

MEMORANDUM

To: Planning Commission

From: Kinsey O'Shea, AICP; Senior Planner

Date: February 17, 2023

Subject: SUB 23-0001 – Northside Park Revised Section XII - Major Subdivision Preliminary Plat Review

for 51 lots on 36.00 acres at 2150 Progress Street NW (Tax Map Numbers 166-10A; 166-10B; 166-17A; 166-17B; 166-A 4C) by Jeanne Stosser of CC&B Development, LLC (property owner)

SUMMARY OF REQUEST

Property Details		
Property Location	2150 Progress Street NW	
Tax Parcel Number	166-10A; 166-10B; 166-17A; 166-17B; 166-A 4C	
Parcel Size	36.00 acres	
Present Zoning District	R-4 Low Density Residential	
Current Use	Undeveloped	
Adjacent Zoning Districts	North: R-4	
	East: R-4	
	South: R-4	
	West: RR-1 (across US 460-Bypass)	
Adjacent Uses	North: Vacant	
	East: Single-family residential	
	South: Single-family residential	
	West: Vacant; US 460-Bypass	
Adopted Future Land Use	Low density residential	
R-4 Low Density Residential District Site Development Standards		
Proposed Use	Single-family residential	
Maximum Number of Lots	51	
Minimum Open Space	37% provided; 30% required	
Minimum Tree Canopy	20% required	
Minimum Lot Size	10,000 square feet for R-4 lots; 7,000 sf for Open Space Overlay lots	
Minimum Lot Frontage	40' on a public street	
Minimum Setbacks	Varies	
Maximum Building Height	30' or up to 40' with 1' additional setback for every 1' in height above 30'	
Maximum Lot Coverage	45%	
Maximum FAR	0.50	

PRELIMINARY PLAT REVIEW PROCESS

The State views subdivision of land as a "by-right" use, provided that *all* the locality's standards can be met, or if variances to standards are requested and approved. The State requires that "major" subdivisions are reviewed by the locality's planning commission for final action, but do not require approval by the elected body such as the Town Council. The threshold for a "major" subdivision is any subdivision of 50 lots or more. Additionally, the Town requires Planning Commission public hearing review for subdivision *variance requests* for subdivisions of 6 or more lots.

The Town's subdivision ordinance sets the process for submittal, review, and approval of subdivision plats in Article IV of the Subdivision Ordinance, beginning with §4-100. The code sections detail the information required on the submittal, the timelines for review, and the process by which a plat is acted upon, and resubmitted if deficiencies are noted. This process is different in both its timelines and review requirements than a typical public hearing request such as a rezoning request or conditional use permit request. The ordinance is very clear in its language regarding rezoning or conditional use permit "requests" vs. a preliminary plat "review".

The purpose of the preliminary plat submission and review is to ensure that the applicant has done enough engineering due diligence to ensure that all of the Town's zoning and subdivision standards can be met for when the subdivision is constructed, or to determine what variances may be required in order to develop the property. The developer's engineer does not have to provide construction-level detail for the development, but must be able to assure Planning Commission and staff that there are no deviations from standards in the Town's ordinances. Upon approval of a preliminary plat, the applicant would then submit the final plat for recordation and legal creation of the lots, and the engineering site plans for construction, which contain all of the specific details for construction of the development. The requirements

Planning Commission Review

The Planning Commission is required to review preliminary subdivision plats for 50 lots or more. Planning Commission is the agent or the arbiter of the Subdivision Ordinance for major subdivisions. Subdivision Ordinance §4-207 lays out the process for Planning Commission review of preliminary subdivision plats. The goal of the preliminary plat process for the Town and the applicant is an approvable plat. The review culminates in the public hearing, where the Planning Commission will "determine the plat's compliance or not with the standards and requirements of [the Subdivision Ordinance], the Zoning Ordinance, and other applicable town ordinances." If a plat is found to be deficient in any of the applicable standards, then it must be denied at public hearing. The applicant can then revise and resubmit the plat for review by the Planning Commission. The Planning Commission is also tasked with making "recommendations to the agent regarding utility service, and transportation access to, and circulation within the proposed subdivision." In its review of subdivision plats, the Planning Commission is asked to thoroughly review and "make a good faith effort to identify all deficiencies, if any, with the initial submission." If a plat is denied, the Planning Commission shall include specific reasons for disapproval, referencing specific ordinances, regulations, or policies, and include methods to correct the plat in "the resolution or on the plat itself". To aid Planning Commission in the review of this preliminary plat, this staff report contains information and analysis on deficiencies identified with the plat, as well as the modifications required to address deficiencies. This staff report also contains analysis of the applicant's variance requests. This staff report, and accompanying memos shall serve as the "specific reasons for disapproval" as required in §4-207.

Application Requirements

The developer is required to submit a plat for review that contains specific elements to demonstrate compliance with the zoning ordinance and the subdivision ordinance. The information required to be submitted with or on the plat is found in Article IV, §4-200, and included as an attachment. Much of this information is routine and

does not involve a complex review to ensure compliance with standards, such as ensuring that the plat includes north arrows, an appropriate drawing scale, and lot statistics including lot size and frontage. Additionally, the applicant must provide more detailed information showing open space dedication, right-of-way dedication as well as street grades and profiles, provisions for stormwater management and public utilities. Some of these requirements entail a more complex review to ensure that applicable Town ordinances, standards, and specifications are, or can be met.

The applicant submitted a plat set containing 13 sheets; a memo containing the subdivision ordinance variance requests; a stormwater concept plan and narrative; traffic impact analysis; and a comment response letter (in response to staff's August 2022 completeness review email).

Existing Preliminary Plat

The subject property is part of a larger development with a long build out period being completed in phases. The property subject to this review currently has an approved preliminary plat from November 2011, which is still valid based on extensions granted at the state level. This means that the applicant could submit engineering drawings and final plats for the legal creation of lots without having to undergo further public review provided they were in compliance with the 2011 plat. In February 2018, Deputy Town Manager Chris Lawrence wrote a letter to the property owners at the time outlining a number of determinations regarding the development of the approved preliminary plat. This letter was included as an attachment in the applicant's submission, and is included as an attachment to this staff report.

Since that time, the property was purchased by the current owner, who desired a different subdivision layout than what was approved in 2011. In August 2022, the applicant submitted a preliminary plat showing a revised lot and road layout for review by Planning Commission. Staff performed a completeness review and identified a number of initial completeness deficiencies (outlined in the August 4, 2022 email from Kali Casper) that would need to be corrected before the plat could be approvable. The applicant opted to revise the plat before beginning the public hearing process. The applicant resubmitted the plat for review on January 4, 2023 including a comment response letter addressing the initial completeness review. This began the formal public hearing process as the submittal was deemed complete upon its completion review.

PLAT REVIEW

The plat will be reviewed per §4-200(c) to "demonstrate compliance with...the [subdivision ordinance]" and is required to contain certain graphical and text elements on the plat document itself. The standards for subdivision development are found in Article V of the Subdivision Ordinance, "Requirements for Design Standards, Public Improvements, and Reservation of Land for Public Purposes". The applicant will have to show enough detail on the preliminary plat and supplemental information to be able to "demonstrate compliance" with the standards in the subdivision ordinance, which may be more information than is listed as "required elements" in §4-200(c). The review of the preliminary plat also requires ensuring that the development conforms to the district standards in the zoning ordinance, which in this case is R-4 Low Density Residential.

To assist in Planning Commission review, staff has prepared the following notes regarding whether or not the plat complies with applicable subdivision standards in Article IV Approval of Plats; Article V Requirements for Design Standards, Public Improvements, and Reservation of Land for Public Purposes; and the zoning district standards for R-4. Some of the standards are not listed, because they are not applicable to a preliminary plat submission, but are still relevant to the development as requirements of the developer, such as requirements for bonding improvements or items more suited for the engineering plans such as installation of handicap ramps at all street intersections. Where specific standards are not called out in this staff report, they have been met or are not applicable at this time. In other instances, staff has provided notes confirming compliance with standards.

In all cases where a standard is not met, analysis is provided. For brevity in the staff report, the standards are not quoted verbatim listed but rather summarized.

At this stage of the process, the requirements are more detailed than rezonings or conditional use permit requests and as such, the information contained in this staff report is technical in nature. It includes analysis that is a summary of the specific items in each of the attached engineering memos. Please refer to the attached memos for more detailed explanation of the requirements and comments.

Compliance and Variance Requests

For the submittal, many standards have been met and may not be discussed in the staff report, some information does not comply with a standard and no variance has been requested, and some information does not comply with a specific standard and a variance has been requested. More specifically, the applicant has made three variance requests. These variance requests are discussed in depth later in the staff report. A list of the specific variances is provided in the summary at the end of this report for discussion at work session. As there are deficiencies noted on the preliminary plat submittal and detailed in this staff report, the plat cannot be approved as submitted. When the plat is in an approvable state, Planning Commission can act on any requested variances.

ARTICLE IV APPROVAL OF PLATS DIVISION 2 PRELIMINARY PLATS

§ 4-200 Size and information required on a preliminary plat

- **(c)** The preliminary plat shall demonstrate compliance with the requirements of the Blacksburg Zoning Ordinance and this chapter [the Subdivision Ordinance]. It shall contain the following elements..."
- § 4-200(c) 2: While the names of the property owners have been provided on the plat, owner signature blocks are also required to show that property owner(s) consent to the development, and are aware of the requirements of the Town with regard to subdivision. There are three individual property owners, two of which are represented by a common entity, but the third owner is the Town. Signature blocks for all owners are required on the cover sheet.
- § 4-200(c) 10: The scale on sheets 2-5 are not appropriate (1" = 250') and 1" = 350', as they are not scalable with a standard engineering scale.
- § 4-200(c) 16: No lot frontage table has been provided.
- § 4-200(c) 18: Existing and proposed open space areas, with acreages and locations, are not shown on sheets 6-9. Additionally, there is existing dedicated open space on proposed Lots 13, 14, and 15. Please rearrange lots accordingly to comply with existing platted open space.
- § 4-200(c) 23: The plat does not show interior or perimeter public utility easements required for all lots.
- § 4-200(c) 24: The plat does not show how bike lanes are accommodated on Progress Street.
- § 4-200(c) 28: The plat shows the location of watercourses, but does not provide name, or identify as "unnamed".
- § 4-200(c) 29: The plat does contain topographical information, but not enough information has been provided to show feasibility of construction for future Progress Street.
- § 4-200(c) 30: The plat does not contain road profiles for the Craig Drive cul-de-sac. The plat also does not contain adequate information to determine the length of Progress Street that will be constructed with this phase of the development. The plan view appears to indicate that the entire length of Progress Street to the eastern property line will be constructed with this development, but the length of the road on the profile sheets is different. Additionally, the variance request letter included with the applicant's submission indicates that approximately 420 linear feet of Progress Street would be constructed, though the Deputy Town Manager letter dated February 2018 indicates that 625 linear feet of Progress Street is required to be constructed to support the development. This letter released the subdivider from the obligation to build all of Progress Street but required construction of segments needed to create and

access proposed subdivision lots. Furthermore, the plan view sheet topography and the road profiles do not match in several locations (please see the attached Transportation memo for more analysis).

The plat submitted includes most of the information required in the list in §4-200, though there were certain elements that were not present on the plat. The required plat elements list §4-200 is included as an attachment to this report. *The preliminary plat does not include all of the required elements, and is not compliant with §4-200.*

In evaluating whether the preliminary plat "demonstrate[s] compliance with the [Subdivision Ordinance]" per §4-200(c), staff has reviewed the submitted information against the applicable standards in Article V of the Subdivision Ordinance. Article V provides the standards for design, public improvements, and open space dedication for subdivisions. Some sections of this article are not applicable at this time because they refer to items not proposed or required, or because they refer to steps in the design and construction process beyond the preliminary plat. Staff has provided the analysis below to identify noncompliance, highlight compliance in certain areas, or provide commentary on the variances requested by the applicant.

In addition to the above requirements, during the plan review of the preliminary plat, staff noted several items pertaining to drafting clarity and legibility that should be corrected as part of any resubmittal. These items are included in a letter as an attachment to this staff report.

ARTICLE V REQUIREMENTS FOR DESIGN STANDARDS, PUBLIC IMPROVEMENTS, AND RESERVATION OF LAND FOR PUBLIC PURPOSES DIVISION 1 IN GENERAL

§ 5-101 Flooding: Land in the flood hazard overlay district shall not be used for residential occupancy, or for uses that endanger health, life, or property, or cause erosion or flood hazards.

The plat includes minor grading within the Floodplain Overlay (FHO) as illustrated on the plan. This FHO is based on a flood study for this watershed approved by the Town in November 2018. All proposed encroachments, including fill, new construction, or other development must demonstrate compliance with FHO provisisions through a Flood Study report. The preliminary plat is not compliant with §4-200(c)(35) because it does not meet all the standards in §5-101. Additional information can be found in the Stormwater Engineering Memo.

DIVISION 2 LOT CHARACTERISTICS

§§ 5-200-204: Lots shall have appropriate building sites; shall comply with minimum lot size; shall be served by a public street; additional considerations for common area and residual land.

Lots proposed range in size from 0.23 acres (10,000 square feet) to 1.24 acres (53,944 sf). Per §5-201, when "lots are more than double the minimum required area for the zoning district, the PC or agent may require that those lots be arranged so as to allow further subdivision and the opening of future streets where they would be

those lots be arranged so as to allow further subdivision and the opening of future streets where they would be necessary to serve potential lots..." Specifically, lots 17-19, and 26-28, around the Cannongate Drive and Craig Drive cul-de-sacs, are more than double the minimum lot size, and their orientation prohibits the extension of existing Craig Drive forming a connection with Cannongate Drive/Progress Street.

Considerations: In consideration of the standards as a whole, the proposed size and layout of lots 17-19 and 26-28 preclude the further subdivision into additional buildable lots. The creation of significantly larger lot sizes is typically a greater concern in rural residential developments with larger acreage. Staff would note, however, that the proposed layout does preclude the extension of existing Craig Drive. The applicant has requested a variance for the proposed Craig Drive cul-de-sac. The evaluation of this request can be found in the Streets section.

Additionally, the proposed lot configuration around the Craig Drive cul-de-sac results in less typical lot shapes. The lots could be reconfigured in such a way as to result in a layout more similar to the lots around Primrose Drive or Cannongate Drive, and more in keeping with the standard that the lot lines should be radial to curving street lines, or perpendicular to straight street sections.

While setbacks are not required to be shown graphically or listed in text on a preliminary plat, this information is helpful for staff during review, as well as for developers and property owners who rely on the plat for land use information in the future. There are two different setback standards that apply in this development: the R-4 zoning district standards, and the Open Space Overlay district standards. The setbacks are different based on whether or not a proposed lot is in the Open Space Overlay, and whether or not it is adjacent to standard R-4 zoning. Especially considering that there are two different standards that apply to this development, it is helpful information to show graphically on the plat itself. The applicant has chosen to depict setbacks in a chart on the cover sheet, and they are also represented graphically on the plat sheets, but they are not labeled. To aid in the building permit review and to benefit the builder, future homeowners, and the Town, due to the varying standards, setbacks should be labeled on the plat sheets especially where adjacent lots have different standards.

DIVISION 3 STREETS

§§ 5-300-325 Requirements for public streets, including standards such as right-of-way widths, provisions for street signs, standards for driveways, and others.

The preliminary plat includes some of the information regarding streets including widths and some profiles per §4-200. In further evaluating the required standards in Division 3, the following text includes identified deficiencies and considerations.

§5-300: Subdivider shall dedicate streets and related improvements

The plat shows that all streets will be dedicated to the Town as required by this standard. However, it should be noted that right-of-way for Progress Street already exists, and has been dedicated to the Town, though it has not been constructed. The applicant is proposing to vacate the existing alignment of Progress Street right-of-way, and relocate it in a different configuration. Vacation of Town right-of-way, whether built or unbuilt, requires a supermajority approval by Town Council. In order to consider the vacation of the right-of-way, the applicant should provide sheets showing existing and proposed layout, as well as existing and proposed profiles to determine if the proposed realignment is acceptable or desirable for the Town. The applicant's lot layout is dependent on the proposed realignment. If existing ROW configuration is retained, the lot layout would have to be revised. See also §5-313(a).

VARIANCE TO § 5-305(a) – The arrangement of streets in new subdivisions shall make provision for the continuation of existing streets in adjoining areas where streets already exist. Major, collector, and local streets shall be respectively extended as such. The street arrangement must be such as to cause no unnecessary hardship to owners of adjoining property when the subdividers plat their land and seek to provide for convenient vehicle access to it.

There are currently five existing streets that are adjacent to the proposed development that could be extended: Progress Street, two stubs on Craig Drive; Primrose Drive; and Claire Drive. The proposed layout does show that Progress Street will be extended, but there is no information on the plat showing the limits of construction of Progress Street for the length of the street. Craig Drive and Primrose Drive are proposed to end in cul-de-sacs. A new cul-de-sac, Cannongate Drive, is also proposed off Progress Street. Cul-de-sac lots are considered more desirable in the single-family housing market. Claire Drive is proposed to extend to the existing stub along Craig Drive. Logical connections to extend existing streets would be to connect the end of Craig Drive through to Progress Street, rather than creating a second cul-de-sac (Cannongate Drive) off of Progress Street. Additionally, Primrose Drive could be extended to connect with the stub along Craig Drive.

The applicant has requested a variance to the above section for the Craig Drive and Primrose Drive cul-de-sacs. The applicant's justification includes information regarding lot desirability, grading impacts, and connectivity. As noted in the Transportation Engineering Memo, additional information is needed to analyze this variance request. Staff does not support the requested variance at this time. Additional detail is found in the attached transportation engineering memo.

§5-310 (a)—The paved area of the bulb turnaround...shall be a minimum of ninety (90) feet in diameter. Pavement is considered the asphalt travel surface of a street, and does not include any concrete gutter pan. The plat shows that the pavement area on Primrose Drive is approximately 85' in diameter, and the pavement area on Craig Drive is 77-79' in diameter, excluding the gutter pan in both cases. The plat will have to be revised to show the appropriate minimum pavement area for all cul-de-sac turnarounds.

Additionally, the Town does not have a standard for the proposed bulb on Cannongate Drive that appears to contain a landscaped median island. The Town will not maintain any landscaping inside the median island in the right-of-way. Additionally, maintenance by a private entity such as a homeowners' association is not desirable for improvements in the Town right-of-way as the expectation for landscaping in a public street is that the Town performs mowing and other maintenance. No justification has been provided for why the island has been included and proposal for private maintenance has been made. *Staff recommends removal of the landscape island.*

§5-312 (a)—Turn lanes shall be installed adjacent and within a subdivision where warranted...

As indicated in the applicant's turn lane analysis, turn lanes are warranted on North Main Street at Countryside Court and Givens Lane. Additional information regarding the necessary turn lanes is found in the attached transportation engineering memo. The plat will have to be revised to show the appropriate construction for required turn lanes.

§5-313 (a)—Street grades may not exceed 10% nor be less than 0.5%.

The proposed grading on the stormwater plans for the lots with rear yards along proposed Progress Street show that lot grading will extend into the proposed ROW for future Progress Street. More information is required to show constructability for future Progress Street, including whether or not walls are required, and ability to match existing, proposed, and future grades, considering the proposed lot and stormwater grading. Without additional information, staff cannot determine that the required grade can be met for Progress Street. *The plat will have to be revised to show the grading for future Progress Street to ensure feasibility for future construction. This is also noted above in §4-200(c)(29) and relates to §5-300.*

VARIANCE TO § 5-317 – Minimum and maximum block lengths

The applicant has requested a variance to allow Claire Drive to be 1500' in length (1200' maximum in a single block). The applicant's justification is provided in the variance request memo, and states that topography prevents connections from being made that would result in shorter block lengths. As outlined in the Transportation Engineering Memo, additional information is needed to analyze this variance request as it relates to the variance regarding continuation of existing streets.

§5-318 (d)—Driveways shall be no closer than fifty (50) feet to an intersection with a public street. The plat shows areas on lots 13 and 24 (adjacent to Cannongate Drive), and lot 59 (adjacent to Carroll Drive), where driveways cannot be constructed due to the minimum distance. Additional hatch areas will have to be shown for lots 13 and 24 along Progress Street, and additional hatch areas will have to be shown for lot 59 along the frontage of Claire Drive to ensure future lot owner are aware of how this may impact home selection, orientation, and driveway location. **The plat will have to be revised to show an additional no-driveway zone for lot 59.**

§5-319—Street trees required along all collector and arterial roads within or adjacent to the subdivision. The plat does not show locations or quantities for required street trees. At a minimum, a schedule showing the required number of street trees per the proposed Progress Street length will need to be provided on the cover sheet. **The plat will need to be revised to show minimum number of street trees required.**

VARIANCE TO § 5-320 – Medians are required on collector roads for landscaping and efficient traffic movement

The applicant has requested a variance to eliminate the required medians. As noted in the February 13, 2018 attached letter from Chris Lawrence, Deputy Town Manager, to Mr. Carroll Givens, one of the property owners at the time, there were a number of items that the property owners were seeking clarification on. The letter indicates that although a "boulevard" with medians is required for a collector street such as Progress Street, a variance may be requested through the preliminary plat. The letter goes on to state that staff would support eliminating the boulevard requirement for medians, but that other requirements for lane widths, sidewalks, etc. would be required to be met. It is through this discussion that it was determined that the applicant did not have to construct all of Progress Street but would be required to construct segments to support specific phases and provide ROW for the remainder.

§5-321—Bicycle lanes are required on all proposed collector streets within a subdivision. Sheet 10 includes a typical street section for Progress Street showing how the ROW is delineated with various improvements and lane widths, but no delineation for bicycle lanes has been shown. Bicycle lanes are required along all of the proposed portion of Progress Street. Additionally, the section shows sidewalk alongside the road, but no sidewalk is proposed. The section will have to be revised to show the actual configuration of the street improvements within the right-of-way. **The plat will need to be revised to show that bicycle lanes can be accommodated on Progress Street.**

§5-322—Street Lights shall be provided on all collector streets within a subdivision; installation shall be cost-share between the applicant and the Town 50%/50%.

The plat does not show provisions for street lights for the portion of Progress Street to be constructed. At a minimum, the cover sheet should include the number of streetlights required per typical spacing along the proposed Progress Street. *The plat will need to be revised to show the minimum number of streetlights required on Progress Street.*

DIVISION 4 SIDEWALKS AND WALKWAYS

§§ 5-400-403 Sidewalks are required along at least one side of public streets within and adjacent to a subdivision.

The preliminary plat includes some of the information regarding sidewalks including general location per §5-401. In further evaluating the required standards in Division 4, the following deficiencies and considerations are noted.

The preliminary plat shows sidewalk adjacent to at least one side of all local public streets within the subdivision. On the engineering plans, the applicant will need to show the required curb cut ramps at intersections per §5-316. Additionally, staff recommends that the proposed sidewalk be completed around the remaining length of the cul-de-sac bulb, but especially on Primrose Drive, where only a small portion of the proposed cul-de-sac is shown without sidewalk.

§5-402—Pedestrian access to open space shall be provided; construction standards

There are a number of private open spaces shown in the development, but access is not provided in all locations. Sheet 4 indicates the open space areas to be dedicated, and those already dedicated. The plat shows that the multi-use trail will provide access to some of the existing and proposed open spaces. However, there

are no paths provided between lots, or at the ends of the cul-de-sac bulbs to provide access to the open spaces interior to the development. *The plat will need to be revised to show how access is provided to the proposed open space areas.*

DIVISION 5 BIKEWAYS

§§ 5-500-503 Multi-use trails required; location of multi-use trails; access to future multi-use trails rights-of-way; construction design standards

There is an existing constructed trail within a 20' wide public trail easement from Walnut Drive and Carroll Drive along and within the existing platted Progress Street right-of-way to where Progress Street intersects with Northside Drive. The plat proposes the demolition, realignment, and reconstruction of portions of this existing trail along the Progress Street ROW, as well as the vacation of the existing trail easement. The request to vacate the existing constructed trail and existing easement will require a Town Council action.

In order for staff to evaluate desirability of the public trail relocation, similar to the condition with the Progress Street right-of-way, the applicant should provide sufficient detail to evaluate whether the proposed layout and grade are acceptable or desirable for the Town, as compared to what is already constructed. The applicant should provide sheets showing existing layout and existing trail profiles to compare to the proposed revised trail.

Additionally, no details have been provided that explain how the trail will be kept open during construction to allow for existing users to continue to use the trail.

DIVISION 6 WATER

§§ 5-600-602 Public water service is required if available; construction and design standards; location of water laterals

§5-601(a) Public water system design and construction shall be in accordance with Town Water Specifications...and Chapter 24 of the Blacksburg Town Code.

The applicant has showed the proposed layout of the public waterline infrastructure on the preliminary plat set. In review of the submitted information, the applicant has shown graphically on the preliminary plat the proposed connections to the public water system as required in §4-200(c). However, in consideration of §5-601, it is noted that there are several locations where water mains are not located in the ROW, or along property lines, and rather cross through the body of a lot. This can create conflict with future structures and landscaping. The plat will need to be revised to show the water infrastructure aligned with property lines and/or ROW to the greatest extent practicable. The preliminary plat is not compliant with §4-200(c)(32) because it does not meet all the standards in §5-601. Specific reasons for disapproval are provided in the attached water services memo.

DIVISION 7 SANITARY SEWER

§§ 5-700-701 Sanitary sewer required if available; construction and design standards

The applicant has showed layout of the public sewer infrastructure on the preliminary plat set. In review of the submitted information, the applicant has shown graphically on the preliminary plat the proposed connections to the existing sanitary sewers as required in §4-200(c), but there are deficiencies regarding constructability and maintenance noted that do not comply with §5-701. Additionally, details regarding how the existing pump station would be accessed for maintenance are not provided. The preliminary plat is not compliant with §4-200(c)(31) because it does not meet all the standards in Subdivision Ordinance Division 7 Sanitary Sewer. Specific reasons for disapproval are provided in the attached sanitary sewer services memo.

DIVISION 8 STORMWATER MANAGEMENT

§§ 5-800-806 Stormwater management required; capacity standards for SWM facilities; use of watercourses and low-lying lands; maintenance of SWM facilities; drainage easements

Section 4-200 states that "provisions for stormwater management" must be shown on the preliminary plat, but no further information regarding the level of detail required has been provided in the ordinance. In evaluating "provisions for stormwater management" it is necessary to understand the full impact of the design of the development on the surrounding drainage area and whether or not there are upstream or downstream impacts. The Town stormwater engineer has reviewed the plat and submitted documents and has provided a memo, which is attached, detailing the deficiencies in the stormwater provisions including lack of stormwater management provisions for Progress Street, method for meeting stormwater quantity provisions, unaccounted for drainage areas, and access to stormwater management facilities for maintenance and inspections. While sufficient information is not available to determine compliance with §5-805 for storm drainage design, this information can be provided at the engineering plan stage. The preliminary plat is not compliant with §4-200(c)(35) because it does not meet all the standards in Subdivision Ordinance Division 8 Stormwater Management. Specific reasons for disapproval are provided in the attached stormwater engineering memo.

DIVISION 9 OTHER UTILITIES

§5-901 Public Utility Easements shall be 15' wide, centered on interior lot lines, and interior to all perimeter lot lines.

Dedication of Public Utility Easements (PUE's), along lot lines help facilitate the expansion of franchised public service corporations furnishing cable television, fiber, telephone, gas and electrical service to proposed development lots as well as the surrounding area. PUEs, as required by Section 5-901, are intended to provide an efficient way for utility providers to provide and maintain critical community services and help provide more diverse opportunities to the consumer. If the requirements of Section 5-901 cannot be met, a variance request, with supporting justification, must be submitted for review by the Planning Commission. Note: PUE locations and alignment should be prioritized along the proposed lot lines, as specified by Section 5-901, to provide a consistent and contiguous alignment that can be easily identified and reasonably utilized for utility franchise installations that will serve the proposed and adjacent development communities. *The preliminary plat is not compliant with §4-200(c)(23) because it does not meet all the standards in §5-901. No PUEs are shown on any interior or perimeter lot lines as required.*

SUMMARY OF VARIANCES AND MODIFICATIONS REQUESTED

- §5-305: Request to end existing streets in cul-de-sac rather than providing for the continuation/extension of existing streets (see discussion in "Division 3 Streets" section and attached transportation engineering memo).
- **§5-317**: Request for 1500' maximum block length (standard is 1200') (see discussion in "Division 3 Streets" section and attached transportation engineering memo).
- **§5-320**: Request to eliminate medians in collector roads (see discussion in "Division 3 Streets" section and attached transportation engineering memo).

SUMMARY

The Planning Commission is asked to review the preliminary plat for compliance with the standards in the Zoning Ordinance and the Subdivision Ordinance. If deficiencies are noted, then the plat must be denied and then can be resubmitted. Planning Commission is also asked to evaluate the requested variances to subdivision ordinance standards. In order to move forward to an approvable plat, the Planning Commission should provide direction to the applicant and staff regarding necessary revisions and additional information needed.

ATTACHMENTS

- GIS Maps
- Letter from Chris Lawrence to Carroll Givens dated February 18, 2018
- Completeness Review Email from Kali Casper dated August 4, 2022
- Planning letter citing clarity items for the plat dated February 15, 2023
- Engineering memo for Stormwater Management dated February 17, 2023
- Engineering memo for Transportation dated February 2, 2023
- Engineering memo from WRA for Transportation dated January 26, 2023
- Engineering memo for Water Services dated February 3, 2023
- Engineering memo for Sanitary Sewer Service dated February 6, 2023
- §4-200(c): Preliminary Plat information required

Application components provided in packet

- Plat Submittal All Sheets (1-13)
- Comment Response Letter
- Variance Request Letter

Application components available online

- Subdivision Application Form
- Stormwater Concept Narrative
- Stormwater Concept Plans
- Traffic Impact Analysis

Northside Park SUB23-0001



Bus Stops



Subject Area



Natural Water



Parcels









2021 Aerials provided by Pictometry Town of Blacksburg, E&G Dept. 2-14-2023

Northside Park SUB23-0001 **Future Land Use** Subject Area Mixed Use Parcels Primrose Lane Park Very Low Density Residential Low Density Residential Medium Density Residential Limited High Density Residential Development High Density Residential Park Land / Open Space / Resource Protection Commercial Pine Dr. Research / Development US 460 Corridor 700' Fieldstone Town of Blacksburg, E&G Dept., 2-14-2023

Northside Park SUB23-0001 **Current Zoning** Subject Area **Parcels** Complement of the second RR-1 Rural Residential 1 Primrose Lane Park RR-2 Rural Residential 2 R-4 Low Density Residential R-5 Transitional Residential RM-48 Medium Density Multiunit Residential GC General Commercial PR Planned Residential RD Research and Development Pine DB PMH Planned Manufactured Home 700' Fieldstone Town of Blacksburg, E&G Dept., 2-14-2023



February 13, 2018

Marc A. Verniel Town Manager mverniel@blacksburg.gov

Steven Ross

Deputy Town Manager Operations sross@blacksburg.gov

Christopher S. Lawrence

Deputy Town Manager Community Development clawrence@blacksburg.gov

Mr. Carroll Givens 1722 C&O Dam Road Daniels, WV 25832

Dear Mr. Givens,

As a follow up to our meeting on November 6, 2017 and the letter we received from Parker Design Group dated April 28, 2017, the Town through this letter is documenting our discussions and evaluation of your request regarding the construction of Progress Street in relation to the Northside residential development. Your request is to not construct the full length of Progress Street as shown on the preliminary plat approved on November 9, 2011.

The approved preliminary plat showed the layout of 119 lots designed under the R-4 zoning district with the open space conservation subdivision overlay district standards. It is our understanding, based on information provided by you and your consultant, that the construction of Progress Street as a boulevard collector road through the entire project is impacted by two fundamental issues: (1) the cost of construction, which you believe is not feasible for the 119 lot subdivision to bear, and (2) all sections of the subdivision can meet subdivision standards as it relates to road access without the construction of the entire road as shown on the approved plan.

We have reviewed the request regarding Progress Street construction in light of the provisions contained in the Town's Subdivision Ordinance and Zoning Ordinance. We are in general agreement with the proposal in your letter. With regards to the Town subdivision and zoning regulations, the Town has made the follow specific determinations:

1. Subdivision Ordinance/Section 5-302 – Dedication of streets

The subdivide shall make provision for the dedication to the Town of proposed street extensions as set forth in the comprehensive plan or other formal documents approved by the Planning Commission and Town Council and for the dedication to the Town of the fee simple title to the land for other land proposed streets in the subdivision.

OBSERVATIONS

- a. The approved preliminary subdivision plat makes "provisions" for the dedication of the right-of-way for Progress Street to extend through the entire property in conformance with the Subdivision Ordinance and the Comprehensive Plan.
- b. Except for phase 3, each phase of the subdivision can provide the right-of-way and streets to meet all Subdivision Ordinance and Zoning Ordinance requirements for roadway connections and cul-de-sac lengths without construction of Progress Street.

c. Phase 3 of the subdivision requires the extension of Progress Street 625 feet to access lots 13-26 and provide the connection to phase 2 of the Northside development on Primrose Drive.

Based on the above, our determination is that the construction of the roadway in its entirety is not required. The dedication of the right-of-way in its entirety, however, will need to occur with phase 1 of the final plat. The required right-of-way width is 75 feet. In addition, construction of 625 feet of Progress Street is required for access to phase 3 and to provide a connection to Primrose Drive.

2. Subdivision Ordinance/Section 5-302 – Medians

Collector and arterial roads within a proposed subdivision shall be built with medians to provide for landscaping and to provide for efficient traffic movement. The medians shall meet the current standards of the Virginia Department of Transportation.

The construction of any portion of Progress Street is required to meet Section 5-302. Any change to this provision will require a variance from the Planning Commission. Staff would support eliminating the boulevard requirement should any variance be sought in future. Other requirements for lane widths, sidewalks, etc., would still be required.

3. Zoning Ordinance/Section 3263(2) – Open Space Design Overlay District – Open Space

At least twenty-five percent of the minimum required open space shall be designated for active recreation purpose, and no more than fifty percent shall be utilized, in order to preserve a reasonable proportion of natural areas on the site. The purpose for which open space areas are proposed shall be documented by the applicant.

The approved preliminary plat design includes the required active recreation components to meet this requirement. These include both a trail system that would connect Primrose Park to the Northside neighborhood and extend to Progress Street. Secondly, the active recreation includes improvements to the Northside Park open space area. The construction of these two items is required in accordance with the approved layout. The reconstructed access drive to the existing pump station and a driveway access to the park needs to be combined with a connection to the dead end of Progress Street. A parking area for the park is also required to be constructed along with the driveway access. This is expected to be designed and constructed with Phase 1.

To demonstrate your concurrence with these determinations and your willingness to dedicate the right-of-way and construct the required recreational access amenities, please sign the "concurrence" line below and then return a copy to my attention. Then resubmit subdivision plans with revisions that reflect these determinations. When you are prepared to proceed with phase 3, or any subsequent phase that requires the extension of Progress Street to access lots, you may request a variance to the median in accordance with the Subdivision Ordinance for the segment of Progress Street.

I believe this provides a summary of our discussions and agreements. If you have any questions or concerns, please feel free to contact me at (540) 443-1005-or Anne McClung at (540) 443-1300.

Christopher S. Lawrence	
Concurrence:	
C. Givens Brothers, LLC	
By: Carroll Givens	

cc: Lawrence Spencer, Town Attorney
Anne McClung, Planning and Building Director
Jeanne Stosser, SAS Construction

Kali Casper

From: Kali Casper

Sent: Thursday, August 4, 2022 3:49 PM

To: Steve Semones; 'James Taylor'; 'Jessie Williford'

Cc: Kinsey O'Shea

Subject: Northside Park completeness review

Hi Steve,

Staff has finished our completion review for the submitted preliminary plat and has identified the deficiencies (Section 4-205) listed below includes issues which must be addressed before the plan is considered in compliance with the Town Code and thus approvable. Many of these are related to Section 4-200(c) with requirements that shall be included on the plat. This is not an exhaustive list but rather a completeness review to determine the best path forward. A more detailed review will be completed by staff and additional items may be identified as part of an administrative plan review or a public hearing review. Given that the plan is un-approvable as submitted there are three options for processing the submitted preliminary plat:

- Keep in the process to go to Planning Commission public hearing on October 4th with staff report that indicates plat is not approvable.
- Withdraw the application to fix significant deficiencies identified (Section 4-205) and then resubmit at a later date to start the process.
- Request an administrative review of the submitted preliminary plat with a 45 day review timeline; then revise and resubmit when plan is in a more approvable state.

Identified Deficiencies Based on Intake Review:

- Street names
- Adjoining subdivision
- Existing and proposed easements we specifically noted the existing trail easement is not included but all easements (existing and proposed) must be shown
- Bikeway (trail) clarity on the plan set as to what is existing and proposed; trail profiles are needed for any proposed trail
- Open space clarity on the plan set as to what is existing and proposed
- Existing contours are incorrect and should be revised
- Ownership of all implicated parcels as they are currently
- Access to pump station
- Access to stormwater management facilities
- Looping of waterlines
- Appropriate scale for all submitted sheets
- Driveway grades (all lots) and driveway distance from intersections (for corner lots)
- Copy of letter with signed acknowledgement from C. Givens (for variance request)
- Typical cross section for Progress Street
- Lot layout meeting Section 5-305 which requires continuation of existing streets and Section 5-317 relating to block design standards (example Craig Drive, Primrose Drive)

In addition, it is our understanding that the plat as proposed requires vacation and relocation of Town right-of-way as well as vacation and relocation of trail easement and existing constructed trail. This requires Town Council action and staff will confirm the process by which this occurs with the Town Attorney.

As I mentioned, Berewick is currently going through this process and was not approvable at Planning Commission public hearing; you can find the staff report here: https://www.blacksburg.gov/town-council/meetings/public-hearings/sub-22-0006-berewick-major-subdivision-preliminary-plat-review.

Please let us know how you and your client would like to proceed so we can begin the process. Let me know if you have any questions. Thanks,

Kali

Kali Casper, AICP, ENV SP Assistant Planning Director Town of Blacksburg 540.443.1300 kcasper@blacksburg.gov http://www.blacksburg.gov



February 15, 2023

Steve Semones Balzer & Associates, Inc. 80 College Street, Suite H Christiansburg, VA 24073

RE: SUB23-0001; Northside Park Section XII Preliminary Plat; 1st Review; 2150 Progress Street

Dear Steve:

This letter is an accompaniment to the staff report dated February 17, 2023, and contains administrative and clarifying comments for the plat. These items may not be related to specific code sections but are required for clarity and legibility in order to determine compliance with all standards as part of the preliminary plat review process.

Clarity and Drafting:

- Overall linework is confusing. Proposed property lines should be darker, setbacks and easements should be different linetypes, and any other differentiation (including adding sheets to separate layer displays) to improve legibility should be considered.
- Sheet 8—is this a trail coming off Primrose Drive? Please label.
- Features and labels under the proposed trail (?) off Primrose Drive are obscured by the trail. It is unclear where property lines, etc. are located.
- Subdivision section lines and Project Boundary lines are confusing especially at the southern end of Progress Street on sheets 3 and 4.
- The linework of easements on the common area near the stormwater management area on sheet 6 and 8 is confusing. Please revise.
- o Label the linework along Progress Street behind the sanitary easement. Is this also an easement?
- Label setback dimensions, especially where they are different (i.e. 57 & 58, 62 & 63)
- o Matchline numbers are incorrect. Please revise.
- Show how/where the proposed Claire Drive improvements tie into the stub on Craig Drive. This
 geographical area is not included on any sheet.
- o Show how/where the proposed Progress Street improvements tie in at Northside Drive.
- Show how/where the proposed Craig Drive cul-de-sac improvements tie into the existing end of Craig Drive.
- o In order to confirm setbacks as they apply for Open Space Overlay (OSO) District, please indicate on sheet 4 and/or 5 the zoning for adjacent areas, including whether or not OSO is utilized. There are several areas within existing Northside Park that are OSO lots.
- o Identify which proposed lots are OSO lots.
- Note 28 on sheet 1 refers to a private cross access easement. What/where is this and why is it needed?
- On sheet 2 and other sheets that reference the adjacent lots, why are the lots lettered and numbered?
 It seems that some of the numbers represent lot numbers, but others do not. Please be consistent.
- Add lot frontage to the lot table on sheet 1. Also include a column indicating whether or not the lot is located in the open space overlay district.

SUB23-0001 Northside Park Section XII Preliminary Plat

Date: 15 FEB 2023 Review Letter #1 Prepared By: KJO

Please call our office with any questions.

Respectfully,

Kinsey O'Shea, AICP

Senior Town Planner, Current Planning & Development Administration

Planning and Building Department

Kinan John



MEMORANDUM

TO: Kinsey O'Shea

FROM: Kafi Howard, Town Engineer

DATE: February 17, 2023

SUBJECT: SUB23-0001-Northside Park Section XXII – Stormwater Concept Plan and Floodplain

Memo

This memo addresses the applicant's proposal for Preliminary Plat approval for the creation of 51 lots on 36 acres of land. The Engineering Department has completed the review of the Northside park Section 12 Stormwater Concept Plan submitted on January 4, 2023. The SWM Concept Plan is **not approved** at this time. Per Chapter 18-605 of the Town code, a concept plan should be prepared at the time of the preliminary plan of subdivision, rezoning application, or special use permit application or other early step in the development process to identify the type of stormwater management measures necessary for the proposed project. The Town's review of this concept plan is to confirm that the stormwater management measures are capable of providing for Stormwater Management consistent with the Virginia DEQ Regulations and BMP Clearinghouse website to comply with **Sec. 4-200(c)(35)** of the Town Code.

Stormwater Management Required §5-800 – The stormwater management proposed for this subdivision is designed to be met with the use of a traditional detention pond. Water quality is met for 75% of the on-site with the installation of 5 bio-retention facilities, the remaining 25% of the water quality will be met through the purchase of off-site nutrient credits.

- This stormwater concept plan does not make provisions for stormwater management for Progress Street. The submitted variance to Section 5-320 requests to construct only 420 linear feet of Progress Street and only this small portion shown as paved on the Stormwater Concept Plat appears to have provisions. There does not appear to be any calculations or planning to confirm that there is sufficient land set aside for stormwater management treatment for the remainder of the proposed road.
- The intended method of meeting stormwater quantity provisions has not been included in the narrative. Currently page 10 of the Stormwater Management Channel Protection summary references a man-made channel on Roanoke Street, which appears to be information regarding a different site. This would be where the designer explains how the plan will meet the Energy Balance Requirements.
- On the pre/post development drainage maps, please update the drainage area going to parcel 120138. There is significant drainage inputs to this point and this must be accounted for in the stormwater management calculations, drainage easement dedications and positioning of the public multi-use trail located in the area.
- Access to the property for purposes of maintenance and regulatory inspection has not been provided. A location for a maintenance path is provided in Town ROW prior to the construction of Progress Street, and once Progress Street is constructed there will be no access. This access must be accounted for now and be contained on land owned or controlled by the Developer, not Town ROW.

Storm Drainage Design and Construction §5-805:

Sufficient information is not available at this time to determine adequacy of drainage design.

Floodplain Management §5-101:

A flood study was performed by Parker Design Group and was approved for this watershed in November of 2018. The limits of this approved flood hazard overlay is illustrated on the preliminary plat. Minor grading appears to be proposed in the edge of the FHO zone, therefore all proposed encroachments, including fill, new construction or other development must illustrate compliance with Sec. 3247 of the Floodplain Hazard Overlay provisions through a Flood Study report.



MEMORANDUM

TO: Kinsey O' Shea, Town Planner/Current Development

FROM: Randy Formica, Director, Engineering and GIS Department

DATE: February 8, 2023

SUBJECT: Northside Park Subdivision Section XII Preliminary Plat – Transportation

Comments

This memorandum will address Town Staff transportation comments from the review of the preliminary plat for Northside Park Subdivision, Section XII. It will also provide the Town's consultant's comments from their review of the Traffic Impact Analysis (TIA). The consultant's comments are attached to this memo.

Review of the Traffic Impact Analysis

Based upon the Town's consultant review of the Traffic Impact Analysis, left turn lanes on North Main Street are warranted at the intersections of North Main Street and Countryside Court and North Main Street and Givens Lane. The warrants are not met under "Existing" conditions but are met under the "No Build" and "Build" conditions.

The TIA shall be revised to include the turn lane analyses per the VDOT Access Management Regulations, Appendix F.

There appears to be to adequate existing right of way to accommodate the construction of a left turn lane at each of these intersections. Future subdivision engineering plans shall include plans for the construction of these left turn lanes.

Review of Preliminary Plat

The preliminary plat shows an island in the bulb of the cul-de-sac on Canongate Drive. Is this island intended to be concrete or grassed? If grassed, Public Works will not install nor maintain any landscaping located in the island. In addition, Public Works will not mow the grass on a regular schedule. Staff would recommend removal of this island.

Section 5-310 (a) of the subdivision ordinance requires that the paved area of the bulb turnaround at the end of the cul-de-sac be 90 feet in diameter. Staff interprets "the paved area" to mean the area of the bulb that is asphalt and can be travel upon, i.e. does not include the 2-foot wide gutter pan. Therefore, the paved area of the bulb of the cul-de-sac on Primrose Drive is approximately 85 feet in diameter and the paved area of the bulb of the cul-de-sac on Craig Drive is approximately 77 feet to 79 feet in diameter. These bulb diameters shall be increased to the 90 feet required in the Subdivision Ordinance.

There are no station numbers on the section of Claire Drive shown as being constructed on Sheet 8. Stationing shall be provided.

Primrose Drive is constructed and paved up to the cul-de-sac to be constructed with Section XII. Why does the profile on Sheet 12 appear to not reflect the finished street grade? The profile shall reflect the existing, finished street grade of Primrose Drive.

The plans shall indicate the extent of the construction of Progress Street being planned for this phase. Since the Town is most likely the entity that will have to construct the remainder of Progress Street, in order for Staff to evaluate the constructability of the entire section of future Progress Street, the plans need to provide the profile for Walnut Drive and Carroll Drive at their connections to future Progress Street. The plans have to show that future Progress Street can actually be constructed from the terminus in this phase to its ultimate terminus along North Main Street. The Town cannot be left with a street extension that we cannot build.

The stormwater management plans provided with the application show more grading detail than the preliminary plat plans. The proposed grading for the construction of future Progress Street should be shown on the plans. The stormwater management plans show the proposed lot grading along Lots 39 through 41. These lots are not included as a part of this preliminary plat and are part of a future preliminary plat. The proposed grading extends into the right of way for future Progress Street. If grading occurs in this manner, at the time the Town proceeds with construction of future Progress Street, a retaining wall will be required or the Town will have to acquire grading easements off the lots to build Progress Street. In order for Staff to evaluate the constructability of future Progress Street, the proposed grading for this future extension shall be shown on the Section XII plans.

Is the proposed grading along Lots 39 through 41 the only manner to perform the required grading? Since the lots do not exist yet, can't the grading be performed outside the right of way? The application cannot propose a grading plan that will prevent or restrict the Town's ability to construct future Progress Street. The construction of a retaining wall should be avoided. If grading easements are required in the future, the applicant shall provide these easements now while those lots are under one ownership rather than the Town attempting to acquire them when the lots are sold.

Concerning the construction of future Progress Street, the profile sheets show construction from Station 7+23 up to Station 47+26. The plan sheets show future Progress Street from Station 7+23 up to approximately Station 35+00. It appears that the profile extends beyond the boundary of the Northside Park Section XII, Phase II as presented on Sheet 3 but not quite to North Main Street. Please confirm this.

Based on the stormwater management plans, it appears the plan is to construct Progress Street to about 20 feet beyond the intersection with Cannongate Drive. Staff recommends treating this termination point as if it was a T turnaround described in Section 5-310 (b) of the Subdivision Ordinance and extend the turnaround to a length of 40 feet. In addition, Sheet 6 should show this as the termination point.

It appears that the topo for the proposed grading along Primrose Drive in plan view does not match the profile. This needs to be reconciled.

No profile was provided for the remaining cul-de-sac that needs to be constructed for Craig Drive.

Connectivity

Staff has reviewed the question of connectivity of the proposed subdivision streets per Section 5-305 of the Subdivision Ordinance, evaluating a connection between Primrose Drive and Claire Drive, and Craig Drive and Cannongate Drive. The variance request letter cites the conclusions of a Hurt & Proffitt geotechnical report dated April 19, 2022 as reasoning not to perform extensive earthwork on the site. However, this report has not been provided to the Town. Staff requests that this report be included as part of the application submittal.

The applicant's variance request letter acknowledges the feasibility of constructing connections between Primrose Drive and Claire Drive, and Craig Drive and Cannongate Drive.

Primrose Drive and Claire Drive

Based upon the current street design and depending upon where a connection would be made from Primrose Drive to Claire Drive, it appears a considerable amount of earthwork could be involved. It also appears that a variance to Section 5-313 (1), street grades may be required. A proposed connection would be required to meet minimum vertical curve design parameters. In order for Staff to provide a more definitive evaluation, additional street design information would be required.

Cannongate Drive and Craig Drive

While a connection between Cannongate Drive and Craig Drive would require the applicant to perform more earthwork than the current plan proposes, it does not appear that the earthwork is extensive. A proposed connection would be required to meet minimum vertical curve design parameters. In order for Staff to provide a more definitive evaluation, additional street design information would be required.

Both of these connections are feasible. Staff recognizes that the connections would require reconfiguration of the lots as currently proposed and possibly re-design of the streets (Claire Drive) as currently proposed.



Whitman, Requardt & Associates, LLP

Engineers · Architects · Environmental Planners

Est. 1915

MEMORANDUM

Date: January 26, 2023

To: Joshua Middleton, PE **From:** John Holst, PE

Subject: Northside Subdivision TIA Review

CC: Randy Formica, PE

Work Order Number: 45892-014

Contract Number: FPO

Project: Traffic Impact Analysis Review

As requested by the Town of Blacksburg, WRA has performed a review of the Traffic Impact Analysis report and related Synchro analysis files for the Northside Subdivision residential development project. This memorandum contains the findings of this review.

SUMMARY OF FINDINGS

Northside Subdivision Traffic Impact Analysis - December 2022

Comments based on this TIA report review are as follows:

- Site trip generation, trip distribution, growth rate, and adjacent development traffic appear to be accurate, reasonable, and incorporated into the study correctly.
- On Page 3 under VDOT Turn Lane Warrant Analysis, it is stated that "due to low traffic volumes, no turn lanes are warranted." This is incorrect. Using Page F-69 of the VDOT Road Design Manual, a left-turn lane from North Main Street to Countryside Court is warranted under both No Build and Build conditions for the PM peak hour.
- On Page 3 under VDOT Turn Lane Warrant Analysis, the intersection of North Main Street at Givens Lane
 was not included in the evaluation for a left-turn lane. Using Page F-69 of the VDOT Road Design Manual, a
 left-turn lane from North Main Street to Givens Lane is warranted under both No Build and Build conditions
 for the PM peak hour.

Northside Subdivision Synchro Files

Comments based on a review of these files are as follows:

No comments on Synchro files, they appear to be coded correctly.

If there are any questions regarding the findings compiled in this memorandum, please do not hesitate to contact us.

1700 Kraft Drive, Suite 1200

Blacksburg, Virginia 24060

www.wrallp.com · Phone: 540.951.3727 · Fax: 540.951.3741



DATE: February 3, 2023

TO: Kinsey O'Shea

FROM: Lori Lester, Water Resources Manager

TITLE: Water Comments for SUB23-0001, Northside XII Preliminary Plat

Water Comments:

- The Town can provide the minimum required pressure (20psi) at the water meters based on the information provided. **Note:** The water model indicates water pressure of proposed development exceeds 100psi in certain areas. The Building Code may have additional requirements for houses with high-pressure.
- Please realign public water mains/lines not located in the ROW to align with PUEs on property lines (Lots 17, 28, and 39). This helps ensure future structures, landscaping, etc. will not impede maintenance and repair of waterlines.
- Additional water infrastructure or changes to proposed water infrastructure may be required to meet Town of Blacksburg Water Standards and Specifications, fire hydrant spacing, Building and Fire Code, etc.



MEMORANDUM

TO: Kafi Howard

FROM: Shawn Veltman, Town Engineer

DATE: February 6, 2023

SUBJECT: SUB23-0001-Northside Park Section XXII

This memo addresses the applicant's proposal for Preliminary Plat approval for the creation of 51 lots on 36 acres of land and my review of the proposed plans for providing sanitary sewer service to the newly formed lots.

SUB23-0001 Review Comments

The lots in the proposed subdivision will be serviced by new gravity sanitary sewer facilities that will connect to existing Town owned gravity sewers and ultimately discharge to the Town's Northside Pump Station. This pump station was upgraded with joint Town/Developer cost sharing in 2015 to provide capacity for expected development in the surrounding sewershed consisting of 108 acres, including the lots in this subdivision. The Virginia Department of Environmental Quality (VDEQ) issued a Certificate to Operate (CTO) for that pump station on April 17, 2016 and the Town has determined that the capacity of the pump station and the downstream sewers to which it discharges are adequate to service the proposed development.

A detailed review of the applicant's plans for sanitary sewer service is not possible at this time because the preliminary plat does not include, nor is it required to include, the utility profiles necessary to determine compliance with all Town sewer standards, including but not limited to a minimum and maximum depths of coverage, conflicts with other utilities, or the ability to service the lowest floor elevation of the buildings on each lot. As a result the comments that follow are based solely upon a review of the available information supplied by the applicant.

In general, it is desirable for public sewers to be located in public rights-of-way rather than in easements through residential properties to improve their accessibility for future repair or maintenance and to limit the disruption to private property owners. The Town Sanitary Sewer System Standards & Specifications (adopted August 5, 2009) specifically prohibit the placement of trees, shrubs, structures, fences other obstacles within an easement if they would make it inaccessible by equipment. Thus, to avoid the potential for future conflicts with property owners when maintenance or repair of the sewers is required, every effort should be made to place sewers within the rights-of-way.

When utilities must be located in easements on private property the most desirable location for such easements is along property lines rather than through the properties. The sewers shown to be servicing lots 34 to 43 are located on the rear of the lots on top of a steep bank along Future Progress Street and Town access to these sewers will likely require the Town to access them through the developed properties from Claire Drive, which is less than ideal. The proposed design also requires the placement of five sanitary sewer manholes in the rear yards. An alternate alignment should be considered in this area.

Likewise, the sewers shown serving Lots 20 to 24 are located in an easement through the rear yards of the lots with three manholes placed in the easements on private property. The grades do not appear to require this and thus to facilitate future Town access to the sewer the line should be moved out of the lots and into the Future Progress Street right-of-way.

The sanitary sewer line located between lots 33 and 34 cuts the corner of Lot 34 rather than following the lot line to the public street and this increases the likelihood that the public sewer will end up under private improvements (e.g. driveways and landscaping) which would make it more difficult for the Town to access it in the future. Instead we recommend continuing the sewer along the lot line and across Claire Drive to a new manhole on the sewer serving the line coming in from the south. This will also eliminate the approximately 135 degree turn that the sewer entering the manhole from Claire Drive to the south is required to make.

Based upon the grading shown on the plans gravity sewer service to Lot 60 appears to be unlikely.

Sec. 4-200. Size and information required on a preliminary plat.

- (a) All preliminary plats shall be either seventeen (17) by twenty-two (22) inches or twenty-four (24) by thirty-six (36) inches in size.
- (b) Prior to final approval by the Planning Commission, the preliminary plat shall be signed by the owner of the land proposed for subdivision. The signature shall certify that the owner is aware of the requirements imposed by the plat and applicable Town codes, and shall further certify that the owner agrees to comply with these requirements, unless modified in accordance with the Town Code.
- (c) The preliminary plat shall demonstrate compliance with the requirements of the Blacksburg Zoning Ordinance and this chapter. It shall contain the following elements:
 - (1) Name of the subdivision, with the notation, "Preliminary Plat."
 - (2) Name(s) of owner(s) of subdivision
 - (3) Name of surveyor or engineer
 - (4) Location of proposed subdivision by vicinity map showing adjoining roads, names of roads, and jurisdiction in which the subdivision lies
 - (5) Adjoining subdivisions
 - (6) Parcel tax numbers
 - (7) Deed references
 - (8) True, record or grid north
 - (9) Identification of graves, objects, or structures marking a place of human burial
 - (10) Scale of drawing
 - (11) Boundary survey
 - (12) Total acreage in overall parcel or parcels involved.
 - (13) Total acreage of subdivided area
 - (14) Number of lots
 - (15) Area of each lot
 - (16) Frontage of each lot
 - (17) Purpose of dedication of land to public use
 - (18) Area in common open space, park or public lands
 - (19) Percentage of land to be subdivided as common open space, park or public lands
 - (20) Names of all existing, platted and proposed streets
 - (21) Width of existing, platted and proposed streets
 - (22) Location of existing buildings within the boundaries of the tract
 - (23) Existing and proposed utility and other easements
 - (24) Sidewalks and bikeways
 - (25) Parking spaces

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- (26) Existing and proposed storm sewer facilities
- (27) Water courses
- (28) Names, if any, of water courses
- (29) Topography at contour intervals satisfactory to the agent for full engineering review
- (30) Road profiles showing existing and proposed street grades
- (31) Proposed connections with existing sanitary sewers
- (32) Existing water supply and proposed connections thereof
- (33) Any non-public means of disposal of sewage
- (34) Any non-public means of water service
- (35) Provisions for stormwater management
- (36) Contiguous land owned or controlled by the subdivider

(Ord. No. 1217, § 2, 12-14-99)

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