

# Franklin City Council Agenda February 24, 2020 Franklin City Hall Council Chambers 207 West 2<sup>nd</sup> Avenue

## 7:00 P.M. Regular Meeting

#### 1. CONSENT AGENDA:

- A. Approval of February 10, 2020 work session and regular meeting minutes
- B. Celebration of Black History Month Resolution 2020-05

#### 2. FINANCIAL MATTERS

A. Preliminary FY 21 Budget Update

#### 3. OLD/ NEW BUSINESS:

- A. City of Franklin Paving Study Overview
- B. Courthouse Update
  - a. Consideration of the contract with Glave and Holmes
- C. City Manager's Report

#### 4. COUNCIL/STAFF REPORTS ON BOARDS/COMMISSIONS

#### 5. <u>CLOSED SESSION</u>

I move that the City of Franklin, Virginia City Council adjourn into a closed meeting pursuant to Virginia Code Section 2.2-3711-1, to discuss appointments to boards and commissions, to discuss the following subject or subjects: Franklin Redevelopment and Housing Authority, Eastern Virginia Regional Industrial Facility Authority, Census Complete Count Committee, Social Services Advisory Board, Industrial Development Authority and the Hurricane Floyd 25<sup>th</sup> Anniversary Committee

And pursuant to Virginia Code Section 2.2-3711-5 regarding the discussion of a prospective business or industry or the expansion of an existing business or industry where no previous announcement has been made of the business' or industry's interest in locating or expanding its facilities in the community in Pretlow Industrial Park and along Armory Drive.

Motion Upon Returning to Open Session- I move that the City of Franklin, Virginia City Council adopt the attached closed meeting resolution to certify that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the

closed meeting held on February 24, 2020; (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the City of Franklin, Virginia City Council; and (iii) no action was taken in closed meeting regarding the items discussed.

# 6. ADJOURNMENT

# **UPCOMING ITEMS TO BE SCHEDULED**

The items below are intended to be reflective, and not inclusive of all subjects staff is working on to bring forward to City Council in the next two months. Both the time lines and subject matter are subject to change and should not be considered final.

<u>SUBJECT</u>	TENTATIVE TIMELINE
Work Session with FRHA	March 9, 2020

The Franklin City Council held a work session to discuss Planning Commission items on February 10, 2020 at 7:00 p.m. in the City Council Chambers at City Hall.

**Council Members in Attendance:** Frank Rabil, Mayor; Barry Cheatham, Vice-Mayor; Councilman Linwood Johnson; Councilman Bobby Cutchins; Councilwoman Wynndolyn Copeland; Councilman Gregory McLemore and Councilman Benny Burgess

**Staff in Attendance:** Amanda Jarratt, City Manager; Christopher Makenbic; Sands Anderson Representative; Leesa Barnes, Executive Assistant, Recording Minutes

Other Staff in Attendance: Steve Patterson, Chief of Franklin City Police Department; Donald Goodwin, Director of Community Development, Russ Pace, Director of Public Works, Vernie Francis, III, Director of Emergency Services and Jerry Griffith, Deputy Director of Emergency Services

#### Call to Order

Frank Rabil, Mayor called the February 10, 2020 work session to order at 6:00 p.m.

#### **Planning Commission Items**

#### Golf Cart Laws and Virginia Department of Transportation (VDOT) Recommendations

Mayor Rabil reminded everyone in attendance that these Planning Commission items were only to be discussed, there would be no actions made at this work session.

Amanda Jarratt, City Manager introduced Steve Patterson, Chief of Franklin City Police to give the following PowerPoint presentation on Virginia State Code concerning the operation of golf carts and utility vehicle operation:

Attachment #1: Virginia State Code 46.2 – 916.1 *Golf cart and utility vehicle operations on public highways not otherwise designated for such operation.* 

This code specifically prohibits the operation of golf carts and utility vehicles on public highways in the Commonwealth unless provided by code. Therefore, to allow golf carts or utility vehicles to operate on public highways, the City would have to develop an ordinance to allow such.

Attachment #2: Virginia State Code 46.2 – 916.2 Designation of public highways for golf cart and utility vehicle operations

This code establishes a framework for the review and approval of a golf cart and utility vehicle ordinance. Important points of this code are listed below:

- No usage of golf carts and utility vehicles on highways unless reviewed and approved by the governing body.
- The review and approval process should consider the speed, volume, and character of motor vehicle traffic that would be using the highways in conjunction with the golf carts or utility vehicles and that the review and approval is consistent with the state and local transportation plans as well as the Commonwealth's Statewide Pedestrian Policy.
- No roadways shall be approved for golf cart of utility vehicle usage if the usage will impede the safe and efficient flow of motor vehicle traffic.

• The City of Franklin may recoup money spent on signage installation and continuing maintenance from those persons or groups who request the usage of golf carts and utility vehicles on city streets.

Attachment #3: Virginia State Code 46.2 – 916.3 Limitations of golf cart and utility vehicle operations on designated public highways

This code provides for additional restrictions on the usage of golf carts and utility vehicles on public highways. Important points of this code are listed below:

- A golf cart or utility vehicle may be operated only roadways with speed limits of 25 miles per hour or less.
- A golf cart or utility vehicle may cross a highway at an intersection controlled by a traffic light if the highway has a posted speed limit of no more than 35 miles per hour.
- No person shall operate any golf cart or utility vehicle without a valid driver's license.
- A golf cart or utility vehicle must display a slow-moving vehicle emblem.
- Golf carts and utility vehicles can only be operated upon the public highways between sunrise and sunset unless they are equipped by lights such like a motor vehicle.
- The City of Franklin can by ordinance add restrictions / limitations as long as they are no less stringent than the restrictions provided by state code.

#### Attachment #4: VDOT Land Use Permit

Provides for considerations toward review and approval of an ordinance based on Virginia Department of Transportation (VDOT) protocols. It is understood that the City of Franklin maintains its own streets. The City of Franklin does not though have its own protocols to establish a golf cart and utility vehicle program. Therefore, it is important to review and discuss their protocols.

- Review the speed, volume, and character of motor vehicle traffic using such highways.
- Review for consistency with the Commonwealth's Statewide Pedestrian Policy.
- Review should establish connectivity to origins and destinations.
- Routes should not cross un-signalized intersections where the annual average daily traffic (AADT)
  exceeds 2000 vehicles per day or where peak period traffic volumes do not allow for the safe
  crossing of golf carts and utility vehicles.
- The speed limit of the highway to be designated shall not exceed 25 miles per hour.
- AADT of the highway to be designated shall not exceed 1000 vehicles per day.
- If parking is allowed on routes, there must be a minimum of 24 feet for one side parking is allowed on routes there must be a minimum of 24 feet for one side parking and 29 feet for both sides (North Main Street at Third Avenue is 34 feet).
- Truck traffic on the selected route shall not exceed 10%.

It is understood that this presentation applies to the City of Franklin and all of its communities. This presentation was prepared to explore the opportunity to allow golf carts into the downtown area. Based on these restrictions, several maps have been completed to address speed limit concerns and AADT numbers for a golf cart route. Those maps are listed below:

Map #1: South Street / Pretlow Street
Map #2: Clay Street / Second Avenue
Map #3: Clay Street / High Street

Map #4: Homestead Road

Map #5: Robinhood Road / Fairveiw Road Map #6: Clay Street and Second Avenue

At the close of Chief Patterson's presentation, he opened the floor for questions.

City Manager Jarratt added since the City of Franklin maintains its own streets, we are not obligated to follow the Virginia Department of Transportation (VDOT)'s state code; however, it is important to take their guidance into consideration.

Councilman Gregory McLemore asked for Chief Patterson's opinion on this matter.

Chief Patterson replied he is not for it or against it. He stated his past experiences with this is that it is more community driven.

Councilman McLemore asked Chief Patterson if allowing golf carts in the City would create more accidents.

Chief Patterson replied he has not seen any feedback concerning accidents in other municipalities however; he has seen feedback concerning parking.

Councilman McLemore asked what kind of parking issues.

Chief Patterson replied citizens parking in a no parking zone or leaving the golf carts in the streets.

#### **Process for Speed Limit Revisions**

City Manager Amanda Jarratt introduced Russ Pace, Director of Public Works to come forward and present the following information:

Franklin Code of Ordinances

Motor Vehicles and Traffic; Chapter 17; Article IV.; Speed; Section 17 – 17; Maximum Limits Established

- Section 17 70 establishes the speed limits for all roads in Franklin
- At the conclusion of Section 17 70 it refers us to the Code of Virginia

Code of Virginia

Code of Virginia 46.2 – 875. Maximum speed limit on certain other highways in cities and towns.

The maximum speed limit shall be 35 miles per hour on highways in any city or town, except on interstate or other limited access highways with divided roadways and in business or residence districts. However, municipalities that maintain their own roads may increase or decrease speed limits on highways over which they have jurisdiction following appropriate traffic engineering.

Director Russ Pace reminded Council that the City of Franklin has jurisdiction over its roads.

Steps to Complete for Speed Limit Adjustment:

- 1. Have a traffic engineer do a study on the areas you are considering a revision of the speed limit. This study may include traffic counts, movements, speeds as well as pedestrian movements. A conclusion with recommendation would be included.
- 2. The City Manager can then take this to Council for discussions and a vote, based on the desire of Council the City Manager would then give guidance to the staff.
- 3. In the event the changes are directed by the City Manager the following actions should happen.
- 4. Notification to the citizens by as many means as possible, newspaper ad, website, and proper signage in the affected area.
- 5. Signage should be in place for 30 days.
- 6. The speed limit change would need to be recovered in the Code of Ordinances. Whatever street or streets revised are removed from their current section and recorded in the correct speed limit section.

Mayor Frank Rabil asked how would the cost of the traffic engineers be handled.

City Manager Jarratt and Director Pace both agreed the cost would come out of Public Works budget.

Mayor Rabil stated he would like to see a recommendation from staff if they wished to proceed with this project or not.

Councilman Gregory McLemore asked why are we pursuing this project.

Mayor Rabil replied this request was brought up at the Town Hall meetings as an alternative means of transportation.

Vice-Mayor Barry Cheatham stated if you look at all the 35 mile per hour speed limits that will have to be changed within the City, I think it's a waste of time.

Councilman McLemore stated do we want to risk citizens breaking speed limits just so that the City can allow golf carts.

Councilman Bobby Cutchins stated that the biggest push for allowing golf carts is to make the City different from other surrounding communities making it a reason for citizens to want to visit the City.

Vice-Mayor Cheatham stated he does not disagree with the reasons for allowing golf carts, but if the City has to change every speed limit, then that might be a problem.

Councilman Bobby Cutchins stated he thinks it can be done.

Director Pace stated Council needs to consider the traffic count which is a huge factor in pursuing this project.

Councilman Benny Burgess asked if there could be some preliminary studies that the City could do before doing an engineer study.

City Manager Jarratt stated she could have Public Works do an analysis of the last five years on the traffic trends.

Mayor Rabil asked if there was enough interest to pursue this project.

Councilman McLemore replied he thought so, he said for the record he was in support of this project.

Councilman Burgess asked what if parts of the City cannot allow golf carts due to the traffic study. Does that mean the City will not pursue the project should golf carts be allowed in the areas that can have them?

The consensus of City Council was to pursue the project of allowing golf carts in the City.

#### **Proposed Zoning Ordinance Text Amendments and Zoning Map Amendment**

City Manager Amanda Jarratt introduced Donald Goodwin, Director of Community Development to present the following information:

Please be advised that the Planning Commission at its regular meeting on January 23, 2020 voted unanimously to forward the zoning ordinance test amendments and zoning map change resolutions to City Council with favorable recommendations. The proposed changes are as follows:

- 1. Ordinance text amendment to reduce the lot size and frontage in the R-O zoning district.
- 2. Zoning map amendment to rezone the current downtown B-3 zoning district to B-3A.
- 3. Ordinance text amendment to allow legal lots of record to be used as a single family dwelling if the lot does not meet the then current lot size and frontage.
- 4. Ordinance text amendments to create provisions regarding food trucks in commercial and industrial zoning districts.
- 5. Ordinance text amendments to allow food trucks in commercial and industrial zoning districts.
- 6. Ordinance text amendment to the off-street parking requirements in order to reduce the number of required spaces, the size of the spaces and provisions for use of various parking surfaces to reduce the amount of stormwater runoff.

Director Goodwin opened the floor for questions.

Mayor Frank Rabil asked for clarification on the minimum lot area.

Director Goodwin replied the minimum lot area shall be no less than 20,000 square feet.

Mayor Rabil stated these ordinances need to be reworded so they are easier to understand.

Councilman Benny Burgess stated he was fine with the 20,000 square foot ordinance, but it does not seem fair to the homeowners that have acre lots and then a someone comes in and constructs a house on a half- acre lot.

Councilman Gregory McLemore stated he agrees with Councilman Benny Burgess' statement but he added, the purpose of doing this is to be able to construct more houses in the City

Councilman Bobby Cutchins asked if this was requested by developers.

Director Goodwin replied no this was brought up at the original work session and also the Town Hall meetings.

Councilman Burgess asked if it was possible to identify specific areas in which to do this and not the whole City.

Mayor Rabil asked if it was possible to spot zone.

Director Goodwin answered no, this was not possible.

Councilman McLemore stated I recall Councilman Burgess saying the City needs to do something because the City needs to move in new directions. At one of the Town Hall meetings Council asked the citizens what would help the City grow and it was brought up that the developers are not coming to the City to build. This was one of the ideas that was brought up and once again Council is trying to shoot this idea down. We know this idea was brought up by citizens and developers and was approved by the Planning Commission, what does it hurt to try this idea.

Councilman Burgess stated I am not trying to shoot this idea down but I am trying to figure out a way this can be done and not tear down what we have accomplished. He then gave an example, if there is house valued at \$400,000.00 and a house is built beside it valued at \$200,000.00 possibly the value of the \$400,000.00 house will decrease to \$200,000.00, if that was to happen then we still have not done anything to improve the City.

Councilman Cutchins agreed with Councilman Burgess' statement.

Councilman Linwood Johnson asked about allowing cluster zoning in some areas of the City and by allowing this the City could increase its tax revenue.

Director Goodwin replied the City allows cluster zoning in the R-O zoning district.

Mayor Rabil stated that he thought it would behoove Council to have a work session concerning the proposed Zoning Ordinance Texts Amendments and Zoning Map Amendment.

It was the consensus of City Council to schedule a future work session concerning the proposed Zoning Ordinance Texts Amendments and Zoning Map Amendment.

Mayor	
	Clerk to City Council

The Franklin City Council held a Regular City Council Meeting on February 10, 2020 at 7:00 p.m. in the City Council Chambers at City Hall.

Council Members in Attendance: Frank Rabil, Mayor; Barry Cheatham, Vice-Mayor; Councilman Linwood Johnson; Councilman Bobby Cutchins; Councilwoman Wynndolyn Copeland; Councilman Gregory McLemore and Councilman Benny Burgess

**Staff in Attendance:** Amanda Jarratt, City Manager and Christopher Makenzie; Sands Anderson Representative; Leesa Barnes, Executive Assistant, Recording Minutes

Other Staff in Attendance: Dan Howe, Director of Downtown Franklin Association; Vernie Francis, III, Director of Emergency Services; Jerry Griffith, Deputy Director of Emergency Services; Mark Bly, Director of Power & Light; Sarah Rexrode, Director of Social Services; Steve Patterson, Chief of City of Franklin's Police Department; Brenda Rickman, Commissioner of Revenue; Dinah Babb, City of Franklin's Treasurer; Russ Pace, Director of Public Works; Tracy Spence, Director of Finance; Michelle Dandridge, Director Human Resources and Sammara Green-Bailey

#### Call to Order

Mayor Frank Rabil called the February 10, 2020 regular City Council meeting to order at 7:00 p.m.

#### Citizen's Time

No one signed up to speak at Citizen's Time.

#### Amendments to Agenda

Mayor Frank Rabil asked if there were any amendments to the agenda.

Barry, Cheatham, Vice-Mayor made a motion to amend the agenda to include the introduction of new employees as Item A under Consent Agenda and to move to add to the Closed Session the statement, briefing by staff members on actual or probable litigation where such consultation for briefing in an open meeting would adversely affect the negotiating or litigating posture of the public body to discuss the following subject in active litigation against the City in Southampton Circuit Court and USDEC Eastern District of Virginia. The motion was seconded by Councilwoman Wynndolyn Copeland.

The motion carried the vote by 7-0.

#### Consent Agenda

#### Introduction of New Employees

#### **Emergency Services**

City Manager Amanda Jarratt asked Vernie Francis, III to come forward and introduce the following new employees for his department:

- Amber Griffin is a native of the Walters area. She was a member of the Carrsville Volunteer Fire Department and has numerous fire and EMS training certificates.
- Jeffrey Bess is a native of the Windsor area who now lives in Southampton County. He is a member of Carrsville Volunteer Fire Department.
- Austin Khoury is a native of Carrolton and is a volunteer with Carrollton Fire Department.

#### Approval of January 27, 2020 Regular Meeting Minutes

Mayor Frank Rabil asked if there were any additions or corrections to the minutes from the work session and the regular minutes from the City Council meeting that was held on January 27, 2020.

Councilman Linwood Johnson made a motion to approve the minutes from the work session and the regular minutes from the City Council meeting that was held on January 27, 2020. The motion was seconded by Vice-Mayor Barry Cheatham.

The motion carried the vote by 5-0 vote.

#### The vote was as follows:

Mayor Frank Rabil ABSTAINED (DUE TO HIS ABSENCE FROM THE MEETING)

Vice-Mayor Barry Cheatham AYE
Councilman Linwood Johnson AYE
Councilman Bobby Cutchins AYE
Councilwoman Wynndolyn Copeland AYE

Councilman Gregory McLemore ABSTAINED (DUE TO HIS ABSENCE FORM THE MEETING)

Councilman Benny Burgess AYE

#### Social Services Benefits Specialist Resolution #2020 – 03

The Social Services Benefits Specialist Resolution #2020 – 03 was read by Vice-Mayor Barry Cheatham and Councilman Benny Burgess.

Vice-Mayor Barry Cheatham made a motion to approve the Social Services Benefits Specialist Resolution #2020 – 03. The motion was seconded by Councilwoman Wynndolyn Copeland.

#### School Board Appreciation Month Resolution #2020 – 04

The School Board Appreciation Month Resolution #2020 -04 was read by Councilman Gregory McLemore.

Councilman Gregory McLemore made a motion to approve the School Board Appreciation Month Resolution #2020 -04. The motion was seconded by Councilwoman Wynndolyn Copeland.

The motion carried the vote by 7-0.

#### Financial Matters

#### Budget Amendment #2019 – 10

City Manager Amanda Jarratt recognized Tracy Spence to come forward and give an overview of the following items that make up Budget Amendment #2019 - 10:

- 1. Recognize revenues in the amount of \$1,100,000.00 from the City's EMS contract with Southampton County and to appropriate such revenue for new uses.
- 2. Reallocate lapsed appropriations to fund professional service costs related to new contracted attorney firm and prior year accounting costs, health insurance costs related to recent retirees, and software costs.
- 3. Recognize revenues in the amount of \$14, 249.00 for various grants and to appropriate such revenue for new uses.
- 4. Recognize revenues in the amount of \$20,000.00 for donations from International Paper and to appropriate such revenue for the Riverwalk Project.
- 5. To Correct Budget Amendment #2020 -03 allocation of grant monies between Hunterdale Volunteer Fire Department & Franklin Fire & Rescue;
- 6. Recognize revenues in the amount of \$44,000.00 from the Camp Foundation and to appropriate such revenue for new uses.
- 7. Authorize the use of fund balance monies in the amount of \$16,000.00 to pay pro rata fees received in prior fiscal years to the developer for the Riverwood Estates Subdivision pursuant to the City's Pro Rata Policy.

Councilman Benny Burgess asked Director Spence to please review number seven.

City Manager Jarratt explained that there was a Pro Rata Policy adopted in 2008 or 2009. Developers extended their money to build a pump station for the Riverwood Estates Subdivision that was then conveyed to the City, when the lots are developed the developer receives payment back from the City as reimbursement for their expenses.

Vice-Mayor Barry Cheatham made a motion to approve Budget Amendment #2019 – 10. The motion was seconded by Councilman Linwood Johnson.

The motion carried the vote by 7-0.

#### **Second Quarter Financial Projections**

#### Highlights – Enterprise Funds for the period ending December 31, 2019

City Manager Amanda Jarratt recognized Tracy Spence, Director of Finance to give an overview of the following second quarter financial projections:

- The information enclosed is the City's Financial Report for the Enterprise Funds for the period ending December 31, 2019.
- The report contains provisions for revenue and expenditure accruals.
  - o Reflects six months of revenue & expenditures full accrual basis of accounting.
- Financial Report presentation is consistent with the department's objectives to:
  - o Report timely, relevant, understandable and accurate financial data
  - o Promote accountability through monitoring, assessment and reporting.

#### Airport Fund

#### Revenue Analysis

• Fuel sales and airport rental fees are below target with 30% of budgeted realized. Total revenues for the fund are at below target with 34% of budget realized.

#### **Expense Analysis**

• Expenses in the fund are below target with 36% of budget expended (net of transfers and depreciation).

#### Cash Balance

• Cash balance in the Airport Fund is (\$26,100.00)

#### Water & Sewer Operating Fund

#### Revenue Analysis

• Revenue from the sale of water and sewer service charges of \$1.6m at the end of the period is slightly below target at 47% of budget and is comparable to prior year period collections.

#### **Expense Analysis**

• Expenses in the fund are \$775k and below target at 41% (net of transfers, debt service and depreciation). Expenses are \$24k lower than prior year in the water division due to well operation maintenance; \$28k lower than prior year in the sewer division due to reduced sewer clean out expenses; and \$38k higher than prior year in the wastewater division treatment plant supply expenses.

#### Water & Sewer Fund - Operating & Capital Cash Balance

The cash balance is \$1,660,600.00 which is comparable to what the City was last year.

#### Solid Waste Operating Fund

#### Revenue Analysis

• Revenue for the Solid Waste Fund is slightly above target with revenue at \$668k or 52% of budget and is slightly higher than prior year period collections.

#### **Expense Analysis**

• Expenses in the fund at \$357k are below target with 36% of budget expended (net of depreciation, transfers and debt service) and comparable to prior year expenses.

#### Solid Waste Fund – Operating & Capital Cash Balance

The cash balance is \$497, 577.00.

#### **Electric Fund**

#### Revenue Analysis

• Revenue from energy sales at \$7.6m is slightly below target at 48% of budget.

#### **Expense Analysis**

• Expenses associated with the sale of energy for the fiscal year was \$5.6m and is below budget at 42.8% of the total budget (net of depreciation, transfers and debt service.)

#### Electric Fund - Operating & Capital Cash Analysis

Cash in the Electric Fund at \$5,048,156.00 increased by \$28,148.00 from the prior month period. Cash is above minimum policy guideline of \$1.494 million by \$3.5 million.

Councilman Benny Burgess asked would the City try and collect the old accounts.

Director Spence replied there are a number of different tools to use to collect the old accounts and confirmed that the City would try to collect these accounts.

Councilman Burgess asked what was the balance of the old accounts.

Director Spence replied \$1.3m, and \$400,000.00 were in penalties.

#### Highlights – General Fund for the period ending December 31, 2019

#### **Basis of Reporting**

- The information enclosed is the City's Financial Report for the General Fund for the period ending December 31, 2019.
- The report contains provisions for most revenue and expenditure accruals
  - o Reflects six months of revenues & expenditures in most cases (where note, the 6<sup>th</sup> month has been estimated) modified accrual basis of accounting.
- Financial Report presentation is consistent with the department's objectives to:
  - o Report timely, relevant, understandable and accurate financial data
  - o Promote accountability through monitoring, assessment and reporting.

#### Revenue Highlights – Tax Collections

- Overall General Property Tax collections of \$177k is down from FY19 collections of \$249k, primarily attributable to delinquent real estate & personal property tax collections.
- There are five major sources included in General Property Taxes:
  - o Real Estate Taxes (Current & Delinquent)
  - o Personal Property Taxes (Current & Delinquent)
  - o Penalty and interest on Taxes
  - o Public Service Corporation Taxes
  - Machinery & Tools Taxes
  - o Current Real Estate taxes of \$2.7m are at 47.2% of budget and 7.6% higher than the prior year period.
  - o Delinquent RE taxes of \$143k are at 65.1% of budget and comparable to the prior year period.
  - o Current Personal Property taxes of \$1.4m are at 92% of budget and comparable to the prior year period
  - o Delinquent Personal Property taxes of \$49k are at 142% of budget and 7.5% higher than prior year period.
  - o Penalties and Interest of \$53k are at 38% of budget and 6% lower than the prior year period.
  - o Public Service Corporation taxes of \$84k are at 105% of budget and 6% higher than the prior year period.

#### General Property Taxes – Overall Budget Comparison – Cash Basis

The current year is at \$4,506,981.00 compared to the previous year which was \$4,288,055.00.

#### Revenue & Expenditure Summary – Cash Basis

- General Fund revenue at the end of the period totaled \$12.5 mil and represented 50% of budget which is \$1m greater than the prior year. This is primarily attributable to the early payment of the Isle of Wight (IOW) revenue sharing payment.
- General Fund expenditures at the end of the period totaled \$10.5 mil and represented 42% of the total budget; when compared to the prior year period of \$12 mil, this is a \$1.5 mil decrease.
- FY20 Fund Balance Appropriated by Council for planned expenditures at December 31st: \$286,970.00.

#### Old / New Business

#### City of Franklin Crime Statistics – Chief Steve Patterson

City Manager Amanda Jarratt recognized Steve Patterson, Chief of City of Franklin Police to come forward and present an overview of the following crime statistics within the City:

#### City of Franklin Part 1 Offenses 2018 vs. 2019

Part 1 Offense	2018	2019	Difference
Homicide	1	2	100%
Rape	4	2	-50%
Robbery	7	7	0.0%
Aggravated Assault	11	4	-63.6%
Burglary	39	24	-38.4%
Larceny	300	250	-16.6%
Motor Vehicle Theft	20	20	0.0%
Arson	2	3	50%

#### City of Franklin Part 1 Offenses 2018 vs. 2019

- Overall comparison on 2018 vs. 2019 lead to a reduction of Part 1 offenses in the City of Franklin.
- In 2018 there were 383 reported Part 1 offenses.
- In 2019 there were 312 reported Part 1 offenses.
- The decrease of 71 reports has resulted in an eighteen and half percent (18.5%) decrease in Part 1 offenses.

#### **Quality of Life Crimes**

- Quality of Life crimes are tracked internally.
- At times, these crimes are more of a proactive response than a reactive response.
- The Franklin Police Department compared the following crimes for 2018 vs. 2019:
  - o Drug / Narcotics Offenses
  - o Weapon Law Violations
  - o Drunkenness
  - o Gun shots fired

#### **Quality of Life Crimes**

Offense	2018	2019	Difference
Drug / Narcotics	55	62	12.7%
Weapon Law Violations	54	64	18.5%
Drunkenness	27	37	37%
Gun Shots Fired	57	77	35%

#### **Quality of Life Crimes**

- Quality of Life crimes showed increases across the board.
- The increase may reflect proactive patrol work on officers working as well as more community involvement.
- It is anticipated that with our refocusing efforts in 2020, addressing gangs, drugs, and weapons, these numbers will increase when we compare numbers next year.

• We are hopeful that with increased staffing in 2020 these numbers will increase.

#### **Arrests and Summonses**

- Additional statistics which are important to public order are listed below:
  - o DUI
  - o Traffic Accidents
  - o Traffic Summonses Issued
  - o Total Arrests

#### **Arrests and Summonses**

Item	2018	2019	Difference
DUI Arrest	22	26	18%
Traffic Accidents	170	141	-17%
Traffic Summonses	Issued 604	424	-29.8%
Total Arrests	549	501	9%

#### **Arrests and Summonses**

- The positives are that in 2019 more DUI drivers were removed from our streets and traffic accidents were down.
- Total arrests and summonses were down from 2018. This could be from a combination of things
  to include less crimes and traffic offenses occurring that would have led to arrests and
  summonses being issued.
- With increased staffing and addressing quality of life issues city wide we are hopeful these numbers will increase in 2020.

#### Communications Center Calls Received

Call Type	2018	2019	Difference
Police CFS	40,101	45,568	13.6%
Self-Initiated	31,799	37,760	18.7%
Fire / EMS	1,838	1,924	5%
Other	626	707	13%
Total	42,565	48,199	13%

#### Conclusion

- 2019 Part 1 Crime is down 18.5%.
- Quality of Life Crimes are up.
- Arrests and Summonses are down.
- Calls handled by the Communications Center are up.

Councilman Gregory McLemore commended Chief Patterson and his staff for being proactive in crime prevention and thanked them for their services.

City Manager Jarratt also thanked Chief Patterson and his staff for their efforts in crime prevention despite there are several officers out with various injuries.

#### Courthouse Update

City Manager Amanda Jarratt informed Council that Mike Johnson, Southampton County Administrator has received the final scoresheets from the new Board of Supervisors last week. The first meeting of the negotiating committee was held on February 5, 2020. Glave and Holmes was the highest ranked firm. In attendance at the meeting were Supervisor Dr. Alan Edwards, Administrator Mike Johnson and Councilman Bobby Cutchins. At this meeting Andrew Moore form Glave and Holmes was present and Tom Potts was on the phone. The group had discussion about the first task orders that would be required. Mr. Moore indicated he would provide tentative pricing back to the localities within a one-week time period. The anticipated schedule would allow for a contract on the February 24, 2020 City Council agenda and on the February 25, 2020 Board of Supervisors agenda.

City Manager Jarratt received indication that Judge Eason will be vacating the Southampton County Courthouse on July 27, 2020 unless there was substantial progress towards renovation or new construction of the Courthouse. This gives us great concern because every day that the court operates in the courthouse it is saving the constituents of both of communities thousands of dollars. Council has asked Dr. Allen Edwards, Chairman of the Board of Supervisors and Administrator Johnson if they would draft a letter to Judge Eason explaining the steps and the numerous meetings that has been held since receiving his letter, since this process has started and ask for an extension while in the process of procuring an architect and going through the design phase. She asked Council if they would like to draft a letter asking Judge Eason for an extension as well.

It was the consensus of Council to draft a letter to Judge Eason asking for an extension.

Mayor Frank Rabil thanked Councilman Bobby Cutchins and City Manager Jarratt for representing the City in the courthouse proceedings.

City Manager Jarratt informed Council that all correspondence will go to both, City Manager Jarratt and Administrator Johnson.

#### City of Franklin Courthouse

Councilman Gregory McLemore stated the Council still has not received any correspondence concerning requests or requirements to the City of Franklin's courthouse.

City Manager Amanda Jarratt stated the metal detector were installed which was a verbal request. She received a request correspondence from the Sheriff's Department regarding locking the doors which has been addressed.

City Manager Jarratt informed Council that the interview of Enteros was scheduled for February 6, 2020 was canceled as a result of the above information she shared with Council. She added she will continue to investigate and will update Council as she gets factual information.

#### City Manager's Report

City Manager gave Council the following general updates:

#### **General Updates**

- Staff attended the State of the Agency regarding the City of Franklin Social Services Department.
- City Staff attended the Old Dominion University Economic Forecast for the Hampton Roads region.
- Staff attended the Hampton Roads Economic Development Annual meeting along with the Southampton County Board of Supervisors and Franklin Southampton Economic Development, Inc. staff.
- Budget meetings with Department
- Bon Secours; City Manager Amanda Jarratt stated the community is excited and welcomes Bon Secours to the City of Franklin but the fiscal impact to the City is still not fully understood. CHS was a for profit entity therefore paid real estate and personal property taxes whereas Bon Secours is a non-profit entity which is not subject to real estate and personal property taxes. As the City enters the budget process, it appears the City will be faced with a loss of \$.07 to \$.08 to the real estate tax rate. She added she will continue to stay in contact with Bon Secours and they are aware of this information.

Councilman Gregory McLemore asked what was the monetary loss to the City.

City Manager Jarratt answered just over \$400,000.00 a year.

- Area Code; City Manager Amanda Jarratt informed Council that there would be a new area code in Hampton Roads and that will be (948). The (757) will remain, the (948) will be for new assigned numbers.
- **CBG Grant**; City Manager Jarratt shared the City would be awarded \$35,000.00 from CBG for another housing grant.

#### **Community Events**

City Manager Amanda Jarratt informed Council of the following Community Events:

- Black History Month Celebration; is scheduled for Saturday, February 22, 2020.
- Leadership Breakfast; is scheduled for March 28, 2020, at the Hayden Village and the tickets are \$10.00.
- Family Movie Night; Toy Story 4 will be playing on March 28, 2020, at 5:00 p.m. at the Hayden Village.
- Partners in Progress; is scheduled for March 17, 2020, 7:30 a.m. 9:00 a.m. at the Main Event. Please call 757 562-1958 to RSVP.
- Franklin Cruise-In; kicks off on Saturday, April 25, 2020.
- Community Day; is scheduled for April 25, 2020, at the High Street Methodist Church.
- Lumber Jack Festival; is sponsored by The Franklin Experience is scheduled for May 9, 2020.
- Independence Day Celebration; is scheduled for July 1, 2020.
- National Night Out; is scheduled for August 4, 2020, at Armory Field. If you are interested in participating or being a part of the planning committee please e-mail <a href="mailto:nno@franklinpolice.org">nno@franklinpolice.org</a>.

#### Council / Staff Reports on Boards / Commissions

Councilman Linwood Johnson informed Council that he had the pleasure of touring Hayden Village and it looked great and recommended the other Council members tour the facility.

#### City Council went into Closed Session at 8:12 p.m.

#### **Closed Session**

There being nothing further to discuss. Mayor Frank Rabil asked for a motion to go into Closed Session.

Councilwoman Wynndolyn Copeland moved that the City of Franklin, Virginia City Council adjourn into a closed meeting pursuant to Virginia Code Section 2.2-3711-1, to discuss appointments to boards and commissions, to discuss the following subject or subjects. Franklin Redevelopment and Housing Authority and Hurricane Floyd  $25^{th}$  Anniversary Committee.

And pursuant to Virginia Code Section 2.2 - 3711 - 7 briefing by staff members on actual or probable litigation where such consultation or briefing in an open meeting would adversely affect the negotiating or litigating posture of the public body.

And pursuant to Virginia Code Section 2.2 - 3711 - 5 regarding the discussion of a prospective business or industry or the expansion of an existing business or industry where no previous announcement has been made of the business' or industry's interest in locating or expanding its facilities in the community in Pretlow Industrial Park and along Armory Drive.

#### Motion Upon Returning to Open Session

Councilwoman Wynndolyn Copeland made a motion to return to open session. The motion was seconded by Vice-Mayor Barry Cheatham.

The motion carried the vote by 7-0.	
Adjournment	
Vice-Mayor Barry Cheatham made a motion to adjo The motion was seconded by Councilman Gregory	ourn the February 10, 2020 Regular City Council meeting. McLemore.
The motion carried the vote by 7-0	
The February 10, 2020 Regular City Council meeting	adjourned at 9:01 p.m.
Mayor	
Mayor	
	Clerk to City Council

### CELEBRATING BLACK HISTORY MONTH RESOLUTION #2020 – 05

Whereas, In 1776, people envisioned the United States as a new nation dedicated to the proposition stated in the Declaration of Independence that all me are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are Life, Liberty and the Pursuit of Happiness;

**Whereas,** Africans were first brought involuntarily to the shores of the United States as early as the 17<sup>th</sup> century;

Whereas, African Americans suffered enslavement and subsequently faced the injustices of segregation and denial of the basic and fundamental rights of citizenship;

**Whereas,** In the face of injustices, people of good will and of all races in the United States have distinguished themselves with a commitment to the noble ideals on which the United States was founded and have fought courageously for the rights and freedom of African Americans and others;

Whereas, African Americans, along with many others, worked against racism to achieve success and to make significant contributions to the economic, educational, political, artistic, athletic, literacy, scientific, and technological advancement of the United States;

**Whereas,** the contributions of African Americans from all walks of life throughout the history of the United States reflect the greatness of the United States;

Whereas, many African Americans, lived, toiled, and died in obscurity, never achieving the recognition those individuals deserved, and yet paved the way for future generations to succeed;

**Whereas,** African Americans continue to serve the United States at the highest levels of business, government, and the military;

Whereas, the birthdays of Abraham Lincoln and Frederic Douglas inspired the Black History Month;

**Whereas,** Dr. Carter G. Woodson, is known as the "Father of Black History" to enhance knowledge of Black History through The Journal of Negro History, published by the Association for the Study of African American Life and History, which was founded by Dr. Carter G. Woodson and Jesse E. Moorland;

Whereas, Black History Month, celebrated during the month of February, originated in 1926 when Dr. Carter G. Woodson set aside a special period in February to recognize the heritage and achievements of Black people in the United States;

**Whereas,** Dr. Carter G. Woodson stated, "We have a wonderful history behind us, if you are unable to demonstrate to the world that you have this record, the world will say to you, you are not worthy to enjoy the blessings of democracy or anything else."

Whereas, since its founding, the United States has imperfectly progressed toward noble goals;

Whereas, the history of the United States is the story of people regularly affirming high ideals, striving to reach those ideals but often falling, and then struggling to come to terms with the disappointment of that failure, before committing to try again;

**Whereas,** on November 4, 2008, the people of the United States elected Barack Obama, an African-American man, as President of the United States; and

Whereas, on February 22, 2012, people across the United States celebrated the groundbreaking of the National Museum of African American History and Culture, which opened to the public on September 24, 2016, on the National Mall in Washington, District of Columbia;

**Now, Therefore, be it Resolved,** that on February 24, 2020, the Franklin City Council acknowledges that February 2020 the City of Franklin will celebrate Black History Month.

Mayor Frank M. Rabil



February 19, 2020

To: Franklin City Council

From: Amanda C. Jarratt, City Manager

Reference: FY 2020-2021 Budget Update

#### **Background**

Budget requests from Agencies and Organizations as well as the various City Departments have been received and are in the process of being reviewed. A series of budget work sessions with departments will be held over the coming weeks. There are a number of variables still being analyzed and an up to date briefing will be provided at the City Council meeting.

#### Needed Action

None at this time.



<u>Dates Subject to</u> Change	Day	Action Item
November 16, 2019	Saturday	City Council Budget Retreat
December 2, 2019	Monday	• FY 2020-2021 Budget Requests Forms For Agencies Posted on City Webpage
December 5, 2019	Thursday	Joint Budget Work Session #1 with School Board
January 6, 2020	Monday	FY 2020-2021 Budget Requests Due from Agencies & Organizations
January 17, 2020	Friday	• FY 2020-2021 Proposed Department Budgets Requests Due to City Manager
January 27, 2020*	Monday	6:00 P.M. Agencies & Organizations Budget Presentations
February 3-7, 2020	Monday	Management Budget Meetings with Dept. Directors
February 24, 2020*	Monday	• 7:00 P.M City Manager Presents Overview of Consolidated Budget Requests to City Council
February 27, 2020	Thursday	<ul> <li>6:00 P.M. – Budget Work Session #1 with City Manager/Council</li> <li>Registrar, Social Services, Inspections &amp; Community Development, Power &amp; Light, Finance, Purchasing &amp; Utility Billing</li> </ul>
March 2, 2020	Monday	<ul> <li>6:00 P.M Budget Work Session #2 with City Manager/Council</li> <li>Commissioner, Treasurer, Police, Fire &amp; Rescue, City Attorney, City Administration (City Council, City Manager &amp; Human Resources)</li> </ul>
March 5, 2020	Thursday	<ul> <li>6:00 P.M. – Budget Work Session #3 with City Manager/Council</li> <li>Information Technology, Parks &amp; Recreation &amp; Public Works</li> </ul>
March 9, 2020	Monday	FY 2020-2021 School Board Budget Submitted to City Manager
March 16, 2020	Monday	Budget Work Session with City Council
March 26, 2020	Thursday	Joint Budget Work Session #2 with School Board
April 19, 2020	Sunday	Release Advertisement for Public Hearing
April 27, 2020*	Monday	<ul> <li>6:00 P.M. – Tentative Budget Work Session (as necessary)</li> <li>7:00 P.M. – Public Hearing(s) on the FY 2020-2021 Proposed Budget</li> </ul>
May 4, 2020	Monday	City Council Considers action on School Board Budget
May 11, 2020*	Monday	• City Council Considers Action on FY 2020-2021 Budget, Sets Tax Rates and Adopt Budget Resolutions



February 18, 2020

To: Franklin City Council

From: Amanda C. Jarratt, City Manager

Reference: City of Franklin Pavement Study

#### **Background**

As shared and discussed at a previous City Council retreat the City of Franklin has not had a paving study or analysis of our street infrastructure conducted in a number of years. In order to fully understand the condition of our roadways and the magnitude of the capital needs a pavement study was conducted. Dave Reaves with Prism Engineering and City staff will be on hand to present the study and answer any questions. The study will be used for capital project planning over the next ten years. The chart below provides a high level summary of the City of Franklin road conditions.

PCI Score	Road Condition Category	Recommended Action	Roadway Length
100-90	Excellent	No action required	3.13 miles
89-75	Good	Crack sealing to slow deterioration	15.79 miles
74-60	Fair	Resurface roadway	16.15 miles
59-0	Poor-Failed	Mill and Overlay	25.69 miles

#### **Needed Action**

Consider this study throughout the FY 21 budget process.

207 W. 2 <sup>nd</sup> At	ve., Franklin, VA 23	8851 -757-562-8561	

# Pavement Condition Analysis and Management Report

# for the City of Franklin, Virginia February 2020

# **Table of Contents**

Executive Summary	3
Introduction	4
Pavement Condition and Ride Quality Assessment	4
Pavement Management Priority and Options	9
Recommendations	11
Appendices	11
Appendix A: Calculation tables	13
Appendix B: Data Collection Reports	14

#### **Executive Summary**

The City of Franklin, Virginia tasked Prism Contractors and Engineers, Inc. (Prism) to assess the condition of their 60 miles of roadway using Pavement Condition Index (PCI) and develop a plan to maintain their pavement. Prism contracted Applied Research Associates, Inc. (ARA) to collect and analyze pavement condition data with their PaVision system. The PCI was then calculated for each road segment and integrated with existing GIS data and assigned a condition category. The table below summarizes our findings and recommendations.

Road	Results	Recommended Action	Approximate
Condition			Cost
Category			
Excellent	3.13 miles	No action required.	
Good	15.79 miles	Crack sealing to slow deterioration.	\$13,273.73
Fair	16.15 miles	Resurfacing roadway with asphalt	\$1,432,359.78
Poor	25.69 miles	Mill and overlay work	\$6,870,951.57
		Total	\$8,316,585.08

Maintenance priority should be given to roads already in good condition to delay when more extensive work is needed. The next priority should be to resurface roads that have a PCI from 64 to 60 and mill-and-overlay areas with a PCI from 34 to 30. These sections are at risk of deteriorating into the next rating category, requiring more expensive maintenance. Roads in failed condition demand the most resources and should be repaired once budgeting allows or immediate safety concerns require it. If Franklin begins dealing with portions of worn pavement in this manner, the City will be able on track to implanting a repeatable pavement maintenance cycle.

#### Introduction

The importance of a proper pavement maintenance routine cannot be understated. Simple maintenance can mean the difference between a roadway that lasts for 20 years or much longer. Pavement preservation can be extraordinarily complicated, even small first steps accomplish a great deal in expanding the lifespan of roadway. These first steps begin with collecting data about the current condition of the pavement.

#### **Pavement Condition and Ride Quality Assessment**

Quality condition data is typically aggregated with the Pavement Condition Index (PCI), maintained by the American Society of Testing and Materials (ASTM). PCI, as defined in ASTM D-6433, rates the quality of pavement on a 0 to 100 scale - with 0 being the most deteriorated, deficient pavement and 100 being the best. The PCI accounts for quantity, type and severity of defects for a given pavement materials. ARA to collect this data with their PaVision system, seen in figure 1 below. This system consists of a forward-facing camera, rear camera pointed toward the asphalt, a GPS antenna and a server box.



Figure 1: ARA vehicle with PaVision unit on the hitch and forward camera above windshield



Figure 2: PaVision server unit with downward camera and GPS antenna above

As operators drove Franklin roads, the PaVision unit automatically collected data in the form of black and white downward photos of the pavement, colored forward photos of the road ahead and GPS points. These can all be seen in figures 3, 4 and 5.

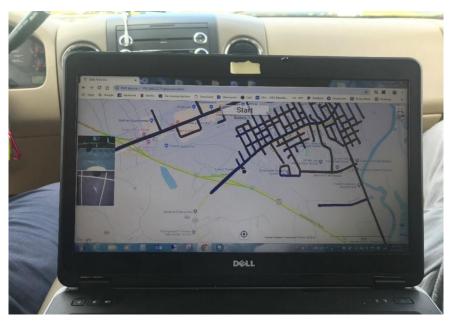


Figure 3: A laptop with PaVision GPS points and camera images to the left



Figure 4: A sample forward image from Bank Street

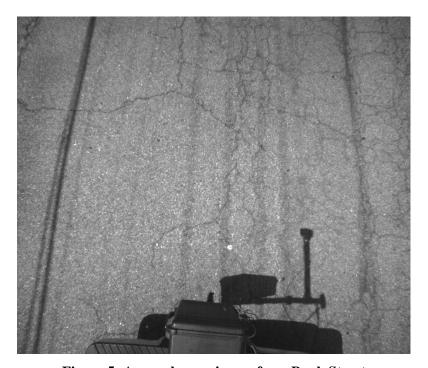


Figure 5: A sample rear image from Bank Street

The rear, downward photos were then processed to identify and count roadway defects. The defects were used calculate the PCI for that specific section. Results were integrated with GIS data using ArcMap, for a visual summary of data collected. An overview can be seen in figure 6 and a color legend with centerline length data can be found in table 1 below the figure. In addition, it was found that the weighted average PCI of all roadways in the City of Franklin to be a 62.

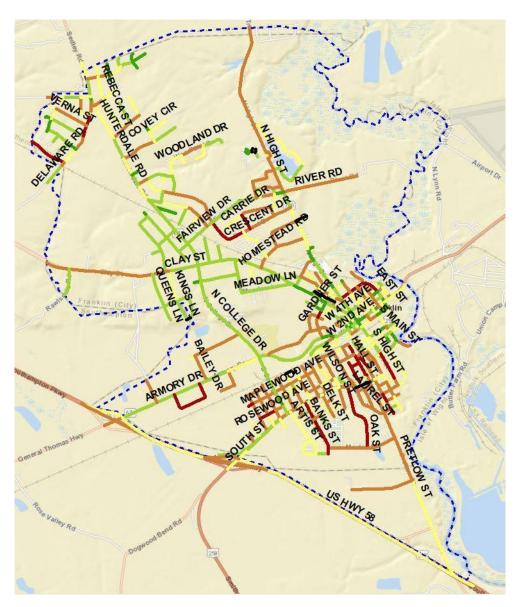


Figure 6: An overview of PCI data collected in Franklin
Table 1: ArcMap color legend and length data

PCI Range		Map Color	Rating	Centerline Length
				(% of total)
100	90	Dark Green	Excellent	3.13 miles (5.55 %)
89	75	Light Green	Good	15.79 miles (28.02 %)
74	60	Yellow	Fair	13.04 miles (23.15 %)
59	30	Orange	Poor	20.56 miles (36.48 %)
29	0	Red	Failed	3.83 miles (6.8 %)

ARA had an accelerometer built into their PaVision system that automatically recorded ride smoothness – per the International Roughness Index (IRI) – while the unit also recorded information for PCI calculations. This IRI data has been integrated into GIS and can be seen in the map below.

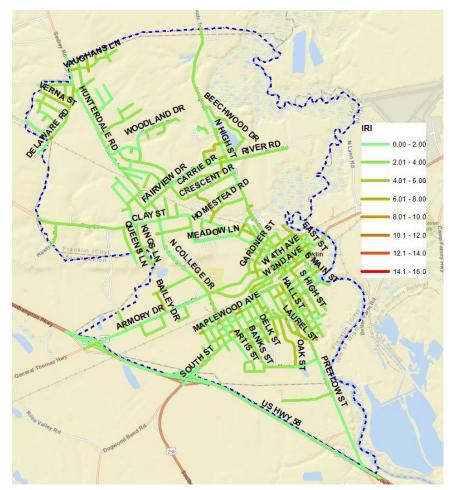


Figure 7: An overview of IRI data collected in Franklin with color legend

The numbers next to each color in the legend have a unit of millimeter per meter, representing how many vertical millimeters the rear axle of a vehicle will travel in one horizontal meter. The lower this number is, the smoother driving on a specific roadway will be. For a point of reference, any sections that have an IRI rating of 4 mm/m or less only have surface imperfections impacting smoothness.

#### **Pavement Management Priority and Options**

Although first instinct might be to repair the worst roadways first, this strategy may ultimately have more expensive consequences and fewer benefits. This is due to the nature of how hot mix asphalt (HMA) deteriorates. The loss in PCI from HMA wear follows an exponential curve and as a result, the longer pavement goes without any intervention, the quicker the degradation. Ignoring pavement in good condition allows it to degrade more quickly, leading to more expensive work to bring it back up to its original condition. A more economical option would be to prioritize the roadways that are already in good condition. Early maintenance can extend pavement life by several years for \$1 or less per square yard, whereas repairs done late in the service life of a roadway could cost \$20 per square yard, or even more. This is evident with the following table for proposed maintenance or repair work that fall within the listed PCI range.

Table 2: Proposed work for a specific PCI range

PCI Range		Rating	Proposed Work
100	90	Excellent	Defer maintenance
90	75	Good	Crack Seal
75	60	Fair	Overlay
60	30	Poor	Mill and Overlay
30	0	Failed	Mill and Overlay

Pavement in excellent condition, as described in the table above, is early on in its service life and has not yet reached a point where even preventative maintenance will have a worthwhile effect. Instead, the first area that would show benefit from maintenance is pavement in good condition. It is structurally sound but has some relatively minor cracking. Crack sealing fills those minor cracks with an asphalt material to prevent water seepage into the dirt below, causing erosion. Rejuvenators also help to extend the time where pavement is in good or excellent condition by restoring oils and other molecules in the asphalt that have been damaged by sun and weather exposure. These two options are relatively inexpensive and can help extend the life of the pavement by another 3 or more years. With crack sealing at a rate of \$1 per foot of cracking, it would cost about \$13,273,73 to fill longitudinal and transverse cracks on all "good" roads, not including alligator cracking.

Once pavement has deteriorated beyond the point where these methods are effective and more extensive repair is required, the next best option is resurfacing.

The presence of extensive fatigue cracking (alligator cracking) and potholes in the pavement signals the end of preventative maintenance and the beginning of full rehabilitation or replacement. At this point, a new pavement overlay is necessary. Milling may be required to ensure that the new overlay is flush with the curb and gutter, or in absence of a gutter, the pavement is not too high above the shoulder. Additional milling may be required in other locations where existing pavement is above or on top of the gutter - these areas can be seen in figure 8 below.

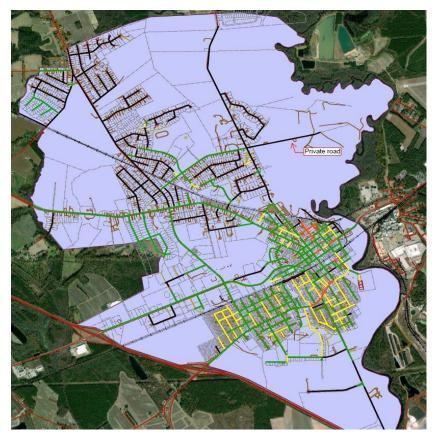


Figure 8: Map of curb status for all streets in Franklin

In figure 8, roadways have been color coded to reflect whether a specific road has curb with gutter and its status with respect to the pavement. Roadways outlined with black do not have any curb or only have parking curb with no gutter. Green indicates where there is curb with gutter and the pavement is roughly flush with it. Yellow indicates that there is gutter, but the top of the pavement is above it. Orange indicates that there may be gutter but is covered by asphalt.

## Recommendations

Prism has put together a 10-year Pavement Plan. This plan is focused on completing neighborhoods or sections of Franklin in a singular year. Figure 9 shows the current pavement plan. Table 3 shows the cost breakdown and type of rehab per rehab year. The total approximate cost for the 10-year plan is \$8,316,585.08.

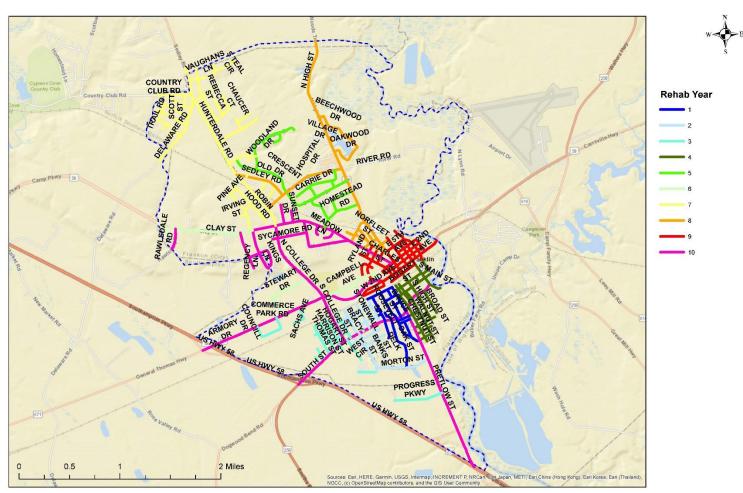


Figure 9: Pavement Plan Rehab map by year

Table 3: Cost breakdown per type of work in a year

Rehab	Mill	Overlay	Seal	Approximate Cost
Year				
1	\$401,702.83	\$411,399.15	\$61.68	\$813,163.66
2	\$392,055.91	\$474,948.42	\$194.19	\$867,198.53
3	\$428,882.00	\$478,639.68	\$141.09	\$907,662.77
4	\$299,932.19	\$454,901.61	\$531.14	\$755,364.94
5	\$369,887.56	\$477,958.65	\$585.52	\$848,431.73
6	\$436,805.94	\$428,135.98	\$ -	\$864,941.92
7	\$254,037.07	\$531,688.66	\$2,757.94	\$788,483.66
8	\$344,085.67	\$490,840.83	\$1,427.38	\$836,353.88
9	\$298,486.58	\$508,785.93	\$774.40	\$808,046.90
10	\$259,705.26	\$560,431.43	\$6,800.38	\$826,937.08
			Total	\$8,316,585.08

# Appendices

# **Appendix A: Calculation tables**

Table A1: Measurements and conversions for calculations

Work Area Measurements

state	length	width	foot	yard	2 lane	adtl ft²	adtl. yd²	total	lane
(ft)	(ft)	area	area	road (yd)	autit	auti. yu	(yd)	miles	
good	83,389	12	1000668	111185	222371	528168	58685	281056	39.92
fair	68,874	12	826490	91832	183665	48749	5417	189081	26.86
poor	108,543	12	1302515	144724	289448	121176	13464	302912	43.03
fail	20,222	12	242670	26963	53927	0	0	53927	7.66
totals	281,029		3372343	374705	749410	698093	77566	826975	117.47

Table A2: Additional areas added into table A1

Table A	A2: Additional areas	added into tab	le A1						
	additional lanes fo	r good roads							
street	centerline length	lanes minus	adtl						
Street	centernine length	2	area						
armory	4711	3	169596						
south	5111	1	61332						
2nd ave	2473	2	59352						
clay	5277	2	126648						
n college	4635	2	111240						
	additional lanes fo	or fair roads							
armory	1354	3	48749						
additional lanes for poor roads									
clay	5049	2	121176						

## **Appendix B: Data Collection Reports**

Please note that numbers for alligator cracking have units of ft<sup>2</sup> and numbers for longitudinal and transverse cracking have units of ft. Other distresses that ARA's software scanned for but did not find include: block cracking, edge cracking, potholes, blowups, corner breaks, durability cracking, linear cracking, patches, map cracking and spalling.

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
HOLLY COVE ST(1)	11280	0	6.80134	45.35703	166.88454	0	0
SOUTH ST(2)	5640	0	3.04303	317.71116	162.23244	0	0
WASHINGTON ST(3)	3000	0	4.80702	112.80274	98.51412	0	0
MEADOW LN(4)	4800	0	0	14.20248	111.94711	8.2311	2.7437
HUNTERDALE RD(5)	6120	0	1.14997	4.89311	32.22127	0	0
N HIGH ST(6)	2280	0	0	0	56.76655	2.7437	0
WALNUT ST(8)	2400	0	0	50.49223	121.98622	0	0
N COLLEGE DR(9)	10200	0.53667	1.93232	15.22152	140.12953	0	2.39479
DELK ST(10)	2160	0	0	176.5821	19.78741	0	0
SOUTHAMPTON RD(11)	1560	0	0	2.48976	18.93098	0	0
E 5TH AVE(12)	2160	0	4.02151	31.76215	126.04625	0	0
E JACKSON ST(13)	3000	0.82098	31.07317	566.48652	79.13375	0	0
W 3RD AVE(14)	2640	0	1.53933	40.46157	69.3643	0	0
MAPLEWOOD AVE(15)	2040	0	3.94533	28.56207	43.9203	0	0
MAGNOLIA AVE(16)	6720	0	1.94982	0	58.45823	0	0
NORFLEET ST(17)	1920	0	1.74634	38.90632	48.60418	0	0
CAMERON ST(18)	1680	0	1.57404	115.27823	28.6846	0	0
W BARRETT ST(19)	3240	0	0	49.4844	32.55431	0	0
CANTERBURY CT(20)	7440	0	1.83247	10.90924	92.65139	0	0
MAPLEWOOD AVE(21)	2400	0	9.86562	132.23307	170.51107	0	0
CRESCENT DR(22)	6720	0	5.52161	103.03648	171.15602	0	0
HUNTERDALE RD(23)	2760	0	1.0969	8.93661	34.03983	0	0
CLAY ST(24)	53400	1.72032	104.75318	1080.70194	1919.45772	16.36175	0
PRETLOW ST(25)	50880	0	11.44714	316.70857	852.03737	8.79675	1.2159
CLAY ST(26)	10800	0	4.69289	193.55277	254.57192	6.87247	0
DELAWARE RD(27)	4560	0.5635	26.96709	459.57332	105.58221	0	0
CRESCENT DR(28)	12960	1.74782	68.48119	1727.61302	625.20907	9.35184	0
CRESCENT DR(29)	2400	0.80136	9.82191	284.0626	126.84978	0	0
CHESTNUT ST(30)	2520	0	21.89182	280.23488	162.04735	0	0
S MAIN ST(31)	4920	0.82942	20.41561	152.99395	193.62901	2.7437	0
SOUTH ST(32)	2160	0	3.79131	115.70728	66.5466	2.70141	0
HOMESTEAD RD(33)	4320	0	3.72223	73.20981	105.53986	2.27849	0
SYCAMORE RD(34)	2040	0	0	0	49.23854	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
GARDNER ST(35)	3120	0	4.25673	23.67904	45.76004	1.44322	0
W 4TH AVE(36)	3600	1.88426	4.69622	6.23809	13.07355	0	0
MAPLEWOOD AVE(37)	2520	0	6.89281	118.67792	96.91229	0	0
E 4TH AVE(38)	2040	0	7.05256	45.38814	108.23599	0	0
ROSEWOOD AVE(39)	2520	1.58536	1.80659	60.2129	108.06156	0	0
SOUTH ST(40)	4920	0	5.31013	87.58905	205.24348	1.34806	0
BEAMON ST(41)	4800	0	5.42768	266.72757	152.57394	0.77712	0
W 4TH AVE(42)	2160	0	7.44015	84.48255	47.6156	0	0
SACHS AVE(43)	7200	0.78056	6.86615	132.15148	109.66337	0	0
HOSPITAL DR(44)	840	0	1.6163	0	8.19938	0.74011	0
S HIGH ST(45)	4080	0	1.87707	4.61917	139.19378	2.7437	0
E 3RD AVE(46)	1680	0	1.08759	22.1756	31.12696	0	0
VAUGHANS LN(47)	3360	0	6.8263	65.07306	114.07231	0	0
WALNUT ST(48)	2640	0	15.17208	63.68247	131.6711	0	0
GAY ST(49)	2880	0.99263	6.72482	29.44444	48.41915	0	0
CHESTNUT ST(50)	2760	0.94992	15.00039	282.58082	109.44661	0	0
ROSEWOOD AVE(51)	2400	0	1.35262	93.93417	93.73513	3.89615	0
BEAMON ST(52)	3000	0	0	11.91165	75.84556	0	0
CLAY ST(53)	7200	0	1.8586	11.36285	117.03276	5.4874	0
COUNTRY CLUB RD(54)	5760	0.97575	5.30142	21.21957	285.6618	3.5261	0
LAUREL ST(55)	2760	0	0	11.24433	40.99687	0	0
W JACKSON ST(56)	2880	0.81709	33.79876	504.13517	77.17247	0	0
E 5TH AVE(57)	1920	0	1.12155	39.10683	63.1685	0	0
W 5TH AVE(58)	4440	0	4.65801	45.55118	370.63725	9.80119	0
NORFLEET ST(59)	2400	0	3.66176	32.7657	109.2933	0	0
W 3RD AVE(60)	1800	0	0	18.96365	69.82422	0	0
BARRISTERS LN(61)	4800	0	0	7.30755	97.83213	0	0
W 3RD AVE(62)	3480	0	1.74458	28.20583	60.43009	0	0
VIRGINIA ST(63)	2400	0.81354	0	24.08877	57.16302	0	0
OAKWOOD DR(64)	11640	0	3.69445	38.30307	137.30652	0	0
BOGART ST(65)	3720	0.7667	8.68883	21.04942	43.94147	0	0
COOL SPRING ST(66)	3120	1.56323	14.22031	260.83695	225.86083	0	0
N FRANKLIN ST(67)	3240	0	1.94118	24.15408	86.41329	3.97545	0
REBECCA ST(68)	11400	0	9.7522	103.06862	374.13155	2.22033	0
N MAIN ST(69)	3120	0	2.28698	20.12957	86.4503	0	0
PRETLOW ST(70)	15000	0	8.29327	279.61229	237.52284	0	0
CLAY ST(71)	10560	0	1.88758	3.08948	166.12328	0.76654	0
N HIGH ST(72)	5400	0.96289	9.99934	504.90333	155.06917	5.08563	0
MAPLEWOOD AVE(73)	2880	0	1.47651	143.55742	86.25998	0	0
CHESTNUT ST(74)	2760	0	11.96121	130.71487	82.58055	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
PEARL ST(75)	4920	0.88872	36.61695	757.36686	139.85462	0	0
SOUTHAMPTON RD(76)	6960	0	1.73412	22.87011	87.29614	0	0
N HIGH ST(77)	5160	0	0	30.67148	180.18538	16.28774	5.4874
N MAIN ST(78)	5280	0	7.80732	91.76302	247.03331	2.41065	0
CHARLES ST(79)	1920	0	1.70819	0	9.06107	0	0
SOUTH ST(80)	3000	0	3.29318	68.98922	109.46777	1.19475	0
HOLLY ST(81)	3600	0	5.38408	109.11795	131.36449	0	0
N HIGH ST(82)	4320	0	1.61082	147.96294	105.73019	0	0
MALITA ST(83)	2280	0	1.46558	2.69785	44.73445	0	0
VAUGHANS LN(84)	4200	0	0	8.7755	91.31389	4.1552	0
W 4TH AVE(85)	720	0	0	0	0	0	0
LAUREL ST(86)	2400	0	1.82747	46.25435	88.89795	0	0
MORTON ST(87)	12240	2.12144	33.29468	706.53976	335.0907	7.15265	1.98244
PARK CIR(88)	4680	0	0	17.70779	37.31218	0	0
CLAY ST(89)	2760	0.88696	0	6.88172	38.21089	2.36307	0
N FRANKLIN ST(90)	3360	0.90088	4.83571	46.14171	80.28094	0	0
HALL ST(91)	3600	1.60998	16.08518	574.23477	171.51024	0	0
BEAMON ST(92)	240	0	0	0	0	0	0
AMBER ST(93)	3600	0	12.074	398.59595	85.20269	0	0
W 4TH AVE(94)	2040	0	0	5.05187	3.65826	0	0
PACE ST(95)	5400	0	5.2593	52.32517	91.28216	1.78684	0
DORCHESTER ST(96)	4320	0.98933	0	12.0745	122.45671	0.76654	0
LAKEVIEW RD(97)	5160	0	1.25203	49.62603	76.04117	0	2.7437
GARDNER ST(98)	1440	0	0	32.155	43.39167	0	0
MAGNOLIA ST(99)	2520	0	0	64.12038	97.84273	0	0
HARRIS ST(100)	2760	1.92559	2.26551	330.48862	57.13131	0	0
RYLAND ST(101)	1440	0	0	0	32.4856	0	0
WALNUT ST(102)	2160	0	0	37.63345	49.66146	0	0
MAPLEWOOD AVE(103)	2400	0	1.98118	44.99183	62.33325	0	0
DELAWARE RD(104)	5280	0.50556	0	43.82471	140.06606	0	0
W 2ND AVE(105)	6840	0	1.61848	25.91554	65.00821	0.75068	0
S HIGH ST(106)	4800	0	6.60582	172.31162	202.30416	0	0
RAILROAD AVE(107)	3600	0	0	34.26454	55.15413	0	0
VILLAGE DR(108)	360	0	0	0	4.72614	0	0
MIDDLE ST(109)	1800	0	0	69.30336	51.94525	0	0
BOBWHITE LN(110)	11040	0.56258	18.35068	160.71852	324.14237	9.98093	0.81941
POCAHONTAS ST(111)	5160	0	5.36082	33.36254	78.26676	0	0
SOUTH ST(112)	4080	0	1.12342	22.88626	93.8144	2.7437	0
HOGART ST(113)	2520	0	10.57097	116.51487	60.03361	0	0
PARKS PLACE(115)	3600	0.91751	0	2.28049	67.40299	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
CAMERON ST(116)	7680	0.99612	3.85965	283.1171	109.21399	0	0
SOUTH ST(117)	5280	0	0	12.09601	81.52327	8.2311	0
HOGART ST(118)	3480	0	9.43726	137.76575	130.60321	0	0
RIDGE RD(119)	4080	0	1.23717	24.82968	17.5988	0	0
COBB ST(120)	3480	0	4.15779	21.90372	50.85093	0	0
SOUTH ST(121)	2880	0	1.91679	0	43.64542	0	0
HOLLY COVE ST(122)	2040	0	0	0	36.46104	0	0
N HIGH ST(123)	5160	0	1.81654	19.33699	99.15905	5.45568	2.71727
BANKS ST(124)	2760	0.9293	13.38519	794.75508	71.37318	0	0
HUNTERDALE RD(125)	5640	0	10.5641	33.785	59.94903	0	0
N HIGH ST(126)	4320	0	0	4.84537	53.55762	0	0
MEADOW LN(127)	20280	0	3.6349	69.38698	302.21923	6.53413	0
LAUREL ST(128)	1680	0	6.78765	147.73924	60.00718	0	0
N HIGH ST(129)	8160	0	1.26782	32.55933	146.49976	0	0
HUNTERDALE RD(130)	5760	0	5.98073	29.47836	82.86078	2.75427	2.3525
ROOSEVELT ST(131)	2760	0	1.85374	106.21405	71.01897	0	0
FAIRVIEW DR(132)	8640	0	6.20146	11.48814	265.49381	2.7437	0
REDWOOD AVE(133)	1800	0	0	24.97786	41.9643	2.38422	0
W 2ND AVE(134)	5400	0	0	9.07798	35.17644	0	0
BOGART ST(135)	3600	0	0	12.96987	63.96147	0	0
GARDEN RD(136)	120	0	0	23.51267	1.14717	0	0
OLD SEDLEY RD(137)	3600	0	0	12.4259	109.62635	2.7437	5.21779
BRANDON LN(138)	5760	0	0	4.69518	46.42612	0	0
N FRANKLIN ST(139)	2880	0.86446	6.3142	69.36586	162.15311	0	0
W 2ND AVE(140)	2880	0	4.70502	77.40702	76.09931	0.99915	0
CARRIE DR(141)	9240	0	4.63104	200.86186	325.13096	2.38422	0
CHARLES ST(142)	4560	0	3.82577	59.95238	132.05704	2.59039	0
ROBIN HOOD RD(143)	1800	0	0	0	15.28329	0	0
W 2ND AVE(144)	3120	0	0	2.00521	46.55829	2.08817	0
W BARRETT ST(145)	1080	0	1.06848	43.40841	20.47994	0	0
WOODLAND DR(146)	6960	0	5.19343	30.43926	267.80928	4.1129	0
N MAIN ST(147)	2880	0.47208	7.37314	55.42167	108.17785	2.36836	0
UNNAMED ST_1(418)	840	0	1.90907	0	6.47597	0	0
SOUTH ST(419)	5280	0	7.13619	95.06349	188.64915	2.07759	0
RAWLSDALE RD(420)	7680	0	1.89951	6.46765	112.03171	1.26876	0
SOUTH ST(421)	4200	0	1.43998	85.16383	95.96599	0	0
CLAY ST(423)	8280	0	16.2861	149.51962	300.03056	0	5.4874
BRACY ST(424)	1320	0.72372	6.46034	45.16738	69.39071	0	0
BANKS ST(425)	3000	0	7.45125	945.51912	116.49351	0	0
CANVASBACK CIR(426)	2640	0	0	2.51217	16.54149	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
PRETLOW ST(427)	2400	0	8.39125	96.74746	112.2749	1.36392	0
HOSPITAL DR(428)	240	0	0	6.439	1.07845	0	0
DELAWARE RD(429)	1920	0	1.4082	46.64275	34.43106	0	0
STEWART DR(430)	15720	1.76663	98.61706	1495.61044	451.14012	0	0
REGENCY LN(431)	4200	0	1.85547	13.34852	101.3054	0	0
WOODLAND DR(432)	6120	0	0	15.61091	317.71393	2.7437	0
PRETLOW ST(433)	6000	0	4.14088	165.82602	244.1944	0	0
GARDNER ST(434)	4320	0	19.27498	318.7699	226.77012	0	0
CAMPBELL AVE(435)	6360	0	10.80595	450.85242	172.58342	0	0
SOUTH ST(436)	6600	0	4.15065	45.55606	98.2762	0	0
WILD TURKEY LN(437)	120	0	0	0	0	0	0
WILLIS RD(439)	3600	0	0	2.25892	16.16615	0	0
VILLAGE DR(440)	840	0	0	0	6.83017	0	0
VILLAGE DR(441)	1080	0	0	4.96979	24.36551	0	0
N HIGH ST(148)	4560	0	0	0	109.8378	0	0
ARMORY DR(149)	7920	0	3.4531	24.02136	83.04051	1.10488	0
ORCHARD ST(150)	3960	0	5.67644	358.1933	57.54894	0	0
EAST ST(151)	1800	0	1.54771	67.39354	58.71729	0	0
VAUGHANS LN(152)	4680	0	1.28096	37.14169	68.28584	1.57538	0
OLD SEDLEY RD(153)	4440	0	2.50661	92.04167	115.98604	0	0
E 4TH AVE(154)	2880	0	0	43.30645	18.48691	0	0
SCOTT ST(155)	4440	0.92729	22.103	94.67255	97.99604	0	0
FAIRVIEW DR(156)	6960	0	2.66066	127.17682	136.11703	17.17587	0
W JACKSON ST(157)	3360	0.99268	18.03205	659.39225	126.73349	0	0
DELAWARE RD(158)	4080	1.74122	20.97684	719.98513	121.66903	0	0
SYCAMORE ST(159)	1680	0	2.86973	13.70642	30.4926	0	0
HARRIS ST(160)	2880	0	1.73437	167.67765	50.95138	2.7437	0
N MAIN ST(161)	3840	0	3.39212	60.52628	129.08598	0	0
CARRIE DR(162)	6480	0	11.14606	67.77713	100.33795	0.60795	0
STEWART DR(163)	1440	0	1.99778	19.55204	7.58614	0	0
LAUREL ST(164)	2160	0	11.65825	144.38113	93.82496	0	0
HUNTERDALE RD(165)	1200	0.81963	0	2.41821	79.7946	0	0
LEE ST(166)	1440	0	4.41364	22.99086	37.936	0	0.79826
ARMORY DR(167)	13200	0	1.94378	31.19261	322.1969	1.62825	0
BIRCH ST(168)	2520	0.95652	1.79899	18.88389	44.94062	0	0
ELM ST(169)	3000	0.55559	0	10.86833	88.4803	2.73313	0
HARRISON ST(170)	5160	0.80438	15.04475	252.51192	210.11231	0	0.70311
W BARRETT ST(171)	1200	0	1.06755	41.47509	8.76503	0	0
SOUTH ST(172)	3240	0	0	44.58921	53.09241	0	0
CIRCLE DR(173)	2040	0	0	14.96549	19.16887	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
W 4TH AVE(174)	2640	0.7311	5.32279	34.47693	23.53554	0	0
NORFLEET ST(175)	2280	0	12.50865	48.26885	104.58833	0	0
W 1ST AVE(176)	1920	0	3.93586	4.83914	98.95817	2.00359	0
GARDNER ST(177)	2160	0.90968	2.53076	17.79168	40.74313	0	0
WEST CIR(178)	1920	0	1.41935	0	31.67148	1.09431	0
SOUTH ST(179)	1320	0	0	38.2753	32.97195	0	0
MARINER ST(180)	6000	0	0	55.06736	164.6325	9.46814	0
ASHTON AVE(181)	6480	0.70896	22.02518	383.30382	343.64954	0	0
THOMAS ST(182)	3120	0	19.36024	294.71587	131.86141	0	0
MADISON ST(183)	5160	0.96968	14.11064	168.56448	180.20129	0	0
GAY ST(184)	1440	0	0	30.35333	18.12215	0	0
SOUTH ST(185)	5640	0	0	22.77624	102.21997	2.75956	0
CLAY ST(186)	10440	0	0	4.78903	189.33635	2.7437	0
HOSPITAL DR(187)	1800	0	0	4.99444	25.24837	0	0
ROOSEVELT ST(188)	2280	0	6.90932	35.69808	60.06533	0	0
MADISON ST(189)	2760	0	8.36942	50.06475	68.76691	0	0
CRESCENT DR(190)	3360	0	2.94256	162.81801	141.22384	0	0
SOUTH ST(191)	4200	0	1.74307	59.63947	97.11316	0	0
WILLIS RD(192)	3120	0	1.24421	0	23.44568	0	0
CLAY ST(193)	8160	0	1.5782	8.50274	186.42348	0	0
CRESCENT DR(194)	8880	0	27.87667	1335.18363	304.2333	0.79826	0
HUNTERDALE RD(195)	7560	0	1.1161	5.7088	120.91834	2.18861	2.62211
W BARRETT ST(196)	600	0.96588	1.58838	17.05391	14.50089	0	0
FAIRVIEW DR(197)	6600	0	1.87889	24.51437	36.11743	0	0
SOUTH ST(198)	2640	0	0	17.48977	124.74049	0	0
S MAIN ST(199)	6840	0	3.716	72.82197	192.1329	2.24148	0
CHARLES ST(200)	4080	0	2.8984	44.32551	88.34814	0	0
N HIGH ST(201)	1920	0	2.93982	46.19602	16.89039	0	0
ANDREW AVE(202)	3480	0.95957	11.68072	95.4411	71.63751	0	0
VINE ST(203)	1920	0	0	0	45.56444	0	0
RAILROAD AVE(204)	3960	0	1.75726	70.97518	66.48842	0	0
W 2ND AVE(205)	2160	0	0	0	44.30094	4.14462	0
LAUREL ST(206)	3960	1.8287	32.06004	236.03928	140.98067	0.67667	0
PROGRESS PKWY(207)	19800	1.93272	41.94994	614.29644	2377.72937	51.91882	0.78769
SOUTH ST(208)	1440	0	1.72219	16.8063	48.28696	0	0
E 5TH AVE(209)	2520	0	1.82504	27.77679	49.51345	0	0
W 1ST AVE(210)	2520	0	12.05947	252.21833	106.63421	0	0
SOUTH ST(211)	360	0	0	0	6.49183	0	0
W 2ND AVE(212)	5160	0	0	0	26.55944	4.63627	0
S COLLEGE DR(213)	2760	0.77341	0	6.27836	7.7976	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
THOMAS ST(214)	4680	0	7.07506	124.37719	87.9675	0	0
ELM ST(215)	1200	0.93567	5.45155	30.32004	85.75247	2.7437	0
ARMORY DR(216)	20640	0	2.60496	100.55545	640.89943	4.49882	0
OLD SEDLEY RD(217)	7920	0	4.77497	40.47551	157.93975	0	0
N HIGH ST(218)	8760	0	2.55887	301.39937	68.04265	0	0
VIRGINIA ST(219)	2280	1.81794	1.84563	77.73421	98.66743	2.59039	0
N HIGH ST(220)	2760	0	0	0	27.02993	0	0
CHARLES ST(221)	360	0	0	0	8.15179	0	0
HUNTERDALE RD(222)	12000	0	2.43847	58.05656	147.08125	1.20004	0
GAY ST(223)	1200	0	0	10.965	29.30312	0	0
FAIRVIEW DR(224)	1920	0	1.87447	0	79.73642	0	0
RIVER RD(225)	3120	0.82444	10.30077	73.41988	44.13707	0	0
WYNNWOOD DR(226)	12360	1.95868	33.02709	868.29041	308.674	1.89786	0
MAPLEWOOD AVE(227)	2400	0	3.74109	148.6523	87.34899	2.3525	1.35335
N FRANKLIN ST(228)	120	0	0	0	0.2749	0	0
CLAY ST(229)	3360	0	0	0	73.45605	2.7437	0
SOUTH ST(230)	4680	0	1.76067	60.11377	163.2897	1.37449	0
W 3RD AVE(231)	1680	0	1.04998	25.10537	11.40828	0	0
HOMESTEAD RD(232)	8640	2.33504	48.83058	654.74618	344.5483	2.7437	0
COBB ST(233)	1920	0	0	3.93074	23.02275	0	0
NORFLEET ST(234)	1320	0	9.28018	68.37304	61.59843	0	0
W 1ST AVE(235)	1200	0.68258	0	6.77507	15.7115	0	0
SOUTHAMPTON RD(236)	8880	0	1.94602	4.68498	50.4016	0	0
E 3RD AVE(237)	840	0	3.38546	34.35696	34.38347	0	0
PRETLOW ST(238)	2280	0	7.04083	128.96177	79.76814	4.02832	0
REGENCY LN(239)	6840	0	0	19.21272	78.20865	0	0
HAYDEN DR(240)	7200	1.74514	32.74974	597.35733	554.75574	13.7185	5.4874
S HIGH ST(241)	2640	0	0	29.49513	13.38543	0	0
ROOSEVELT ST(242)	3600	0	4.70762	55.14654	92.19147	0	0
TRAIL RD(243)	840	0	0	0	6.59757	0	0
ROSEWOOD AVE(244)	2520	0	0	38.88614	119.12621	0	0
ROBIN HOOD RD(245)	9000	0	0	33.89656	63.99319	0	0
BOGART ST(247)	1200	0	0	16.64193	8.72273	0	0
BEECHWOOD DR(248)	20040	0	0	152.87401	87.93578	2.7437	0
OLD SEDLEY RD(249)	4680	0	1.91941	96.18408	68.32284	0	0
EAST ST(250)	1440	0	0	6.81383	31.06882	0	0
CLAY ST(251)	12720	0	0	8.64428	217.26505	2.7437	0
W 4TH AVE(252)	1560	0	0	0	7.78702	0	0
BRUCE ST(253)	8760	1.72504	69.33828	784.57068	434.57227	2.73841	0
MIDDLE ST(254)	2400	0.76519	5.33652	56.51809	114.38419	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
CHESTNUT ST(255)	3840	0	20.88042	250.57411	138.41668	0	0
S HIGH ST(256)	3360	0	0	6.39613	38.96685	0	0
SYCAMORE ST(257)	2760	0.8117	1.63765	101.72717	79.77343	0	0
REDWOOD AVE(258)	3000	0.60802	3.63585	13.03968	71.28329	0	0
RYLAND ST(259)	2400	0	0	0	53.28803	0	0
DORCHESTER ST(260)	13440	0	19.65422	204.92954	225.1789	7.04163	0
REBECCA ST(261)	3480	0	4.9184	46.71424	69.79777	0	0
HARRISON ST(263)	2640	0	8.07444	300.90523	47.33543	0	0
NORTH DR(264)	5760	0.93553	1.97025	6.15431	170.63269	0	0
HOGART ST(265)	1080	0	5.7394	60.82904	30.95251	0	0
DUFFY ST(266)	2760	0	1.85927	33.36581	24.73557	0	0
HUNTERDALE RD(267)	9840	0	0	16.97576	149.78267	0	0
GARDNER ST(268)	2640	0.81382	14.19039	338.00251	140.14542	0	0
PRETLOW ST(269)	2760	0.4786	13.48553	293.85359	63.75001	0	0
W BARRETT ST(270)	600	0	0	0	16.44632	0	0
BOLLING ST(271)	3120	0.95347	22.74367	374.45032	136.02716	0	0
QUEENS LN(272)	10680	0.83171	1.80706	28.27831	249.53915	0	0
FAIRVIEW DR(273)	1920	0	0	6.14726	55.53479	0	0
STONEWALL ST(274)	6000	0.61048	21.73867	101.98237	328.60416	0	0
E 2ND AVE(275)	3480	0	0	0	46.44727	0	0
N MECHANIC ST(276)	1800	0	0	0	25.11092	0	0
WIGHT CRES(277)	1200	0	0	0	25.07391	1.77627	0
N MECHANIC ST(278)	2040	0	17.99762	358.83576	36.21259	0	0
VIRGINIA ST(279)	1800	0	1.13471	97.06167	73.33449	2.57982	0
BOGART ST(280)	2880	0	1.1161	0	64.59059	4.16577	0
REDWOOD AVE(281)	2400	1.58126	7.27873	198.47	109.64226	0.88285	0
N HIGH ST(282)	2160	0	0	0	40.95459	0	0
SOUTH ST(283)	4800	0	0	10.84796	49.25972	1.34806	0
N HIGH ST(284)	960	0	0	0	10.87963	2.7437	0
N HIGH ST(285)	3360	0	0	42.97025	67.01707	2.64325	5.4874
KIMBERLY DR(286)	1680	0	1.88878	0	25.40696	0	0
BEALE CT(287)	2040	0	0	0	73.94768	0	0
CENTER ST(288)	1320	0	0	0	11.70961	1.1366	0
HOLLAND CIR(289)	2640	0	3.07137	6.77205	97.54667	3.62655	0
DELAWARE RD(290)	3240	3.63436	16.12316	545.45672	121.39941	0	0
PINE AVE(291)	3600	0	1.33017	11.46304	52.56377	0	0
GARDNER ST(292)	2640	0.86723	12.8066	373.63764	141.1974	0	0
RAILROAD AVE(293)	2160	0	0	40.98543	32.42215	0	0
SYCAMORE ST(294)	1680	0	3.3649	124.97534	4.22392	0	0
WOODLAND DR(295)	7440	0.97172	14.89992	257.40093	229.93148	1.12074	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
BANKS ST(296)	1440	0	3.24842	303.25046	90.02926	0	0
N HIGH ST(297)	3360	0	0	4.96979	45.51684	0	0
MAGNOLIA ST(298)	1680	0.99143	3.08062	65.66105	87.61859	0	0
ANDREW AVE(299)	3360	0	6.92232	132.86445	107.33194	0.62381	0
ROBIN HOOD RD(300)	3120	0	0	6.66239	21.01914	0	0
N HIGH ST(301)	5640	0	0	53.10102	72.44632	0.72954	2.69083
ARMORY DR(302)	31080	0	1.04209	53.00292	177.89631	18.42348	0
PACE ST(303)	5040	0	3.02154	23.95591	162.40685	7.95619	0
CHAUCER CT(304)	6600	0.91809	14.4288	55.94604	228.4671	0	0
CRESCENT DR(305)	16560	1.49395	89.15527	1040.06875	732.1869	3.36751	0
ARMORY DR(307)	9600	0	0	14.25105	235.49813	3.6477	0
S COLLEGE DR(308)	17040	0	1.89183	32.76256	125.51231	2.5851	0
GILLETTE CT(309)	5640	0	7.66854	61.034	158.45254	0.60795	0
COVEY CIR(310)	6000	1.68399	1.05425	68.16484	60.69439	3.26706	0
ARMORY DR(311)	14640	0	1.09575	56.05264	495.31425	7.39054	0
SOUTH ST(312)	4920	0	0	23.19874	80.01132	0	0
N HIGH ST(313)	2040	0	0	0	11.20211	4.43538	0
CHESTNUT ST(314)	1800	0.72579	7.05055	283.73097	38.69726	0	0
PRETLOW ST(315)	3840	0.94495	38.44667	473.81793	88.34288	0	0
REDWOOD AVE(316)	2400	0	2.7163	2.46578	18.63495	2.22033	0
STONEWALL ST(317)	2040	0	1.97341	34.86513	73.9847	0	0
CRESCENT DR(318)	5880	3.43351	54.00078	422.13049	252.54186	8.75446	0.65553
HOSPITAL DR(319)	2160	0	1.35153	33.5238	54.61492	0	0
HOSPITAL DR(320)	2400	0	3.11114	48.95404	55.4079	0	0
S MAIN ST(321)	2520	0	0	15.78183	34.21955	0	0
IRVING ST(322)	3120	0	0	17.12529	16.4199	0	0
LYTTON ST(323)	2280	0	0	5.02245	56.60267	0	0
ARMORY DR(324)	5880	0	1.83965	0	28.73745	0	0
CLAY ST(325)	18840	0	0	26.04781	364.05551	23.03334	0
GARDNER ST(326)	1200	0	0	5.03309	24.40781	0	0
E BARRETT ST(327)	6840	0	5.36988	58.88215	204.17558	0	0
CLAY ST(328)	4680	0	0	13.58904	85.40356	0	0
W 1ST AVE(329)	4080	0	4.93724	49.36007	167.43433	5.15435	0
W BARRETT ST(330)	960	0	0	43.26766	10.87436	0	0
LAKEVIEW RD(331)	3600	0	7.74202	69.80605	64.68042	0	0
DELAWARE RD(332)	3960	2.7303	10.32649	373.23705	115.93845	0	0
CLAY ST(333)	14400	0	1.28568	0	255.15342	8.2311	0
N COLLEGE DR(334)	15960	0	1.10179	28.35128	183.54765	1.39564	0
MARINER ST(335)	2040	0	6.00597	48.67986	78.39366	2.61154	0
S FRANKLIN ST(336)	2160	0.64787	2.99881	25.07428	140.77448	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
E 2ND AVE(337)	3240	0	0	47.66971	91.31388	3.94902	0
MIDDLE ST(338)	1680	0	0	59.42248	62.39668	0	0
W 3RD AVE(339)	1320	0	0	10.20766	10.79506	0	0
MADISON ST(340)	2760	0	11.79765	121.63082	114.71725	0	0
JOHNSON ST(341)	4920	0	4.91127	45.67522	105.35483	0	0
NORFLEET ST(342)	4800	0	1.99616	47.12709	114.22563	0	0
FAIR ST(343)	2640	0	4.12148	865.90801	33.27855	1.08373	0
ARMORY DR(344)	17280	0	0	56.57213	443.49588	6.86717	0
W 2ND AVE(345)	600	0	0	0	0	0	0
PINE ST(346)	1320	0.70986	8.82478	356.7988	18.42349	0	0
MALITA ST(347)	1200	0	3.09196	134.68197	15.46304	0	0
MAPLEWOOD AVE(348)	2520	0.98285	13.73823	197.70513	81.1902	0	0
S MECHANIC ST(349)	4920	0.78107	3.5947	42.82663	189.34692	1.96129	0
SOUTH ST(350)	2280	0	0	31.56691	76.71783	0	0
CLAY ST(351)	2520	0	0	0	36.58264	0	0
VINE ST(352)	1920	0	1.77263	8.68079	45.03578	0	0
WOODLAND DR(353)	7920	0	16.03252	90.33085	356.8447	3.30407	0
TRAIL RD(354)	4080	0	0	0	60.35607	0	0
PAGE ST(355)	4800	1.85114	6.03075	689.50735	121.48929	0	0
GARDNER ST(356)	2760	0	0	0	112.21143	2.04588	0
CLAY ST(357)	9360	0	5.08438	9.13474	328.07024	2.15161	5.4874
WILSON ST(358)	4200	1.84331	7.86789	71.41357	172.52525	2.22562	0
HALL ST(359)	4560	1.90496	29.44188	795.84293	119.491	0	0
ROSEWOOD AVE(360)	2040	0	0	45.11167	37.26988	2.37893	0
E 1ST AVE(361)	3360	0	0	0	24.04833	0	0
SOUTH ST(362)	3600	0	0	29.5526	128.66306	0	0
N COLLEGE DR(363)	43920	0	0	63.06654	404.25407	20.45881	0
NORTH DR(364)	2400	0	0	2.26875	37.35975	2.5481	0
W 2ND AVE(365)	7200	0	0	26.82273	92.95798	8.52714	0
WALNUT ST(366)	5640	1.57328	27.1862	446.70786	227.26182	0	0
MAPLEWOOD AVE(367)	2520	0	6.22353	54.23948	53.52062	0	0
WILLIS RD(368)	3840	0	0	9.40859	44.42253	2.32078	0
CLAY ST(369)	2760	0	0	3.42283	27.59559	0	0
WILSON ST(370)	3000	0	2.50896	20.88764	51.43774	0	0
FAIRVIEW DR(371)	5520	0	1.40418	0	114.37891	0	0
HALL ST(372)	1680	0.96278	15.67416	253.13255	67.88409	0	0
BAILEY DR(374)	8520	0.90362	25.98731	725.47711	268.75554	0	0
BRUCE ST(375)	4080	1.5955	10.76533	139.28436	220.36812	0	2.32078
CLAY ST(376)	17760	0	0	11.4818	188.38475	2.68555	0
CARRIE DR(377)	5400	0.69765	7.34936	75.34616	138.63342	0	0

NFRANKLIN ST(378) 3000 0 5.5.4995 40.09935 155.27536 0  BRACY ST(379) 3600 0 15.28534 236.22878 171.43624 0  LEE ST(380) 1680 0 0 9.86817 45.68073 0  WALNUT ST(381) 2400 0 6.6.6445 24.92972 91.86897 0  COUNCIL DR(382) 8160 0 2.6.19322 37.04512 343.83459 17.11773  DALE CIR(383) 7680 0 9.20437 72.93887 132.43766 0  HUNTERDALE RO(384) 600 0 0 0 0 25.09506 0  HUNTERDALE RO(385) 5760 0 0 9.07098 105.33897 0  SOUTH ST(386) 4200 0.80382 0 6.669402 58.15161 0  STONEWALL ST(387) 480 0 3.46333 13.07783 18.01113 0  MAGNOLIA ST(388) 1800 0 1.02415 15.74829 59.30935 0  NORFLEET ST(389) 2040 0 7.96036 138.56062 87.10583 0  VEIDES ST(390) 2880 0 12.9759 49.92873 98.96876 1.23176  KINGS LN(392) 8840 0 6.84354 107.59828 159.16095 0  MYRTLE DR(393) 3360 0 0 10.17946 57.59124 0  VALIGHANS LN(394) 4560 0 0 0 75.47018 0.8247 CAMPBELL AVE(395) 6720 0 28.05573 440.08635 206.11047 0  MOSPITAL DR(397) 8520 0.92729 21.88729 97.02017 247.56196 2.59039  SOUTH ST(399) 2400 0 1.664354 17.736629 15.051047 0 0  MOSPITAL DR(397) 8520 0.92729 21.88729 97.02017 247.56196 2.59039  SOUTH ST(399) 2400 0 1.17445 77.7353 48.91077 0 0  HOSPITAL DR(397) 8520 0.99729 21.88729 97.02017 247.56196 2.59039  SOUTH ST(399) 2400 0 1.66735 174.66047 75.53895 0  HUNTERDALE RO(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128  STEAL CIR(403) 2280 0 1.93736 0 18.64023 0 18.64023 0 COUNTRY CLUB ROLLED	Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
LEE ST(380)         1680         0         9.86817         45.68073         0           WALNUT ST(381)         2400         0         6.16445         24.92972         91.86897         0           COUNCIL DR(382)         8160         0         26.19322         327.04512         343.83459         17.11773           DALE CIR(383)         7680         0         9.20437         72.93897         132.43766         0           HUNTERDALE RD(384)         600         0         0         0         25.09506         0           HUNTERDALE RD(385)         5760         0         0         9.07098         105.33897         0           SOUTH ST(386)         4200         0.80382         0         6.69402         58.15161         0           STONEWALL ST(387)         480         0         3.46333         13.07783         18.01113         0           MAGNOLIA ST(388)         1800         0         1.02415         15.74829         59.30935         0           NORFLEET ST(389)         2040         0         7.9636         138.56662         87.10583         0           VEIDEE ST(3919)         1080         0         12.37592         16.02342         0           KINGS	N FRANKLIN ST(378)	3000	0	5.54995	40.09935	155.27536	0	0
WALINUT ST(381)         2400         0         6.16445         24.92972         91.86897         0           COUNCILL DR(382)         8160         0         26.19322         327.04512         343.83459         17.11773           DALE CIR(383)         7680         0         9.20437         72.93897         132.43766         0           HUNTERDALE RD(384)         600         0         0         0         25.09506         0           HUNTERDALE RD(385)         5760         0         0         9.07098         105.33897         0           SOUTH ST(386)         4200         0.80382         0         6.69402         58.15161         0           STONEWALL ST(387)         480         0         3.46333         13.07783         18.01113         0           MAGNOLIA ST(388)         1800         0         1.02415         15.74829         59.30935         0           NORFLEET ST(389)         2040         0         7.96036         138.56062         87.10583         0           YEIDEE ST(3890)         2880         0         12.9759         49.92873         98.96876         1.23176           RYLAND ST(391)         1080         0         1.33269         17.39629         16.023	BRACY ST(379)	3600	0	15.28534	236.22878	171.43624	0	0
COUNCILL DR(382)   8160	LEE ST(380)	1680	0	0	9.86817	45.68073	0	0
DALE CIR(383)   7680   0   9.20437   72.93897   132.43766   0	WALNUT ST(381)	2400	0	6.16445	24.92972	91.86897	0	0
HUNTERDALE RD(384) 600 0 0 0 9.07098 105.33897 0 SOUTH ST(386) 5760 0 0 9.07098 105.33897 0 SOUTH ST(386) 4200 0.80382 0 6.69402 58.15161 0 STONEWALL ST(387) 480 0 3.46333 13.07783 18.01113 0 MAGNOLIA ST(388) 1800 0 1.02415 15.74829 59.30935 0 MORFLEET ST(389) 2040 0 7.96036 138.56062 87.10583 0 SOUTH ST(381) 1800 0 1.33599 17.33650 138.56062 87.10583 0 SOUTH ST(391) 1800 0 1.33599 17.33659 16.02342 0 SOUTH ST(391) 1800 0 1.33599 17.33659 16.02342 0 SOUTH ST(391) 1800 0 1.33599 17.39629 15.916095 0 SOUTH ST(393) 3360 0 0 10.17946 57.59124 0 SOUTH ST(393) 3360 0 0 10.17946 57.59124 0 SOUTH ST(396) 2760 0 28.05573 440.08635 206.11047 0 SOUTH ST(397) 8520 0.92729 21.88739 97.102117 247.56196 2.59039 SOUTH ST(399) 2280 0.99601 14.66373 17.456047 75.35391 0 SOUTH ST(399) 2280 0.99601 14.66373 17.456047 75.35391 0 SOUTH ST(399) 2280 0 19.3736 0 SOUTH ST(399) 2280 0 1.93736 0 SOUTH ST(399) 2280 0 SOUTH ST(399) 2400 0 1.60673 17.456047 75.35391 0 SOUTH ST(400) 2040 0 13.60209 444.84967 75.35391 0 SOUTH ST(400) 2040 0 SOUTH ST(400) 2	COUNCILL DR(382)	8160	0	26.19322	327.04512	343.83459	17.11773	0
HUNTERDALE RO(385) 5760 0 0 9.07098 105.33897 0 SOUTH ST(386) 4200 0.80382 0 6.69402 58.15161 0 STONEWALL ST(387) 480 0 3.46333 13.07783 18.01113 0 MAGNOLIA ST(388) 1800 0 1.02415 15.74829 59.30935 0 MORELET ST(389) 2040 0 7.96036 138.56062 87.10583 0 MORELET ST(389) 2880 0 12.9759 49.92873 98.96876 1.23176 RYLAND ST(391) 1080 0 1.33269 17.39629 16.02342 0 MINTERDALE RO(393) 3360 0 0 0 10.17946 57.59124 0 MINTERDALE RO(393) 3360 0 0 0 0 10.17946 57.59124 0 MINTERDALE RO(395) 6720 0 28.05573 440.08635 206.11047 0 MOSPITAL DR(397) 8520 0.92729 21.88729 971.02017 247.56196 2.59039 SOUTH ST(398) 2280 0.99601 4.93332 174.51171 81.66071 0 MINTERDALE RO(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128 COUNTRY CUBB RO(404) 2760 0 1.60272 14.86949 143.59218 2.56924 PINE ST(405) 5280 0 1.93736 0 1.864023 0 0 1.864023 0 0 0 0 1.864023 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DALE CIR(383)	7680	0	9.20437	72.93897	132.43766	0	0
SOUTH ST(386)         4200         0.80382         0         6.69402         58.15161         0           STONEWALL ST(387)         480         0         3.46333         13.07783         18.01113         0           MAGNOLIA ST(388)         1800         0         1.02415         15.74829         59.30935         0           NORFLEET ST(389)         2040         0         7.96036         138.56062         87.10583         0           VEIDEE ST(390)         2880         0         12.9759         49.92873         98.96876         1.23176           RYLAND ST(391)         1080         0         1.33269         17.39629         16.02342         0           KINGS LN(392)         9840         0         6.84354         107.59828         159.16095         0           MYRTLE DR(393)         3360         0         0         10.17946         57.59124         0           CAMPBELL AVE(395)         6720         0         28.05573         440.08635         206.11047         0           ROOSEVELT ST(396)         2760         0         1.17445         77.7353         48.91077         0           HOSPITAL DR(397)         8520         0.92729         21.88729         971.02017	HUNTERDALE RD(384)	600	0	0	0	25.09506	0	0
STONEWALL ST(387)   480	HUNTERDALE RD(385)	5760	0	0	9.07098	105.33897	0	0
MAGNOLIA ST(388)   1800	SOUTH ST(386)	4200	0.80382	0	6.69402	58.15161	0	0
NORFLEET ST(389) 2040 0 7.96036 138.56062 87.10583 0 YEIDEE ST(390) 2880 0 12.9759 49.92873 98.96876 1.23176 RYLAND ST(391) 1080 0 1.33269 17.39629 16.02342 0 KINGS LN(392) 9840 0 6.84354 107.59828 159.16095 0 WYRTLE DR(393) 3360 0 0 10.17946 57.59124 0 WAUGHANS LN(394) 4560 0 0 0 0 75.47018 0.8247 CAMPBELL AVE(395) 6720 0 28.05573 440.08635 206.11047 0 WAUGHANS LN(397) 8520 0.92729 21.88729 971.02017 247.56196 2.59039 SOUTH ST(398) 2280 0.99601 4.93332 174.51171 81.66071 0 DELK ST(399) 2400 0 14.66735 174.66047 75.53895 0 HALL ST(400) 2040 0 13.60209 444.84967 75.35391 0 GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0 HINTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128 STEAL CIR(403) 2280 0 1.93736 0 18.64023 0 COUNTRY CLUB RD(404) 2760 0 1.60272 14.86949 143.59218 2.56924 PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0 MAPLEWOOD AMERICAN ST(409) 3960 0 0 41.96327 153.44094 0 NORTH DR(410) 3480 0.99604 5.47555 72.36682 96.81716 0 MAPLEWOOD AMERICAN ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769 SOUTH ST(412) 2400 0 3.73464 107.27058 96.92818 0 ARMORY DR(413) 5040 0 0 3.44133 115.33579 2.82299	STONEWALL ST(387)	480	0	3.46333	13.07783	18.01113	0	0
VEIDEE ST(390)         2880         0         12.9759         49.92873         98.96876         1.23176           RYLAND ST(391)         1080         0         1.33269         17.39629         16.02342         0           KINGS LN(392)         9840         0         6.84354         107.59828         159.16095         0           MYRTLE DR(393)         3360         0         0         10.17946         57.59124         0           VAUGHANS LN(394)         4560         0         0         0         75.47018         0.8247           CAMPBELL AVE(395)         6720         0         28.05573         440.08635         206.11047         0           ROOSEVELT ST(396)         2760         0         1.17445         77.7353         48.91077         0           HOSPITAL DR(397)         8520         0.92729         21.88729         971.02017         247.56196         2.59039           SOUTH ST(398)         2280         0.99601         4.93332         174.51171         81.66071         0           DELK ST(399)         2400         0         13.60209         4448.8967         75.35391         0           GROVE ST(401)         4200         0         5.37589         153.67573	MAGNOLIA ST(388)	1800	0	1.02415	15.74829	59.30935	0	0
RYLAND ST(391) 1080 0 1.33269 17.39629 16.02342 0   KINGS LN(392) 9840 0 6.84354 107.59828 159.16095 0   MYRTLE DR(393) 3360 0 0 0 10.17946 57.59124 0    VAUGHANS LN(394) 4560 0 0 0 75.47018 0.8247    CAMPBELL AVE(395) 6720 0 28.05573 440.08635 206.11047 0    ROOSEVELT ST(396) 2760 0 1.17445 77.7353 48.91077 0    HOSPITAL DR(397) 8520 0.92729 21.88729 971.02017 247.56196 2.59039    SOUTH ST(398) 2280 0.99601 4.93332 174.51171 81.66071 0    DELK ST(399) 2400 0 14.66735 174.66047 75.53895 0    HALL ST(400) 2040 0 13.60209 444.84967 75.33931 0    GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0    HUNTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128    STEAL CIRR (403) 2760 0 1.60272 14.86949 143.59218 2.56924    PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0    RAILROAD AVE(407) 2040 0 45.91448 25.41752 0    MAPLEWOOD AVE(407) 3960 0 0 41.96327 153.44094 0    NORTH DR(410) 3480 0.99604 5.47555 72.36682 93.61716 0    BANKS ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769    SOUTH ST(412) 2400 0 3.373464 107.27058 96.92818 0    ARMONY DR(413) 5040 0 0 3.44133 115.33579 2.82299	NORFLEET ST(389)	2040	0	7.96036	138.56062	87.10583	0	0
KINGS LN(392) 9840 0 6.84354 107.59828 159.16095 0 MYRTLE DR(393) 3360 0 0 0 10.17946 57.59124 0 0    VAUGHANS LN(394) 4560 0 0 0 75.47018 0.8247    CAMPBELL AVE(395) 6720 0 28.05573 440.08635 206.11047 0    ROOSEVELT ST(396) 2760 0 1.17445 77.7353 48.91077 0    HOSPITAL DR(397) 8520 0.92729 21.88729 971.02017 247.56196 2.59039    SOUTH ST(398) 2280 0.99601 4.93332 174.51171 81.66071 0    DELK ST(399) 2400 0 14.66735 174.66047 75.53895 0    HALL ST(400) 2040 0 13.60209 444.84967 75.35391 0    GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0    HUNTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128    S TEAL CIR(403) 2280 0 1.93736 0 18.64023 0    COUNTRY CLUB RD(404) 2760 0 1.60272 14.86949 143.59218 2.56924    PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0    RAILROAD AVE(407) 2040 0 0 45.91448 25.41752 0    MAPLEWOOD AVE(408) 2760 0.94204 4.67889 75.92519 205.41261 0    SOUTH ST(409) 3960 0 0 41.96327 153.44094 0    NORTH DR(410) 3480 0.99604 5.47555 72.36682 96.81716 0    BANKS ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769    SOUTH ST(412) 2400 0 3.44133 115.33579 2.82299	YEIDEE ST(390)	2880	0	12.9759	49.92873	98.96876	1.23176	0
MYRTLE DR(393)         3360         0         0         10.17946         57.59124         0           VAUGHANS LN(394)         4560         0         0         0         75.47018         0.8247           CAMPBELL AVE(395)         6720         0         28.05573         440.08635         206.11047         0           ROOSEVELT ST(396)         2760         0         1.17445         77.7353         48.91077         0           HOSPITAL DR(397)         8520         0.92729         21.88729         971.02017         247.56196         2.59039           SOUTH ST(398)         2280         0.99601         4.93332         174.51171         81.66071         0           DELK ST(399)         2400         0         14.66735         174.66047         75.53895         0           HALL ST(400)         2040         0         13.60209         444.84967         75.35391         0           GROVE ST(401)         4200         0         5.37589         153.67573         118.35966         0           HUNTERDALE RD(402)         18120         0.67341         11.12268         8.47112         234.92193         5.65128           S TEAL CIR(403)         2280         0         1.93736         0	RYLAND ST(391)	1080	0	1.33269	17.39629	16.02342	0	0
VAUGHANS LN(394) 4560 0 0 0 75.47018 0.8247  CAMPBELL AVE(395) 6720 0 28.05573 440.08635 206.11047 0  ROOSEVELT ST(396) 2760 0 1.17445 77.7353 48.91077 0  HOSPITAL DR(397) 8520 0.92729 21.88729 971.02017 247.56196 2.59039  SOUTH ST(398) 2280 0.99601 4.93332 174.51171 81.66071 0  DELK ST(399) 2400 0 14.66735 174.66047 75.53895 0  HALL ST(400) 2040 0 13.60209 444.84967 75.35391 0  GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0  HUNTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128  S TEAL CIR(403) 2280 0 1.93736 0 18.64023 0  COUNTRY CLUB RD(404) 2760 0 1.60272 14.86949 143.59218 2.56924  PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0  RAILROAD AVE(407) 2040 0 0 45.91448 25.41752 0  MAPLEWOOD AVE(407) 2040 0 0 45.91448 25.41752 0  MAPLEWOOD AVE(407) 3960 0 0 41.96327 153.44094 0  NORTH DR(410) 3480 0.99604 5.47555 72.36682 96.81716 0  BANKS ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769  SOUTH ST(412) 2400 0 3.73464 107.27058 96.92818 0  ARMORY DR(413) 5040 0 0 3.44133 115.33579 2.82299	KINGS LN(392)	9840	0	6.84354	107.59828	159.16095	0	0
CAMPBELL AVE(395) 6720 0 28.05573 440.08635 206.11047 0 ROOSEVELT ST(396) 2760 0 1.17445 77.7353 48.91077 0 HOSPITAL DR(397) 8520 0.92729 21.88729 971.02017 247.56196 2.59039 SOUTH ST(398) 2280 0.99601 4.93332 174.51171 81.66071 0 DELK ST(399) 2400 0 14.66735 174.66047 75.53895 0 HALL ST(400) 2040 0 13.60209 444.84967 75.35391 0 GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0 HUNTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128 S TEAL CIR(403) 2280 0 1.93736 0 18.64023 0 COUNTRY CLUB RD(404) 2760 0 1.60272 14.86949 143.59218 2.56924 PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0 RAILROAD AVE(407) 2040 0 0 45.91448 25.41752 0 MAPLEWOOD AVE(408) 2760 0.94204 4.67889 75.92519 205.41261 0 SOUTH ST(409) 3960 0 0 41.96327 153.44094 0 NORTH DR(410) 3480 0.99604 5.47555 72.36682 96.81716 0 BANKS ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769 SOUTH ST(412) 2400 0 3.73464 107.27058 96.92818 0 ARMORY DR(413) 5040 0 0 3.44133 115.33579 2.82299	MYRTLE DR(393)	3360	0	0	10.17946	57.59124	0	0
ROOSEVELT ST(396)         2760         0         1.17445         77.7353         48.91077         0           HOSPITAL DR(397)         8520         0.92729         21.88729         971.02017         247.56196         2.59039           SOUTH ST(398)         2280         0.99601         4.93332         174.51171         81.66071         0           DELK ST(399)         2400         0         14.66735         174.66047         75.53895         0           HALL ST(400)         2040         0         13.60209         444.84967         75.35391         0           GROVE ST(401)         4200         0         5.37589         153.67573         118.35966         0           HUNTERDALE RD(402)         18120         0.67341         11.12268         8.47112         234.92193         5.65128           S TEAL CIR(403)         2280         0         1.93736         0         18.64023         0           COUNTRY CLUB RD(404)         2760         0         1.60272         14.86949         143.59218         2.56924           PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0	VAUGHANS LN(394)	4560	0	0	0	75.47018	0.8247	0
HOSPITAL DR(397) 8520 0.92729 21.88729 971.02017 247.56196 2.59039  SOUTH ST(398) 2280 0.99601 4.93332 174.51171 81.66071 0  DELK ST(399) 2400 0 14.66735 174.66047 75.53895 0  HALL ST(400) 2040 0 13.60209 444.84967 75.35391 0  GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0  HUNTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128  S TEAL CIR(403) 2280 0 1.93736 0 18.64023 0  COUNTRY CLUB RD(404) 2760 0 1.60272 14.86949 143.59218 2.56924  PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0  RAILROAD AVE(407) 2040 0 0 45.91448 25.41752 0  MAPLEWOOD AVE(408) 2760 0.94204 4.67889 75.92519 205.41261 0  SOUTH ST(409) 3960 0 0 41.96327 153.44094 0  NORTH DR(410) 3480 0.99604 5.47555 72.36682 96.81716 0  BANKS ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769  SOUTH ST(412) 2400 0 3.73464 107.27058 96.92818 0  ARMORY DR(413) 5040 0 0 3.44133 115.33579 2.82299	CAMPBELL AVE(395)	6720	0	28.05573	440.08635	206.11047	0	0
SOUTH ST(398)         2280         0.99601         4.93332         174.51171         81.66071         0           DELK ST(399)         2400         0         14.66735         174.66047         75.53895         0           HALL ST(400)         2040         0         13.60209         444.84967         75.35391         0           GROVE ST(401)         4200         0         5.37589         153.67573         118.35966         0           HUNTERDALE RD(402)         18120         0.67341         11.12268         8.47112         234.92193         5.65128           S TEAL CIR(403)         2280         0         1.93736         0         18.64023         0           COUNTRY CLUB RD(404)         2760         0         1.60272         14.86949         143.59218         2.56924           PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0         45.91448         25.41752         0           MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327 </td <td>ROOSEVELT ST(396)</td> <td>2760</td> <td>0</td> <td>1.17445</td> <td>77.7353</td> <td>48.91077</td> <td>0</td> <td>0</td>	ROOSEVELT ST(396)	2760	0	1.17445	77.7353	48.91077	0	0
DELK ST(399)         2400         0         14.66735         174.66047         75.53895         0           HALL ST(400)         2040         0         13.60209         444.84967         75.35391         0           GROVE ST(401)         4200         0         5.37589         153.67573         118.35966         0           HUNTERDALE RD(402)         18120         0.67341         11.12268         8.47112         234.92193         5.65128           S TEAL CIR(403)         2280         0         1.93736         0         18.64023         0           COUNTRY CLUB RD(404)         2760         0         1.60272         14.86949         143.59218         2.56924           PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0         45.91448         25.41752         0           MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682 </td <td>HOSPITAL DR(397)</td> <td>8520</td> <td>0.92729</td> <td>21.88729</td> <td>971.02017</td> <td>247.56196</td> <td>2.59039</td> <td>0</td>	HOSPITAL DR(397)	8520	0.92729	21.88729	971.02017	247.56196	2.59039	0
HALL ST(400) 2040 0 13.60209 444.84967 75.35391 0 GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0 HUNTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128  S TEAL CIR(403) 2280 0 1.93736 0 18.64023 0 COUNTRY CLUB RD(404) 2760 0 1.60272 14.86949 143.59218 2.56924  PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0  RAILROAD AVE(407) 2040 0 0 45.91448 25.41752 0  MAPLEWOOD AVE(408) 2760 0.94204 4.67889 75.92519 205.41261 0  SOUTH ST(409) 3960 0 0 41.96327 153.44094 0  NORTH DR(410) 3480 0.99604 5.47555 72.36682 96.81716 0  BANKS ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769  SOUTH ST(412) 2400 0 3.73464 107.27058 96.92818 0  ARMORY DR(413) 5040 0 0 3.44133 115.33579 2.82299	SOUTH ST(398)	2280	0.99601	4.93332	174.51171	81.66071	0	0
GROVE ST(401) 4200 0 5.37589 153.67573 118.35966 0 HUNTERDALE RD(402) 18120 0.67341 11.12268 8.47112 234.92193 5.65128  S TEAL CIR(403) 2280 0 1.93736 0 18.64023 0 COUNTRY CLUB RD(404) 2760 0 1.60272 14.86949 143.59218 2.56924  PINE ST(405) 5280 0 24.56687 1280.84759 161.79361 0  RAILROAD AVE(407) 2040 0 0 45.91448 25.41752 0  MAPLEWOOD AVE(408) 2760 0.94204 4.67889 75.92519 205.41261 0  SOUTH ST(409) 3960 0 0 41.96327 153.44094 0  NORTH DR(410) 3480 0.99604 5.47555 72.36682 96.81716 0  BANKS ST(411) 6960 0.9909 47.147 1661.22021 475.38941 0.78769  SOUTH ST(412) 2400 0 3.73464 107.27058 96.92818 0  ARMORY DR(413) 5040 0 0 3.44133 115.33579 2.82299	DELK ST(399)	2400	0	14.66735	174.66047	75.53895	0	0
HUNTERDALE RD(402)         18120         0.67341         11.12268         8.47112         234.92193         5.65128           S TEAL CIR(403)         2280         0         1.93736         0         18.64023         0           COUNTRY CLUB RD(404)         2760         0         1.60272         14.86949         143.59218         2.56924           PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0         45.91448         25.41752         0           MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682         96.81716         0           BANKS ST(411)         6960         0.9909         47.147         1661.22021         475.38941         0.78769           SOUTH ST(412)         2400         0         3.73464         107.27058         96.92818         0           ARMORY DR(413)         5040         0         0         3.441	HALL ST(400)	2040	0	13.60209	444.84967	75.35391	0	0
S TEAL CIR(403)         2280         0         1.93736         0         18.64023         0           COUNTRY CLUB RD(404)         2760         0         1.60272         14.86949         143.59218         2.56924           PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0         45.91448         25.41752         0           MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682         96.81716         0           BANKS ST(411)         6960         0.9909         47.147         1661.22021         475.38941         0.78769           SOUTH ST(412)         2400         0         3.73464         107.27058         96.92818         0           ARMORY DR(413)         5040         0         0         3.44133         115.33579         2.82299	GROVE ST(401)	4200	0	5.37589	153.67573	118.35966	0	0
COUNTRY CLUB RD(404)         2760         0         1.60272         14.86949         143.59218         2.56924           PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0         45.91448         25.41752         0           MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682         96.81716         0           BANKS ST(411)         6960         0.9909         47.147         1661.22021         475.38941         0.78769           SOUTH ST(412)         2400         0         3.73464         107.27058         96.92818         0           ARMORY DR(413)         5040         0         0         3.44133         115.33579         2.82299	HUNTERDALE RD(402)	18120	0.67341	11.12268	8.47112	234.92193	5.65128	0
RD(404)         2760         0         1.60272         14.86949         143.59218         2.56924           PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0         45.91448         25.41752         0           MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682         96.81716         0           BANKS ST(411)         6960         0.9909         47.147         1661.22021         475.38941         0.78769           SOUTH ST(412)         2400         0         3.73464         107.27058         96.92818         0           ARMORY DR(413)         5040         0         0         3.44133         115.33579         2.82299		2280	0	1.93736	0	18.64023	0	0
PINE ST(405)         5280         0         24.56687         1280.84759         161.79361         0           RAILROAD AVE(407)         2040         0         0         45.91448         25.41752         0           MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682         96.81716         0           BANKS ST(411)         6960         0.9909         47.147         1661.22021         475.38941         0.78769           SOUTH ST(412)         2400         0         3.73464         107.27058         96.92818         0           ARMORY DR(413)         5040         0         0         3.44133         115.33579         2.82299		2760	0	1.60272	14.86949	143.59218	2.56924	0
MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682         96.81716         0           BANKS ST(411)         6960         0.9909         47.147         1661.22021         475.38941         0.78769           SOUTH ST(412)         2400         0         3.73464         107.27058         96.92818         0           ARMORY DR(413)         5040         0         0         3.44133         115.33579         2.82299		5280	0	24.56687	1280.84759		0	0
MAPLEWOOD AVE(408)         2760         0.94204         4.67889         75.92519         205.41261         0           SOUTH ST(409)         3960         0         0         41.96327         153.44094         0           NORTH DR(410)         3480         0.99604         5.47555         72.36682         96.81716         0           BANKS ST(411)         6960         0.9909         47.147         1661.22021         475.38941         0.78769           SOUTH ST(412)         2400         0         3.73464         107.27058         96.92818         0           ARMORY DR(413)         5040         0         0         3.44133         115.33579         2.82299	RAILROAD AVE(407)	2040	0	0	45.91448	25.41752	0	0
NORTH DR(410)     3480     0.99604     5.47555     72.36682     96.81716     0       BANKS ST(411)     6960     0.9909     47.147     1661.22021     475.38941     0.78769       SOUTH ST(412)     2400     0     3.73464     107.27058     96.92818     0       ARMORY DR(413)     5040     0     0     3.44133     115.33579     2.82299	MAPLEWOOD	2760	0.94204	4.67889	75.92519	205.41261	0	0
BANKS ST(411)     6960     0.9909     47.147     1661.22021     475.38941     0.78769       SOUTH ST(412)     2400     0     3.73464     107.27058     96.92818     0       ARMORY DR(413)     5040     0     0     3.44133     115.33579     2.82299	SOUTH ST(409)	3960	0	0	41.96327	153.44094	0	0
SOUTH ST(412)     2400     0     3.73464     107.27058     96.92818     0       ARMORY DR(413)     5040     0     0     3.44133     115.33579     2.82299	NORTH DR(410)	3480	0.99604	5.47555	72.36682	96.81716	0	0
ARMORY DR(413) 5040 0 0 3.44133 115.33579 2.82299	BANKS ST(411)	6960	0.9909	47.147	1661.22021	475.38941	0.78769	0
` '	SOUTH ST(412)	2400	0	3.73464	107.27058	96.92818	0	0
COMMERCE PARK	. ,	5040	0	0	3.44133	115.33579	2.82299	0
RD(414)   17640   0.83084   20.71906   2633.99405   165.7056   0		17640	0.83084	20.71906	2633.99405	165 7056	n	0
TRAIL RD(415) 3240 0 3.45818 53.19836 71.41546 0								0
KINGS LN(417) 1080 0 1.88878 0 19.8297 0	,							0
COUNTRY CLUB RD(443) 3240 0.78873 0 17.71612 145.36317 0	COUNTRY CLUB							0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
VERNA ST(444)	2400	0	1.51653	29.61731	73.07013	0	0
COOL SPRING ST(445)	1920	0	13.91574	138.76984	110.35592	0	0
SOUTH ST(446)	4680	0	0	45.64734	25.63428	0	0
LAUREL ST(447)	7200	1.65771	42.54973	785.19227	334.69423	0	0
HUNTERDALE RD(448)	3480	0	0	4.68085	59.73226	0	0
ARTIS ST(449)	9480	0	1.80645	49.2027	109.24571	0	0
HUNTERDALE RD(450)	5760	0	8.78948	44.73651	60.48297	0	2.7437
N HIGH ST(451)	1680	0	1.93319	15.37817	19.16889	2.7437	0
HARRISON ST(452)	3720	0	6.32643	37.43011	201.15696	0	0
FAIRVIEW DR(453)	16560	0	4.13585	46.14734	310.37625	6.41254	0
VIRGINIA ST(454)	3240	0	1.26182	45.64514	112.8194	1.9983	0
MAGNOLIA ST(455)	2640	0	2.71937	64.0666	80.20691	2.7437	0
HOSPITAL DR(456)	3120	0	0	58.62857	30.14368	0.74011	0
WASHINGTON ST(457)	4560	1.5103	21.1044	186.26284	269.86577	0	2.7437
CYPRESS AVE(458)	3360	0	0	6.6464	54.1867	0	0
KINGS LN(459)	600	0	1.08826	2.45153	37.39148	0	0
VAUGHANS LN(460)	3480	0	11.17268	70.8183	138.07835	0	0
CAMPBELL AVE(461)	23640	2.4506	130.31633	3089.93333	775.55743	0	0
ROSEWOOD AVE(462)	2400	0.99632	0	25.83561	49.23327	4.75258	0
KIMBERLY DR(463)	3480	0	3.70921	0	25.57085	0	0
E 2ND AVE(464)	4440	0	0	34.21806	172.62042	0.76654	0
N MECHANIC ST(465)	2160	0	0	10.99601	21.57423	2.19919	0
QUAIL ROOST RD(466)	1440	0	0	0	2.70669	0	0
VINE ST(467)	1920	0	0	20.17468	39.29992	0	0
ROSEWOOD AVE(468)	2640	0.98849	9.53316	389.86877	26.94006	0	0
LEE ST(469)	1800	0	1.94222	26.63724	55.08544	0	0
EAST ST(470)	2520	0	0	38.76908	32.44861	0	0
SOUTH ST(471)	6120	0	1.76171	12.91842	98.73085	0	0
MARINER ST(472)	960	0	0	26.16228	20.21032	0	0
CLAY ST(473)	2040	0	0	41.51642	61.80988	5.25479	0
VERNA ST(474)	10560	0.92723	29.87336	206.81913	289.61614	0	0
OAK ST(475)	21000	3.33435	124.23311	2796.51907	926.17532	1.32163	0
W BARRETT ST(476)	1320	0.74049	6.03265	74.86763	8.60114	0	0
WOODLAND CIR(477)	2280	0	1.88467	25.12253	82.08363	0	0
MARINER ST(478)	2520	0	2.83239	7.04277	73.62522	0	0
EDWARDS ST(479)	3840	0	8.11854	85.6083	151.06734	0	0
N MECHANIC ST(480)	2400	0	0	0	45.07276	4.20807	0
HUMMINGBIRD LN(481)	1200	0	0	0	5.85745	0	0
S COLLEGE DR(482)	2640	0	0	0	7.94562	0	0
CHARLES ST(483)	2160	0	0	8.13598	34.66365	0	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
ELM ST(484)	2640	0	1.92064	18.05357	45.58559	2.7437	0
N FRANKLIN ST(485)	1440	0	0	31.11455	49.95753	0	0
STONEWALL ST(486)	2640	0	3.74755	26.01123	60.75256	0	0
VILLAGE DR(487)	240	0	0	0	5.41339	0	0
MORTON ST(488)	9480	0	42.06666	547.17078	117.83625	0	0
HOGART ST(489)	2760	0	17.58132	292.68808	98.51937	0	0
THOMAS ST(490)	5040	0.8909	15.10974	247.56888	141.55159	0	0
BANKS ST(491)	2760	1.512	18.19998	680.69218	72.16614	0.65553	0
S MAIN ST(492)	4560	0	0	0	19.53364	0	0
N TEAL CIR(493)	2880	0	3.14417	0	52.63779	0	0
BOBWHITE LN(494)	10080	0	0	22.45967	109.35675	5.8046	0
CHARLES ST(495)	4440	0	0	0	128.47804	0	0
N MAIN ST(496)	2760	0	1.90354	31.74479	92.66724	0	0
CLAY ST(497)	5280	0	0	13.91921	56.53922	0	0
E 4TH AVE(498)	2040	0	0	0	7.16322	0	0
CHARLES ST(499)	2640	0	0	7.21146	63.81874	0	0
HOMESTEAD RD(500)	3720	0	12.26569	195.14299	86.60888	0	0
W BARRETT ST(501)	2280	0	0	4.73627	55.96299	0	0
FOREST PINE RD(502)	11400	0	18.71349	169.68211	318.97736	4.54111	0
HOGART ST(503)	2880	0	14.64383	145.98638	75.78212	0	0
W 1ST AVE(504)	1560	0	1.0564	80.71404	76.19974	0	0
BEAMON ST(505)	1680	0	4.48765	131.90795	58.75956	0	0
BRITT ST(506)	2640	0	3.19134	47.96379	48.73634	0	0
DELK ST(507)	2160	0	14.73403	158.77191	47.50459	0	0
N HIGH ST(508)	33600	2.45519	32.08079	1398.27081	441.04818	12.15898	2.7437
BIRCH ST(509)	2280	0	1.03293	63.83302	91.80555	0	2.7437
CHARLES ST(510)	4080	0	5.86609	11.45438	85.16568	1.36392	0
REBECCA ST(511)	7200	0	7.61779	39.97753	225.64939	2.50581	0
MAPLEWOOD AVE(512)	1200	0	7.32493	322.98359	19.03671	0	0
ROSEWOOD AVE(513)	2400	0	3.64051	56.21564	132.19444	1.54895	0
WYNDHAM XING(514)	2400	0	0	0	98.21278	0	0
SUNSET DR(515)	6960	0	0	10.57385	105.21212	0	0
FONTAINE ST(517)	4800	0.83154	6.84792	296.82082	102.49484	0	0
LAKE CRES(518)	2160	0.87195	3.00899	34.95953	65.57916	0	0
WASHINGTON ST(519)	2760	0.79255	5.69609	70.28679	117.91559	0	0
CHESTNUT ST(520)	2520	0	25.80205	414.55691	162.62894	0	0
DALE CIR(521)	3000	0	4.63803	27.49696	92.29718	0	0
WILSON ST(522)	5280	0	1.82789	107.91299	105.85179	2.31549	0
LEE ST(523)	1320	0	0	0	29.92692	0	0
E 2ND AVE(524)	2160	0	0	13.00036	62.09005	0	5.4874

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
BRACY ST(525)	4560	1.60512	7.61041	170.65184	179.53517	0	0
N FRANKLIN ST(526)	3480	1.94426	7.15163	79.44849	142.99482	0	0
REDWOOD AVE(527)	2640	0	6.74632	30.98538	104.20767	2.33135	0
BROAD ST(528)	10560	0	1.47829	56.97548	405.60217	13.55991	1.0203
CYPRESS AVE(529)	3720	0	0	2.46095	41.43037	0	0
PRETLOW ST(530)	8880	0.86614	36.59997	463.85678	135.51967	0	0
COBB ST(531)	5760	1.71965	13.65807	177.60713	197.12867	0	0
BOWERS RD(532)	5280	0	1.81223	138.00181	42.58811	0	0
STONEWALL ST(533)	2760	0	1.71562	34.02369	140.27225	0	0
BRACY ST(534)	3720	0	1.63488	91.81182	85.85291	0	0
E 3RD AVE(535)	2520	0	0	9.48466	59.71642	0	0
ROBIN HOOD RD(536)	6960	0	0	24.99177	60.92702	0	0
QUAIL ROOST RD(537)	3720	0.99439	3.42529	38.6701	53.01841	0	0
VILLAGE DR(538)	1680	0	1.55428	6.38202	12.18012	0	0
SOUTH ST(539)	3240	0	7.20724	43.69829	90.21431	0	0
WIGGINS CT(540)	2880	0	2.78415	2.38512	25.11092	0	0
YEIDEE ST(541)	2040	0	5.34415	7.13892	58.84415	0	0
LANGSTON COURT(542)	4440	0	0	19.88253	61.6777	4.81601	0
MCCUTCHEON	1110			13.00233	01.0777		Ü
ST(543)	2640	0	5.20665	75.0854	49.62449	0	0
KINGS LN(544)	2400	0	0	3.78246	49.53461	0	0
S MAIN ST(545)	960	0	0	23.51467	20.00414	0	0
ROSEWOOD AVE(546)	2160	0	7.07508	378.87024	14.60133	0	0
ANDREW AVE(547)	3360	0	5.34677	59.01518	123.45057	0	0
BRACY ST(548)	5520	0	26.21926	372.62744	322.1546	2.39479	0
S HIGH ST(549)	9480	1.60718	70.76854	1269.58731	311.40187	0	0
W BARRETT ST(550)	3480	0	4.59581	23.27357	25.63428	0	0
WALNUT ST(551)	2640	0	8.71007	35.45942	84.51015	0	0
MIDDLE ST(552)	2760	0	18.42259	108.8467	121.50514	0	0
BOLLING ST(553)	3120	0	10.22939	101.69175	110.62551	0	0
S COLLEGE DR(554)	2880	0	0	11.02796	16.18199	0	0
N MECHANIC ST(555)	3480	0.96351	29.52316	739.8255	74.32834	0	0
SYCAMORE RD(556)	11280	0.82358	1.81838	27.30999	158.28869	3.49967	0
US HWY 58(557)	10680	0	1.91941	72.62593	230.52357	0	0
US HWY 58(558)	5040	0	1.89873	62.46582	43.8833	0	0
US HWY 58(559) COUNTRY CLUB	89160	0	30.24712	1438.35913	1345.5965	0.69253	0
RD(560)	2520	0	3.19917	213.60688	84.24578	3.17719	0
US HWY 58(561)	34800	0.8895	16.87965	988.98559	366.94187	6.47069	0
ARMORY DR(562)	9000	0	22.00967	360.79029	317.45493	0	0
US HWY 58(563)	25440	0	6.80257	516.49701	312.49616	0.98858	0

Section	Area	Alligator(L)	Alligator(M)	Alligator(H)	Longitudinal/Transverse(L)	Long/Tran(M)	Long/Tran(H)
SOUTH ST(564)	6600	0	0	42.48409	127.94941	0	0
US HWY 58(565)	7560	0	1.08888	112.97217	87.17454	0	0
QUEENS LN(566)	4920	0	0	10.26933	155.19077	0	0
US HWY 58(567)	2760	0	0	25.84492	34.92266	0.80355	1.43264
US HWY 58(568)	39240	0	8.59466	537.89671	691.2852	5.39224	0
US HWY 58(569)	11400	0.78297	16.75568	450.93369	313.25215	0	0
DELAWARE RD(570)	6600	0	1.96033	6.58508	210.37666	0	0



February 19, 2020

To: Franklin City Council

From: Amanda C. Jarratt, City Manager

Reference: Courthouse Update

### **Background**

## Southampton County Courthouse

As previously shared Glave and Holmes was the selected architectural firm for the Southampton County Courthouse project. Per the RFP that was issued, while the City of Franklin is not a party to the contract we are in the approval process and should take formal action on the contract. This is scheduled to be on the Southampton County Board of Supervisors agenda on Tuesday February 25, 2020.

Secondly, a letter was drafted to Judge Eason on behalf of City Council the week of February 18<sup>th</sup>. We will have an update at the meeting on February 24<sup>th</sup>.

### City of Franklin Courthouse

We are monitoring the situation with the Southampton County Courthouse and taking action as appropriate as we learn more information.

#### **Needed Action**

Take action on the contract with Glave and Holmes to begin the Phase 1 design work for the Southampton County Courthouse.



19 February 2020 (Rev 01)

Mr. Michael W. Johnson County Administrator Southampton County P.O. Box 400 Courtland, Virginia 23837

Southampton County Repair and Renovation of Courthouse Facilities RFP #2019-0901 G&HA Proposal No.: 19081

Re: Proposal for Architectural/Engineering Services: Building Assessment, Program Verification & Concept Design Phases

Dear Mike,

We are honored to be given the opportunity to work with Southampton County and the City of Franklin on the renovation of the existing courts facilities in Courtland, Virginia. We look forward to collaborating with the County and the City to craft an optimal approach for enhancing and augmenting the existing courthouse, while being good stewards of the public's resources.

Based on information delineated in the County's RFP (RFP #2019-0901, issued September 3, 2019, hereafter known as the RFP Document), our written response to that RFP Document, and subsequent communications with the County and City representatives, Glavé & Holmes Architecture (G&HA) is pleased to present this proposal letter to Southampton County, Virginia (Owner) for the architectural and engineering services related to Repair and Renovation of Courthouse Facilities (the Project).

### PROJECT DESCRIPTION

We understand the overall Project to consist of the design and construction administration of renovations and repairs to the existing Courthouse Facilities for Southampton County, Virginia, located in Courtland, Virginia. The proposal addressed the initial phases of the Project. The Project includes the facilities for the Southampton County General District Court and associated Clerk, the facilities for the Juvenile and Domestic Relations (J&DR) Court and associated Clerk, and the Commonwealth Attorney's Office. The Project also includes the Circuit Court and associated Clerk, which is shared with the City of Franklin. The Project does not include the adjacent jail or Sherriff's

Southampton County Courthouse Project No. 19081 19 February 2020 (Rev01) Page 2 of 6

office, except for coordination with the relevant flow of personnel between these facilities and the courthouse facilities in this Project.

Although the agreement for this Project will be between G&HA and the Owner, it is understood that an agreement exists between the Owner and the City of Franklin for shared use of the courthouse facilities, i.e. the Circuit Court. The Owner will form a committee, made of representatives of both the Owner and the City of Franklin, to review the work products of G&HA and to attend certain stakeholder meetings. G&HA will copy significant Project communications with the Owner to the City of Franklin.

A budget for the construction of the Project has not been established.

For this Project, we propose to subcontract with the following consultants:

- Silling Architects Associate Architect and Courts Design
- Draper Aden Associates Civil Engineering and Surveying
- Lynch Mykins Structural Engineers Structural Engineering
- 2RW Mechanical, Electrical, Plumbing & Fire Protection Engineering (MEP & FP)
- France Environmental Hazardous Materials Consulting
- Downey & Scott Cost Consulting

We are confident that we have assembled an excellent team for the Project.

### 2. PROJECT SCOPE OF SERVICES AND DELIVERABLES

For this proposal, it is our intent to provide the services described in the RFP Document, under Section 2a – *Scope of Services, Preparation of the Architectural Program*, plus the necessary Building Assessment services to develop Concept Designs.

For the first phases of this Project, we have divided the services into phases and tasks as follows:

- A. Site, Building & Courts Operations Assessment: In order to develop appropriate building repair, renovation and addition concepts, we will conduct a physical building assessment and on-site observations of courts operations, including the following task:
  - a. Project Kick-off meeting: We will meet with Project stakeholders to review the requirements for the Project and to provide stakeholders with an opportunity to identify any building deficiencies that would be relevant to the Project. (This meeting is also envisaged as the kick-off for the Program Verification and Concept Design Phase.)
  - b. Data collection: We will review all available existing documents for the Project facilities.
  - c. Surveying: We will conduct a topographic survey to define site topography and all above-ground improvements to the site.
  - d. Sub-surface Utility Engineering (SUE) Survey: We will conduct a sub-surface utility survey on the site to locate all detectable sub-surface utilities.

Southampton County Courthouse Project No. 19081 19 February 2020 (Rev01) Page 3 of 6

- e. On-site Physical Assessment: Representatives of architectural, civil, structural and MEP & FP disciplines will conduct field surveys of the existing conditions of the existing buildings and the site. We will document findings from the assessment to inform later phases of the services.
- f. Hazardous Materials Survey: Through our Environmental Consultant, we will conduct hazardous materials surveys for asbestos-containing materials and lead paint. The results from these surveys will determine future courses of action for abatement, containment or other strategies.
- g. Building Laser Scan: To assist with the creation of an accurate 3D as-built model of the existing conditions using Building Information Modeling (BIM) technology, we will conduct on-site laser scanning of the interior and exterior of the existing buildings.
- h. As-Built BIM Model: From the laser scan "point cloud," we will create a 3D model of the existing facilities which will serve as a platform for exploring design options for the renovation, modification and expansion of the courthouse facilities. We will conduct limited, on-site spot checks of the laser scan data to verify model accuracy.
- i. On-Site Court Operations Assessment: Coordinating with the schedule of court proceedings, we will observe the general overall court operations and culture to become generally familiar with the Southampton County Courthouse operations, including:
  - i. Overall staffing by court and office
  - ii. Type, frequency and nature of court proceedings;
  - iii. Case filing history and trends;
  - iv. Court technology;
  - v. Records management and retention;
  - vi. Security management including public security screening, in-custody defendant management, secure parking, video surveillance and access control protocol;
  - vii. Jury management and grand jury management
  - viii. Victim witness management
- j. Deliverables: For this phase of the services, we intend to provide the following:
  - i. Written report of building assessment findings (all disciplines), indicating deficiencies noted and recommendations for repairs to be incorporated into the Project.
  - ii. Topographic site survey and sub-surface utility survey, consolidated into an existing site conditions map.
  - iii. As-Built drawings of the existing facilities to serve as base drawings for the following phases of services.

Southampton County Courthouse Project No. 19081 19 February 2020 (Rev01) Page 4 of 6

- k. Meetings: We have included up to one (1) on-site meeting with the Owner, in addition to on-site field survey visits.
- B. Program Verification & Concept Design: The baseline program for the Project is assumed to be the existing document prepared by PMA Architecture entitled Evaluation of Courthouse Needs for Southampton County, dated February 23, 2016. We will base our program verification on this document and proceed with the following tasks:
  - a. We will meet with the Owner and Project stakeholders to review the program and adjust the program as required, based on stakeholder input.
  - b. From the verified and approved program, we will create up to three (3) concepts for deploying the courts program into the existing building and new additions on the site, if required. One of the concepts will limit the program to the existing buildings, with consideration of meeting the Virginia Guidelines for Courts Facilities. If additional space is required, then we will consider both the feasibility of adding new space via new construction and the incorporation of nearby buildings owned by Southampton County into the program.
  - c. The concepts will illustrate the size, nomenclature and adjacencies of programmatic functions, as well as delineate the extent of renovations versus new construction. The concepts will include 3D massing studies to illustrate the impact of any new construction on the overall massing of the existing complex.
  - d. Based on the concepts, we will create conceptual elevations of any new additions to illustrate the proposed architectural character.
  - e. We will provide analysis of the implications of the concept options for building and site systems, including civil, structural, and MEP & FP.
  - f. We will meet with the Owner and stakeholders to present the concept options and assist the Owner to select a final concept that may be one of the concept options or a hybrid of two or more options.
  - g. We will refine the final concept and present the concept to the Owner and Project stakeholders.

#### h. Deliverables:

- a. Verified space program, consisting of a table of included spaces, the size of the spaces and the relationship of the programmed spaces to the Virginia Courthouse Facility Guidelines. We will also include a narrative description of any notable features of the spaces to inform the subsequent design phases.
- b. Conceptual Design documents consisting of conceptual site plan, floor plans, elevations and 3D massing studies.
- c. Preliminary Opinion of Probable Cost to establish the conceptual construction cost of the concept design.

Southampton County Courthouse Project No. 19081 19 February 2020 (Rev01) Page 5 of 6

- d. A schedule of the subsequent design phases and estimates of construction duration.
- i. Meetings: We have included three (3) meetings with the Owner in this phase of the services.

#### 3. SCHEDULE

Upon receipt of a Notice to Proceed (NTP), we expect to complete all portions of the services in this proposal within twelve (12) weeks. If we receive an NTP in the week of February 24, 2020, then we expect to complete the phases in this proposal during the week of May 18, 2020.

#### 4. QUALIFICATIONS & CLARIFICATIONS

- A. The scope of this Project is limited to the General District, Circuit and J&DR Courts, the associated Clerks and support functions, and the Commonwealth Attorney's office. The adjacent Sherriff's Office and Jail are not included, except to coordinate with the personnel circulation to and from the Courts facilities.
- B. All on-site work is assumed to occur within normal business hours and coordinated with the Courts' calendars. We assume that Southampton County will provide the necessary escorts and address security concerns to permit the design teams access to the facilities.
- C. Sub-surface features and utilities that do not have metallic components or are buried deeply (PVC, HDPE, clay, tanks, foundations, etc.) may not be detectable and may not be included in the SUE Survey data.
- D. All building and site assessment survey activities are limited to visual inspections of readily observable elements; no destructive testing or demolition is included. We assume that the Owner will provide ladders to access portions of the building that cannot be observed from floor level.
- E. Geotechnical Investigation services are not included in this proposal. If it is determined that expansion to the existing buildings or parking is required to meet the program, we may request geotechnical investigations, which may be provided as an Additional Service.
- F. Although we have included consideration of additional, County-owned structures to meet program area requirements, as opposed to new construction, we have not included building assessment or survey services of buildings outside of the Project boundaries. We will depend on the Owner providing building area data for additional structures.

#### 5. COST OF SERVICES

Glavé & Holmes Architecture, P.C. will provide the services indicated in this proposal for the following stipulated sum, plus normal and customary Reimbursable Expenses at cost x 1.15. Reimbursable

Southampton County Courthouse Project No. 19081 19 February 2020 (Rev01) Page 6 of 6

Expenses include printing, mileage for travel, long-distance telephone calls and similar project related expenses.

Site, Building & Operations Assessment	Service Fee
Site Assessment, Building Assessment & As-Built Drawings	\$57,800
Topographic & SUE Survey	\$16,100
Hazardous Materials Survey	\$4,850
Laser Scan	\$20,000
Sub-Total Professional Services Fee	\$98,750
Program Verification & Concept Design	Service Fee
Program Verification & Concept Design	\$49,200
Sub-Total Professional Services Fee	\$49,200
Phase	Service Fee
Site, Building & Operations Assessment	\$98,750
Program Verification & Concept Design	\$49,200
Total Professional Services Fee	\$147,950

Services not contained in this proposal, when authorized by the Owner, shall be compensated on an hourly basis using hourly rates contained in Hourly Billing Rates Schedule in effect at the date of this proposal or on the basis of a negotiated stipulated sum.

#### 6. TERMS AND CONDITIONS

We understand that the Owner intends to contract for the services described in this proposal using a standard AIA Form of Agreement. Upon receipt of your approval, we will draft a suitable agreement for your review and signature.

We are excited to be involved with the renovation and repairs to the Courts Facilities in Southampton County and we look forward to working with you. Should you have any questions, please do not hesitate to call us at (804) 649-9303.

Sincerely,

Andrew B. Moore, AIA

Principal

for Glavé & Holmes Architecture P.C.,

Encl: Exhibit A – Billing Rates

Cc: Ms. Amanda Jarrett, City Manager, City of Franklin



## EXHIBIT A

## HOURLY BILLING RATES SCHEDULE

# **EFFECTIVE JANUARY 2020**

Senior Principal	\$265
Principal	\$192
Senior Associate	\$182
Project Manager/Architect III	\$158
Project Manager/Architect II	\$129
Project Manager/Architect I	\$103
Architectural/Intern II	\$ 87
Architectural/Intern I	\$ 72
Clerical	\$ 87
Student Intern	\$ 53

Hourly billing rates are subject to annual adjustments.



February 20, 2020

To: Franklin City Council

From: Amanda C. Jarratt, City Manager

Reference: City Manager's Report

## **General Updates**

• As shared previously with City Council, due to changes at the Federal level, the City's exemption status for the work requirement in order to receive SNAP benefits will end on April 1, 2020, which may affect those clients receiving SNAP who are between the ages of 18-49. Information is being shared with the clients that are potentially impacted as well as various community organizations.

• City staff is closely monitoring the projected winter weather impacts.

#### **Community Events**

- Partners in Progress is scheduled for March 17, 2020 7:30 a.m. 9:00 a.m. at the Main Event. Please call 757-562-1958 to RSVP.
- Franklin Cruise In Kick Off Saturday April 25, 2020.
- High Street Methodist Church Community Day April 25, 2020
- The Franklin Experience has planned a Lumber Jack Festival scheduled for May 9, 2020.
- City of Franklin Independence Day Celebration July 1, 2020.
- National Night Out is scheduled for August 4, 2020 at Armory Field. If you are interested in participating or being a part of the planning committee please e-mail <a href="mailto:nno@franklinpolice.org">nno@franklinpolice.org</a>.