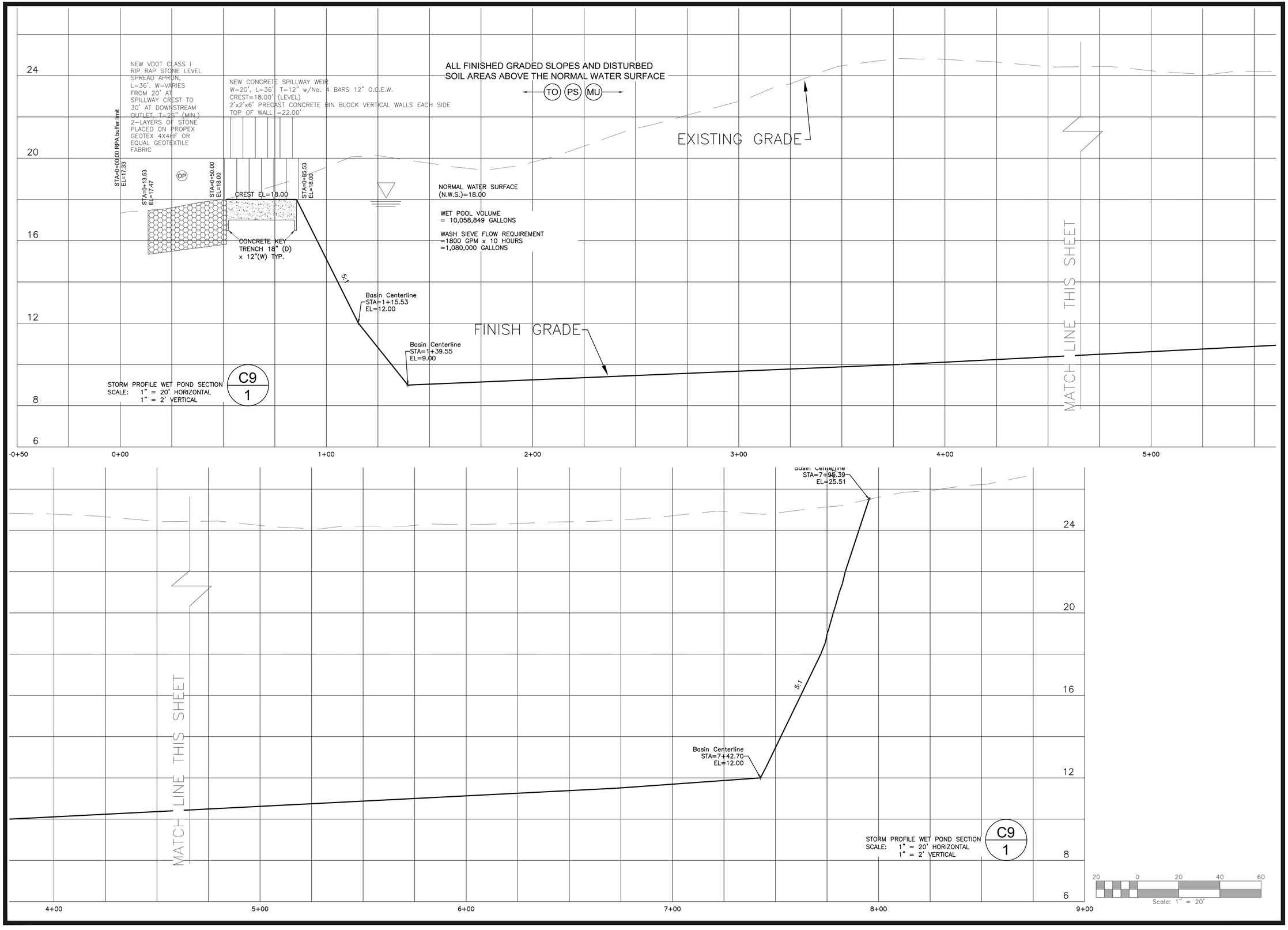
SHEET:

TYPICAL SECTIONS AND DETAILS

SHEET NO:

C8

JOB NO.
WE-0238-25



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PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

SECTIONS AND PROFILES

SHEET NO:

C9

JOB NO.
WE-0238-25

STA 1+00
RPA BUFFER LIMIT

EARTH BERM 10' TOP WIDTH, H=2'+/-

ALL FINISHED GRADED SLOPES AND DISTURBED
SOIL AREAS ABOVE THE NORMAL WATER SURFACE
TO PS MU

EXISTING GRADE

C10-1
STA=1+25.05
EL=22.00

C10-1
STA=1+35.06
EL=22.00

C10-1
STA=1+18.97
EL=19.98

C10-1
STA=1+47.08
EL=18.00

C10-1
STA=5+75.73
EL=22.35

C10-1
STA=5+07.97
EL=18.00

3:1

3:1

5:1

5:1

NORMAL WATER SURFACE
(N.W.S.)=18.00

WET POOL VOLUME
= 10,058,849 GALLONS

WASH SIEVE FLOW REQUIREMENT
=1800 GPM x 10 HOURS
=1,080,000 GALLONS

C10-1
STA=1+77.12
EL=12.00

FINISH GRADE

C10-1
STA=3+36.41
EL=10.53

C10-1
STA=4+77.63
EL=12.00

40 36 32 28 24 20 16 12 8 4 0

0+75 1+00 2+00 3+00 4+00 5+00 6+00 6+75

STORM PROFILE WET POND SECTION
SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

C10
1

20 0 20 40 60
Scale: 1" = 20'

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11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

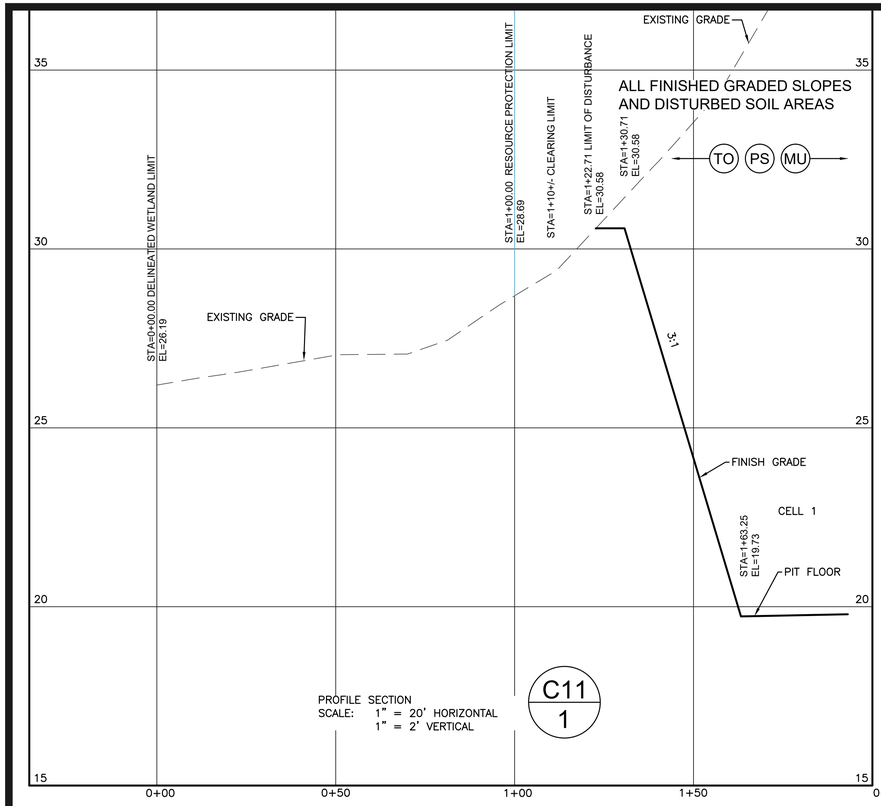
SHEET:

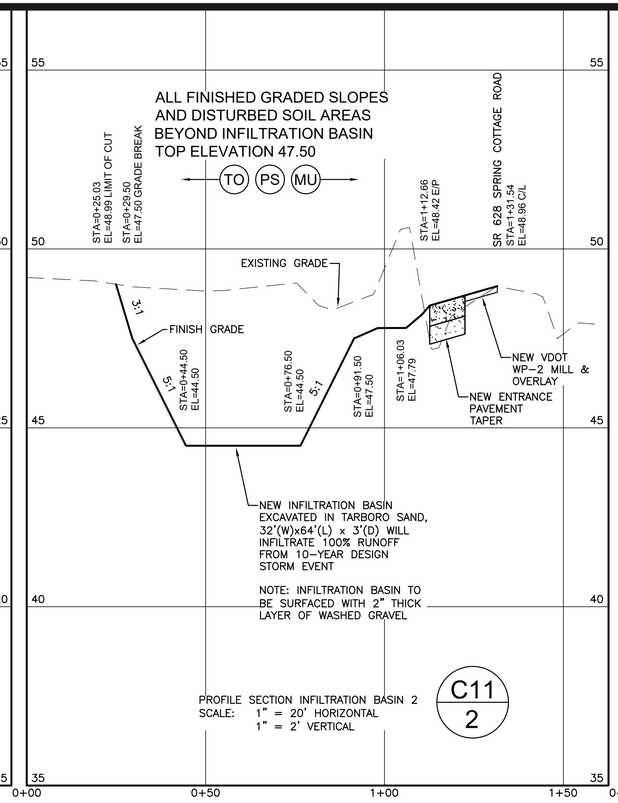
SECTIONS AND PROFILES

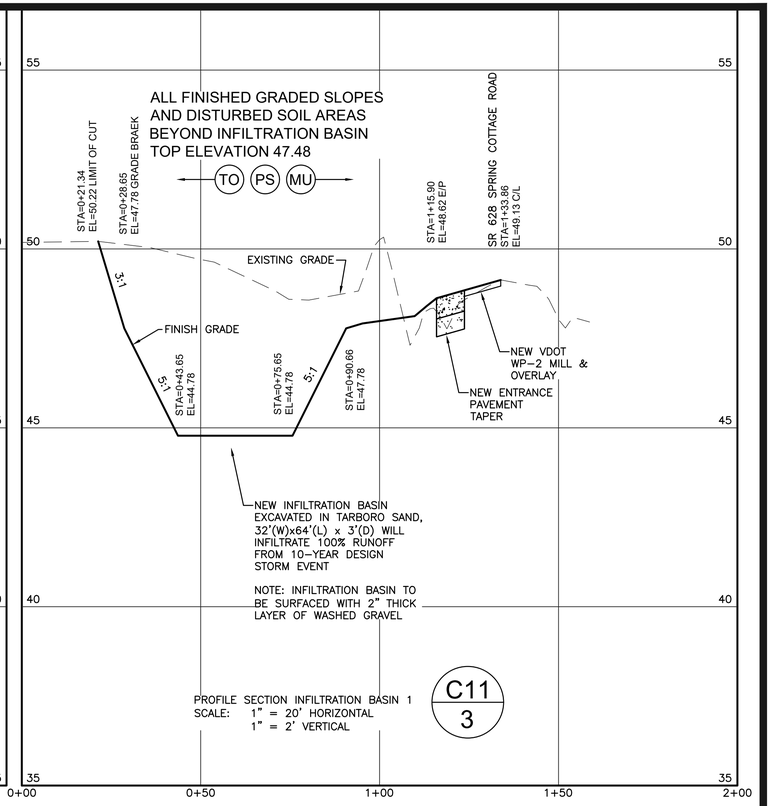
SHEET NO:

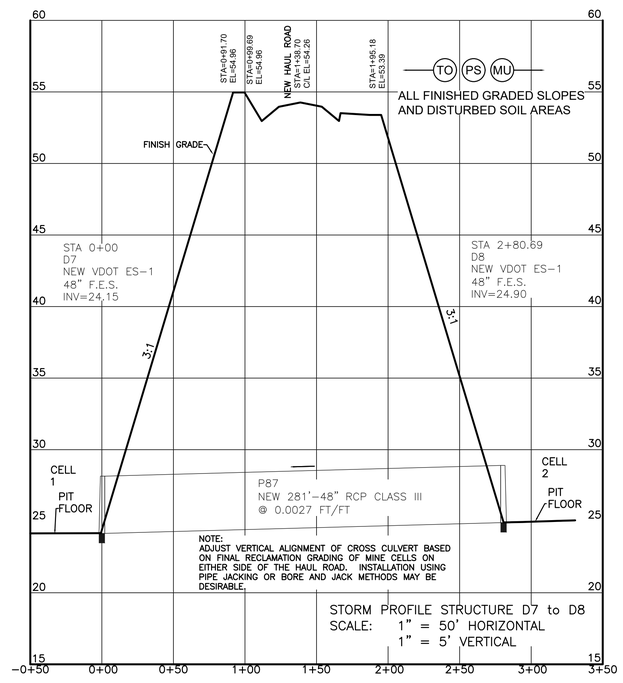
C10

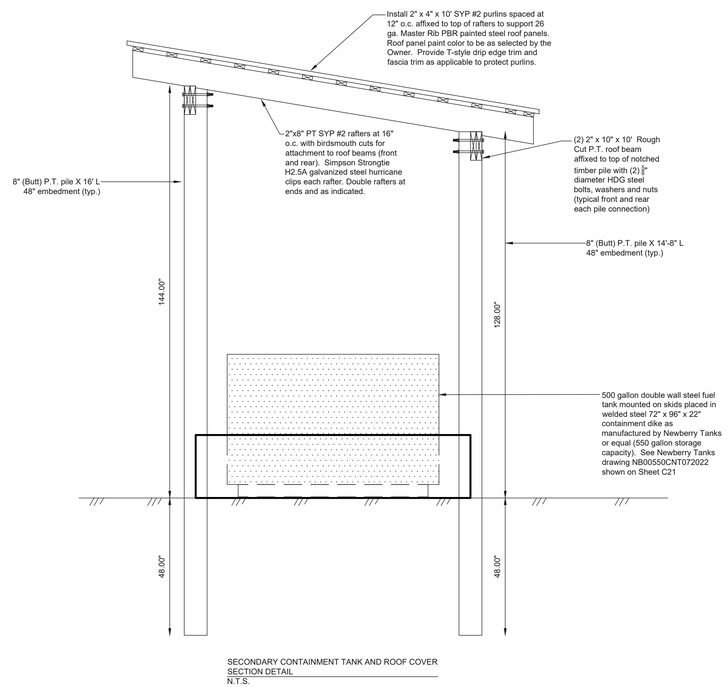
JOB NO.
WE-0238-25



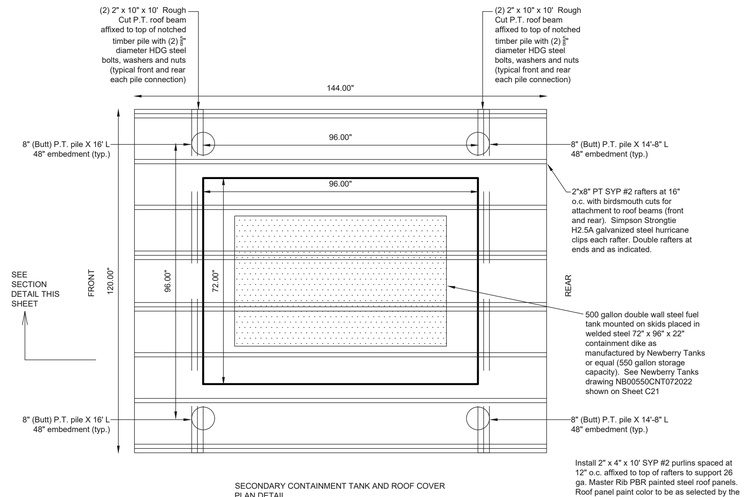








SECONDARY CONTAINMENT TANK AND ROOF COVER SECTION DETAIL
N.T.S.



SECONDARY CONTAINMENT TANK AND ROOF COVER PLAN DETAIL
N.T.S.

Install 2" x 4" x 10' SYP #2 purlins spaced at 12" o.c. affixed to top of rafters to support 26 ga. Master Rib PBR painted steel roof panels. Roof panel paint color to be as selected by the Owner. Provide T-style drip edge trim and fascia trim as applicable to protect purlins.

JOB NO. WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering
P.O. Box 1269
West Point, VA 23181-1269
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COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

SECTIONS AND PROFILES

SHEET NO:

C11

JOB NO. WE-0238-25

STATE PLANE GRID
VA SOUTH ZONE

NEW HAUL ROAD

300' UNDISTURBED BUFFER

300' UNDISTURBED BUFFER

STATE ROUTE 628
SPRING COTTAGE ROAD
50' R/W
NO POSTED SPEED LIMIT

STATE ROUTE 639
EASTERN VIEW ROAD
50' R/W

MATCH GRADE
MATCH GRADE
MATCH GRADE
MATCH EX EDGE OF PAVEMENT

75.00' R/W
20.42'
18.75'

RELOCATE STATE ROUTE SIGN AS DIRECTED BY VDOT

RELOCATE NEWSPAPER BOX

NEW 24" WIDE STOP BAR

NEW R1-1 STOP SIGN

C11
3

C11
2

0+00.00
1+00.00
2+00
3+00
4+00
5+00

0+73.18 R15.00
0+75.04 L15.00
1+30
1+58.71
13+00

FG=47.78
FG=44.78
FG=48.69
FG=48.68
FG=47.77
FG=47.50
FG=48.50
FG=44.50
FG=48.60
FG=47.35

47.77 DT
48.54
47.83 DT
47.73
48.53
47.64
48.64
47.52 DT
45.22 DT
48.17
47.16 DT
47.10 DT

SEE KEYNOTES ON SHEET C1

20 0 20 40 60
Scale: 1" = 20'

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

NEW HAUL ROAD PLAN STA 0+00 TO STA 5+00

SHEET NO:

C12

JOB NO.
WE-0238-25

STATE PLANE GRID
VA SOUTH ZONE

NEW HAUL ROAD
TO CELL 2

D8
NEW VDOT ES-1
48" F.E.S.
INV=24.90

P87
NEW 281'-48" RCP CLASS III
@ 0.0027 FT/FT

CIP

AIN END PIPE
P
8.3

NEW HAUL ROAD

10+00 9+00 8+00 7+00 6+00 5+00

P87

OP

STA 8+49.76 LEFT 138.70'
10'(W) x 15'(L) CLASS I RIP RAP STONE
OUTLET PROTECTION LEVEL SPREADER APRON
26" THICK PLACED ON PROPEX GEOTEX
4X4HF or EQUAL GEOTEXTILE
TOP OF STONE=PIT FLOOR FG=24.15+/-

D7
NEW VDOT ES-1
48" F.E.S.
INV=24.15

20 0 20 40 60
Scale: 1" = 20'

SEE KEYNOTES ON SHEET C1

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

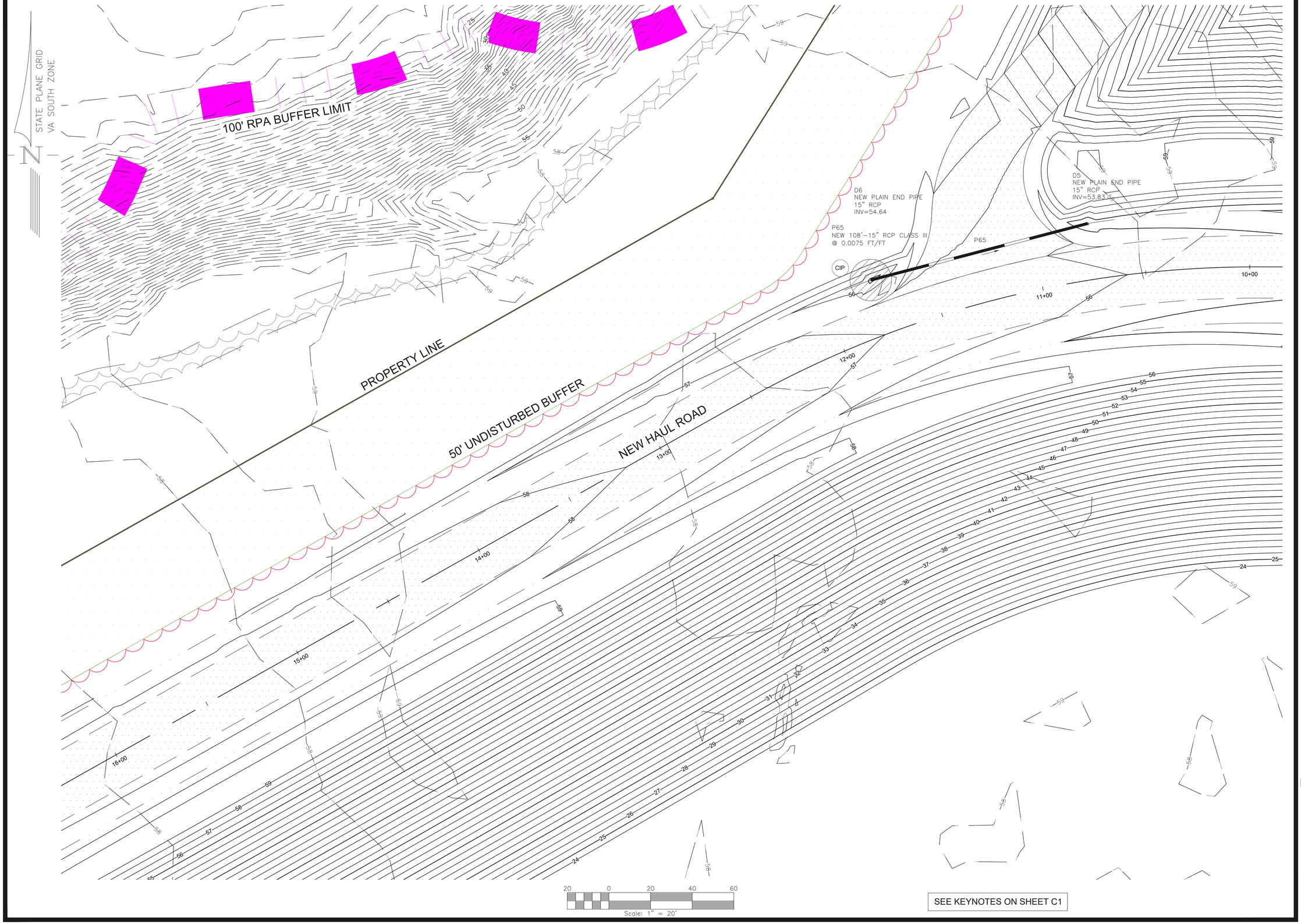
SHEET:

NEW HAUL ROAD PLAN STA 5+00 TO STA 10+00

SHEET NO:

C13

JOB NO.
WE-0238-25



SEE KEYNOTES ON SHEET C1

JOB NO.
WE-0238-25

PROJECT MANAGER:
JBW

DESIGNED:
JBW

CAD:
JBW

CHECKED:
JBW

FILED:

DATE:
NOVEMBER 13, 2024

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

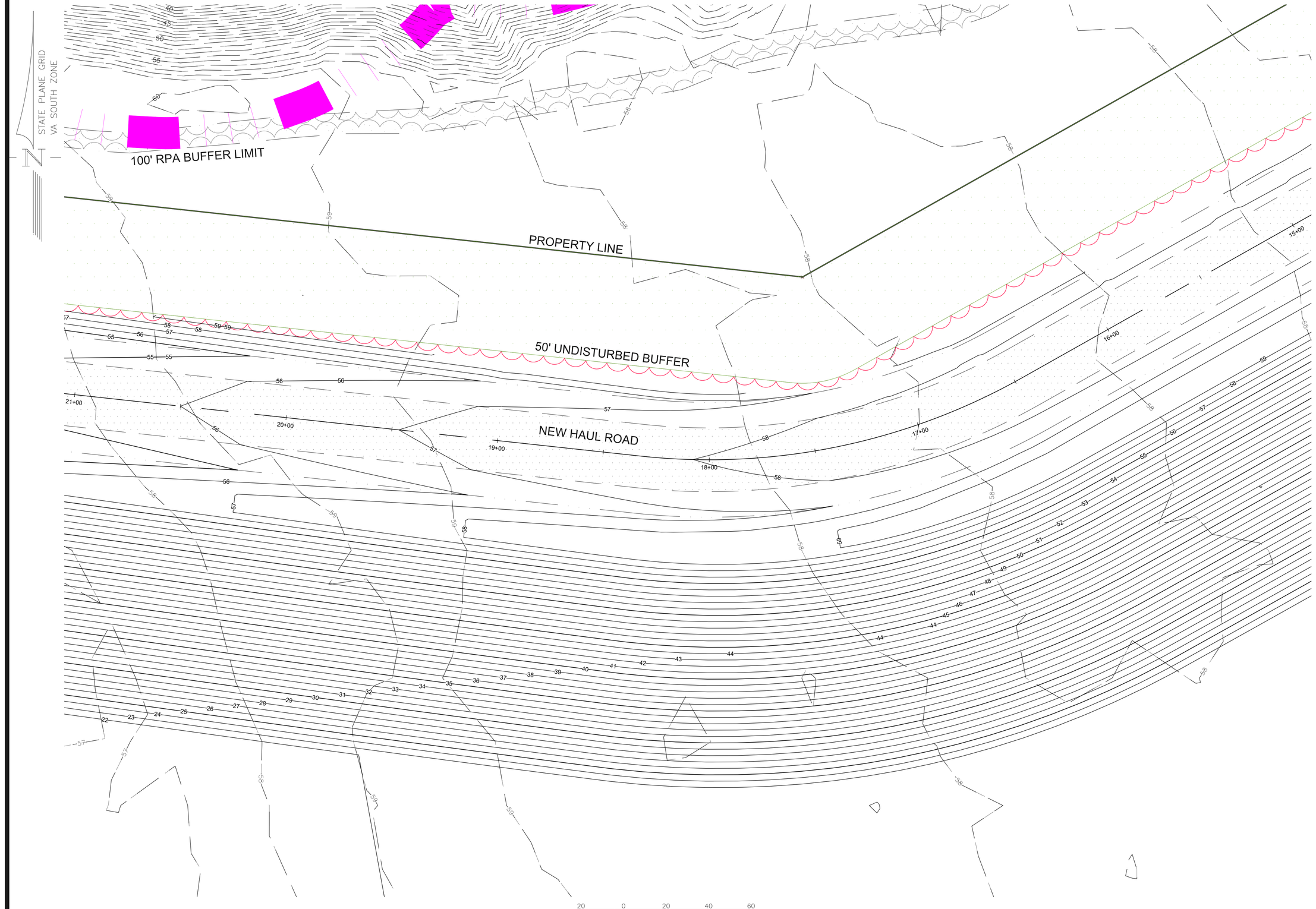
SHEET:

NEW HAUL ROAD PLAN STA 10+00 TO STA 15+00

SHEET NO:

C14

JOB NO.
WE-0238-25



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WE-0238-25

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CAD: JBW

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

NEW HAUL ROAD PLAN STA 15+00 TO STA 20+00

SHEET NO:

C15

JOB NO.
WE-0238-25

STATE PLANE GRID
VA SOUTH ZONE

PROPERTY LINE

100' RPA BUFFER LIMIT

50' UNDISTURBED BUFFER

NEW HAUL ROAD

C31
1

STA 23+10.00 RIGHT 27'
10'(W) x 15'(L) CLASS I RIP RAP STONE
OUTLET PROTECTION LEVEL SPREADER APRON
26" THICK PLACED ON PROPEX GEOTEX
4X4HF or EQUAL GEOTEXTILE
TOP OF STONE=SWALE INVERT=52.90

LS
OP
2+05
2+00

D10
STA 23+10 LEFT 27'
NEW VDOT DI-7
RIM=52.90
INV=48.90
H=4.00'

1+90

P109
NEW 120'-15" HDPE TYPE S
M294 WITH WATERTIGHT
JOINTS AND SLOPE ANCHORS
Sp=0.2296 FT/FT

D9
NEW 15" PLAIN END
PIPE
INV=21.35

IP

OP
0+00

STA 23+10.00 LEFT 147'
10'(W) x 15'(L) CLASS I RIP RAP STONE
OUTLET PROTECTION LEVEL SPREADER APRON
26" THICK PLACED ON PROPEX GEOTEX
4X4HF or EQUAL GEOTEXTILE
TOP OF STONE=PIT FLOOR FG=21.35+/-

C31
1

20 0 20 40 60
Scale: 1" = 20'

SEE KEYNOTES ON SHEET C1

JOB NO.
WE-0238-25

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CAD: JBW
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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

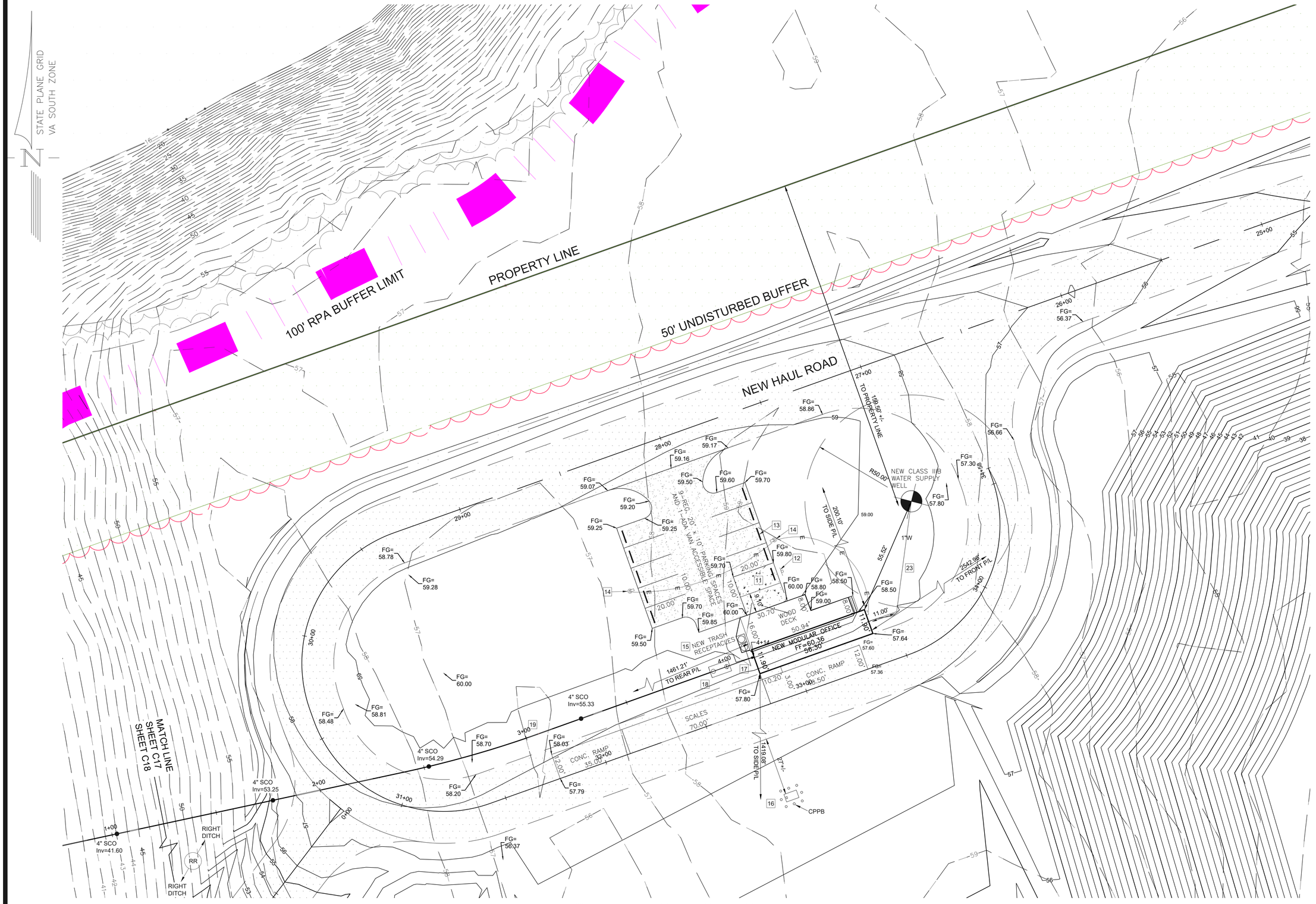
SHEET:

NEW HAUL ROAD PLAN STA 20+00 TO STA 25+00

SHEET NO:

C16

JOB NO.
WE-0238-25



SEE KEYNOTES ON SHEET C1

JOB NO. WE-0238-25

PROJECT MANAGER: JBW

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CAD: JBW

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

NEW HAUL ROAD PLAN STA 25+00 TO STA 34+58

SHEET NO:

C17

JOB NO. WE-0238-25

STATE PLANE GRID
VA SOUTH ZONE

100' RPA BUFFER LIMIT

PROPERTY LINE

50' UNDISTURBED BUFFER

C9
1

SES Boring 2
EL=27.41
BDG #3461

SES Boring 3
EL=30.23
BDG #3463

SES Boring 1
EL=27.50
BDG #3465

NEW SEPTIC DRAINFIELD

NEW RETENTION BASIN

BOTTOM=11.5

MATCH LINE
SHEET C17
SHEET C18

MATCH LINE
SHEET C18
SHEET C19

4" SCO
Inv=53.25

4" SCO
Inv=41.60

4" SCO
Inv=30.50

4" SCO
Inv=29.05

FG=
58.48

RIGHT
DITCH

RR

LEFT
DITCH

CELL 1 HAUL ROAD

20 0 20 40 60
Scale: 1" = 20'

SEE KEYNOTES ON SHEET C1

JOB NO.
WE-0238-25

PROJECT MANAGER:
JBW

DESIGNED:
JBW

CAD:
JBW

CHECKED:
JBW

FILED:

DATE:
NOVEMBER 13, 2024

REVISED:
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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

SEPTIC DRAINFIELD AND CELL 1 HAUL ROAD

SHEET NO:

C18

JOB NO.
WE-0238-25

STATE PLANE GRID
VA SOUTH ZONE

100' RPA BUFFER LIMIT

C10
1

NEW WET POND
SEDIMENT BASIN

NEW HAUL ROAD

BOTTOM=9.0

BOTTOM=10.0

FG=18.00

MATCH LINE SHEET C19
SHEET C20

MATCH LINE
SHEET C18
SHEET C19

MATCH LINE
SHEET C19
SHEET C20

D1
NEW VDOT EW-6, L=22'
CONCRETE HEADWALL
INV=17.00

P21
NEW TRIPLE 60'-24" DIP
PIPE PC350 FULLY ENCASED
IN CONCRETE CLASS A3
Fc=3500 PSI @ 28-DAYS

D2
NEW VDOT EW-6, L=22'
CONCRETE HEADWALL
INV=17.20

C29
1

SEE KEYNOTES ON SHEET C1

20 0 20 40 60
Scale: 1" = 20'

JOB NO.
WE-0238-25

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

CELL 1 HAUL ROAD AND RETENTION BASIN PLAN

SHEET NO:

C19

JOB NO.
WE-0238-25

STATE PLANE GRID
VA SOUTH ZONE

C10
1

NEW RETENTION BASIN
NORMAL WATER SURFACE EL=18.00'
BOTTOM EL = 11.50'
EMBANKMENT TOP EL=22.00'
TOP EMBANKMENT WIDTH=10'
SIDE SLOPES 3:1 TOP EL=22.0' to NWS EL=18.0'
SIDE SLOPES 5:1 NWS EL=18.0' to EL=12.0'
ELEVATION-STORAGE TABLE

ELEV	AREA (SF)	STORAGE (AC-FT)	
9.0	0	0	
10.0	14372	0.16	
12.0	166714	4.32	
18.0	218753	30.87	WET STORAGE
22.0	1665840	86.53	DRY STORAGE

NEW CONCRETE SPILLWAY WEIR W=20', L=36', T=12" w/No. 4 BARS 12" O.C.E.W. CREST=18.00' (LEVEL) 2'x2'x6' PRECAST CONCRETE BIN BLOCK VERTICAL WALLS EACH SIDE TOP OF WALL =22.00'

NEW VDOT CLASS I RIP RAP STONE LEVEL SPREAD APRON, L=36', W=VARIES FROM 20' AT SPILLWAY CREST TO 30' AT DOWNSTREAM OUTLET, T=26" (MIN.) 2-LAYERS OF STONE PLACED ON PROPEX GEOTEX 4X4HF OR EQUAL GEOTEXTILE FABRIC

C9
1

FG=18.00

NEW RETENTION BASIN

NEW HAUL ROAD

BOTTOM=10.0

BOTTOM=9.0

BOTTOM=11.5

MATCH LINE SHEET C19
SHEET C20

MATCH LINE SHEET C19
SHEET C20

ZONING LINE
INDUSTRIAL
AGRICULTURAL

100' RPA BUFFER LIMIT

D1
NEW VDOT EW-6, L=22'
CONCRETE HEADWALL
INV=17.00

P21
NEW TRIPLE 60"-24" DIP
PIPE PC350 FULLY ENCASED
IN CONCRETE CLASS A3
Fc=3500 PSI @ 28-DAYS

D2
NEW VDOT EW-6, L=22'
CONCRETE HEADWALL
INV=17.20

C29
1

20 0 20 40 60
Scale: 1" = 20'

SEE KEYNOTES ON SHEET C1

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NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

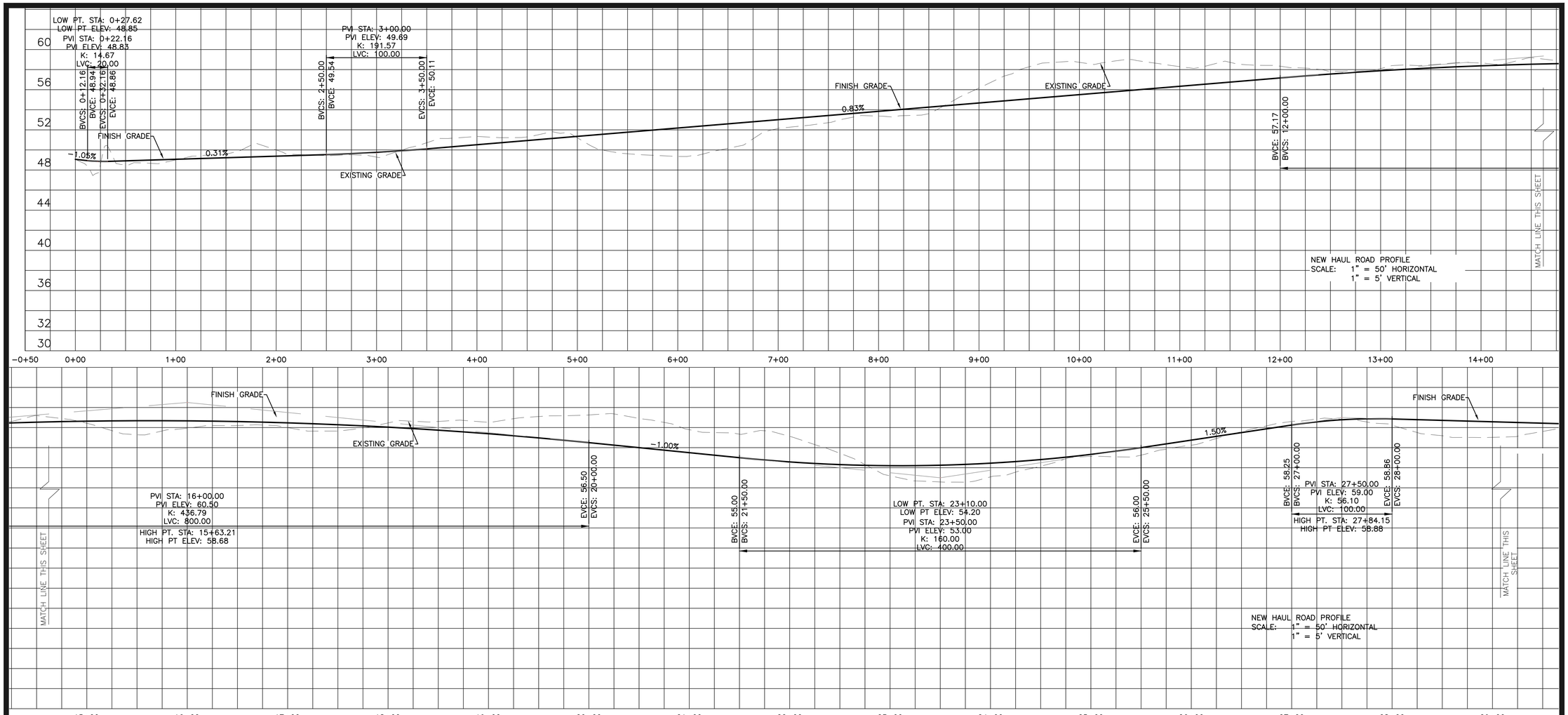
SHEET:

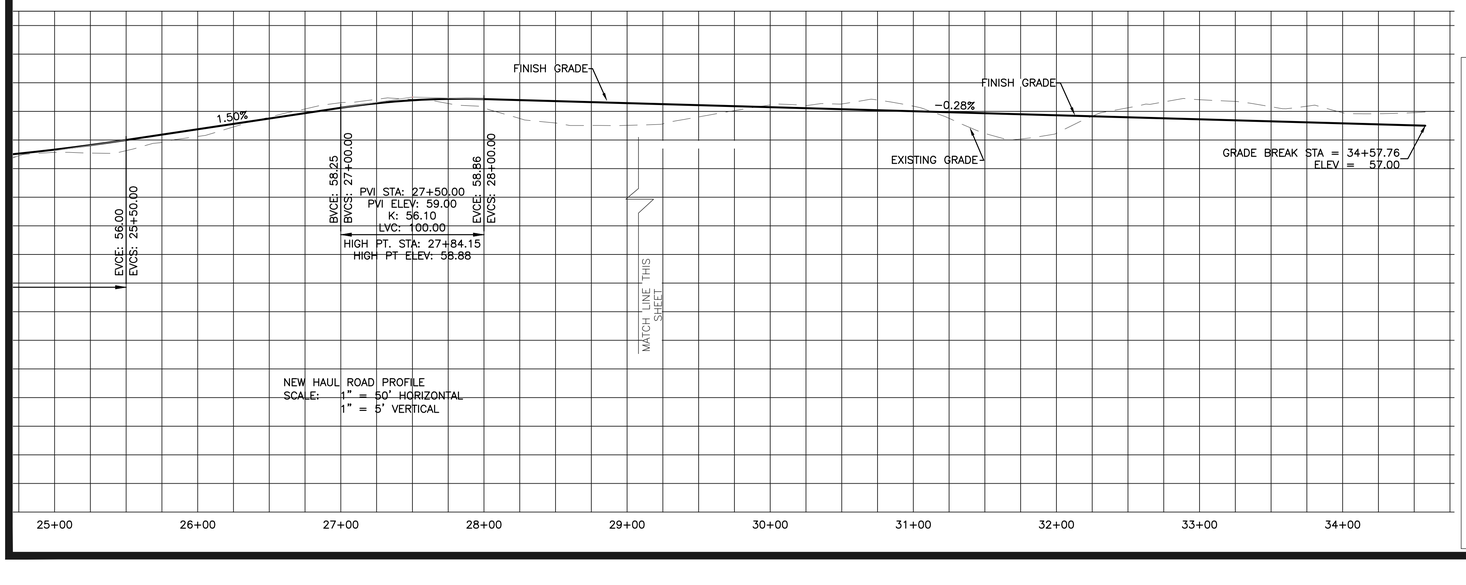
RETENTION BASIN PLAN

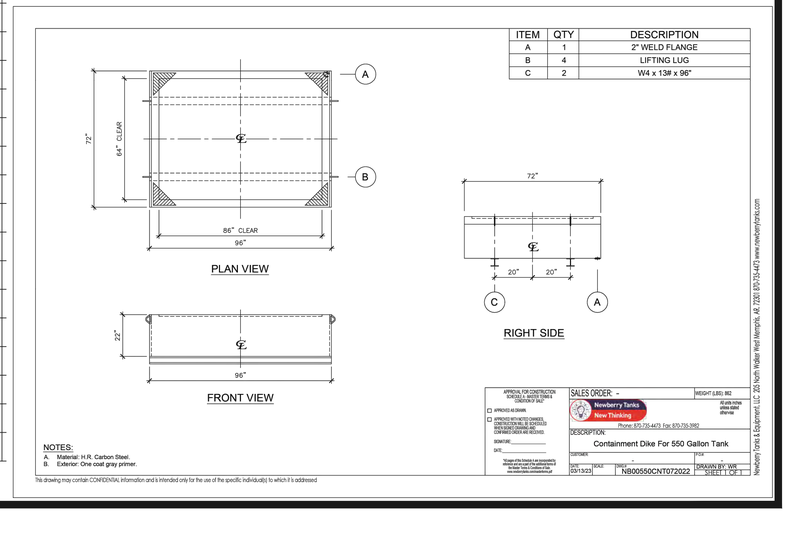
SHEET NO:

C20

JOB NO.
WE-0238-25







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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

NEW HAUL ROAD PROFILE

SHEET NO:

C21

JOB NO.
WE-0238-25

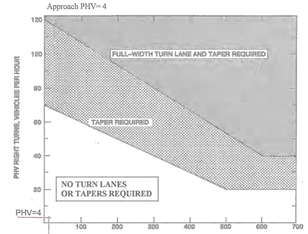
STATE PLANE GRID
VA SOUTH ZONE

CONSTRUCTION NOTES FOR VDOT
(Revised 03/13/2017)

1. Subdivisions only – These requirements were prepared in accordance with the requirements of (select one):
   - VDOT's 2005 Subdivision Street Requirements (SSR)
   - VDOT's 2009 Secondary Street Acceptance Requirements (SSAR)
   - VDOT's 2011 Secondary Street Acceptance Requirements (SSAR 2011)
2. All work shown hereon shall be in strict accordance with the current Standards and Specifications of the Virginia Department of Transportation (VDOT) and County Ordinances.
3. It is the intent of these drawings to show all necessary work. Any item of work not specifically shown, but necessary to eligibility for acceptance is hereby implied.
4. A VDOT permit must be obtained prior to starting construction within any State Highway Rights-of-Way.
5. The contractor/owner shall perform CBR testing on the subgrade in accordance with VDOT specifications by a certified geotechnical engineer to determine base and pavement designs, and this information must be forwarded to VDOT and reviewed prior to placement of aggregate base.
6. The contractor/owner must specify in writing to VDOT prior to construction, the type of subbase, base and surface pavement to be utilized on each street for each traffic group.
7. The contractor shall notify VDOT 72 hours prior to placement of base materials and prior to the placement of asphalt material to ensure VDOT's ability to perform testing, such as proof-rolling, depth checks, compaction, and contamination. Option: A certified analysis from a private engineering/testing firm may be submitted within 7 working days of the required tests. **72 hours notice is still required prior to each activity.**
8. All culvert and driveway pipes shall be of a type approved by VDOT and the Locality. Note that the use of corrugated metal pipe in any location will only be considered after the requirements of standard PC-1, Tables C and D of the *2016 Road and Bridge Standards* are addressed.
9. All entrance pipes for driveways shall be a minimum of 12" in diameter, and 30' in length (concrete culverts may be 28' in length), unless otherwise approved by VDOT. Driveway culverts in cul-de-sacs shall be concrete. See approved road plans for the proper culvert sizes.
10. Contractor must verify all dimensions and elevations in the field before starting construction and notify the design engineer of any discrepancies.
11. The contractor shall erect street signs and traffic control signs as indicated on the subdivision construction plans. The signs shall conform to VDOT and County specifications. All proposed signs are to be installed per STP-1 of the *2016 Road and Bridge Standards*. All pavement markings installed within VDOT Right-of-way will be Type B Class I Thermoplastic.
12. A minimum 35' pavement fillet radius is recommended.
13. The contractor shall do such overlot grading as necessary to preclude the ponding of water adjacent to the roadway.
14. Slope easements will be required at all locations where the top of the cut or the toe of the fill exceeds the proposed dedication of right-of-way. See plat for exact location.
15. If running water is present in any outlet channel during construction where ditch protection is required, the bottom of the channel shall be lined with rip-rap stone with EC-1 placement. Further, EC-2 or EC-3 must have a minimum width of 4' in fill sections, and 5' in cut sections.
16. The contractor shall be responsible to see that all erosion and sediment control standards are met, and the contractor must seed and mulch all disturbed areas along with all graded areas within the proposed right-of-way in accordance with VDOT standards and specifications.
17. Final location of manholes, valves, fire hydrants, and other appurtenances shall not conflict with or constrict roadway drainage. Contractor shall adjust manholes and/or ditch alignment to ensure proper roadside drainage, compatible with existing field conditions.
18. All water, sanitary sewer, and storm sewer trenches shall be compacted to 95% density in 6" layers. Compaction tests may be required by VDOT.
19. VDOT will require density tests from a certified engineering firm for all culvert installations with a diameter of 36" or larger.
20. Video inspection may be required on all storm sewer systems prior to final construction approval. A VDOT inspector must be on-site during the video inspection process.
21. The contractor needs to contact Fredericksburg District Traffic Signals at (855) 475-2335 for a mark out of the traffic signal equipment a minimum of 72 hours prior to work beginning when working within a 1,000 feet of a traffic signal.
22. The final footage and location for VDOT standard guardrail is to be established prior to the completion of fine grading by joint inspection with the contractor, VDOT, and the owner's representative.
23. Whenever tying in to an existing road, VDOT's WP-2 standard will apply, which include milling and overlay of the adjacent travel lane.
24. A pavement leveling course may be required to meet the intended cross-slope and typical section.
25. All storm structures shall have IS-1 invert shaping, and SL-1's (safety landings) will be required in all structures with a depth over 12'. ST-1's (steps) are required in any structure with a depth of 4' or greater.

SR 628 VDOT AADT =60
PHV = 0.11 x AADT = 7
Approach PHV= 4

F-96



Appropriate Radius required at all Intersections and Entrances (Commercial or Private).

LEGEND

PHV - Peak Hour Volume (also Design Hourly Volume equivalent)

Adjustment for Right Turns

For posted speeds at or under 45 mph, PHV right turns > 40, and PHV total < 300.
Adjusted right turns = PHV Right Turns - 20
If PHV is not known use formula: PHV = ADT x K x D

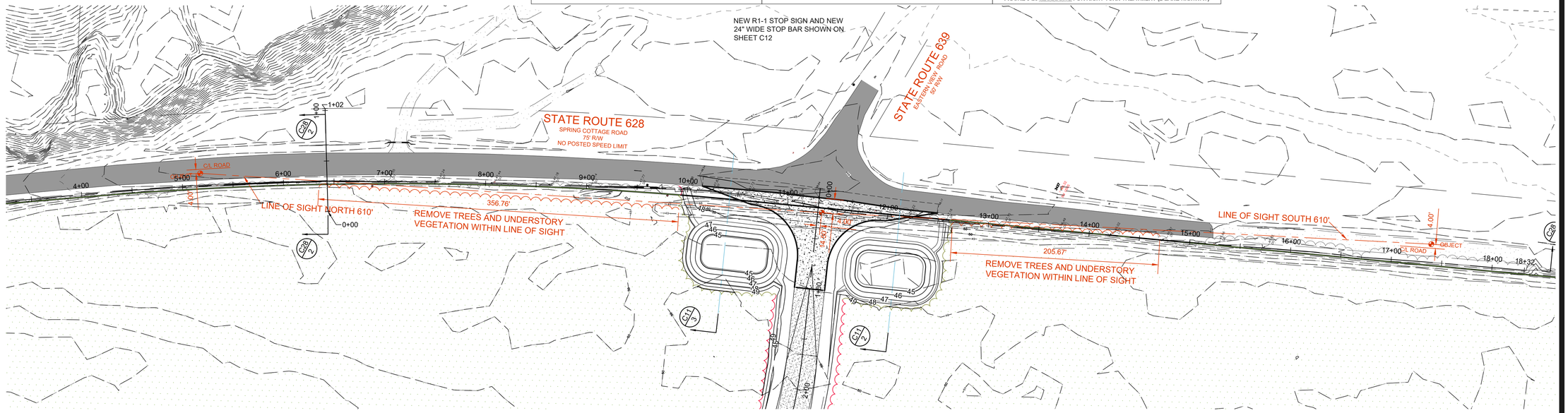
K = the percent of AADT occurring in the peak hour
D = the percent of traffic in the peak direction of flow

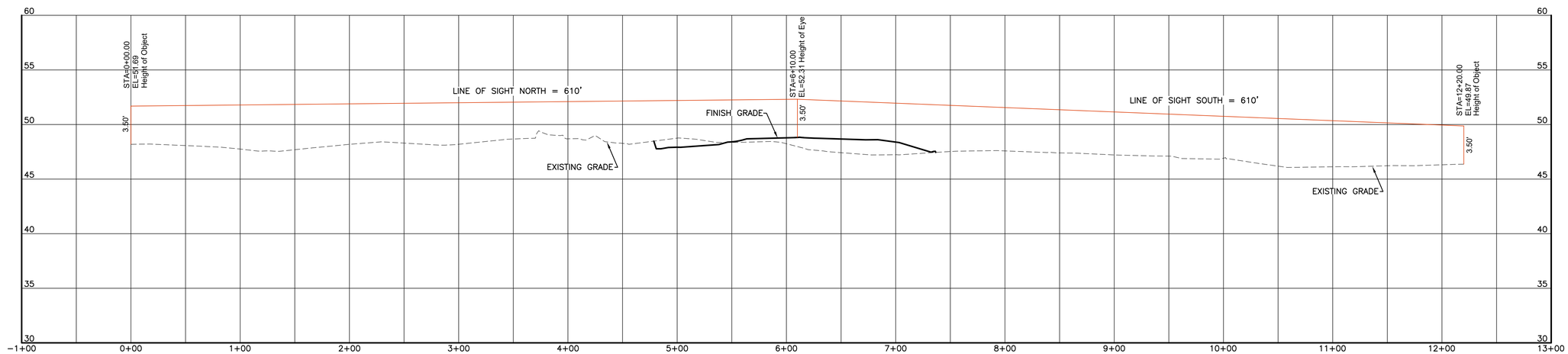
Notes: An average of 11% for K x D will suffice.

When right turn facilities are warranted, see Figure 3-1 for design criteria.

FIGURE 3-26 WARRANTS FOR RIGHT TURN TREATMENT (2-LANE HIGHWAY)

TRIP GENERATION						11/13/2024
Mattaponi Sand & Gravel, LLC						
Tax Parcel 1632-78R-680 ENTRANCE SPRING COTTAGE ROAD, S.R. 628						
Land Use	Intensity	Daily Trips	AM or PM Peak Hour Volumes			
Sand & Gravel Surface Mine	n/a		Total	Enter	Exit	
ITE Code (not applicable)		132	15	8	7	
Calculations:	Trucks per day					
Operational days	52 weeks per year X 6 haul days per week = 312 haul days/year					
Anticipated mining life	10 years x 312 haul days/year = 3120 haul days					
Peak Annual Tonnage	390000 tons/year					
Average Vehicle Load	25 tons per vehicle					
Average Tonnage per day	390000 tons/year /312 haul days/year =1250 tons/day					
Trips per day (loaded)	1250 tons/day/25 tons/vehicle =50 VPD		Max. per CU02-08			
Total Average Trip Ends	50 VPD x 2 = 100 VPD (50 empty in + 50 loaded out)					
Employees	8 employees					
Total Average Trip Ends	4 trip ends/employee x 8 employees = 32 VPD					
Combined PEAK Total ATE	132 (traveling North or South along SR 628)					
AM or PM PHV	132 x 11% = 15					
Enter/Exit Split	53/47 8 entering/7 exiting					
PHV right turns is 50-percent of 8 entering vehicles per hour			4			





50 0 50 100 150
Scale: 1" = 50'

JOB NO.
WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
jblairwilson@gmail.com

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

INTERSECTION SIGHT DISTANCE PLAN & PROFILE

SHEET NO:

C22

JOB NO.
WE-0238-25

Revised April 1, 2017

LAND USE PERMIT
LUP-SPG
Special Provisions – General

VDOT Land Use Permit Required by Law

The General Rules and Regulations of the Commonwealth Transportation Board provide that no work of any nature shall be performed on any real property under the ownership, control, or jurisdiction of VDOT until written permission has been obtained from VDOT. Written permission is granted for the above-referenced activity through the issuance of a land use permit.

By issuing a permit, VDOT is giving permission only for whatever rights it has in the right-of-way; the permittee is responsible for obtaining permission from others who may also have an interest in the property.

The permittee will be civilly liable to the Commonwealth for expenses and damages incurred by VDOT as a result of violation of any of the rules and regulations of this chapter. Violators shall be guilty of a misdemeanor and, upon conviction, shall be punished as provided for in §33.2-210 of the Code of Virginia.

Application Requirements

Application shall be made for VDOT land use permits through the local district permit office where the activity is to take place.

Application forms and general information regarding VDOT land use permitting can be obtained by contacting the central office permit manager or at the following VDOT web site: http://www.virginiadot.org/business/bu-landUsePermits.asp

The applicant shall provide a notarized affidavit indicating compliance with the registration and notification requirements outlined in § 2.2-1151.1 of the Code of Virginia.

Permit Fees

The land use permit application shall include a check in an amount determined by the district administrator's designee based on the schedule found in 24VAC30-151-710 of the Land Use Permit Regulations.

Surety Requirement

A performance surety in the amount determined by the district administrator's designee is required to restore the right-of-way in the event of damage or default. This surety may be in the form of cash, check or surety bond LUP-SB, or LUP-LC irrevocable letter of credit.

Cash Surety Refund

Applicants owing the Internal Revenue Service or the Commonwealth of Virginia may not receive a refund of the cash guarantee provided for the issuance of a VDOT land use permit unless the amount owed is less than the amount of cash guarantee provided. Applicants providing cash guarantee for the issuance of a VDOT land use permit must provide an executed copy of the Commonwealth of Virginia's Substitute Form W-9 to receive a refund of the cash guarantee provided for the issuance of a VDOT land use permit.

Insurance Requirements (excluding County, Town or City)

The permittee or their agent shall secure and maintain insurance to protect against liability for personal injury and property damage that may arise from the activities performed under the authority of a land use permit and from the operation of the permitted activity up to one million dollars ($ 1,000,000) each occurrence to protect the Board members and the Department's agents or employees; seventy-five thousand dollars ($75,000) each occurrence to protect the Board, the Department, or the Commonwealth in event of suit. Insurance must be obtained prior to start of the permitted work and shall remain valid through the permit completion date. VDOT staff may require a valid certificate or letter of insurance from the issuing insurance agent or agency prior to issuing the land use permit.

Any of the following provisions that may apply, shall apply:

General Requirements

1) Permittee acceptance and use of a Virginia Department of Transportation (VDOT) land use permit is prima facie evidence that the permittee has read and is fully cognizant of all required permit provisions, applicable traffic control plans and associated construction

standards to be employed. All applicants to whom permits are issued shall at all times indemnify and save harmless the Commonwealth Transportation Board, members of the Board, the Commonwealth, and all Commonwealth employees, agents, and officers, from responsibility, damage, or liability arising from the exercise of the privileges granted in such permit to the extent allowed by law including any sums ordered to be paid or expended by VDOT by any governmental entity as a fine, penalty or damages for any violation of any applicable environmental law, or to remediate any hazardous or other material, including illicit discharge into VDOT maintained storm sewer systems.

2) The permittee assumes full responsibility for any and all (downstream flooding, erosion, siltation, etc.) damages that may occur as a result of the work performed under this permit. Furthermore, the Department will in no way be responsible for any damage to the facility being placed as a result of future maintenance or construction activities performed by the Department.

3) The permittee agrees to move, remove, alter, or change any installation that interferes with the ultimate construction of the highway in alignment or grade at no cost to the Department unless otherwise stipulated and agreed to by the Department.

4) The permittee shall immediately correct any situation that may arise as a result of these activities that the district administrator's designee deems hazardous to the traveling public.

5) Any and all highway signs, right-of-way markers, etc., disturbed as a result of work performed under the auspices of the subject land use permit shall be accurately reset by the permittee immediately following the work in the vicinity of the disturbed facility. The services of a certified land surveyor with experience in route surveying may be required.

6) It shall be the permittee's responsibility to obtain any and all necessary permits that may be required by any other government agencies, i.e., U.S. Army Corp. of Engineers, Department of Environmental Quality, Department of Conservation and Recreation, etc.

7) A copy of the VDOT land use permit shall be maintained at the work site and made readily available for inspection when requested by authorized VDOT personnel. District administrator's designee may request the permittee to install on site a project information sign to help the public and VDOT personnel identify activities in the right of way (see LUP-IS).

8) The permittee shall notify the local district permit office at least 48 hours prior to commencement of any work requiring inspection and/or testing as stipulated in VDOT's Road and Bridge Standards (current edition) and VDOT's Road and Bridge Specifications (current edition). Failure to carry out this requirement may result in permit revocation.

9) The permittee or their agent must contact the VDOT Customer Service Center at 1-800-367-7623 a minimum of 48 hours prior to initiating any planned excavation within 1,000 feet of a signalized intersection and/or near VDOT ITS infrastructure. Excavation activities may proceed only after the VDOT regional utility location agent has notified the permittee that the utility marking has been completed. Additional information can be found at: http://www.virginiadot.org/business/resources/I&IM/TE-383_Request_for_Marking_VDOT_Utility_Location.pdf

   Alternately, within all localities in the Northern Virginia Construction District, including the Counties of Arlington, Fairfax, Loudoun & Prince William, the Cities of Alexandria, Fairfax, Falls Church, Manassas and Manassas Park, and the Towns of Clifton, Dumfries, Hamilton, Haymarket, Herndon, Hillsboro, Leesburg, Lovettsville, Middleburg, Occoquan, Purcellville, Quantico, Round Hill and Vienna, and on Interstate 95 in the counties of Stafford, Spotsylvania and Caroline, the permittee may request VDOT regional utility marking at: http://www.vdotutilitymarking.virginia.gov

10) The permittee shall to notify "Miss Utility" (or each operator of an underground utility where no notification center exists) of any planned excavation within state maintained right-of-way. This notification must be provided at least 48 hours (excluding weekends and holidays) in advance of commencing with any planned excavation within state maintained right-of-way. Failure to carry out this requirement may result in permit revocation.

11) It is the duty of the district administrator's designee to keep all roads maintained in a safe and traveliable condition at all times. Therefore, any permit may be denied, revoked or suspended when in the opinion of the district administrator's designee, the safety, use or maintenance of the highway so requires.

12) The permittee shall at all times give strict attention to the safety and rights of the traveling public, their employees and themselves. VDOT reserves the right to stop work at anytime due to safety problems and/or non-compliance with the terms of the permit. The Department may, at its discretion, complete any of the work covered in the permit or restore the right-of-way to the department's standards and invoice the permittee for the actual cost of such work. The permittee may be required to move, alter, change or remove from state maintained right-of-way, in a satisfactory manner, any installation made under this permit.

13) All work authorized under the auspices of a VDOT land use permit shall be subject to VDOT's direction and be in accordance with VDOT's Road and Bridge Standards (current edition) and VDOT's Road and Bridge Specifications (current edition).

14) Design changes, specified material changes and/or field changes from the approved plans shall be submitted to the appropriate district administrator's designee for review and approval prior to proceeding with the proposed changes. This submittal shall include written justification, supplemental documentation and/or engineering calculations that support the requested changes.

15) The permittee shall meet or exceed the existing pavement design and typical section when constructing pavement widening adjacent to an existing state maintained roadway. The proposed pavement design and typical section shall be approved by the district administrator's designee prior to commencing with any work within state maintained right-of-way. All pavement widening shall be in accordance with VDOT's Road and Bridge Standard 303.02.

16) Within the limits of a VDOT construction project it is the responsibility of the permit applicant to obtain the contractor's consent in writing prior to permit issuance. Information regarding current and/or planned VDOT construction and maintenance activities can be obtained at: http://www.virginiaroads.org/.

Traffic Control and Safety

1) The permittee shall at all times give strict attention to the safety and rights of the traveling public, their employees, and contractors. Any permit may be revoked or suspended when in the opinion of the district administrator's designee, the safety, use or maintenance of the highway so requires.

2) In accordance with the Virginia Department of Transportation (VDOT) Road and Bridge Specification, Special Provision 105.14, all activities performed under the auspices of a VDOT Land Use Permit involving the installation, maintenance and removal of work zone traffic control devices must have an individual on-site who, at a minimum, is accredited by VDOT in Basic Work Zone Traffic Control. The accredited person must have their VDOT Work Zone Traffic Control accreditation card in their possession while on-site.

3) The individual accredited in Basic Work Zone Traffic Control is responsible for the placement, maintenance and removal of work zone traffic control devices within the project limits in compliance with the permit requirements and conditions, the approved plans and specifications, the Virginia Work Area Protection Manual, and the Manual of Uniform Traffic Control Devices.

4) A person accredited by VDOT in Intermediate Work Zone Traffic Control must be on-site to provide supervision for adjustment to the approved layout of any standard Typical Traffic Control (TTC) layouts outlined in the Virginia Work Area Protection Manual.

5) All traffic control plans shall be prepared by a person verified by VDOT in Advanced Work Zone Traffic Control.

6) Individuals responsible for implementation of work zone traffic control measures shall provide evidence of their accreditation upon request from VDOT personnel.

7) The permittee shall be exempt from the requirements of Virginia Department of Transportation (VDOT) Road and Bridge Specification, Special Provision 105.14 if the authorized activity is not within the roadway (as defined in 24VAC30-151) of a state maintained highway.

8) Non-compliance with the requirements outlined in VDOT Road and Bridge Specification, Special Provision 105.14 may result in a stop work order and/ or permit revocation.

9) All activities that require the disruption (stoppage) of traffic shall utilize VDOT certified flaggers. Flag persons shall be provided in sufficient number and locations as necessary for control and protection of vehicular and pedestrian traffic in accordance with the Virginia Work Area Protection Manual. All flaggers must have their certification card in their possession when performing flagging operations within state maintained right-of-way. Any flag person found not in possession of his/her certification card shall be removed from the flagging site and the district administrator's designee will suspend all permitted activities.

10) Any VDOT certified flag person found to be performing their duties improperly shall have their certification revoked.

11) All signs shall be in accordance with the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

12) The permittee shall immediately correct any situation that may arise as a result of these activities that the district administrator's designee deems hazardous to the traveling public.

13) During authorized activities, the permittee shall furnish all necessary signs, flag persons and other devices to provide for the protection of traffic and workers in accordance with the Virginia Work Area Protection Manual or as directed by the district administrator's designee.

14) Traffic shall not be blocked or detoured without permission, documented in writing or electronic communication, being granted by the district administrator's designee.

15) All lane or shoulder closures on highways in the Northern Virginia construction district classified as arterial or collector routes must be authorized, documented in writing or by electronic communication by the VDOT Transportation Operations Center (NROTOC).

16) If directed by the district, requests for the implementation of temporary lane closures must be entered into the VDOT Lane Closure Advisory Management System (LCAMS) and VaTraffix a minimum of one (1) week prior to the planned execution of lane closure activities on state maintained highways. The permittee or their contractor(s) may enter their requests directly or provide written requests to the VDOT Regional Operations Center as follows:

- Lane closure requests in all the counties listed below are within the Northern Region and shall be sent to: nrolaneclosurerequests@vdot.virginia.gov.

  Contact information:
  NRO- (703) 877-3401
  Carlene McWhirt, Lane Closure Coordinator
  carlene.mcwhirt@vdot.virginia.gov

  Counties: Arlington, Fairfax, Loudoun, Prince William, Spotsylvania, and Stafford

- Lane closure requests in all the counties listed below are within the Northwest Region and shall be sent to: StauntonTrafficManagementCenter@vdot.virginia.gov.

  Contact information:
  NWRO (540) 332-9500
  Sandy WyrickK, Lane Closure Coordinator
  Sandy.WyrickK@VDOT.Virginia.gov,cathal.duffy@vdot.virginia.gov
  Counties: Albemarle, Alleghany, Augusta, Bath, Clarke, Culpeper, Fauquier, Fluvanna, Frederick, Greene, Highland, Louisa, Madison, Orange Page, Rappahannock, Rockbridge, Rockingham, Shenandoah and Warren

- Lane closure requests in all the counties listed below are within the Southwest Region and shall be sent to: SalemSmartTrafficCenter@VDOT.Virginia.gov.

  Contact information:
  SWRO- (540) 375-0170
  Todd Martin, Lane Closure Coordinator
  todd.martin@vdot.virginia.gov,sharon.braden@vdot.virginia.gov

  Counties: Amherst, Appomattox, Bedford, Bland, Botetourt, Buchanan, Buckingham, Campbell, Carroll, Charlotte, Craig, Cumberland, Dickenson, Floyd, Franklin, Giles, Grayson, Halifax, Henry, Lee, Montgomery, Nelson, Patrick, Pittsylvania Prince Edward, Pulaski, Roanoke, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe.

- Lane closure requests in all the counties listed below are within the Eastern Region and shall be sent to: RichmondSat.SmartTraffic@vdot.virginia.gov

  Contact information:
  ERO- (757) 424-9920
  Michael Ambrose, Lane Closure Coordinator
  michael.ambrose@vdot.virginia.gov

  Counties: Accomack, Greensville, Isle of Wight, James City, Northampton, Southampton, Surry, Sussex and York

- Lane closure requests in all the counties listed below are within the Central Region and shall be sent to: RichmondSat.SmartTraffic@vdot.virginia.gov

  Contact information:
  CRO- 804-796-4520
  Sheila Hicks, Lane Closure Coordinator
  sheila.hicks@vdot.virginia.gov

Counties: Amelia, Brunswick, Caroline, Charles City, Chesterfield, Dinwiddie, Essex, Gloucester, Goochland, Hanover, Henrico, King and Queen, King George, King William, Lancaster, Lunenburg, Mathews, Mecklenburg, Middlesex, New Kent, Northumberland, Nottoway, Powhatan, Prince George, Richmond, and Westmoreland

Written requests for implementation of temporary lane closures must be submitted to the appropriate VDOT Regional Operations Center by close of business on the preceding Wednesday for the upcoming week's planned lane closures. All requests being directly input into LCAMS and VaTraffic must be entered no later than 2:00 pm on the preceding Thursday for the upcoming week's lane closure activities. Any conflicts with other roadway work must be resolved by close of business on Thursday the week prior to the scheduled lane closure activities with documented resolution sent to the VDOT point of contact provided by the regional traffic operation center LCAMS Administrator. Any requests received after these time limitations will not be approved and the proposed work within VDOT right of way requiring lane closures must be rescheduled.

Lane closure requestors wanting direct access to LCAMS and VaTraffic must complete ITD-36E & ITD-36F forms and return to Ms. Carlene McWhirt at Carlene.McWhirt@VDOT.Virginia.gov. Online training is available for LCAMS and VaTraffic and VDOT can accommodate any additional training needs. Please contact Ms. McWhirt at (571) 350-2078 to schedule training.

VIRGINIA WORK ZONE TRAFFIC CONTROL TRAINING OPTIONS

The following three options are available to receive Work Zone Traffic Control (WZTC) training based on an individual's job duties and responsibilities as required by the FHWA Final Rule on Work Zone Safety and Mobility and the Virginia Department of Transportation:

OPTION 1 – Have someone trained to become a qualified instructor in your company who can then instruct others , utilizing training material provided by VDOT. The following qualifications must be met in order to teach the VDOT Basic, Intermediate, or Advanced WZTC training courses:

- **Basic** – Be flagger certified either by VDOT or by the American Traffic Safety Services Association (ATSSA); possess two years of practical experience in Highway Design, Construction, Maintenance, or Traffic Operations; possess two years of documented experience in conducting training courses, and successfully complete the VDOT WZTC Intermediate or Advanced course or complete the ATSSA Virginia Intermediate/Traffic Control Supervisor (TCS) course.

- **Intermediate** - Be flagger certified either by VDOT or by ATSSA; possess two years of practical experience in Highway Design, Construction, Maintenance, or Traffic Operations; possess two years of documented experience in conducting training courses; complete and possess the ATSSA Virginia Intermediate/TCS certification.

- **Advanced** - Be flagger certified either by VDOT or by ATSSA; possess two years of practical experience in Highway Design, Construction, Maintenance, or Traffic Operations; possess two years of documented experience in conducting training courses; complete and possess the ATSSA Virginia Advanced Traffic Control Design Specialist (TCDS) certification or ATSSA Virginia Intermediate TCS certification.

To become an approved instructor, an application must be completed listing the above qualifications and sent to the chairman of VDOT's WZST committee at the following location:
http://www.virginiadot.org/business/resources/wztc/wztc_inst_app_form.pdf

Once a person has become an approved instructor, training material can be obtained from VDOT using the order form obtained from the following location (requires an approved instructor identification number):
http://www.virginiadot.org/business/resources/wztc/WZTC_order_form.pdf

OPTION 2 – Obtain the services of an approved instructor from VDOT's Approved WZTC Instructor List to teach the course or courses you need for your employees.

The Approved WZTC Instructor's List can be obtained at the following location:
http://www.virginiadot.org/business/resources/wztc/Approved_WZTC_Instructors.pdf

A list of Approved Providers of training can be obtained at the following location:
http://www.virginiadot.org/business/resources/wztc/wztc_training_sponsors.pdf

OPTION 3 – Send personnel to classes conducted by approved sources such as ATSSA Virginia or the Virginia Local Technical Assistance Program (LTAP).

Courses by ATSSA Virginia can be found at the following location:

http://atssa.com/cs/course_information/courses_by_state?state=56

Courses by the Virginia LTAP can be found at the following location:
http://ltap.cts.virginia.edu/2%20Page%20Calendar%20June%20-%20Sept%2009.pdf

Basic WZTC courses by the Virginia Rural Water Association can be found at the following location:
http://www.vrwa.org/ (See Training Schedule)

Training by the Virginia Transportation Construction Alliance (VTCA) can be found at the following location: http://vtca.org/

Visit the following site for additional information regarding Virginia's Work Zone Traffic Control training program:
http://www.virginiadot.org/business/trafficeng-WZS.asp

Authorized Hours and Days of Work

Normal hours for work under the authority of a VDOT land use permit are from 9:00 a.m. to 3:30 p.m. Monday through Friday for all highways classified as arterial or collector. All highways classified as local roads will have unrestricted work hours and days.
The district administrator's designee may establish alternate time restrictions in normal working hours for single use permits.

The central office permit manager may establish alternate time restrictions in normal working hours for district-wide permits.

The classifications for all state maintained highways can be found at the following link:
http://www.virginiadot.org/projects/ftn_class/maps.asp

Emergency Repair

In the event of an emergency situation that requires immediate action to protect persons or property, work may proceed within the right-of-way without authorization from the district administrator's designee; however, the utility owner must contact the VDOT Emergency Operations Center as soon as reasonably possible but no later than 48 hours after the end of the emergency situation.

The utility owner must apply for a separate land use permit from the local district permit office for any emergency work performed on state maintained right-of-way when the following actions are proposed:

- Stopping or impeding highway travel in excess of 15 minutes, or,
- Accessing facilities within limited access right-of-way, or,
- Cutting the highway pavement or shoulders.

The district administrator's designee shall determine the applicable permit fee for emergency repair permits.

Holiday Restrictions

Permitted non-emergency work will not be allowed on arterial and collector highway classifications from noon on the preceding weekday through the following state observed holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. If the observed holiday falls on a Monday, the permit will not be valid from noon on the preceding Friday through noon on Tuesday.

Excavation

All excavation within state maintained rights-of-way shall comply with OSHA Technical Manual, Chapter 2, Title Excavation: Hazard Recognition in Trenching and Shoring. A professional engineer shall certify all shoring and/or trench boxes.

No excavated material is to be placed or tracked on the pavement without written permission from the District Administrator's designee. When so authorized, the pavement shall be satisfactorily cleaned by a VDOT approved method. No cleated (track-mounted) equipment is to be used on the pavement without properly protecting the pavement from damage.

Trenchless Construction

Site specific geotechnical sub-surface investigation reports, compiled in accordance with the provisions of VDOT Materials Division Manual of Instructions, shall be submitted to the district administrator's designee if the following trenchless installation(s) are proposed:

- The proposed pipe diameter is 24-inches or greater, and;
- The proposed pipe cover is less than 3 times the pipe diameter, and;
- The AADT of the roadway is greater than 25,000, or;
- The proposed pipe diameter is 60-inches or greater, or;
- Any situation where there is a significant risk identified.

Inspection and Restoration

1) Inspection and testing of all backfill and pavement sections shall be performed in accordance with all applicable sections of VDOT's Road and Bridge Specifications (current edition).

2) If during or before construction it is deemed necessary for the local district permit office to assign an inspector to the project, the permittee shall pay the Department an additional inspection fee in an amount that will cover the salary, expense allowance, and mileage allowance for the inspection(s) assigned by the Department for handling work covered by this permit. Said inspection fee shall be paid promptly each month on invoices rendered by the Department.

3) It shall be the decision of the district administrator's designee whether to assign an inspector to monitor the placement of all backfill and pavement restoration activities.

4) The absence of a VDOT inspector does not in any way relieve the permittee of their responsibility to perform the work in accordance with the approved plans, provisions of the attached permit, VDOT's Road and Bridge Standards (current edition) and VDOT's Road and Bridge Specifications (current edition).

5) The permittee shall be responsible for any settlement of all backfill or pavement restoration necessitated by authorized excavation activities for a period of two (2) years after the completion date of permit, and for the continuing maintenance of the facilities placed within the highway right-of-way. A one (1) year restoration warranty period may be considered, provided the permittee adheres to the following criteria:

   - The permittee retains the services of a professional engineer (or certified technician under the direction of the professional engineer) to observe the placement of all backfill and pavement restoration.
   - The professional engineer (or certified technician under the direction of the professional engineer) performs any required inspection and testing in accordance with all applicable sections of VDOT's Road and Bridge Specifications.
   - The professional engineer submits all testing reports for review and approval, and provides written certification that all restoration procedures have been completed in accordance with all applicable sections of VDOT's Road and Bridge Specifications prior to completion of the work authorized by the permit.

6) Whenever existing pavement is permitted to be cut, not over one-half of the roadway width shall be disturbed at one time and the first open cut trench section shall be satisfactorily restored to allow for the passage of traffic prior to the second half of the roadway surface can be disturbed.

7) All crossing of existing pavement shall be bored, pushed or jacked an appropriate distance from the edge-of-pavement so as not to impede the normal flow of traffic or damage the existing pavement section. Existing pavement shall not be cut unless approved by the district administrator's designee and then only if justifiable circumstances prevail or proof is shown that a thorough attempt has been made to push, bore or jack.

8) Authorized daily trench excavation within pavement sections shall not exceed 500 feet in length.

9) Pavement restoration shall be in accordance with the VDOT LUP-OC Pavement Open Cut Special Provisions. This document can also be found at: http://www.virginiadot.org/business/bu-landUsePermits.asp

10) Where the pavement is disturbed or deemed weakened in its entirety or such portions as deemed desirable by the Department, the pavement shall be restored or replaced in a manner that is satisfactory to the district administrator's designee.

Environmental

1) In accordance with the Virginia Department of Transportation (VDOT) Road and Bridge Specification §107.16, all contractors performing regulated land disturbing activities within VDOT right-of-way must have at least one (1) employee that has successfully completed the VDOT Erosion & Sediment Control Contractor Certification training. This person shall be on site during all land

disturbance activities and will be responsible for insuring compliance with all applicable local, state and federal erosion and sediment control regulations during land disturbance activities. This person must have their certification card with them while on the project site. The land use permit will be suspended if proof of certification cannot be provided. Regulated land disturbing activities are defined as those activities that disturb 2,500 square feet or greater in Tidewater, Virginia or 10,000 square feet or greater in all other areas of the State. The Department will require evidence of this certification with any land use permit application that involves utility and/or commercial right of way improvement. Improper installation, maintenance and removal of erosion and sediment control devices may result in revocation of VDOT Erosion & Sediment Control Contractor Certification.

NOTE: Training for the VDOT Erosion & Sediment Control Contractor Certification can be obtained from any of the sources listed under "Upcoming Courses" at: http://www.virginiadot.org/business/locdes/ms4_stormwater_management.asp

2) The permittee is responsible for pursuing and obtaining any and all environmental permits which may be required to pursue the proposed activity prior to any work beginning within state maintained right-of-way.

3) In the event hazardous materials or underground storage tanks are encountered within state maintained right-of-way during authorized activities, the permittee shall suspend all work immediately then notify the local district permit office and other responsible parties, i.e., the local fire department, emergency services, Department of Environmental Quality, etc. The permittee is responsible for coordination and completion of all required remediation necessary to complete the permitted activities within the state maintained right-of-way. The permittee shall provide evidence of such compliance to the local district permit office prior to recommencement of permitted activities.

4) In the event cultural resources, archaeological, paleontological, and/or rare minerals are encountered within the right of way during authorized activities, the permittee shall suspend all work immediately then notify the local district permit office and the proper state authority charged with the responsibility for investigation and evaluation of such finds. The permittee will meet all necessary requirements for resolving any conflicts prior to continuing with the proposed activities within the state maintained right-of-way, and shall provide evidence of such compliance to the local district permit office.

5) Roadway drainage shall not be blocked or diverted. The shoulders, ditches, roadside, drainage facilities and pavement shall be kept in an operable condition satisfactory to the Department. Necessary precautions shall be taken by the permittee to insure against siltation of adjacent properties, streams, etc., in accordance with VDOT's current standards or as prescribed by the Department's Environmental Manual and the district administrator's designee.

Entrances

1) VDOT's authority to regulate highway entrances is provided in §, §33.2-240, and §33.2-241 of the Code of Virginia and its authority to make regulations concerning the use of highways generally is provided in §33.2-210 of the Code of Virginia. Regulations regarding entrances are set forth in VDOT's regulations promulgated pursuant to §33.2-245 of the Code of Virginia.

2) The permittee shall be responsible for the design and installation of a private entrance under the auspices of a VDOT land use permit however the permittee may request that VDOT forces install the private entrance at the permittee's expense.

3) Street connections, private entrances, and construction entrances shall be kept in satisfactory condition during all activities authorized under the auspices of a VDOT land use permit. Entrances shall not be blocked. Ample provisions must be made to provide safe ingress and egress to adjacent properties at all times. Entrances that are disturbed shall be restored to the satisfaction of the property owner and the district administrator's designee.

Utilities

1) Prior to any excavation, the permittee shall comply with the terms of Title 56, Chapter 10.3 of the Underground Utility Damage Prevention Act and §56-265.14 through §56-265.20 of the Code of Virginia. This permit does not grant permission to grade on or near property of others, or, adjust or disturb in anyway existing utility poles or underground facilities within the permitted area. Permission to do so must be obtained from the impacted utility company and any expense involved shall be borne by the permittee. Any conflicts with existing utility facilities must be resolved between the permittee and the utility owner(s) involved.

2) All underground utility installations within limited access right-of-way shall have a minimum of 36 inches of cover. All underground utilities within non-limited access right-of-way will require a minimum of 36 inches of cover, except underground cables that provide telecommunications service shall be at a minimum of 30 inches of cover.

3) Where feasible, all aboveground installations (such as fire hydrants, telephone pedestals, markers, etc.) shall be located adjacent to the outside edge of the right-of-way line and in accordance with minimum clear zone requirements. All manhole covers, valve box, etc., shall be installed two inches below existing ground line and shall conform to existing contours.

4) No poles, guys, anchors, etc., are to be placed on state maintained right-of-way unless authorized under the auspices of a VDOT land use permit. At no time will any such facilities be allowed between the ditch line and the traveled roadway.

5) All overhead installations crossing non-limited access highways shall provide a minimum of 18 feet of vertical clearance or at a minimum height as established by the National Electric Safety Code, whichever is greater. All overhead utility installations within limited access right-of-way shall maintain a minimum of 21 feet of vertical clearance. The vertical clearance for all new overhead parallel installations within non-limited access rights-of-way shall be in compliance with standards as specified in the National Electric Safety Code.

Final Inspection and Completion of Permit

Upon completion of the work covered by this permit all disturbed areas outside of the roadway prism shall be restored to their original condition as found prior to starting such work.

Completion of the permit is contingent upon the permittee's completion of the authorized work in accordance with the approved plan and compliance with all permit conditions and the permittee shall immediately then notify the local district permit office and other responsible parties.

Upon completion of the work under permit, the permittee shall provide notification, documented in writing or electronic communication, to the district administrator's designee requesting final inspection. This request shall include the permit number, county name, route number and name of the party or parties to whom the permit was issued.

The district administrator's designee shall promptly schedule an inspection of the work covered under the permit and advise the permittee of any necessary corrections.

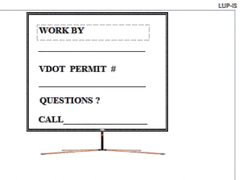
Permit Revocation

At the discretion of the district administrator's designee, a land use permit may be revoked upon written finding that the permittee was not in compliance with all requirements contained herein and/or violated the terms of the permit, or any state and local laws and ordinances regulating activities within the right-of-way. **In addition VDOT may apply additional penalties in accordance with §33.2-1221.**

Permittee Notice

The preceding provisions are intentionally condensed in format and should not be loosely interpreted by the permittee without consultation with the central office permit manager and affirmation from the Land Use Permit Regulations.

LUP-IS



1. Sign must not be oriented facing traffic approaching from any direction
2. Sign must be non-reflective
3. Sign must use Times New Roman font and should not use MUTCD sign fonts (or Clearview)
4. Sign must not show any logos
5. Sign must not contain the contractor's name (unless the contractor is the permittee)
6. Sign must be installed outside clear zone within 50' of work area
7. Sign must remain on site until final restoration of right-of-way
8. For multiple work locations within subdivisions, at least one sign may be installed at the main work area
9. Sign must be at least 36"X36" and made of water-resistant material and firmly secured
10. Sign must be blue with white 3" lettering
11. Sign shall not be installed on existing VDOT sign posts and should not impede pedestrian mobility

JOB NO.
WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
jblairwilson@gmail.com

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

VDOT LAND USE PERMIT NOTES

SHEET NO:

C23

JOB NO.
WE-0238-25

Typical Traffic Control
Work Beyond the Shoulder Operation
(Figure TTC-1.1)
NOTES

Guidance:

1. *The minimum distance between the sign and work vehicle should be 1300'-1500' on Limited Access highways, and on all other roadways 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limited is 45 mph or less.*

Option:

2. The ROAD WORK AHEAD (W20-1) sign may be replaced with other appropriate signs such as the SHOULDER WORK (W21-5) sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.
3. The ROAD WORK AHEAD sign may be omitted where the work space is behind a barrier, more than 4 feet behind vertical curb (Standard CG-2 and CG-6) on urban roadways, or outside of the clear zone for all other roadways. For clear zone values see Page A-4 of Appendix A.
4. For short-term, short duration or mobile operations[1], all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity amber rotating, flashing, or[1] oscillating lights is used.

Standard:

5. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating lights.**
6. **If the work space is in the median of a divided highway, an advance warning sign shall also be placed on the left side of the directional roadway.**

1: Revision 1 – 4/1/2015

Typical Traffic Control
Shoulder Operation with Minor Encroachment
(Figure TTC-5.2)
NOTES

Standard

1. **For required sign assemblies for multi-lane roadways see Note 1, TTC-4.[1]**

Guidance:

2. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*
3. *When work takes up part of a lane on a high volume roadway; vehicular traffic volumes, vehicle mix, speed and capacity should be analyzed to determine whether the affected lane should be closed. Unless the lane encroachment analysis permits a remaining lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.*

Option:

4. The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.

Standard:

5. **A shadow vehicle with either an arrow board operating in the caution mode, or at least one high-intensity amber rotating, flashing, or[1] oscillating light shall be parked 80' - 120' in advance of the first work crew.**
6. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or[1] oscillating lights.**
7. **Taper length (L) and channelizing device spacing shall be at the following:**

Taper Length L											
Speed Limit (mph)	Lane Width (Feet)				Remarks	Speed Limit (mph)	Lane Width (Feet)				Remarks
	9	10	11	12			9	10	11	12	
25	95	105	115	125	L=W/60	50	450	500	550	600	L=SW
30	135	150	165	180	L=S*W/60	55	495	550	605	660	L= SW
35	185	205	225	245	L=S*W/60	60	540	600	660	720	L=SW
40	240	270	295	320	L=S*W/60	65	585	650	715	780	L=SW
45	405	450	495	540	L=SW	70	630	700	770	840	L=SW
Limited Access highways shall use a 1000' merging taper regardless of the posted speed, a 750' shifting taper for posted speeds < 65 mph and a 1000' shifting taper for posted speeds ≥ 65 mph.[1]											
Shoulder Taper = ½ L Minimum											

8. **Channelizing device spacing shall be at the following:**

Channelizing Device Spacing						
Location Spacing	Speed Limit (mph)		Location Spacing	Speed Limit (mph)	Location Spacing	Speed Limit (mph)
	0 -35	36 +		0 -35 | 36 +		0 -35 | 36 +
Transition	20'	40'	Taperway	40' | 80'	*Construction Access	80' | 120'

*Construction access spacing may be increased to this distance, but shall not exceed one access per ¼ mile.

9. **On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.[2]**
10. **The buffer space length The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
11. **A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph.**
12. **When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.**

1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Typical Traffic Control
Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.2)
NOTES

Guidance:

1. *Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, and 500'-800' where the posted speed limit is greater than 45 mph.*
2. *Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the flagger station and transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. Generally speaking, motorists should have a clear line of sight from the graphic flagger symbol sign to the flagger.*
3. *To maintain efficient traffic flow in a flagging operation on a two-lane roadway, the maximum time motorists should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic of 500 or more vehicles per day) to a maximum of 12 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.[1]*

Standard:

4. **Portable Temporary Rumble Strips (PTRS) shall be used as noted in Section 6F.99.**
5. **Flagging stations shall be located far enough in advance of the work space to permit approaching traffic to reduce speed and/or stop before passing the work space and allow sufficient distance for departing traffic in the left lane to return to the right lane before reaching opposing traffic (see Table 6H-3 on Page 6H-5).**
6. **All flaggers shall be state certified and have their certification card in their possession when performing flagging duties (see Section 6E.01, Qualifications for Flaggers).**
7. **Conc spacing shall be based on the posted speed and the values in Table 6H-4 on Page 6H-6.[1]**
8. **A shadow vehicle with at least one high intensity amber rotating, flashing, or[1] oscillating light shall be parked 80'-120' in advance of the first work crew.**

Option:

8. A SLOW (W21-V10) sign[1] may be required in this area to give advance warning of the operation ahead by slowing approaching traffic prior to reaching the flagger station or queued traffic.

Guidance:

9. *If the queue of traffic reaches the BE PREPARED TO STOP (W3-4) sign then the signs, and if used the PTRS, should be readjusted at greater distances.*
10. *When a highway-rail crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the highway-rail grade crossing, the temporary traffic control zone should be extended so that the transition area precedes the highway-rail crossing (see Figure TTC-56 for additional information on highway-rail crossings).*

Standard:

11. **At night, flagger stations shall be illuminated, except in emergencies (see Section 6E.08).**

Option:

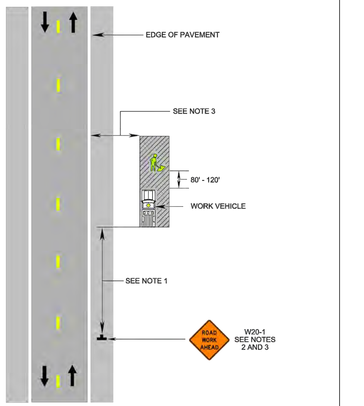
12. Cones may be eliminated when using a pilot vehicle operation or when the total roadway width is 20 feet or less.
13. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6B).

Standard:[1]

14. **When used[1], three portable temporary rumble (PTRS) strips shall be installed across the entire travel lane adjacent to the BE PREPARED TO STOP (W3-4) sign. The portable temporary rumble strips shall be monitored and adjusted as necessary during the work shift to ensure proper placement on the roadway. When the PTRS are installed, the RUMBLE STRIPS AHEAD (W20-V26) sign shall also be utilized.**

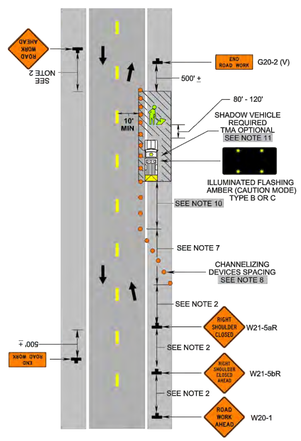
1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Work Beyond the Shoulder Operation
(Figure TTC-1.1)



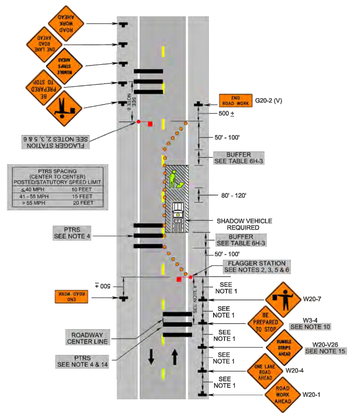
1: Revision 1 – 4/1/2015

Shoulder Operation with Minor Encroachment
(Figure TTC-5.2)



1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.2)



1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

TEMPORARY TRAFFIC CONTROL GENERAL NOTES:

1. THE WORK ZONE OF THE CONTRACT IS LOCATED ALONG SPRING COTTAGE ROAD, STATE ROUTE 628 AT THE INTERSECTION OF EASTERN VIEW RD., S.R. 639 WITH SPRING COTTAGE ROAD, S.R. 628. THIS IS A TYPE "A" TRAFFIC MANAGEMENT PLAN. OFF SITE DETOURS ARE NOT NEEDED.
2. UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER (VDOT), THE CONTRACTOR SHALL PLAN AND PROSECUTE THE WORK IN ACCORDANCE WITH THE FOLLOWING:
   A. GENERALLY, CONSTRUCTION ACTIVITIES WILL BE CONDUCTED WHILE HIGHWAY TRAVEL IS TEMPORARILY LIMITED. NOTIFICATION SHALL BE IN ACCORDANCE WITH THE VDOT PERMIT.
   B. IT IS ANTICIPATED THAT THE FOLLOWING 2011 VIRGINIA WORK PROTECTION MANUAL REVISION 2 TYPICAL TRAFFIC CONTROL APPLICATIONS WILL BE USED TO PERFORM THE CONTRACT WORK: TTC–1.1, TTC–5.2, AND TTC–23.2. DURING PERIODS THAT OPERATIONS ARE PERFORMED UNDER TRAFFIC, THE SPEED LIMIT SHALL BE, AS POSTED. IN ADDITION, "ROAD WORK AHEAD" SIGNS SHALL BE PLACED IN ADVANCE OF THE WORK ZONE.
   C. THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC SCHEDULE, INCLUDING ALL PROPOSED LANE AND SHOULDER CLOSURES, AT LEAST TWO WEEKS PRIOR THE ACTUAL CLOSURES ARE TO BEGIN FOR REVIEW AND APPROVAL.
   D. THE CONTRACTOR SHALL SUBMIT THE FINAL PLAN OF ALL PROPOSED LANE AND SHOULDER CLOSURES BY CLOSE OF BUSINESS WEDNESDAY FOR WORK IN THE FOLLOWING WEEK REQUIRING THE LANE OR SHOULDER CLOSURES IN ORDER FOR THE DEPARTMENT TO NOTIFY THE GENERAL PUBLIC, APPROPRIATE PUBLIC ENTITIES, TRAFFIC MANAGEMENT CENTER, AND THE REGIONAL TRAFFIC ENGINEER.
   E. AN ON–SITE REVIEW OF THE PROJECT'S WORK ZONE TRAFFIC CONTROL BY THE PROJECT MANAGEMENT TEAM, REGIONAL TRAFFIC ENGINEER AND CONTRACTOR SHALL BE CONDUCTED WITHIN 24 HOURS OF ANY FATAL INCIDENT/CRASH WITHIN THE WORK ZONE.
   F. PERIODIC WORK ZONE REVIEWS SHALL BE CONDUCTED JOINTLY BY THE PROJECT MANAGEMENT TEAM, REGIONAL TRAFFIC ENGINEER AND CONTRACTOR.
   G. ALL TRAFFIC CONTROL DEVICES AND SIGNS NECESSARY FOR THE MAINTENANCE OF TRAFFIC ARE TO BE SUPPLIED, INSTALLED, MAINTAINED, AND REMOVED BY THE CONTRACTOR.
   H. ALL TRAFFIC CONTROL DEVICE LOCATIONS SHALL BE MARKED BY THE CONTRACTOR AND REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.
   I. CONSTRUCTION SIGNS SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 2009 EDITION, STANDARD HIGHWAY SIGN MANUAL 2011 EDITION, VIRGINIA WORK AREA PROTECTION MANUAL 2011 EDITION REVISION 2, 2016 ROAD AND BRIDGE STANDARDS AND THE 2020 ROAD AND BRIDGE SPECIFICATIONS.
   J. ALL SIGNS WILL BE EITHER REMOVED FROM THE ROADWAY WHEN NOT NEEDED OR COVERED PER SECTION 6F.04 OF THE VIRGINIA WORK AREA PROTECTION MANUAL, 2011 EDITION REVISION 2.
   K. SOME SKETCHES AND DRAWINGS ARE NOT TO SCALE AND SHALL BE USED FOR REFERENCE ONLY.
   L. TRAFFIC CONSISTS OF RESIDENTS, MATERIAL TRANSPORTATION TRUCKS, DELIVERY TRUCKS, AND SCHOOL BUSES.
   M. SIDEWALK CLOSURES SHALL BE IN ACCORDANCE WITH TTC–35.0 AND TTC–36.1, IF APPLICABLE.
3. GROUP 2 CHANNELIZING DEVICES ARE TO BE PLACED AS DIRECTED BY HE VA WAPM, PAGE A–7.
4. WORK ACTIVITY IN THE ROADWAY WILL BE ALLOWED FROM 9:00AM AND 3:30PM MONDAY THRU FRIDAY. FOR ALTERNATE WORK HOURS THE CONTRACTOR MUST SUBMIT IN WRITING THE PROPOSED ALTERNATE HOURS TO THE FREDERICKSBURG DISTRICT PERMIT OFFICE FOR REVIEW AND APPROVAL. HOLIDAY RESTRICTIONS OUTLINED IN THE 2020 ROAD AND BRIDGE SPECIFICATIONS SECTION 108.02.
5. LANE CLOSURES WILL NOT BE PERMITTED, EXCEPT DURING S.R. 628 PAVEMENT RECONSTRUCTION OPERATIONS.
6. TEMPORARY LANE WIDTHS ARE NOT TO BE LESS THAN THE EXISTING LANE WIDTH (DESIRABLE 11' MIN.) WITHOUT CONCURRENCE OF THE REGIONAL TRAFFIC ENGINEER.
7. NO OBJECTS, EQUIPMENT, OR STORED MATERIALS MAY INTERFERE WITH SIGHT DISTANCE OF ENTRANCES AND INTERSECTIONS.
8. PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED PER THE VIRGINIA WORK AREA PROTECTION MANUAL OR AS DIRECTED BY THE ENGINEER.
9. VDOT WILL NOT ASSIST CONTRACTOR IN SECURING STAGING AREA FOR EQUIPMENT AND MATERIALS WITHIN THE STATE R/W.
10. CONTRACTOR SHALL MAINTAIN ACCESS TO PRIVATE ENTRANCES DURING OPERATIONS.
11. THE CONTRACTOR NEEDS TO CONTACT CENTRAL REGION OPERATIONS TRAFFIC SIGNALS AT (804) 524–6592 FOR A MARK OUT OF THE TRAFFIC SIGNAL EQUIPMENT A MINIMAL OF 72 HOURS PRIOR TO WORK BEGINNING WHEN WORKING WITHIN 1,000 FEET OF A TRAFFIC SIGNAL.
12. ALL AREAS EXCAVATED BELOW EXISTING PAVEMENT SURFACES AT THE CONCLUSION OF EACH WORKDAY SHALL BE BACKFILLED TO FORM A 4:1 WEDGE AGAINST PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC.
13. THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE AS REQUIRED TO PREVENT PONDING OF WATER ON THE ROADWAY AND ADJACENT PROPERTIES AT NO COST TO VDOT.
14. CONTRACTOR SHALL PROTECT ANY EXISTING GUARDRAIL AND SUPPORTS WITHIN CONSTRUCTION AREA FROM DAMAGE. ANY GUARDRAIL OR SUPPORTS DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO PRE–CONSTRUCTION CONDITIONS BY THE CONTRACTOR.
15. MAINTENANCE OF TRAFFIC SHALL BE DONE IN ACCORDANCE WITH THE 2011 VIRGINIA WORK AREA PROTECTION MANUAL REVISION 2 AND THE 2009 EDITION FO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
16. ALL COORDINATION FOR MAINTENANCE OF TRAFFIC SHALL BE PERFORMED BY THE FREDERICKSBURG DISTRICT LAND USE PERMITS OFFICE. THE CONTACT NUMBERS ARE: MARCIE PARKER, VDOT (FREDERICKSBURG DISTRICT LAND USE ENGINEER) 540–899–4288.
17. THIS TRAFFIC MANAGEMENT PLAN WAS PREPARED BY JONATHAN BLAIR WILSON, P.E. (VERIFICATION NO. 012821174).

PUBLIC COMMUNICATIONS PLAN

NOTIFICATION OF CONSTRUCTION START/END DATES AND WORK ZONE INFORMATION WILL BE ENTERED INTO THE VA TRAFFIC SYSTEM.

TRANSPORTATION OPERATIONS PLAN

1. THE PROCESS TO NOTIFY THE REGIONAL TRAFFIC OPERATION CENTER TO PLACE LANE CLOSURE INFORMATION ON THE 511 SYSTEM AND VA, TRAFFIC WILL BE:
   A. CONTRACTOR IS TO ADVISE VDOT PROJECT INSPECTOR AND/OR CONSTRUCTION MANAGER OF PLANNED LANE CLOSURES A MIN. OF 24 HOURS IN ADVANCE OF PROPOSED LANE CLOSURE.
   B. CONSTRUCTION MANAGER IS TO ADVISE THE RESIDENCY MAINTENANCE MANAGER OF PROPOSED LANE/ROAD CLOSURE. RMA IS TO HAVE (VA, TRAFFIC) OPERATOR ENTER DATA INTO (VA, TRAFFIC) AND ALSO ADVISE TOC.
2. THE FOLLOWING IS A LIST OF LOCAL EMERGENCY CONTRACT AGENCIES:
   A. VIRGINA STATE POLICE–800–572–2260
   B. HAZ–MAT CENTER (IF SPILL INVOLVED) 911
3. PROCEDURES TO RESPOND TO TRAFFIC INCIDENTS THAT MAY OCCUR IN THE WORK ZONE:
   A. CONTRACTOR TO NOTIFY VIRGINIA STATE POLICE AND VDOT INSPECTOR IN CHARGE AND REGIONAL TRAFFIC OPERATIONS CENTER.
   B. DEPENDING UPON SEVERITY OF INCIDENT, CONTRACTOR MAY HAVE TO SHUT DOWN WORK.
   C. UPON ARRIVAL ON SCENE, VIRGINIA STATE POLICE WILL DETERMINE RESPONSE NECESSARY TO ALLOW TRAVELING PUBLIC AROUND INCIDENT.
   D. INSPECTOR TO NOTIFY CONSTRUCTION MANAGER/RESIDENCY ADMINISTRATOR OF INCIDENT AND TAKE PICTURES AS NECESSARY, ESPECIALLY PICTURES OF CONTRACTOR'S WORK ZONE TO VERIFY THE PROPER SETUP.
4. PROCESS OF NOTIFICATION OF INCIDENT TO FOLLOWED IS: CONTRACTOR TO CALL:
   A. REGIONAL TRAFFIC OPERATIONS CENTER: SHIFT SUPERVISOR 804–796–4520
   B. DISTRICT WORK ZONE SAFETY COORDINATOR: JEFFREY STONE 540–899–4547 OR 540–907–8621
   C. REGIONAL TRAFFIC ENGINEER ROBERT VILAK 804–524–6119
   D. KING AND QUEEN COUNTY SHERIFF'S OFFICE 804–785–7400
5. THE VIRGINIA STATE POLICE REPORT OF THE INCIDENT WILL BE REVIEWED BY THE RESIDENCY ADMINISTRATOR TO DETERMINE IF ANY MODIFICATION OF THE TEMPORARY CONTROL PLAN IS NECESSARY. IF IT IS NECESSARY TO ALTER THE PLAN, THEN A MEETING WILL BE CALLED WITH THE CONTRACTOR, VDOT PERSONNEL, VDOT SAFETY REPRESENTATIVES AND THE VIRGINIA STATE POLICE (IF NECESSARY) TO DISCUSS MODIFICATION AND IMPLEMENTATION OF AN APPROVED TRAFFIC CONTROL PLAN.

ADDITIONAL LOCAL NON–EMERGENCY NUMBERS:

FIRE	(804)–785–5975
LOCAL POLICE	(804)–785–7400
RESCUE	(804)–785–5975
COUNTY ADMINISTRATION	(804)–785–5975
VDOT SALUDA RESIDENCY ADMINISTRATOR	(804)–758–2321

NEW HAUL ROAD ENTRANCE INSTALLATION

VWAP REFERENCES: TTC–1.1
WORK AREA BEYOND THE SHOULDER ON A TWO LANE RURAL LOCAL ROAD AND OUTSIDE OF THE CLEAR ZONE
TMP TYPE A, CATEGORY I
WORK ZONE LOCATION: BEYOND SHOULDER, OUTSIDE OF CLEAR ZONE
S.R. 628 NORTHBOUND LANE, SPEED LIMIT NOT POSTED: 55 MPH; CLEAR ZONE=25'
S.R. 628 SOUTHBOUND LANE, SPEED LIMIT NOT POSTED: 55 MPH; CLEAR ZONE=25'
ADVANCE WARNING SIGN SPACING: 500'
RWA SIGNS: 500' IN ADVANCE OF WORK AREA, RIGHT SIDE OF DIRECTIONAL LANE
SHOULDER TAPER: N/A
TAPER: N/A
BUFFER: N/A
END TAPER: N/A
ERW SIGN: NOT REQUIRED THIS PROJECT
TOTAL NUMBER OF SOUTHBOUND LANES: 1
TOTAL NUMBER OF NORTHBOUND LANES: 1
TOTAL NUMBER OF SOUTHBOUND LANES CLOSED TO TRAFFIC: 0
TOTAL NUMBER OF NORTHBOUND LANES CLOSED TO TRAFFIC: 0
TOTAL NUMBER OF SOUTHBOUND LANES OPEN TO TRAFFIC: 1
TOTAL NUMBER OF NORTHBOUND LANES OPEN TO TRAFFIC: 1
WORK HOURS RESTRICTED: NO
MATERIAL STORAGE WITHIN R/W: NO
CONSTRUCTION EQUIPMENT WITHIN R/W: NO
ENTRANCES, INTERSECTIONS, OR PEDESTRIAN ACCESS POINTS AFFECTED: NONE
AADT: 60
PHV= 7
USERS: RESIDENTS AND DELIVERIES

NEW HAUL ROAD ENTRANCE INSTALLATION

VWAP REFERENCES: TTC–5.2
SHOULDER OPERATION WITH MINOR ENCROACHMENT
TMP TYPE A, CATEGORY I
WORK ZONE LOCATION: ON SHOULDER, WITHIN CLEAR ZONE
S.R. 628 NORTHBOUND LANE, SPEED LIMIT NOT POSTED: 55 MPH; CLEAR ZONE=25'
S.R. 628 SOUTHBOUND LANE, SPEED LIMIT NOT POSTED: 55 MPH; CLEAR ZONE=25'
ADVANCE WARNING SIGN SPACING: 500'
RWA SIGNS: 500' IN ADVANCE OF WORK AREA, RIGHT SIDE OF DIRECTIONAL LANE
SHOULDER TAPER: 182'
TAPER: 500'
BUFFER: 500'
END TAPER: N/A
ERW SIGN: 500'
TOTAL NUMBER OF SOUTHBOUND LANES: 1
TOTAL NUMBER OF NORTHBOUND LANES: 1
TOTAL NUMBER OF SOUTHBOUND LANES CLOSED TO TRAFFIC: 0
TOTAL NUMBER OF NORTHBOUND LANES CLOSED TO TRAFFIC: 0
TOTAL NUMBER OF SOUTHBOUND LANES OPEN TO TRAFFIC: 1
TOTAL NUMBER OF NORTHBOUND LANES OPEN TO TRAFFIC: 1
WORK HOURS RESTRICTED: NO
MATERIAL STORAGE WITHIN R/W: NO
CONSTRUCTION EQUIPMENT WITHIN R/W: NO
ENTRANCES, INTERSECTIONS, OR PEDESTRIAN ACCESS POINTS AFFECTED: NO
AADT: 60
PHV= 7
USERS: RESIDENTS AND DELIVERIES

S.R. 628 PAVEMENT SECTION RECONSTRUCTION/VDOT WP–2 MILLING AND OVERLAY

VWAP REFERENCES: TTC–23.2
LANE CLOSURE ON A TWO–LANE ROADWAY USING FLAGGERS
TMP TYPE A, CATEGORY I
WORK ZONE LOCATION: SOUTHBOUND TRAVEL LANE
S.R. 628 NORTHBOUND LANE, SPEED LIMIT NOT POSTED: 55 MPH; CLEAR ZONE=25'
S.R. 628 SOUTHBOUND LANE, SPEED LIMIT NOT POSTED: 55 MPH; CLEAR ZONE=25'
ADVANCE WARNING SIGN SPACING: 500'
RWA SIGNS: 500' IN ADVANCE OF WORK AREA, RIGHT SIDE OF DIRECTIONAL LANE
SHOULDER TAPER: 182'
TAPER: 550'
BUFFER: 500'
END TAPER: 100'
ERW SIGN: 500'
TOTAL NUMBER OF SOUTHBOUND LANES: 1
TOTAL NUMBER OF NORTHBOUND LANES: 1
TOTAL NUMBER OF SOUTHBOUND LANES CLOSED TO TRAFFIC: ALTERNATING
TOTAL NUMBER OF NORTHBOUND LANES CLOSED TO TRAFFIC: ALTERNATING
TOTAL NUMBER OF SOUTHBOUND LANES OPEN TO TRAFFIC: ALTERNATING
TOTAL NUMBER OF NORTHBOUND LANES OPEN TO TRAFFIC: ALTERNATING
WORK HOURS RESTRICTED: YES, SEE GENERAL NOTE #4 THIS SHEET
MATERIAL STORAGE WITHIN R/W: NO
CONSTRUCTION EQUIPMENT WITHIN R/W: YES
ENTRANCES, INTERSECTIONS, OR PEDESTRIAN ACCESS POINTS AFFECTED: NONE
AADT: 60
PHV= 7
USERS: RESIDENTS AND DELIVERIES

CERTIFICATE OF CERTIFIED VDOT ADVANCED WORK ZONE OFFICIAL:

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS PLAN IS CORRECT AND COMPLIES WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND THAT I HAVE THE REQUIRED VDOT ADVANCED WORK ZONE CERTIFICATION.

TRAFFIC MANAGEMENT PLAN DESIGNER:	JONATHAN BLAIR WILSON, P.E.
ADVANCED WORK ZONE TRAFFIC CONTROL VERIFICATION No.	121724155
EXPIRATION DATE:	12-31-2028

JOB NO. WE–0238–25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering
P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
jblairwilson@gmail.com

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

VDOT TRAFFIC MANAGEMENT PLAN

SHEET NO:

C24

JOB NO. WE–0238–25

"Quality Pumps Since 1925"

ZOELLER PUMP CO.

Product information presented here reflects conditions at time of publication. Contact factory regarding discrepancies or inconsistencies.

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

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ZOELLER ON-SITE WASTEWATER PRODUCTS

"WW" Residential Effluent Filter P/N 170-0078

Copperhead Industries

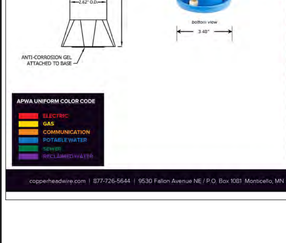
SnakePit® Lite Duty

with Single-terminal Cast Iron Lid

Access Point

APPLICATION

Use to terminate tracer wire systems and provide direct connection to tracer wire, at ground level, in lite duty and off-roadway applications. No ground rod connection.



LD14*TP *– SnakePit Lite Duty with Single-terminal Lid*
(denotes color)*

FEATURES AND BENEFITS

- Direct connection to tracer wire from top of lid
- Cast iron lid
- Anti-corrosion gel protects wires
- Locking cover protects against tampering
- Encapsulated magnet allows for detection by a ferrous metal detector
- Lid color-coded to meet American Public Works (APWA) standards for utility identification

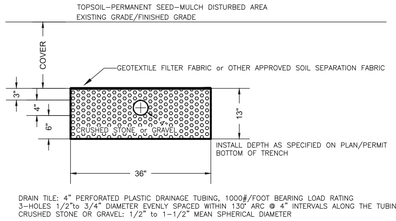
APWA UNIFORM COLOR CODE

ELECTRIC
GAS
COMMUNICATION
POTABLE WATER
SEWER
RECLAIMED WATER

copperheadwire.com | 877-726-5644 | 9530 Fallon Avenue NE / P.O. Box 1081 Monticello, MN 55362 MADE IN THE USA

NOTES:

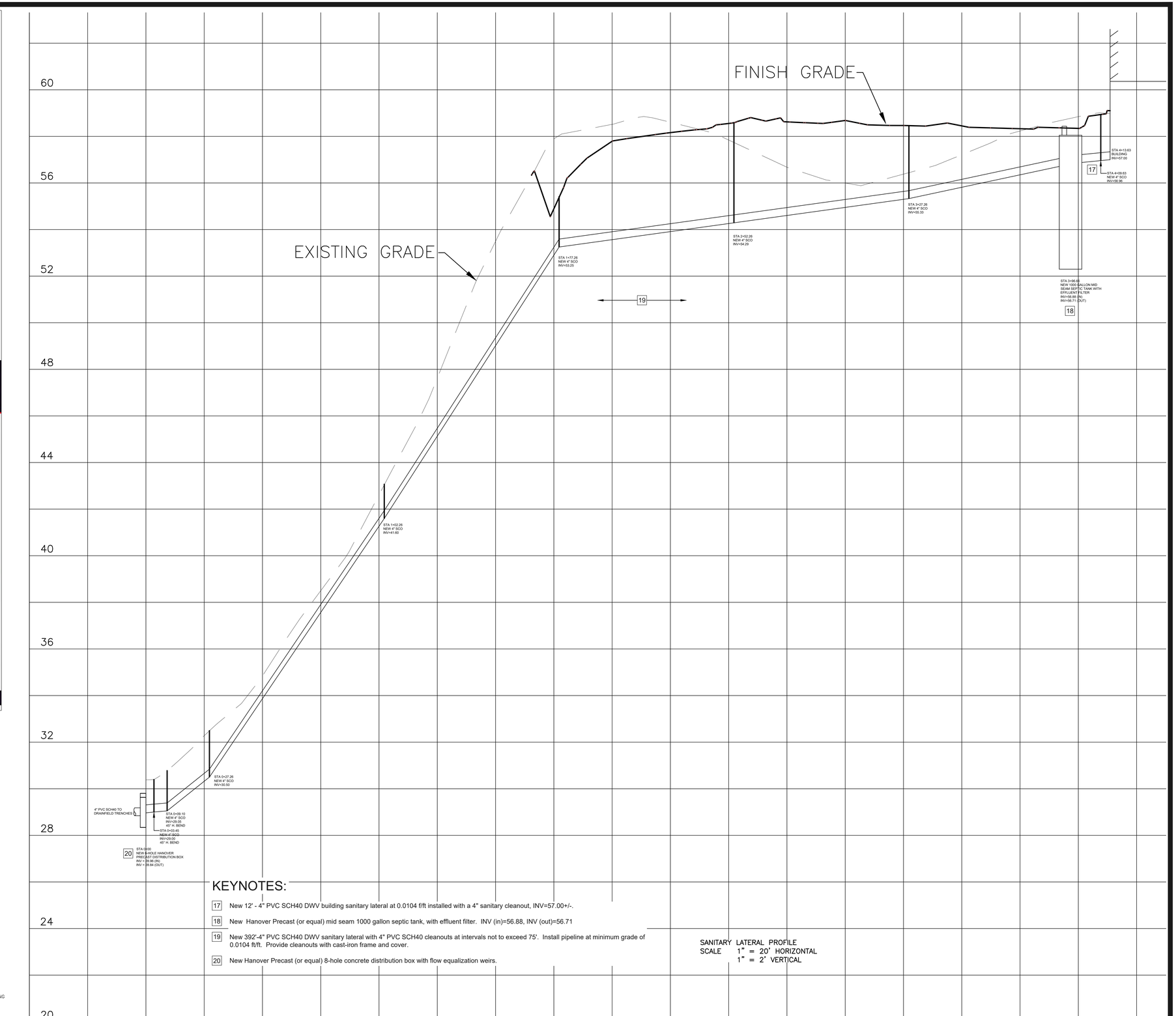
1. ALL NEW GRAVITY SANITARY COLLECTION SYSTEM PIPING FROM THE BUILDING TO THE SEPTIC TANKS SHALL BE 4" PVC SCH40 DWV PIPE WITH SOLVENT WELDED JOINTS AND FITTINGS.
2. INSTALL SANITARY CLEANOUTS AT ALL BENDS AND AT INTERVALS NOT TO EXCEED 75-LINEAR FEET.
3. ALL NEW SANITARY FORCEMAIN PIPING SHALL BE PVC SCH40 WITH SOLVENT WELDED JOINTS.
4. ALL PVC SCH40 PIPE JOINTS AND FITTINGS SHALL BE PRIMED WITH PURPLE PRIMER PRIOR TO GLUE APPLICATION.
5. INSTALLATIONS AND CONSTRUCTION SHALL CONFORM WITH ALL APPLICABLE BUILDING, ELECTRICAL, MECHANICAL AND PLUMBING CODES, AS WELL AS APPLICABLE SAFETY REGULATIONS.
6. CONSTRUCTION SHALL CONFORM WITH THE CURRENT VIRGINIA SEWAGE HANDLING AND DISPOSAL REGULATIONS.



DRAIN TILE: 4" PERFORATED PLASTIC DRAINAGE TUBING, 1000#/FOOT BEARING LOAD RATING
3–HOLES 1/2"to 3/4" DIAMETER EVENLY SPACED WITHIN 130° ARC @ 4" INTERVALS ALONG THE TUBING
CRUSHED STONE OR GRAVEL: 1/2" to 1–1/2" MEAN SPHERICAL DIAMETER
SPACE EACH TRENCH @ 9' ON CENTER

DRAINFIELD TRENCH TYPICAL SECTION

NOT TO SCALE



KEYNOTES:

17 New 12' - 4" PVC SCH40 DWV building sanitary lateral at 0.0104 f/ft installed with a 4" sanitary cleanout, INV=57.00+/-.

18 New Hanover Precast (or equal) mid seam 1000 gallon septic tank, with effluent filter. INV (in)=56.88, INV (out)=56.71

19 New 392'-4" PVC SCH40 DWV sanitary lateral with 4" PVC SCH40 cleanouts at intervals not to exceed 75'. Install pipeline at minimum grade of 0.0104 ft/ft. Provide cleanouts with cast-iron frame and cover.

20 New Hanover Precast (or equal) 8-hole concrete distribution box with flow equalization weirs.

SANITARY LATERAL PROFILE
SCALE 1" = 20' HORIZONTAL
1" = 2' VERTICAL

JOB NO. WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

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COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

SANITARY PROFILE AND DETAILS

SHEET NO:

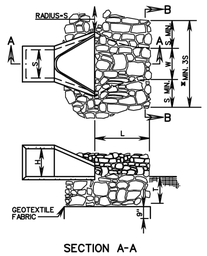
C25

JOB NO. WE-0238-25

2016 ROAD & BRIDGE STANDARDS

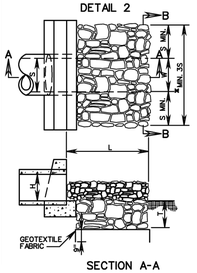
EC-1

DETAIL 1



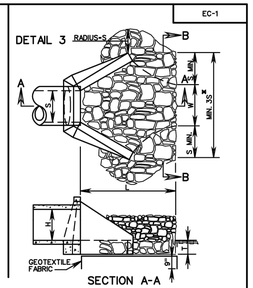
SECTION A-A

DETAIL 2

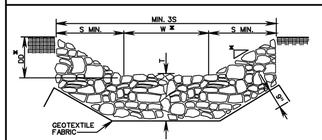


SECTION A-A

DETAIL 3 RADIUS=S



SECTION A-A



SECTION B-B

TYPE OF OUTLET PROTECTION MATERIAL		MAXIMUM OUTLET VELOCITY (FOR DESIGN STORM)	MINIMUM "T" (INCHES)
CLASS AI	CLASS AI DRY RIPRAP	8 fps	18
CLASS I	CLASS I DRY RIPRAP	14 fps	24
CLASS II	CLASS II DRY RIPRAP	19 fps	36

NOTES:

1. FOR MULTIPLE LINE INSTALLATIONS, DIMENSION S IS TO GOVERN THE PROTECTION OUTSIDE THE CHANNEL WIDTH (W).
2. ON ANY INSTALLATION REQUIRING CULVERT OUTLET PROTECTION WHERE NO ENDWALL OR ENDSECTION IS SPECIFIED ON THE PLANS, CONSTRUCTION IS TO BE IN ACCORDANCE WITH DETAIL 2 SHOWN ABOVE.
3. GEOTEXTILE FABRIC TO BE INSTALLED UNDER CLASS AI, I, AND II MATERIALS IN ACCORDANCE WITH THE SPECIFICATIONS.
4. S = DIAMETER OF CIRCULAR CULVERT OR SPAN FOR BOX, ELLIPTICAL OR ARCH CULVERT. H = DIAMETER OF CIRCULAR CULVERT OR RISE/HEIGHT FOR BOX, ELLIPTICAL OR ARCH CULVERT.

✖ USE TYPICAL SECTION SHOWN ON PLANS FOR SIDE SLOPE, BOTTOM WIDTH AND DEPTH OF CHANNEL OR MATCH EXISTING DITCH OR NATURAL GROUND.

OUTLET PROTECTION MINIMUM LENGTH (L)	
TYPE A INSTALLATION	3H
TYPE B INSTALLATION	5H

SPECIFICATION REFERENCE
204 245 303 414

CULVERT OUTLET PROTECTION

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

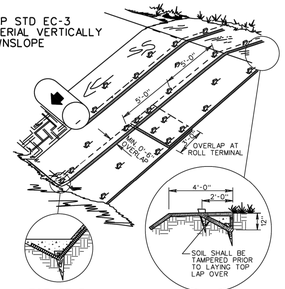
REVISION DATE	SHEET 1 OF 1
	113.01

2016 ROAD & BRIDGE STANDARDS

EC-3

FILL SLOPE SECTION

DROP STD EC-3 MATERIAL VERTICALLY DOWNSLOPE



TOE OF FILL

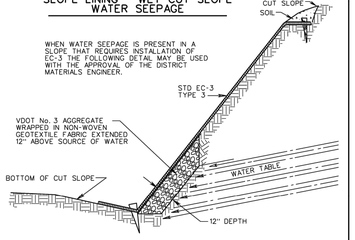
MAINTAIN SLOPE ANGLE

BERM

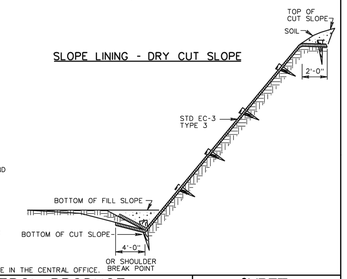
TRENCH INTO BERM AND PROGRESS DOWNSLOPE

SLOPE LINING - WET CUT SLOPE WATER SEEPAGE

WHEN WATER SEEPAGE IS PRESENT IN A SLOPE THAT REQUIRES INSTALLATION OF EC-3 THE FOLLOWING DETAIL MAY BE USED WITH THE APPROVAL OF THE DISTRICT MATERIALS ENGINEER.



SLOPE LINING - DRY CUT SLOPE



NOTES:

1. SLOPE SURFACE SHALL BE SMOOTH AND FREE OF ROCKS, LUMPS OF DIRT, GRASS, AND STICKS. MAT SHALL BE PLACED FLAT ON SURFACE FOR PROPER SOIL CONTACT.
2. STAKES SHALL BE WOOD OR METAL AS RECOMMENDED BY THE MANUFACTURER AND SHALL BE A MINIMUM OF 18 INCHES IN LENGTH.
3. EC-3 MATERIALS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCT LIST.
4. FOR SOURES OF APPROVED MATERIALS SEE VDOT'S APPROVED PRODUCTS LIST FOR STD. EC-3, TYPE 3 MATERIALS.
5. SLOPES SHALL BE SEEDED IMMEDIATELY PRIOR TO INSTALLATION OF STD. EC-3 TYPE 3 MATERIAL.

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.

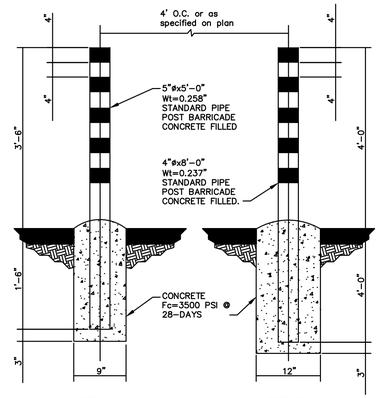
SPECIFICATION REFERENCE
244 606

ROLLED EROSION CONTROL PRODUCT SOIL STABILIZATION MAT (PERMANENT SLOPE INSTALLATION)

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

REVISION DATE	SHEET 3 OF 3
07/16	113.05



TYPE "A" TYPE "B"

NOTES:

1. POST BOLLARDS SHALL BE PAINTED WITH ONE PRIME COAT OF RED OXIDE SHERWIN WILLIAMS SHOPCOAT PRIMER E61RC0036 OR EQUAL, ONE FINISH COAT OF DULL BLACK ENAMEL SHERWIN WILLIAMS COMPATIBLE WITH SHOPCOAT PRIMER OR EQUAL AND STRIPES CONSISTING OF 4" BANDS OF YELLOW RELECTORIZED TAPE SHALL BE USED UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2. FINISH COLOR COMBINATIONS, OTHER THAN THAT SPECIFIED ABOVE, SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

CPPB

CONCRETE PIPE POST BOLLARDS

NTS

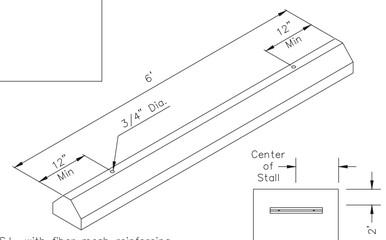
2016 ROAD & BRIDGE STANDARDS

R1-1
STOP
*Reduce spacing 40%

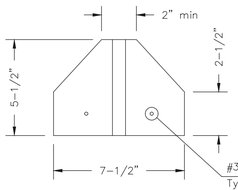
	A	B	C	D	E	F
	18	.375	6	8 C	3	7.75
	24	.625	8	8 C	4	10
C	30	.75	10	10 C	5	12.5
	36	.875	12	12 C	6	15
	48	1.25	16	16 C	8	20

COLORS: LEGEND – WHITE (RETROREFLECTIVE)
BACKGROUND – RED (RETROREFLECTIVE)

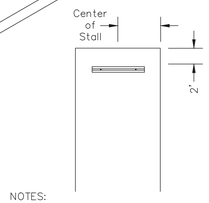
1-1



NOTE:
Concrete to be 3000 P.S.I., with fiber mesh reinforcing.



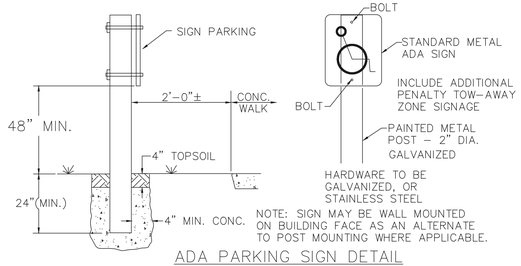
TYPE C
N.T.S.



NOTES:

1. Wheel stops to be placed 2' back, as shown above, and centered in the width of the parking stall.
2. Wheel stops to have drainage slots (not shown this detail).
3. Wheel stops to be anchored with two (2) No. 4, No.5 or No. 6 steel reinforcement bars, 30" in length embedded a minimum of 24" below the pavement surface. Bars shall be inserted in $\frac{3}{4}$" diameter holes in wheel stops and driven flush with the top of the wheel stops.

WHEEL STOP DETAIL
N.T.S.



NOTE: SIGN MAY BE WALL MOUNTED ON BUILDING FACE AS AN ALTERNATE TO POST MOUNTING WHERE APPLICABLE.

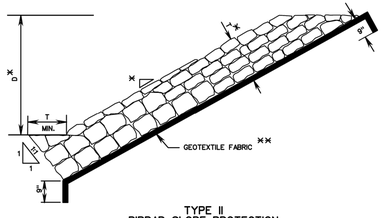
ADA PARKING SIGN DETAIL
N.T.S.

2016 ROAD & BRIDGE STANDARDS

PG-3

TYPE I
RIPRAP DITCH PROTECTION

MINIMUM THICKNESS "T"	
RIP RAP CLASS	MINIMUM "T"
CLASS AI	20"
CLASS I	26"
CLASS II	38"
CLASS III	53"



TYPE II
RIPRAP SLOPE PROTECTION

NOTES:

✖✖ RIP RAP BEDDING MATERIAL

GEOTEXTILE FABRIC TO BE PROVIDED UNDER ALL RIPRAP INSTALLATIONS CLASS AI, CLASS I AND CLASS II UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER.

RIPRAP INSTALLATIONS OF CLASS II SHALL HAVE AN INTERMEDIATE AGGREGATE BEDDING LAYER(S) AS SPECIFIED ON THE PLANS BASED ON GEOTECHNICAL RECOMMENDATIONS.

✖ SEE TYPICAL SECTION SHOWN ON PLANS FOR SIDE SLOPE, BOTTOM WIDTH AND DEPTH OF CHANNEL AND RIPRAP THICKNESS.

SPECIFICATION REFERENCE
245 414

STANDARD RIP RAP DITCH & SLOPE PROTECTION PG-3

VIRGINIA DEPARTMENT OF TRANSPORTATION

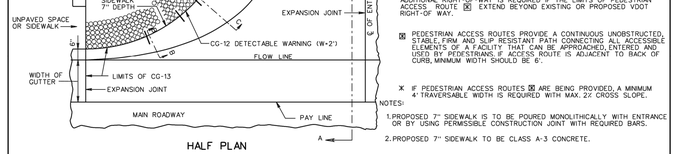
VDOT ROAD AND BRIDGE STANDARDS

SHEET 1 OF 1	REVISION DATE
109.02	

2016 ROAD & BRIDGE STANDARDS

2016 ROAD & BRIDGE STANDARDS

CG-13



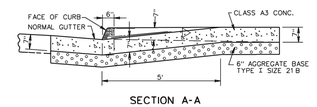
HALF PLAN

PEDESTRIAN ACCESS ROUTE DETAIL

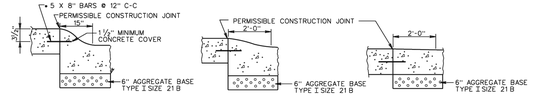
ADDITIONAL RIGHT-OF-WAY IS REQUIRED IF THE LIMITS OF PEDESTRIAN ACCESS ROUTE ☒ EXTEND BEYOND EXISTING OR PROPOSED VDOT RIGHT-OF WAY.

☒ PEDESTRIAN ACCESS ROUTES PROVIDE A CONTINUOUS UNOBSTRUCTED, STABLE, FIRM AND SLIP RESISTANT PATH CONNECTING ALL ACCESSIBLE ELEMENTS OF A FACILITY THAT CAN BE APPROACHED, ENTERED AND USED BY PEDESTRIANS. IF ACCESS ROUTE IS ADJACENT TO BACK OF CURB, MINIMUM WIDTH SHOULD BE 6'.

✖ IF PEDESTRIAN ACCESS ROUTES ☒ ARE BEING PROVIDED, A MINIMUM 4' TRAVERSABLE WIDTH IS REQUIRED WITH MAX. 2% CROSS SLOPE.



SECTION A-A



SECTION B-B SECTION C-C SECTION D-D

NOTES:

1. PROPOSED 7" SIDEWALK IS TO BE POURED MONOLITHICALLY WITH ENTRANCE OR BY USING PERMISSIBLE CONSTRUCTION JOINT WITH REQUIRED BARS.
2. PROPOSED 7" SIDEWALK TO BE CLASS A-3 CONCRETE.
3. REQUIRED BARS ARE TO BE NO. 5X8" PLACED 1' CENTER TO CENTER ALONG BACK OF CURB, MID-DEPTH OF SIDEWALK. MINIMUM CONCRETE COVER 1½".
4. ALL DETAILS AND DIMENSIONS NOT SHOWN ARE THE SAME AS STANDARD CG-9D.
5. THIS DESIGN MAY ALSO BE APPLIED TO OTHER ENTRANCE STANDARDS AS THE NEED ARISES.
6. WHEN USED IN CONJUNCTION WITH STANDARD CG-3 OR CG-7, THE CURB FACE ON THIS STANDARD IS TO BE ADJUSTED TO MATCH THE MOUNTABLE CURB CONFIGURATION.
7. SEE STANDARD CG-12 FOR DETECTABLE WARNING DETAILS.

SPECIFICATION REFERENCE
502

COMMERCIAL ENTRANCE (HEAVY TRUCK TRAFFIC ANTICIPATED)

VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS

REVISION DATE	SHEET 1 OF 1
	203.10

2016 ROAD & BRIDGE STANDARDS

JOB NO. WE-0238-25

PROJECT MANAGER: JBW

DESIGNED: JBW

CAD: JBW

CHECKED: JBW

FILED:

DATE: NOVEMBER 13, 2024

REVISED: FEBRUARY 20, 2025

REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

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COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

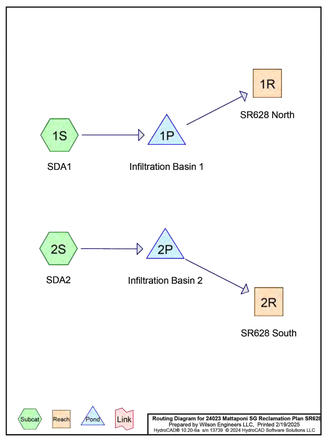
SHEET:

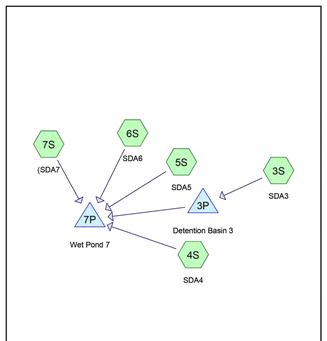
NOTES AND DETAILS

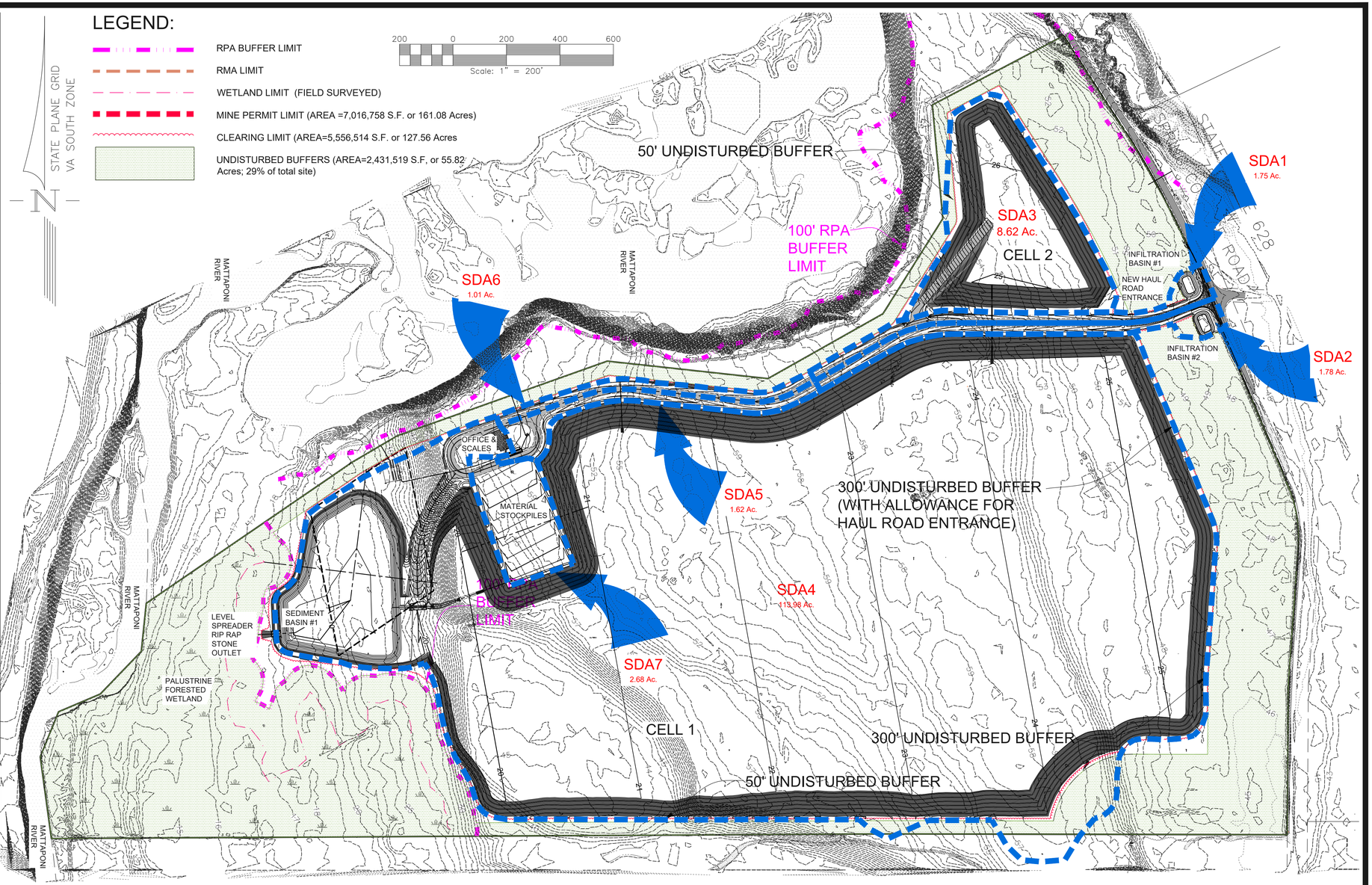
SHEET NO:

C26

JOB NO. WE-0238-25







Sediment Basin #1 (HydroCad Model Node 7S)

Elevation Storage Table				Node #4				
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
18.00	219152	226487.5	1.00				49803	
19.00	233823	306838.5	1.00	226487.5	226487.5	8388.4		
20.00	379854	644642	1.00	306838.5	533326	19752.8		
21.00	909430	1204023	1.00	644642	1177968	43628.4		
22.00	1498616	1847581	1.00	1204023	2381991	88221.9		88221.9
23.00	2196545	2619573	1.00	1847581	4229572	156650.8		
24.00	3042601	3412604	1.00	2619573	6849145	253672.0		
25.00	3782607	3882199	1.00	3412604	10261749	380064.8		
26.00	3981790		0.00	1847581	12109329	448493.7		

Elevation Storage Table				Node #1				
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
44.78	1968	2441.5	1.00	0	0	0.0		
45.78	2915	3469.5	1.00	2441.5	2441.5	90.4		
46.78	4024	4730.5	1.00	3469.5	5911	218.9		
47.78	5437		0.00	4730.5	10641.5	394.1		

Mattaponi Sand & Gravel Infiltration Basin Design

Infiltration Basin No. 1 — 10-Year Design Storm 100% Runoff Infiltration
SDA1
DA (ac) = 1.75
Vro (cf) = 7285

Soils	Group
18B Tarboro Sand	A

		Equation
Infiltration Rate (in/hr), f =	13	
Drawdown Time (hr), Td =	48	
Dmax (ft) =	312	(1/2 f * Td)
Fill Time (hr), Tf =	2	
Basin Depth (ft), d =	3	
Surface Area (sf), SA =	1784.082	(Vro/[d+(1/2 f * Tf)/12])

Elevation Storage Table				Node #2				
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
44.50	1968	2441.5	1.00	0	0	0.0		
45.50	2915	3469.5	1.00	2441.5	2441.5	90.4		
46.50	4024	4690.5	1.00	3469.5	5911	218.9		
47.50	5357		0.00	4690.5	10601.5	392.6		

Mattaponi Sand & Gravel Infiltration Basin Design

Infiltration Basin No. 2 — 10-Year Design Storm 100% Runoff Infiltration
SDA2
DA (ac) = 1.78
Vro (cf) = 7410

Soils	Group
18B Tarboro Sand	A

		Equation
Infiltration Rate (in/hr), f =	13	
Drawdown Time (hr), Td =	48	
Dmax (ft) =	312	(1/2 f * Td)
Fill Time (hr), Tf =	2	
Basin Depth (ft), d =	3	
Surface Area (sf), SA =	1814.694	(Vro/[d+(1/2 f * Tf)/12])

Elevation Storage Table				Node #4				
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
18.00	219152	226487.5	1.00				49803	
19.00	233823	306838.5	1.00	226487.5	226487.5	8388.4		
20.00	379854	644642	1.00	306838.5	533326	19752.8		
21.00	909430	1204023	1.00	644642	1177968	43628.4		
22.00	1498616	1847581	1.00	1204023	2381991	88221.9		88221.9
23.00	2196545	2619573	1.00	1847581	4229572	156650.8		
24.00	3042601	3412604	1.00	2619573	6849145	253672.0		
25.00	3782607	3882199	1.00	3412604	10261749	380064.8		
26.00	3981790		0.00	1847581	12109329	448493.7		

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025
Drainage Basin # SDA1 **Total Area (ac)** 1.75

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.56	98	54.88	0.90	0.504
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	1.19	39	46.41	0.30	0.357
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.75		101.29		0.861

RCN= 58 — Composite C 0.49
S= 7.241

Time of Concentration
Overland Flow

T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.04	10	0.24	3.22	0.02

Shallow Concentrated

T (concentrated)	Height (H)	Length (L)
0.30	9.85	1700

Total Tc 0.33
If Tc is less than 5 min, use 5 min
Tc (min) 20

Total Imper. Area 32 **%Impervious**

TR20 SUMMARY RESULTS:			SDA1		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	
1-year	2.65	0.17	1087	0.00	Infiltrate 100% Ro
2-year	3.22	0.35	2212	0.00	Infiltrate 100% Ro
10-year	4.96	1.15	7285	0.00	Infiltrate 100% Ro
25-year	6.2	1.88	11960		
100-year	8.48	3.46	22006		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.86	3.27	2.81
10-year	60.65	10.79	0.77	0.86	4.33	3.73
25-year	58.96	10.10	0.73	0.95	4.91	4.65
100-year	55.77	8.92	0.67	1.08	5.85	6.30

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025
Drainage Basin # SDA2 **Total Area (ac)** 1.78

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.56	98	54.88	0.90	0.504
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	1.22	39	47.58	0.30	0.366
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.78		102.46		0.870

RCN= 58 — Composite C 0.49
S= 7.241

Time of Concentration
Overland Flow

T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.04	10	0.24	3.22	0.02

Shallow Concentrated

T (concentrated)	Height (H)	Length (L)
0.30	9.85	1700

Total Tc 0.33
If Tc is less than 5 min, use 5 min
Tc (min) 20

Total Imper. Area 31 **%Impervious**

TR20 SUMMARY RESULTS:			SDA2		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	
1-year	2.65	0.17	1105	0.00	Infiltrate 100% Ro
2-year	3.22	0.35	2250	0.00	Infiltrate 100% Ro
10-year	4.96	1.15	7410	0.00	Infiltrate 100% Ro
25-year	6.2	1.88	12165		
100-year	8.48	3.46	22384		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.87	3.27	2.84
10-year	60.65	10.79	0.77	0.87	4.33	3.77
25-year	58.96	10.10	0.73	0.96	4.91	4.70
100-year	55.77	8.92	0.67	1.09	5.85	6.36

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025
Drainage Basin # SDA4 **Total Area (ac)** 113.98

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.00	98	0	0.90	0.000
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	0.00	39	0	0.30	0.000
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	113.98	77	8776.46	0.25	28.495
Totals		113.98		8776.46		28.495

RCN= 77 — Composite C 0.25
S= 2.987

Time of Concentration
Overland Flow

T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.64	100	0.4	3.22	0.0047

Shallow Concentrated

T (concentrated)	Height (H)	Length (L)
0.63	5.91	2800

Total Tc 1.27
If Tc is less than 5 min, use 5 min
Tc (min) 76

Total Imper. Area 0 **%Impervious**

TR20 SUMMARY RESULTS:			SDA4		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	See HydroCad Data
1-year	2.65	0.84	345896		
2-year	3.22	1.23	507301		
10-year	4.96	2.59	1071424		
25-year	6.2	3.65	1511961		
100-year	8.48	5.72	2365157		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	28.50	1.39	39.65
10-year	60.65	10.79	0.77	28.50	1.95	55.52
25-year	58.96	10.10	0.73	31.34	2.28	71.40
100-year	55.77	8.92	0.67	35.62	2.84	101.21

RECLAMATION PLAN: Plant area with mixed hardwood and pine seedlings to produce forested open space. Remaining soils will have been disturbed or underlying clay soil substrata. Use hydrologic soil group "D" with reclamation area conversion to forested open space.

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025
Drainage Basin # SDA4 **Total Area (ac)** 113.98

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.00	98	0	0.90	0.000
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	0.00	39	0	0.30	0.000
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	113.98	77	8776.46	0.25	28.495
Totals		113.98		8776.46		28.495

RCN= 77 — Composite C 0.25
S= 2.987

Time of Concentration
Overland Flow

T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.64	100	0.4	3.22	0.0047

Shallow Concentrated

T (concentrated)	Height (H)	Length (L)
0.63	5.91	2800

Total Tc 1.27
If Tc is less than 5 min, use 5 min
Tc (min) 76

Total Imper. Area 0 **%Impervious**

TR20 SUMMARY RESULTS:			SDA4		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	
1-year	2.65	0.84	345896	36.53	
2-year	3.22	1.23	507301	55.98	
10-year	4.96	2.59	1071424	123.71	
25-year	6.2	3.65	1511961	175.95	
100-year	8.48	5.72	2365157	275.43	

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	28.50	1.39	39.65
10-year	60.65	10.79	0.77	28.50	1.95	55.52
25-year	58.96	10.10	0.73	31.34	2.28	71.40
100-year	55.77	8.92	0.67	35.62	2.84	101.21

RECLAMATION PLAN: Plant area with mixed hardwood and pine seedlings to produce forested open space. Remaining soils will have been disturbed or underlying clay soil substrata. Use hydrologic soil group "D" with reclamation area conversion to forested open space.

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025
Drainage Basin # SDA5 **Total Area (ac)** 1.62

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.60	98	58.8	0.90	0.540
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	1.02	39	39.78	0.30	0.306
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.62		98.58		0.846

RCN= 61 — Composite C 0.52
S= 6.393

Time of Concentration
Overland Flow

T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.00	10	0.015	3.22	0.02

Shallow Concentrated

T (concentrated)	Height (H)	Length (L)
0.19	36.74	1771

Total Tc 0.19
If Tc is less than 5 min, use 5 min
Tc (min) 12

Total Imper. Area 37 **%Impervious**

TR20 SUMMARY RESULTS:			SDA5		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	See HydroCad Data
1-year	2.65	0.24	1424		
2-year	3.22	0.45	2659		
10-year	4.96	1.35	7910		
25-year	6.2	2.14	12587		
100-year	8.48	3.81	22432		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.85	4.25	3.60
10-year	60.65	10.79	0.77	0.85	5.55	4.70
25-year	58.96	10.10	0.73	0.93	6.25	5.82
100-year	55.77	8.92	0.67	1.06	7.38	7.81

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025
Drainage Basin # SDA6 **Total Area (ac)** 1.01

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.42	98	41.16	0.90	0.378
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	0.59	39	23.01	0.30	0.177
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.01		64.17		0.555

RCN= 64 — Composite C 0.55
S= 5.625

Time of Concentration
Overland Flow

T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.00	10	0.015	3.22	0.02

Shallow Concentrated

T (concentrated)	Height (H)	Length (L)
0.15	4.78	747

Total Tc 0.16
If Tc is less than 5 min, use 5 min
Tc (min) 9

Total Imper. Area 42 **%Impervious**

TR20 SUMMARY RESULTS:			SDA6		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	See HydroCad Data
1-year	2.65	0.33	1193		
2-year	3.22	0.57	2084		
10-year	4.96	1.55	5700		
25-year	6.2	2.41	8825		
100-year	8.48	4.17	15280		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.56	4.60	2.55
10-year	60.65	10.79	0.77	0.56	5.98	3.32
25-year	58.96	10.10	0.73	0.61	6.72	4.10
100-year	55.77	8.92	0.67	0.69	7.92	5.50

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025
Drainage Basin # SDA7 **Total Area (ac)** 2.68

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.10	98	9.8	0.90	0.090
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	2.58	39	100.62	0.30	0.774
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		2.68		110.42		0.864

RCN= 41 — Composite C 0.32
S= 14.390

Time of Concentration
Overland Flow

T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.11	50	0.24	3.22	0.038

Shallow Concentrated

T (concentrated)	Height (H)	Length (L)
0.07	9.54	442

Total Tc 0.17
If Tc is less than 5 min, use 5 min
Tc (min) 10

Total Imper. Area 4 **%Impervious**

TR20 SUMMARY RESULTS:			SDA7		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	See HydroCad Data
1-year	2.65	0.00	36		
2-year	3.22	0.01	77		
10-year	4.96	0.26	2560		
25-year	6.2	0.62	6061		
100-year	8.48	1.57	15271		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.86	4.46	3.85
10-year	60.65	10.79	0.77	0.86	5.81	5.02
25-year	58.96	10.10	0.73	0.95	6.54	6.21
100-year	55.77	8.92	0.67	1.08	7.71	8.33

SEE SUPPLEMENTAL PROJECT REPORT FOR DETAILED DRAINAGE CALCULATIONS AND STORM ROUTINGS

JOB NO.
WE-0238-25

THIS DRAWING IS THE PROPERTY OF WILSON ENGINEERS AND IS NOT TO BE REPRODUCED OR USED FOR ANY PROJECT IN WHOLE OR IN PART WITHOUT EXPRESS WRITTEN PERMISSION.

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
jblairwilson@gmail.com

JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25

PROJECT:

MATTAPONI SAND & GRAVEL

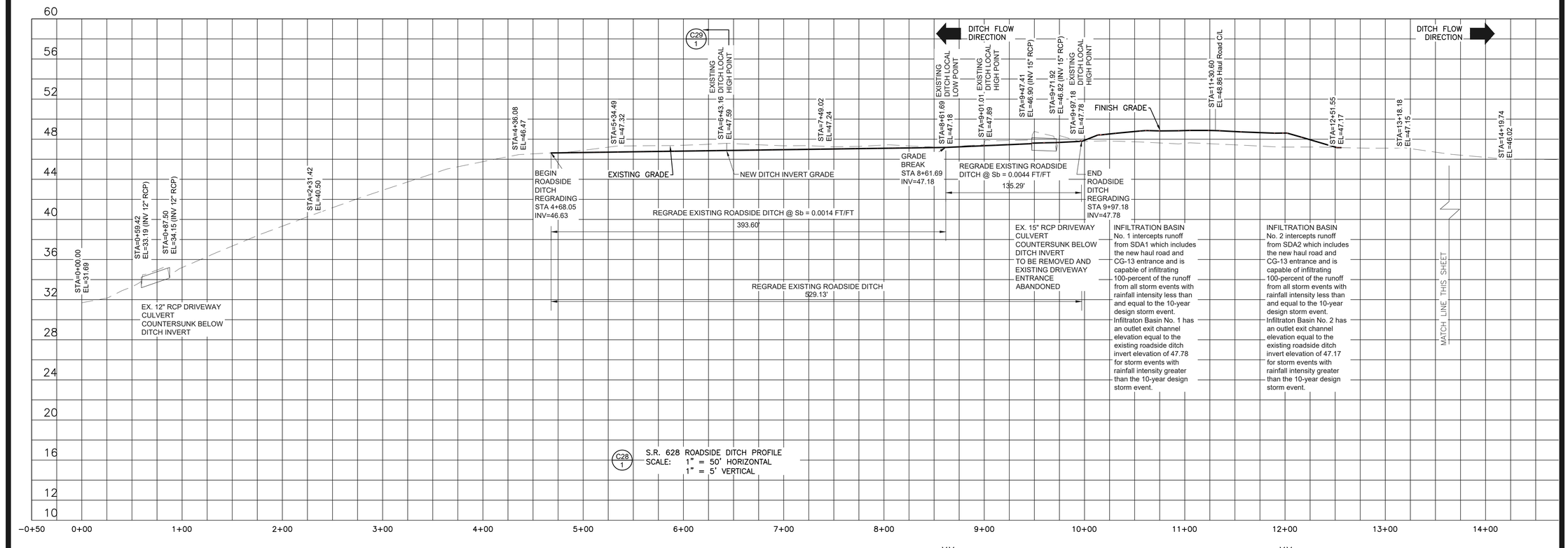
NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

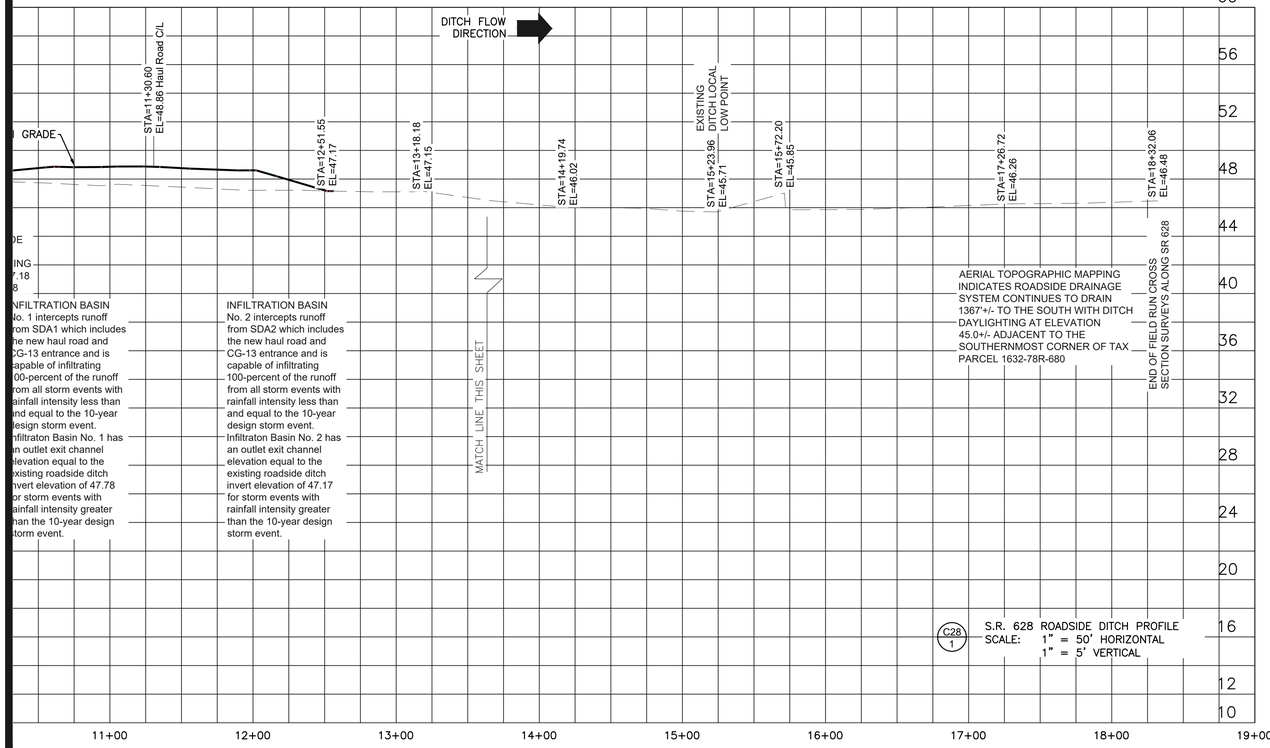
SHEET:

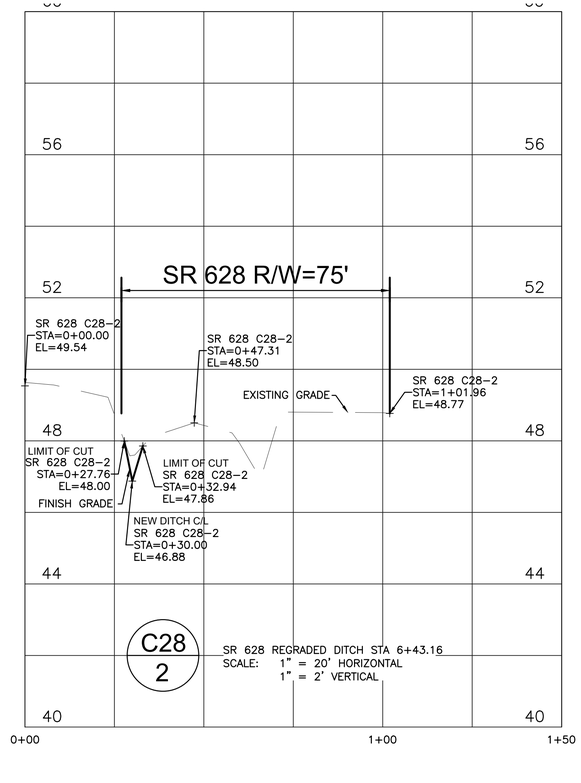
DRAINAGE AREA MAP

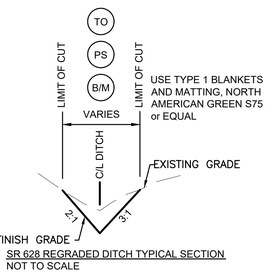
SHEET NO:
C27

JOB NO.
WE-0238-25









SR 628 REGRADED DITCH TYPICAL SECTION
NOT TO SCALE

JOB NO.
WE−0238−25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

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COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-20-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

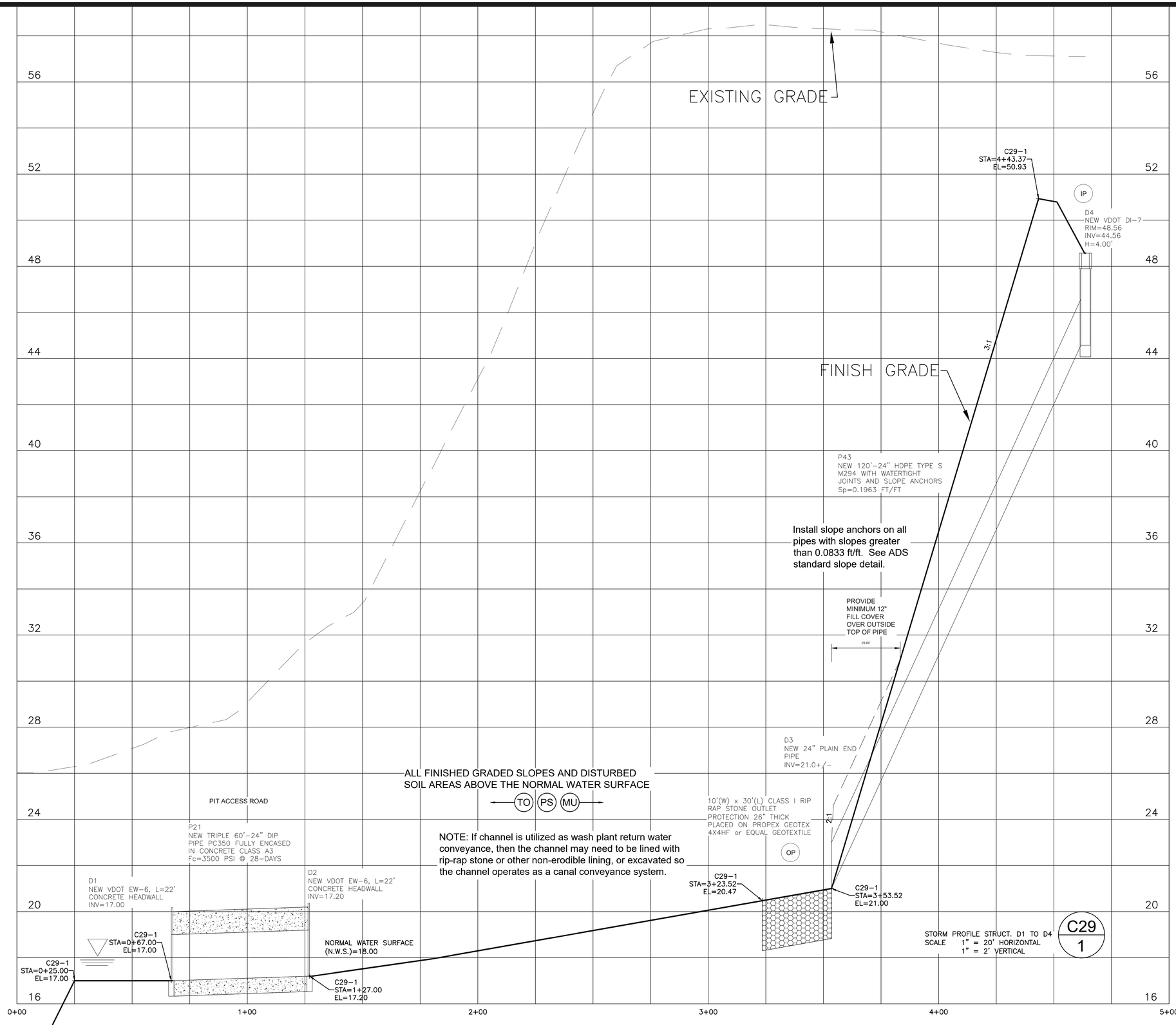
SHEET:

S.R. 628 ROADSIDE DITCH PROFILE

SHEET NO:

C28

JOB NO.
WE−0238−25



STORM PROFILE STRUCT. D1 TO D4
SCALE 1" = 20' HORIZONTAL
1" = 2' VERTICAL

C29
1

JOB NO.
WE-0238-25

PROJECT MANAGER: JBW

DESIGNED: JBW

CAD: JBW

CHECKED: JBW

FILED:

DATE: NOVEMBER 13, 2024

REVISED: FEBRUARY 20, 2025

REVISED:

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PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

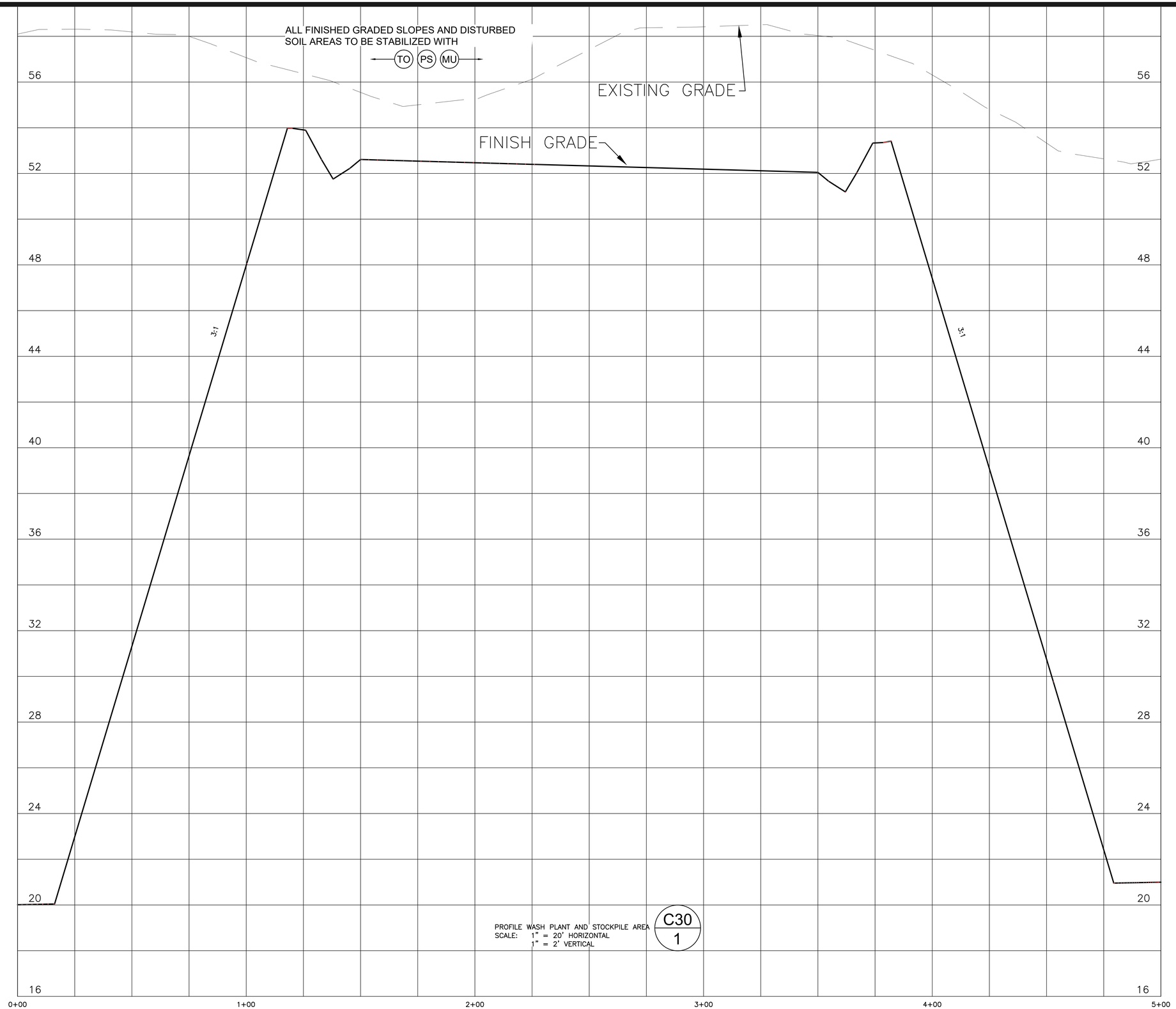
SHEET:

ADDITIONAL SECTIONS AND PROFILES

SHEET NO:

C29

JOB NO.
WE-0238-25



PROFILE WASH PLANT AND STOCKPILE AREA
SCALE: 1" = 20' HORIZONTAL
1" = 2' VERTICAL

C30
1

JOB NO. WE-0238-25

PROJECT MANAGER: JBW

DESIGNED: JBW

CAD: JBW

CHECKED: JBW

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DATE: NOVEMBER 13, 2024

REVISED: FEBRUARY 20, 2025

REVISED:

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

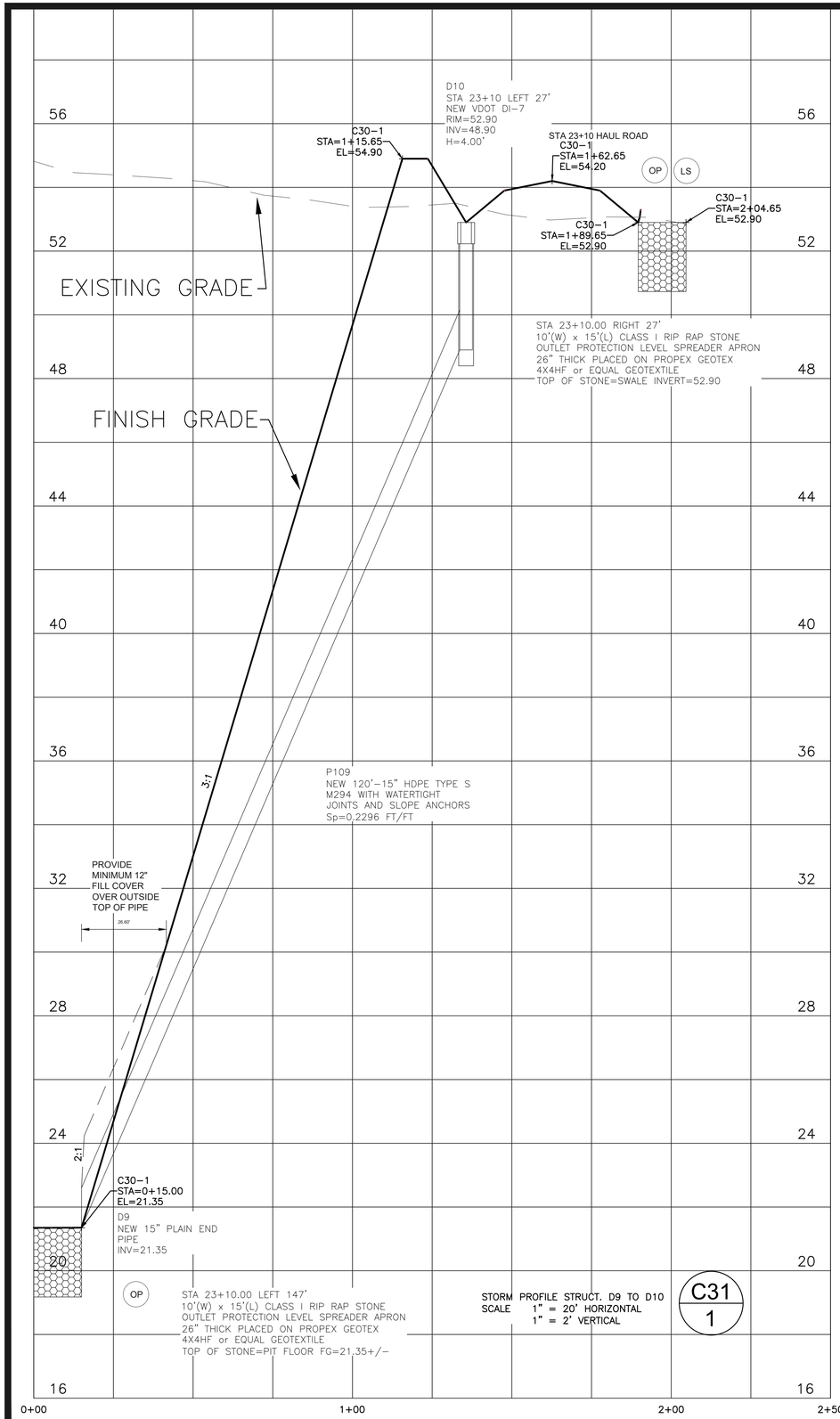
SHEET:

ADDITIONAL SECTIONS AND PROFILES

SHEET NO:

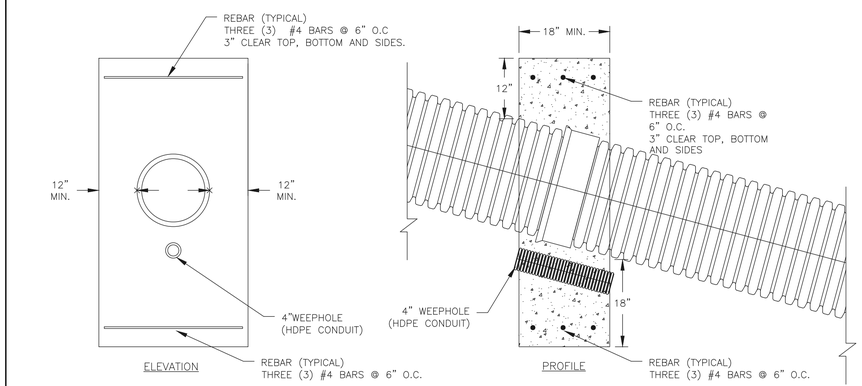
C30

JOB NO. WE-0238-25



STORM PROFILE STRUCT. D9 TO D10
SCALE 1" = 20' HORIZONTAL
1" = 2' VERTICAL

C31
1



NOTES:

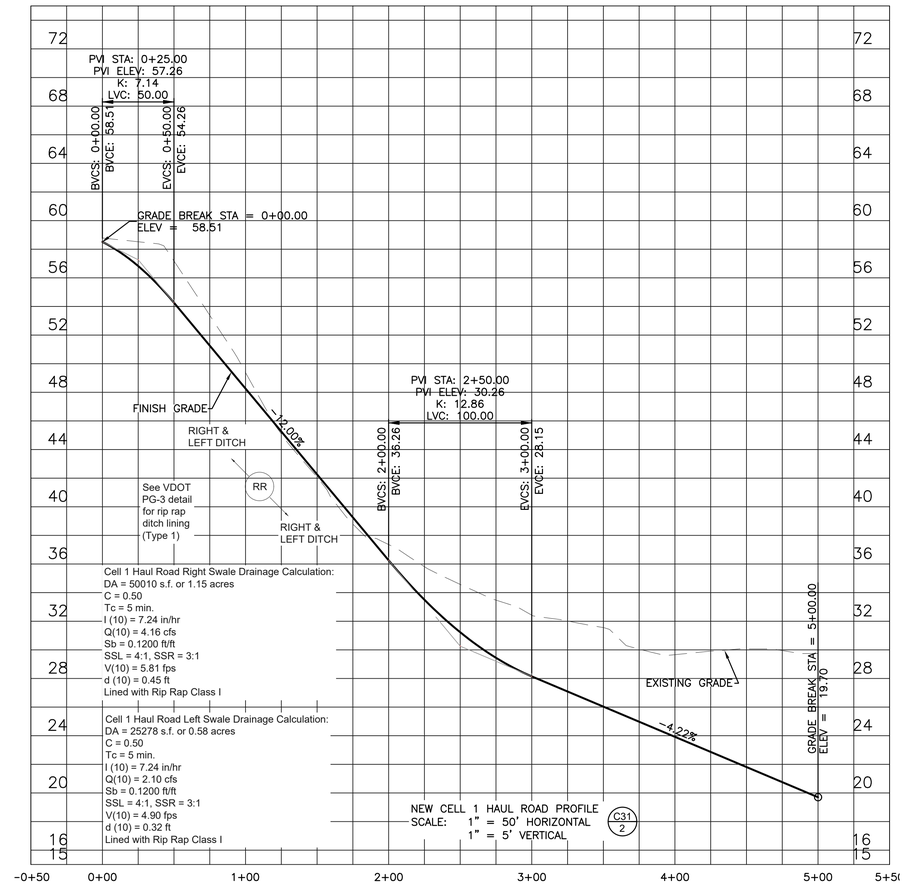
1. PIPE TO BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS. SEE STD-101.
2. ANCHORS SHALL BE PLACED EVERY JOINT.
3. VELOCITY REDUCTION METHODS SHALL BE TAKEN WHEN SLOPE CREATES VELOCITY GREATER THAN 20 FPS.

CONCRETE SLOPE
ANCHOR DETAIL

DRAWING NUMBER:

ADS
ADVANCED DRAINAGE SYSTEMS, INC.
4640 TRUEMAN BLVD
HILLIARD, OHIO 43026

DRAWN BY:
DATE:
DSN BY:
SCALE: NTS
SHEET OF



Cell 1 Haul Road Right Swale Drainage Calculation:
DA = 50010 s.f. or 1.15 acres
C = 0.50
Tc = 5 min.
I (10) = 7.24 in/hr
Q(10) = 4.16 cfs
Sb = 0.1200 ft/ft
SSL = 4:1, SSR = 3:1
V(10) = 5.81 fps
d (10) = 0.45 ft
Lined with Rip Rap Class I

Cell 1 Haul Road Left Swale Drainage Calculation:
DA = 25278 s.f. or 0.58 acres
C = 0.50
Tc = 5 min.
I (10) = 7.24 in/hr
Q(10) = 2.10 cfs
Sb = 0.1200 ft/ft
SSL = 4:1, SSR = 3:1
V(10) = 4.90 fps
d (10) = 0.32 ft
Lined with Rip Rap Class I

NEW CELL 1 HAUL ROAD PROFILE
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

C31
2

JOB NO.
WE-0238-25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 20, 2025
REVISED:

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PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

ADDITIONAL SECTIONS AND PROFILES

SHEET NO:

C31

JOB NO.
WE-0238-25

SUPPLEMENTAL REPORT

Mattaponi Sand & Gravel
Mine Site
King & Queen County, Virginia

November 14, 2024
Revised February 20, 2025

PREPARED BY:
WILSON ENGINEERS, LLC
Civil & Environmental Engineering
P.O. Box 1269
West Point, VA 23181
(804) 513-9564

P.O. Box 1269
West Point, Virginia 23181-1269
(804) 513-9564

Wilson Engineers, LLC

February 20, 2025

Ms. Donna Sprouse
Director of Community Development
King and Queen County
P.O. Box 177
King & Queen Court House, Virginia 23085

RE: Mattaponi Sand & Gravel Level 3 Site Plan – 1st Review Comment Response
TM 1632-78R-680

Dear Ms. Sprouse:

We have revised the Level 3 site plan to address regulatory review comments as contained in the December 23, 2024 review comment letter. The following summarizes how each of the comments have been addressed.

Zoning/Planning Comments

1. We have relocated the scales, office, wash plant and stockpile outside of the designated floodplain. The excavated sediment basin/wet retention pond will remain within the floodplain.
2. Water used in the sieve washing will be pumped from the wet retention pond. There is adequate space available on the mine site to accommodate stockpiles and wash plant operations without concern for impacting the primary or reserve drainfield areas, or encroaching into required buffers. Drainage conveyance channels adjacent to the wash plant and stockpiles are part of the standard facilities and operations on a surface mine site. The purpose of the sediment basin is to allow for sedimentation processes to occur for both surface runoff as well as recycling of the water used in the wash plant sieve operations.
3. There will be a single 500-gallon fuel storage tank on the mine site. Keynote 16 shown on Sheet C1 addresses the issues related to the fuel tank. Please note that the fuel tank is exempt from regulation by the Virginia Department of Environmental Quality, as the tank volume is below threshold limits for permitting and the tank is regulated by the Virginia Department of Energy. We do not believe that a roof covering is required for the 500-gallon tank. Secondary containment does not appear to be required beyond that which is provided by the double wall tank construction based on the limited volume of storage, however, if a code provision is presented that indicates that secondary containment is in fact required, or that a roof cover is required, then Mattaponi Sand & Gravel will provide the facilities necessary to conform with the code provisions to the satisfaction of the regulatory agent having jurisdiction over those particular items. We could not find a regulatory requirement for either the roof cover or secondary containment for fuel storage less than 660 gallons (one of the threshold limits) based on our review of EPA, VDEQ and NFPA regulations related to above ground fuel storage tanks. The location of the fuel tank is identified on Sheet C17. The fuel tank is outside of the designated floodplain.

4. The 300-foot buffer to the rearmost corner of the former Garnett property has been provided.
5. The buffers are currently vegetated. Street level views have been included in the Supplemental Report Tab 2 Narrative Report.

Environmental Codes Compliance Comments
1. Understood.
2. Informational, no action required.

Virginia Department of Health
No comments.

Virginia Department of Transportation Comments
1. We have added Sheet C28 to include a profile of the existing roadside ditch centerline to show that the high point in the roadside drainage system occurs at the intersection of State Routes 628 and the new haul road entrance. We do not believe that an entrance culvert is warranted for the new haul road entrance. The existing ditch undulates with minimal differences between local high points and local low points north of the planned haul road entrance onto State Route 628, and the existing driveway entrance culvert located immediately north of the proposed haul road entrance is countersunk below the invert of the existing roadside ditch. We are proposing minimal regrading of the existing roadside ditch to improve the conveyance of storm runoff by removing the undulations and countersunk culvert. The roadside ditch south of the new entrance drains in a generally south direction toward the common property corner between Tax Parcel 1632-78R-680 (our site) and Tax Parcel 1632-79R-604A (formerly Garnett, now Stephen Schools). The southern roadside ditch daylights at the Stephen Schools property where runoff then sheet flows across the Schools property. A photograph in the Supplemental Report, Tab 2 Narrative Report has been provided to show the south roadside ditch daylight area.
2. We have modified the plans to show that all vegetation within the lines of sight will be removed.

Please contact me at (804) 513-9564, if you have any questions, or need any additional information relative to the project.

Sincerely,

Jonathan Blair Wilson, P.E.
President

cc. file WE-0238-25 MSG

King and Queen County

Founded 1691 in Virginia

Office of the Zoning Administrator
P.O. Box 177 • King and Queen Court House, Virginia 23085
Phone: (804) 785-5985 • Fax: (804) 785-5999

December 23, 2024

Mattaponi Sand & Gravel LLC
C/o Kyle Murray
P.O. Box 2000
Gambrills, MD 21054

RE: Mattaponi Sand & Gravel – Level 3 Site Plan (Plans prepared by Jonathan Blair Wilson, P.E., with Bay Design Group, seal date November 13, 2024)
SP24-04 – Mattaponi Sand & Gravel LLC
Tax Map Parcel: 1632-78R-680

Dear Mr. Murray,

I have received comments from King & Queen County Codes Compliance Department (Joshua Rellick), Virginia Department of Transportation (Robert Butler & Ronald "Chad" Brooks), and Virginia Department of Health (XXXX) in response to a request for a Level 3 Final Site Plan approval to operate a surface mining operation in conformance with the approved conditional use permit CU02-08, as approved on December 9, 2002, by the King and Queen County Board of Supervisors.

Before we may move this site plan through the public hearing process with the Planning Commission, the following comments must be addressed:

Zoning/Planning Comments

1. It appears that you are proposing to place your scales, scale house/office trailer, parking, stock piles, wash plant, septic system & drainfield all within the 5-acre portion of the parcel, zoned Industrial. When the rezoning and conditional use permit were both approved in 2002, the rezoning was to allow for processing. If you are sorting or processing for the facilitation of hauling the product, such use may be permitted outside of the Industrial zoned area. In fact, according to the FEMA FIRM, most of the Industrial zoned area is within the floodplain (Zone A). You may certainly propose this

Move outside of floodplain
JMJ
2-20-25

development within the floodplain; however, a floodplain development application must be submitted and more details regarding your stock piles (size and location), plant size and location, and a flood elevation certificate is required for the scale house/office trailer and any other structure within the floodplain. I simply do not want you to assume that everything must be located within the 5 acres, zoned Industrial.

2. It appears that you intend to use the wet sediment pond as your water source for cleaning the extracted material at your wash plant. How do you intend to get the water from the wet sediment pond to the area you have noted on the plan set as your material stock pile area and plant location? On the current mine site (the Fisher site), it appears that the plant, stock piles, office trailer, scales and haul road occupy about 13 acres. I simply do not see how you are able to use that small area for your plant location and stock piles without encroaching within your drainfield area, required setbacks per the approved conditional use permit, and CBPA areas (RPA and its buffers). It is strongly encouraged that you do not have stock piles located near your inlet at the ditch which directs into your wet pond, unless there is good permanent stabilization at the inlet to prevent sediment from collecting in the inlet and subsequently your wet sediment pond.

3. Are there any fuel tanks proposed on site, if so, where will they be located (will they be located within the floodplain) and please provide details regarding the required self-containment system with roof.

4. At the rear corner of the former Garnett property, next to the mine site, there isn't a full 300' buffer provided. You have identified the 300' buffer to the north of the former Garnett property line, but not to the north-west from the rear corner.

5. Are these buffer/setback areas already fully vegetated? It is important to identify the current vegetative state (if any) of the buffer/setback areas now so in the future, we are able to confirm that these areas are or remain undisturbed. I am not suggesting that they need to be planted if not already vegetated, just simply identifying the state of the current buffer/setback areas.

Environmental Codes Compliance Office Comments

Comments were received from Joshua Rellick, Environmental Codes Compliance Officer for King & Queen County on December 19, 2024. Mr. Rellick noted the following...

"Below are my comments for the Mattaponi Sand and Gravel mine plan, dated November 13th, 2024.

OK 1. *For your information, the King and Queen County government has the authority to enforce the Chesapeake Bay Preservation Act within King and Queen County. If it is found during the operation of this mine that clearing was done within the Resource Protection Area (RPA) buffer, then a Water Quality Impact Assessment permit, mitigation, and a surety payment would be necessary to revegetate the area. Please make sure that all workers clearly know where the RPA buffer is and know not to do any clearing within it.*

OK 2. *For your information, the Department of Energy handles erosion and sediment control and stormwater regulations for mines. Please follow all erosion and sediment control and stormwater regulations as specified by the Department of Energy."*

Virginia Department of Health Comments

OK Comments from Virginia Department of Health, Brandy Colgin were received via email on December 23, 2024. She provided a construction permit/approval of the septic system and noted that VDH has no comments regarding the proposed site plan.

Virginia Department of Transportation Comments

Comments from Virginia Department of Transportation (Robert Butler/Ronald "Chad" Brooks) were received via email, December 11, 2024. The following was noted:

"This office has reviewed the referenced plans with a license stamp date of 11-13-24 per the minimum standards as received on 11-26-24, and we have noted the following comments:

2-20-25 JW 1. *The entrance is in a relatively flat area along Rt. 628 and it is difficult to determine ditch flow direction even with the grades provided on the plan sheets. Therefore, please verify whether or not an entrance culvert is needed and provide one if necessary.* ADDED PROFILE

2-20-25 JW 2. *As vegetation can grow quickly, all vegetation within the sigh lines needs be removed regardless of current heights.* REVISED NOTE TO REMOVE ALL.

Once these comments are addressed, submit revised plans to this office for review. If there are any questions concerning this review, contact Chad Brooks at (804)761-2148."

Once all comments set forth above have been properly addressed, please submit a revised complete site plan package (along with corresponding documentation), including a single comment response letter to the Planning & Zoning Department. Please note that it is important to our orderly and expeditious processing of your application that we receive responses that both explain the response and provide a citation/location of the item in the

submitted plan(s). Once revised plans have been received, the Planning & Zoning Department will then deliver the revised site plans to the appropriate state/local agencies for review, as needed.

Please contact this office should you have any questions about any of the comments mentioned above.

Sincerely,

Donna E. Sprouse
Director of Community Development

CC: Vivian Seay, County Attorney (email)
Joshua Rellick, King & Queen Codes Compliance Officer (email)
Paul Saunders, Department of Energy (email)
Blair Wilson, Bay Design Group (email)
Robert Butler & Ronald Chad Brooks, VDOT (email)
Brandy Colgin & Patricia Duttry, VDH (email)
File

Table of Contents

1. Land Development Application

King & Queen County Land Development Application

Planning & Zoning Department
P.O. Box 177
King & Queen Courthouse, VA 23085
Phone: (804) 785-5975 or (804) 769-5000
Fax: (804) 785-5999 or (804) 769-5070

Please print in ink or use a typewriter

Applicant: Mattaponi Sand & Gravel LLC

Applicant's Address: P.O. Box 2000, Gambrills, MD 21054

Applicant's Phone: (443) 871-3440

Agent (Contact Person): Jonathan Blair Wilson, P.E.

Agent's Address: P.O. Box 51, Urbanna, VA 23175

Current Property Owner: Same as applicant

Owner's Address: _____

Owner's Phone: _____

Correspondence to be sent to: x Applicant _____ Owner x Agent _____ Other _____

Tax Map Number: 1632-78R-680 Magisterial District: Newtown

General Project Location: Intersection of SR 628 and SR 639

Size of Request: 186.27 acres

*Are Proffer's being offered along with this Application: YES _____ or NO x . If so please attach.

Check Appropriate Request:

Zoning Administrator
- _____: Site Plan (Level 1)
- _____: 1-2 Lot Subdivision Request
- _____: Family Subdivision Review
- _____: Boundary Line Adjustment
- _____: Plat Approval

Planning Commission
- _____: Site Plan (Level 2)
- _____: Chesapeake Bay Exception
- _____: Other
- _____: Final Plat Review for Minor & Major Subdivision

Planning Commission & Board of Supervisors
- _____: Rezoning
- _____: Conditional Use Permit
- _____: Zoning Ordinance Text Amendment
- _____: Subdivision Ordinance Text Amendment
- x: Site Plan (Level 3)
- _____: Other
- _____: Preliminary Plat Review for Minor & Major Subdivision

Board of Zoning Appeals
- _____: Administrative Appeal
- _____: Variance
- _____: Special Exception
- _____: Other

King & Queen County Land Development Application

Complete As Applicable:

Name of Subdivision, Development, or Proposal: Mattaponi Sand & Gravel Mine Site

Proposal/Request: Level 3 Site Plan Approval for a surface mining operation conforming with CU02-08.

Reason for Request: Required by county code of ordinances.

Applicant: The information provided is accurate to the best of my knowledge. I acknowledge that any percolation tests, topographic studies, or other requirements of the Health Official or the Zoning Administrator will be carried out at my expense. I understand that the County may deny, approve, or conditionally approve that for which I am applying. I certify that all property corners have been clearly staked and flagged.

Applicant's Signature: _____ **Date:** 11/14/24

Owner: I have read this completed application, understand its content, and freely consent to it's filing. If this application is for the purpose of subdivision, further subdivision of this property will require a new application and approval by the Board of Supervisors. Furthermore, I grant permission to the Zoning Administrator and the other County Officials to enter the property and make such investigations and tests as they deem necessary.

Owner's Signature: _____ **Date:** 11/14/24

2. Narrative Report

NARRATIVE REPORT

Project Description:
Mattaponi Sand & Gravel, LLC is the owner of record of King and Queen County Tax Parcel 1632-78R-680 and seeks approval for a Level 3 Site Plan from the King and Queen County Board of Supervisors to conduct mineral mining on the 186.27 acre parcel in accordance with the Code of King and Queen County and the Conditional Use Permit CU02-08 as approved by the King and Queen County Board of Supervisors on December 9, 2002. The parcel is zoned Agricultural District (181.27 acres) and Industrial District (5.00 acres). Mineral mining is permitted in the Agricultural District and in the Industrial District.

It is anticipated that the Virginia Department of Energy, Division of Mineral Mining (VDE DMM) will issue a mining permit to Mattaponi Sand & Gravel LLC to conduct surface mining of mineral soils on Tax Parcel 1632-78R-680, subsequent to the issuance of a Virginia Department of Transportation Land Use Permit for the new commercial entrance proposed with the project to access State Route 628, Spring Cottage Road.

Mattaponi Sand & Gravel LLC intends on constructing a wash plant for sorting, grading and classifying raw mined materials, and constructing mining operation supporting infrastructure consisting of an administrative office with restroom facilities for employees and visitors, a water supply well for domestic use, and weigh scales on the property. A sediment basin with a wet retention pool will be constructed adjacent to the wash plant. The sediment basin will provide a suitable source and volume of water to enable the wash plant to sort and complete gradation of the mined materials with a wet sieve process. Water will be pumped from the sediment basin wet retention pool up to the wash plant. Wash water from the sieve operation will be returned to the sediment basin for recycling and reuse.

Sanitary facilities to serve the mine employees, mine inspectors and mine visitors will be the restroom that will be located in the administrative office to be constructed on Tax Parcel 1632-78R-680. Water supply and septic drainfield facilities servicing the administrative office on Tax Parcel 1632-78R-680 will permitted and constructed according to Virginia Sewage Handling and Disposal Regulations.

Buffers and Setbacks:
The surface mining operations will be obscured from public view with the maintenance of the Conditional Use Permit CU02-08 300-foot and 50-foot required undisturbed buffers, and the maintenance of the Resource Protection Area (RPA) and RPA 100-foot width buffer. These buffers are currently forested and will be maintained in their current natural conditions. Photographs of the current forested buffers as viewed from State Route 628 are included at the end of this Narrative Report.

Traffic Generation:
The Mattaponi Sand & Gravel mine site is expected to employ a maximum crew of 8 persons to operate and maintain mining equipment and perform administrative duties on the property. The maximum number of trucks that may export material from the site each day is 50 as stipulated

with the Conditional Use Permit CU02-08. Therefore the maximum number of empty trucks that will enter the site each day will be 50, and the maximum number of loaded trucks that will exit the site each day is 50.

Vehicular trip generation for the site is expected as follows:

TRIP GENERATION 11/13/2024

Mattaponi Sand & Gravel, LLC

Tax Parcel 1632-78R-680 ENTRANCE SPRING COTTAGE ROAD, S.R. 628

Land Use	Intensity	Daily Trips	AM or PM Peak Hour Volumes		
Sand & Gravel Surface Mine	n/a		Total	Enter	Exit
ITE Code (not applicable)		132	15	8	7

Calculations:	Trucks per day
Operational days	52 weeks per year X 6 haul days per week = 312 haul days/year
Anticipated mining life	10 years x 312 haul days/year = 3120 haul days
Peak Annual Tonnage	390000 tons/year
Average Vehicle Load	25 tons per vehicle
Average Tonnage per day	390000 tons/year /312 haul days/year =1250 tons/day
Trips per day (loaded)	1250 tons/day/25 tons/vehicle =50 VPD Max. per CU02-08
	50 VPD x 2 = 100
Total Average Trip Ends	VPD (50 empty in + 50 loaded out)
Employees	8 employees
Total Average Trip Ends	4 trip ends/employee x 8 employees = 32 VPD
Combined PEAK Total ATE	132 (traveling North or South along SR 628)
AM or PM PHV	132 x 11% = 15
Enter/Exit Split	53/47 8 entering/7 exiting
PHV right turns is 50-percent of 8 entering vehicles per hour	4

Hours of Operation:
7:00 AM to 6:00 PM Monday through Friday with no loaded trucks leaving the site until after King and Queen County Public Schools morning bus routes are completed, and 7:00 AM to 12:00 PM on Saturday. The mine site will be closed on Sunday.

Outdoor Lighting:
No permanent outdoor lighting is being proposed with the mine site with the exception of lighting shown for the office area parking and that which is required by the building code for ingress and egress doors to the office.

Outdoor Speakers/Paging System:
No outdoor speaker or paging systems are proposed with the project.

Utilities:
Power service to the building and wash plant will be coordinated with the utility service provider.

Buildings and Structures:
Buildings and structures are shown on the site plan. Dimensions from the office building to front, left side, right side and rear property lines are identified on Sheet C20 of the site plan.

Sanitary Facilities:
Restrooms for employees and visitors will be provided in the administrative office. Sewage disposal will be with an on-site septic drainfield system.

Water Supply:
Water supply will be provided with a new Class IIIB groundwater supply well.

Dust Control:
Airborne sediments will be controlled according to Virginia Department of Energy Mineral Mining standards. During periods of dry weather, wetting of the haul roads using a sprinkler or similar spray discharge system mounted on a water tank truck will be employed as necessary to suppress and control dust.

Storm Runoff and Erosion Control:
Adequate provisions for controlling storm runoff, erosion and sedimentation from the surface mining operation have been included on the site plan for the project. The Virginia Department of Energy permit for the surface mining requires when surface mining in an area has been completed that the area be reclaimed. The reclamation plan for this site is to establish native ground cover vegetation, other approved grasses, or to implement the Forestry Reclamation Approach according to the Virginia Department of Energy Mine Operator's Manual. The reclamation grading plan promotes sheet flow to the project's permanent sediment basin. The sediment basin provides for a permanent wet retention pool to assist with the sedimentation process and attenuate peak storm event rates of discharge prior to release of site runoff through a stable rip rap stone outlet level spreader apron to the existing 100-foot Resource Protection Area

forested buffer. The permanent pond and level spreader outlet is designed for the project combined with the forested natural buffers to minimize storm runoff velocities and provide for water quality enhancement using natural sedimentation and filtration processes.

Chesapeake Bay Preservation Area:
The mine site has been designed to keep all mining and land disturbance landward of designated Resource Protection Areas (RPA) and RPA buffers.

The mine site mining and reclamation plan converts the property's silvicultural/forestry land use to an impoundment facility (excavated surface mine) where all surface runoff is retained within the mine limits. Final reclamation of the mined property will revert the land use back to a forestry or meadow land cover condition where pre-development and post-development runoff volumes, velocities and pollutant generation are expected to be equal.

Project Site Conditions:
The project site topography ranges from mild to severe. Stormwater runoff from the site is currently conveyed by overland flows generally in a west direction to the Mattaponi River. The Mattaponi River is non-tidal along this section of the river.

The property contains both Chesapeake Bay Preservation Area Resource Protection Areas (RPA) and Resource Management Areas (RMA). Non-tidal wetlands are located within the boundaries of the project. The limits of the non-tidal wetlands were field identified and flagged by George M. Junkin, Certified Wetlands Delineator #93MD0510034B. Flagged wetland limits were survey located by Bay Design Group. The U.S. Army Corps of Engineers has not issued a Jurisdictional Determination and confirmation of the surveyed wetland limits as of the date of the preparation of this report. No regulated non-tidal wetlands will be disturbed with the mining and reclamation activities on the project.

Project site conditions are identified on the Plan of Development.

Property Owner:
Mattaponi Sand & Gravel LLC

Adjacent Property:
Adjacent property ownership is identified on the project plans.

Offsite Areas:
There are no offsite areas associated with this project.

Soils:
Soils in existence prior to proposed surface mining are identified on Sheet C3 of the Level 3 Site Plan. The predominate soil is Tarboro sand, which is a hydrologic group "A" soil.

Critical Erosion Areas:
Critical erosion areas that must be protected to the maximum extent practical include the existing

roadside drainage channels, streams, non-tidal wetlands, and the adjacent properties. No other areas are considered to be critical.

Erosion and Sediment Control Measures:
The mining operations and erosion and sediment control measures to be implemented on the project site are regulated by the Virginia Department of Energy. Virginia Department of Energy staff conduct periodic inspections of all mine facilities to ensure the performance and adequacy of erosion and sediment control measures to protect areas located outside of the active mining pit areas. Temporary erosion and sediment control measures to be employed during reclamation grading operations include silt fencing, diversion dikes, culvert inlet protection, sediment basins, and dust control. Permanent erosion and sediment control measures to be implemented with the project reclamation include rip rap stone outlet protection and slope stabilization, permanent sediment basins, level spreaders, permanent seeding, mulching, erosion blankets and matting, and the establishment of vegetative cover over disturbed soil surfaces. All erosion and sediment control practices shall be in accordance with the standards and specifications as prescribed in the Virginia Department of Energy Mine Operator's Manual and as supplemented by the 1992 Virginia Erosion and Sediment Control Handbook.

Structural Practices & Vegetative Practices Proposed:
3.02 Construction Entrance
3.05 Silt Fence
3.08 Culvert Inlet Protection
3.09 Diversion Dike
3.13 Sediment Trap
3.14 Sediment Basin
3.18 Outlet Protection
3.19 Rip Rap
3.30 Topsoiling
3.31 Temporary Seeding (as required)
3.32 Permanent Seeding
3.35 Mulching
3.36 Soil Stabilization Blankets and Matting
3.39 Dust Control (as required)

Management Strategies:
See the project site plan. All sediments shall be confined within the project limits. Surface runoff will be directed to stabilized and adequate storm drainage channels or discharged in the form of sheet flow to forested buffers.

Permanent Stabilization:
All denuded areas will be stabilized with native ground cover vegetation as identified on the plans or with other approved groundcovers according to the Virginia Department of Energy Mine Operator's Manual.

Stormwater Management & Drainage Calculations:

In summary, the minimal percentage of site impervious area, revegetation and proposed reclamation of mined areas, and flow attenuation through the permanent pond with discharges in the form of sheet flow to the extensive forested buffers surrounding the mine site are expected to result in no increase is runoff from the project site. Additionally, the total project area of 127.56 acres of land disturbance is significantly less than 1-percent of the total contributing Mattaponi River watershed area at the point where the site contributes flow to the Mattaponi River. The significant difference in size of the offsite contributing drainage area to the onsite development area results in no change to the watershed hydrology, and no change to the total runoff volume, peak discharge rate or velocity of flow in the receiving channel being the Mattaponi River.

The Virginia Department of Energy regulates surface mining operations for compliance with Virginia stormwater management and erosion and sediment control regulations.

Maintenance:

Temporary erosion and sediment control measures are to be inspected at the end of each workday, and after each rainfall. Damaged or inoperative control measures should be replaced and/or repaired immediately. Sediment accumulations shall be removed and disposed of in approved spoil areas to ensure satisfactory performance of the drainage system. Permanent erosion and sediment control measures consisting of permanent vegetation, rip rap stone outlet protection and slope protection should be inspected on an annual basis and after storm events with rainfall intensity of 2.8 inches per hour or greater. Damaged areas or measures should be repaired.


SR628 End of Asphalt
View where SR628 asphalt paving ends
Legend
Mattaponi Sand & Gravel Mine Site
Google Earth
© 2025 Google
N
6.62 ft


SR628 Northeast
View of site at northeast end
Legend
Mattaponi Sand & Gravel Mine Site
Google Earth
© 2025 Google
N
8.03 ft


SR628 ITX SR639
View of site at intersection
Legend
Mattaponi Sand & Gravel Mine Site
628
Google Earth
© 2025 Google
N
6.27 ft


SR628 EX. Driveway
View of site at existing driveway
Legend
Mattaponi Sand & Gravel Mine Site
Google Earth
© 2025 Google
10 ft


SR628 No Ditch
No ditch in front of 1632-79R-604A
Legend
Mattaponi Sand & Gravel Mine Site
Google Earth
© 2025 Google
N
5.61 ft


Street View SR628
Mine Site on the Left
Legend
Mattaponi Sand & Gravel Mine Site
Google Earth
© 2025 Google
N
7.03 ft

3. Virginia Department of Energy Mineral Mining Operational Plan

Mattaponi Sand & Gravel

OPERATIONAL PLAN
for Mattaponi Sand & Gravel Mine Site

MAPS

A general location map showing sensitive features within 1000 feet of the Mattaponi Sand & Gravel property boundaries and mining site is shown in Appendix A and is part of this operational plan.

SIGNS

A 4-foot by 4-foot sign shall be posted at the mining site adjacent to the principal access road. The sign shall be mounted on a metal or wood post with a mounting height at least 4-feet above ground level. The name of the permittee and the Virginia Department of Energy permit number shall be identified on the sign in a clear and legible format with font sizing appropriate for size of the sign and distance from the edge of the principal access road.

MARKING PERMIT BOUNDARY

The permit boundary of the mine site and plant shall be clearly marked with identifiable markings when mine related disturbing activities are within 100' of the permit boundary. The permit boundary will be marked using a combination of witness stakes in open areas consisting of metal fence posts, 1-inch diameter white PVC Sch40 pipe posts, fiberglass boundary posts, or similar permanent delineation materials. In wooded areas, the permit boundary will be marked by painting and flagging of trees at the permit boundary.

ROADS

The entrance to the mine site will require a Virginia Department of Transportation (VDOT) Land Use Permit for a new commercial entrance conforming to the current VDOT Road Design Manual Appendix F standards. The new commercial entrance will have a minimum paved width of 30-feet with 50-foot radii conforming to VDOT requirements. The new entrance will be surfaced with asphalt or concrete extending from the existing Spring Cottage Road, State Route 628 edge of pavement interior to the project site a minimum distance of 100-feet

(Haul Road STA 1+00). Beyond the new VDOT commercial entrance, the access road will be 30 feet in width and surfaced with VDOT No. 21A aggregate material between Haul Road STA 1+00 to 3+50, with the remainder of the Haul Road surfaced with a combination of sand and gravel to create an all-weather travel surface. Internal service roads will be installed as needed by the mine operator. Internal service roads will be a minimum width of 15-feet. All access roads will be properly maintained to ensure that mud and debris are not tracked onto public roads. All access roads and service roads will be properly maintained to control dust. Maintenance of the road system shall consist of inspecting, repairing and cleaning of roadways, ditches and culverts as necessary. Internal service roads and principal access roads shall be planned to minimize the impact of traffic, dust, and vehicle noise on areas outside the mining site.

Road surfaces and ditches will be stabilized with rock or other suitable paving material or vegetated in the case of ditches. When a road is abandoned, steps shall be taken immediately to minimize erosion and establish vegetative cover. These steps will involve scarifying the road to a depth of 12 inches and seeding to meet the post mining land use requirements. The haul roads may be left un-reclaimed with the landowner's approval following the completion of mining. Sediment control shall be provided for roads to minimize sediment that leaves the permitted and disturbed area. If necessary, culverts with a minimum diameter of 12 inches, but adequate to carry storm runoff, will be installed at intervals to prevent overloading of ditches. Where necessary, the inlet end shall be protected by a headwall of a suitable material and the outlet end shall discharge onto an apron of rock riprap or concrete. Runoff will not be allowed to flow over an unprotected fill slope.

DRAINAGEWAYS

No impacts to natural drainageways will be allowed. There are no plans to mine near any intermittent or perennial streams.

100-foot Chesapeake Bay Preservation Area Resource Protection Area buffer shall be maintained. No mining or disturbance of the RPA buffers is permitted.

A 50-foot buffer zone of undisturbed vegetation or undisturbed forest will be provided and maintained between the mining operation and any stream, not otherwise protected by the RPA buffer requirements, or by King and Queen County Conditional Use Permit CU02-08 300-foot and 50-foot undisturbed buffers. Buffer zones will be maintained in addition to proper sediment control.

SCREENING

The Mattaponi Sand & Gravel mine site shall be effectively screened from public view using one or a combination of methods consistent with the following:

1. King and Queen County Conditional Use Permit CU02-08 undisturbed buffers consisting of a 300-foot natural undisturbed forested area within the property boundaries as measured from the State Route 628 public right-of-way and as measured from the property boundary with the now or formerly Garnett property, and a 50-foot natural undisturbed forested area within the property adjacent to all other exterior property boundary lines;
2. Maintenance and use of natural topography;
3. Constructed earth berms, where determined to be necessary; and
4. Planting of trees, where determined to be necessary.

Trees specifically planted for screening purposes shall be evergreen species of adequate height and suitable to the area. Plantings shall be spaced to accommodate the mature size of the species. Plantings shall be provided in at least two (2) rows with trees staggered along the rows as the Virginia Department of Energy minimum requirement.

Constructed earth berms for screening purposes shall be sloped at 3H: 1V. All berms shall be seeded to prevent soil erosion. The toe of berms shall not be constructed within 25-feet of adjacent property boundaries without written permission from the adjoining property owner. Silt fence shall be installed along the toe of berms on the exterior facing side. Screening berms are to be removed and berm materials are to be used during the reclamation of the mining site at the completion of mining operations.

TOPSOIL AND OVERBURDEN STORAGE

Temporary erosion and sediment control measures shall be installed prior to any land disturbance associated with site preparation or mining activities. Erosion and sediment control measures shall conform to the Virginia Department of Energy Mineral Mine Operator's Manual and/or the Virginia Erosion and Sediment Control Handbook. Topsoil and overburden will be removed and stockpiled or used to create diversion berms around the perimeter of the site. All constructed berms will have a top width of at least 4 feet and shall not exceed 5-feet in height as measured from the existing natural ground elevation. Berm side slopes will be 3H:1V or less and will be compacted and vegetated. Topsoil shall not be removed from the permitted mining site without prior approval from the Virginia Department of Energy. Diversion berms will be inspected on a regular basis and maintained as necessary. Berms shall not be constructed within 25 feet of adjacent property boundaries without written permission from the adjoining

property owner. Tree roots and limbs generated on-site may be stockpiled within the permit area.

As areas are completed, the berms will be utilized during reclamation activities to obtain final grade and promote vegetative cover.

MINING METHOD

Mining operations shall be conducted to ensure that all sediment generated from the mining activities at the site will be directed into the mine pit. Grading and surface drainage facilities shall be implemented to minimize soil erosion, adequately control runoff and direct such runoff to stable outlets. Temporary and permanent erosion and sediment control measures shall be implemented as necessary to confine all sediment to the permitted active mine site. Perimeter buffers shall be maintained to further enhance the project site's erosion control program.

Mining will be conducted using dragline equipment, front-end loaders, dozers, off-road dump trucks, pans, excavators and other equipment necessary to remove topsoil and overburden, prepare the site for mining, mineral extraction operations, and during reclamation of mining site.

The mining is expected to extend to an average depth of approximately 20 to 38-feet below the existing ground elevation. Overburden soils are expected to range from 1 to 6 feet below the existing ground surface, with mineable minerals located beneath the overburden soils.

Wooded areas located within the permitted mine limits will be cleared and grubbed. Individual mine cells will be designated by the mine operator and mining will proceed on a cell by cell basis. Areas cleared or disturbed outside of active mining cells will be stabilized with temporary or permanent seeding.

Active mining will commence on individual cells with the removal and stockpiling of overburden soils from the active mining cell area. Mineral extraction will be accomplished in a single lift, with mine pit walls extending from the depth of the overburden soils to the depth of the pit floor (depth varies) below the existing ground surface. The sand and gravel material within the mineral extraction zone will be removed so the pit wall remains stable. No activity will be permitted on the pit floor below or near areas actively being mined. Overburden material will be stripped back at least 10 feet from the top edge of the mineral extraction layer at the pit wall to create a bench at the top of the excavation. Benching the overburden soil away from the top of the pit wall will assist in decreasing overburden soil pressure acting on the face of the pit

wall. The overburden soil will be sloped away from the bench at the active pit area back to natural ground with a slope equivalent to the angle of repose of the overburden soil. All slopes within the mineral extraction zone and overburden layers will be maintained at the angle of repose of the various strata or flatter during mining operations. Final slopes will be graded to 3H:1V with reclamation activities being conducted on a cell by cell basis.

DRAINAGE CONTROL

Mining operations will be conducted to direct all surface runoff into the mine pit area. The mine pit will be excavated to depths approximately 20 to 38-feet below the surrounding adjacent grade, or depths as shown on the Plan of Development. However, the mine operator may extend the depth of extraction to the full extent of the mineral bearing strata, which may be greater than 38-feet. All surface runoff *within areas of active mining* will be contained within the mine pit. The pit will contain at least 0.125 acre-feet of volumetric storage for sediment control. Temporary sediment basins will be constructed as necessary and will include minimum normal pool depths of 3-feet measured from the sediment basin floor. The normal pool depth may be regulated with weir outlets, or with float level controls and dewatering pumping. Dewatering effluent will be clear, non-turbid and free of sediment. Dewatering effluent will be discharged, if necessary, to secondary sediment trapping devices such as dewatering pits or silt bags prior to final release through stabilized outlets.

METAL AND DEBRIS

All metal, lumber and debris generated on site will be stored in one location within the permitted area for use in repair of equipment, or to be sold at a later date. No metal will be left on the site after mining is complete. Any off-site generated metal waste will be promptly removed from the mine site. There will be no landfilling activities on the permitted area.

ACID MATERIAL

All acid-generating spoil materials will be segregated and buried to a minimum depth of four feet.

OFF-SITE MATERIALS / HAZARDOUS WASTE

No off-site materials or hazardous waste will be transported to the Mattaponi Sand & Gravel Mine Site.

No trash and/or debris will be allowed to accumulate on-site. All on-site generated waste such as used petroleum products, contaminated fuel, used anti-

freeze, used batteries, used cleaning solvents, etc. will be properly stored until disposed of at an approved off-site facility.

GROUNDWATER

Shallow seasonal perched ground water may be encountered during mineral extraction. Dewatering of the mine pit shall be conducted in accordance with the Mine Operator's Manual.

Soil evaluation test pits advanced by the Owner indicate no seasonal water table to depths of 20-feet below the existing ground surface, consistent with the maximum depth of the test pit excavations. Mineral extraction may extend to depths of approximately 38-feet below the ground surface, or 18-feet below the test pit excavations, where the depth to the seasonal high water table may be encountered. Dewatering of the mine pit may be necessary during pit excavation operations. Dewatering required to control groundwater seepage in the active mine pit will be conducted to direct pumping effluent to an appropriately sized dewatering structure, sediment trap or basin. Dewatering structures may consist of portable sediment tanks, filter boxes, silt bags or straw bale/silt fence pits conforming to Virginia Erosion and Sediment Control Handbook Standard 3.26. Sediment trapping and dewatering structure outlets will be sized to dissipate pump discharge velocity and ensure that effluent is released from the dewatering structure or sediment trap at velocities that are non-erosive to the receiving drainage channel, stream or forested buffer prior to ultimate discharge into the Mattaponi River.

Mining operations and excavation below the shallow near surface aquifer will not impact the groundwater supply wells in the vicinity of the mine site. There are two (2) expected domestic water supply wells within 1000-feet of the Mattaponi Sand & Gravel Mine Site. The wells are located on properties situated at 1381 Spring Cottage Road and 1878 Spring Cottage Road approximately 200-feet south and 670-east of the designated mine limit.

No impact on groundwater resources are expected to result from the mining operations or from temporary dewatering of the mine pit. The mine site is located adjacent to tributary streams that discharge to the Mattaponi River. Seasonal rainfall, and the tributary streams will effectively recharge the shallow aquifer and will maintain the hydrologic balance of the shallow aquifer.

PETROLEUM AND OTHER SOURCES OF CONTAMINATION

Any above ground fuel storage tanks shall be double walled vessels or tanks shall be constructed with concrete containment dikes to prevent petroleum leakage and contamination. Fueling of mining excavation equipment will be conducted using portable storage containers or fueling trucks. Fueling will be accomplished to

minimize potential for petroleum spills and leakage. Any fuel that accidentally leaks onto the ground will be immediately cleaned up and the contaminated material will be removed from the site.

A Plan for Minimization of Adverse Effects on Water Quality will be implemented on this project to prevent the potential of petroleum products from entering the groundwater system. The following precautions will be taken:

1. *All major mobile equipment repairs will be made off the mine site at service provider shops.*
2. *Minor repairs made to mobile equipment will be made at least 200 feet from any ponds.*
3. *Fluids from repairs will be collected and disposed of properly offsite at an appropriate offsite disposal site.*
4. *A petroleum spill kit and spill kit materials will be available to clean up any accidental spills. Any soil contaminated by an accidental spill will be removed from the site and disposed of in an approved Virginia DEQ approved landfill facility or sent to an appropriate mitigation facility.*
5. *Fuel storage on site will be limited to a single 1,000 gallon tank. This tank shall be a double walled containment vessel. The fuel tank will be located at least 200 feet from any pond.*

SIMULTANEOUS RECLAMATION

The mine site will be reclaimed in general conformance with the Level 3 Site Plan dated November 13, 2024 and revised through February 17, 2025.

Once mining is complete in an individual cell area, the pit walls within the individual cell will be sloped to 3H:1V and the pit floor will be shaped and graded to conform with the final reclamation grading plan. All areas above the normal pool level of any permanent pond will be limed, fertilized, mulched, and seeded with the approved permanent vegetation mix.

Any area within the mine site where mining has not been completed but has been dormant and no land disturbance for a period of one year, will be sloped 3H:1V and the pit floor will be graded level. The dormant area above the normal pool level will be seeded with temporary cover vegetation, as directed by the Virginia Department of Energy.

Any area within the mine site where mining has not been completed but has been dormant and no land disturbance for a period of two years, will be sloped 3H:1V and the pit floor will be graded level. The dormant area above the normal pool level will be limed, fertilized, mulched, and seeded with the approved permanent vegetation mix, as directed by the Virginia Department of Energy.

RE-VEGETATION

No plant species considered a highly invasive species by the Commonwealth of Virginia will be planted on the mine site.

The soil will be tested before seeding. 1000 lbs/acre of 10-10-10 fertilizer or its equivalent will be used, if so recommended by the soil test, on all areas to be seeded. Two tons of agricultural lime will also be used, if needed as shown by the soil test, on all the areas receiving fertilizer and permanent seeding.

The temporary seed mixture will consist of 50 lbs/acre of annual rye except for foxtail millet, which will be planted at the same rate in the summer months.

The permanent seed mixture and seeding rate will be:

As specified on Sheet C8 of the above referenced Level 3 Site Plan.

CLOSURE OF ROADS OR OPENINGS

Upon abandonment of the mine, the operator shall effectively close or fence all roads, openings, and pits where hazardous conditions exist. Warning signs shall be posted. If fencing is necessary, the fence shall be 4-feet high woven wire with two strands of barbed wire on top. Intermittently worked mines shall also be closed or barricaded and posted with warning signs to prevent access to roads and hazardous areas.

THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM PLAT IN P.C. 2 SLIDE 165-J

LEGEND:

- RPA BUFFER LIMIT
- RMA LIMIT
- WETLAND LIMIT (FIELD SURVEYED)
- MINE PERMIT LIMIT (AREA =7,016,758 S.F. or 161.08 Acres)
- CLEARING LIMIT (AREA=5,612,359 S.F. or 128.84 Acres
- UNDISTURBED BUFFERS (AREA=2,376,002 S.F, or 54.54 Acres; 29% of total site)

STATE GRID SOUTH ZONE

50' UNDISTURBED BUFFER

100' RPA BUFFER LIMIT

CELL 2

RMA LIMIT

STATE ROUTE 623
SPRING COTTAGE ROAD
75' R/W

INFILTRATION BASIN #1

NEW HAUL ROAD ENTRANCE

INFILTRATION BASIN #2

300' UNDISTURBED BUFFER (WITH ALLOWANCE FOR HAUL ROAD ENTRANCE)

100' RPA BUFFER LIMIT

LEVEL SPREADER RIP RAP STONE OUTLET

CELL 1

CLEARING LIMIT

MINE PERMIT LIMIT

RMA LIMIT

300' UNDISTURBED BUFFER

50' UNDISTURBED BUFFER

1000' LIMIT FROM ACTIVE MINING OPERATIONS

JOB NO. 24023-03

PROJECT MANAGER: JBW

DESIGNED: JBW/DSS

CAD: DSS

CHECKED: JBW

FILED:

DATE: NOVEMBER 13, 2024

REVISED:

REVISED:

BAY design group
Engineering Surveying & Land Planning
www.baydesigngroup.com

40 CROSS ST., SUITE 100
P.O. BOX 51
URBANNA, VA 23175
(804) 693-2993

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-2024
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

DEMM PERMIT PLAN

SHEET NO:

D1

JOB NO. 24023-03

4. Virginia Department of Health Construction Permit Application

1/12

Commonwealth of Virginia

Application for: ☑ **Sewage System** ☑ **Water Supply**

VDH Use only
Health Department ID#
Due Date

Owner Mattaponi Sand & Gravel LLC — Phone 443-871-3440

Mailing Address P.O. Box 2000 — Phone

Gambrills, MD 21054 — Fax

Agent Jonathan Blair Wilson, P.E. — Phone 804-513-9564

Mailing Address P.O. Box 1269 — Phone

West Point, VA 23181 — Fax

Site Address Spring Cottage Road

Newtown, VA — Email kmurray@chaneyenterprises.com

Directions to Property: SR 14 north to SR 721 north, left SR 639 west, Site is at ITX SR 639 w/ SR 628

Subdivision _____ Section _____ Block _____ Lot _____

Tax Map 1632-78R-680 Other Property Identification _____ Dimension/Acreage of Property 186.

Sewage System

Type of Approval: Applicants for new construction are advised to apply for a certification letter to determine if land is suitable for a sewage system and to apply for a construction permit (valid for 18 months) **only when ready to build.**

○ Certification Letter ◉ Construction Permit ○ Voluntary Upgrade ○ Repair Permit ○ Minor Modification

Proposed Use:

Single Family Home (**Number of Bedrooms** ____) Multi-Family Dwelling (**Total Number of Bedrooms** ____)

Other (describe) Office w/8 employees and up to 50 transient material delivery drivers (450 gpd)

Basement? ○ Yes ◉ No Walk-out Basement? ○ Yes ◉ No Fixtures in Basement ○ Yes ◉ No

Conditional permit desired? ○ Yes ◉ No If yes, which conditions do you want?

☐ Reduced water flow ☐ Limited Occupancy ☐ Intermittent or seasonal use ☐ Temporary use not to exceed 1 year

Do you wish to apply for a betterment loan eligibility letter? ○ Yes ◉ No *There is a $50 fee for determination of eligibility.

Water Supply

Will the water supply be ○ Public or ◉ Private? Is the water supply ○ Existing or ◉ Proposed?

If proposed, is this a replacement well? ○ Yes ◉ No If yes, will the old well be abandoned? ○ Yes ○ No

Will any buildings within 50' of the proposed well be termite treated? ○ Yes ◉ No

Well Type (e.g. domestic use, agricultural, irrigation, etc.) domestic Class IIIB

All Applicants

Is this property intended to serve as your (owners) principal place of residence? ○ Yes ◉ No

All applications must be accompanied by private sector evaluations and designs, unless a petition for VDH services is approved. Is a Petition for Service form attached? ○ Yes ○ No

In order for VDH to process your application for a sewage system you must attached a plat of the property and a site sketch. For water supplies, a plat of the property is recommended and a site sketch is required. The site sketch should show your property lines, actual and/or proposed buildings and the desired location of your well and/or sewage system. When the site evaluation is conducted the property lines, building location and the proposed well and sewage sites must be clearly marked and the property sufficiently visible to see the topography. I give permission to the Virginia Department of Health to enter onto the property described during normal business hours for the purpose of processing this application and to perform quality assurance checks of evaluations and designs certified by a private sector Onsite Soil Evaluator or Professional Engineer as necessary until the sewage disposal system and/or private water supply has been constructed and approved.

Jonathan Blair Wilson — Signature of Owner/ Agent

ROWSOD 2-20-25 — Date

This form contains personal information subject to disclosure under the Freedom of Information Act. Revised 7/1/2019

OSE/PE Report For:

☒ Construction Permit ☐ Repair Permit ☐ Voluntary Upgrade Permit ☐ Certification Letter ☐ Subdivision Approval

Property Location:

911 Address: Spring Cottage Road City: Newtown

Lot _____ Section _____ Subdivision _____

GPIN or Tax Map # 1632-78R-680 Health Dept ID # _____

Latitude 37.858097 Longitude -77.136392

Applicant or Client Mailing Address:

Name: Mattaponi Sand & Gravel LLC

Street: P.O. Box 2000

City: Gambrills State MD Zip Code 21054

Prepared by:

OSE Name David R. Miles License # 1940001111

Address P.O. Box 2270

City Kilmarnock State VA Zip Code 22482

PE Name Jonathan Blair Wilson License # 019961

Address P.O. Box 1269

City West Point State VA Zip Code 23181

Date of Report 11-5-24 Date of Revision #1 02-20-25

OSE/PE Job # WE-0238-25 Date of Revision #2 _____

Contents/Index of this report (e.g., Site Evaluation Summary, Soil Profile Descriptions, Site Sketch, Abbreviated Design, etc.)

Application

Plans and Details

System Specifications

AOSE Soil Evaluation Report

Certification Statement

I hereby certify that the evaluations and/or designs contained herein were conducted in accordance with the *applicable provisions of the* Sewage Handling and Disposal Regulations (12 VAC5-610), the Private Well Regulations (12 VAC5-630), *the* Regulations for Alternative Onsite Sewage Systems (12VAC5-613) and all other applicable laws, regulations and policies implemented by the Virginia Department of Health. I further certify that I currently possess any professional license required by the laws and regulations of the Commonwealth that have been duly issued by the applicable agency charged with licensure to perform the work contained herein. The potential for both conventional and alternative onsite sewage systems has been discussed with the owner/applicant.

☐ The work attached to this cover page has been conducted under an exemption to the practice of engineering, specifically the exemption in Code of Virginia Section 54.1-402.A.11

I recommend that a (select one): construction permit ☒ certification letter ☐ subdivision approval ☐ be (select one) Issued ☒ repair permit ☐ voluntary upgrade ☐ Denied ☐

OSE/PE Signature _____ Date Rev 02-20-25

System Specifications

VDH Use Only
HDIN: _____

Application Information

Name: Mattaponi Sand & Gravel LLC
Address: P.O. Box 2000
Phone: 443-871-3440
Gambrills, MD 21054

Location Information

Tax Map/GPIN #: 1632-78R-680
Property Address: Spring Cottage Road
Subdivision: _____ Section: _____ Block: _____ Lot: _____
Directions: SR 14 north, SR 721 north, left SR 639 to intersection with SR 628, west side of ITX

General Information

Property Type (e.g. residential): Industrial
Number of Bedrooms: _____
Daily Flow: 450 gpd
Conditions: _____
Notes: _____

Sewer Line

Diameter: 4 in. Material: PVC (or equivalent) Notes: _____

Pretreatment Unit(s)

Treatment Level: TL-1
Septic Tank Capacity: 1000 gallons
Number of Septic Tanks 1
Size of Septic Tank(s) 1000 gallons

Per the Sewage Handling and Disposal Regulations, check which option(s) chosen:

☐ Septic tank with inspection port ■ Septic tank with effluent filter ☐ Reduced maintenance septic tank

Secondary treatment device(s), if applicable: _____

Notes: _____

Conveyance Line

Conveyance Method: Gravity
If pumping, include pump specifications sheet.
Material: PVC Sch40 Diameter: 4-inch
Notes: _____

Distribution Method and Header Lines

Distribution Method: Gravity
No. of boxes: 1 No. of outlets: 4
Surge or splitter box required: ■ Yes ☐ No
Header Line Material: 4" PVC Sch40

Percolation Lines/Absorption Area

Dispersal Method (e.g. laterals, pad, mound): laterals

If using pressure dispersal (e.g. drip), include pressure dispersal specifications sheet.

No. of laterals/pads: 4 Length of lateral(s)/pad(s): 75 ft. Width of lateral(s)/pad(s): 36 in.
Center to center spacing: 9 ft. Installation depth: 24 in. Aggregate depth: 12 in.
Size/Type of Aggregate: VDOT No. 57 agg. or washed gravel Lateral/pad slope: 2-4 in. per 100 ft.
Reserve Area Provided: 100 % Notes: _____

Please Note: _____

Well Specifications

VDH Use Only
HDIN:

Applicant Information

Name: Mattaponi Sand & Gravel LLC
Address: P.O. Box 2000
Phone: 443-871-3440
Gambrills, MD 21054

Location Information

Tax Map/GPIN #: 1632-78R-680
Property Address: Spring Cottage Road
Subdivision: _____ Section: _____ Block: _____ Lot: _____
Directions: SR 14 north to SR 721 north to left onto SR 639 to intersection with SR 628, property west of ITX.

General Information

Well Purpose (select all that apply): ■ Domestic Drinking Water ☐ Agricultural
☐ Irrigation ☐ Industrial/Commercial ☐ Geothermal
Well Class: IIIB
Minimum Casing Depth: 50 ft.
Estimated Water Usage: 450 GPD
Minimum Grout Depth: 50 ft.

Horizontal Setbacks

Distance from Building Sewer: 104.00 ft.
Distance from Pretreatment Unit(s): 115.10 ft.
Distance from Conveyance System: 124.08 ft.
Distance from Absorption Area: 493.84 ft.
Distance from Property Line: 159.50 ft.
Distance from foundations: 55.52 ft.
Distance from other source(s) of contamination: _____ ft.
List other source(s): _____

Note: _____

Site and Soil Evaluation Report

VDH Use Only
HDIN: _____

General Information

Date: 8/21/2024 King & Queen County Health Department

Owner: Bay Design Group; ATTN: Gordon L. Jones, L.S. Phone: 804-229-0015

Owner Address: P.O. Box 51 Urbanna, VA 23175

Property Address: Intersection Of Eastern View Road & Spring Cottage Road

Tax Map/GPIN #: _____

Subdivision: _____ Section: _____ Block: _____ Lot: _____

Soil Information Summary

1. Position in landscape satisfactory: ■ Yes ☐ No Describe landscape position: Cleared/Sloping
2. Slope: 5-6 %
3. Depth to rock/impervious strata: Max. _____ in. Min. _____ in. ■ Not observed
4. Free Water Present: ☐ Yes ■ No Range in inches: _____
5. Depth to seasonal water table (gray mottling or gray color): 42-48+ inches ☐ Not observed
6. Soil percolation rate estimated: ■ Yes ☐ No Estimated rate: 35 min/in at 24 inches depth

   Texture Group: ☐ I ■ II ☐ III ☐ IV
7. Percolation test performed: ☐ Yes ☒ No If yes, provide additional data on percolation test results.

Name and title of evaluator: David R. Miles, CPSS, OSE

Signature: David R. Miles

☒ Site approved: Gravel Trenches Only! 4x75's (describe dispersal area, e.g. absorption trenches) dispersing TL-1 (proposed level of treatment at time of evaluation) to be placed at 24 (inches) depth at site designated on permit. Site provides a total of 900 square feet of absorption area for primary and reserve (if applicable). 450 gpd x 191 SF/100 GALLONS = 859.5 SF REQUIRED

☐ Site disapproved: Reasons for rejection (check all that apply)

1. ☐ Position in landscape subject to flooding or periodic saturation.
2. ☐ Insufficient depth of suitable soil over hard rock.
3. ☐ Insufficient depth of suitable soil to seasonal water table.
4. ☐ Rates of absorption too slow.
5. ☐ Insufficient area of acceptable soil for required absorption area, and/or reserve area.
6. ☐ Proposed system too close to well.
7. ☐ Other (specify) _____

Date of Evaluation: 8/20/2024 Profile Description

SOIL EVALUATION REPORT

Property ID: _____

Where the local health department conducts the soil evaluation the location of profile holes may be shown on the schematic drawing on the construction permit or the sketch submitted with the application. If soil evaluations are conducted by a private Onsite Soil Evaluator or Professional Engineer, location of profile holes and sketch of the area investigated including all structural features (i.e. sewage disposal systems, wells, etc.) within 100 feet of the site and reserve site shall be shown on the reverse side of this page or prepared on a separate page and attached to this form.

☐ See application sketch ☐ See Construction Permit ■ See sketch on reverse side or page attached to this form.

Hole #	Horizon	Depth (Inches)	Description of color, texture, etc.	Texture Group
1	A	0-06	10YR 4/3 SL Coarse	IIA
	AE	06-20	10YR 7/3 SL Coarse	IIA
	E	20-24	10YR 6/4 SL Coarse	IIA
	Bt1	24-30	10YR 6/6 SL-SCLL	IIA-IIB
	C	30-42	10YR 6/4-6/6 SL Coarse	IIA
	C	42-48	10YR 7/3 SL w/ Gravel Damp	IIA
2	A	0-06	10YR 4/3 SL Coarse	IIA
	C	06-24	10YR 7/3-8/3 SL Coarse	IIA
	Bt1	24-30	10YR 5/6 SCLM	IIB
	C	30-48	10YR 7/4 SL Coarse Damp @42" Deep	IIA
3	A	0-06	10YR 4/3 LS Coarse	I
	C	06-20	10YR 7/4 LS Coarse	I
	C	20-42	10YR 7/4 LS Coarse w/ Gravel	I
	C	42-48	10YR 8/1-8/2 Sand Coarse W/ Pea Gravel	I

REMARKS: 2" of rain night before!

7/29 12

BAY DESIGN GROUP

To: King and Queen County Health Department

From: Jonathan Blair Wilson, P.E. (804) 513-9564 phone

CC: File 24023

Date: 11/14/2024

Re: Mattaponi Sand & Gravel – Tax Parcel 1623-78R-680, King and Queen County, Virginia

---

Mattaponi Sand & Gravel LLC intends on operating a sand and gravel surface mining operation on Assessor's Tax Parcel 1623-78R-680 in King and Queen County, Virginia. The facility will operate with eight (8) employees and is expected to accommodate the export of a maximum of 50 trucks of material from the site each workday. Wastewater effluent from the facility will have waste concentrations that are less than typical residential strength waste. The following is provided for your consideration:

Design Basis: Similar to Factories and Office Buildings 25 gpd/employee; and

Interstate Rest Areas 5 gpd/person

Units	Use	Employees/Persons	Comments
1	Office/scales	8	Design Flow =1200 gpd
1	Rest Areas	50 (transient truck drivers)	Design Flow =250 gpd
			Total Flow = 450 gpd

The wastewater characterization and disposal facility design is based on Table 5.1 of the current Sewage Handling and Disposal Regulations.

Discharge Facility	Design Unit Per person	Flow (gpd)	BOD (#/day)	S.S. (#/day)	Flow Duration (hour)
Office/Factories		25	0.05	0.05	12
Rest Areas		5	0.01	0.01	24

For comparison (for waste strength)

Discharge Facility	Design Unit Per person	Flow (gpd)	BOD (#/day)	S.S. (#/day)	Flow Duration (hour)
Residential Dwelling		75	0.20	0.20	24

8/29/12

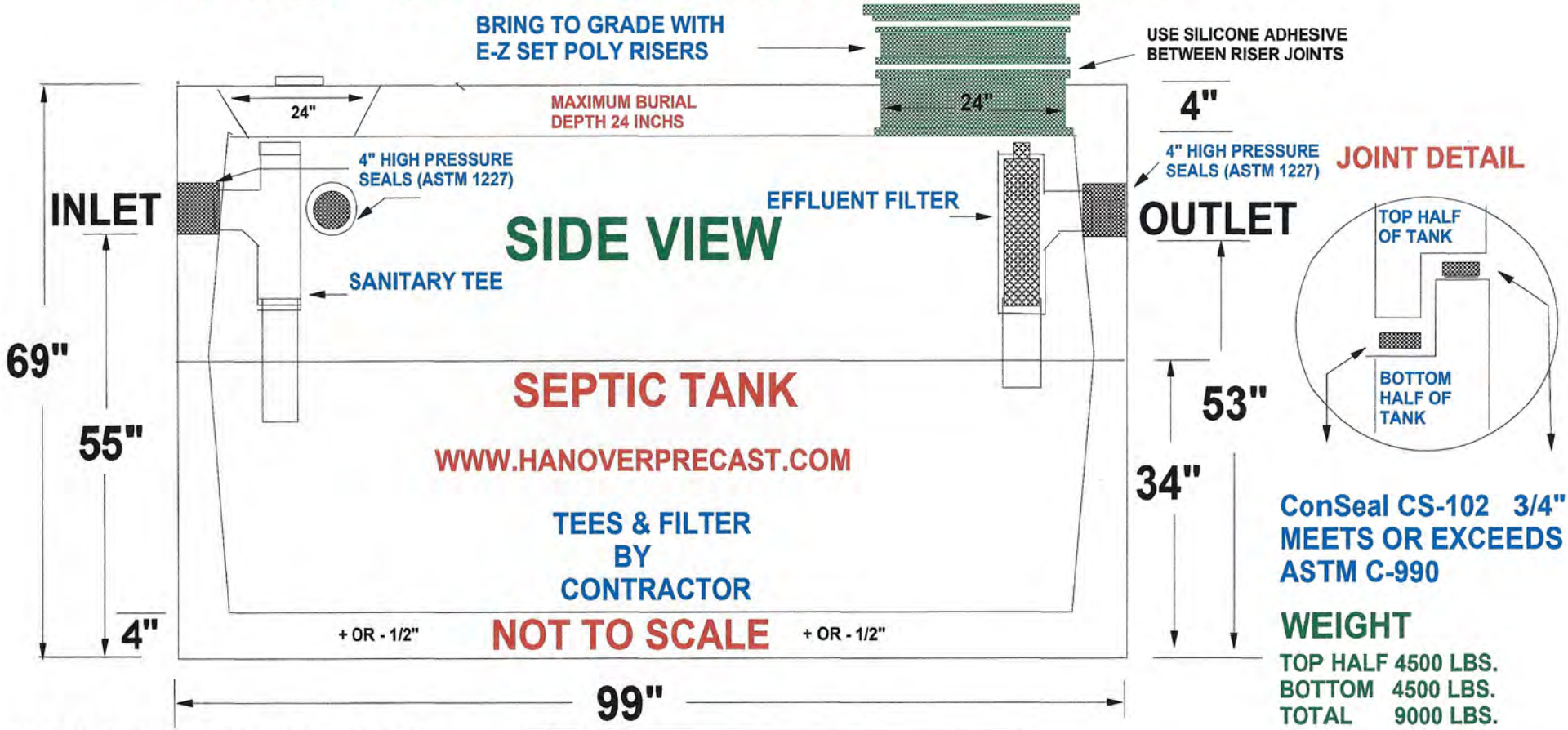
Waste Concentration:

Offices/Factories	BOD:	(0.05 #/day/person)/(25 gal./person/day) = 0.0020 #/gal.
	S.S.:	(0.05 #/day/person)/(25 gal./person/day) = 0.0020 #/gal.
Rest Areas	BOD:	(0.01 #/day/person)/(5 gal./person/day) = 0.0020 #/gal.
	S.S.:	(0.01 #/day/person)/(5 gal./person/day) = 0.0020 #/gal.
Residential Dwelling	BOD:	(0.20 #/day/person)/(75 gal./person/day) = 0.0027 #/gal.
	S.S.:	(0.20 #/day/person)/(75 gal./person/day) = 0.0027 #/gal.

Therefore with respect to effluent waste strength concentrations the facility will have waste strengths that are less than typical residential strength waste.

Hanover PRECAST

1000 GALLON MID SEAM SEPTIC TANK
POLY RISER FOR FILTER ACCESS



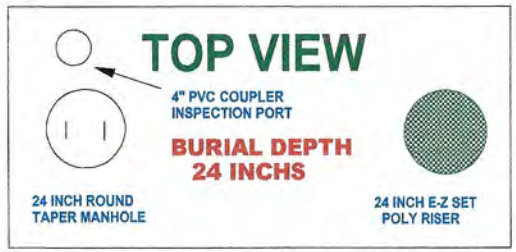
ConSeal CS-102 3/4"
MEETS OR EXCEEDS
ASTM C-990

WEIGHT

TOP HALF 4500 LBS.
BOTTOM 4500 LBS.
TOTAL 9000 LBS.

INLETS & OUTLETS HAVE 4 INCH
HIGH PRESSURE PIPE SEALS
MEETS OR EXCEEDS ASTM 1227
(10 PSI) NO RUST POLY HANDLES

62"



6X6X10X10 REINFORCING WIRE
5000 + PSI CONCRETE WITH FIBER
FOR SECONDARY REINFORCMENT

(804) 798-2336 FAX (804) 798-2339

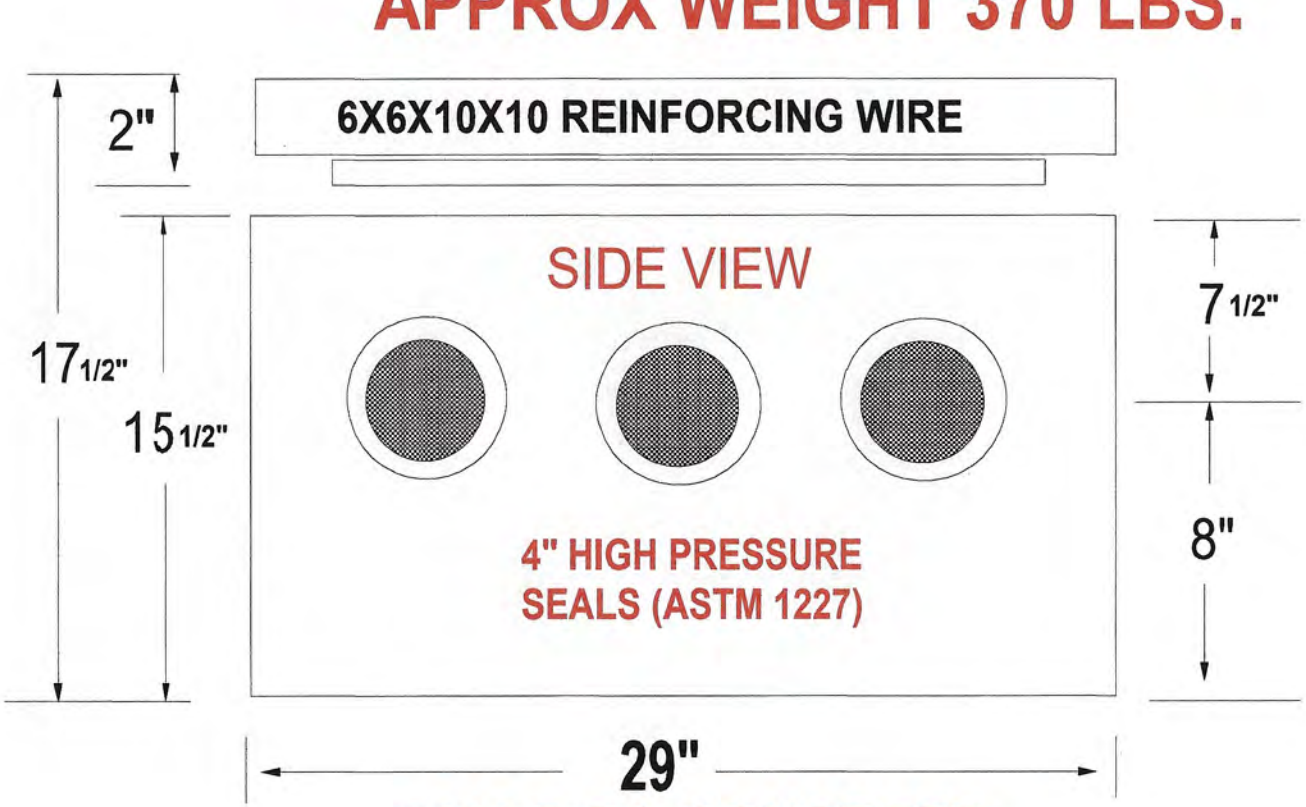
JANUARY 2015 PAGE 1 / FILTER TOP

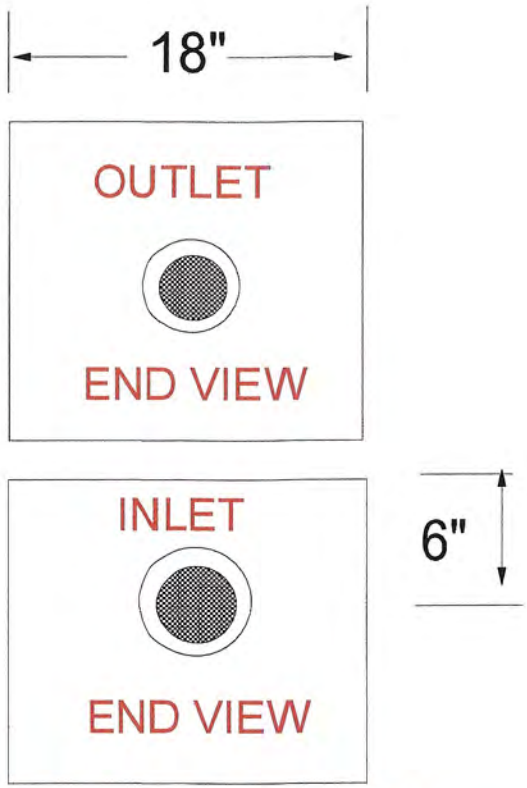
2/16

Hanover PRECAST

8 HOLE DISTRIBUTION BOX WITH PRESSURE SEALS

APPROX WEIGHT 370 LBS.





5000 P.S.I. CONCRETE WITH FIBER

WALLS ARE 2 "
TOP & BOTTOM ARE 2"

(804)-798-2336 FAX (804)-798-2339 WWW.HANOVERPRECAST.COM

MAY 2017

10/12

"Quality Pumps Since 1939"

Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.

SECTION: 3.20.065
FM1775
0507
Supersedes
0705

ZOELLER® PUMP CO.

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

visit our web site:
www.zoeller.com

ZOELLER ON-SITE WASTEWATER PRODUCTS

"WW" Residential Effluent Filter P/N 170-0078

BY-PASS PROTECTION
Sleeve remains in the outlet tee when the main filter is removed for servicing. Solids are prevented from leaving the tank.

GASKETED SEAL
Rubber gasket ensures that all effluent passes through the filter, not around it. Provides protection in all commonly found 4" outlet tees.

DEEP PLEATED CONSTRUCTION
Design adds more effective filter area than any other 4" filter on the market. Pleats retain solids to aid in servicing.

CLEAR ZONE ACCESS
Once installed in the tee, filter pulls effluent from only the "clear zone" of the tank.

TWIST LOCK MECHANISM
Inner cartridge is held firmly in place, but can be easily removed for servicing.

LOCKING TAP
Zoeller invented the locking tap to prevent the filter from floating out and keep the by-pass sleeve in place when servicing.

SUPERIOR FILTRATION
All 132 linear feet of 1/16" filtration is located below the water line, making the filter 100% effective.

NSF Certified to ANSI-NSF 46

Covered by US Patent Nos.
6,136,190; 6,331,247; 6,495,040.

Available with sanitary tee and filter complete, or disposable cartridge only.

170-0144 170-0156

P/N 013244

12/12

Zoeller Residential Septic Tank Effluent Filter Specifications

Application: Single family homes.

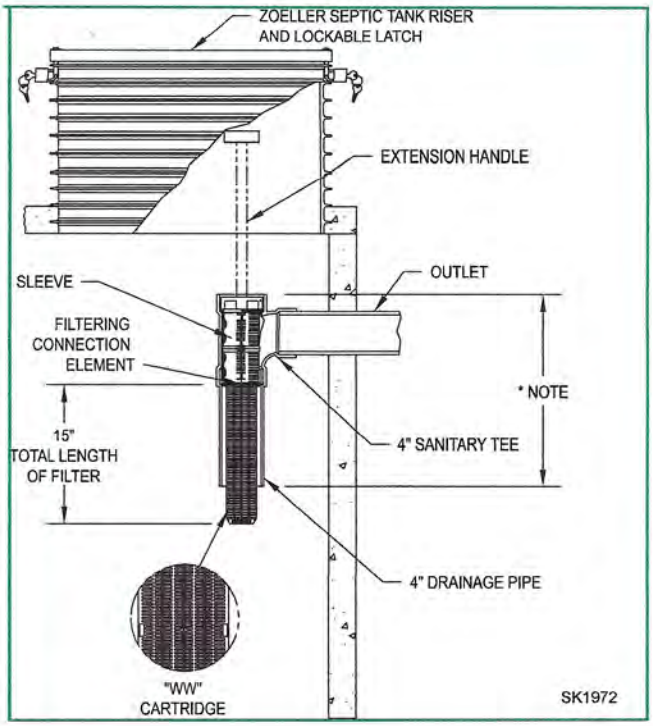
Filter Area: 132 Linear Feet of 1/16" filtration.

Flow Rate: 1,000 gpd.

Material: All materials are noncorrosive in the septic tank environment. Sleeve is PVC, primary filter is polypropylene, and filter connection element is neoprene.

Easy to install or retrofit: The Zoeller Septic System Filter fits inside any 4" sanitary tee. Slide the filter cartridge into the filter sleeve. Slide the assembled cartridge and sleeve into the sanitary tee at the tank's outlet. Ensure the sleeve latch is pointing toward the outlet of the septic tank before filter placement into the tee. The drain field is now protected from solids greater than 1/16".

Adding an extension handle: A 1/2" PVC pipe can be attached to the top of the filter with a stainless steel screw. Cut off to appropriate length below the lid.



NOTE: State and local plumbing codes may require a specific liquid penetration. For example, 25% - 45% into the liquid depth or 9" off the tank bottom.

Easy to maintain: The filter can be maintained by rotating the cartridge counterclockwise and removing for cleaning. The sleeve should remain in the sanitary tee while cleaning the cartridge. To clean, hold cartridge over septic tank opening and rinse with hose until clean, washing filtered trash back into septic tank. After cleaning the cartridge the sleeve should be cleaned inside and out. Reinsert the cartridge, turn it clockwise in the sleeve, locking in place. Remove the filter and sleeve assembly from the sanitary tee. The Zoeller filter should be cleaned each time the septic tank is pumped or when the need is indicated by slow flows from the house. More frequent cleanings will not hurt the filter and could even improve the performance of your septic tank. For installations that exceed the design flow rate of the filter, more frequent cleanings may be required. Two or more filters may be connected with a manifold for higher flow applications.

Troubleshooting, repair, and replacement: Follow the install and maintenance instructions above. For replacement components, call 1-800-928-PUMP.

Lifetime Warranty: Every Zoeller filter is guaranteed to be free from defects in materials and workmanship for the lifetime of the homeowner/purchaser. Free repair or replacement, excluding labor, will be made on return of the filter prepaid to the factory. This warranty is limited to product proven to be free from abuse or improper installation.

ALL ZOELLER ON-SITE PRODUCTS MUST BE INSTALLED IN ACCORDANCE WITH PLUMBING AND HEALTH DEPARTMENT CODES.

Distributed By:

ZOELLER PUMP CO.

1-800-928-PUMP
www.zoeller.com

KEYNOTES:

17 New 12' - 4" PVC SCH40 DWV building sanitary lateral at 0.0104 f/ft installed with a 4" sanitary cleanout, INV=57.00+/-.

18 New Hanover Precast (or equal) mid seam 1000 gallon septic tank, with effluent filter. INV (in)=56.88, INV (out)=56.71

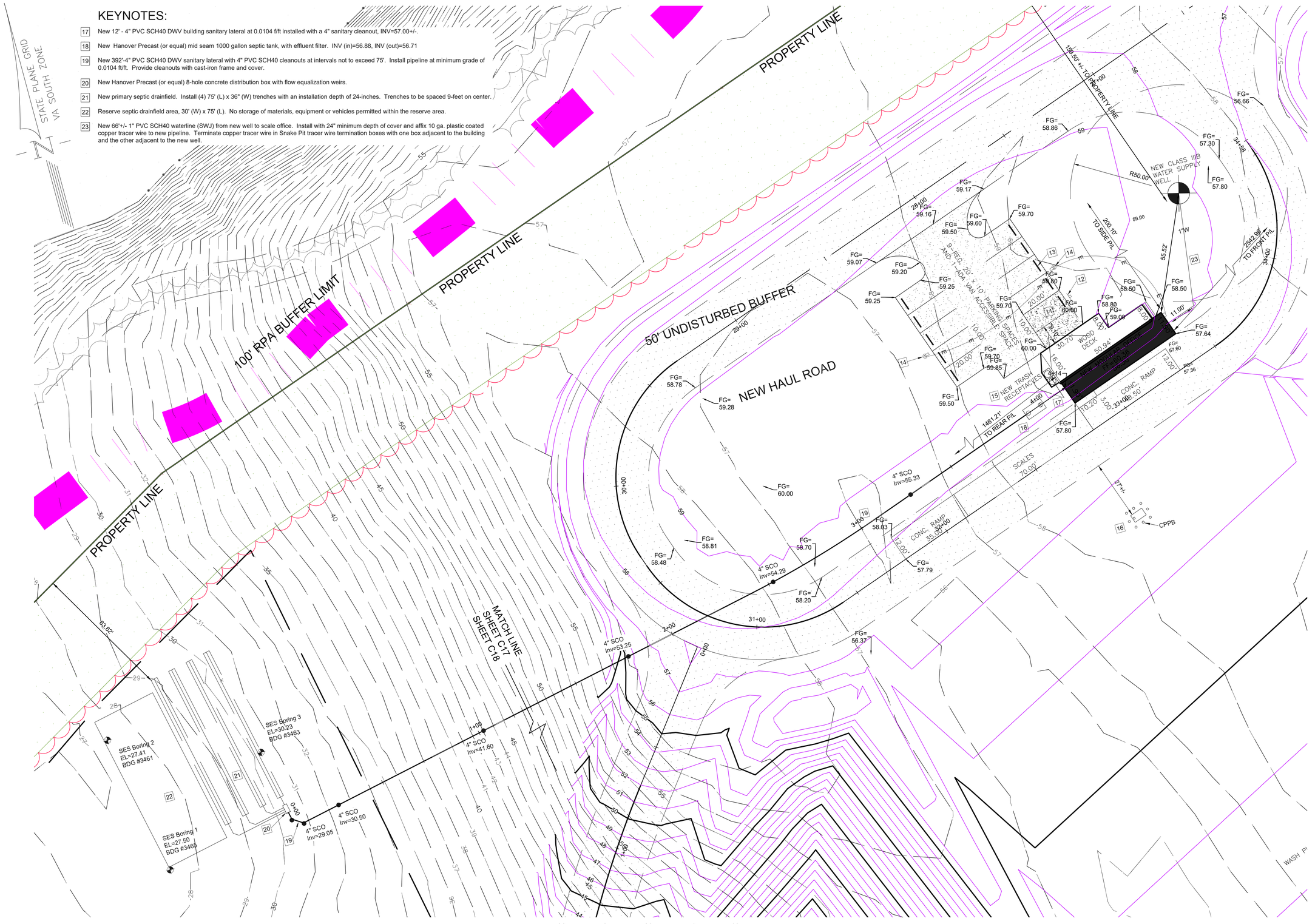
19 New 392'-4" PVC SCH40 DWV sanitary lateral with 4" PVC SCH40 cleanouts at intervals not to exceed 75'. Install pipeline at minimum grade of 0.0104 ft/ft. Provide cleanouts with cast-iron frame and cover.

20 New Hanover Precast (or equal) 8-hole concrete distribution box with flow equalization weirs.

21 New primary septic drainfield. Install (4) 75' (L) x 36" (W) trenches with an installation depth of 24-inches. Trenches to be spaced 9-feet on center.

22 Reserve septic drainfield area, 30' (W) x 75' (L). No storage of materials, equipment or vehicles permitted within the reserve area.

23 New 66'+/- 1" PVC SCH40 waterline (SWJ) from new well to scale office. Install with 24" minimum depth of cover and affix 10 ga. plastic coated copper tracer wire to new pipeline. Terminate copper tracer wire in Snake Pit tracer wire termination boxes with one box adjacent to the building and the other adjacent to the new well.



SEE KEYNOTES ON SHEET C1

JOB NO. WE-0238-25

PROJECT MANAGER: JBW

DESIGNED: JBW

CAD: JBW

CHECKED: JBW

FILED:

DATE: NOVEMBER 13, 2024

REVISED: FEBRUARY 17, 2024

REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
jblairwilson@gmail.com

COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-17-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

SEPTIC AND WELL LOCATION PLAN

SHEET NO:

VDH1

JOB NO. WE-0238-25

"Quality Pumps Since 1925"

ZOELLER PUMP CO.

Product information presented here reflects conditions at time of publication. We apologize for any regarding discrepancies or inconsistencies.

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347
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visit our web site: www.zoeller.com

SECTION: 3.20.065
FM1775
0507
Supersedes
0705

ZOELLER ON-SITE WASTEWATER PRODUCTS

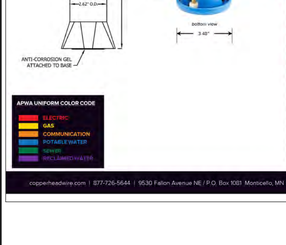
"WW" Residential Effluent Filter P/N 170-0078

Copperhead Industries

SnakePit® Lite Duty
with Single-terminal Cast Iron Lid
Access Point

APPLICATION

Use to terminate tracer wire systems and provide direct connection to tracer wire, at ground level, in lite duty and off-roadway applications. No ground rod connection.



LD14*TP – *SnakePit Lite Duty with Single-terminal Lid*
(denotes color)*

FEATURES AND BENEFITS

- Direct connection to tracer wire from top of lid
- Cast iron lid
- Anti-corrosion gel protects wires
- Locking cover protects against tampering
- Encapsulated magnet allows for detection by a ferrous metal detector
- Lid color-coded to meet American Public Works (APWA) standards for utility identification

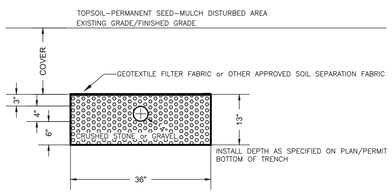
APWA UNIFORM COLOR CODE

- ELECTRIC
- GAS
- COMMUNICATION
- POTABLE WATER
- SEWER
- RECLAIMED WATER

copperheadwire.com | 877-726-5644 | 9530 Fallon Avenue NE / P.O. Box 1081 Monticello, MN 55362 MADE IN THE USA

NOTES:

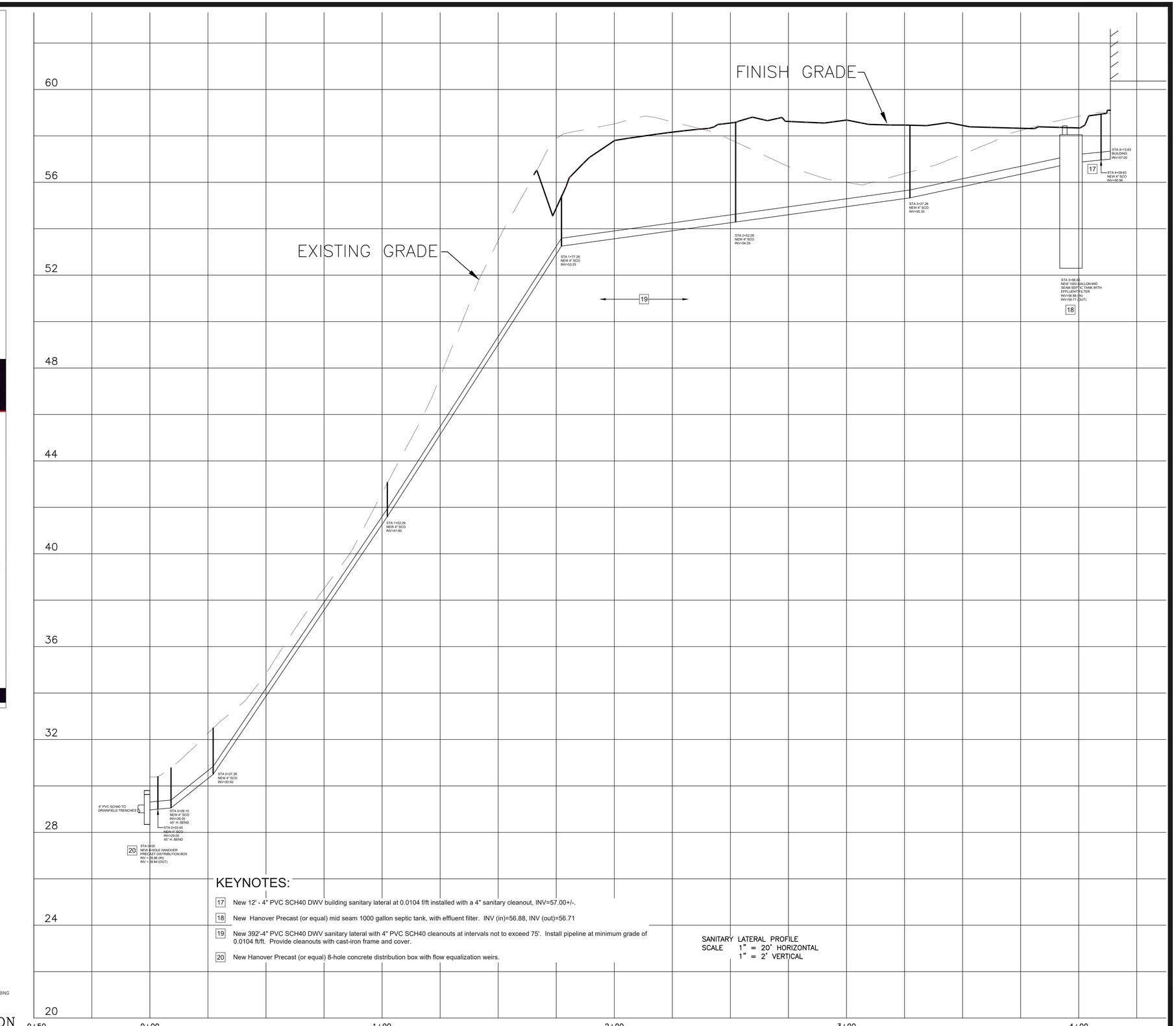
1. ALL NEW GRAVITY SANITARY COLLECTION SYSTEM PIPING FROM THE BUILDING TO THE SEPTIC TANKS SHALL BE 4" PVC SCH40 DWV PIPE WITH SOLVENT WELDED JOINTS AND FITTINGS.
2. INSTALL SANITARY CLEANOUTS AT ALL BENDS AND AT INTERVALS NOT TO EXCEED 75-LINEAR FEET.
3. ALL NEW SANITARY FORCEMAIN PIPING SHALL BE PVC SCH40 WITH SOLVENT WELDED JOINTS.
4. ALL PVC SCH40 PIPE JOINTS AND FITTINGS SHALL BE PRIMED WITH PURPLE PRIMER PRIOR TO GLUE APPLICATION.
5. INSTALLATIONS AND CONSTRUCTION SHALL CONFORM WITH ALL APPLICABLE BUILDING, ELECTRICAL, MECHANICAL AND PLUMBING CODES, AS WELL AS APPLICABLE SAFETY REGULATIONS.
6. CONSTRUCTION SHALL CONFORM WITH THE CURRENT VIRGINIA SEWAGE HANDLING AND DISPOSAL REGULATIONS.



DRAIN TILE: 4" PERFORATED PLASTIC DRAINAGE TUBING, 1000#/FOOT BEARING LOAD RATING
3–HOLES 1/2"to 3/4" DIAMETER EVENLY SPACED WITHIN 130° ARC @ 4" INTERVALS ALONG THE TUBING
CRUSHED STONE OR GRAVEL: 1/2" to 1–1/2" MEAN SPHERICAL DIAMETER
SPACE EACH TRENCH @ 9' ON CENTER

DRAINFIELD TRENCH TYPICAL SECTION

NOT TO SCALE



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19 New 392'-4" PVC SCH40 DWV sanitary lateral with 4" PVC SCH40 cleanouts at intervals not to exceed 75'. Install pipeline at minimum grade of 0.0104 ft/ft. Provide cleanouts with cast-iron frame and cover.

20 New Hanover Precast (or equal) 8-hole concrete distribution box with flow equalization weirs.

SANITARY LATERAL PROFILE
SCALE 1" = 20' HORIZONTAL
1" = 2' VERTICAL

JOB NO. WE–0238–25

PROJECT MANAGER: JBW
DESIGNED: JBW
CAD: JBW
CHECKED: JBW
FILED:
DATE: NOVEMBER 13, 2024
REVISED: FEBRUARY 17, 2024
REVISED:

WILSON ENGINEERS, LLC
Civil & Environmental Engineering

P.O. Box 1269
West Point, VA 23181-1269
(804) 513-9564
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COMMONWEALTH OF VIRGINIA
JONATHAN BLAIR WILSON
Lic. No. 019961
11-13-24
Rev 02-17-25
PROFESSIONAL ENGINEER

PROJECT:

MATTAPONI SAND & GRAVEL

NEWTOWN DISTRICT
KING & QUEEN COUNTY, VA

SHEET:

SANITARY PROFILE AND DETAILS

SHEET NO:

VDH2

JOB NO. WE–0238–25

5. Drainage Calculations

TR-20 HYDROLOGY WORKSHEET

REVISED 2/17/2025

Condition Developed **Project** 24023 Mattaponi Sand & Gravel

Drainage Basin # SDA1 **Total Area (ac)** 1.75

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.56	98	54.88	0.90	0.504
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	1.19	39	46.41	0.30	0.357
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.75		101.29		0.861
					Composite	
RCN=	**58**				C	0.49
S=	7.241					

Time of Concentration				
Overland Flow				
T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.04	10	0.24	3.22	0.02
Shallow Concentrated				
T (concentrated)	Height (H)	Length (L)		
0.30	9.85	1700		
Total Tc	**0.33**			

If Tc is less than 5 min, use 5 min

Tc (min)	20

Total Imper. Area 32 **%Impervious**

Comments:

TR20 SUMMARY RESULTS:			SDA1		
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	
1-year	2.65	0.17	1087	0.00	Infiltrate 100% Ro
2-year	3.22	0.35	2212	0.00	Infiltrate 100% Ro
10-year	4.96	1.15	7285	0.00	Infiltrate 100% Ro
25-year	6.2	1.88	11960		
100-year	8.48	3.46	22006		

Rational Method	Q=CIA	I=B/(Tc+D)^E				
Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.86	3.27	2.81
10-year	60.65	10.79	0.77	0.86	4.33	3.73
25-year	58.96	10.10	0.73	0.95	4.91	4.65
100-year	55.77	8.92	0.67	1.08	5.85	6.30

Elevation Storage Table				Node #1				
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
44.78	1968	2441.5	1.00	0	0	0.0		
45.78	2915	3469.5	1.00	2441.5	2441.5	90.4		
46.78	4024	4730.5	1.00	3469.5	5911	218.9		
47.78	5437		0.00	4730.5	10641.5	394.1		

Mattaponi Sand & Gravel Infiltration Basin Design

Infiltration Basin No. 1	10-Year Design Storm 100% Runoff Infiltration	
SDA1	DA (ac) =	1.75
	Vro (cf) =	7285

Soils	Group
18B Tarboro Sand	A

		Equation
Infiltration Rate (in/hr), f =	13	
Drawdown Time (hr), Td =	48	
Dmax (ft) =	312	(1/2 f * Td)
Fill Time (hr), Tf =	2	
Basin Depth (ft), d =	3	
Surface Area (sf), SA =	1784.082	(Vro/[d+(1/2 f *Tf)/12])

TR-20 HYDROLOGY WORKSHEET

REVISED

Condition Developed **Project** 24023 Mattaponi Sand & Gravel 2/17/2025

Drainage Basin # SDA2 **Total Area (ac)** 1.78

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.56	98	54.88	0.90	0.504
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	1.22	39	47.58	0.30	0.366
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.78		102.46		0.870
					Composite	
RCN=	**58**				C	0.49
S=	7.241					

Time of Concentration						
Overland Flow						
T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)		
0.04	10	0.24	3.22	0.02		
Shallow Concentrated						
T (concentrated)	Height (H)	Length (L)			If Tc is less than 5	
0.30	9.85	1700			min, use 5 min	
Total Tc	**0.33**				Tc (min)	20

Total Imper. Area 31 **%Impervious**

TR20 SUMMARY RESULTS:				SDA2	Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	
1-year	2.65	0.17	1105	0.00	Infiltrate 100% Ro
2-year	3.22	0.35	2250	0.00	Infiltrate 100% Ro
10-year	4.96	1.15	7410	0.00	Infiltrate 100% Ro
25-year	6.2	1.88	12165		
100-year	8.48	3.46	22384		

Rational Method	Q=CIA	I=B/(Tc+D)^E				
Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.87	3.27	2.84
10-year	60.65	10.79	0.77	0.87	4.33	3.77
25-year	58.96	10.10	0.73	0.96	4.91	4.70
100-year	55.77	8.92	0.67	1.09	5.85	6.36

Elevation Storage Table				Node #2				
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
44.50	1968	2441.5	1.00	0	0	0.0		
45.50	2915	3469.5	1.00	2441.5	2441.5	90.4		
46.50	4024	4690.5	1.00	3469.5	5911	218.9		
47.50	5357		0.00	4690.5	10601.5	392.6		

Mattaponi Sand & Gravel Infiltration Basin Design

Infiltration Basin No. 2	10-Year Design Storm 100% Runoff Infiltration	
SDA2	DA (ac) =	1.78
	Vro (cf) =	7410

Soils	Group
18B Tarboro Sand	A

		Equation
Infiltration Rate (in/hr), f =	13	
Drawdown Time (hr), Td =	48	
Dmax (ft) =	312	(1/2 f * Td)
Fill Time (hr), Tf =	2	
Basin Depth (ft), d =	3	
Surface Area (sf), SA =	1814.694	(Vro/[d+(1/2 f *Tf)/12])

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel

Drainage Basin # SDA3 **Total Area (ac)** 8.62

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.00	98	0	0.90	0.000
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	0.00	39	0	0.30	0.000
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	8.62	77	663.74	0.25	2.155
Totals		8.62		663.74		2.155
					Composite	
RCN=	**77**				C	0.25
S=	2.987					

Time of Concentration				
Overland Flow				
T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)
0.59	100	0.4	3.22	0.0057
Shallow Concentrated				
T (concentrated)	Height (H)	Length (L)		
0.16	1.53	517		
Total Tc	**0.75**			

If Tc is less than 5 min, use 5 min

Tc (min)	45

Total Imper. Area 0 **%Impervious**

Comments:

TR20 SUMMARY RESULTS:			SDA3		
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	
1-year	2.65	0.84	26159	4.30	
2-year	3.22	1.23	38366	6.58	
10-year	4.96	2.59	81029	14.55	
25-year	6.2	3.65	114346	20.66	
100-year	8.48	5.72	178870	32.27	

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	2.16	2.01	4.34
10-year	60.65	10.79	0.77	2.16	2.75	5.93
25-year	58.96	10.10	0.73	2.37	3.17	7.51
100-year	55.77	8.92	0.67	2.69	3.87	10.42

RECLAMATION PLAN: Plant area with mixed hardwood and pine seedlings to produce forested open space. Remaining soils will have been disturbed or underlying clay soil substrata. Use hydrologic soil group "D" with reclamation area conversion to forested open space.

Elevation Storage Table				Node #3				
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
24.90	0	2684	0.10	0	0	0.0		
25.00	5368	64630.5	1.00	268.4	268.4	9.9		
26.00	123893	135315.5	1.00	64630.5	64898.9	2403.7		
27.00	146738	220894	22.00	135315.5	200214.4	7415.3		
49.00	295050		0.00	4859668	4924567	182391.4		

Mattaponi Sand & Gravel Infiltration Basin Design

Infiltration Basin No. 3 — 10-Year Design Storm 100% Runoff Infiltration

SDA3

DA (ac) = 8.62

Vro (cf) = 81029

Soils	Group
Subgrade Clays	D

		Equation
Infiltration Rate (in/hr), f =	0.06	
Drawdown Time (hr), Td =	48	
Dmax (ft) =	1.44	(1/2 f * Td)
Fill Time (hr), Tf =	2	
Basin Depth (ft), d =	1.1	
Surface Area (sf), SA =	73329.41	(Vro/[d+(1/2 f *Tf)/12])

TR-20 HYDROLOGY WORKSHEET

REVISED 2/17/2025

Condition Developed **Project** 24023 Mattaponi Sand & Gravel

Drainage Basin # SDA4 **Total Area (ac)** 113.98

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.00	98	0	0.90	0.000
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	0.00	39	0	0.30	0.000
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	113.98	77	8776.46	0.25	28.495
Totals		113.98		8776.46		28.495
					Composite	
RCN=		**77**			C	0.25
S=		2.987				

Time of Concentration						
Overland Flow						
T(overland)		Length (L)	Roughness (n)	Rainfall (P)	Slope (S)	
	0.64	100	0.4	3.22	0.0047	
Shallow Concentrated						
T (concentrated)		Height (H)	Length (L)			If Tc is less than 5 min, use 5 min
	0.63	5.91	2800			
Total Tc		**1.27**				Tc (min) 76

Total Imper. Area 0 **%Impervious**

Comments:

TR20 SUMMARY RESULTS:				SDA4	
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	
1-year	2.65	0.84	345896	36.53	
2-year	3.22	1.23	507301	55.98	
10-year	4.96	2.59	1071424	123.71	
25-year	6.2	3.65	1511961	175.95	
100-year	8.48	5.72	2365157	275.43	

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	28.50	1.39	39.65
10-year	60.65	10.79	0.77	28.50	1.95	55.52
25-year	58.96	10.10	0.73	31.34	2.28	71.40
100-year	55.77	8.92	0.67	35.62	2.84	101.21

RECLAMATION PLAN: Plant area with mixed hardwood and pine seedlings to produce forested open space. Remaining soils will have been disturbed or underlying clay soil substrata. Use hydrologic soil group "D" with reclamation area conversion to forested open space.

Elevation Storage Table				Node #4	(Shown in HydroCad Model as Node 7P)			
Elev (ft)	Area (sf)	Avg. Area (sf)	Elev. Diff. (ft)	Incre. Stor (cf)	Sum Stor (cf)	Sum Stor (cy)	Sediment Basin Wet Vol. (cy)	Sediment Basin Dry Vol. (cy)
18.00	219152	226487.5	1.00				49803	
19.00	233823	306838.5	1.00	226487.5	226487.5	8388.4		
20.00	379854	644642	1.00	306838.5	533326	19752.8		
21.00	909430	1204023	1.00	644642	1177968	43628.4		
22.00	1498616	1847581	1.00	1204023	2381991	88221.9		88221.9
23.00	2196545	2619573	1.00	1847581	4229572	156650.8		
24.00	3042601	3412604	1.00	2619573	6849145	253672.0		
25.00	3782607	3882199	1.00	3412604	10261749	380064.8		
26.00	3981790		0.00	1847581	12109329	448493.7		

TR-20 HYDROLOGY WORKSHEET

Condition	Developed	**Project**	24023 Mattaponi Sand & Gravel	REVISED 2/17/2025
Drainage Basin #	SDA5	**Total Area (ac)**	1.62	

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.60	98	58.8	0.90	0.540
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	1.02	39	39.78	0.30	0.306
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.62		98.58		0.846
					Composite	
RCN=		**61**			C	0.52
S=		6.393				

Time of Concentration						
Overland Flow						
T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)		
0.00	10	0.015	3.22	0.02		
Shallow Concentrated						
T (concentrated)	Height (H)	Length (L)			If Tc is less than 5 min, use 5 min	
0.19	36.74	1771				
Total Tc	**0.19**				Tc (min)	12

Total Imper. Area	37	**%Impervious**	

TR20 SUMMARY RESULTS:			SDA5		Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	See HydroCad Data
1-year	2.65	0.24	1424		
2-year	3.22	0.45	2659		
10-year	4.96	1.35	7910		
25-year	6.2	2.14	12587		
100-year	8.48	3.81	22432		

Rational Method	Q=CIA	I=B/(Tc+D)^E				
Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.85	4.25	3.60
10-year	60.65	10.79	0.77	0.85	5.55	4.70
25-year	58.96	10.10	0.73	0.93	6.25	5.82
100-year	55.77	8.92	0.67	1.06	7.38	7.81

TR-20 HYDROLOGY WORKSHEET

Condition Developed **Project** 24023 Mattaponi Sand & Gravel REVISED 2/17/2025

Drainage Basin # SDA6 **Total Area (ac)** 1.01

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.42	98	41.16	0.90	0.378
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	0.59	39	23.01	0.30	0.177
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		1.01		64.17		0.555
					Composite	
RCN=		**64**			C	0.55
S=		5.625				

Time of Concentration						
Overland Flow						
T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)		
0.00	10	0.015	3.22	0.02		
Shallow Concentrated						
T (concentrated)	Height (H)	Length (L)			If Tc is less than 5	
0.15	4.78	747			min, use 5 min	
Total Tc	**0.16**				Tc (min)	9

Total Imper. Area 42 **%Impervious**

TR20 SUMMARY RESULTS:				SDA6	Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	See HydroCad Data
1-year	2.65	0.33	1193		
2-year	3.22	0.57	2084		
10-year	4.96	1.55	5700		
25-year	6.2	2.41	8825		
100-year	8.48	4.17	15280		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.56	4.60	2.55
10-year	60.65	10.79	0.77	0.56	5.98	3.32
25-year	58.96	10.10	0.73	0.61	6.72	4.10
100-year	55.77	8.92	0.67	0.69	7.92	5.50

TR-20 HYDROLOGY WORKSHEET

Condition	Developed	**Project**	24023 Mattaponi Sand & Gravel	REVISED 2/17/2025
Drainage Basin #	SDA7	**Total Area (ac)**	2.68	

SCS Hydrology					Rational Method	
Soil Group	**Land Use**	**Area (ac)**	**RCN**	**Product**	**C**	**Product**
A	IMPERVIOUS	0.10	98	9.8	0.90	0.090
A	PONDS	0.00	98	0	0.90	0.000
A	AGRICULTURE	0.00	60	0	0.50	0.000
A	OPEN	2.58	39	100.62	0.30	0.774
A	WOODS	0.00	30	0	0.25	0.000
B	IMPERVIOUS	0.00	98	0	0.90	0.000
B	PONDS	0.00	98	0	0.90	0.000
B	AGRICULTURE	0.00	72	0	0.50	0.000
B	OPEN	0.00	61	0	0.30	0.000
B	WOODS	0.00	55	0	0.25	0.000
C	IMPERVIOUS	0.00	98	0	0.90	0.000
C	PONDS	0.00	98	0	0.90	0.000
C	AGRICULTURE	0.00	80	0	0.50	0.000
C	OPEN	0.00	74	0	0.30	0.000
C	WOODS	0.00	70	0	0.25	0.000
D	IMPERVIOUS	0.00	98	0	0.90	0.000
D	PONDS	0.00	98	0	0.90	0.000
D	AGRICULTURE	0.00	83	0	0.50	0
D	OPEN	0.00	80	0	0.30	0
D	WOODS	0.00	77	0	0.25	0
Totals		2.68		110.42		0.864
					Composite	
RCN=	**41**				C	0.32
S=	14.390					

Time of Concentration						
Overland Flow						
T(overland)	Length (L)	Roughness (n)	Rainfall (P)	Slope (S)		
0.11	50	0.24	3.22	0.038		
Shallow Concentrated						
T (concentrated)	Height (H)	Length (L)			If Tc is less than 5	
0.07	9.54	442			min, use 5 min	
Total Tc	**0.17**				Tc (min)	10

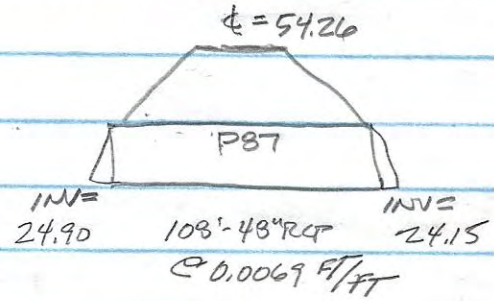
Total Imper. Area 4 **%Impervious**

TR20 SUMMARY RESULTS:				SDA7	Comments:
Storm Event	Rainfall (in/hr)	Runoff (in)	Volume (cf)	Discharge (cfs)	See HydroCad Data
1-year	2.65	0.00	36		
2-year	3.22	0.01	77		
10-year	4.96	0.26	2560		
25-year	6.2	0.62	6061		
100-year	8.48	1.57	15271		

Rational Method Q=CIA I=B/(Tc+D)^E

Storm Event	B	D	E	CCfA	I (in/hr)	Q (cfs)
2-year	56.84	11.21	0.83	0.86	4.46	3.85
10-year	60.65	10.79	0.77	0.86	5.81	5.02
25-year	58.96	10.10	0.73	0.95	6.54	6.21
100-year	55.77	8.92	0.67	1.08	7.71	8.33

CULVERT CALCULATION P87



$Q_{100} = 32.27$ cfs

TR-20 HYDROLOGY

INLET CONTROL

$HW/D = 0.60$

$HW = 2.40$

HW EL = 27.30

OUTLET CONTROL

$HW = H + h_o - LS_o$

$H = \left(1 + K_e + \frac{29n^2L}{R^{1.33}}\right) V^2/2g$

$K_e = 0.50$

$n = 0.013$

$L = 108$

$R = D/4 = 1.00$

$V = 2.57$ fps

$g = 32.2$ ft/s^2

$H = 0.21'$

$h_o = (d_c + D)/2 = 2.80'$

$LS_o = 0.75'$

$HW = 2.26'$

HW EL = 27.16'

INLET CONTROLS FLOW

North American Green
5401 St. Wendel-Cynthiana Rd.
Poseyville, Indiana 47633
Tel. 800.772.2040
>Fax 812.867.0247
www.nagreen.com
ECMDS v7.0

CHANNEL ANALYSIS

> > > Cell 1 Right Swale

Name	Cell 1 Right Swale
Discharge	4.16
Channel Slope	0.12
Channel Bottom Width	0
Left Side Slope	3
Right Side Slope	4
Low Flow Liner	
Retardence Class	E <2 in
Vegetation Type	None
Vegetation Density	None
Soil Type	Sandy Loam (GM)

Rock Riprap

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
Rock Riprap Unvegetated	Straight	4.16 cfs	5.81 ft/s	0.45 ft	0.032	4.33 lbs/ft2	1.63 lbs/ft2	2.66	STABLE	--

P300

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
P300 Unvegetated	Straight	4.16 cfs	5.87 ft/s	0.45 ft	0.032	2.8 lbs/ft2	3.37 lbs/ft2	0.83	UNSTABLE	E
Underlying Substrate	Straight	4.16 cfs	5.87 ft/s	0.45 ft	0.032	2.65 lbs/ft2	1.62 lbs/ft2	1.64	STABLE	E
P300 Reinforced Vegetation	Straight	4.16 cfs	9.01 ft/s	0.36 ft	0.018	12 lbs/ft2	2.71 lbs/ft2	4.42	STABLE	E
Underlying Substrate	Straight	4.16 cfs	9.01 ft/s	0.36 ft	0.018	2.8 lbs/ft2	1.3 lbs/ft2	2.15	STABLE	E

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>Fax 812.867.0247
www.nagreen.com
ECMDS v7.0

CHANNEL ANALYSIS

> > > Cell 1 Left Swale

Name	Cell 1 Left Swale
Discharge	2.1
Channel Slope	0.12
Channel Bottom Width	0
Left Side Slope	3
Right Side Slope	4
Low Flow Liner	
Retardence Class	E <2 in
Vegetation Type	None
Vegetation Density	None
Soil Type	Sandy Loam (GM)

Rock Riprap

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
Rock Riprap Unvegetated	Straight	2.1 cfs	4.9 ft/s	0.35 ft	0.032	4.33 lbs/ft2	1.26 lbs/ft2	3.44	STABLE	--

P300

Phase	Reach	Discharge	Velocity	Normal Depth	Mannings N	Permissible Shear Stress	Calculated Shear Stress	Safety Factor	Remarks	Staple Pattern
P300 Unvegetated	Straight	2.1 cfs	4.72 ft/s	0.36 ft	0.034	2.8 lbs/ft2	2.67 lbs/ft2	1.05	STABLE	E
Underlying Substrate	Straight	2.1 cfs	4.72 ft/s	0.36 ft	0.034	2.65 lbs/ft2	1.28 lbs/ft2	2.07	STABLE	E
P300 Reinforced Vegetation	Straight	2.1 cfs	7.11 ft/s	0.29 ft	0.019	12 lbs/ft2	2.17 lbs/ft2	5.52	STABLE	E
Underlying Substrate	Straight	2.1 cfs	7.11 ft/s	0.29 ft	0.019	2.8 lbs/ft2	1.04 lbs/ft2	2.68	STABLE	E

6. HydroCAD Summary Reports

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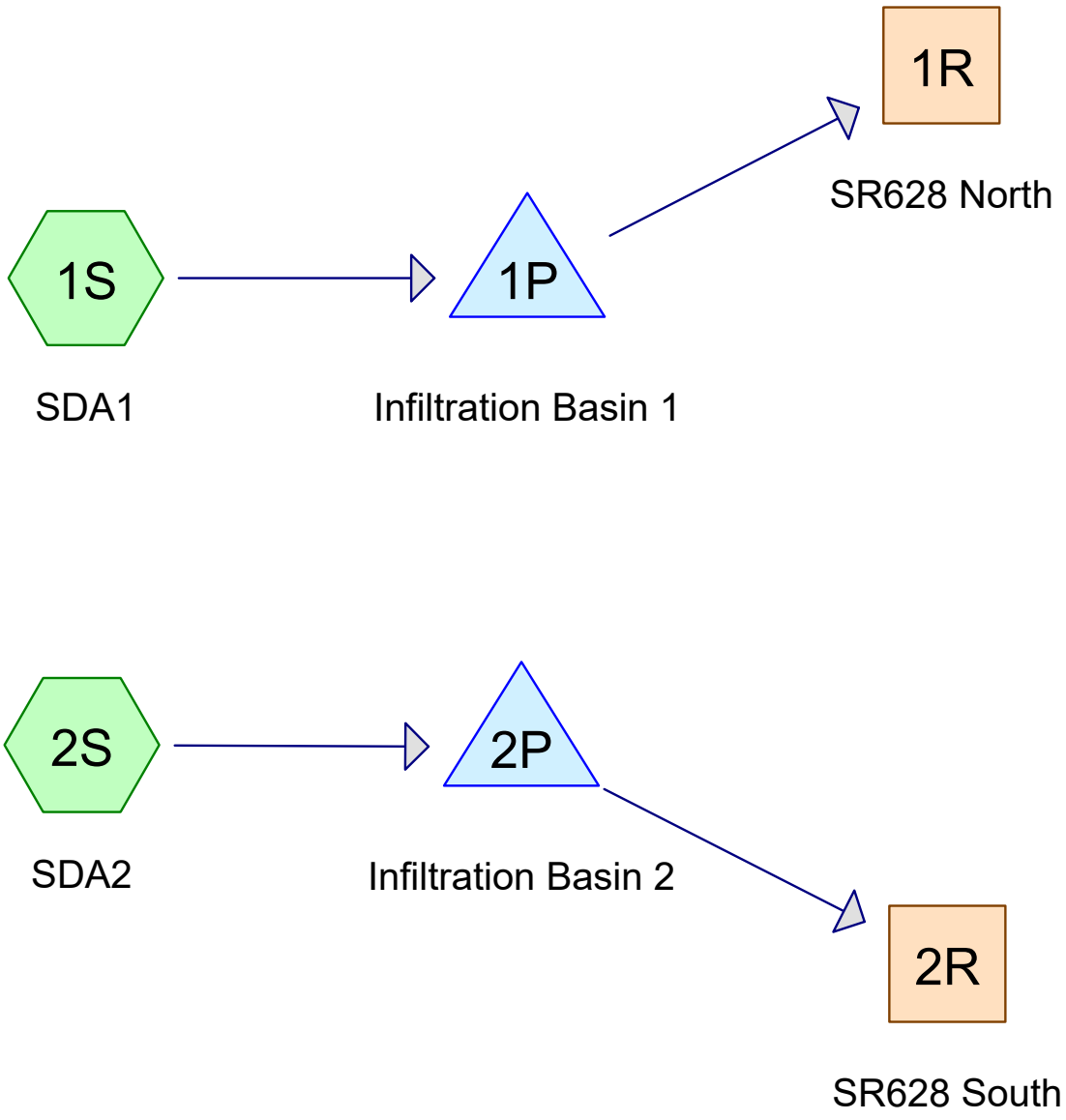


Subcat Reach Pond Link

Routing Diagram for 24023 Mattaponi SG Reclamation Plan SR628
Prepared by Wilson Engineers LLC, Printed 2/21/2025

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type II 24-hr		Default	24.00	1	2.65	2
2	10-Year	Type II 24-hr		Default	24.00	1	4.96	2
3	100-Year	Type II 24-hr		Default	24.00	1	8.48	2

Summary for Pond 1P: Infiltration Basin 1

Inflow Area = 1.750 ac, 32.00% Impervious, Inflow Depth > 0.17" for 1-Year event
Inflow = 0.09 cfs @ 12.27 hrs, Volume= 0.025 af
Outflow = 0.09 cfs @ 12.35 hrs, Volume= 0.025 af, Atten= 5%, Lag= 4.9 min
Discarded = 0.09 cfs @ 12.35 hrs, Volume= 0.025 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : SR628 North

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 44.79' @ 12.35 hrs Surf.Area= 1,978 sf Storage= 21 cf

Plug-Flow detention time= 4.0 min calculated for 0.024 af (99% of inflow)
Center-of-Mass det. time= 2.6 min (982.6 - 980.0)

Volume	Invert	Avail.Storage	Storage Description
#1	44.78'	10,642 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

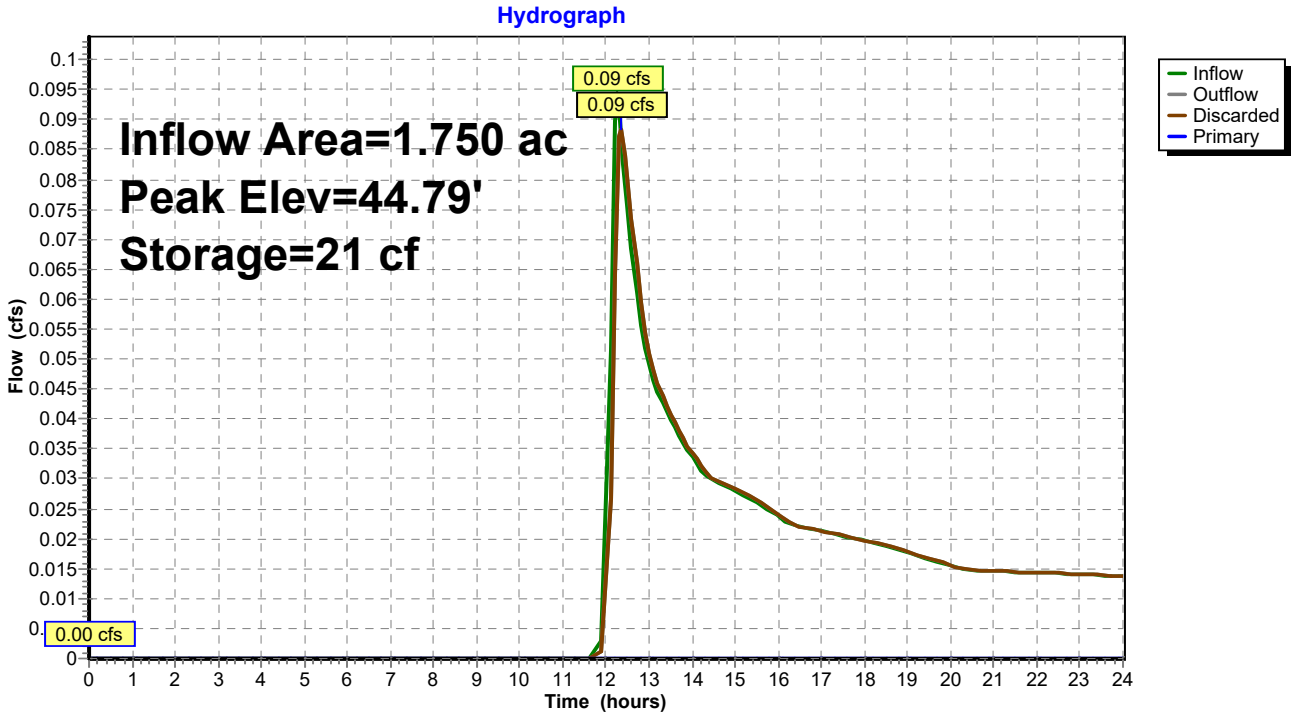
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
44.78	1,968	0	0
45.78	2,915	2,442	2,442
46.78	4,024	3,470	5,911
47.78	5,437	4,731	10,642

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.78'	**6.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 22.00'
#2	Primary	47.78'	**Channel/Reach** using Reach 1R: SR628 North

Discarded OutFlow Max=0.30 cfs @ 12.35 hrs HW=44.79' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.30 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=44.78' (Free Discharge)
↑—**2=Channel/Reach** (Controls 0.00 cfs)

Pond 1P: Infiltration Basin 1



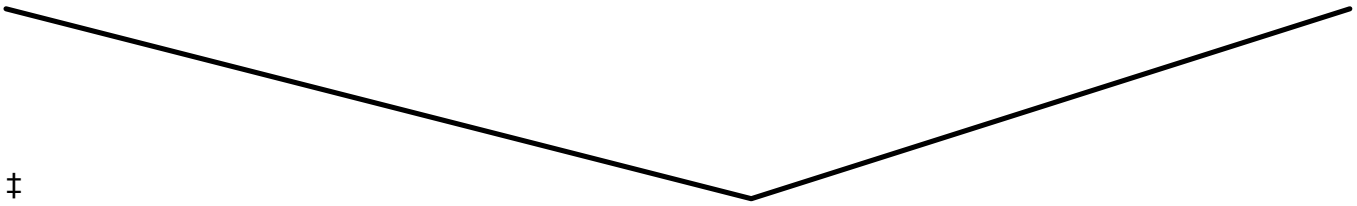
Summary for Reach 1R: SR628 North

Inflow Area = 1.750 ac, 32.00% Impervious, Inflow Depth = 0.00" for 1-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.63' Flow Area= 2.4 sf, Capacity= 10.91 cfs

0.00' x 0.63' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 6.6 5.3 '/' Top Width= 7.50'
Length= 23.2' Slope= 0.0414 '/'
Inlet Invert= 47.78', Outlet Invert= 46.82'



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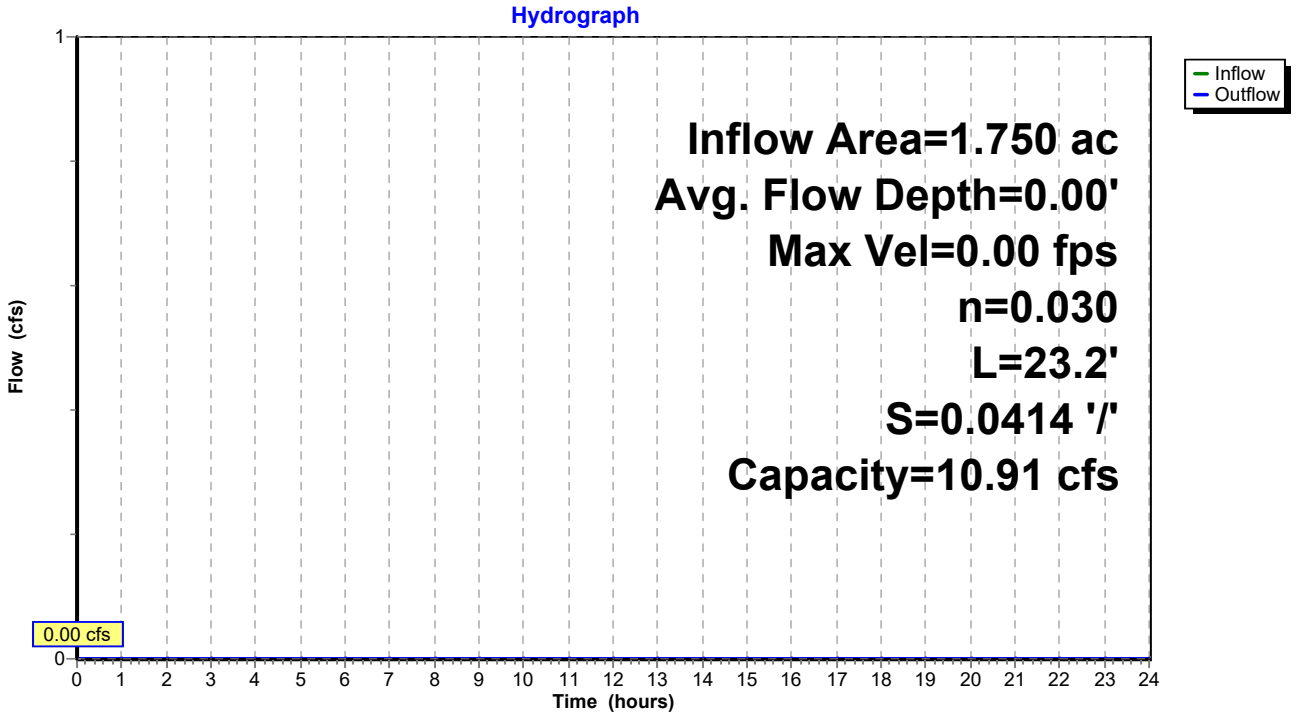
Reach 1R: SR628 North



Summary for Subcatchment 1S: SDA1

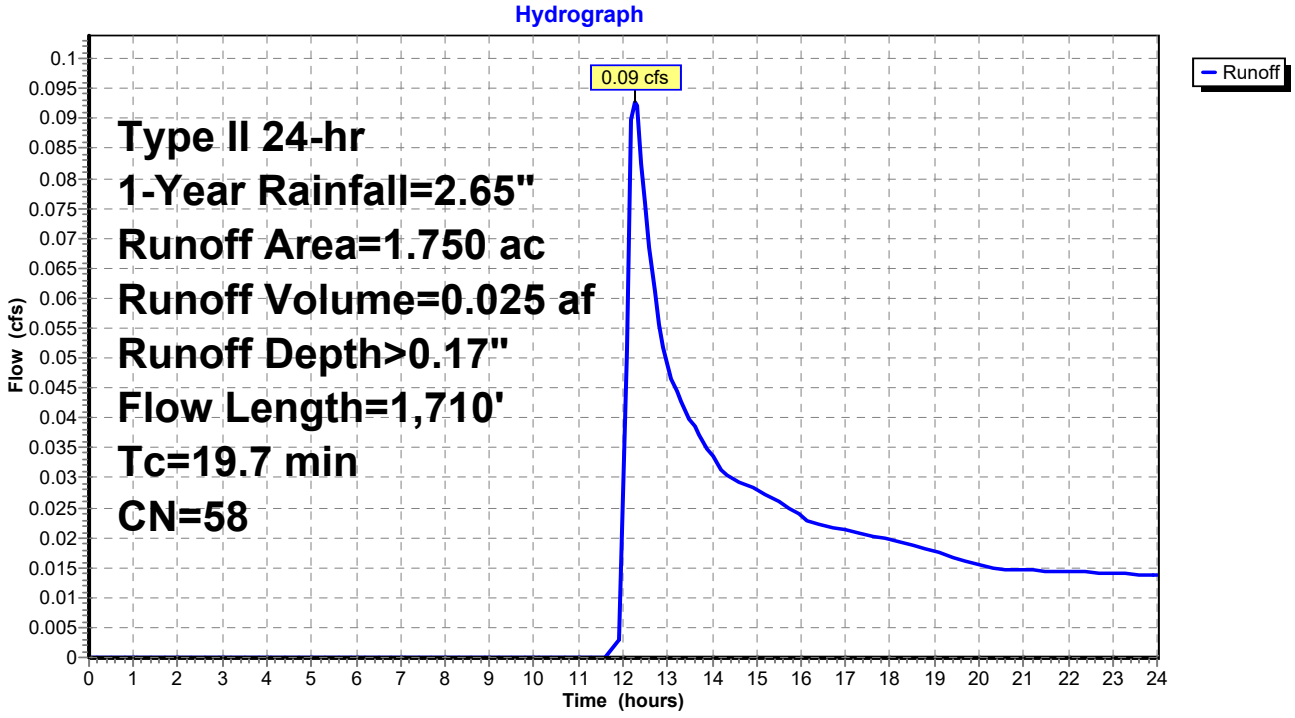
Runoff = 0.09 cfs @ 12.27 hrs, Volume= 0.025 af, Depth> 0.17"
Routed to Pond 1P : Infiltration Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 1-Year Rainfall=2.65"

	Area (ac)	CN	Description
*	0.560	98	Impervious
	1.190	39	>75% Grass cover, Good, HSG A
	1.750	58	Weighted Average
	1.190		68.00% Pervious Area
	0.560		32.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	10	0.0200	0.07		**Sheet Flow, Overland Sheet Flow** Grass: Dense n= 0.240 P2= 3.22"
17.4	1,700	0.0058	1.63		**Kirpich Method, Shallow Concentrated** Bare soil or roadside ditches k= 1.00
19.7	1,710	Total			

Subcatchment 1S: SDA1



Summary for Pond 2P: Infiltration Basin 2

Inflow Area = 1.780 ac, 31.46% Impervious, Inflow Depth > 0.17" for 1-Year event
Inflow = 0.09 cfs @ 12.28 hrs, Volume= 0.025 af
Outflow = 0.09 cfs @ 12.35 hrs, Volume= 0.025 af, Atten= 2%, Lag= 4.2 min
Discarded = 0.09 cfs @ 12.35 hrs, Volume= 0.025 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 2R : SR628 South

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 44.51' @ 12.35 hrs Surf.Area= 1,995 sf Storage= 20 cf

Plug-Flow detention time= 3.6 min calculated for 0.025 af (99% of inflow)
Center-of-Mass det. time= 2.3 min (982.5 - 980.2)

Volume	Invert	Avail.Storage	Storage Description
#1	44.50'	10,611 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

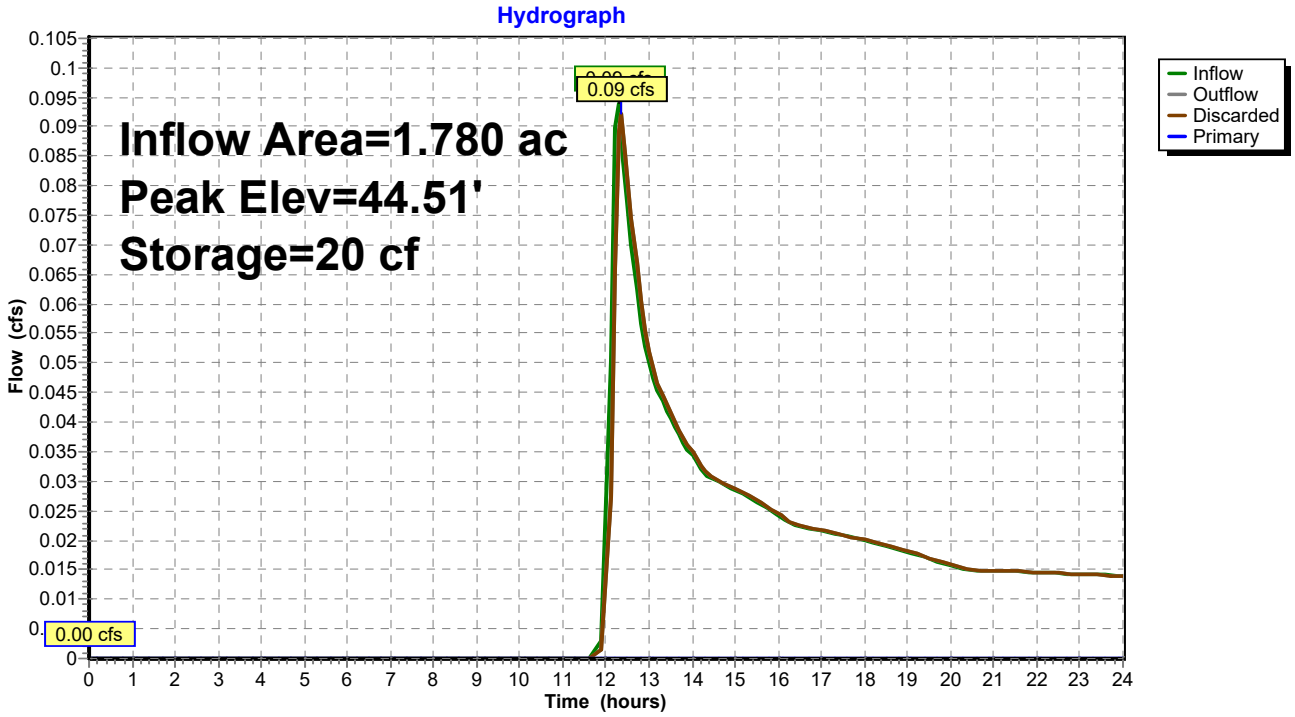
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
44.50	1,986	0	0
45.50	2,915	2,451	2,451
46.50	4,024	3,470	5,920
47.50	5,357	4,691	10,611

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.50'	**6.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 20.00'
#2	Primary	47.16'	**Channel/Reach** using Reach 2R: SR628 South

Discarded OutFlow Max=0.30 cfs @ 12.35 hrs HW=44.51' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.30 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=44.50' (Free Discharge)
↑—**2=Channel/Reach** (Controls 0.00 cfs)

Pond 2P: Infiltration Basin 2



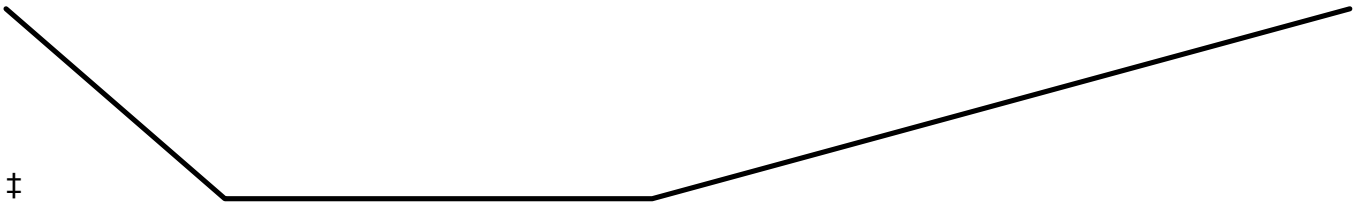
Summary for Reach 2R: SR628 South

Inflow Area = 1.780 ac, 31.46% Impervious, Inflow Depth = 0.00" for 1-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.64' Flow Area= 2.7 sf, Capacity= 2.32 cfs

2.00' x 0.64' deep channel, n= 0.030
Side Slope Z-value= 1.6 5.1 '/' Top Width= 6.29'
Length= 57.8' Slope= 0.0010 '/'
Inlet Invert= 47.16', Outlet Invert= 47.10'



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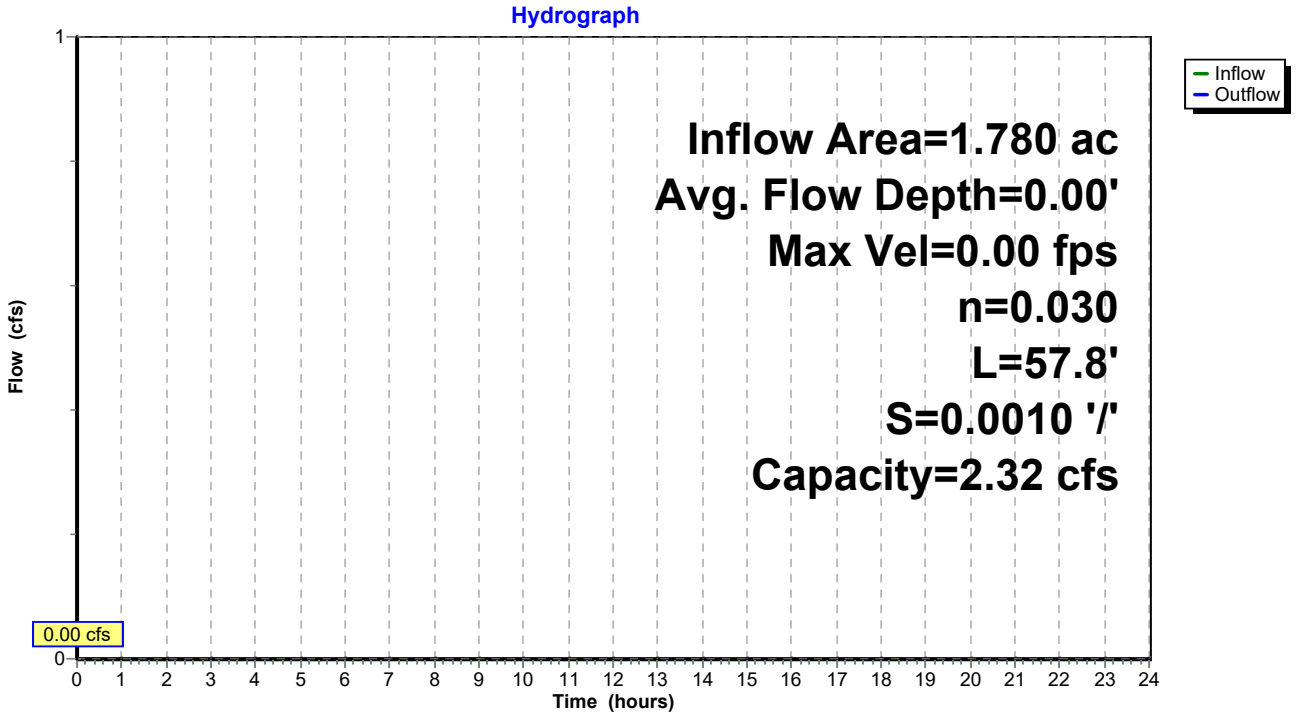
Reach 2R: SR628 South



Summary for Subcatchment 2S: SDA2

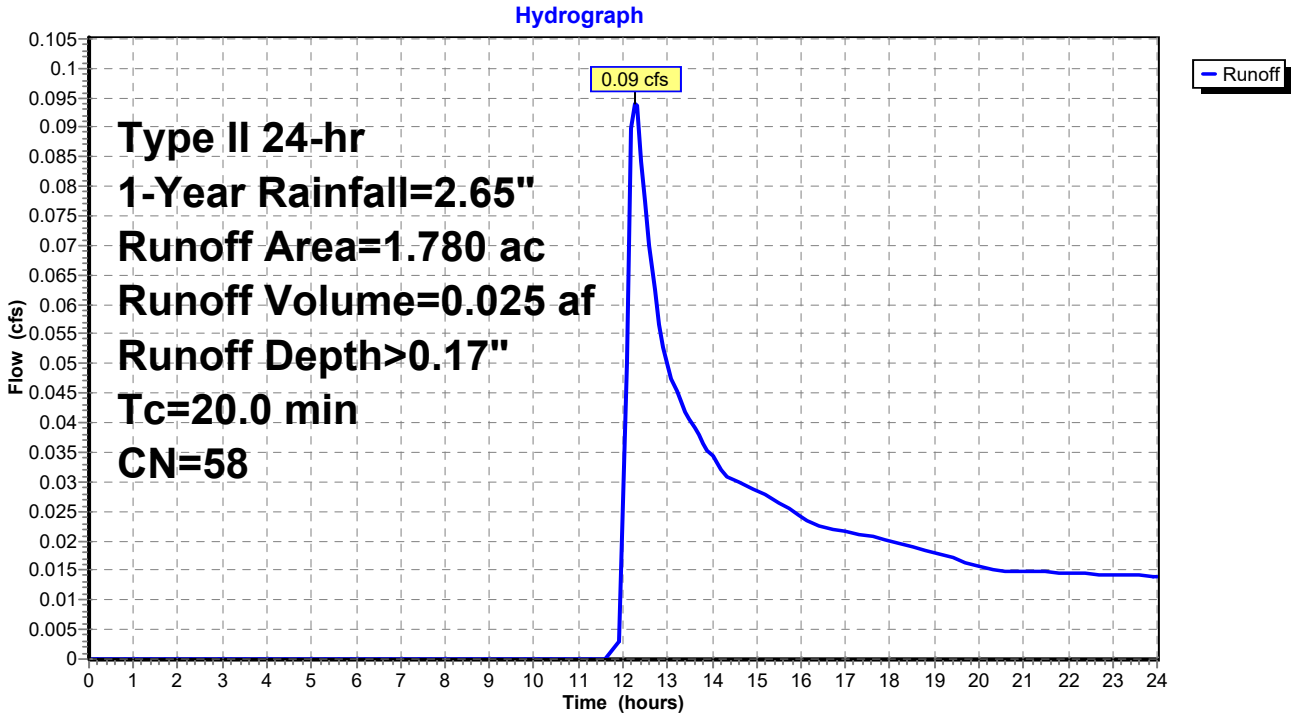
Runoff = 0.09 cfs @ 12.28 hrs, Volume= 0.025 af, Depth> 0.17"
Routed to Pond 2P : Infiltration Basin 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 1-Year Rainfall=2.65"

	Area (ac)	CN	Description
*	0.560	98	Impervious
*	1.220	39	Open, Grass
	1.780	58	Weighted Average
	1.220		68.54% Pervious Area
	0.560		31.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 2S: SDA2



Summary for Pond 1P: Infiltration Basin 1

Inflow Area = 1.750 ac, 32.00% Impervious, Inflow Depth > 1.14" for 10-Year event
Inflow = 1.86 cfs @ 12.15 hrs, Volume= 0.166 af
Outflow = 0.43 cfs @ 12.71 hrs, Volume= 0.166 af, Atten= 77%, Lag= 33.6 min
Discarded = 0.43 cfs @ 12.71 hrs, Volume= 0.166 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : SR628 North

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 45.61' @ 12.71 hrs Surf.Area= 2,754 sf Storage= 1,959 cf

Plug-Flow detention time= 35.5 min calculated for 0.166 af (100% of inflow)
Center-of-Mass det. time= 34.5 min (923.0 - 888.6)

Volume	Invert	Avail.Storage	Storage Description
#1	44.78'	10,642 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

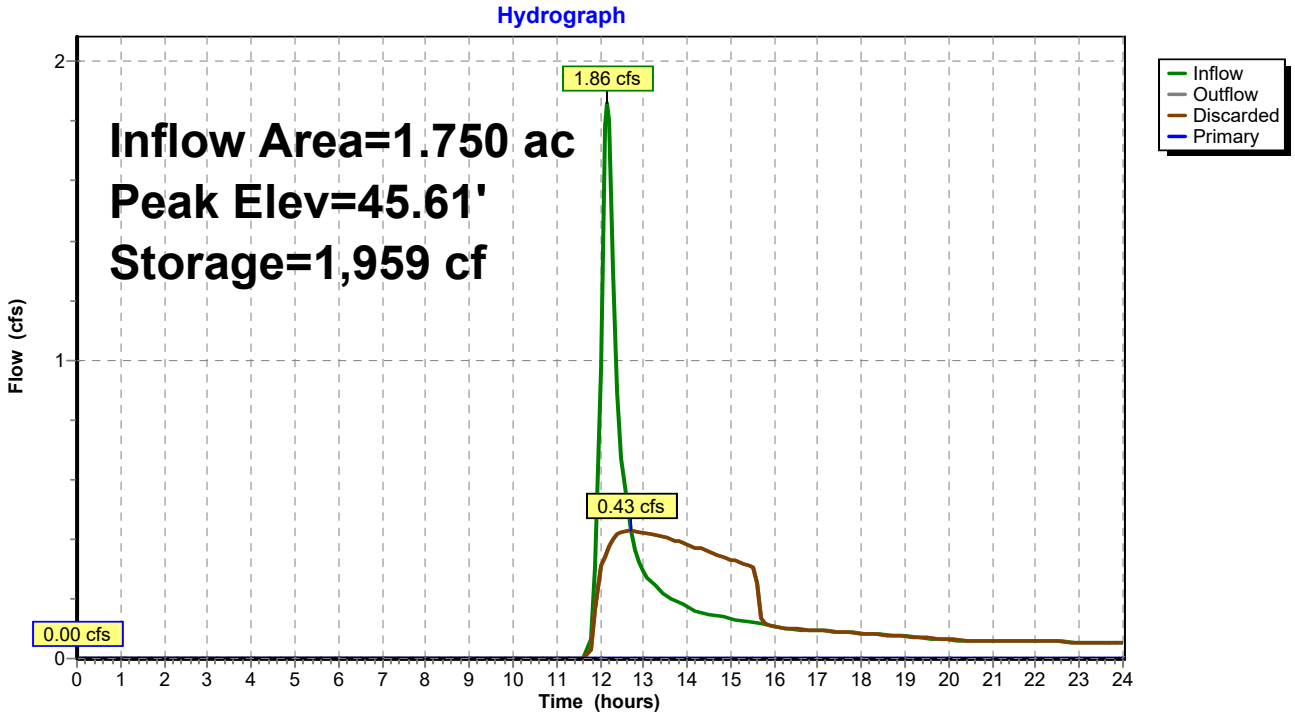
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
44.78	1,968	0	0
45.78	2,915	2,442	2,442
46.78	4,024	3,470	5,911
47.78	5,437	4,731	10,642

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.78'	**6.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 22.00'
#2	Primary	47.78'	**Channel/Reach** using Reach 1R: SR628 North

Discarded OutFlow Max=0.43 cfs @ 12.71 hrs HW=45.61' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.43 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=44.78' (Free Discharge)
↑—**2=Channel/Reach** (Controls 0.00 cfs)

Pond 1P: Infiltration Basin 1



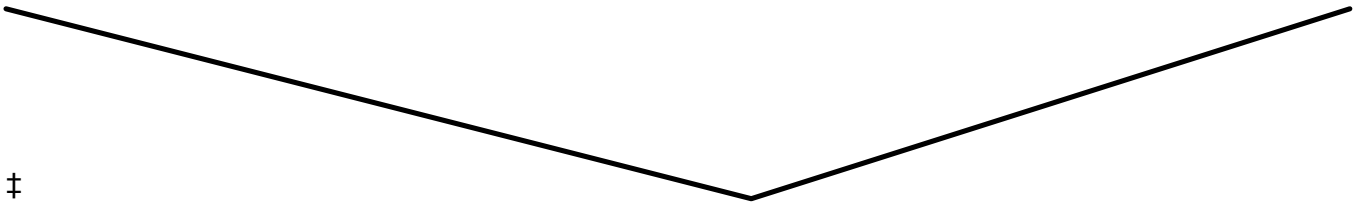
Summary for Reach 1R: SR628 North

Inflow Area = 1.750 ac, 32.00% Impervious, Inflow Depth = 0.00" for 10-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.63' Flow Area= 2.4 sf, Capacity= 10.91 cfs

0.00' x 0.63' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 6.6 5.3 '/' Top Width= 7.50'
Length= 23.2' Slope= 0.0414 '/'
Inlet Invert= 47.78', Outlet Invert= 46.82'



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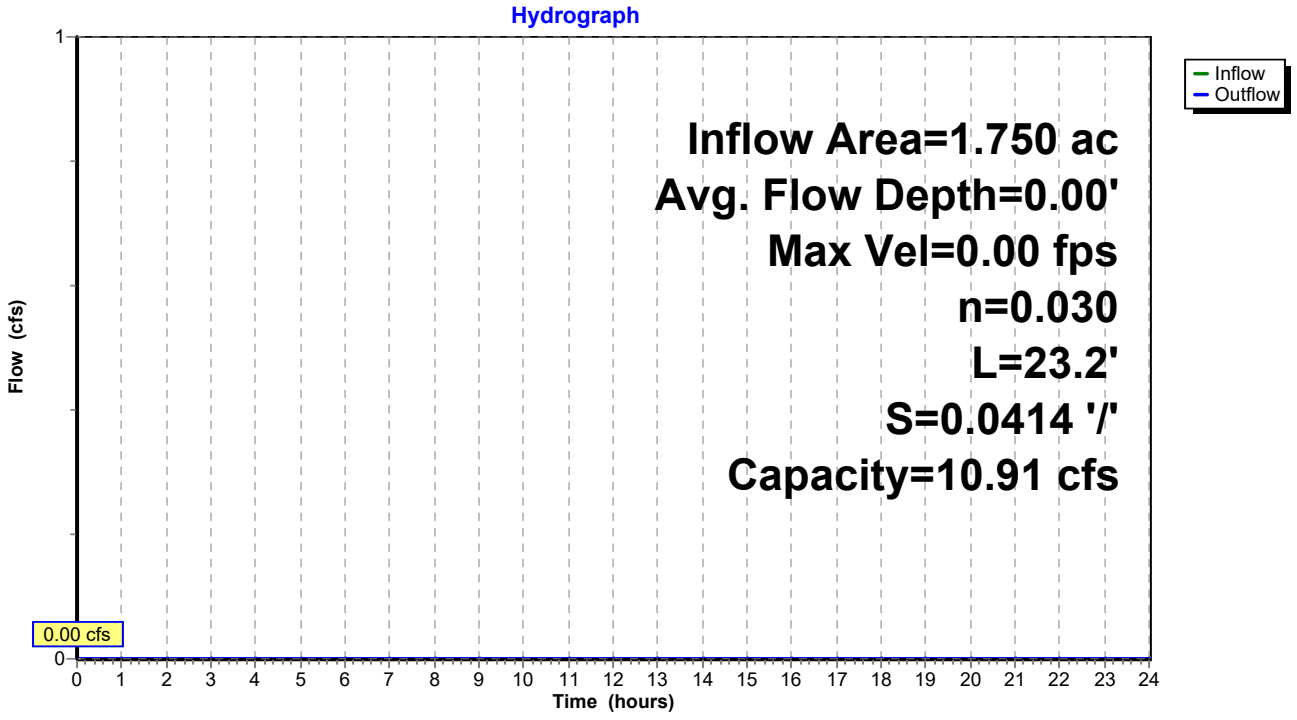
Reach 1R: SR628 North



Summary for Subcatchment 1S: SDA1

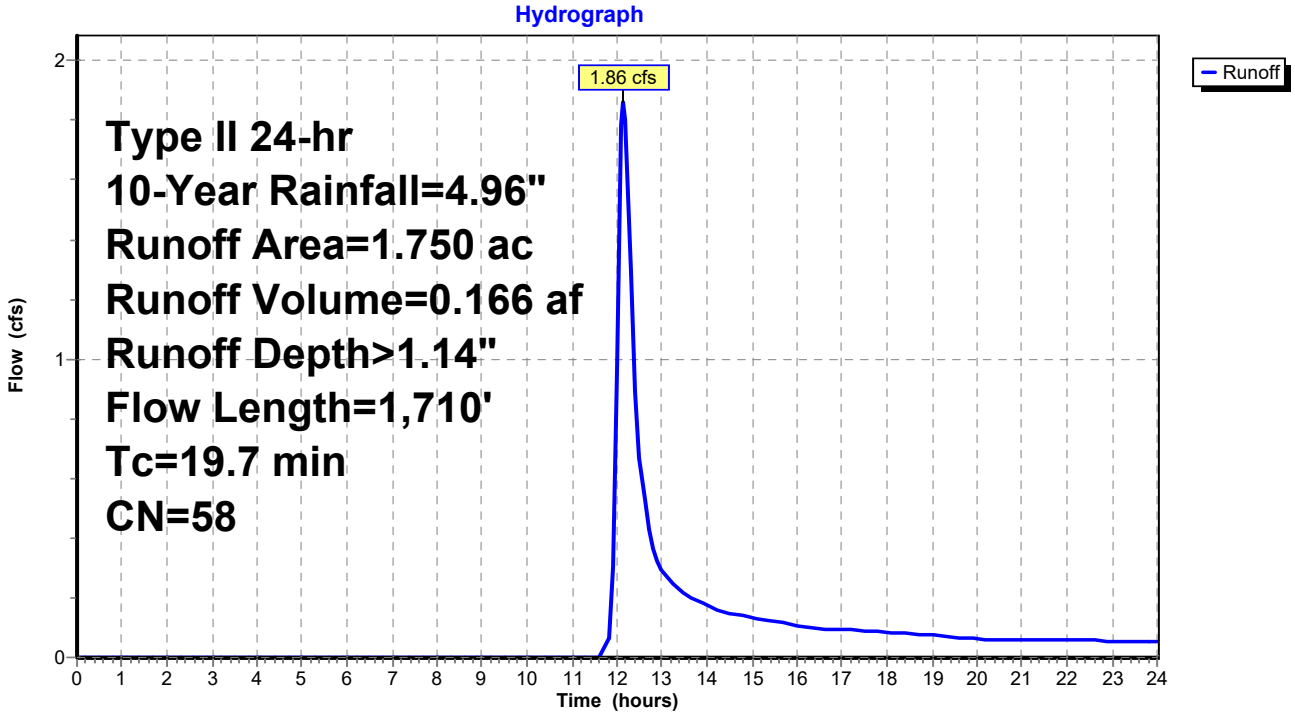
Runoff = 1.86 cfs @ 12.15 hrs, Volume= 0.166 af, Depth> 1.14"
Routed to Pond 1P : Infiltration Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 10-Year Rainfall=4.96"

	Area (ac)	CN	Description
*	0.560	98	Impervious
	1.190	39	>75% Grass cover, Good, HSG A
	1.750	58	Weighted Average
	1.190		68.00% Pervious Area
	0.560		32.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	10	0.0200	0.07		**Sheet Flow, Overland Sheet Flow** Grass: Dense n= 0.240 P2= 3.22"
17.4	1,700	0.0058	1.63		**Kirpich Method, Shallow Concentrated** Bare soil or roadside ditches k= 1.00
19.7	1,710	Total			

Subcatchment 1S: SDA1



Summary for Pond 2P: Infiltration Basin 2

Inflow Area = 1.780 ac, 31.46% Impervious, Inflow Depth > 1.14" for 10-Year event
Inflow = 1.88 cfs @ 12.16 hrs, Volume= 0.169 af
Outflow = 0.43 cfs @ 12.73 hrs, Volume= 0.169 af, Atten= 77%, Lag= 34.0 min
Discarded = 0.43 cfs @ 12.73 hrs, Volume= 0.169 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 2R : SR628 South

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 45.34' @ 12.73 hrs Surf.Area= 2,768 sf Storage= 1,999 cf

Plug-Flow detention time= 36.2 min calculated for 0.168 af (99% of inflow)
Center-of-Mass det. time= 35.2 min (923.9 - 888.8)

Volume	Invert	Avail.Storage	Storage Description
#1	44.50'	10,611 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

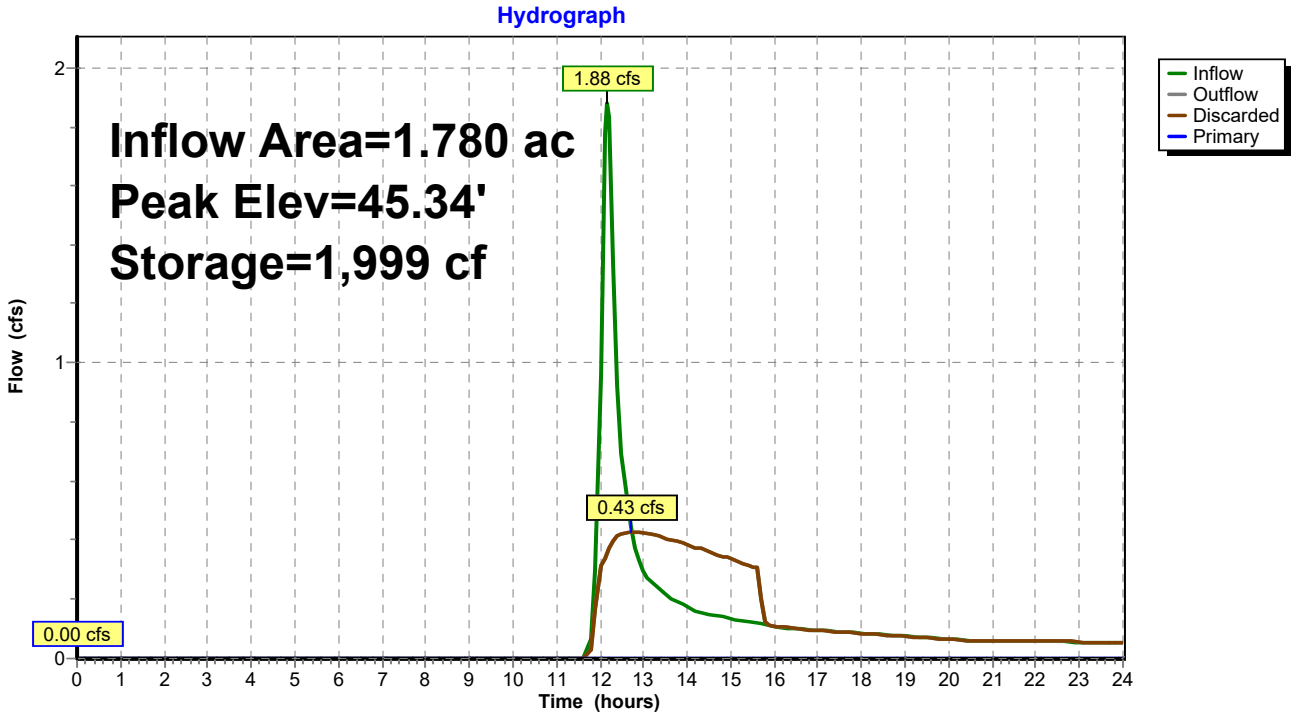
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
44.50	1,986	0	0
45.50	2,915	2,451	2,451
46.50	4,024	3,470	5,920
47.50	5,357	4,691	10,611

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.50'	**6.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 20.00'
#2	Primary	47.16'	**Channel/Reach** using Reach 2R: SR628 South

Discarded OutFlow Max=0.43 cfs @ 12.73 hrs HW=45.34' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.43 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=44.50' (Free Discharge)
↑—**2=Channel/Reach** (Controls 0.00 cfs)

Pond 2P: Infiltration Basin 2



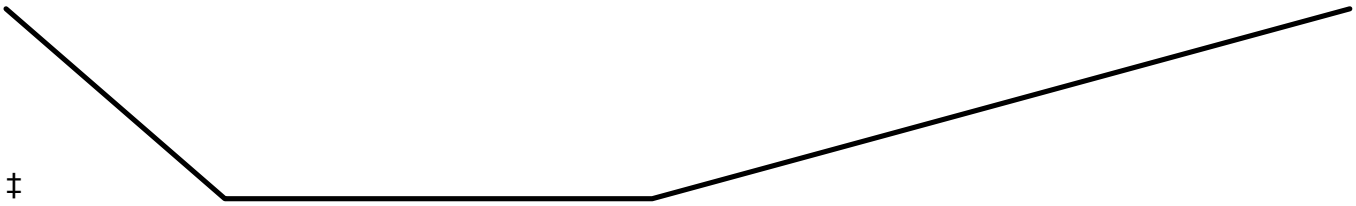
Summary for Reach 2R: SR628 South

Inflow Area = 1.780 ac, 31.46% Impervious, Inflow Depth = 0.00" for 10-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.64' Flow Area= 2.7 sf, Capacity= 2.32 cfs

2.00' x 0.64' deep channel, n= 0.030
Side Slope Z-value= 1.6 5.1 '/' Top Width= 6.29'
Length= 57.8' Slope= 0.0010 '/'
Inlet Invert= 47.16', Outlet Invert= 47.10'



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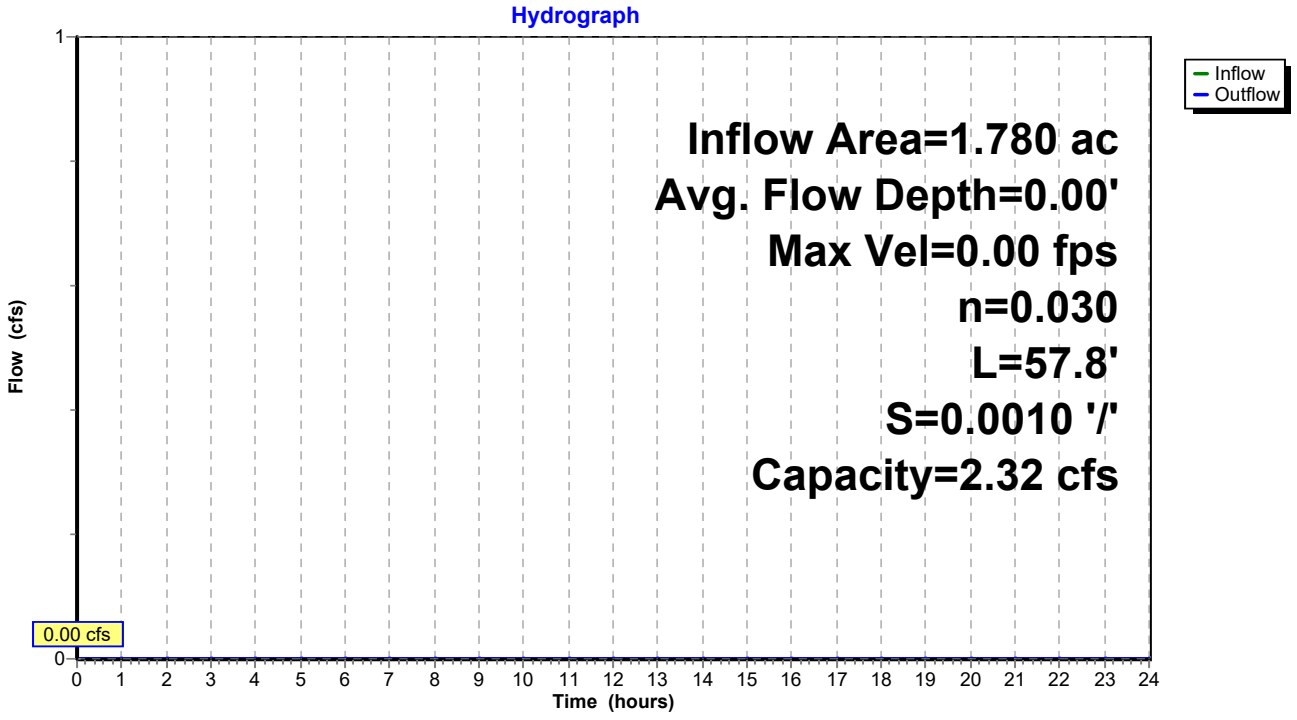
Reach 2R: SR628 South



Summary for Subcatchment 2S: SDA2

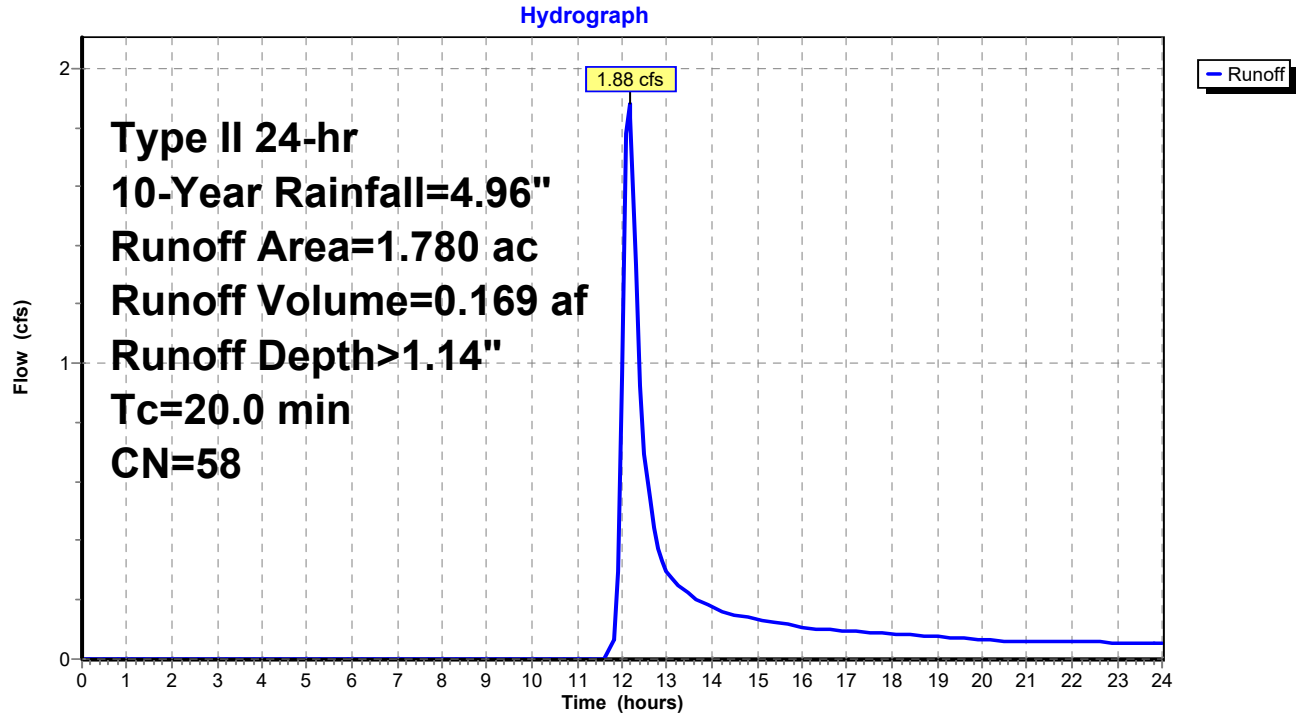
Runoff = 1.88 cfs @ 12.16 hrs, Volume= 0.169 af, Depth> 1.14"
Routed to Pond 2P : Infiltration Basin 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 10-Year Rainfall=4.96"

	Area (ac)	CN	Description
*	0.560	98	Impervious
*	1.220	39	Open, Grass
	1.780	58	Weighted Average
	1.220		68.54% Pervious Area
	0.560		31.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 2S: SDA2



Summary for Pond 1P: Infiltration Basin 1

Inflow Area = 1.750 ac, 32.00% Impervious, Inflow Depth > 3.45" for 100-Year event
Inflow = 6.53 cfs @ 12.13 hrs, Volume= 0.503 af
Outflow = 0.82 cfs @ 12.95 hrs, Volume= 0.502 af, Atten= 87%, Lag= 48.8 min
Discarded = 0.82 cfs @ 12.95 hrs, Volume= 0.502 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : SR628 North

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 47.49' @ 12.95 hrs Surf.Area= 5,030 sf Storage= 9,134 cf

Plug-Flow detention time= 122.7 min calculated for 0.500 af (99% of inflow)
Center-of-Mass det. time= 121.4 min (975.2 - 853.8)

Volume	Invert	Avail.Storage	Storage Description
#1	44.78'	10,642 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

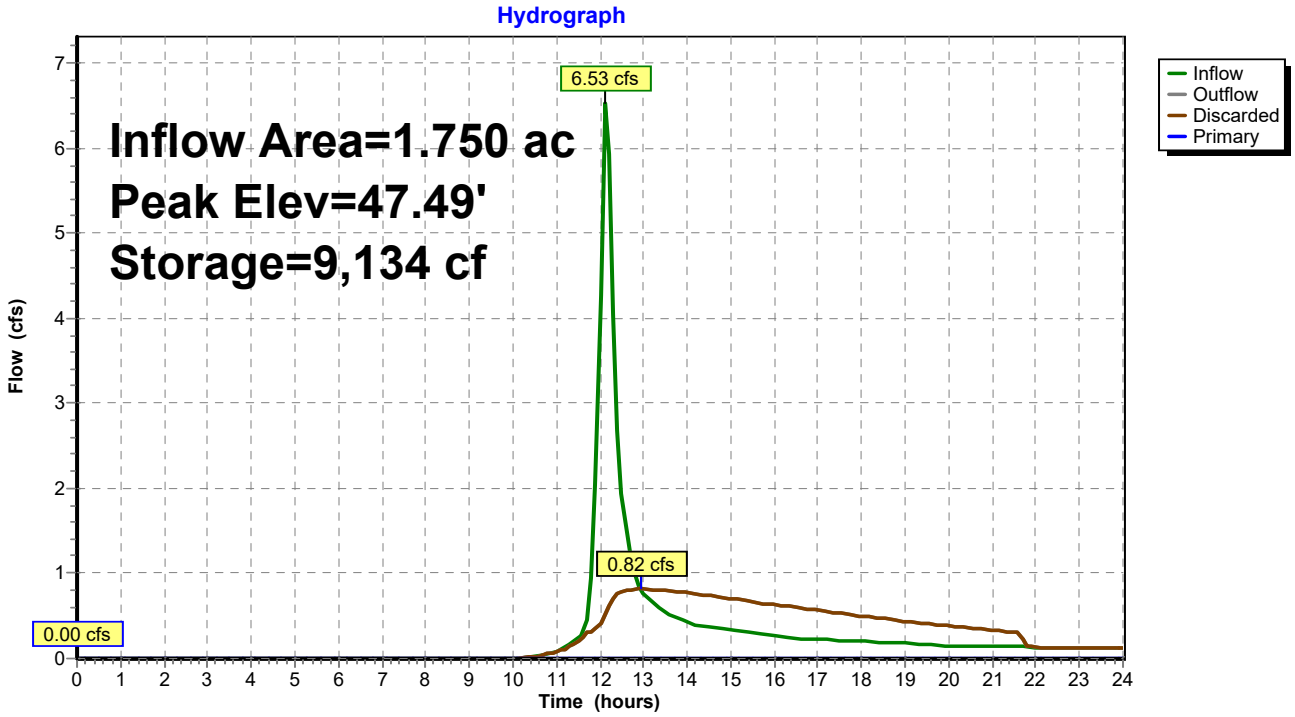
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
44.78	1,968	0	0
45.78	2,915	2,442	2,442
46.78	4,024	3,470	5,911
47.78	5,437	4,731	10,642

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.78'	**6.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 22.00'
#2	Primary	47.78'	**Channel/Reach** using Reach 1R: SR628 North

Discarded OutFlow Max=0.82 cfs @ 12.95 hrs HW=47.49' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.82 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=44.78' (Free Discharge)
↑—**2=Channel/Reach** (Controls 0.00 cfs)

Pond 1P: Infiltration Basin 1



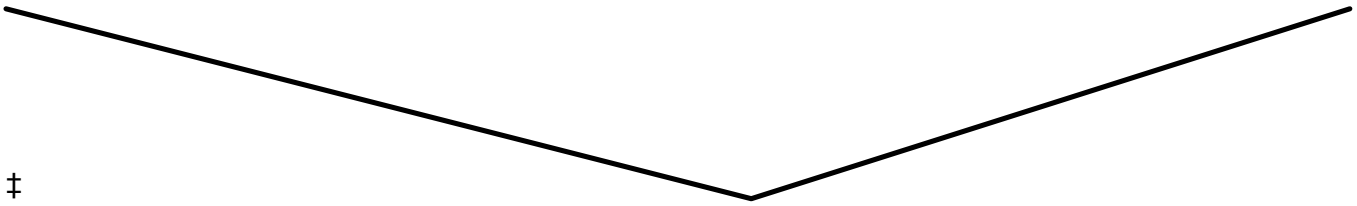
Summary for Reach 1R: SR628 North

Inflow Area = 1.750 ac, 32.00% Impervious, Inflow Depth = 0.00" for 100-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.63' Flow Area= 2.4 sf, Capacity= 10.91 cfs

0.00' x 0.63' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 6.6 5.3 '/' Top Width= 7.50'
Length= 23.2' Slope= 0.0414 '/'
Inlet Invert= 47.78', Outlet Invert= 46.82'



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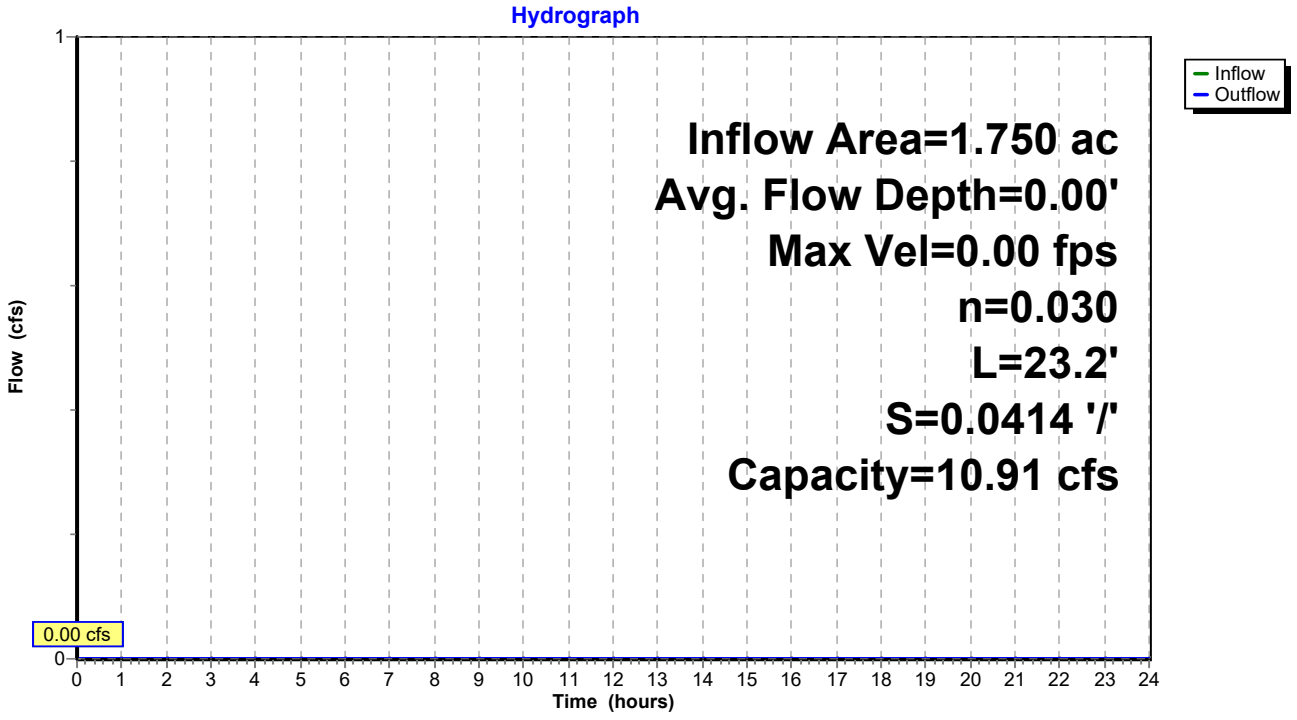
Reach 1R: SR628 North



Summary for Subcatchment 1S: SDA1

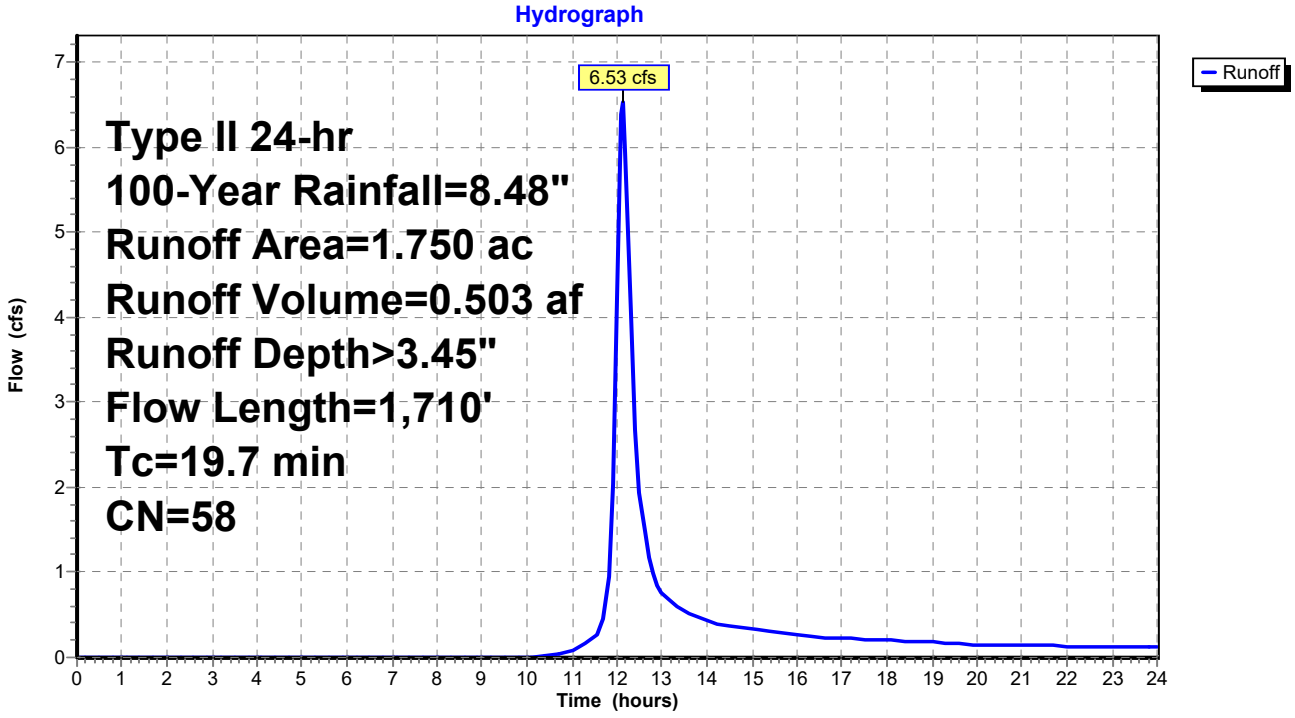
Runoff = 6.53 cfs @ 12.13 hrs, Volume= 0.503 af, Depth> 3.45"
Routed to Pond 1P : Infiltration Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 100-Year Rainfall=8.48"

	Area (ac)	CN	Description
*	0.560	98	Impervious
	1.190	39	>75% Grass cover, Good, HSG A
	1.750	58	Weighted Average
	1.190		68.00% Pervious Area
	0.560		32.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	10	0.0200	0.07		**Sheet Flow, Overland Sheet Flow** Grass: Dense n= 0.240 P2= 3.22"
17.4	1,700	0.0058	1.63		**Kirpich Method, Shallow Concentrated** Bare soil or roadside ditches k= 1.00
19.7	1,710	Total			

Subcatchment 1S: SDA1



Summary for Pond 2P: Infiltration Basin 2

Inflow Area = 1.780 ac, 31.46% Impervious, Inflow Depth > 3.45" for 100-Year event
Inflow = 6.57 cfs @ 12.14 hrs, Volume= 0.511 af
Outflow = 0.87 cfs @ 12.92 hrs, Volume= 0.511 af, Atten= 87%, Lag= 47.1 min
Discarded = 0.81 cfs @ 12.92 hrs, Volume= 0.508 af
Primary = 0.06 cfs @ 12.92 hrs, Volume= 0.003 af
Routed to Reach 2R : SR628 South

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 47.24' @ 12.92 hrs Surf.Area= 5,017 sf Storage= 9,286 cf

Plug-Flow detention time= 123.9 min calculated for 0.511 af (100% of inflow)
Center-of-Mass det. time= 123.2 min (977.2 - 854.0)

Volume	Invert	Avail.Storage	Storage Description
#1	44.50'	10,611 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

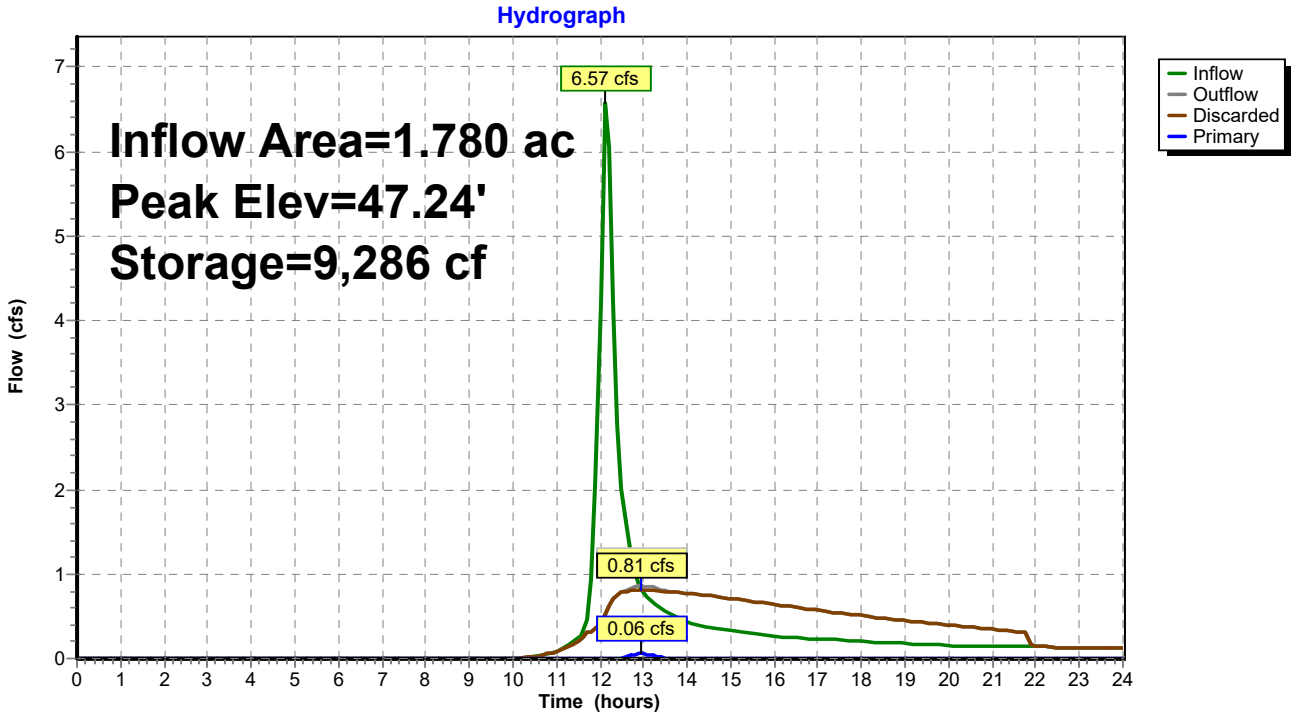
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
44.50	1,986	0	0
45.50	2,915	2,451	2,451
46.50	4,024	3,470	5,920
47.50	5,357	4,691	10,611

Device	Routing	Invert	Outlet Devices
#1	Discarded	44.50'	**6.500 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 20.00'
#2	Primary	47.16'	**Channel/Reach** using Reach 2R: SR628 South

Discarded OutFlow Max=0.81 cfs @ 12.92 hrs HW=47.24' (Free Discharge)
↑—**1=Exfiltration** (Controls 0.81 cfs)

Primary OutFlow Max=0.05 cfs @ 12.92 hrs HW=47.24' (Free Discharge)
↑—**2=Channel/Reach** (Channel Controls 0.05 cfs @ 0.28 fps)

Pond 2P: Infiltration Basin 2



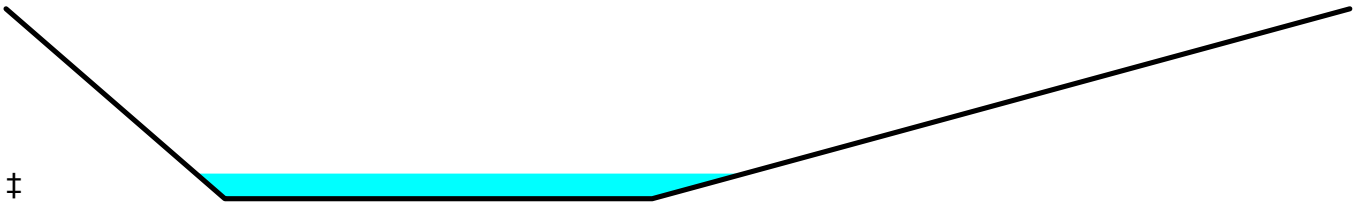
Summary for Reach 2R: SR628 South

Inflow Area = 1.780 ac, 31.46% Impervious, Inflow Depth = 0.02" for 100-Year event
Inflow = 0.06 cfs @ 12.92 hrs, Volume= 0.003 af
Outflow = 0.05 cfs @ 12.96 hrs, Volume= 0.003 af, Atten= 2%, Lag= 2.4 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Max. Velocity= 0.28 fps, Min. Travel Time= 3.4 min
Avg. Velocity = 0.12 fps, Avg. Travel Time= 8.3 min

Peak Storage= 11 cf @ 12.96 hrs
Average Depth at Peak Storage= 0.08' , Surface Width= 2.57'
Bank-Full Depth= 0.64' Flow Area= 2.7 sf, Capacity= 2.32 cfs

2.00' x 0.64' deep channel, n= 0.030
Side Slope Z-value= 1.6 5.1 '/' Top Width= 6.29'
Length= 57.8' Slope= 0.0010 '/'
Inlet Invert= 47.16', Outlet Invert= 47.10'



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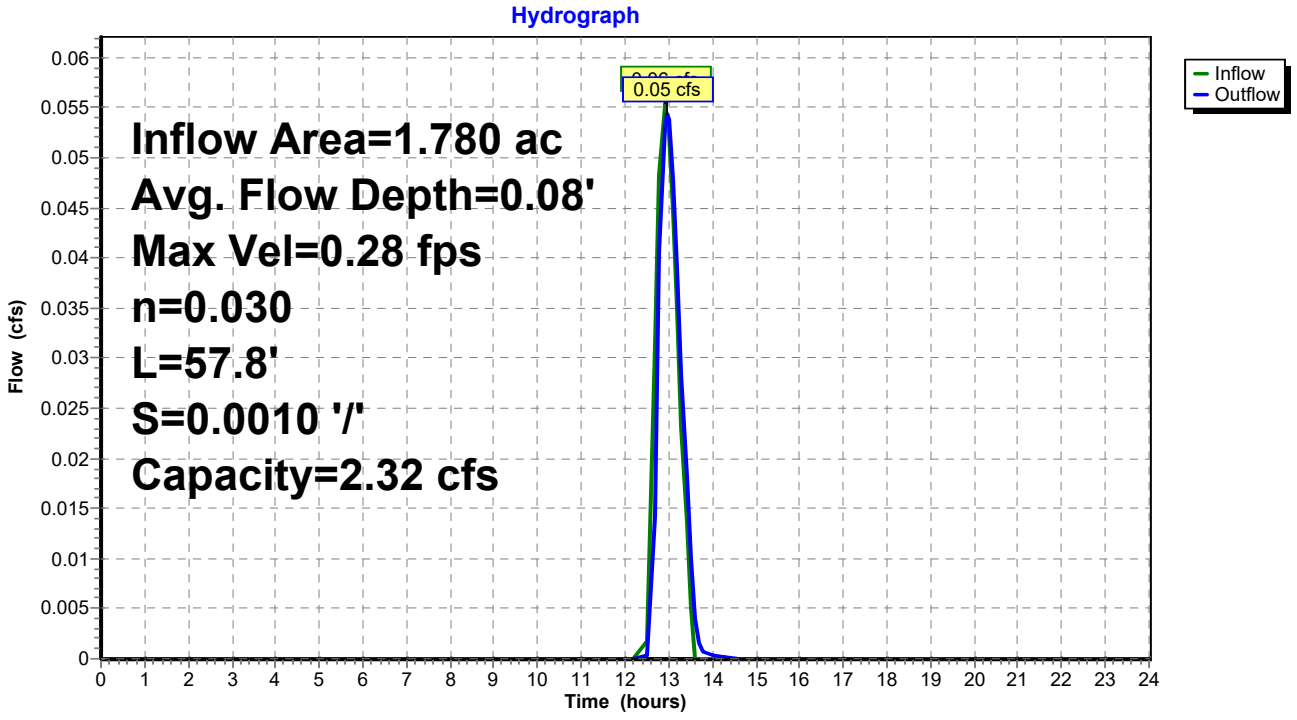
Reach 2R: SR628 South



Summary for Subcatchment 2S: SDA2

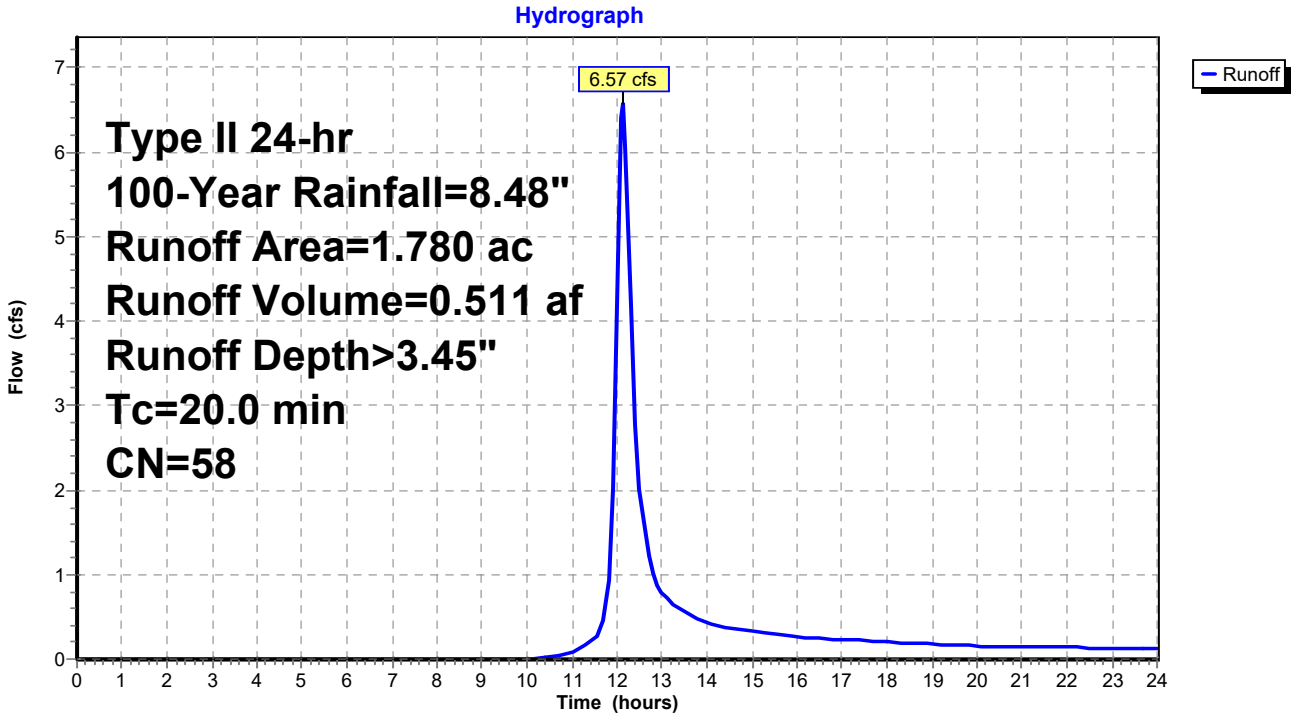
Runoff = 6.57 cfs @ 12.14 hrs, Volume= 0.511 af, Depth> 3.45"
Routed to Pond 2P : Infiltration Basin 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 100-Year Rainfall=8.48"

	Area (ac)	CN	Description
*	0.560	98	Impervious
*	1.220	39	Open, Grass
	1.780	58	Weighted Average
	1.220		68.54% Pervious Area
	0.560		31.46% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 2S: SDA2



Events for Pond 1P: Infiltration Basin 1

Event	Inflow (cfs)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
1-Year	0.09	0.09	0.09	**0.00**	44.79	21
10-Year	1.86	0.43	0.43	0.00	45.61	1,959
100-Year	**6.53**	**0.82**	**0.82**	0.00	**47.49**	**9,134**

Events for Reach 1R: SR628 North

Event	Inflow (cfs)	Outflow (cfs)	Elevation (feet)	Storage (cubic-feet)
1-Year	**0.00**	**0.00**	**47.78**	**0**
10-Year	0.00	0.00	47.78	0
100-Year	0.00	0.00	47.78	0

Events for Subcatchment 1S: SDA1

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.65	0.09	0.025	0.17
10-Year	4.96	1.86	0.166	1.14
100-Year	**8.48**	**6.53**	**0.503**	**3.45**

Events for Pond 2P: Infiltration Basin 2

Event	Inflow (cfs)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
1-Year	0.09	0.09	0.09	0.00	44.51	20
10-Year	1.88	0.43	0.43	0.00	45.34	1,999
100-Year	**6.57**	**0.87**	**0.81**	**0.06**	**47.24**	**9,286**

Events for Reach 2R: SR628 South

Event	Inflow (cfs)	Outflow (cfs)	Elevation (feet)	Storage (cubic-feet)
1-Year	0.00	0.00	47.16	0
10-Year	0.00	0.00	47.16	0
100-Year	**0.06**	**0.05**	**47.24**	**11**

Events for Subcatchment 2S: SDA2

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.65	0.09	0.025	0.17
10-Year	4.96	1.88	0.169	1.14
100-Year	**8.48**	**6.57**	**0.511**	**3.45**

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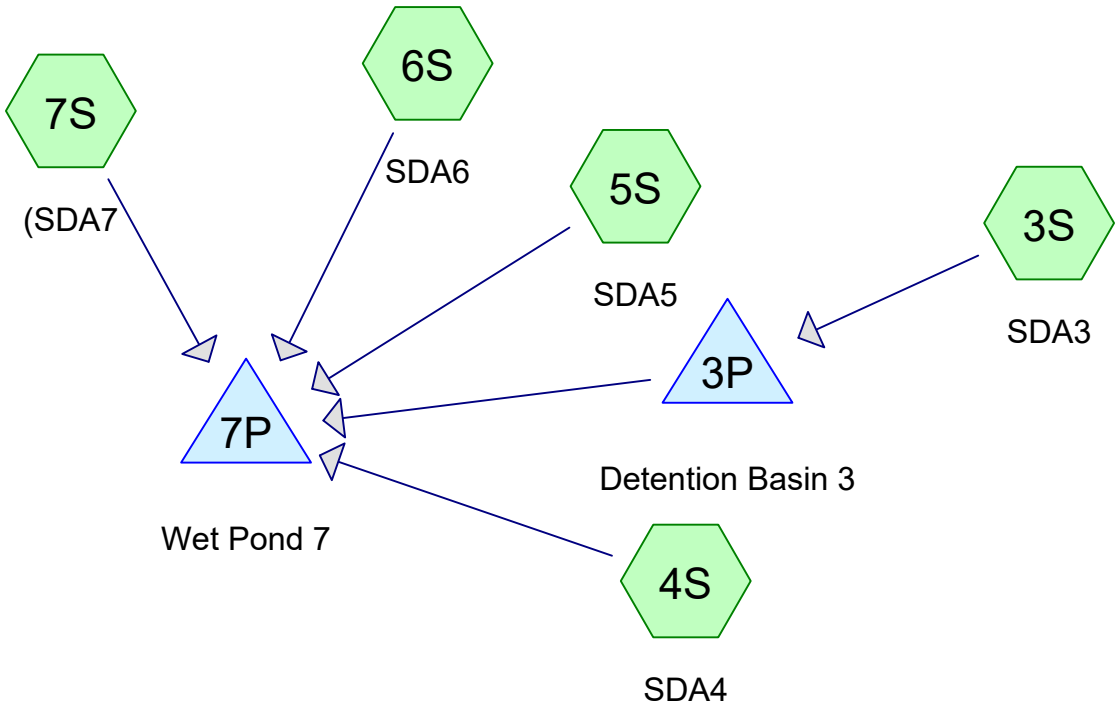


Subcat Reach Pond Link

Routing Diagram for 24023 Mattaponi SG Reclamation Plan
Prepared by Wilson Engineers LLC, Printed 2/21/2025

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type II 24-hr		Default	24.00	1	2.65	2
2	10-Year	Type II 24-hr		Default	24.00	1	4.96	2
3	100-Year	Type II 24-hr		Default	24.00	1	8.48	2

Summary for Pond 3P: Detention Basin 3

Inflow Area = 8.620 ac, 0.00% Impervious, Inflow Depth > 0.82" for 1-Year event
Inflow = 4.30 cfs @ 12.47 hrs, Volume= 0.592 af
Outflow = 1.46 cfs @ 13.24 hrs, Volume= 0.572 af, Atten= 66%, Lag= 45.9 min
Primary = 1.46 cfs @ 13.24 hrs, Volume= 0.572 af
Routed to Pond 7P : Wet Pond 7

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 25.32' @ 13.24 hrs Surf.Area= 42,842 sf Storage= 7,890 cf

Plug-Flow detention time= 89.1 min calculated for 0.572 af (97% of inflow)
Center-of-Mass det. time= 71.6 min (959.6 - 888.0)

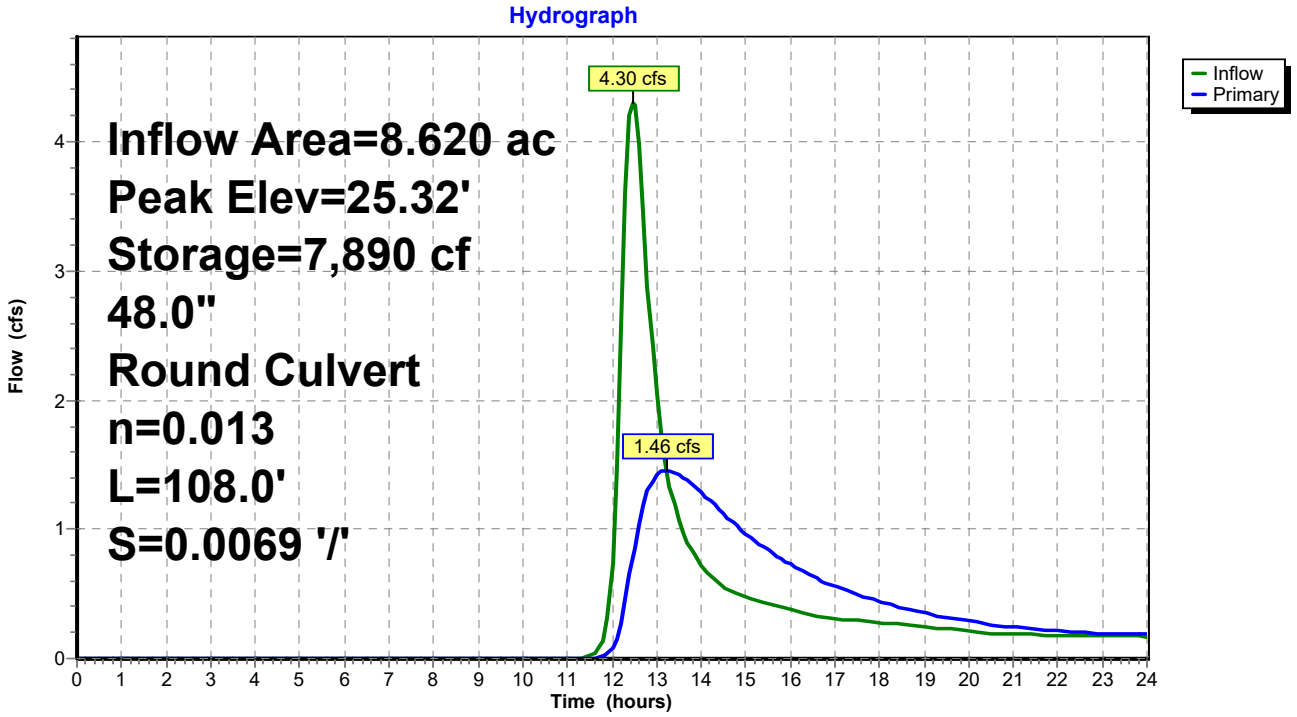
Volume	Invert	Avail.Storage	Storage Description
#1	24.90'	5,059,882 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.90	0	0	0
25.00	5,368	268	268
26.00	123,893	64,631	64,899
27.00	146,738	135,316	200,214
49.00	295,050	4,859,668	5,059,882

Device	Routing	Invert	Outlet Devices
#1	Primary	24.90'	**48.0" Round RCP_Round 48"** L= 108.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 24.90' / 24.15' S= 0.0069 '/' Cc= 0.900 n= 0.013, Flow Area= 12.57 sf

Primary OutFlow Max=1.37 cfs @ 13.24 hrs HW=25.32' (Free Discharge)
1=RCP_Round 48" (Barrel Controls 1.37 cfs @ 3.01 fps)

Pond 3P: Detention Basin 3



Summary for Subcatchment 3S: SDA3

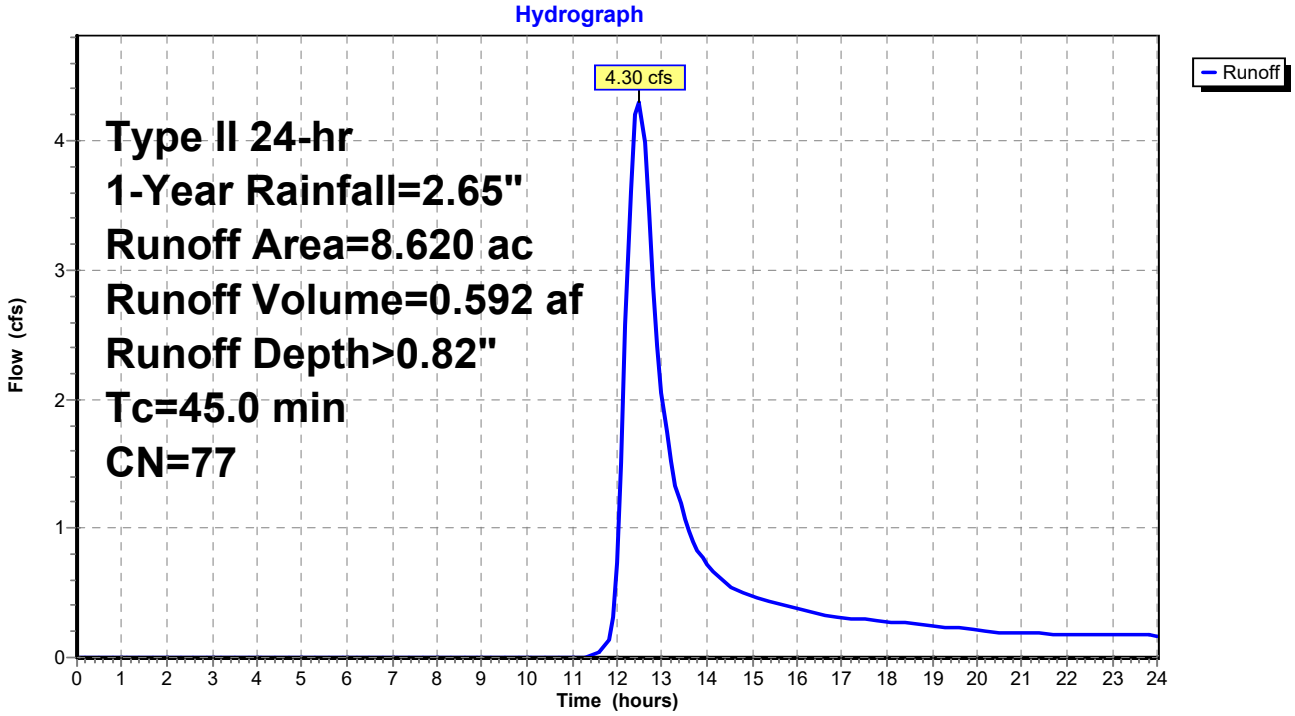
Runoff = 4.30 cfs @ 12.47 hrs, Volume= 0.592 af, Depth> 0.82"
Routed to Pond 3P : Detention Basin 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 1-Year Rainfall=2.65"

	Area (ac)	CN	Description
*	8.620	77	See TR20 Worksheet
	8.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
45.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 3S: SDA3



Summary for Subcatchment 4S: SDA4

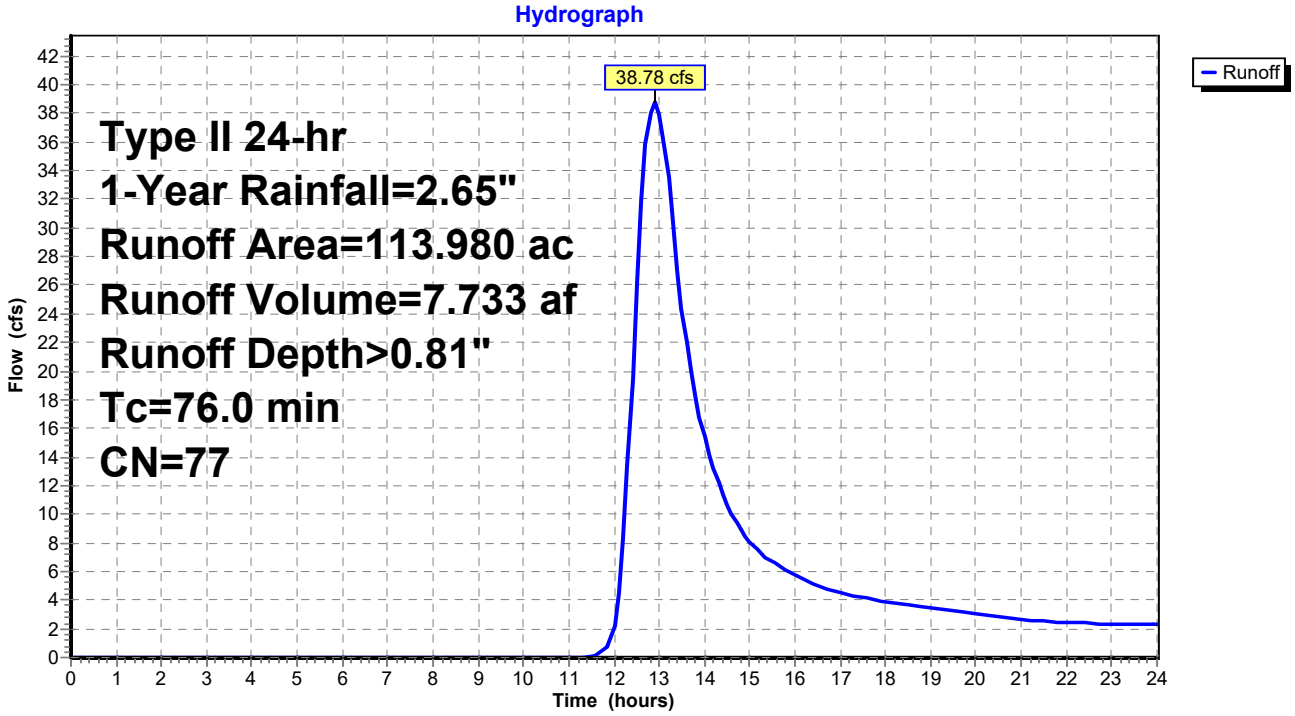
Runoff = 38.78 cfs @ 12.90 hrs, Volume= 7.733 af, Depth> 0.81"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 1-Year Rainfall=2.65"

	Area (ac)	CN	Description
*	113.980	77	See TR20 Worksheet
	113.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
76.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 4S: SDA4



Summary for Subcatchment 5S: SDA5

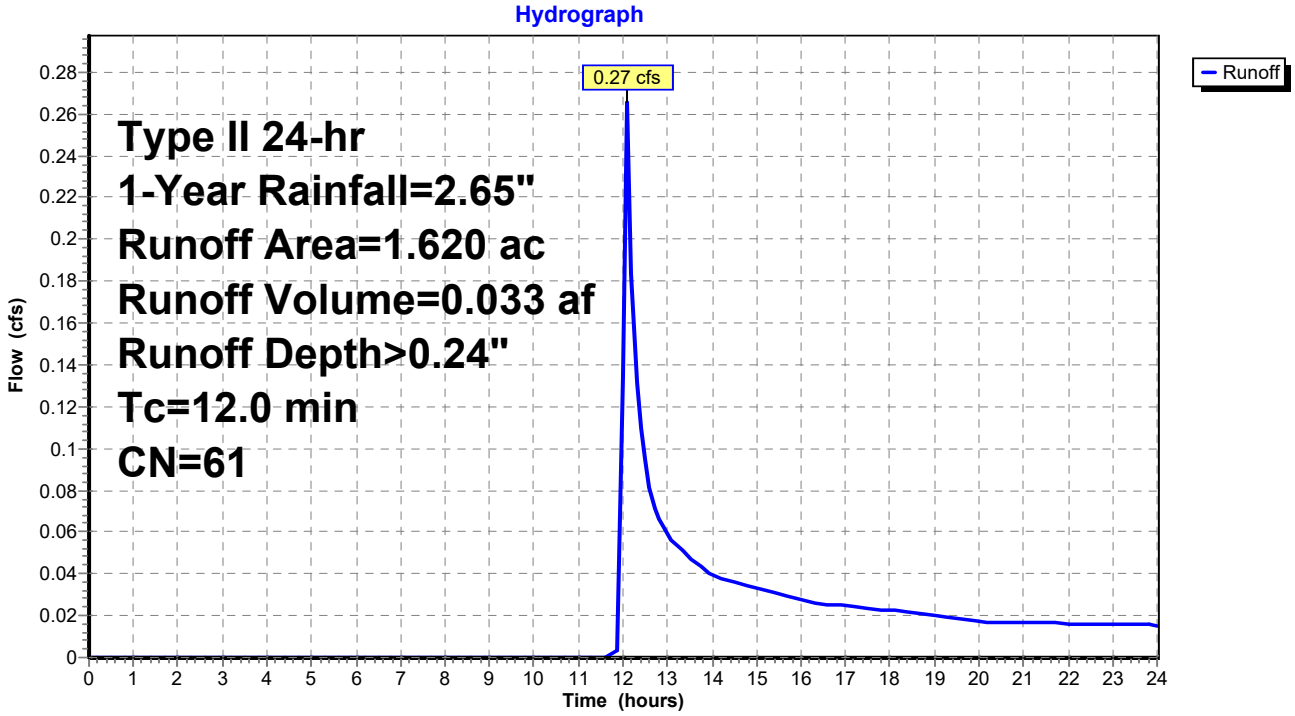
Runoff = 0.27 cfs @ 12.11 hrs, Volume= 0.033 af, Depth> 0.24"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 1-Year Rainfall=2.65"

	Area (ac)	CN	Description
*	1.620	61	See TR20 Worksheet
	1.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 5S: SDA5



Summary for Subcatchment 6S: SDA6

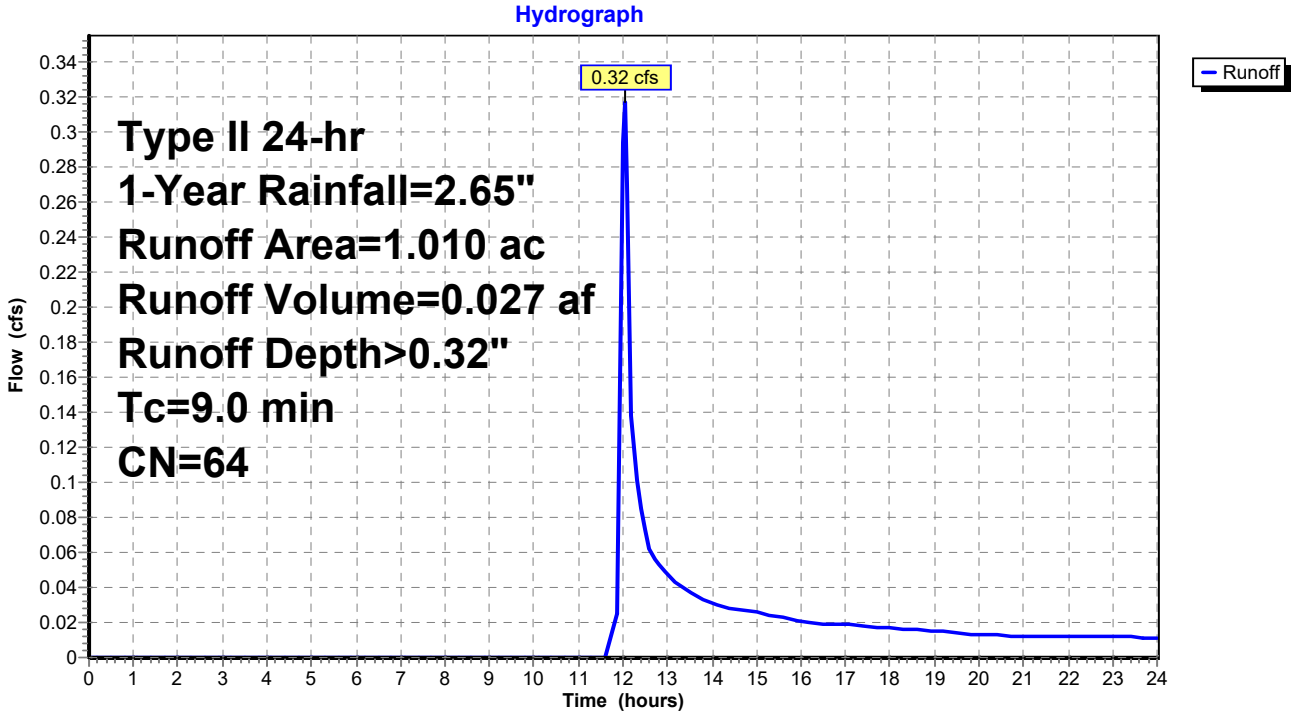
Runoff = 0.32 cfs @ 12.04 hrs, Volume= 0.027 af, Depth> 0.32"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 1-Year Rainfall=2.65"

	Area (ac)	CN	Description
*	1.010	64	See TR20 Worksheet
	1.010		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 6S: SDA6



Summary for Pond 7P: Wet Pond 7

Inflow Area = 127.910 ac, 0.00% Impervious, Inflow Depth > 0.78" for 1-Year event
Inflow = 40.26 cfs @ 12.90 hrs, Volume= 8.365 af
Outflow = 19.59 cfs @ 13.82 hrs, Volume= 7.653 af, Atten= 51%, Lag= 54.9 min
Primary = 19.59 cfs @ 13.82 hrs, Volume= 7.653 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 18.51' @ 13.82 hrs Surf.Area= 226,604 sf Storage= 113,210 cf

Plug-Flow detention time= 114.2 min calculated for 7.621 af (91% of inflow)
Center-of-Mass det. time= 74.7 min (988.5 - 913.9)

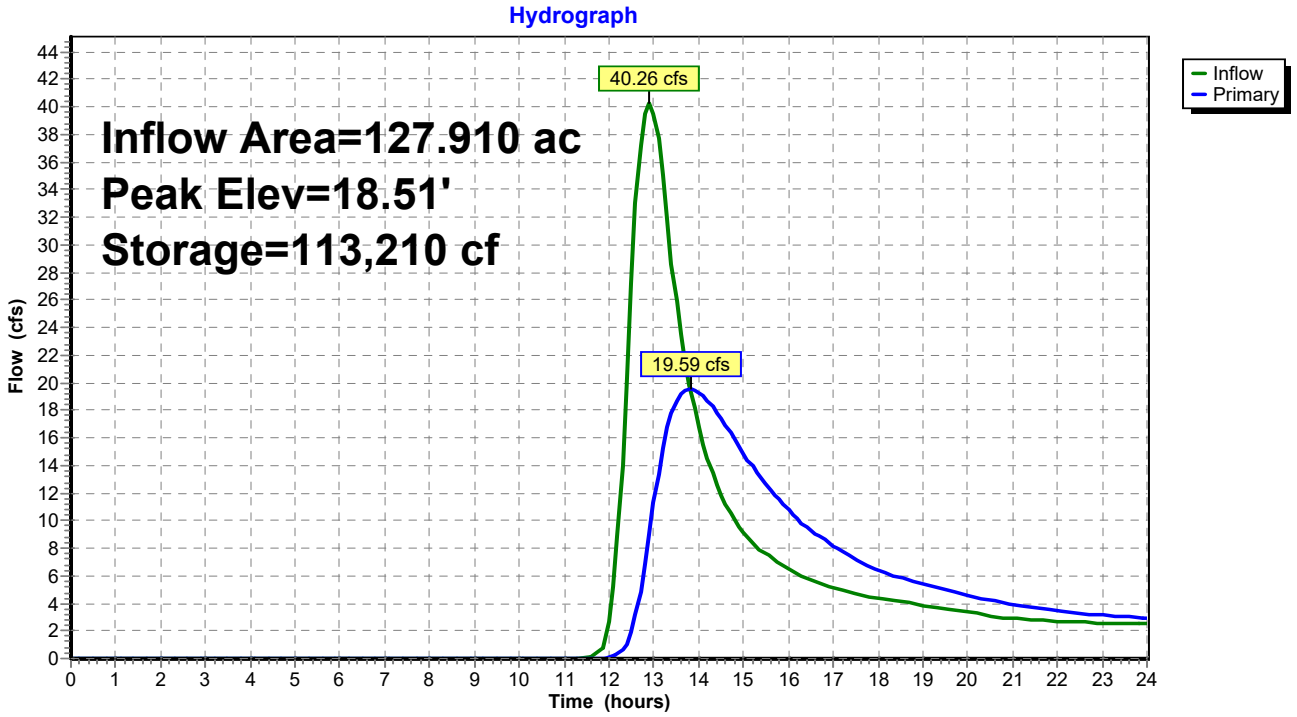
Volume	Invert	Avail.Storage	Storage Description
#1	18.00'	14,143,947 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
18.00	219,152	0	0
19.00	233,823	226,488	226,488
20.00	379,854	306,839	533,326
21.00	909,430	644,642	1,177,968
22.00	1,498,616	1,204,023	2,381,991
23.00	2,196,545	1,847,581	4,229,572
24.00	3,042,601	2,619,573	6,849,145
25.00	3,782,607	3,412,604	10,261,749
26.00	3,981,790	3,882,199	14,143,947

Device	Routing	Invert	Outlet Devices
#1	Primary	18.00'	**20.0' long x 36.0' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=19.54 cfs @ 13.82 hrs HW=18.51' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 19.54 cfs @ 1.92 fps)

Pond 7P: Wet Pond 7



Summary for Subcatchment 7S: (SDA7

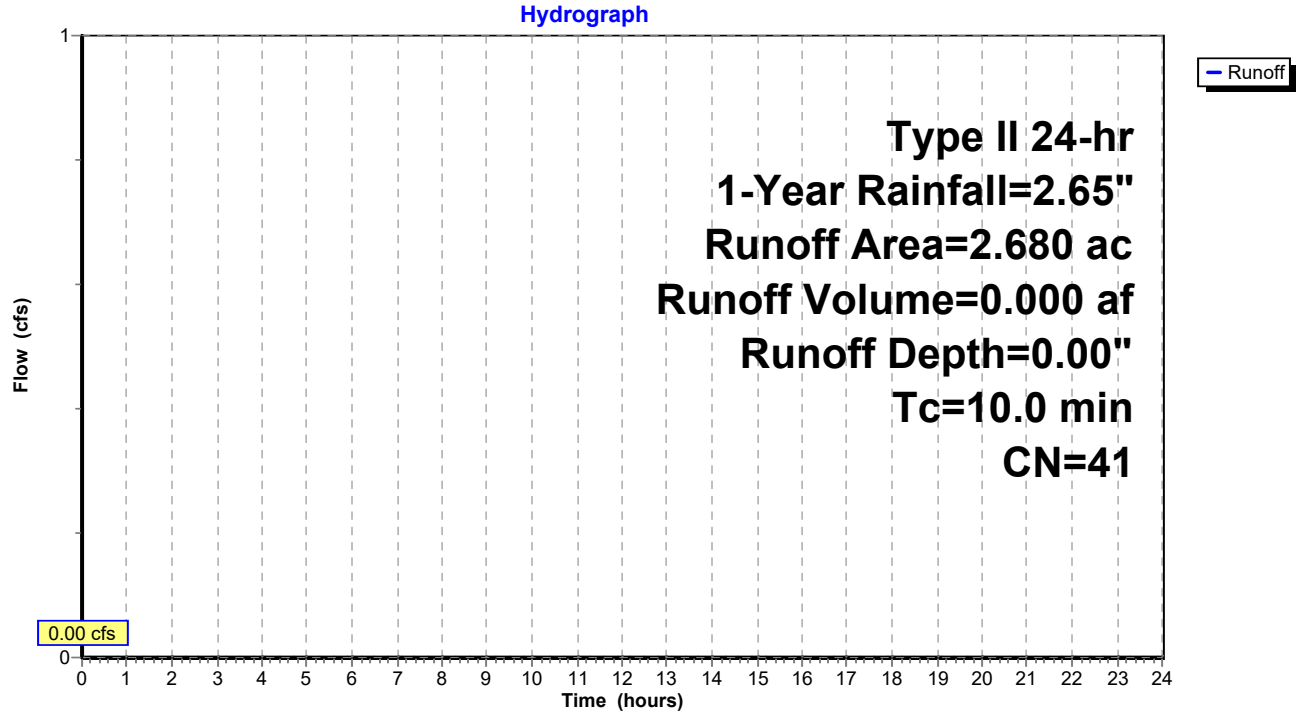
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 1-Year Rainfall=2.65"

	Area (ac)	CN	Description
*	2.680	41	See TR20 Worksheet
	2.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 7S: (SDA7



Summary for Pond 3P: Detention Basin 3

Inflow Area = 8.620 ac, 0.00% Impervious, Inflow Depth > 2.56" for 10-Year event
Inflow = 14.55 cfs @ 12.44 hrs, Volume= 1.839 af
Outflow = 4.62 cfs @ 13.17 hrs, Volume= 1.785 af, Atten= 68%, Lag= 44.1 min
Primary = 4.62 cfs @ 13.17 hrs, Volume= 1.785 af
Routed to Pond 7P : Wet Pond 7

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 25.67' @ 13.17 hrs Surf.Area= 84,556 sf Storage= 30,308 cf

Plug-Flow detention time= 101.0 min calculated for 1.785 af (97% of inflow)
Center-of-Mass det. time= 84.8 min (940.9 - 856.0)

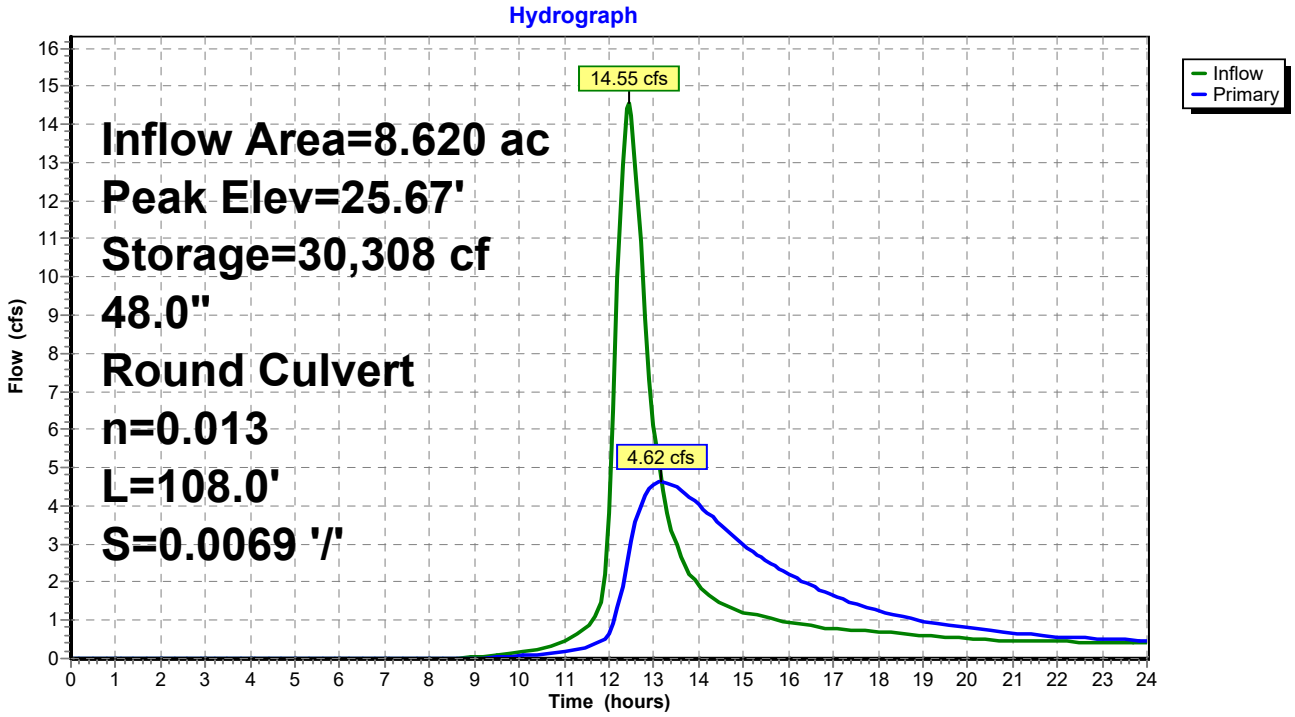
Volume	Invert	Avail.Storage	Storage Description
#1	24.90'	5,059,882 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.90	0	0	0
25.00	5,368	268	268
26.00	123,893	64,631	64,899
27.00	146,738	135,316	200,214
49.00	295,050	4,859,668	5,059,882

Device	Routing	Invert	Outlet Devices
#1	Primary	24.90'	**48.0" Round RCP_Round 48"** L= 108.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 24.90' / 24.15' S= 0.0069 '/' Cc= 0.900 n= 0.013, Flow Area= 12.57 sf

Primary OutFlow Max=4.57 cfs @ 13.17 hrs HW=25.67' (Free Discharge)
1=RCP_Round 48" (Barrel Controls 4.57 cfs @ 4.10 fps)

Pond 3P: Detention Basin 3



Summary for Subcatchment 3S: SDA3

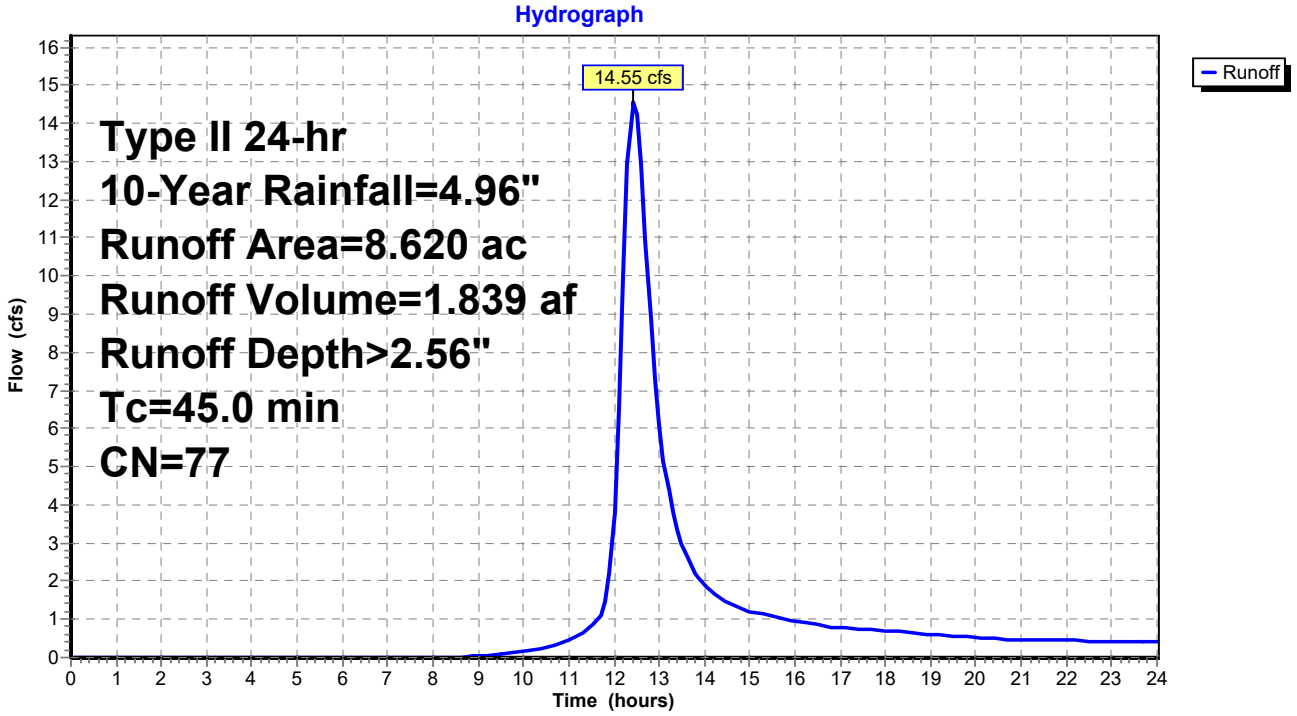
Runoff = 14.55 cfs @ 12.44 hrs, Volume= 1.839 af, Depth> 2.56"
Routed to Pond 3P : Detention Basin 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 10-Year Rainfall=4.96"

	Area (ac)	CN	Description
*	8.620	77	See TR20 Worksheet
	8.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
45.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 3S: SDA3



Summary for Subcatchment 4S: SDA4

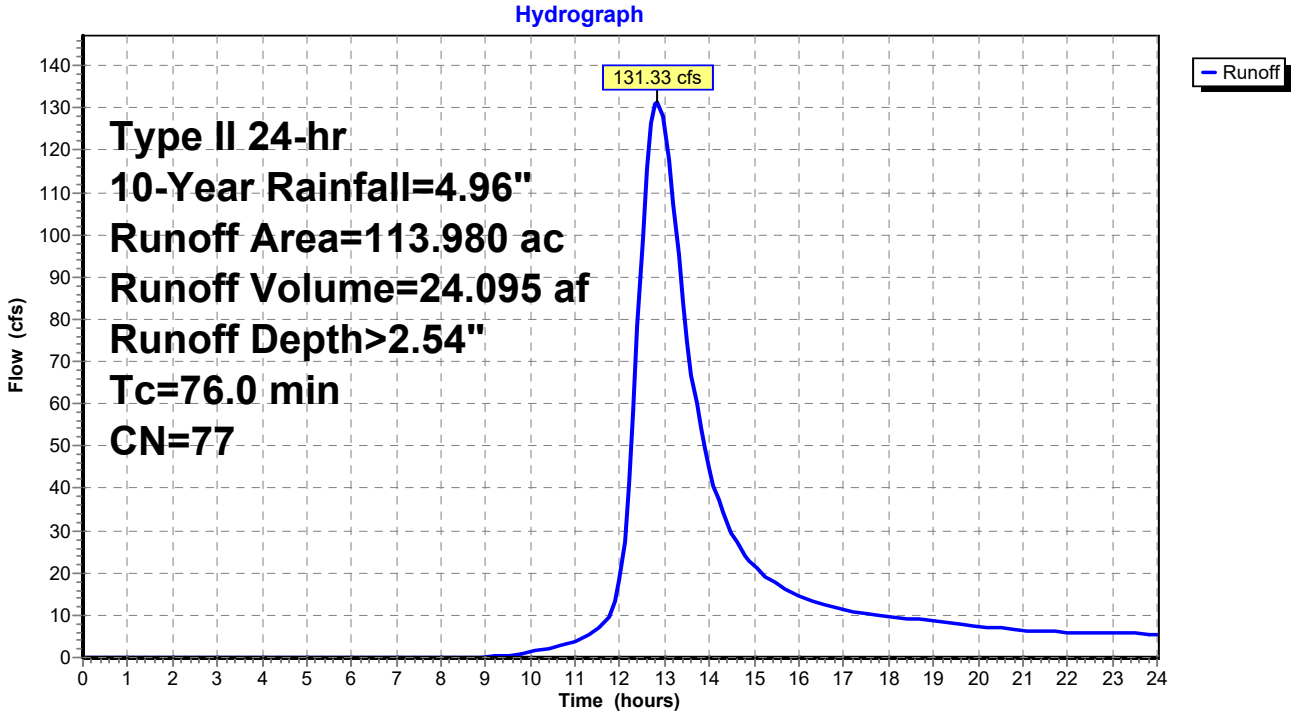
Runoff = 131.33 cfs @ 12.84 hrs, Volume= 24.095 af, Depth> 2.54"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 10-Year Rainfall=4.96"

	Area (ac)	CN	Description
*	113.980	77	See TR20 Worksheet
	113.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
76.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 4S: SDA4



Summary for Subcatchment 5S: SDA5

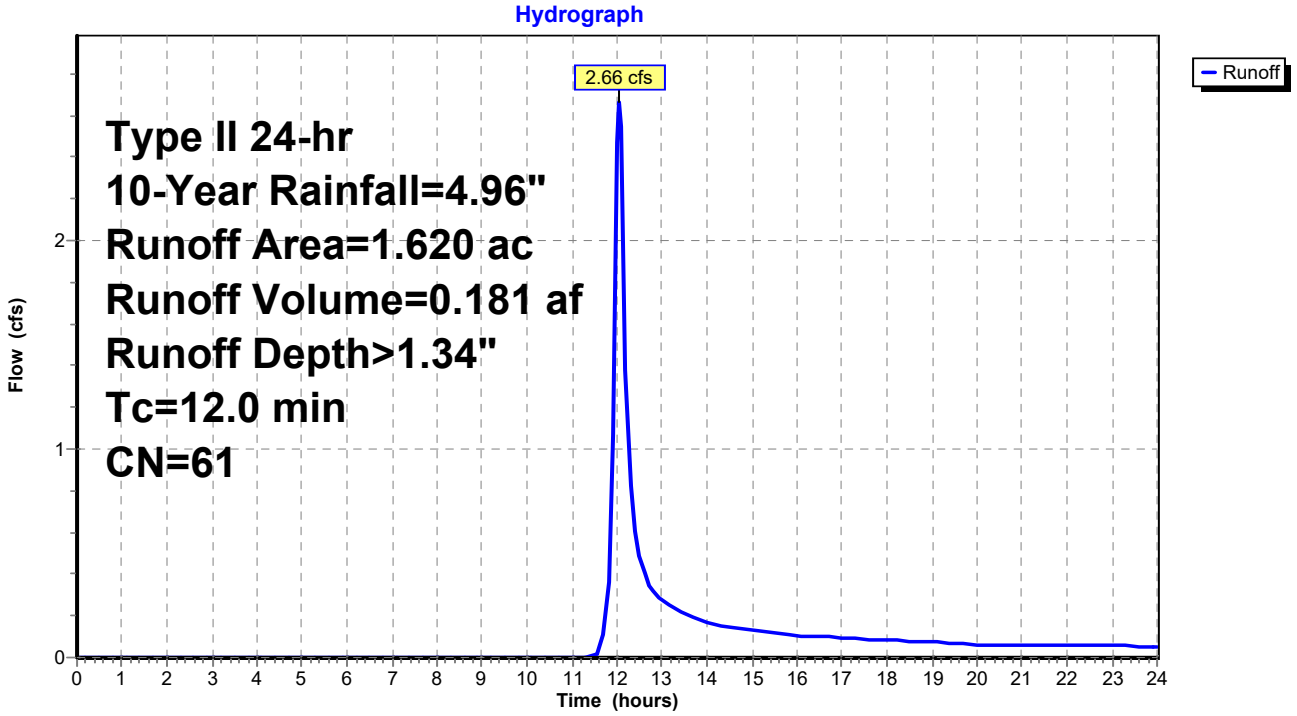
Runoff = 2.66 cfs @ 12.06 hrs, Volume= 0.181 af, Depth> 1.34"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 10-Year Rainfall=4.96"

	Area (ac)	CN	Description
*	1.620	61	See TR20 Worksheet
	1.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 5S: SDA5



Summary for Subcatchment 6S: SDA6

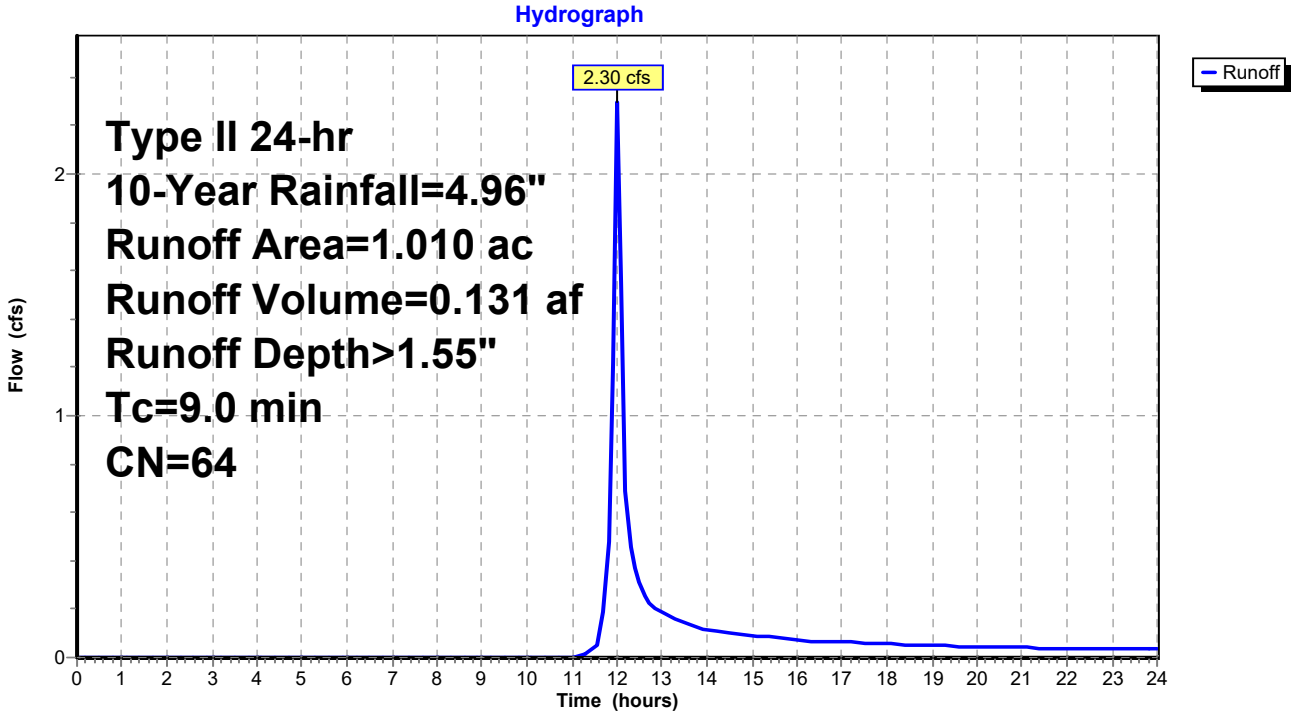
Runoff = 2.30 cfs @ 12.01 hrs, Volume= 0.131 af, Depth> 1.55"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 10-Year Rainfall=4.96"

	Area (ac)	CN	Description
*	1.010	64	See TR20 Worksheet
	1.010		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 6S: SDA6



Summary for Pond 7P: Wet Pond 7

Inflow Area = 127.910 ac, 0.00% Impervious, Inflow Depth > 2.46" for 10-Year event
Inflow = 136.33 cfs @ 12.85 hrs, Volume= 26.251 af
Outflow = 83.60 cfs @ 13.46 hrs, Volume= 24.987 af, Atten= 39%, Lag= 36.8 min
Primary = 83.60 cfs @ 13.46 hrs, Volume= 24.987 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 19.36' @ 13.46 hrs Surf.Area= 286,160 sf Storage= 319,667 cf

Plug-Flow detention time= 80.7 min calculated for 24.884 af (95% of inflow)
Center-of-Mass det. time= 56.5 min (940.3 - 883.8)

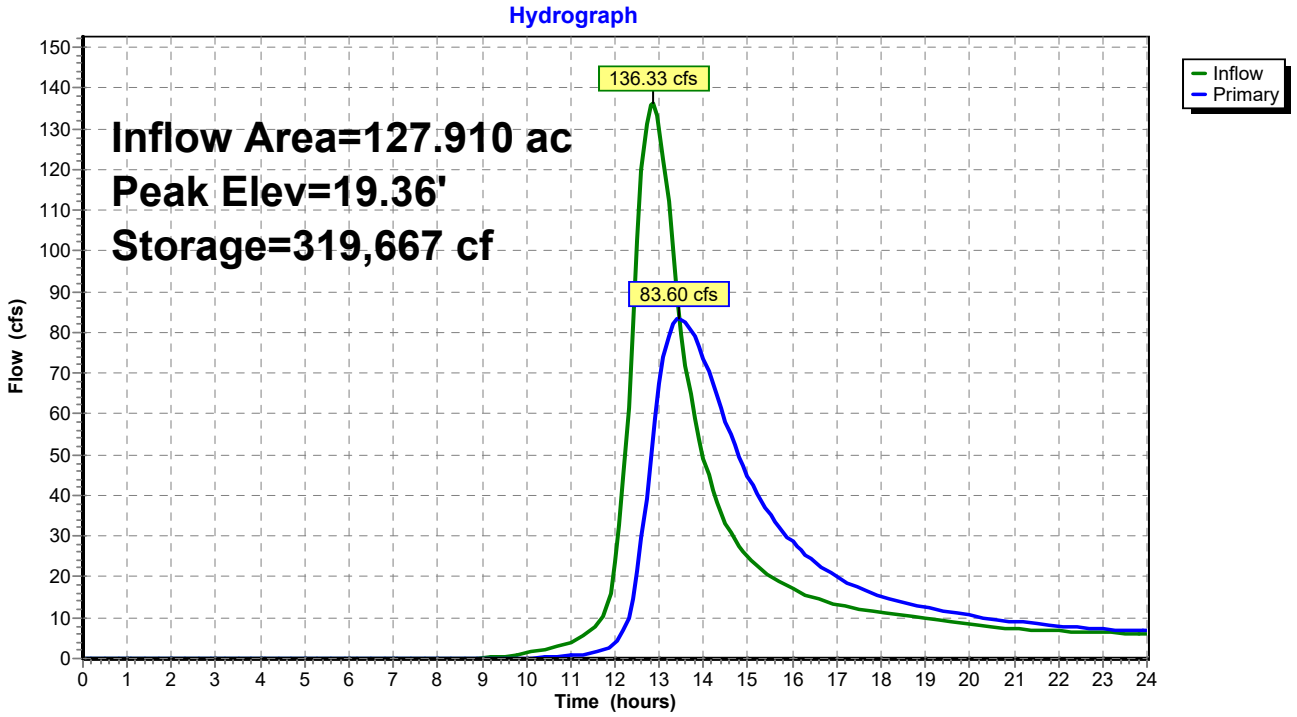
Volume	Invert	Avail.Storage	Storage Description
#1	18.00'	14,143,947 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
18.00	219,152	0	0
19.00	233,823	226,488	226,488
20.00	379,854	306,839	533,326
21.00	909,430	644,642	1,177,968
22.00	1,498,616	1,204,023	2,381,991
23.00	2,196,545	1,847,581	4,229,572
24.00	3,042,601	2,619,573	6,849,145
25.00	3,782,607	3,412,604	10,261,749
26.00	3,981,790	3,882,199	14,143,947

Device	Routing	Invert	Outlet Devices
#1	Primary	18.00'	**20.0' long x 36.0' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=83.48 cfs @ 13.46 hrs HW=19.36' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 83.48 cfs @ 3.08 fps)

Pond 7P: Wet Pond 7



Summary for Subcatchment 7S: (SDA7

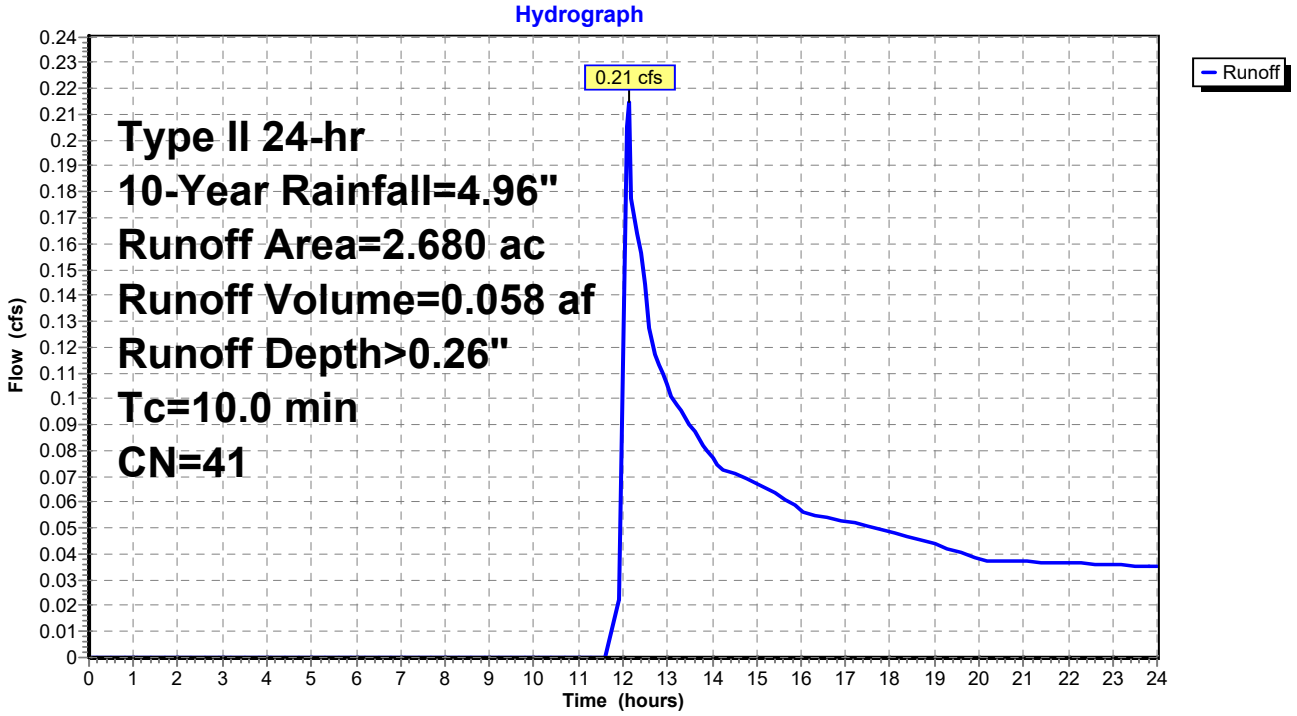
Runoff = 0.21 cfs @ 12.13 hrs, Volume= 0.058 af, Depth> 0.26"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 10-Year Rainfall=4.96"

	Area (ac)	CN	Description
*	2.680	41	See TR20 Worksheet
	2.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 7S: (SDA7



Summary for Pond 3P: Detention Basin 3

Inflow Area = 8.620 ac, 0.00% Impervious, Inflow Depth > 5.66" for 100-Year event
Inflow = 32.27 cfs @ 12.43 hrs, Volume= 4.066 af
Outflow = 9.87 cfs @ 13.15 hrs, Volume= 3.949 af, Atten= 69%, Lag= 43.7 min
Primary = 9.87 cfs @ 13.15 hrs, Volume= 3.949 af
Routed to Pond 7P : Wet Pond 7

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 26.06' @ 13.15 hrs Surf.Area= 125,202 sf Storage= 72,036 cf

Plug-Flow detention time= 109.8 min calculated for 3.933 af (97% of inflow)
Center-of-Mass det. time= 93.5 min (927.8 - 834.3)

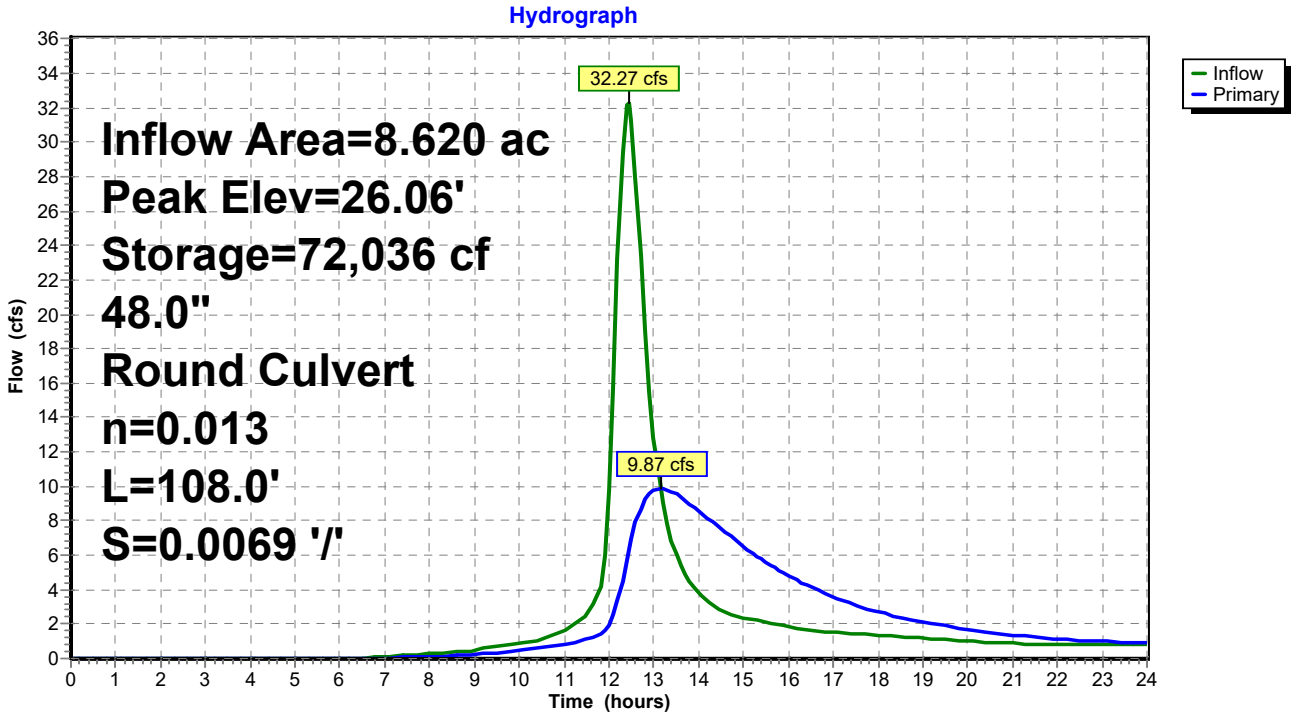
Volume	Invert	Avail.Storage	Storage Description
#1	24.90'	5,059,882 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
24.90	0	0	0
25.00	5,368	268	268
26.00	123,893	64,631	64,899
27.00	146,738	135,316	200,214
49.00	295,050	4,859,668	5,059,882

Device	Routing	Invert	Outlet Devices
#1	Primary	24.90'	**48.0" Round RCP_Round 48"** L= 108.0' RCP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 24.90' / 24.15' S= 0.0069 '/' Cc= 0.900 n= 0.013, Flow Area= 12.57 sf

Primary OutFlow Max=9.85 cfs @ 13.15 hrs HW=26.06' (Free Discharge)
1=RCP_Round 48" (Barrel Controls 9.85 cfs @ 4.90 fps)

Pond 3P: Detention Basin 3



Summary for Subcatchment 3S: SDA3

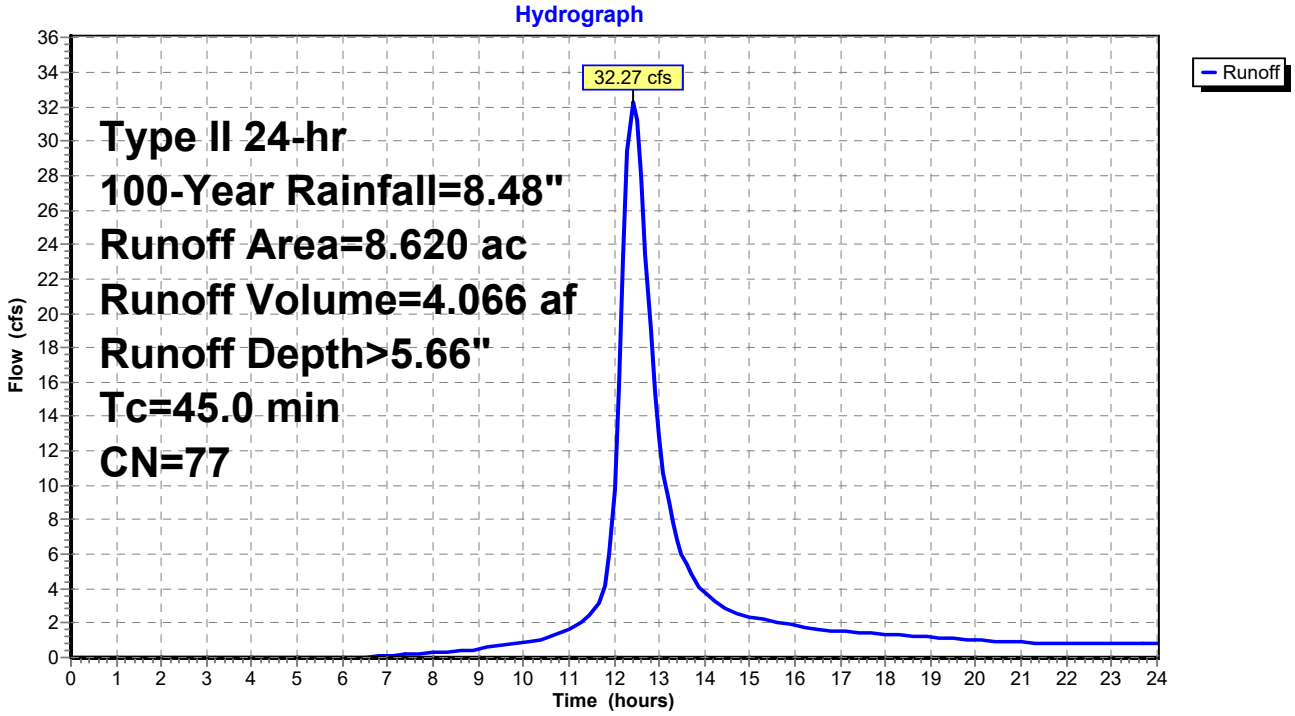
Runoff = 32.27 cfs @ 12.43 hrs, Volume= 4.066 af, Depth> 5.66"
Routed to Pond 3P : Detention Basin 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 100-Year Rainfall=8.48"

	Area (ac)	CN	Description
*	8.620	77	See TR20 Worksheet
	8.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
45.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 3S: SDA3



Summary for Subcatchment 4S: SDA4

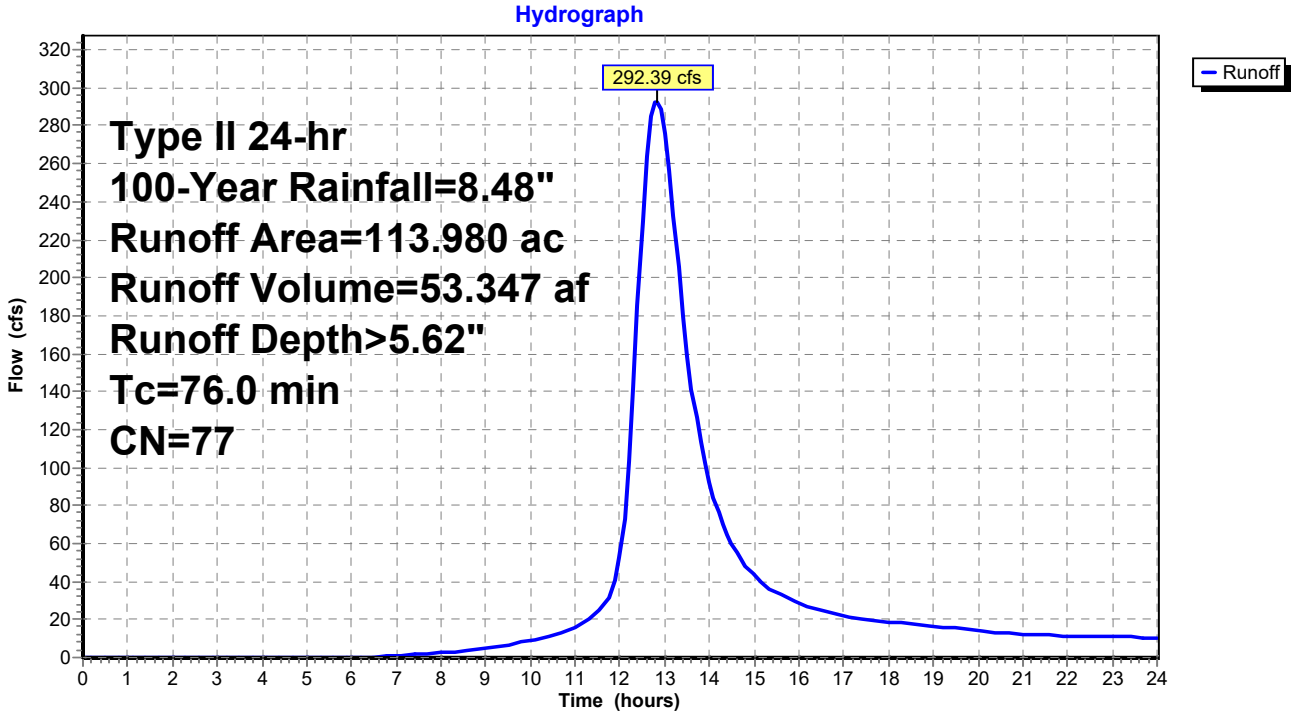
Runoff = 292.39 cfs @ 12.82 hrs, Volume= 53.347 af, Depth> 5.62"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 100-Year Rainfall=8.48"

	Area (ac)	CN	Description
*	113.980	77	See TR20 Worksheet
	113.980		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
76.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 4S: SDA4



Summary for Subcatchment 5S: SDA5

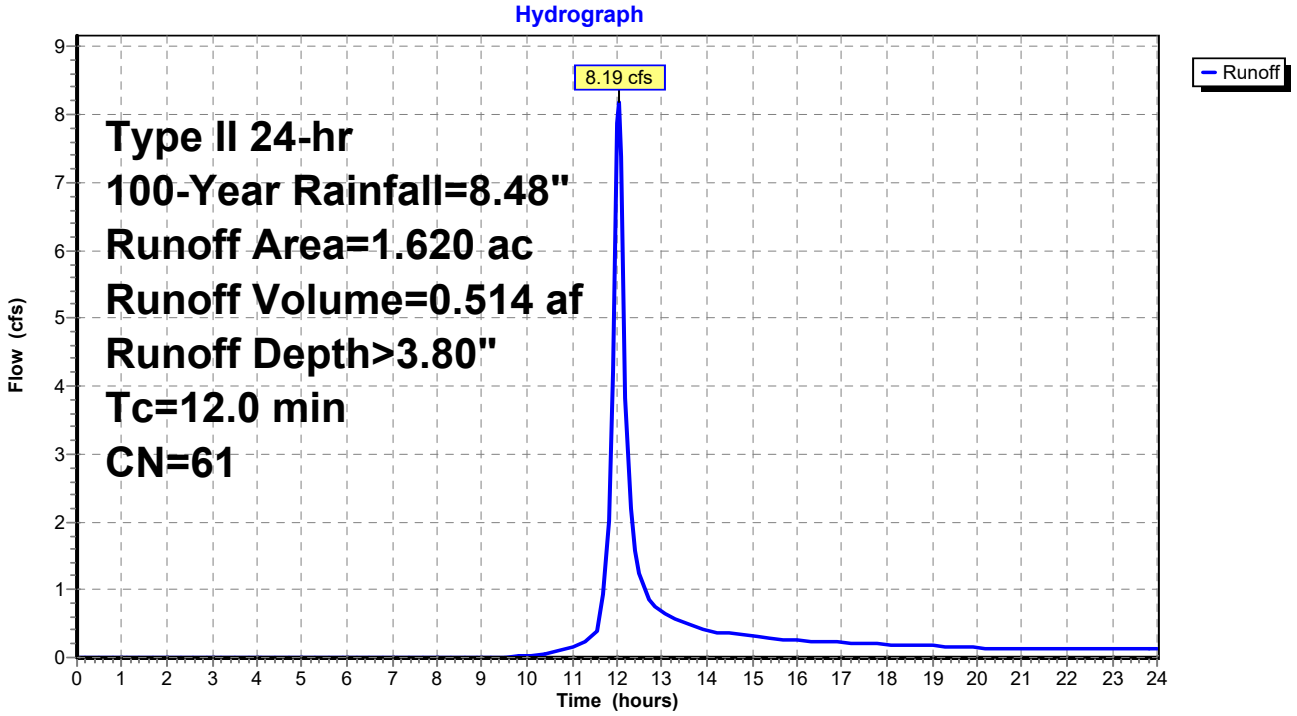
Runoff = 8.19 cfs @ 12.04 hrs, Volume= 0.514 af, Depth> 3.80"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 100-Year Rainfall=8.48"

	Area (ac)	CN	Description
*	1.620	61	See TR20 Worksheet
	1.620		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 5S: SDA5



Summary for Subcatchment 6S: SDA6

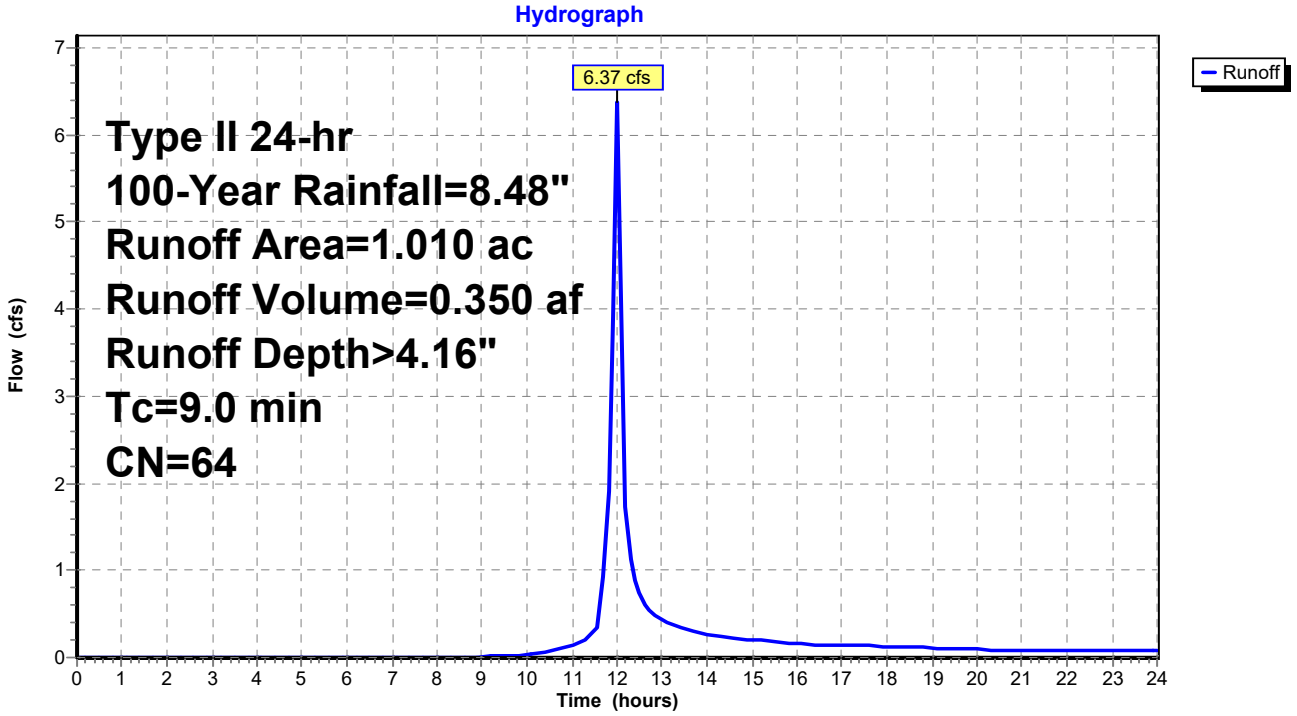
Runoff = 6.37 cfs @ 12.00 hrs, Volume= 0.350 af, Depth> 4.16"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 100-Year Rainfall=8.48"

	Area (ac)	CN	Description
*	1.010	64	See TR20 Worksheet
	1.010		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 6S: SDA6



Summary for Pond 7P: Wet Pond 7

Inflow Area = 127.910 ac, 0.00% Impervious, Inflow Depth > 5.49" for 100-Year event
Inflow = 303.60 cfs @ 12.82 hrs, Volume= 58.509 af
Outflow = 186.38 cfs @ 13.43 hrs, Volume= 56.585 af, Atten= 39%, Lag= 36.2 min
Primary = 186.38 cfs @ 13.43 hrs, Volume= 56.585 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Peak Elev= 20.32' @ 13.43 hrs Surf.Area= 551,552 sf Storage= 684,315 cf

Plug-Flow detention time= 69.5 min calculated for 56.351 af (96% of inflow)
Center-of-Mass det. time= 52.1 min (915.0 - 862.9)

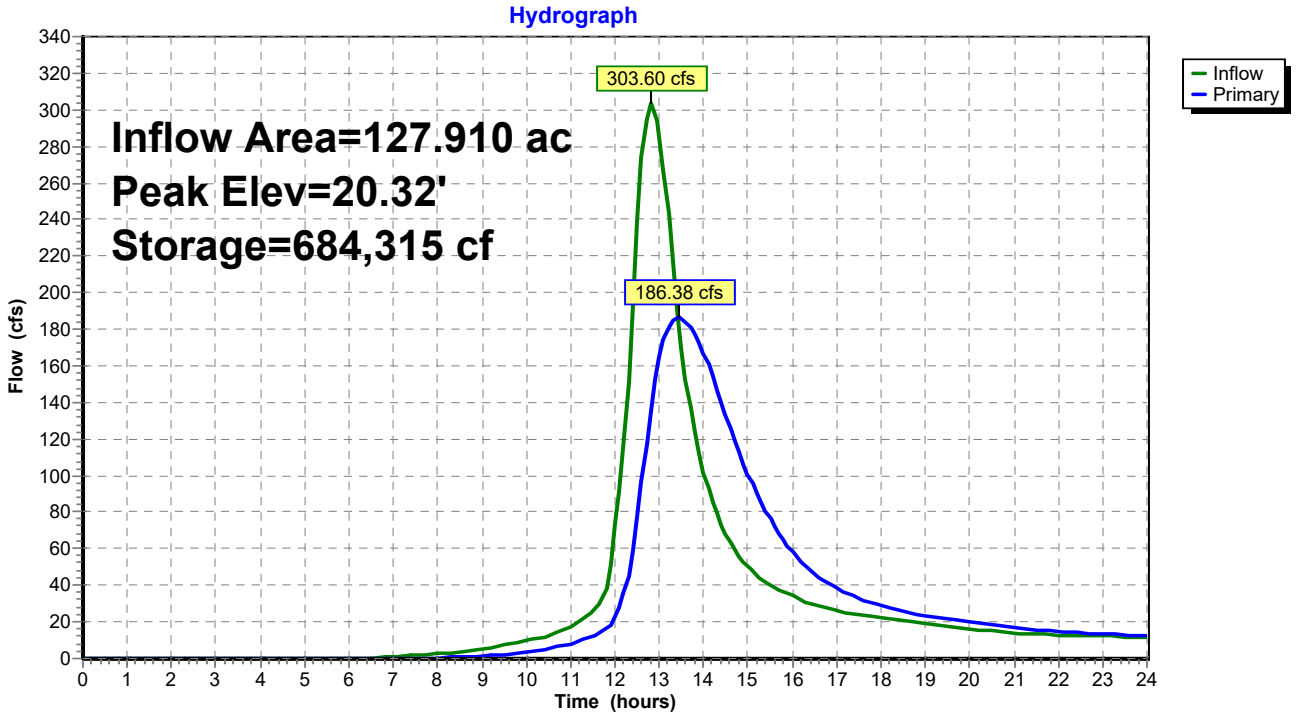
Volume	Invert	Avail.Storage	Storage Description
#1	18.00'	14,143,947 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
18.00	219,152	0	0
19.00	233,823	226,488	226,488
20.00	379,854	306,839	533,326
21.00	909,430	644,642	1,177,968
22.00	1,498,616	1,204,023	2,381,991
23.00	2,196,545	1,847,581	4,229,572
24.00	3,042,601	2,619,573	6,849,145
25.00	3,782,607	3,412,604	10,261,749
26.00	3,981,790	3,882,199	14,143,947

Device	Routing	Invert	Outlet Devices
#1	Primary	18.00'	**20.0' long x 36.0' breadth Broad-Crested Rectangular Weir**
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60
			Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=186.20 cfs @ 13.43 hrs HW=20.32' (Free Discharge)
1=Broad-Crested Rectangular Weir (Weir Controls 186.20 cfs @ 4.01 fps)

Pond 7P: Wet Pond 7



Summary for Subcatchment 7S: (SDA7

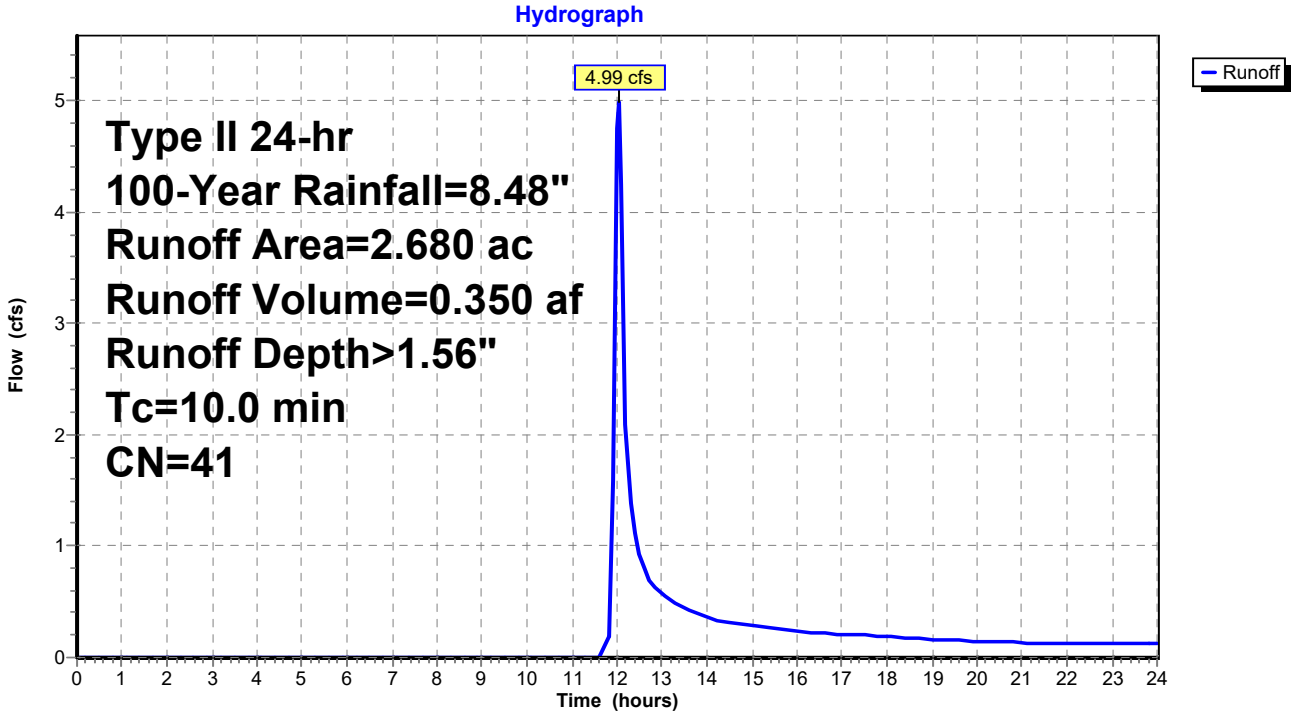
Runoff = 4.99 cfs @ 12.04 hrs, Volume= 0.350 af, Depth> 1.56"
Routed to Pond 7P : Wet Pond 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.10 hrs
Type II 24-hr 100-Year Rainfall=8.48"

	Area (ac)	CN	Description
*	2.680	41	See TR20 Worksheet
	2.680		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry, See TR20 Worksheet**

Subcatchment 7S: (SDA7



Events for Pond 3P: Detention Basin 3

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
1-Year	4.30	1.46	25.32	7,890
10-Year	14.55	4.62	25.67	30,308
100-Year	**32.27**	**9.87**	**26.06**	**72,036**

Events for Subcatchment 3S: SDA3

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.65	4.30	0.592	0.82
10-Year	4.96	14.55	1.839	2.56
100-Year	**8.48**	**32.27**	**4.066**	**5.66**

Events for Subcatchment 4S: SDA4

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.65	38.78	7.733	0.81
10-Year	4.96	131.33	24.095	2.54
100-Year	**8.48**	**292.39**	**53.347**	**5.62**

Events for Subcatchment 5S: SDA5

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.65	0.27	0.033	0.24
10-Year	4.96	2.66	0.181	1.34
100-Year	**8.48**	**8.19**	**0.514**	**3.80**

Events for Subcatchment 6S: SDA6

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.65	0.32	0.027	0.32
10-Year	4.96	2.30	0.131	1.55
100-Year	**8.48**	**6.37**	**0.350**	**4.16**

Events for Pond 7P: Wet Pond 7

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
1-Year	40.26	19.59	18.51	113,210
10-Year	136.33	83.60	19.36	319,667
100-Year	**303.60**	**186.38**	**20.32**	**684,315**

Events for Subcatchment 7S: (SDA7

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-Year	2.65	0.00	0.000	0.00
10-Year	4.96	0.21	0.058	0.26
100-Year	**8.48**	**4.99**	**0.350**	**1.56**

AGENDA: May 12, 2025 Regular Meeting

ITEM #7:

Consideration of ZA24-02, Data Centers and Solar Facilities

ACTION:

No action is required on ZA24-02 at this time. When the Board is ready to take action, however, the motions for the available options are as follows:

Option 1: A motion to approve ZA24-02 as presented by staff and recommended by the Planning Commission.

Option 2: A motion to approve ZA24-02 to add Computer and Data Processing Center and Services as a conditional use in the Agricultural zoning district with no amendment relating to Energy Generation Facility (by natural resources only), which will remain in the Zoning Ordinance only as a conditional use in the Industrial zoning district.

Option 3: A motion to approve ZA24-02 to add Energy Generation Facility (by natural resources only) as a conditional use in the Agricultural zoning district with no amendment relating to Computer and Data Processing Center and Services, which will remain in the Zoning Ordinance as a by right use in the General Business, General Business 1 and General Business 2 zoning districts only.

Option 4: A motion to deny ZA24-02.

ATTACHMENTS:

- None

AGENDA: May 12, 2025 Regular Meeting

ITEM #8:

Quarterly Reports

ACTION REQUESTED:

The Board will receive from the following Department Heads and Agencies:

- Health Department
- Social Services
- School Division
- Community Development
- Cooperative Extension
- Registrar

ATTACHMENTS:

None

AGENDA: May 12, 2025 Regular Meeting

ITEM #9:

Adopt Calendar Year 2025 Tax Rates

ACTION REQUESTED:

The Board held a public hearing on the calendar year 2025 tax rates at their April 28, 2025 meeting. The Board cannot adopt the tax rate for at least 7 days following the hearing.
The Board needs to adopt the resolution setting the tax rates for 2025 as part of the annual budget process. The attached resolution sets the real estate tax rate at .52/$100 value which is a .02 increase.

ATTACHMENTS:

- Draft Resolution

King and Queen County
Founded 1691 in Virginia

KING AND QUEEN COUNTY BOARD OF SUPERVISORS
RESOLUTION SETTING THE TAX RATES FOR
CALENDAR YEAR 2025

WHEREAS, the King and Queen County Board of Supervisors held a public hearing on April 28, 2025 to consider the appropriate tax levy on real estate, personal property, machinery and tools, merchant's capital, manufactured homes, farm machinery, and public service corporations for calendar year 2025; and

WHEREAS, the Board of Supervisors received comments from the citizens of King and Queen County; and

NOW, THEREFORE, IT IS RESOLVED THIS 12th DAY OF MAY, 2025, that the King and Queen County Board of Supervisors, finding it necessary in order to maintain operations and meet the fiscal obligations of the County, does approve the following tax rates for the calendar year 2025:

Per $100 of Assessed Value

Real Estate:	$0.52
Personal Property:	$3.94
Aircraft	$1.58
Machinery and Tools:	$1.10
Merchant's Capital:	$0.65
Manufactured Homes:	$0.52
Farm Machinery:	$1.10
Public Service Corporations:	$0.52.

BE IT FURTHER RESOLVED that the PPTRA rate for calendar year 2025 is set at 39% that will be applied as a credit for qualifying vehicles.

AYE:
NAY:
ABSTAIN:
ABSENT:

_____
Vivian R. Seay, Clerk

AGENDA: May 12, 2025 Regular Meeting

ITEM #10:

Adopt FY26 Budget

ACTION REQUESTED:

The Board held a public hearing on the FY2026 Budget at their April 28, 2025 meeting. The Board cannot adopt the tax rate for at least 7 days following the hearing.
The Board needs to adopt a resolution to approve and appropriate the FY2026 budget.

ATTACHMENTS:

- None

AGENDA: May 12, 2025 Regular Meeting

ITEM #11:

Appointments and Reappointments

ACTION REQUESTED:

Staff is not aware of any terms expiring but listed below are terms that will expire soon.

Board of Zoning Appeals – Robert Bland's term expires July 13, 2025 – staff has reached out to Mr. Bland, and he is willing to serve if recommended for reappointment.

CPMT Private Provider Representative –Thrive is closing the CARE Center on June 30t. Since we have been advised that Karen Forde will no longer be an employee of Thrive, a replacement will need to be found. CPMT is aware and will begin looking for a recommendation for replacement.

ATTACHMENTS:

- None

AGENDA: May 12, 2025 Regular Meeting

ITEM #12:

County Administrator's Comments

ACTION REQUESTED:

None

ATTACHMENTS:

- None

AGENDA: May 12, 2025 Regular Meeting

ITEM #13:

Board of Supervisors Comments

ACTION REQUESTED:

None

ATTACHMENTS:

- None

AGENDA: May 12, 2025 Regular Meeting

ITEM #14:

Adjourn Meeting

ACTION REQUESTED:

A motion is needed to adjourn to the Monday, June 9, 2025 regular monthly meeting at 7:00 p.m., 242 Allens Circle, First Floor Courtroom

ATTACHMENTS:

- None