

	3. PRVs and ARP	Town Engineer Doug Chapman and Public Works Director Matt Blackburn
VIII.	OFFICIALS REPORTS & COMMENTS: 1. Mayor 2. Council Members 3. Town Attorney 4. Town Manager	
XI.	CLOSED SESSION – <i>pursuant to NCGS 143-318.11.</i> <i>(a)(5) Discussion of potential property acquisition.</i>	
I.	ADJOURNMENT/RECESS...<i>Mayor Charles Sellers entertains a motion and second to adjourn or recess the meeting.</i>	

Draft
MINUTES
Town of Blowing Rock
Town Council Meeting
September 7, 2021

The Town of Blowing Rock Town Council met for a special meeting on Tuesday, September 7, 2021, at 5:00 p.m. The purpose of the meeting was to discuss COVID-19 and potential action. The meeting took place at Town Hall located at 1036 Main Street Blowing Rock, NC. Present were Mayor Charlie Sellers, Mayor Pro-Tem Sue Sweeting and Council Members Albert Yount, David Harwood, Doug Matheson, Virginia Powell, Town Manager Shane Fox, Police Chief Aaron Miller, Parks and Recreation Director Jennifer Brown, Public Works and Utilities Director Matt Blackburn and Town Clerk Hilari Hubner who recorded the minutes.

Council met to get an update COVID cases due to the Delta Variant of the virus and options for employee vaccination and weekly testing.

Mayor Pro-Tem Sweeting made a motion that unvaccinated Town employees have three choices; 1. get vaccinated, 2. be tested weekly for COVID or 3. if the employee refuses the first two options be terminated. To be effective September 10, 2021 at 5:00 p.m. with weekly testing beginning the week of September 13th, seconded by Council Member Matheson.

After a lengthy discussion the motion stood. For: Mayor Pro-Tem Sweeting, Council Members Matheson and Harwood. Against: Council Members Powell and Yount. Motion passed.

Council Member Powell stated to Mayor Sellers she would like to announce her resignation from Town Council effective September 10, 2021 at 5:00 p.m.

Mayor Sellers advised he was disappointed in Council Member Powell's decision, but understood she needed to do what she felt was right for her.

EXECUTIVE SESSION

At 6:05 p.m. Council Member Harwood stated pursuant to NCGS 143-318.11. (a)(5) discussion of potential property acquisition, seconded by Council Member Powell.

ADJOURNMENT

There being no further business to discuss, Mayor Pro-Tem Sweeting made a motion to adjourn at 6:55 p.m., seconded by Council Member Powell.

MAYOR _____
Charlie Sellers

ATTEST _____
Hilari Hubner, Town Clerk

Draft
MINUTES
Town of Blowing Rock
Town Council Meeting
September 14, 2021

The Town of Blowing Rock Town Council met for their regular monthly meeting on Tuesday, September 14, 2021, at 6:00 p.m. The meeting took place at Town Hall located at 1036 Main Street Blowing Rock, NC. Present were Mayor Charlie Sellers, Mayor Pro-Tem Sue Sweeting and Council Members Albert Yount, David Harwood, Doug Matheson, Town Manager Shane Fox, Town Attorney Allen Moseley, Town Engineer Doug Chapman, Fire Chief Kent Graham, Parks and Recreation Director Jennifer Brown, Police Chief Aaron Miller, Planning Director Kevin Rothrock and Public Works Director Matt Blackburn. Via Zoom: Finance Officer Nicole Norman and Town Clerk Hilari Hubner who recorded the minutes.

CALL TO ORDER

Mayor Sellers called the meeting to order at 6:00 p.m. and welcomed everyone. Mayor Sellers verified attendance via roll call.

THE PLEDGE OF ALLEGIANCE

SPECIAL ITEM

1. Virginia Powell Resignation

Council Member Matheson made a motion not to fill Council Member Powell's vacant seat, seconded by Mayor Pro-Tem Sweeting. Unanimously approved.

MINUTE APPROVAL

Council Member Harwood stated he had notified Town Clerk Hilari Hubner of a few corrections he had to the minutes from the August 10, 2021, regular meeting and the August 24th special meeting and read them into the record:

1. *Coffee Shop SUP: After closing the public hearing we need to note that the motion was approved unanimously*
2. *Coffee Shop SUP: Sue's motion was that the shop would serve only "coffee beverages" and "packaged pastries", not beverages and pastries.*
3. *COVID Discussion: Sue's motion was that masks are strongly recommended for "businesses/retail/restaurants" versus just retail and restaurants.*
4. *Under Council Member Harwood's official comments and reports Mr. Ethan Dodson's name was spelled incorrectly.*

Council Harwood made the motion to approve the minutes with corrections from the August 10, 2021 regular meeting, seconded by Council Member Matheson. Unanimously approved.

Council Member Harwood stated he also had the following changes to the August 24, 2021 special meeting minutes:

- 1. The minutes need to reflect the individual/individuals that called the emergency meeting. I believe it was Sue as mayor pro tem*
- 2. 1st paragraph: The purpose of the meeting was to discuss COVID-19 and potential actions. It was not to approve resolutions pertaining to the PARTF Grant.*
- 3. 5th paragraph: replace "insensitive" with "incentive"*
- 4. Council Member Matheson added in the fourth paragraph it reads he made a motion and second the motion, it needs to be changed to Mayor Pro-Tem Sweeting made the motion and Council Member Matheson seconded the motion.*

Council Member Harwood made a motion to approve the minutes with corrections from the August 24, 2021, meeting, seconded by Council Member Matheson. Unanimously approved.

REGULAR AGENDA ADOPTION

Council Member Matheson made a motion to approve the agenda as presented, seconded by Council Member Yount.

SPEAKERS FROM THE FLOOR

Homer Ketchie 245 Wonderland Drive (Blowing Rock) – Spoke about the Town parking issue and gave a few suggestions for parking deck locations and design options.

Catherine Reczek 184 Saddle Way Drive (Blowing Rock) – Spoke against the mask mandate.

Evenlight Eagles 612 Ransom Street (Blowing Rock) – Spoke about the COVID Virus and gave some information on studies done on Ivermectin and hydroxychloroquine as preventative measures for the virus.

Karen Winstead 129 Betsy Circle (Todd) – Spoke about COVID vaccine from a medical background and cautioned about pushing the vaccine. She provided information from her research to the Council.

Adam Zebzda 232 Robin Lane (Boone) – Spoke about the COVID Virus and urged the Town to do more in unify with the other municipalities.

Melissa Tausche 1741 Sunset Drive (Blowing Rock) – Spoke against COVID vaccination requirement for employees.

Tyler Bryson 152 Hill Top Way (Blowing Rock) – Spoke against mask mandates and employee vaccination requirement for employees.

Lee Rocamora 300 Laurel Park Road (Blowing Rock) – Spoke for the employee vaccination and/or weekly testing from a medical background as a preventative measure.

Deborah Boyd 214 Mockingbird Lane (Blowing Rock) – Spoke about the vaccine and the safety of the vaccine. She noted this is the most studied vaccine ever.

Terry McInnis 115 Locust Lane (Blowing Rock) – Spoke about COVID, encouraging education about the vaccine and consideration of the vaccine to protect others.

Council took a 10-minute recess.

PUBLIC HEARING

1. Green Hill Estates Subdivision - #2021-04

Planning Director Kevin Rothrock stated Mr. Herbert Townsend is requesting a Special Use Permit for a 10-lot single-family subdivision off Green Hill Rd in the ETJ. The 6.54-acre subject property is zoned R-A, residential-agricultural and is located in the WS-IV water supply watershed. A new private road off Green Hill Road with cul-de-sac will provide access to the lots. The property is outside of the Town limits and will utilize wells and septic systems for the home sites.

The subject property is a 6.54-acre tract off Green Hill Road that is part meadow and part woods. With the property located in the water supply watershed the minimum lot size is ½ acre. Each proposed lot meets the minimum size requirement and minimum lot width of 100 feet. Street trees will be planted or retained every 30 feet on center along the road within the right-of-way.

Each lot will front on the proposed private road. Maintenance of the road will be the responsibility of the homeowner's association.

The Land Use Code has a limit on cul-de-sac roads of 550 feet in length unless no other practical alternative exists. The proposed road is 653 feet in length to the center of the cul-de-sac. Given the steep topography at the end of the proposed road and the property owner not having access beyond the subject property to connect to other public or private roads, there doesn't appear to be any other practicable alternative but to provide a cul-de-sac street at the proposed length of 653 feet to serve all lots.

Storm water detention is proposed for the increased run off from the proposed road. Details are not finalized on the design of the detention but most likely will be above ground

basins along the edge of the road. A berm is proposed to carry run off from lots eight (8) and nine (9) to the ditch along Green Hill Road.

With this property being in the ETJ, no water and sewer utilities are available so private wells and septic systems will be approved by the Watauga County Health Department. Ten (10) lots are proposed on the preliminary plat, but after septic permits are finalized the number of buildable lots may be reduced on the final plat.

At their meeting on August 19, 2021, the Planning Board recommended approval of the subdivision with the following conditions:

1. A berm or ditch must be installed along the rear of lots 8 and 9.
2. The road length is limited to 550 feet.
3. That the final location and number of lots will be determined by the septic systems evaluations.

Council Member Yount asked who maintains the ditch on Green Hill Road. Mr. Rothrock said it was DOT. Council Member Yount further asked where the water runoff go. Mr. Rothrock explained the water runoff goes to the ditch and then to the creek beside Wonderland Woods.

Mayor Pro-Tem Sweeting stated the Town has had complaints from neighbors south of that area before about water issues. She asked how the applicant proposes slowing down the water as the water must be skipping the ditch to get down Green Hill Road.

Mr. Rothrock clarified where the water runoff goes. He further clarified for the impervious of the road the applicant is required to detain that portion of the runoff.

Mayor Pro-Tem Sweeting asked if the developer could come back to the Town and request to annex this property. Mr. Rothrock stated they could but would be responsible for extending water and sewer services to the property. Mayor Pro-Tem Sweeting asked if the applicant could then increase the number of lots. Mr. Rothrock stated there isn't a way to increase the number of lots.

Mayor Pro-Tem Sweeting asked if the applicant was required to notify the Blue Ridge Parkway of the development since the project would be 500 feet from their viewshed. Mr. Rothrock said there was not a requirement to notify them.

Council Member Matheson asked that the applicant spread out the water from the houses. Mr. Rothrock stated that was item number fourteen (14) in their SUP.

Patrick Warren, Project Engineer addressed the length of the road and explained the reason he did the initial design was esthetically the cul-de-sac would look better over the crest of the hill so it wouldn't be seen from Green Hill Road. He advised the other reason was to take that impervious area for the cul-de-sac and disperse into the woods behind the cul-de-sac rather than have all the water go down Green Hill Road. Mr. Warren stated

he respectfully request Council approve the road as designed. Mr. Warren further explained measures being taken to slow the water down and reduce the impact of the development.

Council Member Matheson asked what would happen if the land wouldn't perk, would the sight plan still stay as is. Mr. Warren advised they won't know for sure until the soil samples come back, but it could reduce the number of lots. He further advised the plat could change, but the road will not change. Mr. Warren mentioned the house sale prices are estimated at \$1.2 million to \$1.5 million in today's market.

Mr. Ron Swift advised he had concerns about water drainage and asked why the applicant wasn't putting curb and gutter on the road. He said he didn't understand why anyone would want to pass this project knowing the land might not perk and he felt there were lots of problems with the project Council should consider.

Mr. Rothrock stated to Council Member Matheson's question this was just a preliminary plat and not the final plat. Mr. Rothrock further stated it will not be over ten (10) lots, the road will be built to town specs, he and the applicant's Engineer will certify, and the Town Engineer and Public Works director will sign off on the final plat. Mr. Rothrock explained it's very customary through the county building lots to have some not perk and changes need to be made to the original plat.

Mayor Pro-Tem Sweeting asked since the project is only in the ETJ could Council require the applicant to get a storm water study. Mr. Rothrock stated no and the applicant's already doing storm water retention as well as meeting the code.

Mayor Pro-Tem Sweeting asked what legal limits Council could place to protect the residents down the road from water. Mr. Rothrock explained Council is doing it, the applicant is meeting what the ordinance requires. He further explained unless Council applies this to every other subdivision and makes other single homes detain stormwater that the standard can't be applied.

Town Attorney Allen Moseley advised there are some stormwater requirements in the SUP. Mayor Pro-Tem Sweeting asked if those would be cleared by the town engineer. Mr. Rothrock advised they would be and explained the process.

Council Member Yount asked if they meet code why is Council here if that is true. Mr. Rothrock explained in most communities it would be approved by staff for a ten (10) lot subdivision, but our code requires a SUP.

Town Engineer Doug Chapman stated when he originally reviewed the plans which showed drainage going to Green Hill Road, he asked the applicant to look at the storm water conveyance downstream to make sure it can convey downstream. He further stated he would require the engineer to look at all the culverts and ditches to make sure it can convey that amount of water. He explained the efforts that have been made by the applicant to make sure the water can be conveyed and not cause issues.

Mayor Pro-Tem Sweeting made a motion to close the Public Hearing, seconded by Council Member Harwood. Unanimously approved.

Council Member Harwood made a motion to approve the SUP #2021-04 with the modification that the second paragraph of item number thirteen (13) be removed, seconded by Council Member Matheson.

Further discussion:

Mayor Pro-Tem Sweeting said she would like the road length to be 550 as stated in the code.

Council Member Harwood stated the only thing that concerned him was the length of the road and he had asked Mr. Rothrock about our code and where that comes from. He explained he had done research with other municipalities about lengths of dead-end cul-de-sacs and had yet to find a reason. It doesn't relate to fire hose pressure or any kind of emergency services. Council Member Harwood advised he didn't see any harm in the length of the road as requested and that is why he left in the motion as is.

Council Member Yount stated he was not for the motion because he didn't think the applicant knew where the water is going and doesn't think they care.

With no further comment, the motion stood. For the motion: Council Members Harwood and Matheson. Against the motion: Mayor Pro-Tem Sweeting and Council Member Yount. Mayor Sellers voted for the motion. Motion passed. **Green Hill Estates Subdivision - #2021-04 – Attachment A**

BUSINESS MATTERS

1. 140 Sunset LLC

Planning Director Kevin Rothrock explained that 140 Sunset, LLC is requesting a special consideration for parking at their proposed renovation project at 140 Sunset Drive, the former Moody Furniture Showroom building.

Through a zoning permit application, the owner is planning to keep the lower level as a retail space and convert the upstairs to two (2) apartments with two bedrooms in each. The owner plans to use these apartments for short-term rental, therefore requiring four (4) parking spaces according to the Land Use Code.

There are three (3) existing spaces in front of the building that the applicant plans to remove and use as a courtyard/common area to be used by the tenants and the general public. This would allow the Town to gain two (2) parallel public spaces in front of the building and prevent cars from pulling across the public sidewalk and avoid backing out into traffic and pedestrians.

The owner is requesting the Town Council support the proposed change in the parking arrangement in front of the building in exchange for a credit for the three (3) existing spaces lost towards the Land Use Code parking requirement for the proposed short-term rental use. The owner would still provide one (1) new parking space for the short-term rental use.

Mayor Pro-Tem Sweeting asked for clarification that the applicant was going to pay for curb and gutter. Mr. Wilson, applicant for the project explained there is currently a sidewalk, but it has a knock down curb. The applicant would like to work with the town on the best way to replace that and make that area a nice common area.

Mayor Pro-Tem Sweeting asked if Mr. Wilson had been given a written agreement from Mr. Moody that was between him and the Town about how many parking spaces he had in front of his building. Mr. Wilson advised he did not. Mayor Pro-Tem Sweeting asked Mr. Rothrock if he was aware of the said agreement. Mr. Rothrock said he was aware of the minutes from 1981-1987 that he found and shared with anyone that asked about it. He stated he wasn't aware of an agreement that had been recorded and had not been able to find anything.

Council discussed the parking spaces and the golf cart space. Council Member Matheson said he would like to see the golf cart space be left.

Mayor Pro-Tem Sweeting said she felt what the applicant was proposing was very kind.

Mr. Wilson explained the idea for the building is to have retail on the bottom and short-term rental on the top.

Council Member Harwood asking Mr. Wilson if the applicant was definitely planning on having retail on the bottom and two (2) short term rental units on the top.

Mr. Wilson said the retail on the bottom was a yes, but the applicant was still trying to determine if they would have two smaller rental units on top or one big rental unit.

Council Member Harwood asked Mr. Rothrock if there were any existing parking credits for this property. Mr. Rothrock stated they have three (3) parking spaces only, they aren't required to buy an additional because the building will be retail on the bottom. He further stated they will be losing three (3) spaces in the proposed common area but have parking available in the back of the building.

Council Member Harwood said he ran some numbers and got they would need four (4) upstairs and six (6) retail spaces.

Mr. Rothrock explained they aren't required to provide more.

Council Member Harwood felt we have the cart before the horse usually we talk about a development and then the parking and felt like we are talking about parking before we have a SUP.

Mr. Rothrock explained it's a zoning permit and they don't need a SUP.

Mr. Wilson explained the applicant was not changing anything about the building only changing the parking in front to a common area. People won't be pulling across the sidewalk anymore with two (2) parallel spaces. Two (2) parking will be in the back for STR and retail tenant spaces making for four (4) spaces total. Mr. Wilson commented he felt they had outlined everything they planned.

Mayor Pro-Tem Sweeting made a motion to accept their request as outlined and the applicant can see if they can indeed get two (2) or three (3) spaces and leave the golf cart space, seconded by Council Member Yount.

Further Discussion:

Mayor Pro-Tem Sweeting stated this has been a safety issues for years, it's unsightly and she felt one of the things the town has been trying to do is move retail down Sunset and this is a great way to start.

Council Member Harwood thanked Mr. Wilson and Mr. Rothrock for explaining he had a better understanding now.

With no further comment, the motion stood: Unanimously approved.

2. COVID Discussion -

Manager Shane Fox gave an update on the current COVID Status in the county. He stated one week ago the mandatory vaccine, testing or resignation was put into place.

Council Member Sweeting asked how the testing set up was going. Manager Fox explained testing hadn't started yet, he had been working with the Health Department on when training can take place and have nailed down the best days for testing to take place on Mondays and Wednesdays.

Council Member Yount asked Manager Fox if he or Department Heads had listened to the reasons some resist vaccines and testing.

Manager Fox explained information was sent out to employees when the vaccine first became available and at that time approximately half the staff received the vaccine when it was available. When the incentive was put into place eight (8) more employees were vaccinated. He further stated no employee doesn't feel the virus isn't real, but some just have strong feelings for not receiving the vaccine.

Mayor Sellers asked Council when they plan to stop the mandate, when the staff are at

70% or 75% of the employees are vaccinated. He would also like to suggest a two (2) week additional grace period for testing to begin with the hopes of perhaps having more employees get vaccinated. Manager Fox could report via email a weekly status update and how many additional employees have been vaccinated.

Mayor Pro-Tem Sweeting advised she had spoken with Jennifer Greene with the Health Department about when to remove mandates and she stated that was based on data.

Council Member Harwood proposed instead of immediate termination, give the employees a two (2) week unpaid leave to think about getting vaccinated, getting tested before returning to work or if they don't choose either option, they can seek employment elsewhere.

Council Member Matheson said Council was trying to start a policy the same as the Town of Boone and would like to see a two (2) week grace period put into place and not have to have another meeting on this. He further suggested have testing open to all, not just unvaccinated employees.

Council Member Matheson made a motion while testing is being set up to grant a two (2) week grace period at the end open testing to all employees who are asymptomatic and after two weeks go back to the original mandate that was put in place on September 7th and this will begin on Friday, September 17th, seconded by Council Member Yount.

Council discussed further at length. Council agreed the action to fire or discipline the employees is the Town Manager's responsibility.

With no further comments or questions the motion stood: Unanimously approved.

OFFICIALS REPORTS & COMMENTS

- Mayor Sellers – Gave Council a quote from Watauga Medics for them to look over and think about discussing at a future Council meeting. He thanked former Council Member Virginia Powell for her service. He acknowledged the last eighteen (18) months have been very difficult and extended his thanks to Manager Fox and the Town employees for all they have done.
- Council Member Yount – None
- Council Member Harwood – Thanked former Council Member Virginia Powell for her service also thanked his fellow Council Members for their service. He thanked the employees and stated he has great admiration for them. He said he didn't want any of his comments to be misconstrued as anything but admiration for them. He stated his first priority is to the town services we provide for the citizens and was trying to find the best way to protect that. He commented he didn't think there was anybody in public administration that he respects more than Manager Fox and if Council goes the route of letting the decision of the employees be in his hands, he was very comfortable with that.

- Mayor Pro-Tem Sweeting – Agreed with Council Member Harwood. She stated the virus doesn't care if you are a republican, democrat or independent, this virus cares more about people. Those with comorbid conditions, immunosuppression, children and healthy individuals. Testing has been done on babies, children and adults no one has been injured or died from being tested. The unvaccinated employees are a safety risk to those vaccinated, immunocompromised (chemo patients, transplant patients on dialysis) especially children under twelve (12) who can't be vaccinated. Research has showed unvaccinated can affect up to five (5) to seven (7) others due to the Delta variant. We are in a public health emergency with the COVID pandemic the health of the public should take priority over the individual. Vaccination and masking is the way according to the scientist, physicians and nurses to end this pandemic.
- Council Member Matheson – Thanked former Council Member Virginia Powell for her service. He thanked the board and stated he knows we have all had a hard week. He stated the board tries to make the best decisions for the town and knows there isn't a member on the board that doesn't love this town. He stated sometimes the Council gets unjustly beat up for doing what they think is right and thanked every Council Member for their service. He further stated he was glad that at least when we all disagree, we can still be friends. Another stimulus package should be coming out, but the school system has put in for the most of it. He has a League Board of Directors meeting Thursday.
- Town Attorney Allen Moseley – None
- Manager Shane Fox – The last eighteen months (18) have seemed never ending and the last week has been very difficult for everyone. Audit is coming to an end and will be submitted to the LGC the end of October. Parks and Rec was approached by the Blowing Rock School Principal, Patrick Sukow, about the possibility of Parks and Rec helping with their overflow issue for after school. Parks and Rec took on the task and are being funded for the school. It has been a great addition and has been well received from parents and appreciated by the school. Landscaping is looking great on Sunset Drive, will soon be moving to the Jenkins/Four Forty 4 side and will move up to the Fire Department. PARTF grant will be decided at the end of the month.

EXECUTIVE SESSION

Council Member Harwood made a motion to go into closed session at 9:30 p.m. pursuant to NCGS 143-318.11. (a)(5) discussion of potential property acquisition, seconded by Mayor Pro-Tem Sweeting. Unanimously approved.

Following executive session, Council directed Manager Fox to proceed with an agreement with Mr. Buxton to purchase his land on Hwy 321/Valley Blvd.

ADJOURNMENT

Mayor Pro-Tem Sweeting made a motion to adjourn at 10:15 p.m., seconded by Council Member Matheson. Unanimously approved.

MAYOR _____
Charlie Sellers

ATTEST _____
Hilari Hubner, Town Clerk

Attachments

Green Hill Estates Subdivision - #2021-04 – Attachment A



Town of Blowing Rock

1036 Main Street ★ Post Office Box 47 ★ Blowing Rock, North Carolina 28605

To: Mr. Shane Fox, Mayor Sellers, and Members of Town Council
From: Nicole Norman, Finance Officer
Subject: Budget Amendment Ordinance to Account for Various Items
(Ordinance #2021-11)
Date: October 12, 2021

Enclosed please find a Budget Amendment Ordinance for the fiscal year 2020-2021 for your consideration.

Section 1 (General Fund) allocates grant funds received from Fire House Subs (\$5,225) to purchase AEDs for the police department, allocates donated funds (\$700) intended for the purpose of purchasing a doggie waste station, allocates Manager Discretionary funds approved for use by the Town Manager for a police dispatch CAD program (\$10,995), as well as allocates Rainey Lodge CUP fees (\$3,200) towards sidewalk replacement/repair in the area. Finally, this section also allocates Fund Balance (\$110,000) to the cost of Wastewater Treatment Plant access road repairs.

Please let me know if you need further details on the proposed amendment.

**2021-2022
Budget Amendment Ordinance 2021-11**

Be it ordained by the Town Council of the Town of Blowing Rock, North Carolina, that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2022:

Section 1. To amend the General Fund, the appropriations are to be changed as follows:

<u>Acct. No.</u>		<u>Current Appropriation</u>	<u>Decrease</u>	<u>Increase</u>	<u>Proposed Appropriation</u>
10-10-4310-600	Grant Expense (PD)	\$ 15,000	\$ -	\$ 5,225	\$ 20,225
10-80-6100-033	Materials/Supplies- Park Office	\$ 26,700	\$ -	\$ 700	\$ 27,400
10-10-4310-116	Maintenance Comtracts	\$ 15,000	\$ -	\$ 10,995	\$ 25,995
10-00-4200-508	Manager's Discretionary Fund	\$ 25,000	\$ 10,995	\$ -	\$ 14,005
10-20-4500-333	Sidewalks	\$ 10,000	\$ -	\$ 3,200	\$ 13,200
10-00-4200-505	Transfer to Capital Projects Fund	\$ 400,000	\$ -	\$ 110,000	\$ 510,000
			<u>\$ 10,995</u>	<u>\$ 130,120</u>	

This will result in a net increase of \$119,125. in the appropriations of the General Fund. As a result, the following revenue will be increased.

<u>Acct. No.</u>		<u>Current Appropriation</u>	<u>Decrease</u>	<u>Increase</u>	<u>Proposed Appropriation</u>
10-00-3400-349	Grants (Non-Federal)	\$ 15,000	\$ -	\$ 5,225	\$ 20,225
10-00-3400-358	Donations	\$ -	\$ -	\$ 700	\$ 700
10-00-3400-335	Miscellaeous Revenue	\$ 20,625	\$ -	\$ 3,200	\$ 23,825
10-00-3400-399	Fund Balance Appropriated	\$ 200,000	\$ -	\$ 110,000	\$ 310,000
			<u>\$ -</u>	<u>\$ 119,125</u>	

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Town Council and to the Finance Officer for their implementation.

Adopted this 12th day of October, 2021.

Attested by:

Charles Sellers, Mayor

Hilari Hubner, Town Clerk

Presentation Agenda - Staff Report

To: Mayor Charlie Sellers and the Blowing Rock Town Council

From: Shane Fox, Town Manager

Subject: BRPD Traffic Enforcement

Date: October 12, 2021

Information:

Police Chief Aaron Miller will be present to give an update on traffic enforcement within the town limits of Blowing Rock. Chief Miller will give updated information on traffic stops, radar results, and discuss future plans for traffic enforcement within town limits.

August 11, 2021

Shane Fox
Town Manager
Town of Blowing Rock
1036 Main Street
P.O. Box 47
Blowing Rock, NC 28605
sfox@townofblowingrocknc.gov

Subject: **DRAFT** Green Hill Road Traffic Study
Blowing Rock, North Carolina

Dear Mr. Fox:

This letter provides the results of the traffic study for Green Hill Road in Blowing Rock, North Carolina. The purpose of this study is to determine potential roadway improvements to address citizen concerns regarding speeding and cut-through traffic volumes on Green Hill Road. The scope and methodology outlined in this letter was determined through coordination with the Town of Blowing Rock (Town).

Introduction

Green Hill Road is a two-lane roadway with a posted speed limit of 25 miles per hour (mph) which provides a connection between US 321 and the Blue Ridge Parkway. Green Hill Road is approximately two miles in length and primarily services residential properties but can also be used to access the Blowing Rock Country Club, Green Park Inn, and Church of the Epiphany. Green Hill Road is a state-maintained road from the Blue Ridge Parkway to just south of Wonderland Drive. The remainder of Green Hill Road from just south of Wonderland Drive to US 321 is locally maintained.

Residents on Green Hill Road have expressed their concern about the increasing traffic volumes and safety concerns on Green Hill Road. Major areas of concern include increasing cut-through traffic (vehicles that are only using Green Hill Road to travel between US 321 and the Blue Ridge Parkway without making a stop at a destination on Green Hill Road), speeding vehicles, and the intersection of Green Hill Road and Green Hill Circle. Given the resident concerns, it was determined that the traffic study would analyze current traffic volumes and available crash and speed data on Green Hill Road provided by the Blowing Rock Police Department (BRPD).

Refer to Figure 1, located in Appendix A, for a site location map.

Traffic Count Data

Traffic counts were conducted over a 13-hour period (6:00AM–7:00PM) at the intersections of Green Hill Road / US 321 and Green Hill Road / Blue Ridge Parkway on July 13, 2021, by Quality Counts, LLC. The traffic

count data collected at the study intersections captured not only vehicular traffic but identified the number of heavy trucks and other forms of transportation, such as pedestrians and bicyclists. Refer to Appendix B for the peak hour traffic volumes at the intersections of Green Hill Road / US 321 and Green Hill Road / Blue Ridge Parkway.

The peak hour signal warrant from the *Manual on Uniform Traffic Control Devices* (MUTCD) was considered at the intersections of Green Hill Road / US 321 and Green Hill Road / Blue Ridge Parkway; however, the weekday AM and PM peak hour volumes at both study intersections are lower than those necessary to warrant a traffic signal. It is not expected that these intersections would satisfy the MUTCD 8-hour and 4-hour warrants, which the North Carolina Department of Transportation (NCDOT) favors for installation of a traffic signal. These longer period warrants are not typically met for residential areas that do not meet peak hour warrants due to the distinct peak traffic periods for residential development.

Crash Data

Crash data was obtained from the BRPD along Green Hill Road within the study area. The provided crash data included a summary of crashes from March of 2013 through December of 2020. A summary of the crash data along Green Hill Road is provided in Table 1. A copy of the crash data provided by BRPD can be found in the Appendix C.

Table 1: Crash Data Location Summary

Intersection	Total Crashes
Green Hill Road at US 321	2
Green Hill Road at Village Drive	3
Green Hill Road at West Green Hill Drive	1
Green Hill Road at Green Hill Circle	1
Green Hill Road at Fairway Court	1
Green Hill Road at Green Hill Woods	1
Green Hill Road at Edge Hill Road	3
TOTAL	12

Crash data indicated that 12 crashes were reported on Green Hill Road over the eight-year period of crash data obtained by BRPD. Based on a review of the crash data, a majority of the reported crashes on Green Hill Road were likely a result of vehicles driving too fast for the conditions, the horizontal curvature of Green Hill Road, and/or narrow travel lanes. Of the 12 crashes reported, three (3) occurred at/near the intersection of Green Hill Road and Village Drive due to the sharp curve and grade of Green Hill Road at/near its intersection with Village Drive. Additionally, three (3) crashes occurred at/near the intersection of Green Hill Road and Edge

Hill Lane due to the horizontal curvature of Green Hill Road and/or narrow travel lanes at/near its intersection with Edge Hill Lane.

Speed Data

Speed data was obtained from the BRPD along Green Hill Road within the study area. The provided speed data included a summary of vehicle speeds along Green Hill Road between Heather Ridge Lane (south) and Edge Hill Lane collected in May and June of 2021. Speed and traffic volume data were collected using a speed display monitor. A summary of the speed data collected along Green Hill Road is provided in Table 2. A copy of the speed data provided by BRPD can be found in the Appendix D.

Table 2: Speed Data Summary

	Average Speed	50th Percentile Speed	85th Percentile Speed	Average Daily Traffic
Green Hill Road - Southbound	26 mph	27 mph	35 mph	381 vpd
Green Hill Road - Northbound	24 mph	25 mph	32 mph	366 vpd

Green Hill Road has a posted speed limit of 25 mph. Speed data indicated that motorists on Green Hill Road travel at an average speed of 25 mph and an 85th percentile speed of 34 mph. The 85th percentile speed is defined as the speed at which 85 percent of drivers travel at or below under free-flowing conditions past a monitored point. Based on a review of the speed data, it should be noted that drivers are traveling at faster speeds in the southbound direction due to the vertical curvature of Green Hill Road between Heather Ridge Lane (south) and Edge Hill Lane.

Stopping sight distance is defined as the distance along a roadway required for a driver to perceive and react to an object in the roadway and to brake to a complete stop before reaching the object. Stopping sight distance is directly related to vehicle speed: as a vehicle travels at increased speeds, the stopping sight distance necessary for a vehicle to come to a complete stop also increases. Due to the physical characteristics of Green Hill Road (horizontal/vertical curvature, limited sight distance, narrow travel lanes, etc.), it is critical that uniform pavement markings and signing are in place so drivers are aware of the upcoming changes in roadway geometry and to bring the focus of drivers to Green Hill Road.

Public Engagement

Public engagement efforts for the Green Hill Road Traffic Study included an online survey, hosted on ESRI’s Survey 123, and an interactive map, hosted by ESRI’s ArcGIS WebApps. Both platforms were available for public comment from May 17, 2021, through June 15, 2021. Advertising of the platforms was completed by Town staff. The public survey had a total of 222 participants, although participants were not required to answer every question on the survey, so some questions do not have 222 participants. While the interactive map had 201 input points, it should be noted that interactive map participants had no limit on the number of points they could submit; therefore the 201 input points is not necessarily representative of 201 individual participants. A summary of the survey responses and map input are provided in Appendix E.

Summary of Speeding Countermeasures

Based on a review of public comments from the residents of Green Hill Road and the speed data obtained from BRPD, speed management countermeasures were considered to determine the appropriate countermeasure(s) to reduce driver's speed while traveling along Green Hill Road.

All-Way Stop-Control (AWSC)

AWSC at intersections along Green Hill Road was considered as a speeding countermeasure; however, the Manual on Uniform Traffic Control Devices (MUTCD) Section 2B.04.05 states that “*YIELD or STOP signs should not be used for speed control.*” It is unlikely that intersections along Green Hill Road will meet the minimum volume criteria outlined in the MUTCD necessary to warrant consideration of AWSC. The addition of AWSC along Green Hill Road at intersections with minimal traffic on the side streets may result in the stop signs on Green Hill Road effectively operating under yield conditions, or drivers ignoring the traffic control altogether due to low traffic volumes on the side streets. Additionally, based on a review of crash data obtained from BRPD over the most recent eight-year period, none of the intersections along Green Hill Road meet the minimum crash criteria outlined in the MUTCD necessary to warrant consideration of AWSC.

Speed Humps

Speed humps along Green Hill Road were considered as a speeding countermeasure. Speed humps are most effective in a series to retain slower vehicle speeds over a longer distance. The Institute of Transportation Engineers (ITE) *Guidelines for the Design and Application of Speed Humps* provides specific design and application guidance for speed humps:

- Speed humps should not be placed where the roadway horizontal curvature contains a radius of less than 300 feet.
- Speed humps should not be placed where the roadway vertical curvature exceeds an 8% grade.
- Speed humps in a series should be spaced 260 feet – 500 feet apart from one another.
- Speed humps are appropriate if the posted speed limit is 30 mph or less.

Additional design and placement considerations for speed humps include proximity to the nearest intersection / private driveways, availability of street lighting, and location of drainage and utility access points. Due to the horizontal and vertical alignment of Green Hill Road in addition to the various intersecting roadways and private driveways, the placement of speed humps may prove challenging along Green Hill Road in accordance with ITE *Guidelines for the Design and Application of Speed Humps*.

Curve Delineation

Enhanced curve delineation along Green Hill Road was considered as a speeding countermeasure. By improving striping and signing along horizontal curves, drivers are more aware of the roadway's curvature and are more likely to slow down to a speed that matches the curve's perceived severity. Warning signs alert drivers to conditions that may call for a reduction in speed or an action in the interest of safety and efficient traffic operations. Examples of warning signs illustrating changes in horizontal alignment (some of which are currently placed along Green Hill Road) from the MUTCD include, but are not limited to, turn/curve signs (W1-1, 2-4), winding road (W1-5), one direction large arrow (W1-6), chevrons (W1-8), and combination horizontal alignment/intersection signs (W1-10, 10a-10e). Examples of improved striping along Green Hill Road include, but are not limited to, uniform application of white mini-skips/lane lines through

intersections/private driveways, retroreflective yellow center line and white lane line pavement markings, and yellow reflective center line markers. The goal of uniform and consistent application of enhanced curve delineation (striping and signing) along Green Hill Road is to bring the focus of drivers to Green Hill Road within their field of view so drivers are more aware of the roadway's curvature and upcoming changes in horizontal alignment.

Speed Feedback Signs

Speed feedback signs along Green Hill Road were considered as a speeding countermeasure. These portable, interactive signs display a vehicle's current speed to remind drivers to slow down and obey the posted speed limit. One (1) speed feedback sign should be placed in each direction on the straight sections of Green Hill Road (total of two (2) signs) between Edge Hill Lane and Heather Ridge Lane (north). Additionally, speed feedback signs have the functionality to record speed/traffic volume data which can be utilized by BRPD to determine peak times for speeding vehicles throughout the day to utilize for enforcement efforts.

Summary of Cut-Through Traffic Countermeasures

Based on a review of public comments from the residents of Green Hill Road, cut-through traffic countermeasures were considered to determine the appropriate countermeasure(s) to reduce cut-through traffic and commercial vehicles along Green Hill Road.

Google Maps

Google Maps bases its routing recommendations on two (2) factors: historical traffic patterns/data of the average time it takes to travel a particular section of roadway at certain times/days and real-time data from smartphones that report how fast vehicles are traveling. As a result, Google Maps may recommend Green Hill Road as an alternative route for tourists visiting the Town when the Blue Ridge Parkway is open and if there is congestion, lanes closures, and/or construction on the surrounding roadways during a certain time of day and/or day of the week. Additionally, depending on the origin and destination of a vehicle trip within Town limits, Google maps may recommend Green Hill Road as the fastest route to reach the driver's destination. Therefore, it is recommended that Town staff work with Google Maps to remove Green Hill Road as a routing alternative to reduce cut-through traffic between US 321 and the Blue Ridge Parkway

Selective Exclusion Signs

Selective exclusion signs provide notice to roadway users that State or local statutes/ordinances exclude designated types of traffic from using a particular roadway or facility. If used, selective exclusion signs shall clearly indicate the type of traffic that is excluded (MUTCD Section 2B.39). Examples of selective exclusion signs from the MUTCD include, but are not limited to, no trucks (R5-2, 2a) and no commercial vehicles (R5-4).

As drivers enter Green Hill Road from US 321 or the Blue Ridge Parkway, there is existing signing indicating "No Trucks Over 2 Axles." However, these signs may not be visible to commercial vehicles and truck traffic until they have already entered Green Hill Road in which case would be challenging for these types of vehicles to reverse course. MUTCD Section 2B.39.07 states that *"The Selective Exclusion sign should be placed on the right-hand side of the roadway at an appropriate distance from the intersection so as to be clearly visible to all road users turning into the roadway that has the exclusion."* It is recommended that the existing "No Trucks Over 2 Axles"

signing be replaced with selective exclusion signing such as no trucks (R5-2, 2a) or no commercial vehicles (R5-4).

Additionally, it is recommended that selective exclusion signing be provided in both directions on US 321 and the Blue Ridge Parkway as drivers approach Green Hill Road to provide advance notice of the traffic that is excluded from Green Hill Road. Selective exclusion signing on US 321 and the Blue Ridge Parkway could be paired with movement prohibition signs, such as no right turn (R3-1) and no left turn (R3-2) signing, to further emphasize the traffic that is excluded from Green Hill Road. MUTCD Section 2B.18.03 states that *“If No Right Turn (R3-1) signs are used, at least one should be placed either over the roadway or at the right-hand corner of the intersection.”* MUTCD Section 2B.18.04 states that *“If No Left Turn (R3-2) signs are used, at least one should be placed over the roadway, at the far left-hand corner of the intersection, on a median, or in conjunction with the STOP sign or YIELD sign located on the near right-hand corner.”*

Summary of Green Hill Road / Green Hill Circle Intersection Improvements

The intersection of Green Hill Road and Green Hill Circle operates under AWSC with painted stop bars on all three (3) approaches and stop ahead signs (W3-1) on Green Hill Road in advance of the intersection. It is recommended that a supplemental distance ahead plaque (W16-2P, 2aP) be installed on the same posts as the stop ahead signs on Green Hill Road to inform drivers of the distance to the stop sign indicated by the warning sign.

Transverse rumble strip markings are recommended on Green Hill Road in advance of the Green Hill Road and Green Hill Circle AWSC intersection. Transverse rumble strip markings consist of intermittent narrow, transverse areas of rough-textured or slightly raised or depressed road surface that extend across the travel lanes to alert drivers to unexpected changes in alignment and conditions requiring a reduction in speed or a stop (MUTCD Section 3J.02). MUTCD Section 6F.87.08 indicates that *“Transverse rumble strips should not be placed on sharp horizontal and vertical curves.”*

Recommendations

Based on the findings of this traffic study, the following improvements are recommended along Green Hill Road within the study area:

Speeding Countermeasures

- Install two (2) speed feedback signs on Green Hill Road, one (1) in each direction, between Edge Hill Lane and Heather Ridge Lane (north).
- Install a uniform and consistent application of enhanced curve delineation using warning signs and pavement markings illustrating changes in horizontal alignment on Green Hill Road.

Cut-Through Traffic Countermeasures

- Coordinate with Google Maps to remove Green Hill Road as a routing alternative between US 321 and the Blue Ridge Parkway.
- Install selective exclusion signing on Green Hill Road and in both directions on US 321 and the Blue Ridge Parkway as drivers approach Green Hill Road.
 - Movement prohibition signing on US 321 and the Blue Ridge Parkway should also be considered as a supplement to the recommended selective exclusion signing.

Green Hill Road / Green Hill Circle Intersection Improvements

- Install supplemental distance ahead plaques on the same post as the existing stop ahead warning signs on Green Hill Road.
- Install transverse rumble strip markings on Green Hill Road in advance of the Green Hill Road / Green Hill Circle AWSC intersection.

If you should have any questions or comments regarding this letter, please feel free to contact me at (919) 872-5115.

Sincerely,

Michael Karpinski, P.E.
Traffic Engineering Project Manager
RAMEY KEMP ASSOCIATES, INC.

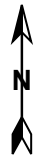
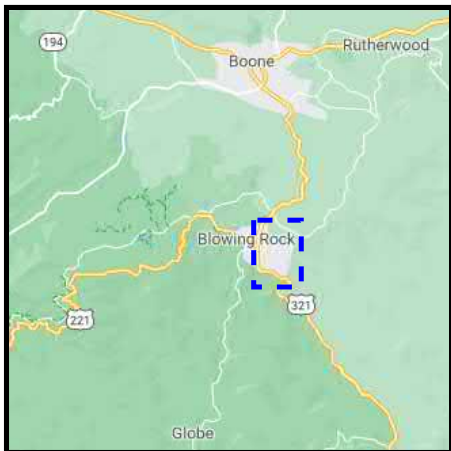
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Attachments: Appendix A – Figures
Appendix B – Traffic Count Data
Appendix C – Crash Data
Appendix D – Speed Data
Appendix E – Public Engagement Summary

TECHNICAL APPENDIX

APPENDIX A

FIGURES



LEGEND

- Green Hill Road Corridor
- Study Intersection
- Study area

Moving forward.



Green Hill Road
Traffic Study
Blowing Rock, NC

Site Location Map

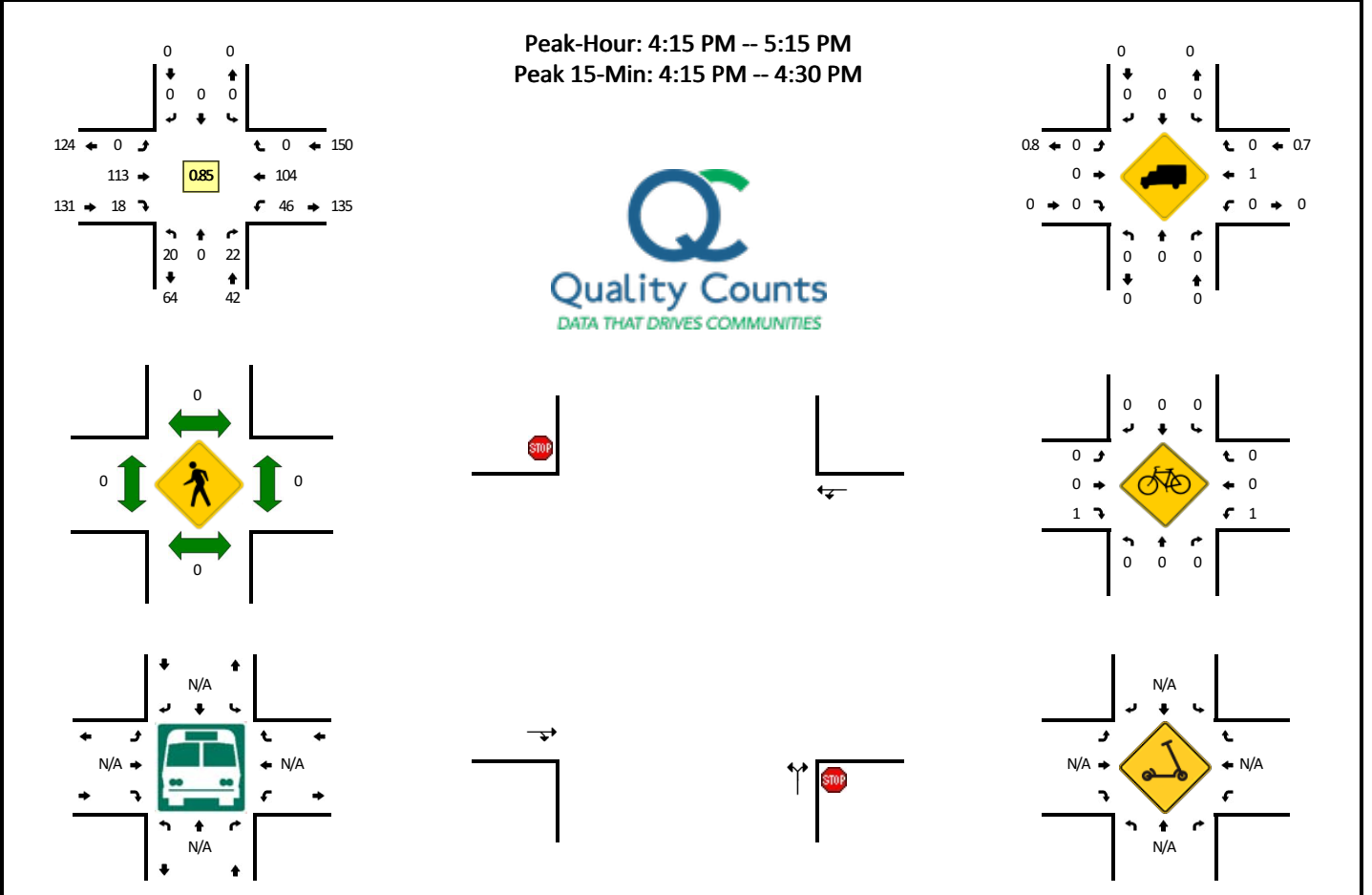
Scale: Not to Scale | Figure 1

APPENDIX B

TRAFFIC COUNT DATA

LOCATION: Green Hill Rd -- Blue Ridge Pkwy
CITY/STATE: Blowing Rock, NC

QC JOB #: 15507701
DATE: Tue, Jul 13 2021



15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				Blue Ridge Pkwy (Eastbound)				Blue Ridge Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	
6:15 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	2	2	0	6	
6:30 AM	0	0	2	0	0	0	0	0	0	3	0	0	0	3	8	0	16	
6:45 AM	0	0	3	0	0	0	0	0	0	6	0	0	0	2	15	0	26	50
7:00 AM	2	0	3	0	0	0	0	0	0	5	0	0	0	5	9	0	24	72
7:15 AM	3	0	2	0	0	0	0	0	0	7	3	0	0	4	10	0	29	95
7:30 AM	5	0	5	0	0	0	0	0	0	9	0	0	0	7	11	0	37	116
7:45 AM	3	0	7	0	0	0	0	0	0	11	3	0	0	7	18	0	49	139
8:00 AM	5	0	3	0	0	0	0	0	0	8	1	0	0	10	15	0	42	157
8:15 AM	4	0	3	0	0	0	0	0	0	12	2	0	0	5	13	0	39	167
8:30 AM	2	0	2	0	0	0	0	0	0	12	3	0	0	3	21	0	43	173
8:45 AM	4	0	3	0	0	0	0	0	0	6	3	0	0	6	30	0	52	176
9:00 AM	6	0	1	0	0	0	0	0	0	11	6	0	0	4	17	0	45	179
9:15 AM	6	0	6	0	0	0	0	0	0	16	3	0	0	4	17	0	52	192
9:30 AM	5	0	4	1	0	0	0	0	0	18	5	0	0	4	25	0	62	211
9:45 AM	2	0	1	0	0	0	0	0	0	13	1	0	0	7	26	0	50	209
10:00 AM	5	0	9	0	0	0	0	0	0	13	6	0	0	4	26	0	63	227
10:15 AM	3	0	3	0	0	0	0	0	0	16	4	0	0	4	28	0	58	233
10:30 AM	5	0	2	0	0	0	0	0	0	19	3	0	0	0	17	0	46	217
10:45 AM	9	0	2	0	0	0	0	0	0	12	4	0	0	2	31	0	60	227
11:00 AM	4	0	7	0	0	0	0	0	0	17	6	0	0	3	31	0	68	232
11:15 AM	3	0	2	0	0	0	0	0	0	16	1	0	0	5	34	0	61	235
11:30 AM	8	0	4	0	0	0	0	0	0	17	3	0	0	4	27	0	63	252
11:45 AM	4	0	4	0	0	0	0	0	0	19	5	0	0	5	32	0	69	261
12:00 PM	5	0	3	0	0	0	0	0	0	22	7	0	0	5	20	0	62	255
12:15 PM	4	0	4	0	0	0	0	0	0	21	8	0	0	5	22	0	64	258
12:30 PM	6	0	1	0	0	0	0	0	0	16	7	0	0	4	24	0	58	253
12:45 PM	9	0	4	0	0	0	0	0	0	19	3	0	0	5	25	0	65	249
1:00 PM	5	0	2	0	0	0	0	0	0	29	4	0	0	1	16	0	57	244
1:15 PM	1	0	0	0	0	0	0	0	0	27	4	0	0	5	22	0	59	239
1:30 PM	0	0	8	0	0	0	0	0	0	18	2	0	0	5	23	0	56	237
1:45 PM	5	0	1	0	0	0	0	0	0	20	7	0	0	4	27	0	64	236
2:00 PM	5	0	2	0	0	0	0	0	0	24	1	0	0	6	20	0	58	237
2:15 PM	7	0	3	1	0	0	0	0	0	27	7	0	0	6	25	0	76	254
2:30 PM	1	0	4	0	0	0	0	0	0	24	2	0	0	3	20	0	55	253
2:45 PM	3	0	4	0	0	0	0	0	0	19	3	0	0	6	18	0	53	242
3:00 PM	8	0	6	0	0	0	0	0	0	17	6	0	0	0	19	0	56	240
3:15 PM	3	0	5	0	0	0	0	0	0	20	9	0	0	10	41	0	88	252
3:30 PM	6	0	8	1	0	0	0	0	0	27	6	0	0	2	21	0	71	268

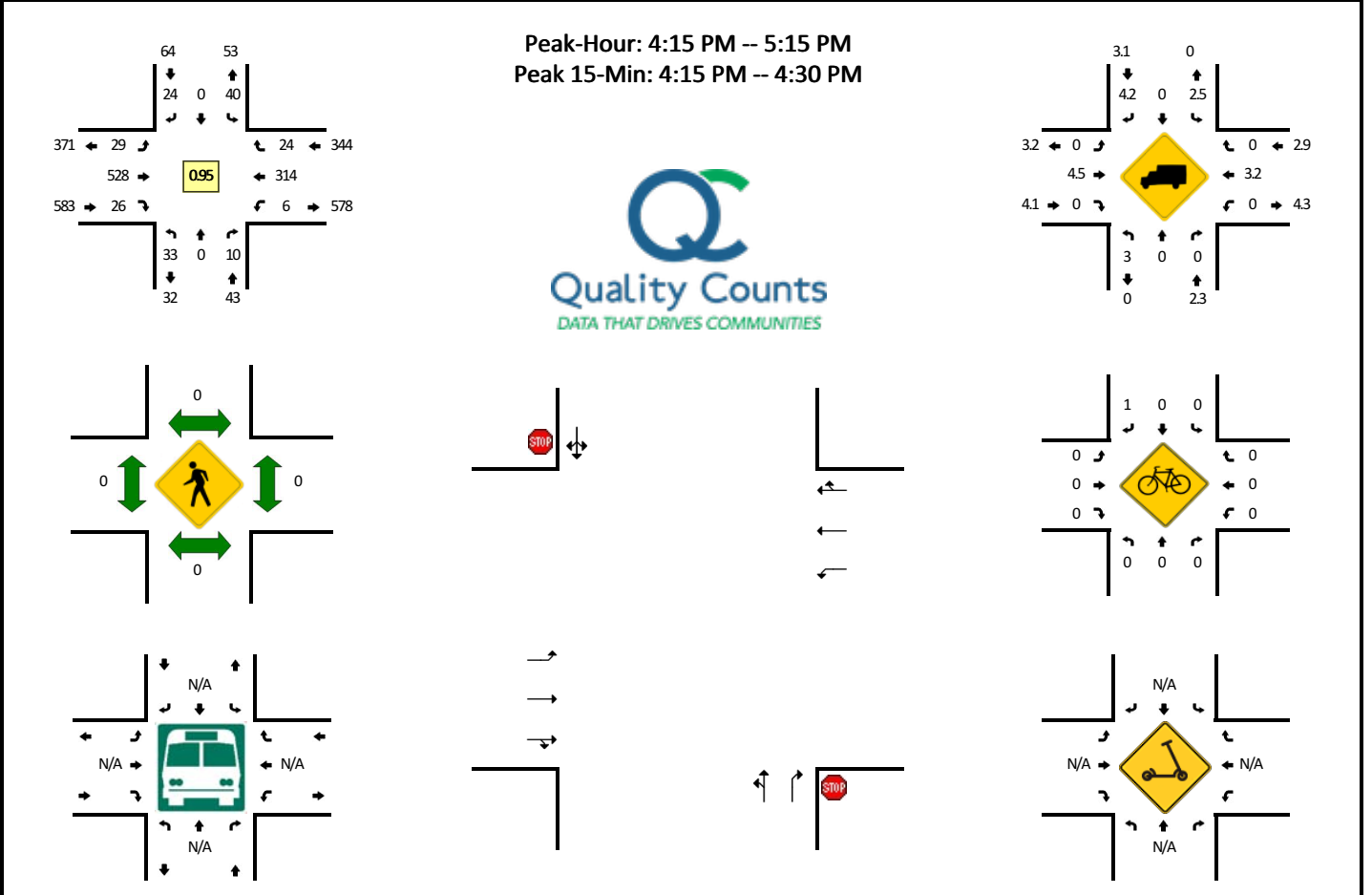
15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				Blue Ridge Pkwy (Eastbound)				Blue Ridge Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	7	0	6	0	0	0	0	0	0	17	1	0	5	25	0	0	61	276
4:00 PM	3	0	4	1	0	0	0	0	0	27	4	0	9	24	0	0	72	292
4:15 PM	9	0	5	0	0	0	0	0	0	38	5	0	11	27	0	0	95	299
4:30 PM	4	0	5	0	0	0	0	0	0	28	7	0	12	21	0	0	77	305
4:45 PM	4	0	3	0	0	0	0	0	0	23	1	0	11	33	0	0	75	319
5:00 PM	3	0	9	0	0	0	0	0	0	24	5	0	12	23	0	0	76	323
5:15 PM	9	0	7	0	0	0	0	0	0	22	6	0	3	22	0	0	69	297
5:30 PM	2	0	10	0	0	0	0	0	0	21	7	0	3	30	0	0	73	293
5:45 PM	4	0	5	0	0	0	0	0	0	16	3	0	7	21	0	0	56	274
6:00 PM	4	0	3	0	0	0	0	0	0	16	3	0	3	26	0	0	55	253
6:15 PM	3	0	3	0	0	0	0	0	0	21	4	0	6	17	0	0	54	238
6:30 PM	1	0	2	0	0	0	0	0	0	14	2	0	3	10	0	0	32	197
6:45 PM	3	0	3	0	0	0	0	0	0	13	0	0	2	12	0	0	33	174
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	36	0	20	0	0	0	0	0	0	152	20	0	44	108	0	0	380	
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		
<i>Comments:</i>																		

Report generated on 7/20/2021 7:47 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

LOCATION: Green Hill Rd -- US Hwy 321
CITY/STATE: Blowing Rock, NC

QC JOB #: 15507702
DATE: Tue, Jul 13 2021



15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				US Hwy 321 (Eastbound)				US Hwy 321 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	0	0	0	1	0	0	0	0	21	0	0	0	35	0	0	57	
6:15 AM	0	0	0	0	0	0	0	0	0	26	0	0	0	51	2	0	79	
6:30 AM	0	0	0	0	1	0	1	0	2	35	0	0	0	57	0	0	96	
6:45 AM	0	0	0	0	2	0	2	0	2	27	1	0	0	51	2	0	87	
7:00 AM	0	0	1	0	5	0	3	0	0	51	0	0	2	65	6	0	133	
7:15 AM	0	0	0	0	6	0	3	0	3	59	1	0	2	101	1	0	176	
7:30 AM	1	0	0	0	3	0	2	0	4	60	2	0	1	109	5	0	187	
7:45 AM	0	0	0	0	5	0	2	0	0	46	1	0	0	97	6	0	157	
8:00 AM	3	0	0	0	7	0	2	0	2	54	1	0	3	81	2	0	155	
8:15 AM	0	0	2	0	10	0	5	0	2	47	3	1	1	113	3	0	187	
8:30 AM	0	0	1	0	2	0	1	0	5	65	1	0	2	88	6	1	172	
8:45 AM	4	0	0	0	2	0	7	0	8	53	4	0	0	89	2	0	169	
9:00 AM	1	1	0	0	10	1	10	0	6	65	6	0	0	80	5	0	185	
9:15 AM	2	0	0	0	3	0	9	0	7	63	3	0	1	81	3	0	172	
9:30 AM	4	0	0	0	6	0	13	0	9	65	9	0	0	78	3	0	187	
9:45 AM	5	0	0	0	3	0	8	0	4	70	3	0	3	85	5	0	186	
10:00 AM	3	0	0	0	5	0	10	0	5	62	7	0	5	78	7	0	182	
10:15 AM	4	0	0	0	3	1	5	0	3	68	9	0	3	62	6	0	164	
10:30 AM	8	0	0	0	2	0	12	0	7	63	10	0	3	91	2	0	198	
10:45 AM	6	1	0	0	4	0	3	0	4	58	5	2	7	79	2	0	171	
11:00 AM	14	1	1	0	2	1	6	0	6	65	10	0	2	93	4	0	205	
11:15 AM	19	1	0	0	1	0	7	0	6	72	14	0	7	70	0	0	197	
11:30 AM	10	1	1	0	4	2	13	0	5	70	7	0	2	102	4	0	221	
11:45 AM	11	0	5	0	4	0	11	0	6	74	7	0	3	91	2	0	214	
12:00 PM	9	0	1	0	1	0	8	0	5	99	7	0	3	69	2	0	204	
12:15 PM	17	2	0	0	7	1	15	0	11	90	4	0	3	85	2	0	237	
12:30 PM	5	1	3	0	1	0	3	0	4	64	10	1	1	66	0	0	159	
12:45 PM	9	0	2	0	4	0	9	0	4	66	4	1	2	66	3	0	170	
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1:15 PM	12	0	1	1	2	1	4	0	11	87	9	0	3	92	3	0	226	
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1:45 PM	11	0	0	0	0	1	8	1	7	76	12	0	3	59	0	0	178	
2:00 PM	7	0	4	0	4	0	9	0	7	93	6	0	2	84	5	0	221	
2:15 PM	7	0	0	0	4	2	8	0	5	82	7	0	1	80	0	0	196	
2:30 PM	8	0	1	0	4	0	5	0	7	84	10	0	6	73	5	0	203	
2:45 PM	12	1	2	0	1	1	5	0	5	105	8	0	3	74	3	0	220	
3:00 PM	9	0	3	0	2	1	6	1	7	104	6	0	0	73	6	0	218	
3:15 PM	7	1	4	0	1	1	6	0	5	113	6	1	1	82	3	0	231	
3:30 PM	5	0	2	0	5	1	6	0	14	100	10	0	1	81	3	0	228	

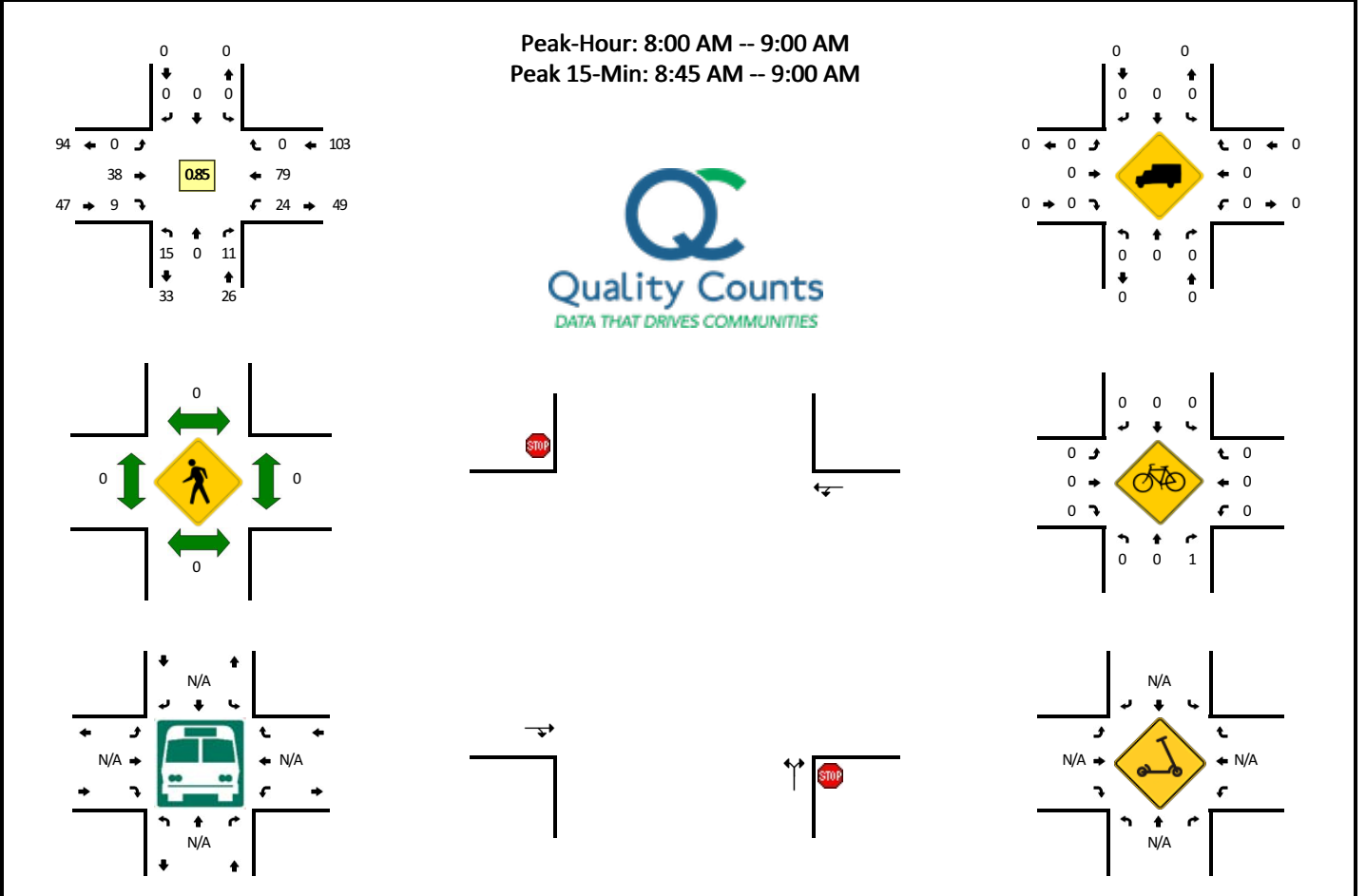
15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				US Hwy 321 (Eastbound)				US Hwy 321 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:45 PM	7	1	0	0	6	0	11	0	10	112	5	0	1	63	7	0	223	900
4:00 PM	4	1	1	0	8	0	8	0	12	104	11	0	1	64	6	0	220	902
4:15 PM	11	0	2	0	7	0	6	0	9	142	13	0	3	71	8	0	272	943
4:30 PM	8	0	4	0	9	0	8	0	6	131	3	0	1	92	4	0	266	981
4:45 PM	7	0	1	0	10	0	5	0	8	127	3	0	1	60	3	0	225	983
5:00 PM	7	0	3	0	14	0	5	0	6	128	7	0	1	91	9	0	271	1034
5:15 PM	5	1	1	0	2	0	6	0	12	140	8	2	1	77	7	0	262	1024
5:30 PM	6	0	1	0	2	0	4	0	10	111	7	1	0	82	5	0	229	987
5:45 PM	3	0	4	0	4	0	8	0	11	91	5	0	0	81	7	0	214	976
6:00 PM	3	0	2	0	5	0	6	0	2	87	2	1	0	69	5	0	182	887
6:15 PM	5	0	0	0	3	1	9	0	6	94	6	0	0	62	3	0	189	814
6:30 PM	5	0	1	0	5	2	5	0	5	61	3	0	0	51	5	0	143	728
6:45 PM	3	0	1	0	1	0	1	0	0	57	1	0	1	38	3	0	106	620
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	44	0	8	0	28	0	24	0	36	568	52	0	12	284	32	0	1088	
Heavy Trucks	0	0	0		0	0	0		0	16	0		0	20	0		36	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		
<i>Comments:</i>																		

Report generated on 7/20/2021 7:47 AM

SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

LOCATION: Green Hill Rd -- Blue Ridge Pkwy
CITY/STATE: Blowing Rock, NC

QC JOB #: 15507703
DATE: Tue, Jul 13 2021



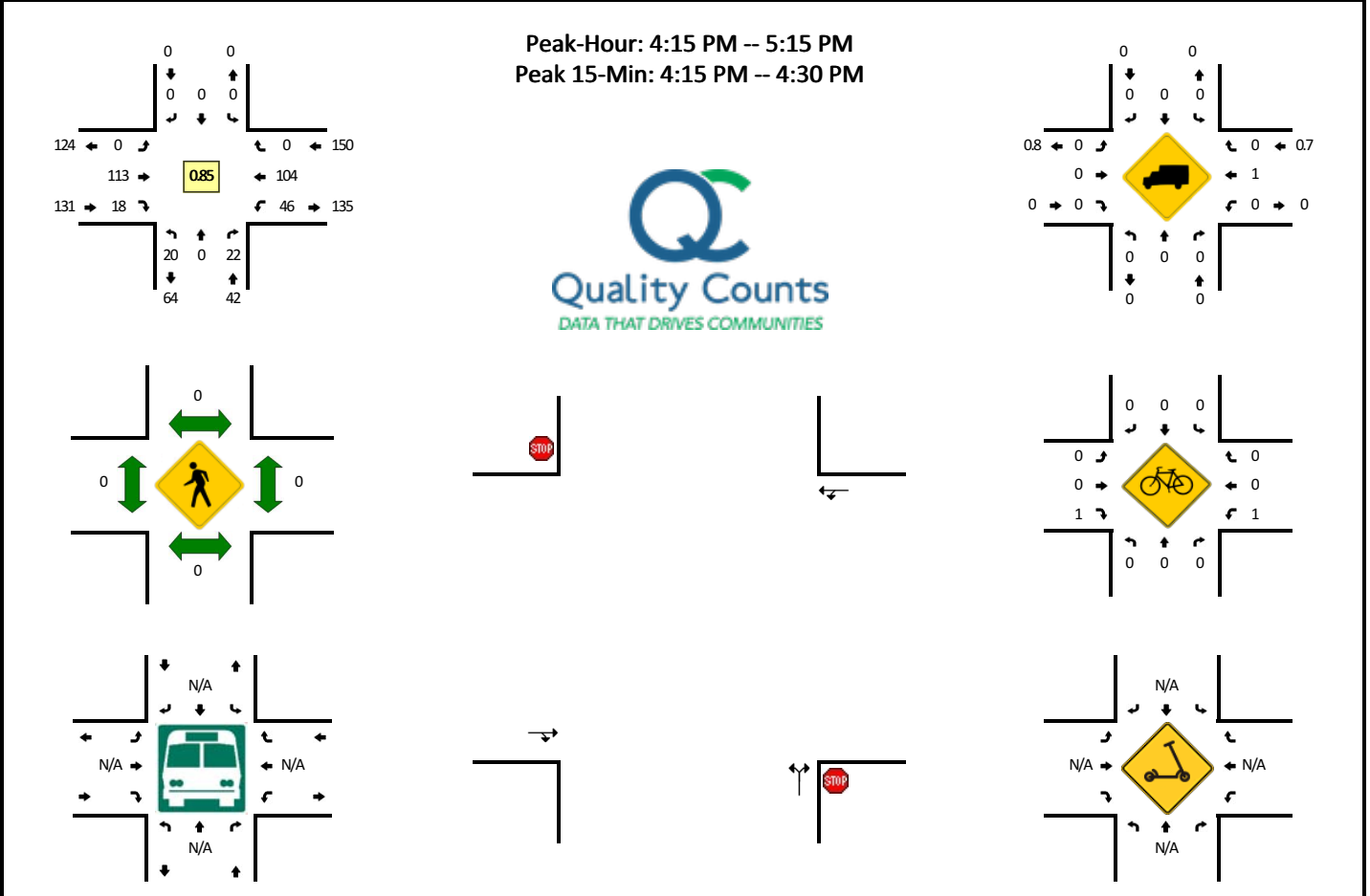
15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				Blue Ridge Pkwy (Eastbound)				Blue Ridge Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	0	3	0	0	0	0	0	0	5	0	0	5	9	0	0	24	
7:15 AM	3	0	2	0	0	0	0	0	0	7	3	0	4	10	0	0	29	
7:30 AM	5	0	5	0	0	0	0	0	0	9	0	0	7	11	0	0	37	
7:45 AM	3	0	7	0	0	0	0	0	0	11	3	0	7	18	0	0	49	139
8:00 AM	5	0	3	0	0	0	0	0	0	8	1	0	10	15	0	0	42	157
8:15 AM	4	0	3	0	0	0	0	0	0	12	2	0	5	13	0	0	39	167
8:30 AM	2	0	2	0	0	0	0	0	0	12	3	0	3	21	0	0	43	173
8:45 AM	4	0	3	0	0	0	0	0	0	6	3	0	6	30	0	0	52	176

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	16	0	12	0	0	0	0	0	0	24	12	0	24	120	0	0	208
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Buses																	
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scoters																	

Comments:

LOCATION: Green Hill Rd -- Blue Ridge Pkwy
CITY/STATE: Blowing Rock, NC

QC JOB #: 15507704
DATE: Tue, Jul 13 2021

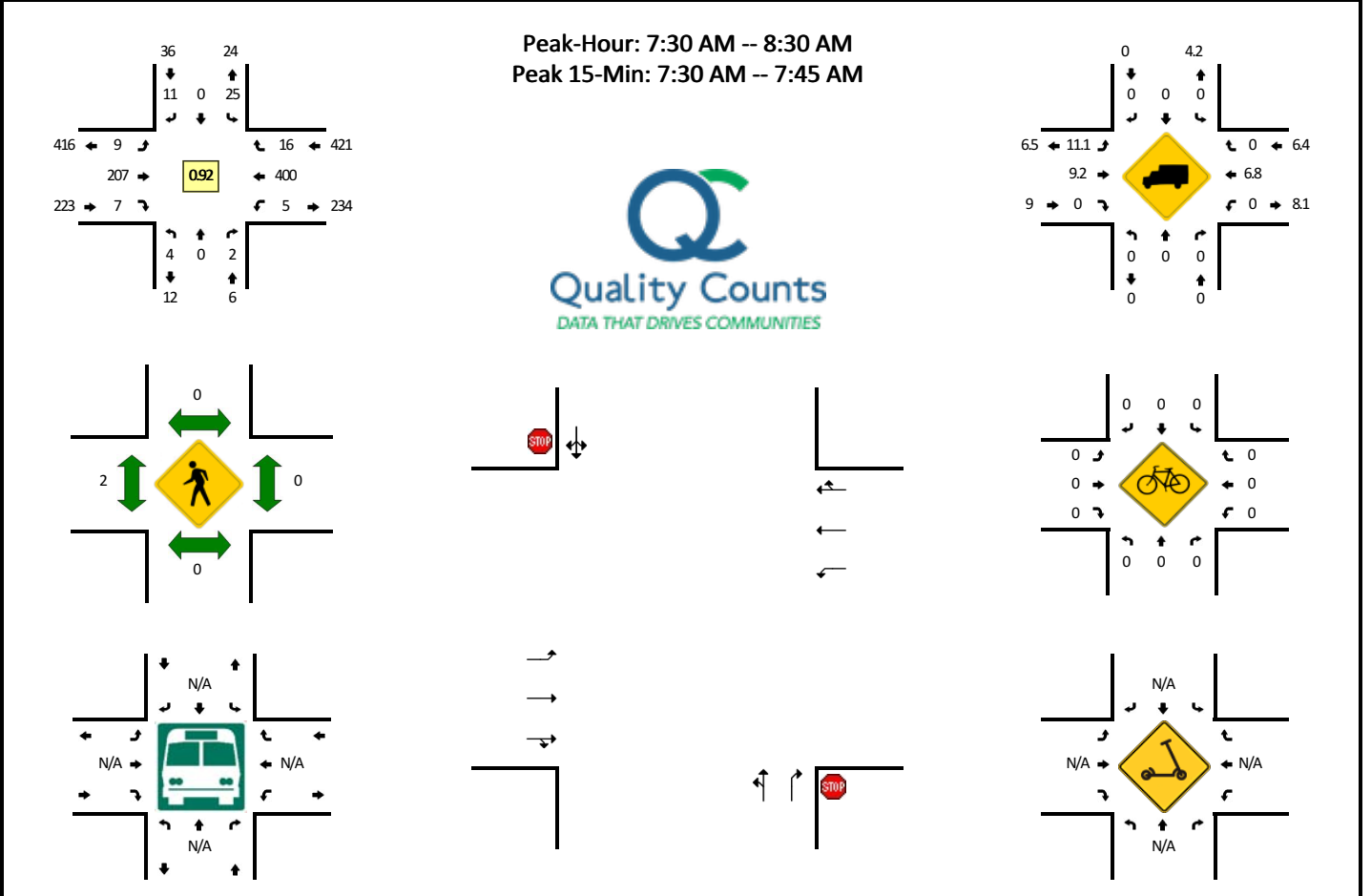


15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				Blue Ridge Pkwy (Eastbound)				Blue Ridge Pkwy (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	0	4	1	0	0	0	0	0	27	4	0	9	24	0	0	72	
4:15 PM	9	0	5	0	0	0	0	0	0	38	5	0	11	27	0	0	95	
4:30 PM	4	0	5	0	0	0	0	0	0	28	7	0	12	21	0	0	77	
4:45 PM	4	0	3	0	0	0	0	0	0	23	1	0	11	33	0	0	75	319
5:00 PM	3	0	9	0	0	0	0	0	0	24	5	0	12	23	0	0	76	323
5:15 PM	9	0	7	0	0	0	0	0	0	22	6	0	3	22	0	0	69	297
5:30 PM	2	0	10	0	0	0	0	0	0	21	7	0	3	30	0	0	73	293
5:45 PM	4	0	5	0	0	0	0	0	0	16	3	0	7	21	0	0	56	274
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	36	0	20	0	0	0	0	0	0	152	20	0	44	108	0	0	380	
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

LOCATION: Green Hill Rd -- US Hwy 321
CITY/STATE: Blowing Rock, NC

QC JOB #: 15507705
DATE: Tue, Jul 13 2021



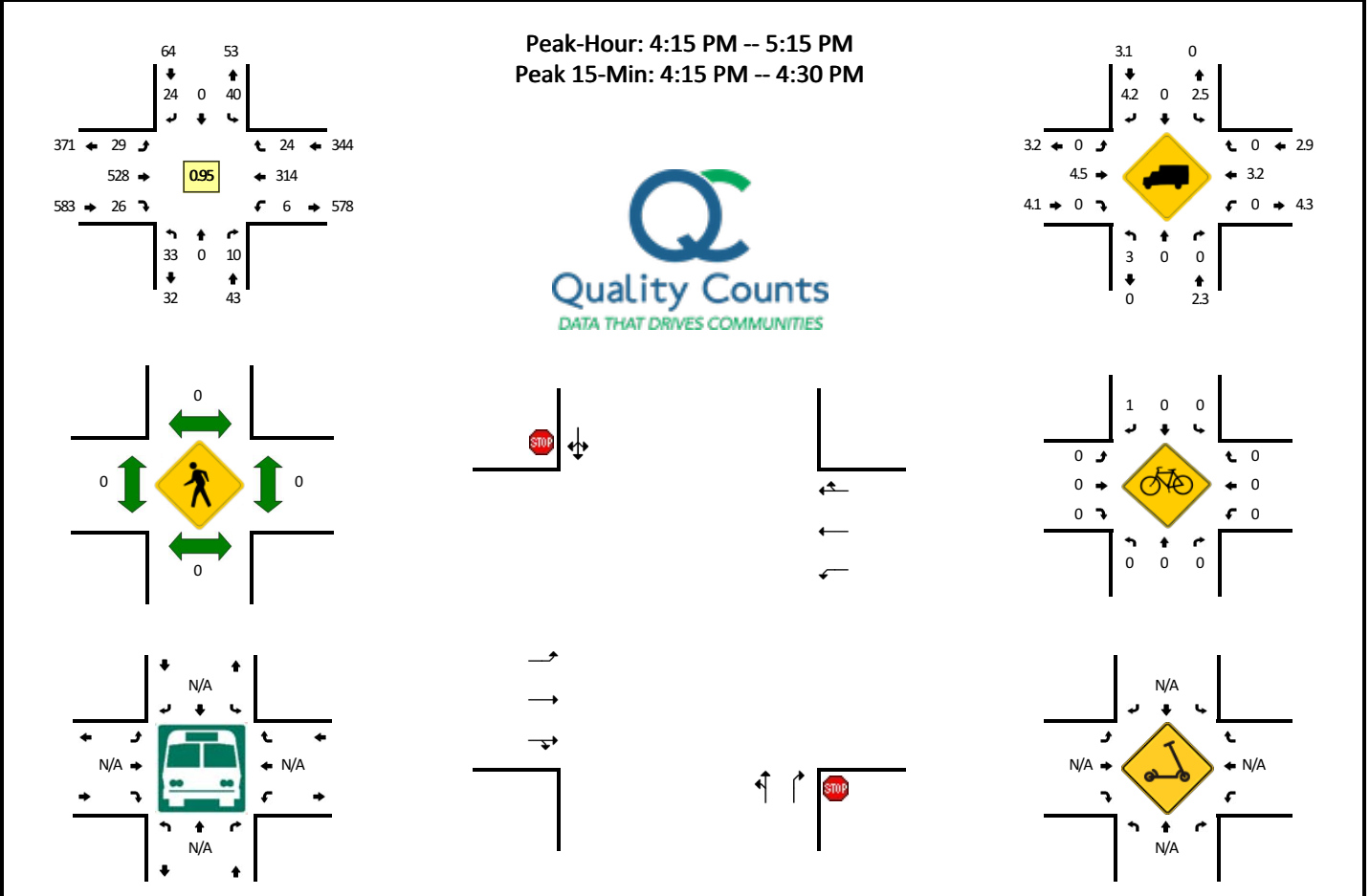
15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				US Hwy 321 (Eastbound)				US Hwy 321 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	1	0	5	0	3	0	0	51	0	0	2	65	6	0	133	
7:15 AM	0	0	0	0	6	0	3	0	3	59	1	0	2	101	1	0	176	
7:30 AM	1	0	0	0	3	0	2	0	4	60	2	0	1	109	5	0	187	
7:45 AM	0	0	0	0	5	0	2	0	0	46	1	0	0	97	6	0	157	653
8:00 AM	3	0	0	0	7	0	2	0	2	54	1	0	3	81	2	0	155	675
8:15 AM	0	0	2	0	10	0	5	0	2	47	3	1	1	113	3	0	187	686
8:30 AM	0	0	1	0	2	0	1	0	5	65	1	0	2	88	6	1	172	671
8:45 AM	4	0	0	0	2	0	7	0	8	53	4	0	0	89	2	0	169	683

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	0	0	12	0	8	0	16	240	8	0	4	436	20	0	748
Heavy Trucks	0	0	0	0	0	0	0	0	4	24	0	0	0	16	0	0	44
Buses																	0
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scoters																	0

Comments:

LOCATION: Green Hill Rd -- US Hwy 321
CITY/STATE: Blowing Rock, NC

QC JOB #: 15507706
DATE: Tue, Jul 13 2021



15-Min Count Period Beginning At	Green Hill Rd (Northbound)				Green Hill Rd (Southbound)				US Hwy 321 (Eastbound)				US Hwy 321 (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	4	1	1	0	8	0	8	0	12	104	11	0	1	64	6	0	220	
4:15 PM	11	0	2	0	7	0	6	0	9	142	13	0	3	71	8	0	272	
4:30 PM	8	0	4	0	9	0	8	0	6	131	3	0	1	92	4	0	266	
4:45 PM	7	0	1	0	10	0	5	0	8	127	3	0	1	60	3	0	225	983
5:00 PM	7	0	3	0	14	0	5	0	6	128	7	0	1	91	9	0	271	1034
5:15 PM	5	1	1	0	2	0	6	0	12	140	8	2	1	77	7	0	262	1024
5:30 PM	6	0	1	0	2	0	4	0	10	111	7	1	0	82	5	0	229	987
5:45 PM	3	0	4	0	4	0	8	0	11	91	5	0	0	81	7	0	214	976

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	44	0	8	0	28	0	24	0	36	568	52	0	12	284	32	0	1088
Heavy Trucks	0	0	0		0	0	0		0	16	0		0	20	0		36
Buses										0				0			0
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scoters																	0

Comments:

APPENDIX C

CRASH DATA

APPENDIX D

SPEED DATA



Start: 2021-05-17

End: 2021-05-27

Times: 0:00-23:59

Violation Threshold: Speed Limit + 10

Speed Range: 1 to 100

Overall Summary

Total Days of Data: 10

Speed Limit: 25

Average Speed: 25.65

50th Percentile Speed: 27.33

85th Percentile Speed: 34.56

Pace Speed Range: 25-35

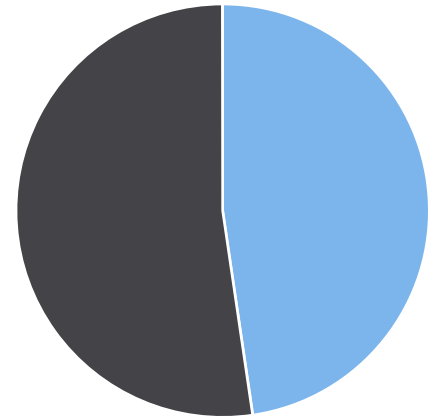
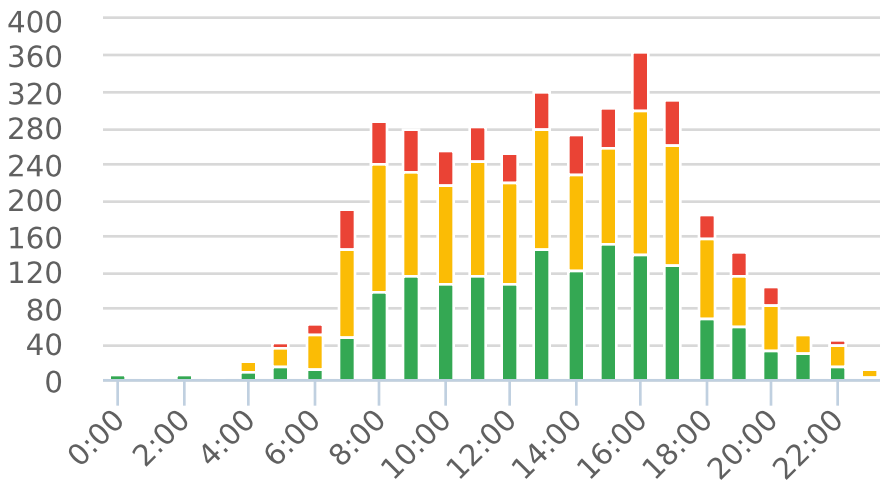
Minimum Speed: 5

Maximum Speed: 64

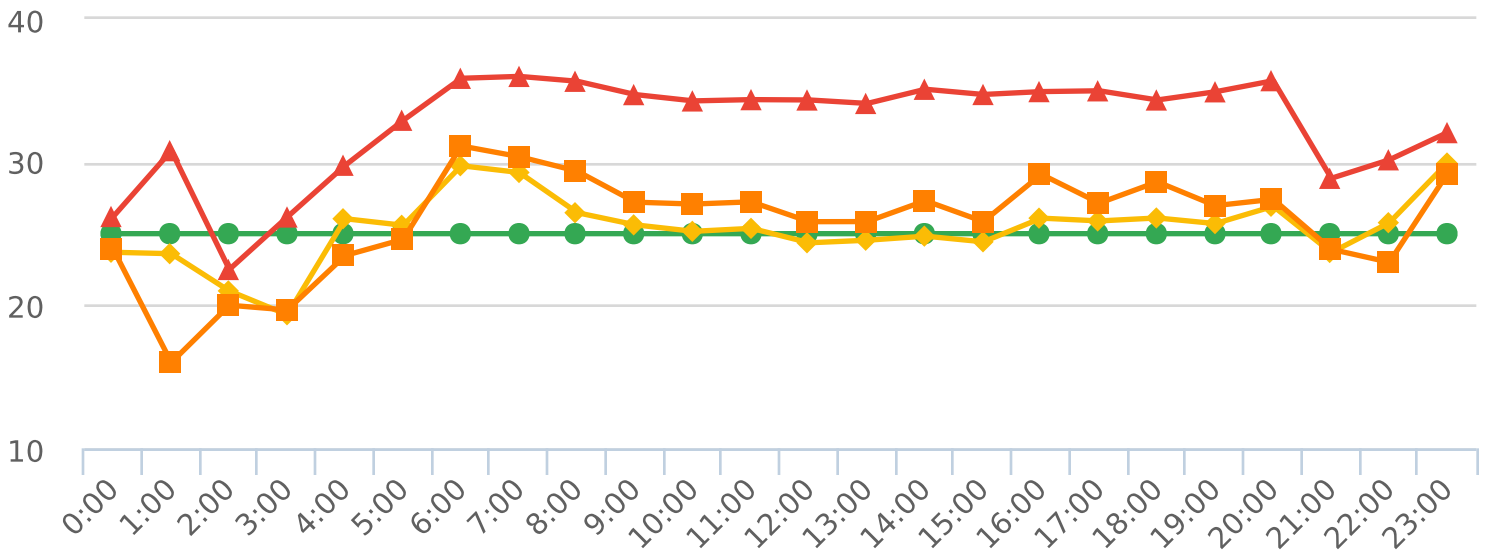
Display Mode: Speed Display

Average Volume per Day: 380.9

Total Volume: 3809



■ **Violators**
 ■ **Inside Threshold**
 ■ **Compliant**
 ■ **Vehicles Slowed**
 ■ **Other**



● **Speed Limit**
 ◆ **Average Speed**
 ■ **50% Speed**
 ▲ **85% Speed**



Start: 2021-05-17
End: 2021-05-27
Times: 0:00-23:59

Violation Threshold: Speed Limit + 10
Speed Range: 1 to 100

Time	Sign Mode	Speed Limit	Total # Vehicles	Total # Violator	% Violator	Avg # Vehicles	Avg # Violators	Min Speed	Max Speed	Avg Speed	50% Speed	85% Speed	Sign Effectiveness
0:00	Speed Display	25	10	0	0.0%	1.1	0.0	9	35	23.7	23.9	26.2	70.1%
1:00	Speed Display	25	5	0	0.0%	0.6	0.0	7	35	23.6	16.0	30.8	80.0%
2:00	Speed Display	25	8	0	0.0%	0.9	0.0	9	33	21.0	20.0	22.5	37.5%
3:00	Speed Display	25	6	0	0.0%	0.7	0.0	6	32	19.3	19.7	26.2	0.0%
4:00	Speed Display	25	23	3	13.0%	2.6	0.3	7	43	26.0	23.5	29.8	39.1%
5:00	Speed Display	25	41	5	12.2%	4.6	0.6	7	41	25.6	24.6	32.9	44.0%
6:00	Speed Display	25	63	14	22.2%	7.0	1.6	7	42	29.7	31.1	35.9	58.9%
7:00	Speed Display	25	189	44	23.3%	21.0	4.9	7	43	29.3	30.4	36.0	53.3%
8:00	Speed Display	25	286	47	16.4%	31.8	5.2	5	47	26.5	29.4	35.7	49.7%
9:00	Speed Display	25	278	46	16.5%	30.9	5.1	5	44	25.6	27.2	34.7	45.9%
10:00	Speed Display	25	255	40	15.7%	28.3	4.4	5	45	25.2	27.1	34.3	46.6%
11:00	Speed Display	25	281	39	13.9%	31.2	4.3	5	42	25.4	27.2	34.4	47.8%
12:00	Speed Display	25	251	31	12.4%	27.9	3.4	5	45	24.4	25.8	34.3	42.3%
13:00	Speed Display	25	319	40	12.5%	35.4	4.4	5	51	24.5	25.8	34.1	43.1%
14:00	Speed Display	25	272	45	16.5%	27.2	4.5	5	46	24.8	27.3	35.1	50.9%
15:00	Speed Display	25	303	45	14.9%	30.3	4.5	5	47	24.4	25.8	34.7	50.2%
16:00	Speed Display	25	364	64	17.6%	40.4	7.1	5	52	26.1	29.1	34.9	47.8%
17:00	Speed Display	25	312	52	16.7%	34.7	5.8	5	50	25.9	27.1	35.0	52.0%
18:00	Speed Display	25	184	27	14.7%	20.4	3.0	7	46	26.1	28.6	34.3	41.9%
19:00	Speed Display	25	142	27	19.0%	15.8	3.0	5	52	25.7	27.0	34.9	46.6%
20:00	Speed Display	25	104	20	19.2%	11.6	2.2	5	52	26.9	27.4	35.7	52.8%
21:00	Speed Display	25	54	3	5.6%	6.0	0.3	5	37	23.7	23.9	28.9	44.3%
22:00	Speed Display	25	43	3	7.0%	4.8	0.3	5	64	25.8	23.0	30.2	37.2%
23:00	Speed Display	25	16	4	25.0%	1.8	0.4	8	39	29.9	29.2	32.1	37.5%
Total Volumes/ Avg			3809	599	15.7%	416.8	65.3	5	64	25.4	25.8	32.6	46.6%
Total/Avg w/o Feedback			0	0	0	0.0	0.0	n/a	n/a	n/a	n/a	n/a	n/a
Total/Avg w/ Feedback			3809	599	15.7%	416.8	65.3	5	64	25.4	25.8	32.6	46.6%



Extended Speed Summary

1500 block Green Hill Rd. EB , EB

Start: 2021-05-27

End: 2021-06-23

Times: 0:00-23:59

Violation Threshold: Speed Limit + 10

Speed Range: 1 to 100

Overall Summary

Total Days of Data: 20

Speed Limit: 25

Average Speed: 24.32

50th Percentile Speed: 25.36

85th Percentile Speed: 31.74

Pace Speed Range: 22-32

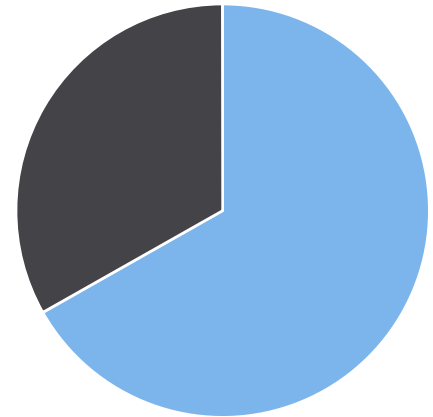
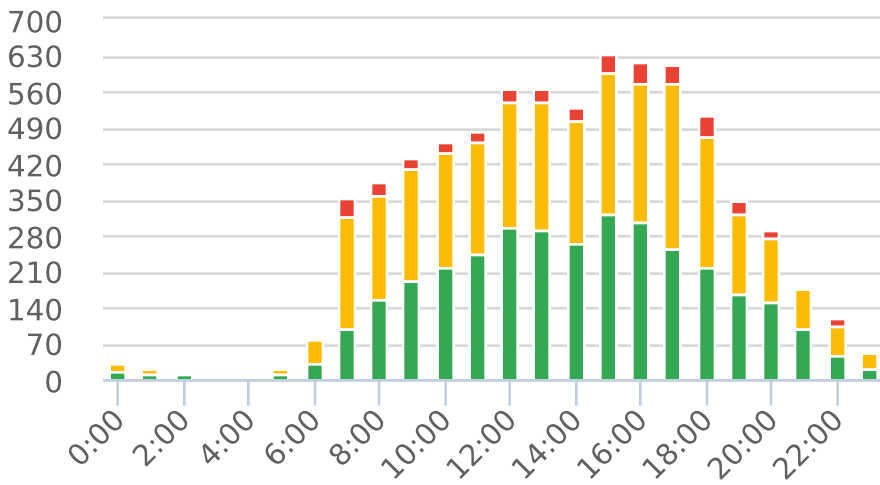
Minimum Speed: 5

Maximum Speed: 51

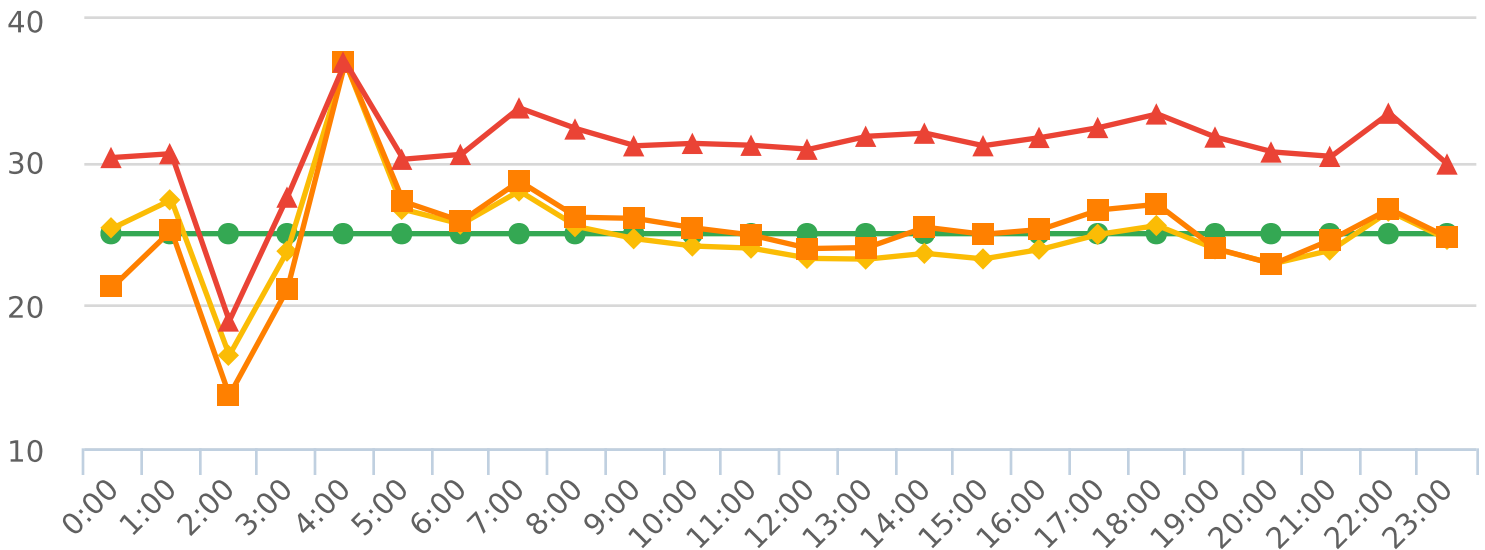
Display Mode: Speed Display

Average Volume per Day: 365.6

Total Volume: 7312



■ **Violators**
 ■ **Inside Threshold**
 ■ **Compliant**
 ■ **Vehicles Slowed**
 ■ **Other**



● **Speed Limit**
 ◆ **Average Speed**
 ■ **50% Speed**
 ▲ **85% Speed**



Extended Speed Summary

1500 block Green Hill Rd. EB , EB

Start: 2021-05-27

End: 2021-06-23

Times: 0:00-23:59

Violation Threshold: Speed Limit + 10

Speed Range: 1 to 100

Time	Sign Mode	Speed Limit	Total # Vehicles	Total # Violator	% Violator	Avg # Vehicles	Avg # Violators	Min Speed	Max Speed	Avg Speed	50% Speed	85% Speed	Sign Effectiveness
0:00	Speed Display	25	34	4	11.8%	2.0	0.2	7	42	25.4	21.3	30.3	70.5%
1:00	Speed Display	25	22	1	4.5%	1.3	0.1	8	38	27.4	25.2	30.6	63.7%
2:00	Speed Display	25	10	0	0.0%	0.6	0.0	6	28	16.5	13.7	18.9	40.0%
3:00	Speed Display	25	9	2	22.2%	0.5	0.1	6	45	23.8	21.1	27.6	66.7%
4:00	Speed Display	25	1	1	100.0%	0.1	0.1	37	37	37.0	37.0	37.0	0.0%
5:00	Speed Display	25	20	1	5.0%	1.3	0.1	8	38	26.7	27.3	30.2	85.0%
6:00	Speed Display	25	81	4	4.9%	5.1	0.3	5	39	25.7	25.9	30.5	72.9%
7:00	Speed Display	25	351	36	10.3%	21.9	2.3	5	49	28.0	28.7	33.8	76.6%
8:00	Speed Display	25	384	27	7.0%	24.0	1.7	5	45	25.5	26.1	32.3	68.0%
9:00	Speed Display	25	430	19	4.4%	25.3	1.1	5	45	24.6	26.1	31.1	64.9%
10:00	Speed Display	25	463	24	5.2%	27.2	1.4	5	42	24.1	25.4	31.3	64.2%
11:00	Speed Display	25	483	24	5.0%	30.2	1.5	5	45	24.0	24.9	31.2	61.2%
12:00	Speed Display	25	567	28	4.9%	35.4	1.8	5	47	23.3	24.0	30.9	64.5%
13:00	Speed Display	25	566	26	4.6%	35.4	1.6	5	44	23.2	24.0	31.8	60.8%
14:00	Speed Display	25	529	26	4.9%	31.1	1.5	5	42	23.6	25.5	32.0	69.3%
15:00	Speed Display	25	631	34	5.4%	37.1	2.0	5	42	23.2	25.0	31.1	64.5%
16:00	Speed Display	25	615	38	6.2%	34.2	2.1	5	44	23.9	25.3	31.7	64.2%
17:00	Speed Display	25	611	35	5.7%	33.9	1.9	5	48	25.0	26.7	32.4	70.2%
18:00	Speed Display	25	514	43	8.4%	28.6	2.4	5	50	25.6	27.1	33.4	70.5%
19:00	Speed Display	25	347	28	8.1%	19.3	1.6	5	51	23.9	24.0	31.8	66.8%
20:00	Speed Display	25	288	15	5.2%	16.9	0.9	5	50	22.9	22.9	30.7	68.8%
21:00	Speed Display	25	184	9	4.9%	10.8	0.5	5	41	23.9	24.6	30.4	72.9%
22:00	Speed Display	25	119	13	10.9%	7.0	0.8	5	46	26.6	26.7	33.4	73.9%
23:00	Speed Display	25	53	2	3.8%	3.1	0.1	6	42	24.6	24.8	29.9	71.7%
Total Volumes/ Avg			7312	440	6.0%	432.3	26.1	5	51	24.9	25.1	31.0	64.6%
Total/Avg w/o Feedback			0	0	0	0.0	0.0	n/a	n/a	n/a	n/a	n/a	n/a
Total/Avg w/ Feedback			7312	440	6.0%	432.3	26.1	5	51	24.9	25.1	31.0	64.6%



Start: 2021-05-17
End: 2021-05-27
Times: 0:00-23:59

Speed Bins: Size 5, Range 1 to 100
Time View: By Hour (Avg Volumes)

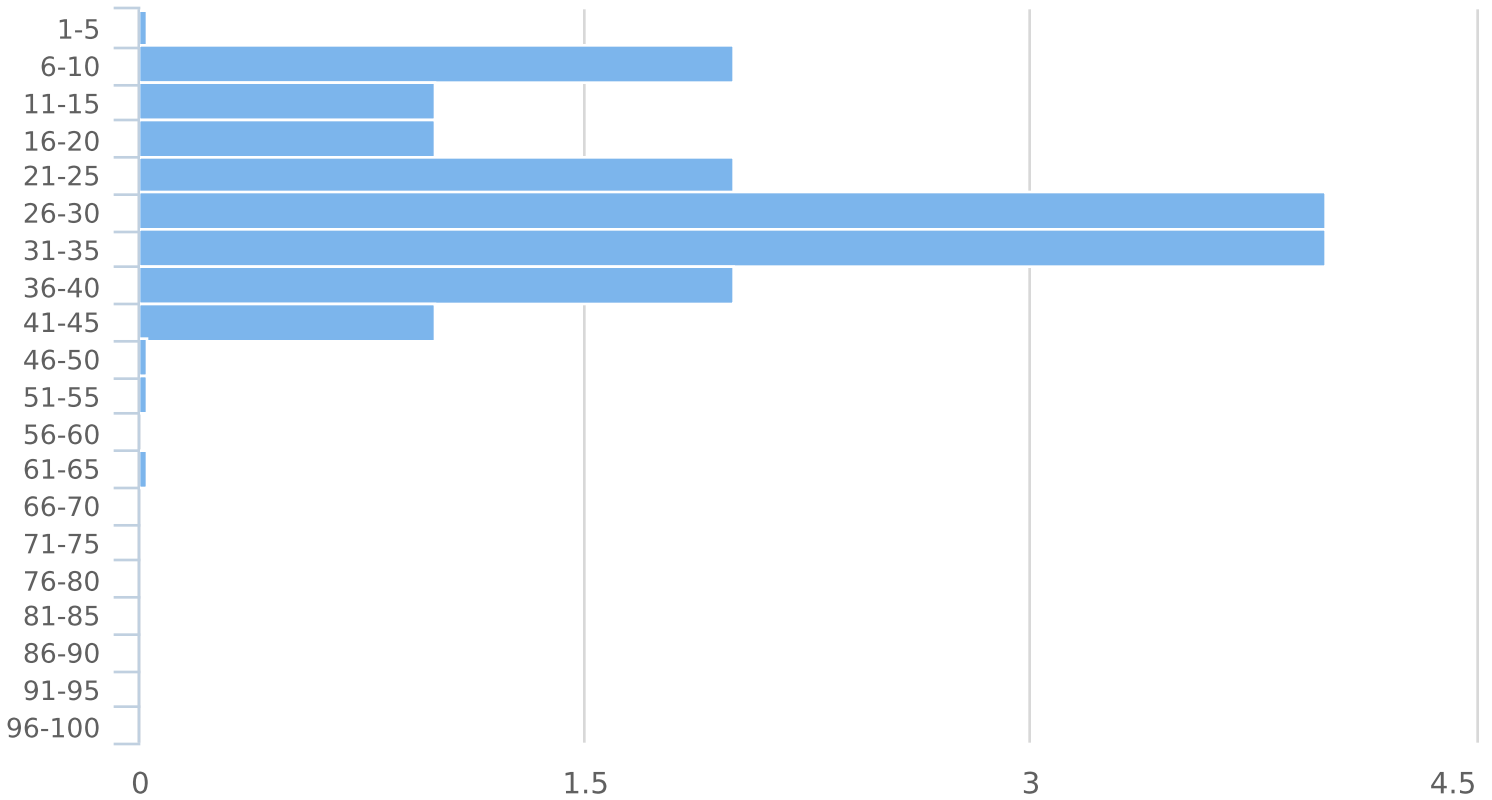
Time	1 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50	51 to 55	56 to 60	61 to 65	66 to 70	71 to 75	76 to 80	81 to 85	86 to 90	91 to 95	96 to 100	Avg Speed	Avg Total	
0:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.7	1
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.4	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21.0	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.5	0
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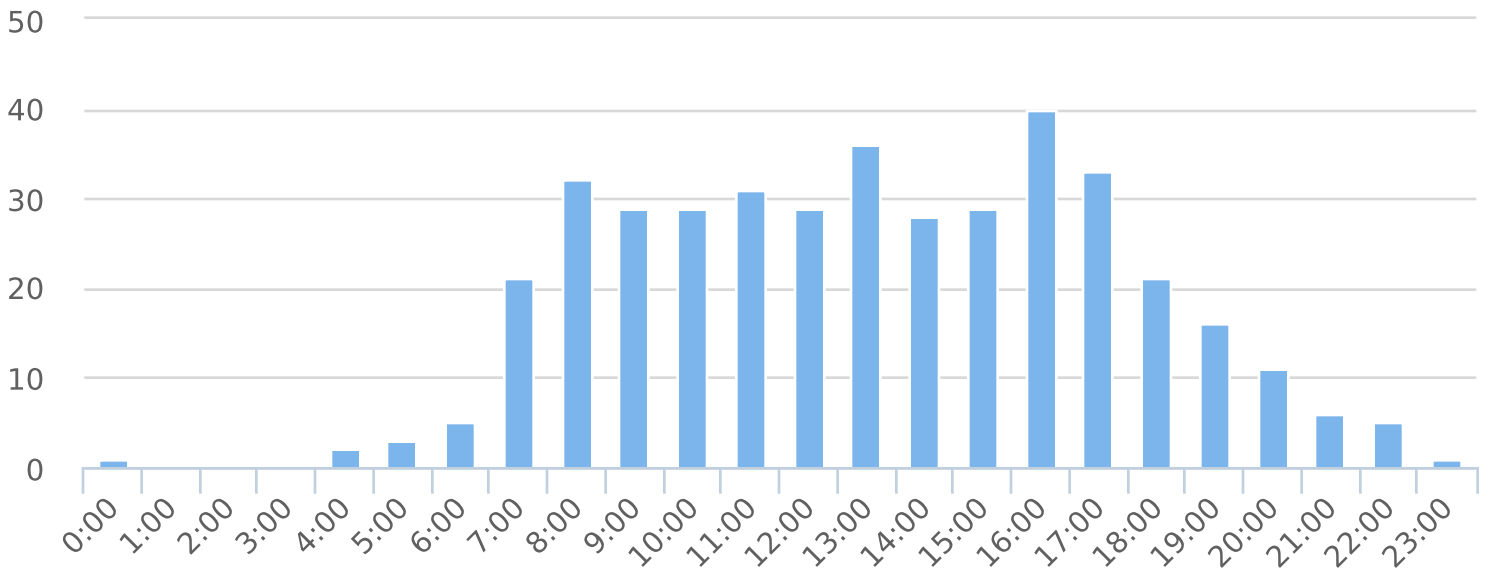
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End: 2021-05-27
Times: 0:00-23:59

Speed Bins: Size 5, Range 1 to 100
Time View: By Hour (Avg Volumes)

Avg Volume by Speed Distribution



Average Volume over Time





Start: 2021-05-27
End: 2021-06-23
Times: 0:00-23:59

Volume by Speed
1500 block Green Hill Rd. EB , EB

Speed Bins: Size 5, Range 1 to 100
Time View: By Hour (Avg Volumes)

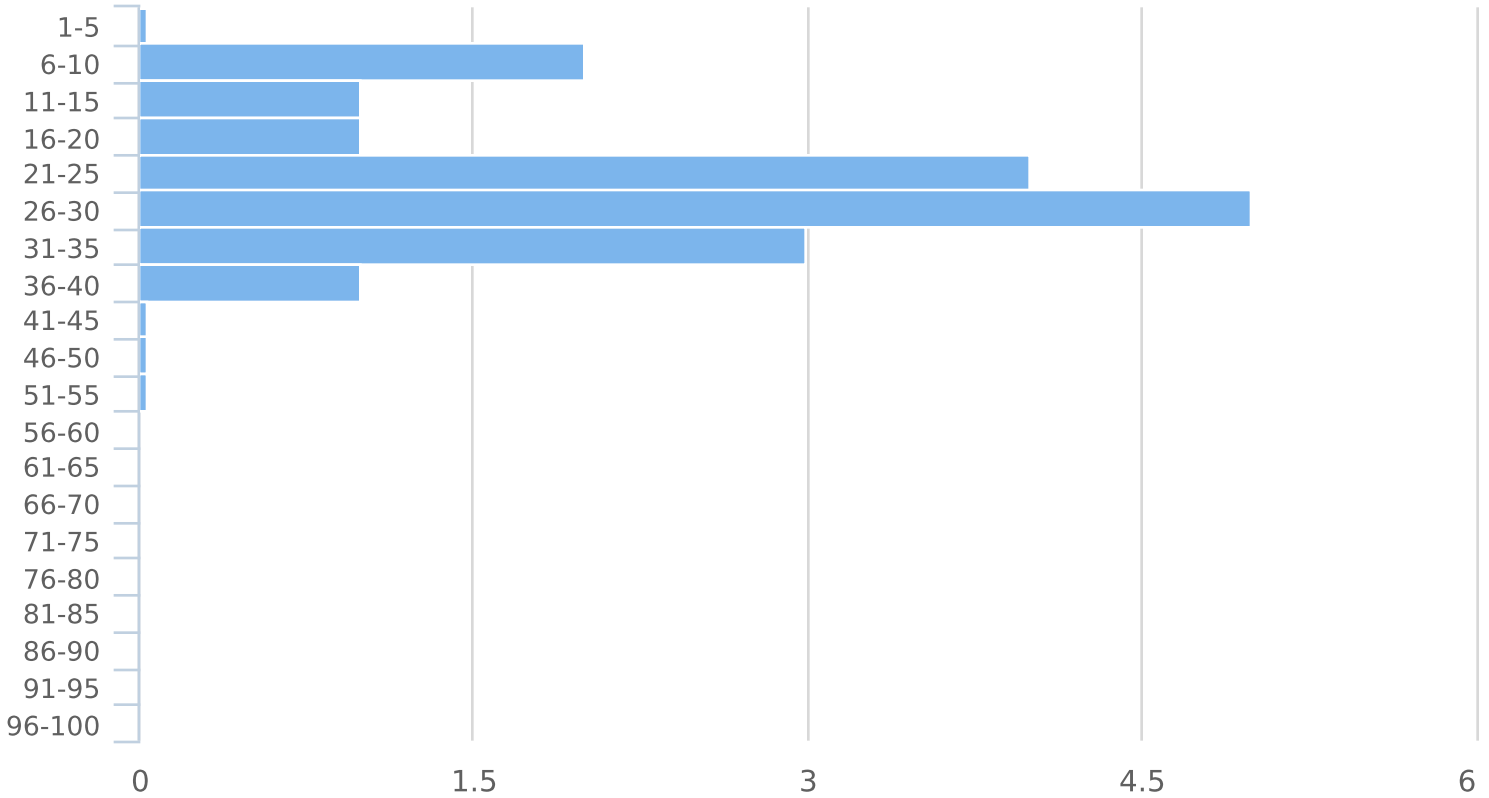
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2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16.4	0
3:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23.8	0
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5:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26.8	0
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23:00	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24.5	3
Avg	0	2	1	1	4	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.3	17



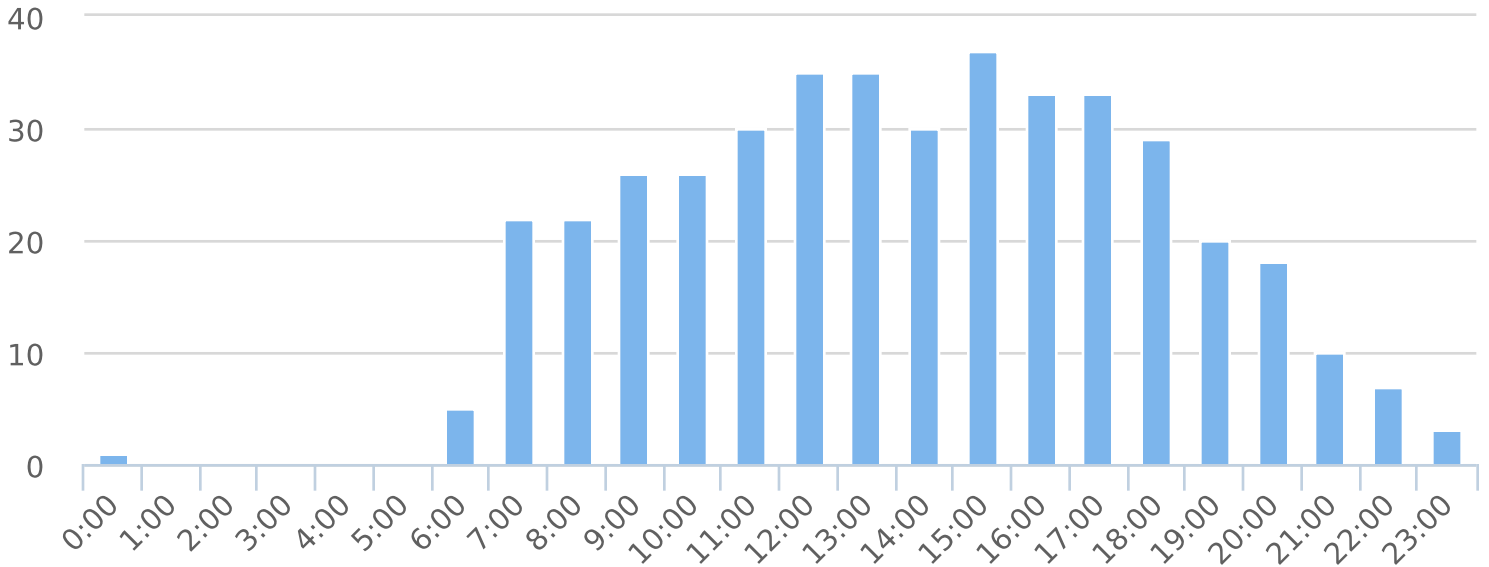
Start: 2021-05-27
End: 2021-06-23
Times: 0:00-23:59

Speed Bins: Size 5, Range 1 to 100
Time View: By Hour (Avg Volumes)

Avg Volume by Speed Distribution



Average Volume over Time



APPENDIX E

PUBLIC ENGAGEMENT SUMMARY

June 30, 2021

TO: Shane Fox
Town Manager
Town of Blowing Rock

FROM: Michael Karpinski, PE
Ramey Kemp Associates

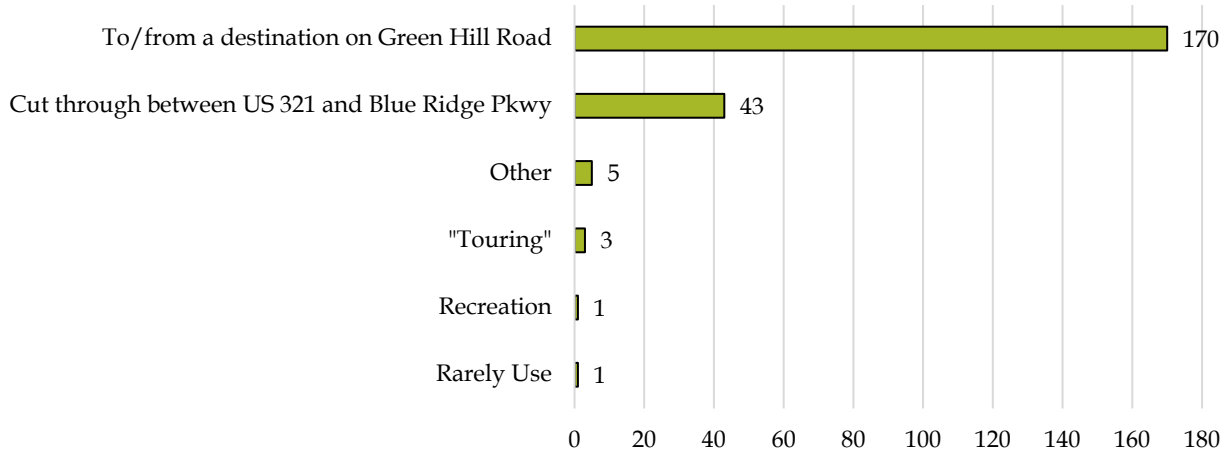
SUBJECT: Summary of Public Engagement
Green Hill Road Traffic Study

This letter summarizes the public engagement efforts held for the Green Hill Road Traffic Study in Blowing Rock, North Carolina. The public engagement efforts included an online survey, hosted on ESRI's Survey 123, and an interactive map, hosted by ESRI's ArcGIS WebApps. Both platforms were available for public comment from May 17, 2021, through June 15, 2021. Advertising of the platforms was completed by Town of Blowing Rock staff. The public survey had a total of 222 participants although participants were not required to answer any question on the survey, so some questions do not have 222 participants. While the interactive map had 201 input points, it should be noted that interactive map participants had no limit on the number of points they could submit; therefore the 201 input points is not necessarily representative of 201 individual participants. A summary of the survey responses and map input are provided on the following pages.

Attached to this letter is the "raw" data collected as part of this public engagement effort. This includes a Microsoft Excel sheet of the online survey results and a GIS geodatabase containing feature classes of the interactive map results. The geodatabase includes two feature classes: one of all points and one of points only within the study area.

Online Survey Results:
Survey Question 1

How Survey Participants Use Green Hill Road



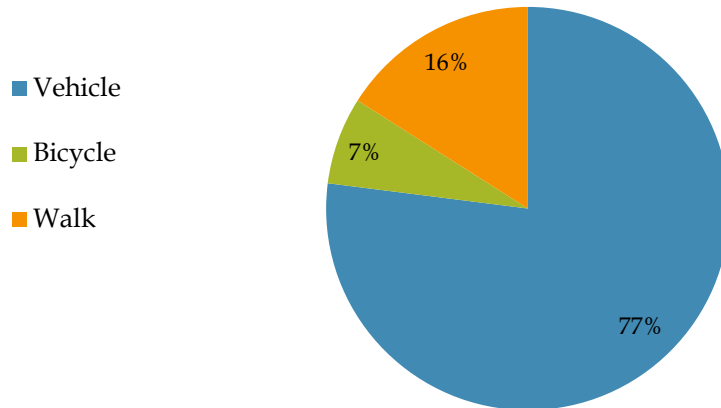
Total Participation: 221

Note: Survey participants were only given three options regarding how they use Green Hill Road: 1, To travel to/from the homes or businesses that have access via Green Hill Road; 2, As a cut through to travel between US 321 and Blue Ridge Parkway, and; 3, Other. The response count above was determined by sorting the "Other" responses appropriately. Two participants in the "Other" category said they used Green Hill Road as both a cut through and to travel to destinations on Green Hill Road; these two participants were added to both categories.

A majority of the survey participants, approximately 77%, use Green Hill Road to travel to/from a destination that is on (or only accessible by) Green Hill Road.

Survey Question 2

The Mode of Transportation that Survey Participants
Use on Green Hill Road
Select all that apply

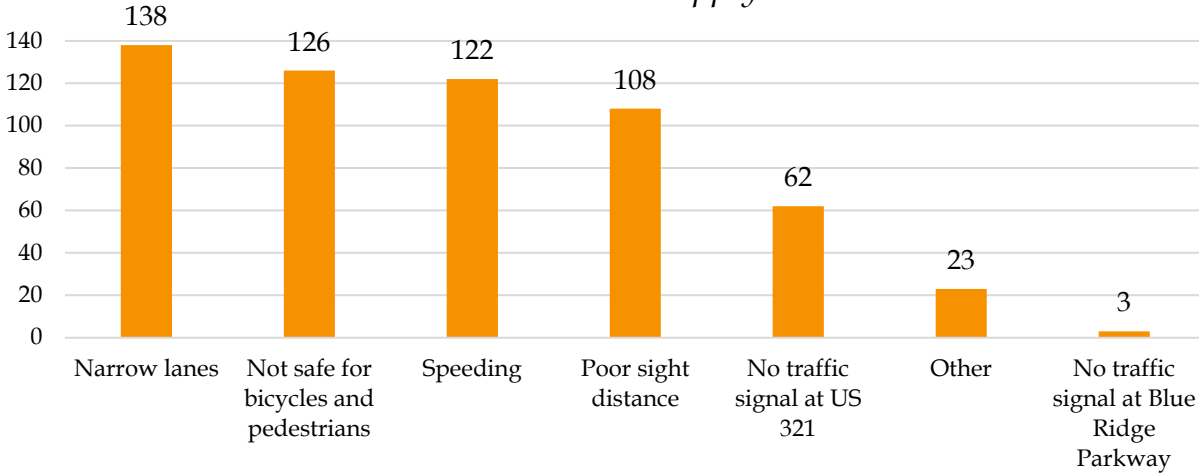


Total Participation: 222

A majority of the survey participants, approximately 77%, said they use a vehicle to travel on Green Hill Road.

Survey Question 3

Most Important Issues Survey Participants Have with Green Hill Road
Select all that apply

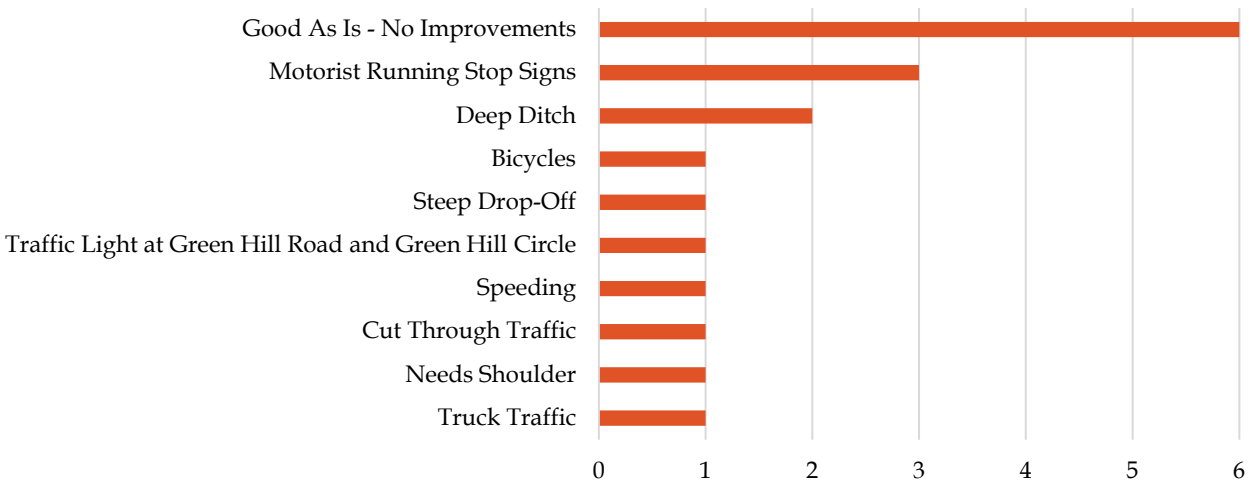


Total Participation: 220

A majority of survey participants, approximately 63%, agree the biggest issue with traveling on Green Hill Road is the width of the existing lanes. This concern is closely followed by the road not being safe for bicycles and pedestrians (57%), speeding (55%), and poor sight distance (49%).

Of the 23 participants who noted “Other” as a response, 18 participants provided specific concerns, which are listed below.

"Other" Survey Responses



Survey Question 4

Total Participation: 220

Question 4 provided survey participants the opportunity to voice any additional concerns they felt had not been addressed by the survey. Participants had an open-ended question to provide additional comments. Some of the most common themes mentioned amongst the comments includes the following concerns with Green Hill Road:

- Speeding traffic.
- Narrow lanes.
- Steep ditches and drop-off on sides of road.
- Truck traffic.
- Too much cut-through traffic.
- No concerns with road – do not make improvements.
- Sight distance while driving.
- Concerns at Green Hill Road’s intersection with Fairway Court.
- People do not stop at the stop sign at Green Hill Circle.

A full list of the open-ended comments can be found in an attachment of this letter.

Interactive Map

Total Comment Points: 201

The interactive map allowed participants the opportunity to place a point on a map to voice their concerns regarding traveling on Green Hill Road. Participants could select from the following options: Speeding, Safety, Other. With each comment, participants were also able to provide additional typed comments in an open-ended text box, attached to the comment.

Attached to this letter are three static maps of the interactive map results. Map 1 shows all results. The mapping platform, ESRI ArcGIS Online, did not allow for a geo-fenced boundary to restrict where points were placed. Because of this, some participants took the opportunity to voice concerns about other locations. Additionally, it seems that some points were misplaced and are in locations with no public roads. Map 2 shows results only within or very close to the study boundary. These are the results that will be taken into consideration for the Green Hill Road Traffic Study. Map 3 shows a heat map of the results within the study area. The heat map identifies locations with more points placed, which can be used to identify common areas of concern.

The interactive map will be available for viewing only by clicking on [this hyperlink](#) until August 1, 2021. On August 2, 2021, the interactive map site will no longer be available for viewing.

Attachments: Survey Question 4 – Public Comments
 Interactive Map Results
 Raw Online Survey Results, Excel
 Raw Interactive Map Results, GIS Geodatabase

Survey Question 4 - Raw Public Comments

“Cannot see the stop signs at Green Hill circle enough time to stop in a blind curve”

“Need additional stop signs on Green Hill Rd.”

“Access to Blue Ridge Parkway should be eliminated.”

“stop signs, mirrors on curves and speed bumps could help”

"On some of the curves , the shoulder is a huge drop; should be wider with less of a drop on the curves.

I also have a street approved golf cart and only travel very short distances on Green Hill, but the speeders scare me"

"I voted as a Blowing Rock Town Council member to hire you. Limiting replies to 1000 or for that matter ten million characters is quite simply unacceptable.

No way I who actually lives just off Green Hill Road limit my MANY concerns of GHR limit my characters of the many facets of problems on this road. When I receive constituent complaints about GHR they certainly do not limits their words.

I AM SO DISAPPOINTED.

Albert Yount

243 Tarry Acres Circle.

828-310-8000

Member Blowing Rock Town Council"

“Vehicles are driven too fast and without respect for others”

“We need to plan for increasing development between Boone and Blowing Rock as Green Hill Road is the fastest way for anyone to get to and from 321 and that part of the county including the Greystone developments and Blue Ridge Mountain Club etc. I believe there was once a plan to build a bypass around Blowing Rock but the Greenhill Community fought that one so now we have traffic. Duh”

“The only problem with Grren Hill Road is a lack of speed limit enforcement. I have cars/trucks going past my house morning and evening at speeds of 60+ mph. They are

not travelers looking for a short cut. They are locals on their way to work or down the mountain who know they can go any speed they desire. I have had a home on Green Hill Road for 30+ years. We had police presence on a daily basis for many years; with limited speeding problems. We now have -0- police presence, and everyone knows it. Accordingly, there is a constant disregard for the speed limit."

"Limit commercial vehicles especially on lower curve at Green Park. Need more 4 way stop sign. Need traffic calming tables - "Speed Bumps". Consider roundabouts. Add electronic speed monitoring devices which are especially needed on the last stretch out to the Parkway"

"Green Hill can be helped by constant patrol and issued tickets fir speeding and reckless driving. More stop signs placed on Green Hill at various neighborhood entry points."

"It is very difficult to turn left coming from The Fairways of Green Hill neighborhood because of the the blind spot. We have recently moved into the neighborhood and are concerned about this potentially hazardous intersection. Would very much like to have a 3 way stop there."

"Excessive speeding, dangerous to pedestrians, unacceptable noise levels have grown over the past two decades. Green Hill Road needs more patrolling and monitering."

"4 way stop should be a 3 way stop. Sight lines are fine going toward parkway."

"No shoulders - many deep treacherous ditches at edge of road"

"I do not live on Hreen Hill but several of my friends do. Scary road particularly at night."

"The best thing to happen on Green Hill was the 3-way stop at GH Circle, eliminating the possibility of sure-fire accidents."

"I do not see what is different about Green Hill Road, most of the roads in Blowing Rock and Watauga County have the same issues. Green Hill Road is a narrow road with many driveways and roads entering it in blind curves. With very little room to widen the road I'm not sure what could be done, at least not anything that makes economic sense."

“Large trucks (even pickup trucks) often use Green Hill Road as a cut through and drive way to fast down the center of the road, including around blind corners. It is dangerous in a car, even being cautious. I no longer even consider walking or biking on Green Hill Rd because it is just too dangerous. There are many people who knowingly "run" the stop sign and do it over and over again. I've yelled at drivers about not stopping and then have seen them do it again, going the other way, just minutes later. There are a lot of drivers who apparently think the rules don't apply to them because in the past no one said anything about their speeding and there were no stop signs to slow them down. The poor sight lines are a characteristic of driving on this ridge road, but it is the speed that makes the poor sight lines potentially deadly. Tourists walking up the road from the Green Park Inn have no idea what they are going to encounter!”

"This road has now become busier with more development and full time residents. Road is narrow, few ditches and no sidewalks. Several areas have poor site distance getting on and off road. Speeding from people cutting through has gotten worse. Town police can't be on the road enough to make a difference. Need physical changes on the road to work."

“The sharp turn just above the Green Park Inn parking lot is a disaster waiting to happen. Large trucks get stuck there. Cars have difficulty passing one another due to narrow road and curves in that area.”

“There are a lot of big trucks on Green Hill Road.”

“Must keep speed limit at 25 so we can use our golf carts on this road.”

“Green Hill Road should not be used as a cut through to avoid Valley Blvd.”

“Large construction vehicles, moving vans and delivery trucks can not safely use the road because of 2 curves behind Green Park Inn parking lot and low overhead lines in several locations.”

"Everyone rolls the stops sign at Green Hill Circle. I walk the dog to that spot every day and 8/10 cars will run it. Wish we had sidewalks. Really appreciate the way the town keeps the Rhodos trimmed and picks up leaves. Thank u!"

“The main problem as I see it is people speeding and ignoring the stop signs at Green Hill Circle. The stop signs have been helpful but there are still people who ignore them.”

“Road is a little narrow in a few places but not that much traffic on it, works pretty good compared to other similar roads in the area. Just like most other mountain roads is what the mountains is all about. You have to be a little careful but it adds to the unique quaintness or character of the area. A big wide 2 lane or 4 lane Road would completely change the character of the area. This is what happened on 321 when it was widened to 4 lanes.”

“Gutters are dangerous.”

“I think all is fine. It only becomes an issue (for some) during the summer months when there are more people using the road: 2nd homeowners taking up residence for "the season" and tourists. As far as it being unsafe for pedestrians and bicycles: the first should know this road is not conducive for an afternoon stroll (there are many places to walk in the area that do not have any traffic, and the latter pose just as much of a threat as a vehicle in my opinion - especially when the cyclists ride in high speed packs, thinking they are in training for the Tour de France! As a year round resident, I have no issues with the road and do not feel we should capitulate to the moans and groans of those who live here only during the summer months.”

“This road is dangerous for all who drive it. We have almost been hit by cars speeding around the curves as we pull out of Fairway 11. We have tried for years to get something done about the road and now it is busier than ever. There are 3 new neighborhoods in some phase of planning that will add additional traffic. Large service trucks basically have to cross the center line in some places to make their way to homes.”

"Constant speeding by people cutting through to the parkway. Usually around 4:30-6:00 pm on weekdays. We live on Green Hill Rd and the speeding past Green Hill Circle towards the parkway is VERY dangerous."

“I have lived on GH Road x 22 years. I enjoy my home as a meandering country road w tree shading & lovely curves - form over function. We do not need another 'bypass' - yes, sightlines are not ~ to widened 321 nor is it appropriate for >25mph speeds, certainly no more stop signs nor traffic lights, nor guardrails. It is not a highway nor should it be - what is the point of this survey? Lance Campbell 1177 Green Hill Rd. 828 638 0884. I am happy to discuss further.”

“Do not have issues with Green Hill Road”

“We live on the sharp corner of Green Hill Rd. We are about mid distance from the BRP and 321. In the last year we have had four accidents on our property. Two we reported and two we just picked up the debris and replaced our mailbox. Our mailbox has been struck three times. The solution I might suggest would be a speed bump on either side of the sharp curve.”

“Need more stop signs or speed bumps. Many vehicles use as a cut through at high speed.”

“I would love to see Green Hill Road expanded to include wider lanes, cleared right of ways. There is heavier traffic on Green Hill Road so we need to make sure it is safer for those traveling on it, no matter for what reason.”

“Where are our speed bumps. Shouldn't have to worry about my kids playing outside or crossing the streets in downtown blowing rock neighborhoods. Unless the police start enforcing speeding we need our speed bumps back”

“I lived on Green Hill Rd until recently. The traffic and pending development on the old golf course property promoted us to sell. The amount of construction trucks that fly on Green Hill Rd from dawn to dusk is ridiculous.”

“I live here year round and use Green Hill both as a cut through and to see neighbors Off Green Hill. Can you please make that first question open for several answers not either/or?”

“Being a life long visitor and part time resident of Blowing Rock we are very aware that neighborhood roads and access are narrow and must be traveled with care. This is what we like about our small town community. We believe big city boulevards encroaching on the private landscapes and lush vegetation in and around Blowing Rock would detract from the mountain appeal.”

“Narrow lanes are the biggest issue.”

“Green Hill Road is fine as it is, and really shouldn't be widened or with sidewalks. It is not and has never been (I've used it for 60 years) a walkable street, and that is due to the

hills and turns. Leave it as it is! BR needs to get some other projects completed before considering ANYTHING with Green Hill Road - finish Bass Lake sidewalk project; get better crossing lights downtown; enforce sound ordinances within the city limits (I grow tired of the very loud motorcycles traveling in groups); more parking availability downtown.”

“We see lots of commercial trucks using Green Hill as a cut thru to 321. Dump trucks & large moving vans in particular. This does make the road narrower for regular traffic.”

“road shoulder is very dangerous”

“Those traveling this road need to use common sense. This is a mountain road; not a highway. Do not speed and you’re going to be safe. If speed is an issue consider speed bumps.”

“There is insufficient sight distance between a car leaving Fairway Court and a car traveling west on GHR (coming from the Parkway). For someone stopped on Fairway Ct. you cannot see the other car until it is 35 yards away (straight lines). A car traveling 30 MPH will cover 35 yards in 3.4 seconds. To add to the problem if the car coming from FC is turning left the car is turning into the other car shortening the time and there is no shoulder for escape. I know that the speed limit is 25, but it is rarely adhered to.”

“I think its fine as we have home just off of GH Road. Some additional guard rails would be good for safety.”

“I feel the traffic has picked up significantly since the 321 widening. There seems to be more trucks and it diminishes the neighborhood feel. I recently changed residences and did not consider Green Hill because of traffic issue.”

“Removing the zig-zag around the parking lot as you start up Green Hill Road from 321 would greatly improve the safety of that section; it's narrow and sight lines are poor; navigable at slow speed. The Green Hill Rd-West Green Hill Drive requires a 270 degree turn in either direction given that most people using West Green Hill Dr are going from or to the town center via the shortest route. Traffic engineers prefer 90 degree turns. In this instance West Green Hill Drive should have the easy angle on the south corner. Similarly, the intersection with Green Hill Circle has exactly the wrong orientation, only in the other direction.”

“With additional homesites being developed along Greenhill Rd the traffic will be greatly increased. It is a cut through road now (commercial vehicles) and adding homesites will only compound the problems. In addition to heavy traffic, the wear and tear of Greenhill has always been a safety issue.”

“I see nothing wrong with Green Hill Rd with the exception of non residents using it as a cut through. There is no reason to take people’s property to widen or make improvements for people that have no real reason to use the road.”

“important to leave this access/road available for all modes of transportation”

"Definitely need a light at 321. Also, more stop signs (like the one at the Greenhill Circle intersection) could deter some of the cut through traffic. Can't remember what the speed limit is, but 25mph could reduce cut throughs. Also a sign during winter at the Greenhill/321 intersection that the parkway may be closed. Of course locals know this but may deter some non residents from cutting through."

“Green Hill road is a road that is used to make a short cut. That it is used for residents is an obvious reason to use the road-it's the only one. The solution to stop drivers already in a rush, who use the road as a short cut is to make it an extremely inconvenient short cut. In other words, make it inconvenient enough that drivers will use some rational thought, and decide to use the 4 lane HWY 321 as it was designed, to be the major artery through town. Green hill road is an old road, never was designed for 21st. Century traffic, and it can't be changed or widened easily. Whether Green Hill road is made slower by imposing speed limits is impractical and will not work. Stop signs/4 way stops might. Policing, radar detection devices is inconsistent and temporary. Permanent Speeding cameras might be effective.”

"Lived on Greenhill for 25 years. It has become a throughway to the Parkway and cars travel at excessive speeds. It has become difficult to exit my driveway onto Greenhill at times. I am not the world’s biggest fan of traffic humps, but nothing else is going to slow down traffic. There are speed humps on Sunset Drive and Possum Hollow Road. There needs to be speed humps on Greenhill as well. Additionally, motorcycles without mufflers need to be ticketed. I own three motorcycles and all have mufflers. It is illegal to ride without mufflers but bands of cyclists use Greenhill without mufflers. There needs to be a traffic stop on weekends and tickets issued to those exceeding decibel limits.

People flock to Blowing Rock for the ambience with peace and quiet. Motorcycle gangs are menacing the peace and quiet."

"suggest you limit trucks and busses"

"No. I find the road safe and have never had problems when I used to drive it everyday to and from work. If could handle more traffic if needed as long as people drive safely. I love the fact that a stop sign was placed at one of the most difficult blind spots on the road. If this survey is to attempt to limit development and access for new housing on the road, please know I support all new responsible development in Blowing Rock."

"Please widen but DONT add a lane that will only increase traffic through a very nice quiet neighborhood."

"Stop sign essential to remain at intersection of Green Hill Rd and Green Hill Curcle."

"People blow through the 3-way stop at Green Hill Rd and Green Hill Circle."

"Install stop signs all along Green Hill Road. Patrol the street with Police and give tickets, often and vigorously! It is time for this to happen on Green Hill Rd. and 321!"

"Under no circumstances remove the stop sign at Greenhill Circle. Consider speed bumps"

"Close attention is needed regarding the Green Hill Rd and Fairway Court entrance. Very dangerous, blind curve."

"I worry that widening Green Hill would just encourage people to speed, and that the meandering of the road keeps people from going too fast. My answer to the first question would have been both "To travel to/from one of the homes or businesses that have access via Green Hill Road" and "As a cut through to travel between US 321 and the Blue Ridge Parkway", because I have friends who live in neighborhoods off of Green Hill Road, and I also always access the Parkway using Green Hill, because it is the closest access to my home."

"We notice an increase of vehicles on Green Hill Circle. They appear to be looking around."

“i think there is some concerns such as bicycle or pedestrian friendly this road isn't and never has been. People moving into this area should have known this before buying. I don't think there has ever been a problem with wrecks. I think people that have moved here the last few years have overstated their concerns. Unfortunately there is speeding everywhere if you look for it.”

“I would like to see warning lights (yellow flashing) at the 321 intersection together with signs posted along 321 with flashing yellow lights warning drivers when a car is entering the intersection from Green Hill or from Rock Rd. The lights can be activated by a car on Green Hill or Rock Rd when they pull up to the stop sign. This is critically needed during foggy weather which happens frequently. The speed limit is 35 along 321 at the intersection but it is not observed.”

“The S curve is the biggest issue for me next to the Green Park Inn parking lot / Susan Little's property /the old crag house . And across the street with the Colie's rock wall makes things tight. Just glad no more larger trucks are not allowed to access the road.”

“A traffic signal at the Blue Ridge Parkway is a terrible idea and totally unnecessary and a traffic signal at 321 will do nothing to address issues surrounding Green Hill Rd. More stop signs are an equally bad idea. Why not place speed bumps at intervals along the road which would slow traffic along the entire road. Another issue is the number of 18 wheelers, who turn onto Green Hill Rd. Several have gotten stuck and at least two have had to be lifted up with a crane to get to 321. There is signage at Green Hill and the parkway, but the sign at the parkway is so far down Green Hill Rd., by the time the driver sees it, if he/she does, they're already all the way on the road, with little opportunity to reverse course. The likelihood of the driver even seeing the sign is remote as the sign itself is too small and the placement makes no sense. If a traffic signal is even a question on the parkway then surely a larger sign placed at the parkway on Green Hill Rd. should be manageable.”

“Dangerous road, due to narrow and no shoulders.”

“Anybody having a problem with sight distance or narrow lanes is not obeying the speed limit. If you drive at 25 mph or below these are not problems. We need greater adherence to the speed limit in recognition of the fact that this is a residential area. Stop signs were recently added on Green Hill Road at Green Hill Circle. This keeps speeds down in that

area and improves safety for everyone who uses the road. If we had additional stop signs on Green Hill at Wonderland Drive, that would solve a lot of problems, too. Drivers pick up speed coming downhill from the Parkway and going in the other direction, downhill from Heather Lane. Stop signs at Wonderland Drive at the bottom of the hill would slow traffic significantly both ways as drivers would brake coming to the signs and be accelerating more slowly from the stop going up the hills. This would be an extremely inexpensive and effective solution to the problem. Please give strong consideration to this simple fix."

"Stop sign at various intersections would slow the speeding and make intersections safer"

"Can a sidewalk from Sourwood Lane to Galax Lane or the Green Park Inn/townhouses be built. Many of us walk that area and it's not safe."

"No sign off the parkway indicating Green Hill Road"

"To remove or move back the new fence at the junction of Green Hill Road and US 321. The view of oncoming traffic to the left coming out of Green Hill Road is blocked by the fence and unsafe. (all of the parallel vertical pieces of the fence line up visually so as to create a solid wall as you look to the left). Also please continue the 3 way stop and stop signs at Green Hill Road and Green Hill Circle junction."

"Traffic is usually traveling at a safe speed. As a pedestrian, it is usually easy to hear the cars and trucks coming and be ready for them. I would be concerned about adding a traffic signal at US 321; it seems that a new signal will encourage more cut-through traffic. Has there been a documented safety problem? The road seems good even though it seems like a state road connecting the Parkway and US 321."

"Very few cars abide by the speed limit. We are very grateful for the 3 way stop to facilitate us departing Greenhill circle. I often see cars not stopping. Too many cut through vehicles from parkway. It's like a highway certsin times of the day. I have been run off the road many times. "

"IT WILL BE BEYOND STUPID FOR AN AND ALL GOVERNMENTS AND MUNICIPALITIES TO ENHANCE THE GREEN HILL RD., SO IT CAN BECOME USED

10 FOLD TIMES MORE AS A CUT THROUGH, AND THEREBY DEGRADED THE PEACE AND TRANQUILITY OF THE CURRENT SETTING.”

“There is a speed limit sign but folks fly through there coming from the parkway. They also cut through Wonderland Drive off Green Hill and speed through there.”

“I am interested in knowing how many deaths we have had on that road, how many serious car crashes we have had how many injuries? Surely this is one of the main components of the study. Anyone riding a bicycle on Green Hill Road or Shull's Mill road should be intelligent enough to know that it is narrow, dangerous and not recommended for cyclists. As for it being a cut through, that is past history. It was only a cut through during the widening of 321. No pass through travelers would think that is a short cut today. As for Blowing Rock streets, this one is really quite wide! I live on the other side of town and the streets are just as narrow. But isn't that just one of the many features that make Blowing Rock charming? If you don't think so, you should consider moving to Lenoir or Boone or Charlotte. I hear that the streets are much wider there. As for that stupid stop sign someone put up there, it should never be in curve where you cannot see it. It creates a dangerous intersection.”

“Speeding on the portion within 1/2 mile of the parkway.”

“There are a number of "treacherous" places on Greenhill that are both narrow and have deep drainage ditches or drop-offs. Oncoming traffic seems to venture over the center line too often, and if you needed to swerve to miss those cars, you are likely to break an axle or do serious damage to your car and perhaps the occupants.”

“Cycling should be prohibited on all town roads”

“Keep the stop sign at Greenhill Circle”

“Having lived on Green Hill for 23 years, I have observed no real problems with driving other than speeding cars. This is a residential area with a meandering road that should serve only those who live along it. It is being used as a shortcut from 321 to the Parkway and people speed never observing the 25 mph limit. It is not a thoroughfare, bypass, or road that is treated as such. Changing this street to provide for a faster speed limit would be an error. Wasting town monies to alter it is also an error. Any substantial change

would not benefit those residents who enjoy the beauty along Green Hill Road. Will there be a period of comment so that residents can voice their opinions?"

"As a resident on Green Hill Road, I am concerned about the following things:

- not enough shoulder on sides of road.
- dangerous for bikers and walkers - not enough shoulder and no sidewalks. As more full time residents move into this neighborhood, more people are walking and biking and it's dangerous.
- Residents backing out of driveways becomes dangerous with speed of other cars.
- Speed limit is not adhered to especially on straighter parts of road."

"The drop off into the drainage is very steep in some areas, which adds to the issue of the narrow lanes."

"We have young children that love to play outside and people are frequently speeding down the streets in the neighborhood. Our yard is just off of green hill rd, and it would be nice if some speed bumps were installed or something was done to reduce the speeding on this road."

"Stop Sign is an excellent addition."

"I live on Fairway Court and travel on Green Hill Road every time I leave home. Turning onto Green Hill road is always an exciting adventure as my sight lines are very short. Cars and bicycles routinely exceed the speed limit. Additional stop signs would help to slow the traffic."

"Traveling north on Green Hill the stop sign at Green Hill Circle is not seen until you are within ~15-20 yards. The vegetation on right side needs to be removed. Warning sign should be illuminated and flashing."

"I'm amazed there have not been major accidents on Green Hill. Very dangerous and don't know what the solution is."

"The cut through traffic poses a danger to area residents due to the volume & their speeding. I would never recommend walking or cycling due to this. Also, the cut through traffic from motorcyclists is extremely noisy. I would strongly support any method(s) to reduce or deter this."

"Speeding is a problem along the entire length of Green Hill Road. Highest speeds, in excess of 50 Miles per Hour, have been recorded at numerous times of the day on the straight sections of Green Hill Road. Unless enforcement is 7 days a week and 24 hours per day enforcement alone will not mitigate problem. Town Council has utilized Stop Signs and Speed Bumps to control speed in parts of the Town. (i.e. Intersection of Possum Hollow & Sunset). Limited visibility has created unsafe conditions for residents backing out of the existing driveways and turning onto Green Hill Road from neighborhoods along road. At a minimum Stop Signs are needed at the following intersections with Green Hill Road

Wonderland

Heather Ridge

Edge Hill Road

Fairway Court

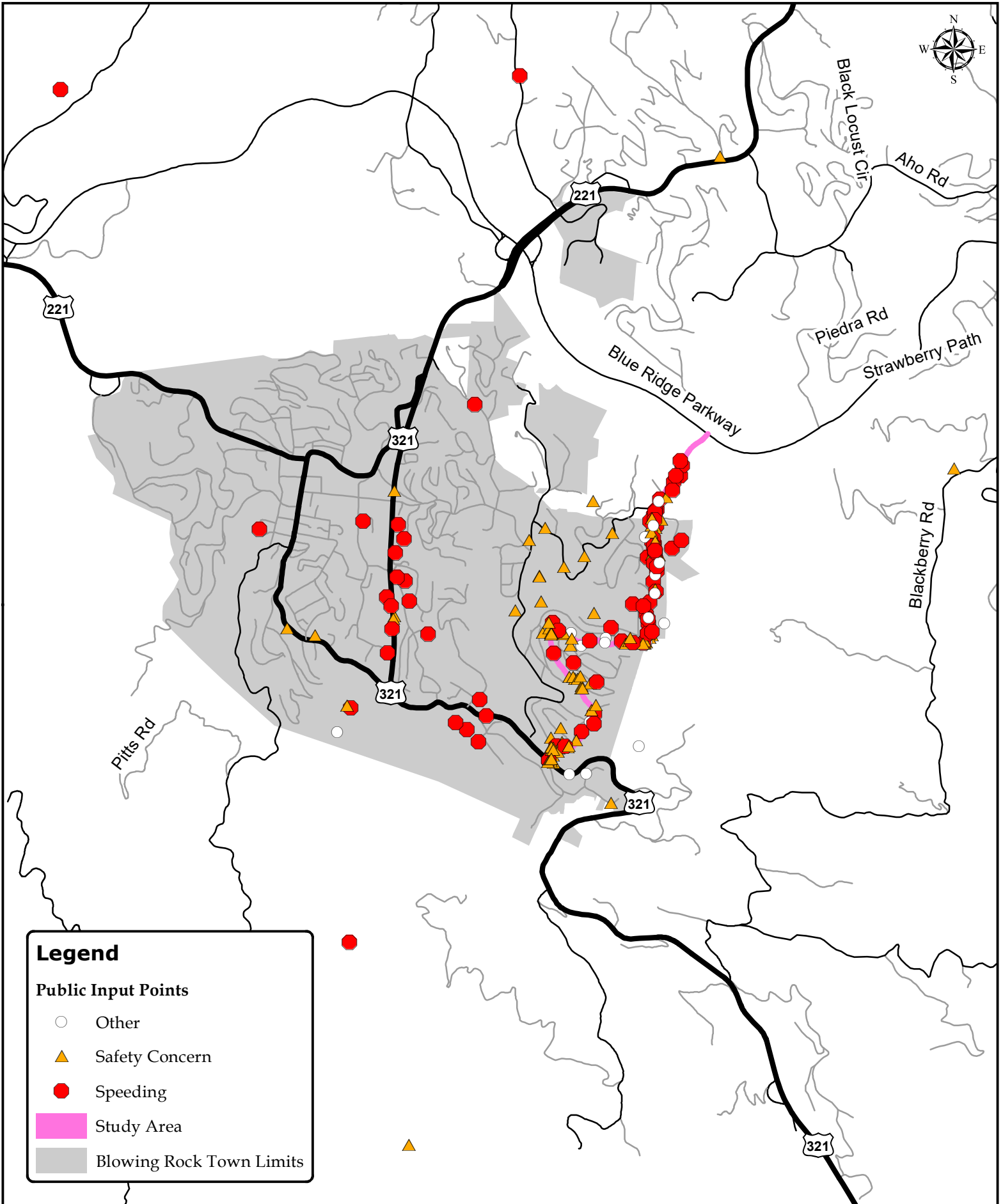
If a Stop Sign cannot be placed at the intersection of Wonderland and Green Hill Road a speed bump should be placed just inside the Town limits at the private Heather Ridge Road. Additional speed bumps should be used as needed."

"As long as I have been driving (long before I became a property owner in Blowing Rock), I have used Green Hill Rd as a bypass to Boone via the Parkway. It really isn't suitable for that and hopefully the new 5 lane will cut down on the volume of Green Hill traffic."

"From listening to Town meetings & some community member comments, it seems some pedestrians feel entitled to walk in a street made for vehicle use, & that they have an issue with vehicles using a street. I feel this is an unreasonable expectation. Streets are made for cars. There are miles of sidewalk around Town, hiking trails, lakes to walk around, & other places made for walking. I think complaints that walking is not safe in a road is shocking, slightly humorous (if we're being honest) & shows the unfortunate beliefs & mentality of some who reside here full time or part of the year. If we want to walk, we should do so somewhere we feel safe & somewhere meant for walking. Walking in the street and being upset that there are cars, is a little crazy. I think the Town should rely on data to make decisions on Green Hill Rd."

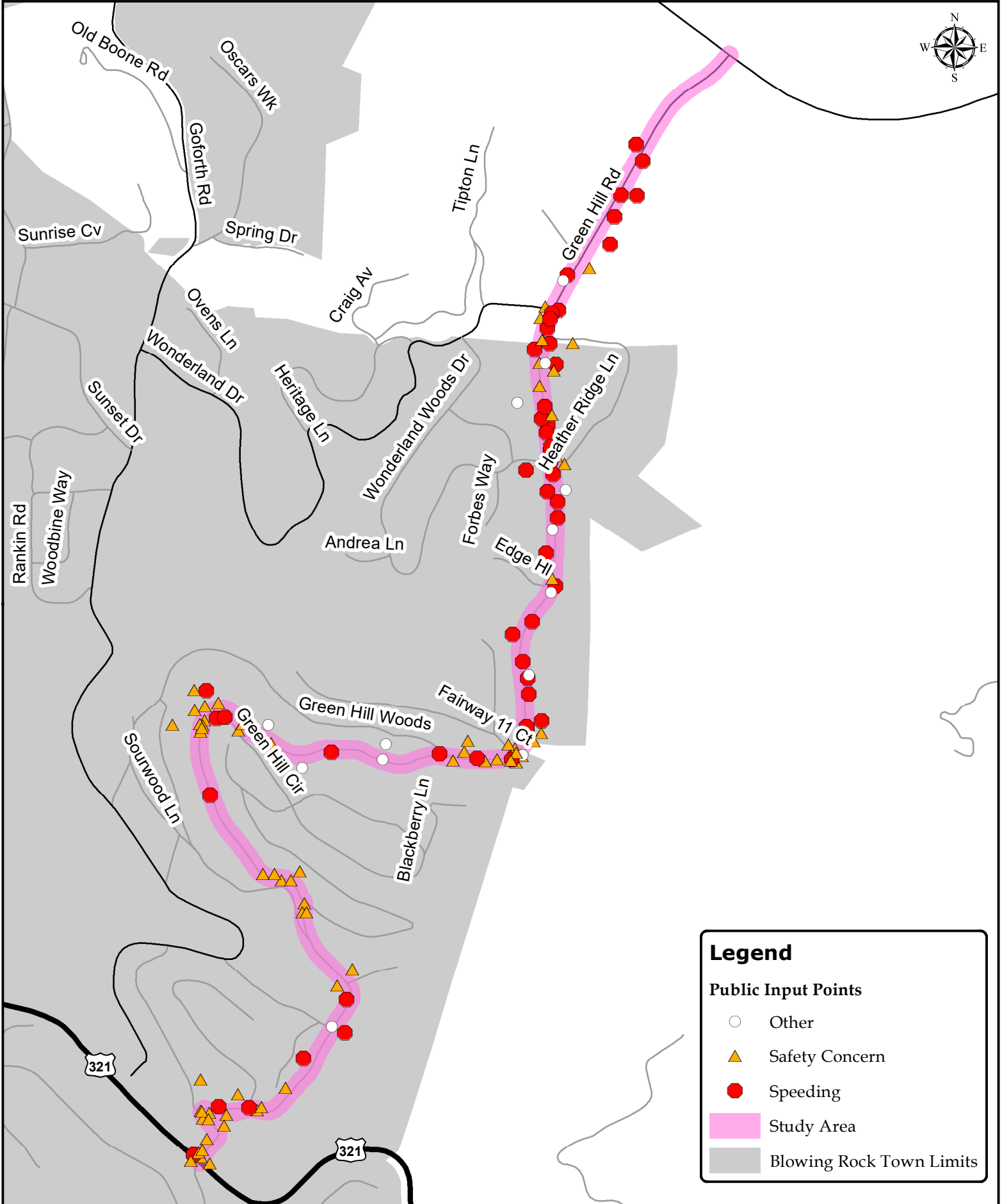
Green Hill Road Traffic Study

Public Interactive Map Points - All



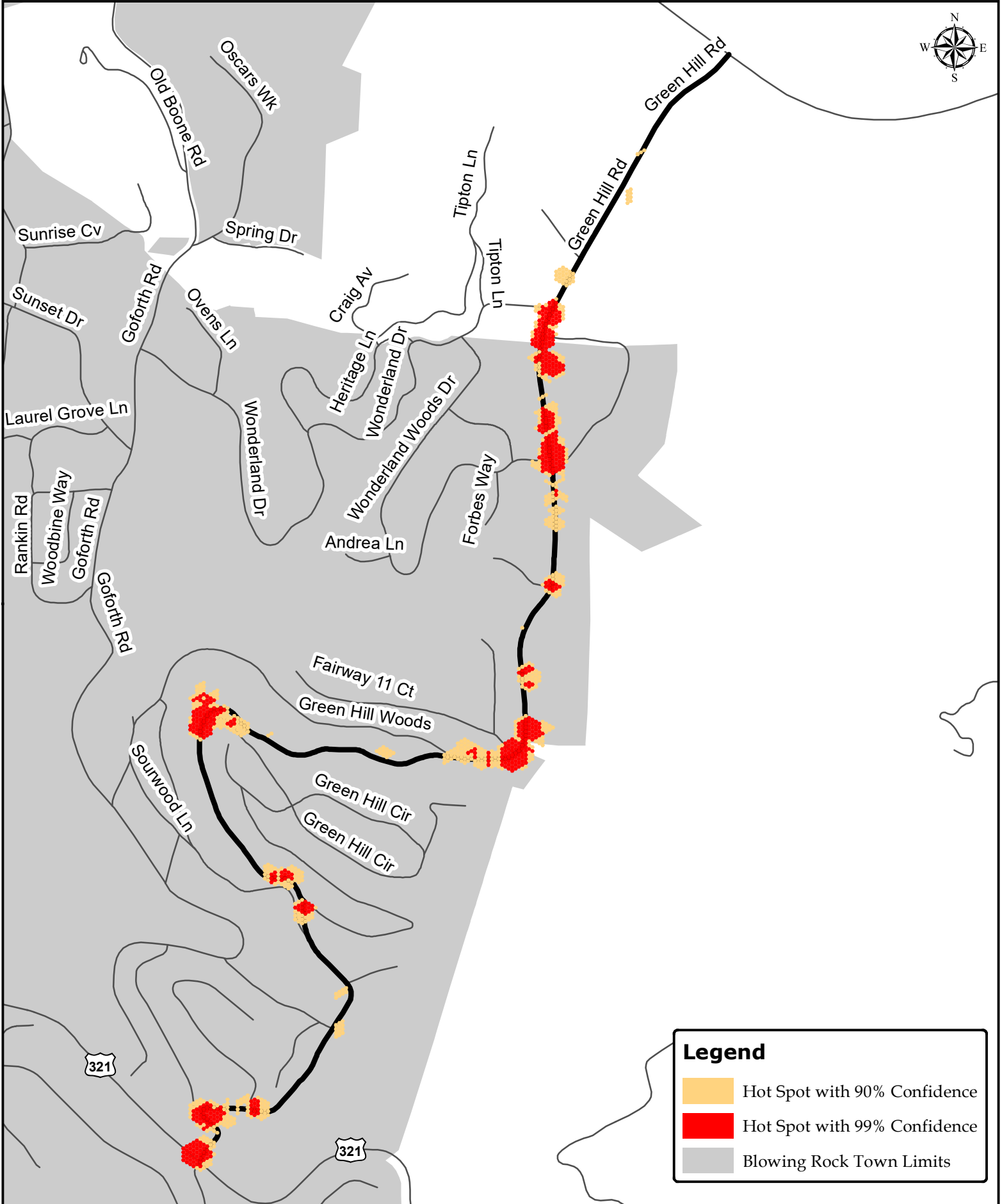
Green Hill Road Traffic Study

Public Interactive Map Points - Study Area Only



Green Hill Road Traffic Study

Public Interactive Map Points - Study Area Only



MEMO

TO: Mayor Charlie Sellers and Blowing Rock Town Council

FROM: Kevin Rothrock, Planning Director

SUBJECT: Downtown Residential Density (CB and TC districts)

DATE: October 6, 2021

On Tuesday, September 14th, the Planning Board subcommittee of Chairman Gherini, Bill McCarter, and Sam Glover and I discussed the residential density limits in the downtown area, specifically Town Center and Central Business. We spoke about some existing residential properties downtown and the applicable densities, and we discussed some recent projects and proposals that have been reviewed recently.

There was consideration of the 2014 Comprehensive Plan that recommends increasing residential density in downtown to at least 8 units/acre. Discussion led the group to evaluate multiple possible residential densities such as 8 units/ac, 12 units/ac, 16 units/acre and 20 units/acre. If you recall, both of Steve Heatherington's projects (Main/Pine and Pine/Laurel) were 20 units/acre projects. The two residential projects proposed on the Barker property behind Speckled Trout were 17 units/acre and 13 units/acre respectively. For reference, Village Green on Main Street is 20 units/acre and The Gables is 17 units/acre.

After much consideration of all other limiting development regulations such as building height, setbacks, impervious limits, and parking, the subcommittee proposed that residential density not be a limiting factor in the Central Business or Town Center zoning districts. In other words, the subcommittee recommended no limit on residential density in the form of maximum dwelling units per acre.

Below is draft language to amend the Land Use Code to eliminate residential density limits in Town Center and Central Business. A full draft ordinance is attached as well.

16-12.2.3. Lots in the R-MH, CB, GB, and HMC zoning districts, where residential developments are permissible, may be developed at a density equal to the density allowed within the R-6S District for single family developments, or the density allowed within the R-6M District for multi-family developments, whichever is applicable to the type of development that is being proposed. Properties zoned CB or TC are not subject to residential density limits.

ORDINANCE NO. 2021-12**AN ORDINANCE TO ELIMINATE RESIDENTIAL DENSITY LIMITS IN THE
CENTRAL BUSINESS AND TOWN CENTER DISTRICTS**

WHEREAS, the Board of Commissioners of the Town of Blowing Rock requested the Planning Board to study the applicability of residential density regulations for the Town Center and Central Business zoning districts; and

WHEREAS, the Planning Board established a subcommittee to review residential density, and the subcommittee's findings suggested other dimensional development regulations in the Land Use Code limit the size of buildings in the TC and CB zoning districts; and

WHEREAS, the subcommittee's recommendation to Planning Board is to remove residential density limits entirely from the TC and CB zoning districts; and

WHEREAS, the 2014 Comprehensive Plan recommends increasing residential density in downtown to at least 8 units per acre; and

WHEREAS, given the evaluation of the dimensional development regulations in the Land Use Code for downtown zoning districts combined with the current residential density limits, this modification ordinance is consistent with the 2014 Comprehensive Plan.

NOW, THEREFORE, BE IT ORDAINED by the Board of Commissioners of the Town of Blowing Rock, North Carolina, that:

Section 1. Chapter 16, Article XII of the Town Code is hereby revised to read as follows:

"16-12.2.3. Lots in the R-MH, **CB**, GB, and HMC zoning districts, where residential developments are permissible, may be developed at a density equal to the density allowed within the R-6S District for single family developments, or the density allowed within the R-6M District for multi-family developments, whichever is applicable to the type of development that is being proposed. **Properties zoned CB or TC are not subject to residential density limits.**"

Section 2. Severability; Conflict of Laws. If this ordinance or application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the ordinance which can be given separate effect and to that end, the provisions of this ordinance are declared to be severable. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 3. Effective Date. This ordinance shall be effective upon adoption.

Adopted this the _____ day of _____, 2021

Charlie Sellers, Mayor

ATTEST: _____
Hilari H. Hubner, Town Clerk

Town of Blowing Rock

Request for Council Action

FROM: Jennifer Brown, Director of Parks & Recreation
SUBJECT: Parks & Recreation Trust Fund Update & Memorial Park Restroom
TO: Town Council
DATE: October 12, 2021
REQUESTED BY: Parks Strategy Committee/Blowing Rock Parks & Recreation

BACKGROUND:

During the Town Council retreat in January, the Parks Strategy Committee presented a drawing of park improvement needs to Town Council. Town Council encouraged the Parks Strategy Committee to pursue applying for a Parks & Recreation Trust Fund Grant (PARTF). The Parks Strategy Committee worked with McGill & Associates and the High-Country Council of Governments and submitted a PARTF Grant application by the end of April. The total projected cost is \$1,285,000. The Town has approximately \$430,000 in bond money and if PARTF awards the grant, that would be \$500,000. The \$355,000 difference would be provided with ABC and TDA funds.

During the March 9th Town Council meeting a discussion about the PARTF grant point system took place and was explained that the proposed renovation and expansion of the restrooms in Memorial Park would not help or hurt our request for PARTF money. It was decided that if we did not receive the PARTF grant, we could move forward with the renovation and expansion of restrooms in Memorial Park with TDA and ABC money as the funding source.

The Parks & Recreation Authority Board met on September 24th and reviewed 55 PARTF applications statewide. Out of 55 applications Blowing Rock's application was ranked first but unfortunately our project did not get funded. There are seven criteria that is considered when deciding on funding and ranking is only one of those. There is still a possibility that our project could get funded if the Governor passes the budget that has been presented. In the proposed budget there is additional funding for PARTF projects and if passed the PARTF Authority Board will fund more projects this year.

We are requesting to move forward with the design, engineering, and bidding on renovating and adding restrooms to Memorial Park while we wait on the approved budget and possible PARTF funding. As stated earlier, moving forward with renovation and addition of restrooms will not affect our PARTF scoring or funding because no points were given for the restroom facilities. The \$355,000 that the TDA and ABC would be providing will cover the restroom cost and the PARTF funding and current bond money would cover the other park improvements in our grant request.

Doug Chapman with McGill will provide details on the cost of the design, engineering, and bidding of the restrooms.

AGREEMENT FOR ENGINEERING SERVICES

This AGREEMENT, made and entered into this the _____ day of _____ 2021, by and between the **Town of Blowing Rock** (OWNER) and **McGill Associates, P.A.** (ENGINEER).

WHEREAS, the OWNER proposes to do certain work toward the accomplishment of the Project entitled **Memorial Park Restroom Improvements** as generally described in Attachment "A" and

WHEREAS, the ENGINEER desires to render professional services in accordance with this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and benefits contained herein, it is hereby mutually understood and agreed as follows:

SECTION 1 - GENERAL SERVICES

The ENGINEER shall:

- 1.1. The ENGINEER shall, as directed by the OWNER, provide professional engineering services for the OWNER in the first phase of the Project; serve as OWNER's professional engineering representative for the Project; and provide professional consultation and advice to OWNER during the performance of the services hereunder.
- 1.2. The ENGINEER shall provide all personnel required in performing the Project unless otherwise provided herein. Such personnel shall not be employees of or have any contractual relationship with the OWNER. All services rendered hereunder shall be performed by the ENGINEER or under his supervision and all personnel engaged in the Project shall be fully qualified under North Carolina law to perform such services.
- 1.3. The ENGINEER shall obtain and furnish, or cause to be obtained and furnished, approvals and permits from all governmental authorities having jurisdiction over the Project, unless otherwise agreed to herein.
- 1.4. The ENGINEER shall seek and obtain authorization from the OWNER or the OWNER's assignee before proceeding with the Project, or before performing any Additional Services as described in Section 3, or before performing any other services which would not be included in the fee for Basic Services set forth in Section 6 hereof, subject to OWNER's right to terminate as herein provided.
- 1.5. The ENGINEER shall comply with all existing federal, state and local laws and regulations regarding equal employment opportunity. The ENGINEER is further obligated to include all requirements hereunder in any subcontract written by him in association with this Agreement.

SECTION 2 - BASIC SERVICES

2.1 DESIGN AND PERMITTING PHASE

- 2.1.1 Meet with the OWNER for the purpose of establishing communication lines, meet project team members, define project schedules, and gather initial data.
- 2.1.2 Complete an initial site investigation with the design team to review base survey information, existing site features, etc.
- 2.1.3 Perform field surveying to locate planimetric and topographic features, property boundary, and location of utilities. Survey of the project area tied to NAD83(2011) and NAVD88 (GEOID12B) for field and aerial mapping efforts.
- 2.1.4 Prepare Schematic Design Documents for the elements identified in the scope of work outlined in Attachment "A".
- 2.1.5 Review Schematic Design Documents with the OWNER.
- 2.1.6 Address comments from the OWNER and prepare Design Development Documents, including grading, drainage, erosion control, landscaping, architectural, and engineering drawings.
- 2.1.7 Prepare complete bid documents, contract documents, technical specifications and construction drawings to detail the character and scope of the work.
- 2.1.8 Review design documents with the OWNER for comments and approval prior to bidding.
- 2.1.9 Submit design documents to the appropriate agencies for review and permitting. Address any comments received.
- 2.1.10 Perform an internal quality control and constructability review of the project.

2.2 BIDDING AND AWARD PHASE

- 2.2.1 Assist the OWNER in advertising, receiving, opening and evaluating bids.
- 2.2.2 Consult with and advise the OWNER as to the acceptability of contractors and subcontractors and make recommendations as to the lowest, responsive, responsible bidder.
- 2.2.3 Assist the OWNER in the final preparation and execution of construction contracts and in checking Performance and Payment Bonds and Insurance Certificates for compliance.
- 2.2.4 Schedule a Pre-Construction Conference with the OWNER, Contractor, ENGINEER and all other applicable parties to assure discussion of all matters related to the Project. Prepare and distribute minutes of the Pre-Construction Conference to all parties.

2.3 CONSTRUCTION PHASE

Upon successful completion of the Bidding and Award Phase, and upon written authorization from OWNER, ENGINEER shall:

- 2.3.1 Provide General Administration of Construction Contract. Consult with OWNER and act as OWNER's representative as provided in the General Conditions. The extent and limitations of the duties, responsibilities, and authority of ENGINEER as assigned in the General Conditions shall not be modified, except as ENGINEER may otherwise agree in writing. All of OWNER's instructions to Contractor will be issued through ENGINEER, which shall have authority to act on behalf of OWNER in dealings with Contractor to the extent provided in this Agreement and the General Conditions except as otherwise provided in writing. ENGINEER shall not be responsible for the acts or omissions of any Contractor, or of any subcontractors, suppliers, or other individuals or entities performing or furnishing any of the Work. ENGINEER shall not be responsible for the failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.
- 2.3.2 Provide a Construction Field Representative (CFR) to periodically observe the progress and quality of the executed work – assuming a five (5) month contract time –and to determine in general if the work is proceeding in accordance with the Contract Documents. During such visits and on the basis of on-site observations as an experienced and qualified design professional, keep the OWNER informed of the progress of the work, endeavor to guard the OWNER against defects and deficiencies in the work of the Contractor. Additional CFR time or construction services will involve an increase in the payments to the ENGINEER as Additional Services under Section 3 of this Agreement.
- 2.3.3 The purpose of ENGINEER's visits and the representation by the Construction Field Representative, (CFR) at the Site, will be to enable ENGINEER to better carry out the duties and responsibilities assigned to and undertaken by ENGINEER during the Construction Phase, and, in addition, by the exercise of ENGINEER's efforts as an experienced and qualified design professional, to provide for OWNER a greater degree of confidence that the completed Work will conform in general to the Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. ENGINEER shall not, during such visits or as a result of such observations of Contractor's Work in progress, supervise, direct, or have control over Contractor's Work, nor shall ENGINEER have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by Contractor, for security or safety on the Site, for safety precautions and programs incident to Contractor's Work, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, ENGINEER neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform the Work in accordance with the Contract Documents. However, ENGINEER shall give prompt notice to the OWNER whenever ENGINEER observes or otherwise becomes aware of any defect in the Project or of any material deviation of Contractor's work from the Contract Documents.

- 2.3.4 Review and determine the acceptability of any schedules that Contractor is required to submit to ENGINEER, including Progress Schedule, Schedule of Submittals and Schedule of Values.
- 2.3.5 Based on ENGINEER's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
- a. Determine the amounts that ENGINEER recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute ENGINEER's representation to OWNER, based on such observations and review, that, to the best of ENGINEER's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the quality of such Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER's responsibility to observe Contractor's Work. In the case of unit price work, ENGINEER's recommendations of payment will include final determinations of quantities and classifications of Contractor's Work (subject to any subsequent adjustments allowed by the Contract Documents).
 - b. By recommending any payment, ENGINEER shall not thereby be deemed to have represented that observations made by ENGINEER to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in this Agreement and the Contract Documents. Neither ENGINEER's review of Contractor's Work for the purposes of recommending payments nor ENGINEER's recommendation of any payment including final payment will impose on ENGINEER responsibility to supervise, direct, or control Contractor's Work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on ENGINEER to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the Work in progress, materials, or equipment has passed to OWNER free and clear of any liens, claims, security interests, or encumbrances, or that there may not be other matters at issue between OWNER and Contractor that might affect the amount that should be paid.
- 2.3.6 Assist the OWNER in the selection and coordination of an independent geotechnical and materials testing laboratory, if required, to be provided at the OWNER's expense.
- 2.3.7 Review and take action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the

information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such reviews and any approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Review of Shop Drawings and Samples identified as frivolous in the General Conditions of the construction contract documents, or review of substitute materials as defined in the same, shall be deemed as Additional Services.

- 2.3.8 Issue instructions to the Contractor from the OWNER as to interpretations and clarifications to the project design plans, specifications and contract documents.
- 2.3.9 Render formal written decisions on all duly submitted issues relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the execution, performance, or progress of Contractor's Work; review each duly submitted Claim by OWNER or Contractor, and in writing either deny such Claim in whole or in part, approve such Claim, or decline to resolve such Claim if ENGINEER in its discretion concludes that to do so would be inappropriate. In rendering such decisions, ENGINEER shall be fair and not show partiality to OWNER or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.
- 2.3.10 Prepare information required to resolve problems due to actual field conditions and to respond to Requests for Information (RFI) from the Contractor.
- 2.3.11 Recommend to OWNER that Contractor's Work be rejected while it is in progress if, on the basis of ENGINEER's observations, ENGINEER believes that such Work will not produce a completed Project that conforms generally to the Contract Documents or that it will threaten the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
- 2.3.12 Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.
- 2.3.13 Review the Contractor's final application for payment and make recommendation as to approval once all issues with the project final observation site visit have been completed and resolved.
- 2.3.14 Promptly after notice that Contractor considers the entire Work ready for its intended use, in company with OWNER and Contractor, conduct a pre-final observation site visit to determine if the Work is substantially complete. If after considering any objections of OWNER, ENGINEER considers the Work substantially complete, ENGINEER shall deliver a certificate of Substantial Completion to OWNER, Infrastructure Finance Services, and Contractor.
- 2.3.15 In company with OWNER's representatives, conduct a final observation site visit to determine if the Project has been completed in accordance with the Contract Documents and if the Contractor has fulfilled all of his obligations thereunder so that the ENGINEER may approve to the OWNER final payment to the Contractor.
- 2.3.16 Provide or make available all Project files and information to effect project closeout.

SECTION 3 - ADDITIONAL SERVICES

If authorized by the OWNER, the ENGINEER will furnish or obtain from others additional services of the following types, which are not considered Basic Services under this Agreement.

- 3.1 Additional services resulting from significant changes in general scope of the Project or its design including, but not limited to, changes in size, complexity, OWNER's schedule, or character of construction. The ENGINEER and OWNER agree that time is of the essence in order to meet funding application deadlines. As such, the OWNER may initiate minor changes in the project scope to be incorporated by the ENGINEER, subsequent to the permit submittals, as not to impede progress toward the funding application deadlines. No work on any such changes shall occur by the ENGINEER unless preapproved by the OWNER. Revising previously approved studies, reports, design documents, drawings or specifications, when such revisions are due to causes beyond the control of the ENGINEER.
- 3.2 Preparing documents for alternate bids requested by the OWNER for work, which is not executed, or documents for out-of-sequence work other than agreed upon in the Planning Phase.
- 3.3 Additional or extended services during construction made necessary by prolongation of the construction contract, award of multiple contracts, or default by the Contractor under any prime construction contract if such construction contract is delayed beyond the original completion date.
- 3.4 Providing geotechnical and subsurface investigations, archeological surveys and any other environmental site surveys necessary for the construction of the project.
- 3.5 Review of Shop Drawings and Samples identified as frivolous in the General Conditions of the construction contract documents, or review of substitute materials as defined in the same General Conditions.
- 3.6 Preparing to serve or serving as a witness for the OWNER in any litigation, condemnation or other legal or administrative proceeding involving the Project.
- 3.7 Additional services in connection with the Project, including services normally furnished by OWNER and services not otherwise included in this Agreement.
- 3.8 Additional services in connection with administering project funding.
- 3.9 Preparing easement maps or plats.
- 3.10 Soliciting bids for elements to be supplied by OWNER.
- 3.11 Preparing design of retaining wall and/or certification if required.
- 3.12 Offsite engineering for water supply, utilities, and drainage.
- 3.13 Preparation of recombination plat.
- 3.14 Preparation of transportation studies and/or offsite roadway design.

SECTION 4 - OWNERS RESPONSIBILITIES

The OWNER shall:

- 4.1 Provide full information as to the requirements for the Project.
- 4.2 Assist the ENGINEER by placing at his disposal in a timely manner all available information pertinent to the Project including previous documents and any other data relative to the evaluation, design, and construction of the Project.
- 4.3 Designate a person to act as OWNER's representative with respect to the work to be performed under this Agreement; and such person shall have complete authority to transmit instructions, receive information, interpret and define OWNER's policies and decisions pertinent to the services in this Agreement.
- 4.4 Guarantee access to and make all provisions for the ENGINEER to enter upon public and private property as required for the ENGINEER to perform the services under this Agreement, provided the same does not unreasonably interfere with the operation of the existing facilities.
- 4.5 Examine all studies, reports, sketches, estimates, specifications, drawings, proposals and other documents presented by the ENGINEER and render decisions and comments pertaining thereto within a reasonable time so as not to delay the services of the ENGINEER.
- 4.6 Obtain any right-of-way easements from public bodies, entities or persons necessary for satisfactory construction of the Project.
- 4.7 Obtain any subsurface geotechnical investigations or other types of testing and analysis needed for the Project.
- 4.8 Pay for permit fees, and all costs incidental to advertising for bids, and receiving bids or proposals from licensed Contractors.
- 4.9 Provide such legal, accounting and insurance counseling services as may be required for the Project, and such auditing services as may be required to ascertain how or for what purpose any Contractor will or has used the monies paid to him under the construction contract.
- 4.10 Give prompt notice to the ENGINEER whenever the OWNER observes or otherwise becomes aware of any defect in the Project.
- 4.11 Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project, subject to the obligations of the ENGINEER outlined in Section 1.3 of this Agreement.
- 4.12 Furnish, or direct the ENGINEER to provide necessary Additional Services as stipulated in Section 3 of this Agreement or other services as required.
- 4.13 Bear all costs incident to compliance with the requirements of this Section 4, except where Contractor will assume responsibility for the same.

SECTION 5 - PERIOD OF SERVICES

- 5.1 Unless this Agreement has been terminated as provided in paragraph 7.1, the ENGINEER will be obligated to render services hereunder for a period, which may reasonably be required for the services described herein. The ENGINEER may decline to render further services hereunder if the OWNER fails to give prompt approval of the various phases as outlined. Upon receiving a written authorization to proceed, the ENGINEER shall provide the OWNER with a written schedule of completion for the services so authorized.
- 5.2 If the Project is delayed significantly for reasons beyond the ENGINEER's control, the various rates of compensation provided for elsewhere in this Agreement shall be subject to renegotiation.

SECTION 6 - PAYMENT TO THE ENGINEER

6.1 PAYMENT FOR BASIC SERVICES

6.1.1 The OWNER agrees to pay the ENGINEER for Basic Services as outlined in Section 2 the following lump sum fees, inclusive of all reimbursable expenditures.

Phase 1

Design Phase Services	\$44,000
Bidding and Award Phase Services	\$3,500
Construction Phase Services	\$25,000
<hr/>	
Total Lump Sum Fee	\$72,500

6.2 PAYMENT FOR ADDITIONAL SERVICES

6.2.1 The OWNER will pay the ENGINEER for Additional Services as outlined in Section 3 an amount based on actual time spent and expenses incurred by principals and employees of the ENGINEER assigned to the Project in accordance with the attached ENGINEER's standard rate and fee schedule Attachment "B", which is subject to update on an annual basis.

6.3 TIMES OF PAYMENT

6.3.1 The OWNER will make prompt monthly payments in response to the ENGINEER's monthly statements for services rendered under this Agreement.

6.4 GENERAL

6.4.1 If the OWNER fails to make any payment due the ENGINEER on account of his services and expenses within sixty days after receipt of the ENGINEER's bill therefor, the ENGINEER may, after giving seven days written notice to the OWNER, suspend services under this Agreement until he has been paid in full all amounts due him on account of his services and expenses.

6.4.2 If the Agreement is terminated at the completion of any phase of the Basic Services called for under Section 2, progress payment to be made to the ENGINEER on account of services rendered shall constitute total payment for services rendered. If this Agreement is terminated during any phase of the Basic Services, the ENGINEER shall be paid for services rendered on the basis of a reasonable estimate of the portion of such phase completed prior to termination. In the event of any termination, the ENGINEER will be paid for all his reasonable expenses resulting from such termination, and for unpaid reimbursable expenses.

6.4.3 If, prior to termination of this Agreement, any work designed or specified by the ENGINEER, under Section 2, is suspended in whole or in part for more than three months or is abandoned, after written notice from the OWNER, the ENGINEER shall be paid for services performed prior to receipt of such notice from the OWNER as provided in paragraph 6.4.2 for termination during any phase of his service.

SECTION 7 - GENERAL CONDITIONS

7.1 TERMINATION

- 7.1.1 The OWNER has the right to terminate this agreement for any reason, and without cause by providing ten (10) days written notice to the ENGINEER of such termination and specifying the effective date of such termination; provided, however, that during such period of ten (10) days the ENGINEER shall have the opportunity to remedy such failures or violations to avoid such termination.
- 7.1.2 In the event of termination, as provided herein, the ENGINEER shall be paid for all services performed and actual expenses incurred up to the date of termination pursuant to Section 6.4.2 herein.

7.2 INSURANCE AND CLAIMS

- 7.2.1 The ENGINEER will secure and maintain such insurance as will protect him from claims under workmen's compensation acts, claims for damages because of bodily injury including personal injury, sickness, or disease, or death of any of his employees or of any person other than his employees, and from claims for damages because of injury to or destruction of tangible property including loss of use resulting therefrom. Said insurance policy or policies shall be written by a company or companies and in a form and substance approved by the OWNER prior to the policies being put into effect, and shall be in an amount not less than one million dollars (\$1,000,000).

7.3 SUCCESSORS AND ASSIGNS

- 7.3.1 The OWNER and the ENGINEER each binds himself and his partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither the OWNER nor the ENGINEER will assign, sublet or transfer his interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the OWNER and the ENGINEER.

7.4 ENTIRE AGREEMENT

- 7.4.1 This Agreement constitutes the entire agreement between the OWNER and ENGINEER and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented or modified by a duly executed written instrument.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first written above.

McGILL ASSOCIATES, P.A.

By: _____
Douglas Chapman, PE
Principal/Hickory Office Manager

(SEAL)

TOWN OF BLOWING ROCK

ATTEST: _____
Hilari Hubner
Town Clerk

By: _____
Shane Fox
Town Manager

PRE-AUDIT CERTIFICATION:

THIS INSTRUMENT has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act as amended.

By: _____
Nicole Norman Finance Director

APPROVED AS TO LEGAL FORM:

By: _____
Allen Moseley
Town Attorney

ATTACHMENT “A”
PROJECT UNDERSTANDING
MEMORIAL PARK RESTROOM IMPROVEMENTS

The Town of Blowing Rock has planned expansion and improvements of the existing restrooms in Memorial Park in downtown.

The project will include construction of an addition to the existing restroom building located between Town Hall and the Police Department, along with updating the fixtures and finishes in the existing restrooms. The new addition will include the following fixture counts:

Fixture Type	Women’s	Men’s
Handicap Accessible Toilet	1	1
Toilet	3	1
Urinal	--	2
Sink	2	2
Hand Dryer	1	1

The new restrooms will be a mirror image of the existing building, constructed to the west of the existing building with a shared entryway to access proposed and existing restrooms. The exterior of the building will have finishes that match the existing building. The addition will require relocating the existing sidewalk and removal of at least one tree and may impact the existing parking lot.

ATTACHMENT “B”
STANDARD RATE AND FEE SCHEDULE

PROFESSIONAL FEES	I	II	III	IV
Senior Principal	\$245			
Principal – Regional Manager – Director	\$195	\$210	\$220	\$225
Practice Area Lead	\$165	\$175	\$200	\$215
Senior Project Manager	\$185	\$195	\$205	\$210
Project Manager	\$165	\$180	\$185	\$190
Project Engineer	\$120	\$130	\$150	\$155
Engineering Associate	\$100	\$105	\$115	\$120
Planner- Consultant – Designer	\$105	\$120	\$140	\$155
Engineering Technician	\$95	\$110	\$120	\$125
CAD Operator – GIS Analyst	\$85	\$90	\$100	\$105
Construction Services Manager	\$135	\$150	\$160	\$165
Construction Administrator	\$100	\$115	\$125	\$130
Construction Field Representative	\$90	\$95	\$100	\$105
Environmental Specialist	\$90	\$100	\$105	\$110
Surveyor	\$95	\$100	\$105	\$110
Surveying Associate	\$75	\$80	\$85	\$90
Survey Technician	\$80	\$85	\$90	\$95
Survey Field Technician	\$65	\$70	\$75	\$80
Administrative Assistant	\$70	\$75	\$80	\$85

1. EXPENSES

- a. Mileage - \$0.65/mile
- b. Robotics/GPS Equipment - \$25/hr.
- c. Survey Drone - \$100/hr.
- d. Telephone, reproduction, postage, lodging, and other incidentals shall be a direct charge per receipt.

2. ASSOCIATED SERVICES -

- a. Associated services required by the project such as soil analysis, materials testing, etc., shall be at cost plus fifteen (15) percent.

MEMORANDUM

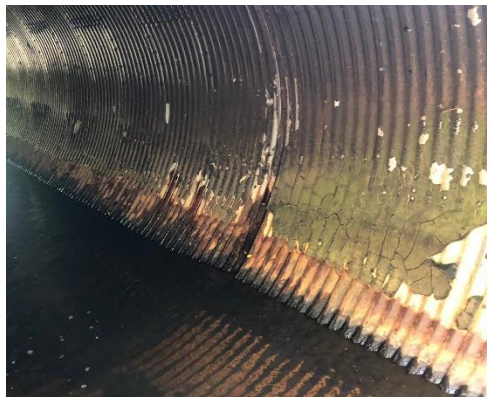
To: Shane Fox, Town Manager

From: Douglas Chapman, PE

Date: October 6, 2021

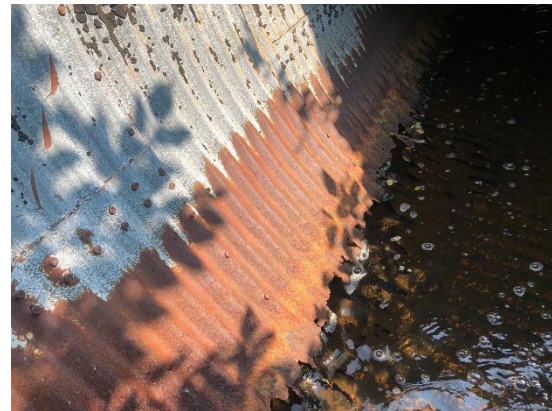
Subject: Blowing Rock – Wastewater Treatment Plant Entrance Culvert

Over the last few months, a small sink hole has developed in the access driveway to the Town's wastewater treatment plant. The sink hole is directly over the twin 84-inch culverts where the South Fork of the Middle Fork of the New River passes under the drive. The photo to the right shows the location of the settlement. Upon review of the site, it appears that the settlement is happening due to holes that have developed in the culverts under the roadway. These corrugated metal pipes have seen corrosion along the bottom and normal water flow line, in addition to some separation at the pipe joints. These conditions are evidenced by the photos below.



We have considered several possible options for addressing this issue, from pipe rehab to total replacement. Pipe rehabilitation can come in several forms, cement lining – centrifugally applied, slip lining with a smaller high density polyethylene pipe, or plate installation. Each method has its advantages and provides less disruption to the roadway. Full replacement would require excavation of the roadway (eliminating access for some period) and handling of the pipes that extend across the area (16-inch raw water line, potable water line, and 16-inch waste line from the water plant). Given the issues related to replacement and the fact that the existing pipes are in fairly good structural condition, replacement has been eliminated as an option. Of the rehabilitation alternatives, cement lining of the existing pipe is the most practical from the perspective of constructability, cost, and flow capacity.

across the area (16-inch raw water line, potable water line, and 16-inch waste line from the water plant). Given the issues related to replacement and the fact that the existing pipes are in fairly good structural condition, replacement has been eliminated as an option. Of the rehabilitation alternatives, cement lining of the existing pipe is the most practical from the perspective of constructability, cost, and flow capacity.



We have solicited pricing from several contractors for repairs to these culverts and received pricing from JW Hampton Company to develop the following budget:

1. 84-inch Culvert Restoration	\$ 80,000
2. Grading, Stone base, and Paving Surface Repair Allowance	\$ 12,000
3. Contingencies	\$ 10,000
4. Engineering	<u>\$ 8,000</u>
Total Project Cost	\$110,000

If you have any questions, please contact me at (828) 328-2024.



Town of Blowing Rock

1036 Main Street ★ Post Office Box 47 ★ Blowing Rock, North Carolina 28605

To: Mr. Shane Fox, Mayor Sellers, and Members of Town Council
From: Nicole Norman, Finance Officer
Subject: Budget Amendment Ordinance to Account for Various Items
(Ordinance #2021-12)
Date: October 12, 2021

Enclosed please find a Budget Amendment Ordinance for the fiscal year 2020-2021 for your consideration.

Section 1 (Capital Projects Fund) allocates Fund Balance (\$110,000) towards the cost of Wastewater Treatment Plant access road repairs.

Please let me know if you need further details on the proposed amendment.

**2021-2022
Budget Amendment Ordinance 2021-12**

Be it ordained by the Town Council of the Town of Blowing Rock, North Carolina, that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2022:

Section 1. To amend the General Capital Fund, the appropriations are to be changed as follows:

<u>Acct. No.</u>		<u>Current Appropriation</u>	<u>Decrease</u>	<u>Increase</u>	<u>Proposed Appropriation</u>
20-20-5000-365	Wastewater Treatment Plant Rd.- Construction	\$ -	\$ -	\$ 92,000	\$ 92,000
20-20-5000-366	Wastewater Treatment Plant Rd.- Engineerig	\$ -	\$ -	\$ 8,000	\$ 8,000
20-20-5000-367	Wastewater Treatment Plant- Contingency	\$ -	\$ -	\$ 10,000	\$ 10,000
			<u>\$ -</u>	<u>\$ 110,000</u>	

This will result in a net increase of \$110,000 in the appropriations of the General Capital Fund. As a result, the following revenue will be increased.

<u>Acct. No.</u>		<u>Current Appropriation</u>	<u>Decrease</u>	<u>Increase</u>	<u>Proposed Appropriation</u>
20-00-3400-331	Transfer from General Fund	\$ 1,870,010	\$ -	\$ 110,000	\$ 1,980,010
			<u>\$ -</u>	<u>\$ 110,000</u>	

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Town Council and to the Finance Officer for their implementation.

Adopted this 12th day of October, 2021.

Attested by:

Charles Sellers, Mayor

Hilari Hubner, Town Clerk

MEMORANDUM

To: Shane Fox, Town Manager
From: Douglas Chapman, PE
Date: October 6, 2021
Subject: Blowing Rock – Pressure Reducing Valve Replacement - Wallingford

As reported at the Town Council retreat in January, McGill has been working with the Town staff for some time at developing a plan for prioritization of the water system pressure reducing valves (PRV). That effort began with developing a computer driven water model of the water system to coordinate PRV interconnectivity. From that effort and staff inventory, a complete listing of valves was prepared. A criticality matrix was then prepared, factoring in the importance of the existing valves, as well as how troublesome they are for staff to maintain. From this effort, five (5) PRVs were identified for immediate attention, varying from complete valve/vault replacement to valve only replacement. Below is a listing of that criticality evaluation.

PRV #	Location	Size	Importance	Troublesome	Criticality
1 & 2	322 Dogwood Lane	6-inch Main & 2-inch Bypass	5	5	10
3	Lower Dogwood Lane	3-inch	4	3	7
4	Hwy 221 & Green Street	6-inch	4	2	6
5	Green Street (feeding Morningside)	8-inch	4	2	6
6	Laurel Park at Dogwood	8-inch	5	4	9
9	Ransom Street at Main	6-inch	2	5	7
10	Ransom Street	6-inch	2	4	6
11	Hill Street	8-inch	4	5	9
12	Green Street (feeding Wallingford)	6-inch	5	5	10
13	Brooker Drive	8-inch	4	3	7
14	Clawson	6-inch	2	2	4
15 & 16	South White Pine	8-inch Main & 2-inch Bypass	1	2	3
17	North White Pine	8-inch	3	2	5
19	Valley Blvd (Pinnacle)	8-inch	4	2	6
22	Old 321 (to Boone)	6-inch	1	2	3
23	Possum Hollow	8-inch	5	3	8

Based on criticality scoring and the current sidewalk work along US 221, the Wallingford PRV (located on Green Street) was identified to be the first valve for replacement. Plans were prepared and submitted to NCDOT and NCDEQ for permit approval. Informal quotes were solicited for the work and two (2) bids received. The lowest responsive, responsible bid was from Iron Mountain Construction with a total amount of \$136,385. This contractor is appropriately licensed and has successfully completed numerous projects for the Town. Consequently, we recommend award to Iron Mountain for replacement of the Wallingford PRV, and establishment of a \$7,000 contingency.

If you have any questions, please contact me at (828) 328-2024.



Town of Blowing Rock

1036 Main Street ★ Post Office Box 47 ★ Blowing Rock, North Carolina 28605

To: Mr. Shane Fox, Mayor Sellers, and Members of Town Council
From: Nicole Norman, Finance Officer
Subject: Budget Amendment Ordinance to Account for Various Items
(Ordinance #2021-13)
Date: October 12, 2021

Enclosed please find a Budget Amendment Ordinance for the fiscal year 2020-2021 for your consideration.

Section 1 (ARPA Fund) allocates ARPA funds (\$152,385) towards the cost of PRV replacements as set as a priority at last year's Winter Retreat.

Please let me know if you need further details on the proposed amendment.

**2021-2022
Budget Amendment Ordinance 2021-13**

Be it ordained by the Town Council of the Town of Blowing Rock, North Carolina, that the following amendment be made to the annual budget ordinance for the fiscal year ending June 30, 2022:

Section 1. To amend the ARPA Fund, the appropriations are to be changed as follows:

<u>Acct. No.</u>		<u>Current Appropriation</u>	<u>Decrease</u>	<u>Increase</u>	<u>Proposed Appropriation</u>
51-91-1001-001	PRVs- Construction	\$ -	\$ -	\$ 136,385	\$ 136,385
51-91-1001-002	PRVs-Engineering	\$ -	\$ -	\$ 6,000	\$ 6,000
51-91-1001-003	PRVs-Contingency	\$ -	\$ -	\$ 10,000	\$ 10,000
51-91-1000-001	ARPA Project Expenditures	\$ 300,000	\$ 152,385	\$ -	\$ 147,615
			<u>\$ 152,385</u>	<u>\$ 152,385</u>	

This will result in a net increase of \$0 in the appropriations of the ARPA Fund. As a result, the following revenue will be increased.

<u>Acct. No.</u>	<u>Current Appropriation</u>	<u>Decrease</u>	<u>Increase</u>	<u>Proposed Appropriation</u>
	\$ -	\$ -	\$ -	\$ -
		<u>\$ -</u>	<u>\$ -</u>	

Section 2. Copies of this budget amendment shall be furnished to the Clerk to the Town Council and to the Finance Officer for their implementation.

Adopted this 12th day of October, 2021.

Attested by:

Charles Sellers, Mayor

Hilari Hubner, Town Clerk