

BRIEFING NOTES

NAME OF GROUP: PLANNING COMMISSION

DATE, TIME AND PLACE OF MEETING: Wednesday, December 2, 2015, 11:30 a.m., Bill Luxford Studio, Room 113, County-City Building, 555 South 10th Street, Lincoln, Nebraska

MEMBERS IN ATTENDANCE: Cathy Beecham, Michael Cornelius, Tracy Corr, Maja Harris, Chris Hove, Jeanelle Lust, Dennis Scheer, Lynn Sunderman and Ken Weber.

OTHERS IN ATTENDANCE: David Cary, Steve Henrichsen, Brandon Garrett and Teresa McKinstry of the Planning Department; Lynn Johnson of Parks & Recreation; Chris Schroeder and Scott Holmes of Lincoln-Lancaster County Health Dept.

STATED PURPOSE: Briefing on **“Emerald Ash Borer”** by Parks & Recreation and **“Pipeline Planning Area”** by Health Dept.

Chair Chris Hove called the meeting to order and acknowledged the posting of the Open Meetings Act in the back of the room.

EMERALD ASH BORER

Lynn Johnson explained that he wants to talk about the preparedness and response plan for the Emerald Ash Borer. These insects lay eggs underneath the bark. The difficult thing about this insect is that it feeds on the water tissue conducting layer of the tree. They are very aggressive feeders. Eventually it cuts off the water conducting ability of the tree. The infestations grow exponentially. In communities that have this bug introduced, all the ash trees die within a 15 year period. The challenge is that by the time it is discovered, it is too late to stop it. Emerald Ash Borer is detected within the first three to five years. In year eight, it starts to have a significant impact on the trees. Within 15 years, essentially all ash trees in the community are dead.

Hove questioned how long it takes to kill the tree. Johnson replied that the tree will be dead in about three to four years. You can treat the tree if less than 50 percent damage has been done. The challenge is that the tree must be treated on an ongoing basis. Treatment is typically an injection method. Every time you do that, you create a wound and scar tissue on the tree. Eventually, the tree becomes covered with scars which is not healthy for it either.

Johnson continued that in Lincoln we have done an inventory of about 14,000 street trees and another 2,000 ash trees in parks. The total ash population in Lincoln is likely over 50,000 when you

take private trees into consideration. Within about one year of the time an ash tree has died, they start to fall apart and become very hazardous. We are now budgeting about \$20,000.00 a year for replacement of trees. We have a 2 for Trees program which generates about \$60,000.00 annually in donations. About 400 trees were planted for 2013-14. 2 for Trees has helped out very significantly. All of those leaves catch a lot of the rain water and slow it down. It is a form of a stormwater detention system. As communities have lost trees, they have increased flash flooding.

Lust wondered how people can donate to the 2 for Trees program. Johnson stated you can donate through the Parks & Recreation website.

Johnson continued that Parks & Rec started about six to seven years ago on a preparedness plan. We are planning for replacement trees. We completed the inventory and mapped all the ash trees. We are now going through and recording the exact locations of all the ash street trees. We are doing selective and pre-emptive removal. The goal is to reduce the public ash population so when the Emerald Ash Borer arrives, there are less trees to deal with.

Beecham inquired if we have a particular strategy for diversification with replacement. Johnson replied yes. We have street tree species identified for every street in Lincoln. We have tree groups. We are trying to diversify so we don't run into this situation again. We are also working with the nurseries as well.

Johnson continued that we have started with our response plan. The plan is to do treatment of a portion of the trees. There will be a few defined as high value trees that we will continue to treat on an ongoing basis. There will also be an "Adopt an Ash" program.

Lust wondered about the treatment cost. Johnson replied it costs around \$50.00 - \$70.00 for a two year period. The cost is coming down. Some communities are stretching their treatment to three years. Our recommendation is to treat them every two years. Kansas City is trying to extend the treatment to three years, and he believes that around the third year, the tree can start to decline.

Beecham questioned if we can spray to keep the bugs away. Johnson replied the recommendation is to start to treat the trees when the insects are within 15 miles of our community. They are already in South Dakota, Missouri, Iowa and Boulder, Colorado. What seems to be happening is they move along transportation borders. Also, as the trees die, they get cut up for firewood and it is sold or hauled around and the insect distributes. There is an estimate there are about three times as many private ash trees. We as a community are going to need to develop a strategy. We could turn the removed trees into wood mulch or into usable lumber. One community is building a library using ash.

Beecham questioned if there is a risk of spreading the insect with wood mulch from infested trees. Johnson replied as long as the wood chunks are chipped to about an inch of size, there is no risk. The eggs and larvae are right under the bark.

Scheer was wondering about the implications of mulch as well. He believes it would be great if our community could figure out a way to repurpose the trees.

Johnson stated that right now, Lincoln and the state, does not have a strategy. We realize we will need to replant. We would like a one to one ratio.

Lust asked if a homeowner would be able to treat their ash tree if they really wanted to keep it. Johnson stated that a homeowner could opt to treat the private tree that sits on their property. Parks & Recreation will treat and track all the ash trees on city property.

Hove questioned if the treatment is done by the homeowner or by an arborist. Johnson noted there are a number of methods. You can apply the chemical to the soil around the tree and water it, and the roots will take it up. Nurseries have this available. There are groundwater impacts from that method. There is a spray for the trunk, a foliage spray. The best method seems to be the trunk injection method. That probably has to be done by an arborist. Hove asked if those treatments are available now. Johnson replied yes.

Scheer believes it would be a waste of time and effort to treat the trees now because the bug is not here yet. This can't be done pre-emptively. The sad thing about treatment is that it won't preserve the trees, it just extends the length of the death curve. Most trees will eventually die, either from the bug or the continual treatment itself that will create a lot of scar tissue.

Hove asked if the Emerald Ash Borer will stay in the community forever. Scheer suspects that someday it might not be a threat if there are no ash trees, but ash trees are a native plant, so it will continue to populate.

Johnson stated that we are going to need to remove ash trees on private property for homeowners who don't have the resources to remove them. Our plan is to treat a declining number of ash trees a year, remove 1,000 a year and plan to replace 1,000 a year. We have projected this out. Based on current costs it is about \$29.1 million over 15 years. We don't have a funding strategy yet. It could be a local bond issue, a local option sales tax, or street tree improvement districts.

Harris inquired if Parks & Rec will be working jointly with LES. What if a tree is on private property and needs removed, not just trimmed? Johnson replied that LES will come and remove limbs that are interacting with power lines. They do not remove trees on private property, but we can explore the idea for more options.

Hove wondered how you can tell if a tree is infected from the bark. Johnson stated that each borer has an exit hole. The Emerald Ash Borer leaves a D shaped hole. The top of the tree will start to die back. Some water sprouts will happen. The tree will start to decline. It will start at the top and work its way down. We start at the upper portion of the tree to locate the bugs. In a bad infestation, the bark will fall off.

Beecham remembers reading that these insects attack healthy trees, not the old and weak ones. Johnson replied she was correct.

Weber has heard of a treatment method that is applied around the base of the tree. Johnson has read that also, but believes injection is the best. Scheer sees chemicals in the soil as a scary concept.

Quiz via Kahoot

Brandon Garrett stated that this is a quiz for discussion purposes.

Question: Where was the Emerald Ash Borer first discovered in the United States?

Answer: Michigan

Question: When was the Emerald Ash Borer first discovered in the United States.

Answer: 2002

PIPELINE PLANNING AREA

Chris Schroeder stated that this has been a more current topic recently. He presented a map of Lancaster County and the general location of pipelines. There are quite a few. They carry anhydrous ammonia, natural gas, petroleum, propane and a mixed line for butane, isobutane and natural gas. The main concern is explosion and fires. The pipeline planning area is calculated using a federal equation. We worked closely with the pipeline companies to locate the lines. Anhydrous ammonia is an airborne and toxic. It is flammable. A 500 foot area to protect and for safety is recommended. Petroleum is flammable. A 150 foot area to protect and for safety is recommended. These recommendations come from the US DOT Emergency Response Guidebook. Propane concerns are explosions and fires. 330 feet is the recommendation for protection and safety. This pipeline is in the same trench as anhydrous ammonia. The mixed product line is flammable. Explosions are a concern. 330 feet is the recommendation for protection and safety. In the early 2000's, the Health Dept. began recommending no commercial or residential within the pipeline planning area. Recommendations were noted in Planning staff reports. In April of 2005, a joint board of Board of Health representatives and Planning Commissioners was formed into a committee. They were charged with examining several health and public safety issues. After countless hours, a final report was issued and approved by the Board of Health and the Planning

Commission. The report found that pipelines do pose a risk and developers should avoid hazardous areas as much as possible. In November of 2010, Pipelines and Informed Planning Alliance (PIPA) was formed by the US DOT Pipeline and Hazardous Materials Safety Administration (PHMSA) to reduce the risk of pipelines through sound land use practices. In February of 2013, the Planning Commission was briefed on public health and land use, which included pipelines. We met with the development community in October of 2014 to review various pipeline planning approaches. There was not a consensus at that meeting on a particular approach.

Risk is a combination of probability and consequence. Pipelines are the safest mode for transporting materials, but incidents still happen for a variety of reasons. Excavation only accounts for 15 percent of incidents. The three largest categories of failure are 1) operator control, 2) material failure and 3) operation and corrosion. The national average is about 615 incidents per year. 15 fatalities per year is the national average. There is a resurgence in development along Yankee Hill and 84th St. where there is a natural gas pipeline. The area of concern can be the explosion or blast area. Outside of the pipeline planning area will be thermal effects. The Gas Research Institute developed the equation for the pipeline planning area. The author felt the area should be increased for the blast area. Transmission versus distribution relates to the strength of the pipe versus operating pressure. The high consequence areas are required to be identified. These contain 20 or more structures for human occupancy. That designates it and triggers additional regulations and requirements. More humans means more requirements.

Cornelius believes the operator might oppose that. Hove thinks it is automatic that they must respond. Schroder believes they have yearly surveys. If they discover more residents, new regulations kick in. Cornelius questioned if we are advertising to the operators of a development in their area. Steve Henrichsen stated that Black Hills Energy Corp. is often notified for review or approval, but not specific to the pipeline.

Sunderman asked if property notifications go to the owner or renters. Schroeder sees that as a good point. It should go to the people who live in the building and actual area.

Schroder showed a picture of the devastation that can happen in the case of a pipeline explosion. The picture was from a natural gas explosion in San Bruno, California from September 9, 2010. In Fremont, Nebraska in March of 2014, there was a natural gas explosion in a rural area. This is a local example of what can happen when a backhoe ruptures a gas line. It concerned him that it took 2.5 hours to get the line shut off. It was a smaller supply line, not a distribution line.

Schroeder continued that the recommendation of the Health Dept. has evolved. We don't support residential dwellings, childcare facilities, retirement facilities, schools and hospitals in the pipeline planning area. He heard information today about a nursing home that has two staff during the night for 48 residents. It can be difficult to evacuate that many patients with limited staff. Uses supported within the pipeline planning area are residential garages, storage, commercial uses,

industrial uses, driveways, parking lots and roads. With commercial and industrial, adults are typically present during the day with their own transportation and are awake and alert to see or smell a leak and evacuate quickly.

Cornelius stated that some time ago, we were told it was undesirable to accurately map the pipelines. Schroeder stated companies are more worried about releasing the pipeline diameter and pressure.

Hove asked how deep the lines are buried. Schroeder replied we have heard several feet to inches. He is not sure what the code is. You obviously want them below the frost line. We have heard from farmers that some lines are just inches below the soil.

Schroeder also talked about how to mitigate risk. We need to inform and educate the consumer. We could place a note on the development plan as a possibility. We talked about placing signage, but developers didn't like that. We have not identified an effective strategy on informing people.

Lust asked what deed restrictions would entail. Henrichsen stated that would be filed with the Register of Deeds against the property notifying the owner about a pipeline.

Schroeder added that where appropriate, we have utilized current operating pressures versus maximum allowable operating pressure to calculate pipeline planning area for natural gas pipelines. We also encourage alternative site design to locate supported uses within these areas. Lust stated we have heard there are Homeland Security concerns regarding the current location of the lines. Schroeder believes we have good relationships with the utility companies and share information.

Harris questioned if an ordinance is needed to address this. Cary stated that the thinking now is on a case by case basis. We have had a lot of success without an ordinance getting the proposals to change their uses. We start from the premise that we want to have different land uses. We have been successful with that strategy. We don't feel we need an ordinance at this point. The other reality is that we don't have a consensus that an ordinance is desirable. The other is we don't know exactly where we would land on an exact ordinance. We might start with a maximum operating pressure as the setback, but it is possible to go in a direction where we have a significantly less setback. Harris noted that Planning Commission has the discretion to change ordinances. Cary believes we have had enough success with a case by case evaluation that we don't feel like it is a problem.

Harris wondered if there has been any reaction from developers on any inconsistencies. Cary believes that because we had so many applications involving pipeline planning areas, he feels the word is out. We are starting with the max allowable pressure as the starting point for discussion.

We have been very consistent and are now being consistent in dealing with operating pressure. He feels that enough information is out there with regard to how we intend to plan for the future.

Beecham asked what happens when a property is up for sale. Does a person know, does the realtor know? Schroeder doesn't know the legality if a realtor is required to know or inform a potential buyer. Henrichsen doesn't believe there is a requirement for a realtor to disclose a pipeline. Cary added we would try to change the plans before they are adopted. The plans now are showing the lines and we are having discussions. We can pose questions to our attorneys. He believes we are in a better spot now than we were in the past.

Lust questioned if there are any developments that were built over a significant pipeline. Schroeder stated if the application was a new preliminary plat, we would apply our recommendations. Going forward, if something has been preliminarily platted already, then we don't recommend applying these recommendations. For a new plan, we would apply these recommendations.

The meeting was adjourned at 12:55 p.m.