

**Albemarle County Planning Commission  
December 19, 2017**

The Albemarle County Planning Commission held a public hearing on Tuesday, December 19, 2017, at 6:00 p.m., at the County Office Building, Room #241, Second Floor, 401 McIntire Road, Charlottesville, Virginia.

Members attending were Tim Keller, Chair; Daphne Spain; Pam Riley; Mac Lafferty, Bruce Dotson, Karen Firehock, Vice Chair and Bill Palmer, UVA representative. Absent was Jennie More.

Other officials present were Scott Clark, Senior Planner; Elaine Echols, Chief of Community Development; Rebecca Ragsdale, Senior Planner; J.T. Newberry, Senior Planner; Sharon Taylor, Clerk to Planning Commission; and John Blair, Deputy County Attorney.

**Call to Order and Establish Quorum**

Mr. Keller, Chair, called the regular meeting to order at 6:00 p.m. and established a quorum.

**Regular Item**

**SP-2017-00017 Greenmont Hopworks Processing Facility**

MAGISTERIAL DISTRICT: Samuel Miller

TAX MAP/PARCEL(S): 12100-00-00-09200

LOCATION: 1463 Plank Road

PROPOSAL: Construct a hops-processing facility, including a 10,000-square-foot structure.

PETITION: Commercial fruit or agricultural produce packing plant under section 10.2.2.23 of the Zoning Ordinance on a 5.75-acre parcel. No dwelling units proposed.

ZONING: RA Rural Area - agricultural, forestal, and fishery uses; residential density (0.5 unit/acre in development lots)

OVERLAY DISTRICT(S): Entrance Corridor

COMPREHENSIVE PLAN: Rural Area – preserve and protect agricultural, forestal, open space, and natural, historic and scenic resources; residential (0.5 unit/ acre in development lots)  
(Scott Clark)

Scott Clark presented a PowerPoint presentation and summarized the staff report. He said this is a special use permit request for an agricultural processing facility located in Keene, which would be a hops-processing facility that would include a 10,000 square-foot structure or up to that size. He noted the use is under the commercial fruit or agricultural produce packing plant use permitted by special use permit in the zoning ordinance. He pointed the location on the slide that was just west of the Keene intersection of Plank Road and Route 20 and reviewed the details of the proposal.

**DETAILS OF THE PROPOSAL:**

- Proposed agricultural processing facility located in a structure of up to 10,000 square feet.
- Facility would process and store freshly grown hops for beer use in brewing. All processing activities would take place within the 10,000-square-foot building.
- Seasonal use – This is a highly seasonal use for about two months out of the year; it is very intense and could even be 24 hours a day but will take place inside the building where the fresh produce is being processed. The rest of the year is a low intensity

use with mostly office and low-volume shipping occurring.

- Up to 24 hours a day - July through September. No outdoor work (such as transportation and unloading of goods) from 7 p.m. to 7 a.m.
- October through June – office and low-volume shipping

Mr. Clark reviewed the conceptual plan for the use. It is about a 5.75- acre property and the envelope outlines the use. There is a new entrance and a general outline of where the parking and the structure would be. He pointed out the line that is measured 500 feet from Route 20 and that the building would be west of that line.

Mr. Clark said he would quickly run through some of the standards for special use permit approval.

**No substantial detriment. The proposed special use will not be a substantial detriment to adjacent lots.**

Noise:

- All processing equipment would be located indoors, so the noise impacts are expected to be minimal.
- Some noise will come from air conditioning units – but this would allow the building to be run with the doors closed at night so the nighttime noise impacts could be reduced further.
- By condition, there will be no use of refrigerated trailers parked on the site for outside storage. All cold storage will be contained within the building. This means no outdoor generators running for keeping those trailers cold so that reduces the noise level further.
- The envelope has a minimum 50-foot setback between the processing facility and adjacent properties. This would increase the distance between the use and the adjacent uses.

**...and with the public health, safety and general welfare.**

Transportation: The transportation demands of the use are fairly small.

- Approximately six trailer loads of hop vines per day during peak activity. About four employees would be on the site.
- The Virginia Department of Transportation has reviewed this proposal and had no objections.

Water:

- Unlike other agricultural processing uses, this one has very little or no water impact because it is mainly a drying use. There is not a lot of washing or other water use going on; they are trying to get rid of water.
- Storm water impacts will be managed during the review of the site development plan. There will be a site plan following this review that would deal with the State storm water requirements.
- The 100-foot stream buffer is shown as a “Wooded Area to Remain”

Emergency Services:

- The Fire/Rescue department had no objection to the proposed use.

### **Consistency with the Comprehensive Plan**

- Strategy 1d of the Rural Area Plan states that the County should “[c]ontinue to assist Rural Area property owners to diversify agricultural activities, including helping to connect local farms with local consumers.”
  - The proposed facility would help to make a perishable crop more viable for local growers by providing a nearby packaging and storage facility, removing the need to either use the crop immediately or quickly transport it long distances. Staff felt this was supportive of our Comprehensive Plan goals for agricultural protection.
- Route 20 Entrance Corridor – Structure would at least be 500 feet from Route 20.

### **SUMMARY:**

Staff has identified the following factors favorable to this proposal:

1. The proposed use is supportive of the County’s goals for maintaining and protecting agriculture in the Rural Areas.
2. The impacts of the use on the surrounding area are minimal and can be managed through design limitations.

Staff has identified no factors unfavorable to this proposal.

### **RECOMMENDED ACTION:**

Staff recommends approval of SP-2017-00017 Greenmont Hopworks Processing Facility with the conditions in the staff report and he would be happy to answer any questions.

Mr. Keller invited questions for staff.

Ms. Firehock asked when they are doing 24-hour processing will the outside lighting be on at night or will it be a motion detector.

Mr. Clark replied that from his discussion with the applicants he thinks they plan for the lighting to be on in the building so they would not spread the lighting out all the time.

Ms. Firehock asked there would be lighting on the entry door or something like that.

Mr. Clark replied that was correct, but we are requiring full cut-off fixtures. He said the applicant can probably answer whether or not they want to have motion detectors or not, but he would think if they are operating all night they will probably want to have those lights on.

Ms. Firehock said she just did not know how much lighting there would be and whether it would be staying on all night.

Mr. Clark said his sense is if there is lighting all night it is going to be down lighting on the building during that active period of the year. He said the rest of the year there would be no need for it except for a door light or something else because there is going to be very little use especially at night.

Ms. Spain said as a point of information if this is the first such facility like this.

Mr. Clark replied yes, this is the first fruit packing or agri-processing special use permit he has reviewed in 18 years.

Ms. Spain asked specifically for hops.

Mr. Clark replied or for any other use. He said there are some out there that are long standing uses that are probably considered existing nonconforming uses like fruit sheds and things like that. He said this is the only one of these we have seen and as far as he knows the only hops processing facility in the entire region, the closest one being somewhere in northern Virginia.

Ms. Spain said that was what she was trying to get at is that this would specifically help the breweries that are depending on hops.

Mr. Clark said it would help the growers and the brewers both because there is a much reduced travel time from the farms to the processing plant.

Ms. Spain said she knows there has been a shortage of hops.

Mr. Keller opened the public hearing and invited the applicant to come forward.

Andrew Cox, Director of Business Development for Greenmont Hopworks, said he was here this evening in support of our company's special use permit application for a hops processing facility. He said he put together some slides that may answer some of the questions around the quality parts of our presentation and application. He said first he would go through the Virginia Hops Market and then a quick operational overview and that will answer some more of the questions and give some more color to what the facility will actually look like during the operational season and then impacts of Virginia Industry both the growers and brewers.

Mr. Cox said the Virginia Hops market unbelievably they have been grown here since the colonial times but it is an increasingly prevalent crop in Virginia mostly because of the craft brewers. As you know, we have had a huge increase in craft brewers over the past five years and seen a 65 percent increase in planted acreage of hops between 2015 and 2016 with that information from a survey the Cooperative Extension puts together each year. He pointed out the 2017 information is being gathered and expects to see between a 40 and 50 percent increase again in 2017. Therefore, it is becoming a more prevalent crop as local brewers are looking for a truly local crop rather than sourcing out to the Pacific Northwest, Michigan or Europe. He pointed out brewers are looking for local products but they are also looking for quality products. So with the immaturity of the Virginia hop market so far they have been mostly using fresh hops so that would be hops that are just directly pulled and have about a 24-hour life span before they will start to really significantly spoil and not be good to use in beer. So what this facility will allow us to do is provide quality processed hops products whether it be dried hops or whether it will be pelletized hops, and he would get a little more into those different products.

Mr. Cox pointed out the hops processing cycle as seen on the slide that the hops are cultivated on an irrigated trellis systems roughly 18' tall from April through September with harvest dates ranging from late July to late September. The hops vines are harvested using a mechanical stripper that separates the vines from the flowers or cones, which outputs fresh hops. From there we can sell to a brewer or they need to go ahead and be dried using a hop oast. What

that allows us to do is take it from roughly 60 percent moisture to about 10 percent moisture, which really stabilizes the product. From there we can sell that product directly to a brewer or we can pelletize that, and brewers prefer pelletized hops since they have a much longer life span and more easily used with traditional modern brewing. The difference here is that Virginia has really only had fresh hops and a very small percentage of brewers can actually use those in typical modern brewing system. In addition, you do not have to schedule the brewing since it is time and labor sensitive and for them they do a lot of their hop ordering on line so it is much easier to go with pellets.

Mr. Cox said the 2016 survey of Virginia growers done by the Cooperative Extension and this map shows in green dots the growers that are greater than 400 plants. He said that is about ½ an acre and to give you an idea of the difference in volume maybe between Washington and Oregon your small grower would be about 100 acres. He said the small growers would grow between 100 plants and 400 plants, but below ½ an acre. So what this demonstrates by the blue dot is where the facility would be located and this kind of shows what our sphere of influence would be. The other processing facility is located in Loudon County and they service more of Maryland and Pennsylvania growers actually as well as some northern Virginia growers. It is very difficult for a grower in Richmond or even into Tidewater to get to that facility in any amount of time without facing some serious spoilage issues. He noted that someone from Richmond it was up to a 3 to 4 hour drive potentially. So it would really be helpful to growers in the south side, in the Shenandoah Valley and in the east side of Virginia.

Mr. Cox said the next is pulled from the Virginia Department of Tourism and shows the location of craft breweries in Virginia. He noted that 66% of all craft breweries in Virginia are located roughly within 75 miles of this facility. This would allow them to source in a quality of local hops products to use in their brewing.

Mr. Cox said in the operational overview he mentions harvesting; the plants are cut down manually in the field, stacked on a trailer and then they would be brought into the facility as such.

- Harvesting
  - Hop Bines are transported to the facility via truck/trailer
  - Bines are then fed into the harvester
  - Cones are removed and weighed
- Drying
  - Cones are then loaded into an oast and dried to 10% moisture
- Packaging
  - The Cones are weighed once more and packed into mylar bags if they are to be used as a dried hops products or either into bales if they are going to be pelletized later on. But, at that point everything is packaged.
- Storage
  - The Bales are then loaded into refrigerated storage

#### Operational Period

- Hop Harvest
  - Begins in mid-July and runs through September
  - Different cultivars mature at different times
- Order Fulfillment
  - Fresh hop orders fulfilled during harvest (July and August)

- Dry hop orders fulfilled from October – January
- Facility Dormancy
  - From October – June no harvesting occurs
  - Largely internal administrative and repackaging activities. We would be shipping some small orders to brewers probably using the post office that is in Keene. But, really, everything is internally conducted at that point.

#### Day-to-Day Operations

- Harvest Bine Deliveries
  - Harvest deliveries will be received from 7:00 am – 7:00 pm as Mr. Clark mentioned 6 deliveries a day.
  - Other external activities will be conducted during this period.
- Harvesting, Drying & Packaging
  - Harvesting, drying & packaging will occur 24 hours a day during harvest.
  - From 7:00 pm – 7:00 am all activities will be internally restricted. They would likely continue running the harvester if we had the volume but then we would be drying the hops. The process takes a substantial amount of time to do it correctly so we would still be drying and then packing in there between 7:00 pm and 7 am both of which really don't make any noise and it would be completely internally confined.

Mr. Cox said the next slide is a visual representation of the trips per day throughout the year. The blue area shows the facility's dormancy period, which would be mostly administrative trips myself going down there to work in the office and ship things out. He pointed out May and June show a ramp up period that would be starting to bring in core rope for hanging the plants themselves and bringing in other materials. He said then in October and November that ramp down period where we still have a fair number of orders that we are filling, but there is really no actually harvesting going on at that point.

Mr. Cox said finally he had some notes on the Impact to Virginia Industry as we mentioned that this is from a horticultural perspective it allows growers that were not able to focus fully on growing or marketing to brewers they would be able to market their crop to us and we would be able to bring it in and that provides them a guaranteed place to off load their crop. It also allows them the ability to turn their crop from a wet very perishable product to something that has a life span up to about 3 years in refrigerated storage. He said that allows crop diversification and we actually have had some farmers in our area especially on Plank Road that came to the community meeting that indicated interest into getting into hops because this is something that would be nearby and an opportunity for them to get into the industry. From a brewing and distillery product perspective, most brewers will look at me and say they have had that nightmare where somebody showed up with a black garbage bag on a hot August day full of rotten hops and they say do you want to brew with these and they have said no. That is unfortunate that there is almost a stigma with local Virginia hops there. He said that brewers are looking for a quality hop product that they can use that would rival the quality of what they are used to seeing out of Oregon and that is something that we would be able to provide from a local perspective.

Mr. Cox said tourism is very similar to vineyards and wineries and you go to a winery and you see the vines but you go to an area of breweries you can drive through an area of hops and it kind of plays hand in hand. He said they have done their research so we are actually partnering with Virginia Tech on our two current yards to do testing to look at how our hops

compare to similar varieties from other locations from a chemical level and then also looking at in our practices how do we do weed management and how we do fertilization management. He said that allows them to have increased quality data, lets them make better decisions and lets them get that data into the hands of additional growers and farmers. He pointed out that Virginia State and NC State also work very closely with Virginia Tech and they would benefit from that additional data as well. Mr. Cox pointed out that is all he has got.

Mr. Keller invited questions for the applicant.

Ms. Riley said she was trying to understand what impacts there might be to any residents or potential new residents. She asked if the harvesting will all take place in the interior of the building or does the harvesting take place outside.

Mr. Cox replied that there were two parts to the harvesting. There is the field harvest where the farmers themselves are cutting the vines down and then transporting them to the facility. The harvesting machine looks very similar to a combine but it is a much smaller machine but it is a much smaller machine that runs on very small electric motors and it is completely on the inside of the building. So the only harvesting that would go on outside the building is moving that product from the trailer inside and staging it to be set onto the harvester and pulled through. Mr. Cox said that is the only harvesting at the facility that will take place.

Ms. Riley asked is the business plan over time to expand to some other uses like hop growing or some other related business.

Mr. Cox replied that Greenmont Farm has two acres of hops currently in the ground. He said this particular business scheme the way hops works is totally focused on being that sort of middle market for locally grown hops. That would from a business perspective expanding into other places like hops distillates or distilling it into a liquid form for some brewers who prefer that, but really that would be the real business diversification. He said we have allowed enough growth within the facility that if we were to add maybe a larger harvester internally that we would have the space for that and plan for enough cold storage that we could continue to grow and bring on acreage without having to change the building or change the special use permit.

Mr. Lafferty asked how are the hops dried.

Mr. Cox replied that we dry them in an oast and what we did this year we essentially built a forced air oast that uses sort of your garage heat pump and an inward blowing fan. He said the moist air leaves through the top and we use a hay probe to test the moisture and we will test it until it gets down to around 10% to 12% and then we pull them off and package from there. However, it is sort of a big hot box and it has trays with metal screens that passes the air through. It is a manual automated process.

Mr. Lafferty asked is there any odor associated with the process.

Mr. Cox replied that there is and it is contained almost completely to the building itself. He said the current building that we have processed in is two rooms, one in which we dried and one in which we packaged and refrigerated. Therefore, the dried one was not air-conditioned and the packaging and refrigeration was air-conditioned. He said you could not smell the product in between the two even with an open wall, but if you went into the other room, you could. He said it is a cousin to cannabis so there are certain varieties that have a very similar

odor, but what we found is even standing outside the building you cannot smell that and it would dissipate inside the building because of how large it is. He noted they were looking at a building with about 20-foot ceilings to accommodate the machinery and it would dissipate mostly inside.

Ms. Spain asked how many employees you would expect during those peak months of production.

Mr. Cox replied that we mentioned about four employees with myself, essentially a production manager or process manager and several part-time employees.

Ms. Spain said the economic development benefit is more than the multiplier effect of the types of people who will benefit from having the hops grown here, and Mr. Cox agreed.

Ms. Spain said you said you would possibly be attracting new growers and then she assumes the brewers you said could make different types of beer.

Mr. Cox replied from the brewer's perspective it is a quality and there are certain varieties of hops that grow better in our area so they have better access to those. He said it was also from a marketing perspective; it is sort of that buy local movement or eat local movement and it is moving towards a drink local movement. He said if it was a local brewery that sources their grain from Iowa and sources their hops from the Pacific Northwest and buys their yeast on line; it is a local product made with foreign ingredients. So that allows them to say we use grain from Copper Fox Granary and in Sperryville, Virginia we use our hops from Greenmont Hops Works in Keene to allow them to bring it a little bit closer and that is a great marketing tool for a lot of local breweries.

Ms. Firehock said she attended the community meeting and thought he did a great job explaining. She said she really liked your handmade poster and wish you would have brought that since it was good understand how it worked. Just a question on the lighting again Ms. Firehock asked when you are operating 24-hours a day she understands that it will be down cast but will it be on all night. She asked how much lighting you would have.

Mr. Cox replied that we have talked about this in our community development meetings that the way we situated the facility itself would be that the main ingress/egress the garage doors would be on the back side of the building away from the road essentially and so that is where the majority of the lighting would be. He would say that lighting we would likely keep on as long as there was someone at the facility and if there were no one at the facility, we would turn it off and have it on motion detection. He noted that anything around the side of the building they would likely just have a motion detection at that time. He said any lighting that would be on would not be visible from the road; it would be downcast on the backside of the building.

Mr. Keller thanked Mr. Cox. He invited public comment. Hearing none, Mr. Keller invited the applicant back up and invited questions for the applicant.

Mr. Dotson said this is a very interesting proposal because of the kind of proposal it is where it works with the local agricultural industry with the local brewing industry and he thinks the staff has done a very good job of analyzing it and he intends to support it. He said but he has two facetious comments that occurred to me during the presentation. In the 1800's in England where they were raising hops the way they would do it is poor Londoners would come out to

the hops farms and stay for a week or two, bring the family and pick the hops. It was the way that they could get out of London and get a vacation. In light of the tourist lodging item later on our agenda he assumes you are not intending any Londoners to come out and stay on the site while working there.

Mr. Cox replied no.

Mr. Dodson said the other facetious thought is more of a comment that I am glad your service area includes Roanoke because he understands there is a brewery down there that is looking for quality hops.

Mr. Keller said building on the London my experience in the mid-west is Door County up above Milwaukee and there was a three or four-year period when everyone decided that they were going to grow hops for the beer industries down south of there and they overproduced. He noted that we have a shortage now but there is this fascinating whether it is the grapes or whatever on how that balance occurs.

Mr. Cox replied totally and he thinks a lot of it is finding products that work really well here that brewers also like because Cascade is a variety that grows well anywhere but a lot of brewers won't work it because it is not new or pretty. He said it is definitely finding those products that work well and that we can grow well here that brewers will be excited about so there will be a little bit of balance there finding that.

Mr. Keller said you brought up its relationship to cannabis and asked if we see in the future a time when Virginia is like a number of other states is this a facility that could lend itself to the drying aspect of cannabis so that it could be a center of a coop operation for small growers of cannabis.

Mr. Cox replied that it is very similar in the distillate side of it that is actually even closer because if it were to be medically out regulated that is what most of the medicinal use is the THC distillate so that would actually be something that could go very closely hand in hand, yes.

Mr. Keller said that means there is the potential on this site for either in the hops area or the cannabis area for a larger operation in the future.

Mr. Cox asked under this special use permit.

Mr. Keller replied no, on this site.

Mr. Cox replied that he could not say there was not the potential but he would say that is not in our current plans.

Mr. Keller closed the public hearing to bring the matter before the Commission for action and discussion.

Ms. Firehock said since it is in my district she will note that she attended the community meeting and they did a great job of answering everyone's questions and concerns. She thinks they have made a good effort here to try to limit any impacts from the site including thoughtfulness about the entrance to the site, how it is buffered and it is a highly appropriate use for the rural area. She said that we finally have something that she feels is pretty non-

controversial and she knows there are hops already being used at the James River Brewery in Scottsville. Ms. Firehock said she was prepared to make a motion unless there were other comments or questions.

Ms. Spain pointed out this is the sort of case that she wished we saw more. She said this is actually a pleasure to be able to vote for this and so you did a good job.

Ms. Firehock moved to recommend approval of SP-2017-00017 Greenmont Hopworks Processing Facility with the conditions outlined in the staff report.

Mr. Lafferty seconded the motion.

Mr. Keller invited further discussion. Hearing none, he asked for a roll call.

The roll was called and the motion was approved by a vote of 6:0:1 (More absent).

Mr. Keller said the Planning Commission's recommendation for approval of SP-2017-00017 Greenmont Hopworks Processing Facility would be forwarded to the Board of Supervisors for their action in the future. He thanked the applicant.

The meeting moved to the next item.