

Town of Montreat
Board of Commissioners Meeting Agenda – Public Forum
July 12, 2018 – 6:30 p.m.
Walkup Building

I. Call to Order

- Welcome
- Moment of Silence

II. Agenda Adoption

III. Public Comments

IV. Adjournment

**Town of Montreat
Board of Commissioners
Special Meeting - Budget Workshop
June 7, 2018
Walkup Building**

Board members present: Mayor Tim Helms
Mayor Pro Tem Kent Otto
Commissioner Kitty Fouche
Commissioner Bill Gilliland (arrived at 7:01 p.m.)
Commissioner Alice Lentz
Commissioner Tom Widmer

Board members absent: None

Town staff present: Alex Carmichael, Town Administrator
Angie Murphy, Town Clerk
David Arrant, Chief of Police
Barry Creasman, Public Works Director
Erin Marie Wheeler, Interim Finance Officer

No members of the public were present. Mayor Helms called the meeting to order at 7:00 p.m., led the group in reciting the Pledge of Allegiance, and held a moment of silence.

Agenda Approval

Commissioner Gilliland moved to adopt the agenda as presented. Commissioner Fouche seconded and the motion carried 5/0.

Public Comments

Mayor Helms reiterated that this Public Comment period was intended for remarks pertaining to items listed on the meeting agenda.

There were no public comments at this time.

Old Business

There was no Old Business at this time.

New Business
Budget Workshop

Mr. Carmichael made some introductory comments. He acknowledged there were some immaterial changes to the Budget. Mr. Carmichael stated that tonight was an opportunity to direct staff to make change to the draft budget.

Commissioner Fouche moved to direct staff to amend the draft budget for Public Works from \$5,000 to \$10,000 for tree removal in the right-of way. Mr. Carmichael stated this item would be listed under Contract Services: Tree Removal and Other Related Road Maintenance. Public Works Director Barry Creasman stated that the public are becoming more aware of the trees around them. Commissioner Lentz seconded the motion. Commissioner Widmer asked Mr. Creasman how he determines when to call a contractor versus when to do the work himself. Mr. Creasman stated that if he can get the bucket truck anywhere close to the tree then he is able to do the work himself but sometimes it is easier to get a contractor to do the work due to the location of the trees. The motion carried 5/0.

Commissioner Gilliland had a couple of comments. He thanked Commissioner Widmer for the document he put together for the Commissioners. Commissioner Gilliland likes what was done in the Planning & Zoning Department and would like to see more of this type of thinking used in other departments. Commissioner Gilliland stated that he was a fan of merit-based pay. Commissioner Gilliland has never thought the Town had enough in the Budget for street paving and thinks that the storms might could actually help us through FEMA. Commissioner Gilliland also took the opportunity to congratulate Public Works on their hard work during the cleanup from Tropical Storm Alberto.

Commissioner Widmer reflected on last week's public comment referencing Calvin Trail and questioned whether monies needed to be set aside for this paving project. Mr. Carmichael stated that if the Town gets a Federal Disaster Notification FEMA will provide 75% of the cost to fix the road back to the pre-disaster state. Any upgrades will be out of our pockets. The state of North Carolina will cover the remaining 25%. So returning to asphalt millings, which was what was on Calvin Trail, will be covered 100%.

Commissioner Fouche stated that she likes the recent idea of outsourcing payroll. Mr. Carmichael stated that he currently did not have any cost estimates on this resource. Mr. Carmichael stated that if we took the currently budgeted bookkeeper position and converted it to a full time (40 hours) temporary accountant at the same rate and we reduced Erin Marie Wheelers hours from 30 hours to 20 hours it would be a net savings of \$1,470.81. If we do the same conversion but keep Mrs. Wheeler at 30 hours it would cost us \$12,988.31 in expenses not presented in the draft budget. Commissioner Widmer asked what the chances were in finding an accountant versus a bookkeeper while offering the same amount of money for both. Mr. Carmichael suggested that we

would recruit right out of the university system. Commissioner Widmer suggested another strategy. Commissioner Widmer feels that we need someone with more experience and has the ability to hit the ground running which would necessitate a higher hourly rate. Mr. Carmichael stated that the proposed rate is \$18.75. Commissioner Widmer asked Mrs. Wheeler what the going rate is for an accountant and she stated \$25 per hour. Commissioner Gilliland moved to direct staff to amend the draft budget in the amount of \$17,000 in the administration department. Commissioner Lentz seconded and the motion carried 5/0.

Commissioner Widmer asked Mr. Carmichael how comfortable he was with the new Planning & Zoning model. Mr. Carmichael stated that overall it is working better than he anticipated. The one area we seem to be lacking in is Code Enforcement. We do not have the capacity to go out and look for transgressions the way we used too.

Mr. Carmichael stated that we would now need to reduce the budget by \$22,000 to offset this evening's changes to the proposed budget. Mr. Carmichael stated that the surplus of the budget was put into Public Buildings so it would make sense to reduce that line item by \$22,000 but the Commission was welcome to propose another offset as they saw fit. Mr. Carmichael also mentioned that the Town has been awarded another grant from the US Urban Forestry Department of \$3700 but we have to reflect the revenue and expense in our current budget. Mr. Carmichael recommends reflecting the revenues and expenses in the Public Works line items. Next week staff will present Council with some budget amendments for approval. We are not asking for additional local dollars we will be reflecting the budget from federal and state dollars. Commissioner Gilliland moved to direct staff to amend the draft budget by -\$22,000 in the Public Buildings Department. Commissioner Widmer seconded and the motion carried 5/0. Commissioner Gilliland moved to direct staff to amend both expense and revenue in the Public Works Department in the draft budget by \$3,700. Mayor Pro Tem Otto seconded and the motion carried 5/0. Commissioner Gilliland moved to add a FEMA Project Fund as a line item prior to adoption of the budget. Commissioner Fouche seconded and the motion carried 5/0. Mayor Helms stated that he sat with Mr. Carmichael and Mr. Creasman as they met with FEMA yesterday and they were very organized. Mr. Creasman had pictures of every tree and culvert and road that was affected by the storm. Mr. Carmichael stated that all the credit for the smoothness of that meeting goes to Mr. Creasman.

Public Comments-Other Topics

Mayor Helms reiterated that the Public Comment period were for remarks pertaining to public business items not listed on the meeting agenda, including any reports or communications from other community entities.

There was no public comments at this time.

Adjournment

There being no further business, Commissioner Gilliland moved to adjourn the Town Council Meeting. Commissioner Widmer seconded and the motion carried 5/0. The meeting was adjourned at 8:05 p.m.

Tim Helms, Mayor

Angela Murphy, Town Clerk

**Town of Montreat
Board of Commissioners
Town Council Meeting
July 12, 2018 – 7:00 p.m.
Walkup Building**

I. Call to Order

- Pledge of Allegiance
- Moment of Silence

II. Agenda Adoption

III. Mayor's Communications

IV. Consent Agenda

A. Meeting Minutes Adoption

- June 7, 2018, Town Council Budget Workshop
- June 14, 2018, Town Council Public Forum Meeting Minutes
- June 14, 2018, Town Council Meeting Minutes
- June 26, 2018, Special Meeting Minutes
- June 28, 2018, Special Meeting Minutes

All items on the Consent Agenda are considered routine, to be enacted by one motion with the adoption of the agenda and without discussion. If a member of the governing body requests discussion of an item, it will be removed from the Consent Agenda and considered separately.

V. Town Administrator's Communications

- Consent Agenda Review
- Safety Update
- Capital Projects Update
- Legislative Update
- Other Items

VI. Administrative Reports

- Administration
- Finance
- Planning and Zoning
- Police
- Public Works and Water
- Sanitation
- Streets

VII. Public Comment – Agenda Items

Public comments will be heard during this period for only those items listed on the meeting agenda.

VIII. Old Business

IX. New Business

A. Tree Management Plan

- **Suggested Motion:** Move to approve the Town of Montreat Tree Management Plan.

B. Policy Updates: Conflict of Interest Policy

- **Suggested Motion:** Move to approve Conflict of Interest Policy as presented.

C. Policy Updates: Uniform Guidelines Procurement Policy

- **Suggested Motion:** Move to approve Uniform Guidelines Procurement Policy.

D. FY 17/18 Budget Amendment #22

- **Suggested Motion:**

E. FY 17/18 Budget Amendment #25

- **Suggested Motion:**

F. Various Budget Amendments for FY 2017-2018

- **Suggested Motion:**

G. Various Budget Amendments for FY 2018-2019

- **Suggested Motion:**

I. Public Comment – Other Topics

**Montreat Board of Commissioners
Town Council Meeting
July 12, 2018**

Public comments will be heard during this period for other public business items or topics not listed on the meeting agenda.

II. Commissioner Communications

III. Meeting Dates

Tree Board:

Tuesday, July 24, 2018
9:30 a.m. Town Services Building

Bridge Aesthetics Committee:

Tuesday, July 26, 2018
2:00 p.m. Location to be determined

Bid Opening: Town Hall Design-Build Project
Number 2018-004

Monday, July 30, 2018
Time & Location to be determined

Montreat Landcare

Wednesday, August 1, 2018
9:00 a.m. Location to be determined

August Town Council Meeting:

Thursday, August 9, 2018
7:00 p.m. Walkup Building
Public Forum begins at 6:30 p.m.

Bid Evaluation & Selection of Short List: Town
Hall Design-Build Project Number 2018-004:

Friday, August 10, 2018
Time & Location to be determined

Meeting with Top Firms: Town Hall Design-
Build Project Number 2018-004:

Monday, August 27, 2018
Time & Location to be determined

IV. Adjournment

**Town of Montreat
Board of Commissioners
Town Council Meeting – Public Forum
June 14, 2018
Walkup Building**

Board members present: Mayor Tim Helms
Mayor Pro Tem Kent Otto
Commissioner Kitty Fouche
Commissioner Bill Gilliland
Commissioner Alice Lentz
Commissioner Tom Widmer

Board members absent: None

Town staff present: Alex Carmichael, Town Administrator
Angie Murphy, Town Clerk
Ed Teters, Police Officer

Approximately 35 members of the public were also present. Mayor Helms called the Public Forum to order at 6:30 p.m., and held a moment of silence. Mayor Helms also asked those in attendance to remember the Smith family in the passing of Kent L. Smith. Mayor Helms detailed the purpose of the Public Forum.

Agenda Approval

Commissioner Lentz moved to adopt the agenda as presented. Mayor Pro Tem Otto seconded and the motion carried 5/0.

Public Forum

Mrs. Ginny Porter of 388 Appalachian Way questioned what the Town was going to do about pipes sticking out of the road on Greybeard Trail where her son has a home. Mayor Helms stated that when you lay water and sewer pipes in rocky areas the rocks are almost always removed and sand is used to fill in around the pipes. The reason is that the ground heaves in heat and cold and the rocks would eventually break the pipes. Mr. Carmichael stated that when Tropical Storm Alberto came through there was damage to property but no one was evicted from their homes. There was also minor damage to public buildings and private institutions. The Town saw a lot of damage to roads and culverts. Mr. Carmichael recently met with the Office of Emergency Management and FEMA to do a preliminary assessment to see if Montreat qualifies for federal disaster relief. There is estimated to be \$184,000 in damages to roads and culverts. There is a long list of roads that need repairs. It will be a long process for the Town to identify all the needs and to put into play the necessary processes for repair schedules. Commissioner Fouche clarified that this was concerning Greybeard Trail rather than Appalachian Way. Mrs. Porter stated that these were not Montreat roads but Montreat trucks go up there twice a day. Mr. Carmichael stated that the Town has an access easement to the roads on Greybeard but he could not speak at this time about

repairs to the roads.

Mr. Bill Scheu of 146 Eastminster Terrace asked for updated information on the annexation process and wondered if there were ways the public could help to move the process along. Mr. Carmichael stated that Commissioner Lentz and himself traveled to Raleigh a few weeks ago and talked to legislature and it seems to be bearing fruit now. Commissioner Lentz stated that Senate Bill 775 has cleared the Senate completely. This was uncontested in the Senate. We are now waiting for the House of Representatives. Mr. Scheu asked if there were people the citizens can call to lobby. Mayor Helms stated that he didn't feel that was necessary at this time. Mayor Helms then went on to explain the de-annexation/annexation process.

Mr. Peter Boggs of 338 Chapman Road stated that he was gratified to see that the Creek Side property did not seem to flood during the rains.

Mr. Tom Frist of 98 Frist Road stated that he felt it was important to have a welcome center for MRA and Montreat College as well as the Town in the new Town Hall.

Mayor Helms stated that Mr. Jim McNair had taken some pictures of buildings and structures around Town that he would like to see the new Town Hall reflected in the style of architecture. Mayor Helms advised those in attendance that if they had an idea for the new Town Hall to snap a picture; that it didn't have to be a hand drawn design.

Mr. Jim Williamson of 529 Memphis Lane suggested hiring an architect who is sympathetic to the architecture of this region for the new Town Hall. Mr. Williamson also suggested having the architect look at older building and do a more contemporary interpretation of them. Mr. Williamson also mentioned using landscaping to soften the impact of the building.

Mrs. Clare Frist of 98 Frist Road asked if the Council could pass around Mr. McNair photos.

Mayor Helms praised the Public Works Crews for their hard work during the Alberto storms.

Mrs. Judy Shuford of 619 Greybeard Trail complimented the Council on "The Burn". She felt that it was a great time of community between Black Mountain and Montreat. Mrs. Shuford enjoyed meeting the families of town employees and felt that it was a wonderful evening.

Mrs. Suzanne Phelps of 433 Kentucky Road stated that she thought the meeting was fun and informative with great comradery.

Commissioner Fouche stated that the Tree Board received a grant for a Tree Inventory along with an intern. The trees, in the rights-of-way, were inventoried from the gate to the dam. Volunteers tagged trees based on several different criteria. Seven of the trees were tagged red meaning they needed to come down and two of the seven fell down on Assembly Drive. Public Safety played a huge part in completing this inventory plan.

Mrs. Jane Sewell of 143 Virginia Road stated that she felt welcomed back. She's moved to think about the town workers and is thinking about making a batch of cookies. Mayor Helms told her that would be a great idea and that the majority of staff are there Monday through Thursday.

Adjournment

Commissioner Gilliland moved to adjourn the Public Forum. Commissioner Widmer seconded and the meeting was adjourned 5/0.

Tim Helms, Mayor

Angie Murphy, Town Clerk

**Town of Montreat
Board of Commissioners
Town Council Meeting
June 14, 2018
Walkup Building**

Board members present: Mayor Tim Helms
Mayor Pro Tem Kent Otto
Commissioner Kitty Fouche
Commissioner Bill Gilliland
Commissioner Alice Lentz
Commissioner Tom Widmer

Board members absent: None

Town staff present: Alex Carmichael, Town Administrator
Angie Murphy, Town Clerk
David Arrant, Chief of Police
Barry Creasman, Public Works Director
Erin Marie Wheeler, Interim Finance Officer

Approximately 35 members of the public were also present. Mayor Helms called the meeting to order at 7:00 p.m., led the group in reciting the Pledge of Allegiance, and held a moment of silence.

Agenda Approval

Mayor Helms stated that Budget Amendment #17 needed to be added to the Agenda. Commissioner Widmer moved to add Budget Amendment #17 to Agenda. Mayor Pro Tem Otto seconded and the motion carried 5/0. Commissioner Gilliland moved to adopt the agenda as amended. Commissioner Fouche seconded and the motion carried 5/0.

Mayor's Communications

Mayor Helms thanked Town Staff for all they did during the storm recovery period. There was a round of applause for Public Works Director Barry Creasman and Police Chief Dave Arrant.

Consent Agenda Review

The proposed Consent Agenda will include the following items:

- May 10, 2018, Town Council Public Forum Meeting Minutes
- May 10, 2018, Town Council Meeting Minutes
- May 24, 2018, Special Meeting Minutes

Town Administrator's Communications

- Mr. Carmichael displayed a flood evacuation map with primary and secondary evacuation routes out of the Town of Montreat. This map can be found in the Agenda Packet on the website. Commissioner Widmer suggested making the map a more permanent feature on the new redesigned website.
- Mr. Carmichael stated that members of Town Staff met with FEMA recently and it was estimated that we had public property damage of \$184,000. If a federal disaster is declared FEMA will reimburse the Town for 75% and the State of North Carolina will pick up the remaining 25%. This will be a long process and the payout will probably be in the next fiscal year. Staff continues to make smaller repairs around Town. The culvert repairs will most likely require an Army Corps of Engineers permit which will elongate the process considerably.
- Mayor Pro Tem Otto asked for an update on the damages to Texas Road alongside the Walkup Building. Mr. Carmichael stated that Texas Road was a complicated road to fix. The road was originally built without a base and in most cases it was paved over red clay mud. The Town will be required to repair to appropriate street standards. The process will require a little more work. It is a high priority for the Town.
- Mr. Carmichael stated that the RFQ (Request for Qualification) for design build for new Town Hall had been posted on the Town's website. Mr. Carmichael also utilized a tool on the State's website of minority owned businesses. This website contains over 400 firms. Mr. Carmichael stated that we received four emails from businesses that are interested in putting in a bid for the project. The closing day of the RFQ is July 11th and we will move forward with evaluating those bids in July.
- Mr. Carmichael stated that the Bridge Aesthetics Committee has been diligently meeting.
- Mr. Carmichael stated that our legislative bill has passed the Senate. It has passed its first reading in the House of Representative and it's required to go through three readings. Mr. Carmichael feels this is very positive progress. Commissioner Widmer asked if it would be beneficial if members of Montreat wrote the delegation to thank them for their efforts. Mr. Carmichael suggested that writing the House Finance Committee would be a great place to start.
- Mr. Carmichael thanked the Caring Neighbors for the recent "Mexican Fiesta" for Staff.

Administrative Reports

Administration: Reports were in written form as requested by Council.

Finance: Reports were in written form as requested by Council.

Planning and Zoning: Reports were in written form as requested by Council.

Police: Reports were in written form as requested by Council.

Public Works and Water: Reports were in written form as requested by Council.

Sanitation: Reports were in written form as requested by Council.

Streets: Reports were in written form as requested by Council.

Public Comments

Mayor Helms reiterated that this Public Comment period was intended for remarks pertaining to items listed on the meeting agenda, including staff reports and communications.

There were no public comments at this time.

Old Business

There was no Old Business at this time.

New Business

- A. Adoption for FY 18/19 Budget: Mayor Helms announced that this year's budget included no tax increase and no increase in the water rates which was all good news. Commissioner Fouche moved to approve the 2018-2019 Budget Ordinance as presented. Commissioner Widmer seconded the motion. Mr. Carmichael stated that at the work session a few weeks ago Council asked staff to investigate the paving of Calvin Trail. The cost of paving Calvin Trail would be approximately \$33,000. Mr. Carmichael stated that there were two alternate motions to be utilized this evening if Council wants to move forward with paving Calvin Trail. Commissioner Gilliland moved to amend the proposed Town of Montreat 2018/2019 Budget Ordinance to allocate \$33,000 of the restricted fund balance to the Powell Bill General Fund Budget for the paving of Calvin Trail. Commissioner Fouche seconded the motion. After a brief discussion about the restricted fund balance the motion carried 5/0. Commissioner Gilliland moved to approve the 2018-2019 Budget Ordinance as amended. Mayor Pro Tem Otto seconded and the motion carried 5/0.
- B. FY 17/18 Budget Amendment #7: Mr. Carmichael stated this was for the grant funds received for the Hemlock Project. This gives the authority to accept and spend the grant. Commissioner Widmer moved to increase account number 10-80-6190-452 by \$6,065 increase account number 10-80-3340-452 by \$6,000 and decrease account number 10-20-5600-340 by \$65 as presented in Budget Amendment #7. Mayor Pro Tem Otto seconded and the motion carried 5/0.
- C. FY 17/18 Budget Amendment #8: Mrs. Wheeler stated that Mr. Creasman's salary had been budgeted in Public Works but his salary has been coming out of the Street's line item.

Commissioner Gilliland moved to adjust budget for salary being paid out of a different department. Commissioner Widmer seconded and the motion carried 5/0.

- D. FY 17/18 Budget Amendment #9: Commissioner Gilliland moved to cover expenses related to the flooding. Commissioner Lentz seconded and the motion carried 5/0.
- E. FY 17/18 Budget Amendment #10: Commissioner Lentz moved to establish special revenue fund for FEMA – Calvin Trail. Commissioner Gilliland seconded the motion. Commissioner Gilliland moved to change special revenue fund to capital projects fund. Commissioner Widmer seconded the amended motion. The amended motion carried 5/0. Commissioner Widmer moved to establish a capital projects fund for FEMA – Calvin Trail. Commissioner Gilliland seconded and the motion carried 5/0.
- F. FY 17/18 Budget Amendment #11: Commissioner Gilliland moved to establish capital project fund for FEMA – Texas Road Paving. Mayor Pro Tem Otto seconded and the motion carried 5/0.
- G. FY 17/18 Budget Amendment #12: Commissioner Gilliland moved to establish capital projects fund for FEMA – Lower Greybeard retaining wall. Commissioner Lentz seconded and the motion carried 5/0.
- H. FY 17/18 Budget Amendment #13: Commissioner Gilliland moved to establish capital project fund for FEMA – Providence Terrace. Commissioner Widmer seconded and the motion carried 5/0.
- I. FY 17/18 Budget Amendment #14: Commissioner Gilliland moved to establish special revenue fund for FEMA – Culvert projects. Mayor Pro Tem Otto seconded and the motion carried 5/0.
- J. FY 17/18 Budget Amendment #15: Commissioner Gilliland moved to establish special revenue fund for FEMA – Debris projects. Commissioner Widmer seconded and the motion carried 5/0.
- K. Technical Service Assistance Contract: Mr. Carmichael stated that this is a renewal of Adrienne Isenhower’s part time Zoning Administrator Contract. Staff highly recommends renewing this contract. Commissioner Fouche moved to approve the Technical Service Assistance Contract between the Town of Montreat and Land of Sky Regional Council for Zoning Administration in the amount of \$34,128. Mayor Pro Tem Otto seconded the motion. Mr. Carmichael stated that Adrienne Isenhower works in Montreat two days a week, Biltmore Forest two days a week and Land of Sky one day a week. Mr. Carmichael stated there was no change to this contract at all. The motion carried 5/0.
- L. FY 17/18 Budget Amendment #16: Mr. Carmichael stated that the Town of Montreat applied and was awarded a renewal grant. This is asking Council to accept the grant and move forward

with the project. Commissioner Fouche moved to establish a special revenue fund for the Urban Forestry Grant. Commissioner Widmer seconded and the motion carried 5/0.

- M. FY 17/18 Budget Amendment #17: Commissioner Lentz moved to amend the General Budget to cover Landcare expenditures by increasing 10-80-6190-340 by \$475 and decreasing 10-20-5600-340 by \$475. Mayor Pro Tem Otto seconded and the motion carried 5/0.

Public Comments-Other Topics

Mayor Helms reiterated that the Public Comment period were for remarks pertaining to public business items not listed on the meeting agenda, including any reports or communications from other community entities.

Mr. Barry Creasman thanked Angie Murphy, Alex Carmichael, Erin Marie Wheeler, Officers Whitson, Kiser and Arrant for their help during the storm recovery period.

Ms. Priscilla Durkin of 103 Mecklenberg Circle asked if the Town of Montreat had anything to do with Robert Lake Park. Mr. Richard DuBose stated the park sustained significant damage during Alberto. The play equipment, which was the only thing insured, was the only thing that didn't sustain any damage. The fundraising for the restoration is going very well. They estimate the costs to be \$100,000 to repair with renovations made to make the park more sustainable in the event of future flooding. Mr. DuBose hopes to get a portion of the park back in operation by the end of the month.

Commissioner Communications

Commissioner Lentz thanked everyone for coming to this evening's reception. She stated this was a constituent's idea expressed to her which she then took to the whole Board. Commissioner Lentz thanked Mary Jo Clark, Clare Frist, Grace Nichols and Town Staff for helping to make this evening a success.

Commissioner Fouche reminded everyone to come to Second Loaf on Saturday. It will be a tribute to Kent L. Smith and a way to support Kent's family. The family wants this to be the biggest Second Loaf ever.

Commissioner Widmer advised everyone to keep their eyes open! Town Staff are working on a new website with a new brand for the Town. Coming soon!!

Mayor Pro Tem Otto stated that he had thought about looking into Montreat's ordinances and regulations this month but he is still working through this currently.

Upcoming Meeting Dates

**Montreat Board of Commissioners
Town Council Meeting Minutes
June 14, 2018**

Mayor Helms reviewed the following list of upcoming meeting dates and deadlines:

<u>Tree Board:</u>	Tuesday, June 26, 2018 9:30 a.m. Town Services Building
<u>Town Services Office Closed:</u>	Wednesday, July 4, 2018
<u>July 4th Parade:</u>	Wednesday, July 4, 2018
<u>Bridge Aesthetics Committee:</u>	Tuesday, July 10, 2018 2:00 p.m. Location to be determined
<u>Bulk Item Pickup/White Good Day:</u>	Tuesday, July 10, 2018
<u>July Town Council Meeting:</u>	Thursday, July 12, 2018 7:00 p.m. Walkup Building Public Forum begins at 6:30 p.m.

Mayor Pro Tem Otto moved to enter into Closed Session in accordance with NCGS §143-318.11(6) for discussion of a personnel matter and approval of November and December 2017 Closed Session Minutes. Commissioner Widmer seconded and the motion carried 5/0.

Upon returning to Open Session Commissioner Gilliland moved that we extend an offer to these three individuals (Monte Hensley, Mary Montgomery, and Phillip Holderman) to be part time/auxillary reserve officers at a rate of \$17 an hour. Commissioner Fouche seconded and the motion carried 5/0.

Adjournment

There being no further business, Commissioner Gilliland moved to adjourn the Town Council Meeting. Mayor Pro Tem Fouche seconded and the motion carried 5/0. The meeting was adjourned at 8:06 p.m.

**Montreat Board of Commissioners
Town Council Meeting Minutes
June 14, 2018**

Tim Helms, Mayor

Angela Murphy, Town Clerk

**Town of Montreat
Board of Commissioners
Special Meeting
June 26, 2018
Town Services Building**

Board members present: Mayor Tim Helms
Mayor Pro Tem Kent Otto
Commissioner Kitty Fouche
Commissioner Alice Lentz
Commissioner Tom Widmer (arrived at 3:34 p.m.)

Board members absent: Commissioner Bill Gilliland

Town staff present: Alex Carmichael, Town Administrator
Angie Murphy, Town Clerk
Barry Creasman, Public Works Director
Erin Marie Wheeler, Interim Finance Officer

No members of the public were present. Mayor Helms called the meeting to order at 3:30 p.m., and held a moment of silence.

Agenda Approval

Commissioner Fouche moved to adopt the agenda as presented. Commissioner Lentz seconded and the motion carried 3/0.

Public Comments

Mayor Helms reiterated that this Public Comment period was intended for remarks pertaining to items listed on the meeting agenda.

There were no public comments at this time.

Old Business

There was no Old Business at this time.

New Business

A. FY 17/18 Budget Amendment #19: Mrs. Wheeler stated this Budget Amendment was for the Urban Forestry grant 50/50 match. The majority of the money has been spent this year with the reimbursement coming next year. Commissioner Fouche moved to approve Budget Amendment #19 to designate matching funds for the Urban Forestry Grant. Commissioner Lentz seconded and the motion carried 3/0.

B. FY 17/18 Budget Amendment #20: Mrs. Wheeler stated this Budget Amendment was to cover salaries and FICA in the sanitation department. Commissioner Lentz moved to approve Budget Amendment #20 for salaries and FICA. Mayor Pro Tem Otto seconded and the motion carried 4/0.

C. FY 17/18 Budget Amendment #21: Mrs. Wheeler stated this Budget Amendment was to cover the underfunded portion of the administrative group health insurance. Commissioner Widmer moved to approve Budget Amendment #21 for Group Health Insurance Expenditures. Commissioner Fouche seconded and the motion carried 4/0.

D. Resolution #18-06-0001 RESOLUTION EXEMPTING SITE INVESTIGATION CULVERT REPLACEMENTS RELATED TO DAMAGE TO PUBLIC INFRASTRUCTURE SUSTAINED FROM SUBTROPICAL STORM ALBERTO FROM G.S. 143-64.31: Mr. Carmichael stated that the Mini-Brooks Act in North Carolina requires that all professional services related to engineers, construction manager-at-risk, surveyors and architects go through an RFQ process. General Statutes allow for local governments to exempt itself from this requirement for projects under \$50,000. The resolution is a motion to exempt ourselves from the requirements of the Mini-Brooks Act. The next item on the agenda is the actual contract. Commissioner Fouche moved to adopt Resolution #18-06-0001 as presented. Commissioner Lentz seconded and the motion carried 4/0.

E. Contract for McGill & Associates for consulting work related to disaster recovery: Mayor Pro Tem Otto moved to approve contract for McGill & Associates as presented. Commissioner Widmer seconded the motion. Commissioner Widmer stated that McGill & Associates seemed to get a lot of Montreat business and questioned whether we are getting the “best deal”. Mr. Creasman stated that McGill & Associates are very familiar with the Town of Montreat and they do offer us the best deal in his opinion. They plan to use interns for the investigation and recommendations for culvert repair which will not cost the Town any money. The motion carried 4/0.

F. Ordinance #18-06-0001: Mrs. Wheeler stated that the auditors are requiring that we have an actual ordinance saying we are establishing a special revenue fund. Commissioner Widmer moved to adopt Ordinance #18-06-0001 as presented. Commissioner Fouche seconded and the motion carried 4/0.

Public Comments-Other Topics

Mayor Helms reiterated that the Public Comment period were for remarks pertaining to public business items not listed on the meeting agenda, including any reports or communications from other community entities.

There was no public comments at this time.

Adjournment

There being no further business, Commissioner Fouche moved to adjourn the Special Meeting. Mayor Pro Tem Otto seconded and the motion carried 4/0. The meeting was adjourned at 3:48 p.m.

Tim Helms, Mayor

Angela Murphy, Town Clerk

**Town of Montreat
Board of Commissioners
Special Meeting
June 28, 2018
Town Services Building**

Board members present: Mayor Tim Helms
Mayor Pro Tem Kent Otto
Commissioner Kitty Fouche
Commissioner Alice Lentz
Commissioner Tom Widmer

Board members absent: Commissioner Bill Gilliland

Town staff present: Alex Carmichael, Town Administrator
Angie Murphy, Town Clerk

No members of the public were present. Mayor Helms called the meeting to order at 7:00 p.m., and held a moment of silence.

Agenda Approval

Commissioner Widmer moved to adopt the agenda as presented. Commissioner Lentz seconded and the motion carried 4/0.

Public Comments

Mayor Helms reiterated that this Public Comment period was intended for remarks pertaining to items listed on the meeting agenda.

There were no public comments at this time.

Old Business

There was no Old Business at this time.

New Business

A. Discuss possible changes for Request for Qualifications for Project Number 2018-004-Town Hall: Commissioner Widmer stated that he did not read the original RFQ as thoroughly as he should have and upon further studying he found that the word “architect” was not even used in the entire RFQ. He felt that an architect would be a valuable member of the team. Commissioner Widmer also felt that the RGQ was ponderous in length. The RFQ was posted on the website and sent out via email to over 400 email addresses. It is believed that the current complicated RFQ

would probably exclude small to medium sized firms from participating. Mr. Jim Williamson of Memphis Lane stood up at the Public Forum and gave his thoughts on the new Town Hall. Earlier this week Commissioner Widmer met with Mr. Williamson to review the RFQ. Mr. Williamson thought the RFQ was well done but it was probably more of an Asheville RFQ as opposed to our size job. Mr. Williamson did think it would exclude the small to medium sized firms and he noticed that it did not include an architect. Mr. Williamson marked up the RFQ with suggestions that would make it less onerous. He offered a great deal of professional advice. Commissioner Widmer stated that the rewritten RFQ was now in front of the Commission. Commissioner Widmer stated that the rewritten RFQ was simplified (10 pages as opposed to 15 pages) and included an aesthetic component to balance the functional component. Section 1.1 characterizes the differences. It was decided that firms could have the opportunity to present on either RFQ but they have to include the four changes. Commissioner Widmer stated that 16 days would be lost: original date on first RFQ was August 9th and the date on the new RFQ is August 27th.

Mayor Helms questioned the role of the architect. Commissioner Widmer stated that the expertise of the architect is to understand the character of the Town and put that Montreat character into the design. Mayor Helms asked if the architect would come separately or with the firm. Commissioner Widmer advised that it would be up to whomever is submitting to put the team together. Commissioner Fouche questioned whether the word “engineer” was too restrictive. Mr. Carmichael stated that there would have to be stamped engineered drawings from engineers on site.

Mayor Pro Tem Otto thanked everyone for going the extra step to put this new RFQ together. He likes the fact that it is being simplified to allow for more bids. Mayor Pro Tem Otto thinks that opening the bid up for medium sized builders and possibly local builders is a positive move. Mayor Pro Tem Otto questioned whether the Commission was being too restrictive now. For instance, what if local builders do not have an architect on staff. Commissioner Widmer stated that it was an industry standard to have an architect on the building team. Mayor Pro Tem Otto stated that the Town Hall should be built for function because it is a government building and he wants the Council to be mindful of how they are spending tax dollars. He wants to continue to get input from the community.

Commissioner Lentz questioned whether people will be confused by the two different RFQs. Commissioner Widmer felt that it will all depend on how it is communicated back out to the public.

Commissioner Fouche moved to approve the material changes to the Design-Build Request for Qualifications for 2018-004 Town Hall. Commissioner Lentz seconded. The motion carried 3/1 with Mayor Pro Tem Otto voting in opposition.

Commissioner Fouche mentioned that everyone should thank Jim Williamson for all of his valuable advice.

Public Comment

Comment period were for remarks pertaining to public business items not listed on the meeting agenda, including any reports or communications from other community entities.

There was no public comments at this time.

Adjournment

There being no further business, Commissioner Fouche moved to adjourn the Special Meeting. Commissioner Widmer seconded and the motion carried 4/0. The meeting was adjourned at 752 p.m.

Tim Helms, Mayor

Angela Murphy, Town Clerk



TOWN OF MONTREAT

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Montreat, NC 28757
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www.townofmontreat.org

ADMINISTRATIVE REPORTS: Town Administration

Town Administration report for the period beginning June 1 and ending June 30, 2018.

Monthly Statistics

Public Meetings	7
Inter-Organizational /Intergovernmental Meetings	2
Agendas Prepared	2
Minutes Transcribed	5
Resolutions Drafted	1
Public Records Requests Processed	0
Water Bills Processed	674
Leak Adjustments	25
New Water Accounts Established	6
Purchase Orders	
Account Reconciliations	
Journal Entries Approved	
Professional Development Hours	2
Sunshine List Messages	6
Website Posts	8
Social Media Posts	2
Code Red Alerts	1
Workers Compensation Claims	0

Upcoming Events and Schedule Changes

Comments

- N/A

Staff Communications

- Changes to the Town website are coming soon



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ADMINISTRATIVE REPORTS: POLICE

Monthly Statistics

<u>MONTHLY POLICE STATISTICS REPORT</u>					
JUNE	2018	2017	2016	2015	2014
Mileage	2448	2874	3347	3462	2465
Dispatched Calls	134	101	123	119	127
Officer-Initiated Calls	492	412	289	231	265
Fire/EMS Assistance Calls	2F,2E	2F/3E	2F/1E	7F/4E	5F/5E
Motorist/Other Assistance Calls	116	106	48	71	57
Traffic Stops/Checking Station*	15,15*	10	25	23	34
Parking Issues	2	8	9	2	14
Burglar/Fire Alarm Responses	3B,3F	4	0	2B	2B/2F
Residential/Building Checks	265	258	224	173	62
Ordinance violations	2	8	36	24	13
LE Agency Assistance Calls	30	10	9	21	16
Animal Calls	7	0	4	8	7
Larcenies	1	4	0	1	3
B&E Calls	0	3	0	0	1
Suspicious Person/Vehicle Investigations	2P/3V	2P/25V	3P/35V	10P/25V	12P/7V
Disturbance Calls	36	43	3	5	0
Accident Responses	3	3	3	0	0
Auxiliary Hours Worked	88T/32R	65T/40R	48T/32R	24T/32R	00/32R
Truck turns at gate	2	3	2	0	1

Comments

- Town service: 489
- MRA service: 176
- College service: 8
- Fuel Cost:

June has seen the typical rise in population and congestion normal for summertime here. This month we have seen Youth Conferences and Music and Worship Conferences, as well as summer folk coming in for the season. No major problems have arisen.

Also increasing is bear issues and interaction. While pretty normal, there was one instance worth noting. MPD was dispatched to a frantic call from a woman who was in a tent with her small child. A bear had taken interest in them, and was probing the tent. Officer Kiser and Officer Hensley (BMPD) arrived with enough bombast from their lights and sirens to scare the bear away instantly.

This month has also seen interagency operations between us and BMPD, BCSO, and NC ALE, at various times and situations.

Lastly; I would like to welcome the newest member of the Montreat Police Department, Officer Monte Hensley. Monte has joined us in a Reserve capacity.

Note: MPD wants to advise residents that Terminix provides bat removal services. They have proper license and equipment to remove bats and do testing if required.

Note: MPD would like to remind residents to please call the Police Department 24 hours a day, 7 days a week, for any suspicious activity, and to remember to lock vehicles and residences at all times.



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ADMINISTRATIVE REPORTS: Water and Public Works

Water and Public Works report for the period beginning on June 1, 2018 and ending June 30 , 2018.

Monthly Statistics

Calls for Service	56
Water Leaks Repaired	1
New Water Lines Installed	0
Meters Read	674
Meter Replacements	0
Water Produced	4,897,100 gal
Hours Pumped (11 wells combined total)	2535 hrs

Comments

- We had one water leak at a creek crossing. It was a leak that we had been searching for .
- Our CCR has been accepted by the state . (Consumer Confidence Report)

Staff Communications

- We have started our inventory count for the auditors.



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ADMINISTRATIVE REPORTS: STREETS

Streets report for the period beginning on June 1, 2018 and end June 30 , 2018 .

Monthly Statistics

Roads Maintained	15.12
New Roads Added	0
Sand Applied	0
Ice Melt Applied	0
Bagged Leaf Pickup	
FTE Staff Hours	
Contracted Employee Staff Hours	

Comments

- We have scraped our gravel roads and applied stone where needed.
- If you know anyone that needs leaf mulch for their garden please let them know we have plenty and its free.
- We have removed three trees from town right of way with a savings of a estimated 1800.00 to the town .

Staff Communications

- As you all may know we have a lot of repairs to do all over Town I am asking for everyone to pass it along that there will be multiple crews making multiple repairs at the same time all over the Town and to please travel slowly and safely when traveling around the crews Thank You.
- Pothole and curb repair , Mowing season and scraping of the dirt roads .All will begin this month for the season . Please keep an eye out for the crew let keep them safe.

TOWN OF MONTREAT
TREE MANAGEMENT
GUIDE



July 2018

TREE MANAGEMENT GUIDE

TOWN OF MONTREAT, NC

Compiled by

The Town of Montreat



Tree Board

The Town of Montreat Tree Management Guide is a compilation of helpful information and guidelines for citizens and developers. It provides summaries of Town Regulations, suggestions for good tree care and other helpful information regarding the cultivation and protection of the Montreat forest and ecosystem. It is expected that the materials included will be updated as needed to remain current for the advancement of that goal.

Funding for this project was provided in part through Urban & Community Forestry Grant from the North Carolina Forest Service, Department of Agriculture and Consumer Services, in cooperation with the USDA Forest Service, Southern Region.

Acknowledgements

The following have contributed to the creation and production of this Guide:

Town of Montreat Tree Board (past and present):

Martha Campbell, Katheryn Fouche, J. Russell Frank, John Johnson, Margaret Ray, William Seaman, William Solomon, Ann Vinson

Town of Montreat Staff (past and present):

Darrick Allen, Alex Carmichael, Barry Creasman, David Currie, Steve Freeman, Adrienne Isenhower, Ron Nalley
Andrew Hiltbrand (2018 Urban Forestry Intern)

The Urban and Community Forestry of the NC Forest Service:

Lucy Cohn-Still, Eric Meucke, Nancy Stairs

Members of the Montreat Community:

Cathie Dodson, Frank Dodson, Brad Hestir, Jane P. Holt, Nancy Midgette, Jean Norris, Joe Standaert

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TOWN OF MONTREAT TREE BOARD VISION AND MISSION STATEMENTS

Our vision is that healthy native trees and shrubs on public lands add social, cultural, spiritual, environmental and economic benefit to a community that values a vibrant forest ecosystem.

The mission of the Town of Montreat Tree Board is to represent and act on behalf of citizens in the promotion, protection and preservation of healthy native trees and shrubs on public lands in ways that enhance the quality of life in the community, in partnership with town officials and staff, educators and forest professionals through research, education, outreach and application of best practices for planting, pruning, preservation, removal, replacement and overall care and planning of a sustainable forest canopy and its associated biodiversity.

TOWN OF MONTREAT NON-DISCRIMINATION POLICY

It is the policy of the Town to foster, maintain and promote equal employment opportunity. The Town shall select employees on the basis of the applicant's qualifications for the job and award them, with respect to compensation and opportunity for training and advancement, including upgrading and promotion, without regard to age, sex, race, color, religion, national origin, disability, political affiliation, or marital status. Applicants with physical disabilities shall be given equal consideration with other applicants for positions in which their disabilities do not represent an unreasonable barrier to satisfactory performance of duties with or without reasonable accommodation.¹

¹ ARTICLE IV. RECRUITMENT AND EMPLOYMENT. Section 1. Equal Employment Opportunity Policy

Introduction

Trees are an essential part of the Montreat valley. They are fundamental to the character of Montreat, a town that celebrates its reputation as one of the greenest towns in America. The trees themselves create beauty in their own right, and frame views of flora and fauna preserved in the Blue Ridge mountain ranges, watershed tributaries and clear watered creeks. And it is trees that frame the stone buildings, homes and recreational areas of the Town of Montreat - those kinds of places where we pull together the histories of our lives.

It is important that community engagement in Montreat be grounded in the continuing ethic of environmental stewardship and be based on an ecological framework that sees our trees as a shared community resource. Trees are a part of the natural valley ecology and provide important environmental, social and economic functions and ecological services for the community. Strategies need to be based on actions that contribute to the health and regeneration of our forest. Policies and programs must emphasize opportunities for creating public, private and community partnerships and stewardship through outreach, information, regulation, incentives and development of skills that promote long-term sustainability and positive outcomes. Canopy coverage is substantial. It has taken decades for most of the community canopy to reach its current height. More trees will reach their ultimate size during the coming years. Some of these trees have reached great girths along steep, eroding, creek banks along Flat Creek and its tributaries.

This first Tree Management Guide forms the foundation for an effective, systemic and proactive tree care program along the Town's rights-of-way and public properties that address the interests of community. It is a guide that will grow and change with the Town. The guiding principle of this Guide is the community's commitment to the fact that our valley's forest is worth caring for and that the actions we take are a significant part of its maintenance.

It is the purpose of this Guide and the part of the mission of the Town's Tree Board to provide data and other information for all entities and members of the Town to better maintain Montreat's tree population. It is important to know what species are most prevalent in Town? Are they susceptible to disease and/or rot? How should both the public and private trees be pruned to promote better health and growth? (See Appendix E.) What species of plants and trees are best suited for planting in this area? (See Appendix D.) What species of plants and trees are least flammable and could help deter the spread of wildfire? (See Appendix C.) What resources are available to the community to learn more about these and other topics? (See References and Resources.) These are many of the questions to which this Guide hopes to provide answers.

Who will use the Guide? It is anticipated that the Guide will be used on many levels: Town Staff, various community environment committees and boards, the various corporate entities located within the Town limits, builders, contractors, developers, and property owners. It is anticipated that it will also be a resource for utility companies and various regional environmental groups which have an interest in helping to preserve the natural tree resources within Montreat.

The first step in creating this Guide was to begin an inventory process to evaluate the at-risk trees along the Town's major transportation corridor. With the assistance of an Urban and Community Forestry grant from the North Carolina Forest Service, approximately one mile has been inventoried (see Inventory section of this document). It will take several inventories along different stretches of roadway to assess all of the trees in Town. Some trees are reaching maturity in inappropriate places. These include the dead or diseased trees in and around playgrounds, creeks, byways, pathways and public gardens. These trees clearly present a hazard to both automotive and pedestrian traffic and activities. The initial focus falls on these hazard trees. By doing the inventory, the Town has increased awareness of maintaining existing trees through proper pruning, the prevention and treatment of invasive species, and has begun an ongoing, systematic surveillance of the valley forests. The Town's participation and the community's commitment to the Eastern Hemlock Restoration Project is an excellent example.

A thriving forest is one that is not threatened by invasive species. It is important to continue the engagement of all property owners, both private and corporate, to increase awareness of the threats of invasive species to help with eradication and control efforts. Various volunteer groups continue to monitor and eliminate areas of Japanese Knotweed and English Ivy while students at Montreat College continue to help monitor the progress of the *Laricobius Nigrinus* predator beetle in the ongoing treatment of the Hemlock Woolly Adelgid. Property owners have also been alerted to watch for signs of the Emerald Ash Borer. A thriving forest also needs to be thinned responsibly to allow for better growing conditions for the healthy and native tree species.

The ability to preserve, sustain and regenerate the community forest is dependent on the actions taken by the multiple environmental organizations within the Town which realize the importance of trees to this community. These include not only the Town's Public Works Department and the Town's various committees and boards, but also the Mountain Retreat Association (a 60% property owner in Town), Montreat College, valley churches, sub-committees of various community organizations, property owners and individuals. The Town is proud to be a Tree City USA. The community knows that healthy trees reduce costs for energy, stormwater management, and erosion control. They yield 3-5 times their cost in overall benefits to the city. They cut energy consumption by up to 25%. They also boost property values.

It is the thriving and sustainable mix of trees, understory species and enormous varieties of mosses, ferns, lichens, mushrooms and the duff accumulated and nurtured over millions of years that has created the healthy ecosystem that is valued and cared for by the Montreat community. It is an essential environmental, economic and shared community asset that reinforces Montreat's identity and legacy as a forested, livable community.

In the Beginning

Jane Holt and Ann Vinson¹

In letters which have been preserved from the late 1890s and early 1900s, residents and visitors to Montreat raved over the forested mountainsides and peaks over which they enjoyed hiking or riding on horseback. It was obvious from the beginning that the forests were a real asset for the Mountain Retreat Association and, by the late 1960s, the Town of Montreat. With this appreciation grew a commitment to the stewardship of the Montreat forests.

Following the end of the Civil War in 1865, Asheville and its surroundings were discovered by those who sought the beauty and tranquility of the mountains, and who relished the cool temperatures of the summers along with the relatively mild winters. Bubbling streams came down from the mountain tops and provided springtime moisture which nurtured the beauty of countless wild flowers of exquisite beauty popping up from the forest floor, as well as a diversity of tree species higher in number in this region and into the Great Smoky Mountains than anywhere else in the United States.

In 1879, the construction of the railroad broke through the last tunnel in the Swannanoa Gap and continued into Black Mountain (known as Grey Eagle at that time), and continued on into Asheville. In the 1880s, George Washington Vanderbilt II, youngest son of William Henry Vanderbilt, began to make regular visits to the Asheville area with his mother, Maria Louisa Kissam Vanderbilt. He loved the mountain scenery and climate so much that he built his own summer estate in this area between 1889 and 1895, which he called his “little mountain estate”. We know it as the Biltmore Estate.

Vanderbilt was appalled at the forestry practices common in the Southern Appalachians. Wanting the best, he brought in Gifford Pinchot and later, in 1895, Dr. Carl Schenck from Germany, to manage the forests of his vast estate. Dr. Schenck started the first School of Forestry in the United States in 1895 on property owned by Mr. Vanderbilt, and it continued in operation for the next 14 years when it was closed in 1909.

During the latter part of the 19th century, an interdenominational group of men, lead by Rev. John C. Collins of New Haven, CT and Mr. Weston R. Gales of Raleigh, NC, decided on the purchase of an approximately 4,500 acre tract which is now known as Montreat. On March 2, 1897, the General Assembly of the State of North Carolina granted a charter to the Mountain Retreat Association to establish a colony “primarily

¹ This brief history of Montreat and its forests, is taken from pages 1-17 of *An Informal History of the Montreat Wilderness* by Jane P. Holt, and edited by Ann Vinson with Dr. Holt's permission. For a more complete picture of the history and evolution of the conservation and stewardship of Montreat's wilderness and forests, this book is a must.

as a health and rest resort to be composed largely of Christian people ... for religious and educational purposes.”²

Mr. John S. Huyler, who had individually built the Montreat hotel at his own expense and invested heavily in Montreat, was elected President of the Mountain Retreat Association in 1899. Soon after 1902, due to financial difficulties, Mr. Huyler offered the land to the YMCA. After due consideration, Dr. Weatherford of the YMCA decided that the interaction of the residents of the Montreat Valley with the conferences of young men would be a distraction from the retreat nature of the YMCA program and turned down the offer. This left Montreat and its forest under the management of the Mountain Retreat Association.³

The purchased tract was described by Anderson: “It is said that in the virgin forest covering the mountains were over a hundred different species of trees, the towering hemlock, the sturdy oak, the pine, chestnut, maple, gum, sourwood, wild cucumber or wild magnolia, in abundance. Mountain Laurel, Rhododendron, Azaleas and Calacanthus grow in profusion. Ferns, Galax, and a countless variety of wild flowers are native to this section ... and that taking Montreat as a center with a radius of 15 miles, it would embrace the greatest variety of trees and shrubbery to be found in a like area anywhere in the world.”⁴ The valley floor from the site of the present gate to the approximate location of the present Lake Susan, had been cleared and was operated as a sheep farm prior to the sale to the Mountain Retreat Association. Thus, the virgin forests were located in the higher elevations of the cove.

The Mountain Retreat Association trustees began looking into forestry management soon after purchasing the Montreat property and forming the Mountain Retreat Association in 1897. The June, 1907, *The Mountain Retreat Bulletin*, p. 13, contains a Forestry Report with extracts from the report of the United States forester who had recently surveyed the tracts at Montreat and whose report was published for the information of stockholders. Remembering that there was active logging in the valley at that time, the following excerpts from this report are interesting from both a listing of the species in the area and contemporary forestry reporting:

“ESTIMATE OF STAND After deducting (a) for trees below 15 inches that must not be cut, (b) for rot, windshake, or other injury, and (c) for inaccessible timber, a stand of about eleven and a half million feet is thought to be available. Of this amount, about 50 percent is in chestnut, 25 percent chestnut oak, 10 percent poplar, and 15 percent miscellaneous species, chiefly red oak, red maple, pitch pine, etc. Counting stumpage as

² Anderson, 1949, pp.1-3.

³ Rowland, 1952.

⁴ Anderson, 1949, pp.5&6

follows: Chestnut \$1, chestnut oak \$2, poplar \$8, and miscellaneous \$2. this would bring about \$24,000, or \$8 per acre.”

Montreat’s virgin forests began to be fragmented by logging to a significant degree following 1911. Until then the only timber harvesting apparently was done by early settlers in the area below the present location of the dam and by the Mountain Retreat Association.⁵ In 1910, Montreat granted a right-of-way for a logging railway to be built running up Brushy Mountain to Grey Beard Mountain and on to Mt. Mitchell. Dr. R. C. Anderson, who later became the President of the MRA, arrived in Montreat in August of 1910 to spend his summer vacation.

We have Dr. Anderson to thank for maintaining the valley in which we live with its forested surroundings intact. In 1910, Dr. Anderson was a member of the Managing Committee of the MRA. He writes that he became aware of a logging contract that needed the signature of the President of the MRA for logging to begin. Dr. Anderson worked to prevent that from happening and was able to prevent this logging venture. This was a crucial first step to the protection of the Montreat Watershed.

Another significant contribution made by Dr. Anderson was in December 1912. Anderson had been President of the MRA for just over a year when he was going through papers of previous administrations, and discovered another unsigned contract that concerned the transportation of logs from Mt. Mitchell to a sawmill in Black Mountain. The logging company was transporting logs from Mt. Mitchell on the railroad that passed along Montreat’s east ridge and through Montreat property. The discovered, unsigned contract allowed the logging company to retain the railroad bed right-of-way after the railroad ceased logging. Dr. Anderson refused to sign until a clause was added that the right-of-way would revert back to Montreat when the company no longer transported logs. It took a lawsuit against the company and strong resistance by the MRA to prevent the company’s retention of the roadbed right-of-way. In April 1922, the suit was settled in favor of Montreat, the road right-of-way reverted to Montreat, and the turnpike originally envisioned by the logging company to run from Black Mountain to Mt. Mitchell along that right-of-way was rerouted to the eastern side of Lookout Mountain.⁶

Montreat’s forests are almost wholly second growth, with practically no areas of old growth forest. During the 1930s, at least one-half of Montreat’s forest was lost to the Chestnut blight. This loss, coupled with some logging which had occurred before the land was bought by the Mountain Retreat Association, resulted in the loss of a large percentage of the virgin timber. The same loss was occurring in the entire SE mountain region.

⁵ Foreman, 1972.

⁶ To learn more about the logging contract and the right-of-way contract, see Anderson, 1949, pp.36-37.

The Montreat wilderness and forests include a great diversity of tree and other plant species growing in a variety of habitats at different levels of elevations and with different exposures and moisture gradients. A similar diversity of animal species and herbivorous plants live in this forest, some of which are threatened species. The wide variety of plant and animal species are valuable natural resources which should be preserved. Montreat's forests are managed for multiple use, leaving as small a footprint of human intrusion as possible. Adding to its intrinsic value is the location of the Montreat Wilderness contiguous with, or in close proximity to, several large natural preserve areas.

As had been the case since its inception, Montreat's residents and visitors delight in hiking and exploring its mountainsides. In its early days, children and adults, in a spirit of adventure, often struck off where there were no trails, either on foot or on horseback. Gradually, trails emerged leading to Montreat's major peaks. During the mid 1970s, the first rangers began organizing hikes and doing trail maintenance.

Conservation efforts were begun by the MRA, Montreat Cottagers' Inc., individuals and other organizations within the valley. In 2007, The Town of Montreat, the Mountain Retreat Association, Montreat College, Montreat Trail Club, The Wilderness Committee of Mountain Retreat Association, The Wilderness and Open Space Committee of Montreat Cottagers', Inc., and The Certified Wildlife Habitat Program organized the Montreat Landcare Committee. A few years later the Earth Ministry Team of Montreat Presbyterian Church also became a member. This umbrella organization and its eight member groups are working together to continue the long tradition of ecological stewardship in the valley begun by the original Mountain Retreat Association.

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Relationships and Connections:
Tree Board and the Community of Montreat

While the Tree Board is an official Town Board and operates under the rules and regulations of a municipal body, it has many connections and relationships with other organizations that share the interests and concerns of the Board in relation to the Montreat forests. These include The Town of Montreat, the Mountain Retreat Association, the Montreat Landcare Committee, Montreat College, and the Montreat Cottagers' Association, Inc.

Town of Montreat	Public Works Open Space Conservation Committee
Mountain Retreat Association	Wilderness Committee Ranger Program Grounds and Maintenance Department
Montreat College	Outdoor Education Department Natural Sciences Department Building and Grounds
Montreat Landcare Committee	Firewise Program (see Appendix C) Invasive plant removal Arbor Day Celebration/Native Plant Sale
Montreat Cottagers', Inc.	Wilderness and Open Space Committee

Tree City USA Concept and Practices in Montreat

Trees as an essential part of the Montreat community have been celebrated since the community's founding a century ago. The recognition of Montreat as a "Tree City USA" in 2015 formalized the community's commitment to maintaining the forest canopy that makes the town a special place to live and visit. Trees shade our homes, institutions, businesses and streets. They clean the air and water, reduce storm water run-off, increase property values, reduce energy costs and make neighborhoods greener, safer and healthier. The value of trees is recognized in Montreat. The Tree City USA program provides an effective framework for managing them on public lands here, as well in the more than 3,400 Tree Cities in the nation as designated by the Arbor Day Foundation. Cities achieve this status by meeting four core standards of sound community forestry management: Maintaining a tree board or department, having a community tree ordinance, spending at least \$2 per capita on urban forestry and celebrating Arbor Day.

The Montreat Tree Board was formed as an outgrowth of the Montreat Landcare Committee, after Landcare submitted a successful application for Tree City USA status in 2015. Part of that application required that the applicant have a viable ordinance concerning trees on public property, and as part of Montreat's revised ordinance the Tree Board was created. It is a grass-roots, citizen-driven committee. It is composed of three at-large community members appointed by the Town Council, the Environmental Commissioner of the Board of Commissioners and the Chair of the Montreat Landcare Committee. The Town's Public Works Director serves as an ex-officio non-voting member. All appointed members serve three-year terms.

Montreat held its first Arbor Day in 2015, and has celebrated Arbor Day each year since that time including educational classes on topics such as hemlock tree health, the Firewise program for homeowner safety, conservation of large land tracts in Appalachia, proper tree care for residents, and updates on the revival of the American Chestnut. All Arbor Days were established by a proclamation from the town's mayor, and several were organized by graduate students from Montreat College as one of the several community and regional partnerships that the Tree Board has been developing. The Tree Board also works closely with the North Carolina Forest Service and the National Wildlife Federation, which donated trees for free distribution at the 2016 Arbor Day.

Montreat's Tree Board meets monthly. It provides a bridge between citizens and town staff by addressing matters such as the disposition of stressed or dead trees on public lands and responding to homeowner ideas and concerns. It has conducted the first inventory along a portion of the major Town traffic corridor. In addition, it has been tasked with the following:

1. Study, investigate, counsel and develop and review a written plan for the care, preservation, pruning, planting, replanting, removal or disposition of trees and shrubs in Greenspace, within public rights-of-way and on Town Property.

2. Facilitate the planting, growth and protection of trees and shrubs within the Town;







3. Foster the communication among citizens of the Town that would provide the needed protection of trees and shrubs and to coordinate active measures to support their health and growth with the Town;

4. Conduct continuing education, research and planning and feasibility studies; and

5. Work with Town staff to promote and enforce the regulation of planting, protection, preservation and removal of trees and shrubs. As a Tree City USA Montreat has access to technical knowledge and assistance from experts and also possible funding to assist with its efforts.

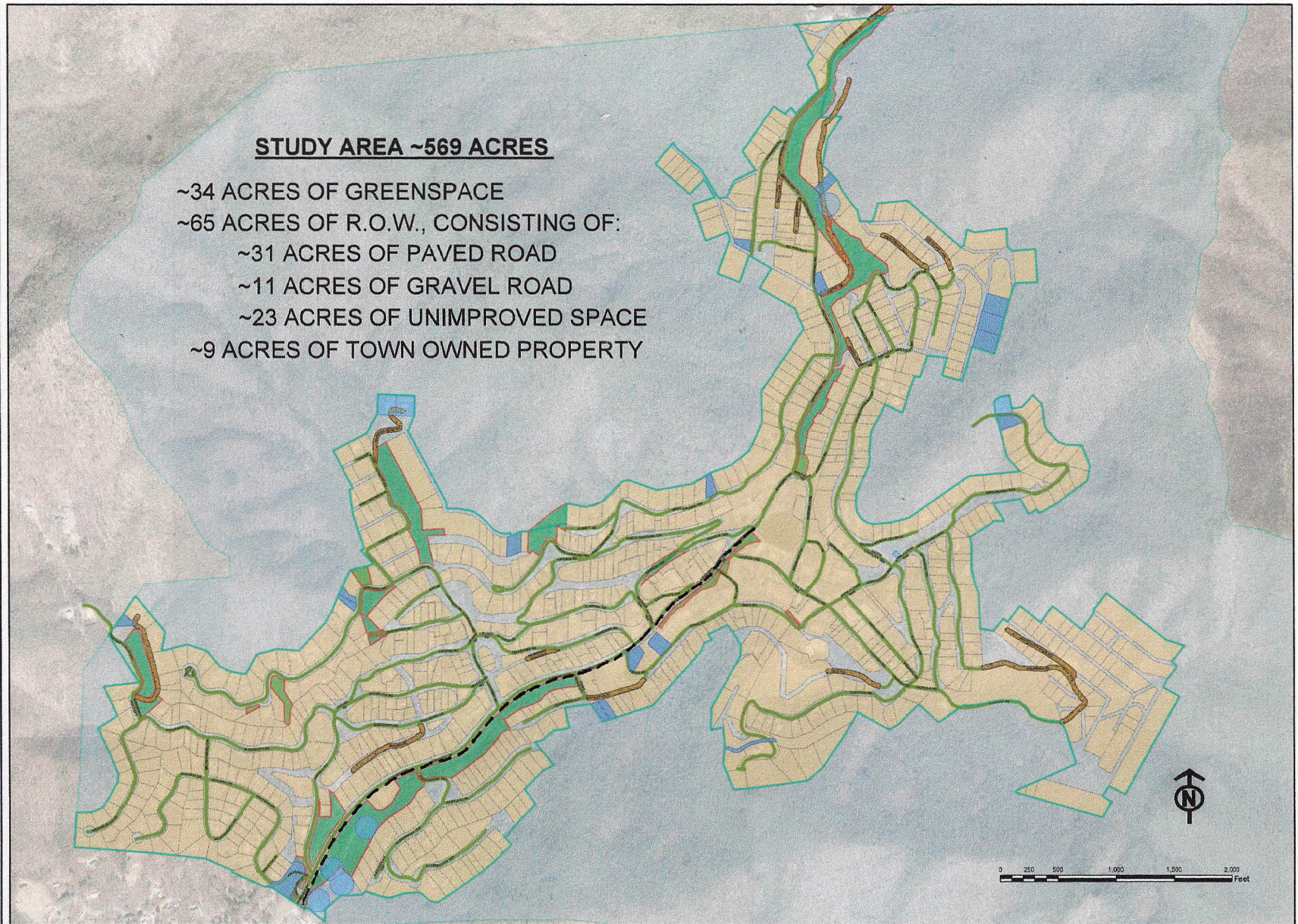
MONTREAT TREE BOARD REFERENCE MAP

Legend

-  Town Owned Property
-  Greenspace
-  Gravel Road
-  Montreat Streets
-  Parcels in Study Area
-  Corporate Limits

STUDY AREA ~569 ACRES

- ~34 ACRES OF GREENSPACE
- ~65 ACRES OF R.O.W., CONSISTING OF:
 - ~31 ACRES OF PAVED ROAD
 - ~11 ACRES OF GRAVEL ROAD
 - ~23 ACRES OF UNIMPROVED SPACE
 - ~9 ACRES OF TOWN OWNED PROPERTY



----- Assembly Drive Section Inventoried - Phase I

Montreat Tree Guide Inventory – Phase I

Overview of Inventory

A tree inventory was conducted to characterize a risk assessment of trees along the public right-of-way on Assembly Drive from the Montreat Gate to Lake Susan (approximately 1 mile). This inventory was conducted to categorize the condition of trees (Good, Fair, Poor, & Dead), 12” or greater in diameter, along the selected portion of the Assembly Drive corridor. The inventory was conducted for the creation of a database for future planning, monitoring, or removal, if necessary, of at-risk trees. The inventory used the buffer of road, bike lane, plus 20’ on each side which is equal to 65’1” or 65.083’ for Assembly Drive.

The inventory was financed by an Urban and Community Forestry grant from the North Carolina Forest Service, Department of Agriculture and Consumer Services, in cooperation with the USDA Forest Service, Southern Region.

Inventory Process

Before

- Planning/Methods
 - Divide survey area into sections
 - Walk through of study area
 - Determine the boundary distance from edge of the public Right-of-Way (ROW)
 - Conduct training for volunteers to gather survey information:
 - Species
 - DBH (Diameter at Breast Height)
 - Condition
 - Problem
 - Recommendation
 - Location (GPS)
- Data
 - General idea of inventory area (random sample in study area)
 - Conduct a test/sample of inventory for proper data collection
 - Quality and quantity assessment of trees

During

Volunteers indicated times available for conducting the inventory with a trained staff member. Teams were established and assigned sections for data collection. The diameter of each tree was calculated and its condition determined by both volunteers and staff. Problems with the tree, if any, were recorded in the ESRI Survey 123 app. Tree location and placement within the ROW was verified for accuracy during data collection.

After

The data input by volunteers using the ESRI Survey 123 app were converted into spreadsheets and then exported into ArcMap (ESRI). A GIS Urban Forestry intern edited points for accuracy, generated reports and charts in various formats showing the results of the data collected. These documents are available to the public in both electronic and printed format, and they were submitted to the Public Works department for management purposes.

Findings from Inventory - Phase I

229 trees were surveyed during the inventory along Assembly Drive corridor with the following results for tree condition (see Chart 1):

Good: 158

Fair: 35

Poor: 29

Dead: 7

The following shows the DBH (measured in inches) frequency:

12-18 inches: 110

18-24 inches: 65

24-30 inches: 36

30-36 inches: 11

36-42 inches: 7

Most trees were located on one side of the road because of the proximity of private property and tree size on the other side. The inventory showed that the three most documented species of trees in the survey include (see Chart 2): *Tsuga Canadensis* (Eastern Hemlock), *Liriodendron tulipifera* (Tulip Poplar), and *Quercus falcata* (Southern Red Oak).

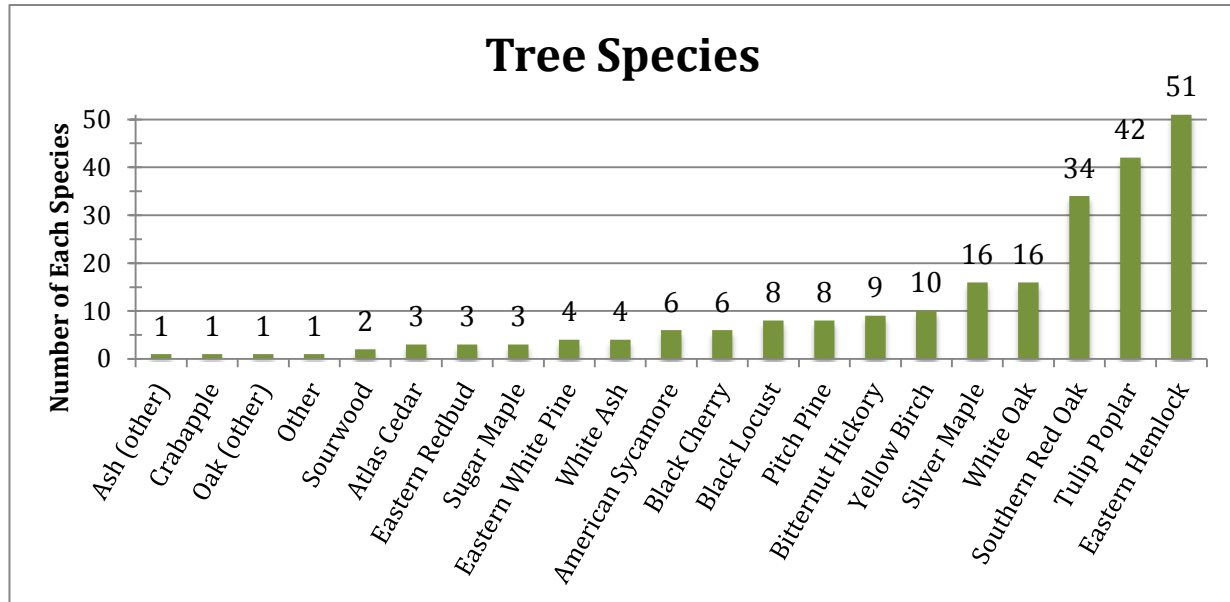
Montreat's Public Works Department is using this data for the monitoring, pruning, and removal of the trees surveyed. At this time, no re-planting is scheduled. Part of good forestry practice is to thin overgrown forest areas. Most of the pruning and removal is to help with the thinning of various stands of trees to improve the overall health of the Town's forest.

At this point in the Town's timeline, the thinning has become the first step in the more proactive approach to tree care. Once Phase II of the inventory is completed, the Public Works Department and the Tree Board will be able to decide how many, if any, of the areas need to be re-planted.

Chart 1

SPECIES	GOOD	FAIR	POOR	DEAD	TOTAL
Ash (other)	1	N/A	N/A	N/A	1
Crabapple	N/A	N/A	1	N/A	1
Oak (other)	1	N/A	N/A	N/A	1
Other	N/A	N/A	N/A	1	1
Sourwood	1	1	N/A	N/A	2
Atlas Cedar	3	N/A	N/A	N/A	3
Eastern Redbud	N/A	2	1	N/A	3
Sugar Maple	3	N/A	N/A	N/A	3
Eastern White Pine	4	N/A	N/A	N/A	4
White Ash	2	1	1	N/A	4
American Sycamore	4	N/A	2	N/A	6
Black Cherry	N/A	2	4	N/A	6
Black Locust	3	2	2	1	8
Pitch Pine	7	1	N/A	N/A	8
Bitternut Hickory	7	1	N/A	1	9
Yellow Birch	7	2	1	N/A	10
Silver Maple	12	2	2	N/A	16
White Oak	10	3	3	N/A	16
Southern Red Oak	20	8	6	N/A	34
Tulip Poplar	33	4	5	N/A	42
Eastern Hemlock	40	6	1	4	51
TOTAL	158	35	29	7	229

Chart 2



Planting Plan

This space held for future use

See Appendix C and Appendix D for suggested
plantings

See Appendix E for planting guide

Summary of Education and Training Goals and Activities

A key role of the Tree Board is providing information to the members of the Montreat community. This is accomplished through:

- Arbor Day classes and presentations – the Tree Board provides educational program that are open to the public at the annual Landcare Native Plant Sale and Arbor Day celebration. These have included Firewise, Hemlock Preservation, Pruning and Planting techniques.
- Distribution of pamphlets and publications at public gatherings such as MRA luncheons, Cottagers' annual meetings, and Road Scholars groups. These materials include updated information on invasive species, best practices for tree care, and Firewise.
- Regular announcements at Town Council and other citizen gatherings.
- Various media outlets including local print media, Town and environmental committee websites, and other social media.

Another important role of the Tree Board is to assist with providing needed training to Town employees and citizen volunteers.

An Urban and Community Forestry Grant from the North Carolina Forest Service funded arborist training for two members of the Town's public works department. As a result, the Town now has one certified Arborist on staff, and anticipates the addition of a second staff member within a year. The Board will continue to search for funding to help with the further training needs of staff.

Two specific training events have been held for citizens. The first was to train Montreat College students and staff to monitor the progress of the *Laricobius nigrinus* predator beetles. The beetles were released into stands of Eastern and Carolina Hemlocks that were heavily infested with the Hemlock Woolly Adelgid. This is a part of the Hemlock Restoration project which is in progress in our valley and surrounding areas of Buncombe County. Participants were instructed in use of collection equipment and safety considerations, followed by hiking to areas where the beetles were released to determine their activity and, hopefully, to document their migration to other areas of the valley.

The second training activity was a session conducted for citizen volunteers and staff for Phase I of the Tree Inventory. A representative from the NC Forestry service instructed Montreat Public Works employees and fifteen volunteers in the measurement, assessment, and identification of trees along the designated corridor, and recording the data in the ESRI Survey 1-2-3 app database for analysis and compilation to help with planning for immediate and long term care of our forest canopy.

As the Town moves forward with future inventories, continues the monitoring of the Laricobius beetles, and monitors the threat of other invasive species, more training opportunities for members of the community will be available.

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Web Resources

<https://www.arborday.org/>

Arbor Day Foundation promotes the planting and caring for trees.

<https://www.ncarboretum.org/>

The North Carolina Arboretum, an affiliate entity of The University of North Carolina System, is under permit by the Pisgah National Forest for use of the U. S. Forest Service property on which it is located. The Arboretum provides education, research, and a wonderful venue for visitors, educators, and researchers.

<http://www.treesaregood.org/>

This site provides the public with educational information about the benefits of trees and how to properly care for trees in the urban environment. The site contains resources from the International Society of Arboriculture, and also provides a collection of reliable tree care information provided by other industry organizations.

<https://buncombe.ces.ncsu.edu/>

This is a link to the NC Cooperative Extension in Buncombe County. Another link on that website is the forestry division at <https://forestry.ces.ncsu.edu/>

<http://ncforestservice.gov/publications/IE0112.pdf>

This is a link to a publication on tree identification from the NC Department of Agriculture and Consumer Services.

https://www.ncwildflower.org/native_plants/recommendations

The mission of the NC Native Plant Society is to promote the enjoyment and conservation of North Carolina's native plants and their habitats through education, protection, propagation, and advocacy. They have a link for trees of NC.

<https://www.ncpedia.org/>

NCpedia highlights North Carolina's unique resources, people, and culture to enrich, educate and inform. It is coordinated and managed by the North Carolina Government & Heritage Library at the State Library of North Carolina, a part of the North Carolina Department of Natural and Cultural Resources. The encyclopedia contains articles covering a broad spectrum of topics and resources about North Carolina, including a section on trees.

<https://digitalheritage.org/2011/06/trees-commonly-found-in-western-north-carolina/>

This site includes essays, video interviews, and other materials created by the students of Western Carolina University. It also includes regional lesson plans created by teachers participating in the Adventure of the American Mind project sponsored by the Library of Congress. Radio spots created by WCU faculty and students may be heard on stations WKSF-FM, WMXF-AM, WPEK-AM, WWCU-FM, and WWNC-AM. A print version is available each month in the *Laurel of Asheville*.

<https://www.ncforestry.org/>

The NCFA is the state's oldest forest conservation organization, dating back to 1911. Membership includes 4,000 members across the state directly involved with forest ownership, forest management, and/or the production of forest products. The site is a good resource for teachers.

<https://www.hendersonvillenc.gov/Data/Sites/1/media/Departments/planning/2010-tree-species-list.pdf>

This link is to a PDF report that suggests the best landscape species for street trees and land development projects in this area. It identifies which trees are native, drought resistant, likely to interfere with power lines, etc.

Tree Identification Apps

Picture This

VTree

APPENDICES

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In Case of Wildfires

Code Red is the vehicle used in case of emergencies in the Montreat community. It is important for each property owner and/or community member to have **Code Red** AND to make certain that **Code Red** has accurate telephone numbers and contact information.

The Black Mountain Fire Department (BMFD) is the coordinating agency during certain disasters such as wildfires, housefires, and floods. BMFD works in unison with the Montreat Police Department (MPD) and the Montreat Public Works Department (MPW).

In the case of wildfire, the BMFD and MPD have plans for each scenario that could possibly arise as to location of the fire. BMFD is the agency responsible for implementing proper evacuation of affected areas. In the case of wildfires, the NC Forest Service and US Forest Service will be on the scene also. Once BMFD is on scene and has identified the areas to be evacuated, it will ask MPD and MPW for assistance in implementing evacuation plans. The Town will also use **Code Red** and reverse 911 to notify residents and/or visitors of when and how to evacuate. All of these agencies are trained in the Incident Command System (ICS) so that multiple agencies can work in unison. MPD and MPW are also been trained in ICS and are ready to assist in any way.

HELP! A Tree has Fallen!

1. *What should I do?*

IF POWER LINES ARE INVOLVED, **STAY AWAY** and keep others away. Call 911 and Duke Power 1-800-419-6356

2. *Who owns the tree?*

Know where your property lines are. If you are uncertain where the rights of way are located – both town and power line – or where your neighbor’s property line is located, call the Town of Montreat Public Works department, 828-669-8002, during regular business hours.

3. *A tree has fallen across a public roadway. What should I do?*

Call the Town of Montreat Public Works Department, 828-669-8002, during business hours or the non-emergency police number after hours and weekends, 828-419-9350; the police will call the town’s public works department. The Public Works department will clear public roads. Individual home owners are responsible for private driveways.

4. *A tree has fallen on my car or house. What should I do?*

IF POWER LINES ARE INVOLVED, **STAY AWAY** and call 911 and Duke Power 1-800-419-6356. If no power lines are involved, call the non-emergency police number, 828-419-9350, Duke Power, 1-800-419-6356, and your insurance company.

5. *There is a dangerous tree on my property, or my neighbor’s property, what should I do?*

Know where your property lines are. You are responsible for removing dangerous trees on your own property. If the dangerous tree is on your neighbor’s property, notify them of the danger. Your neighbor and your neighbor’s insurance company will then be responsible for any liability that may occur. You must notify them **before** something occurs. Take pictures.

6. *There is a dangerous tree on town right of way. What should I do?*

Notify the Town of Montreat Public Works Department, 828-669-8002, during regular working hours, or the non emergency police number, 828-419-9350, if it is after hours or the weekend. Again, know where your property lines are. Mark the tree and your property line corners in order to help identify that the tree is on town right of way.



Firewise Landscaping in North Carolina

Do you live in a home or community that is tucked into the woods or surrounded by marsh or shrubs? Then your home may be at risk of exposure to wildfire. You can use firewise landscaping practices to create a survivable space around your home and reduce your risk of damage from a wildfire.

What Is Firewise Landscaping?

Firewise landscaping involves creating survivable space by selecting, placing, and maintaining plants around your home that will make it less vulnerable to wildfire. Survivable space is the area extending outward from your home 30 feet or more that is designed to serve as a buffer to slow or stop a wildfire. Survivable space doesn't mean you cannot have trees in your yard. Nor does survivable space mean that your landscape will be bare or that it won't attract wildlife. Instead, firewise concepts allow you to make decisions about what you value while taking steps to reduce your risk. By using firewise landscaping, you can decrease the risk of damage to your property from a wildfire.

This publication summarizes some basic firewise concepts to use when creating a landscape around your home. It also provides lists of native plants by their flammability ratings so homeowners can make informed decisions when selecting and maintaining plants. Many of North Carolina's native plants are well-suited to firewise landscaping—they have evolved

to thrive in the state's soils and climate, are non-invasive, and are best suited to provide food, shelter, and nesting sites for North Carolina's wildlife.

Basic Concepts

All vegetation is potential fuel for a fire. There are no "fireproof" plants. But the type, amount, and placement of vegetation can have a dramatic effect on fire behavior. In fact, plant choice, spacing, and maintenance are critical to firewise landscaping.

Survivable space is the area extending outward from the boundaries of your home or structure (Figure 1). The recommended distance for survivable space varies based on the kinds of vegetation around your home and the steepness of the terrain. For homes and other structures on terrain that slopes less than 20 percent, a minimum of 30 feet is recommended for survivable space. For steeper terrain, survivable space may need to extend from the structure as much as 200 feet. To determine how much survivable space is needed for your home, contact your local fire officials, the N.C. Division of Forest Resources, or your local Cooperative Extension center.

Plant Choice

Select plants with a low flammability rating for the areas nearest your house. By selecting plants with certain characteristics, you can reduce the flammability potential of your landscape and provide habitat for wildlife. Plants that are resistant to wildfire have one or more of the following characteristics:

- They grow without accumulating large amounts of combustible dead branches, needles, or leaves (example: *Cornus florida*, flowering dogwood).
- They have open, loose branches with a low volume of total vegetation (example: *Euonymus americana*, strawberry bush).
- They have low sap or resin content (example: many deciduous species).
- They have high moisture content (example: *Impatiens capensis*, jewelweed).
- They grow slowly and need little maintenance, such as pruning (example: *Carpinus caroliniana*, ironwood).
- They are short and grow close to the ground (example: *Viola pedata*, bird-foot violet).
- They can resprout following fire and thereby reduce the costs of replanting a landscape after a fire (example: *Rhus glabra*, smooth sumac).

Plant a variety of types and species. Besides being aesthetically pleasing and more attractive to a wide range of wildlife, a variety of plants will help to ensure a healthier landscape by reducing insect and disease problems. Insects and diseases tend to increase in areas where a host plant dominates the landscape. Plants that are stressed from insects and diseases are more flammable because of the loss of vigor and increased amount of dead, dry plant material.

Plant Placement

Keep plants widely spaced. Fire can race rapidly from one plant to another when there is no space between plants. Maintain ample space between plants by placing them in small irregular clusters and islands. This will reduce the threat from wildfire by decreasing the volume of fuel available to a wildfire in your landscape.

Do not plant vines or ornamental grasses within the zone of survivable space. Vines and ornamental grasses, such as switchgrass (*Panicum virgatum*), are extremely flammable plants that can cause a wildfire to spread rapidly. This is especially so if dead growth has not been removed.

Plant Maintenance

Do not forget maintenance. A landscape is a dynamic system that is constantly changing. Trees, shrubs, and herbaceous plants that have a low flammability rating and low fuel volumes can lose these characteristics over time if they are not maintained properly. Conducting seasonal maintenance activities, such as pruning, will help you to maintain the plants' firewise properties by keeping them green and healthy. When conducting maintenance, keep the following tips in mind:

- Cut and remove the dried foliage of annual and perennial herbaceous plants.
- Rake up and dispose of plant litter as it builds up over the season.
- Mow or trim turfgrass to a low height within the survivable space.
- Remove all dead branches, twigs, and leaves attached to living trees to a height of 10 feet above the ground.
- Remove all dead shrubs from within the survivable space.
- Remove vegetation encroaching on power lines.
- Remove branches within 15 feet of the chimney and roof.
- Remove vegetation touching the house or structure.
- Conduct pruning before the nesting season (April 15 through September 15) to encourage wildlife.
- Schedule and conduct maintenance with the North Carolina fire seasons (spring and fall) in mind.

Summary

Wildfire can significantly reduce the resources and services produced by North Carolina's wildlands, including wildlife habitat, recreation, clean water, timber, and scenic beauty. More than 41 percent of North Carolina's homes are located within the wildland-urban interface, the zone where human development meets or intermixes with wildland vegetation. As the state's population grows and residential development increases, the risk increases that a wildfire will encroach upon someone's home and have a significant impact on their lives. Some homeowners may have to deal only with smoke and evacuation. For others, fire often results in destruction of their homes and property. By using firewise landscaping strategies, homeowners can create landscapes with less potential fuel for a fire and minimize the risk of a wildfire spreading to their home.

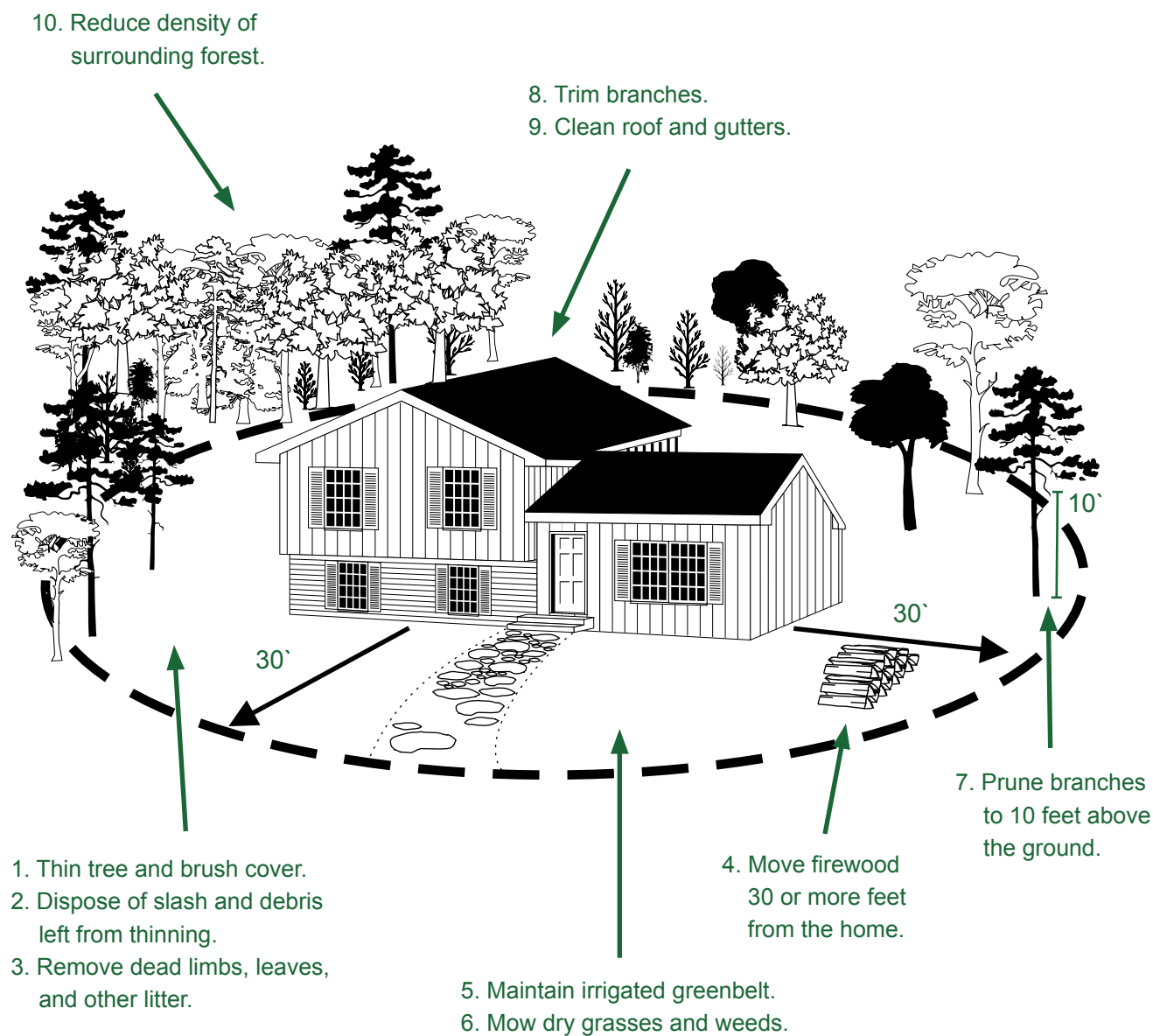


Figure 1.

An example of survivable space around a home. A firewise home has at least 30 feet of space around it that is clear of dead vegetation and flammable debris. Trees and shrubs are pruned, and the landscape consists of healthy, irrigated, fire-resistant vegetation.

Table 1. Plant Species Native to North Carolina with a Low Flammability Rating

Latin Name	Common Name	Soil Moisture			Light Needs			Native Region			Wildlife Value					
		Wet	Moist	Dry	Full sun	Partial shade	Shade	Mountains	Piedmont	Coastal plain	Winter cover	Fleshy fruit	Seed, mast, or catkin	Hummingbird nectar	Butterfly/insect nectar	Butterfly larvae host
Tall Trees (taller than 30 feet)																
<i>Acer barbatum</i>	Southern sugar maple		•		•	•	•		•	•			•			
<i>Acer rubrum</i>	Red maple	•	•	•	•	•	•	•	•	•			•			
<i>Acer saccharum</i>	Sugar maple		•		•	•	•	•					•			
<i>Aesculus flava</i>	Yellow buckeye		•			•	•	•						•		
<i>Betula lenta</i>	Sweet birch		•	•	•	•	•	•					•			•
<i>Betula nigra</i>	River birch		•		•				•	•			•			•
<i>Carya glabra</i>	Pignut hickory		•	•	•	•		•	•	•			•			•
<i>Carya ovata</i>	Shagbark hickory		•	•	•	•	•	•	•	•			•			•
<i>Carya tomentosa</i>	Mockernut hickory		•	•	•	•		•	•	•			•			•
<i>Celtis laevigata</i>	Sugarberry		•		•	•	•		•	•		•				•
<i>Diospyros virginiana</i>	Persimmon		•	•	•	•		•	•	•		•				
<i>Fraxinus americana</i>	White ash		•		•	•	•	•	•				•			•
<i>Fraxinus pennsylvanica</i>	Green ash	•	•	•	•	•		•	•	•			•			•
<i>Liquidambar styraciflua</i>	Sweetgum		•		•	•		•	•	•			•			
<i>Liriodendron tulipifera</i>	Yellow poplar		•		•	•		•	•	•			•	•	•	•
<i>Magnolia acuminata</i>	Cucumber tree		•		•	•		•	•				•			
<i>Magnolia virginiana</i>	Sweetbay	•	•		•	•			•	•			•			•
<i>Nyssa sylvatica</i>	Blackgum		•	•	•	•		•	•	•		•				
<i>Oxydendrum arboreum</i>	Sourwood		•	•	•	•	•	•	•	•					•	
<i>Prunus serotina</i>	Black cherry		•	•	•			•	•	•		•			•	•
<i>Quercus alba</i>	White oak		•	•	•	•		•	•	•			•			•
<i>Quercus coccinea</i>	Scarlet oak			•	•	•		•	•				•			•
<i>Quercus falcata</i>	Southern red oak		•	•	•	•		•	•	•			•			•
<i>Quercus michauxii</i>	Swamp chestnut oak		•		•	•			•	•			•			•
<i>Quercus nigra</i>	Water oak		•		•	•			•	•			•			•
<i>Quercus pagoda</i>	Cherrybark oak		•		•	•			•	•			•			•
<i>Quercus phellos</i>	Willow oak		•		•	•			•	•			•			•
<i>Quercus rubra</i>	Northern red oak		•		•	•		•	•				•			•
<i>Quercus shumardii</i>	Shumard oak		•		•	•			•	•			•			•
<i>Quercus stellata</i>	Post oak		•	•	•			•	•	•			•			•
<i>Quercus velutina</i>	Black oak		•	•	•	•		•	•	•			•			•
<i>Robinia pseudoacacia</i>	Black locust		•	•	•	•		•	•				•			•
<i>Salix nigra</i>	Black willow	•	•		•	•	•	•	•	•						•
<i>Sassafras albidum</i>	Sassafras		•	•	•	•		•	•	•		•				•
<i>Taxodium distichum</i>	Baldcypress	•	•		•	•				•			•			
<i>Tilia americana</i>	Basswood		•		•	•		•	•	•			•		•	•
<i>Ulmus alata</i>	Winged elm		•	•	•	•		•	•	•			•			•
<i>Ulmus americana</i>	American elm		•		•	•		•	•	•			•			

Table 1. Plant Species Native to North Carolina with a Low Flammability Rating (continued)

Latin Name	Common Name	Soil Moisture			Light Needs			Native Region			Wildlife Value					
		Wet	Moist	Dry	Full sun	Partial shade	Shade	Mountains	Piedmont	Coastal plain	Winter cover	Fleshy fruit	Seed, mast, or catkin	Hummingbird nectar	Butterfly/insect nectar	Butterfly larvae host
Small Trees and Shrubs (10 to 30 feet tall)																
<i>Aesculus pavia</i>	Red buckeye		•			•				•				•	•	
<i>Aesculus sylvatica</i>	Painted buckeye		•			•			•					•		
<i>Alnus serrulata</i>	Alder	•	•		•	•		•	•	•			•			•
<i>Amelanchier arborea</i>	Serviceberry		•		•	•	•	•	•			•			•	•
<i>Amelanchier canadensis</i>	Juneberry		•		•	•			•	•		•			•	•
<i>Amelanchier laevis</i>	Allegheny serviceberry		•	•	•	•	•	•				•			•	•
<i>Aralia spinosa</i>	Devil's walking stick		•		•	•		•	•	•		•			•	
<i>Asimina triloba</i>	Pawpaw		•		•	•	•	•	•	•		•				•
<i>Carpinus caroliniana</i>	Ironwood		•			•	•	•	•	•			•			•
<i>Celtis tenuifolia</i>	Dwarf hackberry			•	•	•			•			•				•
<i>Cercis canadensis</i>	Eastern redbud		•	•	•	•		•	•				•		•	•
<i>Chionanthus virginicus</i>	Fringetree		•	•	•	•		•	•	•		•				
<i>Cornus florida</i>	Flowering dogwood		•	•	•	•		•	•	•		•			•	•
<i>Crataegus</i> spp.	Hawthorn		•		•	•	•	•	•	•		•		•	•	•
<i>Halesia carolina</i>	Carolina silverbell		•			•	•	•	•						•	
<i>Hamamelis virginiana</i>	Witch hazel		•		•	•	•	•	•	•			•			
<i>Ilex decidua</i>	Possumhaw	•	•	•	•	•	•		•	•		•			•	•
<i>Ilex verticillata</i>	Winterberry	•	•		•	•	•	•	•	•		•			•	•
<i>Morus rubra</i>	Red mulberry		•	•	•	•	•	•	•	•		•				•
<i>Ostrya virginiana</i>	Hophornbeam		•	•	•	•	•	•	•			•				•
<i>Prunus americana</i>	Wild plum		•	•	•			•	•			•			•	•
<i>Prunus angustifolia</i>	Chickasaw plum		•	•	•				•	•		•			•	•
<i>Prunus pensylvanica</i>	Fire cherry		•	•	•			•				•			•	•
<i>Rhus copallinum</i>	Winged sumac		•	•	•	•		•	•	•		•			•	•
<i>Rhus glabra</i>	Smooth sumac		•	•	•	•		•	•	•		•			•	•
<i>Salix caroliniana</i>	Carolina willow	•	•		•	•			•	•						•
<i>Sambucus canadensis</i>	Elderberry	•	•		•	•		•	•	•		•				
<i>Sorbus americana</i>	Mountain ash		•		•	•		•				•				
<i>Viburnum prunifolium</i>	Blackhaw		•		•	•	•	•	•	•		•				•
<i>Viburnum rufidulum</i>	Rusty blackhaw		•	•	•	•	•		•	•		•				•
Small Shrubs (less than 10 feet tall)																
<i>Callicarpa americana</i>	American beautyberry		•	•	•	•	•		•	•		•				
<i>Calycanthus floridus</i>	Sweetshrub		•			•	•	•	•						•	
<i>Ceanothus americanus</i>	New Jersey tea		•	•		•	•	•	•	•			•		•	•
<i>Cephalanthus occidentalis</i>	Buttonbush	•	•		•	•		•	•	•			•	•	•	
<i>Clethra alnifolia</i>	Sweet pepperbush	•	•		•	•			•	•		•		•	•	
<i>Corylus americana</i>	Hazelnut		•		•	•		•	•				•			
<i>Euonymus americana</i>	Strawberrybush		•			•	•	•	•	•			•			

Table 1. Plant Species Native to North Carolina with a Low Flammability Rating (continued)

Latin Name	Common Name	Soil Moisture			Light Needs			Native Region			Wildlife Value					
		Wet	Moist	Dry	Full sun	Partial shade	Shade	Mountains	Piedmont	Coastal plain	Winter cover	Fleshy fruit	Seed, mast, or catkin	Hummingbird nectar	Butterfly/insect nectar	Butterfly larvae host
Small Shrubs (less than 10 feet tall) (continued)																
<i>Gaylussacia frondosa</i>	Blue huckleberry		•	•	•	•	•		•	•		•			•	•
<i>Hydrangea arborescens</i>	Wild hydrangea		•			•	•	•	•				•		•	
<i>Itea virginica</i>	Virginia willow	•	•			•	•	•	•	•			•		•	
<i>Lindera benzoin</i>	Spicebush		•	•	•	•	•	•	•	•		•				•
<i>Photinia pyrifolia</i>	Red chokeberry		•		•	•		•	•	•		•				•
<i>Vaccinium corymbosum</i>	Highbush blueberry		•		•	•			•	•		•			•	•
<i>Vaccinium stamineum</i>	Deerberry		•	•	•	•		•	•	•		•			•	•
<i>Vaccinium pallidum</i>	Lowbush blueberry			•	•	•		•	•	•		•			•	•
<i>Viburnum acerifolium</i>	Mapleleaf viburnum		•	•		•	•	•	•			•				•
<i>Viburnum dentatum</i>	Arrowwood		•	•	•	•	•	•	•	•		•				•
<i>Viburnum nudum</i>	Wild raisin	•	•		•	•	•	•	•	•		•				•
Ferns																
<i>Polystichum acrostichoides</i>	Christmas fern		•			•	•	•	•	•	•					
Herbs and Wildflowers																
<i>Apocynum cannabinum</i>	Hemp dogbane		•	•	•	•		•	•	•					•	
<i>Arisaema triphyllum</i>	Jack-in-the-pulpit		•			•	•	•	•	•		•				
<i>Aristolochia serpentaria</i>	Virginia snakeroot		•	•		•	•	•	•	•						•
<i>Chrysogonum virginianum</i>	Green-and-gold		•				•		•	•			•		•	
<i>Desmodium</i> spp.	Beggarlice		•	•	•	•		•	•	•			•			•
<i>Eupatorium coelestinum</i>	Mistflower		•		•	•		•	•	•			•		•	
<i>Eupatorium fistulosum</i>	Joe-pye-weed		•		•			•	•	•			•	•		•
<i>Geranium maculatum</i>	Wild geranium		•	•	•	•		•	•				•		•	
<i>Houstonia caerulea</i>	Bluets		•	•	•	•	•	•	•	•					•	
<i>Impatiens capensis</i>	Jewelweed		•			•	•	•	•	•				•	•	
<i>Iris cristata</i>	Crested iris		•			•	•	•	•					•		
<i>Phlox carolina</i>	Carolina phlox		•	•	•	•		•	•	•					•	
<i>Phlox divaricata</i>	Blue phlox		•			•	•	•	•	•					•	
<i>Phlox paniculata</i>	Summer phlox		•		•	•		•	•	•					•	
<i>Phlox pilosa</i>	Prairie phlox		•	•	•	•			•	•					•	
<i>Phlox subulata</i>	Moss pink		•	•	•			•	•						•	
<i>Silene virginica</i>	Fire pink		•	•		•	•	•	•	•			•	•	•	
<i>Spigelia marilandica</i>	Indian pink		•			•	•	•	•	•				•		
<i>Viola pedata</i>	Bird-foot violet		•	•	•	•		•	•	•						•

Table 2. Plant Species Native to North Carolina with a *Medium* Flammability Rating

Latin Name	Common Name	Soil Moisture			Light Needs			Native Region			Wildlife Value					
		Wet	Moist	Dry	Full Sun	Partial Shade	Shade	Mountains	Piedmont	Coastal plain	Winter cover	Fleshy fruit	Seed, mast, or catkin	Hummingbird nectar	Butterfly/insect nectar	Butterfly larvae host
Tall Trees (taller than 30 feet)																
<i>Fagus grandifolia</i>	American beech		•			•	•	•	•	•			•			
<i>Gordonia lasianthus</i>	Loblolly bay	•	•		•	•				•	•					
<i>Magnolia grandiflora</i>	Southern magnolia		•			•	•		•	•	•		•			
<i>Persea borbonia</i>	Redbay	•	•		•	•	•			•	•	•				•
<i>Platanus occidentalis</i>	Sycamore		•		•	•		•	•	•			•			
Small Trees and Shrubs (10 to 30 feet tall)																
<i>Castanea pumila</i>	Chinquapin		•	•	•	•		•	•	•			•			
<i>Cornus amomum</i>	Silky dogwood	•	•		•	•		•	•	•		•			•	•
<i>Cyrilla racemiflora</i>	Titi	•	•		•	•	•		•	•	•				•	
<i>Osmanthus americanus</i>	Wild olive, devilwood		•	•	•	•				•	•	•				
<i>Prunus caroliniana</i>	Carolina laurel cherry		•	•	•	•				•	•	•			•	•
<i>Symplocos tinctoria</i>	Sweetleaf		•	•	•	•	•	•	•	•			•		•	•
Small Shrubs (less than 10 feet tall)																
<i>Gaylussacia dumosa</i>	Dwarf huckleberry		•	•	•	•		•	•	•		•			•	•
<i>Lyonia lucida</i>	Fetterbush		•			•	•		•	•	•				•	
<i>Rhododendron atlanticum</i>	Dwarf azalea		•	•	•	•	•		•	•				•	•	
<i>Rhododendron calendulaceum</i>	Flame azalea		•	•		•	•	•						•	•	
<i>Rhododendron maximum</i>	Rosebay rhododendron		•			•	•	•	•		•			•	•	
<i>Rhododendron periclymenoides</i>	Wild azalea		•		•	•	•	•	•	•				•	•	
<i>Vaccinium arboreum</i>	Sparkleberry		•	•	•	•	•		•	•	•	•			•	•
Herbs and Wildflowers																
<i>Aquilegia canadensis</i>	Columbine		•	•		•	•	•	•	•			•	•	•	
<i>Aruncus dioicus</i>	Goat's beard		•			•	•	•	•							•
<i>Asclepias incarnata</i>	Swamp milkweed	•	•		•	•		•	•	•					•	•
<i>Asclepias tuberosa</i>	Butterfly weed			•	•	•		•	•	•					•	•
<i>Asclepias variegata</i>	White milkweed		•	•	•	•		•	•	•					•	•
<i>Aster curtisii</i>	Aster		•	•	•	•		•					•		•	•
<i>Aster divaricatus</i>	Heart-leaved aster		•	•		•	•	•	•				•		•	•
<i>Aster novae-angliae</i>	New England aster		•	•	•	•		•					•		•	•
<i>Aster novi-belgii</i>	New York aster		•		•	•				•			•		•	•
<i>Aster pilosus</i>	White heath aster			•	•			•	•	•			•		•	•
<i>Baptisia australis</i>	Blue false indigo		•		•	•		•	•						•	•
<i>Baptisia tinctoria</i>	Yellow wild indigo			•	•	•		•	•	•					•	•
<i>Bidens aristosa</i>	Sticktight	•	•	•	•	•			•	•			•		•	
<i>Chamaecrista fasciculata</i>	Partridge pea		•	•	•			•	•	•			•			•
<i>Cimicifuga racemosa</i>	Black cohosh		•				•	•	•							•

Table 2. Plant Species Native to North Carolina with a *Medium* Flammability Rating (continued)

Latin Name	Common Name	Soil Moisture			Light Needs			Native Region			Wildlife Value					
		Wet	Moist	Dry	Full Sun	Partial Shade	Shade	Mountains	Piedmont	Coastal plain	Winter cover	Fleshy fruit	Seed, mast, or catkin	Hummingbird nectar	Butterfly/insect nectar	Butterfly larvae host
Herbs and Wildflowers (continued)																
<i>Coreopsis angustifolia</i>	Narrow-leaved coreopsis		•		•	•				•			•		•	
<i>Coreopsis auriculata</i>	Eared coreopsis		•		•	•		•	•	•			•		•	
<i>Coreopsis falcata</i>	Sickle tickseed	•	•		•	•			•	•			•		•	
<i>Coreopsis lanceolata</i>	Lance-leaved coreopsis		•	•	•			•	•	•			•		•	
<i>Coreopsis major</i>	Greater tickseed		•	•	•	•		•	•				•		•	
<i>Coreopsis verticillata</i>	Threadleaf coreopsis		•	•	•	•		•	•	•			•		•	
<i>Echinacea purpurea</i>	Purple coneflower		•	•	•			•	•				•		•	
<i>Helianthus angustifolius</i>	Swamp sunflower	•	•		•	•		•	•	•			•		•	
<i>Helianthus atrorubens</i>	Sunflower		•	•	•			•	•	•			•		•	•
<i>Helianthus divaricatus</i>	Woodland sunflower		•	•		•		•	•	•			•		•	
<i>Heliopsis helianthoides</i>	Ox-eye		•	•	•	•		•	•	•			•		•	
<i>Hibiscus moscheutos</i>	Rose mallow		•		•	•		•	•	•				•	•	
<i>Liatris spicata</i>	Blazing star		•		•	•		•	•						•	
<i>Lobelia cardinalis</i>	Cardinal flower	•	•		•	•	•	•	•	•				•	•	
<i>Lobelia puberula</i>	Downy lobelia	•	•	•	•	•		•	•	•				•	•	
<i>Lobelia siphilitica</i>	Great blue lobelia	•	•			•	•	•						•	•	
<i>Mitchella repens</i>	Partridgeberry		•		•	•	•	•	•	•		•				
<i>Monarda didyma</i>	Beebalm		•			•	•	•						•	•	
<i>Monarda fistulosa</i>	Wild bergamot		•	•	•	•		•	•					•	•	
<i>Monarda punctata</i>	Horsemint		•	•	•	•			•	•				•	•	
<i>Oenothera fruticosa</i>	Sundrops		•	•	•	•		•	•	•			•	•		
<i>Penstemon canescens</i>	Hairy beardtongue		•	•	•	•		•	•					•	•	•
<i>Penstemon laevigatus</i>	Smooth beardtongue		•		•	•	•	•	•	•				•	•	•
<i>Phytolacca americana</i>	Pokeweed		•	•	•			•	•	•		•	•			
<i>Pycnanthemum incanum</i>	Hoary mountainmint		•	•	•	•		•	•	•					•	
<i>Rudbeckia fulgida</i>	Orange coneflower		•		•			•	•	•			•		•	
<i>Salvia lyrata</i>	Lyreleaf sage		•	•	•	•	•	•	•	•				•	•	
<i>Solidago</i> spp.	Goldenrod		•	•	•	•		•	•	•			•		•	
<i>Vernonia noveboracensis</i>	Ironweed		•		•	•		•	•	•					•	

Table 3. Plant Species Native to North Carolina with a *High* Flammability Rating

Latin Name	Common Name	Soil Moisture			Light Needs			Native Region			Wildlife Value					
		Wet	Moist	Dry	Full Sun	Partial Shade	Shade	Mountains	Piedmont	Coastal plain	Winter cover	Fleshy fruit	Seed, mast, or catkin	Hummingbird nectar	Butterfly/insect nectar	Butterfly larvae host
Tall Trees (taller than 30 feet)																
<i>Chamaecyparis thyoides</i>	Atlantic whitecedar	•	•		•	•				•	•					•
<i>Ilex opaca</i>	American holly		•	•	•	•	•	•	•	•	•	•			•	•
<i>Juniperus virginiana</i>	Eastern redcedar		•	•	•	•		•	•	•	•	•				•
<i>Pinus echinata</i>	Shortleaf pine		•	•	•	•		•	•	•	•		•			•
<i>Pinus palustris</i>	Longleaf pine		•	•	•				•	•	•		•			
<i>Pinus strobus</i>	Eastern white pine		•	•	•			•	•		•		•			
<i>Pinus taeda</i>	Loblolly pine		•	•	•			•	•	•	•		•			•
<i>Quercus virginiana</i>	Live oak		•	•	•					•	•		•			•
<i>Tsuga canadensis</i>	Eastern hemlock		•			•	•	•	•		•		•			
Small Trees and Shrubs (10 to 30 feet tall)																
<i>Ilex vomitoria</i>	Yaupon		•	•	•	•				•	•	•			•	•
<i>Morella cerifera</i>	Wax myrtle		•	•	•	•			•	•	•	•				•
Small Shrubs (less than 10 feet tall)																
<i>Ilex glabra</i>	Inkberry		•		•	•			•	•	•	•			•	•
<i>Kalmia carolina</i>	Carolina laurel		•	•	•	•	•			•	•			•	•	
<i>Kalmia latifolia</i>	Mountain laurel		•	•	•	•	•	•	•		•			•	•	
<i>Leucothoe axillaris</i>	Doghobble	•	•		•	•		•	•	•	•				•	
<i>Rhododendron catawbiense</i>	Catawba rhododendron		•			•	•	•	•		•			•	•	

Table 4. Plant Species Native to North Carolina with an *Extreme* Flammability Rating
(These species should *not* be planted inside the zone of survivable space.)

Latin Name	Common Name	Soil Moisture			Light Needs			Native Region			Wildlife Value					
		Wet	Moist	Dry	Full Sun	Partial Shade	Shade	Mountains	Piedmont	Coastal plain	Winter cover	Fleshy fruit	Seed, mast, or catkin	Hummingbird nectar	Butterfly/insect nectar	Butterfly larvae host
Vines																
<i>Ampelopsis arborea</i>	Peppervine	•	•		•	•				•		•				
<i>Aristolochia macrophylla</i>	Dutchman’s pipe		•	•		•	•	•								•
<i>Berchemia scandens</i>	Rattanvine, supplejack	•	•		•	•			•	•		•				
<i>Bignonia capreolata</i>	Crossvine		•	•	•	•			•	•				•		
<i>Campsis radicans</i>	Trumpet vine		•	•	•	•		•	•	•				•		
<i>Decumaria barbara</i>	Climbing hydrangea		•		•	•	•			•					•	
<i>Gelsemium sempervirens</i>	Carolina jasmine		•		•	•			•	•	•			•	•	
<i>Lonicera sempervirens</i>	Coral honeysuckle		•		•	•			•	•				•		
<i>Parthenocissus quinquefolia</i>	Virginia creeper		•	•	•	•	•	•	•	•		•				
<i>Passiflora incarnata</i>	Passionflower		•	•	•	•		•	•	•				•	•	•
<i>Smilax</i> spp.	Greenbrier	•	•	•	•	•		•	•	•	•	•				
<i>Vicia caroliniana</i>	Wood vetch			•	•	•		•	•	•			•			•
<i>Vitis</i> spp.	Grape	•	•	•	•	•		•	•	•		•				
Grasses																
<i>Andropogon glomeratus</i>	Bushy bluestem		•		•				•	•	•		•			•
<i>Andropogon temarius</i>	Splitbeard bluestem		•	•	•			•	•	•	•		•			•
<i>Aristida stricta</i>	Wiregrass		•	•	•	•			•	•	•		•			
<i>Arundinaria gigantea</i>	Switchcane	•	•	•	•	•	•	•	•	•	•		•			•
<i>Panicum virgatum</i>	Switchgrass	•	•		•	•		•	•	•	•		•			•
<i>Sorghastrum nutans</i>	Indiangrass		•	•	•			•	•	•	•		•			

Additional Resources

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TOWN OF MONTREAT

ZONING ORDINANCE

APPENDIX A – RECOMMENDED SPECIES FOR LANDSCAPING

<u>Type/Size</u>	<u>Genus</u>	<u>Species</u>	<u>Variety</u>	<u>Common Name</u>	<u>Evergreen</u>	<u>Native</u>
Groundcover	Ajuga	Reptans		Bugleflower	*	
Groundcover	Cotoneaster	Dammeri		Bearberry	*	
				Cotoneaster		
Groundcover	Festuca	Ovina		Blue Fescue	*	*
Groundcover	Helleborus	Orientalis		Lenten Rose	*	
Groundcover	Hemerocallis	Hybrida or fulva		Day Lilly		
Groundcover	Hosta	Many	Many	Hosta, Plantain		
Groundcover	Juniperus	Horizontalis		Creeping Juniper	*	
Groundcover	Pachysandra	Alleghaniensis or procumbens		Alleghany Spurge	*	*
Groundcover	Pachysandra	Terminalis		Japanese Spurge	*	
Groundcover	Phlox	Subulata		Thrift	*	
Low Shrub	Callicarpa	Dichotoma		Beautyberry		
Low Shrub	Ceanothus	Americanus		New Jersey Tea		*
Low Shrub	Cotoneaster	Horizontalis		Rockspray Cotoneaster	*	
Low Shrub	Deutzia	Gracilis		Slender Deutzia		
Low Shrub	Diervilla	Sessifolia		Southern Bush Honeysuckle		*
Low Shrub	Euonymus	Americanus		Evergreen Bittersweet	*	
Low Shrub	Hydrangea	Arborescens		Snowhill Hydrangea		*
Low Shrub	Hypericum	Profilicum		Shrubby St. John's Wort		*
Low Shrub	Juniperus	Communis	Depressa	Prostrate Juniper		
Low Shrub	Leucothoe	Fontanesiana		Drooping Leucothoe	*	*

<u>Type/Size</u>	<u>Genus</u>	<u>Species</u>	<u>Variety</u>	<u>Common Name</u>	<u>Evergreen</u>	<u>Native</u>
Low Shrub	Mahonia	Aquifolium		Oregon holly-grape	*	
Low Shrub	Pieris	Japonica		Japanese Andromeda	*	
Low Shrub	Potentilla	Fruticosa		Bush cinquefoil		
Low Shrub	Viburnum	Acerifolium		Maple-leaf Viburnum		*
Med. Shrub	Abelia	Grandiflora		Glossy Abelia	*	
Med. Shrub	Alnus	Serrulata		Tag Alder		*
Med. Shrub	Buddleja	Davidii		Butterfly Bush		
Med. Shrub	Callicarpa	Americana		American Beautyberry		*
Med. Shrub	Clethra	Ainifolia		Sweet Pepperbush		*
Med. Shrub	Cornus	Sericea		Redtwig Dogwood		*
Med. Shrub	Fothergilla	Major		Large Fothergilla		*
Med. Shrub	Hydrangea	Quercifolia		Oakleaf Hydrangea		
Med. Shrub	Hypericum	Densiflorum		Dense Hypericum		*
Med. Shrub	Ilex	Montana or Ambigua		Mountain Winterberry		*
Med. Shrub	Ilex	Verticillata		Common Winterberry		*
Med. Shrub	Itea	Virginica	Henry's Garnet	Virginia Sweetspire		*
Med. Shrub	Kalmia	Latifolia		Mountain Laurel	*	*
Med. Shrub	Kerria	Japonica		Kerria		
Med. Shrub	Mahonia	Bealei		Leatherleaf Mahonia	*	
Med. Shrub	Pyracantha	Coccinea		Scarlet Firethorn	*	
Med. Shrub	Rhododendron	Calendulaceum		Flame Azalea		*
Med. Shrub	Rhododendron	Carolinianum		Carolina Rhododendron	*	*
Med. Shrub	Rhododendron	Catawbiense	Many	Mountain	*	*

<u>Type/Size</u>	<u>Genus</u>	<u>Species</u>	<u>Variety</u>	<u>Common Name</u>	<u>Evergreen</u>	<u>Native</u>
Med. Shrub	Rhododendron	Nudiflorum		Rosebay Wild or Pinxter Azalea		*
Med. Shrub	Spiraea	Prunifolia	Plena	Bridlewreath Spirea		
Med. Shrub	Symphoricarpus	Orbiculatus		Coral berry		*
Med. Shrub	Viburnum	Ainifolium		Hobblebush		*
Med. Shrub	Viburnum	Cassinoides		Witherod Viburnum		*
Med. Shrub	Viburnum	Burkwoodii		Burkwood Viburnum		
Tall Shrub	Aesculus	Parviflora		Bottlebrush Buckeye		
Tall Shrub	Aralia	Spinosa		Devil's Walkingstick		*
Tall Shrub	Calycanthus	Floridus	Laevigatus	Sweetshrub		*
Tall Shrub	Ilex	Decidua		Possumhaw		*
Tall Shrub	Lonicera	Frangrantissima		Winter Honeysuckle		*
Tall Shrub	Philadelphus	Inordorus		Mock Orange		*
Tall Shrub	Rhododendron	Maximum	Many	Rosebay Rhododendron	*	*
Tall Shrub	Rhododendron	Hybrida	Exbury	Exbury Hybrid Azalea		
Tall Shrub	Rhododendron	Indica		Indian Azalea	*	
Tall Shrub	Rhododendron	Prinophyllum (Roseum)		Rose Azalea		*
Tall Shrub	Rhododendron	Prunifolium		Plumleaf Azalea		*
Tall Shrub	Salix	Sericea		Silky Willow	*	*
Tall Shrub	Sambucus	Canadensis		Elderberry		*
Tall Shrub	Syringa	Vulgaris		Common Lilac		
Tall Shrub	Syringa	Persica		Persian Lilac		
Tall Shrub	Viburnum	Plicatum	Tomentosum	Doublefile Viburnum		
Tall Shrub	Viburnum	Rhtidophyllum		Leatherleaf Viburnum	*	
Small Tree	Amalanchier	Arborea		Serviceberry		*
Small Tree	Cercis	Candensis		Eastern Redbud		*

<u>Type/Size</u>	<u>Genus</u>	<u>Species</u>	<u>Variety</u>	<u>Common Name</u>	<u>Evergreen</u>	<u>Native</u>
Small Tree	Chionanthus	Virginicus		Fringe Tree		*
Small Tree	Cornus	Alternifolia		Pagoda		*
				Dogwood		
Small Tree	Cornus	Florida		Flowering		*
				Dogwood		
Small Tree	Cornus	Kousa		Kousa		
				Dogwood		
Small Tree	Hamamelis	Virginiana		Common		*
				Witch Hazel		
Small Tree	Ilex	Opaca		American	*	*
				Holly		
Small Tree	Ostrya	Virginiana		Eastern		*
				Hophornbeam		
Small Tree	Oxydendrum	Arboretum		Sourwood		*
Small Tree	Pistacia	Chinensis		Pistachio		
Small Tree	Prunus	Pensylvancia		Pin Cherry		*
Small Tree	Prunus	Serotina		Black Cherry		*
Small Tree	Ptelea	Trifoliata		Hoptree		*
Small Tree	Tilia	Cordata		Littleleaf		
				Linden		
Small Tree	Viburnum	Rifidulum		Blackhaw		*
				Viburnum		
Large Tree	Acer	Rubrum		Red Maple		*
Large Tree	Acer	Saccharum		Sugar Maple		*
Large Tree	Aeculus	Flava		Yellow		*
				Buckeye		
Large Tree	Betula	Allegheniensis		Yellow Birch		*
		(Lutea)				
Large Tree	Betula	Lenta		Sweet Birch		*
Large Tree	Betula	Papyriferia		Paper Birch		*
Large Tree	Carya	Cordiformis		Bitternut		*
				Hickory		
Large Tree	Carya	Glabra		Pignut Hickory		*
Large Tree	Cladrastis	Lutea		Yellowwood		*
Large Tree	Fagus	Grandifolia		Beech		*
Large Tree	Liriodendron	Tulipifera		Tulip Tree		*
Large Tree	Magnolia	Acuminata		Cucumber		*
				Tree		
Large Tree	Nyssa	Sylvatica		Black Tupelo		*
Large Tree	Picea	Rubens		Red Spruce	*	*
Large Tree	Quercus	Alba		White Oak		*

<u>Type/Size</u>	<u>Genus</u>	<u>Species</u>	<u>Variety</u>	<u>Common Name</u>	<u>Evergreen</u>	<u>Native</u>
Large Tree	Quercus	Montana		Chestnut Oak		*
Large Tree	Quercus	Palustris		Pin Oak		*
Large Tree	Quercus	Phellos		Willow Oak		*
Large Tree	Quercus	Rubra		Red Oak		*
Large Tree	Quercus	Stellata		Post Oak		*
Large Tree	Platanus	Occidentalis		Sycamore		*
Large Tree	Tilia	Americana		American Linden		*
Large Tree	Tsuga	Canadensis		Canadian Hemlock	*	*
Large Tree	Ulmus	Americana		American Elm		*
Vine	Aristolochia	Macrophylla		Dutchman's Pipe		*
Vine	Bignonia	Capreolata		Crossvine	*	*
Vine	Clematis	Virginiana		Virgin's Bower		*
Vine	Parthenocissus	Quinquefolia		Virginia Creeper		*

Trees add beauty and so much more.

In your backyard

Trees in your backyard can be home to many different types of wildlife. Trees can also reduce your heating and cooling costs, help clean the air, add beauty and color, provide shelter from the wind and the sun, and add value to your home.

Choosing a tree

Choosing a tree should be a well thought-out decision. Tree planting can be a significant investment in money and time. Proper selection can provide you with years of enjoyment as well as significantly increase the value of your property. An inappropriate tree for your property can be a constant maintenance problem or even a hazard. Before you buy, take advantage of the abundant references on gardening at local libraries, universities, arboreturns, parks where trees are identified, native plant and gardening clubs, and nurseries. Some questions to consider in selecting a tree include:

Select trees for your backyard that will add beauty and help you achieve the diversity you want.

*Backyard
Conservation*

is a cooperative project of:

**USDA Natural Resources
Conservation Service
National Association of
Conservation Districts
Wildlife Habitat Council**

April 1998

1. What purpose will this tree serve?

Trees can serve numerous landscape functions including beautification,

screening of sights and sounds, shade and energy conservation, and wildlife habitat.



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One in a series of 10 tip sheets on backyard conservation

2. Is the species appropriate for your area? Reliable nurseries will not sell plant material that is not suitable for your area. However, some mass marketers have trees and shrubs that are not winter hardy in the area sold. Even if a tree is hardy, it may not flower consistently from year to year at the limits of its useful range due to late spring freezes. If you are buying a tree for the spring flowers and fall fruits, this may be a consideration. In warmer climates, there may not be a long enough period of cool temperatures for some species, such as apples, to develop flowers. Apples and other species undergo vernalization—a period of near-freezing temperatures that cause changes in the plant, resulting in the production of flowers.

Be aware of microclimates. Microclimates are very localized areas where weather conditions may vary from the norm. A very sheltered yard may support vegetation not normally adapted to the region. On the other hand, a north-facing slope may be significantly cooler or windier than surrounding areas and survival of normally adapted plants may be limited.

Select trees native to your area. They will be more tolerant of local weather and soil conditions, enhance natural biodiversity in your neighborhood, and be more beneficial to wildlife than many non-native trees. Avoid exotic trees that can invade other areas, crowd out native plants, and harm natural ecosystems.

3. How big will it get? When planting a small tree, it is often difficult to imagine that in 20 years it could be shading your entire yard. Unfortunately, many trees are planted and later removed when the tree grows beyond the dimensions of the property.

4. What is the average life expectancy of the tree? Some trees can live for hundreds of years. Others are considered “short-lived” and may live for only 20 or 30 years. Many short-lived trees tend to be smaller ornamental species. Short-lived species should not necessarily be ruled out when considering plantings. They may have other desirable characteristics, such as size, shape, tolerance of shade, or fruit, that would be useful in the landscape. These species may also fill a void in a young landscape, and can be removed as other larger, longer-lived species mature.

5. Does it have any particular ornamental value such as leaf color or flowers and fruits? Some species provide beautiful displays of color for short periods in the spring or fall. Other species may have foliage that is reddish or variegated and can add color in your landscaping year round.

Trees bearing fruits or nuts can provide an excellent source of food for many species of wildlife. However, some people consider some fruit and nut bearing trees to be “dirty.”

6. Does it have any particular insect, disease, or other problem that may reduce its usefulness? Certain insects and diseases can be serious problems on some desirable species in some regions. Depending on the pest, control of the problem may be difficult and the pest may significantly reduce the attractiveness, if not the life expectancy, of the plant. Other species such as the silver maple (*Acer saccharum*) are known to have weak wood that is susceptible to damage in ice storms or heavy winds.

7. How common is this species in your neighborhood or town? Some species are over-planted. Increasing the natural diversity will provide

habitat for wildlife and help limit the opportunity for a single pest to destroy all plantings. An excellent example of this was the American elm (*Ulmus americana*). This lovely tree was widely planted throughout the United States. With the introduction of Dutch elm disease, thousands of communities lost all their street trees in only a few years.

8. Is the tree evergreen or deciduous? Evergreen trees will provide cover and shade year round. They may also be more effective as a barrier for wind and noise. Deciduous trees will give you summer shade but allow the winter sun to shine in. This may be a consideration for where to place the tree in your yard.

Placement of trees

Proper placement of trees is critical for your enjoyment and their long-term survival. Check with local authorities about regulations pertaining to placement of trees. Some communities have ordinances restricting placement of trees within a specified distance of a street, sidewalk, street-light, or other utilities.

Before planting your tree, consider the tree's ultimate size. When the tree nears maturity, will it be too near your house or other structures? Be considerate of your neighbors. An evergreen tree planted on your north side may block the winter sun from your next door neighbor. Will it provide too much shade for your vegetable and flower gardens? Most vegetables and many flowers require considerable amounts of sun. If you intend to grow these plants, consider how the placement of trees will affect these gardens. Will it obstruct driveways or sidewalks? Will it cause problems for buried or overhead utilities?

Planting a tree

A properly planted and maintained tree will grow faster and live longer than one that is incorrectly planted. Trees can be planted almost any time of the year as long as the ground is not frozen. Late summer or early fall is the optimum time to plant trees in many areas. This gives the tree a chance to establish new roots before winter arrives and the ground freezes. When spring arrives, the tree is ready to grow. The second choice for planting is late winter or early spring. Planting in hot summer weather should be avoided. Planting in frozen soil during the winter is difficult and tough on tree roots. When the tree is dormant and the ground is frozen, there is no opportunity for the growth of new roots.

Trees are purchased as container grown, balled and burlapped (B&B), and bare root. Generally, container grown are the easiest to plant and successfully establish in any season, including summer. With container grown stock, the plant has been growing in a container for a period of time. When planting container grown plants, little damage is done to the roots as the plant is transferred to the soil. Container grown trees range in size from very small plants in gallon pots up to large trees in huge pots. B&B plants frequently have been dug from a nursery, wrapped in burlap, and kept in the nursery for an additional period of time, giving the roots opportunity to regenerate. B&B plants can be quite large. Bare root trees are usually extremely small plants. Because there is no soil on the roots, they must be planted when they are dormant to avoid drying out. The roots must be kept moist until planted. Frequently, bare root trees are offered by seed and nursery mail

order catalogs or in the wholesale trade. Many state operated nurseries and local conservation districts also sell bare root stock in bulk quantities for only a few cents per plant. Bare root plants usually are offered in the early spring and should be planted as soon as possible upon arrival.



Rules of thumb for planting a balled and burlapped tree:

- 1) Dig a hole twice as wide as, and slightly shallower than, the rootball. Remove the string or wire holding the burlap to the root ball, and gently place the ball in the hole. 2) Fill with soil, lightly tamping the soil to collapse air pockets. 3) Finish by forming a temporary water basin around the tree; water and mulch an area about 3 feet in diameter.

Carefully follow the planting instructions that come with your tree. If specific instructions are not available, follow these tips:

1. BEFORE DIGGING, call your local utilities to identify the location of any underground utilities.
2. Dig a hole twice as wide as, and slightly shallower than, the root ball. Roughen the sides and bottom of the hole with a pick or shovel so that roots can penetrate the soil.
3. With a potted tree, gently remove the tree from the container. Lay the tree on its side with the container end near the planting hole. Hit the bottom and sides of the container until the root ball is loosened. If roots are growing in a circular pattern around the root ball, slice through the roots on a couple of

sides of the root ball. With trees wrapped in burlap, remove the string or wire that holds the burlap to the root crown. It is unnecessary to completely remove the burlap. Plastic wraps must be completely removed. Gently separate circling roots on the root ball. Shorten

exceptionally long roots, and guide the shortened roots downward and outward. Root tips die quickly when exposed to light and air, so don't waste time.

4. Place the root ball in the hole. Leave the top of the root ball (where the roots end and the trunk begins) $\frac{1}{2}$ to 1 inch above the surrounding soil, making sure not to cover it unless roots are exposed. For bare root plants, make a mound of soil in the middle of the hole and spread plant roots out evenly over mound. Do not set trees too deep. As you add soil to fill in around the tree, lightly tamp the soil to collapse air pockets, or add water to help

settle the soil. Form a temporary water basin around the base of the tree to encourage water penetration, and water thoroughly after planting. A tree with a dry root ball cannot absorb water; if the root ball is extremely dry, allow water to trickle into the soil by placing the hose at the trunk of the tree.

5. Mulch around the tree. A 3-foot diameter circle of mulch is common.

6. Depending on the size of the tree and the site conditions, staking may be beneficial. Staking supports the tree until the roots are well established to properly anchor it. Staking should allow for some movement of the tree. After trees are established, remove all support wires. If these are not removed they can girdle the tree, cutting into the trunk and eventually killing the tree.

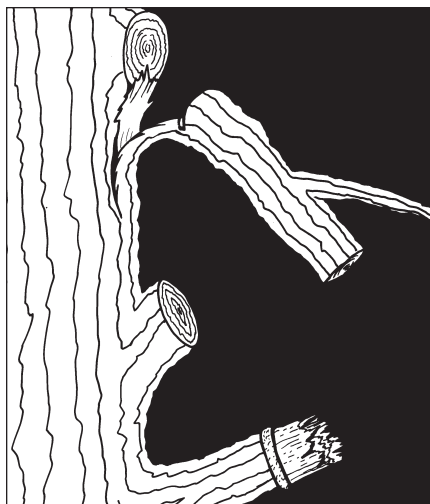
Maintenance

For the first year or two, especially after a week or so of especially hot or dry weather, watch your trees closely for signs of moisture stress. If you see leaf wilting or hard, caked soil, water the trees well and slowly enough to allow the water to soak in. This will encourage deep root growth. Keep the area under the trees mulched.

Some species of evergreen trees may need protection against winter sun and wind. A thorough watering in the fall before the ground freezes is recommended. Spray solutions are available to help prevent drying of foliage during the winter.

Fertilization is usually not needed for newly planted trees. Depending on soil and growing conditions, fertilizer may be beneficial at a later time.

Young trees need protection against rodents, frost cracks, sunscald, and lawn mowers and weed whackers. Mice and rabbits frequently girdle small trees by chewing away the bark at snow level. Since the tissues that transport nutrients in the tree are located just under the bark, a girdled tree often dies in the spring when growth resumes. Weed whackers are also a common cause of girdling. Plastic guards are an inexpensive and easy control method. Frost cracking is caused by the sunny side of the tree expanding at a different rate than the colder shaded side. This can cause large splits in the trunk. Sunscald can occur when a young tree is suddenly moved from a shady spot into direct sun. Light colored tree wraps can be used to protect the trunk from sunscald.



Improper pruning: Cuts from the top in one operation can tear at the bark. A sloped cut will gather water and decay. A decaying stub that's irregular won't callous over well.

Pruning

Usually, pruning is not needed on newly planted trees. As the tree grows, lower branches may be pruned to provide clearance above the ground, or to remove dead or damaged limbs or suckers that sprout from the trunk. Sometimes larger trees need pruning to allow more light to enter the canopy. Small branches can be removed easily with pruners. Large branches should be removed with a pruning saw. All cuts should be vertical. This will allow the tree to heal quickly without the use of sealants. Major pruning should be done in late winter or early spring. At this time the tree is more likely to "bleed" as sap is rising through the plant. This is actually healthy and will help prevent invasion by many disease organisms. Heavy pruning in the late summer or fall may reduce the tree's winter hardiness. Removal of large branches can be hazardous. If in doubt about your ability to prune properly, contact a professional with the proper equipment.

Under no circumstance should trees be topped. Not only does this prac-



Proper pruning: A ring of callous (top) will form over a good vertical cut. First cut away the limb to remove the weight, making initial cuts from the bottom. Then cut the stub from below.

tice ruin the natural shape of the tree, but it increases susceptibility to diseases and results in very narrow crotch angles, the angle between the trunk and the side branch. Narrow crotch angles are weaker than wide ones and more susceptible to damage from wind and ice. If a large tree requires major reduction in height or size, contact a professionally trained arborist. There are other methods to selectively remove large branches without sacrificing the health or beauty of the tree.

On the farm

Windbreaks and tree plantings slow the wind and provide shelter and food for wildlife. Trees can shelter livestock and crops; they are used as barriers to slow winds that blow across large cropped fields and through farmsteads. Windbreaks can be beneficial in reducing blowing and drifting snow along roadways. Farmstead and field windbreaks and tree plantings are key components of a conservation system. They also help prevent dust particles from adding to smog over urban areas.

**Montreat General Ordinance
Chapter K- Environment, Article V: Trees
(Revised 12/10/2015)**

Article V: Trees

Section 1: General Provisions

1. Purpose and Intent

The Town of Montreat, realizing that trees have a profound effect on the quality of life in the community, deems it necessary and desirable in the interest of public health, safety and welfare to enact an ordinance for the preservation, planting, replacement and removal of trees on municipally owned property, areas designated as Greenspace and public rights-of-way within the Town. The purposes of this Article are to regulate the planting of new trees and shrubbery; to vigorously encourage the protection of existing trees and shrubbery, including their root systems; to regulate the preservation, replacement and removal of trees and to establish procedures for fulfilling these purposes.

2. Applicability

The terms and provisions of this Article shall apply to all Town Property, all public rights of way within the Town, those areas designated as Greenspace in the Offer of Dedication dated May 12, 1983 from the Mountain Retreat Association to the Town of Montreat as well as to private property in the manner specifically described herein.

Section 2: Tree Board

1. Tree Board Composition

The Montreat Tree Board shall consist of three members appointed by Town Council. In addition, the Environmental Commissioner of the Montreat Board of Commissioners and the Chair of the Montreat Landcare Committee shall serve as ex-officio voting members of the Tree Board. Additionally, the Public Works Director shall serve as an ex-officio non-voting member. All appointed members shall serve a term of three years. The Board shall select annually from among its members a chair, vice-chair and secretary. Vacancies resulting from resignation, death or removal of a member shall be filled by Town Council for the unexpired term upon request by the Chairperson.

The Public Works Director will serve as the Town staff member specifically charged with the responsibility of carrying out the planning, implementation and coordination with other agencies and advisory boards of all projects undertaken by the Tree Board.

The Tree Board shall formulate and adopt rules of procedure under which it will operate.

2. Duties and Responsibilities

Subject to such limitation as may be imposed by laws or regulations, the Montreat Tree Board shall serve as an advisory board to the Town Council for the following purposes in order to further the public welfare:

- a) Study, investigate, counsel and develop and review a written plan for the care, preservation, pruning, planting, replanting, removal or disposition of trees and shrubs in Greenspace, within public rights-of-way and on Town Property. Such plan will be presented to the Board of Commissioners and upon its acceptance and approval shall constitute the official comprehensive Town Tree Plan for the Town.
- b) When requested by the Town Council, consider, investigate, make findings, report upon, and recommend any special matter or question coming within the scope of its work.
- c) Facilitate the planting, growth and protection of trees and shrubs within the Town.
- d) Foster the communication among citizens of the Town that would provide the needed protection of trees and shrubs and to coordinate active measures to support their health and growth with the Town.
- e) Conduct a tree survey of existing trees along rights-of-way and on Town Property.
- f) Investigate available grants, loans or contributions from other governmental agencies, public or private entities, or individuals, and to recommend the expenditure of any proceeds toward the accomplishment of its purpose.
- g) Conduct continuing education, research, planning and feasibility studies required to support the purposes stated in this Article.
- h) Work with Town staff to promote and enforce this Article regarding the regulation of planting, protection, preservation and removal of trees and shrubs.

3. Review by Board of Commissioners

The Board of Commissioners shall have the right to review the conduct, acts and decisions of the Montreat Tree Board. Any person may appeal from any ruling or order of the Montreat Tree Board to the Board of Commissioners, who may hear the matter and make a final decision. The Tree Board shall submit to the Town Council an annual report of its activities and recommendations and shall file with the Town Clerk copies of its minutes and proceedings of its regular and special meetings.

4. Interference with Tree Board

It shall be unlawful for any person to prevent, delay or interfere with the Montreat Tree Board, or any of its agents, while engaging in the performance of its duties and responsibilities. It shall be unlawful for any Person to prevent, delay or interfere with the Public Works Director or Town employees or agents while engaging in and about the assessment, planting, cultivation,

mulching, pruning, spraying or removing of any Street Trees, Greenspace Trees or trees on Town Property, as authorized in this Article.

Section 3: Administration

1. For the purposes of carrying out the provisions of this Article, the Public Works Director shall have responsibility and control over all trees and shrubbery planted or growing in or upon Town Property, including public rights-of-way.
2. The Public Works Director, or agent thereof, shall be responsible for formulating, in conjunction with the Montreat Tree Board, a written plan for the care, preservation, pruning, planting, replanting, removal or disposition of trees and shrubs in Greenspace, within rights-of-way and on Town Property. The Town Tree Plan shall govern the species of trees to be planted and consideration shall be given to the existing and future utility and environmental factors in recommending a specific species for each area. Such plan will be presented to the Board of Commissioners and upon its acceptance and approval shall constitute the official comprehensive Town Tree Plan for the Town.
3. The Public Works Director and Zoning Administrator, or agent thereof, in conjunction with the Montreat Tree Board, shall have prepared a document entitled, Montreat Tree and Shrub Standards Specification and Detail Manual, which shall contain the guidelines and specifications for tree and shrub planting, care, maintenance, removal and landscape design which shall be adopted by Board of Commissioners and used by developers, landscape architects, designers and the general public in furtherance of the requirements and intent of this Article. The Guidelines shall be reviewed by the Montreat Tree Board at a minimum, every two years, and any revisions to the Guidelines shall be adopted by the Board of Commissioners.

Section 4: Permitting

1. Permits shall be obtained from the Public Works Director for all activity involving the planting, removal and replacement of trees and shrubs on Town Property, public rights-of-way and Greenspace areas except as noted herein.
2. The Public Works Director shall review all requests for permits for the planting, removal and replacement of trees and shrubbery on Town Property, including rights-of-way and Greenspace. If the planting, removal or replacement complies with the Guidelines, the Public Works Director shall issue a permit and may attach reasonable conditions or remedies to the permit. If the plans do not comply with the Guidelines, the permit shall be denied.

3. Before any permit shall be issued, each applicant shall first file evidence of possession of liability insurance in the minimum amounts of \$300,000 for bodily injury and \$100,000 property damage indemnifying the Town or any person injured or damaged resulting from the pursuit of such endeavors as described in this Article.
4. The Town may withhold or withdraw Town issued permits, certificates and other authorizations until such requirements of the permit are met.
5. During the period of an emergency such as a windstorm, ice storms, tornado, or other Acts of God, the requirements of this Section may be waived by the Town Administrator, Public Works Director or the Board of Commissioners.

Section 5: Public Tree Care

1. The Town shall have the right to plant, prune, maintain and remove trees, plants and shrubs within the lines of all streets, roads, ways, and Town property, as may be necessary to ensure public safety or to preserve or enhance the symmetry and beauty of such public grounds.
2. No person shall remove, destroy, cut, prune or otherwise treat any Street Tree, Greenspace Tree or other tree or shrubbery having its trunk upon any Town Property or right-of-way or contract with another Person to perform such acts without first obtaining a written permit from the Public Works Director except as herein set forth.
3. No person shall plant or contract with another to plant any tree or shrubbery on any Town Property, except as herein noted, without a permit from the Public Works Director.
4. Public and private utilities shall submit written specifications for pruning, trenching or grading around trees and shrubbery on Town Property to the Public Works Director for approval. A utility company shall not be required to obtain a permit for routine maintenance operations affecting trees and shrubbery having their trunks upon Town Property so long as such work is done in strict accordance with the Guidelines and specifications as approved by the Public Works Director. A utility company is required to obtain a permit to remove any tree or shrubbery on Town Property. Approved written specifications shall be valid for two years, after which new specifications or a request for an additional two-year extension of the previously approved specifications must be made by the utility company.
5. The Montreat Tree Board may remove or cause or order to be removed, any Street Tree, Greenspace Tree or other tree or shrub growing on Town Property or part of said tree or shrub, which is in an unsafe condition or which by reason of its nature is injurious to utility lines, water and sewer lines, gas lines, or other public improvements, or is affected with any injurious fungus, insect or other pest. This Section does not

prohibit the planting of Street Trees by adjacent property owners providing that the selection and location of such trees is in accordance with the Guidelines for planting developed by the Montreat Tree Board and the property owner has obtained a permit. The Montreat Tree Board, in conjunction with the Public Works Director, has the right to approve any plantings that take place on Town Property, including public rights-of-way.

Section 6: Injuring Trees and Shrubbery

1. No person shall place or maintain upon the ground upon any Town Property any compacted stone, cement or other impervious matter or substance in such a manner as may obstruct the free access of air and water to the root of any tree or shrubbery. This provision shall not apply to paving, repairing or altering of Town streets, sidewalks, greenways or other Town Property performed by the Town.
2. No Person shall perform or contract with another to perform construction work (including the operation or storage of equipment or materials) within the drip line of any tree or shrubbery having its trunk on any Town Property without first obtaining a permit from the Public Works Director.
3. No Person shall attach any object, including, but not limited to, rope, wire, chain or sign, to any tree or shrubbery in or upon any Town Property or to the guard or stake intended for the protection of such tree or shrubbery except for the purpose of protecting it or the public.

Section 7: Planting Plan

1. For planned developments subject to the provisions of the Montreat Subdivision Ordinance, the property owner or developer desiring to plant trees and shrubbery in or upon Town Property, including rights-of-way, shall, in addition to applying for a permit, submit a planting plan or written statement to the Public Works Director. Planting plans upon Town Property shall accurately show the following:
 - a) The proposed street width, together with its pavement, curb, and/or gutter, parking strip and sidewalk areas, to a definite indicated scale.
 - b) The location of underground and overhead utilities, all poles and posts, to a definite indicated scale.
 - c) The proposed location of each and every proposed tree and shrub, together with the location of each existing tree, shrub, plant or vine within the proposed street right-of-way in scaled relation to the other features to the plan.
 - d) The variety, height and caliper, where applicable, of each and every tree and shrub proposed to be planted and of those already existing within the proposed street lines, either indicated on the plan or referenced with a

number to a key list.

- e) The distance in feet between the trees and shrubs in any one row.
 - f) The nature of the soil in the planting space to a depth of three feet and all existing and proposed surface and subsurface drainage system.
2. In the case of persons not involved in planned development and who desire to perform small scale landscape plantings on Town Property, written statements in lieu of a planting plan shall contain the same information required on the planting plan. In such a case, a simple letter of intent outlining the location, method and materials, may be submitted.

Section 8: Mitigation of Unsafe Trees on Private Property

1. The Public Works Director, in conjunction with the Environmental Commissioner of the Montreat Board of Commissioners, may cause or order to be removed any shrub, tree or part thereof on private property which is unsafe, injurious to the public welfare or which, by reason of its nature, is injurious to public improvements or is infested with an injurious fungus, insect or other pest. Hemlock trees infected with Hemlock Woolly Adelgid are exempt from this Section.
2. The Public Works Director may enter upon private property in the Town to treat or cause or order to be otherwise treated, any shrub or tree infected or infested by any parasite, insect or pest when it shall be necessary to do so to prevent the breeding or scattering of any parasite or animal or plant pest and to prevent danger therefrom to persons or property or to trees growing on Town Property or Greenspace.
3. Whenever, in the opinion of the Public Works Director and the Environmental Commissioner, the removal of a tree or shrub on private property shall be necessary, under the provisions of this Article, the Public Works Director and Environmental Commissioner shall have the power to remove such tree or shrub or cause or order the same to be done upon notice and an opportunity to be heard by the property owner.
4. Prior to exercising the authority conferred by this Article, the Public Works Director and Environmental Commissioner shall give the property owner notice and an opportunity to correct the condition by requesting that corrective action be taken. The request shall be in writing to the owner of the property in question and shall be acted upon within 30 days, or a lesser period of time if an imminent threat to life or property exists, from the date of the request. If, after 30 days or such lesser period of time, the owner has not corrected the condition or undertaken action that would lead to a timely correction of the condition, the Public Works Director may enter upon the property, perform the work necessary to correct the condition and bill the owner for the actual costs incurred. In situations involving an imminent threat to the public health, safety or welfare, or to Town Property, the Town may act without prior notification to the property owner but

notice shall be given within a reasonable period thereafter.

Section 9: Trees and Shrubbery Abutting Town Property

1. Trees, shrubbery, flowers, bushes or vines standing in or upon any property abutting Town Property and having branches, limbs, trunks, or other parts projecting onto Town Property shall be maintained by the owner of the property on which such trees, shrubbery, flowers, bushes or vines are growing so as not to interfere with the free and safe passage along the Town right-of-way by pedestrians and vehicular traffic.
2. If the owner of such property does not keep this growth from trees and other plants from projecting onto Town Property, the Public Works Director may order its removal. The order shall be in writing to the owner and shall be acted upon within 30 days from the time of the order. If, after 30 days, the owner has not responded or acted to remove the projecting growth from such trees or plants, then the Public Works Director may enter upon the private property to perform the work necessary to correct the condition and bill the owner for the actual costs incurred. In situations deemed by the Public Works Director to constitute an imminent threat to the public health, safety or welfare, or to Town Property, the Public Works Director may act without prior notification to the property owner.

Section 10: Tree Topping

It shall be unlawful as a normal practice, except as described below, for any Person to top any Street Tree, Greenspace Tree, or other tree on Town Property. Topping is defined as the severe cutting back of limbs and trunks to stubs larger than three inches in diameter within the tree's crown to such a degree so as to remove the normal canopy and disfigure the tree. Trees severely damaged by storms or other causes, or certain trees that interfere with or are an imminent threat to utility wires or other obstructions where other pruning practices are impractical may be exempted from this Section at the determination of the Montreat Tree Board.

Section 11: Removal of Stumps

All stumps of Street and Greenspace Trees shall be removed below the surface of the ground so that the top of the stump shall not project above the surface of the ground.

Section 12: Inspection, Enforcement, Appeal and Penalty

1. Inspection
 - a) The Public Works Director and the Zoning Administrator may periodically inspect

areas subject to the provisions of this Article.

- b) If through inspection it is determined that a Person has failed to comply or is no longer in compliance with the provisions of this Article, a notice to comply shall be served upon that Person by registered mail, return receipt requested or by hand delivery from the Public Works Director. The notice shall state the violation and describe those measures necessary to comply with this Article.
- c) The Public Works Director may conduct such investigations as deemed reasonably necessary to carry out the duties as prescribed in this Article and may enter at reasonable times upon private property as defined herein, for the purpose of inspecting trees and shrubbery subject to the provisions of this Article. No person shall refuse entry or access to any authorized representative or agent of the Town who requests entry for the purposes of inspection and who presents appropriate credentials, nor shall any person obstruct, hamper or interfere with such representative while in the process of carrying out official duties.

2. Notice and Appeal

- a) Any person who violates any provision of this Article shall be notified by the Public Works Director of the specific violation by certified or registered mail, return receipt requested, or by hand delivery. The notice shall set forth the nature of the violation, the measures required to comply with this Article, if compliance is at all practicable, and a reasonable time period within which compliance must be completed.
- b) If any aggrieved person disagrees with a decision of the Public Works Director, such person may request a hearing within ten working days of receipt of the notice of violation. The request must be in writing and directed to the Montreat Tree Board secretary. The secretary shall immediately assemble an appeals board, made up of at least three members, from among the full membership of the Montreat Tree Board. The chairperson of the Montreat Tree Board shall always serve on the appeals board as the chairperson and shall not vote except to cast the deciding vote in case of a tie. The members to sit on the appeals board shall be selected on a rotating basis. The owners shall have the right to be represented by counsel, and to examine and cross examine witnesses at said hearing. The Town Attorney shall serve as the appeals board's legal advisor during said hearing. The appeals board shall render its written decision within 30 days after the hearing.
- c) The appeals board may modify, amend or revise the appealed decision. The decision of the appeals board shall be served upon the appealing party by registered or certified mail, return receipt requested, or by hand delivery.
- d) If any aggrieved party is dissatisfied with the decision of the appeals board, an appeal may be taken to the Buncombe County Superior Court. Notice of the appeal must be filed within ten working days of receipt of the appeals board's decision. The parties may stipulate that the appeal to the Buncombe County Superior Court shall be a review of the record only. In the absence of a mutual stipulation, the review shall be de novo.
- e) Any aggrieved party may request an injunction to preserve the status quo during the

pendency of any appeal in accordance with applicable North Carolina law.

3. Civil Penalty

Any person violating any provision of this Article shall be subject to the civil penalties found in Chapter L of the Town of Montreat Code of General Ordinances.

4. Injunctive Relief

Whenever there exists reasonable cause to believe that any Person is violating this Article or the Guidelines or any other standards adopted pursuant to this Article or any term, condition or provision of an approved permit, the Town may, either before or after the institution of any other action or proceeding authorized by this Article, institute a civil action in the name of the Town for a mandatory or prohibitory injunction and an order of abatement demanding the violator to correct the unlawful condition upon or cease the unlawful use of the property.

Definitions to be Added or Amended in Chapter A – General Administration;
Article 1 – Definitions of Words and Phrases

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this Article, except where the context clearly indicates a different meaning:

- a) Caliper – Diameter measurement of the trunk taken six inches above ground level for trees up to and including four-inch-caliper size. Measurements shall be taken twelve inches above the ground for larger trees.
- b) Diseased Tree – A tree affected by a process in which fungi, bacteria, mycoplasmas, and viruses are able to invade and infect trees causing poor growth and weak appearance, disruption of plant processes, distortion of certain tree parts and strain or death of the tree.
- c) Diameter Breast Height (DBH) – The diameter of a tree four and one-half feet above the average ground level.
- d) Drip Line – a vertical line running through the outermost portions of the tree crown extending to the ground.
- e) Greenspace Trees – Trees and shrubs found in those areas designated as Greenspace in the Offer of Dedication dated May 12, 1983 from the Mountain Retreat Association to the Town of Montreat.
- f) Guidelines – Montreat Tree and Shrub Standards Specifications and Detail Manual, published by the Public Works Department.

- g) Impervious Cover – Building and structure footprints, areas of pavement, compacted gravel or other compacted areas which by their dense nature do not allow the passage of sufficient oxygen and moisture to support and sustain healthy root growth.
- h) Maintenance – Property cultural practices including pruning, fertilization, pest management, and root system protection. The standards of maintenance are those published by the National Arborists Association.
- i) Paved Area – Any ground surface covered with concrete, asphalt, stone, compacted gravel, brick or other paving material.
- j) Person – A public or private individual, corporation, company, firm, association, trust, estate, commission, board, public or private institution, utility cooperative or other legal entity.
- k) Private Property – Property that is not owned by a federal, state or local government.
- l) Public Works Director – The head of the Town of Montreat Public Works Department or his or her designee.
- m) Replacement – Replacement of dead, dying, diseased, or removed trees with trees of equal or comparable size, species, vigor and health.
- n) Removal – The cutting down of any tree or shrub and all other acts which cause the actual removal or the effective removal through damaging, poisoning or other direct or indirect actions resulting in the death of a tree or shrub.
- o) Root Protection Zone- Generally, 18 to 24 inches deep and a radius distance from the trunk of the tree equal to one foot for each one inch of trunk diameter or the outermost drip line of the tree, whichever is greater.
- p) Street Trees – Trees and shrubs on land lying within right-of-way on either side of all streets, roads, or ways within the Town.
- q) Topping – Any pruning practice that results in the severe cutting back of limbs and trunks to stubs larger than three inches in diameter within the trees crown to such a degree so as to remove the normal canopy and disfigure the tree.
- r) Town – The Town of Montreat, North Carolina
- s) Town Property – All real property which is owned or leased by the Town or which is maintained by it or any part of any Town right-of-way or for which the Town has a license, easement, or right to use, possess or occupy property.

- t) Unsafe Tree – For a tree to be unsafe, one of the following criteria must apply;
- (1) A combination of a structural defect and a target.
 - (a) A structural defect which predisposes the tree to failure; i.e., dead tree, trunk decay, dead branches, V-crotches; and
 - (b) A target such as a structure, road, walkway, campsite or other area where improvements to property exists or people reside.
 - (2) A tree that is otherwise structurally sound, but which interferes with the routine activities of people. Interferences include obstructions, sight distance problems for motorists, buckling of sidewalks or greenways, attracting lightning, or interference with utilities.

MONTREAT GENERAL ORDINANCES

CHAPTER K – ENVIRONMENT

ARTICLE IV: HILLSIDE DEVELOPMENT

(Adopted 6/11/2009); (Revised 9/08/2011)

Section I. General Provisions.

1. Purpose. The hillside development regulations of this article shall establish guidelines for responsible land use addressing both aesthetics (the “viewscape”) and slope stability, utilizing approved methods of erosion prevention and stormwater control. Montreat contains intensely varied topography within a relatively small area, involving significant regions that transition abruptly from gentle slope to steep gradient. These factors pose unique challenges for the location and installation of structures while preserving the natural aesthetic characteristic of the Town. It has been determined that measures must be taken to ensure the stability of our hillsides while permitting continued low-impact development.
2. Scope. Except as otherwise expressly stated, the hillside development regulations of this article apply to all development within Montreat and the unincorporated areas of Buncombe County inside the extraterritorial jurisdiction of Montreat.
3. Applicability and Exemptions. The hillside development regulations of this article do not apply to any of the following development activities:
 - a) Land disturbing activities involving property with an existing slope less than forty percent (40%);
 - b) Land disturbing activities associated with the installation of water quality Best Management Practices (BMP’s) as set forth in the Stormwater Best Management Practices Manual published by the North Carolina Division of Water Quality. The BMP’s shall not affect the calculation of Approved Graded Area (AGA) if revegetation of the disturbed area is determined to adequately offset negative impacts of disturbance;
 - c) Minor improvements to properties involving the addition of one hundred (100) square feet impervious surface or less, and for which no grading or building permit are required;
 - d) Activities undertaken on forestland for the production or harvesting of timber and timber products and conducted in accordance with best management practices as set out in Forest Practice Guidelines Related to Water Quality referenced as follows:

http://www.ncforestry.org/docs/Landowners/regulations/mgmt_practices.htm

- f) Activities for which a permit is required under the mining act, G.S. 74-46 et seq.:

<http://www.dlr.enr.state.nc.us/pages/miningprogram.html>

- g) Any development in which the owner has accrued a vested right. For the purposes of this Article only, a vested right is recognized if either (i) a preliminary plan has been approved by the Planning Board that meets the required specifications and standards of the Town of Montreat ordinances, Buncombe County ordinances, or (ii) a Land Disturbing Permit has been issued pursuant to a Buncombe County Soil Erosion and Sedimentation Control ordinance in effect on or before the effective date of this ordinance, and that such plan or permit remains unexpired.

A party in interest to a particular plan found to have no vested right to construct or develop on or before the effective date of this ordinance may appeal to the Town of Montreat Board of Adjustment for a hearing de novo. Such hearing shall be expedited and shall be limited to the issue of whether the landowner has a vested right to construct or develop their site under plans submitted to the effective date of this ordinance.

- 4. Interpretation of Certain Words or Terms. Except as specifically defined herein, all words used in this Ordinance have their customary dictionary definitions. For the purposes of this Ordinance, certain words or terms used herein are defined as follows:

- a) Words used in the present tense include the future tense. Words used in the singular include the plural, and words used in the plural include the singular;
- b) The word "shall" is always mandatory;
- c) The word "may" is permissive;
- d) The word "lot" includes the word "plot" or "parcel";
- e) The term "remediation" refers to *aesthetic remediation* as defined herein;
- f) The word "person" includes a firm, association, organization, partnership, trust company, limited liability company, or corporation as well as an individual;
- g) The terms "Department," "Office(s)," or "Zoning and Inspections" refer to the Town of Montreat Zoning and Inspections Department;

- h) The term "Planning Commission" refers to the Montreat Planning and Zoning Commission. The terms "Town Commissioners" "Town Board of Commissioners" or "Mayor and Town Commissioners" refer to the legally constituted and elected governing body of the Town of Montreat. The term "Board of Adjustment" refers to the Zoning Board of Adjustment for the Town of Montreat.

5. Definitions.

Aesthetic remediation: A variety of measures including, but not limited to, reclamation of non-developed portions of a disturbed area through reforestation, revegetation, naturescaping or other approved methods to restore the character of an area representative of its natural state; (re)introduction of approved plant species or modification of color and/or texture of surface materials to mitigate the undesirable visual impact of specific structural elements associated with a development project.

Aggregate Visible Area (AVA): The sum, expressed in square feet, of all exposed (plane) surfaces associated with a structure. Material exhibiting a high Light Reflectance Value of greater than thirty-two percent (>32%) represents a significant impact upon the viewscape when the aggregate quantity exceeds one hundred and fifty (150) square feet. A structure located within the Hillside Development Area having existing slope of forty percent (40%) or greater, with more than one hundred and fifty (150) square feet AVA and high Light Reflectance Value finishes/materials, shall require aesthetic remediation.

Applicant: An owner or developer of a site who executes the Hillside Development Permit Application pursuant to Town of Montreat Hillside Development Ordinance.

Approved Graded Area (AGA): The maximum surface area (measured in square feet) of a proposed development site that may be graded pursuant to execution of a Hillside Development Permit. Portions of the AGA unimproved by addition of structure(s) or impervious surfaces shall be remediated before issuance of the Certificate of Occupancy.

Artificial slope: Any land disturbing activity that modifies an existing slope.

Best Management Practices (BMP): Best Management Practices (BMP's) consist of both structural and non-structural methods of preventing exposure to stormwater runoff, and provide measures designed to remove a substantial percentage of any pollutants that may be present in the stormwater stream. BMP's also treat the volume of stormwater leaving a developed site with the goal of approximating pre-construction, or natural conditions.

Cut slope: Exposed ground surface resulting from excavation of material.

Develop: Conversion of land to new service or purpose so as to make use of its resources, or to use the land for residential or commercial purposes.

Development density: The total number of primary structures permitted per unit area as modified by existing grade.

Development intensity: The permitted ratio, expressed as percentages, of unimproved (preserved) area versus developed (buildings, parking, other improvements) area.

Disturbed area: The portions of a development project that include graded areas disturbed so as to remove the natural cover in conjunction with development activities; both pervious and impervious surfaces installed and/or constructed including, but not limited to, buildings concrete/asphalt pavement and gravel areas such as parking lots, patios, roads, and paths; lawn and artificially surfaced (e.g. recycled rubber mulch, crushed brick, etc) areas; retention structures including, but not limited to, timber, stone and masonry walls; buried tanks or cisterns, etc. Grading activities undertaken exclusively for the installation of legally permitted septic leach/drainage field systems are not regulated under the requirements of this definition.

Existing grade: The vertical elevation of the land as it exists on the adoption date of this ordinance.

Existing grade is determined as follows:

Calculation of Existing Grade. The applicant may submit calculations of the existing grade for the entire parcel or for the proposed graded area; these calculations shall be sealed by a licensed surveyor, engineer, or landscape architect. If no calculations are provided, the Town of Montreat may calculate the existing grade of any entire parcel – or portion thereof - using Buncombe County’s “Slope Tool” <http://72.250.240.51/slopetool/> or calculate the average slope of any portion of a parcel using the following formula:

$$S = \frac{.0023(I)(L)}{A}$$

Where: S = Existing grade of parcel or fraction thereof, in percent
I = Contour interval of map in feet, with said contour intervals to be five feet or less
L = Total length of the contour lines within the parcel or fraction thereof, in feet
A = Area of the parcel or fraction thereof, in acres
0.0023 = Product of two constants, one of which converts feet into acres and one of which converts a decimal fraction into a percentage
Once “S” is calculated, it shall be rounded to the nearest whole number.

The advantage of submitting calculations for existing grade within the proposed graded area may be realized by providing evidence that improvements will be limited to less steeply-sloped portions of a lot, thereby reducing restrictions placed upon development based upon existing grade.

Fill slope: Exposed ground surface resulting from deposition of material.

Finished grade: Proposed final elevation of a given lot area (surrounding a structure) subsequent to completion of development activities.

Geotechnical Assessment (GA): A comprehensive analysis of soil type(s), composition and characteristics (colluvial, cohesive or expansive, pH, water retention, etc.) conducted pursuant to proposed development of a building site.

Global Stability (GS): Geotechnical analysis of characteristics within a reinforced soil mass evaluating potential slip surfaces or failure planes that can go behind or through the reinforced soil mass. Global Stability shall be included in assessment of all development if recommended by the consulting geotechnical engineer. The analysis takes into consideration the following factors:

- The overall geometry of the structural system installed including, but not limited to, foundation & retaining walls, footings, etc., and the slopes above and below the system.
- Loading or surcharge conditions (e.g. 250 pounds per square foot (3.65 kPa) for highway loading). Any superimposed load, with the exception of retained earth, shall be considered surcharge.
- Soil parameters (shear strength and unit weight of the soil) determined by the laboratory tests of the soil conducted as part of a geotechnical survey or assessment.
- Subsurface and surface water conditions (groundwater can have a negative effect on slope stability).

Hillside Development Area: That region inside the Town of Montreat boundaries and unincorporated areas of Buncombe County within Montreat extraterritorial jurisdiction (ETJ) with an existing slope equal to forty percent (40%) or greater.

Impervious surface: Any surface that does not allow water to percolate through, or significantly penetrate, for natural absorption by the ground within a twenty-four (24) hour period, including but not limited to: rooftops; parking/driving areas finished with asphalt, concrete, or densely-compacted gravel; patios, or pools.

Improved site: A lot or parcel that contains disturbed area(s) attributable to development activities.

Land disturbing activity: Any use of, or operations on, the land by any person or firm in residential, industrial, educational, institutional, or commercial development, including road construction and maintenance, that results in a change in the natural cover or topography.

Light Reflectance Value (LRV): A measurement used to express the percentage (0-100%) of light reflected from the surface of a material. Large exposed regions of structures with LRV greater than thirty-two percent (>32%) shall require aesthetic remediation.

Low Impact Development (LID): A term used in the United States to describe a land planning and engineering design approach to managing stormwater runoff. LID emphasizes conservation and use of on-site natural features to protect water quality.

Natural grade: The elevation of a given lot area before any land disturbing activities commence.

Naturescaping: Landscaping installed using only native plant species and materials endemic to the region.

Non-conforming Improved Lot: Any improved lot in existence prior to adoption of this ordinance that, whether by aggregate graded area and/or existing impervious area, exceed the permitted limits established herein.

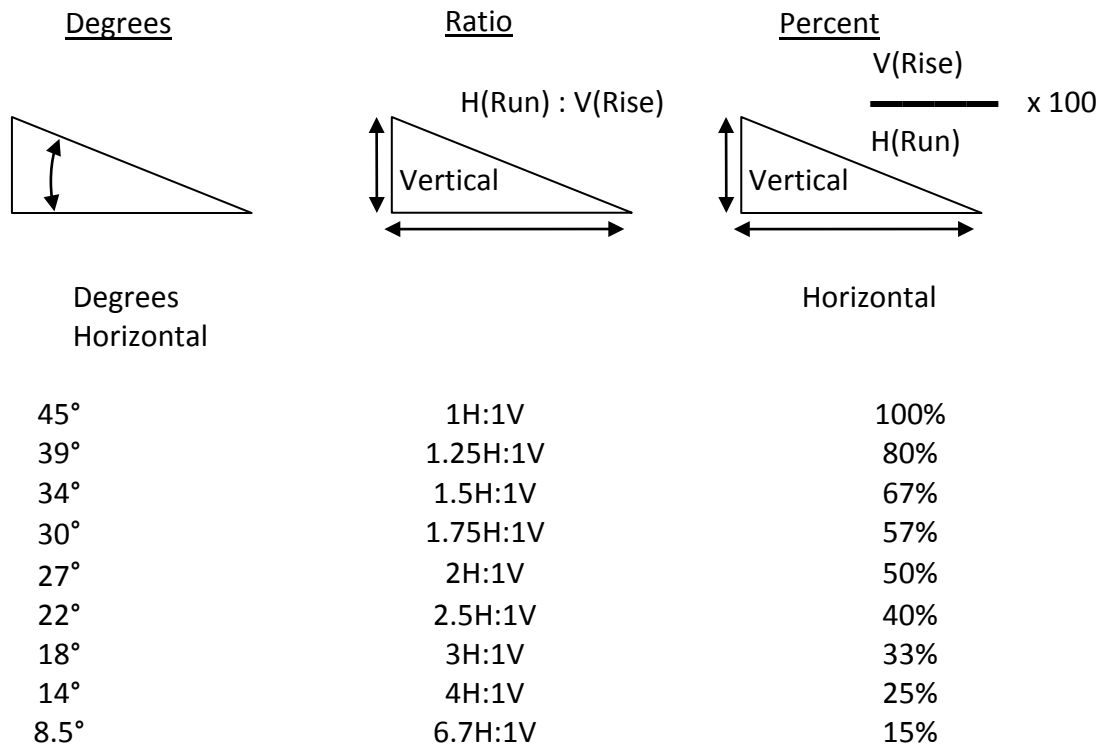
Reforestation: The action of renewing forest cover as by natural seeding or by the artificial planting of seeds or young trees.

Revegetation: Reintroducing entirely native, or a combination of at least fifty-percent (50%) native and approved non-native, plant species (see Appendix A) back into a disturbed area to effect aesthetic remediation and prevent potential erosion.

Slope: The extent to which a land form deviates from the perfectly horizontal as expressed in percent, degree or ratio. To ensure consistent conversion between these separate methods of expressing the extent of slope, the following explanatory table is provided as part of this definition.

[CONTINUED ON FOLLOWING PAGE]

Slope Measurements



Structure: Anything constructed or erected, the use of which requires permanent location on the ground, or attachment to something having a permanent location on the ground, including fences, business signs, and driveways.

Viewscape: The overall aesthetic impression a view presents at any given time within commonly traveled or occupied locations inside Montreat and/or its extraterritorial jurisdiction.

Section II. Administration and Procedures.

1. Administration of this Ordinance. All questions arising in connection with this Ordinance shall be presented first to the Code Administrator who shall be responsible for the day-to-day administration of this Ordinance. The Board of Adjustment shall have the authority to rule on matters of interpretation of this Ordinance and consider appeals from the decisions of the Code Administrator. Any appeal from a decision of the Board of Adjustment shall be to the courts as provided by law.

2. Review and Appeals Procedure.

- a) A Hillside Development Permit is required for all development and redevelopment on lots with an existing slope of forty percent (40%) or greater, unless exempt pursuant to this ordinance.
- b) Two (2) copies of a site plan including the following information shall be submitted:
 - 1. Orientation referencing north meridian;
 - 2. Scale of drawing; boundaries and acreage of the parcel;
 - 3. Location of adjacent streets and any easements;
 - 4. Location of existing and/or proposed structures including setbacks; structure dimensions and separation distance(s);
 - 5. Contour interval(s) of existing and proposed contours; and
 - 6. Clear graphic indication of any proposed alterations or additions
- c) The site plan and permit application shall be accompanied by results from the required Geotechnical Assessment and recommendations from a North Carolina-registered geotechnical engineer.
- d) Application and permit review fees shall be established by the Montreat Board of Commissioners and posted in the fee schedule for Town services.
- e) Plan review fees shall be double the posted amount when land disturbing activity begins before a Hillside Development Permit is issued by the Town.
- f) The Department shall review the submittal for completeness and for compliance with the requirements of this ordinance. An incomplete or nonconforming permit application will be returned to the applicant prior to review with an explanation of issues requiring resolution before plan review can be initiated.
- g) Within thirty (30) days of receipt of complete application for hillside development approval, the Department shall take action on the plan.
- h) Approval, approval with modifications, or denial of the proposed hillside development project shall be in writing. In the case of denial, the reasons for denial shall be clearly stated. The applicant may appeal the decision of the Code Administrator to the Board of Adjustment.
- i) Upon appeal, the Montreat Board of Adjustment will conduct a hearing in the nature of a quasi-judicial proceeding with all findings of fact supported by material evidence.

- j) Decisions appealing the final decision by the Board of Adjustment may be filed in Buncombe County Superior Court, to be reviewed by proceedings in the nature of certiorari, within thirty (30) days of the final decision of the Board of Adjustment.
- k) The Code Administrator shall take action on revisions to a hillside development application which has been previously denied, within fifteen (15) days of receipt of the revised plan application for approval.
- l) If a revised application is not re-submitted within sixty (60) calendar days from the date the applicant was notified, the application shall be considered withdrawn, and a new submittal for the same or substantially the same project shall be required along with the appropriate fee and pursuant to the then current standards.
- m) Application for an amendment to an approved hillside development plan in written and graphic form may be made at any time. Until such time as an amendment is approved by the Code Administrator, it shall be unlawful to deviate from the approved plan.
- n) A hillside development permit shall become null and void if the applicant has failed to make progress on the site within six (6) months after the date of approval. The Code Administrator may grant a single, six-month extension of this time limit, for good cause shown, upon receiving a written request from the applicant before the expiration of the approved plan.

3. Penalties for Violation.

Civil penalties may be imposed as follows:

- a) Any person who violates any of the provisions of this article, or rules or orders adopted or issued pursuant to this article, or who initiates or continues improvement to property for which a hillside development permit is required, except in accordance with the terms, conditions and provisions of an approved plan shall, upon conviction, be guilty of a misdemeanor and shall be subject to a fine not to exceed five hundred dollars (\$500.00) or imprisonment not to exceed thirty (30) days as provided by N.C.G.S. § 14-4 and § 15A-1340.23. Each day such violation continues shall constitute a separate offense pursuant to N.C.G.S. §160A-175 (g). Additional fees may be charged for remedies and enforcement of this ordinance.

- b) No penalty shall be assessed until the applicant is notified of the violation by registered or certified mail, return receipt requested, or, if reasonable attempts to contact the applicant have failed, by conspicuously posting the property in such manner as to be readily visible from an adjacent street or public thoroughfare for a period not less than ten (10) days giving notice to the violation.

A posting affidavit shall be required, including graphic record of the noticing, and filed with Zoning and Inspections Department. The notice shall list the parcel identification number and location of the property, the date, the applicant's name and a description of the violation in reasonable detail. It shall also specify the timeframe in which the violation shall be corrected, and warn that failure to correct the violation within the prescribed time period will result in the assessment of civil penalty or other enforcement action.

- c) If the violation has not been corrected within the designated time period, a civil penalty may be assessed from the date the violation is detected.
- d) Refusal to accept the notice or failure to notify the Code Administrator of a change of address shall not relieve the violator's obligation to pay such penalty.
- e) The Code Administrator may refuse to issue a certificate of occupancy for any building or other improvements constructed or being constructed on a site for which an approved hillside development permit has been issued until the applicant has taken the remedial measures set forth in the notice of violation and cured the violations described therein.

4. Development Standards.

- a) Grading. The following requirements shall regulate the extent (see Table I) and technique of grading within a hillside development area based on the existing grade.

[CONTINUED ON FOLLOWING PAGE]

Table I. Approved Graded Area.

APPROVED GRADED AREA (AGA) BY SLOPE		
SLOPE	AGA	NOTE (*)
40% - 45%	40%	GA (*)
45% - 50%	35%	GA (*)
50% - 55%	30%	GA (*)
55% - 60%+	25%	GA (*)

****NOTE**** Slope values shown in the above table shall be interpreted in the following manner: “40% - 45%” will include all slopes 40% up to any slope less than 45%, etc.

- (*) A Geotechnical Assessment shall be required for lots with existing grade forty percent (40%) or greater. Investigation of Global Stability shall be required as indicated by a Geotechnical Assessment. The recommendations of a NC registered geotechnical engineer regarding a particular site may reduce the percentage AGA below the value indicated.

Applicants may request up to fifty percent (50%) increase of tabular Approved Graded Area by the Code Administrator if accompanied by a Landscape Plan detailing adequate revegetation of the disturbed area to offset negative impacts of disturbance. The increase shall only be granted in cases determined by the Code Administrator to be justified, due to inherent difficulties associated with the subject lot making adequate grading impractical or upon written recommendation of a NC registered geotechnical engineer. The additional approved graded area shall not be built upon to include impervious cover or structures.

- b) Front Yard Setback Reduction. Owners of previously-platted parcels with an existing grade of forty percent (40%) or greater may request up to a fifty percent (50%) reduction in the required front yard building setback for the associated Zoning District. Requests will be evaluated on a case-by-case basis, and permission must be evidenced by written approval bearing signatures of both the Zoning and Town Administrators.
- c) Vehicular Access Construction. Roads, streets and driveways constructed on any lot, parcel, tract of land or designated right-of-way within a hillside development area with natural grade forty percent (40%) or greater shall require consultation with a North Carolina-registered geotechnical engineer prior to land disturbing activities.

The site assessment shall include investigation for colluvial deposits and other factors indicating potential instability. Recommendations of the geotechnical engineer shall be submitted with the application for review and approval. All streets constructed shall meet the minimum street construction standards for the Town as detailed in (Insert reference to Montreat's Street Standards Ordinance).

- d) Artificial Slopes. Artificial slopes shall be reforested, revegetated, naturescaped or otherwise remediated to visually integrate disturbed areas into surrounding terrain with the purpose of maintaining a natural appearance. Artificial slopes shall not exceed a 1:1 cut and 1.5:1 fill. However, if stable exposed rock is the intended result, the cut and/or fill slope(s) may be increased with approval of the Code Administrator and supporting recommendation from a North Carolina-registered professional engineer.

Remediation shall consist of a combination of trees, shrubs and groundcover plants native to the area or taken from the list of approved species contained in Appendix A of the Town of Montreat Zoning Ordinance. A maintenance plan shall be required for remediation areas and such plan shall include provisions for replacement of dead vegetation when greater than fifty percent (50%) mortality rate occurs. Invasive plant species, as referenced in list maintained by NC State University (see link below), shall not be introduced as landscape specimens or for remediation purposes:

<http://www.ncsu.edu/goingnative/howto/mapping/invxse/index.html>

- e) Preservation of Vegetation. All trees and other natural vegetation shall be preserved in hillside development areas except within the designated Approved Graded Area. Non-native invasive species may be removed. For new development or additions, these preservation areas shall be designated on plans submitted for development approval. For existing development, aerial photographs or other methods for determining the extent of tree cover shall be utilized to enforce this requirement. Preservation areas shall be clearly designated during all land disturbing activities using protective fencing. If a property owner desires to remove trees or other protected vegetation required to be preserved in this section, he or she may submit an alternative landscape plan for consideration by the Code Administrator. The alternative landscape plan must contain:
- i. a tree survey of the property showing which trees and protected vegetation are to be removed and which will remain;
 - ii. the location of any structures, driveways and other impervious surfaces; and
 - iii. an explanation of the reason(s) for removal of the required trees and other protected vegetation, including a statement of how the

removal supports the purposes of this section or how such removal can be mitigated consistent with the purposes of this section.

Within two (2) business days of receiving an alternative landscape plan, the Code Administrator shall approve, approve with conditions, or deny the alternative landscape plan. If the Code Administrator denies the alternative landscape plan, the reasons shall be detailed in writing. Appeals of the Code Administrator's decisions shall be made, in writing, to the Board of Adjustment within thirty (30) days of denial of the alternative landscape plan.

- f) Structure height. The maximum height of principal structures in all residential zoning districts within hillside development areas shall be limited to thirty five (35) feet. No structure shall exceed the height requirement of the underlying zoning district. For the purpose of this section, height shall be defined as the vertical distance measured from average natural grade encompassing the living areas of a structure to the highest point of its roofline, or from the top of the parapet or roof surface for flat-roofed structures. Carports, garages, decks and other non-inhabited additions to structures that may increase the building footprint are not included in calculation of average natural grade.
- g) Light Reflectance Value (LRV). Large exposed regions of structures greater than one hundred and fifty square feet (>150SF) with LRV greater than thirty-two percent (>32%) shall require aesthetic remediation. Building finish and trim materials possessing muted colors, natural tones and textures representative of the structure's surroundings will minimize the visual impact within wooded areas.
- h) Existing Non-Conformities. Non-conforming improved lots in existence prior to adoption of this ordinance that violate the minimum provisions for AGA and/or maximum impervious area, shall be combined with contiguous lots in the same ownership prior to further development and evaluated for compliance with the minimum provisions of this ordinance. A twenty percent (20%) allowance shall be made for existing impervious area on improved lots within the Institutional (I) or Institutional/Residential (I/R) Districts of Montreat. If the applicant demonstrates that no possibility of combining adjacent lots exist to achieve compliance, and the maximum allowable increases available for AGA and impervious area still exceeds allowable tabular values, a variance must first be obtained from the Board of Adjustment before additional improvements are permitted for grading or increased impervious area on the property.
- i) Development Intensity. Intensity of development shall be limited as follows in hillside development areas of Montreat to preserve, to the greatest reasonable extent, the viewscape and other natural features that distinguish the Town from neighboring developed mountain regions. For the purpose of this

section, “impervious ratio” shall mean the quotient obtained from the combined gross structure footprint and other impervious surface areas on a lot, divided by the gross area of the lot or site.

Table II. Allowable Development Intensity.

MAXIMUM IMPERVIOUS RATIO/AVA			
Existing Grade	Maximum Allowable Impervious Ratio	Maximum Allowable Ratio With Bonus	Aggregate Visible Area (AVA) Permitted With High LRV (>32%)
40% - 45%	0.30	0.40	* 400 SF
45% - 50%	0.25	0.375	* 350 SF
50% - 55%	0.225	0.338	* 300 SF
> 55%	0.20	0.30	< * 250 SF

****NOTE**** Existing grade values shown in the above table shall be interpreted in the following manner: “40% - 45%” will include all slopes 40% up to any slope less than 45%, etc.

The maximum impervious ratio may be offset by an intensity bonus accrued through conscientious measures undertaken to mitigate the impact of improvements within hillside development areas. The symbol (*) in column 4 of Table II indicates combined area(s) that shall require remediation to lessen the negative visual effect. “Earth berm” homes, “green” roofs, LEED, Green Globe, NC Healthy Built Home, Clear Water Contractor, and other sustainable and innovative alternatives to conventional construction practices, recognized at the national or state level to be consistent with LID project goals, will receive consideration for development intensity bonus credit as well.

- i) Intensity Bonus. An intensity bonus may be granted for each of the items listed below. A total intensity bonus of up to fifty percent (50%) of the allowable intensity may be achieved under this provision through accumulation. No intensity bonus shall permit a structure to violate requirements of the underlying zoning district or to allow development in the case of a non-conforming improved lot. Measures such as locating structures and other improvements on less steep and (environmentally or aesthetically) sensitive areas of a lot and designating a preservation easement for more sensitive regions, shall receive an intensity bonus. Less sensitive areas may include previously cleared areas, such as pastures/fields, old camp or home sites, and logging roads, provided such clearing predates June 11, 2009.

Grading is limited to ninety percent (90%) or less of the maximum approved graded area allowed in Table I; bonus of fifteen percent (15%);

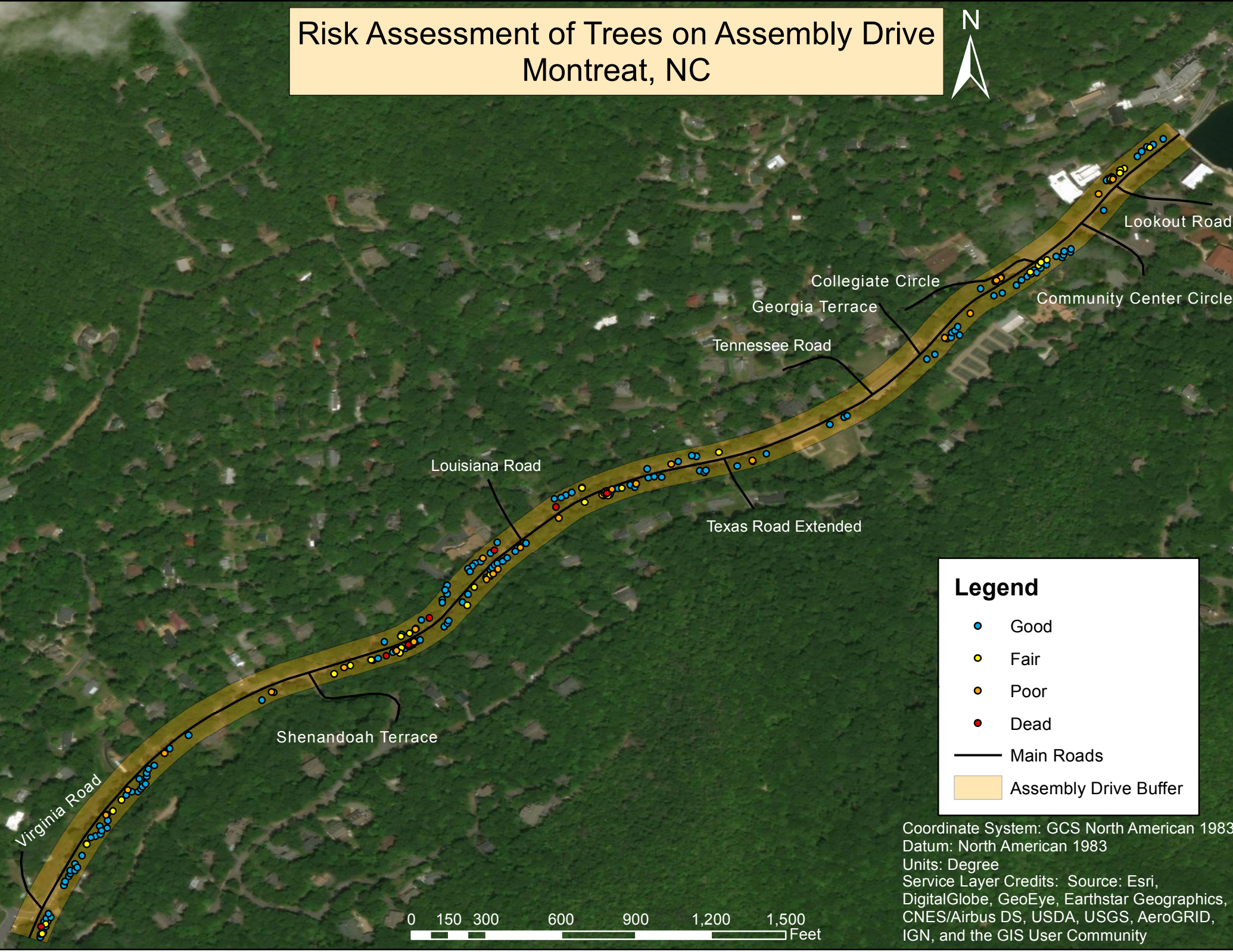
1. Grading of streets, access drives and driveways is located outside of slopes forty percent (40%) or greater and/or is predominately located on existing cleared areas; bonus of fifteen percent (15%);
 2. Structures and parking areas are screened by vegetation to minimize the visual impact from commonly frequented or accessible areas; bonus of fifteen percent (15%);
 3. The Code Administrator determines that substantial stormwater best management practices are met in the proposed development, or rainwater recycling/retention features such as cisterns or rain gardens are implemented; bonus of fifteen percent (15%);
- j) Development Density. Re-combinations, re-development or newly-platted tracts undergoing development activities, or major/minor subdivisions as defined in the Subdivision Ordinance for the Town of Montreat with an existing grade of forty percent (40%) or greater shall conform to the following density table:

[CONTINUED ON FOLLOWING PAGE]

Table III. Development Density.

SLOPE %	UNITS PER ACRE	MINIMUM LOT IN ACRES
40	1.650	0.606
41	1.585	0.631
42	1.524	0.656
43	1.468	0.681
44	1.416	0.706
45	1.368	0.731
46	1.323	0.756
47	1.280	0.781
48	1.241	0.806
49	1.203	0.831
50	1.168	0.856
51	1.135	0.881
52	1.104	0.906
53	1.074	0.931
54	1.046	0.956
55	1.019	0.981
56	0.994	1.006
57	0.970	1.031
58	0.947	1.056
59	0.925	1.081
60	0.904	1.107
61	0.884	1.131
62	0.865	1.156
63	0.847	1.181
64	0.829	1.206
65	0.812	1.231

Risk Assessment of Trees on Assembly Drive Montreat, NC



Legend

Good

Fair

Poor

Dead

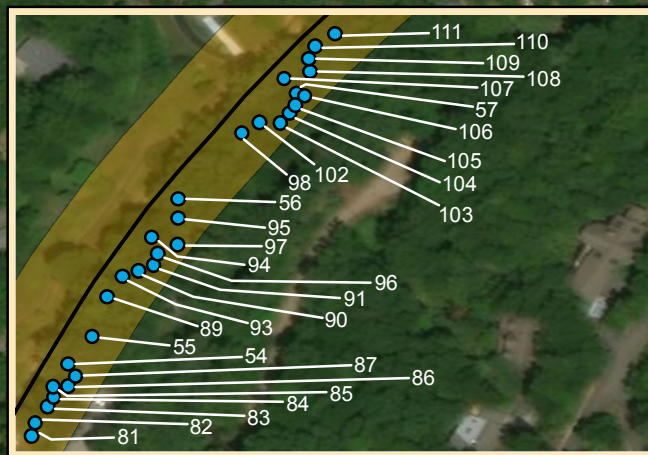
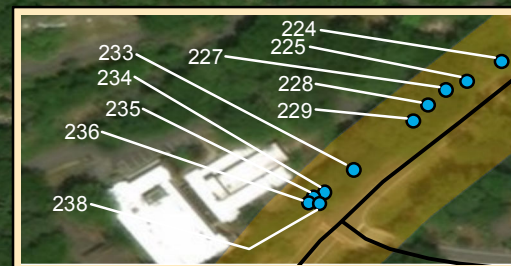
Main Roads

Assembly Drive Buffer

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Service Layer Credits: Source: Esri,
DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AeroGRID,
IGN, and the GIS User Community

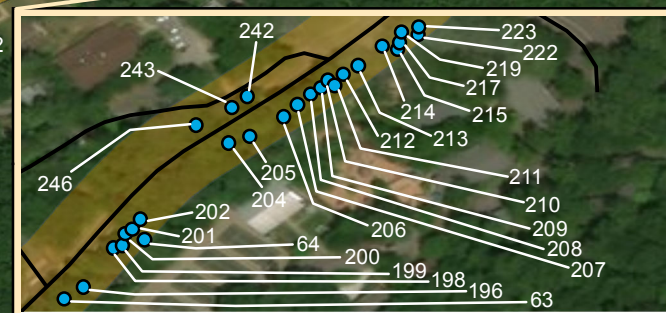


Good Condition Trees on Assembly Drive Montreat, NC



Louisiana Road

Texas Road Extended



Lookout Road

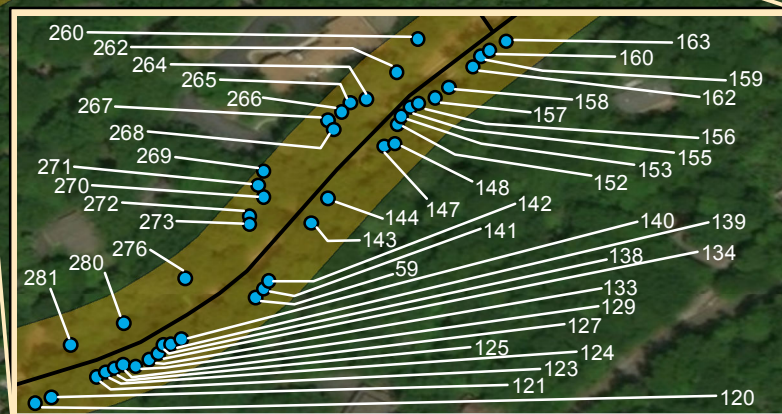
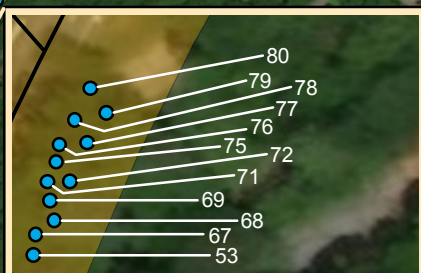
Community Center Circle

Collegiate Circle
Georgia Terrace

Tennessee Road

Shenandoah Terrace

Virginia Road



Legend

● Good

— Main Roads

Assembly Drive Buffer

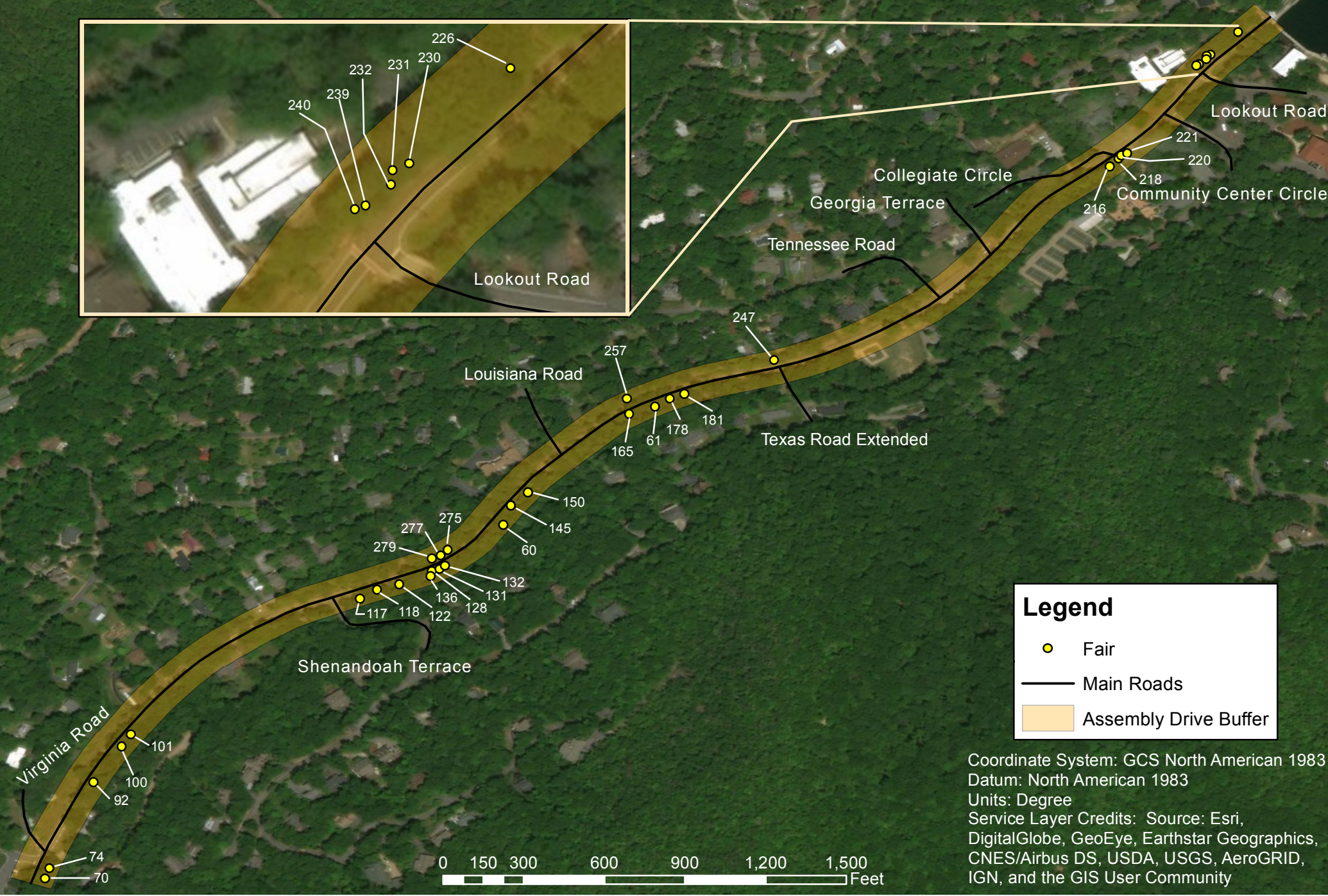
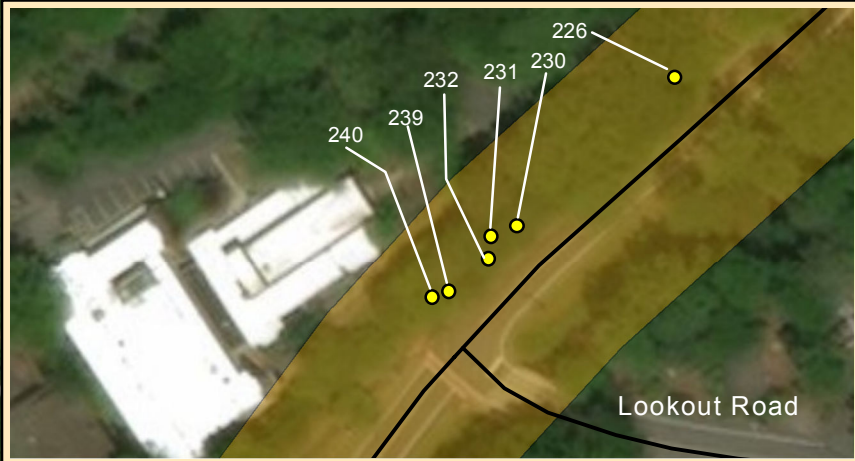
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Datum: North American 1983

Units: Degree

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Fair Condition Trees on Assembly Drive Montreat, NC

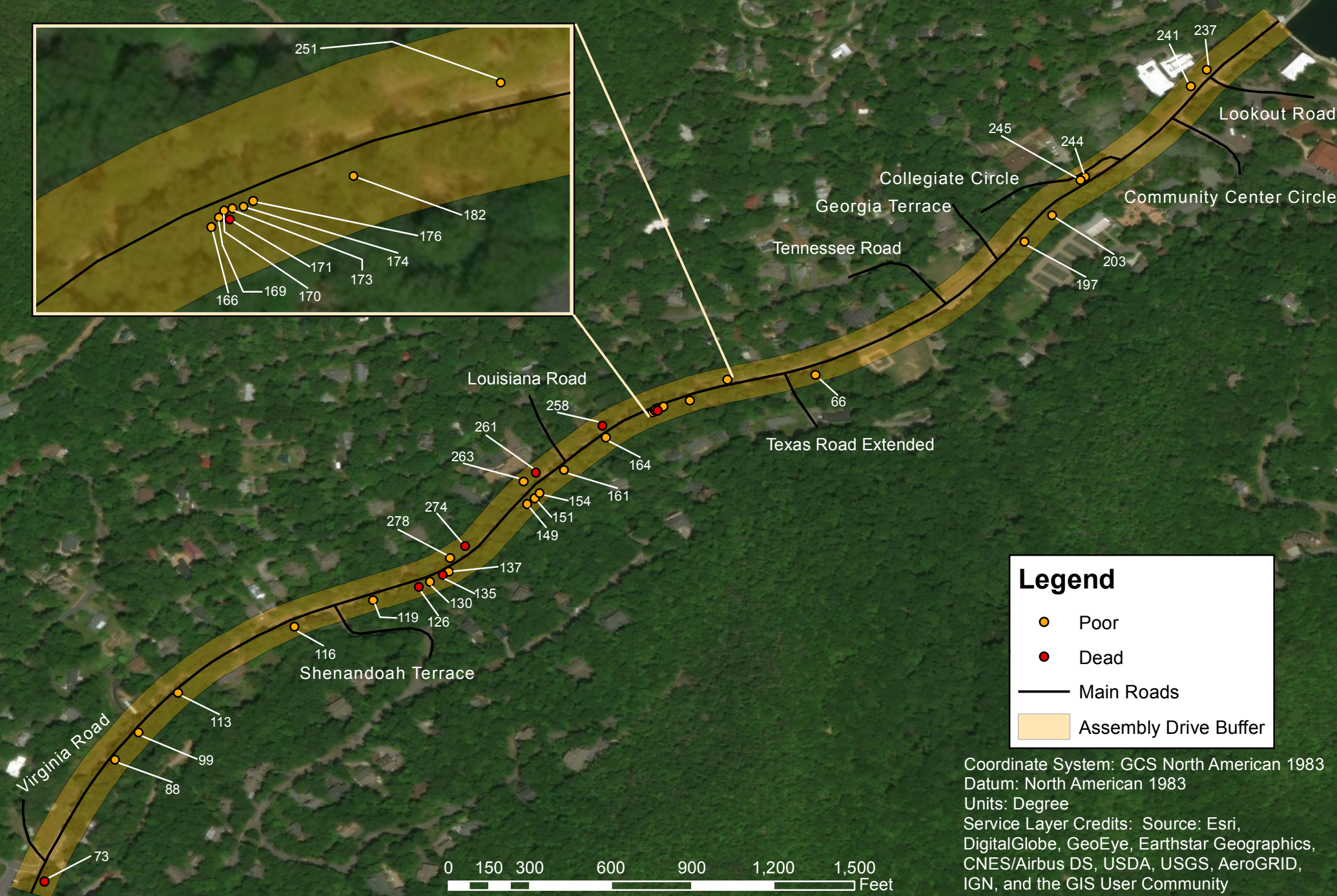
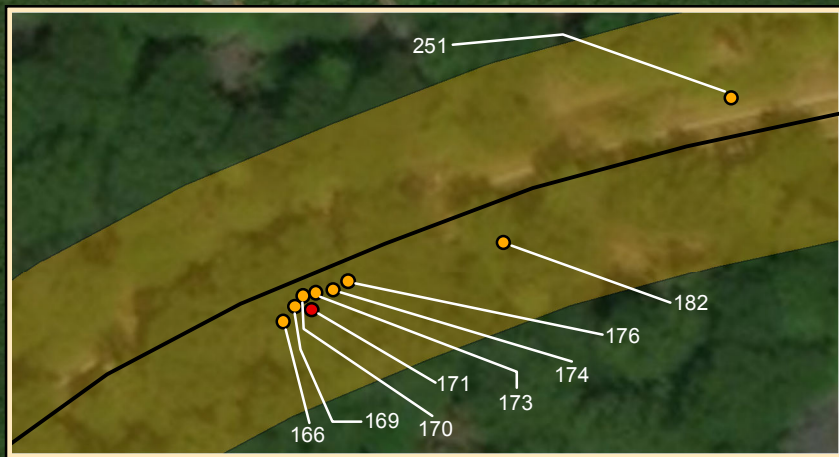


Legend

- Fair
- Main Roads
- ▭ Assembly Drive Buffer

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Poor Condition and Dead Trees on Assembly Drive Montreat, NC



Legend

Poor

Dead

Main Roads

Assembly Drive Buffer

Coordinate System: GCS North American 1983
Datum: North American 1983
Units: Degree
Service Layer Credits: Source: Esri,
DigitalGlobe, GeoEye, Earthstar Geographics,
CNES/Airbus DS, USDA, USGS, AeroGRID,
IGN, and the GIS User Community



Good Trees Along Assembly Drive

ID	Location	Species	Multistem	DBH	Tree Problem	Condition	Recommendation	Comments	x	y
53	Assembly Dr	Silver Maple	Yes (2)	18-24	Buried_Root_Collar,Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Routine_Prune,Monitor		-82.31173	35.63856
54	Assembly Dr	Pitch Pine	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31134	35.63928
55	Assembly Dr	Eastern Hemlock	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31126	35.63937
56	Assembly Dr	Eastern Hemlock	No	12-18		Good	Monitor		-82.31098	35.63982
57	Assembly Dr	White Oak	Yes (2)	30-36	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor,Insects_or_Disease,Leaning	Good	Prune_Schedule,Monitor		-82.31057	35.64022
58	Assembly Dr	Eastern Hemlock	No	24-30	Broken_Branches,Dead_Wood_Minor	Good	Monitor	Remove Ivy	-82.30928	35.64108
59	Assembly Dr	Eastern Hemlock	No	12-18	Buried_Root_Collar,Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30728	35.64189
62	Assembly Dr	White Oak	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30546	35.64334
63	Assembly Dr	Silver Maple	No	12-18		Good	Monitor		-82.30189	35.64477
64	Assembly Dr	Tulip Poplar	No	24-30	Buried_Root_Collar	Good	Monitor		-82.30162	35.64509
65	Assembly Dr	Bitternut Hickory	No	12-18	Buried_Root_Collar,Dead_Wood_Minor,Leaning	Good	Prune_Schedule,Monitor	Roots over rock next to creek	-82.29999	35.64645
67	Assembly Dr	Tulip Poplar	Yes (2)	36-42	Buried_Root_Collar,Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor,Included_Bark	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.31202	35.63865
68	Assembly Dr	Black Locust	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.31202	35.63865
69	Assembly Dr	Silver Maple	Yes (2)	18-24	Buried_Root_Collar,Co-dominant_Leaders/Forking,Dead_Wood_Minor,Leaning	Good	Prune_Schedule,Monitor		-82.31202	35.63865
71	Assembly Dr	Tulip Poplar	No	12-18	Buried_Root_Collar,Girdling_Roots,Dead_Wood_Minor	Good	Monitor		-82.31193	35.63839
72	Assembly Dr	Bitternut Hickory	No	18-24	Buried_Root_Collar,Girdling_Roots,Leaning	Good	Prune_Schedule,Monitor		-82.31193	35.63839
75	Assembly Dr	Pitch Pine	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.3118	35.63845
76	Assembly Dr	Ash (other)	No	24-30	Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.31169	35.63862
77	Assembly Dr	Pitch Pine	No	30-36	Girdling_Roots,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.31179	35.63867
78	Assembly Dr	Eastern Hemlock	No	18-24	Girdling_Roots,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.31179	35.63867
79	Assembly Dr	Southern Red Oak	No	18-24	Girdling_Roots,Dead_Wood_Minor,Decay/Fungus_in_crown	Good	Prune_Schedule,Monitor		-82.31179	35.63867
80	Assembly Dr	Tulip Poplar	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.31179	35.63867
81	Assembly Dr	American Sycamore	No	18-24	Buried_Root_Collar	Good	Monitor		-82.31165	35.63914
82	Assembly Dr	Pitch Pine	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31165	35.63914
83	Assembly Dr	Pitch Pine	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31165	35.63914
84	Assembly Dr	Eastern Hemlock	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31165	35.63914
85	Assembly Dr	Pitch Pine	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31165	35.63914
86	Assembly Dr	Yellow Birch	No	12-18	Leaning	Good	Monitor		-82.31165	35.63914
87	Assembly Dr	Tulip Poplar	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.31165	35.63914
89	Assembly Dr	Tulip Poplar	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.31133	35.63998
90	Assembly Dr	Pitch Pine	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31133	35.63998
91	Assembly Dr	Yellow Birch	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31133	35.63955
93	Assembly Dr	Yellow Birch	No	12-18	Buried_Root_Collar,Dead_Wood_Minor,Leaning	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.31133	35.63955
94	Assembly Dr	Tulip Poplar	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.31133	35.63955
95	Assembly Dr	Silver Maple	Yes (2)	12-18	Co-dominant_Leaders/Forking,Dead_Wood_Minor	Good	Monitor		-82.31115	35.63986
96	Assembly Dr	Yellow Birch	No	12-18	Dead_Wood_Minor,Leaning	Good	Monitor		-82.31103	35.63959
97	Assembly Dr	Tulip Poplar	No	12-18	Buried_Root_Collar	Good	Monitor		-82.31103	35.63959
98	Assembly Dr	Eastern Hemlock	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31087	35.64019
102	Assembly Dr	Southern Red Oak	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.31083	35.64022
103	Assembly Dr	Bitternut Hickory	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.31061	35.6401
104	Assembly Dr	Eastern White Pine	No	18-24	Crown_Dieback_Minor,Dead_Wood_Minor	Good	Monitor		-82.31075	35.63998
105	Assembly Dr	Tulip Poplar	No	18-24		Good	Monitor		-82.31075	35.63998
106	Assembly Dr	American Sycamore	Yes (2)	24-30	Dead_Wood_Minor,Leaning,Included_Bark	Good	Monitor,Arborist_Inspect		-82.31075	35.63998
107	Assembly Dr	Sugar Maple	Yes (2)	36-42	Co-dominant_Leaders/Forking,Dead_Wood_Minor,Insects_or_Disease,Leaning,Included_Bark	Good	Monitor		-82.31065	35.64027
108	Assembly Dr	Sugar Maple	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.31065	35.64027
109	Assembly Dr	Tulip Poplar	No	12-18		Good	Monitor		-82.31053	35.64032
110	Assembly Dr	Southern Red Oak	No	12-18	Dead_Wood_Minor,Leaning	Good	Monitor		-82.31053	35.64032
111	Assembly Dr	Eastern White Pine	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.31064	35.64016
112	Assembly Dr	Tulip Poplar	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.3101	35.64071
114	Assembly Dr	Silver Maple	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.31041	35.64052
115	Assembly Dr	Eastern Hemlock	No	24-30	Dead_Wood_Minor	Good	Monitor,Arborist_Inspect	Remove Ivy	-82.30922	35.64122
120	Assembly Dr	Tulip Poplar	No	18-24	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30818	35.64168
121	Assembly Dr	Bitternut Hickory	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30819	35.64184

Good Trees Along Assembly Drive

ID	Location	Species	Multistem	DBH	Tree Problem	Condition	Recommendation	Comments	x	y
123	Assembly Dr	Eastern Hemlock	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.3079	35.64172
124	Assembly Dr	Eastern Hemlock	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.3079	35.64172
125	Assembly Dr	Southern Red Oak	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.3078	35.64168
127	Assembly Dr	Southern Red Oak	No	24-30	Crown_Dieback_Minor,Dead_Wood_Minor,Leaning	Good	Prune_Schedule,Monitor,Arborist_Inspect		-82.3078	35.64168
129	Assembly Dr	Southern Red Oak	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30777	35.64177
133	Assembly Dr	Eastern Hemlock	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30769	35.64172
134	Assembly Dr	Silver Maple	No	12-18	Dead_Wood_Minor,Leaning	Good	Monitor		-82.30769	35.64172
138	Assembly Dr	Eastern Hemlock	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30776	35.64174
139	Assembly Dr	Southern Red Oak	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30776	35.64174
140	Assembly Dr	Southern Red Oak	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30776	35.64174
141	Assembly Dr	Southern Red Oak	No	24-30	Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30725	35.64189
142	Assembly Dr	Southern Red Oak	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30725	35.64189
143	Assembly Dr	White Oak	No	12-18	Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30706	35.64224
144	Assembly Dr	Southern Red Oak	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30713	35.64219
147	Assembly Dr	Silver Maple	No	12-18	Buried_Root_Collar	Good	Monitor		-82.30682	35.64243
148	Assembly Dr	Bitternut Hickory	No	12-18	Buried_Root_Collar	Good	Monitor		-82.30678	35.64244
152	Assembly Dr	Southern Red Oak	No	18-24	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30664	35.64279
153	Assembly Dr	Silver Maple	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30663	35.6427
155	Assembly Dr	Sugar Maple	No	18-24		Good	Monitor		-82.30668	35.64283
156	Assembly Dr	Eastern Hemlock	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30674	35.64261
157	Assembly Dr	Tulip Poplar	No	18-24	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30659	35.64256
158	Assembly Dr	Tulip Poplar	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30642	35.64256
159	Assembly Dr	Southern Red Oak	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30651	35.6428
160	Assembly Dr	Tulip Poplar	No	12-18	Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30649	35.6428
162	Assembly Dr	Southern Red Oak	No	30-36	Dead_Wood_Minor	Good	Monitor		-82.30666	35.64278
163	Assembly Dr	Tulip Poplar	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.3066	35.643
167	Assembly Dr	Eastern Hemlock	No	12-18	Buried_Root_Collar,Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30553	35.64333
168	Assembly Dr	White Oak	No	30-36	Dead_Wood_Minor	Good	Monitor		-82.30553	35.64333
172	Assembly Dr	White Oak	No	24-30	Dead_Wood_Minor	Good	Monitor	Remove ivy	-82.30551	35.64337
175	Assembly Dr	Silver Maple	Yes (2)	18-24	Co-dominant_Leaders/Forking,Dead_Wood_Minor	Good	Monitor		-82.30527	35.64348
177	Assembly Dr	White Oak	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30547	35.64347
179	Assembly Dr	Southern Red Oak	No	30-36	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30544	35.64348
180	Assembly Dr	Silver Maple	Yes (2)	12-18	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule		-82.30527	35.64348
183	Assembly Dr	Silver Maple	No	12-18		Good	Monitor		-82.30517	35.64338
184	Assembly Dr	Southern Red Oak	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30494	35.64358
185	Assembly Dr	Tulip Poplar	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30455	35.6437
186	Assembly Dr	Yellow Birch	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30495	35.64352
187	Assembly Dr	Silver Maple	No	12-18	Girdling_Roots,Dead_Wood_Minor	Good	Prune_Schedule		-82.30438	35.64357
188	Assembly Dr	Southern Red Oak	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30436	35.64353
189	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30437	35.64356
190	Assembly Dr	Yellow Birch	No	12-18	Dead_Wood_Minor,Leaning	Good	Monitor		-82.30401	35.64363
191	Assembly Dr	White Oak	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30383	35.64367
192	Assembly Dr	Tulip Poplar	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30369	35.64376
193	Assembly Dr	Tulip Poplar	No	36-42	Girdling_Roots,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30306	35.64409
194	Assembly Dr	Tulip Poplar	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30295	35.64427
195	Assembly Dr	Eastern Hemlock	No	24-30	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30285	35.64413
196	Assembly Dr	Eastern Hemlock	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30189	35.64488
198	Assembly Dr	American Sycamore	No	18-24		Good	Monitor		-82.30167	35.64512
199	Assembly Dr	Tulip Poplar	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30164	35.64511
200	Assembly Dr	Tulip Poplar	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30151	35.64526
201	Assembly Dr	Eastern Hemlock	Yes (4)	24-30	Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30166	35.64507
202	Assembly Dr	American Sycamore	No	36-42	Dead_Wood_Minor	Good	Monitor		-82.30165	35.64514
204	Assembly Dr	Tulip Poplar	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30098	35.64567

Good Trees Along Assembly Drive

ID	Location	Species	Multistem	DBH	Tree Problem	Condition	Recommendation	Comments	x	y
205	Assembly Dr	Tulip Poplar	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.3012	35.64547
206	Assembly Dr	Tulip Poplar	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30094	35.6456
207	Assembly Dr	Tulip Poplar	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30085	35.64574
208	Assembly Dr	Eastern Hemlock	No	24-30	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30074	35.64579
209	Assembly Dr	Eastern Hemlock	Yes (2)	24-30	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30078	35.6458
210	Assembly Dr	Black Locust	No	12-18	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30068	35.64584
211	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30054	35.64544
212	Assembly Dr	Eastern Hemlock	No	18-24	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30059	35.64574
213	Assembly Dr	Tulip Poplar	No	18-24	Buried_Root_Collar,Dead_Wood_Minor	Good	Monitor		-82.30061	35.64585
214	Assembly Dr	Eastern Hemlock	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30053	35.64593
215	Assembly Dr	Eastern Hemlock	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30049	35.64594
217	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30045	35.64598
219	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30044	35.64597
222	Assembly Dr	Southern Red Oak	No	24-30	Dead_Wood_Minor,Decay/Fungus_in_crown	Good	Prune_Schedule,Monitor		-82.30041	35.64598
223	Assembly Dr	Bitternut Hickory	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30035	35.64577
224	Assembly Dr	White Oak	No	18-24	Buried_Root_Collar,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.29938	35.64725
225	Assembly Dr	Tulip Poplar	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.2995	35.64718
227	Assembly Dr	White Ash	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.29956	35.64716
228	Assembly Dr	Southern Red Oak	No	30-36	Dead_Wood_Minor	Good	Monitor		-82.29962	35.64711
229	Assembly Dr	Eastern Hemlock	Yes (2)	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.29945	35.64694
233	Assembly Dr	Eastern White Pine	No	24-30	Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.29986	35.6469
234	Assembly Dr	Yellow Birch	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.29994	35.64681
235	Assembly Dr	Black Locust	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.29999	35.64681
236	Assembly Dr	Eastern White Pine	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line		-82.29995	35.6468
238	Assembly Dr	Sourwood	No	18-24	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Good	Monitor	Sourwood	-82.29997	35.64679
242	Assembly Dr	Oak (Other)	No	12-18	Dead_Wood_Minor	Good	Prune_Schedule		-82.30116	35.64573
243	Assembly Dr	Eastern Hemlock	No	24-30	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor	Remove Ivy	-82.30126	35.64567
246	Assembly Dr	Eastern Hemlock	No	18-24	Dead_Wood_Minor,Leaning	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor	Unmarked	-82.30111	35.64536
248	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line		-82.30451	35.64376
249	Assembly Dr	Eastern Hemlock	No	24-30	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line		-82.30456	35.64377
250	Assembly Dr	Tulip Poplar	No	24-30	Dead_Wood_Minor	Good	Monitor		-82.30471	35.6437
252	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor,Topped	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30505	35.64362
253	Assembly Dr	Atlas Cedar	Yes (2)	18-24	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line		-82.30572	35.64359
254	Assembly Dr	Atlas Cedar	Yes (3)	24-30	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line		-82.30573	35.64353
255	Assembly Dr	Atlas Cedar	Yes (2)	18-24	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Good	Prune_Away_From_Utility_Line		-82.30601	35.64329
256	Assembly Dr	Eastern Hemlock	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Away_From_Utility_Line,Monitor		-82.30563	35.6434
259	Assembly Dr	Eastern Hemlock	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Monitor		-82.30607	35.64329
260	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30677	35.64266
262	Assembly Dr	Tulip Poplar	No	24-30	Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30673	35.64279
264	Assembly Dr	Eastern Hemlock	No	18-24	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30684	35.64258
265	Assembly Dr	Southern Red Oak	No	18-24	Dead_Wood_Minor	Good	Monitor		-82.30702	35.64253
266	Assembly Dr	Tulip Poplar	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.30695	35.64254
267	Assembly Dr	White Oak	No	12-18	Dead_Wood_Minor,Leaning	Good	Monitor		-82.30697	35.64256
268	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.307	35.64249
269	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30725	35.64234
270	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30725	35.64225
271	Assembly Dr	White Oak	No	36-42	Broken_Branches,Dead_Wood_Minor	Good	Monitor		-82.30727	35.64229
272	Assembly Dr	Tulip Poplar	No	12-18	Dead_Wood_Minor	Good	Monitor		-82.3073	35.64218
273	Assembly Dr	White Ash	No	18-24	Broken_Branches,Crown_Dieback_Minor,Leaning	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.3073	35.64215
276	Assembly Dr	Tulip Poplar	No	30-36	Dead_Wood_Minor	Good	Monitor		-82.30753	35.64196
280	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor	Good	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor	Unmarked	-82.30775	35.6418
281	Assembly Dr	Bitternut Hickory	No	12-18	Dead_Wood_Minor	Good	Prune_Away_From_Utility_Line		-82.30792	35.64168

Fair Trees Along Assembly Drive

ID	Location	Species	Multistem	DBH	Tree Problem	Condition	Recommendation	Comments	x	y
60	Assembly Dr	White Oak	No	12-18	Buried_Root_Collar,Broken_Branches,Dead_Wood_Minor	Fair	Monitor	Signs of stress	-82.30694	35.6421
61	Assembly Dr	Sourwood	No	12-18	Buried_Root_Collar,Cavity,Crown_Dieback_Minor,Leaning	Fair	Remove_Schedule,Monitor	Sourwood	-82.30548	35.64333
70	Assembly Dr	Pitch Pine	No	12-18	Dead_Wood_Minor,Leaning	Fair	Monitor		-82.31202	35.63865
74	Assembly Dr	Bitternut Hickory	No	12-18	Buried_Root_Collar,Dead_Wood_Minor,Leaning	Fair	Monitor		-82.31193	35.63839
92	Assembly Dr	Tulip Poplar	No	18-24	Cavity,Dead_Wood_Minor	Fair	Monitor		-82.31133	35.63955
100	Assembly Dr	Southern Red Oak	No	18-24	Dead_Wood_Minor,Leaning	Fair	Monitor		-82.31081	35.6399
101	Assembly Dr	Black Locust	No	18-24	Buried_Root_Collar,Crown_Dieback_Minor,Dead_Wood_Major,Decay/Fungus_in_crown	Fair	Prune_Schedule,Monitor,Arborist_Inspect		-82.31078	35.63985
117	Assembly Dr	Eastern Hemlock	No	24-30	Buried_Root_Collar,Dead_Wood_Minor	Fair	Monitor		-82.30857	35.64149
118	Assembly Dr	Tulip Poplar	No	12-18	Buried_Root_Collar,Dead_Wood_Minor,Leaning	Fair	Monitor		-82.30848	35.64165
122	Assembly Dr	Southern Red Oak	No	24-30	Dead_Wood_Minor,Leaning	Fair	Prune_Schedule,Monitor		-82.30819	35.64184
128	Assembly Dr	Southern Red Oak	No	18-24	Dead_Wood_Minor	Fair	Monitor		-82.3078	35.64168
131	Assembly Dr	Southern Red Oak	No	12-18	Cavity,Dead_Wood_Minor	Fair	Monitor		-82.30777	35.64177
132	Assembly Dr	Southern Red Oak	No	18-24	Dead_Wood_Minor	Fair	Monitor		-82.30776	35.64171
136	Assembly Dr	Southern Red Oak	No	12-18	Dead_Wood_Minor	Fair	Monitor		-82.30777	35.6416
145	Assembly Dr	Southern Red Oak	No	12-18	Buried_Root_Collar	Fair	Monitor		-82.30695	35.64232
146	Assembly Dr	White Oak	No	18-24	Dead_Wood_Minor	Fair	Prune_Schedule,Monitor		-82.30695	35.64232
150	Assembly Dr	Black Cherry	No	12-18	Dead_Wood_Minor,Leaning	Fair	Prune_Schedule,Monitor		-82.30686	35.64249
165	Assembly Dr	Eastern Hemlock	No	18-24	Buried_Root_Collar,Broken_Branches,Dead_Wood_Minor	Fair	Prune_Schedule,Monitor		-82.30585	35.64344
178	Assembly Dr	Black Cherry	No	12-18	Fungus_or_decay_on_roots,Cavity,Dead_Wood_Minor,Leaning	Fair	Monitor		-82.30537	35.64346
181	Assembly Dr	Silver Maple	No	18-24	Cavity,Dead_Wood_Minor	Fair	Prune_Schedule,Monitor		-82.30525	35.6435
216	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor,Leaning	Fair	Monitor		-82.30048	35.64591
218	Assembly Dr	Tulip Poplar	No	30-36	Broken_Branches,Dead_Wood_Minor	Fair	Monitor		-82.30048	35.646
220	Assembly Dr	Tulip Poplar	No	18-24	Broken_Branches,Dead_Wood_Minor	Fair	Monitor		-82.30035	35.64577
221	Assembly Dr	Yellow Birch	No	12-18	Dead_Wood_Minor	Fair	Prune_Schedule,Monitor		-82.30051	35.64591
226	Assembly Dr	Southern Red Oak	No	18-24	Broken_Branches,Dead_Wood_Minor,Leaning	Fair	Monitor		-82.29953	35.64715
230	Assembly Dr	White Oak	No	36-42	Fungus_or_decay_on_roots,Broken_Branches,Cavity,Dead_Wood_Minor	Fair	Prune_Schedule,Monitor		-82.29981	35.64692
231	Assembly Dr	Eastern Hemlock	No	24-30	Broken_Branches,Dead_Wood_Minor	Fair	Prune_Schedule,Monitor		-82.29962	35.64677
232	Assembly Dr	Black Locust	No	12-18	Dead_Wood_Minor,Leaning	Fair	Prune_Schedule,Monitor		-82.29986	35.64687
239	Assembly Dr	White Ash	No	12-18	Buried_Root_Collar,Girdling_Roots,Included_Bark	Fair	Prune_Schedule,Prune_Away_From_Utility_Line		-82.29993	35.64682
240	Assembly Dr	Yellow Birch	No	12-18	Buried_Root_Collar,Girdling_Roots,Dead_Wood_Minor,Included_Bark	Fair	Prune_Schedule,Prune_Away_From_Utility_Line		-82.29996	35.64681
247	Assembly Dr	Eastern Hemlock	No	12-18	Broken_Branches,Dead_Wood_Minor,Topped	Fair	Prune_Schedule,Prune_Away_From_Utility_Line		-82.30428	35.64383
257	Assembly Dr	Eastern Hemlock	No	12-18	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Fair	Prune_Schedule,Prune_Away_From_Utility_Line	Remove Ivy	-82.30577	35.64334
275	Assembly Dr	Silver Maple	No	12-18	Broken_Branches,Dead_Wood_Minor,Leaning	Fair	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.30762	35.64194
277	Assembly Dr	Eastern Redbud	No	12-18	Co-dominant_Leaders/Forking,Broken_Branches,Dead_Wood_Minor	Fair	Monitor		-82.3076	35.64189
279	Assembly Dr	Eastern Redbud	No	12-18	Girdling_Roots,Co-dominant_Leaders/Forking,Broken_Branches,Cavity,Dead_Wood_Minor,Leaning	Fair	Prune_Schedule,Prune_Away_From_Utility_Line,Monitor		-82.3075	35.64187

TOWN OF MONTREAT
CONFLICT OF INTEREST POLICY

Adopted: June 14, 2007

Purpose: To establish conflict of interest ~~conduct~~ guidelines for all Town officials and employees that meet or exceed the requirements under state law and local policy when procuring goods (apparatus, supplies, materials, and equipment), services, and construction or repair projects paid for in part or whole by federal funds and required under 2 C.F.R. § 200.318(c)(1) in accordance with the following principles:

1. The proper operation of democratic government requires that public officials and employees be independent, impartial and responsible to the people;
2. Governmental decisions and policies shall be made through the proper channels of governmental structure;
3. Public office or employment shall not be used for personal gain; and,
4. The public shall have confidence in the integrity of its government.

It is the responsibility of everyone covered by this policy to act in the best interests of the Town at all times and to make certain that s/he refrains from placing himself or herself in positions that may produce conflicts of interest. When federal funds are involved, the employee responsible for managing the federal financial assistance award shall review the notice of award to identify any additional conflicts of interest prohibitions or requirements associated with the award, and shall notify all employees, officers, and agents, including subrecipients, of the requirements of this policy and any additional prohibitions or requirements.

Policy: This policy applies when procuring goods (apparatus, supplies, materials, and equipment), services, and construction or repair projects funded in part or whole with federal financial assistance (direct or reimbursed). This policy also applies to any subrecipient of the funds.

Definitions: For the purposes of this policy, the following definitions shall apply:

Business Entity means any business, proprietorship, firm, partnership, person in representation or fiduciary capacity, association, venture, trust or corporation which is organized for financial gain or profit.

Immediate Family Member means a spouse, mother, father, legal guardian, child, sister, brother, grandparent, grandchild and the various combinations of half, step, in-law and adopted relationships regardless of marital status.

TOWN OF MONTREAT
CONFLICT OF INTEREST POLICY
Adopted: June 14, 2007

Interest means any direct or indirect pecuniary or material benefit accruing as a result of a contract or transaction which is or may be the subject of an official act or action by or with the Town of Montreat.

Official Act or Action means any legislative, administrative, appointive or discretionary act of any appointed Board or Commission member or elected official, or any action passed by a majority vote of the Montreat Board of Commissioners.

Town Official means the Mayor, members of the Montreat Board of Commissioners, appointees to any Town Boards, Commissions or Committees, individuals appointed to represent or serve on behalf of the Town of Montreat on a board, commission or committee founded by an outside entity, and any full-time, part-time, regular, probationary, temporary, trainee or volunteer employee as defined under Article I, Section 7 of the Town of Montreat Personnel Policy.

Standards of Conduct:

A. Conflicts of Interest. In addition to the prohibition against self-benefiting from a public contract under G.S. 14-234, no officer, employee, or agent of the Town of Montreat may participate directly or indirectly in the selection, award, or administration of a contract if he or she has a real or apparent conflict of interest. A real or apparent conflict exists when any of the following parties has a financial or other interest in or receives a tangible personal benefit from a firm considered for award of a contract:

1. The employee, officer, or agent involved in the selection, award, or administration of a contract;
2. Any member of his or her immediate family;
3. His or her partner; or
4. An organization which employs or is about to employ any of these parties.

~~A. Scope. This policy shall apply to all Town Officials and may be amended from time to time by official action of the Montreat Board of Commissioners.~~

~~B. Interest in Contract or Agreement. No Town Official shall have or thereafter acquire an interest in any contract or agreement with the Town if s/he will privately benefit or profit from the contracting or undertaking.~~

The Mayor or any member of the Montreat Board of Commissioners who has an interest in an official act or action shall publicly disclose the nature of their interest and shall

TOWN OF MONTREAT
CONFLICT OF INTEREST POLICY
Adopted: June 14, 2007

withdraw from voting upon that matter if excused by a majority vote of the Montreat Board of Commissioners pursuant to N.C.G.S. §160A-75. Any officer, employee, or agent with an actual, apparent, or potential conflict of interest as defined in this policy shall report the conflict to his or her immediate supervisor. When federal funds are involved any such conflict shall be disclosed in writing to the federal award agency or pass-through entity in accordance with applicable Federal awarding agency policy.

- C. Use of Official Position. No Town Official shall use his or her official position or the Town's facilities for private or political gain. In addition, no Town Official shall misuse their status in such a way as to require, expect or accept favors from subordinate employees.
- D. Disclosure of Information. No Town Official shall use or disclose confidential information gained in the course of or by reason of his or her official position for the purposes of advancing:
1. His or her financial or personal interest;
 2. A Business Entity of which s/he is an owner(in part or in whole), an officer or a director; or
 3. The financial or personal interest of an Immediate Family Member or that of any other person.
- E. Incompatible Service. No Town Official shall engage in, or accept private employment or render service for private interest, when such employment or service is incompatible with the proper discharge of the Official's public duties or would tend to impair independence of judgment or action in the performance of his or her official duties unless otherwise permitted by law and unless disclosure is made and provided in this Policy. Before accepting private employment, the Town Official should consider whether such employment would negatively impact the Town.
- F. Gifts. In addition to the prohibition against accepting gifts and favors from vendors and contractors under G.S. 133-32, officers, employees, and agents of the Town of Montreat are prohibited from accepting or soliciting gifts, gratuities, favors, or anything of monetary value from contractors, suppliers, or parties to subcontracts. Items of nominal value valued at less than \$50.00 which fall into one of the following categories may be

TOWN OF MONTREAT
CONFLICT OF INTEREST POLICY
Adopted: June 14, 2007

accepted:

1. Promotional items;
2. Honorariums for participation in meetings; or
3. Meals furnished at banquets.

Any officer, employee or agent who knowingly accepts an item of nominal value allowed under this policy shall report the item to his or her immediate supervisor.

No Town Official shall solicit, accept or receive any gift having a value exceeding \$50.00, pursuant to Article V, Section 7 of the Town of Montreat Personnel Policy.

- G. Special Treatment. No Town Official shall grant any special consideration, treatment or advantage to any citizen or public or private entity beyond that which is available to every other citizen or entity.

~~Disclosure of Interest in Legislative Action: The Mayor or any member of the Montreat Board of Commissioners who has an interest in an official act or action shall publicly disclose the nature of their interest and shall withdraw from voting upon that matter if excused by a majority vote of the Montreat Board of Commissioners pursuant to N.C.G.S. §160A-75.~~

~~Violation: Employees violating this policy will be subject to discipline up to and including termination. Contractors violating this policy will result in termination of the contract and may not be eligible for future contract awards.~~

TOWN OF MONTREAT
CONFLICT OF INTEREST POLICY
Adopted: June 14, 2007



TOWN OF MONTREAT UNIFORM GUIDANCE PROCUREMENT POLICY

Adopted July 12, 2018 as Administrative Policy for all Town Employees
Effective July 1, 2018

I. Purpose

The purpose of this policy is to establish guidelines that meet or exceed the procurement requirements for purchases of goods (apparatus, supplies, materials, and equipment), services, and construction or repair projects when federal funds are being used in whole or in part to pay for the cost of the contract. To the extent that other sections of procurement policies and procedures adopted by the Town of Montreat are more restrictive than those contained in this policy, local policies and procedures shall be followed.

II. Policy

- A. **Application of Policy.** This policy applies to contracts for purchases, services, and construction or repair work funded with federal financial assistance (direct or reimbursed). The requirements of this Policy also apply to any subrecipient of the funds.

All federally funded projects, loans, grants, and sub-grants, whether funded in part or wholly, are subject to the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for federal awards (Uniform Guidance) codified at 2 C.F.R. Part 200 unless otherwise directed in writing by the federal agency or state pass-through agency that awarded the funds.

- B. **Compliance with Federal Law.** All procurement activities involving the expenditure of federal funds must be conducted in compliance with the Procurement Standards codified in 2 C.F.R. § 200.317 through § 200.326 unless otherwise directed in writing by the federal agency or state pass-through agency that awarded the funds. The Town of Montreat will follow all applicable local, state, and federal procurement requirements

when expending federal funds. Should the Town of Montreat have more stringent requirements, the most restrictive requirement shall apply so long as it is consistent with state and federal law.

- C. **Contract Award.** All contracts shall be awarded only to the lowest responsive responsible bidder possessing the ability to perform successfully under the terms and conditions of the contract.
- D. **No Evasion.** No contract may be divided to bring the cost under bid thresholds or to evade any requirements under this Policy or state and federal law.
- E. **Contract Requirements.** All contracts paid for in whole or in part with federal funds shall be in writing. The written contract must include or incorporate by reference the provisions required under 2 C.F.R § 200.326 and as provided for under 2 C.F.R. Part 200, Appendix II.
- F. **Contractors' Conflict of Interest.** Designers, suppliers, and contractors that assist in the development or drafting of specifications, requirements, statements of work, invitation for bids or requests for proposals shall be excluded from competing for such requirements.
- G. **Approval and Modification.** The administrative procedures contained in this Policy are administrative and may be changed as necessary at the staff level to comply with state and federal law.

III. General Procurement Standards and Procedures:

Either the Purchasing Department or the Requesting Department shall procure all contracts in accordance with the requirements of this Section of the Policy.

- A. **Necessity.** Purchases must be necessary to perform the scope of work and must avoid acquisition of unnecessary or duplicative items. The Purchasing Department and/or the Requesting Department should check with the federal surplus property agency prior to buying new items when feasible and less expensive. Strategic sourcing should be considered with other departments and/or agencies who have similar needs to consolidate procurements and services to obtain better pricing.
- B. **Clear Specifications.** All solicitations must incorporate a clear and accurate description of the technical requirements for the materials, products, or services to be procured, and shall include all other requirements which bidders must fulfill and all other factors to be used in evaluating bids or proposals. Technical requirements must not contain features that restrict competition.

- C. Notice of Federal Funding.** All bid solicitations must acknowledge the use of federal funding for the contract. In addition, all prospective bidders or offerors must acknowledge that funding is contingent upon compliance with all terms and conditions of the funding award.
- D. Compliance by Contractors.** All solicitations shall inform prospective contractors that they must comply with all applicable federal laws, regulations, executive orders, and terms and conditions of the funding award.
- E. Fixed Price.** Solicitations must state that bidders shall submit bids on a fixed price basis and that the contract shall be awarded on this basis unless otherwise provided for in this Policy. Cost plus percentage of cost contracts are prohibited. Time and materials contracts are prohibited in most circumstances. Time and materials contracts will not be used unless no other form of contract is suitable and the contract includes a “Not to Exceed” amount. A time and materials contract shall not be awarded without express written permission of the federal agency or state pass-through agency that awarded the funds.
- F. Use of Brand Names.** When possible, performance or functional specifications are preferred to allow for more competition leaving the determination of how to reach the required result to the contractor. Brand names may be used only when it is impractical or uneconomical to write a clear and accurate description of the requirement(s). When a brand name is listed, it is used as reference only and “or equal” must be included in the description.
- G. Lease versus Purchase.** Under certain circumstances, it may be necessary to perform an analysis of lease versus purchase alternatives to determine the most economical approach.
- H. Dividing Contract for M/WBE Participation.** If economically feasible, procurements may be divided into smaller components to allow maximum participation of small and minority businesses and women business enterprises. The procurement cannot be divided to bring the cost under bid thresholds or to evade any requirements under this Policy.
- I. Documentation.** Documentation must be maintained by the Purchasing Department and/or the Requesting Department detailing the history of all procurements. The documentation should include the procurement method used, contract type, basis for contractor selection, price, sources solicited, public notices, cost analysis, bid documents, addenda, amendments, contractor’s responsiveness, notice of award, copies of notices to unsuccessful bidders or offerors, record of protests or disputes, bond documents, notice to proceed, purchase order, and contract. All documentation relating to the award of any contract must be made available to the granting agency upon request.

- J. Cost Estimate.** For all procurements costing \$250,000 or more, the Finance Department and/or Requesting Department shall develop an estimate of the cost of the procurement prior to soliciting bids. Cost estimates may be developed by reviewing prior contract costs, online review of similar products or services, or other means by which a good faith cost estimate may be obtained. Cost estimates for construction and repair contracts may be developed by the project designer.
- K. Contract Requirements.** The Requesting Department must prepare a written contract incorporating the provisions referenced in Section II.C of this Policy.
- L. Debarment.** No contract shall be awarded to a contractor included on the federally debarred bidder's list.
- M. Contractor Oversight.** The Requesting Department receiving the federal funding must maintain oversight of the contract to ensure that contractor is performing in accordance with the contract terms, conditions, and specifications.
- N. Open Competition.** Solicitations shall be prepared in a way to be fair and provide open competition. The procurement process shall not restrict competition by imposing unreasonable requirements on bidders, including but not limited to unnecessary supplier experience, excessive or unnecessary bonding, specifying a brand name without allowing for "or equal" products, or other unnecessary requirements that have the effect of restricting competition.
- O. Geographic Preference.** No contract shall be awarded on the basis of a geographic preference.

IV. Specific Procurement Procedures

Either the Purchasing Department or the Requesting Department shall solicit bids in accordance with the requirements under this Section of the Policy based on the type and cost of the contract.

- A. Service Contracts** (except for architectural/engineering professional services) and **Purchase Contracts costing less than \$10,000** shall be procured using the Uniform Guidance "micro-purchase" procedure (2 C.F.R. § 200.320(a)) as follows:
 - 1. The contract may be awarded without soliciting pricing or bids if the price of the goods or services is considered to be fair and reasonable.
 - 2. To the extent practicable, purchases must be distributed among qualified suppliers.

B. Service Contracts (except for architectural/engineering professional services) and **Purchase Contracts costing \$10,000 up to \$90,000** shall be procured using the Uniform Guidance “small purchase” procedure (2 C.F.R. § 200.320(b)) as follows:

1. Obtain price or rate quotes from an “adequate number” of qualified sources (a federal grantor agency might issue guidance interpreting “adequate number,” so the Requesting Department should review the terms and conditions of the grant award documents to confirm whether specific guidance has been issued).
2. Take affirmative steps to solicit price quotes from minority/women owned businesses vendors and suppliers as required under 2 C.F.R. § 200.321.
3. Cost or price analysis is not required prior to soliciting bids.
4. Award the contract on a fixed-price basis (a not-to-exceed basis is permissible for service contracts where obtaining a fixed price is not feasible).
5. Award the contract to the lowest responsive, responsible bidder.

C. Service Contracts (except for architectural/engineering professional services) and **Purchase Contracts costing \$90,000 and above** shall be procured using a combination of the most restrictive requirements of the Uniform Guidance “sealed bid” procedure (2 C.F.R. § 200.320(c)) and state formal bidding procedures (G.S. 143-129) as follows:

1. Cost or price analysis is required prior to soliciting bids.
2. Complete specifications or purchase description must be made available to all bidders.
3. The bid must be formally advertised in a newspaper of general circulation for at least seven full days between the date of the advertisement and the date of the public bid opening. Electronic-only advertising must be authorized by the governing board. The advertisement must state the date, time, and location of the public bid opening, indicate where specifications may be obtained, and reserve to the governing board the right to reject any or all bids only for “sound documented reasons.”
4. Take affirmative steps to solicit price quotes from minority/women owned business vendors and suppliers as required under 2 C.F.R. § 200.321.
5. Open bids at the public bid opening on the date, time, and at the location noticed in the public advertisement. All bids must be submitted sealed. A minimum of 2 bids must be received in order to open all bids.
6. Award the contract to the lowest responsive, responsible bidder on a fixed-price basis. Governing board approval is required for purchase contracts unless the governing board has delegated award authority to an individual official or employee. Any and all bids may be rejected only for “sound documented reasons.”

D. Service Contracts (except for architectural/engineering professional services) **costing \$250,000 and above** may be procured using the Uniform Guidance “competitive proposal” procedure (2 C.F.R. § 200.320(d)) when the “sealed bid” procedure is not appropriate for the particular type of service being sought. The procedures are as follows:

1. A Request for Proposals (RFP) must be publicly advertised. Formal advertisement in a newspaper is not required so long as the method of advertisement will solicit proposals from an “adequate number” of qualified firms.
2. Take affirmative steps to solicit price quotes from minority/women owned business vendors and suppliers as provided under 2 C.F.R. § 200.321.
3. Identify evaluation criteria and relative importance of each criteria (criteria weight) in the RFP.
4. Consider all responses to the publicized RFP to the maximum extent practical.
5. Must have a written method for conducting technical evaluations of proposals and selecting the winning firm.
6. Award the contract to the responsible firm with most advantageous proposal taking into account price and other factors identified in the RFP. Governing board approval is not required.
7. Award the contract on a fixed-price or cost-reimbursement basis.

E. Construction and repair contracts costing less than \$10,000 shall be procured using the Uniform Guidance “micro-purchase” procedure (2 C.F.R. § 200.320(a)) as follows:

1. The contract may be awarded without soliciting pricing or bids if the price of the goods or services is considered to be fair and reasonable.
2. To the extent practicable, contracts must be distributed among qualified suppliers.

F. Construction and repair contracts costing \$10,000 up to \$250,000 shall be procured using the Uniform Guidance “small purchase” procedure (2 C.F.R. § 200.320(b)) as follows:

1. Obtain price or rate quotes from an “adequate number” of qualified sources (a federal grantor agency might issue guidance interpreting “adequate number,” so the requesting department should review the terms and conditions of the grant award documents to confirm whether specific guidance has been issued).
2. Take affirmative steps to solicit price quotes from M/WBE vendors and suppliers as required under 2 C.F.R. § 200.321.
3. Cost or price analysis is not required prior to soliciting bids, although price estimates may be provided by the project designer.
4. Award the contract on a fixed-price or not-to-exceed basis.
5. Award the contract to the lowest responsive, responsible bidder. Governing board approval is not required.

G. Construction and repair contracts costing \$250,000 up to \$500,000 shall be procured using the Uniform Guidance “sealed bid” procedure (2 C.F.R. § 200.320(c)) as follows:

1. Cost or price analysis is required prior to soliciting bids (this cost estimate may be provided by the project designer).
2. Complete specifications must be made available to all bidders.
3. Publically advertise the bid solicitation for a period of time sufficient to give bidders notice of opportunity to submit bids (formal advertisement in a

newspaper is not required so long as other means of advertising will provide sufficient notice of the opportunity to bid). The advertisement must state the date, time, and location of the public bid opening, and indicate where specifications may be obtained.

4. Take affirmative steps to solicit price quotes from M/WBE vendors and suppliers as provided under 2 C.F.R. § 200.321.
5. Open the bids at the public bid opening on the date, time, and at the location noticed in the public advertisement. All bids must be submitted sealed. A minimum of 2 bids must be received in order to open all bids.
6. A 5% bid bond is required of all bidders. Performance and payment bonds of 100% of the contract price is required of the winning bidder.
7. Award the contract on a firm fixed-price basis.
8. Award the contract to the lowest responsive, responsible bidder. Governing board approval is not required. Any and all bids may be rejected only for “sound documented reasons.”

H. Construction and repair contracts costing \$500,000 and above shall be procured using a combination of the most restrictive requirements of the Uniform Guidance “sealed bid” procedure (2 C.F.R. § 200.320(c)) and state formal bidding procedures (G.S. 143-129) as follows:

1. Cost or price analysis is required prior to soliciting bids (this cost estimate should be provided by the project designer).
2. Complete specifications must be made available to all bidders.
3. Formally advertise the bid in a newspaper of general circulation for at least seven full days between the date of the advertisement and the date of the public bid opening. Electronic-only advertising must be authorized by the governing board. The advertisement must state the date, time, and location of the public bid opening, indicate where specifications may be obtained, and reserve to the governing board the right to reject any or all bids only for “sound documented reasons.”
4. Take affirmative steps to solicit price quotes from minority/women owned vendors and suppliers as provided under 2 C.F.R. § 200.321.
5. Open the bids at the public bid opening on the date, time, and at the location noticed in the public advertisement. All bids must be submitted sealed and in paper form. A minimum of 3 bids must be received in order to open all bids.
6. A 5% bid bond is required of all bidders (a bid that does not include a bid bond cannot be counted toward the 3-bid minimum requirement). Performance and payment bonds of 100% of the contract price is required of the winning bidder.
7. Award the contract on a firm fixed-price basis.
8. Award the contract to the lowest responsive, responsible bidder. Governing board approval is required and cannot be delegated. The governing board may reject and all bids only for “sound documented reasons.”

- I. Construction or repair contracts involving a building costing \$300,000 and above** must comply with the following additional requirements under state law:
1. Formal HUB (historically underutilized business) participation required under G.S. 143-128.2, including local government outreach efforts and bidder good faith efforts, shall apply.
 2. Separate specifications shall be drawn for the HVAC, electrical, plumbing, and general construction work as required under G.S. 143-128(a).
 3. The project shall be bid using a statutorily authorized bidding method (separate-prime, single-prime, or dual bidding) as required under G.S. 143-129(a1).
- J. Contracts for Architectural and Engineering Services costing under \$250,000** shall be procured using the state “Mini-Brooks Act” requirements (G.S. 143-64.31) as follows:
1. Issue a Request for Qualifications (RFQ) to solicit qualifications from qualified firms (formal advertisement in a newspaper is not required). Price (other than unit cost) shall not be solicited in the RFQ.
 2. Take affirmative steps to solicit price quotes from M/WBE vendors and suppliers as provided for under 2 C.F.R. § 200.321.
 3. Evaluate the qualifications of respondents based on the evaluation criteria developed by the Purchasing Department and/or Requesting Department.
 4. Rank respondents based on qualifications and select the best qualified firm. Price cannot be a factor in the evaluation. Preference may be given to in-state (but not local) firms.
 5. Negotiate fair and reasonable compensation with the best qualified firm. If negotiations are not successfully, repeat negotiations with the second-best qualified firm.
 6. Award the contract to best qualified firm with whom fair and reasonable compensation has been successfully negotiated. Governing board approval is not required.
- K. Contracts for Architectural and Engineering Services costing \$250,000 or more** shall be procured using the Uniform Guidance “competitive proposal” procedure (2 C.F.R. § 200.320(d)(5)) as follows:
1. Publically advertise a Request for Qualifications (RFQ) to solicit qualifications from qualified firms (formal advertisement in a newspaper is not required). Price (other than unit cost) shall not be solicited in the RFQ.
 2. Take affirmative steps to solicit price quotes from M/WBE vendors and suppliers as provided under 2 C.F.R. § 200.321.
 3. Identify the evaluation criteria and relative importance of each criteria (the criteria weight) in the RFQ.
 4. Proposals must be solicited from an “adequate number of qualified sources” (an individual federal grantor agency may issue guidance interpreting “adequate number”).
 5. Must have a written method for conducting technical evaluations of proposals and selecting the best qualified firm.

6. Consider all responses to the publicized RFQ to the maximum extent practical.
7. Evaluate qualifications of respondents to rank respondents and select the most qualified firm. Preference may be given to in-state (but not local) firms provided that granting the preference leaves an appropriate number of qualified firms to compete for the contract given the nature and size of the project.
8. Price cannot be a factor in the initial selection of the most qualified firm.
9. Once the most qualified firm is selected, negotiate fair and reasonable compensation. If negotiations are not successfully, repeat negotiations with the second-best qualified firm.
10. Award the contract to best qualified firm with whom fair and reasonable compensation has been successfully negotiated. Governing board approval is not required.

V. Exceptions

Non-competitive contracts are allowed **only** under the following conditions and with the written approval of the federal agency or state pass-through agency that awarded the federal funds:

- A. Sole Source.** A contract may be awarded without competitive bidding when the item is available from only one source. The Purchasing Department and/or Requesting Department shall document the justification for and lack of available competition for the item. A sole source contract must be approved by the governing board.
- B. Public Exigency.** A contract may be awarded without competitive bidding when there is a public exigency. A public exigency exists when there is an imminent or actual threat to public health, safety, and welfare, and the need for the item will not permit the delay resulting from a competitive bidding.
- C. Inadequate Competition.** A contract may be awarded without competitive bidding when competition is determined to be inadequate after attempts to solicit bids from a number of sources as required under this Policy does not result in a qualified winning bidder.
- D. Federal Contract.** A contract may be awarded without competitive bidding when the purchase is made from a federal contract available on the U.S. General Services Administration schedules of contracts.
- E. Awarding Agency Approval.** A contract may be awarded without competitive bidding with the express written authorization of the federal agency or state pass-through agency that awarded the federal funds so long as awarding the contract without competition is consistent with state law.

Budget #	Account Number	Account Name	Original Budget in Ord.	Increase	Decrease	Revised Budget in Ord.	Note
24	10-00-4100-570	INTER-FUND TRANS TO WATER	19,751.00	10,491.00		30,242.00	
	10-10-5400-452	CONTRACT SERVICE-TECHNICAL PLANNIN	25,596.00	10,491.00		36,087.00	
	10-00-5000-480	INDIRECT COST ALLOCATION TO WF	10,491.00		20,982.00	(10,491.00)	
			55,838.00	20,982.00	20,982.00	55,838.00	
26	30-91-3900-900	INTER-FUND TRANS FROM GENERAL	(19,751.00)	(10,491.00)		(30,242.00)	
	30-91-3905-900	FUND BALANCE APPROPRIATED	-	(2,909.00)		(2,909.00)	
	30-91-8100-540	INTEREST EXPENSE	-	15,700.00		15,700.00	Will not match the ord. which is \$18,000
			(19,751.00)	2,300.00	-	(17,451.00)	
				CHECK			
		General Revenues	(1,919,447.00)	-	-	(1,919,447.00)	
		General Expenses	1,919,447.00	20,982.00	20,982.00	1,919,447.00	
		Difference	-	20,982.00	20,982.00	-	
		Water Revenues	(356,611.00)	(13,400.00)		(370,011.00)	
		Water Expenses	354,311.00	15,700.00		370,011.00	
		Difference	(2,300.00)	2,300.00	-	-	

Budget #	Account Number	Account Name	Original Budget in Ord.	Increase	Decrease	Revised Budget in Ord.	Note
24	10-00-4100-570	INTER-FUND TRANS TO WATER	19,751.00	10,491.00		30,242.00	
	10-10-5400-452	CONTRACT SERVICE-TECHNICAL PLANNIN	25,596.00	10,491.00		36,087.00	
	10-00-5000-480	INDIRECT COST ALLOCATION TO WF	10,491.00		20,982.00	(10,491.00)	
			55,838.00	20,982.00	20,982.00	55,838.00	

26	30-91-3900-900	INTER-FUND TRANS FROM GENERAL	(19,751.00)	(10,491.00)		(30,242.00)	
	30-91-3905-900	FUND BALANCE APPROPRIATED	-	(2,909.00)		(2,909.00)	
	30-91-8100-540	INTEREST EXPENSE	-	15,700.00		15,700.00	Will not match the ord. which is \$18,000
			(19,751.00)	2,300.00	-	(17,451.00)	

CHECK							
	General Revenues	(1,919,447.00)				(1,919,447.00)	
	General Expenses	1,919,447.00	20,982.00	20,982.00		1,919,447.00	
	Difference	-	20,982.00	20,982.00		-	
	Water Revenues	(356,611.00)	(13,400.00)			(370,011.00)	
	Water Expenses	354,311.00	15,700.00			370,011.00	
	Difference	(2,300.00)	2,300.00	-		-	

