Town of Altavista

Meeting Agenda
Town Council Meeting

J.R. "Rudy" Burgess Town Hall
510 7th Street
Altavista, VA 24517

Tuesday, November 10, 2015

7:00 PM Regular Council Meeting

1. **Call to Order**
2. **Invocation**
3. **Approval of Agenda**
4. **Recognitions and Presentations**
   a. **Employee Milestones**
5. **Public Comment**

   This portion of the meeting is to receive comments from the public on items not included in this agenda. Citizens should sign up prior to the start of the meeting. The Council is interested in hearing your concerns, but may take no action or deliberate on the subject matter at this time. Topics requiring further investigation will be referred to the appropriate town officials or staff and may be scheduled for a future agenda. Each speaker limited to 3 minutes with a total of 15 minutes allotted for this purpose.

6. **Consent Agenda**

   NOTE: All items under the Consent Agenda are considered routine by the Town Council and will be enacted by one motion and vote. There will be no separate discussion of items unless a request by a Council Member is made prior to the time of the Town Council voting on the motion. In such an event, the item will be removed, without debate, from the general order of business and considered in its normal sequence.

   a. Approval of Minutes – *Regular Meeting October 13th; Work Session October 27th*
   b. Acceptance of Monthly Finance Reports
      i. Invoices
      ii. Revenues & Expenditures Report
      iii. Reserve Balance/Investment Report
   c. Departmental Reports

7. **Public Hearings (None Scheduled)**

8. **New/Unfinished Business**
   a. Broad Street (1000 Block) Sidewalk Improvements (David Garrett)

8. New/Unfinished Business (Continued)

b. Lynch Road Sewer Extension (David Garrett)

c. FY2017 Budget Calendar

d. ACTS Bus Wrap (Dan Witt)

e. Planning Commission Recommendations (Dan Witt)

f. Main Street Waterline (Project 1B) Bids

g. Staunton River Canoe Launch (Dan Witt)

h. WWTP EOP – University of Iowa berm request

i. Economic Development Marketing Update (Dennis Jarvis)

9. Reports

a. Town Manager's Report

10. Informational Items/Late Arriving Matters

a. Correspondence/Articles

i. EMS Letter - Contribution

b. Calendars - November & December

11. Matters from Council

12. **Closed Session**

Section 2.2-3711 (A)(5) – Discussion concerning a prospective business or industry or the expansion of an existing business of industry where no previous announcement has been made of the business' or industry's interest in locating or expanding its facilities in the community.

13. Adjournment

UPCOMING COUNCIL MEETINGS/ACTIVITIES

(All meetings are at Town Hall unless otherwise noted)

Tuesday, November 24th @ 5:00 p.m. Town Council Work Session

Tuesday, December 8th @ 7:00 p.m. Town Council Regular Meeting

Tuesday, December 22nd @5:00 p.m. Town Council Work Session

Notice to comply with Americans with Disabilities Act: Special assistance is available for disabled persons addressing Town Council. Efforts will be made to provide adaptations or accommodations based on individual needs of qualified individuals with disability, provided that reasonable advance notification has been received by the Town Clerk's Office. For assistance, please contact the Town Clerk's Office, Town of Altavista, 510 Seventh Street, Altavista, VA 24517 or by calling (434) 369-5001.

Thank you for taking the time to participate in your Town Council meeting. The Mayor and Members of Council invite and encourage you to attend whenever possible because good government depends on the interest and involvement of citizens.

Agenda Item: 4a

ALTAVISTA TOWN COUNCIL
Agenda Item Summary - Staff Report

Date: November 10, 2015

To: Mayor Mattox and Council members

FROM: Waverly Coggsdale, Town Manager

SUBJECT: Recognitions/Presentations

Employee Recognitions

- Gary David – WWTP - 5 years of service to the Town (November 3rd)

Presentation(s)

None Scheduled.

Agenda Item: 6 a-c

ALTAVISTA TOWN COUNCIL
Agenda Item Summary - Staff Report

Date: November 10, 2015

To: Mayor Mattox and Council members

FROM: Waverly Coggsdale, Town Manager

SUBJECT: Consent Agenda

One motion to approve the Consent Agenda will include each motion for the specific items listed below:

Minutes: *Regular Meeting October 13th; and Work Session October 27th*
(Motion to Approve the Minutes as presented or amended.)

Monthly Finance Reports: *Invoices, Revenues & Expenditures Report, and Reserve Balance/Investment Report*
(Motion to Accept the Finance Reports)

Departmental Reports
(Motion to accept Departmental Reports)

Regular Council Meeting—October 13, 2015

The meeting of the Council of the Town of Altavista was held in the Council Chambers of the J.R. Burgess Municipal Building, 510 Seventh Street on October 13, 2015 at 7:00 p.m.

1. Mayor Mattox called the meeting to order and presided.

   Mayor Mattox requested a moment of silence in memory of Kevin Mason, an Altavista native who died in a military plane crash in Afghanistan.

2. Pastor David Sage, Grace Community Church, gave the invocation.

   Council members present: Mayor Michael Mattox, Mrs. Micki Brumfield, Mrs. Beverley Dalton, Mr. Charles Edwards, Mr. Tracy Emerson, Mr. Timothy George, Mr. Jay Higginbotham

   Also present: Mr. Daniel Witt, Assistant Town Manager; Mrs. Tobie Shelton, Finance Director; Mr. Dennis Jarvis, Economic Dev. Director; Mr. David Garrett, Public Works/Utilities Director; Mr. John Eller, Town Attorney; Mrs. Mary Hall, Administration

3. Mayor Mattox asked if there were any questions regarding the amended agenda; Main Street Waterline Update and Habitat for Humanity Request for Street Closure.

   A motion was made by Mrs. Dalton, seconded by Mr. George, to approve the agenda as amended.

   Motion carried:

VOTE:		
	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

4. Recognitions and Presentations

   a. Employee Milestones

      Mayor Mattox advised of two employees at the Wastewater Treatment Plant who have reached milestones: Mr. Andy Wyatt has 25 years of service to the Town and Mr. Steve Miller will be retiring October 31, 2015.

5. Public Comment

   Mayor Mattox asked if anyone would like to speak on anything not listed on the agenda.

   Ms. Gwen Wells, 621 B Main Street and owner of Mitchell's Salon on 7th Street, addressed Council in favor of the proposed boat launch on the Staunton River. On behalf of her friends from Pittsylvania, Lynchburg and the Buchanan she asked Council to please consider the boat launch. People come into town to fill up their coolers, buy gas and snacks. She noted finding launching locations are more and more difficult as landowners have prohibited boats from accessing the river via their

property. Having a boat launch may call for a canoe delivery service in town. Ms. Wells mentioned a mountain bike trail would also be nice for the outdoor enthusiast. Altavista has outstanding natural resources and she would love for these to be shared.

Mr. Mitch Bernard, 1701 Avondale Drive, addressed Council advising he had sent each of them an email in regards to the Water Plant Emergency and is surprised at not receiving a response from Council. He referred to the damage that occurred at the Water Plant as a result of a probable water hammer according to the Hazon Sawyer engineering investigation. Mr. Bernard stated he wrote to them, requested the report and was advised they would forward the request to town staff. He received a packet of information from the town manager but this information does not deal with how the damage occurred. He read the Hazon Sawyer report and is in agreement with what is said likely happened but is surprised there is no analysis of the engineering report from town staff. Mr. Bernard stated he sent an additional email in which Mr. Coggsdale requested they meet. Mr. Bernard noted he has not received a reply after a week adding the Freedom of Information Act requires a response within five days. Mr. Bernard again expressed his surprise at not being contacted by Council.

6. Consent Agenda

a) Minutes- Regular Meeting September 8th; Work Session September 22nd –The Council approved the minutes of the Council meeting and work session.
b) Monthly Finance Reports-Council approved the monthly reports
    i. Invoices
    ii. Revenues & Expenditures Report
    iii. Reserve Balance/Investment Report
c) Departmental Reports-Council approved the departmental reports
d) Delinquent Reports-Council approved the tax write-offs as presented.
e) Budget Amendment-Police Weapons Exchange-Council approved the budget amendment for the Police Weapons exchange.

A motion was made by Mr. Emerson, seconded by Mrs. Dalton, to approve the items as listed on the consent agenda.

Motion carried:

VOTE:	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

7. Public Hearings

8. New/Unfinished Business

a. Chamber of Commerce-Christmas Parade Request/Update

Mrs. Heather Reynolds, President of the Altavista Chamber of Commerce, addressed Council on behalf of the Altavista Chamber of Commerce, Altavista Rotary Club and Altavista on Track and requested permission to organize the Altavista Christmas parade scheduled for December 3, 2015 at 7:00 p.m. Mrs. Reynolds noted the theme for this year's parade is "Season of Lights".

A motion was made by Mr. Edwards, seconded by Mrs. Dalton, to approve as presented the Altavista Chamber of Commerce's request to organize the annual Christmas Parade on Thursday, December 3, 2015.

Motion carried:

VOTE:	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

Mrs. Reynolds gave a brief update of the activities of the Altavista Chamber. She thanked Mr. Michael Hudson, Director of Avoca Museum and the Town of Altavista for the usage of the Avoca grounds for the TGIF events. She also thanked Council, Lt. Kenneth Moorefield and Captain Barry Stocks for helping with the Uncle Billy's Day festivities. She addressed an area of concern with the traffic and parking situation as one lot (at the Lane building) has been lost which created a huge problem. She advised they are working to address to this problem.

b. Marketing Program Update-Economic Development Office

Mr. Jarvis addressed Council referring to the September 22, 2015 work session in which the Economic Development Office is working towards a new tagline. He brought Council up to date on this process, stating 159 people have voted with the majority asking that "Alive with the spirit of rivers and rails" be considered. A committee comprised of Ms. Gwynn, Mr. Coggsdale and Mr. Jarvis is now looking for a second vote; approximately 65 people have responded thus far. Mr. Jarvis advised he is continuing to work on the brochure and video. He advised an ad was recently placed with the Expansion Journal which is targeting industries within the town and has also entered into a partnership with a site selection consultant that he will be meeting with this week.

c. Main Street Storm Water

Mr. Garrett advised he met with the Virginia Department of Transportation to review the Storm Water drainage issue on Main Street. VDOT requested staff submit to them additional information: hydraulic calculations and additional drawings on the draining; they narrowed down the size of pipe (18"). He advised VDOT is requesting the bidding process scheduled for Thursday, October 15 be postponed so that drawings could be finalized. Staff is recommending the bids be postponed and extended for an additional two weeks in order to get the paperwork to VDOT. Mr. Garrett noted VDOT has extended the paving of Main Street to September 2016.

Mr. Edwards stated he had heard the original submission was for a 30" line and asked if these calculations would support an 18" line.

Mr. Garrett advised the engineers were looking at a larger area than what VDOT was looking at so this made the numbers be off. VDOT has this scaled down. This would be extended to Charlotte Avenue with a drop inlet box on both sides of Charlotte to take in the water.

Mayor Mattox thanked Mr. Higginbotham for his help in that matter.

A motion was made by Mrs. Dalton, seconded by Mr. George, to extend the bidding process for the Main Street Storm Water line an additional two weeks.

Motion carried:

VOTE:	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes

Mr. Tracy Emerson	Yes
Mr. Timothy George	Yes
Mr. Jay Higginbotham	Yes

Mr. Garrett noted the Water Plant should be up and running at 100% at 7:00 p.m. tonight.

Mayor Mattox thanked Mr. Garrett and his staff for a quick turnaround time on a water line issue at the north end of town.

d. Habitat for Humanity Street Closure Request

Mayor Mattox advised Altavista Habitat for Humanity is requesting permission to close a portion of Amherst Avenue between 11th and 13th Streets on Saturday, October 17 and Sunday, October 18th between hours of 7:30 a.m. and 6:00 p.m. while volunteers complete a blitz build.

A motion was made by Mr. Higginbotham, seconded by Mr. Emerson to grant closure of a portion of Amherst Avenue between 11th and 13th Streets on Saturday, October 17 and Sunday, October 18th between hours of 7:30 a.m. and 6:00 p.m. for a blitz build.

Motion carried:

VOTE:	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

9. Reports

a. Town Manager's Report

Mayor Mattox advised Mr. Coggsdale was traveling with the Altavista High School Golf Team to the State Tournament and stated the Colonel's Golf Team placed second.

Mayor Mattox presented Council with the Town Manager's report.

Bedford Avenue Waterline Project (Project 1A)

Bedford Avenue has been paved.
Punch list is being created for completion.

Mr. Higginbotham asked Mr. Garrett to check a patch at the entrance of Myrtle Lane to see if it is acceptable.

Main Street Waterline Project (Project 1B)

WW Associates issued Addendums deferring the bid date and inclusion of storm water project. Mr. Garrett gave an update earlier in the meeting. Bids are due Wednesday, October 28th.

WWTP EOP – PCB Remediation

Dr. Scott Lowman (IALR) is scheduled to present a report on the "recharacterization" of the pond (grid sampling) as compared to the 2002 sampling and update Council on IALR's "pot study" at the October 27th Town Council Work Session.

Staff has provided Dr. Schnoor (University of Iowa) an update on their berm request. It has been Council's direction to await the report regarding the "recharacterization" of the pond before proceeding with the decision in regard to the berm and potential locations.

DEQ has not provided the letter for the Informal Fact Finding (IFF) and has indicated that they may need to reschedule to an undetermined date in November.

Mr. Edwards questioned the date for the meeting as being October 29th and suggested getting a report from Dr. Lowman before the date of October 27th.

Mr. Higginbotham suggested the information be emailed to Council members and Dr. Schnoor for review before meeting to discuss.

10. Informational Items/Late Arriving Matters

a. Correspondence/Articles
b. Calendars- September & October

11. Matters from Town Council

12. Closed Session

I move that the Altavista Town Council convene in closed session in accordance with the provisions set out in the *Code of Virginia,* 1950 as amended, for the following purpose:

Section 2.2-3711 (A)(1) – Discussion or consideration of prospective candidates for appointment to the Altavista Economic Development Authority.

Section 2.2-3711 (A)(5) regarding discussion concerning a prospective business or industry or the expansion of an existing industry where no previous announcement has been made of the business' or industry's interest in locating or expanding its facilities in the community.

A motion was made by Mrs. Dalton, and seconded by Mr. George.

Motion carried:

VOTE:	Mr. Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

Council went into closed session at 7:35 P.M.
Notice was given that council was back in regular session 7:50 P.M.

FOLLOWING CLOSED SESSION:
A motion was made by Mrs. Dalton, seconded by Mr. Emerson, to adopt the certification of a closed meeting.

CERTIFICATION OF CLOSED MEETING

WHEREAS, the town council has convened a closed meeting on this date pursuant to an affirmative recorded vote and in accordance with the provisions of The Virginia Freedom of Information Act; and

WHEREAS, Section 2.2-3712 of the Code of Virginia requires a certification by the town council that such closed meeting was conducted in conformity with Virginia law;

NOW, THEREFORE, BE IT RESOLVED that the town council hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the town council.

Motion carried:

VOTE:	Mr. Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

A motion was made by Mrs. Dalton, seconded by Mr. Emerson, to reappoint Mr. Todd Hall to the Altavista Economic Development Authority for a term of four years expiring November 30, 2019.

Motion carried:

VOTE:	Mr. Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

A motion was made by Mrs. Dalton, seconded by Mr. Edwards, to approve an incentive package for Sensata/Schrader in the amount of $30,000 to be paid in four annual payments.

Motion carried:

VOTE:	Mr. Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

A motion was made by Mrs. Dalton, seconded by Mr. Edwards, to approve an incentive package for BGF Industries in the amount of $47,000 to be paid in four annual payments.

Motion carried:

VOTE:		
	Mr. Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

I move that the Altavista Town Council convene in closed session in accordance with the provisions set out in the *Code of Virginia,* 1950 as amended, for the following purpose:

Section 2.2-3711 (A)(1) – Discussion or consideration of personnel.

A motion was made by Mrs. Dalton, and seconded by Mr. Edwards.

Motion carried:

VOTE:		
	Mr. Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

Council went into closed session at 8:00 P.M.
Notice was given that council was back in regular session 8:55 P.M.

FOLLOWING CLOSED SESSION:
A motion was made by Mrs. Dalton, seconded by Mr. Edwards, to adopt the certification of a closed meeting.

CERTIFICATION OF CLOSED MEETING

WHEREAS, the town council has convened a closed meeting on this date pursuant to an affirmative recorded vote and in accordance with the provisions of The Virginia Freedom of Information Act; and

WHEREAS, Section 2.2-3712 of the Code of Virginia requires a certification by the town council that such closed meeting was conducted in conformity with Virginia law;

NOW, THEREFORE, BE IT RESOLVED that the town council hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the town council.

Motion carried:

VOTE:		
	Mr. Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

13. Adjournment

Mayor Mattox asked if there was anything else to bring before Council.

The meeting was adjourned at 8:56 p.m.

_____
Michael E. Mattox, Mayor

_____
Mary Hall, Deputy Clerk

COUNCIL WORK SESSION OCTOBER 27, 2015

The work session of the Council of the Town of Altavista was held in the Council Chambers of the J.R. Burgess Municipal Building, 510 Seventh Street, on October 27, 2015 at 5:00 p.m.

Council members present:	Mayor Michael Mattox Mrs. Micki Brumfield Mrs. Beverley Dalton Mr. Charles Edwards Mr. Tracy Emerson Mr. Timothy George Mr. Jay Higginbotham
Also present:	Mr. J. Waverly Coggsdale, III, Town Manager Mr. Daniel Witt, Assistant Town Manager Mrs. Tobie Shelton, Finance Director Mr. David Garrett, Public Works/Utilities Director Mr. Steve Bond, Wastewater Treatment Plant Mr. John Eller, Town Attorney Mrs. Mary Hall, Administration

1. Mayor Mattox called the meeting to order and presided.

2. A motion was made by Mr. Emerson, seconded by Mrs. Dalton, to approve the agenda as presented.

   Motion carried:

VOTE:	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

3. Public Comments—Agenda Items Only

   Mayor Mattox asked if anyone would like to speak on anything listed on the agenda.

   Mrs. Ann Shelton on behalf of the Recreation Committee addressed Council and spoken in favor of the proposed boat launch. Mrs. Shelton presented Council with a petition signed by over 200 persons in favor of this proposal.

   Mayor Mattox asked that these pages be included in the minute book.

4. Introductions and Special Presentations

   a. Staunton River Boat Ramp Concepts

   Mr. Coggsdale advised at the July 14, 2015 Town Council meeting, staff was authorized to proceed with the preliminary engineering assessment related to the proposed boat ramp on the Staunton River. The firm of Gay & Neel was hired to assess the site and create a layout and cost estimate for the project.

   Mr. Tim Guthrie, Gay & Neel presented to Council a power point presentation with two layout concepts and construction estimates based on their review. He referred to FEMA and advised they do not like any land fill in their flood plain. He pointed out the FEMA floodway and if fill is placed in the area, the base flood plain cannot be raised; obtaining permits with FEMA may take six months to a year. He advised on the first option he tried to minimize any fill. He presented the second option which shows the grades

differently. He advised the two options are very similar; the only savings would come in the earthwork and shifting the retaining walls.

Mr. George questioned the gray areas on the layouts if they were to catch runoff water.

Mr. Guthrie responded those areas were to increase the turning radius for a vehicle pulling a trailer.

Mr. Higginbotham asked if this could be a place to park a pickup truck with a rack on it.

Mr. Guthrie advised the budget estimate covers earthwork, erosion control, pavement and miscellaneous; the cost is very close when comparing both options. Mr. Guthrie felt based on the criteria the town would be eligible for a $75,000 grant with DGIF.

Mr. Higginbotham asked what the issues were when dealing with the river.

Mr. Guthrie advised in order to build the ramp out into the river, the area would have to be pumped out which would allow the stone base to be placed. Another option would be not to pump out but place the stone in the river and then place the ramp. Would have to know what is in the river and if it is solid enough to support the ramp. He noted at the minimum the permitting would be taken through JTA (made up of the core of engineers, DEQ, and DMRC). They will review the design and also make sure the species in the water are not disturbed.

Mr. George referred to the listed cost for grading and advised it is hoped that Campbell County would take care of the grading portion of the project.

Mr. Guthrie noted the estimate cost of the grading includes the retaining walls.

Mr. George asked if the project was just a canoe launch would that change things significantly.

Mr. Guthrie responded it would because the presented design is for vehicle and trailer access.

Mr. Emerson asked for an estimate to build a canoe launch.

Mr. Guthrie stated the presented estimated project can be cut to a fourth of the cost because it reduces the access issues and parking limitations.

Mr. Higginbotham asked how many motor boats access the river.

Mr. Emerson said he didn't think there was very many.

Mr. George stated in talking to the DGIF there is another tear of grants when there is motor boat access for emergency crews.

Mayor Mattox asked if there were grants readily available.

Mr. Higginbotham asked if the canoe design would be similar to the presented design.

Mr. Guthrie responded the requirements for a canoe ramp is not as significant.

Mr. Emerson mentioned there is a plastic, fiberglass rail that the canoe can be slid on.

Mr. Witt presented Council with some available grant opportunities. He asked Council to understand going in all these grants are competitive and can't guarantee the town would be awarded any of them. He asked Council if this is something staff moves forward with.

Mrs. Brumfield asked if starting with the canoe launch was a possibility; apply for grants and later on put in the turnaround for the longer vehicles.

Mr. Witt advised that was possible.

Mrs. Brumfield felt the ones that have expressed an interest are interested in the canoe launch.

Mr. Witt mentioned with the County being a partner in this; the use of their workforce and equipment could go away. If this does occur then there would be additional cost for doing the site.

Mayor Mattox asked if Council was in agreement to ask staff to move forward with the grant process and to approach the Board of Supervisors in regards to the excavation.

Mrs. Brumfield stated she was not aware this was for motor boats.

Mr. Witt stated it would be designed for jon boats with motor on back and canoes; this would allow for river rescue and river access for fire, EMS, and the Game Department.

Mr. Emerson noted if Fire or Rescue needs to access the river they will tow the boat over the bank if necessary. He advised he has floated Staunton River many times and very few times he has seen a motor boat on the river. He felt the canoe part made more sense; the larger scale is a waste of resources.

Mr. George asked if a canoe launch was built would the ramp still be installed at an angle.

Mr. Guthrie responded you would want it tucked back as much as possible. DGIF doesn't want the ramp to run perpendicular to the river.

Mr. Emerson referred to the launch at Long Island which has been used for 20 to 30 years and felt this project should be similar to that one.

Mayor Mattox asked if it was the consensus of Council to re-evaluate the project moving more towards a canoe launching point, ask staff to continue looking for/applying for grants when applicable and request Campbell County to help with the excavation.

Mrs. Dalton stated if proceeding with grants, Council needs to know what the town's obligation is.

Mr. Coggsdale asked Mr. Guthrie what it would take to correct to a canoe launch design or is it needed.

Mr. Guthrie advised it would be a scaled down version.

Mr. Emerson stated people want a place to put in their canoes and kayaks and didn't think gravel versus pavement matters.

Mr. George asked if this would make a difference when applying for grants.

Mr. Witt responded no.

Mr. George asked if the grading would be the same so we would know how to approach Campbell County.

Mr. Witt asked if there was an additional cost to redesign the layout concept.

Mr. Guthrie said he would see what could be done.

b. IALR's WWTP Emergency Overflow Pond Re-Characterization.

Mr. Coggsdale advised at the August 11, 2015 Town Council meeting, staff was authorized to proceed with the Institute of Advanced Learning and Research in regard to testing the sludge in the EOP in a manner consistent with the 2003 grid. Dr. Scott Lowman (IALR) was in charge of the re-characterization and issued a report regarding the project.

Dr. Lowman addressed Council with the results of his testing noting most of the testing area was below 100 mg/kg; the aim is below 50 mg/kg. He mentioned with the pot study he was looking for the hot spots and tested seven different spots around the pond that were really high in 2003; these came back considerably lower. He approached the testing with a conference call with the University of Iowa and the University of Maryland and others to make sure the experimental design was proper. Everything was done to recreate the 2003 report exactly; sampling was completed on September 16, 2015. Dr. Lowman stated on average there was a 90% reduction over the 12 year period; three samplings were higher in this study than in the 2003 study. Dr. Lowman stated the data looks as expected nothing strange and noted his speculation is it would take an additional 7 ½ years to get below 50 mg/kg. He felt this was good data for the town.

Mrs. Dalton asked if the requirement is that every spot has to test below 50 parts per one million or is that an average.

Dr. Lowman stated that was a great question but he didn't know the answer.

Mrs. Dalton stated we have moved considerably in that direction.

Mr. Bond stated DEQ's original stance was if any spot in the bowl was over they considered the whole bowl as being high.

Dr. Lowman recommended getting feedback from DEQ and the EPA.

<u>Pot Study</u>

Dr. Lowman advised the pond was tested in seven different locations; one hot spot was found near the peer at 152 parts per million. Dr. Lowman advised this sludge was mixed with difference combinations (10 pots of six combinations). The greatest reduction came with the mixture of switch grass, microbial consortia and sludge. Dr. Lowman stated he would like to test again at the beginning and end of the growing seasons.

Mayor Mattox asked Dr. Lowman to update Council on what he is looking to accomplish with the pot studies.

Dr. Lowman advised the pot studies have been shown to work in the lab; it doesn't translate to the field at all (too many factors in play and variation). The fact that it shows it is working the first growing season is great, the second growing season hopefully the reduction will continue to occur. The plan is to seek funding for a larger study in the pond.

Mr. George asked ultimately if this works, how it would be applied to the pond.

Dr. Lowman stated the pond would have to be dry as switch grass will not grow like rice.

Mr. George questioned building a berm across the middle of the pond basically a cap and seal and planting the switch grass on the dry side.

Dr. Lowman responded that was correct. He stated when he began reviewing the data, in the 2003 Draper Aden report there was a berm drawn and a living cap. If the whole pond was being treated, this would be the way to do it by moving the contaminants to one side planting switch grass or whatever.

Mr. Higginbotham advised Dr. Schnoor is requesting a berm be built in the lagoon. Based on the fact that the EPA has funded the University of Iowa to research and Dr. Schnoor has asked for the berm; this berm would be to the north of Dr. Sowers' project. This berm will be 10 feet wide and 1,000 cubic yards. He asked Council to consider this berm so they could move forward with the University of Iowa giving Mr. Garrett time to build the berm.

Mr. George asked if something would be planted on the berm.

Mr. Higginbotham felt something would be planted on the berm with a foot of water being pumped off the other side to expose the island. They want to plant on the island and section off Plot 5 because that is where the hot spot is located. This would give two planting seasons next Spring to move forward with.

Mr. George asked what was being planted.

Mr. Higginbotham responded it would be willow, poplar and some other trees.

Mr. George questioned the desire to plant deep root hybrid poplars as mentioned in the packet; this poplar tree grows 70 feet tall and is a huge tree to be planted in the perfect petri dish. His concern is when this huge tree falls it takes a chunk of earth with it.

Mr. Higginbotham stated the trees that are on Plot 5 will be cut back; they will not let them grow into massive trees. He has asked Dr. Licht if there was concern with roots penetrating the liner and his reply was 'absolutely not'.

Mr. George questioned if Dr. Licht knows.

Mr. Higginbotham stated they have the funding from EPA to do this and this is what they are recommending.

Mayor Mattox advised he likes research and asked if they would be funding the entire cost of building the berm.

Mr. Higginbotham replied "no"; their research funding with EPA cut them 23% so they only have $119,000 to spend each year for the next five years.

Mayor Mattox asked if there was an estimate to build such a berm and if this had been discussed with the DEQ.

Mr. Higginbotham responded no not with DEQ.

Mayor Mattox asked if it would interfere with the Class 1 liability.

Mr. Higginbotham responded no there would only be 1,000 yards in the pond.

Mr. Emerson asked when the meeting with VDEQ is scheduled for.

Mr. Coggsdale advised it is scheduled for November 30th.

Mr. Emerson asked if this meeting would tell the town they have done everything the EPA wants done at this point.

Mr. Higginbotham drew a chart showing EPA at the top with the University of Iowa being funded by the EPA. DEQ is the remediation program. He did not feel Council

would hear back from the DEQ. The voluntary remediation program has nothing to do with the path of the University of Iowa and Council told the University of Iowa they would participate in their program.

Mayor Mattox asked Dr. Lowman if he were to carry out his process would he go after funding.

Dr. Lowman stated funding is difficult.

Mayor Mattox asked if he would be ready to do more.

Dr. Lowman stated he would need to see his second year results because they may stay the same.

Mr. George asked how long the trees had been in the pond and if they had remediated any PCBs.

Mr. Higginbotham advised test have been sent on Plot 5 and have not received results back.

Mrs. Dalton noted the re-characterization tells you the general direction. It does not tell the direct result of what has been done.

Mayor Mattox asked Mr. Garrett for a cost to construct the berm.

Mr. Garrett explained his approach to building the berm and estimates it would take 15 days to build it across the pond; with labor and equipment the approximate cost would be $30,000.

Mayor Mattox asked if we knew the dirt that is going into the pond is clean.

Mr. Garrett advised the soil has not been tested that came from Hurt; some of the soil came from the project on Bedford Avenue.

Mayor Mattox noted if the PCBs are down 90% he did not want that messed up.

Mrs. Dalton asked if this was the best configuration of the berm.

Mr. Higginbotham stated he was excited that Council chose to retest the pond because it gives data that they didn't have before.

Mrs. Dalton felt the berm was in response to the request from the University of Iowa; we are trying to facilitate their research. If Council didn't have to do this much of a berm because of the University of Iowa's needs, this would be a good thing.

Mrs. Brumfield mentioned DEQ would not let the Town keep the hot spots.

Mayor Mattox asked Dr. Lowman how he would proceed.

Dr. Lowman suggested talking to EPA Region 3 because they are the ones in control of this pond. Let them know that University of Iowa has funding to do research in this pond; that would get everyone on the same page.

Mr. George asked who would be liable if the University of Iowa's experiment doesn't work.

Mrs. Dalton stated it would be the town's responsibility.

Mayor Mattox confirmed according to regulations, EPA has to be notified if experiments continue.

Mr. Coggsdale presented Council with information from Dr. Schnoor.

Dr. Lowman mentioned he has read this information and felt it needed to be more specific.

Mr. Emerson asked Mr. Higginbotham if Council doesn't have to answer to DEQ why do this.

Mr. Higginbotham responded the EPA has funded the University of Iowa specifically for research in the pond.

Mr. Emerson asked why keep doing all this if the Town is not going to stay in the VRP and why do anything to the pond if waiting another five years the pond will take care of itself.

Mr. Emerson stated his point is if the pond is taking care of itself and the Town hasn't decided if it will stay in the program why build another berm.

Mr. Higginbotham stated the program has nothing to do with EPA.

Mrs. Brumfield stated it would not hurt to stay in the program.

Mayor Mattox said they may accept the path the Town is on with the 90% reduction.

Mr. Emerson asked if Council had to answer to the DEQ or not.

Mr. Coggsdale advised as long as we are in the VRP pursuing that yes, if we are not he assumed no.

Dr. Lowman stated the VRP would probably not let the Town sit and wait. The whole idea is to get people to remediate and get out of their program. It all falls under the EPA.

Mr. Bond stated it does look like we don't have to answer to the EPA on what is done with the pond except the liability status. It is in the permit to be reliable; DEQ has control over that. The town has to be careful where the berm is constructed and the proposed berm is getting really close to cutting into the liability.

Mr. Higginbotham stated the berm will be about 5 feet high and will be about 1,000 cubic yards.

Mayor Mattox referred back to the cost to construct the berm.

Mr. Garrett advised his estimate consists of labor and equipment and anticipates taking 15 days to construct using three town employees; $30,000. He noted the equipment cost alone would be $7,100.

Mayor Mattox asked what Council would learn that they didn't already know by building a berm. The ultimate goal is to remove PCBs from the pond. Is there value in spending $30,000 to construct another berm? Will this increase the speed of degradation?

Mr. George stated Council has the responsibility to keep the pond safe and he is not a proponent of the trees. The University of Iowa has been given money for research but ultimately the town is responsible for the pond and possibly 10 years from now a tree will fall and breach the perfect petri dish. He did not see why the trees were being considered or gain anything different. Why would Council proceed when they don't know if the trees that are there are doing anything?

Mrs. Brumfield referred to the chart stating there were 18 out of 29 locations that are still above 50mg/kg. The EPA is not going to let Council pull back and do nothing.

Mayor Mattox noted DEQ has already said they want remediation quickly.

Mr. Higginbotham read the letter that was written to the University of Iowa:

March 12, 2014

Community Engagement Director
Iowa Superfund Research Program
University of Iowa
Iowa City, VA 52242

Dear Dr. Just:

The Town of Altavista welcomes the opportunity to partner with the Iowa Superfund Research Program to facilitate research at the PCB contaminated site on the grounds of our wastewater treatment facility. We are happy to offer site access and can accommodate modest needs for your research. We also are continuing the phytoremediation studies that we have pursued in the past in cooperation with Ecolotree, Inc. as part of our efforts.

It is our understanding that the majority of research costs related directly to work performed by the Iowa Superfund Research Program will be the responsibility of the University of Iowa. But, we acknowledge and are willing to contribute some staff time to facilitate the research endeavor.

We look forward to working together.

Warm regards,

Michael E. Mattox, Mayor
Town of Altavista

Mr. Higginbotham felt Council needs to support the people they said they would support and that on November 30, 2015 DEQ was not going to give Council an answer. He felt DEQ was totally separate from the EPA and the University of Iowa funding.

Mr. George asked if anyone was pushing to have the berm constructed.

Mr. Higginbotham stated the University of Iowa would like to get the berm in because they can't plant under water.

Mrs. Dalton stated this was difficult and obviously there isn't a consensus. Someone suggested the EPA be informed of the berm idea; she felt this was a good faith effort. She asked that the scientific community confirm that the berm as designed is the right one.

Dr. Lowman stated this berm is reasonable because Draper Aden proposed this berm in 2003. They called for this berm and a cap.

Mrs. Dalton suggested the berm idea be delayed two weeks and more information be gathered. There is no disagreement that Council wants the pond in regulation status.

Mr. Edwards stated some 15 years ago to cap this pond would be $4 to $4.5 million and now Council is talking $30,000. At this time $360,000 has been spent, 10% of what was originally estimated. Mr. Edwards stated he was not sure that it was critical

to stay in the VRP but the point is EPA is driving this event. He stated he supported the idea of getting the EPA's approval to build the berm and felt the price for the berm was small enough pending this approval. Mr. Edwards was in agreement with postponing a decision for two weeks.

Mr. Higginbotham said Council realizes Dr. Schnoor sent a proposal to the EPA and the EPA approved funding for it; will EPA even comment on putting the berm in.

Mr. Emerson stated he was not for spending money on maybes until there is a straight course. There has to be some clear answers from the EPA.

Mayor Mattox stated he has nothing against research if a scientist wants to come here and asked if it is worth $30,000 of the tax payers' dollars to plant trees in the pond when there is no evidence that the trees work. The berm may be a good thing but why should the town have to pay for it. If the berm is so important, $30,000 is a lot of money to spend on a maybe. The DEQ meeting is on November 30 and Council is required by statute to send EPA a notice of any work in the pond. Whether or not anything can be done before the EPA response is unknown.

Mr. Coggsdale stated he didn't know if the EPA would respond, they just have to be notified.

Mayor Mattox stated in respect to Mr. Higginbotham's request 15 days could be 15 days in February just as easily as it could be 15 days in November.

Mr. Edwards suggested asking staff to notify EPA Region 3 that the town is considering building a berm as shown on the map.

Mr. Coggsdale asked Council to rewind to the original request of the University of Iowa; they wanted to get to the island with the other area being a control zone. They wanted the island because it was the hottest spot in the pond. This spot is sitting beside of Plot 5. There is already a pad close to the hottest spot.

Mr. Higginbotham noted the difference between February and November is the weather conditions.

Mr. Eller noted the study submitted by Dr. Lowman is a great report to present to the EPA and will take the urgency down a lot in what is done at the pond. Dr. Lowman will be presenting his findings. He felt telling them an additional experiment will be done on the hottest spots in the pond will be a sales pitch. He noted he may be able to sell that what has been done is enough because the urgency is down but to not do anything would not. He asked Council if they wanted to try and stay in or give it up and go on.

Mr. George noted the DEQ has never liked the berm and trees out there.

Mr. Eller stated it is now a lot less dangerous pond.

Mr. George mentioned it is discomforting that Mr. Steve Rock, EPA, has been asked to stand down from the town.

Mrs. Dalton stated the discussion is over who will pay for the berm and can Council get approval for the berm She stated the University of Iowa coming in and experimenting at their cost is fine and to facilitate that is fine. The University of Iowa saying the berm will look like this and the fact that it will cost $30,000; she felt conversation with Dr. Schnoor telling him the object and seeing what the minimum is that he would need was important. She did not feel Council was ready to vote on this but needs to continue to build the body of knowledge to help with the decision.

Mr. Edwards suggested discussing with the University of Iowa the possibility of extending Plot 5.

Mr. Bond stated when the University of Iowa is contacted ask what their objective is because he spoke with a couple of the folks while in Danville and some of their objectives are not completely directed to the pond's problems. They advocated continuing with the phytoremediation and with Ecolotree, Inc. This is not necessarily what this group's main focus is.

It was the consensus of Council to gather more information before moving forward.

5. Items Contingent for the Regular Meeting

   a. Economic Development Marketing (Tagline)

      Moved to the November 10, 2015 meeting.

   b. Declaration of Surplus (Fire Hydrants)

      Mr. Coggsdale advised the Town was contacted by a representative of the Altavista Fire Company in regard to the scrap fire hydrants that were replaced as part of the Bedford Avenue water project. Mr. Garrett advises there are 8 intact hydrants that can be deemed surplus. The scrap value is $10.00 per unit.

      A motion was made by Mrs. Brumfield, seconded by Mr. George, to give the scrap hydrants (8) to the Altavista Fire Company.

      Motion carried:

VOTE:	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

   c. VDOT Route 43 "Gateway Project" Update

      Mr. Witt advised the Route 43 "Gateway Project" had been funded and up until October 13, staff had the understanding that part of this project was going to be traffic signal replacement for the intersection of Main Street, Seventh Street and Bedford Avenue (Route 43). VDOT has advised the funding source is no longer available and the Town will have to pay for the project. VDOT has offered the town to apply for revenue funding to pay for the new traffic lights. The town would be paying for traffic signals that are the responsibility of VDOT at a cost of $700,000; a 50/50 match. The town's portion would be $350,000 per intersection. The applications are due on October 30th. The grant was submitted under the premise that the Town is providing a safe corridor for kids and people walking to our Main Street District. The second option is to amend the original TAP grant which would allow for the project to move forward. VDOT has determined the existing cabinet/conduit boxes will not accommodate the pedestrian actuators contained in the project. VDOT has estimated the cost to be $220,000. This is an 80/20 grant and is due October 30, 2015.

      A motion was made by Mr. Edwards, seconded by Mrs. Dalton, to allow Mr. Witt to apply to amend the TAP grant in the amount of $220,000 with the Town's matching amount being $44,000.

      Motion carried:

VOTE:	Mayor Michael Mattox	Yes
	Mrs. Micki Brumfield	Yes
	Mrs. Beverley Dalton	Yes
	Mr. Charles Edwards	Yes
	Mr. Tracy Emerson	Yes
	Mr. Timothy George	Yes
	Mr. Jay Higginbotham	Yes

6. Items Scheduled for the Regular Meeting Agenda
7. Public Comments

Adjournment

Mayor Mattox adjourned the meeting at 7:20 p.m.

_____
Michael E. Mattox, Mayor

_____
J. Waverly Coggsdale, Clerk

ALL CHECKS REGISTER — ACCOUNTING PERIOD 04/2016
TOWN OF ALTAVISTA — FROM: 10/01/2015 TO: 10/31/2015

CHECK NO	VENDOR NO	VENDOR NAME	CHECK DATE	CHECK AMOUNT
34015	128	ADAMS CONSTRUCTION CO	10/02/2015	272.42
34016	1	AIRABELLA FLOWERS & GIFTS	10/02/2015	184.28
34017	8	ALTAVISTA EMS	10/02/2015	10,000.00
34018	126	ALTAVISTA VOLUNTEER FIRE CO IN	10/02/2015	9,841.00
34019	1	APRIL COX	10/02/2015	50.00
34020	19	CARTER MACHINERY CO INC	10/02/2015	4,685.00
34021	427	CENTURYLINK	10/02/2015	2,312.62
34022	28	COLUMBIA GAS	10/02/2015	176.02
34023	701	CORNETT PUBLISHING CO INC	10/02/2015	1,682.00
34024	283	EECO	10/02/2015	82.62
34025	71	FAIRPOINT COMMUNICATIONS	10/02/2015	423.10
34026	41	FISHER SCIENTIFIC	10/02/2015	1,097.95
34027	50	GRETNA TIRE INC	10/02/2015	2,713.22
34028	52	HACH COMPANY	10/02/2015	2,095.42
34029	697	LITTLETON AND ASSOC INC	10/02/2015	2,783.00
34030	680	MCI COMM SERVICE	10/02/2015	32.26
34031	218	MINNESOTA LIFE	10/02/2015	158.12
34032	423	NTELOS	10/02/2015	960.54
34033	68	ORKIN PEST CONTROL	10/02/2015	300.40
34034	450	REGION 2000	10/02/2015	64.00
34035	695	SERVPRO	10/02/2015	675.64
34036	80	SOUTHSIDE ELECTRIC COOP	10/02/2015	950.89
34037	228	SYDNOR HYDRO INC	10/02/2015	58,575.00
34038	515	DALE TYREE JR	10/02/2015	4,485.00
34039	587	US POSTAL SERVICE (POSTAGE BY	10/02/2015	1,500.00
34040	624	WINFALL NURSERIES INC	10/02/2015	937.50
34041	116	XEROX CORP	10/02/2015	1,352.80
34042	93	UNITED STATES POST OFFICE	10/02/2015	442.80
34043	147	US POSTAL SERVICE/POSTMASTER	10/02/2015	225.00
34044	103	BEACON CREDIT UNION	10/09/2015	385.00
34045	4	BOXLEY AGGREGATES	10/09/2015	1,054.97
34046	583	CAMPBELL COUNTY PUBLIC LIBRARY	10/09/2015	902.86
34047	16	CAMPBELL COUNTY UTILITIES & SE	10/09/2015	15,571.40
34048	19	CARTER MACHINERY CO INC	10/09/2015	3,606.72
34049	145	CHANDLER CONCRETE CO INC	10/09/2015	1,270.00
34050	9999997	COOK, KIMBERLY ANN	10/09/2015	33.07
34051	20	J JOHNSON ELLER JR	10/09/2015	2,000.00
34052	1	GARY DAVID	10/09/2015	100.00
34053	52	HACH COMPANY	10/09/2015	547.03
34054	9999997	HALL, CHRISTOPHER	10/09/2015	VOID
34055	305	HAWKINS-GRAVES INC	10/09/2015	VOID
34056	120	HD SUPPLY WATERWORKS	10/09/2015	445.31
34057	9999997	HUNT, SHEKERRA	10/09/2015	103.76
34058	57	ICMA RETIREMENT TRUST-457 #304	10/09/2015	870.00
34059	644	INSTITUTE FOR ADVANCED LEARNIN	10/09/2015	4,445.50
34060	566	INTEGRATED TECHNOLOGY GROUP IN	10/09/2015	2,000.00
34061	9999997	MAYHEW, BRICE	10/09/2015	107.57
34062	121	MULTI BUSINESS FORMS INC	10/09/2015	788.38
34063	300	NAPA AUTO PARTS	10/09/2015	430.87
34064	9999997	NGUYEN, DOUGLAS	10/09/2015	109.60
34065	454	O'REILLY AUTOMOTIVE INC	10/09/2015	607.85

34066	450	REGION 2000	10/09/2015	1,045.00
34067	74	REGION 2000 ECONOMIC DEV ALLIA	10/09/2015	4,363.00
34068	510	RIVER VALLEY RESOURCES LLC	10/09/2015	28.33
34069	186	THE NEWS & ADVANCE	10/09/2015	533.00
34070	35	TREASURER OF VA/VITA	10/09/2015	126.34
34071	92	UNIFIRST CORP	10/09/2015	2,081.66
34072	104	VIRGINIA LOCAL GOVT MGMENT ASS	10/09/2015	222.25
34073	192	WW ASSOCIATES INC	10/09/2015	1,600.00
34074	623	YARBOROUGH REFRIGERATION INC	10/09/2015	838.45
34075	661	BASS SOD FARM	10/16/2015	250.00
34076	164	DMV	10/16/2015	500.00
34077	36	DOMINION VIRGINIA POWER	10/16/2015	40,255.59
34078	671	KENT EANES	10/16/2015	25.00
34079	118	FERGUSON ENTERPRISES INC #75	10/16/2015	9,651.22
34080	41	FISHER SCIENTIFIC	10/16/2015	817.19
34081	119	FOSTER ELECTRIC CO INC	10/16/2015	336.42
34082	43	FOSTER FUELS INC	10/16/2015	13,432.55
34083	9999997	HALL, CHRISTOPHER	10/16/2015	27.19
34084	305	HAWKINS-GRAVES INC	10/16/2015	2,790.00
34085	9999998	HURT VOLUNTEER FIRE DEPARTMENT	10/16/2015	300.00
34086	653	MAJOR SECURITY CONSULTING & DE	10/16/2015	5,000.00
34087	9999998	MASON, HERMAN	10/16/2015	150.00
34088	67	ORKIN PEST CONTROL LLC	10/16/2015	255.13
34089	379	REI CONSULTANTS INC	10/16/2015	877.18
34090	9999997	STOCKS, BARRY L	10/16/2015	63.92
34091	110	VUPS INC	10/16/2015	127.05
34092	116	XEROX CORP	10/16/2015	235.76
34093	9	AFLAC	10/23/2015	2,007.62
34094	667	ASHWELL'S TREE SERVICE LLC	10/23/2015	350.00
34095	103	BEACON CREDIT UNION	10/23/2015	385.00
34096	461	KATHI BOGERT	10/23/2015	862.68
34097	702	CHRISTOPHER BRUMFIELD	10/23/2015	315.00
34098	294	BUSINESS CARD	10/23/2015	7,542.37
34099	574	CHRISTOPHER MICALE, TRUSTEE	10/23/2015	125.00
34100	301	ENGLISH'S LLC	10/23/2015	1,111.75
34101	652	HAWKINS LOCK & KEY CO INC	10/23/2015	107.70
34102	57	ICMA RETIREMENT TRUST-457 #304	10/23/2015	910.00
34103	644	INSTITUTE FOR ADVANCED LEARNIN	10/23/2015	5,000.00
34104	58	INSTRUMENTATION SERVICES INC	10/23/2015	708.00
34105	697	LITTLETON AND ASSOC INC	10/23/2015	VOID
34106	172	LLOYD ELECTRIC COMPANY INC	10/23/2015	5,578.98
34107	1	MIM'S HOUSE OF PRAYER	10/23/2015	40.00
34108	218	MINNESOTA LIFE	10/23/2015	158.12
34109	423	NTELOS	10/23/2015	892.56
34110	588	PITNEY BOWES GLOBAL FINANCIAL	10/23/2015	50.00
34111	1	STEVE MILLER	10/23/2015	185.40
34112	228	SYDNOR HYDRO INC	10/23/2015	6,411.62
34113	95	UNITED WAY OF CENTRAL VA	10/23/2015	112.00
34114	192	WW ASSOCIATES INC	10/23/2015	35,411.25
34115	6	ALTAVISTA AREA YMCA	10/30/2015	25,000.00
34116	303	ALTAVISTA CHAMBER OF COMMERCE	10/30/2015	5,000.00
34117	84	ALTAVISTA JOURNAL	10/30/2015	76.32
34118	170	ALTAVISTA ON TRACK	10/30/2015	1,250.00
34119	91	ANTHEM BLUE CROSS/BLUE SHIELD	10/30/2015	30,669.00
34120	11	AVOCA	10/30/2015	12,025.00
34121	9999997	BARKER, THAD	10/30/2015	42.76
34122	12	BRENNTAG MID-SOUTH INC	10/30/2015	574.98

34123	249	CALVIN BRYANT	10/30/2015	810.00
34124	19	CARTER MACHINERY CO INC	10/30/2015	779.40
34125	427	CENTURYLINK	10/30/2015	2,318.07
34126	28	COLUMBIA GAS	10/30/2015	270.78
34127	364	DLB INC	10/30/2015	85,474.15
34128	119	FOSTER ELECTRIC CO INC	10/30/2015	3,041.83
34129	50	GRETNA TIRE INC	10/30/2015	1,542.50
34130	659	LYNCHBURG CHAMBER OF COMMERCE	10/30/2015	50.00
34131	680	MCI COMM SERVICE	10/30/2015	32.14
34132	9999997	MITCHELL III, BUDDY M	10/30/2015	102.26
34133	9999998	MT. AIRY BACK PACK COMMITTEE	10/30/2015	150.00
34134	665	SELECT AIR MECHANICAL ELECTRIC	10/30/2015	3,405.68
34135	9999997	SNIVELY, PHILIP	10/30/2015	89.83
34136	605	TRIPLE E RENTAL LLC	10/30/2015	105.00
34137	92	UNIFIRST CORP	10/30/2015	1,184.92
34138	601	VACORP	10/30/2015	68.81
34139	703	VALLEY COMMUNICATIONS	10/30/2015	968.37
34140	9999997	WILLIAMSON, MICHAEL EDWARD	10/30/2015	53.15

NO. OF CHECKS: 126 TOTAL CHECKS 473,686.53

Town of Altavista
FY 2016 Revenue Report
33% of Year Lapsed

General Fund Revenue	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Property Taxes - Real Property	375,000	375,000	10,871	3	19,570	5	375,000
Public Service - Real & Personal	165,000	165,000	0	0	0	0	165,000
Personal Property	195,000	195,000	4,721	2	7,043	4	195,000
Personal Property - PPTRA	100,000	100,000	2,094	2	8,838	9	100,000
Machinery & Tools	1,487,200	1,487,200	0	0	0	0	1,487,200
Mobile Homes - Current	500	500	0	0	4	1	500
Penalties - All Taxes	5,500	5,500	142	3	1,406	26	5,500
Interest - All Taxes	3,000	3,000	147	5	1,603	53	3,000
Local Sales & Use Taxes	145,000	145,000	13,232	9	55,323	38	145,000
Local Electric and Gas Taxes	110,000	110,000	9,329	8	41,000	37	110,000
Local Motor Vehicle License Tax	43,000	43,000	2,318	5	4,101	10	43,000
Local Bank Stock Taxes	160,000	160,000	0	0	0	0	160,000
Local Hotel & Motel Taxes	83,000	83,000	9,300	11	34,079	41	83,000
Local Meal Taxes	690,000	690,000	61,719	9	247,434	36	690,000
Audit Revenue	0	0	0	0	0	0	0
Container Rental Fees	900	900	0	0	50	6	900
Communications Tax	40,000	40,000	3,235	8	13,202	33	40,000
Transit Passenger Revenue	5,200	5,200	907	17	937	18	5,200
Business License Fees/Contractors	7,000	7,000	0	0	0	0	7,000
Busines License Fees/Retail Services	110,000	110,000	239	0	828	1	110,000
Business Licnese Fees/Financial/RE/Prof.	7,000	7,000	0	0	158	2	7,000
Business License Fees/Repairs & Person Svcs	18,000	18,000	30	0	202	1	18,000
Business Licenses Fees/Wholesale Businesses	1,500	1,500	0	0	0	0	1,500
Business License Fees/Utilities	8,000	8,000	0	0	0	0	8,000

Town of Altavista
FY 2016 Revenue Report
33% of Year Lapsed

General Fund Revenue (Continued)	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Business License Fees/Hotels	1,500	1,500	0	0	0	0	1,500
Permits - Sign	1,000	1,000	60	6	260	26	1,000
Fines & Forfeitures - Court	10,000	10,000	0	0	1,544	15	10,000
Parking Fines	500	500	100	20	200	40	500
Interest and Interest Income	49,000	49,000	1,693	3	5,756	12	49,000
Rents - Rental of General Property	1,000	1,000	75	8	350	35	1,000
Rents - Pavilion Rentals	3,000	3,000	150	5	1,250	42	3,000
Rents - Booker Building Rentals	4,000	4,000	125	3	1,300	33	4,000
Rents - Rental of Real Property	60,000	60,000	1,481	2	14,716	25	60,000
Property Maintenance Enforcement	0	0	0	0	0	0	0
Railroad Rolling Stock Taxes	18,000	18,000	0	0	18,651	104	18,000
State DCJS Grant	80,000	80,000	0	0	20,037	25	80,000
State Rental Taxes	800	800	228	29	734	92	800
State/Misc. Grants (Fire Grant)	10,300	10,300	0	0	9,841	96	10,300
State/VDOT Contract Services	3,000	3,000	0	0	0	0	3,000
VDOT Police Grant for Overtime	0	0	0	0	0	0	0
State Transit Revenue	13,670	13,670	2,403	18	18,550	136	13,670
Campbell County Grants	57,100	57,100	0	0	57,100	100	57,100
Litter Grant	2,000	2,000	2,001	100	2,001	100	2,000
Fuel - Fire Dept. (Paid by CC)	3,300	3,300	0	0	2,289	69	3,300
VDOT TEA 21 Grant	0	0	0	0	0	0	0
VDOT LAP Funding	0	0	0	0	0	0	0
Federal Transit Revenue	105,700	105,700	22,867	22	33,669	32	105,700
Federal/Byrne Justice Grant	3,400	3,400	0	0	0	0	3,400
Federal/Bullet Proof Vest Partnership Grant	0	0	0	0	0	0	0
Misc. - Sale of Supplies & Materials	7,000	7,000	1,145	16	1,928	28	7,000
Misc. - Cash Discounts	300	300	3	1	31	10	300

Town of Altavista
FY 2016 Revenue Report
33% of Year Lapsed

General Fund Revenue (Continued)	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Miscellaneous	13,000	13,000	-2,122	-16	-3,783	-29	13,000
Reimbursement of Insurance Claim	0	0	0	0	5,007	0	0
Misc. - Donations	0	0	4,564	0	4,564	0	0
Misc. - State Forfeiture Fund	0	0	0	0	0	0	0
Misc. - Federal Forfeiture Fund	0	0	0	0	0	0	0
Transfer In from General Fund (C.I.P.)	184,000	184,000	0	0	0	0	184,000
Transfer In from General Fund (C.I.P.)	0	0	0	0	0	0	0
Transfer In from General Fund Design. Reserves	0	0	0	0	0	0	0
	4,391,370	**4,391,370**	**153,059**	**3.49**	**631,774**	**14.39**	**4,391,370**

Town of Altavista
Fund Expenditure Totals
FY 2016
33% of Year Lapsed

	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
ALL FUNDS TOTAL							
Operations	5,832,210	5,832,210	459,038	8	1,823,979	31	5,832,210
Debt Service	280,000	280,000	0	0	214,750	0	280,000
CIP	1,172,700	1,172,700	206,703	18	736,673	63	1,172,700
Transfer Out to General Fund Reserve	471,100	471,100	0	0	0	0	471,100
Transfer Out to CIF	0	0	0	0	0	0	0
Transfer Out to General Fund Reserve (Fire Dept.)	65,000	65,000	0	0	16,250	25	65,000
Transfer Out to Cemetery Reserve	25,000	25,000	0	0	0	0	25,000
Transfer Out to Enterprise Fund Reserve	147,260	147,260	0	0	0	0	147,260
ALL FUNDS - GRAND TOTAL:	7,993,270	7,993,270	665,741	8	2,791,652	35	7,993,270

Town of Altavista
Fund Expenditure Totals
FY 2016
33% of Year Lapsed

GENERAL FUND (FUND 10)	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Council / Planning Commission							
Operations	28,030	28,030	1,749	6	7,890	28	28,030
Debt Service	0	0	0	0	0	0	0
CIP	0	0	0	0	0	0	0
Administration - TOTAL:	28,030	28,030	1,749	6	7,890	28	28,030
Administration							
Operations	768,040	768,040	54,098	7	269,218	35	768,040
Debt Service	0	0	0	0	0	0	0
CIP	10,000	10,000	0	0	0	0	10,000
Administration - TOTAL:	778,040	778,040	54,098	7	269,218	35	778,040
Non-Departmental							
Operations	912,280	912,280	63,381	7	186,456	20	912,280
Transfer Out to Cemetery Fund	-49,280	-49,280	0	0	0	0	-49,280
Transfer Out to Enterprise Fund	0	0	0	0	0	0	0
Transfer Out to General Fund Reserve	-471,100	-471,100	0	0	0	0	-471,100
Transfer Out to CIF	0	0	0	0	0	0	0
Transfer Out to Gen. Fund Reserve (Fire Dept.)	-65,000	-65,000	0	0	-16,250	25	-65,000
Operations w/o Transfers Out	326,900	326,900	63,381	19	170,206	52	326,900
Debt Service	0	0	0	0	0	0	0
CIP	25,000	25,000	0	0	0	0	25,000
Non-Departmental - TOTAL:	351,900	351,900	63,381	18	170,206	48	351,900
Public Safety							
Operations	926,200	926,200	63,472	7	282,328	30	926,200
Debt Service	0	0	0	0	0	0	0
CIP	67,950	67,950	0	0	6,503	10	67,950
Public Safety - TOTAL:	994,150	994,150	63,472	6	288,831	29	994,150

Town of Altavista
Fund Expenditure Totals
FY 2016
33% of Year Lapsed

GENERAL FUND (FUND 10)	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Public Works							
Operations	927,500	927,500	79,430	9	300,392	32	927,500
Debt Service	0	0	0	0	0	0	0
CIP	385,000	385,000	0	0	0	0	385,000
Public Works - TOTAL:	1,312,500	1,312,500	79,430	6	300,392	23	1,312,500
Economic Development							
Operations	169,870	169,870	10,313	6	41,046	24	169,870
CIP	0	0	0	0	0	0	0
Economic Development - TOTAL:	169,870	169,870	10,313	6	41,046	24	169,870
Transit System							
Operations	96,350	96,350	6,010	6	32,157	33	96,350
Debt Service	0	0	0	0	0	0	0
CIP	75,150	75,150	1,246	2	2,221	3	75,150
Transit System - TOTAL:	171,500	171,500	7,256	4	34,378	20	171,500
GENERAL FUND TOTALS							
Operations	3,242,890	3,242,890	278,453	9	1,103,238	34	3,242,890
Debt Service	0	0	0	0	0	0	0
CIP	563,100	563,100	1,246	0	8,724	2	563,100
GENERAL FUND - GRAND TOTAL:	3,805,990	3,805,990	279,699	7	1,111,962	29	3,805,990

Town of Altavista
Council / Planning Commission
FY 2016 Expenditure Report
33% of year Lapsed

COUNCIL / PLANNING COMMISSION - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	21,000	21,000	1,749	8	6,997	33	21,000
Other Employee Benefits			0	0	0	0	
Services	2,000	2,000	0	0	0	0	2,000
Other Charges	5,030	5,030	0	0	893	18	5,030
Materials & Supplies	0	0	0	0	0	0	0
Capital Outlay	0	0	0	0	0	0	0
Total Expenditures	**28,030**	**28,030**	**1,749**	**6**	**7,890**	**28**	**28,030**

Town of Altavista
Administration
FY 2016 Expenditure Report
33% of year Lapsed

ADMINISTRATION - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	402,200	402,200	25,228	6	132,086	33	402,200
Other Employee Benefits	18,400	18,400	0	0	1,322	7	18,400
Services	193,840	193,840	11,466	6	74,676	39	193,840
Other Charges	125,200	125,200	11,437	9	48,807	39	125,200
Materials & Supplies	28,400	28,400	5,966	21	12,327	43	28,400
Capital Outlay	10,000	10,000	0	0	0	0	10,000
Total Expenditures	**778,040**	**778,040**	**54,098**	**7**	**269,218**	**35**	**778,040**

Town of Altavista
Non-Departmental
FY 2016 Expenditure Report
33% of Year Lapsed

NON-DEPARTMENTAL - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
CONTRIBUTIONS - OTHER CHARGES							
Other Charges - Misc.	105,800	105,800	5,000	5	68,015	64	105,800
Campbell County Treasurer	*57,200*	*57,200*	*0*	*0*	*54,992*	*0*	*57,200*
USDA Assistance	*0*	*0*	*0*	*0*	*0*	*0*	*0*
NABF Youth Baseball Tournament	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Property Maintenance Enforcement	*5,000*	*5,000*	*0*	*0*	*3,023*	*60*	*5,000*
Business Development Center	*2,500*	*2,500*	*0*	*0*	*0*	*0*	*2,500*
Altavista Chamber of Commerce	*20,000*	*20,000*	*5,000*	*25*	*10,000*	*50*	*20,000*
Dumpster Reimbursement	*600*	*600*	*0*	*0*	*0*	*0*	*600*
Uncle Billy's Day Funding	*20,000*	*20,000*	*0*	*0*	*0*	*0*	*20,000*
Christmas Parade Liablity Insurance	*500*	*500*	*0*	*0*	*0*	*0*	*500*
Contribution - Altavista EMS	10,000	10,000	10,000	0	10,000	0	10,000
Contribution - Senior Center	1,000	1,000	0	0	0	0	1,000
Economic Development Incentives	42,000	42,000	0	0	0	0	42,000
Contribution - YMCA Recreation Program	100,000	100,000	25,000	25	50,000	50	100,000
Contribution - Altavista Fire Co.	10,000	10,000	9,841	98	11,446	114	10,000
Contribution - Avoca	18,700	18,700	4,675	25	9,350	50	18,700
Contribution - Altavista On Track (MS)	5,000	5,000	1,250	25	2,500	50	5,000
CONTRIBUTIONS - OTHER CHARGES - TOTAL	**292,500**	**292,500**	**55,766**	**19**	**151,311**	**52**	**292,500**
NON-DEPARTMENTAL - Non-Departmental							
Insurance Claim	0	0	0	0	3,175	0	0
Fuel - Fire Company	5,000	5,000	265	5	987	20	5,000
NON-DEPARTMENT - ND - TOTAL	**5,000**	**5,000**	**265**	**5**	**4,163**	**83**	**5,000**
NON-DEPARTMENTAL - SUBTOTAL	**297,500**	**297,500**	**56,031**	**19**	**155,473**	**52**	**297,500**
TRANSFER OUT							
Transfer Out - Cemetery Fund	49,280	49,280	0	0	0	0	49,280

Town of Altavista
Non-Departmental
FY 2016 Expenditure Report
33% of Year Lapsed

NON-DEPARTMENTAL - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Tranfer Out - Enterprise Fund	0	0	0	0	0	0	0
Transfer Out - Library Fund	0	0	0	0	0	0	0
Transfer Out - General Fund Reserve	471,100	471,100	0	0	0	0	471,100
Transfer Out - CIF	0	0	0	0	0	0	0
Transfer Out - General Fund Reserve (Fire Dept.)	65,000	65,000	0	0	16,250	25	65,000
TRANSFER OUT - TOTAL	**585,380**	**585,380**	**0**	**0**	**16,250**	**3**	**585,380**
DEBT SERVICE							
Debt Service - Principal	0	0	0	0	0	0	0
Debt Service - Interest	0	0	0	0	0	0	0
DEBT SERVICE - TOTAL	**0**	**0**	**0**	**0**	**0**	**0**	**0**
MATERIALS & SUPPLIES - Non. Dept.							
Avoca Materials & Supplies	29,400	29,400	7,350	25	14,733	50	29,400
MATERIALS & SUPPLIES - TOTAL	**29,400**	**29,400**	**7,350**	**25**	**14,733**	**50**	**29,400**
NON-DEPARTMENTAL TOTAL - EXCLUDING CAPITAL	**912,280**	**912,280**	**63,381**	**7**	**186,456**	**20**	**912,280**
CAPITAL OUTLAY - Non-Departmental							
Capital Outlay - New	0	0	0	0	0	0	0
Replacement Improvements (T-21 / Streetscape)	0	0	0	0	0	0	0
Replacement Other than Buildings (Avoca)	25,000	25,000	0	0	0	0	25,000
Replacement Other than Buildings (VDOT LAP)	0	0	0	0	0	0	0
CAPITAL OUTLAY -TOTAL	**25,000**	**25,000**	**0**	**0**	**0**	**0**	**25,000**
NON-DEPARTMENTAL TOTAL - INCLUDING CAPITAL	**937,280**	**937,280**	**63,381**	**7**	**186,456**	**20**	**937,280**
NON-DEPARTMENTAL TOTAL - EXCLUDING TRANSFERS OUT	**351,900**	**351,900**	**63,381**	**18**	**170,206**	**48**	**351,900**

Town of Altavista
Public Safety
FY 2016 Expenditure Report
33% of Year Lapsed

PUBLIC SAFETY - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	804,000	804,000	58,431	7	249,299	31	804,000
Other Employee Benefits	0	0	0	0	0	0	0
Services	16,200	16,200	1,204	7	2,299	14	16,200
Other Charges	39,500	39,500	1,772	4	13,028	33	39,500
Materials & Supplies	66,500	66,500	2,065	3	17,702	27	66,500
Capital Outlay	67,950	67,950	0	0	6,503	10	67,950
Total Expenditures	**994,150**	**994,150**	**63,472**	**6**	**288,831**	**29**	**994,150**

Town of Altavista
Public Works
FY 2016 Expenditure Report
33% of Year Lapsed

PUBLIC WORKS - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	641,100	641,100	52,718	8	211,551	33	641,100
Other Employee Benefits	0	0	0	0	0	0	0
Services	8,400	8,400	164	2	1,535	18	8,400
Other Charges	25,300	25,300	2,705	11	6,350	25	25,300
Materials & Supplies	252,700	252,700	23,844	9	80,956	32	252,700
Debt Service	0	0	0	0	0	0	0
Capital Outlay	385,000	385,000	0	0	0	0	385,000
Total Expenditures	**1,312,500**	**1,312,500**	**79,430**	**6**	**300,392**	**23**	**1,312,500**

Town of Altavista
Economic Development
FY 2016 Expenditure Report
33% of Year Lapsed

ECONOMIC DEVELOPMENT - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	102,600	102,600	7,794	8	34,425	34	102,600
Other Employee Benefits	0	0	0	0	0	0	0
Services	30,400	30,400	1,866	6	4,740	16	30,400
Other Charges	31,670	31,670	619	2	1,820	6	31,670
Materials & Supplies	5,200	5,200	34	1	61	1	5,200
Capital Outlay	0	0	0	0	0	0	0
Total Expenditures	**169,870**	**169,870**	**10,313**	**6**	**41,046**	**24**	**169,870**

Town of Altavista
Transit System
FY 2016 Expenditure Repost
33% of Year Lapsed

TRANSIT SYSTEM - FUND 10	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	64,000	64,000	4,804	8	23,211	36	64,000
Services	3,250	3,250	0	0	150	5	3,250
Other Charges	4,150	4,150	169	4	1,470	35	4,150
Materials & Supplies	24,950	24,950	1,036	4	7,326	29	24,950
Capital Outlay	75,150	75,150	1,246	2	2,221	3	75,150
Total Expenditures	**171,500**	**171,500**	**7,256**	**4**	**34,378**	**20**	**171,500**

Town of Altavista
FY 2016 Revenue Report
33% of Year Lapsed

Enterprise Fund Revenue	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Interest/Interest Income	2,000	2,000	968	48	4,065	203	2,000
Water Charges - Industrial	904,000	904,000	81,717	9	340,704	38	904,000
Water Charges - Business/Residential	294,000	294,000	12,366	4	100,256	34	294,000
Water Charges - Outside Community	136,000	136,000	9,555	7	48,562	36	136,000
Water Charges - Water Connection Fees	3,000	3,000	1,613	54	3,113	104	3,000
Sewer Charges - Industrial	1,187,400	1,187,400	94,294	8	392,955	33	1,187,400
Sewer Charges - Business/Residential	291,000	291,000	11,714	4	93,829	32	291,000
Sewer Charges - Outside Community	2,000	2,000	526	26	1,086	54	2,000
Sewer Charges - Sewer Connection Fees	5,200	5,200	0	0	2,000	38	5,200
Sewer Charges - Sewer Surcharges	100,000	100,000	1,139	1	15,892	16	100,000
Charges for Service - Water/Sewer Penalties	4,600	4,600	1,477	32	2,608	57	4,600
Misc. Cash Discounts	200	200	2	1	5	3	200
Misc. Sale of Supplies & Materials	500	500	0	0	0	0	500
Miscellaneous	25,000	25,000	2,325	9	22,334	89	25,000
State Fluoride Grant	0	0	0	0	0	0	0
Transfer In from Fund 50 (CIP Designated Res)	0	0	0	0	0	0	0
Transfer In from Reserves	0	0	0	0	0	0	0
Transfer in From General Fund	0	0	0	0	0	0	0
ENTERPRISE FUND - REVENUE:	2,954,900	2,954,900	217,698	7	1,027,409	35	2,954,900

Town of Altavista
Fund Expenditure Totals
FY 2016
33% of Year Lapsed

ENTERPRISE FUND (FUND 50)	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Water Department							
Operations	932,090	932,090	79,559	9	341,254	37	932,090
Debt Service	280,000	280,000	0	0	214,750	0	280,000
CIP	210,600	210,600	205,457	98	702,070	333	210,600
Transfer Out	73,630	73,630	0	0	0	0	73,630
Water Department - TOTAL:	1,496,320	1,496,320	285,016	19	1,258,074	84	1,496,320
Wastewater Department							
Operations	1,174,950	1,174,950	82,378	7	307,324	26	1,174,950
Debt Service	0	0	0	0	0	0	0
CIP	210,000	210,000	0	0	8,626	4	210,000
Transfer Out	73,630	73,630	0		0		73,630
Wastewater Department - TOTAL:	1,458,580	1,458,580	82,378	6	315,951	22	1,458,580
ENTERPRISE FUND TOTAL							
Operations	2,107,040	2,107,040	161,937	8	648,578	31	2,107,040
Debt Service	280,000	280,000	0	0	214,750	0	280,000
CIP	420,600	420,600	205,457	49	710,696	169	420,600
Transfer Out	147,260	147,260	0		0		147,260
ENTERPRISE FUND - GRAND TOTAL:	2,954,900	2,954,900	367,394	12	1,574,025	53	2,954,900

Town of Altavista
Water Department
FY 2016 Expenditure Report
33% of Year Lapsed

WATER DEPARTMENT - FUND 50	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	543,600	543,600	36,739	7	172,693	32	543,600
Other Employee Benefits	0	0	0	0	0	0	0
Services	43,300	43,300	18,104	42	64,844	150	43,300
Other Charges	163,350	163,350	12,601	8	42,905	26	163,350
Materials & Supplies	181,840	181,840	12,115	7	60,811	33	181,840
Debt Service	280,000	280,000	0	0	214,750	0	280,000
Capital Outlay	210,600	210,600	205,457	98	702,070	333	210,600
Transfer Out to Reserves	73,630	73,630					73,630
Total Expenditures	**1,496,320**	**1,496,320**	**285,016**	**19**	**1,258,074**	**84**	**1,496,320**

Town of Altavista
Wastewater Department
FY 2016 Expenditure Report
33% of Year Lapsed

WASTEWATER DEPARTMENT - FUND 50	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Wages & Benefits	677,600	677,600	40,889	6	184,897	27	677,600
Other Employee Benefits	0	0	0	0	0	0	0
Services	15,650	15,650	10,388	66	11,407	73	15,650
Other Charges	313,000	313,000	25,269	8	82,092	26	313,000
Materials & Supplies	168,700	168,700	5,832	3	28,929	17	168,700
Debt Service	0	0	0	0	0	0	0
Capital Outlay	210,000	210,000	0	0	8,626	4	210,000
Transfer Out	73,630	73,630					73,630
Total Expenditures	**1,458,580**	**1,458,580**	**82,378**	**6**	**315,951**	**22**	**1,458,580**

Town of Altavista
Fund Expenditure Totals
FY 2016
33% of Year Lapsed

State/Hwy Reimbursement Fund (Fund 20)	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Operations	451,000	451,000	16,355	4	62,154	14	451,000
CIP	168,000	168,000	0	0	0	0	168,000
State/Hwy Water Department - TOTAL:	619,000	619,000	16,355	3	62,154	10	619,000

Cemetery Fund - (Fund 90)	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
Cemetery - Operations - Total:	31,280	31,280	2,293	7	10,009	32	31,280
CIP	21,000	21,000	0	0	17,253	82	21,000
Transfer Out - Cemetery Reserve	25,000	25,000	0	0	0	0	25,000
Cemetery Fund - TOTAL:	77,280	77,280	2,293	3	27,262	35	77,280

Town of Altavista
FY 2016 State/Highway Fund
33% of Year Lapsed

State/Highway Reimbursement Fund - Fund 20	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
REVENUE							
Street & Highway Maintenance	619,000	619,000	0	0	163,309	26	619,000
Street & Highway Maintenance/Carry Over	0	0	0	0	0	0	0
Street & Highway Maintenance/Cash Discount	0	0	0	0	0	0	0
State/Highway Reimbursement Fund - GRAND TOTAL:	**619,000**	**619,000**	**0**	**0**	**163,309**	**26**	**619,000**
EXPENDITURES							
Maintenance - Other Maintenance	0	0	0	0	0	0	0
Maintenance - Drainage	48,200	48,200	1,015	2	6,564	14	48,200
Maintenance - Pavement	150,000	150,000	1,517	1	4,062	3	150,000
Maintenance - Traffic Control Devices	56,800	56,800	3,664	6	11,608	20	56,800
Engineering - Repairs & Maintenance	10,000	10,000	0	0	0	0	10,000
Traffic Control Operations	0	0	0	0	0	0	0
Road/Street/Highway - Snow & Ice Removal	56,000	56,000	0	0	0	0	56,000
Road/Street/Highway - Other Traffice Services	50,000	50,000	6,271	13	22,519	45	50,000
General Admin. & Misc. - Miscellaneous	80,000	80,000	3,888	5	17,400	22	80,000
State/Highway Reimb. Fund - Subtotal:	451,000	451,000	16,355	4	62,154	14	451,000
Improvements Other Than Buildings - New	168,000	168,000	0	0	0	0	168,000
Engineering - New							
State/Highway Reimb. Fund - Capital Outaly - Subtotal:	**168,000**	**168,000**	**0**	**0**	**0**	**0**	**168,000**
Transfer Out - General Fund Reserve							
State/Highway Fund - GRAND TOTAL:	**619,000**	**619,000**	**16,355**	**3**	**62,154**	**10**	**619,000**

Town of Altavista
FY 2016 Cemetery Fund
33% of Year Lapsed

Cemetery Fund - Fund 90	FY 2016 Adopted Budget	FY 2016 Amended Budget	FY 2016 MTD	MTD % of Budget	FY 2016 YTD	YTD % of Budget	YTD Projections
REVENUE							
Permits/Burials	15,000	15,000	0	0	4,950	33	15,000
Interest/Interest Income	9,000	9,000	153	2	2,564	28	9,000
Miscellaneous/Sale of Real Estate	4,000	4,000	0	0	0	0	4,000
Miscellaneous/Misc.	0	0	25	0	25	0	0
Transfer In From General Fund	49,280	49,280	0	0	0	0	49,280
Cemetery Fund - GRAND TOTAL:	**77,280**	**77,280**	**178**	**0**	**7,539**	**10**	**77,280**
EXPENDITURES							
Salaries and Wages/Regular	9,500	9,500	31	0	2,199	23	9,500
Salaries and Wages/Overtime	500	500	0	0	249	50	500
Benefits/FICA	800	800	2	0	164	21	800
Benefits/VRS	1,050	1,050	4	0	240	23	1,050
Benefits/Medical Insurance is pre-paid	1,300	1,300	5	0	380	29	1,300
Benefits/Group Life	130	130	0	0	26	20	130
Other Charges/Misc. Reimb.	0	0	0	0	0	0	0
Materials/Supplies & Repairs/Maint.	18,000	18,000	2,250	13	6,750	38	18,000
CAPITAL OUTLAY							
Machinery & Equip. - Replc.	21,000	21,000	0	0	17,253	82	21,000
TRANSFER OUT							
Transfer Out/To Cemetery Reserve	25,000	25,000	0	0	0	0	25,000
Cemetery Fund - GRAND TOTAL:	**77,280**	**77,280**	**2,293**	**3**	**27,262**	**35**	**77,280**

Town of Altavista

Grand Total of all Investments and Deposits **$ 14,277,090.98**

Balance as of October 31 , 2015

			Non-Specific
Green Hill Cemetery	562,493.89		
General Fund Reserves			
Capital Improvement Program Reserves			3,442,330.72
Altavista EDA Funding	300,174.67	*	
	300,174.67		
Enterprise Fund Reserves			
Capital Improvement Program Reserves			200,571.44
PCB Remediation	600,468.83		
Community Improvement Reserve	0.00		
Police Federal	2,908.32		
Police State	15,437.15		
Public Funds Money Market Accounts			8,766,874.59 → Includes Funds $624,374.07 for Proj 1A - Bedford Waterline
Operating Checking Account (Reconciled Balance)	**385,831.37**		
DESIGNATED FUNDS	1,867,314.23		
			12,409,776.75
Reserve Policy Funds (This figure changes annually w/audit)			-6,313,403.00
UNDESIGNATED FUNDS			6,096,373.75

NOTES:	Earmarked CIP Reserve / Trash Truck - FY 2015		-184,000.00
	Earmarked for Final Downtown Map-21 Project		-77,600.00
	ED rem balance of $35,000(website and marketing)		-6,240.00
	FY 2014 Highway Carryover of Funds		-256,918.72
	Earmarked for AOT No Interest Loan Program		-40,000.00
	"Pop-Up" Altavista Funding		-10,000.00
	Accrued Liability		-197,801.84
	Tank Maintenance FY 2014		-50,000.00
	FY15 Projected Carryover Needs		-277,375.00
	Transit Funding		-4,209.00
Apprvd 8/11/15	Funds for Project 1A - Bedford Waterline Imrpovement		-850,261.62
Apprvd 8/11/15	Littleton & Assoc. Emergency - doesn't include pumps		-102,600.00
Apprvd 8/11/15	PCB - Test entire pond		-6,000.00
Apprvd 6/9/15	Bedford Ave water tank		-62,000.00
Apprvd 8/25/15	Mill & pave project area of Bedford estimated cost		-55,000.00
Apprvd 8/25/15	Woodard & Curran's phase I SCADA system		-95,000.00
Apprvd 9/22/15	Concept presented at work session for improvements to electrical at WTP and construction of new bldg to house electric panels		-1,041,859.80
	UNDESIGNATED RESERVE FUND BALANCE		2,779,507.77

	General	*Enterprise*	*Total*
Policy $	4,982,908	1,330,495	6,313,403

AOT October Monthly Report

Special Events

- CVCC Listening Tour
- Met with Jamie Glass for Giblet Jog and website planning
- CVCC lunch and learn- “Marketing through Community Involvement”
- Jefferson Assembly networking event
- Chamber meeting about John Martin
- Technology Council- Region 2000
- Let’s Put Altavista On The Map
- Ribbon Cutting for Label Shopper

AOT Events

- Completed VMS quarterly report
- Revised and rebuilt Altavista On Track Website
- Researched Virginia Tourism Love signs
- Met with Mosca design to discuss new banner designs
- Held monthly AOT board meeting
- Giblet jog registration is live!
- Sent out donation letters for Giblet jog to local sponsors
- Sent out Giblet Jog Registration brochures
- Met with public works and Tim George about day of race planning
- Met with promotions committee to discuss magnet design for AOT campaign and promotional items for race day goodie bags
- Met with Economic Vitality Committee to discuss applying for Powell Grant
- Helped facilitate planning for Nov 16th VMS training in Altavista
- Handled all depositions of checks for Giblet Jog
- Fixed information for Google Businesses for AOT
- Handed out rewards to DMV & Smith Building Mercantile for Scarecrow Stroll
- Participated in town-wide Halloween candy give out

Economic Development

- Met with local artist to discuss the possibility of mural designs
- Attended property viewing of KFC
- Met with JoSa Gardens- New CSA business license was gained
- Maid revisions on Marketing booklet for Economic Development

Goals to be completed by next month

- Christmas Parade Promotion
- Powell Grant will be submitted
- Will look into applying for the Greater Lynchburg Area Trust Fund
- Will participate in business Expo
- Successful Giblet Jog
- Will review and revise marketing brochure for downtown area

Memo

To: Town Council

From: Dennis Jarvis, II, Director of Economic Development

Cc: J. Waverly Coggsdale, III, Town Manager

RE: October 2015 Economic Development Update

Announcements/Highlights:

- **Staff worked with a site selection consultant for contacts and leads for the Altavista Office Park call center space.**
- **Staff attended Region 2000 marketing meeting with officials at the Virginia Economic Development Partnership.**
- **The town of Altavista was selected as a Tier III participant in the Virginia Broadband Planning Initiative.**

Networking:

- Staff attended the Region 2000 SBDC Marketing Committee meeting.
- Staff attended the Region 2000 VEDP marketing meeting.
- Staff led delegation of the Altavista Chamber of Commerce to VEDP to discuss data center projects.
- Staff attended e Civics training.
- Staff attended Region 2000 Governmental Council dinner.
- Staff attended Jefferson's Assembly.
- Staff attended Altavista Planning Council meeting.

Existing Business and Retention

- Staff met with officials at Schrader Bridgeport.
- Staff met with officials at Abbot.
- Staff met with officials at English Hardware regarding internet service.

Marketing

- Staff is working with Blair Marketing on the final drafts of the economic development and quality of life brochure. The final drafts of the items will be presented to the town council in December.
- Staff worked with the Campbell Office of Economic Development and Region 2000 on a marketing effort for the Altavista Office Park.

Develop Products

- Staff continued assistance with Hub Scrap on the demolition at the former Lane Site.
- Staff prepared a briefing for the Altavista EDA on an industrial property evaluation. The briefing will be presented at the December Town Council meeting.

Encourage Entrepreneurism

- Staff has identified a grant opportunity to develop a training program to encourage entrepreneurial growth. Will apply this month.

Monthly Report to Council

Date: November 10, 2015

To: Town Council

From: Dan Witt, Assistant Town Manager

Re: October Reporting

---

1. **Zoning/Code Related Matters:**
   October 2015 Permits

DATE	PERMIT #	APPLICANT NAME & ADDRESS	REASON FOR PERMIT
1-Oct	038-15	Tammy Barksdale, 1802 Forest St.	12x16' deck on front of house
1-Oct	039-15	Thomas Kathan, PO Box 251, Altavista	TK Transport, 914 Main St
2-Oct	040-15	Huck Finn, INC, Latham NY	New Business, 1301 Main St. T&C Shopping Center
22-Oct	041-15	Delois Webb, 346 Starkey Rd, Gretna	New Sign at 1029 Main St. C&W Hair Salon

- Notice of Zoning Violation issued to owner of property at 2209 Beech Avenue for possible encroachment of a shed.
- Contacted Bank of Charlotte about grass at former Mosely Heights Elementary School.

2. **Site Plans Reviewed and/or Approved:**
   - Approved survey on West Road for parcels 68-A-201, 202 & 234. Z
   - Zoning Compliance letter issued for 1106 4th Street.
   - Notice of Zoning Violation issued to owner of property at 2209 Beech Avenue for possible encroachment of a shed.

3. **Planning Commission (PC) Related:**
   - Completed packets for November 2nd meeting. Included notice public hearing to consider 'chicken ordinance,' preparing for November 16th SUP public hearing, and Comp Plan update.
   - The PC has a recommendation to Council for the proposed ordinance to allow for chickens.
   - The PC reviewed chapters 6-7 of the Comp Plan.

4. **AOT Related**
   - Nothing Noted

5. **ACTS Related**
   - Validated daily ridership and revenue for bus system (October) - see bus report. Ridership seems to have peaked and leveled off and remains at 98% compared to the same timeframe for 2014.

- No further details for the replacement bus was ordered from Sony Merriman, INC. Delivery is still expected for late October or November.
- Operations reimbursements submitted for July and August 2015 and letter of explanation drafted and provided to Neil Sherman related to the bus shelter reimbursement request submitted in September.
- De-obligated Federal funds not spent for shelters and operations for FY2015.
- Completed DRPT documentation for FY2015 operations, validating expenses, revenue mileage and ridership.
- Seeking input for vehicle wrap for new bus.
- Quarterly DBE reporting.
- Updates and corrections to Title VI policy completed and submitted back to DRPT.
- Met with Carlton to complete annual review.

6. **Projects and Administrative Related:**
   - Attended Industry appreciation reception at AVOCA.
   - Updated GIC
   - Town Council report for October regular meeting and attended regular meeting. Report and presentation at the October work session for boat launch site and TAP grant application request.
   - Certified September bank statements.
   - Continued with vulture depredation and dispersion. They have finally been moving on from normal roosting sites off Franklin Avenue.
   - Completed TAP FY2017 grant for upgrades to the traffic signals at 7th and Bedford Ave. and Main Street and Bedford Avenue. Grant amount requested was $220,000 with a Town match of $44,000. Applications were due on October 30th.
   - Completed 2016 Town Calendar for final staff review.
   - Release for Habitat to park for Blitz Build on 16th Street.
   - ECivis online training for grant writing.
   - Attended Chamber ribbon cutting for Label Shopper.

David T. Garrett, Jr. Director of Public Works● P.O. Box 420, Altavista, VA 24517
Telephone: (434) 369-6050 ● Fax: (434) 369-6981 ● dtgarrett@altavistava.gov

Public Works / Utility Report
October 2015

During the month the Public Works / Utility Crews were busy with the following Maintenance, Repairs, and other assorted task. These activities reflect the Town Wide Goals of Stewardship, Public Safety and Improving Customer Service as well as Improving Altavista's Environment and Image.

Work Orders Process 235

Utility Department - Water Distribution:

- Located Miss Utility Tickets----------64
- Water Turn On / Turn Off(s)----------71
- Read Monthly Meters----------65
- Exchanged Meters----------6

Utility Department – Location Distribution:

- Maintain Meters----------63 Man Hours
- Maintain Water and Sewer Utilities----------217.50 Man Hours
- Maintain Tanks----------2.50 Man Hours
- Assisting Water Treatment Plant----------103 Man Hours
- Assisting Waste Water Treatment Plant----------30 Man Hours

Street Department:

- Mowing----------0 Acres
- Litter Pick up----------0 Bags
- Weed Control----------27 Gallons
- Sweeping Streets----------60 Miles
- Weekend Trucks----------3
- Other Traffic Roadside Maintenance On Streets----------414.50 Hrs

Buildings & Grounds and Sanitation:

- Green Hill Cemetery – Burial----------0
- Green Hill Cemetery – Cremations----------0
- Brush Collected Stops----------130 Stops
- Brush Collected Loads----------10 Loads
- Bulk Collection Stops----------126 Stops
- Bulk Collection Tonnage----------10.99 Tons
- Solid Waste Tonnage----------85.55 Tons
- Labor Hours at Green Hill Cemetery to maintain Grave Sites----------2 Man Hours
- Maintain Park Buildings----------121 Man Hours
- Maintain Parks, Mowing, Flowers Beds, Weed Control----------295 Man Hours

Special Projects:

- PCB Remediation Work

Water Department Report:

****NOTE: (THE INFORMATION FOR THIS SECTION IS NOT AVAILABLE AT THE MOMENT PER POLLY BROWN)***

Water Production:

- Water Plant: 39.68 million gallons of raw water treated.
- Water Plant: 36.35 million gallons of finished water delivered.
- McMinnis Spring: 7.56 million gallons of finished water treated.
- McMinnis Spring: average 263,033 gallons per day and run time hours 16 a day.
- Reynolds Spring: 5.26 million gallons of finished water treated.
- Reynolds Spring: average 184,267 gallons per day and run time hours 11 a day.

Water Consumption From:

- Campbell County Utility and Service Authority: 000,000 Gallons

Water Sold:

- Town of Hurt 2,850,400 Gallons

Water Plant Averages for August 2015 :

- Weekday**: 22.5 hrs** / day of production
  1,317,318 gallons treated / day
- Weekends: **17.6 hrs**/ day of production
  1,044,875 gallons treated / day

Water Plant Projects:

- Flushed Out Filter Line 1-5
- Quarterly Sampling Completed
- Chemical Calibrations Completed
- Continued Progress on SCADA system
- Safety Equipment Stations installed at Springs and Plant

Wastewater Department Report

- IALR Dr. Lowman sampled EOP (grass pots)
- Flood preparedness meeting Town Hall
- Flood Weekend of 10-3-15 No damage reported at WWTP
- Replaced pump float at RVDPS
- Replaced electrical pull box at Headworks WWTP
- Repainted electrical boxes at Headworks WWTP
- Bill Jackson repaired well level meter at RVDPS (2hrs)
- Steve Miller retirement (10-30-15)
- Normal Monthly Work Session with Council
- Submitted Corrective Action Plan to DCLS for Lab Inspection 9/22/15
- Sampled industrial users for surcharge and permit compliance
- Normal plant operation and maintenance

Sludge Processed	74 wet tons
Gallons of Water Treated	55.76 MG

Plant Efficiency

BOD Reduction	**98%**
TSS Reduction	**98%**

ACTS RIDER TALLY

October 2015 Ridership Report

Yearly Totals				
	Rider Totals	Miles Driven	Fare Box Revenue	*Days Run	Ave./per Day
2011	10,919	40,392	$ 3,783.00	272.5	40
2012	15,265	45,706	$ 5,329.50	281	54
2013	17,760	45,358	$ 5,721.00	282.5	63
2014	23,511	47,856	$ 6,924.94	302.5	78 *Summer Hours initiated
2015	**19,703**	**40,786**	**$ 4,564.14**	**259**	**76** **YTD Numbers**

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTALS	Net Gain
2011	391	590	481	495	551	1,617	1,364	1,499	1,201	805	849	1,076	10,919	
2012	813	875	983	872	1,028	2,026	1,850	1,962	1,618	1,176	1,083	979	15,265	140%
2013	939	1,015	968	1,152	1,362	2,272	1,956	2,231	1,705	1,416	1,440	1,304	17,760	116%
2014	1,318	1,253	1,259	1,527	1,486	3,335	3,051	2,575	2,502	1,790	1,587	1,828	23,511	132%
2015	1,644	1,591	1,696	1,596	1,444	3,145	2,538	2,242	2,036	**1,771**			19,703	98%

* Day is equivalent to 10 hours

Agenda Item: 8a

STAFF REPORT

To: Mayor Mattox and Council members

From: Waverly Coggsdale, Town Manager

Date: November 10, 2015

Re: Broad Street Sidewalk Improvements

Summary

Previously the Town received complaints in regard to the uneven nature of the sidewalk in the 1000 block of Broad Street causing trip hazards. Following an investigation of the area it was noted that several sections of sidewalk along Broad Street were in need of repair, primarily due to the roots of large trees between the curb and the sidewalk, as well as wear/tear and age. Town staff blocked of the section of sidewalk until a "temporary fix" could be implemented.

At this time staff presents to you a plan by which to address the sidewalk in this area. Of note, is the attention that is being paid to the "memorial" wall at St. Peters Episcopal Church and our attempt to salvage the wall. This area is one of the worst in regard to the sidewalk condition but is complicated by the wall and its condition.

Each year the Town's budget includes funds received from the Virginia Department of Transportation for maintenance issues related to the roads and right of ways which are under our domain. Sidewalk repair is one of the categories listed for use of such funds. Staff will present cost estimates for this work to Council at their meeting. It is anticipated that the necessary funds would be available in the State/Highway Reimbursement Fund (Fund 20) of the FY2016 Budget.

Recommendation

Approve the sidewalk project for Broad Street as outlined.

Attachments: Staff Memo; Broad Street Sidewalk Drawings

Memorandum

To: Waverly Coggsdale, Town Manager

From: David Garrett, Public Works Director

Date: 11-4-15

Subject: Broad Street Sidewalk Repair/Replacement

The Public Works Department has located 755 linear feet of sidewalk that needs to be removed and replaced on Broad Street. Starting at the corner of 11th and Broad Street down to 10th Street we have 220 feet, and from 10th Street to 9th Street we have 530 feet. These sections of the sidewalk have been broken up and pushed up due to the large Pen Oak Trees that are located right next to the sidewalk, and due to the age.

We have put together a drawing that shows the location of the trees, location of sidewalk that needs to be replaced, and pictures that show the condition of the sidewalk.

The Public Works Department is requesting for approval, to go in on Broad Street and remove the 755 linear feet of the bad section of sidewalk and replace. With this project we will also have to attempt to save or salvage 75 linear feet of retaining wall that is located in front of the Saint Peters Episcopal Church. The retaining wall has cracked, push in toward the sidewalk, and is leaning.

The Public Works Department and the Town Manager has been in contact with the Saint Peters Episcopal building & grounds members. The retaining wall was erected by the church as a memorial project in memory of the Jenks Family. The retaining wall is located on Town property and it is our belief, that when the adjacent sidewalk is removed the retaining wall may be further damaged or fall in and would have to be replaced. The church committee has requested that the town salvage the wall if at all possible. If the wall has to be removed the church committee would like for the town to build the wall back with brick by using the old brick or by using new brick. This would preserve the historic significant of the wall. The Committee also feels that the wall was damaged due to the roots from the trees that the Town planted some many years ago.

Staff would also like to point out that due to the large tree roots around the area of the sidewalk we will have to cut some of the roots that have grown up around the sidewalk in order to put the sidewalk back in place. At this time we are not proposing to remove the large trees, however by cutting roots that are close to the trees may damage the tree and cause the trees to die in the near future.

Due to the sensitivity of this project, the labor for this project will consist of the Town Public Works Crews and Sub Contractors to complete in a timely manner.

The first option would be to salvage the retaining wall by going in with town forces and excavating the dirt behind the retaining wall, attempt to straighten the wall, stabilize the wall with new concrete wall and attach, install drain pipe and backfill with stone on back side. After the retaining wall is secure we would then remove the old sidewalk and install new.

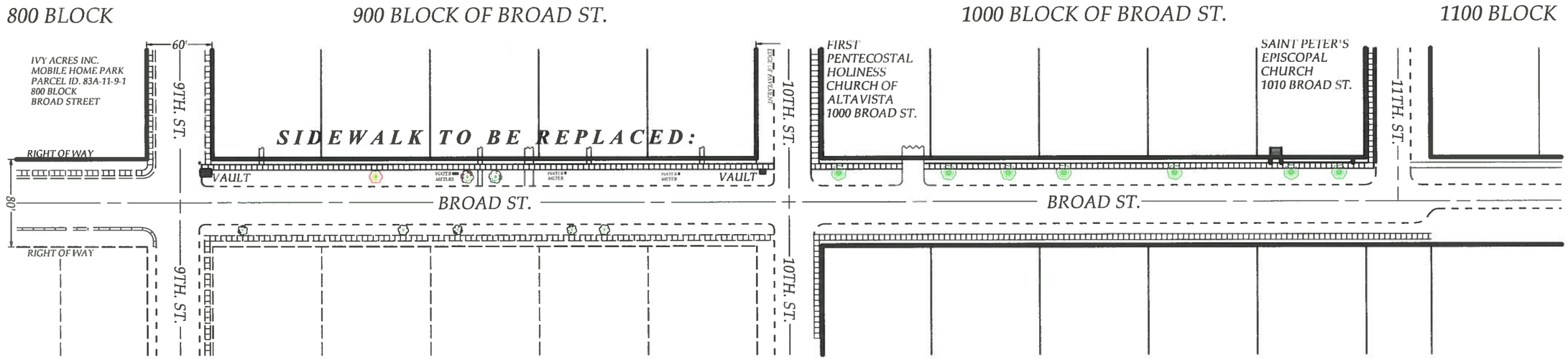
The second option, should option 1 fail, we would remove the old wall and sidewalk, install foundation for wall, pour 8" concrete retaining wall, have brick mason to lay bricks on the front side for the finish to include existing memorial plaque. After the retaining wall is back in place we would install the new sidewalk.

The rest of the project would consist of just removing old sidewalk and pouring new concrete and finishing.

The funding for this project would come out of our current CIP 020-4101-608.82-30. Town Staff is in the process of obtaining estimates for this project and will be presented at the Council Meeting.


2
3
4
5
6
7

755 LINEAR FEET OF SIDEWALK:



BROAD STREET:

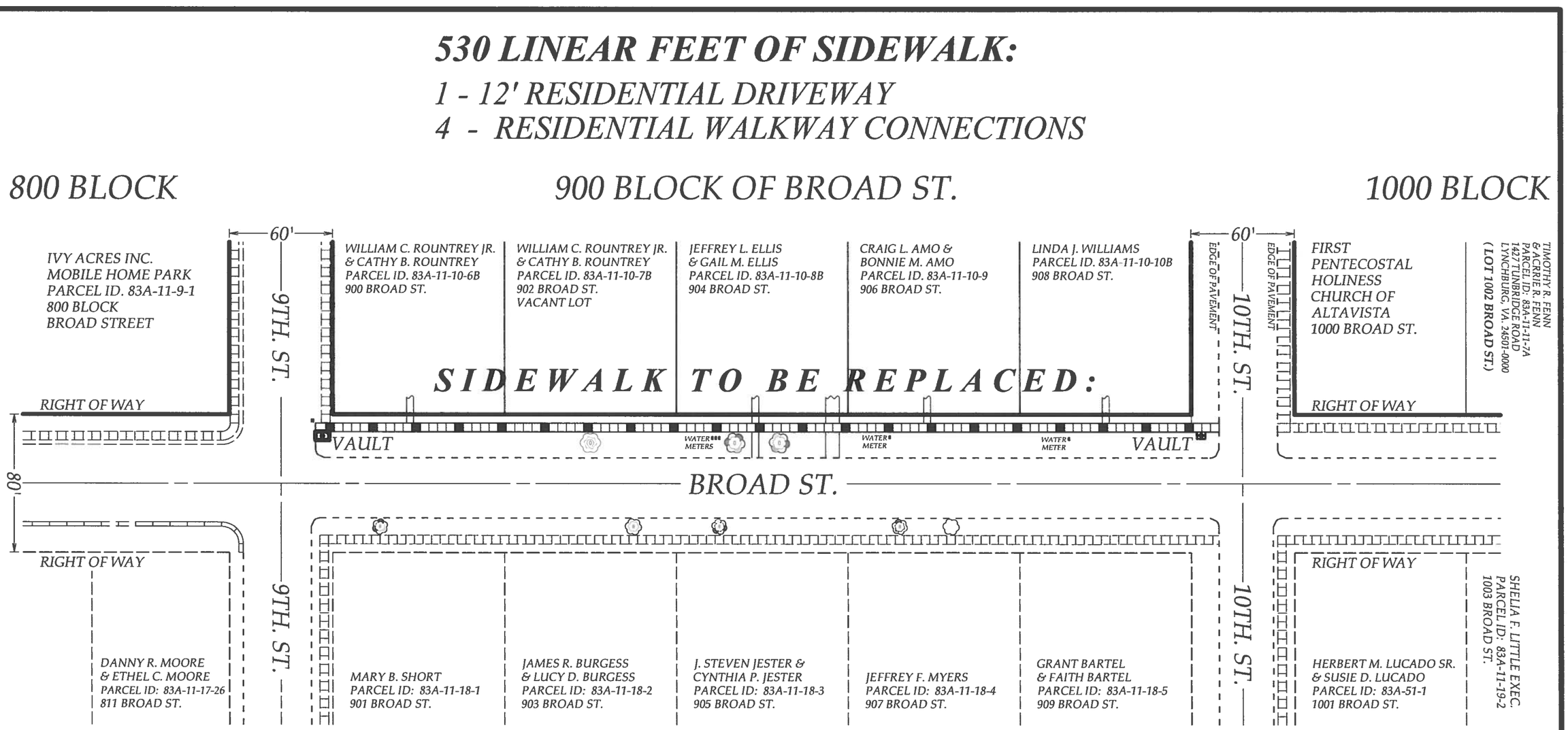
SIDEWALK REPLACEMENT

900 AND 1000 BLOCKS

REFERENCE:	SHEET:	
CIVIL:	1 OF 6	
DATE:	SCALE:	PROJECT NO.:
OCT. 08, 2015.	1" = 100'	15-10-002

530 LINEAR FEET OF SIDEWALK:

1 - 12' RESIDENTIAL DRIVEWAY
4 - RESIDENTIAL WALKWAY CONNECTIONS



BROAD STREET:

SIDEWALK REPLACEMENT

FOR THE 900 BLOCK

REFERENCE:	SHEET:
CIVIL:	2 OF 6
DATE:	SCALE:	PROJECT NO.:
NOV. 04, 2015.	1" = 60'	15-10-003

900 BLOCK:

225 LINEAR FEET OF SIDEWALK IN 1000 BLOCK

1000 BLOCK:

CRAIG L. AMO &
BONNIE G. M. AMO
PARCEL ID: 83A-11-10-9
1004 BROAD ST.

LINDA J. WILLIAMS
PARCEL ID: 83A-11-10-10B
908 BROAD ST.

RIGHT OF WAY

WATER METER

FIRE HYD.

10TH. ST.

FIRST PENTECOSTAL HOLINESS CHURCH OF ALTAVISTA
1000 BROAD ST.

TIMOTHY R. FENN
& ACRRIE R. FENN
PARCEL ID: 83A-11-11-7A
1427 TUNBRIDGE ROAD
LYNCHBURG, VA. 24501-0000

(LOT 1002 BROAD ST.)

KENNETH C. PRUETT
& JANICE I.. PRUETT
PARCEL ID: 83A-11-11-8
1004 BROAD ST.

MATCH LINE:

ROBERT I. STEELE &
ELIZABETH S. STEELE
PARCEL ID: 83A-11-11-9
1006 BROAD ST.

ASPHALT DRIVEWAY

WATER METERS

GAS LINE

S. C.

SEWER CLEANOUT

GAS LINE

GRATED DRAIN

S. C.

35'

EDGE OF PAVEMENT

25'

30'

WATER METERS

35'

STEPPING STONES

1+00 2+00' 3+00' 4+00' BROAD ST. 5+00' 6+00'

EDGE OF PAVEMENT

RIGHT OF WAY

JEFFREY F. MYERS
PARCEL ID: 83A-11-18-4
907 BROAD ST.

GRANT BARTEL
& FAITH BARTEL
PARCEL ID: 83A-11-18-5
909 BROAD ST.

HERBERT M. LUCADO SR.
& SUSIE D. LUCADO
PARCEL ID: 83A-51-1
1001 BROAD ST.

SHELIA F. LITTLE EXEC.
PARCEL ID: 83A-11-19-2
1003 BROAD ST.

SHELIA F. LITTLE EXEC.
PARCEL ID: 83A-11-19-2A
1005 BROAD ST.

JAMES H. HIGGINBOTHAM II
& PHYLLIS S. HIGGINBOTHAM
PARCEL ID: 83A-11-19-3
1007 BROAD ST.

KURT R. MAULBECK
& PATTI A. MAULBECK
PARCEL ID: 83A-51-4
1009 BROAD ST.

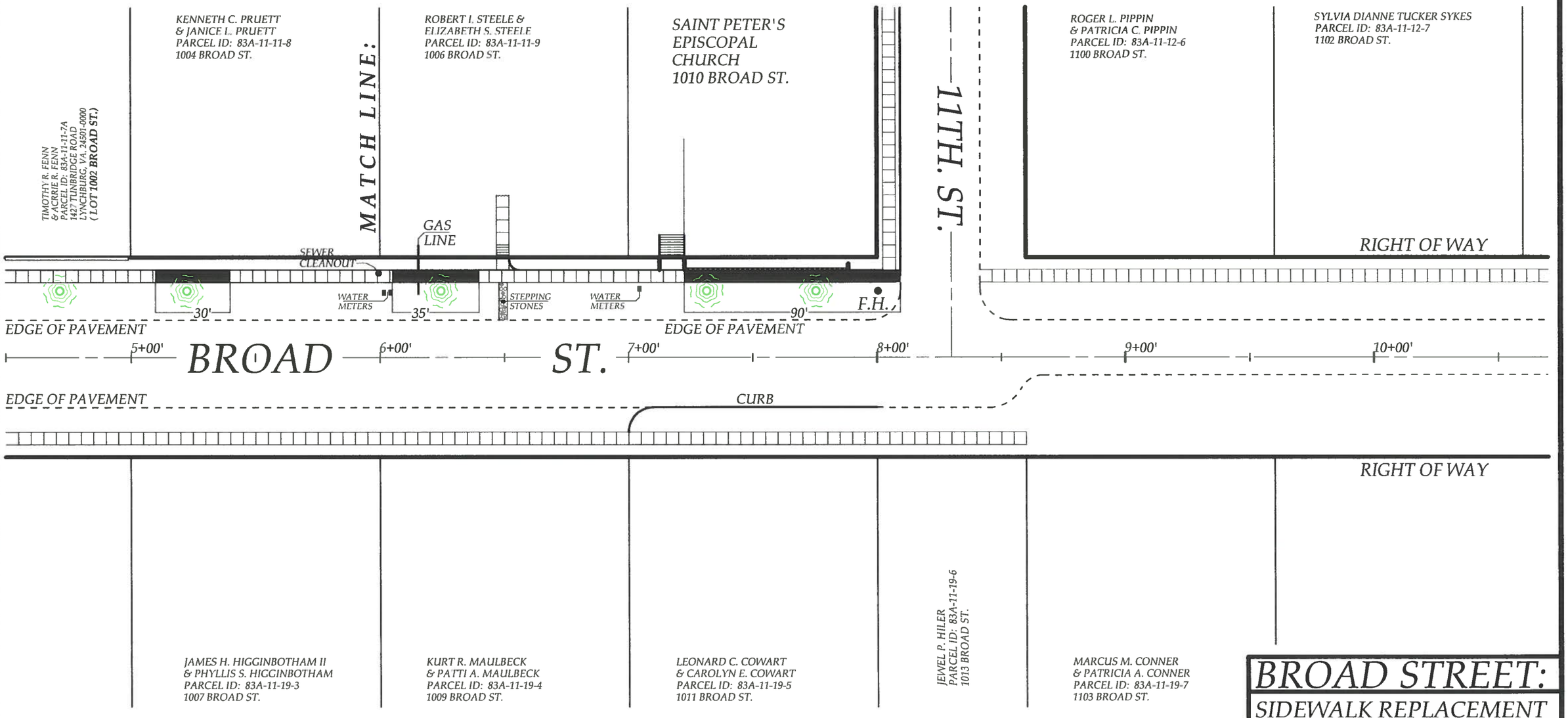
BROAD STREET:

SIDEWALK REPLACEMENT

900 AND 1000 BLOCKS

REFERENCE:	SHEET:	
CIVIL:	3 OF 6	
DATE:	SCALE:	PROJECT NO. :
OCT. 08, 2015.	1" = 40'	15-10-002

1000 BLOCK OF BROAD ST. **225 LINEAR FEET OF SIDEWALK:** 1100 BLOCK



BROAD STREET:

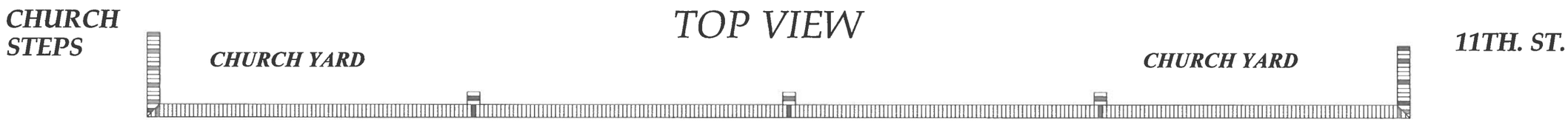
SIDEWALK REPLACEMENT

900 AND 1000 BLOCKS

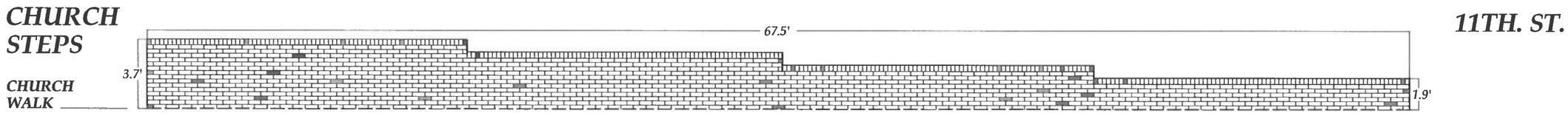
REFERENCE:	SHEET:
CIVIL:	4 OF 6
DATE:	SCALE:	PROJECT NO. :
OCT. 08, 2015.	1" = 40'	

BRICK RETAINING WALL AT SAINT PETER'S EPISCOPAL CHURCH

TOP VIEW

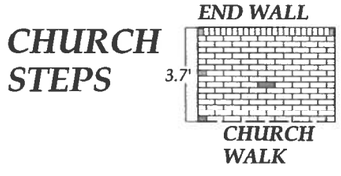


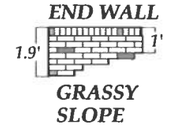
FRONT VIEW



THERE ARE A NUMBER OF VERTICAL CRACKS ALONG THE LENGTH OF THE WALL

END VIEWS



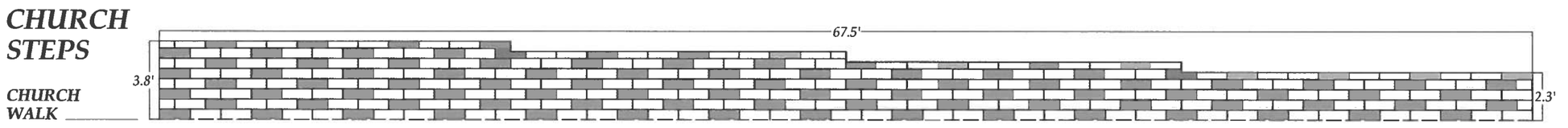


11TH. ST.

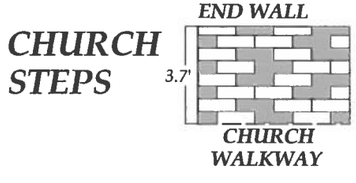
PROPOSED DECORATIVE RETAINING WALL AT SAINT PETER'S EPISCOPAL CHURCH

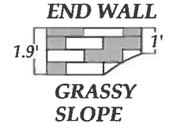
TOP VIEW

FRONT VIEW



END VIEWS





SHEET 6 OF 6

DATE: -- NOVEMBER 04, 2015.
SCALE: -- 1" = 6'

Agenda Item: 8b

STAFF REPORT

To: Mayor Mattox and Council members

From: Waverly Coggsdale, Town Manager

Date: November 10, 2015

Re: Lynch Road Sewer Extension Request

Summary

Previously the Town was contacted in regard to the extension of sewer service to a citizen on Lynch Road that was having issues with their failing private septic system (septic tank/drainfields). Public Works staff has been working on exploring alternatives to this situation as the property in question is not currently served by Town sewer.

Attached is a staff memo that reviews the situation and the alternatives explored. Staff will be presenting costs associated with the alternatives that would involve the Town. If appropriate information is available, we would ask Council to review and give staff direction on this matter. If not, then we would ask to move it to the next Work Session agenda.

Recommendation

Per discussion

Attachments: Staff Memo; Lynch Road Sewer Extension Drawings

INTEROFFICE MEMORANDUM

TO: WAVERLY COGGSDALE, TOWN MANAGER
FROM: DAVID GARRETT, PUBLIC WORKS DIRECTOR
SUBJECT: LYNCH ROAD SEWER REQUEST
DATE: NOVEMBER 5, 2015
CC:

The Town has received a request for a sewer service connection from Mrs. James West located at 1265 Lynch Road. This property is located within the Town limits and the current private sewer system is served by septic drain field. The current drain field system trenches have failed and they are pumping and hauling to get by.

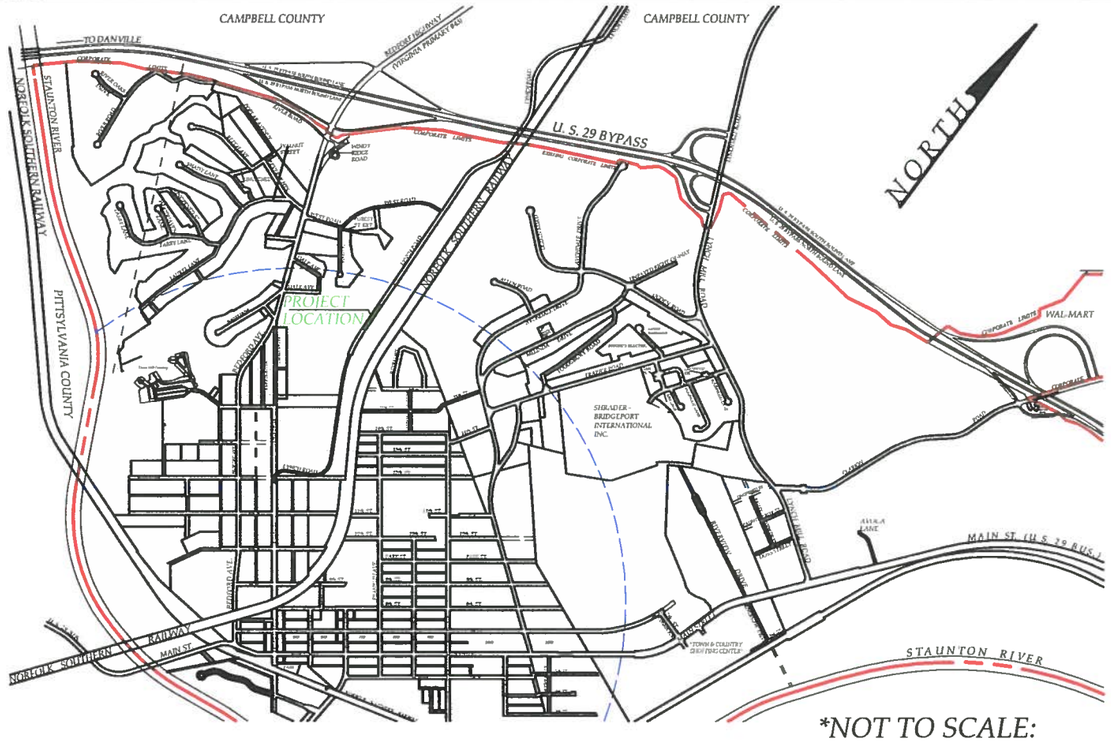
After looking into this request we found that Town Sewer is not currently available at this property unless we construct and extend the sewer main 462 linear feet. The Public Works Engineering Department has looked into four options.

Option 1 would be that the home owner installs a new drain field system. At this time the owner wishes not to do this option because they desire to be connected to the Towns system.

Option 2 would be that the home owner install a sewage grinder pump station and pump the discharge to the Town sewer. Home owner would have to obtain easements and install 600 linear feet of force main. Also the owner would have electrical and maintenance cost to maintain this system. At this time the owner wishes not to do this option because they desire to be connected to the Towns system.

Option 3 would be that the Town could construct 575 linear feet of 8" SDR 35 sewer pipe that would run straight across Lynch Road onto the W.W. Properties LLC. and connect into the existing sewer main. Town Staff does not recommend this option due to the depth of sewer line being 6 feet and greater, sewer line easements would be required, and this would only serve the one residential connection.

Option 4 would be that the Town could construct 462 linear feet of 8" SDR 35 sewer pipe parallel to Lynch Road. This option would be the most optimal because the sewer line depth would be 4' and above, trench boxes would not be required, and the new sewer line could be extended to serve future connections in this area. We have engineered and designed this extension of sewer line for you to consider. The scope of work would be to install three sewer manholes, run the new sewer line up the shoulder of Lynch Road to serve the resident at 1265.



*NOT TO SCALE:

TOWN OF ALTAVISTA SEWERAGE SYSTEM IMPROVEMENTS

ALTAVISTA, VIRGINIA.

*NOTE--- 1

- This Project Shall Be Constructed In Accordance With The Approved Sewerage Rules And Regulations And Construction Specifications And Standards Of The Town Of Altavista Dated January 1st. 1994.
- No Wells Located Within 100' Of This Sewer Line.
- All Sanitary Sewer Lines Are To Be 8" SDR 35 (PVC) Unless Otherwise Indicated.
- All Easements Will Be Centered Over The Entire Length Of The Sewer Line.

*NOTE--- 2

- The Town Of Altavista: Shall Provide Specified Materials Needed For This Project And Listed Separately.

*NOTE--- 3

- Sewer Line Slopes May Be Subject To Adjustment At The Time Of Excavation.

*NOTE--- 4

- Field adjustments may be permited with prior approvel by agent for the Town Of Altavista.

SEWER LINE EXT.

1265 LYNCH ROAD

REFERENCE:	SHEET:	
CIVIL:	1 OF 4	
DATE:	SCALE:	PROJECT NO.:
SEPT. 23, 2015.	1" = 20'	09-001

NORTH

*NOTE: - A
BENCHMARK TAKEN FROM
PROJECT #88-109 -- 09/01/1988
TOP OF EXISTING MANHOLE #3
(ELEVATION 508.8')

JAMES L. WEST JR. &
JANET R. WEST
D. B. 459 P. 740
TAX I. D. #83-A-21A

RUTH S. RICE
D. B. 430 P. 016 - REF:
TAX I. D. #83-A-21

GARY W. ADAMS &
SHELIA C. ADAMS
D. B. ??? P. ???
TAX I. D. #83A-4-11

EXISTING 6" DUCTILE IRON
WATER LINE GENERAL LOCATION

WEST DRIVEWAY

PROPERTY LINE

DRIVEWAY

DRIVEWAY

PROPERTY LINE

EXISTING 15' PERMANENT EASEMENT
EXISTING 10" SDR 35 (PVC)
SANITARY SEWER LINE

MH. #2 - (NEW)
GROUND L. ELEV. — 510.86'
ELEV. TOP OF MH. — 510.86'
ST. NO. — 0+29.00'
INV. IN — 506.69'
INV. OUT — 506.59'

MH. #2 - (EXISTING)
GROUND L. ELEV. — 511.36'
ELEV. TOP OF MH. — 511.36'
ST. NO. — 15+27.72'
INV. IN — 504.65'
INV. OUT — 504.75'

RIGHT OF WAY
TELEPHONE LINE
EDGE OF PAVEMENT
EDGE OF PAVEMENT
RIGHT OF WAY

F. H.
LYNCH ROAD

1+00'
2+00'
3+00'
4+00'
5+00'

133° 48'
94° 00'

(PVC)
4" LATERAL
180° 00'
8" STUB OUT

EXISTING SDR 35 TO BE RELAYED WITH DUCTILE IRON

MH. #1 - (NEW)
STA. NO. — 0+00.00' / 15+97.66'
GROUND L. ELEV. — 509.64'
ELEV. TOP OF MH. — 510.10'
INV. IN — 505.9' – (8" D. I.)
INV. IN — 503.68' – (10" D. I.)
INV. OUT — 503.78' – (10" D. I.)

SEE - *NOTE - A
MH. #3 - (EXISTING)
GROUND L. ELEV. — 508.4'
ELEV. TOP OF MH. — 508.8'
STA. NO. — 16+51.66'
INV. IN — 502.89'
INV. OUT — 502.99'

RIGHT OF WAY
TELEPHONE LINE
12" CONCRETE DRAIN PIPE
EDGE OF PAVEMENT
EDGE OF PAVEMENT
O. H. E. L.
RIGHT OF WAY

MH. #3 - (NEW)
ST. NO. — 4+60.16'
GROUND L. ELEV. — 516.25'
ELEV. TOP OF MH. — 516.25'
INV. IN — 512.08'
INV. OUT — 511.98'

DRIVEWAY

DRIVEWAY

EXISTING 15' PERMANENT EASEMENT
EXISTING 10" SDR 35 (PVC)
SANITARY SEWER LINE

W. W. PROPERTIES LLC.
D. B. ??? P. ???
TAX I. D. #83-A-20

W. W. PROPERTIES LLC.
D. B. ??? P. ???
TAX I. D. #83A-16-1

RICHARD L. ANNAS &
DEBORAH D. ANNAS
D. B. 515 P. 210
TAX I. D. #83A-16-2

LARRY D. PILLOW SR.
MARY R. PILLOW
D. B. 441 P. 823
TAX I. D. #83A-16-3

LAWRENCE S. BENNETT JR.
MONA P. BENNETT
D. B. 802 P. 127
TAX I. D. #83A-4-4

PROPOSED LYNCH ROAD SEWER LINE EXT.

REFERENCE: CIVIL:	SHEET: 2 OF 4
DATE: SEPT. 23, 2015.	SCALE: 1" = 20'
	PROJECT NO.: 09-001

LYNCH ROAD SANITARY SEWER LINE EXTENSION

SCALE: 1" = 50' HORIZONTAL 1" = 02' VERTICAL

SEPT. 28, 2015.

SHEET 3 OF 4

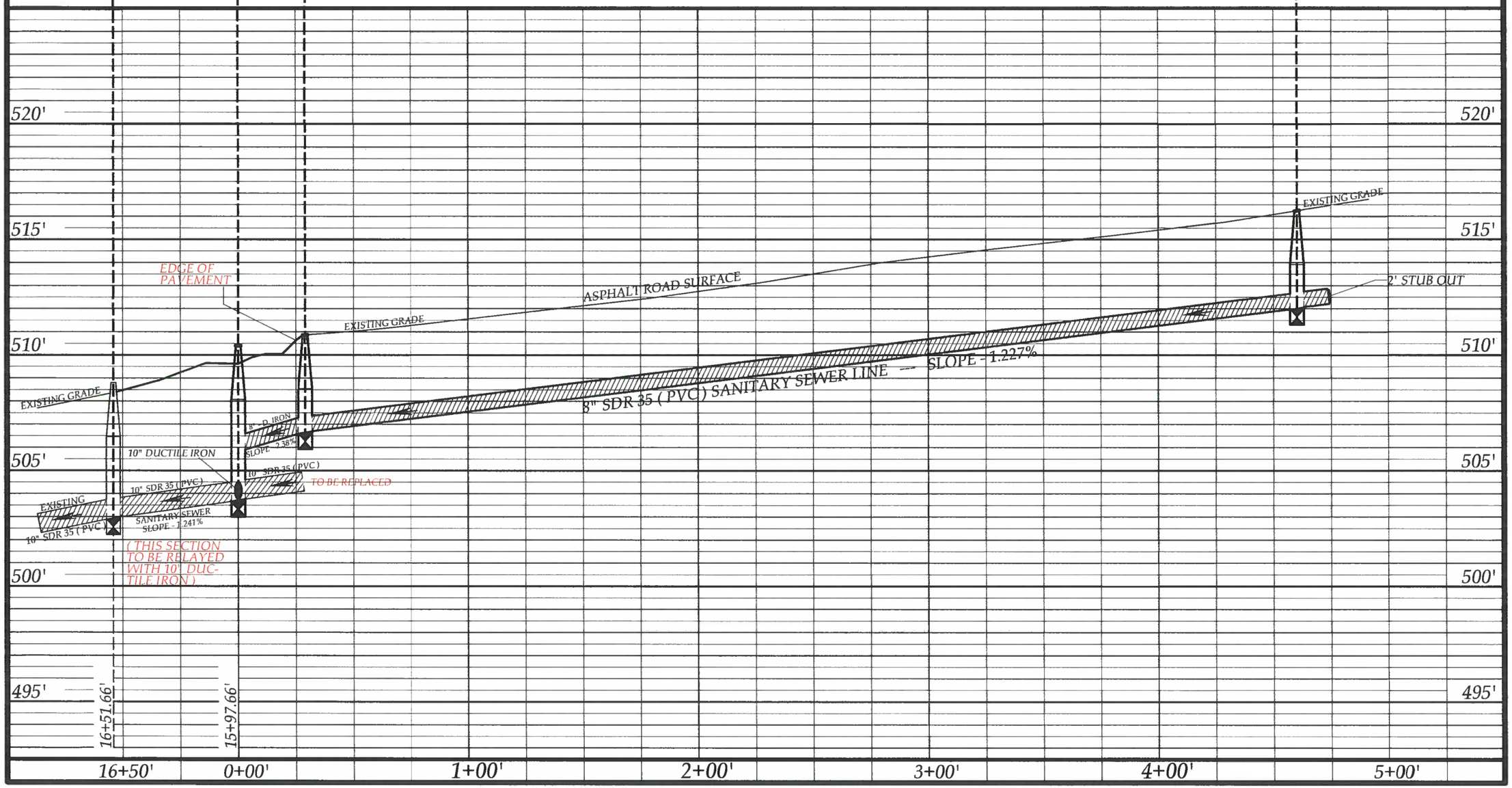
DESIGNED BY: R. P. JACOBS
DRAWN BY: R. P. JACOBS
REVIEWED BY: TERI C. ANDERSON
APPROVED BY: DAVID T. GARRETT

MH. #3 (EXISTING)
STA. NO. — 16+51.66'
G. L. E. — 508.4'
E. T. O. MH. — 508.8'
INV. IN — 502.99'
INV. OUT — 502.89'

MH. #1 (DROP)
STA. NO. — 15+97.66' (10" D.I.)
STA. NO. — 0+00.00' (8" PVC)
G. L. E. — 509.61'
E. T. O. MH. — 510.1'
INV. IN (8" DROP) — 505.90'
INV. IN (10") — 503.76'
INV. OUT (10") — 503.66'

MH. #2
STA. NO. — 0+29.00'
G. L. E. — 510.86'
E. T. O. MH. — 510.86'
INV. IN — 506.69'
INV. OUT — 506.59'
MANHOLE IN PAVEMENT

MH. # 3
STA. — 4+60.16'
G. L. ELEV. — 516.25'
ELEV. TOP MH. — 516.25'
INV. FLEV. IN — 512.08'
INV. ELEV. OUT — 511.98'
MANHOLE IN PAVEMENT



LYNCH ROAD SANITARY SEWER LINE EXTENSION

SCALE: 1" = 50' HORIZONTAL
1" = 02' VERTICAL

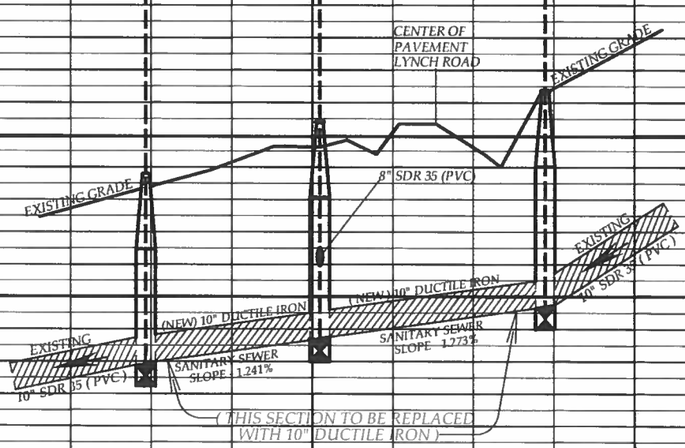
SEPT. 28, 2015.
SHEET 4 OF 4

DESIGNED BY: R. P. JACOBS
DRAWN BY: R. P. JACOBS
REVIEWED BY: TERI C. ANDERSON
APPROVED BY: DAVID T. GARRETT

MH. #3 (EXISTING 10")
STA. NO. — 16+51.66'
G. I. F. — 508.4'
E. T. O. MH. — 508.8'
INV. IN — 502.99'
INV. OUT — 502.89'

MH. #1
STA. NO. — 15+97.66'
STA. NO. (8") — 0+00.00'
G. L. E. — 509.61'
E. T. O. MH. — 510.4'
INV. IN (8" D. I.) — 505.90'
INV. IN (10" D. I.) — 503.76'
INV. OUT (10" D. I.) — 503.66'

MH. #2 (EXISTING 10")
STA. NO. — 15+27.72'
G. I.. F... — 511.36'
E. T. O. MH. — 511.36'
INV. IN — 504.75'
INV. OUT — 504.65'



Agenda Item: 8c

STAFF REPORT

To: Mayor Mattox and Council members
From: Waverly Coggsdale, Town Manager
Date: November 10, 2015
Re: FY2017 Budget Calendar Review

Summary

Attached please find the Draft FY2017 Budget Calendar. Please note that a Public Input Session is included for the December 8th Town Council meeting. This will begin the process of gathering information relative to the creation of the FY2017 Budget.

Staff would ask that Council review the Draft FY2017 Budget Calendar and any proposed changes be discussed and agreed upon by Council.

Recommendation

Adopt the FY2017 Budget Calendar

Attachments: Draft Budget Calendar

PROPOSED BUDGET CALENDAR
FY2017 BUDGET PREPARATION

December		**Begin revenue forecasts, review Transit Budget; (Grant deadline is January), instruct department managers, and distribute copies of dept. budgets**
December 8 (Tuesday)		**Public Input Session for FY 2017 Budget to be held during Council meeting.**
January		**Council decision on updating wage/salary (COLA)**
January 20 (Wednesday)		**Department requests due by 5:00 p.m.**
January 29 (Friday)		**Written requests from outside agencies and non-profits due by this date**
February 1 (Monday)		**Begin collation/consolidation of requests**
March 4 (Friday)		**Council receives Draft Budget document**
March 22 (Tuesday)	**5:00 p.m.**	**Council Budget Work Session** **Note: Outside agencies/non-profits requesting funding should attend this work session**
April 12 (Tuesday)		**First Reading of Budget/Designate Public Hearing for May 10th**
April 13 (Wednesday)		**First Public Hearing Advertisement**
April 20 (Wednesday)		**Second Public Hearing Advertisement**
May 10 (Tuesday)	**7:00 p.m.**	**Public Hearing on the FY2017 Budget**
June 14 (Tuesday)	**7:00 p.m.**	**Council Meeting to approve FY2017 Budget**

Agenda Item: 8d

STAFF REPORT

To: Mayor Mattox and Council members
From: Waverly Coggsdale, Town Manager
Date: November 10, 2015
Re: ACTS New Bus – Exterior Wrap

Summary

Per the attached memo from staff, the ACTS will be purchasing a new bus during this fiscal year and would like to "wrap" the exterior of the bus with "local" scenes. The memo includes photos of a wrap on a bus from another transit system, to give you an idea of what it would potentially look like. Dan Witt, Assistant Town Manager, will be available to discuss this issue with Council.

Recommendation

Approve the concept to "wrap" the new ACTS bus.

Attachments: Staff memo with attached photos

MEMORANDUM

To: Waverly Coggsdale, Town Manager

From: Dan Witt, Assistant Town Manager *DW*

Date: November 4, 2015

Re: ACTS New Bus Wrap

Overview: When the first two buses were purchased, staff did not budget money to place a wrap on either of the buses. A wrap is a way to set the ACTS buses apart and advertise the Town and some of its unique attractions. The ACTS Advisory Committee requested that staff include money for a wrap when it came time to start replacing vehicles. The first replacement bus was scheduled for FY2016 and has been ordered with delivery before the end of the calendar year.

Request: The P.O. for the bus was in the amount of $57,933. The estimated cost for the wrap is $4,350 which includes graphic design work, development and installation of the wrap. The Town will need to provide the photographs, which could be professionally done. The wrap would be similar to the RADAR bus; pictures of this bus are attached below. I would like to proceed with the plan to wrap the ACTS bus but would like some ideas as to what needs to be shown. Ideas thus far include Town Hall, Staunton River Memorial Library, English Park, & Avoca.

Budget: The approved CIP budget for the bus is $63,150. Vehicle cost is $57,933 and wrap is $4,350 which totals $62,283, leaving a balance of $867 for production of photographs, if necessary. The grant breakdown for this money is $50,520 Federal grant, $10,104 State grant, and $2,526 Local match. We will sell one of the buses and this money will go towards and likely exceed the local match; however, any money that exceeds the local match must be used for ACTS CIP (DRPT requirement) items, current or future, if the total cost for the bus and wrap happens to exceed the $63,150.

Note- the wrap would be done locally by Creative Edge Design.


RADAR
Serving the community for 40 yea
VIRGINIA'S BLUE RIDGE


RADAR
Serving the community for 40 years
VIRGINIA'S BLUE RIDGE


RADAR
Serving the community for 40 years
Cities
Buena Vista
Covington
Lexington
Martinsville
Roanoke
Salem
Counties
Alleghany
Franklin
Henry
Roanoke
Rockbridge
Towns
Clifton Forge
Rocky Mount
Vinton
Iron Gate
H524476
36
STARCRAFT


Serving the community for

Agenda Item: 8e

STAFF REPORT

To: Mayor Mattox and Council members
From: Waverly Coggsdale, Town Manager
Date: November 10, 2015
Re: Planning Commission Recommendations

Summary

Per the attached staff memo, the Planning Commission forwards recommendations on two items:

First, the Planning Commission is recommending proposed amendments to the Town's Zoning Ordinance in regard to the keeping of chicken within the town limits.

Town Council Options:

- Accept Planning Commission' recommendation and conduct a "First Reading " on the proposed amendments at Town Council's November 10th meeting with a public hearing scheduled for a future Council meeting, possibly December 8th.
- Place the item on a future Town Council Work Session agenda for additional discussion.
- Take No Action.

Staff is seeking Council's direction on this item.

Secondly, the Planning Commission requests that Town Council schedule a public hearing on a Special Use Permit application for 1051 Main Street for their December 8, 2015 Regular Meeting. The Planning Commission continued their regular meeting (November 2nd) to November 16th in order to conduct their public hearing. If the Planning Commission reaches a recommendation at that meeting, staff is seeking approval by Council to schedule its public hearing on December 8th.

Recommendation

Per Council's discussion.

Attachments: PC Recommendation on Zoning Ordinance Amendments (Keeping of chickens); Memorandum regarding scheduling of public hearing for SUP application (1051 Main Street)

MEMORANDUM

To: Waverly Coggsdale, Town Manager

From: Dan Witt, Assistant Town Manager

Date: December 10, 2013

Re: Planning Commission Recommendation

At the November 2, 2015 Planning Commission meeting a public hearing was held to consider changes to the Town of Altavista Zoning Ordinance, 2002 to allow for chickens to be raised in town. This discussion was initiated when a citizen approached a member of the PC and asked if this was permitted. Staff reported that no agriculture uses were permitted in town and chickens were defined as an agricultural animal. However, staff pointed out that violations were only dealt with on a 'complaint basis.' Because of the popularity in other communities the PC requested that staff and legal counsel draft an ordinance for review and consideration that would allow for this use with specified conditions/regulations.

No one spoke for or against this ordinance at the public hearing. All the Planning Commissioners were present at the meeting and voted unanimously to recommend to Town Council approval of the changes listed below.

An Ordinance to add to the Code of the Town of Altavista, 1968, a new Section 86-515.1 relating to keeping of chickens.

Be it ordained by the Town Council of the Town of Altavista:

1. That a new Section 86-515.1 be added to the Code of the Town of Altavista as follows:

Sec. 86-515.1. Keeping of chickens.

(a) It shall be lawful for any person to keep on premises owned and occupied by him or her for such owner's personal use not more than six (6) female chickens such chickens to be kept not less than thirty (30) feet from any dwelling and 20 feet from any property line. Such chickens shall be kept in the rear yard of the lot, meaning the portion of the lot between the rear line of the main dwelling and the rear line of the lot extending the full width of the lot.

(b) Such chickens within the town shall be provided with and kept within a completely enclosed covered enclosure (coop) and an open outside enclosure (pen) at all times. Such coop shall contain a minimum of 10 sq. ft. per chicken and such pen shall contain a minimum of 10 sq. ft. per chicken. The coop shall not exceed 8' in height. Pre-manufactured coops and pens may be made from any material. Otherwise, the following materials may not be used to construct coops and pens: Tarps, plastic, fabric, rubber, paper, cardboard, or other non-traditional building materials.

It shall be the duty of such owner to maintain such coop and pen at all times in a safe, clean and sanitary condition, free of excrement and other unsanitary or offensive substances, liquids or odors, and so as not to constitute a hazard to the health or safety of any person or to become a nuisance.

(c) The outdoor harvesting of any chicken is prohibited.

(d) Prior to locating such chickens on his or her property, such owner shall obtain a permit from the Town on forms provided by the Town. Newly issued permits will run from the date of issuance to December 31 and shall be renewed annually on January 1 thereafter. There shall be no fee for the issuance of such permit.

Failure to obtain such permit prior to placing chickens on property within the Town shall be a Class 4 misdemeanor and each day in violation after notification in writing shall constitute a separate offense.

(e) This Ordinance shall become effective immediately upon passage by the Town Council of the Town of Altavista and shall expire one year from the date of such passage subject to extension and/or modification.

An Ordinance to repeal, amend and re-ordain Section 86-32 of the Code of the Town of Altavista, 1968, relating to use types (definitions).

Be it ordained by the Town Council of the Town of Altavista:

1. That Section 86-32 of the Code of the Town of Altavista, 1968, be repealed, amended and re-ordained as follows:

Sec. 86-32. Use types.

Accessory apartment means a second dwelling unit within a detached single-family dwelling or within an accessory structure on the same lot as the detached single-family dwelling, which is clearly incidental and subordinate to the main dwelling unit.

Adult bookstore means an establishment that devotes more than 15 percent of the total floor area utilized for the display of books and periodicals to the display and sale of the following: (a) books, magazines, periodicals or other printed matter, or photographs, films, motion pictures, blue ray discs, compact discs, digital video discs, video cassettes, slides, tapes, records, or other forms of visual or audio representations which are characterized by an emphasis upon the depiction or description of "specified sexual activities" or "specified anatomical areas"; or (b) instruments, devices, or paraphernalia which are designed for use in connection with "specified sexual activities". An adult bookstore does not include an establishment that sells books or periodicals as an incidental or accessory part of its principal stock-in-trade and does not devote more than 15 percent of the total floor area of the establishment to the sale of books and periodicals, or photographs, films, motion pictures, blue ray discs, compact discs, digital video discs, video cassettes, slides, tapes, records, or other forms of visual or audio representations.

Adult drive-in-theatre means an open lot or part thereof, with appurtenant facilities, devoted primarily to the presentation of motion pictures, films, theatrical productions, and other forms of visual productions, for any form of consideration, to persons in motor vehicles or on outdoor seats, and presenting material distinguished or characterized by an emphasis on matter depicting, describing or relating to "specific sexual activities" or "specified anatomical areas" for observation by patrons.

Adult mini-motion picture theatre means an establishment, with a capacity of more than five but less than 50 persons, where, for any form of consideration, films, motion pictures, video cassettes, slides, or similar photographic reproductions are shown, and in which a substantial portion of the total presentation time is devoted to the showing of material which is distinguished or characterized by an emphasis upon the depiction or description of "specified sexual activities" or "specified anatomical areas" for observation by patrons.

Adult model studio means an establishment open to the public where, for any form of consideration or gratuity, figure models who display "specified anatomical areas" are provided to be observed, sketched, drawn, painted, sculptured, photographed, or similarly depicted by persons, other than the proprietor, paying such consideration or gratuity. This provision shall not apply to any school of art which is operated by an individual,

firm, association, partnership, corporation, or institution which meets the requirements established in the Code of Virginia, for the issuance or conferring of, and is in fact authorized there under to issue and confer, a diploma.

Adult motion picture arcade means a place to which the public is permitted or invited where coin or slug-operated or electronically, electrically, or mechanically controlled still or motion picture machines, projectors, or other image producing devices are maintained to show images to five or fewer persons per machine at any one time, and where the images so displayed are distinguished or characterized by an emphasis on depicting or describing "specified sexual activities" or "specified anatomical areas".

Adult motion picture theatre means an establishment, with a capacity of 50 or more persons, where, for any form of consideration, films, motion pictures, video cassettes, slides, or similar photographic reproductions are shown; and in which a substantial portion of the total presentation time is devoted to the showing of material which is distinguished or characterized by an emphasis upon the depiction or description of "specified sexual activities" or "specified anatomical areas" for observation by patrons.

Adult use means any adult bookstore, adult motion picture theatre, adult mini-motion picture theatre, adult motion picture arcade, adult model studio, or adult drive-in theatre, as defined in this chapter.

Agricultural service means services provided specifically for the agricultural community which is not directly associated with a farm operation. Included in this use type would be servicing of agricultural equipment, independent equipment operators, and other related agricultural services.

Agriculture means the use of land for the production of food and fiber, including farming, dairying, pasturage, agriculture, horticulture, viticulture, and animal and poultry husbandry. The keeping of a cow, pig, sheep, goat, <u>male</u> chicken <u>(rooster)</u> or similar animal shall constitute agriculture regardless of the size of the animal and regardless of the purpose for which it is kept. <u>The keeping of female chickens in compliance with Sec. 86-515.1 shall not constitute agriculture.</u> A garden accessory to a residence shall not be considered agriculture (see definition for *Garden, home*).

REMAINING USE TYPE DEFINITIONS IN SEC. 86-32 ARE UNCHANGED.

2. This Ordinance shall become effective immediately upon passage by the Town Council of the Town of Altavista.

An Ordinance to repeal, amend and re-ordain Section 86-132 of the Code of the Town of Altavista, 1968, relating to permitted uses in R-1 low-density residential district.

Be it ordained by the Town Council of the Town of Altavista:

1. That Section 86-132 of the Code of the Town of Altavista, 1968, be repealed, amended and re-ordained as follows:

Sec. 86-132. - Permitted uses.

(a) Only one building and its accessory buildings may be erected on any lot or parcel of land in the R-1 low-density residential district.

(b) The following uses are permitted by right or by special use permit in the R-1 low-density residential district, subject to all other applicable requirements contained in this chapter. An (S) indicates a special use permit is required. An asterisk (*) indicates that the use is subject to additional, modified or more stringent standards as listed in article IV, use and design standards:

(1) *Agricultural use types.*
(None)

(2) *Residential use types.*
Accessory apartment*

Community garden (S)

Family day care home (S)*

Group home*

Home garden

Keeping of chickens per Sec. 86-515.1

Home occupation*

Manufactured home, emergency*

Single-family dwelling, detached*

Temporary family health care structures*

(3) *Civic use types.*

Community recreation*

Cultural service

Educational facilities, primary/secondary (S)

Public parks and recreational areas (S)

Religious assembly (S)*

Safety service

Utility service, minor

(4) *Office use types.*
(None)

(5) *Commercial use types.*
Bed and breakfast (S)*

(6) *Industrial use types.*
(None)

(7) *Miscellaneous use types.*
Amateur radio tower*

Satellite dish antenna one meter or less in diameter or measured diagonally

Satellite dish antenna in excess of one meter in diameter or measured diagonally*

2. This Ordinance shall become effective immediately upon passage by the Town Council of the Town of Altavista.

An Ordinance to repeal, amend and re-ordain Section 86-192 of the Code of the Town of Altavista, 1968, relating to permitted uses in R-2 medium-density residential district.

Be it ordained by the Town Council of the Town of Altavista:

1. That Section 86-192 of the Code of the Town of Altavista, 1968, be repealed, amended and re-ordained as follows:

Sec. 86-192. - Permitted uses.

(a) The following uses are permitted by right or by special use permit in the R-2 medium-density residential district, subject to all other applicable requirements contained in this chapter. An (S) indicates a special use permit is required. An asterisk (*) indicates that the use is subject to additional, modified or more stringent standards as listed in article IV, use and design standards:

(1) *Agricultural use types.*
(None)

(2) *Residential use types.*
Accessory apartment*

Community garden (S)

Duplex*

Family day care home*

Group home*

Home garden

Keeping of chickens per Sec. 86-515.1

Home occupation*

Manufactured home, emergency*

Multi-family dwelling—Consisting of three or fewer units

Multi-family dwelling—Consisting of more than three units—(S)*

Single-family dwelling, attached*

Single-family dwelling, detached*

Temporary family health care structures*

Townhouse*

(3) *Civic use types.*

Assisted care residence*

Cemetery (S)

Club (S)*

Community recreation*

Crisis center (S)

Cultural service

Educational facilities, primary/secondary (S)

Governmental service (S)

Guidance service (S)

Halfway house (S)

Life care facility (S)

Nursing home (S)

Public parks and recreational areas (S)

Religious assembly (S)*

Safety service

Utility service, minor

(4) *Office use types.*

(None)

(5) *Commercial use types.*

Bed and breakfast (S)*

Day care center (S)*

Golf course (S)

Personal service business(s)

(6) *Industrial use types.*

Recycling center (S)

(7) *Miscellaneous use types.*

Amateur radio tower*

Satellite dish antenna one meter or less in diameter or measured diagonally

Satellite dish antenna in excess of one meter in diameter or measured diagonally*

2. This Ordinance shall become effective immediately upon passage by the Town Council of the Town of Altavista.

10/TA/O-86-192-Permitted uses in R-2 medium density

An Ordinance to repeal, amend and re-ordain Section 86-322 of the Code of the Town of Altavista, 1968, relating to permitted uses in C-1 local business district.

Be it ordained by the Town Council of the Town of Altavista:

1. That Section 86-322 of the Code of the Town of Altavista, 1968, be repealed, amended and re-ordained as follows:

Sec. 86-322. - Permitted uses.

The following uses are permitted by right or by special use permit in the C-1 local business district, subject to all other applicable requirements contained in this chapter. An (S) indicates a special use permit is required. An asterisk (*) indicates that the use is subject to additional, modified or more stringent standards as listed in article IV, use and design standards.

(1) *Agricultural use types.*

(None)

(2) *Residential use types.*

Accessory apartment*

Duplex*

Home garden

Keeping of chickens per Sec. 86-515.1

Home occupation*

Multi-family dwelling (S)*

Single-family dwelling, attached*

Single-family dwelling, detached*

Temporary family health care structures*

Townhouse*

(3) *Civic use types.*

Assisted care residence*

Club*

Crisis center (S)

Cultural service

Educational facilities, college/university (S)

Educational facilities, primary/secondary

Governmental service

Guidance service

Halfway house (S)

Life care facility

Nursing home

Park and ride facility

Post office

Public assembly (S)

Public parks and recreational areas (S)

Religious assembly*

Safety service

Utility service, major (S)

Utility service, minor

(4) *Office use types.*

Financial institution*

General office

Laboratory (S)

Medical office

Substance abuse clinic (S)*

(5) *Commercial use types.*

Bed and breakfast*

Business support service

Business/trade schools

Car wash (S)

Commercial indoor sports and recreation (S)

Communications service

Day care center*

Funeral service

Garden center

Gasoline station (S)*

Hospital (S)

Personal improvement service

Personal service

Restaurant, small—Whether in a new or existing shopping strip center*

Restaurant, small—As a stand-alone building (S)*

Retail sales—Not exceeding 3,000 gross square feet per use

Studio, fine arts

(6) *Industrial use types.*

(None)

(7) *Miscellaneous uses.*

Amateur radio tower*

Parking facility, surface/structure (S)

Satellite dish antenna one meter or less in diameter or measured diagonally

Satellite dish antenna in excess of one meter in diameter or measured diagonally*

Tower (S)*

2. This Ordinance shall become effective immediately upon passage by the Town Council of the Town of Altavista.

An Ordinance to repeal, amend and re-ordain Section 86-352 of the Code of the Town of Altavista, 1968, relating to permitted uses in C-2 general business district.

Be it ordained by the Town Council of the Town of Altavista:

1. That Section 86-352 of the Code of the Town of Altavista, 1968, be repealed, amended and re-ordained as follows:

Sec. 86-352. - Permitted uses.

The following uses are permitted by right or by special use permit in the C-2 general business district, subject to all other applicable requirements contained in this chapter. An (S) indicates a special use permit is required. An asterisk (*) indicates that the use is subject to additional, modified or more stringent standards as listed in article IV, use and design standards:

(1) *Agricultural use types.*

(None)

(2) *Residential use types.*

Accessory apartment*

Duplex*

Home garden

Keeping of chickens per Sec. 86-515.1

Home occupation*

Multi-family dwelling (S)*

Single-family dwelling, attached*

Single-family dwelling, detached*

Temporary family health care structures*

Townhouse*

Upper-story housing unit*

(3) *Civic use types.*

Assisted care residence*

Club*

Correction facility (S)

Crisis center

Cultural services

Educational facilities, college/university (S)

Educational facilities, primary/secondary

Governmental service

Guidance service

Halfway house (S)

Life care facility

Nursing home

Park and ride facility

Post office

Public assembly

Public maintenance and service facility (S)

Public parks and recreational areas (S)

Religious assembly*

Safety services

Utility service, major (S)

Utility service, minor

(4) *Office use types.*

Financial institution*

General office

Laboratory

Medical office

Substance abuse clinic (S)*

(5) *Commercial use types.*

Adult use (S)*

Agricultural service

Antique shop

Assembly hall

Automobile dealership, new*

Automobile dealership, used (S)*

Automobile parts/supply, retail

Automobile rental/leasing

Automobile repair service, major (S)*

Automobile repair service, minor

Business support service

Business/trade schools

Car wash

Commercial indoor amusement

Commercial indoor entertainment

Commercial indoor sports and recreation

Commercial outdoor entertainment

Commercial outdoor sports and recreation

Communications service

Construction sales and service

Consumer repair service

Convenience store

Dance hall (S)

Day care center*

Equipment sales and rental (S)

Farmers market (S)

Flea market (S)

Funeral service

Garden center

Gasoline station*

Hospital

Hotel/motel/motor lodge

Kennel, commercial (S)*

Laundry

Manufactured home sales

Mini-storage (S)*

Modular home sales

Pawn shop

Payday loan establishment

Personal improvement service

Personal service

Recreational vehicle sales and service

Restaurant, small

Restaurant, fast food or drive-thru*

Restaurant, general

Retail sales*

Studio, fine arts

Transient merchant*

Travel center (S)

Veterinary hospital/clinic

(6) *Industrial use types.*

Construction yard (S)

Custom manufacturing

Recycling center

Transportation terminal (S)

Truck terminal (S)

(7) *Miscellaneous uses.*

Amateur radio tower*

Parking facility, surface/structure (S)

Satellite dish antenna one meter or less in diameter or measured diagonally

Satellite dish antenna in excess of one meter in diameter or measured diagonally*

Tower (S)*

2. This Ordinance shall become effective immediately upon passage by the Town Council of the Town of Altavista.

An Ordinance to repeal, amend and re-ordain Section 86-382 of the Code of the Town of Altavista, 1968, relating to permitted uses in M (industrial) district.

Be it ordained by the Town Council of the Town of Altavista:

1. That Section 86-382 of the Code of the Town of Altavista, 1968, be repealed, amended and re-ordained as follows:

Sec. 86-382. - Site development regulations.

The following uses are permitted by right or by special use permit in the M (industrial) district, subject to all other applicable requirements contained in this chapter. An (S) indicates a special use permit is required. An asterisk (*) indicates that the use is subject to additional, modified or more stringent standards as listed in article IV, use and design standards:

(1) *Agricultural use types.*

(None)

(2) *Residential use types.*

Home garden

Keeping of chickens per Sec. 86-515.1

Home occupation (S)*

Multi-family dwelling (S)*—Only when redeveloping or renovating an existing industrial building

(3) *Civic use types.*

Correction facility (S)

Educational facilities, college/university (S)

Governmental services

Post office

Public maintenance and service facility

Safety services

Utility service, major (S)

Utility service, minor

(4) *Office use types.*

Financial institution*

General office

Laboratory

Medical office

(5) *Commercial use types.*

Business support services

Business trade school

Communication services

Construction sales and services

Equipment sales and rental

Mini-storage*

(6) *Industrial use types.*

Construction yard

Custom manufacturing (S)

Industry, light

Industry, medium

Industry, heavy (S)

Recycling center

Resource extraction (S)

Transportation terminal

Truck terminal (S)

Warehousing and distribution

(7) *Miscellaneous use types.*

Parking facility, surface/structure (S)

Satellite dish antenna one meter or less in diameter or measured diagonally

Satellite dish antenna in excess of one meter in diameter or measured diagonally*

Tower (S)*

2. This Ordinance shall become effective immediately upon passage by the Town Council of the Town of Altavista.

Town of Altavista Virginia
A place to live, a way to live.

MEMORANDUM

To: Waverly Coggsdale, Town Manager

From: Dan Witt, Assistant Town Manager DW

Date: November 5, 2015

Re: Special Use Permit Application 1051 Main Street

Staff received an application from Mr. Kevin Campbell on October 20th to operate a used car lot at 1051 Main Street. This use, while located in the C2 General Commercial zoning district, requires the issuance of a special use permit. Both the property and business owner requested that this application be expedited, if possible. Staff contacted Chairman Barbee and the Town Attorney and it is possible to have a public hearing on November 16th as a continuation of the November 2nd meeting. A motion was made to continue the November 2nd meeting until November 16th and staff has advertised to hold the hearing at 5:00 p.m. on that day.

If the Planning Commission has a recommendation for Town Council after the November 16th public hearing, staff would request that Town Council advertise for a public hearing at their December 8th regularly scheduled meeting. I realize this is not typical of how we advertise for a special use permit hearing but we are doing this to accommodate Mr. R.B. Hancock, building owner, and Mr. Kevin Campbell and Mr. Robert O'Neal, business owners.

Agenda Item: 8f

STAFF REPORT

To: Mayor Mattox and Council members
From: Waverly Coggsdale, Town Manager
Date: November 10, 2015
Re: Main Street Waterline (Project 1B) Bid Construction

Summary

For several months, the Town has been in the process of bidding out the Main Street Waterline (Project 1B). After receiving the original bids several months ago, it was recommended to and agreed upon that Council to reject the bids due to the bids being in excess of the estimated project budget. After discussion bid options, Council opted to include a proposed storm water project along Main Street as an "Additive Alternate" to the project utilizing unit prices.

On October 29, 2015, the bids were opened for the project and based on the documents the bid was deemed to be awarded on the "Base Bid" of the Main Street Waterline Project. Attached is correspondence from the project engineer (WW Associates) providing a recommendation for bid award and the bid tabulation results.

Based on the engineer's recommendation, staff would request that the Main Street Waterline (Project 1B) be awarded to E.C. Pace Company Inc. in the amount of $2,145,303.91; in addition staff would request approval of a 5% project contingency ($107,265) and a budget for inspection services of $100,000. In regard to the "Additive Alternate" bid items (storm water project), staff would seek authorization to negotiate with E.C. Pace Company, Inc. with a not to exceed amount equal to the Additive Alternate bid items ($311,643) and a 10% project contingency ($31,164). The higher contingency amount for the storm water project is due to it being a unit price bid.

PROJECT 1B and Storm Water Project

$ 2,145,304	Project 1B Base Bid
$ 107,265	5% Contingency
$ 2,252,569	
$ 311,643	Storm Water Unit Price Bid(s)
$ 31,164	10% Contingency
$ 342,807	
$ 100,000	Inspection Services
$ 2,695,376	Total

In regard to financing the project, Council previously discussed borrowing funds and assuming annual debt service. Based on 15 and 20 year terms at a 3% rate on $2.75 million, the annual debt service range would be $183,000 to $228,000 (this is for illustration/planning purposes only). If Council decides to borrow the fund, staff is ready to issue a proposal for bank bids.

It is important to point out that in the current FY2016 Budget; the Enterprise Fund was identified as having a surplus of $147,700. With the thought that debt service payments would not be due until the FY2017 budget year (after July 1, 2016), for planning purposes you could estimate that this year's surplus could continue into the future. Based on a deficit in project funding, based on the debt service range and the annual fund surplus estimate, additional funding would need to be identified. Based on the debt service range the additional fund could be in the $36,000 to $81,000 range (amount depends on the term/rate/amount of the bank borrowing). With a deficit, an annual revenue source would need to be identified to pay for the annual debt service obligation. Revenue source options could include: Annual Revenue Increases (i.e. Rate increases); Annual surplus from the General Fund (FY2016 Budget Amount is $471,100); or Undesignated Reserve Fund Balance ($2,779,507 as of October 31, 2015).

Should the Town borrow funds, there would be an estimated cost of $40,000 for debt issuance, thus the total project budget would be roughly $2.75 million, if this expense is included.

Recommendation

Per Council's discussion.

Possible Motions:

- "I move to award the Main Street Waterline (Project 1B) to E.C. Pace Company Inc. in the amount of $2,145,303.91 with a 5% contingency in the budget."
- "I move to authorize the Town Manager to negotiate with E.C. Pace Company Inc. in regard to the Additive Alternate Bid Items No. 1 – 5 (18-inch storm water improvements/Main Street) at a not to exceed budget of the bid totals and a 10% contingency."
- "I move that the Town Manager be authorized to procure "Inspection Services" for this project in an amount not to exceed $100,000."

Attachments: WW Associates Recommendation Letter with Bid Tabulations/Attachments

ENGINEERS
SURVEYORS
PLANNERS
ASSOCIATES

November 5, 2015

Mr. J. Waverly Coggsdale, III
Town Manager
Town of Altavista
510 7th Street
Altavista, VA 24517

Re: Main Street Water Line Improvements – REBID
Town of Altavista, Virginia
WWA Project No. 214066.03

Dear Mr. Coggsdale:

The bids for the referenced project were opened at 2:00 P.M. on October 29, 2015. Enclosed are the bid tabulation results from the bid opening. E.C. Pace Company, Inc. was the apparent low bidder with a Total Base Bid amount of $2,145,303.91.

We have confirmed that the Contractor's license is current and clear of complaints. We have evaluated the bids and associated documentation. The bids and documentation have been found to be acceptable.

We therefore recommend a contract award of the Total Base Bid to E.C. Pace Company, Inc. in the amount of $2,145,303.91. The award of the Total Base Bid is contingent upon fund availability. We also recommend negotiating the price of Additive Alternate Bid Item Nos. 1-5, which represent the 18-inch storm sewer improvements along Main Street, with the Contractor.

We appreciate the opportunity to be of continued service to the Town of Altavista, and look forward to a successful completion of the Main Street Water Line Improvements project. Should you have any questions, feel free to call.

Sincerely,

WW Associates, Inc.

Jason A. Clark, P.E.
Vice President

Enclosures: Bid Tabulation, E.C. Pace Bid Form/Bid Bond, and Contractor's License Information

P.O. Box 4119 ▪ Lynchburg, VA 24502
Telephone (434) 316-6080 ▪ Fax (434) 316-6081
Lynchburg ▪ Charlottesville

Client: Town of Altavista, VA
Project Name: Main Street Water Line Improvements - REBID
WW Associates Project No. 214066.04
Bid Opening Date: Thursday, October 29, 2015 at 2:00 PM

#	Contractor	Contractor License No.	Bid Bond	Add #1	Add #2	Add #3	Add #4	Add #5	Add #6	Add #7	Base Bid #1	Base Bid #2	Base Bid #3	Base Bid #4	TOTAL BASE BID (Item Nos. 1 - 4)	Additive Alternate #1	Additive Alternate #2	Additive Alternate #3	Additive Alternate #4	Additive Alternate #5	Deductive Alternate #1	Deductive Alternate #2
1.	E.C. Pace Company, Inc.	2705-105165A	X	X	X	X	X	X	X	X	$957,341.94	$952,660.20	$210,301.77	$25,000.00	$2,145,303.91	$272,543.00	$3,500.00	$4,000.00	$7,100.00	$24,500.00	$50,354.00	$0.00
2.	Faulconer Construction Company	2701-003330A	X	X	X	X	X	X	X	X	$895,000.00	$932,000.00	$384,500.00	$40,050.00	$2,251,550.00	$281,126.00	$3,800.00	$6,000.00	$10,000.00	$10,500.00	$155,700.00	$20,000.00
3.	F.L. Showalter, Inc.	2701-000021A	X	X	X	X	X	X	X	X	$1,157,000.00	$1,007,000.00	$249,500.00	$31,500.00	$2,445,000.00	$536,500.00	$1,000.00	$5,000.00	$17,500.00	$14,000.00	$75,000.00	$0.00
4.	Virginia Carolina Paving Company	2705-057730	X	X	X	X	X	X	X	X	$1,147,002.00	$1,055,000.00	$327,000.00	$26,775.00	$2,555,777.00	$236,060.00	$1,200.00	$6,000.00	$15,000.00	$17,500.00	$41,375.00	$0.00
5.	DLB, Inc.	2701-022512A	X	X	X	X	X	X	X	X	$1,592,198.22	$982,020.06	$368,017.31	$284,435.65	$3,226,671.24	$299,806.93	$2,770.00	$4,108.00	$4,597.00	$7,996.52	$60,660.41	$1.24
6.																						
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14.																						
15.																						

Contractor E. C. Pace Company, Inc. Date October 29, 2015

VA License No. 2705 105165A

Section 01300
Bid Form

Gentlemen:

The undersigned, having visited and examined the site and having carefully studied the drawings and project manual for the Main Street Water Line Improvements – REBID, Town of Altavista, Virginia, hereby proposes to furnish all plant, labor, equipment, materials, and services and to perform all operations necessary to execute and complete the work required for the project, in strict accordance with the drawings and technical specifications prepared by WW Associates, Engineers • Surveyors • Planners, dated August 21, 2015, together with addenda numbered 1, 2, 3, 4, 5, 6, 7, issued during bidding period and hereby acknowledged, subject to the terms and conditions of the agreement as follows:

Base Bid Item No. 1 is defined as all work associated with the 12-inch water line from Station 10+00.00 (Pittsylvania Avenue) to Station 41+50.00 (Hughes Avenue) for the sum of Nine Hundred Fifty Seven Thousand Three Hundred Forty One and 94/100---------- dollars ($ 957,341.94).

Base Bid Item No. 2 is defined as all work associated with the 12-inch water line from Station 41+50.00 (Hughes Avenue) to Station 76+40.74 (Riverview Drive) for the sum of Nine Hundred Fifty Two Thousand Six Hundred Sixty and 20/100---------- dollars ($952,660.20).

Base Bid Item No. 3 is defined as all work associated with the 8-inch water line from Station 80+00.00 to Station 96+11.78 (Nelson Avenue and 4th Street) for the sum of ____ Two Hundred Ten Thousand Three Hundred One and 77/100---------- dollars ($ 210,301.77).

Base Bid Item No. 4 is the total of the unit prices for furnishing and installing the following additional quantities:

- Near side water service lateral piping and appurtenances associated with the project: $ 45.00 /LF x 150 LF of near side water service lateral piping = $ 6,750.00 ,
- Far side water service lateral piping and appurtenances associated with the project: $ 55.00 /LF x 150 LF of far side water service lateral piping = $ 8,250.00 ,
- Water meter assembly, installation of water meter, and appurtenances: $ 2,000.00 /EA x 5 water meter assemblies, installation of water meter, and appurtenances = $ 10,000.00 ,

Total of the unit prices times the quantities for the three items listed above: Twenty Five Thousand and No/100---------- dollars ($ 25,000.00).

Contractor E. C. Pace Company, Inc. Date October 29, 2015

VA License No. 2705 105165A

Total Base Bid (Item Nos. 1-4) for the sum of: Two Million One Hundred Forty Five Thousand Three Hundred Three and 91/100---------- **dollars** ($2,145,303.91).

Additive Alternate Bid Item No. 1 is defined as all work associated with an 18-inch storm sewer and structures from existing Structure D-1 to Structure D-8 on Drawing C-3 for a unit price of $ 254.00 per foot X 1,073 feet equals: Two Hundred Seventy Two Thousand Five Hundred Forty Three and No/100---------- dollars ($272,543.00). (See Note "h")

Additive Alternate Bid Item No. 2: Unit price for concrete sidewalk associated with the storm sewer work: $ 35.00 per square foot X 100 square feet equals: Three Thousand Five Hundred and No/100---------- dollars ($3,500.00).

Additive Alternate Bid Item No. 3: Unit price for concrete curb and gutter associated with the storm sewer work: $40.00 per linear foot X 100 linear feet equals: Four Thousand and No/100 ---------- dollars ($4,000.00).

Additive Alternate Bid Item No. 4: Unit price for removal and replacement of additional asphalt base pavement for the storm sewer work: $71.00 per square yard X 100 square yards equals: Seven Thousand One Hundred and No/100---------- dollars ($7,100.00).

Additive Alternate Bid Item No. 5: Unit price for removal and replacement of light poles associated with the storm sewer work: $3,500.00 per pole X 7 light poles equals: Twenty Four Thousand Five Hundred and No/100---------- dollars ($24,500.00).

Deductive Alternate Bid Item No. 1 is defined as provisions for using AWWA C900 PVC piping in lieu of ductile iron piping for this project for the deductive sum of: Fifty Thousand Three Hundred Fifty Four & No/100 ---------- dollars ($50,354.00).

Deductive Alternate Bid Item No. 2: The deductive price for allowing the Contractor to construct the Main Street Project at night from 7:00 PM to 7:00 AM in lieu of the VDOT required daytime schedule for the deductive sum of: Zero and No/100---------- dollars ($0.00).

Notes:

work in accordance with the drawings, project manual, and this bid. We further agree that if awarded the contract, we will commence the work on the date stated in the "Notice to Contractor to Proceed," and will prosecute the work and shall be substantially complete as defined in the general conditions within 330 calendar days and complete all obligations within 360 calendar days.

The Owner and Contractor recognize that time is of the essence with this agreement and that the Owner will suffer financial loss if the work is not completed within the above noted calendar days for all work associated with this project. They also recognize the delays, expense, and difficulties involved in proving the actual loss suffered by the Owner if the work is not completed on time. Accordingly, instead of requiring any such proof, the Owner and Contractor therefore agree that, as liquidated damages for delay (but not as a penalty), the Contractor shall pay the Owner one thousand dollars ($1,000.00) for each day that expires after the time specified for substantial completion of this project.

Enclosed herewith is the following security, offered as evidence that the undersigned will enter into agreement for the execution and completion of the work in accordance with the drawings and project manual:

Certified check for the sum of _____

Name of bank _____

Bidder's bond in amount of 5% of Bid Amount

Bond issued by The Hanover Insurance Company

The undersigned further agrees that in case of failure on his part to execute the said agreement within 10 consecutive calendar days after written notice being given on the award of the contract, the monies payable by the securities accompanying this bid shall be paid to the Owner as liquidated damages for such failure; otherwise, the securities accompanying this bid shall be returned to the undersigned.

This bid is subject to acceptance within a period of 90 days from bid submission date.

Contractor E. C. Pace Company, Inc. Date October 29, 2015

VA License No. 2705 105165A

Respectfully Submitted,

E. C. Pace Company, Inc.
Contractor

By _____
Patrick Wade
Vice President

P. O. Box 12685, Roanoke, VA 24027
Address

540-343-6816
Telephone

Date October 29, 2015

Contractor's Current Virginia
License Number 2705 105165A Code H/H

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER *(Name and Address)*:

E. C. Pace Company, Incorporated

P. O. Box 12685, Roanoke, VA 24027

SURETY *(Name, and Address of Principal Place of Business)*:

The Hanover Insurance Company

440 Lincoln Street, Worcester, MA 01653

OWNER *(Name and Address)*:

Town of Altavista

510 Seventh Street, Altavista, VA 24517

BID

Bid Due Date: October 29, 2015

Description *(Project Name— Include Location)*: Main Street Water Line Improvements - REBID; as per attached bid.

BOND

Bond Number: Bid Bond

Date: October 29, 2015

Penal sum Five Percent of Amount Bid $ 5%

(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER	SURETY
E. C. Pace Company, Incorporated (Seal)	The Hanover Insurance Company
Bidder's Name and Corporate Seal	Surety's Name and Corporate Seal
By: [signature]	By: [signature]
Signature	Signature (Attach Power of Attorney)
Patrick Wade	Elizabeth A. Dyer
Print Name	Print Name
Vice President	Attorney-in-Fact
Title	Title
Attest: [signature]	Attest: [signature]
Signature Frank E Thomas Jr	Signature Cynthia Ellinwood
Title Asst Secretary/Vice President	Title Witness

Note: Addresses are to be used for giving any required notice.
Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.

3. This obligation shall be null and void if:

3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or

3.2 All Bids are rejected by Owner, or

3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

THE HANOVER INSURANCE COMPANY
MASSACHUSETTS BAY INSURANCE COMPANY
CITIZENS INSURANCE COMPANY OF AMERICA

POWERS OF ATTORNEY
CERTIFIED COPY

KNOW ALL MEN BY THESE PRESENTS: That THE HANOVER INSURANCE COMPANY and MASSACHUSETTS BAY INSURANCE COMPANY, both being corporations organized and existing under the laws of the State of New Hampshire, and CITIZENS INSURANCE COMPANY OF AMERICA, a corporation organized and existing under the laws of the State of Michigan, do hereby constitute and appoint

Wyatt H. Walton, Joseph C. Thomas, Jr., Cynthia Ellinwood and/or Elizabeth A. Dyer

of **Roanoke, VA** and each is a true and lawful Attorney(s)-in-fact to sign, execute, seal, acknowledge and deliver for, and on its behalf, and as its act and deed any place within the United States, or, if the following line be filled in, only within the area therein designated any and all bonds, recognizances, undertakings, contracts of indemnity or other writings obligatory in the nature thereof, as follows:

Any such obligations in the United States, not to exceed Forty Million and No/100 ($40,000,000) in any single instance

and said companies hereby ratify and confirm all and whatsoever said Attorney(s)-in-fact may lawfully do in the premises by virtue of these presents. These appointments are made under and by authority of the following Resolution passed by the Board of Directors of said Companies which resolutions are still in effect:

"RESOLVED, That the President or any Vice President, in conjunction with any Vice President, be and they are hereby authorized and empowered to appoint Attorneys-in-fact of the Company, in its name and as its acts, to execute and acknowledge for and on its behalf as Surety any and all bonds, recognizances, contracts of indemnity, waivers of citation and all other writings obligatory in the nature thereof, with power to attach thereto the seal of the Company. Any such writings so executed by such Attorneys-in-fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company in their own proper persons." (Adopted October 7, 1981 - The Hanover Insurance Company; Adopted April 14, 1982 - Massachusetts Bay Insurance Company; Adopted September 7, 2001 - Citizens Insurance Company of America)

IN WITNESS WHEREOF, THE HANOVER INSURANCE COMPANY, MASSACHUSETTS BAY INSURANCE COMPANY and CITIZENS INSURANCE COMPANY OF AMERICA have caused these presents to be sealed with their respective corporate seals, duly attested by two Vice Presidents, this **10th** day of **August 2012**.

THE HANOVER INSURANCE COMPANY
MASSACHUSETTS BAY INSURANCE COMPANY
CITIZENS INSURANCE COMPANY OF AMERICA

Robert Thomas, Vice President

Joe Brenstrom, Vice President

THE COMMONWEALTH OF MASSACHUSETTS)
COUNTY OF WORCESTER) ss.

On this **10th** day of **August 2012** before me came the above named Vice Presidents of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, to me personally known to be the individuals and officers described herein, and acknowledged that the seals affixed to the preceding instrument are the corporate seals of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, respectively, and that the said corporate seals and their signatures as officers were duly affixed and subscribed to said instrument by the authority and direction of said Corporations.

BARBARA A. GARLICK
Notary Public
Commonwealth of Massachusetts
My Commission Expires Sept. 21, 2018

Barbara A. Garlick, Notary Public
My Commission Expires September 21, 2018

I, the undersigned Vice President of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America, hereby certify that the above and foregoing is a full, true and correct copy of the Original Power of Attorney issued by said Companies, and do hereby further certify that the said Powers of Attorney are still in force and effect.

This Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of The Hanover Insurance Company, Massachusetts Bay Insurance Company and Citizens Insurance Company of America.

"RESOLVED, That any and all Powers of Attorney and Certified Copies of such Powers of Attorney and certification in respect thereto, granted and executed by the President or any Vice President in conjunction with any Vice President of the Company, shall be binding on the Company to the same extent as if all signatures therein were manually affixed, even though one or more of any such signatures thereon may be facsimile." (Adopted October 7, 1981 - The Hanover Insurance Company; Adopted April 14, 1982 - Massachusetts Bay Insurance Company; Adopted September 7, 2001 - Citizens Insurance Company of America)

GIVEN under my hand and the seals of said Companies, at Worcester, Massachusetts, this 29th day of October 2015.

THE HANOVER INSURANCE COMPANY
MASSACHUSETTS BAY INSURANCE COMPANY
CITIZENS INSURANCE COMPANY OF AMERICA

J. Michael Pete, Vice President

DPOR License Lookup License Number 2705105165

License Details

Name	E C PACE COMPANY INC
License Number	2705105165
License Description	Contractor
Firm Type	Corporation
Rank [1]	Class A
Address	1811 HOLLINS ROAD N E, ROANOKE, VA 24012
Specialties[2]	Highway / Heavy (H/H)
Initial Certification Date	2006-05-03
Expiration Date	2016-05-31

1 Refer to the Statutory Definitions (http://law.lis.virginia.gov/vacode/title54.1/chapter11/section54.1-1100/) for descriptions of the rank or class of license (A, B, or C) that determines the monetary limits on contracts/projects.

2 Refer to the Classification Definitions (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+18VAC50-22-20) and Specialty Definitions (http://lis.virginia.gov/cgi-bin/legp604.exe?000+reg+18VAC50-22-30) for detailed definitions of these classifications and specialties.

The license information in this application was last updated at Fri Oct 30 02:50:18 EDT.

The disciplinary action information in this application was last updated at Fri Oct 30 02:50:18 EDT.

DPOR License Lookup build 1,161 (built 2015-10-27 02:21:24).

Agenda Item: 8g

STAFF REPORT

To: Mayor Mattox and Council members
From: Waverly Coggsdale, Town Manager
Date: November 10, 2015
Re: Staunton River Canoe Launch

Summary

At last month's Work Session, Mr. Tim Guthrie (Gay & Neel) made a presentation about the boat ramp/canoe launch proposed for Staunton River. Following discussion, Council asked that the proposal be "scaled down" to a canoe/kayak launch only. Attached is the layout drawing and the cost estimates for the scaled down version.

Staff seeks Council's direction on moving this project forward.

Recommendation

Per Council's discussion.

Attachments: Engineer's Layout drawing and Cost Estimates

GAY AND NEEL, INC.
ENGINEERING ❖ LANDSCAPE ARCHITECTURE ❖ SURVEYING
1260 Radford Street
Christiansburg, Virginia 24073
Phone: (540) 381-6011
Fax: (540) 381-2773
Email: info@gayandneel.com
Web: www.gayandneel.com

STAUNTON RIVER BOATRAMP

TOWN OF ALTAVISTA, VIRGINIA

REVISIONS

NO.	COMMENTS	DATE

PROJECT TEAM

PIC	TREVOR KIMZEY, PE
PM	KEVIN CONNER, LA
DESIGN	CBB, LEC

ISSUE DATE

11/3/2015

GNI JOB NO.

2630

SHEET TITLE

CANOE ACCESS OPTION

SHEET NUMBER

1 OF 1

GAY AND NEEL, INC.
ENGINEERING ◆ LANDSCAPE ARCHITECTURE ◆ SURVEYING
1260 Radford Street, Christiansburg, Virginia 24073
540-381-6011 FAX 540-381-2773

Date: 11/03/2015 **JN 2630**

Staunton Boat Landing - Canoe Ramp Option 3
Town of Altavista, Virginia
Project Budget Estimate

Project Construction ("Hard") Costs

Section 1.00 - Earthwork & Demolition

Item	Description	Unit	Quantity	Unit Cost	Amount
1.01	Clearing & Grubbing	AC	1.3	$ 3,000.00	$ 3,900.00
1.02	Earthwork & Grading (cut-to-fill volume)	CY	5500	$ 10.00	$ 55,000.00
1.03	Import & Place Fill	CY	0	$ 10.00	$ -
1.04	Rock Excavation	CY	0	$ 30.00	$ -
1.05	Cofferdam/River Work	LS	0	$ 60,000.00	$ -
1.06	Retaining Wall (segmental block)	SF	0	$ 40.00	$ -
			Section Subtotal		$ 58,900.00

Section 2.00 - Erosion Control

Item	Description	Unit	Quantity	Unit Cost	Amount
2.01	Plastic Safety Fence	LF	0	$ 5.00	$ -
2.02	Chain Link Safety Fence	LF	0	$ 20.00	$ -
2.03	Construction Entrance	EA	1	$ 1,000.00	$ 1,000.00
2.04	Construction Road Stabilization	SY	0	$ 10.00	$ -
2.05	Silt Fence	LF	500	$ 5.00	$ 2,500.00
2.06	Storm Drain Inlet Protection	EA	0	$ 200.00	$ -
2.07	Culvert Inlet Protection	EA	0	$ 200.00	$ -
2.08	Temporary Diversion Dikes	LF	0	$ 6.00	$ -
2.09	Diversion	LF	0	$ 13.00	$ -
2.10	Temporary Sediment Traps	EA	0	$ 2,000.00	$ -
2.11	Temporary Sediment Basin	EA	0		$ -
2.12	Temporary Slope Drains	LF	0	$ 20.00	$ -
2.13	Paved Flume	SY	0	$ 50.00	$ -
2.14	Blankets & Matting - EC-2	SY	0	$ 3.00	$ -
2.15	Blankets & Matting - EC-3 Type B	SY	0	$ 8.00	$ -
2.16	Stormwater Conveyance Channel - Seeded	SY	0	$ 5.00	$ -
2.17	Stormwater Conveyance Channel - Riprap	SY	0	$ 70.00	$ -
2.18	Outlet Protection- Non-grouted Riprap	SY	0	$ 70.00	$ -
2.19	Riprap	SY	100	$ 70.00	$ 7,000.00
2.20	Rock Check Dam	SY	0	$ 26.00	$ -
2.21	Surface Roughening	AC	0	$ 1,000.00	$ -
2.22	Temporary Seeding	AC	0.5	$ 1,400.00	$ 700.00
2.23	Permanent Seeding & Mulching - Slope	AC	0	$ 3,000.00	$ -
2.24	Permanent Seeding & Mulching - Lawn	AC	0.5	$ 3,000.00	$ 1,500.00
2.25	Tree Protection	EA	0	$ 100.00	$ -
			Section Subtotal		$ 12,700.00

Section 3.00 - Storm Drainage

			Section Subtotal		$ -

Section 4.00 - Pavement

Item	Description	Unit	Quantity	Unit Cost	Amount
4.01	Regular Duty Pavement - installed (2" SM, 8" Base)	SF	1000	$ 3.00	$ 3,000.00
4.02	Heavy Duty Pavement - installed (2" SM, 3" IM, 8" Base)	SF	0	$ 5.50	$ -
4.03	Concrete Pavement	SF	0	$ 6.60	$ -
4.04	Regular Duty Pavement Patch (small areas)	SF	0	$ 4.00	$ -
4.05	Heavy Duty Pavement Patch (small areas)	SF	0	$ 6.50	$ -
4.06	Concrete Equipment Pads	SF	0	$ 8.00	$ -
4.07	Permeable Pavers	SF	0	$ 6.50	$ -
4.08	Pervious Concrete	SF	0	$ 6.50	$ -
4.09	Fine Grading - all paved areas (grading to subgrade)	SF		$ 0.50	$ -
4.10	Curb & Gutter	LF	0	$ 17.50	$ -
4.11	Sidewalk	SF	0	$ 5.00	$ -

4.12	Pavement Marking	SF	1000	$ 8.00	$ 8,000.00
4.13	VDOT CG-12 (curb ramp)	EA	0	$ 1,000.00	$ -
4.14	Gravel Parking	SF	21802	$ 1.50	$ 32,703.00
4.15	Guardrail (Assumed VDOT GR-2)	LF	400	$ 20.00	$ 8,000.00
4.16	Guardrail End-units (Assumed VDOT GR-9, in pairs)	EA	2	$ 3,000.00	$ 6,000.00
4.17	Driveway Entrance Gutter (VDOT CG-9D)	LF	0	$ 125.00	$ -
4.18	Open Grid Environmental Pavers, & Steel Edging	SF	0	$ 5.50	$ -
4.19	Geotextile Fabric	SY	0	$ 4.00	$ -
			Section Subtotal		$ 57,703.00

Section 5.00 - Sanitary Sewer					
			Section Subtotal		$ -

Section 6.00 - Water Distribution					
			Section Subtotal		$ -

Section 7.00 - Lighting					
			Section Subtotal		$ -

Section 8.00 - Misc.					
Item	Description	Unit	Quantity	Unit Cost	Amount
8.01	Fixed Bollard	EA		$ 1,600.00	$ -
8.02	Fence (Fabric Only)	LF		$ 12.00	$ -
8.03	Signs	EA	3	$ 225.00	$ 675.00
8.04	Split Rail Wood Fence	LF	400	$ 20.00	$ 8,000.00
8.05	Chain Link Fence	LF		$ 35.00	$ -
8.06	Pedestrian Guardrails - Straight Run	LF		$ 150.00	$ -
8.07	Pedestrian Guardrails - Sloped (along ramps or steps)	LF		$ 165.00	$ -
8.08	Canoe Ramp Access (Steps/Rail)	LS	1	$ 10,000.00	$ 10,000.00
8.09		LS		$ 4,000.00	$ -
8.10		EA		$ -	$ -
			Section Subtotal		$ 18,675.00

Site Work Estimate = $ 147,978

Section 9.00 - Construction Mobilization / Stakeout				
Item	Description	Ratio	Site Subtotal	Amount
9.02	Construction Surveying (% of total cost)	5%	$ 147,978	$ 7,398.90
		Section Subtotal		$ 14,797.80

Mobilized Site Estimate = $ 162,776

Design Contingency @ ***20%*** $ 32,555

Projected Final Design Estimate = $ 195,331

Construction Contingency @ ***5%*** $ 9,766.55

Total Opinion of Probable Construction ('Hard') Costs = $ 205,098

Project "Soft" Costs

The following estimates are offered as budgetary placeholders for planning; a final fee propsoal will be prepared upon request.

VSMP Permit	LS	1		$ 3,000
Topographic Survey	LS	1		$ 7,500
Site Design / Plan Preparation	LS	1		$ 15,000
Site Plan Approval Process	LS	1		$ 5,000
Joint Permit Application Process	LS	1		$ 4,000
Bidding / Construction Contract Admin Services	LS	1		$ 5,000
	LS	1		$ -

Total Opinion of Probable Soft Costs = $ 39,500

Total Project Budget Estimate (Rounded) = $ 245,000

Agenda Item: 8h

STAFF REPORT

To: Mayor Mattox and Council members
From: Waverly Coggsdale, Town Manager
Date: November 10, 2015
Re: WWTP "EOP PCB research

Summary

At last month's Work Session, Mr. Scott Lowman presented information on the EOP re-characterization and his research (Pot Study) through the IALR.

In addition, Council continued its discussion on the request of the University of Iowa's isrp for the construction of a berm in regard to their Project 5. I have again attached the data provided by the University of Iowa in regard to their proposed research. Also here is a link to the University of Iowa's isrp website related to their research projects: http://iowasuperfund.uiowa.edu/research-projects

Staff was asked to seek answers to several questions, the answers are below:

Q1: Will the Town have Class I Reliability if a berm is built in the pond?

A1: Based on discussion at the Work Session, it appears that if any internal berm is built to a height lower than the height of the sides of the EOP, any water added to the pond could "top" the internal berm and allow ample volume per the requirements for Class I Reliability. Note: The issue as to the exact location of the inflow pipe is still outstanding.

Q2: Notification to EPA?

A1: The Town has forwarded to EPA per their regulations the information that the University of Iowa provided in regard to their proposed research.

Q3: What is the potential danger in regard to trees growing in the pond (i.e puncturing the liner and height of trees)?

A3: Below is Dr. Schnoor and Dr. Licht's responses.

Schnoor

Both trees and grasses are recommended. Trees help to stabilize the soils, provide additional remediation capability, and transpire large amounts of water to dewater the sediments and allow for aerobic break-down of the PCBs. The dense roots of grasses in the top couple of feet also help to stabilize the surface soil and degrade

any PCBs in the upper soils. Research literature indicates that tree roots will not (cannot) penetrate a clay liner. Also, tree roots will not reach down deeply into saturated soils (groundwater), but the roots can survive periods of submerged conditions (on the order of weeks) by pumping oxygen down into the root system.

Licht

In Altavista, there is both grasses and 4 year old trees now growing in the lagoon. I recommend looking at the root systems of both the plot 1 trees and emergent reed canary grass growing on the 'island' to compare both rooting depths and penetration of any liner in your actual situation. When/if I travel to Altavista to plant any future plot next year, I'd be glad to help look at the rhizosphere.

My past experience is that poplar or willow roots do not penetrate an intact clay layer under saturated conditions. My past experience is that tall trees increase evapotranspiration by more than 33% compared to grass, which is when you want a tall leaf canopy in the wind.

At Ecolotree we routinely manage poplar tree heights. By cutting the tree off an allowing it to coppice or regrow from the existing root system allows maintaining height but keep rhizosphere healthy. I do own poplar that are 80 feet tall. But I also eight year olds that are 15 feet tall and have been harvested 4 times. Also, the roots entwine like rebar to make a very stable surface. One tree cannot independently blow over when planted in a dense ECap formation.

Q4: What size of a research plot does the University of Iowa require/need?

A4: Dr. Schnoor's response is below:

A half-acre would ensure that the most contaminated zone could be accessed by some of the split plots. We need a variation in PCB concentrations to determine the dose-response relationship for degradation of the PCBs. We also need some areas that have essentially no PCBs as a reference or "control". That is why a larger bermed area is recommended (if possible), to reach all the different concentrations in the area of planting.

Staff seeks Council's direction on this issue.

Recommendation

Per Council's discussion.

Attachments: University of Iowa Research Summary submittal

University of Iowa isrp website: http://iowasuperfund.uiowa.edu/research-projects

University of Iowa Proposed Research Engineering Project Information

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Altavista WWTP Emergency Overflow Pond

SPECIFIC AIMS

The overall goal of Project 5 is to provide engineering research (non-biomedical) for the intervention and remediation of semi-volatile PCB congeners which may expose humans and biota. Specifically, it is to understand the mechanisms whereby plants and associated rhizosphere bacteria may provide *in situ* bioremediation of lower chlorinated PCBs from contaminated soils and sediments. Project 5 focuses on PCB congeners of higher volatility which are ubiquitous in air, soil, and sediments; and which may pose a significant problem of mass, toxicity or persistence at contaminated sites. Plants can stimulate rhizosphere biodegradation of PCBs by providing the habitat, redox potential, and substrates (exudates) necessary for PCB degradation.

It is hypothesized that some phytoremediation metabolites may be toxic to plants and bacteria, thus limiting further biodegradation and posing a risk to the food chain. We also hypothesize that plant uptake and metabolism may be selective for certain chiral compounds rendering them relatively more biodegradable than their optical isomers. In addition, exposure of plants to PCBs can induce epigenetic changes that, in turn, may affect the regulation of genes involved in plant metabolism. Genes and microorganisms involved in biodegradation and dechlorination of PCBs will be investigated in the laboratory and in actual contaminated sediments utilizing real-time qPCR and metagenomic molecular approaches. Finally, we hypothesize that by planting grasses and hybrid poplar trees deeply into contaminated sediments, plants will stimulate the biodegradation of PCBs and reduce exposures to humans and the environment.

Project 5 has four specific aims:

AIM 1: Identify plant metabolites of selected PCB congeners (PCB 11, 52, 77, 101, 126, 153) that are semi-volatile, persistent, and toxic; and also the uptake/selectivity/metabolism of chiral compounds (PCB 91 and 95).

AIM 2: Elucidate the regulation of metabolism of PCBs by poplar plants (*Populus trichocarpa*) at the epigenetic and transcriptional levels.

AIM 3: Identify microorganisms and functional genes associated with PCB dechlorination in enrichment cultures derived from PCB-contaminated soil and in un-enriched PCB-contaminated sediment.

AIM 4: Characterize PCB-induced changes by plants and their associated rhizosphere microorganisms at a contaminated site (Altavista, Virginia) and in contaminated sediments using gene sequencing and transcriptomic responses.

Biodegradation of lower chlorinated PCBs to innocuous end-products is an overall goal of Project 5. It is well integrated with Project 4 to identify sources of PCBs and with Project 6 on characterizing exposures near the wastewater lagoon at Altavista, Virginia, a highly contaminated PCB site where we will investigate the detailed mechanisms and efficacy of phytoremediation. The Synthesis Core provides authentic standards of selected metabolites, and the Analysis Core will collaborate with us on analytical methods. Research will be translated to industry (Ecolotree, Inc.) and a strong community engagement component exists with stakeholders at the site. This project provides a key element to the overall isrp center at the University of Iowa on "Semi-Volatile PCBs: Sources, Exposures, and Toxicities", investigating a public health strategy for intervention and reducing human exposure through research and understanding of phytoremediation.

RESEARCH STRATEGY

Relation of Project 5 to Overall Program:

Project 5 is a central non-biomedical (engineering) component of the Iowa Superfund Research Program (isrp: *Semivolatile PCBs: Sources, Exposures and Toxicities,* Figure 5-1). **Project 5 leads the research related to intervention, remediation and exposure reduction; it is a major contributor to the overall isrp related to *Exposures*.** The overall goal of **Project 5** is to provide engineering research to determine how plants can be used for the *in situ* bioremediation of semi-volatile PCB congeners. The Project is integrated throughout the isrp: It is a major player in the basic science of PCB metabolism by plants and microbes, and it provides a public health strategy for significant and measureable reduction of human risk to PCBs and related metabolites via phytoremediation.

The Aims of **Project 5** are organized around understanding plant metabolism of PCBs (Aims 1 and 3) and also their associated rhizosphere microorganisms (Aims 2 and 4). In addition, demonstration of the mechanisms of phytoremediation at a severely contaminated field site (Altavista, Virginia) is also provided (Aim 4). We have major isrp partners with complementary objectives (Figure 5-2). **Project 4** examines categorical and specific emission sources of PCBs in Chicago and at the Altavista site. **Project 5** is closely connected to the **Research Translation Core** by sharing our results within the isrp and releasing findings to interested agencies, policymakers, and the public in Virginia. We work collaboratively with Ecolotree, Inc. on phytoremediaiton experimentation and demonstrations at the site (see letter of support). Dr. Louis Licht, President of Ecolotree, will benefit directly from our research on the mechanisms of phytoremediation and the microorganisms involved in biodegradation of PCBs. He will develop the next generation technology for (hopefully) full-scale deployment at the site, thus, ensuring research translation.

Project 5 collaborates closely with **Project 6** whose objectives include determination of human exposure and assessing reduction in exposure due to contaminated sediments and soils. We will share the efforts of collecting, analyzing and characterizing PCB congeners and their metabolites in environmental samples at the Altavista site. **Project 5** also works well with the **Community Engagement Core** whose objectives are to engage the mayor, town council, and wastewater treatment plant manager in explaining isrp research results.

Another major isrp partner is the **Analytical Core**. Because **Project 5** depends on accurate PCB measurements in complex matrices, this research support core is indispensable in developing methods for analysis of samples. Lastly, the **Synthesis Core** provides authentic standards of PCB metabolites and works closely with us on interpreting laboratory microcosm results. We have many joint publications with the **Synthesis** and **Analytical Cores.**

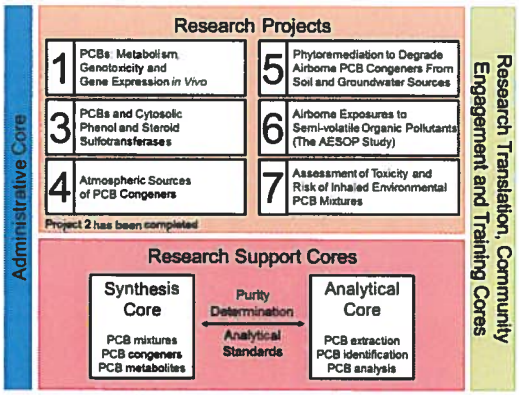

Figure 5-1. Overall Iowa Superfund Research Program (Semivolatile PCBs: Sources, Exposures and Toxicities)

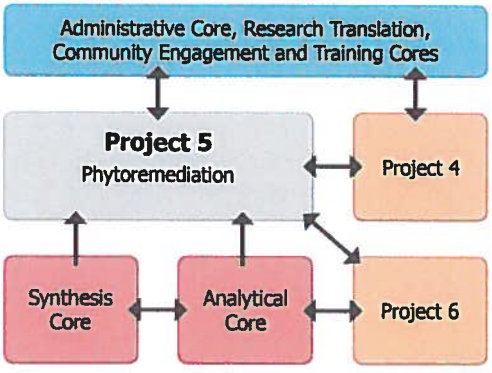

Figure 5-2. Relation of Project 5 to Overall Center.

SIGNIFICANCE:

The overall goal of Project 5 is to provide engineering research (non-biomedical) for the remediation of sites containing semi-volatile PCB congeners which may expose humans. Specifically, it is to determine whether plants and associated microbes can provide *in situ* phytoremediation of lower chlorinated PCBs from soil and sediment sources like the municipal wastewater lagoon at Altavista, Virginia. To date, most hazardous waste sites for PCBs have been subject to "dig and haul" management actions. For example, dredging of Hudson River PCBs resulted in excavation of the sediments and removal to a hazardous waste landfill in Texas. If phytoremediation can prove to be a cost-effective green remedy to intervene at contaminated sites and decrease human exposures, Project 5 will have provided a great service to society via development of a natural solution to a very complex problem. But first, scientific research must be undertaken to elucidate how and why phytoremediation works at such sites (or does not), and second, we must identify potential intermediate metabolites (and secondary toxicity) that can be produced by plants and associated microbes in the degradation of PCBs *in situ*. Our *leading theme* of the competitive renewal is to understand further the metabolism of PCBs by plants and the associated microorganisms in rhizosphere soils and sediments, including the identification of new, potentially toxic metabolites, and new PCB-responsive genes and regulation mechanisms. We strive to understand the biochemical mechanisms to achieve full-scale phytoremediation of PCBs at contaminated sites like the wastewater lagoon in Altavista, Virginia.

INNOVATION:

Project 5 innovatively combines laboratory and field experimentation to understand the potential for phytoremediation to remediate and reduce exposures at hazardous waste sites contaminated by PCBs. Our proposed laboratory research (Aims 1-3) utilizes the most modern molecular biological approaches (transcriptomic, metabolomic, metagenomic, and epigenetic techniques) for investigating plant and microbe transformation of PCBs. We have discovered more than ten metabolites of PCBs never before reported *in vivo* in plants. Although regulation and epigenetic responses are well documented in mammalian studies, our proposed work with plants has never been undertaken. Project 5 field research (Aim 4) establishes state-of-the-art instrumented test plots in the contaminated soils and sediments of the wastewater lagoon at Altavista, Virginia (plus unplanted controls), in full collaboration with the Town Council of Altavista, the wastewater treatment manager, and in cooperation with EPA. To our knowledge, this is the only active research site utilizing plants to help clean an actual regulated PCB contaminated site.

APPROACH:

Our approach is to use laboratory microcosms to detect and identify metabolites of selected PCBs in whole plants exposed in hydroponic and soil/sediment experiments. The PCB congeners were selected based on their semi-volatile airborne tendencies (only 2-5 chlorine atoms), airborne exposure from building paints and caulks (PCB 11), persistency (PCB 52, 101), dioxin-like toxicity (PCB 77, 126), and chiral selectivity (PCB 91, 95). We seek to understand the persistency of PCB congeners in soils and sediments by examining microbial dechlorinating enrichment cultures versus microbes present at actual PCB-contaminated sites. Sequencing metagenomic libraries will be utilized to elucidate active PCB-dechlorinating microorganisms and communities, and epigenetic responses will be employed to measure changes that affect the regulation of genes involved in plant metabolism of PCBs. A field site with test plots will be used to assess the efficacy and transformation pathways of poplar trees deeply-rooted in sediments of a contaminated wastewater treatment lagoon. Unplanted controls will be used to monitor so-called "intrinsic bioremediation", and gene sequencing will ensure the characterization of active dechlorinating bacteria and commensurate genes/transcripts.

PROGRESS REPORT:

The Project 5 team has been quite active publishing more than 20 papers in the past four years directly related to this research, and graduating 3 M.S. students and 4 Ph.D. students, one of whom accepted a tenure track Assistant Professor Position at The Milwaukee School of Engineering. We have identified more than ten novel hydroxyl-PCB (OH-PCB) and PCB sulfate metabolites in PCB-exposed plants. We discovered that poplar plants can metabolize PCB 3 to PCB 3 sulfates via transformation of intermediate OH-PCB 3 metabolites. Formation of OH-metabolites was inhibited by suicide inhibitors of cytochrome P450s (1). Three isomers of PCB 3 sulfate were subsequently discovered in whole plants exposed to PCB 3 for the first time. A totally novel method for extraction and LC/MS analysis was also developed (2).

Utilizing contaminated soil microcosms, we proved that dechlorination of recalcitrant PCB congeners could be achieved, especially under conditions of redox cycling systems planted with switchgrass or poplar, and bioaugmented systems with *Burkholderia xenovorans* LB400. Bioaugmentation with PCB-degrading *B. xenovorans* LB400 was associated with improved degradation of PCB 52, but not PCB 77 or PCB 153 (3). Increased abundances of *bph*A (a functional gene that codes for a subunit of PCB-degrading biphenyl

dioxygenase) and its transcript were observed after bioaugmentation. The highest total PCB removal was observed in switchgrass treated soil with LB400 bioaugmentation (47.3 ±1.22 %), and the presence of switchgrass appeared to facilitate LB400 survival in the soil. Redox cycling (sequential flooding and no flooding) was performed to promote anaerobic PCB dechlorination leading to an increased removal of PCB 153 by 5.3% after 24 weeks ($p<0.05$). Transformation products were detected in all soils, suggesting PCB dechlorination, and microbial communities were characterized including known PCB degraders.

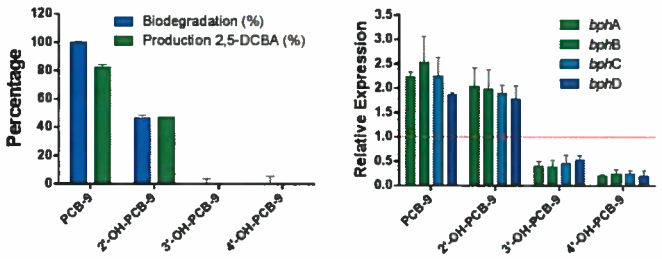

Figure 5-3. ***Left panel:*** Biodegradation of PCB-9 and OH-PCB-9 (and formation of the metabolite, 2,5-dichlorobenzoate–2,5-DCBA) by *B. xenovorans* LB400. ***Right panel:*** Expression of the *bph* genes, *bph*A, *bph*B, *bph*C, and *bph*D, by *B. xenovorans* LB400 exposed to PCB-9 and OH-PCB-9.

We have made progress on the toxicity of PCBs and OH-PCBs to pure cultures using *B. xenovorans* LB400. The expression levels of *bph* genes were shown to correlate well with biodegradation rates, suggesting that these genes constitute potential biomarkers for monitoring PCB biodegradation, such as for PCB 9 (**Figure 5-3**). These results provide the first evidence that bacteria are able to metabolize PCB derivatives hydroxylated on the non-chlorinated ring (4, 5). Researchers from Temple University and The University of Iowa performed metagenomic analyses on PCB-contaminated sediment from the Mississipi River (publication in preparation). Environmental DNA (eDNA) was extracted from every 5-cm sections of a sediment core and used to construct 16S rDNA metagenomic libraries, which were analyzed by Roche 454 pyrosequencing.

Comment [BVA1]: Can be removed. It is all published, unlike the next one.

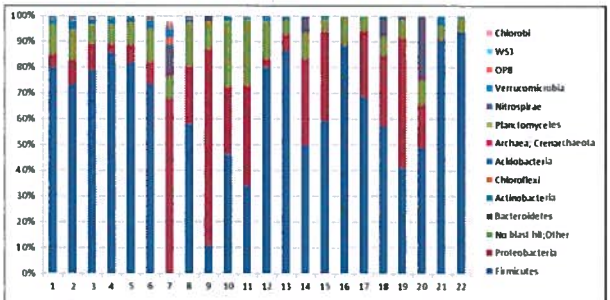

Figure 5-4: Major taxonomic phyla in a PCB-contaminated sediment core. The core was divided into 5-cm sections numbered from 1 (0-5 cm) to 22 (205-210 cm).

Taxonomic analysis performed using the Quantitative Insight Into Microbial Ecology (QIIME) package (http://qiime.org/) showed that a total of 38,949 distinct operational taxonomic units (OTUs) were retrieved. The dominant bacterial phyla at all sites were Firmicutes (*Bacilli* and *Clostridia*), Proteobacteria (*Alphaproteobacteria* and *Betaproteobacteria*), Bacteroidetes (*Sphingobacteriia* and *Flavobacteriia*), and Actinobacteria (*Actinobacteira* and *Thermoleophilia*) (**Figure 5-4**). As expected, these bacterial groups include major aerobic PCB-degraders, e.g., *Comamonas*, *Rhodococcus*, *Burkholderia*, *Pseudomonas*.

OH-PCBs have been detected in a variety of environmental samples by Project 5, and these metabolites are today increasingly considered as a new class of environmental contaminants. Our results provide some of the first evidence that PCB-degrading bacteria transform PCBs *and* OH-PCBs via the biphenyl pathway (4–6).

OVERALL GOALS/HYPOTHESES: Project 5 focuses on PCB congeners of higher volatility which are ubiquitous in air, soil, and sediments; and which may pose a significant problem of mass, toxicity or persistence at contaminated sites. It is hypothesized that some PCB metabolites from plants and microbes may be toxic, limiting further biodegradation. We also propose that plant metabolism is selective for certain chiral compounds rendering them relatively more biodegradable than their optical isomers. In addition, exposure of plants to PCBs may induce epigenetic changes that, in turn, affect the regulation of genes involved in plant metabolism. Regarding the role of microorganisms in rhizosphere soils, we will investigate reductive dehalogenase enzymes suspected of dechlorinating PCBs in real soils and sediments. Finally, we hypothesize that by planting hybrid poplar trees deep into contaminated sediments at a full-scale PCB contaminated site, plants can transport sufficient oxygen into the root zone to allow for total biodegradation and mineralization of PCBs *in situ*.

SPECIFIC AIM 1: *Identify plant metabolites of selected PCB congeners that are relatively volatile, persistent, and toxic (PCB 11, 52, 77, 101, 126, 153); and investigate the uptake, selectivity, and metabolism of chiral compounds (PCB 91 and 95).*

Rationale/Objectives: Although PCBs are persistent in the environment, they are susceptible to enzyme-mediated biotransformation which may produce various metabolites after entry into biota, e.g., plants, bacteria and humans. Furthermore, the metabolites of PCBs may cause greater adverse effects than parent congeners depending on their toxicity to plants and bacteria at the base of the food chain.

Plant metabolism of PCBs and other xenobiotic compounds is conceptually represented by a three-phase process known as the *green liver model* (7). We have summarized reports on metabolism of PCBs by various plants species (8). Our group provided the first evidence of the transformation of PCBs by poplar plants. Liu et al. (9) and Zhai et al. (10) reported that dioxin-like PCB 77 was transformed into three different OH-metabolites by hybrid poplars (*P. deltoides* x *nigra* DN34). In addition, Zhai et al. (2) recently showed the formation of sulfate metabolites in hybrid poplars exposed to PCB 3. Oxidative enzymes implicated in the initial steps of the plant metabolism of PCBs have been suggested to include cytochrome P-450 monooxygenases (11) and peroxidases (12). Although very little is known about the potential conjugative enzymes involved in the PCB metabolism in plants, knowledge gained from other chlorinated xenobiotics suggests the potential role of transferases, such as glutathione-*S*-transferases and glycosyltransferases (7, 13), and we propose to analyze this reductive pathway more thoroughly. Generally, for mammals, two major biotransformation pathways of PCBs are known to include oxidation to hydroxylated PCBs and then glucuronide and sulfate PCBs, and reduction to glutathione conjugates and methylsulfone PCBs shown in **Figure 5-5** (14). To date, we have found these pathways also common for plants.

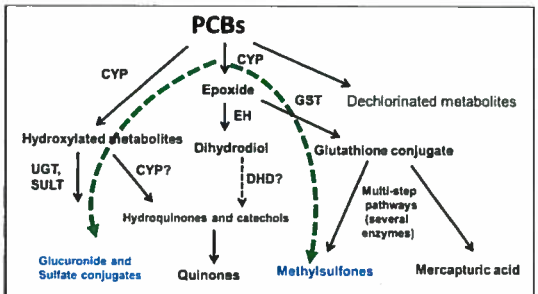

Figure 5-5: Potential pathways for biotransformation of PCBs in mammals (14).CYP: cytochrome P450; EH: epoxide hydrolase; DHD: dihydrodiol dehydrogenase; UGT: UDP-glucuronosyltransferase; SULT: PAPS-sulfotransferase; GST: glutathione S-transferase

Approach: We will identify novel metabolites from both reductive and oxidative pathways within plant tissues and elucidate the pathways (e.g., OH-, sulfate-, methoxy-, methylsulfonyl- and glucuronide metabolites). We were the first investigators to confirm several OH- and sulfate-metabolites in whole plants, and we will use **Figure 5-5** as a working hypothesis to identify metabolic pathways in plants for PCB congeners in Aim 1. Two specific studies are listed below.

Study 1.1: Metabolism and metabolites of PCB 101 in plants

PCB 101 was a major PCB congener in original commercial Aroclor mixtures, resulting in its ubiquity in the environment. PCB 101 was found in the global atmosphere (15–17), in human milk (18) and blood (19–21). Furthermore, various metabolites of PCB 101 were detected in different matrices. Hydroxyl and methylsulfone PCB metabolites have also been found in human tissues (22–24). Two methylsulfonyl metabolites of PCBs, 3-$MeSO_2$-CB 101 and 4-$MeSO_2$-CB 101, were detected in sculpin (25), harbor porpoises (26), and human milk (27). In addition, methylsulfonyl metabolites of chlorinated biphenyls, including 4-$MeSO_2$-PCB 101, were found in humans (28, 29). However, data pertaining to metabolism and metabolites of PCB 101 in plants are lacking. Therefore, the metabolic pathways of PCB 101 were designed based on the potential metabolites of PCBs in plants (poplar and switchgrass) shown in **Figure 5-6**.

Expected Results: First, we expect to develop new methods for detecting the hydroxyl-, methoxy- and methylsufonyl- metabolites of PCB 101 by GC-MS and LC-MS. Then, we will expose PCB 101 to switchgrass and poplar plants in hydroponic solution to examine its uptake and translocation kinetics, and the distribution of metabolites in plant tissues. Identification and quantification of the metabolites will allow elucidation of the metabolic pathways of PCB 101 in plants. Potential toxicity of PCB 101 to plants will be measured by biomass growth rates and transpiration rates with respect to controls.

Pitfalls and Alternate Approaches: These metabolites have not been previously identified *in vivo* in plant tissues, and authentic standards do not exist. Through collaboration with the Synthesis Core, we will obtain standards for the possible metabolites of PCB 101 shown in **Figure 5-6**, which should allow identification and

confirmation. If no metabolites are confirmed, we will have increased our understanding and will modify our ideas as represented by **Figure 5-6**.

Study 1.2: Metabolites and enantoselectivity of PCB 91 in plants

The enantiomeric enrichment of chiral PCBs is a powerful tool to study their biotransformation in the environment because different optical isomers often lead to variations in toxicity (30). Up to now, at least 12 out of 19 possible chiral PCBs, including PCB 91 and 95, have been detected in commercial PCB mixtures above 1% (w/w) (31). Chiral PCB 91 (+/-) with enantiomeric enrichment has been found in various matrices, such as milk (32, 33), plants (34), whales (35), sharks (36), river and riparian biota (37, 38) and humans (29, 33). In addition, enantioselective metabolism of PCB 91 and 95 was confirmed in female C57Bl/6 mice (39). Metabolites of PCB 91 were discovered to be chiral hydroxylated metabolites (40–43) and methylsulfonyl metabolites (29). In preliminary experiments to test our techniques, we have successfully extracted and detected enantioselection of metabolites of PCB 91 in PCB-induced rat liver microsomal samples (44).

Enantioseletive metabolism of chiral PCBs is known to be species-dependent (45). However, little is known about enantioselective metabolism of chiral PCB 91 in plants. Futhermore, metabolism of PCB 91 to sulfate PCB 91 and glucuronide PCB 91 has not been studied in plants but could be important (**Figure 5-7**). Therefore, we propose an experiment to elucidate the possible enantioselective metabolism of PCBs in plants (poplar and switchgrass) and **Figure 5-7** represents a working hypothesis.

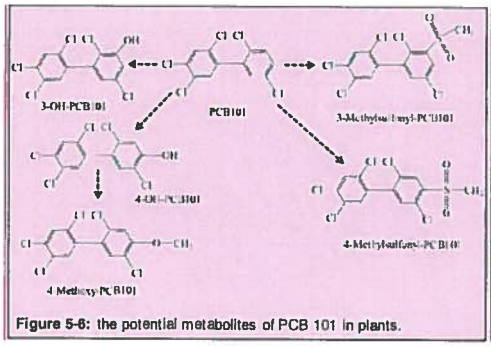

Figure 5-6: the potential metabolites of PCB 101 in plants.

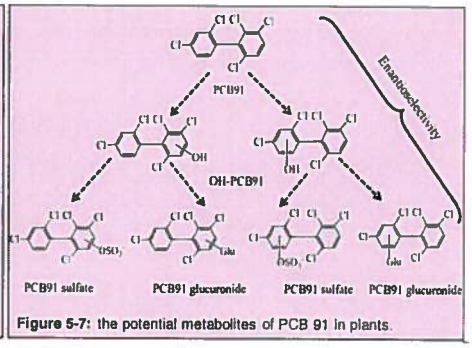

Figure 5-7: the potential metabolites of PCB 91 in plants.

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Expected Results: First, we expect to develop new methods for detecting chiral hydroxylated, sulfated and glucuronided metabolites of PCB 91 by LC-MS/MS. Then, we will expose poplar plants to racemic mixtures of PCB 91 enantiomers in hydroponic solution to examine the kinetics of their relative uptake, translocation, and enantioselection -- including the distribution of metabolites in plant tissues. Quantification of the chiral metabolites will allow elucidation of the metabolic pathways of chiral PCB 91. Potential toxicity to plants will be measured by biomass growth and transpiration rates with respect to controls.

Pitfalls and Alternate Approaches: Uptake, translocation, and metabolism of chiral PCB 91 is expected to result in chiral hydroxylated, sulfated, and glucuronided metabolites (usually two chiral metabolites for each enantiomer). These metabolites have not been previously identified *in vivo* in plant tissues, and authentic standards do not exist. Enantiomers of chiral metabolites of PCB 91, in general, cannot be separated by our existing chiral HPLC columns. If separation proves to be a problem, we will investigate other chiral HPLC columns to separate the enantiomers. Through collaboration with the Synthesis Core, we will obtain standards for the possible metabolites of PCB 91 shown in **Figure 5-7**, which should allow identification and confirmation. If no metabolites are confirmed, we will have increased our understanding, and we will modify the hypotheses represented by **Figure 5-7**.

SPECIFIC AIM 2: *Elucidate the regulation of metabolism of PCBs by poplar plants (Populus trichocarpa) at the epigenetic and transcriptional levels.*

Rationale/Objectives: Poplars have been shown to effectively metabolize lower-chlorinated PCBs through hydroxylation and the formation of sulfate conjugates (2, 10). The metabolism of xenobiotics in plants is known to be primarily regulated at the transcriptional level, which is mediated by complex interactions between transcription factors and gene promoters. However, *epigenetic*[1] responses, such as DNA methylation, have

[1] 'Epigenetic', for some authors, refers to specifically to chromatin modifications that are inherited to next generation.

emerged as novel mechanisms that regulate gene expression in mammals and plants (46). Exposure of plants to environmental stressors, such as infection, drought, and salts, is known to be partly regulated at the epigenetic level. However, epigenetic changes induced by environmental contaminants in plants have received little attention (47). The hypothesis underlying this research is that exposure of plants to PCBs induces epigenetic changes that, in turn, affect the regulation of genes involved in the plant metabolism of PCBs.

Approach: Regulation of gene expression in higher organisms has been shown to occur through mechanisms affecting the structural properties of the chromatin. These mechanisms, including DNA cytosine methylation, are referred to as *epigenetic* because they affect the regulatory status of genes without changing the DNA sequence (48). Typical plant genomes contain high levels of DNA methylation (up to 40% as compared with an average of 8% in animals). DNA methylation in plants occurs in CG, CHG, and CHH regions (where H = A, T or C) and is mediated by different types of DNA methyltransferases (DNMTs) (49). Methylation of promoter regions generally results in gene silencing, while methylation of transcribed regions can either induce or repress gene expression (48). Exposure of plants to environmental stressors, such as infection, metals, drought or salts, has been shown to be partly regulated at the epigenetic level (reviewed in (46)). For instance, Choi and Sano (50) reported that exposure of tobacco plants to abiotic stresses (salts, aluminum, and cold) induced demethylation and overexpression of stress-responsive genes.

Animal and human investigations have provided evidence that different classes of environmental pollutants, including PCBs, may induce epigenetic responses (47). Rusiecki (51) observed a significant relationship between total plasma PCBs and global DNA methylation (hypomethylation), estimated by the percentage of 5'-methylcytosine in 70 Greenland Inuits, a population with persistent organic pollutants (POPs) in their blood. Also DNA methylation may play a role in the tolerance of Atlantic killifishes to PCBs (52).

This research will study the plant response to PCBs at three successive levels: transcriptional (gene expression), epigenetic (DNA methylation), and phenotypic (metabolism of PCBs). PCB-responsive genes will be identified using commercial whole-genome expression microarrays (Affymetrix). PCB-induced DNA methylation changes will be analyzed for a suite a selected PCB-responsive genes using bisulfite (BS) pyrosequencing. Finally, PCBs and their metabolites will be analyzed in exposed plant tissues using GC-MS and LC-QToF/MS and the activity of key enzymes likely to be involved in the PCB metabolism will be monitored. Metabolic transformation of PCBs and enzymatic activities will then be related to gene expression and DNA methylation patterns.

We have developed expertise using microarrays to study the transcriptional response of plants exposed to environmental contaminants as shown in **Figure 5-8** for *Arabadopsis* exposed to silver nanoparticles.

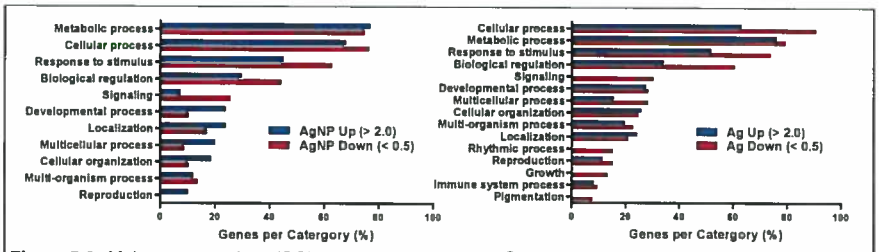

Figure 5-8: Major gene ontology (GO) categories (BLAST2GO®) of genes up- (fold change >2.0) and down-regulated (fold change <0.5) in *A. thaliana* plants exposed for 10 days to AgNPs (**A**) and Ag^{+} (**B**) (53).

Besides transcriptional analyses, we plan to study the epigenetic regulation of PCB-responsive poplar genes using bisulfite sequencing methods. Dr. Van Aken will conduct these studies in collaboration with a colleague at the Temple Medical School, Carmen Sapienza, who is a well-recognized expert in the field of epigenetics (see letter of support from Dr. Sapienza).

Study 2.1: *Identify specific genes that are involved in the metabolism of selected PCBs (PCB 11, 52, and 77) by the model woody plant, Populus trichocarpa.*

Hydroponic Experiments: Hydroponic *P. trichocarpa* plantlets pre-grown for three weeks will be exposed to sub-toxic levels of PCBs[2] as we described elsewhere (1, 2, 10). Non-exposed plants will be used as controls. After one to three week of exposure, plants will be sacrificed and tissues will be ground under liquid nitrogen and stored at -80°C (54). Powdered plant tissues will be used to study gene expression, DNA methylation, PCB metabolism, and enzymatic activities.

Microarray Design and Analysis: Genome-wide gene expression analyses will be conducted based on a procedure that we described in Kaveh et al. (53). Briefly, RNA will be extracted using TRIzol® Plus RNA Purification kit with on-column PureLink® DNAase treatment. RNA will be analyzed using a NanoDrop™ ND-2000 (Vernon Hills, IL) and an Agilent 2100 Bioanalyzer (Santa Clara, CA). RNA samples will be labeled and hybridized to the GeneChip® Poplar Genome Array (Affymetrix, Santa Clara, CA). Expression levels of differentially expressed genes will be confirmed by reverse-transcription real-time PCR (RT-qPCR) using a StepOnePlus™ Real-Time PCR System (Applied Biosystems, Foster City, CA) as described elsewhere (53).

Data Analysis: Microarray images will be analyzed using the Affymetrix Gene Expression Console with RMA (Robust Multi-array Average) and the BRB-ArrayTools (55). Gene classification into ontology categories (GO) will be performed using BLAST2GO® version 2.6.4 (Biobam Bioinformatics, Valencia, Spain). RT-qPCR amplification levels of selected genes will be calculated using REST 2009 version 2.0.13 (Qiagen, Foster City, CA). PCB-responsive genes based on the microarray screening will be further selected by searching public databases (NCBI, www.ncbi.nlm.nih.gov/, and JGI Poplar genome Project, http://genome.jgi-psf.org/Poptr1_1/Poptr1_1.home.html) for their predicted function in PCB metabolism.

Study 2.2: *Determine DNA methylation occurring in P. trichocarpa upon exposure to the selected PCBs.*

Melting Curve Analysis and Bisulfite Pyrosequencing: DNA will be extracted from PCB-exposed and non-exposed plants using Plant DNeasy® Tissue Mini Kit (Qiagen). DNA will be quantified using a NanoDrop™ ND-2000 and kept at -80°C. DNA will be treated with sodium bisulfite (BS) using the EpiTect Bisulphite Kit (Qiagen). Melting curve analysis will be conducted according to Vossen et al. (56). Briefly, primers for each target gene will be designed in methylation independent regions spanning multiple methylation sites using the software MethPrimer (www.urogene.org/tool.html). Post-PCR melting curves with temperature increments of 0.1°C will be recorded using a StepOnePlus™ Real-Time PCR System (Applied Biosystems, Foster City, CA). Site-specific methylation will be analyzed in BS-converted DNA using custom-designed bisulfite pyrosequencing assays (Qiagen) (57). Briefly, 5'-biotin modified primers and sequencing primers will be designed using the PyroMark Assay Design Software 2.0 (Agilent), and biotinylated sequences will be generated by PCR as previously described. Bisulfite pyrosequencing will be performed using a PSQ96HS system using the PyroMark Gold Reagent Kit (Qiagen) to examine the percent methylation at each CpG site analyzed. *Data Analysis:* The degree of methylation of single loci will be expressed by the *methylation index* (%) i.e., the ratio of methylated sequences to the sum of methylated and unmethylated sequences in a sample.

Study 2.3: *Determine the effects of PCB-induced DNA methylation on the regulation of gene expression and PCB metabolism in P. trichocarpa.*

Extraction and Analysis of PCBs and their Metabolites: PCBs and their metabolites will be extracted from plant tissues and analyzed by GC-MS and LC-QToF/MS as described below (10).

Enzymatic Activities in Plant Crude Extracts: Plant crude extracts will be prepared from PCB-exposed tissues as described in Brentner et al. (54). Briefly, tissues will be homogenized under liquid nitrogen and mixed with 4 volumes of enzymatic extraction buffer (Tris, EDTA, glycerol, PVP, BSA, cystein, and protease inhibitors). Extracts will be centrifuged and filtered to be used for activity assays. Based on the gene expression data, activities of enzymes potentially involved in PCB metabolism will be recorded: glutathione *S*-transferase (58), peroxidase (59), glutathione reductase (60), cytochrome P-450 reductase (61), cytochrome P450 mono-oxygenase (62). Total protein content will be analyzed by the bicinchoninic acid (BCC) Protein Assay Kit.

Data Analysis: Data will be subjected to analysis of the variance using one-way ANOVA followed by Tukey's multiple comparison tests (Prim 6.0, GraphPad, La Jolla, CA). Metabolic transformation of PCBs will be modeled following a pseudo-first order kinetics. Correlation between DNA methylation, gene expression, and PCB metabolism will be based on conventional statistical tools, including coefficient of determination (R^2), Pearson's correlation coefficient (r), and Spearman's rank correlation coefficient (63).

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[2] Sub-toxic concentration will be the highest concentration that does not result in negative effects on tolerance indexes (TIs). It is expected that exposure to lower PCB concentrations would increase the plant growth rate.

Expected Results: This Specific Aim is a logical extension of Specific Aim 1 on plant metabolism of PCBs. Based on a whole-genome expression analysis, Study 3.1 will identify PCB-responsive genes, which are involved in the toxic response to PCBs and PCB metabolites (e.g., cytochrome P450s, glutathione *S*-transferase). Study 3.2 will focus on the epigenetic regulation of gene expression in PCB-exposed plants. More specifically, we will determine the DNA methylation status of PCB-responsive genes. Unlike what is observed in mammals, DNA methylation in plants have been shown to be transferred to the plant progeny, which may pave the way for innovative phytotechnologies using seedlings adapted for PCB uptake and transformation. In Study 3.3, we will link PCB-induced epigenetic changes to the expression of genes and activities of enzymes involved in PCB metabolism. These effects will also be observed in parallel with the profile of PCB metabolites determined in Aim 1. Results collected in this study will be submitted to PoplarCyc (64). PoplarCyc is a poplar metabolic pathway database that is part of the Plant Metabolic Network (PMN) (www.plantcyc.org/index.faces).

Pitfalls and Alternate Approaches: Pitfall 1: Although extraction of RNA from the model plant *A. thaliana* is a routine task, extraction of good quality RNA from poplar trees may be more challenging. Alternate approach: Many RNA alternate extraction procedures are today available for plant material and will be tried, such as the promising PowerPlant® RNA Isolation Kit (Mo Bio, Carlsbad, CA). Pitfall 2: Understanding epigenetic regulation of the metabolic and stress responses of plants exposed to PCBs will require merging DNA methylation, gene expression, and phenotypic data (Studies 1, 2, and 3). Although exciting results are expected, we are aware that difficulties may arise due to phenotypic characteristics, such as biotransformation and enzymatic activities, which are mediated through the coordinated activity of many genes potentially under complex epigenetic control. They may not be fully captured by transcriptional and/or epigenetic regulation at the individual gene level, but we shall try (high risk, high reward).

SPECIFIC AIM 3: *Identify microorganisms and functional genes associated with PCB dechlorination in enrichment cultures derived from PCB-contaminated soil and in un-enriched PCB-contaminated sediment.*

Rationale/Objectives: Understanding the microorganisms and functional genes involved in PCB degradation in rhizosphere soils and in sediments from contaminated sites is critical to effective design of phytoremediation-based clean-up strategies. Anaerobic reductive dechlorination of PCBs can occur in contaminated soils and sediments, and the presence of plants and root exudates appears to enhance PCB reductive dechlorination processes (3). Anaerobic PCB-dechlorinating enrichment cultures have been developed and characterized since the early 1990s, and some PCB-dechlorinating isolates described (65, 66).

PCB-dechlorinating bacteria isolated from PCB-contaminated sediments include members of the growing group of "dechlorinating Chloroflexi", including the well-characterized and sequenced dechlorinators *Dehalococcoides* strains 195 and CBDB1 (67, 68). Members of the genus *Dehalobacter* (Phylum Firmicutes) have also been implicated. However, the microorganisms mediating reductive dechlorination in the rhizosphere and the specific functional genes involved also remain unclear.

In our recent work, we investigated PCB dechlorination in unplanted soils and switchgrass (*Panicum virgatum*) rhizosphere soils spiked with PCB congeners 52, 77, and 153. Switchgrass planted soils showed signicantly greater losses of PCB congeners than unplanted soils ($p<0.05$). Dechlorinated congeners were detected in all soils, suggesting PCB dechlorination was actively occurring. To further understand the microbial community involved in PCB dechlorination, we performed a microbial community analysis of the soil samples using qPCR and terminal restriction fragment length polymorphism (T-RFLP) analysis. The abundance of putative dechlorinating *Chloroflexi*, as estimated by qPCR, increased after two weeks of flooding in redox cycled soils. Characterization of the bacterial community by T-RFLP analysis revealed distinct bacterial communities in soils with different treatments. Sequences classified as *Geobacter* and *Clostridium* were identified, which have never been identified as PCB dechlorinators before, suggesting their possible role in PCB dechlorination.

Approach: We aim to extend these results and to close knowledge gaps, particularly the uncertainty surrounding functional genes that participate in bacterial PCB dechlorination. By analogy to other reductive dehalogenation processes, key enzymes in PCB dechlorination are likely to be reductive dehalogenases. There is some evidence to support the involvement of RDase genes in PCB dechlorinating sediment microcosms (69). The goal of this specific aim is to build on that evidence. Our approach will be to develop PCB dechlorinating enrichment cultures from PCB-contaminated site material and rhizosphere soils, and to use qPCR and "deep sequencing" approaches to better understand the key microorganisms and functional genes involved.

Study 3.1: *Develop PCB-dechlorinating enrichment cultures from PCB-contaminated site material and rhizosphere soils.*

An enrichment culture approach will allow us to track PCB dechlorination in microcosms with time under controlled conditions. Bacteria using PCBs as electron acceptors for growth will be expected to display increased abundance with time in the enrichments. General microcosm construction procedures will be used as described in previous studies (69, 70). Bottles will be prepared in triplicate. In addition to PCB congener-fed microcosms, killed (autoclaved) controls as well as live controls (fed electron donors only) will be constructed and monitored. These will provide the necessary controls to demonstrate biological PCB dechlorination and associated changes in the microbial community.

We propose to develop enrichment cultures by providing the same PCB congeners we have studied previously (PCB 52, 77, and 153) as electron acceptors. Although the preferred electron donor for PCB dechlorinators is likely to be hydrogen (H_2), feeding pure H_2 to these cultures might be counterproductive to enrichment of PCB dechlorinators since microorganisms in the culture (e.g. methanogens and sulfate-reducing bacteria) could compete more effectively for H_2 at higher partial pressures. Thus, a mixture of electron donors (lactate, acetate, butyrate, and propionate) will be added in the attempt to allow sustained low-level H_2 production by fermenters (70). We will also explore the effect of other compounds as either "haloprimers" or inhibitors of PCB dechlorination. Haloprimers are compounds known to enhance PCB dechlorination rates in microcosms, and include single PCB congeners (such as PCB 116), halobenzoates, and chlorobenzene, among others (70). Pentachloronitrobenzne (PCNB) is also known as an effective haloprimer (69). The effect of plant exudates on PCB dechlorination rates will also be investigated to determine if they enhance or inhibit PCB dechlorination.

Following microcosm construction and inoculation with appropriate carbon sources, electron donors, acceptors, nutrients and potential haloprimers, the microcosms will be monitored regularly for evidence of PCB dechlorination by extraction and GC-MS detection in collaboration with the Analytical core. Samples will also be taken periodically for DNA extraction and molecular analysis (as described in Studies 3.2. and 3.3). Based on our previous work, we expect to see PCB dechlorination activity develop in these microcosms over a period of several months. Microcosms showing robust dechlorination activity will be selected for transfer into defined medium and for development of sediment-free cultures.

Expected results: Key potential PCB dechlorinators in these cultures include species of *Dehalococcoides*, *Dehalogenimonas*, and *Dehalobacter* (71, 72), thus we expect to observe similar results in our enrichments. However, since we are using single PCB congeners as electron acceptors, rather than Arochlor mixtures, potentially novel dechlorinating groups from different phyla could be observed, such as the recently discovered organochlorine-degrading *Firmicutes* group (73). These enrichment cultures, once developed, will be a resource for studies 3.2 and 3.3, where we aim to conduct metagenomic and qPCR analyses for PCB RDases.

Potential pitfalls and alternative approaches: The primary challenge of developing PCB dechlorinating enrichments is keeping the cultures active in the absence of sediment (65). Recent studies have reported development of robust sediment-free PCB dechlorinating cultures (71, 72) – we plan to adopt the methods described therein for developing sediment-free enrichments.

Study 3.2: *Conduct metagenomic analyses of PCB-dechlorinating enrichment cultures and PCB-contaminated environmental samples.*

The purpose of this study is to retrieve metagenomic sequence information from PCB-dechlorinating enrichment cultures and PCB-contaminated sediment samples. Our goal is to interrogate the resulting dataset for the presence of reductive dehalogenase (RDase) gene homologs as well as for 16S rRNA gene sequences of putative dechlorinating *Chloroflexi*. A general workflow for metagenomics sequencing involves DNA extraction, next-generation sequencing, sequence assembly, taxonomic binning, and gene annotation (74).

Many metagenomic studies use indirect extraction of high molecular weight DNA from samples so that large insert DNA libraries (such as fosmid libraries) can be constructed. However, it was found in a recent study that metagenomic sequencing of DNA that has been extracted directly from an environmental sample yields little bias in the metabolic functions and taxonomic information discovered (75). Thus, we propose to perform direct DNA extraction from enrichment cultures and environmental samples using commercially available kits. Community DNA from cultures and environmental samples will be subjected to high-throughput "deep sequencing" using the Illumina HiSeq 2500 Sequencer at the University of Iowa Institute for Human Genetics. In high output mode this instrument can provide ~600 gigabases (Gb) of sequence information in one run. However, since the sequence read length is typically no longer than 100 bp, the sequence data must be

subjected to further bioinformatics analysis (i.e. contig assembly, binning and annotation). This can be performed using the MG-RAST online server (http:/metagenomics.nmpdr.org)(76).

Expected results: Once the metagenomic dataset has been assembled, binned and annotated, we will query the data for RDase gene homologs and for 16S rRNA genes sequences from putative dechlorinating groups such as the *Chloroflexi*. We expect to find RDase genes and add them to the RDase database in study 3.3.

Study 3.3: Employ PCR-based molecular biology tools to quantify the presence, abundance, and functionality of genes potentially involved in anaerobic PCB dechlorination.

An extensive set of degenerate PCR primers that target RDases was recently developed and applied to enrichment cultures and environmental samples from chloroethene and chloroethane contaminated sites (77). Illumina sequencing of the resulting PCR products yielded a large set of RDase genes, many of which were less than 70% similar to other RDase genes found in the database (77). The results of this study suggest that these primers would be very useful for uncovering RDase gene diversity in PCB-contaminated environments and to compare RDase gene diversity in enrichments with that observed in environmental samples.

This study can be executed in parallel to Study 3.2 –the same DNA extracted (as described above), will also be used in PCRs with the degenerate RDase primer suite subjected to high-throughput Illumina sequencing. We plan to initially adopt the sequence assembly approach used by Hug and Edwards, which includes the application of the IDBA_UD assembly program (78). The resulting assembled sequences (contigs) will be subjected to BLAST analysis against an RDase database.

Expected results: Comparison of RDase genes retrieved from enrichments and from the original environmental samples is expected to yield a subset of genes identified as likely PCB dehalogenases.

Potential pitfalls and alternative strategies: While we expect development of PCB-dechlorinating enrichment cultures to be relatively straightforward, development of sediment-free cultures is more difficult. Studies 3.2 and 3.3 can be initiated with DNA from environmental samples and sediment microcosms and do not rely on immediate success with sediment-free cultures. Performing metagenomics in complex soil/sediment samples, while possible, is more difficult than in sediment-free enrichments. Development of the sediment-free enrichments is an alternative strategy. The PCR-based approach to identifying PCB RDase genes is limited by the quality of the primers. In previous work we have encountered problems with PCR-based detection of RDase genes in environmental samples. The metagenomics approach, therefore is an alternative strategy to inherently biased PCR-approaches for discovering possible PCB RDase genes.

SPECIFIC AIM 4: *Characterize PCB-induced changes by plants and their associated rhizosphere microorganisms at a contaminated site (Altavista, Virginia) and in contaminated sediments using gene sequencing and transcriptomic responses.*

Rationale/Objectives: The Town Council of Altavista has authorized the University of Iowa isrp to perform research at their 6.2 acre wastewater treatment plant emergency overflow lagoon. It became heavily contaminated with up to 10,000 mg PCBs/kg wet sediment through past decades (~40 years) of industrial discharges during wet weather, causing over-flow of the wastewater treatment plant and depositing a thick sludge containing PCBs in the sediment of the lagoon. A remediation strategy has not yet been decided, but the Virginia Department of Environmental Quality has oversight and insists that a plan must be developed. A "dig and haul" solution is estimated to cost about $4.5 million, so the City of Altavista is considering more cost-effective solutions like phytoremediation. One plan would be to drain the pond, treat the water with Granular Activated Carbon (GAC) and discharge it to the stream, and then fill-in the lagoon with fresh soil mixed with sediments, and to plant deep-rooted trees throughout the zone of contamination. Phytoremediation would theoretically biodegrade the PCBs, but research is needed to test the concept and to understand the mechanisms and risks of such a solution. Isrp will provide that mechanistic scientific research during the next five years. Isrp will translate the research to industry through collaboration with Dr. Louis Licht, President of Ecolotree, an active participant at the site with approval of the Town Council (see letters of support).

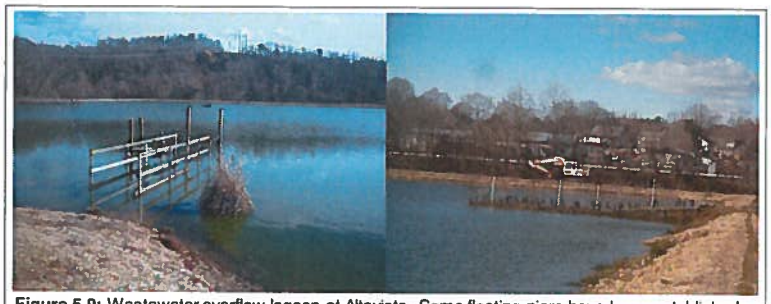


Figure 5-9: Wastewater overflow lagoon at Altavista. Some floating piers have been established for sediment sampling (**left photo**). Plot #7 established by Ecolotree Inc. to investigate the PCB degradation in a hot spot using hybrid poplar and willow trees deeply rooted throughout the contaminated zone (**right photo**). Images courtesy of Gabriele Ludewig, isrp.

Study 4.1. Laboratory Soil Mesocosms with sediments from Altavista: Soil mesocosms in the laboratory will be used in a parallel study to the prototype (Study 4.2). Here, multiple variables can be tested, reproducible results obtained, and positive/negative controls afforded. For the soil mesocosms, glass beakers (2 L) will be acid washed and the bottom covered with 5 mm diameter glass beads, followed by 3 mm diameter glass beads to aid drainage. A sampling port will be included near the bottom of the beaker with a PTFE-faced silicon septum. Contaminated sediment (~5000 mg/kg wet sediment) and uncontaminated material (< 1 mg/kg) will be collected from the lagoon at Altavista. Triplicates will be utilized for the following conditions with contaminated sediment: autoclaved sediment only (killed control), sediment (unplanted), sediment with plants under aerobic conditions, sediment with plants under anoxic conditions, and sediment with plants under aerobic conditions and bioaugmentation with LB400. The same conditions will be utilized for uncontaminated site sediment spiked with the same congeners selected for Aim #1 to allow comparison with metabolic pathways observed under clean, hydroponic conditions. Poplar plants (*Populus deltoides x nigra*, DN-34) will be grown from 8" cuttings in the mesocosms. There will be 30 mesocosms total and all will be incubated at 25°C, and 50% relative humidity in a 10 m^3 plant growth chamber (*Percival Intellus*) under approximately 1000 umol/m^2-s photosynthetically active region (PAR) light and measured by a calibrated sensor (LI-COR). Redox conditions will be controlled by varying the moisture content of the soil and collecting soil-water samples from the bottom septum. Field capacity will be evaluated by saturating the bead layers with water initially, and then saturating the soil. Water (1/10 strength Hoagland solution) will be replaced gravimetrically by weighing the soil to the desired moisture content as the plants transpire. Spiked additions of PCB congener mixtures will be added to a level of 5000 mg/kg (total) which is commensurate with concentrations in the most heavily contaminated areas. These spiked additions will be compared to the native sediment of similar concentrations to determine if the long history at the site has resulted in irreversible sorption of PCBs and non-bioavailability. Each experiment will run >90 days such that the anoxic and aerobic mesocosms will have ample time for biodegradation. Conduct of the experiments, analysis of the samples, and sampling methods for soil, soil water, and plant material will be handled similar to Meggo and Schnoor (3).

Study 4.2. Split-plot design of phytoremediation at Altavista contaminated lagoon site: The Altavista lagoon will be sampled in the first year of the project for study 4.1. At the same time, a meeting of the wastewater treatment plant manager, EPA, Ecolotree, and Iowa isrp will take place to lay out the plots for field experimentation. Plantings will consist of hybrid poplar trees (*Populus deltoides x nigra*, DN34) and cool/warm season grass seeds from a local nursery. The grasses include deep rooted varieties which thrive in summer (e.g., switchgrass, *Panicum* spp.), legumes which help to supply nitrogen (e.g., white clover), and other varieties which will maintain root structure throughout the winter (bluegrass). Grasses are needed to provide a dense root mass in the top few feet, and deep-rooting phreatophytic trees are needed to access PCBs deeper in the profile (3-8'). In this study, we wish to demonstrate that the degradation we observe in laboratory studies translates to actual field remediation.

Variables in the split plot design (15 x 15 ft each plot) will be: fallow (unplanted) soil with contaminated material (only) to determine intrinsic bioremediation at the site; planted with grasses and hybrid poplar trees without bioaugmentation; and planted with grasses and trees with bioaugmentation using LB400. Separate planted control plots will be established in nearby areas with little contamination to assess potential toxicity of the PCB mixture on plants in the treatment plots. Triplicates of each split plot will be maintained, resulting in 9 treatment

plots total, randomly distributed. Our experience at other sites indicates that the roots of hybrid poplar can withstand up to two months of saturated (flooded) conditions if wet conditions occur during the 4-yr period.

Split plots will be established and planted in the fall of the first year at the lagoon facility. Grass seeds will be purchased from a local nursery based on their experience of what mixtures grow well in that location. Grass seeds will be spread on a light perlite layer, covered in straw, and soaked in half-strength Hoagland solution (or commercial equivalent) and allowed to sprout. Sprouted grasses will be watered with 1/10-strength Hoagland's nutrient solution. Eight-ft poles ("whips") of hybrid poplar (Hramoor Nursery, Michigan) will be planted (pushed) directly into the soil/sediment material. Trees will root spontaneously within two weeks of planting. Any loss of plant material during the winter will be replaced the next spring.

Soil and plant samples will be collected quarterly for five years (before planting, at the time of planting, and during the next four years of growth). Hand augers will be used to collect depth-composites of the leaf-layer and soil. Leaves will be hand-picked from the trees, and live twigs will be collected for woody tissue analyses. Samples will be composites from eight locations in the plot to account for heterogeneity. Soil samples will be dried at room temperature until constant weight. Samples will then be ground with mortar and pestle and extracted with 10 ml acetonitrile to 1 g soil in a refrigerated ultrasonic bath overnight. They will be filtered under 0.2 um. Filtrate will be analyzed for PCB congeners by GC-ECD and GC-MS/MS (3), and metabolites by high pressure liquid chromatography (HPLC) and LC-MS/MS, respectively (44).

We will also extract nucleic acids (DNA and RNA) from these soil samples immediately after receipt in the laboratory. Microbial community analysis will be performed with the DNA extract via PCR and deep sequencing of the 16S rRNA gene (Specific Aim 3). Prior to bioaugmentation, strain LB400 will be grown in medium on solid biphenyl as the sole carbon and energy source until exponential phase. Cells will be harvested by centrifugation, washed once with sterile medium, and resuspended into sterile medium. The survival and activity of strain LB400 following bioaugmentation will be estimated by qPCR using the bphA primer set bphA 463f/674r and the LB400 16S-23S rRNA internal transcribed spacers (ITS) primer set LB400 84f/278r. Aim 4 at the Altavista field site helps to tie the entire Project together (Aims 1-4 on plants and bacteria). We will pursue a novel intervention strategy for reducing human exposure at contaminated sites.

MILESTONE CHART

Experimental Schedule	Year 1				Year 2				Year 3				Year 4				Year 5			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Aim 1 Identify novel PCB metabolites in plants for PCB 11, 52, 77, 126, and 153																				
Study 1 PCB 101 methylsulfonyls																				
Study 2 PCB 91 95 (chirals)																				
Aim 2 Regulation of PCB metabolism in poplar (epigenetics)																				
Study 1 Identify specific genes																				
Study 2 DNA methylation to PCB																				
Study 3 Regulation & epigenetics																				
Aim 3 Identify microorganisms, functnal genes in dechlorination																				
Study 1 Enrichment cultures																				
Study 2 Metagenomics																				
Study 3 PCR for genes																				
Aim 4 PCB degradation in plants and rhizosphere at Altavista VA																				
Study 1 Lab mesocosms																				
Study 2 Site split plots																				

Project 5 – Progress Report

The goal of Project #5 is to provide engineering research (non-biomedical) to determine whether plants can be used for the *in situ* bioremediation of PCB congeners from airborne sources. Plants can uptake PCB congeners from soil and groundwater, as well as from air directly. Microbes in the rhizosphere of plants together with the plants can break-down PCBs to less toxic products depending on the metabolites produced. In 2014, we continued to identify novel metabolites within plant tissues and to elucidate their reaction pathways (e.g., chiral PCB metabolites). Using metagenomics, we have identified the dominate groups of bacteria and individual species in a sediment core contaminated with PCBs. By mining 16S rDNA databases, we revealed that a large proportion of 'no blast' sequences belong to an uncultured *Thiobacillus* sp. that was previously detected at various contaminated sites and which may play a role in PCB natural attenuation. Results from microcosm experiments showed that the combined use of phytoremediation and bioaugmentation with *Burkholderia xenovorans* LB400 could be an efficient and sustainable strategy to remediate PCB contaminated soil.

Publications 2014

1. Guangshu Zhai, Sarah M. Gutowski, Hans-Joachim Lehmler, Jerald L. Schnoor, (2014). Enantioselective transport and biotransformation of chiral hydroxylated metabolites of polychlorinated biphenyls in whole poplar plants. *Environ Sci Technol* 48, 12213–12220, DOI: 10.1021/es503443e; PubMed # 25238141; PMC # 4207536, NIHMSID# 650065.
2. Guangshu Zhai, Katherine S. Walters, David W. Peate, Pedro J. J. Alvarez, Jerald L. Schnoor, (2014). Transport of gold nanoparticles through plasmodesmata and precipitation of gold ions in woody poplar. *Environ Sci Technol Lett* 1, 146–151, DOI: 10.1021/ez400202b; PubMed # 25386566, PMC # 4224293, NIHMSID # 557381.
3. Rouzbeh Tehrani, Monica M. Lyv, Benoit Van Aken, (2014). Transformation of hydroxylated derivatives of 2,5-dichlorobiphenyl and 2,4,6-trichlorbiphenyl by *Burkholderia xenovorans* LB400. *Environ Sci Pollut Res* 21, 6346-6353, DOI:10.1007/s11356-013-1629-6;
4. Rouzbeh Tehrani, Benoit Van Aken, (2014). Hydroxylated polychlorinated biphenyls in the environment: sources, fate, and toxicities. *Environ Sci Pollut Res* 21, 6334-6345, DOI:10.1007/s11356-013-1742-6;
5. Yi Liang, Richard Meggo, Dingfei Hu, Jerald L. Schnoor, Timothy E. Mattes, (2014). Enhanced polychlorinated biphenyl removal in a switchgrass rhizosphere by bioaugmentation with *Burkholderia xenovorans* LB400. *Ecological Engineering* 71, 215-222, DOI:10.1016/j.ecoleng.2014.07.046;
6. Yi Liang, Andres Martinez, Keri C. Hornbuckle, Timothy E. Mattes, (2014). Potential for polychlorinated biphenyl biodegradation in sediments from Indiana harbor and Ship Canal. *International Biodeterioration & Biodegradation* 89, 50-57, DOI:10.1016/j.ibiod.2014.01.005;

Highlights:

1. **Reactivity of chiral PCB metabolites in plants.** Poplar plants can enantioselectively uptake and biotransform chiral 5-OH-PCB95, but not chiral 5-OH-PCB91. This has important implications for which chiral metabolites are recalcitrant in the environment and which are ultimately degraded.

2. **Metagenomic Analysis of the Bacterial Community in a PCB-Contaminated Sediment Core.** Using 16S rDNA metagenomic pyrosequencing, we obtained detailed

profiles of the bacterial community structure in a sediment core from a PCB-contaminated site which showed that the dominant bacterial groups in all core sections were taxa containing known PCB-degraders: Firmicutes, Proteobacteria, Bacteroidetes, and Actinobacteria. Interestingly, a strong correlation was also detected between PCBs and unidentified 16S rDNA ('no blast'), suggesting the presence of unknown bacterial species involved in the PCB metabolism. Mining further 16S rDNA databases revealed that a large proportion of 'no blast' sequences belong to an uncultured *Thiobacillus* sp. that was previously detected at various contaminated sites and may play a role in PCB natural attenuation.

3. **Bioaugmentation with LB400.** Results from microcosm experiments show that combined use of phytoremediation and bioaugmentation with *Burkholderia xenovorans* LB400 could be an efficient and sustainable strategy to remediate PCB contaminated soil.

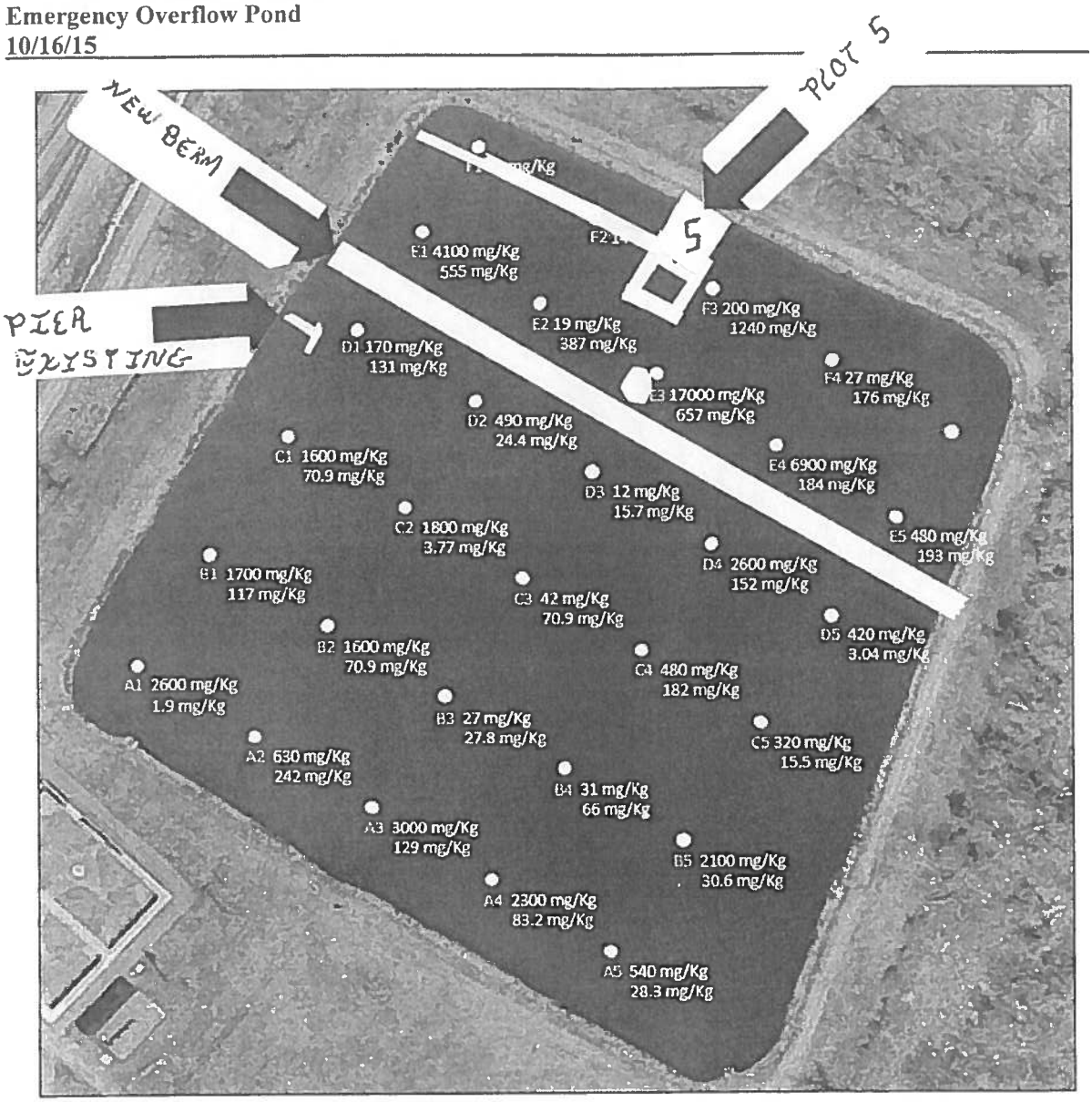
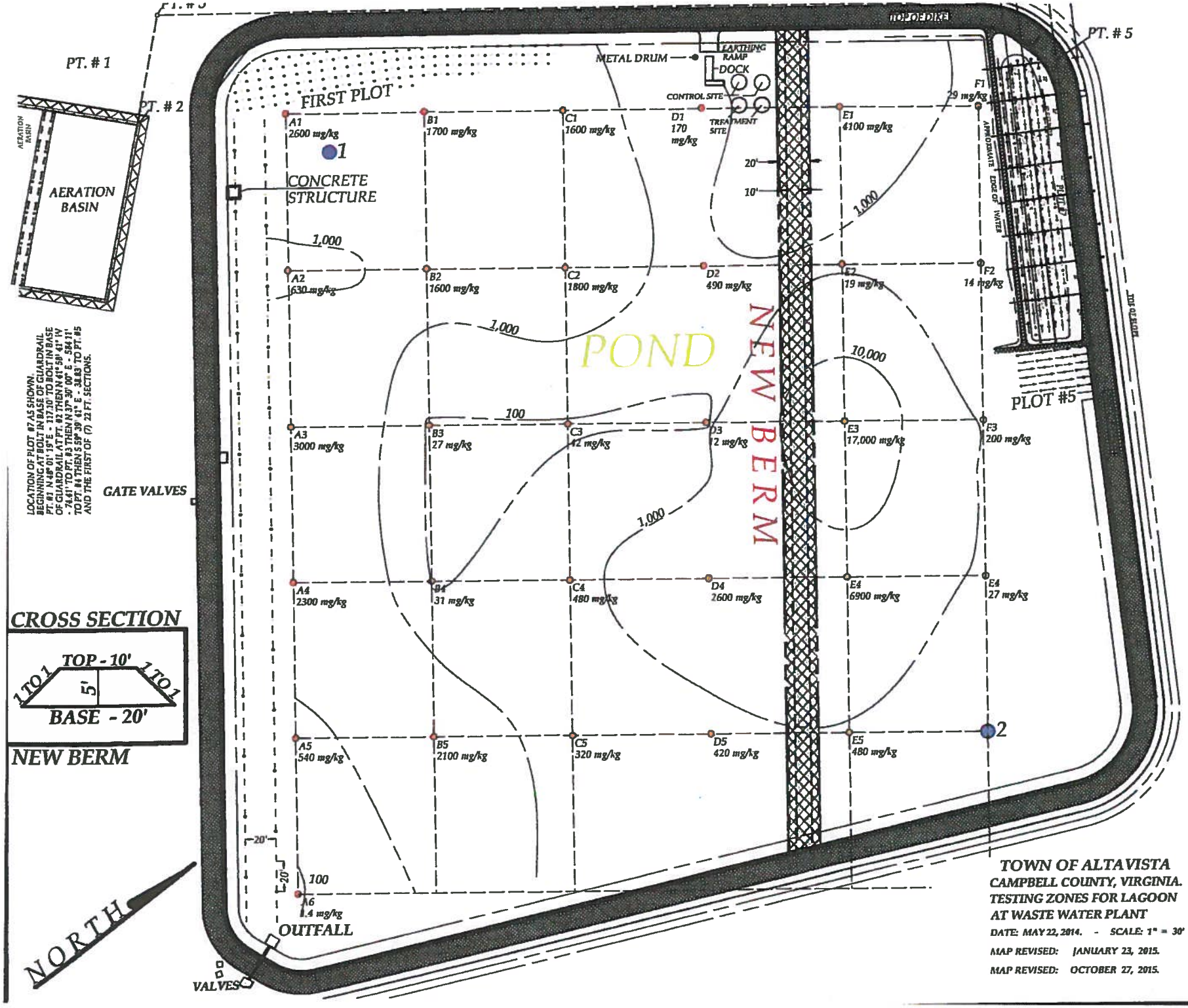


Figure 4. 2015 pond re-characterization results. Blue indicates the sample position. White represents data from the 2003 VRR. Yellow indicates results from the 2015 sampling.



TOWN OF ALTAVISTA
CAMPBELL COUNTY, VIRGINIA.
TESTING ZONES FOR LAGOON AT WASTE WATER PLANT

DATE: MAY 22, 2014. - SCALE: 1" = 30'

MAP REVISED: JANUARY 23, 2015.

MAP REVISED: OCTOBER 27, 2015.

Agenda Item: 8i

STAFF REPORT

To: Mayor Mattox and Council members
From: Waverly Coggsdale, Town Manager
Date: November 10, 2015
Re: Economic Development Marketing Program update

Summary

Per the attached memo from staff, an update on the Economic Development Marketing Program is provided. Dennis Jarvis, Economic Development Director, will provide a brief update.

This item was on the Work Session agenda but postponed due to time.

Recommendation

Per discussion.

Attachments: Staff memo

ALTAVISTA VIRGINIA ECONOMIC DEVELOPMENT

Memo

To: Altavista Town Council

From: Dennis Jarvis, II

Cc: Waverly Coggsdale, III Town Manager

Re: Marketing Materials Update

The final votes were cast on Friday October 16, 2015 for the proposed new tagline for the town of Altavista.

106 voters participated and the final results showed the respondents selected a town resident submission: ***"Treasured past, innovative future."*** Please see the bar graph attached for the final vote tallies. If the town council agrees the new tagline would be utilized for the marketing purposes and other items from the town. Here is the final data from the last round of voting for the new tagline:

- ***Moving forward with tradition and spirit 9 Votes 8.49%***
- ***Alive with the spirit of rivers and rail 19 votes 17.92%***
- ***Where tradition meets innovation 23 votes 21.70%***
- ***Treasured past, innovative future. 55 votes 51.89%***

With the assistance of Blair Marketing we are providing the first working draft of the marketing materials for the economic development office. The draft will reflect the following:

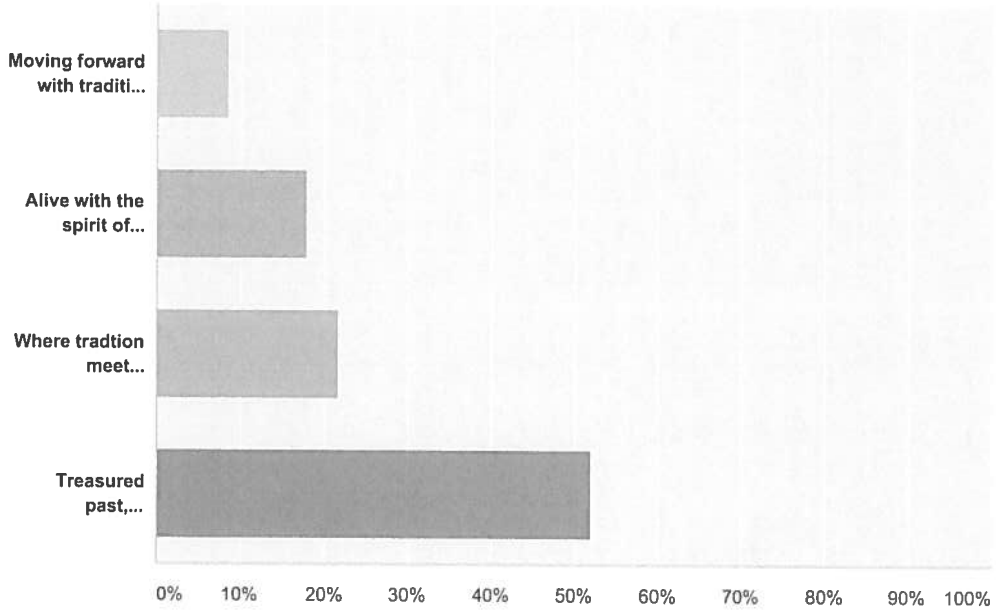
- The piece complements the color and style of the website for the Office of Economic Development.
- The marketing piece will be bound and can be customized to fit the needs of a specific client or an industrial sector.
- The marketing piece will reflect the pro-business climate of the town of Altavista, Campbell County, and Region 2000.
- The marketing piece will provide information on the following items: utility rates, tax rates for the town and county, additional demographic information
- The video included in the marketing program is completed and being edited. We will provide a preview of the video at the November town council meeting.
- The quality of life piece that is currently being designed and will be presented in draft form at the next town council meeting as well. This marketing brochure will highlight the shopping, eating, recreational, and cultural amenities in the Town of Altavista.
- The quality of life brochure will be placed in the state certified regional tourist/visitors centers in addition to the state of Virginia operated visitor centers.

Town of
Altavista
Virginia

Treasured Past, Innovative Future.

Q1 Now is your time to vote! Thank you for your time and support!!

Answered: 106 Skipped: 0



Answer Choices	Responses	
Moving forward with tradition and spirit.	8.49%	9
Alive with the spirit of rivers and rails.	17.92%	19
Where tradtion meet innovation.	21.70%	23
Treasured past, innovative future.	51.89%	55
Total		106

Town Manager's Report – For Month of October 2015

Bedford Avenue Waterline Project (Project 1A)

- Inspection of the project was conducted on Tuesday, November 3rd; a punch list is being created for completion.

Main Street Waterline Project (Project 1B)

- Bids Received (This item will be addressed under New Business)

WWTP EOP – PCB Remediation

- USEPA was forwarded a copy of the information submitted by the University of Iowa in regard to their proposed research project.
- Dr. Scott Lowman (IALR) provided updates at the October 27th Work Session in regard to the re-characterization of the pond and the IALR's "pot study".
- The DEW Informal Fact Finding proceeding will be held on Monday, November 30th in Richmond.

Broadband Grant Award

- Governor McAulliffe announced that the Town of Altavista was one of several communities to receive a grant to the Virginia Telecommunications Planning Initiative (VATPI). The VATPI program provides funding for communities to develop a comprehensive community-based telecommunication plan. The Towns award, as a Tier III recipient totals $30,000. The press release associated with this is attached. (Press Release)

Commonwealth of Virginia

Office of Governor Terry McAuliffe

FOR IMMEDIATE RELEASE
Date: October 30, 2015

Office of the Governor
Contact: Brian Coy
Email: brian.coy@governor.virginia.gov

Virginia Department of Housing and Community Development
Contact: Amanda Pearson
Phone: (804) 840-0129
Email: amanda.pearson@dhcd.virginia.gov

Governor McAuliffe Announces $500,000 in Telecommunication Planning Grants

~ Funding will help develop community telecommunication plans ~

RICHMOND – Governor Terry McAuliffe today announced $500,000 in grants through the Virginia Telecommunication Planning Initiative (VATPI) for Albemarle, Augusta, Culpeper, New Kent, Bland and Pulaski counties and the town of Altavista. Two joint grants were also awarded to two regional projects including one for Bath and Highland counties and another for Alleghany, Botetourt and Craig counties, the city of Covington and the town of Clifton Forge. The VATPI program provides funding for communities to develop a comprehensive community-based telecommunications plan.

"Access to high-quality Internet connectivity is one of the most critical tools for communities to grow, diversify and build a new Virginia economy," **said Governor McAuliffe**. "Providing adequate telecommunications in a community is essential for preparing our students and workforce, attracting businesses, improving medical services and providing a better quality of life for all Virginians."

"Quick, reliable and affordable access to the Internet is a prerequisite for community and economic development efforts throughout the Commonwealth," **said Secretary of Commerce and Trade Maurice Jones**. "The Virginia Telecommunication Planning Initiative will help localities develop the telecommunications plan necessary to prosper in the 21st century economy."

Projects were selected through a two-phased process. Phase one was a letter of interest, and phase two was a detailed response. Twenty-two letters of interest were received, representing 43 communities. Of those 22 letters of interest, 13 applicants were selected to participate in phase II.

Funding for the grants is allocated in a three-tier system. Tier one included grants up to $75,000, tier two has grants for up to $50,000, and tier three has grants up to $35,000. The level of funding awarded is based on the telecommunication planning needs of the communities. Thirteen applications totaling more than $800,000 in funding were received.

The following projects were awarded funding through the 2015 Virginia Telecommunication Planning Initiative program:

Tier Level Funding	Locality	Award
Tier I	Albemarle County	$ 75,000
Tier I	Augusta County	$ 75,000
Tier I	Culpeper County	$ 75,000
Tier I	New Kent County	$ 75,000
Tier II	Bland County	$ 50,000
Tier II	Alleghany, Botetourt and Craig counties, city of Covington and town of Clifton Forge*	$50,000
Tier II	Pulaski County	$40,000
Tier III	Bath and Highland counties*	$ 30,000
Tier III	Town of Altavista	$ 30,000

*Regional project

###

AB | asifbhavnagri
Office of Governor Terence R. McAuliffe
Press Special Assistant
804.971.8513
asif.bhavnagri@governor.virginia.gov

Altavista EMS
Office of the Chief
P.O. Box 1 / 1510 Main Street
Altavista, VA 24517
mmoss@altavistaems.com Phone (434) 369-4716
www.AltavistaEMS.com Fax (434) 369-4306

October 22, 2015

Town of Altavista
Altavista Town Council
PO Box 420
Altavista, VA 24517

Dear Council Members:

Altavista Life Saving and First Aid Crew would like to express our sincere appreciation to the Altavista Town Council for the generous contribution of $10,00.00.

Altavista EMS recently added a 2015 International TerraStar ambulance to our fleet as well as a state of the art patient monitor, the TempusPro. With such modern and up-to-date equipment, Altavista EMS will be able to continue first-rate service to the citizens of Altavista and the surrounding communities. It is contributions such as yours that make these additions possible.

Altavista EMS strives for excellence in every aspect of its daily operations. With commitments from entities such as Altavista Town Council, we can continue these efforts with much success.

Thank you once again for recognizing our organization with your donation and we look forward to your continued support.

Thank you
I am,

Mark A. Moss
Chief

◄ Oct 2015

~ November 2015 ~

Dec 2015 ►

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	**2** Planning Commission 5:00 pm	**3** Election Day	**4**	**5**	**6**	**7**
8	**9**	**10** **Council Meeting** **7:00 pm**	**11** Veterans Day	**12**	**13**	**14**
15	**16**	**17**	**18**	**19**	**20**	**21**
22	**23**	**24**	**25**	**26** Thanksgiving Day Town Offices Closed Giblet Jog-8:30 a.m.	**27** Black Friday Town Offices Closed	**28**
29	**30** Meeting with DEQ	**Notes:**				

~ December 2015 ~

◄ Nov 2015 | Jan 2016 ►

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	**2**	**3** Christmas Parade 7PM	**4**	**5** Avoca-Christmas Open House
6 Avoca-Christmas Open House	**7** Planning Commission 5:00 pm	**8** **Council Meeting** **7:00 pm**	**9**	**10**	**11**	**12** Avoca-Christmas Open House
13 Avoca-Christmas Open House	**14** Avoca-Christmas Members Dinner	**15**	**16**	**17**	**18**	**19**
20	**21**	**22**	**23**	**24** **Christmas Eve** Town Offices Closed	**25** **Christmas Day** Town Offices Closed	**26**
27	**28** Town Offices Closed	**29**	**30**	**31**	**Notes:**	