AGENDA
TUESDAY, JANUARY 21, 2020
6:00 P.M. (4TH FLOOR CONFERENCE ROOM 438)

WORK SESSION

A. Call to Order

B. Approval of Agenda

C. Approval of Minutes: December 2, 2019

D. Consent Agenda: February 4, 2020

   1. The petition of Michele Meinhart to rezone property to remove the proffered conditions on approximately 1.24 acres zoned C-1C, Low Intensity Commercial, District with conditions, located at 5681 Starkey Road, Cave Spring Magisterial District.

E. Election of Officers

F. 2020 Planning Commission Meeting Schedule

G. Discussion on Zoning Ordinance Amendments – Floodplain Ordinance

H. Discussion of Hollins Center Plan

I. Citizens’ Comments

J. Comments of Planning Commissioners and Planning Staff

K. Adjournment
Commissioners Present:
  Mr. Wayne Bower
  Mr. Troy Henderson
  Mr. Rick James
  Mr. Jim Woltz

Staff Present:
  Mr. Philip Thompson, Secretary
  Ms. Mary Beth Nash, Senior Assistant County Attorney
  Ms. Becky James
  Ms. Cecile Newcomb
  Ms. Alyssa Dunbar
  Mr. Will Crawford
  Mr. Isaac Henry
  Ms. Susan McCoy, Recording Secretary

EVENING SESSION
Mr. Henderson called the Public Hearing to order at 7:00 p.m. He gave the invocation and led the pledge of allegiance.

Approval of Agenda
Mr. Bower made a motion to approve the agenda, which passed 4-0.

Approval of Minutes
Mr. Woltz made a motion to approve the minutes of October 15, 2019 and November 4, 2019, which passed 4-0.

Consent Agenda
There were no consent agenda items.

Public Hearing Petitions
1. The petition of Bane International Company, LLC to obtain a Special Use Permit in a AG-3, Agricultural/Rural Preserve, District to operate a campground on approximately 48.06 acres, located at 2745 Loch Haven Lake Drive, Catawba Magisterial District. Ms. James presented the staff report including a PowerPoint presentation, including a brief overview of the petition. She reviewed current zoning, surrounding uses, and future land use designation. She reviewed applicable regulations and regulatory agencies for the proposed use. She discussed input received at the community meeting, including concerns regarding access, noise, trash, use of proposed parking area, business plan, and operation of campground. She reviewed the revised concept plan and suggested conditions.
Mr. James inquired about buffering. Ms. James discussed this issue. Mr. Woltz inquired about use and design standards. Ms. James discussed the suggested conditions. Mr. Henderson inquired about all-terrain vehicle (ATV) use on the property. Ms. James discussed this issue, noting she did not believe ATVs would be allowed on the property. Mr. Woltz inquired about regulations regarding primitive campgrounds. Ms. James stated only tents would be allowed. Mr. Woltz inquired about recreational vehicles (RV). Ms. James noted the applicant does not want RVs in the campground. Mr. James stated AG-3 district regulation do not separate between types of camping. He noted there are other uses which are more intensive and allowed by right, including commercial kennel and custom manufacturing. He stated he is surprised the campground requires a special use permit in this district. Mr. Woltz inquired about the process needed if applicant wants to change density in the future. Ms. James discussed this issue, noting if they wanted cottages on these sites it would be a density issue. She stated they would have to apply for a special use permit for that use and have approval from the health department.

Mr. Ben Crew, Balzer and Associates, Inc., introduced Mr. Gene Bane, Ms. Becky Bane, Mr. Ember Bane, and Mr. Blaine Elliott.

Mr. Blaine Elliott stated Bane International Company, LLC has owned the property for eighteen years. He stated they have events and a healthy membership, noting the property is an outdoor oasis. He noted they have made many improvements to the property, including a picnic shelter and a chalet for weddings. He stated there is a need for campgrounds in the area. He stated there are many outdoor activities in the area. He stated the concept is for primitive tent camping with each site having a fire ring and place to pitch a tent, noting they revised the concept plan. He stated it will be a phased development plan, starting small with five to ten sites and growing into no more than thirty-six sites. He stated they will develop sites as needed, noting they will keep the neighbors in mind. He stated they plan to add trees for more buffering. He stated they will carefully manage the facility, noting someone will be onsite twenty-four hours a day, seven days a week. He stated quiet hours will be 10:00 p.m. to 7:00 a.m. He stated they will conduct inspections of the campground with daily trash pickup, noting the dumpster will be bear proof and off-site. He stated it will be an oasis for outdoor enthusiasts.

Mr. Crew stated they are sensitive to the environment and the neighbors, noting they have worked with staff to create the framework for the conditions. He stated input was received at the community meeting which has made the project stronger. He reviewed the development of each suggested condition. He reviewed the revised concept plan which proposes thirty-six sites, noting originally they planned to construct forty sites. He stated the intent is not to be a big RV park. He stated the existing gate can only be used in certain circumstances. He discussed noise regulations. He stated no campsites will be within fifty feet of the property line. He discussed buffering, noting they want to fit into the fabric of the existing site. He stated they plan not to maximize density and stay within the
proposed three to four acres, noting they are using approximately one-half of what is allowed.

Mr. Woltz inquired about the campsites. Mr. Crew stated each campsite will have a fire ring and tent pad, noting there would be no water at each campsite. Mr. Henderson inquired about restroom facilities. Mr. Crew stated portable restrooms would be available in compliance with health department standards. He stated the portable restrooms will be screened from view. Mr. James inquired about the years the club has operated. Mr. Crew stated it has been operating at least since 1935. Mr. Woltz inquired about water availability. Mr. Crew discussed this issue, noting water is available within the club which serves the membership. Mr. Bower inquired about lighting. Mr. Crew discussed this issue, noting there would be no hardwired lighting. Mr. Bower inquired if parking at the current tennis court would be adequate. Mr. Crew discussed parking accommodations. He stated each campsite would have one space for parking. Mr. James inquired about the concept plan and development of tent pads. Mr. Crew stated they plan to maintain existing vegetation as much as possible, noting there may be minor grading for each tent pad. Mr. James inquired about evergreen screening. Mr. Crew discussed installing the evergreens, and grading the road for maximum screening potential from the evergreens. Mr. James inquired about development timeline. Mr. Crew discussed this issue, noting they will likely begin developing on the lakeside first. Mr. Henderson inquired if RVs and ATVs would be permitted in campground. Mr. Crew stated the club has rules and regulations, noting RVs are not allowed. He stated they are willing to add no ATV can be used by patrons in the campground. Mr. Henderson asked if ATVs are currently used on the property. Mr. Crew stated staff members currently use ATVs but no patrons will be allowed to use an ATV while on the property. Mr. James inquired about quiet hours. Mr. Thompson and Ms. Nash discussed the regulations within the County noise ordinance. Mr. Bower inquired if the neighbors had any issues regarding noise with the existing operation. Mr. Elliott stated none that he could recall. Mr. Woltz inquired about the number of events which are held at the club. Mr. Elliott stated he was unsure of exact number events.

Mr. Henderson opened the public hearing for public comment.

Colonel David Lofgren, 3024 Timberview Road, stated he is within direct sight and hearing of the property. He stated the club has not been a good or bad neighbor. He stated the proposed use would cause a reduction in property values. He stated the use is a major issue for the residents. He stated there are County recreational areas at both ends of Timberview Road. He stated Timberview Road is poorly maintained. He stated the County has received easements for trails from people who do not live there. He stated he has been at his current address since 1995. He stated they have lived with day use only at the club with no issue to their property values. He stated the club is separated by outcroppings and hilltops. He stated it will degrade the tranquil lifestyle. He asked if the new use would be a separate entity from the club. He inquired about phasing, stating the applicant says one thing and the application says another. He stated Explore Park already has three types of camping within the County. He stated the distance between the parking area
Mr. Lofgren submitted a signed petition and two photo exhibits to the Commissioners and staff. He stated Exhibit A shows the power line where vegetation has been cleared down to the ground so the existing forest buffer does not exist. He stated Exhibit B shows the proximity of the homes to the campsites. He stated the diagrams are from existing maps and surveys made in the past. He stated the amendment to the application talks about the evergreen buffering but it does not extend beyond the first two campsites. He stated you will be able to see the campground from his driveway and his neighbor’s driveway. He stated campers would use the rear exit to hike and bike on Timberview Road to get to the recreational area at the end of the road. He stated Loch Haven Lake is separate and only partly used, noting the club would be separate from the campground. He stated the Commissioners should look at the issues as if it was their homes.

Laura Spafford, 3218 Timberview Road, discussed a forest fire which occurred near her home in February, 2008. She stated a fire fighter came to their door to inform them they had to evacuate. She stated they were fortunate they did not lose their home or animals, noting the experience still shakes her to her core. She stated the risk of campfires in a campground is preventable. She discussed the risk, noting they live in the middle of the woods. She stated the party campers could flip cigarettes on a windy day and start fires. She stated the campers will not care. She stated the answer to the request should be no.

Jami Weidmann, 2980 Timberview Road, discussed the location of her home, noting her home borders the lake. She stated the applicant shows on the slides (12-18) that the club is part of the proposal. She stated the applicant told homeowners that campers would not be allowed to use club facilities and the campground would be a separate entity. She stated it worries the homeowners if the campers only have portable restrooms because they might come to their homes if they need personal items. She stated Mr. Crew alluded that the campers would be allowed to use the club facilities but they were directly told they would not be allowed to use those facilities. She stated she wants to know response time of the police and fire and rescue departments. She discussed her concern regarding trespassers. She stated a house previously burned to the ground because fire department could not get there fast enough. She stated being a fire hazard is a big issue.

Tim Phillips, 3010 Timberview Road, stated he is in the apex of the curve on Timberview Road next to Colonel Lofgren. He discussed the placement of the campground regarding road safety. He discussed his concerns regarding fire, noting he has lived in his residence twenty-five years. He stated there are no operating procedures for the proposed use. He stated nine houses will be detrimentally impacted. He stated he is not resistant to change or good development but using forty-eight acres is violating the spirit of the regulations. He stated the lights of the cars in the parking lots will shine over the ridge. He stated this use is his definition of bad development. He stated he is opposed to the petition.
With no other citizens requesting to speak, Mr. Henderson closed the public hearing.

Mr. Woltz inquired about acreage needed. Mr. Crew stated they will need a minimum of ten contiguous acres. He reviewed the location of the acreage. Mr. Woltz inquired about preferred access to the campground. Mr. Crew stated they will enter from Loch Haven Road like other members and stop at the office. He stated amenities and infrastructure are in place. He stated they would proceed up the drive to the campsite. He stated you cannot exit onto Timberview Road. Mr. Woltz inquired about the width of the campground road. Mr. Crew stated it would be a one-way loop approximately 12 feet wide. He discussed the flow of traffic on the road. Mr. Woltz inquired about topography and the internal roadway. Mr. Crew discussed this issue.

Mr. James inquired about availability of bath and restroom facilities for campers. Mr. Crew stated portable restrooms will be available within the campground. Mr. James inquired if campers would have access to the club. Mr. Crew stated not all places, noting they can use the lake and trails. Mr. James inquired about the use and emergency access from Timberview Road. Mr. Crew stated Loch Haven Road will be the access, noting it is straighter and striped. He stated the club is unique because it is between two public roads. He stated historically the access has been used only for residents of Timberview Road if there is snow or a tree has blocked the road. Mr. Woltz inquired about phasing. Mr. Crew stated it was a checkbox on the application, noting there was no intent to mislead the public. Mr. Bower inquired about fire concerns. Mr. Crew stated they talked with the Fire Marshal onsite to make sure they meet regulations. Mr. Bower inquired about the gate being locked at Timberview Road access and emergency access if needed. Mr. Elliott stated the Fire Marshal walked the grounds and told them the type of fire rings to use. He stated he discussed regulations and fire suppressant requirements. He stated a key will be available from the onsite employee. Mr. Crew stated most fire and rescue departments have master keys. He recommended a Knox-Box lock for fire and rescue access. Mr. Bower inquired about maintenance. Mr. Crew stated the fire inspector is allowed to come without notice for an inspection.

Mr. Woltz inquired if the club currently has any fire pits. Mr. Elliott stated they have had them for many years for picnics and outdoor activities. Mr. Woltz inquired about how many people would be on each campsite. Mr. Elliott stated approximately two to four people would be at each campsite. Mr. Henderson inquired about portable restroom screening. Mr. Crew stated he is unsure of requirements for screening, noting that they will be screened. Mr. Henderson inquired about the Health Department regulations for garbage disposal and refuse collection. Mr. Elliott reviewed the requirements. He stated they have a dumpster and bear proof containers. Mr. Bower inquired if they had met with VDOT. Mr. Elliott stated they have contacted VDOT. Mr. Henderson inquired about including in the conditions the campground would be limited to thirty-six primitive campsites. Mr. Thompson noted the ordinance does not define primitive. Mr. Woltz requested to include no ATV use allowed by campground patrons. Mr. Thompson and the Commission
discussed this issue. Mr. Woltz discussed power line right of way and size of buffer. Mr. Crew discussed buffering, noting they are providing two layers of buffering.

Mr. Woltz stated he understands the residents do not want the area to change. He noted the use compliments what currently exists at the site. Mr. Bower stated the use would compliment what is already there. He stated he has heard the opposition but they need to look at the facts. He stated the applicant has listened and responded. Mr. Woltz noted other uses allowed in the zoning district could be worse than the proposed use.

Mr. Henderson made a motion to recommend approval of the special use permit with the following conditions:

1. The campground shall be developed in substantial conformance with the concept plan entitled “Loch Haven Lake Campground” prepared by Balzer and Associates, Inc., dated October 8, 2019, and revised November 22, 2019, subject to any required changes during the site plan review process.

2. The maximum number of campsites shall be 36 campsites.

3. No recreational vehicles shall be operated by patrons within the campground including ATVs (all-terrain vehicles).

4. The existing gated access on Timberview Road shall remain closed to vehicular access except when needed for emergency response vehicles or to allow access to Loch Haven Road if Timberview Road is blocked or closed. Pedestrian and bicycle access shall be allowed via Timberview Road.

5. No generators shall be operated within the campground.

6. The existing 50-foot vegetated buffer shall remain along Timberview Road as shown on the concept plan entitled “Loch Haven Lake Campground” prepared by Balzer and Associates, Inc., dated October 8, 2019, and revised November 22, 2019.

7. Large evergreen trees shall be provided along the western side of the campground as shown on the concept plan entitled “Loch Haven Lake Campground” prepared by Balzer and Associates, Inc., dated October 8, 2019, and revised November 22, 2019. The evergreen trees shall be planted in a staggered pattern with a minimum spacing of 20 feet on center with a minimum height of 6 feet above grade when planted.

Mr. James stated he is conflicted, noting he has no problem with the use. He stated he is disappointed this use requires a special use permit. He stated the applicant has listened and made appropriate changes. He stated it complies with the Comprehensive Plan, noting he does not think it will have a detrimental impact on the property values. He stated it bothers him that fifty-nine signatures on the petition along with people who spoke are against the petition.
Mr. Thompson called the roll and the motion passed (3-1) with the following vote:

AYES: Bower, Henderson, Woltz
NAYES: James
ABSTAIN: None

Mr. Thompson stated the Board of Supervisors Public Hearing regarding this petition will be held on Tuesday, December 17, 2019, at 7:00 p.m.

Citizens’ Comments
A citizen stated the County should pay for property appraisals if the campground is approved. Mr. Henderson explained it was not within the purview of the Planning Commission to authorize that request.

Comments of Planning Commissioners and Planning Staff
Mr. Thompson and the Commissioners discussed the 2020 Planning Commission Meeting Schedule. The Commissioners unanimously approved the 2020 Planning Commission Meeting Schedule with changes as discussed.

Mr. Thompson and the Commissioners discussed upcoming meetings. The Commissioners unanimously voted to cancel both December 17, 2019 and January 7, 2020 Planning Commission Meetings.

Final Orders
1. The petition of David and Stace Todd to obtain a special use permit in a R-1, Low Density Residential, District to comply with the use and design standards associated with an accessory apartment in an accessory building on approximately 0.346 acre, located at 1047 Barrens Village Court, Hollins Magisterial District was approved by the Board of Supervisors at a Public Hearing on November 19, 2019.

2. The petition of Fellowship Community Church to rezone property to remove the proffered conditions and to obtain a special use permit for a religious assembly on approximately 3.50 acres zoned C-2C, High Intensity Commercial, District with conditions, located near the 6500 block of Merriman Road, Cave Spring Magisterial District was approved by the Board of Supervisors at a Public Hearing on November 19, 2019.

With no further business or comments, Mr. Henderson adjourned the meeting at 9:11 p.m.

Respectfully Submitted:

Susan McCoy
Recording Secretary, Roanoke County Planning Commission
Philip Thompson
Secretary, Roanoke County Planning Commission

Troy Henderson
Chairman, Roanoke County Planning Commission
County of Roanoke
Community Development
Planning & Zoning
5204 Bernard Drive
P.O. Box 29800
Roanoke, VA 24018
(540) 772-2068  FAX (540) 776-7155

For Staff Use Only

Date received: 12/12/19
Received by: UJ
Application fee: $1039.27
PC/BZA date: 2/4/2020
Placards issued: BOS date: 2/4/2020
Case Number 1-2/2020

ALL APPLICANTS

Check type of application filed (check all that apply)

- Rezoning
- Special Use
- Variance
- Waiver
- Administrative Appeal
- Comp Plan (15.2-2232) Review

Applicants name/address w/zip

Same as owner

Phone:
Work:
Cell #:
Fax No.:

Owner’s name/address w/zip

Michele Meinhardt
1486 Hollybrook Rd
Salem, VA 24153

Phone #: 540-819-5042
Work #: 540-857-9700
Fax No.: 540-857-9704

Magisterial District:
Cave Spring

Property Location
5681 Starkey Rd
Roanoke, VA 24018

Tax Map No.: 087-01801-40.00-000
Existing Zoning: C1C
Existing Land Use: Vacant

REZONING, SPECIAL USE PERMIT, WAIVER AND COMP PLAN (15.2-2232) REVIEW APPLICANTS (R/S/W/CP)

Proposed Zoning: C1
Proposed Land Use: Remove Proffers

Does the parcel meet the minimum lot area, width, and frontage requirements of the requested district? Yes [X] No [ ]

IF NO, A VARIANCE IS REQUIRED FIRST (Rezoning).

Does the parcel meet the minimum criteria for the requested Use Type in Article IV (Special Use Permit)? Yes [ ] No [X]

IF NO, A VARIANCE IS REQUIRED FIRST
If rezoning request, are conditions being proffered with this request? Yes [X] No [ ]

VARIANCE, WAIVER AND ADMINISTRATIVE APPEAL APPLICANTS (V/W/AA) [X]

Variance/Waiver of Section(s) [ ] of the Roanoke County Zoning Ordinance in order to

Appeal of Zoning Administrator’s decision to

Appeal of Interpretation of Section(s): [ ] of the Roanoke County Zoning Ordinance

Appeal of Interpretation of Zoning Map to

Is the application complete? Please check if enclosed. APPLICATION WILL NOT BE ACCEPTED IF ANY OF THESE ITEMS ARE MISSING OR INCOMPLETE.

R/S/W/CP V/W/AA

Consultation [X] Application [X]
Justification [X] Varies [X]

8 1/2" x 11" concept plan
Motes and bounds description
Water and sewer application
Application fee
Proffers, if applicable
Adjoining property owners

I hereby certify that I am either the owner of the property or the owner’s agent or contract purchaser and am acting with the knowledge and consent of the owner.

Michele Meinhardt
Owner’s Signature
michelemeinhart@yahoo.com
The variance shall not be contrary to the public interest and shall be in harmony with the intended spirit and purpose of the Zoning Ordinance.

A Club is within the intended purpose of this area. I am requesting the restrictions be removed from this property as I no longer want to use it exclusively for one purpose which was as a medical office only. I request it be used as intended.

2. The variance will not be of a substantial detriment to the adjacent properties or the character of the district.

True

3. Evidence supporting claim:

No structural changes will be made.
No construction will occur.
Cosmetic improvements will be made such as painting, landscaping, and plants.
No additional parking needed.
New sign for our front according to established regulations.
JUSTIFICATION FOR REZONING, SPECIAL USE PERMIT WAIVER OR COMP PLAN (15.2-2232) REVIEW REQUESTS

Applicant: Michele Meinhardt

The Planning Commission will study rezoning, special use permit waiver or community plan (15.2-2232) review requests to determine the need and justification for the change in terms of public health, safety, and general welfare. Please answer the following questions as thoroughly as possible. Use additional space if necessary.

Please explain how the request furthers the purposes of the Roanoke County Ordinance as well as the purpose found at the beginning of the applicable zoning district classification in the Zoning Ordinance.

1) Connects Roanoke County to the world by fostering relationships among our local immigrants and neighbors
2) Encourages knowledge of other cultures, which may lead to economic development and trust that Roanoke County is a good place to bring and raise a family
3) Promotes learning
4) Encourages inclusion, caring, and compassion
5) Promotes a clean and beautiful neighborhood

Please explain how the project conforms to the general guidelines and policies contained in the Roanoke County Community Plan.

It is consistent with the use intended for this area. Clubs promote learning and close neighbors
It maintains a scenic environment, provides for a better understanding of our cultural heritage

Please describe the impact(s) of the request on the property itself, the adjoining properties, and the surrounding area, as well as the impacts on public services and facilities, including water/sewer, roads, schools, parks/recreation and fire and rescue.

The club will allow neighbors and local citizens a gathering place for learning a new language in a quiet and relaxing environment. It will give them opportunity for fellowship and celebration of their culture.
JUSTIFICATION FOR ADMINISTRATIVE APPEAL REQUEST

Applicant: Michele Meinhardt

Please respond to the following as thoroughly as possible. If additional space is needed, use additional sheets of paper.

1. Reasons for appeal:

This property currently has very limited use as a medical office only. I am no longer planning to build a medical office on the site. I have an opportunity to develop a Not for Profit organization and would love to use this property which I own for that purpose. I further feel that once I am aged and leave my estate it will help the future owner to have a property free of such narrow use.

2. Evidence supporting claim:

Please see the current restrictions on record
CONCEPT PLAN CHECKLIST

A concept plan of the proposed project must be submitted with the application. The concept plan shall graphically depict the land use change, development or variance that is to be considered. Further, the plan shall address any potential land use or design issues arising from the request. In such cases involving rezonings, the applicant may proffer conditions to limit the future use and development of the property and by so doing, correct any deficiencies that may not be manageable by County permitting regulations.

The concept plan should not be confused with the site plan or plot plan that is required prior to the issuance of a building permit. Site plan and building permit procedures ensure compliance with State and County development regulations and may require changes to the initial concept plan. Unless limiting conditions are proffered and accepted in a rezoning or imposed on a special use permit or variance, the concept plan may be altered to the extent permitted by the zoning district and other regulations.

A concept plan is required with all rezoning, special use permit, waiver, community plan (15.2-2232) review and variance applications. The plan should be prepared by a professional site planner. The level of detail may vary, depending on the nature of the request. The County Planning Division staff may exempt some of the items or suggest the addition of extra items, but the following are considered minimum:

ALL APPLICANTS
   a. Applicant name and name of development
   b. Date, scale and north arrow
   c. Lot size in acres or square feet and dimensions
   d. Location, names of owners and Roanoke County tax map numbers of adjoining properties
   e. Physical features such as ground cover, natural watercourses, floodplain, etc.
   f. The zoning and land use of all adjacent properties
   g. All property lines and easements
   h. All buildings, existing and proposed, and dimensions, floor area and heights
   i. Location, widths and names of all existing or platted streets or other public ways within or adjacent to the development
   j. Dimensions and locations of all driveways, parking spaces and loading spaces

Additional information required for REZONING and SPECIAL USE PERMIT APPLICANTS

   k. Existing utilities (water, sewer, storm drains) and connections at the site
   l. Any driveways, entrances/exits, curb openings and crossovers
   m. Topography map in a suitable scale and contour intervals
   n. Approximate street grades and site distances at intersections
   o. Locations of all adjacent fire hydrants
   p. Any proffered conditions at the site and how they are addressed
   q. If project is to be phased, please show phase schedule

I certify that all items required in the checklist above are complete.

[Signature of applicant]

12/11/2019

Date
POTENTIAL OF NEED FOR TRAFFIC ANALYSIS AND/OR TRAFFIC IMPACT STUDY

The following is a list of potentially high traffic-generating land uses and road network situations that could elicit a more detailed analysis of the existing and proposed traffic pertinent to your rezoning, subdivision waiver, public street waiver, or special use permit request. If your request involves one of the items on the ensuing list, we recommend that you meet with a County planner, the County traffic engineer, and/or Virginia Department of Transportation staff to discuss the potential additional traffic related information that may need to be submitted with the application in order to expedite your application process.

(Note this list is not inclusive and the County staff and VDOT reserve the right to request a traffic study at any time, as deemed necessary.)

High Traffic-Generating Land Uses:

- Single-family residential subdivisions, Multi-family residential units, or Apartments with more than 75 dwelling units
- Restaurant (with or without drive-through windows)
- Gas station/Convenience store/Car wash
- Retail shop/Shopping center
- Offices (including: financial institutions, general, medical, etc.)
- Regional public facilities
- Educational/Recreational facilities
- Religious assemblies
- Hotel/Motel
- Golf course
- Hospital/Nursing home/Clinic
- Industrial site/Factory
- Day care center
- Bank
- Non-specific use requests

Road Network Situations:

- Development adjacent to/with access onto/within 500-ft of intersection of a roadway classified as an arterial road (e.g., Rte 11, 24, 115, 117, 460, 11/460, 220, 221, 419, etc)
- For new phases or changes to a development where a previously submitted traffic study is more than two (2) years old and/or roadway conditions have changed significantly
- When required to evaluate access issues
- Development with ingress/egress on roads planned or scheduled for expansion, widening, improvements, etc. (i.e. on Long Range Transportation Plan, Six-Yr Road Plan, etc.)
- Development in an area where there is a known existing traffic and/or safety problem
- Development would potentially negatively impact existing/planned traffic signal(s)
- Substantial departure from the Community Plan
- Any site that is expected to generate over one hundred (100) trips during the peak hour of the traffic generator or the peak hour on the adjacent streets, or over seven hundred fifty (750) trips in an average day

Effective date: April 19, 2005
NOTICE TO APPLICANTS FOR REZONING, SUBDIVISION WAIVER, PUBLIC STREET WAIVER, OR SPECIAL USE PERMIT PETITION

PLANNING COMMISSION APPLICATION ACCEPTANCE PROCEDURE

The Roanoke County Planning Commission reserves the right to continue a Rezoning, Subdivision Waiver, Public Street Waiver or Special Use Permit petition if new or additional information is presented at the public hearing. If it is the opinion of the majority of the Planning Commissioners present at the scheduled public hearing that sufficient time was not available for planning staff and/or an outside referral agency to adequately evaluate and provide written comments and suggestions on the new or additional information prior to the scheduled public hearing then the Planning Commission may vote to continue the petition. This continuance shall allow sufficient time for all necessary reviewing parties to evaluate the new or additional information and provide written comments and suggestions to be included in a written memorandum by planning staff to the Planning Commission. The Planning Commission shall consult with planning staff to determine if a continuance may be warranted.

POTENTIAL OF NEED FOR TRAFFIC ANALYSES AND/OR TRAFFIC IMPACT STUDY

The Roanoke County Planning Commission reserves the right to continue a Rezoning, Subdivision Waiver, Public Street Waiver, or Special Use Permit petition if the County Traffic Engineer or staff from the Virginia Department of Transportation requests further traffic analyses and/or a traffic impact study that would be beneficial in making a land use decision (Note: a list of potential land uses and situations that would necessitate further study is provided as part of this application package). This continuance shall allow sufficient time for all necessary reviewing parties to evaluate the required traffic analyses and/or traffic impact study and to provide written comments and/or suggestions to the planning staff and the Planning Commission. If a continuance is warranted, the applicant will be notified of the continuance and the newly scheduled public hearing date.

Effective date: April 19, 2005

Michele Meinhart
Name of Petition

Michele Meinhart
Petitioner's Signature

12/11/2019
Date
Pura Vida Language Club

Purpose: To foster language development skills through language classes, tutoring, and interactive events.

Mission: We acknowledge that all individuals and cultures have value in our world. We strive to foster understanding of language and culture of all people supporting that communication is the key ingredient to building a better understanding between cultures. Our goals are to enhance language development and support the virtues of every culture by providing opportunities for learning, personal development, and social engagement.

Goals: To offer classes in foreign language supportive of our current cultural mix in Roanoke county. These include primarily: Spanish, Korean, Vietnamese, Arabic, French, and American Sign Language.

To provide opportunities for celebrating meaningful cultural events such Quinceanera's, birthday parties, Cinco de Mayo, family reunions, Dia de los Mertos, Chinese New Year, or weddings. Celebrations could be in our Club house or Garage if more space is needed. Parking would be in designated spaces or on the grass of the 1 ½ acre yard if needed. Catering would be allowed.

To provide alternate learning opportunities including crafts and art projects with the teacher instructing in the foreign language while guiding the learner in the craft as well as the language. These classes may be held in the garage space or yard due to potential for spills and easy cleaning.

To extend learning opportunities to local schools including public and private day care, elementary, secondary, and colleges. These schools may participate either in the instructional mode or learning mode.

Volunteer and paid staff will be arranged to promote adequate staffing and support of the learning environment.

Club fees will include access to the club house, yard, and garage, with appropriate staffing providing for proper usage of the space.

This club is Not for Profit and will strive to attain Non-Profit 501C3 status
Major Holidays and Celebrations of Spanish-Speaking Countries

This list is designed to reflect the major holidays and celebrations of the Spanish-speaking countries. The celebrations of holidays are rich with meaning and diversity. Latin American countries which have been significantly influenced by Catholicism have many holidays to celebrate their patron saints and virgins to venerate Mary, the mother of Jesus.

JANUARY

Jan 1
Año Nuevo, New Year's Day.

Jan 6
Día de los Reyes Magos or Día de los Santos Reyes, Epiphany. In many Catholic countries, this is the time for Christmas fun. Traditionally the children receive gifts on this day rather than on Christmas. Since the Three Kings brought gifts, people exchange presents and children put out their shoes for the magi to leave the presents inside.

Jan 10

Jan 21
Feast of Nuestra Sra. de Altazgracia, Our Lady of Highest Grace, the patron virgin of the Dominican Republic.

Jan 26
Juan Pablo Duarte Day (Dominican Republic). Commemorates the hero of Dominican independence from Haiti.

Jan 28
Birth of José Martí (Cuba). A political activist, independence hero and poet who led the fight for Cuba's independence from Spain.

FEBRUARY

Feb 2
Treaty of Guadalupe Hidalgo (Mexico). This treaty, which marked the end of the Mexican War, established U.S. sovereignty over 1.193,061 square miles of formerly disputed or Mexican territory, including the present states of Texas, Arizona, California, and Utah, and parts of New Mexico, Colorado, and Wyoming.

Feb 5
Constitution Day (Día de la Constitución), Mexico.

Feb 24
Flag Day (Mexico).

Feb 27
Dominican Republic Independence Day and beginning of Dominican Carnival. The pre-Lenten celebration coincides with the anniversary of the Dominican Republic's Independence from Haiti.

MARCH

March 5
Carnaval, an official Mexican holiday that kicks off a five-day celebration of the libidino before the Catholic Lent. Beginning the weekend before Lent, Carnaval is celebrated exuberantly with parades, floats and dancing in the streets.

March 9
Baron Bliss Day (Belize). Honors the Englishman Sir Henry Edward Ernest Victor Bliss, who left his entire fortune to the city of Belize.

March 21
Birth of Benito Juárez (Mexico). One of the national heroes of Mexico, Juárez served his country as president during the turbulent period from 1855 until his death, and instituted a number of civil reforms. He led the military resistance to the French emperor's attempt to impose Maximilian of Austria as emperor of Mexico.

March 22
Emancipation Day (Puerto Rico). Slaves in Puerto Rico were freed on this date in 1873.

March 31
César Chávez holiday (California, Arizona and Texas). This holiday honors the Mexican-American labor and civil rights activist who gained attention in the 1960s as the leader of the United Farm Workers. His non-violent advocacy approach earned him worldwide respect. California, Arizona and Texas have made the day a state holiday; other states are considering doing so.

APRIL

La Semana Santa or Easter and the Holy Week: Observed in Spain, Mexico and all of Latin America. Easter is one of the highest holy days of the year. The week leading up to Easter involves solemn processions, prayer, masses and other preparation for Jesus' resurrection. Customs in the United States include Mexicans' cascarones, the Mexican version of an Easter egg or eggshells, filled with confetti. They are meant to be cracked on someone's head as a fun surprise.

April 11
Battle of Rivas Day (Costa Rica): Anniversary of victory over Confederates invaders in 1856. An army consisting mainly of farmers armed with machetes forced William Walker, an American who planned to enslave Central American countries, back into Nicaragua.

April 19
Landing of the 33 Patriots Day (Uruguay). Anniversary of the landing of thirty-three exiles in 1825, who began a campaign leading to Uruguay's independence.

MAY

May 1
Primera de Mayo or Día del Trabajo or Día del Trabajador, a national holiday celebrated in most Spanish-speaking countries, equivalent to the U.S. Labor Day.
May 5
Cinco de Mayo (México). Commemorates the victory of Mexican forces over the French army at the Battle of Puebla on May 5, 1862. It is primarily a regional holiday celebrated in the Mexican state capital city of Puebla, and in other parts of Mexico. It is also celebrated in U.S. cities with a significant Mexican population. It is not, as many people think, Mexico’s Independence Day, which is actually September 16.

May 10
Día de las Madres, or Day of the Mothers, observed on this date in Mexico and other Latin-American countries.

May 15
Independence Day for Paraguay.

May 18
Battle of Las Piedras (Paraguay). Anniversary of the end of the conflict between Uruguay and Brazil in 1828.

May 20
Cuba’s birth as an independent republic in 1802.

May 25
Independence Day for Argentina. It commemorates the establishment of an autonomous government resulting from the revolution on this day in 1810. Known in Argentina as Revolución de Mayo.

JUNE

June 19
Artigas Day (Uruguay). Celebrates the birthday of General José Gervasio Artigas, forefather of Uruguay.

June 24
Feast of San Juan Bautista, or St. John the Baptist, patron saint of Puerto Rico’s capital, San Juan. Other Latinos celebrate the day as el Día de San Pedro.

June 29
Saint Peter and St. Paul, known as San Pedro y San Pablo. Celebrated in Spain and many Latin-American countries.

JULY

July 5
Independence Day for Venezuela.

July 6-14
Las Sanfermines, or the San Fermín Festival or the Running of the Bulls in Pamplona, Spain.

July 9
Independence Day for Argentina.

July 19
Revolution Day (Nicaragua). Anniversary of the day the National Liberation army declared victory over the Somoza dictatorship.

July 20
Independence Day for Colombia.

July 24
Birth of Simón Bolívar (Colombia, Venezuela, Panama). Known as The Liberator, El Libertador, he led the rebellion against Spanish rule that established the independence of Venezuela, Colombia, Ecuador, Peru and Bolivia.

July 25
Constitution Day in Puerto Rico.
July 25
St. James or Santiago Apostol (Spain), celebrates the patron saint of Spain.

July 28
Revolution Day, Cuba.

July 28
Independence Day for Peru.

AUGUST

Aug 1-6
Feast of the Savior of the World or el Salvador del Mundo, patron saint of El Salvador. San Salvadorans celebrate with street fairs and a "bajada", a procession honing the saint.

Aug 6
Independence Day for Bolivia.

Aug 7
Battle of Boyacá (Colombia): A public holiday celebrating the anniversary of the defeat of the Spanish in 1819 in the province of Boyacá.

Aug 10
Independence Day for Ecuador.

Aug 15
Feast of the Assumption, celebrated by Catholics in Spanish-speaking countries. It celebrates the belief in Mary’s ascending to heaven.

Aug 17
San Martín Day. Anniversary of the death of General José Francisco de San Martín, liberator of Argentina.

Aug 25
Independence Day for Uruguay.

SEPTEMBER

Sept. 2
Independence Day for Belize. Belize was known as British Honduras prior to their independence from the United Kingdom on September 21, 1981.

Sept. 8
Feast of Nuestra Señora de la Caridad del Cobre, patron of Cuba.

Sept. 10
St. George’s Cay Day (Belize). The Battle of St. George’s Cay in 1798 was won by a handful of locals over a superior Spanish force.

Sep 15
Independence Day for Central American nations (El Salvador, Costa Rica, Guatemala, Honduras, and Nicaragua). Commemorates the declaration of independence from Spain in 1921.

Sep 16
Mexican Independence Day or 16 de septiembre, celebrates the day that Miguel Hidalgo delivered El Grito de Dolores, and announced the Mexican revolt against Spanish rule.

Sep 18
Independence Day for Chile. Also known as Fiestas Patrias and El Dieciocho.

Sept 23
Grito de Lares. Anniversary of the uprising that initiated the movement for Puerto Rican independence from Spain.
OCTOBER

Oct 10
Grito de Yara (Cuba). The revolt of Yara begun Cuba's struggle for independence from Spain on this day.

Oct 12
Spanish National Day, also known as Día de la Hispanidad (Spain). In most of the Spanish-speaking countries celebrated as Día de la Raza, Columbus Day, or Panamerican Day. This holiday commemorates the arrival of Christopher Columbus in America. A holiday with complex and changing meanings, Hispanics in the U.S. are split on their political feelings about the holiday.

Nov 18
Señor de los Milagros or Our Lord of Miracles (Peru), Also called the holiday of the Purple Christ. The holiday stems from the 1700s when a huge earthquake destroyed Lima, but a painting of the Purple Christ was not affected.

NOVEMBER

Nov 1 & 2
Día de los Muertos or Day of the Dead (Mexico, Central America). In most regions of Mexico, November 1 is to honor children and infants, whereas deceased adults are honored on November 2. This is indicated by generally referring to November 1 mainly as Día de los Santos Inocentes ("Holy Innocents Day") but also as Día de los Angelitos ("Day of the Little Angels") and November 2 as Día de los Muertos or Día de los Difuntos ("Day of the Dead"). Traditionally, it is an observance festivity to celebrate and honor one's ancestors. It's based on the belief that there is interaction between the living world and the world of spirits. On the Día de los Muertos, the altars, or the spirits of the dead, are said to come back for family reunions. Many celebrate setting up ofrendas (altars) in their homes to honor the memory of deceased loved ones and to welcome their visiting souls. Others visit their loved one's cemetery plot and decorate it with flowers, candles and food. The holiday is celebrated with family and community gatherings, music, and feasting, and the festivity of its observance acknowledges death as an integral part of life.

* Día de los Santos Inocentes is not to be confused with Día de los Inocentes (April Fool's or All Fools' Day) which is celebrated on April 1st.

Nov 2
All Souls' Day or Día de los Difuntos. This Catholic observance celebrates the memory of all early martyrs, saints and the faithful departed.

Nov 3
Independence Day for Panama.

Nov 5
First Call for Independence (El Salvador): Commemorates the first battle for independence in 1811, led by Padre José Matías Delgado.

Nov. 11
Cartagena Independence Day (Colombia). Commemorates the city of Cartagena's declaration of independence made in 1811.

Nov 19
Feast of Nuestra Señora de la Divina Providencia or Our Lady of Divine Providence, Puerto Rico's patron virgin.

Nov 20

DECEMBER

Dec 6
Day of the Constitution, Spain.
Dec 8
Immaculate Conception, celebrated in many Spanish-speaking countries.

Dec 12
_Día de la Virgen de Guadalupe_ or the Feast Day of our Lady of Guadalupe, patron saint of Mexico. The Virgin Mary is said to have appeared to an Indian, Juan Diego on this date in 1531.

Dec 16-24
_Las Posadas_ (Mexico, Guatemala and other Central American countries). Las Posadas commemorate the journey of Mary and Joseph to Bethlehem and their search for a place to stay. Family and friends visit one another in their homes and enjoy conversations and traditional foods, and visitors sing carols. Colombians celebrate a similar holiday called “_La Novena_”, and for nine days, families pray and sing traditional carols.

Dec 24 & 25
_La Nochebuena y la Navidad_, Christmas Eve and Christmas. In many Catholic countries, people attend midnight mass on Christmas Eve. Preparing traditional foods is also an integral part of the holiday. Mexicans get together for a “_tamales_” or a tamale-making session. A tamal is usually made of shredded pork and corn meal called masa, and tucked into a corn shuck or leaf. Puerto Ricans prepare _pasteles puertorriqueños_ which are encased in plantain leaves and stuffed with bloc.
That said real estate is more fully described as follows:

Beginning at a point on the westerly side of Starkey Road, Virginia Secondary Route 904 at the southeasterly corner of the property now or formerly known as the Baptist Parsonage; thence with the westerly side of Starkey Road South 24° 16' West 154 feet to a point in the center of a dry branch; thence leaving Starkey Road North 73° 30' West 310.6 feet to a point; thence North 21° 37' East 191.75 feet to a point; thence South 66° 33' East 316.8 feet to the point of beginning.
AT A REGULAR MEETING OF THE BOARD OF SUPERVISORS OF ROANOKE COUNTY, VIRGINIA, HELD AT THE ROANOKE COUNTY ADMINISTRATION CENTER, TUESDAY, OCTOBER 28, 2008

ORDINANCE 102808-10 TO MODIFY EXISTING PROFFERED CONDITIONS IN A C-1C, OFFICE DISTRICT WITH CONDITIONS, ON 1.241 ACRES LOCATED AT 5681 STARKEY ROAD (TAX MAP NO. 87.18-1-40), CAVE SPRING MAGISTERIAL DISTRICT, UPON THE APPLICATION OF STARKEY MEDICAL, PC

WHEREAS, the first reading of this ordinance was held on August 26, 2008, and the second reading and public hearing were held October 28, 2008; and,

WHEREAS, the Roanoke County Planning Commission held a public hearing on this matter on September 2, 2008 and October 7, 2008; and

WHEREAS, legal notice and advertisement has been provided as required by law.

BE IT ORDAINED by the Board of Supervisors of Roanoke County, Virginia, as follows:

1. That the proffered conditions in a C-1C, Office District with Conditions, on a certain tract of real estate containing 1.241 acres, as described herein, and located at 5681 Starkey Road (Tax Map Number 87.18-1-40) in the Cave Spring Magisterial District, are hereby amended as set out below.

2. That this action is taken upon the application of Starkey Medical, PC.

3. That the owner of the property has voluntarily proffered in writing the following amended conditions which the Board of Supervisors of Roanoke County, Virginia, hereby accepts:

(1) The property shall be developed in substantial conformance with the site plan prepared by Craighead and Associates, dated September 29, 2008.
(2) No more than 5,600 square feet of medical office shall be constructed, and no more than 2,404 square feet of general office shall be constructed including the existing structure.

(3) The proposed building shall be constructed in substantial conformance with the Starkey Road Elevation (East) prepared by Craighead and Associates, dated August 10, 2008.

(4) The proposed landscaping shall be constructed in substantial conformance with the Landscape Plan prepared by Craighead and Associates, dated September 29, 2008.

(5) If a new freestanding sign is proposed, it shall be monument in style, and constructed with materials to compliment the proposed building elevation. The monument sign shall not exceed ten (10) feet in height and contain no more than fifty (50) total square feet.

(6) All exterior lighting poles shall not exceed fifteen (15) feet in total height inclusive of the base.

(7) The proposed uses on-site shall be limited to General Office, Medical Office, Business or trade schools and Guidance Services.

4. That said real estate is more fully described as follows:

Beginning at a point on the westerly side of Starkey Road, Virginia Secondary Route 904 at the southeasterly corner of the property now or formerly known as the Baptist Parsonage; thence with the westerly side of Starkey Road South 24° 16' West 154 feet to a point in the center of a dry branch; thence leaving Starkey Road North 73° 30' West 310.6 feet to a point; thence North 21° 37' East 191.75 feet to a point; thence South 86° 33' East 316.6 feet to the point of beginning.
5. That this ordinance shall be in full force and effect thirty (30) days after its final passage. All ordinances or parts of ordinances in conflict with the provisions of this ordinance be, and the same hereby are, repealed. The Zoning Administrator is directed to amend the zoning district map to reflect the change in zoning classification authorized by this ordinance.

On motion of Supervisor Moore to adopt the ordinance, and carried by the following recorded vote:

AYES: Supervisors Moore, Church, Altizer, McNamara, Flora

NAYS: None

A COPY TESTED:

Brenda J. Holten, CMC
Deputy Clerk to the Board

c: Arnold Covey, Director, Community Development
Tarek Moneir, Deputy Director, Development
Philip Thompson, Deputy Director, Planning
John Murphy, Zoning Administrator
Paul Mahoney, County Attorney
Disclaimer: It is understood that the data displayed through this application is subject to constant change and that its accuracy cannot be guaranteed. The maps have been created from information provided by various government and private sources at various levels of accuracy. The data is provided to you as is; with no warranty, representation or guaranty as to the content, sequence, accuracy, timeliness or completeness of any of the information provided herein. It is the responsibility of the user of the data to be aware of the data’s limitations and to utilize the data in an appropriate manner.
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FLOOD: Michele Meinhart - 5681 Starkey Road

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Roanoke County, VA 2019, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Flood Plain
Floodway
Not in Flood Plain

10ft Contour
2ft Contour
500 year Floodplain

Starkey Road

Date: 1/10/2020

1:2,257

Feet

0 70 140 210 280

0 70 140 210 280

0 70 140 210 280

0 70 140 210 280
ZONING: Michele Meinhart - 5681 Starkey Road

Disclaimer: It is understood that the data displayed through this application is subject to constant change and that its accuracy cannot be guaranteed. The maps have been created from information provided by various government and private sources at various levels of accuracy. The data is provided to you as is; with no warranty, representation or guaranty as to the content, sequence, accuracy, timeliness or completeness of any of the information provided herein. It is the responsibility of the user of the data to be aware of the data's limitations and to utilize the data in an appropriate manner.
Future Land Use

- Neighborhood Conservation
- Transition
- Core

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Address of Subject Property: 5681 Starkey Road  
Cave Spring Magisterial District  
Roanoke County  

Tax Map No.: 087.18-01-40.00-0000

Owner/Applicant's Name: Starkey Medical

PROFFERS

These conditions replace and void those listed in Ordinance 082801-13 from August 2001, and shall apply to the property in conjunction with this rezoning application. The undersigned owner/applicant does hereby proffer the following conditions:

1. The property shall be developed in substantial conformance with the Site Plan prepared by Craighead and Associates, dated September 29, 2008.

2. No more than 5,600 square feet of medical office shall be constructed, and no more than 2,464 square feet of general office shall be constructed including the existing structure.

3. The proposed building shall be constructed in substantial conformance with the Starkey Road Elevation (East) prepared by Craighead and Associates, dated August 10, 2008.

4. The proposed landscaping shall be constructed in substantial conformance with the Landscape Plan prepared by Craighead and Associates, dated September 29, 2008.

5. If a new freestanding sign is proposed, it shall be monument in style, and constructed with materials to compliment the proposed building elevation. The monument sign shall not exceed ten (10) feet in height, and contain no more than fifty (50) total square feet.

6. All exterior lighting poles shall not exceed fifteen (15) feet in total height inclusive of the base.

7. The proposed uses on-site shall be limited to General Office, Medical Office, Business or trade schools, and Guidance Services.

Owner/Applicant: Starkey Medical
Memorandum

TO: Planning Commission
FROM: Philip Thompson, AICP
      Director of Planning
DATE: January 15, 2020
SUBJECT: Election of Officers – 2020

In accordance with the Planning Commission’s bylaws, the annual election of officers (Chairman and Vice Chairman) will be conducted at the January 21st meeting. In the table below are the Chairman and Vice Chairman over the past several years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Chairman</th>
<th>Vice Chairman</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>Troy Henderson</td>
<td>Rick James</td>
</tr>
<tr>
<td>2018</td>
<td>Paul Mahoney</td>
<td>Rick James</td>
</tr>
<tr>
<td>2017</td>
<td>Wayne Bower</td>
<td>Paul Mahoney</td>
</tr>
<tr>
<td>2016</td>
<td>Rick James</td>
<td>Wayne Bower</td>
</tr>
</tbody>
</table>

If you have any questions, please contact me by phone at (540) 772-2029 or by email at pthompson@roanokecountyva.gov.

PGT:pt
TO: Planning Commission

FROM: Philip Thompson, AICP
Director of Planning

DATE: January 15, 2020

SUBJECT: 2020 Planning Commission Meeting Schedule Revision

At the December 2nd meeting, the Planning Commission adopted its meeting schedule for 2020. The adopted schedule included meeting dates for Tuesday, October 6th and Tuesday, October 20th. These dates are in conflict with the Board of Supervisors meeting dates for October. Staff recommends revising the Commission’s October meeting dates to Monday, October 5th and Monday, October 19th as indicated on the revised meeting schedule (attached).

If you have any questions, please contact me by phone at (540) 772-2029 or by email at pthompson@roanokecountyva.gov.

PGT:pt

Attachment
PLANNING COMMISSION MEETING DATES
2020

<table>
<thead>
<tr>
<th>PUBLIC HEARINGS</th>
<th>WORK SESSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>JANUARY 7, 2020</td>
<td>JANUARY 21, 2020</td>
</tr>
<tr>
<td>FEBRUARY 4, 2020</td>
<td>FEBRUARY 18, 2020</td>
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<td>MARCH 3, 2020</td>
<td>MARCH 17, 2020</td>
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<tr>
<td>APRIL 7, 2020</td>
<td>APRIL 21, 2020</td>
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<td>MAY 5, 2020</td>
<td>MAY 19, 2020</td>
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<td>JUNE 2, 2020</td>
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<td>JULY 7, 2020</td>
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<td>AUGUST 4, 2020</td>
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<tr>
<td>SEPTEMBER 1, 2020</td>
<td>SEPTEMBER 15, 2020</td>
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<tr>
<td><strong>OCTOBER 5, 2020 (Monday)</strong> (tentative)</td>
<td><strong>OCTOBER 19, 2020 (Monday)</strong> (tentative)</td>
</tr>
<tr>
<td>NOVEMBER 2, 2020 (Monday)</td>
<td>NOVEMBER 16, 2020 (Monday)</td>
</tr>
<tr>
<td>NOVEMBER 30, 2020 (Monday)</td>
<td>DECEMBER 14, 2020 (Monday)</td>
</tr>
</tbody>
</table>

All meetings are on Tuesdays unless otherwise noted.
Public Hearings are held at 7:00 p.m. in the Board Meeting Room.
Work Sessions are held at 6:00 p.m. in the 4th Floor Training Room.
Roanoke County Administration Center
5204 Bernard Drive, Roanoke
Memorandum

TO: Planning Commission

FROM: Philip Thompson, AICP
       Director of Planning

DATE: January 15, 2020

SUBJECT: Zoning Ordinance Amendments – Floodplain Regulations

At the Planning Commission’s January 21st meeting, staff will review with the Commission proposed amendments to the County’s Zoning Ordinance dealing with floodplain regulations. The proposed amendments are consistent with the Virginia Department of Conservation and Recreation’s revised model ordinance (attached) which complies with the requirements of the Federal Emergency Management Agency’s (FEMA) National Flood Insurance Program (NFIP) regulations. The proposed amendments would amend Article I – General Provisions, Article II – Definitions and Use Types, and Article III - District Regulations) regarding floodplain management (amendments attached). The proposed amendments would add, amend, and delete definitions associated with floodplain management; and would add or amend regulatory sections dealing with floodplain management.

If you have any questions, please contact me by phone at (540) 772-2029 or by email at pthompson@roanokecountyva.gov.

PGT:pt

Attachments
XV. Example Floodplain Management Ordinance

This is an example of an ordinance that could be used by municipalities to comply with the requirements of the Federal Emergency Management Agency’s (FEMA) National Flood Insurance Program (NFIP) regulations. Your municipal attorney and engineer should be consulted to make this fit the needs of your community.

In using these provisions, certain things must be understood and kept in mind:

➢ These provisions should be modified to reflect the kinds of flooding hazards in your community as well as the community's circumstances, objectives, or policies.

➢ These provisions have been prepared only with the intention of meeting the minimum requirements of the FEMA NFIP regulations and the Virginia Uniform State Building Code (USBC).

➢ The Department of Conservation and Recreation (DCR) suggests that in some cases the minimum standards provide insufficient protection, create a risk of higher than necessary insurance rates, or create a more complex program. In these cases we have recommended specific higher standards or excluded additional complex options. We do this with italics and try to explain why the change is recommended or a provision might require additional attention in a footnote. Local requirements (higher standards) are encouraged, such as those under the Community Rating System (CRS) for example, and are supported by the Federal Emergency Management Agency and DCR. The more restrictive local regulations are recognized as taking precedence over the federal minimum guidelines.

➢ The needs, circumstances, and objectives of communities are diverse and the development of a single model ordinance or set of provisions for use by all is unrealistic to produce and what is provided may be subject to community revisions to meet individualized needs.

➢ This document is a template highlighting minimum requirements a community must have in their ordinance pursuant to federal requirements. You must make certain changes in order for this template to act as a document that meets 44 CFR requirements for your community. Changes required are as follows:

   o Replace text {community} throughout the document with the name of the community adopting the ordinance.
   o Add the date of the community’s effective Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) to the first paragraph of Article III, Section 3.1.A as indicated.
   o Adopt, sign and date the ordinance as described in Article VII.

If there are any questions concerning these suggested provisions or concerning the National Flood Insurance Program, please contact DCR’s Division of Dam Safety and Floodplain Management at (804) 371-6095 or the FEMA Region 3 Office at (215) 931-5500.
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ORDINANCE NO.____

AN ORDINANCE AMENDING ORDINANCE NO.____, THE ZONING ORDINANCE OF {community} VIRGINIA, BY ESTABLISHING FLOODPLAIN DISTRICTS, BY REQUIRING THE ISSUANCE OF PERMITS FOR DEVELOPMENT, AND BY PROVIDING FACTORS AND CONDITIONS FOR VARIANCES TO THE TERMS OF THE ORDINANCES.

BE IT ENACTED AND ORDAINED BY THE {community}, Virginia, as follows:

ARTICLE I - GENERAL PROVISIONS

Section 1.1 – Statutory Authorization and Purpose [44 CFR 59.22(a)(2)]

Va. Code § 15.2-2283 specifies that zoning ordinances shall be for the general purpose of promoting the health, safety, or general welfare of the public and of further accomplishing the objectives of § 15.2-2200 which encourages localities to improve the public health, safety, convenience, and welfare of their citizens. To these ends, flood ordinances shall be designed to provide for safety from flood, to facilitate the provision of flood protection, and to protect against loss of life, health, or property from flood.

In accordance with these directed provisions, this ordinance is specifically adopted pursuant to the authority granted to localities by Va. Code § 15.2 - 2280.

The purpose of these provisions is to prevent: the loss of life, health, or property, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

A. Regulating uses, activities, and development which, alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies;

B. Restricting or prohibiting certain uses, activities, and development from locating within districts subject to flooding;

C. Requiring all those uses, activities, and developments that do occur in flood-prone districts to be protected and/or floodproofed against flooding and flood damage; and,

D. Protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.
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Section 1.2 – Applicability

These provisions shall apply to all privately and publicly owned lands within the jurisdiction of {community} and identified as areas of special flood hazard identified by the community or shown on the flood insurance rate map (FIRM) or included in the flood insurance study (FIS) that are provided to the {community} by FEMA.

Section 1.3 - Compliance and Liability

A. No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this ordinance and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this ordinance.

B. The degree of flood protection sought by the provisions of this ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study, but does not imply total flood protection. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance does not imply that districts outside the floodplain district or land uses permitted within such district will be free from flooding or flood damages.

C. This ordinance shall not create liability on the part of {community} or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

Section 1.4 – Records [44 CFR 59.22(a)(9)(iii)]

Records of actions associated with administering this ordinance shall be kept on file and maintained by or under the direction of the Floodplain Administrator in perpetuity.

Section 1.5 - Abrogation and Greater Restrictions [44 CFR 60.1(b)]

To the extent that the provisions are more restrictive, this ordinance supersedes any ordinance currently in effect in flood-prone districts. To the extent that any other existing law or regulation is more restrictive or does not conflict it shall remain in full force and effect.

These regulations are not intended to repeal or abrogate any existing ordinances including subdivision regulations, zoning ordinances, or building codes. In the event of a conflict between these regulations and any other ordinance, the more restrictive shall govern.

1 Communities have the authority and are encouraged to regulate areas known to flood that do not appear in the FIRM or FIS. Even if you have not identified areas of flood risk that are not included in FEMA’s products you might want to adopt this higher standard to reserve the option to identify and regulate locally known risk areas.

2 This is a requirement to participate in the NFIP and is more restrictive then the Library of Virginia policy. If these records are not available, there is no way to show that a structure was built in compliance with the regulations at the time. Maintaining these records is the only way the community can show that it has been fairly administering the program.
Section 1.6 - Severability

If any section, subsection, paragraph, sentence, clause, or phrase of this ordinance shall be declared invalid for any reason whatever, such decision shall not affect the remaining portions of this ordinance. The remaining portions shall remain in full force and effect; and for this purpose, the provisions of this ordinance are hereby declared to be severable.

Section 1.7 - Penalty for Violations [44 CFR 60.2(e)]

Any person who fails to comply with any of the requirements or provisions of this article or directions of the director of planning or any authorized employee of the {community} shall be guilty of the appropriate violation and subject to the penalties thereof.

The VA USBC addresses building code violations and the associated penalties in Section 104 and Section 115. Violations and associated penalties of the Zoning Ordinance of {community} are addressed in Section _____ of the Zoning Ordinance.

In addition to the above penalties, all other actions are hereby reserved, including an action in equity for the proper enforcement of this article. The imposition of a fine or penalty for any violation of, or noncompliance with, this article shall not excuse the violation or noncompliance or permit it to continue; and all such persons shall be required to correct or remedy such violations within a reasonable time. Any structure constructed, reconstructed, enlarged, altered or relocated in noncompliance with this article may be declared by the {community} to be a public nuisance and abatable as such. Flood insurance may be withheld from structures constructed in violation of this article.³

³ If this is not a part of the zoning ordinance specific fines and penalties will need to be adopted instead.
ARTICLE II - ADMINISTRATION

Section 2.1 - Designation of the Floodplain Administrator [44 CFR 59.22(b)]

The Floodplain Administrator\(^4\) is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator. The Floodplain Administrator may:

A. Do the work themselves. In the absence of a designated Floodplain Administrator, the duties are conducted by the [community] chief executive officer.

B. Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.

C. Enter into a written agreement or written contract with another community or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.

Section 2.2 - Duties and Responsibilities of the Floodplain Administrator [44 CFR 60.3]

The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:

A. Review applications for permits to determine whether proposed activities will be located in the Special Flood Hazard Area (SFHA).

B. Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.

C. Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.

D. Review applications to determine whether all necessary permits have been obtained from the Federal, State, or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the 100-year frequency floodplain of free-flowing non-tidal waters of the State.

E. Verify that applicants proposing an alteration of a watercourse have notified adjacent communities, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), and other appropriate agencies (VADEQ, USACE), and have submitted copies of such notifications to FEMA.

\(^4\) Instead of Floodplain Administrator you can appoint the zoning administrator, town manager or other official who can be specifically identified here. Floodplain administrator does not always have to be a standalone job, but someone has to have the job.
F. Advise applicants for new construction or substantial improvement of structures that are located within an area of the Coastal Barrier Resources System established by the Coastal Barrier Resources Act that Federal flood insurance is not available on such structures; areas subject to this limitation are shown on Flood Insurance Rate Maps as Coastal Barrier Resource System Areas (CBRS) or Otherwise Protected Areas (OPA).

G. Approve applications and issue permits to develop in flood hazard areas if the provisions of these regulations have been met, or disapprove applications if the provisions of these regulations have not been met.

H. Inspect or cause to be inspected, buildings, structures, and other development for which permits have been issued to determine compliance with these regulations or to determine if non-compliance has occurred or violations have been committed.

I. Review Elevation Certificates and require incomplete or deficient certificates to be corrected.

J. Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for the [community], within six months after such data and information becomes available if the analyses indicate changes in base flood elevations.

K. Maintain and permanently keep records that are necessary for the administration of these regulations, including:

1. Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies and maps and current effective studies and maps), and Letters of Map Change; and

2. Documentation supporting issuance and denial of permits, Elevation Certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been floodproofed, inspection records, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.

L. Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.

M. Advise the Board of Zoning Appeals regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.

N. Administer the requirements related to proposed work on existing buildings:

1. Make determinations as to whether buildings and structures that are located in flood hazard areas and that are damaged by any cause have been substantially damaged.

2. Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct. Prohibit the non-compliant repair of substantially damaged buildings except for temporary emergency protective
measures necessary to secure a property or stabilize a building or structure to prevent additional damage.

O. Undertake, as determined appropriate by the Floodplain Administrator due to the circumstances, other actions which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other Federal, State, and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in special flood hazard areas; and assisting property owners with documentation necessary to file claims for Increased Cost of Compliance coverage under NFIP flood insurance policies.

P. Notify the Federal Emergency Management Agency when the corporate boundaries of the {community} have been modified and:

1. Provide a map that clearly delineates the new corporate boundaries or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation; and

2. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

Q. Upon the request of FEMA, complete and submit a report concerning participation in the NFIP which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.

R. It is the duty of the Community Floodplain Administrator to take into account flood, mudslide and flood-related erosion hazards, to the extent that they are known, in all official actions relating to land management and use throughout the entire jurisdictional area of the Community, whether or not those hazards have been specifically delineated geographically (e.g. via mapping or surveying).

Section 2.3 - Use and Interpretation of FIRMs [44 CFR 60.3]

The Floodplain Administrator shall make interpretations, where needed, as to the exact location of special flood hazard areas, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of FIRMs and data:

A. Where field surveyed topography indicates that adjacent ground elevations:

1. Are below the base flood elevation in riverine SFHAs, or below the 1% storm surge elevation in coastal SFHAs, even in areas not delineated as a special flood hazard area
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on a FIRM, the area shall be considered as special flood hazard area and subject to the requirements of these regulations;

2. Are above the base flood elevation and the area is labelled as a SFHA on the FIRM, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the SFHA.

B. In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a Federal, State, or other source shall be reviewed and reasonably used.

C. Base flood elevations and designated floodway boundaries on FIRM and in FISs shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.

D. Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRM and in FISs.

E. If a Preliminary Flood Insurance Rate Map and/or a Preliminary Flood Insurance Study has been provided by FEMA:

1. Upon the issuance of a Letter of Final Determination by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.

2. Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data shall be deemed the best available data pursuant to Article III, Section 3.1.A.3 and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.

3. Prior to issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.

Section 2.4 - Jurisdictional Boundary Changes [44 CFR 59.22, 65.3]

The County floodplain ordinance in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements for participation in the National Flood Insurance Program. Municipalities with existing floodplain ordinances shall pass a resolution acknowledging and accepting responsibility for enforcing floodplain ordinance standards prior to annexation of any area containing identified flood hazards. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, the governing body shall prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date
of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

In accordance with the Code of Federal Regulations, Title 44 Subpart (B) Section 59.22(a)(9)(v) all NFIP participating communities must notify the Federal Insurance Administration and optionally the State Coordinating Office in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.

In order that all Flood Insurance Rate Maps accurately represent the community’s boundaries, a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority must be included with the notification.

Section 2.5 - District Boundary Changes

The delineation of any of the Floodplain Districts may be revised by the {community} where natural or man-made changes have occurred and/or where more detailed studies have been conducted or undertaken by the U. S. Army Corps of Engineers or other qualified agency, or an individual documents the need for such change. However, prior to any such change, approval must be obtained from the Federal Emergency Management Agency. A completed LOMR is a record of this approval.

Section 2.6 - Interpretation of District Boundaries

Initial interpretations of the boundaries of the Floodplain Districts shall be made by the Zoning Officer. Should a dispute arise concerning the boundaries of any of the Districts, the Board of Zoning Appeals shall make the necessary determination. The person questioning or contesting the location of the District boundary shall be given a reasonable opportunity to present his case to the Board and to submit his own technical evidence if he so desires.

Section 2.7 – Submitting Model Backed Technical Data [44 CFR 65.3]

A community’s base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Emergency Management Agency of the changes by submitting technical or scientific data. The community may submit data via a LOMR. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

Section 2.8 – Letters of Map Revision

When development in the floodplain will cause or causes a change in the base flood elevation, the applicant, including state agencies, must notify FEMA by applying for a Conditional Letter of Map Revision and then a Letter of Map Revision.
Example cases:

- Any development that causes a rise in the base flood elevations within the floodway.

- Any development occurring in Zones A1-30 and AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation.

- Alteration or relocation of a stream (including but not limited to installing culverts and bridges) 44 Code of Federal Regulations §65.3 and §65.6(a)(12).
ARTICLE III - ESTABLISHMENT OF ZONING DISTRICTS

Section 3.1 - Description of Special Flood Hazard Districts [44 CFR 59.1, 60.3]

A. Basis of Districts

The various special flood hazard districts shall include the SFHAs. The basis for the delineation of these districts shall be the FIS and the FIRM for {community} prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated _____________ {insert the effective date of the community’s Flood Insurance Rate Map}⁵, and any subsequent revisions or amendments thereto.

The {community} may identify and regulate local flood hazard or ponding areas that are not delineated on the FIRM. These areas may be delineated on a “Local Flood Hazard Map” using best available topographic data and locally derived information such as flood of record, historic high water marks, or approximate study methodologies.

The boundaries of the SFHA Districts are established as shown on the FIRM which is declared to be a part of this ordinance and which shall be kept on file at the {community} offices.

1. The Floodway District is in an AE Zone and is delineated, for purposes of this ordinance, using the criterion that certain areas within the floodplain must be capable of carrying the waters of the one percent annual chance flood without increasing the water surface elevation of that flood more than one (1) foot at any point. The areas included in this District are specifically defined in Table ____ of the above-referenced FIS and shown on the accompanying FIRM.

The following provisions shall apply within the Floodway District of an AE zone [44 CFR 60.3(d)]:

a. Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

Development activities which increase the water surface elevation of the base flood may be allowed, provided that the applicant first applies – with the {community’s}

⁵ If preparing an ordinance amendment for adoption of a new FIRM and FIS, the new effective date should be used here, not the initial FIRM date. Every time a community receives a new FIRM, an ordinance amendment must be adopted to update the FIRM’s effective date. This amendment must be adopted and approved by FEMA prior to the effective date of the new FIRM to avoid suspension from the NFIP.
endorsement – for a Conditional Letter of Map Revision (CLOMR), and receives
the approval of the Federal Emergency Management Agency.

If Article III, Section 3.1.A.1.a is satisfied, all new construction and substantial
improvements shall comply with all applicable flood hazard reduction provisions
of Article 4.

b. The placement of manufactured homes (mobile homes) is prohibited, except in an
existing manufactured home (mobile home) park or subdivision. A replacement
manufactured home may be placed on a lot in an existing manufactured home park
or subdivision provided the anchoring, elevation, and encroachment standards are
met.

2. The AE, or AH Zones on the FIRM accompanying the FIS shall be those areas for
which one-percent annual chance flood elevations have been provided and the
floodway has not been delineated. The following provisions shall apply within an AE
or AH zone [44 CFR 60.3(c)] where FEMA has provided base flood elevations:

   Until a regulatory floodway is designated, no new construction, substantial
improvements, or other development (including fill) shall be permitted within the areas
of special flood hazard, designated as Zones A1-30, AE, or AH on the FIRM, unless it
is demonstrated that the cumulative effect of the proposed development, when
combined with all other existing and anticipated development, will not increase the
water surface elevation of the base flood more than one foot at any point within the
{community}.

Development activities in Zones A1-30, AE, or AH on the {community's} FIRM which
increase the water surface elevation of the base flood by more than one foot may be allowed,
provided that the applicant first applies – with the {community’s} endorsement – for a
Conditional Letter of Map Revision, and receives the approval of the Federal Emergency
Management Agency.

3. The A Zone on the FIRM accompanying the FIS shall be those areas for which no
detailed flood profiles or elevations are provided, but the one percent annual chance
floodplain boundary has been approximated. For these areas, the following provisions
shall apply [44 CFR 60.3(b)]:

The Approximated Floodplain District shall be that floodplain area for which no
detailed flood profiles or elevations are provided, but where a one percent annual chance
floodplain boundary has been approximated. Such areas are shown as Zone A
on the maps accompanying the FIS. For these areas, the base flood elevations and
floodway information from Federal, State, and other acceptable sources shall be used,
when available. Where the specific one percent annual chance flood elevation cannot
be determined for this area using other sources of data, such as the U. S. Army Corps
of Engineers Floodplain Information Reports, U. S. Geological Survey Flood-Prone

6 The requirement in 60.3(c)(10) only applies along rivers, streams, and other watercourses where FEMA has provided base flood elevations. The
requirement does not apply along lakes, bays and estuaries, and the ocean coast.
Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this base flood elevation. For development proposed in the approximate floodplain the applicant must use technical methods that correctly reflect currently accepted practices, such as point on boundary, high water marks, or detailed methodologies hydrologic and hydraulic analyses. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

The Floodplain Administrator reserves the right to require a hydrologic and hydraulic analysis for any development. When such base flood elevation data is utilized, the lowest floor shall be elevated to or above the base flood level plus eighteen (18) inches.7

During the permitting process, the Floodplain Administrator shall obtain:

a. The elevation of the lowest floor (in relation to mean sea level), including the basement, of all new and substantially improved structures; and,

b. If the structure has been floodproofed in accordance with the requirements of this article, the elevation (in relation to mean sea level) to which the structure has been floodproofed.

Base flood elevation data shall be obtained from other sources or developed using detailed methodologies comparable to those contained in a FIS for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser.8

4. The AO Zone on the FIRM accompanying the FIS shall be those areas of shallow flooding identified as AO on the FIRM. For these areas, the following provisions shall apply [44 CFR 60.3(c)]:

a. All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to or above the flood depth specified on the FIRM, above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than two feet above the highest adjacent grade.

b. All new construction and substantial improvements of non-residential structures shall

(1) Have the lowest floor, including basement, elevated to or above the flood depth specified on the FIRM, above the highest adjacent grade at least as high as the

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7 The flood maps anticipate one foot of rise in BFE due to fill in the floodplain, so while building to BFE is all that is required; it will result in flooding if all assumptions made in mapping are correct. Flood insurance rounds up for freeboard so an 18 inch requirement offers the best “bang for the buck” in reducing flood insurance rates and allows for an additional margin of safety in case the models have an error or are based on incomplete data.

8 The recommended standard here is 5 lots instead of 50. Fifty lots is the breakpoint suggested in the federal regulations but the 5/5 rule is less confusing and captures more commercial development.
depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two feet above the highest adjacent grade; or,

(2) Together with attendant utility and sanitary facilities be completely floodproofed to the specified flood level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

c. Adequate drainage paths around structures on slopes shall be provided to guide floodwaters around and away from proposed structures.

5. The **Coastal A Zone** is labelled as AE on the FIRM; it is those areas that are seaward of the limit of moderate wave action (LiMWA) line. As defined by the VA USBC, these areas are subject to wave heights between 1.5 feet and 3 feet. For these areas, the following provisions shall apply:

Buildings and structures within this zone shall have the lowest floor elevated to or above the base flood elevation plus one foot of freeboard, and must comply with the provisions in Article III, Section 3.1.A.2 and Article IV, Sections 4.2 and 4.3.

6. The **VE or V Zones** on FIRM accompanying the FIS shall be those areas that are known as Coastal High Hazard areas, extending from offshore to the inland limit of a primary frontal dune along an open coast or other areas subject to high velocity waves. For these areas, the following provisions shall apply [44 CFR 60.3(e)]:

a. All new construction and substantial improvements in Zones V and VE, including manufactured homes, shall be elevated on pilings or columns so that:

(1) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level plus eighteen (18) inches, if the lowest horizontal structural member is parallel to the direction of wave approach or elevated at least two feet above the base flood level if the lowest horizontal structural member is perpendicular to the direction of wave approach; and,

(2) The pile or column foundation and structure attached thereto is anchored to

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9 Instead of having a coastal A zone a community can include this area in the V zone, adopting these standards for Coastal A areas provides a higher degree of protection, reflects the level of surge risk seen in actual events, and helps ensure that buildings built now receive favorable insurance rates if FEMA does change their program requirements to include coastal A limitations. Right now the only provisions effecting this zone are found in the Virginia Building Code and are reflected in the language here.

10 If your community has adopted a higher freeboard (as is recommended) this one foot requirement might need to be changed for consistency with the freeboard required in A or V zones. Consider changing the one foot to 18” of freeboard.

11 Flood insurance round up for freeboard so an 18 inch requirement offers the best “bang for the buck” in reducing flood insurance rates and allows for an additional margin of safety in case the models have an error or are based on incomplete data.
resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equalled or exceeded in any given year (one-percent annual chance).

b. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Article III, Section A.6.a.

c. The Floodplain Administrator shall obtain the elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V and VE. The Floodplain Management Administrator shall maintain a record of all such information.

d. All new construction shall be located landward of the reach of mean high tide.

e. All new construction and substantial improvements shall have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood-lattice work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this Section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

(1) Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

(2) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equalled or exceeded in any given year.

f. The enclosed space below the lowest floor shall be used solely for parking of vehicles, building access, or storage. Such space shall not be partitioned into multiple rooms, temperature-controlled, or used for human habitation. The enclosed

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12 An optional higher standard is to simply require that all areas below the lowest floor be free from obstructions that cannot be seen through. This makes it much easier to be sure that these areas are not converted to living spaces and means that breakaway walls do not need technical inspections.
g. The use of fill for structural support of buildings is prohibited. When non-structural fill is proposed in a coastal high hazard area, appropriate engineering analyses shall be conducted to evaluate the impacts of the fill prior to issuance of a permit.

h. The man-made alteration of sand dunes, which would increase potential flood damage, is prohibited.

7. The mapped floodplain includes all of the above regions and also the regions designated as having a 0.2 percent annual chance of flooding on any flood map or flood insurance study. In this area no emergency service, medical service, or governmental records storage shall be allowed except by special exception using the variance process.

Section 3.2 - Overlay Concept

The Floodplain Districts described above shall be overlays to the existing underlying districts as shown on the Official Zoning Ordinance Map, and as such, the provisions for the floodplain districts shall serve as a supplement to the underlying district provisions.

If there is any conflict between the provisions or requirements of the Floodplain Districts and those of any underlying district, the more restrictive provisions and/or those pertaining to the floodplain districts shall apply.

In the event any provision concerning a Floodplain District is declared inapplicable as a result of any legislative or administrative actions or judicial decision, the basic underlying provisions shall remain applicable.

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13 Spaces that are 300 square feet or more trigger very high insurance rates, so limiting the size of these spaces to less than 300 square feet is a higher standard that can make the structure more affordable to insure.

14 This limitation on the use of the 0.2 percent floodplain is not required by NFIP regulations but is an accepted standard for critical facilities in emergency management. Critical facilities that are built in mapped floodplain might not be eligible for rebuilding assistance after a disaster, therefore DCR recommends this provision to ensure that any decision made to build in these circumstances is carefully considered.
ARTICLE IV - DISTRICT PROVISIONS [44 CFR 59.22, 60.2, 60.3]

Section 4.1 – Permit and Application Requirements

A. Permit Requirement

All uses, activities, and development occurring within any floodplain district, including placement of manufactured homes, shall be undertaken only upon the issuance of a permit. Such development shall be undertaken only in strict compliance with the provisions of this Ordinance and with all other applicable codes and ordinances, as amended, such as the Virginia Uniform Statewide Building Code (VA USBC) and the [community] Subdivision Regulations. Prior to the issuance of any such permit, the Floodplain Administrator shall require all applications to include compliance with all applicable State and Federal laws and shall review all sites to assure they are reasonably safe from flooding. Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system.

B. Site Plans and Permit Applications

All applications for development within any floodplain district and all permits issued for the floodplain shall incorporate the following information:

1. The elevation of the Base Flood at the site.

2. For structures to be elevated, the elevation of the lowest floor (including basement) or, in V zones, the lowest horizontal structural member.

3. For structures to be floodproofed (non-residential only), the elevation to which the structure will be floodproofed.

4. Topographic information showing existing and proposed ground elevations.

Section 4.2 - General Standards

The following provisions shall apply to all permits:

A. New construction and substantial improvements shall be built according to this ordinance and the VA USBC, and anchored to prevent flotation, collapse, or lateral movement of the structure.

B. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state anchoring requirements for resisting wind forces.

C. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

D. New construction or substantial improvements shall be constructed by methods and
practices that minimize flood damage.

E. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

F. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

G. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

H. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

In addition to provisions A – H above, in all special flood hazard areas, the additional provisions shall apply:

I. Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within this jurisdiction a permit shall be obtained from the U. S. Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission (a joint permit application is available from any of these organizations). Furthermore, in riverine areas, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), other required agencies, and the Federal Emergency Management Agency.

J. The flood carrying capacity within an altered or relocated portion of any watercourse shall be maintained.

Section 4.3 - Elevation and Construction Standards [44 CFR 60.3]

In all identified flood hazard areas where base flood elevations have been provided in the FIS or generated by a certified professional in accordance with Article III, Section 3.1.A.3 the following provisions shall apply:

A. Residential Construction

New construction or substantial improvement of any residential structure (including manufactured homes) in Zones A1-30, AE, AH, and A with detailed base flood elevations shall have the lowest floor, including basement, elevated to or above the base flood level plus eighteen(18) inches. See Article III, Section 3.1.A.5 and Article III, Section 3.1.A.6 for requirements in the Coastal A, VE, and V zones.

15 The flood maps anticipate one foot of rise in BFE due to fill in the floodplain, so while building to BFE is all that is required; it will result in flooding if all assumptions made in mapping are correct. Flood insurance rounds up for freeboard so an 18 inch requirement offers the best “bang for the buck” in reducing flood insurance rates and allows for an additional margin of safety in case the models have an error or are based on incomplete data.
B. Non-Residential Construction

1. New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated to or above the base flood level plus eighteen (18) inches. See Article III, Section 3.1.A.5 and Article III, Section 3.1.A.6 for requirements in the Coastal A, VE, and V zones.

2. Non-residential buildings located in all A1-30, AE, and AH zones may be floodproofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus two feet are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to mean sea level) to which such structures are floodproofed, shall be maintained by (title of community administrator).

C. Space Below the Lowest Floor

In zones A, AE, AH, AO, and A1-A30, fully enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation shall:

1. Not be designed or used for human habitation, but shall be used solely for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator).

2. Be constructed entirely of flood resistant materials below the regulatory flood protection elevation;

3. Include measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:

   a. Provide a minimum of two openings on different sides of each enclosed area subject

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16 The flood maps anticipate one foot of rise in BFE due to fill in the floodplain, so while building to BFE is all that is required; it will result in flooding if all assumptions made in mapping are correct. Flood insurance rounds up for freeboard so an 18 inch requirement offers the best “bang for the buck” in reducing flood insurance rates and allows for an additional margin of safety in case the models have an error or are based on incomplete data.

17 If your community has adopted the recommended freeboard you might need to change this provision to be consistent or higher than the freeboard otherwise required. Please note that the minimum requirements are BFE plus one foot – two feet of freeboard is the recommended minimum.
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to flooding.

b. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.

c. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.

d. The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.

e. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.

f. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.

D. Accessory Structures

1. Accessory structures of any size shall be prohibited within the SFHA and no variance shall be granted for accessory structures.

OR

2. Accessory structures in the SFHA shall comply with the elevation requirements and other requirements of Article IV, Section 4.3.B or, if not elevated or dry floodproofed, shall:

a. Not be used for human habitation;

b. Be limited to no more than 600 square feet\(^\text{18}\) in total floor area;

c. Be useable only for parking of vehicles or limited storage;

d. Be constructed with flood damage-resistant materials below the base flood elevation;

e. Be constructed and placed to offer the minimum resistance to the flow of floodwaters;

f. Be anchored to prevent flotation;

\(^\text{18}\) This is the minimum size restriction set by FEMA Region III, but a community could choose a higher standard and limit accessory structures to a size less than 600 square feet. However, a variance could be issued for larger accessory structures, not to exceed 600 square feet. If a smaller size limit is chosen, additional language would be required in Article VI: Variances - see Footnote 23. The chosen size restriction should also be reflected in Article IV, Section 4.3.D.2.b, Article VI, Section M, and Article VIII-Glossary in the definition of “Appurtenant or accessory structure”.
g. Have electrical service and mechanical equipment elevated to or above the base flood elevation;

h. Shall be provided with flood openings which shall meet the following criteria:

(1) There shall be a minimum of two flood openings on different sides of each enclosed area; if a building has more than one enclosure below the lowest floor, each such enclosure shall have flood openings on exterior walls.

(2) The total net area of all flood openings shall be at least 1 square inch for each square foot of enclosed area (non-engineered flood openings), or the flood openings shall be engineered flood openings that are designed and certified by a licensed professional engineer to automatically allow entry and exit of floodwaters; the certification requirement may be satisfied by an individual certification or an Evaluation Report issued by the ICC Evaluation Service, Inc.

(3) The bottom of each flood opening shall be 1 foot or less above the higher of the interior floor or grade, or the exterior grade, immediately below the opening.

(4) Any louvers, screens or other covers for the flood openings shall allow the automatic flow of floodwaters into and out of the enclosed area.

i. A signed Declaration of Land Restriction (Non-Conversion Agreement) shall be recorded on the property deed.  

E. Standards for Manufactured Homes and Recreational Vehicles

1. In zones A, AE, AH, and AO, all manufactured homes placed, or substantially improved, on individual lots or parcels, must meet all the requirements for new construction, including the elevation and anchoring requirements in Article III, Section 3.1.A.6 and Article IV, Sections 4.2 and 4.3.

2. All recreational vehicles placed on sites must either:

   a. Be on the site for fewer than 180 consecutive days, be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions); or

   b. Meet all the requirements for manufactured homes in Article IV, Section 4.3.E.1.

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19 A non-conversion agreement is strongly recommended, especially if a variance is being issued for an accessory structure. However, the non-conversion agreement is not a requirement.
Section 4.4 - Standards for Subdivision Proposals

A. All subdivision proposals shall be consistent with the need to minimize flood damage;

B. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

C. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and

D. Base flood elevation data shall be obtained from other sources or developed using detailed methodologies, hydraulic and hydrologic analysis, comparable to those contained in a Flood Insurance Study for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty\(^{20}\) lots or five acres, whichever is the lesser.

\(^{20}\) The recommended standard here is 5 lots instead of 50. Fifty lots is the breakpoint suggested in the federal regulations, but the 5/5 rule is less confusing and captures more commercial development.
ARTICLE V – EXISTING STRUCTURES IN FLOODPLAIN AREAS

Any structure or use of a structure or premises must be brought into conformity with these provisions when it is changed, repaired, or improved unless one of the following exceptions is established before the change is made:

A. The floodplain manager has determined that:

1. Change is not a substantial repair or substantial improvement AND
2. No new square footage is being built in the floodplain that is not complaint AND
3. No new square footage is being built in the floodway AND
4. The change complies with this ordinance and the VA USBC AND
5. The change, when added to all the changes made during a rolling 5-year period does not constitute 50% of the structure’s value.

B. The changes are required to comply with a citation for a health or safety violation.

C. The structure is a historic structure and the change required would impair the historic nature of the structure.

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21 The assumption that all buildings will be brought in to compliance unless an exception is found is not required by the federal regulations, it is a recommended change for the sake of administrative efficiency and improved compliance.

22 This cumulative change requirement is a recommended higher standard. DCR has found that not having a time period for cumulative change can lead to people trying to split work up to avoid hitting the 50% limit which puts the community in a difficult place with enforcement and increases administrative burdens.
ARTICLE VI - VARIANCES: FACTORS TO BE CONSIDERED [44 CFR 60.6]

Variances shall be issued only upon (i) a showing of good and sufficient cause, (ii) after the Board of Zoning Appeals has determined that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) after the Board of Zoning Appeals has determined that the granting of such variance will not result in (a) unacceptable or prohibited increases in flood heights, (b) additional threats to public safety, (c) extraordinary public expense; and will not (d) create nuisances, (e) cause fraud or victimization of the public, or (f) conflict with local laws or ordinances.

While the granting of variances generally is limited to a lot size less than one-half acre, deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases. Variances may be issued by the Board of Zoning Appeals for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the provisions of this Section.

Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of this Section are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

In passing upon applications for variances, the Board of Zoning Appeals shall satisfy all relevant factors and procedures specified in other sections of the zoning ordinance and consider the following additional factors:

A. The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance shall be granted for any proposed use, development, or activity within any Floodway District that will cause any increase in the one percent (1%) chance flood elevation.

B. The danger that materials may be swept on to other lands or downstream to the injury of others.

C. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.

D. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.

E. The importance of the services provided by the proposed facility to the community.

F. The requirements of the facility for a waterfront location.

G. The availability of alternative locations not subject to flooding for the proposed use.

H. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
I. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.

J. The safety of access by ordinary and emergency vehicles to the property in time of flood.

K. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.

L. The historic nature of a structure. Variances for repair or rehabilitation of historic structures may be granted upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

M. Variances will not be issued for any accessory structure within the SFHA. *(Note: See Article IV, Section 4.3.D.1).*

OR

No variance shall be granted for an accessory structure exceeding 600 square feet. *(Note: See Article IV, Section 4.3.D.2).*

N. Such other factors which are relevant to the purposes of this Ordinance.

The Board of Zoning Appeals may refer any application and accompanying documentation pertaining to any request for a variance to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for flood protection and other related matters.

Variances shall be issued only after the Board of Zoning Appeals has determined that the granting of such will not result in (a) unacceptable or prohibited increases in flood heights, (b) additional threats to public safety, (c) extraordinary public expense; and will not (d) create nuisances, (e) cause fraud or victimization of the public, or (f) conflict with local laws or ordinances.

Variances shall be issued only after the Board of Zoning Appeals has determined that the variance will be the minimum required to provide relief.

The Board of Zoning Appeals shall notify the applicant for a variance, in writing that the issuance of a variance to construct a structure below the one percent (1%) chance flood elevation (a) increases the risks to life and property and (b) will result in increased premium rates for flood insurance.

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23 If a size restriction for accessory structures that is less than 600 square feet is chosen, variances could be issued for structures larger than that size restriction, not to exceed 600 square feet. In this case, additional language is required under Article VI, Section M. Suggested language:

“Accessory structures within the SFHA that are greater than {insert size restriction} square feet, do not exceed 600 square feet, and do not meet all requirements for elevating or dry floodproofing, as set out in Article IV, Section 4.3.B, must secure a variance in accordance with the floodplain ordinance before a permit is issued. The structure must comply with accessory structure criteria in Article IV, Section 4.3.D.2. No variance shall be granted for an accessory structure exceeding 600 square feet. *(Note: See Article IV, Section 4.3.D.2).*”
A record shall be maintained of the above notification as well as all variance actions, including justification for the issuance of the variances. Any variances that are issued shall be noted in the annual or biennial report submitted to the Federal Insurance Administrator.
ARTICLE VII - GLOSSARY [44 CFR 59.1]

A. **Appurtenant or accessory structure** - A non-residential structure which is on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures are not to exceed 600 square feet\(^{24}\).

B. **Base flood** - The flood having a one percent chance of being equalled or exceeded in any given year.

C. **Base flood elevation** - The water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year. The water surface elevation of the base flood in relation to the datum specified on the community’s Flood Insurance Rate Map. For the purposes of this ordinance, the base flood is the 1% annual chance flood.

D. **Basement** - Any area of the building having its floor sub-grade (below ground level) on all sides.

E. **Board of Zoning Appeals** - The board appointed to review appeals made by individuals with regard to decisions of the Zoning Administrator in the interpretation of this ordinance.

F. **Coastal A Zone** - Flood hazard areas that have been delineated as subject to wave heights between 1.5 feet and 3 feet.

G. **Development** - Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, temporary structures, mining, dredging, filling, grading, paving, excavation, drilling or other land-disturbing activities or permanent or temporary storage of equipment or materials.

H. **Elevated building** - A non-basement building built to have the lowest floor elevated above the ground level by means of solid foundation perimeter walls, pilings, or columns (posts and piers).

I. **Encroachment** - The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

J. **Existing construction** - For the purposes of the insurance program, structures for which the “start of construction” commenced before the effective date of the FIRM or before January 1, 1975 for FIRMs effective before that date. “Existing construction” may also be referred to as “existing structures” and “pre-FIRM.”

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\(^{24}\) This is the size restriction set by FEMA Region III, but a community could choose a higher standard and limit accessory structures to a size less than 600 square feet. However, a variance could be issued for larger accessory structures, not to exceed 600 square feet. If a smaller size limit is chosen, additional language would be required in Article VI: Variances - see Footnote 23. The chosen size restriction should also be reflected in Article IV, Section 4.3.D.2.b, Article VI, Section M, and Article VIII-Glossary in the definition of “Appurtenant or accessory structure.”
K. **Flood or flooding** -
   1. A general or temporary condition of partial or complete inundation of normally dry land areas from:
      a. The overflow of inland or tidal waters; or,
      b. The unusual and rapid accumulation or runoff of surface waters from any source.
      c. Mudflows which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
   2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph 1 (a) of this definition.

L. **Flood Insurance Rate Map (FIRM)** - an official map of a community, on which the Federal Emergency Management Agency has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

M. **Flood Insurance Study (FIS)** - a report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudflow and/or flood-related erosion hazards.

N. **Floodplain or flood-prone area** - Any land area susceptible to being inundated by water from any source.

O. **Floodproofing** - any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

P. **Floodway** - The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot at any point within the community.

Q. **Freeboard** - A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. “Freeboard” tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization in the watershed.

R. **Functionally dependent use** - A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. This term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.
S. **Highest adjacent grade** - the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

T. **Historic structure** - Any structure that is:
   1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
   2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
   3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or,
   4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
      a. By an approved state program as determined by the Secretary of the Interior; or,
      b. Directly by the Secretary of the Interior in states without approved programs.

U. **Hydrologic and Hydraulic Engineering Analysis** - Analyses performed by a licensed professional engineer, in accordance with standard engineering practices that are accepted by the Virginia Department of Conservation and Recreation and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

V. **Letters of Map Change (LOMC)** - A Letter of Map Change is an official FEMA determination, by letter, that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include:

   **Letter of Map Amendment (LOMA)** - An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a land as defined by meets and bounds or structure is not located in a special flood hazard area.

   **Letter of Map Revision (LOMR)** - A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. A Letter of Map Revision Based on Fill (LOMR-F), is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community’s floodplain management regulations.

   **Conditional Letter of Map Revision (CLOMR)** - A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map or Flood Insurance Study.

W. **Lowest adjacent grade** - the lowest natural elevation of the ground surface next to the walls of a structure.
X. **Lowest floor** - The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building’s lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Federal Code 44CFR §60.3.

Y. **Manufactured home** - A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term “manufactured home” also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.

Z. **Manufactured home park or subdivision** - a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

AA. **Mean Sea Level** – for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988 to which base flood elevations shown on a community’s FIRM are referenced.

BB. **New construction** - For the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after ________________ [insert the effective date of the community’s initial Flood Insurance Rate Map] [or “after December 31, 1974”, choose whichever is later], and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

CC. **Post-FIRM structures** - A structure for which construction or substantial improvement occurred on or after ________________ [insert the effective date of the community’s initial Flood Insurance Rate Map] [or “after December 31, 1974”, choose whichever is later].

DD. **Pre-FIRM structures** - A structure for which construction or substantial improvement occurred before ________________ [insert the effective date of the community’s initial Flood Insurance Rate Map] [or “on or before December 31, 1974”, choose whichever is later].

EE. **Primary frontal dune** - a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms.

FF. **Recreational vehicle** - A vehicle which is:
1. Built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable by a light duty truck; and,
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal use.

GG. **Repetitive Loss Structure** - A building covered by a contract for flood insurance that has incurred flood-related damages on two occasions in a 10-year period, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

HH. **Severe repetitive loss structure** - a structure that: (a) Is covered under a contract for flood insurance made available under the NFIP; and (b) Has incurred flood related damage - (i) For which 4 or more separate claims payments have been made under flood insurance coverage with the amount of each such claim exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000; or (ii) For which at least 2 separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

II. **Shallow flooding area** - A special flood hazard area with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

JJ. **Special flood hazard area** - The land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year as determined in Article 3, Section 3.1 of this ordinance.

KK. **Start of construction** - For other than new construction and substantial improvement, under the Coastal Barriers Resource Act (P.L. – 97-348), means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of the construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

LL. **Structure** - for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

MM. **Substantial damage** - Damage of any origin sustained by a structure whereby the cost of restoring the structure to it’s before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. *It also means flood-related*
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*damages sustained by a structure on two occasions in a 10-year period, in which the cost of the repair, on the average, equals or exceeds 25 percent of the market value of the structure at the time of each such flood event.*

NN. **Substantial improvement** - Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
2. Any alteration of a historic structure, provided that the alteration will not preclude the structure’s continued designation as a historic structure.
3. Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined above, must comply with all ordinance requirements that do not preclude the structure’s continued designation as a historic structure. Documentation that a specific ordinance requirement will cause removal of the structure from the National Register of Historic Places or the State Inventory of Historic places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

OO. **Violation** - the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

PP. **Watercourse** - A lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.
ARTICLE VIII – ENACTMENT

Enacted and ordained this ___ day of __________, 20___. This ordinance, number ____ of {community}, Virginia, shall become effective upon passage.

________________________________________
Signature

________________________________________
Title

________________________________________
Attested

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25 This section can be customized based upon a community’s preferences. The model ordinance contains this section as FEMA requires an ordinance to have signatures from the community, either elected officials or administrators, showing that the ordinance has been officially adopted. FEMA also requires a date of adoption and an ordinance number.
ARTICLE I – GENERAL PROVISIONS

SEC. 30-5. ZONING ADMINISTRATOR; POWERS AND DUTIES.

(A) The zoning administrator shall serve as the administrator of this ordinance, unless otherwise specified.

ARTICLE II – DEFINITIONS AND USE TYPES

SEC. 30-28. DEFINITIONS.

(C) For the purposes of this ordinance, the words and phrases listed below in this section shall have the meanings described below.

Accessory building or structure: A building or structure detached from a principal building on the same lot and customarily incidental and subordinate to the principal building or use. Where an accessory building or structure is attached to the principal building in a substantial manner, as by a wall or roof, such accessory building shall be considered a part of the principal building. Accessory structures shall not exceed 600 square feet in special flood hazard areas.

Base flood: The flood having a one percent chance of being equaled or exceeded in any given year.

Base flood elevation (BFE): The water surface elevation which occurs in a one hundred-year flood as designated by the Federal Emergency Management Agency, or in approximated floodplains, approved by the director of community development of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year and is generally referred to as the “100-year flood.” The water surface elevation of the base flood in relation to the datum specified on the community’s Flood Insurance Rate Map. For the purpose of this ordinance, the base flood is the 1% annual chance flood.

Board of zoning appeals (BZA): The term board of zoning appeals will refer to the Roanoke County Board of Zoning Appeals, also referred to in this ordinance as BZA. This board is appointed to review appeals made by individuals with regard to decisions of the zoning administrator, and in special flood hazard areas the decisions of the floodplain administrator, in the interpretation of this ordinance. In addition, the BZA is responsible for granting variances from local zoning regulations.

Conditional letter of map revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum National Flood Insurance Program (NFIP) requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective Flood Insurance Rate Map (FIRM) or Flood Insurance Study (FIS).
Development: Any manmade change to improved or unimproved real estate including but not limited to buildings or other structures, temporary structures, mining, dredging, filling, grading, paving, excavation or drilling operations or other land-disturbing activities, or permanent or temporary storage of equipment or materials.

Elevated building: A non-basement building built to have the lowest floor elevated above the ground level by means of solid foundation perimeter walls, pilings, or columns (posts and piers).

Encroachment: The advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing construction: For the purpose of the flood insurance program, structures for which the “start of construction” commenced before the effective date of the FIRM for that location, or before October 17, 1978, for FIRM effective before that date. “Existing construction” may also be referred to as “existing structures” and “pre-FIRM.”

Flood or flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters; or the unusual and rapid accumulation or runoff of surface waters from any source.

(1) A general or temporary condition of partial or complete inundation of normally dry land areas from:
   (a) the overflow of inland or tidal waters; or,
   (b) the unusual and rapid accumulation or runoff of surface waters from any source.
   (c) Mudflows which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph 1 (a) of this definition.

Flood insurance rate map (FIRM): An official map of a community, on which the Federal Emergency Management Agency (FEMA) has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood insurance study (FIS): A report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination,
evaluation and determination of mudflow and/or flood-related erosion hazards.

_Flood, one hundred year_: A flood that, on the average, is likely to occur once every one hundred (100) years (i.e., that has a one percent chance of occurring each year, although the flood may occur in any year). A one hundred year flood is also referred to as the base flood.

_Floodplain administrator_: The Floodplain Administrator of Roanoke County, Virginia. The floodplain administrator shall be responsible for administering the floodplain regulations on behalf of the county.

_Floodproofing_: Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

_Floodway_: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height, one foot at any point within the community.

_Freeboard_: A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. “Freeboard” tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization in the watershed.

_Highest adjacent grade_: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

_Hydrologic and hydraulic engineering analysis_: Analyses performed by a licensed professional engineer, in accordance with standard engineering practices that are accepted by the Virginia Department of Conservation and Recreation and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodplain and floodway information and boundaries, and flood profiles.

_Letter of map amendment (LOMA)_: An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a Land as defined by metes and bounds or structure is not located in a special flood hazard area.

_Letters of map change (LOMC)_: A Letter of Map Change is an official FEMA determination, by letter, that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include Letter of Map Amendment (LOMA), Letter of Map Revision (LOMR), and Conditional Letter of Map Revision (CLOMR).

_Letter of map revision (LOMR)_: A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric
features. A Letter of Map Revision Based on Fill (LOMR-F) is a determination that a structure or parcel of land has been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the community’s floodplain management regulations.

*Lowest adjacent grade:* The lowest natural elevation of the ground surface next to the walls of a structure.

*New construction:* For the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial FIRM for that location, or after October 17, 1978, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

*Post-FIRM structures:* A structure for which construction or substantial improvement occurred on or after the effective date of the initial FIRM for that location, or on or after October 17, 1978.

*Pre-FIRM structures:* A structure for which construction or substantial improvement occurred before the effective date of the initial FIRM for that location, or before October 17, 1978.

*Recreational vehicle:* A vehicle, built on a single chassis and measuring 400 square feet or less at the largest horizontal projection, which can be towed, hauled or driven, designed and used as temporary living accommodations for recreational, camping or travel uses only. Recreational vehicles shall include travel trailers, pick-up campers, motor homes, tent trailers or similar devices used for temporary mobile housing, boats and personal watercraft.

*Repetitive loss structure:* A building covered by a contract for flood insurance that has incurred flood-related damages on two occasions in a 10-year period, in which the cost of the repair, on the average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

*Severe repetitive loss structure:* A structure that: (a) Is covered under a contract for flood insurance made available under the NFIP; and (b) Has incurred flood related damage – (i) For which 4 or more separate claims payments have been made under flood insurance coverage with the amount of each such claim exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000; or (ii) For which at least 2 separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.
**Shallow flooding area:** A special flood hazard area with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

**Special flood hazard area:** The land in the floodplain subject to a one (1%) percent or greater chance of being flooded in any given year as determined in Section 30-74-8 of this ordinance.

**Start of construction:** For other than new construction and substantial improvement, start of construction means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of the construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**Structure:** Anything that is constructed or erected with a fixed location on the ground, or attached to something having a fixed location on the ground, including but not limited to buildings, signs, manufactured homes and swimming pools. Walls and fences shall not be deemed structures except as otherwise specifically provided in this ordinance. For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

**Substantial damage.** Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. It also means flood-related damages sustained by a structure on two occasions in a 10-year period, in which the cost of repair, on average, equals or exceeds 25 percent of the market value of the structure at the time of each such flood event.

**Substantial improvement.** Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred repetitive loss or substantial damage regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified
by the local code enforcement official which are the minimum necessary to assure
safe living conditions; or

(2) Any alteration of a historic structure provided that the alteration will not preclude
the structure’s continued designation as a historic structure; or

(3) Historic structures undergoing repair or rehabilitation that would constitute a
substantial improvement as defined above, must comply with all ordinance
requirements that do not preclude the structure’s continued designation as a
historic structure. Documentation that a specific ordinance requirement will cause
removal of the structure from the National Register of Historic Places or the State
Inventory of Historic places must be obtained from the Secretary of the Interior or
the State Historic Preservation Officer. Any exemption from ordinance
requirements will be the minimum necessary to preserve the historic character and
design of the structure.

SEC. 30-29. USE TYPES; GENERALLY.

Sec. 30-29-2. Residential Use Types.

Manufactured home: A structure subject to federal regulation, which is transportable in
one (1) or more sections: is eight (8) body feet or more in width and forty (40) body feet or more
in length in the traveling mode, or is three hundred twenty (320) or more square feet when
erected on site; is built on a permanent chassis; is designed to be used as a single-family
dwelling, with or without a permanent foundation, when connected to the required utilities; and
includes the plumbing, heating, air conditioning, and electrical systems contained in the
structure. For floodplain management purposes also included are park trailers, travel trailers, and
other similar vehicles placed on a site for greater than 180 consecutive days.

ARTICLE III – DISTRICT REGULATIONS

SEC. 30-74. FO FLOODPLAIN OVERLAY DISTRICT.

Sec. 30-74-1. Purpose.

(A) The purpose of the Floodplain Overlay (FO) District is to provide mandatory floodplain
restrictions for Federal Emergency Management Agency (FEMA) compliance. The
purpose of these floodplain provisions is to prevent the following hazards:

1. The loss of life, health, or property;

2. The creation of health and safety hazards;

3. The disruption of commerce and governmental services;
4. The extraordinary and unnecessary expenditure of public funds for flood protection and relief; and

5. The impairment of the tax base.

(B) These provisions are designed to accomplish the above purposes by:

1. Regulating uses, activities, and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies;

2. Restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding;

3. Requiring all those uses, activities, and developments that do occur in flood-prone areas to be protected and/or flood-proofed against flooding and flood damage; and

4. Protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

Sec. 30-74-2. Applicability and Administration.

(A) These provisions shall apply to all lands within the jurisdiction of Roanoke County and identified as being within a floodplain, as stipulated in this section as special flood hazard areas (SFHAs), shown on the flood insurance rate map (FIRM) or included in the flood insurance study (FIS) provided to Roanoke County by FEMA.

(B) These provisions shall supersede any regulations currently in effect in floodplain areas. Where conflict exists between these provisions and those of any underlying zoning district, the more restrictive provisions shall apply.

(C) In the event any provision concerning a floodplain area is declared inapplicable as a result of any legislative or administrative actions or judicial discretion, the basic underlying zoning district provisions shall remain applicable.

Sec. 30-74-3. Compliance.

(A) No land shall hereafter be developed and no structure shall be located, relocated, constructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this section and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this section.

(B) The degree of flood protection sought by the provisions of this section is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study, but does not imply total flood protection. Larger floods may occur on rare
occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This section does not imply that areas outside floodplain areas, or that land uses permitted within such areas, will be free from flooding or flood damages.

(C) This ordinance shall not create liability on the part of Roanoke County or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

Sec. 30-74.4. Severability

If any section, subsection, paragraph, sentence, clause, or phrase of this ordinance shall be declared invalid for any reason whatever, such decision shall not affect the remaining portions of this ordinance. The remaining portions shall remain in full force and effect; and for this purpose, the provisions of this ordinance are hereby declared to be severable.

Sec. 30-74.5. Designation of the Floodplain Administrator

The County Administrator shall designate the Floodplain Administrator for Roanoke County.

Sec. 30-74.6. Duties and Responsibilities of the Floodplain Administrator

The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:

(A) Review applications for permits to determine whether proposed activities will be located in the Special Flood Hazard Area (SFHA).

(B) Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.

(C) Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.

(D) Review applications to determine whether all necessary permits have been obtained from the Federal, State or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the one hundred year frequency floodplain of free-flowing non-tidal waters of the State.

(E) Verify that applicants proposing an alteration of a watercourse have notified adjacent communities, the Department of Conservation and Recreation (Division of Dam Safety
and Floodplain Management), and other appropriate agencies (Virginia Department of Environmental Quality (VADEQ), United States Army Corps of Engineers (USACE)) and have submitted copies of such notifications to FEMA.

(F) Approve applications and issue permits to develop in flood hazard areas if the provisions of these regulations have been met, or disapprove applications if the provisions of these regulations have not been met.

(G) Inspect or cause to be inspected, buildings, structures, and other development for which permits have been issued to determine compliance with these regulations or to determine if non-compliance has occurred or violations have been committed.

(H) Review Elevation Certificates and require incomplete or deficient certificates to be corrected.

(I) Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain the FIRM, including hydrologic and hydraulic engineering analyses prepared by or for Roanoke County, within six months after such data and information becomes available if the analyses indicate changes in base flood elevations.

(J) Maintain and permanently keep records that are necessary for the administration of these regulations, including:

1. Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies and maps and current effective studies and maps) and Letters of Map Change (LOMC); and

2. Documentation supporting issuance and denial of permits, Elevation Certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been flood-proofed, inspection records, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.

(K) Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders and require permit holders to take corrective action.

(L) Advise the Board of Zoning Appeals (BZA) regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.

(M) Administer the requirements related to proposed work on existing buildings:

1. Make determinations in consultation with the building official as to whether buildings and structures that are located in flood hazard areas and that are damaged by any cause have been substantially damaged.
2. Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct. Prohibit the non-compliant repair of substantially damaged buildings except for temporary emergency protective measures necessary to secure a property or stabilize a building or structure to prevent additional damage.

(N) Undertake other actions which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other Federal, State, and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in special flood hazard areas; and assisting property owners with documentation necessary to file claims for Increased Cost of Compliance coverage under the National Flood Insurance Program (NFIP) flood insurance policies.

(O) Notify FEMA when the corporate boundaries of Roanoke County have been modified and:

1. Provide a map that clearly delineates the new corporate boundaries or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation; and

2. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

(P) Upon the request of FEMA, complete and submit a report concerning participation in the NFIP which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.

(Q) It is the duty of the Floodplain Administrator to take into account flood, mudslide and flood-related erosion hazards, to the extent that they are known, in all official actions relating to land management and use throughout the entire jurisdictional area of the community, whether or not those hazards have been specifically delineated geographically (e.g. via mapping or surveying).

Sec. 30-74-7. Use and Interpretation of FIRM

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The Floodplain Administrator shall make interpretations, where needed, as to the exact location of SFHAs, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of FIRMs and data:

(A) Where field surveyed topography indicates that adjacent ground elevations:

1. Are below the base flood elevation in riverine SFHAs, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as SFHA and subject to the requirements of these regulations;

2. Are above the base flood elevation and the area is labelled as a SFHA on the FIRM, the area shall be regulated as SFHA unless the applicant obtains a Letter of Map Change that removes the area from the SFHA.

(B) In FEMA-identified SFHAs where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a Federal, State, or other source shall be reviewed and reasonably used.

(C) Base flood elevations and designated floodway boundaries on the FIRM and in the FIS shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.

(D) Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on the FIRM and in the FIS.

(E) If a Preliminary FIRM and/or a Preliminary FIS has been provided by FEMA:

1. Upon the issuance of a Letter of Final Determination by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.

2. Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data shall be deemed the best available data pursuant to Section 30-74-8(A)3 and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.

3. Prior to issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.

Sec. 30-74-48. Delineation of Areas.
(A) The various special flood plain hazard areas shall include the SFHAs areas subject to inundation by waters of the one hundred year flood. The primary basis for the delineation of these areas shall be the flood insurance study FIS and the FIRM for the county, Roanoke County prepared by Federal Emergency Management Agency, FEMA, dated September 28, 2007, as amended, and any subsequent revisions or amendments thereto.

Roanoke County may identify and regulate local flood hazard and ponding areas that are not delineated on the FIRM. These areas may be noted on a “Local Flood Hazard Map” using the best available topographic data and locally derived information such as flood of record, historic high water marks or approximate study methodologies.

The boundaries of the SFHAs are established as shown on the FIRM which is declared to be a part of this ordinance and which shall be kept on file at the Roanoke County offices. These areas are more specifically defined as follows:

1. The Floodway is part of an AE Zone and is delineated, for purposes of this section, using the criteria that a certain area within the floodplain must be capable of carrying the waters of the 100-year one percent annual chance flood without increasing the water surface elevation of that flood more than one foot at any point. These Floodways are specifically defined in Table 45 of the above referenced Flood Insurance Study FIS and shown on the accompanying Flood Insurance Rate Map FIRM accompanying that study.

The following provisions shall apply within the Floodway of an AE zone:

a. Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations and other required information shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

Development activities which increase the water surface elevation of the base flood may be allowed, provided that the applicant first applies – with Roanoke County’s endorsement – for a Conditional Letter of Map Revision (CLOMR), and receives the approval of the FEMA.

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Once approved by FEMA, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 30-74-13 and 30-74-15.

b. The placement of manufactured homes (mobile homes) is prohibited, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring, elevation, and encroachment standards are met.

32. The AE or AH Zones, Special Floodplain shall be those areas identified as an AE zone on the maps accompanying the flood insurance study that are designated as AE or AH Zones on the FIRM accompanying the FIS shall be the areas for which one hundred year percent annual chance flood elevations have been provided but for which no and the floodway has not been delineated. The following provisions shall apply within an AE or AH zone where FEMA has provided base flood elevations:

a. Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within the SFHA, designated as Zones AE or AH on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within Roanoke County.

Development activities in Zones AE or AH on the County of Roanoke’s FIRM which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the applicant first applies – with Roanoke County’s endorsement – for a CLOMR, and receives the approval of FEMA.

43. The A Zone, or Approximated Floodplain, on the FIRM accompanying the FIS, shall be those floodplain areas shown on the flood insurance rate map for which no detailed flood profiles or elevations are provided, but the one percent annual chance floodplain boundary has been approximated, and all other floodplain areas where the drainage area is greater than 100 acres. For these areas, the following provisions shall apply:

a. The base flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available. Where the specific 100 year one percent annual chance flood elevation cannot be determined for this area using other sources of data, such as the U.S. Army Corps of Engineers-USACE Floodplain Information Reports, U. S. Geological Survey Flood-Prone Quadrangles, etc and similar sources, then the applicant for the proposed use, development and/or activity shall
determine this base flood elevation in accordance with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Calculations for the design flood shall be related to existing land use and potential development under existing zoning. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the director of community development. For development proposed in the approximate floodplain the applicant must use technical methods that correctly reflect currently accepted practices, such as point on boundary, high water marks, or detailed methodologies hydrologic and hydraulic analyses. Studies, analyses, computations, and other information shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

b. The Floodplain Administrator reserves the right to require a hydrologic and hydraulic analysis for any development. When such base flood elevation data is utilized, the lowest floor shall be elevated to or above the base flood level plus twelve (12) inches for non-residential structures and twenty-four (24) inches for residential structures.

c. During the permitting process, the Floodplain Administrator shall obtain:

i. The elevation of the lowest floor (in relation to mean sea level), including the basement, of all new and substantially improved structures; and,

ii. If the structure has been flood-proofed in accordance with the requirements of Section 30-74, the elevation (in relation to mean sea level) to which the structure has been flood-proofed.

Base flood elevation data shall be obtained from other sources or developed using detailed methodologies comparable to those contained in a FIS for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser.

24. The Flood Fringe AO Zone, shall be that those areas of the 100-year floodplain not included in the Floodway shallow flooding identified as AO on the FIRM accompanying the FIS. The basis for the outermost boundary of the Flood Fringe shall be the 100-year flood elevations contained in the flood profiles of the above referenced Flood Insurance Study and as shown on the Flood Insurance Rate Map accompanying the study. For these areas, the following provisions shall apply:
a. All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to or above the flood depth specified on the FIRM, above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than two feet above the highest adjacent grade.

b. All new construction and substantial improvements of non-residential structures shall:

i. Have the lowest floor, including basement, elevated to or above the flood depth specified on the FIRM, above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two feet above the highest adjacent grade; or,

ii. Together with attendant utility and sanitary facilities be completely flood-proofed to the specified flood level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

c. Adequate drainage paths around structures on slopes shall be provided to guide floodwaters around and away from proposed structures.

(B) The mapped floodplain, includes all of the above regions and also the regions designated as having a 0.2 annual chance of flooding on any flood map or flood insurance study. In this area, no new emergency service, medical service, or governmental records storage shall be allowed except through the variance process.

Sec. 30-74-59. Creation of Overlay.

(A) The floodplain areas described above shall be an overlay to the existing underlying zoning districts as shown on the Official Zoning Map, and as such, the provisions for the floodplain areas shall serve as a supplement to the underlying zoning district provisions.

(B) The boundaries of the floodplain areas are established as shown on the Flood Insurance Rate Map FIRM which is declared to be part of this chapter and which shall be kept on file in the office of the Floodplain Administrator.

Sec. 30-74-610. Floodplain Boundary Changes and Interpretation
(A) In regards to jurisdictional boundary changes, the County Floodplain Ordinance in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements for participation in the National Flood Insurance Program. Municipalities with existing Floodplain Ordinances shall pass a resolution acknowledging and accepting responsibility for enforcing Floodplain Ordinance standards prior to annexation of any area containing identified flood hazards. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

In accordance with the Code of Federal Regulations, Title 44 Subpart (B) Section 59.22 (a) (9) (v) all NFIP participating communities must notify the Federal Insurance Administration (FIA) and optionally the State Coordinating Office in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.

In order that the FIRM accurately represent the community’s boundaries, a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority must be included with the notification.

(AB) The delineation of any of the floodplain areas may be revised by the board of supervisors, Roanoke County where natural or man-made changes have occurred and/or where more detailed studies have been conducted or undertaken by the U.S. Army Corps of Engineers USACE or other qualified agency, or an individual documents the need for such change. However, prior to any such change, approval must be obtained from the Federal Insurance Administration FEMA. A completed LOMR is a record of this approval.

(BC) Initial interpretations of the boundaries of the floodplain areas shall be made by the Floodplain Administrator. Should a dispute arise concerning the boundaries of any of the floodplain areas, the board of zoning appeals BZA shall make the necessary determination. The person questioning or contesting the location of the floodplain area boundary shall be given an opportunity to present his case to the board of zoning appeals BZA and to submit technical evidence. Procedures for such appeals shall be as outlined in Section 30-24 of this ordinance.

Sec. 30-74-11. Submitting Model Backed Technical Data
A community’s base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six (6) months after the date such information becomes available, a community shall notify FEMA of the changes by submitting technical or scientific data. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

Sec. 30-74-12. Letters of Map Revision (LOMR)

(A) When development in the floodplain will cause or causes a change in the base flood elevation, the applicant, including state agencies, must notify FEMA by applying for a CLOMR and then a LOMR. Example cases may include, but not be limited to:

1. Any development within the floodway that causes a rise in the base flood elevations.

2. Any development occurring in Zones A1-30 and AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation.

3. Alteration or relocation of a stream (including but not limited to installing culverts and bridges) 44 Code of Federal Regulations §65.3 and §65.6(a)(12).

Sec. 30-74-213. Floodplain Area Provisions, Generally.

(A) All uses, activities, and development occurring within any floodplain area, including placement of manufactured homes, shall be undertaken only upon the issuance of a zoning permit. Such development shall be undertaken only in strict compliance with the provisions of this section and with all other applicable codes and ordinances such as the Virginia Uniform Statewide Building Code (VA USBC) and the Roanoke County Subdivision Ordinance. Prior to the issuance of any such permit, the Floodplain Administrator shall require all applications to include compliance with all applicable state and federal laws and shall review all sites to assure they are reasonably safe from flooding. Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodways or any watercourse, drainage ditch, or any other drainage facility or system.

(B) Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodways or any watercourse, drainage ditch, or any other drainage facility or system. Prior to any proposed alteration or relocation of any channels or floodways of any watercourse, stream, etc., within Roanoke County, approval shall be obtained from the Virginia Department of Environmental Quality, Division of Water. Further, notification of the proposal shall be given to all affected adjacent jurisdictions. Copies of such notification shall be forwarded to the Virginia Department of

1/21/20-17
Environmental Quality, Division of Water, the State Department of Intergovernmental Affairs, and the Federal Insurance Administration.

(C) The lowest floor elevation of any new residential structure constructed within a floodplain area shall be at least two (2) feet above base flood elevation. The lowest floor elevation of any new non-residential structure constructed within a floodplain area shall be at least one (1) foot above base flood elevation, unless such structure is floodproofed. In addition, no existing structure shall be modified, expanded or enlarged unless the new construction complies with this standard.

(DB) All applications for development in the floodplain district and all building permits issued for the floodplain shall incorporate the following information:

1. For structures to be elevated, the elevation of the lowest floor (including basement).
2. For structures to be flood-proofed (non-residential only), the elevation to which the structure will be flood-proofed.
3. The elevation of the one hundred-year base flood at the site.
4. Topographic information showing existing and proposed ground elevations.

(EC) For all new subdivisions which adjoin or include floodplain areas identified in the flood insurance study FIS, the base flood elevation shall be shown on the final record plat.

(D) The following provisions shall apply to all permits:

1. New construction and substantial improvements shall be built according to Section 30-74-8 of this ordinance and the VA USBC, and anchored to prevent flotation, collapse or lateral movement of the structure.
2. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state anchoring requirements for resisting wind forces.
3. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
4. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
5. Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

6. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

7. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

8. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

9. Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, or other water feature, within this jurisdiction a permit shall be obtained from the USACE, the VADEQ, and the Virginia Marine Resources Commission (a joint permit application is available from any of these organizations). Furthermore, in riverine areas, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the Virginia Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), other required agencies, and FEMA.

10. The flood carrying capacity within an altered or relocated portion of any watercourse shall be maintained.

(F) All recreational vehicles located in a FEMA designated floodplain shall either:

1. Be on site for fewer than one hundred eighty (180) consecutive days, be fully licensed and inspected, and ready for highway use; or

2. Meet the minimum requirements for placement and the elevation and anchoring requirements for manufactured homes as contained in the Virginia Uniform Statewide Building Code.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

Sec. 30-74-8-14. Floodway Development Regulations.

(A) In the floodway no development shall be permitted except where the effect of such development on flood heights is fully offset by accompanying improvements which have been approved by all appropriate authorities as required above.
(B) The placement of any manufactured home, except in an existing manufactured home park within the floodway is specifically prohibited.

(C) In the floodway, the following uses, types and activities are permitted provided that (1) they are in compliance with the provisions of the underlying zoning district, (2) are not prohibited by any other ordinance and (3) no specific land use requires any type of structure, fill, or storage of materials and equipment:

1. Agricultural
2. Public Parks and Recreational Areas
3. Outdoor Sports and Recreation
4. Golf Courses
5. Accessory residential uses such as yard areas, gardens, play areas, and loading areas.
6. Accessory industrial and commercial uses such as, but not limited to, yard areas, parking and loading areas, and airport landing strips, etc.

(D) The following uses and activities may be permitted by Special Use pursuant to Section 30-19 of this ordinance provided that they are in compliance with the provisions of the underlying zoning district and are not prohibited by this or any other ordinance:

1. Structures (except for manufactured homes) accessory to the uses and activities by right, above.
2. Certain utilities and public facilities and improvements such as pipe lines, water and sewage treatment plants, and other similar or related uses.
3. Water related uses and activities such as marinas, docks, wharves, piers, etc.
4. Extraction of sand, gravel, and other materials (where no increase in level of flooding or velocity is caused thereby).
5. Storage of materials and equipment provided that they are not buoyant, flammable or explosive, and are not subject to major damage by flooding, or provided that such material and equipment is firmly anchored to prevent flotation or movement, and/or can be readily removed from the area within the time available after flood warning.
6. Other similar uses and activities provided they cause no increase in flood heights and/or velocities. All uses, activities, and structural development, shall be undertaken
in strict compliance with the flood-proofing provisions contained in all other applicable codes and ordinances.

Sec. 30-74-15. Elevation and Construction Standards

In all identified flood hazard areas where base flood elevations have been provided in the FIS or generated by a certified professional in accordance with Section 30-74-8, the following provisions shall apply:

(A) Residential Construction

New construction or substantial improvement of any residential structure (including manufactured homes) in Zones AE, AH and A with detailed base flood elevations shall have the lowest floor, including basement, elevated to or above the base flood level plus twenty-four (24) inches.

(B) Non-Residential Construction

1. New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated to or above the base flood level plus twelve (12) inches.

2. Non-residential buildings located in all AE, and AH zones may be flood-proofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus two feet are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to mean sea level) to which such structures are flood-proofed, shall be maintained by the Floodplain Administrator.

(C) Space below the Lowest Floor

In zones A, AE, AH, and AO, fully enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation shall:

1. Not be designed or used for human habitation, but shall be used solely for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator).
2. Be constructed entirely of flood resistant materials below the regulatory flood protection elevation;

3. Include measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:

   a. Provide a minimum of two openings on different sides of each enclosed area subject to flooding.

   b. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.

   c. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.

   d. The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.

   e. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.

   f. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.

(D) Accessory Structures

Accessory structures in the SFHA shall comply with the elevation requirements and other requirements of 30-74-15(B) or, if not elevated or dry flood-proofed, shall:

1. Not be used for human habitation;

2. Be limited to no more than 600 square feet in total floor area;

3. Be useable only for parking of vehicles or limited storage;

4. Be constructed with flood damage-resistant materials below the base flood elevation;

5. Be constructed and placed to offer the minimum resistance to the flow of floodwaters;
6. Be anchored to prevent flotation;

7. Have electrical service and mechanical equipment elevated to or above the base flood elevation;

8. Shall be provided with flood openings which shall meet the following criteria:
   a. There shall be a minimum of two flood openings on different sides of each enclosed area; if a building has more than one enclosure below the lowest floor, each such enclosure shall have flood openings on exterior walls.
   b. The total net area of all flood openings shall be at least 1 square inch for each square foot of enclosed area (non-engineered flood openings), or the flood openings shall be engineered flood openings that are designed and certified by a licensed professional engineer to automatically allow entry and exit of floodwaters; the certification requirement may be satisfied by an individual certification or an Evaluation Report issued by the ICC Evaluation Service, Inc.
   c. The bottom of each flood opening shall be 1 foot or less above the higher of the interior floor or grade, or the exterior grade, immediately below the opening.
   d. Any louvers, screens or other covers for the flood openings shall allow the automatic flow of floodwaters into and out of the enclosed area.

(E) Standards for Manufactured Homes and Recreational Vehicles

1. All manufactured homes placed, or substantially improved, on individual lots or parcels, must meet all the requirements for new construction, including the elevation and anchoring requirements in Section 30-74-13 and Section 30-74-15.

2. All recreational vehicles located in a FEMA designated floodplain shall either:
   a. Be on site for fewer than one hundred eighty (180) consecutive days, be fully licensed and inspected, and ready for highway use; or
   b. Meet the minimum requirements for placement and the elevation and anchoring requirements for manufactured homes as contained in the VA USBC; or
   c. Be fully licensed and highway ready. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only
by quick disconnect type utilities and security devices, and has no permanently attached additions.

(F) Standards for Subdivision Proposals

1. All subdivision proposals shall be consistent with the need to minimize flood damage;

2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;

3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and

4. When the FIS does not provide detailed base flood elevations, base flood elevation data shall be obtained from other sources or developed using detailed methodologies, hydraulic and hydrologic analysis, comparable to those contained in a Flood Insurance Study for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser.


(A) In the flood-fringe, special floodplain and approximated floodplain the development and/or use of land shall be permitted in accordance with the regulations of the underlying zoning district provided that all such uses, activities, and/or development shall be undertaken in strict compliance with the flood-proofing and related provisions contained in the Virginia Uniform Statewide Building Code and all other applicable codes and ordinances.

However, in the special floodplain and the approximated floodplain areas the applicant and/or developer shall evaluate the effects of the proposed development and/or use of land on the floodplain with current hydrologic and hydraulic engineering techniques. The applicant and/or developer shall submit studies, analysis, computations, etc. to show the delineation of a floodway based on the requirement that all existing and future development not increase the one hundred year flood elevation more than one (1) foot at any point. The engineering principle, equal reduction of conveyance, shall be used to make the determination of increased flood height.

Sec. 30-74-126. Existing Structures in Floodplain Areas.

(A) Any structure or use of a structure or premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions may
be continued subject to the following conditions: must be brought into conformity with these provisions when it is changed, repaired, or improved unless one of the following exceptions is established before the change:

1. Existing structures and/or uses located in the floodway shall not be expanded or enlarged (unless the effect of the proposed expansion or enlargement on flood heights is fully offset by accompanying improvements). The Floodplain Administrator has determined that:
   
   a. Change is not a substantial repair or substantial improvement; and
   b. No new square footage is being built in the floodplain that is not compliant; and
   c. No new square footage is being built in the floodway; and
   d. The change complies with the zoning ordinance and the VA USBC.

2. Any modification, alteration, repair, reconstruction, or improvement of any kind to a structure and/or use located in any floodplain area to an extent or amount of fifty (50) percent or more of its market value, shall be undertaken only in full compliance with the Virginia Uniform Statewide Building Code. The changes are required to comply with a citation for a health and safety violation.

3. The structure is a historic structure and the change requires would impair the historic nature of the structure.

**Sec. 30-74-10. Procedures for Special Uses in Floodways.**

(A) Any use listed as permitted with a special use in a floodway shall be allowed only after approval of an application submitted to the BOS. All such applications shall be reviewed pursuant to the procedures outlined in Section 30-19 of this ordinance. In addition to information required by Section 30-19, all such application shall include the following:

1. Plans in triplicate drawn to scale not less than 1” to 100‘ horizontally showing the location, dimensions, and contours (at five foot intervals) of the lot, existing and proposed structures, fill, storage areas, water supply, sanitary facilities, and relationship of the floodway to the proposal.

2. A typical valley cross section as necessary to adequately show the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and one hundred year flood elevation.
3. A profile showing the slope of the bottom of the channel or flow line of the stream.

4. A summary report, prepared by professional engineers or others of demonstrated qualifications, evaluating the proposed project in relation to flood heights and velocities; the seriousness of flood damage to the use; and other pertinent technical matters.

5. A list of names and addresses of adjoining property owners.

(B) In acting upon such applications, the planning commission and the BOS shall consider all relevant factors specified in other sections of this ordinance and:

1. The danger to life and property due to increased flood heights or velocities caused by encroachments. No special use shall be granted for any proposed use, development, or activity within the floodway that will cause any increase in flood levels during the one hundred year flood.

2. The danger that materials may be swept on to other lands or downstream to the injury of others.

3. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.

4. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.

5. The importance of the services provided by the proposed facility to the county.

6. The requirements of the facility for a waterfront location.

7. The availability of alternative locations not subject to flooding for the proposed use.

8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

9. The relationship of the proposed use to the community plan and floodplain management program for the county.

10. The safety of access to the property in times of flood for ordinary and emergency vehicles.

11. Such other factors which are relevant to the purpose of this Section.
Sec. 30-74-147. Variances.

(A) The board of zoning appeals may consider variances to the requirements of this section, under the following guidelines and conditions:

1. Variances may not be considered within any floodway if any increase in flood levels during the 100-year flood would result.

2. Variance requests may be granted for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or a State Inventory of Historic Places without regard to the procedures set forth in this section.

3. Variances may be considered for new construction and substantial improvements to be erected on a lot contiguous and surrounded by lots with existing structures constructed below the 100-year flood level using the guidelines set forth in Section 30-74-10 (B) above.

(A) Variances shall be issued only upon a showing of good and sufficient cause, and after the BZA has determined that failure to grant the variance would result in exceptional hardship to the applicant.

While the granting of variances generally is limited to a lot size less than one-half acre, deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases. Variances may be issued by the BZA for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the provisions of this Section.

Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of this Section are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

In passing upon applications for variances, the BZA shall satisfy all relevant factors and procedures set forth in Section 30-24-1 et seq. of the zoning ordinance and consider the following additional factors:

1. The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance shall be granted for any proposed use, development, or activity within any Floodway District that will cause any increase in the one percent (1%) chance flood elevation.
2. The danger that materials may be swept on to other lands or downstream to the injury of others.

3. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.

4. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.

5. The importance of the services provided by the proposed facility to the county.

6. The requirements of the facility for a waterfront location.

7. The availability of alternative locations not subject to flooding for the proposed use.

8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

9. The relationship of the proposed use to the comprehensive plan and floodplain management program for the county.

10. The safety of access by ordinary and emergency vehicles to the property in time of flood.

11. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.

12. The historic nature of a structure. Variances for repair or rehabilitation of historic structures may be granted upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

13. No variance shall be granted for an accessory structure exceeding 600 square feet.

14. Such other factors which are relevant to the purposes of this Ordinance.

(B) The board of zoning appeals BZA may refer any application and accompanying documentation pertaining to any request for a variance to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for protection and other related matters. Variances shall only be issued after the board of zoning appeals BZA has determined that the granting of such will not result in:
1. Unacceptable or prohibited increases in flood heights;
2. Additional threats to public safety;
3. Extraordinary public expense;
4. Creation of nuisances;
5. Fraud or victimization of the public; or,
6. Conflict with local laws or ordinances.

Variances shall only be issued after the board of zoning appeals BZA has determined that the variance will be the minimum to provide relief to any hardship.

(C) The board of zoning appeals BZA shall notify the applicant for a variance, in writing, that the issuance of a variance to construct a structure below the 100-year one percent (1%) flood elevation (a) increases the risks to life and property, and (b) will result in increased premium rates for flood insurance. A record of the above notification as well as all variance actions, including justification for their issuance, shall be maintained and any variances which are issued shall be noted in the annual report submitted to the Federal Insurance Administration FIA.

Sec. 30-74-18. Records.

Records of actions associated with administering this ordinance shall be kept on file and maintained by or under the direction of the Floodplain Administrator in perpetuity.

Sec. 30-74-19. Violations.

The failure of a structure or other development to be fully compliant with the county’s floodplain management regulations shall be considered a violation. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Sections 30-74-13 (9), 30-74-15 (B) 2, 30-74-15 (E) 4, and 30-74-16 (A) is presumed to be in violation until such time as that documentation is provided.

Sec. 30-74-20. Penalty for Violations

Section 30-22 of the Zoning Ordinance contains provisions for enforcement of this section and penalties that apply for violations.

Sec. 30-74-13. Liability.
(A) The degree of flood protection sought by the provisions of this section is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This section does not imply that areas outside floodplain areas, or that land uses permitted within such areas, will be free from flooding or flood damages.

(B) This ordinance shall not create liability on the part of Roanoke County or any officers or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.
Memorandum

TO: Planning Commission

FROM: Philip Thompson, AICP
Director of Planning

DATE: January 15, 2020

SUBJECT: Draft Hollins Center Plan Information

At the Planning Commission’s January 21st meeting, staff will review the final draft sections of the Hollins Center Plan dealing with existing conditions, community engagement, and vision and principles with the Commission (sections attached). Staff will also discuss with the Commission the draft plan recommendations (attached) as well as the timeline to finalize the draft Plan and hold a public hearing. Staff will also handout portions of the Plan Summary document at the meeting.

If you have any questions, please contact me by phone at (540) 772-2029 or by email at pthompson@roanokecountyva.gov.

PGT:pt

Attachments
Appendix 1. Existing Conditions Study Area

Location, Context and Boundary

The study area is roughly bounded by Interstate 81 to the north, Williamson Road and Peters Creek Road to the south, Hollins University to the east, and residential neighborhoods and Walrond Park to the west. Plantation Road splits the study area approximately in half (see Map 1-1). The study area encompasses over 270 parcels totaling approximately 465 acres and includes residential, commercial and industrial uses. The Hollins Center study area is located in the northeast portion of Roanoke County, adjacent to Interstate 81 (Exit 146) near the Botetourt County boundary (see Map 1-2).

In early 2016, Planning and Economic Development staff identified several activity centers that were appropriate for new commercial and residential redevelopment and/or infill development. These activity centers present opportunities for investment that will improve their economic viability, aesthetics and value. The Hollins Center study area was chosen for its proximity to Interstate 81 and Hollins University, the highest concentration of employment in the County, as well as for multiple redevelopment opportunities. Further, several transportation projects, which were identified in the 2008 Hollins Area Plan, are currently underway or complete.

The Hollins Center Plan will guide future decisions and actions in Hollins over the next 10 to 20 years.
Population and Demographics

Figure 1-3

The nation’s current young adult generations are soon expected to surpass older generations in size as they decline. In addition, younger generation numbers continue to grow due to immigration. In Virginia, where the state’s largest age group was age 25 to 34 in 2017, younger adult populations have begun to outnumber the population of residents approaching retirement (see Figure 1-3). However, those approaching retirement age make up the largest population in Roanoke County, resulting in an aging population countywide (see Figure 1-4).

There are few differences in population age trends in Hollins versus Roanoke County except for the 20 to 24 age group, which is 8% in Hollins and 5.6% countywide. This difference may be attributed to the student population at Hollins University (see Figure 1-5). Total population in the Hollins area increased by less than two percent from 2010 to 2018, while the median age increased by two years to 44.8.

Figure 1-4

Figure 1-5

Hollins University students
Source: Hollins.edu
In keeping with national trends, Roanoke County’s population growth in the last seven years was attributed to new population emigrating from foreign countries, while the rest migrated here from other localities in Virginia or from other states. Deaths exceeded births, resulting in a natural decrease in population (see Figure 1-6).
Hollins Center Demographics within a 1.5 mile radius from Elbit Systems of America; 2018
To compare the demographics for both Hollins and Roanoke County (see Figures 1-7 and 1-8):

- The percentage of owner-occupied and renter-occupied households is the same with 74% owner-occupied, and 26% renter-occupied.
- Average household size is also essentially the same with 2.34 for the County and 2.33 for Hollins.
- Median age in Hollins is 44.8, only 0.6 years higher than the County median age.
- Hollins and Roanoke County are both predominately white at 83% and 89%, respectively.
- Hollins has nominally higher diversity with 9% Black and 4% Asian populations, as compared to 6% Black and 3% Asian populations countywide.
- Per capita and household incomes are higher countywide at $32,220 and $77,347, respectively. In Hollins they are $31,410 and $73,437.

**Figure 1-8**

<table>
<thead>
<tr>
<th>Demographics (Roanoke County, 2016)</th>
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<tbody>
<tr>
<td>2.34 average household size</td>
<td>$32,220 per capita income</td>
</tr>
<tr>
<td>94,031 residents in 38,322 households</td>
<td>$77,347 average household income</td>
</tr>
<tr>
<td>28,492 : 74% owner-occupied units</td>
<td>44.3 median age</td>
</tr>
<tr>
<td>9,830 : 26% renter-occupied units</td>
<td>89% White</td>
</tr>
</tbody>
</table>

Demographic breakdown:
- White: 69,906 (83%)
- Black: 7,361 (6%)
- Asian: 4,608 (3%)
- Other: 4,749 (2%)

Source: U.S. Census Bureau 2016 ACS 5-year estimates

**Household and Per Capita Income**

"Household income considers the incomes of all people ages 15 years or older occupying the same housing unit, regardless of relation. Per capita income measures the average income earned by each person in a given area. Therefore, two income earners in the same family or household are counted separately when measuring per capita income."

Investopedia.com

Source: Moz.com
Land Use and Housing

Existing Land Use

Williamson and Peters Creek Roads

Existing land use refers to the current use of a parcel of land. The commercial areas along Williamson Road are characterized by single-story buildings with parking in front, strip shopping centers, frequent curb cuts, and drive-through restaurants. The northern end of the Plantation Road corridor near Interstate 81 is developed with businesses primarily serving highway travelers such as restaurants, hotels, and gas stations. Roanoke County’s largest employment base is located farther south on Plantation Road. Two manufacturing facilities, Double Envelope and Elbit Systems of America, along with a Wells Fargo call center, are situated at the intersection of Plantation Road and Lila Drive. There are also many small scale industrial operations thriving in the Plantation Road area. Many locally owned businesses line Williamson Road, serving the community as well as travelers.

Hollins University Apartments are located in the study area across Williamson Road from Hollins University.

Williamson Road, Tinker Mountain

Of the total 465 acres in the Hollins Center study area, agricultural/vacant are the largest cumulative land uses, accounting for 35.6% of the study area. Industrial establishments account for 16.6% of the study area, and commercial establishments make up 29.7%. Residential uses include 15.7% as single-family homes, and 2.2% as multi-family duplex and triplex. Churches and cemeteries make up 0.2% of the study area (see Figure 1-10).

Figure 1-10
Surrounding Neighborhoods

The commercial corridors of the Hollins Center study area are adjacent to residential neighborhoods and Hollins University. The Hollins Center study area is surrounded primarily by single-family neighborhoods built between 1950 and 1980. Multi-family and infill subdivisions were built on undeveloped parcels between 1980 and 2015. There are a few multi-family developments in the area. Townhomes on Stonelyn Cottage Court and Peters Creek Apartments are located just outside the study area boundary (see Map 1-11).
EXISTING CONDITIONS
LAND USE AND HOUSING

Map 1-12

Zoning Districts

- AR Agricultural Residential
- R-1 Low Density Residential
- R-2 Med. Density Residential
- R-4 High Density Multi-Family Res.
- C-1 Low Intensity Commercial
- C-2 High Intensity Commercial
- I-1 Low Intensity Industrial
- I-2 High Intensity Industrial

Study Area

October 2018
Zoning

The Roanoke County Zoning Ordinance is part of the Roanoke County Code. The official zoning map identifies zoning designations for every property in the County. Together, the zoning ordinance and map regulate what kinds of uses are permitted on a property as well as structure location and size, and other site development characteristics. The Hollins Center Zoning Map 1-12 and Figure 1-13 illustrate zoning designations in the study area.

Collectively, C-1 and C-2 commercial districts and I-1 and I-2 industrial districts dominate the study area, making up 46% and 31% of the properties, respectively. The length of Williamson Road, as well as the northern end of Plantation Road near Interstate 81, are lined on both sides by C-2 High Intensity Commercial zoning. C-2 includes a wide variety of retail and service-related uses. I-1 Low Intensity Industrial includes less intensive industrial activities and employment centers, while I-2 High Intensity Industrial includes more intensive industrial uses. I-1 and I-2 zones are located in the middle of the study area along Plantation Road and along Interstate 81.

Residentially-zoned properties make up 23% of the study area. There are several areas west of Plantation Road, south of Interstate 81, and adjacent to Hollins University that are currently zoned R-1 and R-2. R-1 Low Density Residential includes primarily single-family detached homes, while R-2 Medium Density Residential allows single-family attached and detached homes. There are four parcels zoned R-3 Medium Density Multi-Family Residential, which permits single-family attached homes, townhomes, and multifamily homes. One of these R-3 parcels fronts on Williamson Road and is owned by Hollins University. The property is currently used for student apartments. The other three parcels are located south of Milk-A-Way Drive and north of Williamson Road.

The Hollins Center study area includes 150 total acres (approximately 32% of the study area) of potentially developable agricultural and vacant land in the study area. Nearly 63 total acres are zoned C-2 High Intensity Commercial, 45.4 total acres are zoned I-1 Low Intensity Industrial, and 30.4 total acres are zoned R-1 Low Density Residential. 9 total acres are zoned R-3 Medium Density Multi-Family Residential, 2 total acres are zoned C-1 Low Intensity Commercial, and 0.4 acre is zoned R-2 Medium Density Residential (see Figure 1-14).
Non-conforming land use refers to uses that were allowed under previous zoning regulations but are no longer allowed by the current zoning regulations. There are several non-conforming uses in the study area including a mobile home park near the intersection of Peters Creek Road and Williamson Road, several single-family homes on Plantation Road and agricultural uses adjacent to Hollins University.

Of the total 465 acres in the Hollins Center study area, 61 acres, or 13%, are currently non-conforming uses. The largest non-conforming use type is agriculture, which is located on parcels zoned R-1 Low Density Residential. There are numerous residential uses occurring on parcels zoned for I-1 Low Intensity Industrial and C-2 High Intensity Commercial (see Figure 1-15). These properties are allowed to have more intensive uses by current zoning than exist at this time.
The Roanoke County Comprehensive Plan includes a Future Land Use Guide and Map. The Guide serves as a reference and policy framework for citizens and policy makers for how the County should develop, and is used for evaluation of requested zoning amendments.

The Hollins Center Future Land Use Map (see Map 1-16) shows that the study area has three main designations: Core, Principal Industrial, and Transition. Core comprises 57% of the study area, Principal Industrial 26%, and Transition 17%. Figure 1-17 provides additional information regarding these designations.

**Core**
- High intensity urban development encouraged.
- Parallel to business districts in Roanoke, Salem and Vinton.
- Appropriate for highway-oriented retail and regional shopping facilities.

**Land Use Types**
- General Retail and Personal Services
- Office and Institutional
- Limited Industrial

**Principal Industrial**
- A variety of industry types are encouraged.
- Regional employment centers convenient to residential areas and suitable highway access.

**Land Use Types**
- Industrial Parks
- Freestanding Industrial
- Small Industries/Custom Manufacturing
- Mining and Extraction
- Agricultural Industries

**Transition**
- Orderly development of highway frontage parcels.
- Buffers between highways and nearby lower intensity development.
- Office, institutional and small-scale coordinated retail.

**Land Use Types**
- Office and Institutional
- Retail
- Multifamily Residential
- Single-Family Attached Residential
- Parks
Environment

Historic and Cultural Resources

The Huffman Farm, Hollins University, Carvins Cove
Sources: Roanoke County Economic Development, Hollins University, Western Virginia Water Authority

The history of the Hollins community is characterized by agriculture, education, water and transportation. Early settlers in Roanoke County were Scots-Irish and German immigrants who displaced American Indian tribes, establishing an agrarian economy on the relatively flat land with ample water supply. In the 1930s wheat fields, livestock, and dairy farms dominated the Hollins area.

The area takes its name from Mr. and Mrs. John Hollins of Lynchburg, the first donors to Hollins Institute, now named Hollins University. The University’s campus was originally a mineral springs resort named Botetourt Springs. The property began first transitioning to an educational use in 1839 and remains a thriving university today. The Hollins College Quadrangle is listed on the National Register of Historic Places.

Although Hollins is home to the County’s largest employment center and greatest population density, there are still remnants of Hollins’ history in the study area. The Huffman farm is comprised of several parcels totaling about 60 acres. Family members raise cattle and cut hay on the
The original Huffman farmhouse was identified in a 1992 Virginia Department of Historic Resources survey, and sits at the edge of the farm at 7790 Lila Drive.

A tombstone listed on the National Register of Historic Places remains in the Old Tombstone Cemetery on Plantation Drive (see Map 1-18). Additional sites identified by the 1992 Virginia Department of Historic Resources survey include two homes located near the study area at 6615 and 6621 Peters Creek Road, several structures on Williamson Road, and the Hollins University campus adjacent to the study area. The remnants of the Green Ridge Baptist Church and Cemetery are located near the intersection of Plantation Road and Milk-A-Way Drive. The church had a cultural affiliation with African-American and Euro-American populations, and operated during the second half of the 19th century and the first half of the 20th century.

Beginning with the Great Wagon Road, a major pioneer route, Hollins has long been an important transportation corridor. The Great Wagon Road became Williamson Road/Route 11, an early macadam-paved road which still operates as a regional and interstate corridor as well as a detour route for Interstate 81. With development of the railroad in 1852, the Hollins railroad station became a busy station for both passengers and for shipping agricultural products and livestock.

Over the decades, growth spread from the City of Roanoke north to Hollins, with a gradual conversion of large agricultural lands to suburban and urban developments. The transition from rural to suburban development patterns was hastened by the construction of Interstate 81 between the 1950s and 1970s. During this time several large industries located on Plantation Road, while Williamson Road developed into a commercial corridor. By 1979, Hollins had transformed from a...
sparsely populated agricultural area to a suburban community with residential subdivisions and commercial establishments arranged along major roads. Development followed the same auto-centric pattern in subsequent decades.

Natural Resources

The Roanoke Valley is located in the Blue Ridge Mountains, in the Valley and Ridge geographical regions of Virginia. Natural resources exist in the form of mountains, forests, caves, rivers and streams, fertile soils, and four distinct seasons. The mountains and forests provide scenic vistas and an abundance of outdoor recreation opportunities. A wide variety of aquatic life thrives in the cool, well-oxygenated water, including Trout and the Roanoke Logperch, an endangered species identified by the U.S. Fish and Wildlife Service.

The Roanoke River originates in the Jefferson National Forest in Virginia’s western mountain highlands, flowing east through Montgomery, Roanoke, Bedford and Franklin Counties, the Cities of Salem and Roanoke, and the Town of Vinton; through Southside Virginia, into North Carolina; to the Albemarle Sound and the Atlantic Ocean. The Roanoke Valley was carved by the Roanoke River between the parallel ridges of the Allegheny and Blue Ridge Mountains, resulting in a beautifully scenic, fertile valley ringed by mountains. The geographic location of Hollins affords scenic views of these surrounding mountains, adding significant character to the area.

The Roanoke River enters Roanoke County in Glenvar, and picks up many short and steep tributaries as it traverses the Valley. The river is constricted naturally by mountainous topography and also by manmade structures such as bridges, rail embankments, and other floodplain development along the river’s route. These characteristics can result in flash flooding and flood damage.

Carvins Cove, named after the earliest settler in the Hollins area, William Carvin, is nestled around the base of Brushy Mountain to the north of the study area. Carvins Cove Natural Reserve and Reservoir function as one of the Roanoke Valley’s water sources and simultaneously as the second largest municipal park in the nation. 11,363 acres of the reserve are protected by the largest conservation easement in Virginia’s history. The City of Roanoke-owned park contains more than 12,000 acres of hardwood and mixed pine forests, a 630-acre reservoir managed by the Western Virginia Water Authority and 60 miles of trails for hiking, mountain biking and horseback riding. Roanoke County provides emergency services for Carvins Cove, which is located in both Roanoke and Botetourt Counties.

The Hollins Center area is relatively flat, with its main source of surface water being Carvin Creek (see Map 1-18). 95 percent of the area’s water flows to Carvin Creek, which flows into Tinker Creek and ultimately to the Roanoke River. Flooding
occurs during significant rain events, resulting in a floodway designation for the creek channel and 100-year floodplain designations adjacent to the floodway. These areas are regulated by the Roanoke County Zoning Ordinance Floodplain Overlay District. The length of Carvin Creek has been listed on Virginia’s List of Impaired Waters since 2002 due to violations of the fecal coliform bacteria water quality standard. The primary cause of this impairment is surface water runoff from areas such as parking lots and roads. Karst topography featuring caves and sinkholes is found in and around Walrond Park, south of Williamson Road, and to the east of Plantation Road.
Community Facilities and Infrastructure

Schools

Roanoke County Public Schools serving the Hollins Center area include Burlington Elementary, Mountain View Elementary, Northside Middle and Northside High. None of these schools are located within the Hollins Center study area. Burlington Elementary is just west of the study area boundary on Peters Creek Road (see Map 1-1). Hollins University, a private liberal arts university with graduate and undergraduate academic programs, lies adjacent to the study area on Williamson Road. Enrollment at Hollins University for the 2018-2019 school year is 654 undergraduate women and 145 coed graduate students. Community School, located near the study area on Williamson Road, is a private institution educating children age 3 through middle school. 2018-2019 enrollment at Community School is 150 students.

The public schools serving the Hollins area have extra capacity to absorb future growth. These schools are all below capacity now, and are forecasted to be further under capacity through 2026 (see Figure 1-19).

Libraries

The Hollins Branch Library is a 17,900 square foot facility that lies just west of the study area at 6624 Peters Creek Road (see Map 1-1). The Hollins University Private Library, located adjacent to the study area, is open to the public for a fee.

The Hollins Branch Library is the second busiest library in the Roanoke Valley Consortium, which includes Botetourt County, Roanoke County, the City of Roanoke and the City of Salem. Hollins Library circulates 23% of the County’s items and averages 600 visitors per day, also 23% of the County’s total. Hollins Library restarted Sunday operations in 2018, which has been popular. Hollins is maintaining this high service level without offering the square footage or amenities such as a cafe, multiple study rooms, and the modernized meeting rooms provided by the Vinton and South County Libraries. In 2018, Hollins Library reached capacity and is therefore unable to increase visitors or circulation without a new or modernized building. The popularity of the library is a testament to its value to the community.
Parks

Walrond Park lies just west of the study area on Walrond Drive (see Map 1-1). Walrond is a busy, popular 40-acre public park offering a variety of passive and active recreation as well as beautiful panoramic vistas. Scheduled baseball, soccer, and softball games are held in Walrond Park, which also offers disc golf, picnic shelters, a soap-box derby track, playground, tennis courts and a 2/3 mile walking path around Walrond Pond. Recent upgrades have been completed to field lighting, the soap box derby track, and disc golf course. A wetland boardwalk was recently constructed and a tennis court was converted into four pickleball courts. A new playground was constructed in 2019. Future plans include construction of the Roanoke County North District Maintenance Shop. Many of the people who work at establishments along Plantation Road enjoy walking or picnicking here at lunchtime.

Sadler Park is located two miles from Hollins Center, north of Williamson Road near the Botetourt County line. Sadler Park features a basketball court and playground, as well as trees and open lawn. Hollins Park is located on Hollins Road, 3 miles from Hollins Center, featuring soccer fields, a 1/3 mile gravel path and a playground. Potential improvements include paving the parking lot, a new picnic shelter and restroom, playground improvements and paving the existing park trail.

Roanoke County’s Green Ridge Recreation Center and Splash Valley Water Park are located 2.8 miles from the Hollins Center study area. Green Ridge provides strength training and cardiovascular health equipment, personal trainers, group exercise classes, a walking track, indoor swimming pool, gymnasium, and programmed activities for adults and children. Splash Valley is an outdoor aquatic facility featuring water slides, a children’s sprayground, and other water play features.

Public Safety

Roanoke County’s Fire and Rescue Department is staffed with a combination of career and volunteer personnel operating out of 13 stations and one administrative office. All career personnel are trained to the Virginia Department of Fire Program Firefighter 2 standard, which is the highest standard for firefighters. All career ambulances are staffed as Advance Life Support ambulances. The Hollins Fire and Rescue Station #5 is located on Barrens Road, just west of the study area. Personnel from this station are the first responders to North Roanoke County and to any traffic accidents on Interstate 81 in Roanoke and Botetourt Counties. Calls to this station can come from a variety of sources: industrial facilities, residences, commercial businesses, interstate auto accidents, and other emergencies. Call diversity can create a variety of challenges for available equipment and responder expertise (see Figure 1-20).
Figure 1-20

<table>
<thead>
<tr>
<th>Facility</th>
<th>Acreage</th>
<th>Square Footage</th>
<th>Age of Original Structure</th>
<th>Equipment</th>
<th>Service</th>
<th>Station staff capacity per shift</th>
<th>Total Staff</th>
<th>Total Volunteers</th>
</tr>
</thead>
<tbody>
<tr>
<td>#5 Hollins Fire and Rescue Station</td>
<td>2.5</td>
<td>12,208</td>
<td>1981</td>
<td>Fire Engine, Ambulance, Brush Truck, Command Truck</td>
<td>All hazards response, Advance Life Support, medical response, public education, public standbys</td>
<td>5</td>
<td>18</td>
<td>32</td>
</tr>
</tbody>
</table>

Source: Roanoke County Fire and Rescue, November 2018

The Hollins Station was the third busiest station by incident in Roanoke County for fiscal year 2018 (see Figure 1-21). At this time the Hollins Station does not have adequate coverage and capacity for growth in the Hollins area. Although call volumes were consistently about 2,200 per year between fiscal years 2014 and 2018, future economic growth will present a challenge for the station to respond to calls within the Hollins District without relying on outside stations and agencies.

Figure 1-21

The Roanoke County Police Department records reveal that crime in the Hollins area decreased in 2015, 2016 and 2017, and remained stable in 2018. The most prevalent crimes in the area during that time period were related to illegal drug possession (average 16 per year), driving under the influence of alcohol (average 15 per year) and public intoxication (average 11 per year). In 2018, calls for service increased countywide by approximately 8%. While the majority of these calls are not related to crime, there was an increase in shoplifting and theft from vehicles.
EXISTING CONDITIONS
COMMUNITY FACILITIES AND INFRASTRUCTURE

Infrastructure

Roads

Interstate 81 is the northern boundary of the study area. Portions of three primary roads, Plantation Road (Route 115), Williamson Road (Route 11) and Peters Creek Road (Route 117), form the study corridors (see Map 1-22). The 2018 average daily (vehicle) trips for these roads are:

- Interstate 81 near Exit 146 (53,000-63,000)
- Peters Creek Road (19,000)
- Plantation Road (13,000 to 16,000)
- Williamson Road (11,000)

There are no road projects planned in the Hollins Center study area; however, Interstate 81 is being studied as part of a state-led Interstate 81 Corridor Improvement Plan. The study will identify targeted improvements and potential revenue sources to fund improvement projects.

The Interstate 81 Exit 150 interchange, four miles north in Botetourt County, was rebuilt in 2018-2019 by the Virginia Department of Transportation to improve safety and traffic flow on Routes 220 and 11. The number of motor vehicle crashes is increasing in the Hollins Center study area (see Figure 1-23). Over the past ten years, both pedestrian and bicycle fatalities have also been documented in and around the Hollins Center study area.

Bicycle and Pedestrian Accommodations

Currently, people are walking and biking in the Hollins area. Sidewalks are located along Williamson Road between Plantation Road and Hollins Court (south side) and Plantation Road and Marson Drive (north side). Social paths are visible in grassed areas along Williamson Road and Peters Creek Road.

Several bicycle and pedestrian projects were sparked by the implementation strategies included in the 2008 Hollins Area Plan.

2014: Pedestrian crosswalks and signals were installed on all four legs of the Williamson Road/Plantation Road intersection.

2018: A turnaround was completed at the end of Lila Drive, enabling Roanoke County to request that VDOT accept the formerly private road into its system as a Secondary Street.

2018: Phase 1 of the Plantation Road Bicycle, Pedestrian and Streetscape Improvement Project was completed, which added a ten-foot-wide shared use path to the west side of Plantation Road between Williamson Road and Walrond
Drive. Curb, gutter, storm drain, street trees and a “Welcome to the Hollins Community” gateway sign were also a part of the project.

Other Funded Projects:

**2020:** A new traffic signal will be installed at the intersection of Plantation Road and Lila Drive. The project will consolidate entrances at Double Envelope and Wells Fargo. Pedestrian signals and crosswalks will also be included.

**2021:** Phase 2 of the Plantation Road Bicycle, Pedestrian and Streetscape Improvement Project will add sidewalk, curb, gutter and street trees along the west side of Plantation Road between Walrond Drive and Gander Way. The Walrond Drive intersection will also be realigned and pedestrian signals and crosswalks will be added to the Gander Way/Plantation Road intersection.

VDOT has also directed safety funds to this area because of recent bicycle and pedestrian fatalities. A pedestrian was hit and killed by a car while crossing Williamson Road near Greenway Drive in the early morning hours of April 18, 2012. A bicyclist traveling northbound was hit and killed by a car at night in the 6900 block of Williamson Road, near North Roanoke Assisted Living, on November 17, 2016. Another pedestrian was hit and killed by a car while walking along Williamson Road at night near the intersection of Hollins Court Drive on April 27, 2017.

Two VDOT Highway Safety Improvement Program projects are proposed for Williamson Road:

1) Add pedestrian crosswalks and signals at the intersection of Peters Creek Road and Williamson Road; construct sidewalk along the west side of Williamson Road between Peters Creek Road and North Roanoke Assisted Living. Design is underway and construction is anticipated in 2021.

2) Continue sidewalk along the west side of Williamson Road between North Roanoke Assisted Living and Clubhouse Drive/Dent Road. Design is anticipated to begin in 2023.

Partial funding has been obtained to construct a sidewalk along the north side of Williamson Road to connect the Plantation Road Bicycle, Pedestrian and Streetscape Improvement Project to the Williamson Road sidewalk and intersection improvements at Peters Creek Road. Additional funding has been requested through SMARTSCALE.

See the Transportation Projects map for project locations.

**Greenways**

The 2018 Roanoke Valley Greenway Plan (Greenway Plan) shows the proposed route for the Tinker Creek Greenway extending from the Roanoke River in the City of Roanoke, through Roanoke County to the Botetourt Center at Greenfield.
EXISTING CONDITIONS
COMMUNITY FACILITIES AND INFRASTRUCTURE

Botetourt County. Two sections of the Tinker Creek Greenway are existing:

- Wise Avenue to the Roanoke River Greenway, 1.5 paved miles in the City of Roanoke, completed in 2001.
- Trailhead parking lot north of Interstate 81 to Carvins Cove Boat Dock, 2 natural surface miles in Roanoke County and Botetourt County, completed in 2012.

The City of Roanoke has obtained funding to design and construct a 1.8-mile paved segment of the greenway from Wise Avenue to Mason Mill Park. Construction is anticipated in 2021.

The Tinker Creek Greenway map shows the conceptual routes identified in the Greenway Plan.

Alignments analyzed between the City of Roanoke boundary and Williamson Road are described as:

- Road Corridor: Roanoke City/Roanoke County boundary to Hollins Road to Plantation Road to Williamson Road.
- Combined Stream-Road Corridor: Roanoke City/Roanoke County boundary along the stream corridor to Mountain View Elementary School connecting to Plantation Road to Williamson Road.
- Creek Corridor: Roanoke City/Roanoke County boundary to Williamson Road along Tinker Creek and Carvin Creek.
EXISTING CONDITIONS

COMMUNITY FACILITIES AND INFRASTRUCTURE

Map 1-24

2018 Roanoke Valley Greenway Plan
- Tinker Creek Greenway Conceptual Routes
- Conceptual Carvins Creek Greenway
- Existing Sidewalk/Shared Use Path
- Tinker Creek Greenway Hollins Trail
- Streams

Study Area 2018

HOLLINS CENTER PLAN - DRAFT
The Road Corridor option was most preferred by nearby residents. Sections of Plantation Road have wide right-of-way which could fit a greenway/shared use path.

There are three potential routes identified between the intersection of Williamson Road/Plantation Road to reach and continue into Botetourt County:

1) **Road Corridor:** U.S. 11/Williamson Road/Lee Highway corridor from Hollins University to Cloverdale and I-81 underpass at Tinker Creek.

2) **Combined Stream-Road Route:** U.S. 11/Williamson Road/Lee Highway corridor but route off the highway where feasible between Williamson Road at Hollins University and the I-81 underpass at Tinker Creek.

3) **Off-Road Corridor:** Tinker Mountain option; cross under I-81 at Hollins University and continue on the northwest side of I-81, off-road, around the base of the mountain to the Tinker Creek underpass.

The ultimate greenway alignment and surface will depend upon where right-of-way and/or easements can be obtained.

Botetourt County has also obtained funding for design and construction of the Daleville Greenway, which will connect Lord Botetourt High School with the Botetourt Center at Greenfield. Construction is anticipated in 2020. The Tinker Creek Greenway will connect to the Daleville Greenway at Lord Botetourt High School.

**Trails**

Carvins Cove Natural Reserve contains 60 miles of hiking, biking and equestrian trails. In 2019 Roanoke County and Roanoke Valley Greenways opened the Hinchee Trail, a two-mile segment connecting Salem to Hollins via the trails at Carvins Cove. These trails helped contribute to the Roanoke Valley’s designation as a Mountain Bikers at Carvins Cove Silver-Level Ride Center. Virginia’s Blue Ridge is the only East Coast destination to earn the Silver-Level designation from IMBA.

The Appalachian National Scenic Trail passes through Roanoke and Botetourt Counties just north and east of Hollins, including crossing the ridge of Tinker Mountain. The Appalachian Trail is a 2,180-mile long public footpath that traverses the great diversity of natural and cultural beauty along the Appalachian Mountains. The Appalachian Trail is managed by the...
National Park Service, U.S. Forest Service, Appalachian Trail Conservancy, as well as many state agencies and volunteers. These natural resources provide many opportunities for accessing outdoor amenities and culture, while preserving mountain views from the Hollins Center study area. Read Mountain Preserve, a 243-acre preserve will soon be expanded by an additional 300 acres, further protecting mountains views.

Transit

There is currently no fixed-route transit service in the Hollins area. The closest Valley Metro routes run from the City of Roanoke north on Plantation Road past Food Lion and Walmart Neighborhood Market, then west on Hershberger Road with a stop at Edinburgh Square apartments and Friendship Health and Living Community, approximately two miles from the study area.

Hollins University contracts with RADAR to provide shuttle service Thursdays, Fridays and Saturdays to Valley View Mall, Center in the Square (Downtown) and Townside Square shopping center.

Regional Transportation Plans

Roanoke County is a member of both the Roanoke Valley-Alleghany Regional Commission (RVARC) and the Roanoke Valley Transportation Planning Organization (TPO). The TPO boundary includes the Roanoke Valley Urbanized Area, which includes most of Roanoke County with the exception of the Catawba and Bent Mountain areas. The Urbanized Area also includes the City of Roanoke, City of Salem, parts of Botetourt County, Bedford County and Montgomery County.

Map 1-25

The 2016 RVARC Roanoke Valley Transit Vision Plan included recommendations for the Hollins area. Short-term recommendations (2016-2022) focused on expanding transit service to employment and residential areas in the North Roanoke County/ Hollins/ Plantation Road area. More specifically, the Plan recommends implementing a new circulator connecting the activity centers of Crossroads, Hollins/ Plantation Road, the DMV and other key locations in North Roanoke County. A medium-term recommendation (2022-2030) proposes improving regional connectivity with new peak hour service between Greenfield/ Daleville, Plantation Road and Downtown Roanoke providing transit access to key destinations. A long-term recommendation (2030-2040) expands upon this proposal, by providing a
consistent all-day connection between Greenfield/Daleville via Plantation Road to Downtown Roanoke. Additionally, a Small Transit Transfer Facility is another long-term recommendation for the Hollins area.

The 2012 Update to the Bikeway Plan for the Roanoke Valley Area Metropolitan Organization identifies Priority and Vision corridors for bicycle accommodations. “Corridors comprising the Priority List generally form the foundation of the current and/or planned bikeway system in the RVAMPO with Vision List corridors supporting the framework of the Priority List and fill in any gaps in connectivity.” (Bikeway Plan, p. 111) Several corridors are identified in the Hollins Center area.

Priority List Corridors:
- Plantation Road from Interstate 81 to Williamson Road
- Plantation Road from Interstate 81 to Crowe Hollow Lane (Botetourt County)

Vision List Corridors:
- Peters Creek Road from the City of Roanoke to Williamson Road
- Williamson Road from Peters Creek Road to Botetourt County
- Plantation Road from Williamson Road to the City of Roanoke
- Laban Road from North Barrens Road to Webster Road
- Webster Road from Laban Road to Dallas Road
- Dallas Road between Webster Road and Enon Drive
- Enon Drive between Dallas Road and Walrond Drive
- Walrond Drive from Walrond Park Road to Plantation Road

The Plantation Road shared use path provides bicycle accommodations between Williamson Road and Walrond Drive.

The 2015 TPO Regional Pedestrian Vision Plan identifies and prioritizes pedestrian accommodations. Figures 1-26 and 1-27 summarize the high priority and medium priority locality projects and include status updates for each project.
### 2015 TPO Regional Pedestrian Vision Plan Locality High Priority Projects

<table>
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<tr>
<th>Road</th>
<th>From/To</th>
<th>Accommodation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Williamson Road</td>
<td>Campus Drive to Plantation Road</td>
<td>Hard Surface Pedestrian Improvements</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Plantation Road to Peters Creek Road</td>
<td>Requested additional project funding (2018)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Peters Creek Road to Greenway Drive</td>
<td>Preliminary engineering underway; Construction 2021</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greenway Drive to Middleton Road</td>
<td>Preliminary engineering underway; Construction 2021</td>
<td></td>
</tr>
<tr>
<td>Plantation Road</td>
<td>Williamson Road Intersection</td>
<td>Signalized Pedestrian Crossing</td>
<td>Completed 2014</td>
</tr>
<tr>
<td></td>
<td>Williamson Road to Interstate 81</td>
<td>Pedestrian Improvements</td>
<td>Completed 2018 Williamson Road and Walrond Drive; Construction 2021 Walrond Drive to Gander Way</td>
</tr>
<tr>
<td></td>
<td>Gander Way/Friendship Lane Intersection</td>
<td>Signalized Pedestrian Crossing</td>
<td>Construction 2021</td>
</tr>
<tr>
<td>Peters Creek Road</td>
<td>Williamson Road Intersection</td>
<td>Signalized Pedestrian Crossing</td>
<td>Construction 2021</td>
</tr>
<tr>
<td></td>
<td>Williamson Road to Barrens Road</td>
<td>Hard Surface Pedestrian Improvements</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Barrens Road Intersection</td>
<td>Pedestrian Intersection Improvements</td>
<td>None</td>
</tr>
<tr>
<td>Friendship Lane</td>
<td>Plantation Road and the (future) tinker Creek Greenway</td>
<td>Hard Surface Pedestrian Connection between Plantation Road and Hollins University</td>
<td>None</td>
</tr>
</tbody>
</table>

### 2015 TPO Regional Pedestrian Vision Plan Locality Medium Priority Projects

<table>
<thead>
<tr>
<th>Road</th>
<th>From/To</th>
<th>Accommodation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Williamson Road</td>
<td>Botetourt County to Campus Drive</td>
<td>Hard surface pedestrian improvements</td>
<td>None</td>
</tr>
<tr>
<td>Peters Creek Road</td>
<td>Barrens Road to Wood Haven Road</td>
<td>Sidewalk</td>
<td>None</td>
</tr>
<tr>
<td>Tinker Creek Greenway</td>
<td>Botetourt County to Interstate 81</td>
<td>Greenway hard surface</td>
<td>Completed 2012, natural surface trail</td>
</tr>
</tbody>
</table>

Regional Pedestrian Vision Plan, excerpts

Source: Roanoke Valley Transportation Planning Organization
Utilities

Water and Sewer

The Western Virginia Water Authority owns and manages public water and sewer utilities in most of the Roanoke Valley, including in the Hollins area. In general, public water and sewer infrastructure in the Hollins area is in good condition.

Most properties in the Hollins area are served by public water and sewer, with the exception of the North Burlington Heights neighborhood which is located north of Walrond Park and south of the Buckland Forest neighborhood.

While there are no water pressure issues, there are some fire flow challenges in locations where water line sizes are small. There are opportunities for upgrading and relocating both water and sewer lines in conjunction with new development.

The Carvins Cove Water Treatment Facility, located just north of Interstate 81, treats and distributes water from Carvins Cove Reservoir. Two 36-inch transmission lines run south under Interstate 81. One transmission line runs to and along Plantation Road, then south along Williamson Road. The other transmission line runs east to Hollins University and then south along Carvins Creek to Williamson Road, runs west and south to Dexter Road, then runs behind Kroger to Williamson Road. The two lines run parallel along Williamson Road until the intersection with Florist Road where they split (see Map 1-28).

Sewer mains generally run along streams and creeks. Sewer lines from all over the area flow to an 18-inch sewer main that runs along Carvins Creek. This sewer main intersects with the Tinker Creek main at the City of Roanoke boundary. From this point, the sewer main follows Tinker Creek to the Roanoke Regional Water Pollution Control Facility located near the intersection of Tinker Creek and the Roanoke River.
**Stomwater**

Starting with the adoption of the Clean Water Act in 1972, stormwater regulations and requirements have changed several times since the majority of the study area was constructed. As a result, the stormwater infrastructure present is located along major roadways widened in the 1990s and in conjunction with newer development. When combined with poor drainage in several areas, there are many places where stormwater infrastructure could be improved. Since new development and redevelopment will need to conform with current regulations, incremental improvements are possible.

**Electric**

Appalachian Power provides electricity to the study area and to the Roanoke Valley.

**Gas**

Natural gas and propane are available in the area from Roanoke Gas Company.

**Cable**

Several providers offer cable television service, including Cox Cable, Xfinity TV from Comcast, Dish TV and DIRECTV.

**Phone**

Land line and cell phone service are available through AT&T and Verizon. Sprint and T-Mobile provide cell phone service in the study area.

**Internet/Broadband**

Internet service is available through Cox Cable Internet, Xfinity Internet from Comcast, ViaSat Satellite Internet and Verizon.

The Roanoke Valley Broadband Authority was established in 2014 by Roanoke County, Botetourt County, the City of Roanoke and the City of Salem. Fiber-optic internet is now accessible throughout the Roanoke Valley. In the study area, broadband conduit runs along Peters Creek Road, Williamson Road, and along Plantation Road between Williamson Road and the Carvins Cove Water Treatment Facility.
Appendix 2. Community Engagement

Engagement Activities

In order to build a robust plan supported by the Hollins community, staff sought to engage those who live, work and shop in the area as well as those who care about its regional importance. Public input was gathered throughout the planning process to help shape, define and refine the Plan. The Plan’s Vision and Principles include input received from the community and stakeholders through meetings, surveys and other outreach.

Community Meetings

The study kicked off with two community meetings covering the technical context of the study area, which included land use regulations, environmental conditions and current transportation projects.

**Meeting Attendance**
Saturday, March 3, 2018: 40
Thursday, March 8, 2018: 56

Participants gave feedback on opportunities and challenges that they as residents, business owners and area employees saw for transportation, development and economic growth in Hollins. Activities were also available for children.

The meetings were advertised in a news release that was shared by the media, County e-newsletters, the County website, County social media pages (using paid advertising), and emails to members of the public who signed up online or at previous planning meetings. Staff also visited more than 130 businesses within the study area and mailed postcards to addresses within one mile of the study area.

Participants examine the study area, March 8, 2018

Participants provide feedback, March 8, 2018
Source: Roanoke Valley Television (RVTV-3)
Stakeholder Feedback

Over the course of the study, staff engaged 78 stakeholders at 18 meetings. These in-depth discussions included a wide range of local staff, community advocates, business representatives and other organizations. The discussions generated several overarching themes shared across the groups, available for reference online.
Environmental Stakeholders

Utilities Stakeholders

Public Safety Stakeholders

Property Owners/Tenants Stakeholders
Online Survey

An online survey, open to the public from February 1, 2018, through April 7, 2018, received 393 responses about the Hollins Center area. The survey asked respondents to share opinions and information about their relationship to the study area; their perspectives on how safe, easily accessed, and unique it is; the issues they saw regarding businesses, transportation, housing and land use; and the types of improvements they’d like to see there. The online survey was also translated into Spanish and paper copies in both languages were available at County libraries and at the community meetings. The survey was promoted on social media and advertised in area mailings, County e-newsletters and study fliers. The complete survey results were revealed at the Design Open Houses in May, available for reference online.

Design Open Houses

The Design Open Houses presented the results of the community meetings and survey and asked questions related to potential future design options for a new Hollins Center.

**Meeting Attendance:**
Thursday, May 10, 2018: 37
Saturday, May 19, 2018: 17

Attendees voted on possibilities for commercial and residential redevelopment, new community spaces and multi-modal transportation improvements. They indicated preferred and not preferred improvements in each category. This visual preference survey helped staff identify design recommendations and priorities.
COMMUNITY ENGAGEMENT

ENGAGEMENT ACTIVITIES

Transportation Feedback

- Bicycle and Pedestrian Facility Comments
- Vehicular Facility Comments
- Bus Service Comments
- Signals and Crosswalks associated with new transportation projects
- Existing Sidewalk

Study Area

Map 2-2

Soundwall Desired

Walmond Park

Fire and Rescue Station #5

Hollins Library

Burlington Elementary School

Extend right turn lane onto Plantation Road

Turns Cause Congestion at Driveway

Extend left turn lane onto Plantation Road

Hollins University
Open House Exhibits

A map labeled Potential Redevelopment Areas and Suggestions for Uses (Map 2-1) displayed possible types and sites for development and redevelopment in the study area. The Transportation Feedback map (Map 2-2) showed issues and needs in the study area. Both maps were based on the March meetings’ public feedback, survey results and stakeholder interviews. Attendees could also view plans and concepts for several funded multi-modal transportation projects.

Another map asked participants where in the Roanoke Valley they wanted to walk or bike to from the study area. A final map of the greater region asked participants where they would like to take the bus from the study area. Participants marked their desired destinations on the map.

Top Walk/Bike Destinations:
- Surrounding neighborhoods
- Green Ridge Recreation Center
- Hollins Trailhead/Carvins Cove
- Walrond Park

Top Bus Destinations:
- Downtown Roanoke
- Along Plantation Road
- Around the study area
- Downtown Salem
Online Design Survey

In order to increase feedback on the preferred and not preferred future design options, the Design Open House exercise was adapted into an online survey. It was available to the public from June 3, 2018, through July 2, 2018, and received 58 responses. The full results of the visual preference survey, combining the results of the two meetings and the online survey are available online.

Draft Plan Reveal Meetings

A final round of meetings asked participants to consider potential projects and design concepts that built on the previous meeting results.

**Meeting Attendance:**
Saturday, March 23, 2019: 59
Monday, March 25, 2019: 84

Participants gave feedback on:
- Public space and landscaping concepts, various park improvements and a range of multimodal transportation improvements;
- Vision and implementation principles for new development and redevelopment; and
- Future land use scenarios that would guide the type of development to be encouraged in the area.

The meeting exercises were also available online from March 23 to April 26, 2019.

Draft Plan Reveal Exhibits

The meeting exhibits included a process display showing previous exercises and results. The draft Vision, Principles, and Core Objectives were shared for the first time at this meeting. The interactive exhibits included ranking and comment exercises.

Park Improvements Exercise
A combined transportation exercise showed a map with all potential road, pedestrian/bicycle and greenway projects and asked participants to rank them within those categories. A parks exercise showed maps of Walrond Park, Hollins Park and Sadler Park with potential improvements and requested comments about other desired improvements for each park.

Two exercises asked participants to rank six types of Gateway/Streetscape Improvements and Community Amenities. The examples were drawn from previous engagement exercises where participants expressed a desire to “green up” the area and create comfortable outdoor gathering spaces.

Finally, a Future Land Use exercise asked participants to pick which of three land use scenarios most appealed to them. The options included a no change scenario, partial mixed use scenario (around the intersections of Peters Creek Road/Williamson Road and Plantation Road/Williamson Road) and full mixed use scenario.

Each exercise included the relevant Principle, Core Concept(s) and Supporting Initiative(s) identified in the draft Plan. The results of each exercise (combining the results from both meetings and online surveys) are available online.
Planning Commission Work Sessions

Staff provided regular updates about the study to the Planning Commission. Presentations included information about upcoming community meetings, other engagement exercises and public input received. The meetings were held in 2018 on February 6, March 20, April 17 and May 15; and in 2019 on March 19, April 16 and May 21.

Other Outreach

Hoping to engage members of the public who may not have heard of the study, staff planned a lunchtime public input session at the Goodwill on Peters Creek Road on March 20, 2018, from noon to 2 p.m. A table was set up near the front door, offering shoppers and employees a chance to learn about and discuss the study with staff. Paper copies of the spring survey were also available.

Staff also promoted the Hollins Center and other planning studies at Tons of Fun at Tanglewood Mall on February 2, 2018. Kids used a table map and cutouts to design their own County park while staff talked with parents about the upcoming study. Table visitors of all ages could also vote on their favorite style of park. Anyone who provided their email address for the study mailing list was entered into a prize drawing for a business at Tanglewood Mall.

All of the study’s engagement activities were promoted on a dedicated webpage and email list, and shared in County e-newsletters, Facebook pages and news releases.
Engagement Results

The survey results, public meeting exercises and stakeholder discussions brought to light many of the same needs and issues in the study area.

Feedback highlighted that people who live or work near the study area are not only interested in greater convenience for their daily activities, but also in enhancing the appearance of Hollins. Many agreed that the community and Hollins in general was a desirable place to live, work and raise a family, but were frustrated with the lack of many perceived upgrades still needed to elevate its position in the County. Residents from other areas of the County suggested that very little drew them to the area. Local residents were disappointed to have to go elsewhere in the County for entertainment.

Online Survey

Half of the Hollins Center Survey respondents did not feel that the area had unique qualities. Those who did believed that the area’s natural views, access to I-81, outdoor recreation opportunities and Hollins University made it distinct from other areas in the Roanoke Valley. Many hoped visual improvements including gateway signage and landscaping, along with commercial area upgrades and new restaurants, could make Hollins a destination for the greater region.

Asked to choose three different improvements, 60 percent of respondents
felt that walkability and the aesthetics or character of the study area were important to its future success. Half of respondents desired public outdoor spaces.

Nearly all respondents use a car in the study area, whereas only 26 percent walk and 9 percent bike. Asked to choose the three most important transportation issues in the study area, 65 percent chose pedestrian accommodations, 56 percent chose traffic congestion and 37 percent chose bicycle accommodations.

Survey respondents wanted economic improvements to focus on the variety and quantity of restaurants (68 percent) and retail (59 percent) while supporting existing business (37 percent) and encouraging more local events/activities (36 percent).

At the stakeholder meetings, March community meetings, and in the survey results, participants identified a large variety of desired development, including:

- Sit-down restaurants
- Coffee shops
- Bars and breweries
- Entertainment venues
- Specialty grocery stores
- A lifestyle/Town Center
- A youth center
- A sports complex
- Research and development
- Apartments
- Library (relocated)
- Retirement housing

Complete results for each exercise and the surveys are available online.

Two thirds of survey respondents stated that they appreciate Hollins' convenient location

Given the option of three transportation and streetscape improvements, respondents selected sidewalks and crosswalks (58 percent), greenways and shared use paths (50 percent), landscaping (33 percent) and road safety improvements (33 percent).
Design Survey Results

The visual preference survey broke down the broad improvements that were recommended by the Hollins Center Survey results into specific options for redevelopment, placemaking and transportation. This enabled participants to more clearly convey the changes they wanted to see in the study area.

Clockwise from top left, the top results of the commercial and housing visual preference survey show a town center, a typical one-floor shopping center, a modern on-street mixed-use and an entertainment complex.

Community meeting participants and online survey takers cast more votes for the commercial redevelopment options than the high or low-density housing options. Of the commercial redevelopment options, survey respondents showed a strong preference for town center mixed-use development, but did not want to see more “big box” anchor stores. Of the low-density housing options, standalone patio homes were preferred. Results were mixed about high-density housing, with most respondents showing some interest in multi-family options with fewer floors.

Clockwise from top left, the top results of the placemaking and outdoor spaces visual preference survey show restaurant outdoor seating, a natural water and play park, sidewalk rain gardens and street trees.

Of the options for landscaping and streetscaping, most survey respondents wanted outdoor seating at restaurants and greener streets. For outdoor recreation, participants liked the idea of a natural water / play park or a large festival and event park for the Hollins Center area.
Survey respondents also liked pedestrian-oriented lighting and signs as placemaking elements. All visual preference survey images and results are available online.

Draft Plan Reveal Results

In addition to the 143 participants who attended one of the meetings, 54 participants completed the exercises for the Draft Plan Reveal online. The following results combine all the input received.

Clockwise from top left, the top results of the transportation visual preference survey shows paved greenways, separated bike-ped shared path, main street sidewalks and natural surface hiking trails.

For pedestrian improvements, survey respondents liked paved greenways, natural surface hiking trails and sidewalks in both public spaces and neighborhoods. The winning choice for bikes was the separated bike and pedestrian shared use paths, with sharrows (bikes share the lane with cars) as the least desired option. Finally, respondents wanted to see an expansion of the Valley Metro bus system or a community trolley to provide transit options.

Feedback about transportation needs was received at nearly every event. At the Draft Plan Reveal meetings, staff synthesized the results of previous meetings and surveys and asked participants to rank those potential projects. Potential projects were categorized as road projects, bicycle and pedestrian projects, greenway projects and transit projects.
Top 3 Road Projects
1. Improve the Williamson Road/Peters Creek Road Intersection
2. Widen Interstate 81 (support regional and statewide efforts)
3. Improve the Plantation Road/Williamson Road intersection

Top 3 Greenway Projects
1. Construct a greenway segment from the trailhead parking lot under I-81 to Carvins Creek in collaboration with Hollins University
2. Continue discussions with Hollins University regarding constructing a greenway segment along Carvins Creek from the Friendship Lane bridge at Carvins Creek to Williamson Road
3. Construct along Williamson Road from Plantation Road to Campus Drive/LaMarre Drive (north side)

Transit Opportunity Question
68 percent of respondents said that Roanoke County should work with area businesses and Hollins University to determine demand and support for potential expansion of mass transit routes.

Three future land use (FLU) scenarios were presented at the Draft Plan Reveal meetings. Two scenarios recommended changing property within the study area to a Mixed-Use FLU designation. The online survey and public meetings results followed the same order (combined here):

- Full Mixed Use (56%)
- Partial Mixed Use (38%)
- No Change (6%)

A final visual preference exercise helped clarify the types of gateway and streetscape improvements that were
suggested at previous meetings. Staff displayed six common examples of features in a streetscape and asked participants to rank them.

Clockwise from top left, the top results of the gateway and streetscape visual preference survey shows gateway features, street lighting, street trees and pedestrian sidewalk lighting.

The most desired element was gateway signage with landscaping. Roadway lighting was the second highest result. Street trees which separate the sidewalk from the street or line a roadway were third, and pedestrian-scale lighting for sidewalks was fourth. Landscaped medians and street furniture (including fixtures such as benches and trashcans) were fifth and sixth respectively.

A similar exercise asked about the type of community amenities (particularly outdoor amenities) that should be incorporated in the plan. These examples also drew on popular requests from previous meetings or survey results.

Clockwise from top left, the top results of the community amenities visual preference survey shows pedestrian connections, playground equipment, places to gather and places for pets.

Participants most liked the idea of pedestrian (and/or bicycle) connections throughout the study area, followed by outdoor play areas. Places to gather was third and places for pets was fourth. Community gardens and public art were fifth and sixth respectively.

Complete results for each exercise and the surveys are available online.
Appendix 3. Vision and Principles

The vision and principles for the Hollins Center Plan are derived from community feedback, stakeholder interview responses and existing conditions.

Together, the vision and principles set the foundation for plan recommendations and implementation strategies in Appendix 4.

Vision

The Hollins Center is a beautiful, dynamic and inclusive community with a balanced mix of housing, commercial and industrial businesses, and places to gather. As a regional gateway to outdoor and urban amenities, the Hollins Center is a well-connected community with safe, efficient transportation options.

Principles

1. Create a destination.
2. Continue to improve and expand the multimodal transportation network.
3. Upgrade community facilities.
4. Pursue opportunities for collaboration.

1. Create a destination.

Draw people to places where they can spend time engaging in many different kinds of recreational, educational and leisure activities.

Figure 3-1

<table>
<thead>
<tr>
<th>Core Concept</th>
<th>Examples of Supporting Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage a mix of commercial and residential uses to serve residents, employees, students and visitors.</td>
<td>Determine desired land uses that are consistent with the area’s vision.</td>
</tr>
<tr>
<td>Provide alternatives to single-family detached homes with a diverse and affordable housing mix for a varied population.</td>
<td></td>
</tr>
<tr>
<td>Consider public-private partnerships for redevelopment and revitalization opportunities.</td>
<td></td>
</tr>
<tr>
<td>Create a unique sense of place through innovative and high quality development.</td>
<td>Review and update Design Guidelines for the study area.</td>
</tr>
<tr>
<td>Create pedestrian scale development standards for the study area.</td>
<td></td>
</tr>
<tr>
<td>Embrace the outdoors.</td>
<td>Provide multimodal connections to parks and natural resources.</td>
</tr>
<tr>
<td>Protect open spaces, creeks and mountain views.</td>
<td></td>
</tr>
</tbody>
</table>
2. Continue to improve and expand the multimodal transportation network.

A shared-use path for bicyclists and pedestrians is complete and several more pedestrian projects are slated for construction over the next few years. Build on this momentum to provide safe accommodations for all users on all major corridors.

<table>
<thead>
<tr>
<th>Core Concept</th>
<th>Examples of Supporting Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a safe, efficient and accessible transportation network that provides a range of choices.</td>
<td>Work with VDOT to address congestion and safety for all users.</td>
</tr>
<tr>
<td></td>
<td>Plan for and construct accessible pedestrian and bicycle accommodations throughout the study area.</td>
</tr>
<tr>
<td></td>
<td>Construct segments of the Tinker Creek Greenway and/or other bicycle and pedestrian facilities.</td>
</tr>
<tr>
<td></td>
<td>Expand transit opportunities to the study area when and where feasible.</td>
</tr>
</tbody>
</table>

3. Upgrade community facilities.

Community facilities in the Hollins area are among the busiest and most visited in the County, and are also some of the oldest facilities with little room for expansion. Roads widened in the 1980s and 1990s were built for cars and did not include aesthetic features, pedestrian or bicycle accommodations desired today.

<table>
<thead>
<tr>
<th>Core Concept</th>
<th>Examples of Supporting Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure that the public services and facilities meet the needs of the community.</td>
<td>Consider options for the Hollins Fire and Rescue Station to optimize response times.</td>
</tr>
<tr>
<td></td>
<td>Rebuild the Hollins Branch Library as a 21st Century location for learning and gathering.</td>
</tr>
<tr>
<td></td>
<td>Connect public parks (Walrond, Hollins, Sadler) when and where feasible.</td>
</tr>
<tr>
<td>Enhance major corridors with attractive streetscape features.</td>
<td>Construct and install gateway and streetscape improvements (lighting, landscaping, signage, street furniture, etc.) throughout the study area.</td>
</tr>
<tr>
<td></td>
<td>Ensure the maintenance of landscaping and other streetscape improvements throughout the study area.</td>
</tr>
</tbody>
</table>
4. **Pursue opportunities for collaboration.**

Partnerships are important to facilitate and achieve meaningful change. It will be vital to increase awareness of the Hollins Center Plan and provide updates about implementation to stakeholders and the public.

**Figure 3-4**

<table>
<thead>
<tr>
<th>Core Concept</th>
<th>Examples of Supporting Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engage and collaborate with stakeholders to implement the plan’s vision.</td>
<td>Actively seek out developer partners interested in and capable of building mixed-use projects.</td>
</tr>
<tr>
<td></td>
<td>Actively promote the area to restaurants, retailers and entertainment businesses.</td>
</tr>
<tr>
<td></td>
<td>Maintain communication with business and property owners.</td>
</tr>
<tr>
<td>Continue to engage the community.</td>
<td>Keep residents and the larger area informed about progress.</td>
</tr>
</tbody>
</table>

Hollins Center conceptually shown as a mixed use corridor that is safe for bicyclists and pedestrians.
Hollins Recommendations

Land Use

Future Land Use

- Amend the Future Land Use Map as recommended in this plan (see Map).

Regulations

- Determine desired land uses that are consistent with the area’s vision.
- Review and update design guidelines for the study area.
- Create pedestrian scale development standards for the study area.

Community Facilities and Infrastructure

Library

- Rebuild the Hollins Branch Library as a 21st Century location for learning and gathering.

Fire and Rescue

- Consider options for the Hollins Fire and Rescue Station to optimize response times.

Parks

Transportation

- Work with VDOT to address roadway congestion and traffic safety by constructing the following projects:
  1. Improve the Williamson Road/Peters Creek Road Intersection.
  2. Widen Interstate 81 (support regional and statewide efforts).
  3. Improve the Plantation Road/Williamson Road intersection.
  4. Improve Peters Creek Road shoulders to accommodate U-tums, deceleration lanes and bike lanes.
  5. Reconstruct Plantation Road from Williamson Road to Hershberger Road to allow a three-lane section with multimodal accommodations.
  6. Reconstruct Walrond Drive to widen for industrial and park traffic.
  7. Improve the Plantation Road/Dexter Road intersection.
  8. Reconstruct Friendship Lane to widen the roadway and address drainage issues.
- Improve bicycle and pedestrian safety and accessibility by planning and constructing the following bicycle and pedestrian projects:
  1. Peters Creek Road from Williamson Road to Barrens Road
2. Williamson Road from Plantation Road to Campus Drive/LaMarre Drive (north side)
3. Plantation Road from Williamson Road to Lila Drive (east side)
4. Walrond Drive from Plantation Road to Walrond Park
5. Peters Creek Road from Barrens Road to Airport Road/Archcrest Drive
6. Plantation Road from Lila Drive to McDonald’s (east side)
7. Plantation Road from Gander Way to Days Inn (west side)
8. Williamson Road from Campus Drive to Botetourt County (north side)
9. Plantation Road from Williamson Road to Ridgecrest Drive
10. Friendship Lane from Plantation Road to Carvins Creek
11. Gander Way

- Construct the following segments of the Tinker Creek Greenway:
  1. Construct a greenway segment from the trailhead parking lot under I-81 to Carvins Creek in collaboration with Hollins University.
  2. Continue discussions with Hollins University regarding constructing a greenway segment along Carvins Creek from the Friendship Lane bridge at Carvins Creek to Williamson Road.
  3. Construct along Williamson Road from Plantation Road to Campus Drive/LaMarre Drive (north side).
  4. Construct along Plantation Road from Williamson Road to Ridgecrest Drive.
  5. Reconstruct Friendship Lane bridge across Carvins Creek.
  6. Construct along Williamson Road from Campus Drive to Botetourt County (north side), considering the alignment through Sadler Park if needed.
  7. Construct along Plantation Road from Ridgecrest Drive to Flora Farm Drive.
  8. Construct along Plantation Road and/or along Tinker Creek between Flora Farm Drive and the City of Roanoke as opportunities arise.

- Expand transit opportunities to the study area when and where feasible.

**Gateway/Streetscape Improvements**

- Construct and install gateway and streetscape improvements throughout the study area.
- Ensure the maintenance of landscaping and other streetscape improvements throughout the study area.

**Community Engagement**
• Consider public-private partnerships for redevelopment and revitalization opportunities.
• Actively seek out developer partners interested in and capable of building mixed-use project
• Maintain communication with business and property owners
• Keep residents and the larger area informed about progress
Mixed Use Future Land Use Designation
Roanoke County Comprehensive Plan

The Mixed Use designation recognizes the existing mixture of uses and zoning districts and provides for a mix of uses to preserved and developed. This future land use designation allows for more choice and/or opportunity in how the land can be [re]developed. A high degree of architectural and creative site design is encouraged to enhance the rural and historic character of the area as well as pedestrian and vehicular connectivity between properties.

**Land Use Types**

**Community Activity Centers** - Public and private facilities serving surrounding residents including parks, schools, community clubs and meeting areas connected to residential areas by sidewalks, bikeways and/or greenways;

**Commercial** - Planned small-scale or clustered commercial including specialty businesses, personal services and sit-down or family-style restaurants. Also included are small, highway-oriented retail establishments providing goods and services to passing motorists. Such facilities should be designed to complement the character of the community;

**General Retail Shops and Personal Services** - Planned shopping centers and clustered retail uses are encouraged. These centers should incorporate greenways, bike and pedestrian accommodations into their designs to link to surrounding development;

**Limited Industrial** - Low intensity industrial uses are encouraged. Such development should be clustered and should not have an adverse impact on air or water quality, the natural environment or scenic viewsheds;

**Mixed Use** - Developments that combine retail, service or other commercial uses with office and/or residential use in the same building or on the same site;

**Office and Institutional** - Planned office parks and independent facilities in park-like surroundings are encouraged. Such developments should be designed to enhance the rural and historic character of the area;

**Parks and Outdoor Recreation/Ecotourism** - Public and private recreation from small-scale community based facilities to regional attractions with greenway linkages and bike and pedestrian accommodations. Also encouraged are eco- and sustainable tourism businesses;

**Residential** - Townhouse, low density multi-family, single-family attached and two-family dwellings. Clustering and connectivity are encouraged.
Land Use Determinants

Existing Land Use Pattern - Locations where commercial or industrial uses have been developed or will likely be developed.

Existing Zoning - Locations where commercial or industrial zoning exists.

Access - Locations served by arterial street system.

Utility Availability - Locations where water and sewer service exist or can be provided.
Transportation

Road Projects (Purple):

1. Improve the Williamson Road/Peters Creek Road Intersection
2. Widen Interstate 81 (support regional and statewide efforts)
3. Improve the Plantation Road/Williamson Road intersection
4. Improve Peters Creek Road shoulders to accommodate U-tums, deceleration lanes and bike lanes
5. Reconstruct Plantation Road from Williamson Road to Hershberger Road to allow a three-lane section with multimodal accommodations
6. Reconstruct Walrond Drive to widen for industrial and park traffic
6. Improve the Plantation Road/Dexter Road intersection
8. Reconstruct Friendship Lane to widen the roadway and address drainage issues
Transportation

Bicycle and Pedestrian Projects (Red):

1. Peters Creek Road from Williamson Road to Barrens Road
2. Williamson Road from Plantation Road to Campus Drive/LaMarre Drive (north side)
3. Plantation Road from Williamson Road to Lila Drive (east side)
4. Walrond Drive from Plantation Road to Walrond Park
5. Peters Creek Road from Barrens Road to Airport Road/Archcrest Drive
6. Plantation Road from Lila Drive to McDonald’s (east side)
7. Plantation Road from Gander Way to Days Inn (west side)
8. Williamson Road from Campus Drive to Botetourt County (north side)
9. Plantation Road from Williamson Road to Ridgecrest Drive
10. Friendship Lane from Plantation Road to Carvins Creek
11. Gander Way
Transportation

Bicycle and Pedestrian Project Results
Greenway Projects (Green):

1. Construct a greenway segment from the trailhead parking lot under I-81 to Carvins Creek in collaboration with Hollins University
2. Continue discussions with Hollins University regarding constructing a greenway segment along Carvins Creek from the Friendship Lane bridge at Carvins Creek to Williamson Road
3. Construct along Williamson Road from Plantation Road to Campus Drive/LaMarre Drive (north side)
4. Construct along Plantation Road from Williamson Road to Ridgecrest Drive
5. Reconstruct Friendship Lane bridge across Carvins Creek
6. Construct along Williamson Road from Campus Drive to Botetourt County (north side), considering the alignment through Sadler Park if needed
7. Construct along Plantation Road from Ridgecrest Drive to Flora Farm Drive
8. Construct along Plantation Road and/or along Tinker Creek between Flora Farm Drive and the City of Roanoke as opportunities arise
Transportation

Greenway Projects Results