April 15, 2026

To: Cranston Planning Commission
From: Brent Wiegand, Land Use Professional

Re: Vaughn Lane Subdivision. Plat 30 lots 4, 83, 84, 85, &258

Brent Wiegand
LAND USE COMPANY
PROFESSIONAL CONSULTING

Introduction:

The residents surrounding the Vaughn Lane subdivision have major concerns about the development as proposed. I have identified several issues within this report that I believe must be addressed before the approval of a development on this site. I have completed a thorough analysis of the proposed development and have identified ways to improve upon this development, to benefit the City and future residents of this proposed development while highlighting ways to safeguard the existing community.

Floodplain:

The intersection of Vaugh Lane and Main Street is encompassed by a floodplain identified on FEMA FIRM[1] panel number 44007C0406H with an effective date of October 2, 2015. In this FIRM map the floodplain is identified as a shaded "X Zone" having a .2% annual Chance of Flood Hazard Area or 1% annual chance of flood with average depth less than one foot or with drainage areas of less than one square mile. To put this into perspective, the highest annual chance of flooding is 1% in the most restrictive flood zones.

Source: Cranston GIS

According to the National Institute for Occupational Safety and Health, as little as 6 inches of water is able to carry a car away, thus rendering this access unusable during flooding events.

Cranston Planning Staff noted in the staff report that "Staff contacted RIDOT and requested information on flooding at this intersection. RIDOT has no reports regarding flooding at this intersection. However, local residents have sent videos and have given comment during the proceedings of an application from 2025 that "flash flooding does occur on Main Street." Intensifying the use of a road where there is evidence of natural hazards hindering its operation is not in line with the intent of the comprehensive plan and would be creating a more hazardous situation.

Soils:

The soils on this property are comprised of mostly Ablation till and Lodgment till, which are characterized by mixtures of large stone, steep slope and areas of bedrock, according to the National Geologic survey. With these topographic geologic conditions on the property, removal of ledge may be required to construct the foundations and roads. Ledge and bedrock are a firm geological foundation that do not absorb impact but instead radiate the impact vibrations further than typical soils. Neighboring residents have previously testified about the vibrations that they experience in their homes under normal conditions, indicating a significant risk of damage to private properties if the developer's work were to proceed without proper precautions. **I would emphasize the need for a geologic study to be performed before Preliminary Plan** to identify the exact locations of these firm substrates. If there are subsurface conditions that require blasting, I would encourage the developer to redesign the plan to avoid these subsurface elements to minimize the potential for harmful vibrations. Topographic conditions on the property require grading in areas and the relocation of soils around the property. The development should be prohibited from exporting these soils from the property. Importing of soils has historically led to the introduction of hazardous

[1] Flood Insurance Rating Map.

waste into the environment causing ecological and health safety disasters. The Cranston Planning Commission should take precautionary measures and condition any approval on the testing of all fill introduced to the site to confirm there will be no environmental impact from the composition of those soils.

Circulation:

The width of Vaughn Lane is roughly 12-13 feet as it exists. A standard 2-way traffic pattern is 24 feet wide. Your average car is roughly 6 feet wide without the mirrors. This leaves 2 feet for mirrors, the swing radius through the "S" curve, and room for driver error. Vaughn lane Should not be utilized as it is making a bad situation worse. Widening of Vaughn Lane poses more harm than good. If it is utilized and widened it would cause destruction of properties to exacerbate a hazardous situation.

Vaughn Lane has essentially an "S" curve to enter the subject property. The location of these curves within roughly 200 feet of each other poses a traffic safety hazard. For 6 properties the potential for conflict is minimal, however introducing an average of 2 cars per house for forty-four additional houses would significantly increase the potential for traffic accidents. Simply put Vaughn Lane was not designed to be an access road for a 50 lot residential subdivision. It appears Vaugh Lane was initially designed as an access driveway for the houses on lots 162, 230, and 259. Widening of this road would not resolve the dangerous "S" curve with associated line of sight issues, at the entrance of the subdivision.

This property is bordered by Main Street to the West and Lippitt Avenue to the east with access points available to the applicant on either side.[2] If a secondary access point is deemed necessary, development of both of them within roughly 1,000 feet of one another would not be conducive to circulation. The two access points within hundreds of feet from one another will funnel all traffic for this development on to Main Street, traveling through Fiskeville, a previously quiet historic village. Increasing the intensity of the circulation system of the small mill village may prove detrimental to its character. The access points and capacity of Main Street have not been reviewed at this point and **should have a traffic study performed before approval of Preliminary Plan**.

In combination, the "S" curve with the roughly 12-13-foot roadway width is a hazardous preexisting condition. Intensifying this hazardous condition would be in direct conflict with the Comprehensive Plan, Land Development Regulations, and Zoning Ordinance, which all promote the general welfare and safety.

Frank Corrao and Mark Brum, the City Engineers for Cranston Department of Public Works provided the following comments

> *"If Low impact design standards are proposed the applicant shall provide paved roadway widths of at least 24 feet due to the density of the subdivision"*

The City engineers do not believe this plan is adequate for the density of this subdivision and constructing the road to standard in that location would require the demolition of private structures and historic stone walls when alternative routes are available.

As of April 2nd, Steven Mulcahy, of the Cranston Traffic Safety Division has not commented on the project. This would be a critical opinion to get before the approval of this project as there are known safety concerns with the design of the traffic circulation on this site.

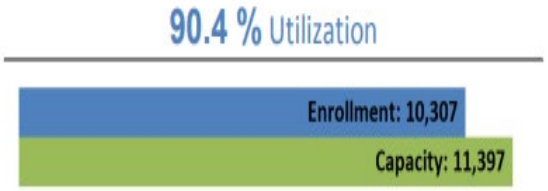
A traffic study is critical to the success of this development as it would indicate if Vaughn Lane would provide safe passage or if the neighborhood would even require 2 entrances. Creating excessive impervious surfaces and roadways to maintain may not be needed, and to approve this project without confirmation of that would be irresponsible as the tax payers would have to pay the maintenance bill. The City should require a **peer reviewed traffic study**, at the cost of the developer, to confirm if the Vaughn Lane design would pose a hazard to the public or if it is even necessary for a development this size. I believe this step should be taken before vesting the 44-unit density at masterplan because this decides if there is a reasonable access to create the frontages of the 44 individual lots in the subdivision. At this point in time it is unknown if the proposed circulation pattern is able to safely accommodate the density proposed, or if it would be excessive impervious surface at a detriment to the environment. If this proposal makes it to preliminary stage without a safe entry road, the developer could be vested in the density proposed without guaranteed functional access – a problem that we should seek to avoid.

[2] The developer has publicly stated to the neighbors that access could be obtained through 201 Lippitt Avenue.

Phasing:

In order to ensure the City has adequate infrastructure in place to service this new development, the Land Development Regulations permit the Planning Commission to require phasing of projects. In the most recent capital improvement budget there is a proposed line item for 17.5 million dollars to construct a new Western Cranston Fire station. This fact shows that the existing development is already a large enough burden on the fire department that they require a new station before the approval of this development.

The Land Development Regulations require the Planning Commission to review the adequacy of the public amenities and infrastructure. The following passage from the Cranston Land Development Regulations grants the commission authority to require a full review in order to confirm the City is able to provide adequate service for the new 44 units being put on the tax roll.



"When a Major Subdivision or Major Land Development Project is submitted for Master Plan approval, the City Plan Commission shall review the adequacy of existing and projected future public improvements, services, and facilities which may be impacted by the proposed development in its entirety. If the City Planning Commission determines that such improvements, services and facilities, including but not limited to water supply, sewerage, streets and associated drainage facilities, schools, recreational facilities, and fire and police protection will not be adequate to serve the residents of the subdivision or development at the time of recording of the plan, the City Plan Commission shall have the authority to establish a rate of development of the entire subdivision by requiring it to [be] brought for final approval in phases." (underline added).

According to the US Census Cranston households are an average of 2.44 people. Using this average, we can assume roughly half of these units will introduce children into the school system. 22 students would equate to one full additional classroom of students. This level of increase is significant in the context of existing capacity constraints. The Cranston school system is already operating at approximately 90.4% utilization, according to the most recent LEA summary, a figure derived from the ratio of current enrollment to available capacity. At this level, even modest increases in student population place measurable pressure on classroom space, staffing allocation, and program resources. The addition of an estimated full classroom of students would therefore further exacerbate an already constrained system and should be carefully weighed in the Planning Commission's determination of infrastructure adequacy and the appropriate rate of development.

Infrastructure:

The closest sewers are on Vaughn Lane according to the City sewer map (pictured on the right). A sewer availability letter was submitted stating there was adequate service capacity at the West Warwick Sewer. While this addresses the treatment plant's ability to treat the additional capacity it does not confirm the existing sewer main's ability to handle the additional flow of sewage to the plant. No plans have been reviewed by the Sewer Authority as of April 2, 2026. This will need to be confirmed before Preliminary plan approval.

A water availability letter was submitted stating they are able to make a connection, but at this point there does not appear to be a plan on how they will be making the connection or if they are planning to make a connection at all or drill wells. The Providence water supply map (right) shows the closest water line on Whispering Pines drive off of Phenix Avenue to the west. It may not be possible to connect to the waterline and a well may be necessary to service these houses.

Land Development and Subdivision Regulations:

While this project does not meet the threshold for a required Impact Assessment (15 disturbed acres of development), this property contains 15 acres of land in total which has the potential to be impacted by the development We would encourage the City of Cranston to request **an impact assessment** for this major land development.

The intent of the land development regulations lists the following outcomes for the developments within the City. Several of these items speak directly against creating hazardous traffic patterns

Intent

The intent of these Regulations is to:

1. promote the public health, safety, and general welfare;
2. prevent overcrowding of land;
3. prevent development of unsanitary areas for housing purposes;
4. secure a well-articulated street and highway system;
5. promote coordinated development of unbuilt areas;
6. secure the appropriate allotment of land in new developments for all the requirements of community life;
7. conserve natural beauty and other natural resources;
8. conform to the Comprehensive Plan; and
9. facilitate the adequate, efficient, and economic provision of transportation, water supply, sewerage, recreation, and other public utilities and requisites.

The Land development regulations permit the Commission to request an impact statement in the following paragraph:

Impact Assessment-

For any subdivision or land development project not meeting the criteria above, the Subdivision & Land Development Regulations Section III – General Provisions Page 26 of 123 Page 26 of 123 City Plan Commission may require an Impact Assessment if it is determined that there is a reasonable expectation that a proposed subdivision or land development project will have a significant negative impact on a site or nearby properties, or on the built or natural environment. Said determination shall be made prior to any initial public meeting or hearing.

Considering the request for a new Western Cranston Fire Station and the layoffs currently occurring throughout the City due to the deficit recently announced, it is appropriate to request an impact statement for a major subdivision of this magnitude in order to ensure the city is able to service a sizable increase in population in this historically under-developed and under-serviced part of the city.

Comprehensive Plan:

The Cranston Comprehensive Plan emphasizes the need to address the increasing severity of storms due to climate change. The floodplain engulfing the intersection at Vaughn and Main is an existing hazardous situation for the residents on Vaughn Lane. The Comprehensive Plan states that the flooding situation will only get worse over time due to climate change. This point can be summarized by the following sections taken from the Cranston Comprehensive Plan:

> **Section 12.1-12.1 Introduction**
> *Natural hazards are environmental phenomena that have the potential to impact societies and the human environment (FEMA, 2024). These events are referred to as natural disasters, and they have intensified and become more frequent because of climate change. Climate-related events often refer to natural hazards and disasters that are becoming more prevalent, frequent, severe, or erratic, because of global warming. Current hazard mitigation efforts are aimed at protecting the City's resources, property, infrastructure, and general welfare from future disasters. This element of the comprehensive plan addresses Cranston's management of natural hazards and mitigation of climate change impacts.*
>
> ***12.2 Ways the City Can Prepare for Climate Change***
> *Climate mitigation, climate adaptation, and climate resilience are three approaches for addressing climate change impacts.*
>
> *Climate change mitigation refers to activities that help reduce the impacts of climate change by reducing carbon emissions, creating renewable energy sources, storing carbon, and supporting energy efficiency. See Chapter 9, Energy, for additional information on climate change mitigation.*
> *Climate adaptation refers to actions that can be taken to adjust and evolve the way we live, build, and operate to sustain a safe and productive quality of life despite climate change.*
>
> *Climate resilience refers to the ability of the community to prepare, respond, and recover from climate impacts and climate-related events.*
>
> *Climate resilience is a newer state-wide initiative in Rhode Island. The first comprehensive climate preparedness strategy, Resilient Rhody, was released in July 2018. This strategy identifies critical actions for state agencies, municipalities, and statewide organizations to take in the face of climate change.*
>
> *How the City currently responds to natural hazards will have to be adapted as events become more frequent and severe. This element of the Plan addresses Cranston's management of natural hazards and climate change under the following categories:*
>
> *Existing conditions including current threats from natural hazards and potential impacts caused by climate change (Section 12.3).*
>
> *Current measures (Section 12.4).*
>
> These are the City's priorities when considering how natural hazards and climate change influence decision making, based on the concerns and preferences of residents and stakeholders.

Zoning:

The Cranston Zoning Ordinance has several sections that speak against having an access to a neighborhood within a flood plain. Specifically, section 17.16 Special Flood Hazards Districts. This location is by no means acceptable when opportunity exists for more optimal alternatives or possibly no need for secondary access, if a traffic study indicates it is not necessary. There are examples within the City of Cranston of larger neighborhoods accessed by a single road, specifically Twin Birch Drive which is the only access point for 59 residential homes and Apple House Drive which exclusively accessed 63 residences. Of all the possible access points along Lippitt and south of Arkwright along Main Street, Vaughn appears to be the least ideal as far as safety and circulation is concerned.

§ 17.16.020 Purpose.

The purpose of this chapter is to promote the public health, safety, and general welfare; minimize property damage; encourage sound construction practices; minimize future damage and protect water supply; and promote sanitary sewage disposal and natural drainage. The requirements of this chapter are designed to:

A. Protect human life and health;

B. Prevent development from increasing flood hazards;

C. Protect new structures and substantial improvements to structures from flood damage;

D. Minimize expenditure of public funds for flood control projects;

E. Minimize the need for rescue and relief efforts associated with flooding;

If an emergency response vehicle cannot navigate the intersection at Vaughn and Main during a flooding event to access the 50 properties being proposed for Vaugh Lane, approval of this project would not only be against the Comprehensive Plan but also against the intent of the special flood hazard ordinance. Any emergency that takes place in the proposed neighborhood during a flooding event could require rescue relief efforts associated with flooding in direct conflict with section17.16.02A, B and E. While this is not within the AE flood zone itself, it is within the shaded X zone, which as stated above is susceptible to a 0.2% annual chance of flood hazard or 1% annual chance of flooding 1 foot or less which certainly put this infrastructure at risk. Compared to a 100-year floodplain (AE flood zone), which has a pre-determined base flood elevation based on topographic conditions, this shaded X zone has an equal 1% chance of annual flooding with the expectation that it will remain less than 1 foot which is not always the case with the increase in intensity and sheer volume of storms in recent years. The Cranston Comprehensive Plan anticipates these storms and flooding events to worsen with climate change.

Subdivision Regulations:

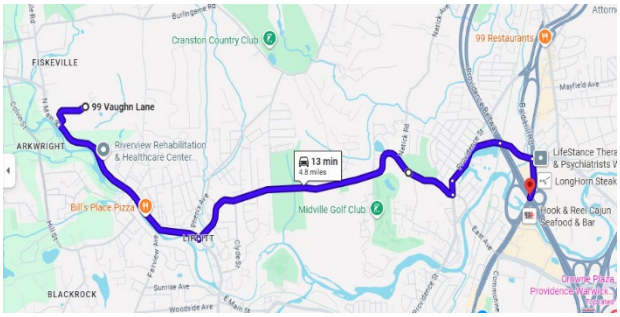
Approving this Major Subdivision with an access onto Vaughn Lane would be detrimental to the safety of the residents and thus against the intent of the subdivision regulations which list the following relevant intents.

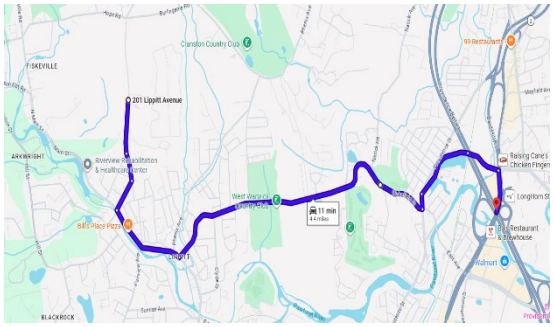
B. Intent
The intent of these Regulations is to:
1. promote the public health, safety, and general welfare;
4. secure a well-articulated street and highway system;

Intensifying a roughly 12-foot wide road with sharp "S" curves will significantly increase the risk of head on collisions. The combination of sharp curves, minimal line of site and narrow roadway is the perfect combination to create a hazardous situation, in direct conflict with the intent of the Subdivision Regulations requiring "securing a well-articulated street and highway system". The applicant has expressed that Vaughn Lane is intended to be utilized as a "secondary" access to this neighborhood. If a connection to Vaughn Lane is established there is no way to control the traffic entering and exiting via this route. A sign could be placed here; however, it would take authority to enforce these rules at a cost burden to the City. This is not a realistic solution as the City has existing financial issues that they are addressing with layoffs and reduced man hours. If there is no enforcement, it could effectively be used as a primary access point for the units that deem it more efficient. Some planned developments utilize a secondary gated off access point for fire access however these are generally not the length of the proposed Vaughn Lane secondary access extension. A study would confirm if a secondary access is needed or if that concept will only add unnecessary impervious surface and roadway to maintain with limited functionality.

Alternative Access:

A better alternative to Vaughn Lane would be connecting to Lippitt Avenue. An alternative access to the east would alleviate the pressure on main street that is created by funneling all traffic from this development into the quiet Fiskeville Village. The applicant has publicly stated that he can create access to the east and connect the development through his property at 201 Lippitt to create an alternative access point. An access point to the east would provide convenience to the neighborhood as all major highways are located to the east of the property. (rt95 & rt295) Approval of a Lippitt Avenue entrance would be directly in line with the comprehensive plan as this strategy would reduce greenhouse emissions by reducing the travel distance to access all major highways by half of a mile as illustrated in the maps below.





Another alternative location would be to follow the clearing of the road that previously existed connecting Vaughn Lane and Main Street. The following map shows the location of this road that previously existed and is indicated on Google Maps. The area of this road is moderately cleared minimizing the impact to the environment. There is an existing curb cut onto Main Street outside of the Floodplain avoiding any potential hazards. There is an existing opening in the historic rock wall along Vaughn Lane eliminating the need to harm historic structures and other older structures on Vaughn Lane. This route follows a more linear pattern with ample room for proper width, instead of a hazardous, 1 ¼ width road with a sharp "S" curve.

Previously existing roadway identified on google maps. (above)

Existing break in the Historic stone wall with existing remnants of roadway. South side of Vaughn Lane. (below)

Existing Curb Cut with remnants of road intersecting with Main Street (above)

Conclusion:

I would encourage the Planning Commission to review the plans based on the intent of the Subdivision Regulations, Comprehensive Plan and Zoning Ordinance, all of which speak to the safety and general welfare of the community. Approval of the access on Vaughn Lane has not been reviewed by the proper City authorities at this time and there is potential for major circulation conflicts. Vaughn Lane exists as a hazardous situation and it is the Planning Commission's responsibility not to intensify these hazards. There is potential for this project to cause harm to existing developments in the area. It is requested that the Commission seek alternative routes to Vaughn Lane with safer circulation patterns, or not require a secondary access at all, and to seek the relevant staff comments and permits from utility agencies before making a decision.

If the Cranston Planning Commission feels this project is appropriate, then we urge them to consider passing the following conditions which speak to the safety of the neighborhood, the functionality of the development, protection of the environment and general welfare of the community.

- That a traffic study be completed and peer reviewed at the cost of the applicant.
- That Vaughn Lane is not to be utilized because better alternative access points exist and the need for secondary access has not been determined.
- That a geotechnical study be performed prior to Preliminary Plan to confirm the magnitude of the bedrock and subsurface composition.
- A full mapping of existing stone walls should be required prior to Final Plan approval, along with a plan to maintain or rebuild all walls that aligns with any applicable local and state laws.

- The developer shall retain a qualified local arborist to conduct a comprehensive tree inventory, documenting existing trees and identifying those that have been removed.
- All replacement plantings shall consist exclusively of native tree species and vegetation, in order to prevent the introduction and spread of invasive species and to support the integrity of the local ecosystem.
- That no blasting occurs on property and any ledge removal be limited to non-explosive, strictly mechanical methods such as drilling, or hydraulic splitting.
- That a comprehensive property survey be conducted before any ledge removal and a cash bond is submitted to the city to cover damages to surrounding properties if they occur.
- That all construction activity is limited to the hours between 8 am and 4pm with loudest activity being concentrated between 10am and 3pm with no work being done on holidays and weekends, to ensure the peaceful enjoyment of surrounding properties.
- That prior to the issuance of a building permit, the applicant must submit a comprehensive erosion control plan to the building official for their approval. The plan must be in accordance with the Rhode Island Soil Erosion and Sedimentation Control Handbook. Said erosion control measures must be in place prior to the start of any construction and shall be maintained or replaced throughout the construction phase. They may only be removed when vegetative cover has been restored.
- That any proposed site work or landscape improvements such as driveway construction, grading and/or other landscape improvements within the public right-of-way (between the property line and existing edge of pavement) are subject to review and approval of the Department of Public Works. No site work may begin until the project has been reviewed, approved, and a road construction permit is issued by the DPW. In addition, a track out pad must be installed and used for the duration of onsite construction
- That the limit of disturbance indicated on the site plan becomes permanent. Stone bounds, boulders, or some other permanent form of marker shall delineate this limit. No further clearing, cutting, or filling may occur to the wetland side of this limit.
- That prior to the issuance of a Building Permit the proposed subsurface element is certified by a Professional Engineer to comply with the Development Standards
- That 50% of the trees with a diameter greater than 8 inches be retained on the property for erosion control, beautification, habitat, and environmental purposes.
- That a photovoltaic plan be submitted to ensure compliance with General law 42-136-4 Outdoor lighting controls.
- That a peer review of the storm water plan be conducted before approval of preliminary plan to ensure no increase in runoff.
- That the applicant provides a phasing plan for the project that includes, the order of phasing and extent of each phase to be approved by the planning Board in order to ensure the city is able the provide adequate services.
- All work within a phase of construction should be completed and all impacted areas should be properly stabilized prior to additional construction. Sequencing the construction in this manner is an accepted best practice for site development to limit erosion during construction and will limit the impact on the local community and environment.
- That any area of disturbance be reseeded or sodden with a low maintenance conservation grass mixture with only slow release fertilizers being permitted to maintain an intact vegetative cover.