

APPROVAL <i>Slw</i>	REQUEST FOR COUNCIL ACTION	MEETING DATE January 17, 2017
REPORTS AND RECOMMENDATIONS	An Ordinance to Amend §178-6. of the Municipal Code to Include Emerald Ash Borer as an Infectious Tree Disease; and An Ordinance Amending Chapter 240 of the Municipal Code "Trees" to Provide that Ash Trees Found to be Infected with Emerald Ash Borer are Declared a Public Nuisance	ITEM NUMBER <i>G.11.</i>

The above entitled ordinance amending §178-6. of the Municipal Code subject matter was referred to this meeting from the December 6, 2016 meeting. Attached are a copy of the action sheet and draft ordinance from that meeting. The subject matter was referred due to a question regarding the enforcement of the ordinance on private property. Following prior concerns stated by the City Attorney at the meeting on December 6, 2016 involving the potential time and costs involved with regard to enforcement of the subject matter on private property, further review was undertaken. While the Municipal Code is silent with regard to any specific reference to ash trees as a species, the Code has other existing provisions regarding trees. §178-5. Public nuisances affecting peace and safety, provides at sub. F.: "Dangerous trees. All trees which are a menace to public safety or are the cause of substantial annoyance to the general public." Chapter 240 Trees, in part regulates the authority of the City Forester over trees on public and private lands:

§240-9. Powers and duties of City Forester.

A. Authority over public trees and shrubs. The City Forester shall have the authority to plant, trim, spray, preserve, renew and remove public trees and shrubs or cause such work to be done as may be necessary to ensure the safety or preserve the symmetry and beauty of public streets or grounds and to protect public sidewalks, streets, sewers and mains from damage or injury.

B. Authority over private trees and shrubs.

(1) Notice to abate nuisances. Whenever the City Forester shall find on examination that any tree or shrub or part thereof growing or located upon private premises is a public nuisance as previously defined in this chapter, or endangers the life, health, safety or property of the public, or is infested with parasites or insect pests or disease which may spread or scatter to public trees and shrubs, he or she shall notify the owner or his or her agent, in writing or by publication in a newspaper of general circulation in the City, that the nuisance must be sprayed, removed or otherwise abated as directed in the notice within the time specified, which shall not be less than 10 days, unless the City Forester shall determine that immediate correction or removal is necessary for public safety.

(2) Abatement by City. If the owner of such premises or his or her agent shall refuse or neglect to comply with the notice within the time specified, the City Forester shall proceed pursuant to § 178-8., Abatement of public nuisances, of this Code.

The City Attorney posed a question on the League municipal lawyers listserv. on January 10, 2017: "[w]ould appreciate being informed as to any municipalities enforcing a local code prohibition of emerald ash borer on private property, and the method of enforcement. Query is driven by my hypothetical: 5 one acre residential lots; #1 has one ash; #2 has five; #3 has fifteen; #4 has forty; and #5 has a hundred. Thanks." As of this writing, no response (rare). Additionally, a brief discussion was had with a municipal attorney whose office represents many municipalities, with no information of any enforcement on private property. Additional online research was undertaken, specifically with regard to area municipalities. The attached draft ordinance amending Chapter 240 Trees, simply plagiarizes the Greenfield ordinance, which declares emerald ash borer infected trees a public nuisance, to be abated pursuant to a City response plan. A copy of the Greenfield plan is attached. The plan in part provides at page 8: "1. Who will be responsible for removing EAB-infested trees?"

Answer: The residents of Greenfield are responsible for maintaining all privately owned trees in a safe manor and condition. The City will not force removal except in instances where public safety is a concern. The City of Greenfield will continue to strictly enforce its hazard tree policy.

The City of Greenfield Department of Public Works will continue to be responsible for the safe management and removal if necessary of all municipally owned park and right of way trees.”

Subsequent to distribution to staff of the above, the attached copy of the Franklin Emerald Ash Borer Management Plan adopted by the Common Council on May 18, 2010 was received. Note item 9.d. on page 2 of the Plan Summary: “[p]rivate trees cutting and removal will be by property owners.”

The City should additionally amend the Plan if it is determined that the §178-6. or the Chapter 240 amendment is appropriate. The Greenfield plan remains attached for review of its “Factors that Influence Selection of Control or Containment Options” listing for consideration of the prioritization of abatement procedures and perhaps incorporation into the Franklin Plan.

Also attached is a copy of “Reducing the Impact of Emerald Ash Borer Guidelines for Managing Ash in Wisconsin’s Urban Forests”, prepared by the Wisconsin Emerald Ash Borer Program, which “is a cooperative effort between the Wisconsin Department of Agriculture, Trade and Consumer Protection, the Wisconsin Department of Natural Resources, the University of Wisconsin-Madison, the University of Wisconsin-Extension, the United States Department of Agriculture-Forest Service and the United States Department of Agriculture –Animal and Plant Health Inspection Service – Plant Pest Quarantine v. 8/03/2010.”

COUNCIL ACTION REQUESTED

A motion to refer the enforcement of emerald ash borer infected trees subject matter to the Board of Public Works and the Environmental Commission for their review and recommendations of and upon both draft ordinances, the City of Franklin Emerald Ash Borer Management Plan, the Greenfield Plan and Wisconsin Emerald Ash Borer Program materials presented at this meeting, and such further information as the Board and Commission deem appropriate, for return to the Common Council;

or

As the Common Council deems appropriate.

STATE OF WISCONSIN

CITY OF FRANKLIN

MILWAUKEE COUNTY

Draft 1/12/17

ORDINANCE NO. 2017-____

AN ORDINANCE AMENDING CHAPTER 240 "TREES" OF THE MUNICIPAL CODE
TO PROVIDE THAT ASH TREES FOUND TO BE INFECTED WITH
EMERALD ASH BORER ARE DECLARED A PUBLIC NUISANCE

WHEREAS, Chapter 240 of the Municipal Code of the City of Franklin, Wisconsin regulates trees and provides for the powers and duties of the City Forester; and

WHEREAS, Chapter 240 and all other provisions of the Municipal Code do not regulate ash trees found to be infected with emerald ash borer disease; and

WHEREAS, while the City of Franklin has undertaken substantial efforts to remove infected ash trees and prevent the spread of emerald ash borer disease on public property, it has not undertaken regulatory efforts to address such concerns on private property; and

WHEREAS, the subject matter of regulating emerald ash borer infected ash trees on private property has been reviewed by the Board of Public Works, which recommended that

NOW, THEREFORE, the Mayor and Common Council of the City of Franklin, Wisconsin, do ordain as follows:

SECTION 1: §§240-9., 240-10. and 240-11. of the Municipal Code of the City of Franklin, Wisconsin, are hereby renumbered to §§240-10., 240-11. and 240-12., respectively.

SECTION 2: §240-9. of the Municipal Code of the City of Franklin, Wisconsin, is hereby created to read as follows: "Emerald Ash Borer. Ash trees found to be infected with Emerald Ash Borer (EAB) are declared a public nuisance, to be abated as set forth in this Chapter and in the City of Franklin Emerald Ash Borer Response Plan on file in the Office of the City Engineer."

SECTION 3: The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION 4: All ordinances and parts of ordinances in contravention to this ordinance are hereby repealed.

ORDINANCE NO. 2017-_____

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SECTION 5: This ordinance shall take effect and be in force from and after its passage and publication.

Introduced at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2017, by Alderman _____.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this _____ day of _____, 2017.

APPROVED:

Stephen R. Olson, Mayor

ATTEST:

Sandra L. Wesolowski, City Clerk

AYES _____ NOES _____ ABSENT _____

APPROVAL	REQUEST FOR COUNCIL ACTION	MTG. DATE 12/06/2016
Reports & Recommendations	ORDINANCE TO AMEND SECTION 178-6 OF THE MUNICIPAL CODE TO INCLUDE EMERALD ASH BORER AS AN INFECTIOUS TREE DISEASE	ITEM NO.

BACKGROUND

Alderman Steve Taylor requested that Staff, with the assistance of the Board of Public Works, propose a strategy for addressing private property trees that are affected with the emerald ash borer (EAB). After consideration in October and November, the Board requested that it be modified for further discussion and consideration at the November meeting.

ANALYSIS

The City has a policy to address EAB for public trees. The City does not chemically treat trees but will remove them if they are seen to be infected. It is estimated that the City has removed over 3,000 EAB trees and annual removals range from 300 to 800 EAB trees. The City's first priority is to address EAB trees that have been planted along urban roadways within public right-of-ways. The second priority is address naturally-growing EAB trees along rural roadways and third priority is to remove naturally-growing EAB trees located on public lands (parks, vacant right-of-ways, donated MMSD lands, etc).

Section 178-6 of the Municipal Code discusses Dutch Elm Disease (DED). This ordinance was probably adopted circa 1960's and although DED is still present, it is not considered a current threat. Staff proposes that an EAB ordinance be incorporated into the DED ordinance in such a way that it can be easily amended when the next fungus/beetle infection is found to affect other tree species.

In addition, Staff would like to remove some language that requires excessive staff time to implement the ordinance.

DED is a fungus primarily spread by beetles. Both DED and EAB are highly infectious and it is advantageous to the community for all affected trees to be removed. Staff proposes to modify Section 178-6 to include EAB and make it easier to add. Below is the existing ordinance (*italicized*) with proposed changes (**bold and underlined**)

§ 178-6 ~~Dutch Elm Disease~~ Infectious Tree Diseases

A. *Public nuisances declared. The Council, having determined that the health of the elm trees within the City is threatened by a fatal diseases known as "Dutch Elm Disease," hereby declares the following to be public nuisances:*

- (1) *Any living or standing elm tree or part thereof infected with the Dutch Elm Disease fungus or which harbors any type of the elm bark beetles.*
- (2) *Any dead elm tree or part thereof, including logs, branches, firewood, stumps or other elm material, from which the bark has not been removed and burned or sprayed with an effective elm bark beetle destroying insecticide.*
- (3) **Any living or standing ash tree or part thereof which harbors any type of the emerald ash borer beetles.**

(4) Any dead ash tree or part thereof, including logs, branches, firewood, stumps or other ash material, from which the bark has not been removed and burned or sprayed with an effective emerald ash borer beetle destroying insecticide.

B. Nuisances prohibited. No person shall permit any public nuisance as defined in Subsection A to remain on any premises owned or controlled by him or her within the City.

C. Inspection. The City Forester, or designated representative, shall respond to written complaints and inspect or cause to be inspected all premises and places within the City at least twice each year to determine whether any public nuisance as defined in Subsection A exists thereon, and shall also inspect or cause to be inspected any elm tree reported or suspected to be infected with the Dutch Elm Disease or elm bark bearing material infested with elm bark beetle disease or beetle identified in Subsection A.

D. Abatement of nuisances.

(1) If the City Forester or designated representative, upon inspection and examination, shall determines that any public nuisance as herein defined exists in or upon any public street, alley, boulevard, parkway, park or other public place, including the terrace strip between curb and sidewalk within the City, and that the danger to other trees within the City is imminent, he or she shall immediately cause it to be removed and burned or otherwise abate the same in such a manner as to prevent as fully as possible the spread of Dutch Elm Disease or the insect pests or vectors known to carry such disease fungus.

(2) If the City Forester or designated representative, determines with positive certainty that any public nuisance as herein defined exists in or upon private premises and the danger to other elm trees within the City is not imminent, he or she shall immediately serve upon the owner of the property, if he or she can be found, or upon the occupant, a written notice to abate such nuisance within-with no less than 30 days of the service of such notice. If the owner or occupant does not abate such nuisance within the time limit, the Forester, or designated representative, shall cause the same to be abated. No damages shall be awarded to the owner for destruction of any elm tree, elm wood or any part thereof pursuant to this chapter.

It should be noted that Staff requested other Wisconsin municipalities to provide input on how they address EAB. Below is a summary of that research.

- **Mount Horeb** (Chapters 8 and 10) nuisance trees not specific to any species.
- **Middleton** (Chapter 20) defines "Dutch Elm Disease" includes all standing elm trees or parts thereof, logs, branches, stumps or other elm materials infected with the fungus *ceratocystis ulmi* or which harbors any of the Elm Bark, Beetle, *scolytus multistriatus* - (European) or *hylurgopinos rufides* (American).
- **Oconomowoc** (Section 8A) infected trees not specific to any species
- **Port Washington** (Section 7.20) hazardous or infected trees not specific to any species
- **Racine** (Section 102-76) identifies Dutch Elm Disease, Oak Wilt Disease, and Emerald Ash Borer
- **Beaver Dam** (Section 54-10) Private trees are addressed under sub (c)
- **Cedarburg** (Section 6-4-11) infected trees not specific to any species

- **Chenequa** (Section 3.07) nuisance trees not specific to any species
- **Deforest** (Section 16.25) nuisance trees not specific to any species
- **Fox Point** (Section 310) Private trees are addresses in 310-119(B)
- **Milwaukee** (Section 116-53) Private trees are addressed in 116-66-67.

OPTIONS

Adopt Ordinance change; or
Deny Ordinance; or
Table

FISCAL NOTE

This is proposed to be a private property matter and would have no impact on the City budget with the exception of City Forester time to perform the role outlined in the ordinance.

RECOMMENDATION

The Board of Public Works discussed this issue at the October and November 2016 meetings and made a recommendation to Common Council to adopt the modified Ordinance.

Motion to adopt Ordinance No. 2016-_____, a resolution to amend Section 178-6 of the Municipal Code to include Emerald Ash Borer as an infectious tree disease.

ORDINANCE NO. 2016-____

AN ORDINANCE TO AMEND §178-6 OF THE MUNICIPAL CODE TO INCLUDE EMERALD ASH BORER AS AN INFECTIOUS TREE DISEASE

WHEREAS, the emerald ash borer is infecting ash trees throughout the City of Franklin to cause Emerald Ash Borer (EAB) disease, and;

WHEREAS, Section 178-6 of the Municipal Code addresses another infectious tree disease known as Dutch Elm Disease (DED) caused by elm bark beetles, and;

WHEREAS, there will likely be future widespread infectious tree diseases, and;

NOW, THEREFORE, the Mayor and Common Council of the City of Franklin, Wisconsin, do ordain as follows:

SECTION 1: §178-6. Of the Municipal Code of the City of Franklin, Wisconsin, is hereby amended to read as follows (additions double underlined, deletions in strikethrough):

§ 178-6 ~~Dutch Elm Disease~~ Infectious Tree Diseases

- A. Public nuisances declared. The Council, having determined that the health of the ~~elm~~ trees within the City is threatened by a fatal diseases known as "~~Dutch Elm Disease~~," hereby declares the following to be public nuisances:
- (1) Any living or standing elm tree or part thereof infected with the Dutch Elm Disease fungus or which harbors any type of the elm bark beetles.
 - (2) Any dead elm tree or part thereof, including logs, branches, firewood, stumps or other elm material, from which the bark has not been removed and burned or sprayed with an effective elm bark beetle destroying insecticide.
 - (3) Any living or standing ash tree or part thereof which harbors any type of the emerald ash borer beetles.
 - (4) Any dead ash tree or part thereof, including logs, branches, firewood, stumps or other ash material, from which the bark has not been removed and burned or sprayed with an effective emerald ash borer beetle destroying insecticide.

- B. Nuisances prohibited. No person shall permit any public nuisance as defined in Subsection A to remain on any premises owned or controlled by him or her within the City.
- C. Inspection. The City Forester, or designated representative, shall respond to written complaints and inspect or cause to be inspected all premises and places within the City at least twice each year to determine whether any public nuisance as defined in Subsection A exists thereon, and shall also inspect or cause to be inspected any elm-tree reported or suspected to be infected with the Dutch Elm Disease or elm bark bearing material infested with elm bark beetle-disease or beetle identified in Subsection A.
- D. Abatement of nuisances.
- (1) If the City Forester or designated representative, upon inspection and examination, shall determines that any public nuisance as herein defined exists in or upon any public street, alley, boulevard, parkway, park or other public place, including the terrace strip between curb and sidewalk within the City, and that the danger to other trees within the City is imminent, he or she shall immediately cause it to be removed and burned or otherwise abate the same in such a manner as to prevent as fully as possible the spread of Dutch Elm Disease or the insect pests or vectors known to carry such disease fungus.
- (2) If the City Forester or designated representative, determines with positive certainty that any public nuisance as herein defined exists in or upon private premises and the danger to other ~~elm~~ trees within the City is not imminent, he or she shall ~~immediately~~ serve upon the owner of the property, if he or she can be found, or upon the occupant, a written notice to abate such nuisance ~~within~~ with no less than 30 days of the service of such notice. If the owner or occupant does not abate such nuisance within the time limit, the Forester, or designated representative, shall cause the same to be abated. No damages shall be awarded to the owner for destruction of any ~~elm~~ tree, ~~elm~~ wood or any part thereof pursuant to this chapter.

SECTION 5: The terms and provisions of this ordinance are severable. Should any term or provision of this ordinance be found to be invalid by a court of competent jurisdiction, the remaining terms and provisions shall remain in full force and effect.

SECTION 6: All ordinances and parts of ordinances in contravention to this ordinance are hereby repealed.

SECTION 7: This ordinance shall take effect and be in force from and after its passage and publication.

Introduced at a regular meeting of the Common Council of the City of Franklin this
_____ day of _____, 2016, by Alderman _____.

Passed and adopted at a regular meeting of the Common Council of the City of
Franklin this _____ day of _____, 2016.

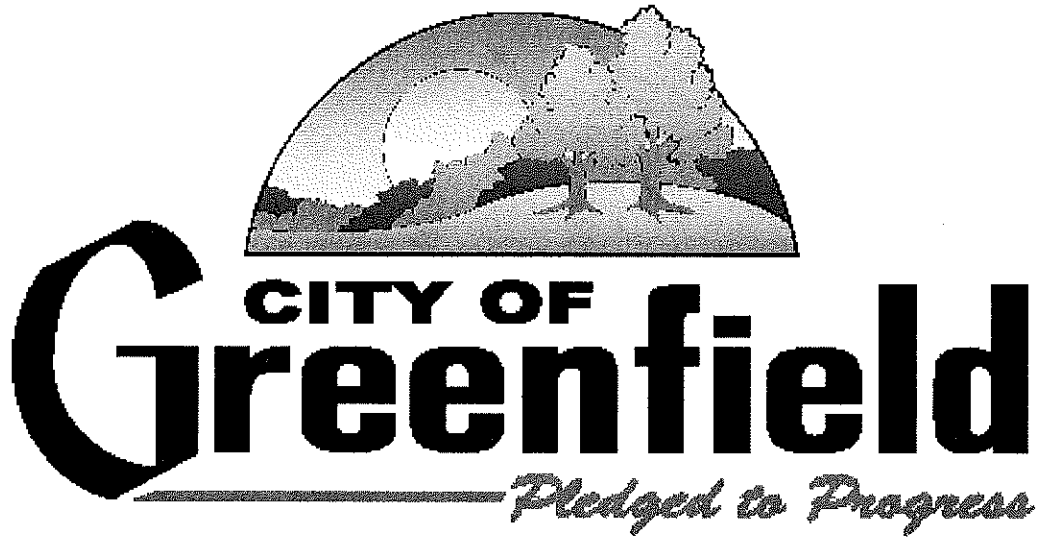
APPROVED:

Stephen R. Olson, Mayor

ATTEST:

Sandra L. Wesolowski, City Clerk

AYES _____ NOES _____ ABSENT _____



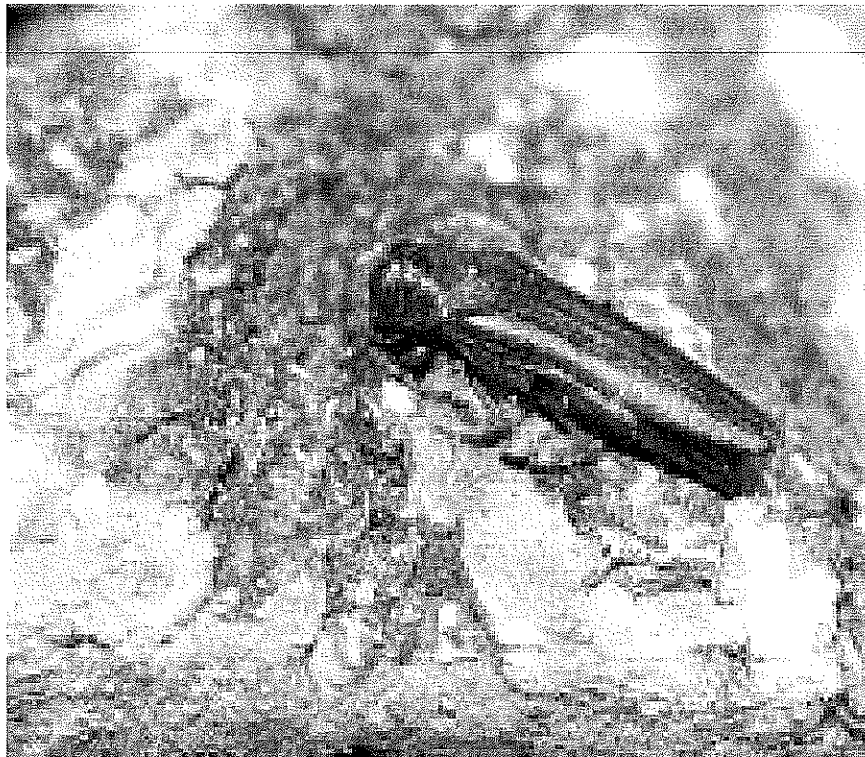
**DEPARTMENT OF
NEIGHBORHOOD SERVICES
PUBLIC WORKS DIVISION
FORESTRY**

**EMERALD ASH BORER
RESPONSE PLAN**

This plan details a response to EAB infestations that may be found in the City of Greenfield and surrounding communities.

The plan is based on the most recent scientific studies and recommendations from key partners and multiple state and federal agencies. Updates to this plan will be made as needed and posted on the City of Greenfield website.

This plan is in a dynamic state. Progress in research and management programs and recommendations by the DATCP, DNR and the Wisconsin EAB Management Team will likely impact the City's response.



EAB Executive summary

The Emerald Ash Borer (EAB) is an invasive species from Asia that arrived in the United States in wood packing material. The pest was first detected in Michigan in 2002 and has subsequently spread to Canada and a number of other states including northern Illinois. The pest kills all species of North American ash trees and has killed an estimated 30 million trees to date.

When it comes to the potential devastation of EAB, there is a lot at stake in Wisconsin. There are an estimated 737 million ash in our forests and another 5 million in our communities. Although we do not have accurate information on the number of ash trees in the City, it is estimated that on average, 20 percent of the trees in Greenfield are ash species. Impacts to the City will be substantial. Similar size communities that have experienced EAB infestation have seen dramatic increases in water and energy consumption, storm water run off and flooding and the problems associated with disposal and utilization of so much wood.

On August 4, 2008 officials from the Wisconsin Department of Natural Resources and the Wisconsin Department of Agriculture, Trade and Consumer Protection confirmed the arrival of EAB in the Village of Newburg. Three days later, a second EAB find a short distance from the first site was confirmed. Within a week, EAB quarantine regulations were put in place. As recently as October 2008 EAB was found in Kenosha county.

Since it was first discovered in Detroit, Michigan in 2002, EAB has spread to nine other states and to Canada. "This continued movement, coupled with the high price tag connected to the death of infested ash trees, are reasons why communities should prepare for this destructive invasive insect." Richard Rideout Wisconsin DNR Urban forestry director said. "EAB is not a problem that belongs to any single agency or location."

The actions taken by the City of Greenfield will be guided by the DATCP, DNR and Wisconsin's EAB team. Each infestation will be individually examined and evaluated to determine the most appropriate course of action for that particular EAB find. The response to an infestation must take into account the unique circumstances surrounding the specific infestation. The State of Wisconsin and the City of Greenfield are committed to using the best available science and information about the economic, environmental and social consequences of the available options, as the basis for making appropriate management and control recommendations.

While there is much work yet to be done to fully prepare for EAB's ultimate arrival, Wisconsin is taking proactive steps to prevent EAB from arriving and to find it early, before populations become established. DATCP, DNR staff and the University of Wisconsin, along with other partners at the state and federal level, continue to work diligently on matters of early detection, regulatory safeguards and public outreach in an effort to protect and preserve the ash resource across the entire state.

The Response Plan

The City of Greenfield response will be guided by and where discrepancies occur will differ to the State of Wisconsin EAB response Plan. Devised by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) and the Department of Natural Resources (DNR) The plan was created with the input of the University of Wisconsin-Madison, USDA Animal and Plant Health Inspection Service – Plant Protection and Quarantine (APHIS-PPQ) and the USDA Forest Service.

Goal

The goal of the Greenfield Emerald Ash Borer Program is to identify appropriate and effective response actions to be taken by the City and its residents when EAB arrives. These actions include prevention, detection, communication, regulation and management activities.

Objective

The objective of the plan is to minimize the destructive effects of EAB on our ash resources. Ash trees are a prolific species well adapted to the urban environment. In Greenfield, ash trees are one of the first species to reestablish on disturbed sites. The highly adaptable ash tree has been widely planted as landscape trees in our homes and parks for decades.

Background

EAB is native to Asia and appears to have been introduced on solid wood packing material to the Detroit, Michigan area sometime in the early to mid 1990s. The beetle went unnoticed for many years for a variety of reasons: EAB is small, ash often don't show symptoms in the first years they are infested, and many ash in the Detroit area were in poor health for other reasons. EAB was finally recognized in 2002 when the borer started causing widespread death of ash in the Detroit area and across the Canadian border in Windsor, Ontario. Quarantines on nursery stock, logs, firewood and other potential vectors of EAB were instituted, but EAB had already become established in many areas and it was just a matter of time before they were detected.

In 2003, EAB was found in northwestern Ohio. Nursery stock shipped to Maryland in violation of quarantine led to its introduction in that state and in northern Virginia. Populations of the borer found in Indiana in 2004 and in Illinois in 2006 may also have become established prior to the recognition of EAB in Detroit in 2002. EAB continues to spread and, in 2007, was found in western Pennsylvania. A recent introduction in West Virginia appears to have a firewood origin.

In Wisconsin, DATCP and DNR have been surveying for the pest since 2004. Surveys have been done using commonly accepted delimitation strategies in counties nearest established populations and using other common techniques in areas of high risk such as campgrounds.

The City of Greenfield established a moratorium on planting all ash species and extended that moratorium to all developments in the City shortly after EAB was first identified in Michigan.

In 2008, established populations of EAB were found in Ozaukee & Washington counties. In October 2008 EAB was also found in Kenosha County however that find does not appear to be part of an established population. The Wisconsin EAB team is investigating the site to decide if county should also be under quarantine. To date, four Wisconsin counties are under quarantine to control the movement of ash trees and ash products.

Current Detection Activities

The State of Wisconsin has been conducting targeted surveys of high-risk areas since 2004. Surveys include destructive sampling of girdled ash trees and deployment of the purple prism traps throughout the state.

The City of Greenfield is working to establish an accurate estimate of the ash population and its distribution in the community using information gathered from the City's right of way inventory, aerial survey maps and ground observation.

The City Forester will investigate all reports of suspect ash trees in the community and make a determination as to whether the incident warrants further investigation by state EAB officials.

Residents are encouraged to report trees that exhibit visible signs of Emerald Ash Borer infestation such as crown thinning, vertical bark splits, D-shaped exit holes, dead and dying branches, woodpecker damage and epicormic sprouts.

Management and Response Activities

Once EAB is identified in the City of Greenfield or Milwaukee County, the City will assist the DATCP and the Wisconsin EAB team wherever possible.

Although most of the actual command staff will be comprised of representatives from DATCP, DNR and USDA-APHIS, the Greenfield City Forester, Tree Commission and selected DPW staff will assist as needed.

Projected early EAB management activities will include press releases, distribution of EAB literature and educational meetings available to City and County residents and interested industry personnel.

The City Forester and State Command Staff will assist Greenfield residents with identification and management options of infected trees on private property.

The City of Greenfield does not endorse total ash tree eradication, unless otherwise dictated by the DATCP. Greenfield residents will be however be expected to maintain their ash trees in a safe manor and condition.

The City of Greenfield will maintain a strict policy of removal or treatment of infected park and right of way ash trees. However in some instances the City may reserve the right not to remove infected ash trees where it is deemed that such removal will cause excessive damage to remaining healthy trees or the environment and where the dying trees will not pose a hazard to the community at large.

Once EAB is found in Milwaukee County, the DATCP will likely issue a county wide quarantine to restrict the movement of EAB and infested host material.

Disposal and Utilization

Ash trees killed by EAB or those taken as part of a management plan may result in a significant number of trees. As a result, one of the largest challenges in EAB management will be disposal and utilization of ash material. Because quarantine regulations restrict the movement of ash material out of quarantined areas (with some exceptions), wood utilization becomes even more difficult. These restrictions may limit the ability to use this material as commercial landscape mulch, wood pulp chips and solid wood products (lumber, railroad ties).

Given the potentially large volume of resulting wood debris, wood utilization issues are of primary concern. The state EAB task force is currently gathering information regarding the location of potential utilization assets, such as biomass fuel users, firewood processors, tree care firms, sawmills, pulp mills, mulch manufacturers, and landfills. The City of Greenfield is exploring local wood utilizations options and will weigh them against options provided by the EAB task force.

It is hoped that new markets will become available or can be developed. For example, wood chips can be used as a bulking agent for sewage sludge composting or as feedstock for creation of pyrolysis oils. Pyrolysis oils can be used as heating oil, a carrier for creosote treating, or as a feedstock for the production of various wood chemicals and wood pellets.

Implementing EAB Management Strategies

Implementing one or all of the management strategies will perhaps slow, or in some cases stop, the movement of EAB. While researchers continue to develop tools to manage EAB, delaying the spread and population expansion of the insect allows more time to develop even more effective management tools. Wisconsin communities, homeowners and woodland managers and forestry professionals will need as much time as possible to implement practices that could buffer the effects of quickly losing large numbers of ash trees.

Management strategies are based on research findings and the experience of managers working with EAB. Some of the management options are considered experimental and may change as new information is acquired. The most current and best information must be used when evaluating options.

Management Strategies

Factors that Influence Feasibility of Control or Containment Strategies

1. Age and Size of Infestation

Recent research has provided a reliable method for determining the age of an infestation. Infestations that have been present for several years have had the opportunity to become established and spread. It is much more difficult to determine the boundaries of these infestations. Large infestations covering a range of habitats and landowners are typically more difficult to manage aggressively.

2. Ash Density and Distribution Within and Adjacent to Infestation

This information, obtained from a combination of existing resource maps, database and newly collected data will give decision-makers insight into the amount of resource at risk in the area. Areas with higher densities of ash will create serious management challenges.

4. Proximity to Other Infestations

Examining how each infestation fits in the bigger picture of a larger infested area will guide strategic management decisions and allow more efficient use of available resources. The proximity to existing infestations affects the likelihood for success of certain management strategies. This factor is closely related to the likelihood of reintroduction.

6. Risk of Artificial Spread from a Location

Knowledge of the level of risk of artificial spread and how it may occur will help determine the likelihood of successfully managing an infestation and determine the strategies needed to minimize artificial spread. If a site is deemed a high risk for further spread, managers may wish to focus additional efforts at reducing that risk.

7. Presence of Natural Dispersal Corridors

The presence of natural dispersal corridors could provide additional challenges and require managers to focus on options for limiting spread through these corridors. The presence of such corridors may increase the likelihood of a particular management strategy designed to restrict movement through that corridor. In contrast, a site that is very isolated with limited corridors for dispersal may be managed differently since spread may be less likely.

Making decisions related to the implementation of control or containment options must include evaluation of the factors that influence feasibility and selection.

Factors that Influence Selection of Control or Containment Options

1. Environmental impact
2. Land ownership
3. Land use and classification (e.g. state natural area, agricultural, river edge, swamp, etc.)
4. Cost of implementing management
5. Availability of resources to carry out management
6. Sociological impact
7. Size of infestation

The above factors have been identified as important to analyze as part of the process for selecting a control or containment option. The order of the factors is not significant. The influence of one may outweigh others and each infestation should be analyzed separately.

Management Strategies

Integrated EAB Control or Containment: Taking No Action

Taking no action means EAB is permitted to multiply and expand without any human intervention. The rate of spread of EAB across the landscape will be much greater if no action is taken.

Considerations

When choosing to take no action, EAB management is reactive instead of proactive. The general consensus based on research findings and survey work concludes that most ash will be eliminated from the landscape.

1. There is little or no evidence of any inherent resistance or tolerance in any species of native ash in North America.
2. There is little or no evidence of any environmentally based resistance due to soil types, moisture, nutrients, light, heat and topographic position.

EAB in Greenfield

1. Who will be responsible for removing EAB-infested trees?

Answer: The residents of Greenfield are responsible for maintaining all privately owned trees in a safe manor and condition. The City will not force removal except in instances where public safety is a concern. The City of Greenfield will continue to strictly enforce its hazard tree policy.

The City of Greenfield Department of Public Works will continue to be responsible for the safe management and removal if necessary of all municipally owned park and right of way trees.

2. Can the DPW handle the additional work without additional financial resources?

Answer: Not likely. The DPW and City forester are exploring management options to improve crew and equipment efficiency. The City is also exploring wood utilization options to help defer some of the expenses associated with wood storage, treatment and removal. Communities that have already experienced EAB infestations have had their budgets stretched to the limits often suspending maintenance and equipment purchases for several years as EAB moves through the community.

3. How will EAB infested trees be disposed of?

Answer: The City will provide a safe area for storage and processing of diseased wood removed by City crews and Greenfield residents only.

Commercial tree and landscape companies will be charged a fee to dispose of ash wood in the municipal storage area. Fee yet to be determined.

4. Who will be notified of a possible EAB problem, and how will citizens receive EAB information?

Answer: General EAB information will be distributed on a county wide basis. The Department of Public works, the City Forester and the City website can provide answers to specific questions posed by residents.

Conclusions

Ultimately effective management of this potentially devastating pest must be a dynamic process of continual analysis, assessment and adjustment of techniques and policy as needed.

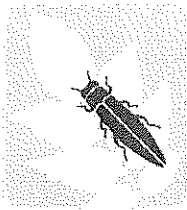
Our urban forest is a valuable and under-utilized resource that can be 'put to work' to positively impact storm water problems, air pollution, and climate change. We need to protect what we have while planning and replanting for a sustainable, pest resistant urban forest in the City of Greenfield. The support, cooperation and commitment of the City fathers and residents of Greenfield will determine whether we can preserve the quality of life and our environment in Greenfield.

Available resources

EAB information can be found at the Wisconsin Emerald Ash Borer Resource website at emeraldashborer.wi.gov (exit DNR) and at the Websites of the DNR, DATCP, the University of Wisconsin and UW-Extension, the U.S. Department of Agriculture-Animal and Plant Health Inspection Service, and the U.S. Forest Service. These agencies share responsibility for responding to EAB. The [Wisconsin Emerald Ash Borer Resource Web site](#) also has a link to the [Wisconsin Emerald Ash Borer Response Plan \(pdf\)](#) (exit DNR), which details how state and federal agencies will respond to EAB finds.

Another valuable source of information is the [Emerald Ash Borer Toolkit for Wisconsin Communities](#), a compilation of documents and resources prepared by DNR Urban Forestry staff. The Toolkit is regularly updated and includes planning documents, copies of sample ordinances, and information about management strategies that can be used “as-is” or adapted to meet a community’s circumstances. All or select parts of the Toolkit now can be downloaded from the DNR [Urban Forestry](#) Web site. A CD of the Toolkit can also be ordered from that webpage at no charge.

Greenfield’s DPW and City Forester, UW-Extension staff and private sector consulting arborists are valuable resources for City residents.



Wisconsin Emerald Ash Borer Program

Reducing the Impact of Emerald Ash Borer Guidelines for Managing Ash in Wisconsin's Urban Forests

August 3, 2010

This document provides Wisconsin communities and the professionals that serve them with guidance and recommendations on how to manage their urban forests in the face of emerald ash borer (EAB). It is not a guide for controlling EAB, nor does it provide details on implementing management tactics. There are numerous publications and resources that contain that information and this document provides links to those detailed resources.

These guidelines and recommendations were developed by a panel of agency, university and private industry experts and reflect application of the best science and experience currently available to minimize the impact of EAB on Wisconsin's urban forests. There is no state mandate to implement these recommendations. It is up to individual local governments to adopt or adapt these recommendations as fits their situation and resources. Because the science and practice of dealing with EAB is changing rapidly, this document will only be produced electronically so that information and links can be continually updated.

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www.emeraldashborer.wi.gov

EAB Hotline: 1-800-462-2803

The Wisconsin Emerald Ash Borer Program is a cooperative effort between the Wisconsin Department of Agriculture, Trade and Consumer Protection, the Wisconsin Department of Natural Resources, the University of Wisconsin-Madison, the University of Wisconsin-Extension, the United States Department of Agriculture-Forest Service and the United States Department of Agriculture –Animal and Plant Health Inspection Service – Plant Pest Quarantine v. 8/03/2010

RES. 2010-6644
REVENUE BOND
FINANCING
(DASH MEDICAL
GLOVES, INC.)

G-3.

Alderman Olson moved adopt Resolution No. 2010-6644, AN INITIAL RESOLUTION REGARDING INDUSTRIAL DEVELOPMENT REVENUE BOND FINANCING FOR DASH MEDICAL GLOVES, INC. Seconded by Alderman Taylor. All voted Aye; motion carried.

EMERALD ASH
BORER
MANAGEMENT

G-4.

Alderman Wilhelm moved to proceed with the implementation of Emerald Ash Borer Management Plan as recommended by the Board of Public Works and Environmental Commission and to report back to the Common Council quarterly, unless a special presentation is required. Seconded by Alderman Solomon. All voted Aye; motion carried.

IAFF LOCAL 2760
TENTATIVE 2010-
2012 LABOR AGMT.

G-5.

Alderman Solomon moved to approve the tentative agreement for a 2010-2012 labor agreement with the Franklin Professional Firefighters, I.A.F.F. Local 2760, and authorize the Mayor, Director of Clerk Services, and Director of Administration to execute a labor agreement incorporating the provisions of the tentative agreement. Seconded by Alderman Taylor. At 8:22 p.m. Mayor Taylor passed the gavel to Council President Taylor who chaired the meeting. At 8:26 p.m. the gavel was returned to Mayor Taylor who then returned to chairing the meeting.

On the vote for the main motion, all voted Aye; motion carried.

UDO AMENDMENT
NATURAL
RESOURCE
PROTECTION PLAN
EXEMPTION

G-6.

Alderman Olson moved to direct staff to prepare an ordinance to exempt in part existing principal structure developed parcels from Natural Resources Protection Plan and conservation easement requirements upon applications for accessory structure or building remodeling or addition permission, for natural resources that are not within 100 feet of the area to be disturbed by the new development, and to include comments submitted by Alderman Wilhelm and staff, and to schedule the ordinance for public hearing before the Plan Commission. Seconded by Alderman Taylor.

Alderman Solomon moved to call the question. Seconded by Alderman Skowronski. All voted Aye; motion carried.

On the vote for the main motion, all voted Aye; motion carried.

ORD. 2010-1999
AMEND BUILDING
CONSTRUCTION
PROVISIONS

G-7.

Alderman Solomon moved to adopt Ordinance No. 2010-1999, AN ORDINANCE TO AMEND THE MUNICIPAL CODE BUILDING CONSTRUCTION PROVISIONS TO REQUIRE CERTIFICATION OF GRADE PRIOR TO CONSTRUCTION OF FOOTINGS AND FOUNDATION. Seconded by Alderman Schmidt. All voted Aye; motion carried.

APPROVAL <i>Slw</i>	REQUEST FOR COUNCIL ACTION	MTG. DATE 5/18/10
Reports & Recommendations	SUBJECT: Implementation of recommended Emerald Ash Borer Management Plan	ITEM NO. <i>6/14</i>

BACKGROUND

On August 4, 2010 the Council directed the Board of Public Works and Environmental Commission to jointly develop a recommended policy as how the City should react to infestation of the Emerald Ash Borer (EAB). A sub-committee made up of two members from the Board and two members from the Commission along with staff has met monthly, reporting to respective Board and Commission. After extensively considering the ash borer, its infestation into Oak Creek and Franklin and strategies to deal with the potential, the Board of Public Works and Environmental Commission hereby present its findings in a recommended management plan.

ANALYSIS

The EAB has been detected in several locations in the City of Franklin, as expected infestation is beginning to spread from the Southwood East Subdivision. The rate of infestation does not appear to be overly aggressive to date.

Staff has surveyed a number of Wisconsin communities and others in neighboring states of Michigan, Ohio, Indiana and Illinois.

As can be seen on the summary survey sheets, little activity has started in Wisconsin. Most communities are not treating public trees. Communities that treat are doing it to retain higher value types of ash – white typically. Others are treating to stage out infestation to better manage the handling of trees. Out-of-state surveys, most notably from Michigan, indicate the potential rate and severity of infestation.

This has lead to the sub-committee to express its concern that the plan needs to be adaptable to adapt to change.

OPTIONS

The management plan was recommended based on several decisions which can be found on the sheet titled Emerald Ash Borer Management Plan Recommendations.

FISCAL NOTE

A plan cost estimate has been developed. It maximizes the use of City Department of Public Works. There is no proposed ash tree treatment of public trees or handling of private trees. It assumes eight (8) years of DPW involvement to remove and replace public trees. Presently the annual cost of material and rental is estimated at \$90,750. The recommended program uses extensive Highway personnel; and therefore, would require adding two full-time persons to the Highway Department for the next 8 to 10 years to maintain City infrastructure.

There will be no significant material or rental expenditure in 2010. A budget for 2011 will need to be established once the tree survey and monitoring is complete.

RECOMMENDATION

Motion to proceed with the implementation of recommended plan and to report back to Council quarterly, unless a special presentation is required.

RJR/sg
Encl.

**RECOMMENDED
EMERALD ASH BORER MANAGEMENT PLAN SUMMARY
CITY OF FRANKLIN
2010**

The following is a plan to control the impact of the infestation of the emerald ash borer and potential premature loss of ash trees using the most updated scientific advice and at the lowest cost to the City of Franklin. It should be recognized that due to the uncertainty of the points of infestation and rate of infestation, this plan will need to be dynamic to respond to change.

The following is an anticipated sequence of events and action items:

1. Developed acceptance of plan by Borer sub-committee, recommendation by Board of Public Works and Environmental Committee and authorization of Common Council to proceed.

A number of plan decisions were required and are made part of this plan.

The anticipated program and annual costs of this plan is made part of this plan.

2. Using a Department of Public Works Forestry grant fund match this summer, a consultant will inventory and survey City planted and maintained terrace trees (trees placed back of curb). The consultant survey will rate the trees based on size, vitality and structural condition. This rating will guide decisions which ash trees are infested have the lowest value and therefore would be first to be taken down. This will be done in an orderly progression.
3. A windshield survey of ash trees along rural roadways will also be completed in 2010. The survey will be specific to the number and condition of ash trees. Public Works will remove infested and declining ash trees on City right-of-way. Although unknown at this time, the number will be in the thousands. Removed trees along rural roadways will not be replaced.
4. Notification of residents of this plan. The resident will be made aware plan details regarding how only ash trees within public right-of-way will be dealt with by the City. In addition, the resident will be notified that:
 - a. A replacement tree will be provided, one per lot side abutting a street(s).
 - b. The City will not be treating terrace trees. If the residents desire, they may introduce root drench or hire a licensed pesticide applicator and notify the City of each (annual) application.
 - c. Notifying the City of treated trees is so that the City will not remove a tree that a resident has treated and these trees can be monitored for effectiveness of the treatment.
5. The Department of Public Works will begin cutting down infested trees in the fall of 2010. It is anticipated cutting will begin in the Southwood East Subdivision area, the only area presently showing infestation.

An eight (8) year removal of the 3,000 terrace ash trees will uniformly result in a manageable 375 trees taken and replaced per year. To keep ahead of the potential of infestation, trees rated poorly in sections immediately adjacent to Southwood East are proposed to be taken.

6. All infested and declining ash trees within City parks, near active area around City buildings will also be removed by the Public Works Department. Dead ash trees in public natural areas that are not in active park areas will not be removed.
7. A marshalling yard on lands near the Department of Public Works facility may be required in the future. The yard would be managed by Public Works for disposal of public trees.
8. In the spring of 2011, the Public Works will finish stumping as soon as possible trees taken in the fall of 2010, landscape sites and replace trees with new (2" diameter) trees, a species to be determined.
9. The process will continue until public ash trees within the City have been removed and processed.
 - a. Priority given to completing removal of terrace trees which present the highest potential of public hazard.
 - b. Priority also given to infested trees in close proximity to public buildings and active park areas.
 - c. The need for a marshalling yard will be determined with analysis of rate of trees received, processed and removed.
 - d. Private trees cutting and removal will be by property owners.
10. Additional management information is available for review.

EMERALD ASH BORER MANAGEMENT PLAN DECISION

1. Insecticide treatment
 - √ - No Treatment due to cost, liability and uncertainty of success
 - √ - City to annually treat "valued" terrace ash trees
 - If the City were to treat, assume 300 trees x \$30/ea = \$9,000/year
 - City to treat most terrace ash trees greater than 8 inches in diameter
 - Assume 1,000 trees x \$25/ea = \$25,000/year
2. Tree to be taken down and hauled
 - √ - Public trees in street terrace
 - √ - Public trees in road right-of-way
 - √ - Public trees in active park areas
 - Public trees in public lands
 - Trees in WE Energies, Milwaukee County
 - Franklin School properties
 - Trees on private lands
- √ 3. Begin taking down infested street terrace ash trees with noticeable poor condition this September, 2010
4. Replacement of trees taken
 - √ - No replacement by City of Franklin
 - √ - One terrace tree placed per lot side
 - Assume 3,000 trees x \$150/ea = \$450,000
- √ 5. Stump and landscape site at terrace taken tree
6. Establish marshall yard
 - √ - Wait to determine need based on public trees and private wood received following present practice and the resulting amount of wood to be processed at the existing DPW yard
 - Establish yard for all public trees \$81,000
 - Enlarge for private trees \$65,000
 - No location established to date

A land lease cost of non-City lands will likely be required
- √ 7. Tub grinder is required to process wood product to acceptable size. The following are options:
 - Purchase reconditioned unit – \$200,000
 - Long term contract with private contractor – \$25,000/yr x 8 years
 - Agreement with Waste Management – uncertain
- √ 8. Pursue agreement with lumber yard(s) for log processing

√ Management Plan Recommendation

May, 2010

EMERALD ASH BORER MANAGEMENT PLAN
COST ESTIMATE

This alternative maximizes the use of City Department of Public Works. There is no proposed treatment of public trees or handling of private trees. It assumes eight (8) years of DPW involvement.

Material/Rental Costs

Replacement Trees:	
3,000 trees @ \$150/tree	\$ 450,000
Landscape Materials:	
3,200 sites @ \$10/site	32,000
Treatment of Valued Trees (estimated 300) 8 yrs.	36,000
Tub grinder Rental/Purchase	200,000
Replacement Stumper and Miscellaneous Tools	<u>10,000</u>
MATERIAL/RENTAL TOTAL	\$ 728,000
ANNUAL COST	\$ 91,000

Labor/Equipment Costs

		<u>DPW Hours</u>
Cut down and haul		
5,700 trees* @ \$150/tree	\$ 855,000	11,860 hrs
Stump tree		
3,200 trees @ \$50/tree	128,000	2,150 hrs
Landscape sites		
3,200 sites @ \$80/site	256,000	3,840 hrs
Replace tree & maintain		
3,000 trees @ \$150/tree	450,000	12,000 hrs
Treat valued trees (estimated 300) 8 yrs.	36,000	1,200 hrs
Manage DPW yard		
5,700 trees @ \$ 56/tree	<u>319,200</u>	<u>5,700 hrs</u>
LABOR/EQUIPMENT TOTAL	\$2,044,200	36,750 hrs
MANAGEMENT PLAN (8 YR)		
TOTAL COST	\$2,772,200	36,750 hrs
TOTAL ANNUAL COST	\$ 346,525	4,594 hrs

*This tree total includes 3,200 terrace, 2,000 public right-of-way and 500 park, public lands and buildings.

ASH TREE SURVEY RESULTS
MAY, 2010

City	# Terrace Trees	# Ash Trees	Treating Ash Trees	Size Of Trees Being Treated	White Ash, Green Ash Or Both	Pick-Up Brush From Residents	Accept Brush From Residents	Accept Brush From Contractor	Comments
Brookfield	4,000	200	No	n/a	n/a	No	Yes	For fee	
Franklin	10,000	3,000				Pick-up 3 x year, 3cy	Yes	No	
Greendale	10,700	1,300	No decision at this time			Pick-up under 2.5 cy for \$40	Yes	No	
Greenfield	7,500	1,200	No - all ash trees are under 8"	n/a	n/a	Yes	Yes - \$8 cy	No	
Menomonee Falls	?	?	No	n/a	n/a	Pick-up 2x year	Yes - use of Waste Mngmt	No	
Mequon	?	?	No	n/a	n/a	No	Yes	No	
Milwaukee	200,000	30,000	12,000 - 2009 12,000 - this year	8" and over	Both	Pick-up under 2cy	Yes	No	a. Removal of declining trees b. Trunk injections (safer) c. Treatment primarily to slow infestations / removals
New Berlin	1,145	172 (15%)	Yes - merit soil drenching	5" and under (majority of trees)	Both	No	Yes	No	
Oak Creek	10,000	1,000	Yes	under 6" - see comments	Both	Yes	Yes	No	Treating trees under 6" until all large trees are removed, at which time they will begin removing the small trees
Wauwatosa	30,000	5,400	No	n/a	n/a	Yes - \$55.00 minimum charge	Yes - \$5 daily or \$20 annual permit req.	No	
West Allis	23,000	4,300	Yes	Over 6" injection, under 6" soil drench	White Ash - in good condition	Yes	Yes	No	a. Treatment primarily to slow infestations / removals b. Save white ash

City	# Terrace Trees	# Ash Trees	Treating Ash Trees	Size Of Trees Being Treated	White Ash, Green Ash Or Both	Pick-Up Brush From Residence	Accept Brush From Residents	Accept Brush From Contractor	Comments
Gurnee, IL	13,000	3,500	No	n/a	n/a	Small piles of brush are picked up with trash	No	No	
Wilmette, IL	17,300	1,700 remain (1,200 already removed)	One historic ash	n/a		Yes	No	No	a. 70 ash were treated for educational purposes. A few are doing OK. b. Note following cycle: Infestation and dieback occur over 2 years, major sprouting and woodpeckers occur in the 3 rd year, and the tree is dead in the 4 th year
Fort Wayne, IN	57,000	13,000	Yes - see comments	12" - 18" 2" - 8" cut down	White Ash - they uptake treatment better	No	Yes - minimal fee charged	No	a. 1 st attempt - Soil injection 11,000 trees. b. Presently - Treated 1,100 primarily to slow infestation and removals. c. 2010 - Remove / replace 300 trees
Bowling Green, OH	10,000	1,000	200 treated in 2006 - almost all are dead now	6" and under	Both	Yes	Yes	No	They have noted: Dutch Elm took 20 years to spread EAB has taken 6 years to spread
Ann Arbor, MI	47,000	7,000 (all removed)	No - all removed	n/a	n/a		No	No	a. Had a temporary marshalling yard provided by the state - no longer in service b. All ash trees removed
Grosse Pointe Farms, MI	6,000	583	Yes, all trees over 5" treated - see comments	5" or larger	Both	Yes	At contractors yard	No	a. Started in 2002 - soil injection b. Last 3 years - trunk injections c. Lost 40 treated trees to EAB 7% d. They have 500 elm trees that have been treated since 1960 for Dutch Elm disease
Romulus, MI	12,800	3,217 (22%)	No	n/a	n/a	No	No	No	a. A tree with 20% crown dieback will be dead the next year b. Had a temporary marshalling yard provided by the state - no longer in service c. All ash trees removed

CITY OF FRANKLIN
RESIDENT OPTIONS
PRIVATE ASH TREE DISPOSAL

The City of Franklin will not be providing any service for ash tree cutting, hauling or disposal of trees from private lands. The following are options available to residents:

1. Long standing practice of the Department of Public Works to receive branches, woody material up to 6 inches in diameter brought to the yard by property owner. No charge.

8:00 a.m. – 3:00 p.m. Monday thru Saturday

2. Waste Management Landfill will accept branches, leaves or woody material brought and handled by the property owner. No charge presently.

8:00 a.m. – 4:00 p.m. Wednesday

7:00 a.m. – Noon Saturday

3. Property owner can hire a tree service (private contractor) to privately cut, haul and dispose of trees at the expense of the owner.

This material will not be accepted at the DPW yard.

Wisconsin's Urban and Community Ash Resource

There are over 5.2 million ash trees in Wisconsin's communities – on streets and rights-of-way and in parks, private landscapes, natural areas and woodlots. About 20% of all trees in Wisconsin communities are ash. They have an estimated value of over \$1.5 billion and also provide millions of dollars of environmental, social and economic benefits annually. On average, ash also make up about 20% of all street trees, but for some communities, over 50% of their street trees are ash!

More detail on the composition and value of Wisconsin's urban forests is available at:
<http://www.dnr.state.wi.us/forestry/UF/assessment.htm>

Why Manage Ash Now for EAB?

EAB is very difficult to detect and could be anywhere in the state - Right Now!

To date, infestations found in Wisconsin were detected 4-5 years after the infestation actually began, some after the trees started to die, but others where the trees showed few or no symptoms. EAB has been found in or adjacent to all four corners of the state. There is no reason to believe that any part of the state is safe from EAB. Because EAB is moved long distances by individual human activities, certain sites are at higher risk for introduction of EAB. These include:

- Campgrounds, recreational areas, and cottage communities – from infested firewood
- Public, commercial and residential areas landscaped since 1995 – from out-of-state infested nursery stock
- Sawmills, pallet operations, other wood utilization firms – from infested sawlogs from undetected infested areas.
- Major transportation corridors and industrial areas – from infested firewood and packing materials

However, every community has some of these types of sites or has residents that burn firewood that could have inadvertently been brought in from known or unknown infested areas, so all Wisconsin communities are at risk.

More information on current survey efforts and where EAB has been detected is available at:
<http://www.emeraldashborer.wi.gov/article.jsp?topicid=14>

The impact of EAB on Wisconsin's Urban Forests will be devastating.

Our native ash species have no known resistance to attack by EAB. Unless treated with insecticides, once ash trees are infested, EAB will likely kill them in 2 to 4 years. Though we can't predict what will happen in Wisconsin, experience in other states has shown that once EAB is detected in an area, more detections follow quickly and loss of ash trees increases rapidly over a few short years. If we can slow the spread of EAB and ash mortality through management, we can buy time for research to potentially catch up and provide us even more options for managing this destructive pest. If we do nothing, rapid loss of our urban ash trees will likely:

- cost communities and their residents \$2-4 billion to remove and replace their trees. This will overwhelm local government and private property owner budgets, and overwhelm public and commercial capacity to remove the trees, handle the wood, and produce and plant new trees.
- increase fraud, substandard work, non-ash tree removal, damage and injuries from fly-by-night operators drawn to the disaster
- increase storm water runoff due to lost tree canopy
- increase energy use and cost for cooling and heating due to loss of shade

- increase water use for irrigating sun-parched landscapes due to loss of shade
- increase electric outages from dead ash trees falling on power lines
- reduce air quality from loss of trees' pollution filtering and air cooling capacity
- set up a repeat of this disaster if lost trees are replaced by too few species all the same age

Doing nothing is a risky option!

Many communities will wish to do nothing to manage their trees for a variety of legitimate reasons: no budget, no staff, higher priorities, etc. This strategy will work only until EAB is found in your community – and it will be found – and then you'll be faced with an even bigger problem!

When EAB is first detected in an unprepared community, a few dead trees will rapidly spread into many dead trees. If infested trees are allowed to stand, the insects will breed and spread far and wide, both naturally and from unknowing movement by residents moving firewood. Dead ash trees, especially large ones, quickly become public safety hazards that have to be removed immediately to protect lives and property. Staff, equipment, and funding for contracts will have to be found from somewhere on short notice. In addition, **it will cost 2 to 3 times more to take down dead ash trees** than live or dying trees because dead trees are more hazardous to work in and have a tendency to shatter into many pieces when they fall, creating greater clean up costs.

Then there's the question of what to do with all that wood on short notice. There are fewer utilization options for wood from dead trees which can eliminate potential income to offset costs. Even chipping is more expensive because dead trees are harder on equipment. And where will you store the wood and debris?

And finally, how will you pay for replacing the trees and where will the trees come from? Experience in other states has shown that communities that don't prepare don't have funding to replace the lost trees, which just compounds the loss of the ash trees.

EAB offers opportunities to improve the urban forest resource and expand business.

Despite all the negatives of EAB, managing for EAB can improve your community forest and its overall management program. For example:

- Ash and maple are over-represented in our urban forests. EAB has highlighted the devastating result of this lack of diversity. A long-term management plan for the current and soon-to-be vacant planting spaces can help create a more diverse, adaptable and resilient forest in the future.
- EAB has improved public awareness of the value of urban forests. An inventory can quantify this value for community leaders and residents.
- EAB threatens so many aspects of the community that people don't realize are impacted by the urban forest. Partnering with these interests – community engineers, planners, waste managers, businesses, utilities, environmental groups, neighborhood associations – can result in stronger long-term support for tree management.

Beginning to manage for EAB now can also stimulate local business. For example:

- Urban forestry, tree service and landscape professionals can provide tree inventories, GIS layers, urban forest management plans, staff training, tree health care, planting, maintenance and removal services.
- Communities can work with nurseries to develop innovative ways to provide a broad diversity of tree species.

- EAB will generate a flood of wood to cope with. Large and small entrepreneurs can come up with creative solutions to produce products for a profit or at least offset some of the disposal costs not only for ash, but all urban wood.

On the other hand, waiting until EAB causes an emergency demand for services will overwhelm existing business and attract out of town disaster chasers.

Who is Responsible for Managing Ash and EAB?

The short answer is: Everyone! EAB has spread beyond the point where the federal or state governments alone can control it. While the federal and state governments have a role in public outreach, coordinating detection, regulating the movement of infested material, recommending control strategies, providing financial incentives and technical assistance and supporting research, ultimately it is up to the local governments, businesses and private property owners to regulate and manage ash and EAB in their own jurisdictions and control EAB in their own trees.

More information on responsibilities can be found in the 2008 Wisconsin EAB Response Plan at: <http://www.emeraldashborer.wi.gov/article.jsp?topicid=16>

How to Manage Ash in Your Urban Forest

Ash Management Goals

With EAB in or adjacent to all four corners of Wisconsin, it is recommended that all communities adopt the following four broad goals.

1. Develop and implement an inventory-based management plan

Inventories will provide you with information on what trees including ash you have so you can determine what goals you are trying to reach and what resources you need to manage your urban forest efficiently and effectively.

2. Reduce the risk of introduction and spread of EAB

This will give you more time to prepare for EAB and respond once you detect it. It will also give researchers more time to develop better management tools.

3. Minimize the impact of EAB

If left unchecked, EAB can have a rapid and devastating affect, not only on your urban forest, but also on your community, overwhelming its resources, and causing long-term impact to its environment, quality of life and economy. Proper management now can both reduce those impacts and spread them out over a longer period of time.

4. Prevent future catastrophic losses

While EAB is a devastating threat, it also presents an incredible opportunity to demonstrate the value of your urban forest so you can develop support for management and create a more resilient and sustainable urban forest for your community.

Tactics to Accomplish Management Goals

The following tactics can be used to accomplish these four management goals:

1. Develop and implement an inventory-based management plan

a. Inventory the urban forest resource to determine the potential impact of EAB

An inventory should identify tree species, and count or estimate their numbers, size, location and condition. The inventory can be simple or detailed, but without one, it is impossible to assess your community's risk for EAB, the impact it will have on your community and budget, or even the ash management tactics you should consider using.

A street and park tree inventory will tell you what ash you'll have to deal with directly. However, most of the ash in a typical community will be on private property. When EAB starts killing private trees it will affect the community's waste stream and standing dead trees will create a public nuisance. A community-wide inventory will provide you with information on what to expect from private property. An analysis of the inventory data with software programs such as i-Tree Streets or i-Tree Eco (<http://www.itreetools.org/>) will also give you the value of the trees and services they provide to help you justify your management choices to decision-makers.

*More information on inventories can be found in Section 5c of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

b. Determine costs and resources

The treatment, removal, disposal/utilization and replanting of community ash trees will cost money and you need to identify sources of funding and resources. This cost information will show you the direct impact EAB will have on your budget and staff. It will help you make choices on whether to treat or remove trees, whether to spread the costs over time or deal with them all at once and what kind of training, equipment, supplies and contracts you'll need. Regardless of your choices, EAB will require more funding, whether it's redirected from other accounts or from new sources.

*Information on estimating costs can be found in Section 8.b of the EAB Toolkit and ideas on funding sources can be found in Section 10 of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

c. Prepare and implement an EAB readiness and response plan

Like inventories, community readiness and response plans can range from very simple to complex depending on your needs. Regardless, these plans will help you organize your community's strategies to deal with EAB.

*Section 2 of the EAB Toolkit will walk you through the process at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

d. Train staff in needed skills

Your staff will need training whether you're going to do the work yourself or not. If you are going to survey, treat, remove or replace your ash yourself, your staff will need to have those skills. If you're going to contract for those services, your staff will need to be well informed to produce contract specifications, manage the contracts and inspect the work. In any case, citizens will be calling you for information about their private trees or what you're doing about their public trees

and to answer them you'll need to be well informed on ash identification, EAB signs and symptoms and EAB management options.

Training is available from UW Extension, DNR, UW and technical colleges, and through professional organizations and on-line resources. Contact your DNR urban forester for information at: <http://dnr.wi.gov/forestry/uf/staff/>

e. Prepare specifications, contracts and cooperative agreements for needed resources

If you wait until the crisis hits, there likely will be few contractors available, no equipment for lease, few trees for replanting and no community willing to share their over-stretched resources and equipment. Enter into agreements and negotiate contracts as soon as possible before EAB hits, so you'll be first in line to receive the services and equipment you'll need when it does.

Sections 2 and 8 of the EAB Toolkit will help you through the process at: <http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>

2. Reduce the risk of introduction and spread of EAB

a. Educate and involve elected officials, business and private property owners

Your community's residents and power-brokers can be part of the solution such as in early detection, creating cooperative agreements, or supporting budget requests, but they can also be part of the problem – bringing in or moving infested firewood, opposing best management tactics or cutting budgets. Engaging them now will assure you have enough support to succeed and that they have enough information to make informed consumer decisions on their own property.

For more information on education and awareness see section 9 of the EAB Toolkit at: <http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>

b. Enact or strengthen ordinances

You will need to have the legal authority to carry out the management strategies you select or deal with the threats you could face. At the very least, dead and dying ash trees will pose a public safety hazard, so you will need the authority to declare infested or dead trees a public nuisance and have that nuisance abated on private property. Other ordinances to consider to reduce introduction and spread include regulating firewood sale and movement, licensing tree service companies, and requiring private property tree removal permits. Ordinances addressing tree preservation and tree planting requirements in developments and reconstruction would help achieve the goals of minimizing EAB impact and preventing future losses. It is important to enact ordinances broad enough to encompass not only EAB, but potential future pests as well.

Section 4 of the EAB Toolkit will help you through ordinance development at: <http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>

c. Facilitate early detection of EAB

Detecting EAB as soon as possible will give you the most options and time to deal with it and slow its spread. New infestations are most often found by informed residents, arborists, and others working in and around ash trees. Work with UW Extension, DNR and DATCP to find training and education so as many people as possible are helping you watch for EAB. However, since early detection methods are not very reliable and trees in new infestations typically don't show obvious symptoms for the first few years, you can't be certain where EAB is until it has already begun damaging a tree.

*Information on detection is in Section 6 of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

- d. Develop disposal and utilization sites, methods and markets before quarantines are imposed.**
Find sites within your county and methods to store, treat, dispose or utilize infested ash wood that minimizes transportation distance. Small communities and those without much ash may want to work with nearby communities, towns or their county for collective wood disposal. Waiting to establish these after an infestation is found will limit options, increase costs and delay destruction of the EAB infested wood, accelerating the insect's spread.

*For more information on disposal and utilization see section 8.c. of the EAB Toolkit at:
<http://dnr.wi.gov/forestry/uf/eab/filesTOC.asp>*

- e. Contact Dept of Agriculture, Trade & Consumer Protection (DATCP) regarding compliance agreements**

Once EAB arrives, your county will be quarantined. If you or your waste hauler will be moving infested branches and logs to a disposal or processing site outside of a quarantined area, you will need a compliance agreement with DATCP to reduce further spread of EAB in your community. Determining now what steps you will need to get an agreement in place will prevent any delays in responding to your first and future finds of EAB.

*For information on compliance agreements, contact:
<http://emeraldashborer.wi.gov/articleassets/EasyGuideEABRegulations.pdf>*

- f. Avoid pruning or removing ash during the adult EAB flight period (May-July)**
Since EAB is very hard to detect early on, your ash trees may be infested before you're aware of it. If you prune or remove infested trees during adult emergence and move the material without chipping or treating it, you might inadvertently spread EAB around your community. If you have to prune or remove ash trees during this time, treat the wood as if it were infested to prevent possible spread of EAB.

*For information of how to treat infested wood, see:
http://emeraldashborer.wi.gov/articleassets/Managing_Infested_Wood_1-15-09.pdf*

- g. Identify trees or areas to use for sinks or lethal trap trees once EAB is found**
When EAB is found in your community, one method being tested to minimize spread is to create groups of girdled trees known as sinks that will attract EAB to that area rather than dispersing farther away. The trees are removed that fall to destroy the EAB. Lethal trap trees work on the same principle, but are also treated with a systemic insecticide which kills the larvae once they hatch and start feeding. Trees identified for possible treatment should be easily accessible and treatable.

*For more information on sinks and trap trees see page 21 of Wisconsin's EAB Response Plan at:
<http://emeraldashborer.wi.gov/articleassets/2008WIEABResponsePlan.pdf>*

3. Minimize the impact of EAB

a. Preserve non-ash large canopy trees

When EAB starts killing your ash trees, the remaining trees that are not ash will become even more important in providing environmental, social and economic services to your community. Large canopy trees provide the most services so it will be critical to protect them while the newly planted trees grow to fill the gaps. These trees can be preserved through routine maintenance, protection during street reconstruction, home remodeling, or business redevelopment, and preservation during new development. You can accomplish this through community policies, ordinances and public education.

b. Identify large canopy and high value ash for preventive insecticide treatment

Healthy, properly located, large-canopy trees provide the most environmental, social and economic benefits to a community. Preserving these trees as long as possible will do the most to minimize impact of EAB on your community. To help you determine the cost/benefit of treatment versus removal and replacement use the EAB Cost Calculator developed by Purdue University at: <http://extension.entm.purdue.edu/treecomputer/index.php>

When to begin preventive insecticide treatments is open to debate. The official recommendation is to begin treatments when EAB is within about 15 miles of your site. However, since early detection methods are not very reliable and trees in new infestations typically don't show obvious symptoms for the first few years, you can't be certain where EAB is until it has already begun damaging a tree. Available resources, the value of the tree and your tolerance for risk will have to go into your decision on when to start treatment.

More information on insecticide treatment can be found at:

<http://emeraldashborer.wi.gov/articleassets/InsecticideOptionsForProtectingTreesFromEAB.pdf>

c. Preemptively remove uninfested ash trees in priority order

This tactic is intended to reduce the peak rate that trees are lost to EAB thereby reducing the impact of EAB on the community's budget and the long-term health of the community's urban forest. Experience in states infested with EAB shows that a community's resources quickly become overwhelmed when EAB starts killing trees. Funds have to be taken from anywhere and everywhere to deal with the public safety threat of standing dead trees. And once the trees are down, there are no funds to replace them. If replacement funding is found, diverse tree species in the quantity needed may not be available. Public pressure to fill those vacant holes with trees could lead to overplanting a few, cheap and plentiful species, setting you up for a future disaster.

The extent to which a community will need to use preemptive removal will depend on the number, size, location and condition of their ash trees and the proximity of EAB. This again shows how an inventory is essential. Communities with large numbers of ash, particularly ones in poor condition need to implement preemptive removal immediately. Communities with few ash may be able to handle the losses with existing resources and won't need preemptive removals.

Of the trees that you have NOT identified for preventive insecticide treatment, use the following in priority order to set a preemptive removal plan:

1. Large, structurally unsound ash in poor condition
2. Smaller ash in poor condition

3. Ash that are improperly placed or are interfering with other infrastructure, for example ash blocking traffic signs or under power lines.
4. If you have not accomplished your goal after completing the first three priorities, continue with this fourth priority. Of the remaining ash trees, annually remove and replace the number of ash that your budget allows until you reach a total population number that you could handle when EAB starts killing your trees. If EAB is in your community or nearby you should either preventively treat, or remove and replace ash more aggressively, but remember, even if EAB is not yet confirmed in your area, it may already be there.

d. Fill existing vacant planting spaces with diverse tree species

About 40% of possible urban tree planting spaces are vacant according to a statewide estimate. Planting these spaces now before EAB comes to town, will not only give your community a head start on tree replacement, but will give those new trees a chance to grow and spread the age of your urban forest out more evenly.

The reason EAB will be so devastating to your community's urban forest is there are too many ash trees – on average, 20% of community trees are ash. While Dutch elm disease taught us not to plant an entire community to one species, losing 20% of our entire canopy to a catastrophic pest is still too much. The new diversity rule of thumb is to strive for no more than 5% of one species, 10% of one genus and 20% of one family. Even if you followed this rule, a pest like EAB could still kill one-tenth of your trees, so communities should strive for even more diversity while continuing to make sure to use species adaptable to your climate and site. Avoid planting tree genera and species that are already over-represented, and encourage your residents to do the same. Maple is the most commonly over-represented species in Wisconsin communities making up 44% of all street trees.

For ideas on replacement species see:

<http://www.uwex.edu/ces/wihort/landscape/AshAlternatives.doc>

e. Maintain all new and existing trees

As the ash die out, the new and remaining trees will become all the more important. Community trees need care such as pruning, watering and mulching to maintain their health, vigor and structural strength. This will minimize additional tree loss to storms, pests and other damage, increase the value of those trees and prevent trees from becoming a financial and public safety liability. In Wisconsin, studies have shown that every dollar invested in tree planting and care returns \$3 in benefits.

For basic information on tree care, see the Tree Owner's Manual at:

<http://www.treeownersmanual.info>

4. Prevent future catastrophic losses

a. Don't over-plant any tree species

Dutch elm disease destroyed a huge portion of our urban trees because we over-planted American elm. EAB will wipe out 20% of our urban trees because we over-planted ash. What's next? The "big 4" urban street trees are maple (44%), ash (20%), honeylocust (8%) and linden (7%). If Asian long-horned beetle comes to Wisconsin, it could wipe out our maples – almost half of our urban forest! Do an inventory and focus your planting efforts on genera and species that are under-represented in your community. Strive for the new diversity rule of thumb – no more than 5% of one species, 10% of one genus and 20% of one family.

The uncommon trees are less common for a reason. They may be harder to grow, more expensive or in less demand. This makes them a business risk for nurseries to grow and stock. Work with your nurseries to help them with that risk and assure a steady, long-term supply of less common species. If you wait until all your ash are dead, public demand will require rapid replacement and the only trees available in the quantity you need will be ones you already have too many of.

b. Spread tree planting over time and location

Not only should your urban forest be species diverse, but ideally it should diverse in age. If you wait to plant until all your ash are gone, all the replacements will be the same age. This means all the trees will require maintenance at the same time and they will mature and die at the same time. Just like payroll deduction to a savings account, planting trees every year will provide you a diversified portfolio of benefits over time with less risk of loss.

Diversifying the distribution of your trees is a harder balancing act. If you plant all the same species of trees all in one area, a pest like EAB would not only wipe out a whole area, but because the trees are close together, the pest will spread faster. If you plant trees randomly throughout the community, no one area will lose all its trees to a specific pest and the pest might spread more slowly. However, the down sides to this are loss of visual uniformity, not every species is appropriate everywhere and tree maintenance may be more expensive and complicated because different species require different maintenance at different times. Many communities compromise between these two extremes by planting the same species on one city block and then vary the species block by block.

c. Design new planting spaces with tree success in mind

It is becoming much clearer to everyone that trees are part of the infrastructure of a community. For trees to thrive and achieve their full potential benefits to the community, new construction needs to be designed to provide sufficient root volume for tree success rather than viewing trees as an afterthought to be fit in wherever some space is available. Work with your community planners, landscape architects, engineers and utilities to include an arborist in the team that designs both new construction and reconstruction. Trees are part of the solution to storm water management, drinking water supply, air quality, energy conservation, business development and property value.

For more information on trees as infrastructure visit the Smart Forestry for Smart Growth toolbox at: <http://dnr.wi.gov/forestry/SmartForestry/toolbox/>

Selecting Management Tactics

Unfortunately, there is no black and white rule on which ash management tactics a community should use. The tactics a community selects to reduce its ash liability will be based on the number, size, condition and location of its ash trees, the value of those trees and the benefits they provide, the proximity of EAB to the community, the funding and resources available, how aggressive the community wishes to protect its urban forest and the public's support for the chosen options.

To best protect your community, be as aggressive as possible and search out creative ways to succeed. In general, the greater the proportion of ash you have and the closer EAB is to your community, the more aggressive you should be. While it would be best if communities implemented all of the ash management tactics, you will no doubt be faced with the tough choice of which tactics you can afford to undertake. Use the following table as a guide to help identify the priority of each action you could or should take based on your situation.

Customizing your priority actions

In the table, go through each tactic one by one and find the situation that best fits your community - high, medium or low priority- and place the selected priority in the "Your Priority" column. Once you've completed this, you will have a listing of your priority actions. It is likely that you will still have too many actions than you have the time and funds for, so use the "Rank" column to further prioritize your actions. Actions rated "high priority #1" should be done first and foremost. Actions rated "high priority #2" should be done next and so on until you have an action plan that your community can afford to implement.

Management Tactic:	High Priority Situation:	Medium Priority Situation:	Low Priority Situation:	Rank:	Your Priority:
1. Inventory-based Management Plan:					
a. Inventory your urban forest resource to determine potential impact of EAB	No inventory, inventory is out of date or inventory is insufficient to determine EAB impact	Current inventory of public trees, but have not quantified EAB impact	Current inventory of public and private ash and have quantified EAB's impact	1	1
b. Determine costs and resources for treatment, removal, disposal and replanting	EAB response costs and/or sources of needed funds, materials and labor have not been determined	Costs and resources have been assessed for public, but not private property. Public sources of funding, materials and labor established	Costs and resources have been assessed for public and private property and sources of funding, materials and labor established	1	1
c. Prepare and implement an EAB readiness and response plan	All communities, all situations should prepare, implement and regularly update an EAB response plan that fits your needs	NA	NA	1	
d. Train staff in needed skills	Insufficient staff with little or no training	Some staff trained in some skills	Sufficient number of existing staff trained in all needed skills	2	
e. Prepare specs, contracts and coop agreements	Few staff and resources, unable to handle expected workload and wood volume	Existing staff or contractors can handle early stages of EAB infestation	Sufficient resources to handle expected workload and volume of wood, &/or specifications, contracts, agreements in place	3	
2. Reduce Risk of Introduction & Spread:					
a. Educate officials, businesses & residents	Elected officials and administrators are not aware of the impact EAB will have on the community. Business and residents aren't aware of how their activities could spread EAB or how they can help protect their ash and the community's forest	Elected officials and administrators are engaged in the EAB issue. The media is covering EAB.	NA	1	
b. Enact or strengthen ordinances	No tree ordinance, or existing ordinances do not provide authority for all needed EAB prevention and response	NA	Up-to-date ordinances that give you all needed authority to prevent and respond to EAB on public and private property	1	
c. Facilitate early detection of EAB	All communities, all situations	NA	NA	1	

d. Develop disposal & utilization sites, markets	No disposal sites in the county, no utilization options or markets	County sites available but far away, few or no utilization options	Various sites available, existing utilization options & markets	1
e. Contact DA TCP regarding compliance agreement	Potential disposal or processing sites are outside your county	Close to a county border and overwhelmed by maximum wood volume (public and private)	Far from a county border and identified disposal sites could handle maximum expected wood volume (public and private)	2
f. Avoid ash pruning/removal during May-July	All communities, all situations	NA	Specific exceptions can be made if all ash wood and branches can be processed on site to kill any EAB	2
g. Identify trees or areas for sinks or lethal trap trees	Greater than 20% ash trees Sufficient staff or resources to establish and remove sink/trap trees in a timely manner and to gain public acceptance.	10-20% ash trees Sufficient staff or resources to establish and remove sink/trap trees in a timely manner and to gain public acceptance.	Less than 10% ash trees or insufficient staff or resources to establish or remove sink/trap trees in a timely manner.	3
3. Minimize the Impact of EAB:				
a. Preserve structurally sound, non-ash, large canopy trees	All communities, all situations	NA	NA	1
b. Preemptively remove uninfested ash trees	Greater than 20% ash, many large poor condition ash, insufficient resources to handle EAB workload, volume of wood and replanting with diverse species	10-20% ash trees, more large, structurally unsound ash, some resources to handle EAB workload, volume of wood and replanting with diverse species, but insufficient to handle peak load	Less than 10% ash, most ash small diameter, large ash are structurally sound, sufficient resources to handle EAB workload, volume of wood and replanting with diverse species	1
c. Identify large &/or valuable ash for insecticide pre-treatment	EAB nearby, large ash a significant proportion of community's tree canopy, large ash in culturally or economically important locations	Community at higher risk of EAB introduction, large ash in culturally or economically important locations	EAB far away, few large valuable ash, no public or private resources or interest to pre-treat large ash	2
d. Fill vacant planting spaces with diverse species	High percentage of vacant planting spaces, tree population heavily weighted in 1-4 genera	Moderate number of vacant planting spaces, tree population has 5 to 9 evenly distributed genera	Few vacant planting spaces, tree population has at least 10 evenly distributed genera	2
e. Maintain all new and existing trees	Trees in poor to fair condition, new trees need structural training, community has public &/or private maintenance capacity	Trees in fair to good condition, community has public &/or private maintenance capacity	Community has no public or private capacity to maintain public trees	3
4. Prevent Future Catastrophic Losses:				
a. Don't over-plant any tree species	All communities, all situations	NA	NA	1
b. Spread tree planting over time and location	All communities, all situations	NA	NA	2
c. Design new planting spaces for tree success	Community plants public trees and has the resources to regulate and inspect reconstruction and development	Community plants public trees, but does not regulate reconstruction and development	Community does not plant public trees and does not regulate reconstruction and development	3

The advantage of this prioritized list is you can add the next highest action to your plan if your resources increase or you can remove the least important action if your resources are cut. Remember, this is only a guide. Your community may have different combinations of situations and priorities. The final decision is yours to make.

Additional Technical Resources

If you need help using this guide or have other questions about urban ash management or emerald ash borer, please see the following resources:

Contact:	For:
DNR Regional Urban Foresters http://dnr.wi.gov/forestry/uf/staff/	Local government urban forest management and staff training assistance Networking with other managers
DATCP EAB Program http://emeraldashborer.wi.gov/contactus.jsp	EAB Survey, quarantine and infested materials movement information and training
UW- Extension Statewide: http://emeraldashborer.wi.gov/contactus.jsp County: http://www.uwex.edu/ces/cty/	Insecticide treatment and EAB biology Homeowner information Public awareness assistance
Wisconsin EAB web portal http://www.emeraldashborer.wi.gov	Wisconsin EAB information and links
National EAB web portal http://www.emeraldashborer.info	National EAB information and links
EAB University http://www.emeraldashborer.info/eab_university.cfm	Web-based EAB training seminars
Commercial Urban Forestry Consultants http://dnr.wi.gov/forestry/UF/resources/consultants.pdf Certified Arborists for Hire http://www.waa-isa.org/arborists/search.asp	Contractual technical assistance and service

APPROVAL <i>Slw</i>	REQUEST FOR COUNCIL ACTION	MTG. DATE 01/03/2017
Reports & Recommendations	REMOVAL OF STREET LIGHTS AT FIVE LOCATIONS IN FRANKLIN	ITEM NO. <i>G.12.</i>

This item was tabled at the December 20, 2016, Common Council Meeting (Item G8) and the January 3, 2017, meeting (Item G9). In the December 20 meeting packet, color exhibits were enclosed and at the meeting the Aldermen were given copies of comments (total 48 pages). Please contact the Engineering Department if another copy is needed.

BACKGROUND

In an effort to identify areas for savings within the annual budget, Staff is making efforts to determine how the street lighting budget may be reduced. Those efforts include Replacing High Pressure Sodium (HPS) with Light-Emitting Diode (LED) fixtures and recommending the removal of existing lights and/or service meters. These efforts have been discussed at the Board of Public Works and this issue is now brought to the Common Council with their recommendation for approval.

ANALYSIS

Staff and Board of Public Works recommend that the following streets lights be removed (see attached color exhibits)

1. S. 47th Street. This mid-block location was a former dead-end street that was extended when the subdivision was fully developed. Now there are lights at each end of the block (W. Sharon Lane and W. Hunting Park Drive). This is a 200W HPS WE Energies fixture and annual savings from removal is expected to be \$274.32. (Aldermanic District 5) Received responses are enclosed and equally included an objection, no opinion, and removal of light.
2. 59th and Ryan. This location is the Franklin Industrial Park Sign. There are three 175 MV lights inside of the sign and it has a dedicated meter. The lights have been inoperable for several years so there has been no electricity used, however it does incur a meter charge. Staff proposes to leave the sign but abandon the service meter to the sign-a savings of approximately \$200/year. (Aldermanic District 4). Staff met with Franklin Business Park Consortium at a meeting and received comments that the businesses in the park are fine with removing the meter service.
3. S. 34th Street / W. Oakwood Road. There is a City-owned light system on W. Oakwood Road with the fixtures at about 35 feet high. There is also a 150 W HPS WE Energies light fixture on the northeast corner that predates the W. Oakwood Road system. Since the 34th Street Pole is about 15 feet high, and the light patterns are redundant with the Oakwood system, the WE Energies pole should be removed. Removal is expected to save approximately \$245.52 per year. (Aldermanic District 4). Received responses are mostly objecting to the removal.
4. S. Grant Lane cul-de-sac. There is a street light with minimal effectiveness because of the growth of a pine tree between 7265 and 7264 S. Grant Lane. This light fixture will continue to be ineffective unless the tree is removed. The City Arborist has confirmed that the tree appears to be healthy. Even if the tree were removed, the City does not generally place light fixtures at the end of cul-de-sacs. Removing this 100W HPS WE

Energies light fixture is expected to save \$219.24 per year. (Aldermanic District 6). Received responses objecting to the removal.

5. 10601 S. 27th Street. This is a median cut on US 241 that serves XPO Logistics and neighboring properties. There are two single-fixture lights on both sides of the median cut and it is proposed that one of the two is unneeded and be removed. This is a 200W HPS WE Energies fixture with an annual savings from removal is expected to be \$274.32. (Aldermanic District 4). Received responses were some no opinions, but mostly objecting to the removal.

Each light may not appear to significantly impact the budget, however the total of all 5 recommendations equates to over \$1,200 per year. Staff is working on other locations for consideration of similar removal.

Residents in the vicinity of locations 1, 3, 4 & 5 were sent notification of Council's consideration and were invited to send comments and/or attend the Common Council meeting. Location 2 was discussed at the November meeting of the Franklin Business Park Consortium. The written comments with names redacted are attached.

OPTIONS:

Direct Staff to have one, some, or all of the street lights/meters removed; or

Table

FISCAL NOTE

The 2017 adopted budget for Street Light Rental is \$215,000. The five locations listen herein would save an expected \$1,200.00 annually.

RECOMMENDATION

Direct Staff to remove lights and/or service meters at all locations.

APPROVAL <i>Slw</i>	REQUEST FOR COUNCIL ACTION	MTG. DATE 01/17/2017
Reports & Recommendations	PROFESSIONAL SERVICES AGREEMENT WITH RA SMITH NATIONAL FOR \$7,400 TO DEVELOP OPINION OF PROBABLE PROJECT COSTS FOR OAKWOOD ROAD BETWEEN S. 76 TH STREET AND S. 60 TH STREET	ITEM NO. <i>G.13.</i>

BACKGROUND

On December 20, 2016, staff presented a RA Smith National report regarding improvements to W. Oakwood Road to minimize or eliminate inundation by the 100-year storm events. The road is inundated by over 4-feet of water during the 100-year storm event.

Alderman Barber moved to authorize Engineering staff, with the understanding to include the Southeastern Wisconsin Regional Planning Commission, to continue the investigation that the reconstruction of W. Oakwood Road at Root River could remove it from the floodplain. Seconded by Alderwoman S. Mayer.

ANALYSIS

Staff contacted Ms. Laura Kletti Herrick, P.E., CFM, Chief Environmental Engineer with Southeastern Wisconsin Regional Planning Commission (SEWRPC). Ms. Herrick verified that SEWRPC would work with the City's consultant on alternative design review but does not have the available staff time needed to develop preliminary construction estimates.

The attached RA Smith National proposal for \$7,400 includes work to develop an opinion of probable costs for construction, design, and permitting costs. These costs potentially could be allocated between the City of Franklin Costs and a potential Waukesha Water Diversion Costs.

OPTIONS:

Execute the enclosed RA Smith National contract for \$7,400; or

Table.

FISCAL NOTE

There are funds available in the General Fund Contingencies that could be used for this purpose.

RECOMMENDATION

Authorize Staff to execute professional services agreement with RA Smith National for \$7,400 to develop Opinion of Probable Project Costs for Oakwood Road, pending review by City Attorney.

Engineering: GEM

A G R E E M E N T

This AGREEMENT, made and entered into this ____ day of _____, 2017, between the City of Franklin, 9229 West Loomis Road, Franklin, Wisconsin 53132 (hereinafter "CLIENT") and R.A. Smith National, Inc. (hereinafter "CONSULTANT"), whose principal place of business is 16745 W. Bluemound Road, Brookfield, WI 53005-5938.

W I T N E S S E T H

WHEREAS, the CONSULTANT is duly qualified and experienced as a municipal services CONSULTANT and has offered services for the purposes specified in this AGREEMENT; and

WHEREAS, in the judgment of CLIENT, it is necessary and advisable to obtain the services of the CONSULTANT to provide consultation with respect to W. Oakwood Road Improvements - Opinion of Probable Project Costs.

NOW, THEREFORE, in consideration of these premises and the following mutual covenants, terms, and conditions, CLIENT and CONSULTANT agree as follows:

- A. This AGREEMENT may only be amended by written instrument signed by both CLIENT and CONSULTANT.

I. BASIC SERVICES AND AGREEMENT ADMINISTRATION

- A. CONSULTANT shall provide services to CLIENT for consultation with respect to W. Oakwood Road Improvements – Opinion of Probable Project Costs, as described in CONSULTANT's proposal to CLIENT dated January 12, 2017, annexed hereto and incorporated herein as Attachment A.
- B. CONSULTANT shall serve as CLIENT's professional representative in matters to which this AGREEMENT applies. CONSULTANT may employ the services of outside consultants and subcontractors when deemed necessary by CONSULTANT to complete work under this AGREEMENT following approval by CLIENT.
- C. CONSULTANT is an independent CONSULTANT and all persons furnishing services hereunder are employees of, or independent subcontractors to, CONSULTANT and not of CLIENT. All obligations under the Federal Insurance Contribution Act (FICA), the Federal Unemployment Tax Act (FUTA), and income tax withholding are the responsibility of CONSULTANT as employer. CLIENT understands that express AGREEMENTS may exist between CONSULTANT and its employees regarding extra work, competition, and nondisclosure.

- D. During the term of this AGREEMENT and throughout the period of performance of any resultant AGREEMENT, including extensions, modifications, or additions thereto, and for a period of one (1) year from the conclusion of such activity, the parties hereto agree that neither shall solicit for employment any technical or professional employees of the other without the prior written approval of the other party.

II. FEES AND PAYMENTS

CLIENT agrees to pay CONSULTANT, for and in consideration of the performance of Basic Services further described in Attachment A, at the CONSULTANT's standard billing rates with a not-to-exceed budget of \$7,400, subject to the terms detailed below:

- A. CONSULTANT may bill CLIENT and be paid for all work satisfactorily completed hereunder on a monthly basis. CLIENT agrees to pay CONSULTANT's invoice within 30 days of invoice date for all approved work.
- B. Total price will not exceed budget of \$7,400. For services rendered, monthly invoices will include a report that clearly states the hours and type of work completed and the fee earned during the month being invoiced.
- C. In consideration of the faithful performance of this AGREEMENT, the CONSULTANT will not exceed the fee for Basic Services and expenses without written authorization from CLIENT to perform work over and above that described in the original AGREEMENT.
- D. Should CLIENT find deficiencies in work performed or reported, it will notify CONSULTANT in writing within thirty (30) days of receipt of invoice and related report and the CONSULTANT will remedy the deficiencies within thirty (30) days of receiving CLIENT's review. This subsection shall not be construed to be a limitation of any rights or remedies otherwise available to CLIENT.

III. MODIFICATION AND ADDITIONAL SERVICES

- A. CLIENT may, in writing, request changes in the Basic Services required to be performed by CONSULTANT and require a specification of incremental or decremental costs prior to change order agreement under this AGREEMENT. Upon acceptance of the request of such changes, CONSULTANT shall submit a "Change Order Request Form" to CLIENT for authorization and notice to proceed signature and return to CONSULTANT. Should any such actual changes be made, an equitable adjustment will be made to compensate CONSULTANT or reduce the fixed price, for any incremental or decremental labor or direct costs, respectively. Any claim by CONSULTANT for adjustments hereunder must be made to CLIENT in writing no later than forty-five (45) days after receipt by CONSULTANT of notice of such changes from CLIENT.

IV. ASSISTANCE AND CONTROL

- A. Glen E. Morrow, PE will coordinate the work of the CONSULTANT, and be solely responsible for communication within the CLIENT's organization as related to all issues originating under this AGREEMENT.
- B. CLIENT will timely provide CONSULTANT with all available information concerning PROJECT as deemed necessary by CONSULTANT.
- C. CONSULTANT will appoint, subject to the approval of CLIENT, CONSULTANT's Project Manager and other key providers of the Basic Services. Substitution of other staff may occur only with the consent of CLIENT.

V. TERMINATION

- A. This AGREEMENT may be terminated by CLIENT, for its convenience, for any or no reason, upon written notice to CONSULTANT. This AGREEMENT may be terminated by CONSULTANT upon thirty (30) days written notice. Upon such termination by CLIENT, CONSULTANT shall be entitled to payment of such amount as shall fairly compensate CONSULTANT for all work approved up to the date of termination, except that no amount shall be payable for any losses of revenue or profit from any source outside the scope of this AGREEMENT, including but not limited to, other actual or potential agreements for services with other parties.
- B. In the event that this AGREEMENT is terminated for any reason, CONSULTANT shall deliver to CLIENT all data, reports, summaries, correspondence, and other written, printed, or tabulated material pertaining in any way to Basic Services that CONSULTANT may have accumulated. Such material is to be delivered to CLIENT whether in completed form or in process. CLIENT shall hold CONSULTANT harmless for any work that is incomplete due to early termination.
- C. The rights and remedies of CLIENT and CONSULTANT under this section are not exclusive and are in addition to any other rights and remedies provided by law or appearing in any other article of this AGREEMENT.

VI. INSURANCE

The CONSULTANT shall, during the life of the AGREEMENT, maintain insurance coverage with an authorized insurance carrier at least equal to the minimum limits set forth below. The minimums in parenthesis were adjusted to match the CONSULTANT's limits after July 19, 2016 correspondence with the CLIENT.

A. Limit of General/Commercial Liability	(\$2,000,000)
B. Automobile Liability: Bodily Injury/Property Damage	\$1,000,000
C. Excess Liability for General Commercial or Automobile Liability	(\$5,000,000)
D. Worker's Compensation and Employers' Liability	\$500,000
E. Professional Liability	\$2,000,000

Upon the execution of this AGREEMENT, CONSULTANT shall supply CLIENT with a suitable statement certifying said protection and defining the terms of the policy issued, which shall specify that such protection shall not be cancelled without thirty (30) calendar days prior notice to CLIENT, and naming CLIENT as an additional insured for General Liability.

VII. INDEMNIFICATION AND ALLOCATION OF RISK

- A. To the fullest extent permitted by law, CONSULTANT shall indemnify and hold harmless CLIENT, CLIENT'S officers, directors, partners, and employees from and against costs, losses, and damages (including but not limited to reasonable fees and charges of engineers, architects, attorneys, and other professionals, and reasonable court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of CONSULTANT or CONSULTANT'S officers, directors, partners, employees, and consultants in the performance of CONSULTANT'S services under this AGREEMENT.
- B. To the fullest extent permitted by law, CLIENT shall indemnify and hold harmless CONSULTANT, CONSULTANT'S officers, directors, partners, employees, and consultants from and against costs, losses, and damages (including but not limited to reasonable fees and charges of engineers, architects, attorneys, and other professionals, and reasonable court or arbitration or other dispute resolution costs) caused solely by the negligent acts or omissions of CLIENT or CLIENT'S officers, directors, partners, employees, and consultants with respect to this AGREEMENT.
- C. To the fullest extent permitted by law, CONSULTANT'S total liability to CLIENT and anyone claiming by, through, or under CLIENT for any injuries, losses, damages and expenses caused in part by the negligence of CONSULTANT and in part by the negligence of CLIENT or any other negligent entity or individual, shall not exceed the percentage share that CONSULTANT'S negligence bears to the total negligence of CLIENT, CONSULTANT, and all other negligent entities and individuals.
- D. In addition to the indemnity provided under Paragraph VII.B, and to the fullest extent permitted by law, CLIENT shall indemnify and hold harmless CONSULTANT and CONSULTANT'S officers, directors, partners, employees,

and consultants from and against injuries, losses, damages and expenses (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other disputes resolution costs) caused by, arising out of, or resulting from an unexpected Hazardous Environmental Condition, provided that (i) any such injuries, losses, damages and expenses is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, and (ii) nothing in this Paragraph shall obligate CLIENT to indemnify any individual or entity from and against the consequences of that individual or entity's own negligence or willful misconduct.

VIII. TIME FOR COMPLETION

CONSULTANT shall commence work immediately having received a Notice to Proceed as of _____, 2017.

IX. DISPUTES

This AGREEMENT shall be construed under and governed by the laws of the State of Wisconsin. The venue for any actions arising under this AGREEMENT shall be the Circuit Court for Milwaukee County. The prevailing party shall be awarded its actual costs of any such litigation, including reasonable attorney fees.

X. RECORDS RETENTION

CONSULTANT shall maintain all records pertaining to this AGREEMENT during the term of this AGREEMENT and for a period of 3 years following its completion. Such records shall be made available by the CONSULTANT to CLIENT for inspection and copying upon request.

IN WITNESS WHEREOF, the parties have caused this AGREEMENT to be executed on the day and year first above written.

CITY OF FRANKLIN, WISCONSIN

BY: _____

Stephen R. Olson, Mayor

DATE: _____

R.A. Smith National, Inc.

BY: Cynthia V. DeBruine

Cynthia V. DeBruine

TITLE: Senior Water Resources Engineer

DATE: _____

BY: _____

Sandra L. Wesolowski, City Clerk

DATE: _____

BY: _____

Paul Rotzenberg, CPA, Director of Finance & Treasurer

DATE: _____

Approved As to Form:

BY: _____

Jesse A. Wesolowski, City Attorney

DATE: _____

Attachment A

January 12, 2017

Mr. Glen E. Morrow, P.E.
City Engineer/Director of Public Works
9229 West Loomis Road
Franklin, WI 53132

Re: Proposal for Professional Services
Oakwood Road Improvements - Opinion of Probable Project Costs

Dear Mr. Morrow:

Thank you for this opportunity to provide a quotation for professional services. The contents of this proposal letter spell out the Scope of Services to be provided, the Services Not Included, the proposed Completion Schedule, the Professional Fees, and the Assumptions and Conditions under which this proposal is being made.

- I. PROJECT NAME: W. Oakwood Road Improvements - Opinion of Probable Project Costs
- II. DESCRIPTION OF SERVICES TO BE PERFORMED:

It is our understanding that the City of Franklin is considering reconstruction of W. Oakwood Road between S. 60th Street and S. 76th Street at a higher elevation and with larger waterway crossings. This section of road is closed to traffic multiple times annually due to flooding from the Root River. Oakwood Road Tributary to the Root River is on the south side of the road and flows to the Root River from the west; therefore widening of the roadway is anticipated to occur to the north so the tributary channel would not be impacted.

The City contracted with R.A. Smith National, Inc. in 2016 to evaluate alternatives for replacement structures crossing the Root River that would allow for raising the roadway profile and reducing the road overtopping potential. All the alternatives evaluated included a 2-span bridge structure over the Root River and additional overflow culverts to maintain a wide floodway.

It is our understanding that the City would like to obtain an opinion of probable project costs associated with the roadway project for budget planning purposes. The project is currently in the conceptual stage, so the proposal includes pre-construction design and permitting costs. Due to projected floodplain elevation increases, it also includes a pre-construction hydraulic analysis submittal to the Wisconsin Department of Natural Resources (WDNR) and a Conditional Letter of Map Revision (CLOMR) submittal to the Federal Emergency Management Agency (FEMA), and post-construction as-built survey and analysis required for a final Letter of Map Revision (LOMR). Estimating the roadway costs will require preparing an approximate roadway profile and cross sections to calculate the potential fill required.

R.A. Smith National, Inc. (RASN) proposes to provide the following services:

- A. Prepare an opinion of probable project cost for the projected improvements to W. Oakwood Road between S. 76th Street on the west and S. 60th Street on the east which will include the following items:
1. Survey, Design, and Permitting Services
 - Survey
 - Borings

Deliver excellence, vision, and responsive service to our clients.

- Road design
 - Bridge design
 - Culverts and grading design
 - Erosion control plan
 - Hydraulic analysis of final design and submittal to WDNR
 - CLOMR preparation and submittal to FEMA
 - Permitting
2. Construction Costs
- Bridge
 - Culverts
 - Roadway
 - Engineering Services during construction (staking and inspection)
3. Post-Construction Services
- As-built survey
 - As-built hydraulic analysis and WDNR submittal
 - LOMR preparation and submittal to FEMA

- B. Deliverable will be a written document describing the opinion of probable costs for the above items and the basis for the estimate.

III. COMPLETION SCHEDULE:

We anticipate completion of the cost opinion within 4 weeks of receipt of the signed agreement and notice to proceed

IV. PROFESSIONAL FEES:

The above-described services will be provided on a time and expense basis for a not-to-exceed fee of \$7,400. We will bill you monthly with an itemized statement for the time and expenses incurred on the project.

V. ASSUMPTIONS AND CONDITIONS:

Our estimated fees are based on the following set of assumptions and conditions. Deviations from these may result in additional fees:

- A. The terms and conditions set forth herein are valid for 90 days from the date of this proposal and are conditioned upon our completion of all services within 12 months of this date.
- B. The hourly rates shown on the Professional Fees Rate Schedule are subject to change on an annual basis.
- C. The City of Franklin will determine the bridge and culvert alternative to be included in the estimate from the alternatives provided to the City by RASN in the Memo dated December 12, 2016.
- D. The opinion of probable project costs will not include services that will be provided by the City including land acquisition, public notices, property owner notification, floodplain rezoning, and preparing and obtaining flood easements.

City of Franklin
Page 3 / January 12, 2017

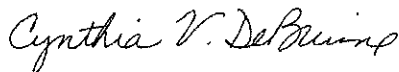
- E. Evaluation assumes no sanitary sewer, water main, storm sewer, lighting, traffic signals, or dry utility relocations.
- F. Roadway can be built using conventional marsh excavation and filling to the level needed. Does not include geo-piers or similar structure systems.
- G. Existing aerial photo imagery will be used to get quantities for items such as removals, driveways, clearing and grubbing, restoration, signs, and pavement marking.

VI. SERVICES NOT INCLUDED:

Additional or extended services beyond those specifically described in the Scope of Services are not included as part of this project and, therefore, are not reflected in our estimate of fees. If requested, these services will be performed on an hourly, time-and-material basis according to the attached Professional Fees Rate Schedule, unless other arrangements are agreed upon.

If there are any questions please contact us. We look forward to a very successful project!

Sincerely,
R.A. Smith National, Inc.



Cynthia V. DeBruine, P.E., CFM
Senior Water Resources Engineer

Enclosure

H:\160329\Contract\Opinion of Probable Cost Proposal Jan 2017\EP 170112 Oakwood Rd-Opinion of Probable Cost Proposal.docx

**PROFESSIONAL FEES RATE SCHEDULE
GENERAL 2017 RATES****ENGINEERING SERVICES****2017 PER HOUR**

Principal-In-Charge	\$214
Division Director	\$186
Senior Project Consultant	\$170
Senior Project Manager	\$152
Project Manager	\$140
Senior Project Engineer	\$140
Project Engineer	\$133
Civil Engineer	\$ 93 - \$116
Engineering Technician	\$ 68 - \$119
Planner	\$ 99 - \$140
Landscape Architect	\$128 - \$148
Landscape Technician	\$105
Irrigation Designer	\$136
Ecologist	\$108 - \$129
Senior Structural Engineer	\$125 - \$175
Structural Engineer	\$100 - \$130
Structural CAD Technician	\$ 80 - \$ 95

SURVEYING SERVICES

Survey Director	\$149
Senior Project Manager	\$139
Project Manager	\$124
2-Member Field Crew GPS/Robotics	\$186
Field Person GPS/Robotics	\$129
GPS Equipment	\$ 26
Project Surveyor	\$108
Survey Technician	\$ 77 - \$103
3D Laser Scan Project Manager	\$124
3D Laser Scan Technician	\$ 93
2-Member Field Crew w/Scanner	\$278
3-Member Field Crew w/Scanner	\$360

CONSTRUCTION SERVICES

Construction Services Manager	\$150
Construction Technician	\$ 82 - \$131

GIS & VISUALIZATION SERVICES

GIS Project Manager	\$125 - \$142
GIS Technician	\$ 78 - \$111
Visualization Services Manager	\$120
Visualization Technician	\$102 - \$113

IT & ADMINISTRATIVE SERVICES

Computer Services	\$163
Grants Specialist	\$111
Project Technician	\$ 77
Litigation/Expert Witness	\$247 - \$268

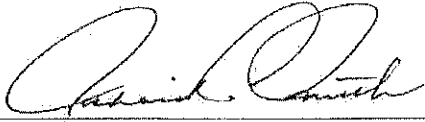
Deliver excellence, vision, and responsive service to our clients.

**SIGNATURE AUTHORITY FORM
Designated Signatories****Designated Signatory Section**

R.A. Smith National, Inc. hereby authorizes Cynthia M. DeBruine, P.E., CFM as a designated signatory on standard contracts related to engineering services with the City of Franklin. This authorization exists while Cynthia M. DeBruine remains employed with R.A. Smith National, Inc. as a Senior Water Resources Engineer.

Authorized Signatory Section

By signing this form, I acknowledge and authorize the above, designated signatory, to sign standard contracts on behalf of R.A. Smith National, Inc.

Signature: Name: Richard A. Smith, M.S., P.E.Title: PresidentDate: September 9, 2016

APPROVAL <i>Slw</i> <i>Par</i>	REQUEST FOR COUNCIL ACTION	MEETING DATE Jan 17, 2017
	City of Franklin Audit Agreement between Baker Tilly LLP and the City of Franklin for audit of the 2016 annual financial statements	ITEM NUMBER <i>G.14.</i>

Each year the City of Franklin engages an outside accounting firm to perform an audit of the annual financial statements.

There are several deliverables from this engagement including an auditor's opinion on the Comprehensive Annual Financial Report. This report is required to be posted to the Municipal Securities Rulemaking Board (MSRB) to comply with agreements connected to Debt Offerings of the City in the public debt markets. The auditors will report the findings of their work to the Finance Committee and the Common Council upon completion. They will provide several communications direct to the Common Council on any findings of material deficiencies in internal controls which aid in preparation of financial statements

To qualify for General Transportation Aids, the City is required to file an annual report reviewed by our auditors with the Dept of Revenue by May 15. This audit will include the required communication from our auditors for that annual report.

In the summer of 2016, a Request for Proposal was circulated to a group of qualified auditing firms. In September 2016, Baker Tilly was awarded the audit by Common Council Action with the recommendation of the Finance Committee.

The Baker Tilly LLP engagement letter for 2016 is a contractual agreement. The City Attorney is reviewing the 2016 agreement.

The amount of the estimated audit fees for the 2016 year has been included in 2017 budget.

The Director of Finance is recommending approval of the agreement.

COUNCIL ACTION REQUESTED

Motion to direct the Mayor, City Clerk and Director of Finance & Treasurer to execute the Audit Agreement between Baker Tilly LLP and the City of Franklin for an audit of the 2016 annual financial statements subject to technical corrections by the City Attorney.



Baker Tilly Virchow Krause, LLP
777 E Wisconsin Ave, 32nd Floor
Milwaukee, WI 53202-5313
tel 414 777 5500
fax 414 777 5555
bakertilly.com

September 7, 2016

Mr Paul Rotzenberg
City of Franklin
9229 W Loomis Road
Franklin, WI 53132

Dear Mr Rotzenberg:

Thank you for using Baker Tilly Virchow Krause, LLP ("Baker Tilly" or "we" or "our") as your auditors.

The purpose of this letter (the "Engagement Letter") is to confirm our understanding of the terms and objectives of our engagement and the nature of the services we will provide as independent accountants of the City of Franklin ("you" or "your").

Services and Related Report

We will audit the basic financial statements of the City of Franklin as of and for the year ended December 31, 2016, and the related notes to the financial statements. Upon completion of our audit, we will provide the City of Franklin with our audit report on the financial statements and supplemental information referred to below. If, for any reasons caused by or relating to the affairs or management of the City of Franklin, we are unable to complete the audit or are unable to or have not formed an opinion, or if we determine in our professional judgment the circumstances necessitate, we may withdraw and decline to issue a report as a result of this engagement.

In order to perform the professional services outlined in this Engagement Letter, Baker Tilly requires access to information subject to Title II of the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"). Federal law requires Baker Tilly to execute a Business Associate Agreement ("BA Agreement") prior to being granted this information. For your convenience, we have attached our firm standard BA Agreement for your review and signature as Addendum C. Please execute and return a copy with this Engagement Letter, keeping the original BA Agreement on file with your HIPAA compliance records.

The following supplementary information accompanying the financial statements will also be subjected to the auditing procedures applied in our audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America, and our auditor's report will provide an opinion on it in relation to the financial statements as a whole.

Combining and Individual Fund Financial Statements
Budgetary Comparison Schedules
Schedules of Capital Assets Used in Governmental Activities

Mr Paul Rotzenberg
City of Franklin

September 7, 2016
Page 2

Accounting standards generally accepted in the United States of America provide for certain required supplementary information ("RSI"), such as management's discussion and analysis, to supplement the City of Franklin's basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the City of Franklin's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's response to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We will not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. The following RSI is required by generally accepted accounting principles and will be subjected to certain limited procedures, but will not be audited:

Management's Discussion and Analysis
OPEB - related schedules
Pension - related schedules

We will read the following other information accompanying the financial statements to identify any material inconsistencies with the audited financial statements; however, the other information will not be subjected to the auditing procedures applied in our audit of the financial statements and our auditor's report will not provide an opinion or any assurance on that other information:

Introductory Section
Statistical Section

The Tax 16 accompanying the financial statements will also be subject to the auditing procedures applied in our audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America, and our auditor's report will provide an opinion on it in relation to the financial statements as a whole.

Our Responsibilities and Limitations

The objective of a financial statement audit is the expression of an opinion on the financial statements. We will be responsible for performing that audit in accordance with auditing standards generally accepted in the United States of America ("GAAS"). These standards require that we plan and perform our audit to obtain reasonable, rather than absolute assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud. The audit will include examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit does not relieve management and the audit committee or equivalent group charged with governance of their responsibilities.

Mr Paul Rotzenberg
City of Franklin

September 7, 2016
Page 3

The audit will include obtaining an understanding of the City of Franklin and its environment, including internal controls, sufficient to assess the risks of material misstatement of the financial statements and to determine the nature, timing and extent of further audit procedures. An audit is not designed to provide assurance on internal controls or to identify deficiencies in internal control. However, during the audit, we will communicate to management and the audit committee or equivalent group charged with governance internal control matters that are required to be communicated under professional standards.

We will design our audit to obtain reasonable, but not absolute, assurance of detecting errors or fraud that would have a material effect on the financial statements as well as other illegal acts having a direct and material effect on financial statement amounts. An audit is not designed to detect error or fraud that is immaterial to the financial statements. Our audit will not include a detailed audit of transactions, such as would be necessary to disclose errors or fraud that did not cause a material misstatement of the financial statements. It is important to recognize that there are inherent limitations in the auditing process. Audits are based on the concept of selective testing of the data underlying the financial statements, which involves judgment regarding the areas to be tested and the nature, timing, extent and results of the tests to be performed. Our audit is not a guarantee of the accuracy of the financial statements and, therefore, is subject to the limitation that material errors or fraud or other illegal acts having a direct and material financial statement impact, if they exist, may not be detected. Because of the characteristics of fraud, particularly those involving concealment through collusion, falsified documentation and management's ability to override controls, an audit designed and executed in accordance with GAAS may not detect a material fraud. Further, while effective internal control reduces the likelihood that errors, fraud or other illegal acts will occur and remain undetected, it does not eliminate that possibility. For these reasons, we cannot ensure that errors, fraud or other illegal acts, if present, will be detected. However, we will communicate to you, as appropriate, any such matters that we identify during our audit.

We are also responsible for determining that the audit committee or equivalent group charged with governance is informed about certain other matters related to the conduct of the audit, including (i) our responsibility under GAAS, (ii) an overview of the planned scope and timing of the audit, and (iii) significant findings from the audit, which include (a) our views about the qualitative aspects of your significant accounting practices, accounting estimates, and financial statement disclosures; (b) difficulties encountered in performing the audit; (c) uncorrected misstatements and material corrected misstatements that were brought to the attention of management as a result of auditing procedures; and (d) other significant and relevant findings or issues (e.g., any disagreements with management about matters that could be significant to your financial statements or our report thereon, consultations with other independent accountants, issues discussed prior to our retention as independent auditors, fraud and illegal acts, and all significant deficiencies and material weaknesses identified during the audit). Lastly, we are responsible for ensuring that the audit committee or equivalent group charged with governance receives copies of certain written communications between us and management including written communications on accounting, auditing, internal controls or operational matters and representations that we are requesting from management.

The audit will not be planned or conducted in contemplation of reliance of any specific third party or with respect to any specific transaction. Therefore, items of possible interest to a third party will not be specifically addressed and matters may exist that would be addressed differently by a third party, possibly in connection with a specific transaction.

Mr Paul Rotzenberg
City of Franklin

September 7, 2016
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Management's Responsibilities

The City of Franklin's management is responsible for the financial statements referred to above. In this regard, management is responsible for establishing policies and procedures that pertain to the maintenance of adequate accounting records and effective internal controls over financial reporting, the selection and application of accounting principles, the authorization of receipts and disbursements, the safeguarding of assets, the proper recording of transactions in the accounting records, and for reporting financial information in conformity with accounting principles generally accepted in the United States of America ("GAAP").

Management is also responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us in the management representation letter (i) about all known or suspected fraud affecting the City of Franklin involving: (a) management, (b) employees who have significant roles in internal control over financial reporting, and (c) others where the fraud or illegal acts could have a material effect on the financial statements; and (ii) of its knowledge of any allegations of fraud or suspected fraud affecting the City of Franklin received in communications from employees, former employees, analysts, grantors, regulators, or others.

Management is responsible for (i) adjusting the basic financial statements to correct material misstatements and for affirming to us in a management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period under audit are immaterial, both individually and in the aggregate, to the basic financial statements taken as a whole, and (ii) notifying us of all material weaknesses, including other significant deficiencies, in the design or operation of your internal control over financial reporting that are reasonably likely to adversely affect your ability to record, process, summarize and report external financial data reliably in accordance with GAAP. Management is also responsible for identifying and ensuring that the City of Franklin complies with the laws and regulations applicable to its activities.

As part of management's responsibility for the financial statements and the effectiveness of its system of internal control over financial reporting, management is responsible for making available to us, on a timely basis, all of your original accounting records and related information and for the completeness and accuracy of that information and your personnel to whom we may direct inquiries. As required by GAAS, we will make specific inquiries of management and others about the representations embodied in the financial statements and the effectiveness of internal control over financial reporting. GAAS also requires that we obtain written representations covering audited financial statements from certain members of management. The results of our audit tests, the responses to our inquiries, and the written representations, comprise the evidential matter we intend to rely upon in forming our opinion on the financial statements.

Baker Tilly is not a municipal advisor as defined in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act or under Section 15B of the Securities Exchange Act of 1934 (the "Act"). Baker Tilly is not recommending an action to the City of Franklin; is not acting as an advisor to you and does not owe a fiduciary duty pursuant to Section 15B of the Act to you with respect to the information and material contained in the deliverables issued under this engagement. You should discuss any information and material contained in the deliverables with any and all internal and external advisors and experts that you deem appropriate before acting on this information or material.

Mr Paul Rotzenberg
City of Franklin

September 7, 2016
Page 5

Non-Attest Services

Prior to or as part of our audit engagement, it may be necessary for us to perform certain non-attest services. For purposes of this letter, non-attest services include services that *Government Auditing Standards* refers to as non-audit services.

Non-attest services that we will be providing are as follows:

- > Financial statement preparations
- > Adjusting journal entries
- > Compiled regulatory reports

None of these non-attest services constitute an audit under generally accepted auditing standards including *Government Auditing Standards*.

We will not perform any management functions or make management decisions on your behalf with respect to any non-attest services we provide.

In connection with our performance of any non-attest services, you agree that you will:

- > Continue to make all management decisions and perform all management functions, including approving all journal entries and general ledger classifications when they are submitted to you.
- > Designate an employee with suitable skill, knowledge, and/or experience, preferably within senior management, to oversee the services we perform.
- > Evaluate the adequacy and results of the non-attest services we perform.
- > Accept responsibility for the results of our non-attest services.
- > Establish and maintain internal controls, including monitoring ongoing activities related to the non-attest function.

On a periodic basis, as needed, we will meet with you to discuss your accounting records and the management implications of your financial statements. We will notify you, in writing, of any matters that we believe you should be aware of and will meet with you upon request.

In addition to the audit services discussed above, we will compile the Public Service Commission Annual Report. See Addendum B attached, which is an integral part of this Engagement Letter.

Mr Paul Rotzenberg
City of Franklin

September 7, 2016
Page 6

Other Documents

GAAS requires that we read any annual report that contains our audit report. The purpose of this procedure is to consider whether other information in the annual report, including the manner of its presentation, is materially inconsistent with information appearing in the financial statements. We assume no obligation to perform procedures to corroborate such other information as part of our audit.

If you intend to reproduce or publish the financial statements, and make reference to our firm name in connection therewith, you agree to publish the financial statements in their entirety. In addition, you agree to provide us, for our approval and consent, proofs before printing and final materials before distribution.

With regard to the electronic dissemination of audited financial statements, including financial statements published electronically on your Internet website, you understand that electronic sites are a means to distribute information and, therefore, we are not required to read the information contained in these sites or to consider the consistency of other information in the electronic site with the original document.

The documentation for this engagement, including the workpapers, is the property of Baker Tilly and constitutes confidential information. We may have a responsibility to retain the documentation for a period of time sufficient to satisfy any applicable legal or regulatory requirements for records retention. If we are required by law, regulation, or professional standards to make certain documentation available to regulators, the City of Franklin hereby authorizes us to do so.

Legal Terms

In no event shall either party be liable for any punitive damages arising out of or related to this Engagement Letter, even if the other party has been advised of the possibility of such damages.

Resolution of Disagreements

In the unlikely event that differences concerning services or fees should arise that are not resolved by mutual agreement, both parties agree to attempt in good faith to settle the dispute by mediation administered by the American Arbitration Association ("AAA") under its mediation rules for professional accounting and related services disputes before resorting to litigation or any other dispute-resolution procedure. Each party shall bear their own expenses from mediation.

Mr Paul Rotzenberg
City of Franklin

September 7, 2016
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If mediation does not settle the dispute or claim, then the parties agree that the dispute or claim shall be settled by binding arbitration. The arbitration proceeding shall take place in the city in which the Baker Tilly office providing the relevant services is located, unless the parties mutually agree to a different location. The proceeding shall be governed by the provisions of the Federal Arbitration Act (FAA) and will proceed in accordance with the then current Arbitration Rules for Professional Accounting and Related Disputes of the AAA, except that no pre-hearing discovery shall be permitted unless specifically authorized by the arbitrator. The arbitrator will be selected from AAA, Judicial Arbitration & Mediation Services (JAMS), the Center for Public Resources or any other internationally or nationally-recognized organization mutually agreed upon by the parties. Potential arbitrator names will be exchanged within fifteen (15) days of the parties' agreement to settle the dispute or claim by binding arbitration, and arbitration will thereafter proceed expeditiously. The arbitration will be conducted before a single arbitrator, experienced in accounting and auditing matters. The arbitrator shall have no authority to award non-monetary or equitable relief and will not have the right to award punitive damages. The award of the arbitration shall be in writing and shall be accompanied by a well-reasoned opinion. The award issued by the arbitrator may be confirmed in a judgment by any federal or state court of competent jurisdiction. Each party shall be responsible for their own costs associated with the arbitration, except that the costs of the arbitrator shall be equally divided by the parties. The arbitration proceeding and all information disclosed during the arbitration shall be maintained as confidential, except as may be required for disclosure to professional or regulatory bodies or in a related confidential arbitration. In no event shall a demand for arbitration be made after the date when institution of legal or equitable proceedings based on such claim would be barred under the applicable statute of limitations.

Our services shall be evaluated solely on our substantial conformance with the terms expressly set forth herein, including all applicable professional standards. Any claim of nonconformance must be clearly and convincingly shown.

Release

Because of the importance of the information that you provide to Baker Tilly with respect to Baker Tilly's ability to perform the services, you hereby release Baker Tilly and its present and former partners, principals, agents and employees from any liability, damages, fees, expenses and costs, including attorney's fees, relating to the services, that arise from or relate to any information, including representations by management, provided by you, City of Franklin personnel or agents, that is not complete, accurate or current.

Each party recognizes and agrees that the warranty disclaimers and liability and remedy limitations in this Engagement Letter are material bargained for bases of this Engagement Letter and that they have been taken into account and reflected in determining the consideration to be given by each party under this Engagement Letter and in the decision by each party to enter into this Engagement Letter.

The terms of this section shall apply regardless of the nature of any claim asserted (including, but not limited to, contract, tort or any form of negligence, whether of you, Baker Tilly or others), but these terms shall not apply to the extent finally determined to be contrary to the applicable law or regulation. These terms shall also continue to apply after any termination of this Engagement Letter.

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Timing and Fees

While we have completed certain client acceptance procedures, we have not yet completed our pre-acceptance inquiries of CliftonLarsonAllen, LLP. These inquiries are required by GAAS. Accordingly, our final acceptance of this engagement remains subject to your authorizing CliftonLarsonAllen, LLP to respond fully to our inquiries regarding matters that will assist us in determining whether to accept this engagement, and our evaluation of the results of those inquiries. We will inform you promptly in the event we determine we cannot accept this engagement.

You agree to authorize CliftonLarsonAllen, LLP to allow a review of their audit documentation and respond to additional inquiries we consider relevant to our planning and performing of this engagement.

Any fees charged by CliftonLarsonAllen, LLP in connection with the preceding paragraphs are your responsibility.

Completion of our work is subject to, among other things, (i) appropriate cooperation from the City of Franklin's personnel, including timely preparation of necessary schedules, (ii) timely responses to our inquiries, and (iii) timely communication of all significant accounting and financial reporting matters. When and if for any reason the City of Franklin is unable to provide such schedules, information, and assistance, Baker Tilly and you will mutually revise the fee to reflect additional services, if any, required of us to complete the audit. Delays in the issuance of our audit report beyond the date that was originally contemplated may require us to perform additional auditing procedures which will likely result in additional fees.

Revisions to the scope of our work will be set forth in the form of an "Amendment to Existing Engagement Letter." In addition, if we discover compliance issues that require us to perform additional procedures and/or provide assistance with these matters, fees at our standard hourly rates apply.

	2016
City	\$ 23,000
Water	4,000
Sewer	4,000
TIF #3	1,000
TIF #4	1,000
New TID	1,000
Form C	2,000
PSC Report	<u>2,000</u>
Total	<u>\$ 38,000</u>
DHFS Audit, if required	<u>\$ 2,000</u>

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The fees above are fixed and not-to-exceed amounts. They are based on the known facts and circumstances as noted in our proposal dated July 6, 2016. Should circumstances change significantly during the course of this engagement, we will discuss with you the need for any revised audit fees. Our fees do include routine questions throughout the year fielded by Baker Tilly personnel. Invoices for these fees will be rendered each month as work progresses and are payable on presentation. A charge of 1.5% per month shall be imposed on accounts not paid within thirty (30) days of receipt of our statement for services provided. In accordance with our firm policies, work may be suspended if your account becomes thirty (30) days or more overdue and will not be resumed until your account is paid in full. If we elect to terminate our services for nonpayment, our engagement will be deemed to have been completed upon written notice of termination, even if we have not completed our report. You will be obligated to compensate us for all time expended and to reimburse us for all out-of-pocket expenditures through the date of termination.

We may use temporary contract staff to perform certain tasks on your engagement and will bill for that time at the rate that corresponds to Baker Tilly staff providing a similar level of service. Upon request, we will be happy to provide details on training, supervision, and billing arrangements we use in connection with these professionals.

Additionally, we may from time to time, and depending on the circumstances, use service providers (e.g., to act as a specialist or audit an element of the financial statements) in serving your account. We may share confidential information about you with these service providers, but are committed to maintaining the confidentiality and security of your information.

Any additional services that may be requested and we agree to provide will be the subject of a separate engagement letter.

We may be required to disclose confidential information to federal, state and international regulatory bodies or a court in criminal or other civil litigation. In the event that we receive a request from a third party (including a subpoena, summons or discovery demand in litigation) calling for the production of information, we will promptly notify the City of Franklin, unless otherwise prohibited. In the event we are requested by the City of Franklin or required by government regulation, subpoena or other legal process to produce our engagement working papers or our personnel as witnesses with respect to services rendered to the City of Franklin, so long as we are not a party to the proceeding in which the information is sought, we may seek reimbursement for our professional time and expenses, as well as the fees and legal expenses, incurred in responding to such a request.

Our fees are based on known circumstances at the time of this Engagement Letter. Should circumstances change significantly during the course of this engagement, we will discuss with you the need for any revised audit fees. This can result from changes at the City of Franklin, such as the turnover of key accounting staff, the addition of new funds or significant federal or state programs or changes that affect the amount of audit effort from external sources, such as new accounting and auditing standards that become effective that increase the scope of our audit procedures. This Engagement Letter currently includes all auditing standards through Statement on Auditing Standards ("SAS") No. 129 – *Letters for Underwriters and Certain Other Requesting Parties*, all accounting standards through Governmental Accounting Standards Board ("GASB") No. 82 – *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73* and the current federal and state single audit guidance.

We would expect to continue to perform our services under the arrangements discussed above from year to year, unless for some reason you or we find that some change is necessary. We will, of course be happy to provide the City of Franklin with any other services you may find necessary or desirable.

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Other Matters

Neither this Engagement Letter, any claim, nor any rights or licenses granted hereunder may be assigned, delegated, or subcontracted by either party without the written consent of the other party. Either party may assign and transfer this Engagement Letter to any successor that acquires all or substantially all of the business or assets of such party by way of merger, consolidation, other business reorganization, or the sale of interest or assets, provided that the party notifies the other party in writing of such assignment and the successor agrees in writing to be bound by the terms and conditions of this Engagement Letter.

Baker Tilly Virchow Krause, LLP represents as follows: Baker Tilly Virchow Krause, LLP is a member of Baker Tilly International Limited. Each member firm of Baker Tilly International Limited is a separate and independent legal entity. Baker Tilly International Limited and its other members are not responsible or liable for any acts or omissions of Baker Tilly Virchow Krause, LLP. Baker Tilly Virchow Krause, LLP and its subsidiaries are not responsible for or liable for any acts or omissions of any other member of Baker Tilly International Limited. Baker Tilly International Limited does not render any professional services and does not have an ownership or partnership interest in Baker Tilly Virchow Krause, LLP.

Baker Tilly Virchow Krause, LLP further represents: Baker Tilly International Limited is an English Company. Neither Baker Tilly International Limited nor any other member firm has a right to exercise management control over any other member firm. Baker Tilly Virchow Krause, LLP is not Baker Tilly International Limited's agent and does not have authority to bind Baker Tilly International Limited or act on Baker Tilly International Limited's behalf.

This Engagement Letter constitutes the entire agreement between the City of Franklin and Baker Tilly regarding the services described in this Engagement Letter and supersedes and incorporates all prior or contemporaneous representations, understandings or agreements, and may not be modified or amended except by an agreement in writing signed between the parties hereto.

The provisions of this Engagement Letter, which expressly or by implication are intended to survive its termination or expiration, will survive and continue to bind both parties. If any provision of this Engagement Letter is declared or found to be illegal, unenforceable or void, then both parties shall be relieved of all obligations arising under such provision, but if the remainder of this Engagement Letter shall not be affected by such declaration or finding and is capable of substantial performance, then each provision not so affected shall be enforced to the extent permitted by law or applicable professional standards.

If because of a change in the City of Franklin's status or due to any other reason, any provision in this Engagement Letter would be prohibited by, or would impair our independence under laws, regulations or published interpretations by governmental bodies, commissions or other regulatory agencies, such provision shall, to that extent, be of no further force and effect and this agreement shall consist of the remaining portions.

This agreement shall be governed by and construed in accordance with the laws of the state of Wisconsin, without giving effect to the provisions relating to conflict of laws.

We appreciate the opportunity to be of service to you.

Mr Paul Rotzenberg
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If there are any questions regarding the Engagement Letter, please contact John Knepel, the engagement partner on this engagement who is responsible for the overall supervision and review of the engagement and for determining that the engagement has been completed in accordance with professional standards. John Knepel is available at 414 777 5359, or at john.knepel@bakertilly.com.

Sincerely,

BAKER TILLY VIRCHOW KRAUSE, LLP

Baker Tilly Virchow Krause, LLP

Enclosures

The services and terms as set forth in the Engagement Letter are agreed to by:

Official's Name

Official's Signature

Title

Date

ADDENDUM B

We will perform the following services:

1. We will compile, from information you provide, the Public Service Commission Annual Report, including the balance sheets of the Franklin Municipal Water Utility, an enterprise fund of the City of Franklin, as of December 31, 2016 and 2015, and the related statements of income and retained earnings for the years then ended and the supplemental schedules as of and for the year ended December 31, 2016. Upon completion of the Public Service Commission Annual Report, we will provide you with our accountants' compilation report. If for any reason caused by or relating to affairs or management of the City of Franklin, we are unable to complete the compilation or if we determine in our professional judgment the circumstances necessitate, we may withdraw and decline to submit the Public Service Commission Annual Report to you as a result of this engagement.

Our report on the Public Service Commission Annual Report of the City of Franklin is presently expected to read as follows:

Management is responsible for the balance sheets of the Franklin Municipal Water Utility, an enterprise fund of the City of Franklin, as of December 31, 2016 and 2015, and the related statements of income and retained earnings for the years then ended and the supplemental schedules as of and for the year ended December 31, 2016 included in the accompany prescribed form. We have performed a compilation engagement in accordance with *Statements on Standards of Accounting and Review Services* promulgated by the Accounting and Review Services Committee of the American Institute of Certified Public Accountants. We did not audit or review the financial statements included in the accompanying prescribed form, nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on these financial statements included in the prescribed form.

These financial statements included in the accompanying prescribed form are presented in accordance with the requirements of the Public Service Commission of Wisconsin, and are not intended to be a presentation in accordance with accounting principles generally accepted in the United States of America.

This report is intended solely for the information and use of the Public Service Commission of Wisconsin and is not intended to be and should not be used by anyone other than this specified party.

Our Responsibilities and Limitations

We will be responsible for performing the compilation in accordance with *Statements on Standards for Accounting and Review Services* established by the American Institute of Certified Public Accountants. The objective of a compilation is to assist management in presenting financial information in the form of financial statements. We will utilize information that is the representation of management without undertaking to obtain or provide any assurance that there are no material modifications that should be made to the financial statements in order for the statements to be in conformity with GAAP.

Our engagement cannot be relied upon to disclose errors, fraud, or other illegal acts that may exist and, because of the limited nature of our work, detection is highly unlikely. However, we will inform the appropriate level of management of any material errors, and of any evidence that fraud may have occurred. In addition, we will report to you any evidence or information that comes to our attention during the performance of our compilation procedures regarding illegal acts that may have occurred, unless they are clearly inconsequential. We have no responsibility to identify and communicate deficiencies in your internal control as part of this Engagement Letter.

Management's Responsibilities

The City of Franklin's management is responsible for the financial statements referred to above. In this regard, management is responsible for (i) the preparation and fair presentation of the financial statements included in the form prescribed by the Public Service Commission of Wisconsin, (ii) designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the financial statements, (iii) preventing and detecting fraud, (iv) identifying and ensuring that you comply with the laws and regulations applicable to its activities, and (v) making all financial records and related information available to us. Management also is responsible for identifying and ensuring that you comply with the laws and regulations applicable to its activities.

Management is responsible for providing us with the information necessary for the compilation of the financial statements and the completeness and the accuracy of that information and for making your personnel available to whom we may direct inquiries regarding the compilation. We may make specific inquiries of management and others about the representations embodied in the financial statements.

ADDENDUM D
BUSINESS ASSOCIATE AGREEMENT
BETWEEN CITY OF FRANKLIN
and
BAKER TILLY VIRCHOW KRAUSE, LLP

THIS BUSINESS ASSOCIATE AGREEMENT (BA Agreement) replaces previous business associate agreements between Baker Tilly Virchow Krause, LLP (Business Associate) and City of Franklin (Covered Entity) (each a "Party" and collectively the "Parties") and is effective on September 7, 2016 ("Effective Date").

1. PREAMBLE

Covered Entity and Business Associate enter into this BA Agreement to comply with the requirements of: (i) the implementing regulations at 45 C.F.R. Parts 160, 162 and 164 for the Administrative Simplification provisions of Title II, Subtitle F of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) (i.e., the HIPAA Privacy, Security, Electronic Transaction, Breach Notification and Enforcement Rules the (Implementing Regulations)), (ii) the requirements of the Health Information Technology for Economic and Clinical Health Act, as incorporated in the American Recovery and Reinvestment Act of 2009 the (HITECH Act) that are applicable to business associates and (iii) the requirements of the final modifications to the HIPAA Privacy, Security, Enforcement and Breach Notification Rules as issued on January 25, 2013, and effective March 26, 2013, (75 Fed. Reg. 5566 (Jan. 25, 2013)) the (Final Regulations). The Implementing Regulations, the HITECH Act and the Final Regulations are collectively referred to in this BA Agreement as the "HIPAA Requirements".

Covered Entity and Business Associate agree to incorporate into this BA Agreement any regulations issued by the U.S. Department of Health and Human Services (DHHS) with respect to the HIPAA Requirements that relate to the obligations of business associates and that are required to be (or should be) reflected in a business associate agreement. Business Associate recognizes and agrees that it is obligated by law to meet the applicable provisions of the HIPAA Requirements and that it has direct liability for any violations of the HIPAA Requirements.

2. DEFINITIONS

(a) "Breach" shall mean, as defined in 45 C.F.R. § 164.402, the acquisition, access, use or disclosure of Unsecured Protected Health Information in a manner not permitted by the HIPAA Requirements that compromises the security or privacy of that Protected Health Information.

(b) "Business Associate Subcontractor" shall mean, as defined in 45 C.F.R. § 160.103, any entity (including an agent) that creates, receives, maintains or transmits Protected Health Information on behalf of Business Associate.

(c) "Electronic PHI" shall mean, as defined in 45 C.F.R. § 160.103, Protected Health Information that is transmitted or maintained in any Electronic Media.

(d) "Limited Data Set" shall mean, as defined in 45 C.F.R. § 164.514(e), Protected Health Information that excludes the following direct identifiers of the individual or of relatives, employers or household members of the individual:

- (i) Names;
- (ii) Postal address information, other than town or city, State and zip code;
- (iii) Telephone numbers;
- (iv) Fax numbers;
- (v) Electronic mail addresses;
- (vi) Social security numbers;

- (vii) Medical record numbers;
- (viii) Health plan beneficiary numbers;
- (ix) Account numbers;
- (x) Certificate/license numbers;
- (xi) Vehicle identifiers and serial numbers, including license plate numbers;
- (xii) Device identifiers and serial numbers;
- (xiii) Web Universal Resource Locators (URLs);
- (xiv) Internet Protocol (IP) address numbers;
- (xv) Biometric identifiers, including finger and voice prints; and
- (xvi) Full face photographic images and any comparable images.

(e) "Protected Health Information" or "PHI" shall mean, as defined in 45 C.F.R. § 160.103, information created or received by a Health Care Provider, Health Plan, employer or Health Care Clearinghouse, that (i) relates to the past, present or future physical or mental health or condition of an individual, provision of health care to the individual or the past, present or future payment for provision of health care to the individual, (ii) identifies the individual, or with respect to which there is a reasonable basis to believe the information can be used to identify the individual and (iii) is transmitted or maintained in an electronic medium, or in any other form or medium. The use of the term "Protected Health Information" or "PHI" in this BA Agreement shall mean both Electronic PHI and non-Electronic PHI, unless another meaning is clearly specified.

(f) "Security Incident" shall mean, as defined in 45 C.F.R. § 164.304, the attempted or successful unauthorized access, use, disclosure, modification or destruction of information or interference with system operations in an information system.

(g) "Unsecured Protected Health Information" shall mean, as defined in 45 C.F.R. § 164.402, Protected Health Information that is not rendered unusable, unreadable or indecipherable to unauthorized persons through the use of a technology or methodology specified by DHHS.

(h) All other capitalized terms used in this BA Agreement shall have the meanings set forth in the applicable definitions under the HIPAA Requirements.

3. GENERAL TERMS

(a) In the event of an inconsistency between the provisions of this BA Agreement and a mandatory term of the HIPAA Requirements (as these terms may be expressly amended from time to time by the DHHS or as a result of interpretations by DHHS, a court or another regulatory agency with authority over the Parties), the interpretation of DHHS, such court or regulatory agency shall prevail. In the event of a conflict among the interpretations of these entities, the conflict shall be resolved in accordance with rules of precedence.

(b) Where provisions of this BA Agreement are different from those mandated by the HIPAA Requirements, but are nonetheless permitted by the HIPAA Requirements, the provisions of this BA Agreement shall control.

(c) Except as expressly provided in the HIPAA Requirements or this BA Agreement, this BA Agreement does not create any rights in third parties.

4. SPECIFIC REQUIREMENTS

(a) Flow-Down of Obligations to Business Associate Subcontractors. Business Associate agrees that as required by the HIPAA Requirements, Business Associate will enter into a written agreement with all Business Associate Subcontractors that: (i) requires them to comply with the Privacy and Security Rule provisions of this BA Agreement in the same manner as required of Business Associate and (ii) notifies such Business Associate Subcontractors that they will incur liability under the HIPAA Requirements for non-compliance with such provisions. Accordingly, Business Associate shall ensure that all Business Associate Subcontractors agree in writing to the same privacy and security restrictions, conditions and requirements that apply to Business Associate with respect to PHI.

(b) Privacy of Protected Health Information

(i) Permitted Uses and Disclosures of PHI. Business Associate agrees to create, receive, use, disclose, maintain or transmit PHI only in a manner that is consistent with this BA Agreement or the HIPAA Requirements and only in connection with providing the services to Covered Entity identified in the Engagement Letter and this BA Agreement. Accordingly, in providing services to or for the Covered Entity, Business Associate, for example, will be permitted to use and disclose PHI for "Treatment, Payment, and Health Care Operations," as those terms are defined in the HIPAA Requirements. Business Associate further agrees that to the extent it is carrying out one or more of the Covered Entity's obligations under the Privacy Rule (Subpart E of 45 C.F.R. Part 164), it shall comply with the requirements of the Privacy Rule that apply to the Covered Entity in the performance of such obligations.

(1) Business Associate shall report to Covered Entity any use or disclosure of PHI that is not provided for in this BA Agreement, including reporting Breaches of Unsecured Protected Health Information as required by 45 C.F.R. § 164.410 and required by Section 4(d)(ii) below.

(2) Business Associate shall establish, implement and maintain appropriate safeguards and comply with the Security Standards (Subpart C of 45 C.F.R. Part 164) with respect to Electronic PHI, as necessary to prevent any use or disclosure of PHI other than as provided for by this BA Agreement.

(ii) Business Associate Obligations. As permitted by the HIPAA Requirements, Business Associate also may use or disclose PHI received by the Business Associate in its capacity as a Business Associate to the Covered Entity for Business Associate's own operations if:

(1) the use relates to: (1) the proper management and administration of the Business Associate or to carry out legal responsibilities of the Business Associate or (2) data aggregation services relating to the health care operations of the Covered Entity or

(2) the disclosure of information received in such capacity will be made in connection with a function, responsibility or services to be performed by the Business Associate, and such disclosure is required by law or the Business Associate obtains reasonable assurances from the person to whom the information is disclosed that it will be held confidential and the person agrees to notify the Business Associate of any Breaches of confidentiality.

(iii) Minimum Necessary Standard and Creation of Limited Data Set. Business Associate's use, disclosure or request of PHI shall utilize a Limited Data Set if practicable. Otherwise, in performing the functions and activities as specified in the Engagement Letter and this BA Agreement, Business Associate agrees to use, disclose or request only the minimum necessary PHI to accomplish the intended purpose of the use, disclosure or request.

(iv) Access. In accordance with 45 C.F.R. § 164.524 of the HIPAA Requirements, Business Associate will make available to the Covered Entity (or as directed by the Covered Entity, to those individuals who are the subject of the PHI (or their designees)), their PHI in the Designated Record Set. Business Associate shall make such information available in an electronic format where directed by the Covered Entity.

(v) Disclosure Accounting. Business Associate shall make available the information necessary to provide an accounting of disclosures of PHI as provided for in 45 C.F.R. § 164.528 of the HIPAA Requirements by making such information available to the Covered Entity or (at the direction of the Covered Entity) making such information available directly to the individual.

(vi) Amendment. Business Associate shall make PHI in a Designated Record Set available for amendment and, as directed by the Covered Entity, incorporate any amendment to PHI in accordance with 45 C.F.R. § 164.526 of the HIPAA Requirements.

(vii) Right to Request Restrictions on the Disclosure of PHI and Confidential Communications. If an individual submits a Request for Restriction or Request for Confidential Communications to the Business Associate, Business Associate and Covered Entity agree that Business Associate, on behalf of Covered Entity, will evaluate and respond to these requests according to Business Associate's own procedures for such requests.

(viii) Return or Destruction of PHI. Upon the termination or expiration of the Engagement Letter or this BA Agreement, Business Associate agrees to return the PHI to Covered Entity, destroy the PHI (and retain no copies) or if Business Associate determines that return or destruction of the PHI is not feasible, (a) continue to extend the protections of this BA Agreement and of the HIPAA Requirements to the PHI and (b) limit any further uses and disclosures of the PHI to the purpose making return or destruction infeasible.

(ix) Availability of Books and Records. Business Associate shall make available to DHHS or its agents the Business Associate's internal practices, books and records relating to the use and disclosure of PHI in connection with this BA Agreement.

(x) Termination for Breach.

(1) Business Associate agrees that Covered Entity shall have the right to terminate this BA Agreement or seek other remedies if Business Associate violates a material term of this BA Agreement.

(2) Covered Entity agrees that Business Associate shall have the right to terminate this BA Agreement or seek other remedies if Covered Entity violates a material term of this BA Agreement.

(c) Information and Security Standards

(i) Business Associate will develop, document, implement, maintain and use appropriate Administrative, Technical and Physical Safeguards to preserve the Integrity, Confidentiality and Availability of, and to prevent non-permitted use or disclosure of, Electronic PHI created or received for or from the Covered Entity.

(ii) Business Associate agrees that with respect to Electronic PHI, these Safeguards, at a minimum, shall meet the requirements of the HIPAA Security Standards applicable to Business Associate.

(iii) More specifically, to comply with the HIPAA Security Standards for Electronic PHI, Business Associate agrees that it shall:

- (1) Implement Administrative, Physical and Technical Safeguards consistent with (and as required by) the HIPAA Security Standards that reasonably protect the Confidentiality, Integrity and Availability of Electronic PHI that Business Associate creates, receives, maintains or transmits on behalf of Covered Entity. Business Associate shall develop and implement policies and procedures that meet the documentation requirements as required by the HIPAA Requirements;
- (2) As also provided for in Section 4(a) above, ensure that any Business Associate Subcontractor agrees to implement reasonable and appropriate safeguards to protect the Electronic PHI;
- (3) Report to Covered Entity any unauthorized access, use, disclosure, modification or destruction of PHI (including Electronic PHI) not permitted by this BA Agreement, applicable law or permitted by Covered Entity in writing ("Successful Security Incidents" or Breaches) of which Business Associate becomes aware. Business Associate shall report such Successful Security Incidents or Breaches to Covered Entity as specified in Section 4(d)(iii)(1);
- (4) For Security Incidents that do not result in unauthorized access, use, disclosure, modification or destruction of PHI (including, for purposes of example and not for purposes of limitation, pings on Business Associate's firewall, port scans, attempts to log onto a system or enter a database with an invalid password or username, denial-of-service attacks that do not result in the system being taken off-line or malware such as worms or viruses) ("Unsuccessful Security Incidents"), aggregate the data and, upon the Covered Entity's written request, report to the Covered Entity in accordance with the reporting requirements identified in Section 4(d)(iii)(2);
- (5) Take all commercially reasonable steps to mitigate, to the extent practicable, any harmful effect that is known to Business Associate resulting from any unauthorized access, use, disclosure, modification or destruction of PHI;
- (6) Permit termination of this BA Agreement if the Covered Entity determines that Business Associate has violated a material term of this BA Agreement with respect to Business Associate's security obligations and Business Associate is unable to cure the violation; and
- (7) Upon Covered Entity's request, provide Covered Entity with access to and copies of documentation regarding Business Associate's safeguards for PHI and Electronic PHI.

(d) Notice and Reporting Obligations of Business Associate

- (i) Notice of Non-Compliance with the BA Agreement. Business Associate will notify Covered Entity within 30 calendar days after discovery, any unauthorized access, use, disclosure, modification or destruction of PHI (including any successful Security Incident) that is not permitted by this BA Agreement, by applicable law or permitted in writing by Covered Entity, whether such non-compliance is by (or at) Business Associate or by (or at) a Business Associate Subcontractor.
- (ii) Notice of Breach. Business Associate will notify Covered Entity following discovery and without unreasonable delay but in no event later than 30 calendar days following discovery, any Breach of Unsecured Protected Health Information, whether such Breach is by Business Associate or by Business Associate Subcontractor.

(1) As provided for in 45 C.F.R. § 164.402, Business Associate recognizes and agrees that any acquisition, access, use or disclosure of PHI in a manner not permitted under the HIPAA Privacy Rule (Subpart E of 45 C.F.R. Part 164) is presumed to be a Breach. As such, Business Associate shall (i) notify Covered Entity of any non-permitted acquisition, access, use or disclosure of PHI and (ii) assist Covered Entity in performing (or at Covered Entity's direction, perform) a risk assessment to determine if there is a low probability that the PHI has been compromised.

(2) Business Associate shall cooperate with Covered Entity in meeting the Covered Entity's obligations under the HIPAA Requirements and any other security breach notification laws. Business Associate shall follow its notification to the Covered Entity with a report that meets the requirements outlined immediately below.

(iii) Reporting Obligations.

(1) For Successful Security Incidents and Breaches, Business Associate – without unreasonable delay and in no event later than 30 calendar days after Business Associate learns of such non-permitted use or disclosure (whether at Business Associate or at Business Associate Subcontractor) – shall provide Covered Entity a report that will:

- a. Identify (if known) each individual whose Unsecured Protected Health Information has been or is reasonably believed by Business Associate to have been accessed, acquired or disclosed;
- b. Identify the nature of the non-permitted access, use or disclosure including the date of the incident and the date of discovery;
- c. Identify the PHI accessed, used or disclosed (e.g., name; social security number; date of birth);
- d. Identify what corrective action Business Associate (or Business Associate Subcontractor) took or will take to prevent further non-permitted accesses, uses or disclosures;
- e. Identify what Business Associate (or Business Associate Subcontractor) did or will do to mitigate any deleterious effect of the non-permitted access, use or disclosure; and
- f. Provide such other information, including a written report, as the Covered Entity may reasonably request.

(2) For Unsuccessful Security Incidents, Business Associate shall provide Covered Entity, upon its written request, a report that:

- a. identifies the categories of Unsuccessful Security Incidents as described in Section 4(c)(iii)(4),
- b. indicates whether Business Associate believes its (or its Business Associate Subcontractor's) current defensive security measures are adequate to address all Unsuccessful Security Incidents, given the scope and nature of such attempts and
- c. if the security measures are not adequate, the measures Business Associate (or Business Associate Subcontractor) will implement to address the security inadequacies.

(iv) Termination.

(1) Covered Entity and Business Associate each will have the right to terminate this BA Agreement if the other Party has engaged in a pattern of activity or practice that constitutes a material breach or violation of Business Associate's or the Covered Entity's respective obligations regarding PHI under this BA Agreement and, on notice of such material breach or violation from the Covered Entity or Business Associate, fails to take reasonable steps to cure the material breach or end the violation.

(2) If Business Associate or Covered Entity fail to cure the material breach or end the violation after the other Party's notice, Covered Entity or Business Associate (as applicable) may terminate this BA Agreement by providing Business Associate or Covered Entity written notice of termination, stating the uncured material breach or violation that provides the basis for the termination and specifying the effective date of the termination. Such termination shall be effective 60 days from this termination notice.

(v) Continuing Privacy and Security Obligations. Business Associate's and Covered Entity's obligation to protect the privacy and security of the PHI it created, received, maintained or transmitted in connection with services to be provided under the Engagement Letter and this BA Agreement will be continuous and survive termination, cancellation, expiration or other conclusion of this BA Agreement or the Engagement Letter. Business Associate's other obligations and rights, and Covered Entity's obligations and rights upon termination, cancellation, expiration or other conclusion of this BA Agreement, are those set forth in this BA Agreement and/or the Engagement Letter.

IN WITNESS WHEREOF, the Parties have signed this BA Agreement on the dates indicated below.

BAKER TILLY VIRCHOW KRAUSE, LLP

CITY OF FRANKLIN

By John Knepel
Signature

By _____
Signature

John Knepel
Print Name

Print Name

Title Partner

Title _____

Date Signed 9/7/16

Date Signed _____

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APPROVAL <i>slw mwl</i>	REQUEST FOR COUNCIL ACTION	MEETING DATE 1/17/2017
REPORTS & RECOMMENDATIONS	Authorization to Execute a Purchase Order with Sharp Electronics Corporation c/o Office Copying Equipment LTD for a New Copier for the Planning Department	ITEM NUMBER 615.

In February the lease on the existing Planning Department copier expires. This is a critical piece of equipment for departmental and Planning Commission activities. The current Sharp product has provided excellent reliability and the current vendor has provided good support. Five (5) vendors were considered. Ultimately, staying with the same product line and service provider was determined to be in the best interest of the City.

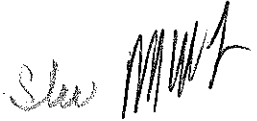
The pricing for the new lease is per the State of Wisconsin Vendor Contract, a competitively bid out process where the lowest vendors are selected. This ensures competitive pricing. Additionally, the State contract provides that by issuing a purchase order all provisions and terms of the State contract are extended to the City. The City will not sign a separate lease agreement and only has to issue a purchase order under the State contract. This is the same methodology that was used for the current contract.

A four-year term has an initial monthly payment of \$129.69, which is lower than the current rate of \$135.09. Similarly the black/white and color per copy charges are down from \$.009 to \$.0082 and \$.065 to \$.052, respectively. This should reduce the average monthly usage charge by around 20 percent, from \$120.09 to \$100.78.

COUNCIL ACTION REQUESTED

Motion to Authorize the Planning Manager to execute a purchase order with a four-year term with Sharp Electronics Corporation c/o Office Copying Equipment LTD for a new Sharp MX-3070N copier for the Planning Department under the statewide Copier Contract No. 505ENT-M15-MFDCOPIER-03 and, per Vendornet.wi.gov Contract Use/Terms & Conditions, the order is subject to WSCA-NASPO Contract #3091.

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APPROVAL 	REQUEST FOR COUNCIL ACTION	MEETING DATE 1/17/2017
REPORTS & RECOMMENDATIONS	Authorization to Enter Into a Professional Services Agreement with Liechty & Associates, Inc. Consulting Engineers for a Preliminary HVAC Engineering Study Related to the City Hall Remodeling Project	ITEM NUMBER <i>G. 16.</i>

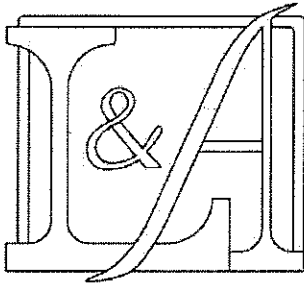
At the Committee of the Whole meeting of December 5, 2016, the Common Council discussed at length the budgeted 2017 City Hall Remodeling Project. In the action sheet and at that meeting, the Director of Administration reported that the driving factor in the project and project budget will be the HVAC system replacement. It was further discussed that a preliminary professional engineering assessment is necessary to provide a baseline strategy and alternatives, with preliminary cost estimates. This step is necessary before a potential scope can be established for Architects, which then impacts the roofing project. As such, the Director of Administration advised that this first step would be undertaken promptly in 2017.

Attached is a proposal, dated July 12, 2016, for a study addressing HVAC systems replacement for Franklin City Hall. A second proposal, dated January 11, 2017, expands on the discussion providing a greater explanation of the scope, the nature of the study, and the timeline. The consulting engineers of Liechty & Associates (Randall L. Liechty, P.E., LEED AP, President) has been used by the City for two recent projects. For both the boiler room modifications a few years ago and the Community Room Venting Project last year, Randy Liechty provided quality services. Fred Baumgart has reviewed HVAC plans prepared by many engineers, and Fred indicates that he holds Mr. Liechty's work in high regard for its thoroughness, accuracy, and attention to detail.

The cost for this initial study is a fixed fee of \$7,900. If approved, both letters will be attached to and incorporated into a boiler plate professional services agreement as approved by the City Attorney. The City Attorney is currently reviewing an updated boiler plate document.

COUNCIL ACTION REQUESTED

Motion to authorize the Director of Administration to execute a professional services agreement with Liechty & Associates, Inc. incorporating the proposals dated July 12, 2016, and January 11, 2017, in a form as determined by the City Attorney, for professional engineering services for a preliminary HVAC Engineering Study related to the City Hall Remodeling Project.



LIECHTY & ASSOCIATES INC. CONSULTING ENGINEERS

15220 GEBHARDT ROAD, ELM GROVE, WI 53122
PHONE: 262-366-3676, FAX: 262-784-4199
E-MAIL: rliechty@MSN.com

July 12, 2016

City of Franklin
9229 W. Loomis Road
Franklin, WI 53132

Attention: Mr. Mark W. Lubberda - Director of Administration

RE: Study addressing HVAC systems replacement - Franklin City Hall

Dear Mark,

I am pleased to propose HVAC Engineering study services for the areas served by the 1993 Mammoth units. Normal useful life for rooftop HVAC equipment is estimated at 15-18 years. The study will include a summary documenting the existing HVAC systems and modifications recommended, in the near term.

I understand that the (3) existing multi-zone RTU's are requiring an excessive amount of service and ongoing maintenance / repairs. I'm proposing a two step approach to addressing the issues outlined in the email request from Bob Tesch. The first step would involve an analysis of the current building, existing HVAC system zoning and any proposed near term internal modifications. My evaluations would then be summarized in a letter form report outlining my recommendation along with several options with the estimated budget range associated with implementing each alternative.

For HVAC engineering report services including estimated mechanical construction and replacement costs, I am proposing a fixed fee of \$7,900.

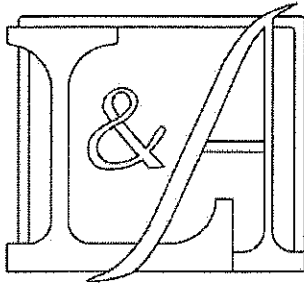
The above proposed fee does not include HVAC engineering services including design and specific documentation for proposed modifications and maintenance. Once a scope of work is defined, I would be happy to propose engineering services to prepare plans and specifications to implement the replacement of equipment and revisions to existing systems.

If you would elect to retain our services, please indicate by signing below and return a copy of this proposal to our office. If you should have any questions, please do not hesitate to call. Thank you for allowing me to propose the services of Liechty & Associates Inc.

Respectfully,

Randall L. Liechty, P.E., LEED AP
President
rl

Accepted By: _____ Date: _____



LIECHTY & ASSOCIATES INC. CONSULTING ENGINEERS

15220 GEBHARDT ROAD, ELM GROVE, WI 53122

PHONE: 262-366-3676, FAX: 262-784-4199

E-MAIL: rliechtype@MSN.com

City of Franklin
9229 W. Loomis Road
Franklin, WI 53132

January 11, 2017

Attention: Mr. Mark W. Luberda - Director of Administration

RE: Study addressing HVAC systems replacement - Franklin City Hall

Dear Mark,

I am writing in follow-up to our phone conversation earlier today regarding the Study services I proposed in July of 2016.

As I had indicated in my proposal, the first step would involve a proper analysis of the current building use, existing HVAC system zoning and proposed internal modifications. Calculations for sizing the replacement equipment will address existing as well as proposed changes. For example, high efficiency LED lighting has reduced internal heat gains from lighting to less than half of what was commonly seen just 5 years ago. If interior re-lighting is considered with renovation work, I want to address that in the study.

Replacement of the existing HVAC systems will include the challenge of demolition and construction while the building remains occupied. Existing fiberglass duct-board distribution systems will be investigated, but most probably need to be replaced in addition to the primary heating/cooling rooftop units.

Technology continues to evolve to achieve higher efficiencies and better control of the building environment. HVAC system alternatives that were not so common, and in some cases non-existent in the early 90's may offer some efficiencies in regard to installation labor time and energy use. When evaluating replacement options we will be looking at VRF (Variable Refrigerant Flow) and VAV with reheat as two potential options. DDC controls have become less proprietary and operating protocols have become more standardized.

Access to service and maintain HVAC equipment, traffic on roof areas, and screening of equipment are also areas to consider when analyzing HVAC system replacement.

My evaluations and recommendations will be summarized in a letter form report outlining several options along with the estimated budget range associated with implementing each alternative. Budget always enters into the analysis of HVAC replacement; however, the lowest first cost Option may not be the best long term solution. Additional zoning controls allow for better personal comfort, but it also comes at a price. A long term view with regard to flexibility and occupant comfort should be addressed at this time.

As indicated in my proposal, the report does not include HVAC engineering services including design and specific documentation for proposed modifications and maintenance.


The HVAC engineering report is the first step in establishing a defined scope of work. Once a scope of work is defined, I would be happy to propose engineering services to prepare HVAC plans and specifications to implement the replacement of equipment and revisions to the existing building.

I am anticipating the timeline to complete the report will involve 3-5 weeks from the date of contract authorization.

If you should have any questions, please do not hesitate to call. Thank you for allowing me to propose the services of Liechty & Associates Inc.

Respectfully,

Randall L. Liechty, P.E., LEED AP
President
rl

APPROVAL 	REQUEST FOR COUNCIL ACTION	MEETING DATE 1/17/2017
REPORTS & RECOMMENDATIONS	Carpet Replacement for the Health Department Remodeling Project	ITEM NUMBER <i>617</i>

At their meeting of December 20, 2016, the Common Council authorized the Health Department Remodel/Repair Project as a component of the 2017 budgeted City Hall Remodeling Project. A project estimate was provided as \$20,000. The largest cost component of the project is carpeting.

Initial pricing was obtained from 3 vendors; however, different warranty levels were initially quoted. Building Service Incorporated (BSI) quoted \$12,583 for a product with a 15-year warranty. Stu's Flooring Ltd. quoted \$8,860 for a 10-year warranty and, subsequently, under \$9,500 for a 15-year warranty, due to a vendor offering a special governmental pricing promotion. Bartz's Floor Coverings quoted \$8,756 for a product with a 10-year warranty. The final written quote with the 15-year warranty from Stu's was not available at the time agenda items were required; as such, it will be provided at the meeting.

The Health Department project is scheduled to commence at the end of January and take about three weeks with the carpet installation nearer to the end of the project. Approval for the carpeting contract is requested at this time, since waiting until the next Common Council meeting could delay the project if there is delay in carpet delivery, etc. As the price exceeds \$5,000, it is necessary to take the added step of publishing a first class notice of intent to enter into a contract. The motion for approval, therefore, is subject to completion of the notice publication. Following the publication, if any valid concern is brought to the attention of the Director of Administration prior to the one week publication notice period, the Director of Administration would withhold execution of the purchase order pending resolution.

Staff recommends approval.

COUNCIL ACTION REQUESTED

Motion to authorize publication of a first-class notice of an intent to award a contract for new carpeting in the Health Department to Stu's Flooring Ltd. for an amount not to exceed \$9,500 and to authorize the Director of Administration to execute a purchase order for such services following publication of the notice.

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APPROVAL <i>Slw</i>	REQUEST FOR COUNCIL ACTION	MEETING DATE 1/17/17
LICENSES AND PERMITS	MISCELLANEOUS LICENSES	ITEM NUMBER H.1.
<p>See attached list from meeting of January 17, 2017.</p> <p>COUNCIL ACTION REQUESTED</p>		



City of Franklin

9229 W. Loomis Road
Franklin, WI 53132-9728

414-425-7500

License Committee

Agenda*

Aldermen's Room

January 17, 2017 – 5:55 pm

1.	Call to Order & Roll Call	Time:		
2.	Applicant Interviews & Decisions			
License Applications Reviewed		Recommendations		
Type/ Time	Applicant Information	Approve	Hold	Deny
Operator 2016-17 6:00 pm	Stacy M Rodriguez 6835 S Ash St Oak Creek, WI 53154 Chili's Bar & Grill			
Operator 2016-17	Dao T Dang 1219 Turnberry Dr Pewaukee, WI 53072 St. Martin of Tours Church			
Operator 2016-17	Mary E Furey 3333 5 th Ave., #61 South Milwaukee, WI 53172 Country Lanes			
Operator 2016-17	Son Thanh Le 4927 W Woodland Dr Franklin, WI 53132 St. Martin of Tours Church			
Operator 2016-17	Kerri A McCracken 3025 E Somers Ave Cudahy, WI 53110 Mulligan's Irish Pub			
Operator 2016-17	Ashleigh A Wegner 7714 W Arthur Ave West Allis, WI 53219 Irish Cottage			
People Uniting for the Betterment of Life and Investment in the Community (PUBLIC) Grant	Franklin Lioness Club – St Martins Fair Fee Waivers: St Martins Fair Permit, Temporary Class B Beer and Wine Licenses, and Temporary Operator's Permit Date of Events: 9/3/17-9/4/17 Location: St Martin Fair booth			
3.	Adjournment			
		Time		

*Notice is given that a majority of the Common Council may attend this meeting to gather information about an agenda item over which they have decision-making responsibility. This may constitute a meeting of the Common Council per State ex rel. Badke v. Greendale Village Board, even though the Common Council will not take formal action at this meeting.

APPROVAL <i>Slw RDR</i>	REQUEST FOR COUNCIL ACTION	MEETING DATE 1/17/17
Bills	Vouchers and Payroll Approval	ITEM NUMBER I. 1

Attached are vouchers dated January 4, 2017 through January 12, 2017 Nos. 163403 through Nos. 163541 the amount of \$ 1,698,375.94. Included in this listing are EFT's Nos. 3349 through Nos. 3359 and Library vouchers totaling \$ 8,241.61. Voided check in the amount of \$ (225.00) is separately listed.

Early release disbursements dated January 4, 2017 through January 11, 2017 under Resolution 2013-6920 in the amount of \$ 385,255.02 are provided on a separate listing and are also included in the complete disbursement listing.

The net payroll dated January 6, 2017 is \$ 358,798.43 previously estimated at \$ 364,000.00. Payroll deductions for January 6, 2017 are \$ 203,371.16, previously estimated at \$ 224,000.00.

The estimated payroll for January 20, 2017 is \$ 420,000.00 with estimated deductions and matching payments of \$ 373,000.00.

The estimated payroll for February 3, 2017 is \$ 377,000.00 with estimated deductions and matching payments of \$ 208,000.00.

Attached is a list of property tax settlements and refunds Nos. 16668 through Nos. 17071 and EFT Nos. 124 through Nos. EFT 131 dated December 30, 2016 through January 12, 2017 in the amount of \$56,219,588.62. These payments have been released as authorized under Resolution 2013-6920.

COUNCIL ACTION REQUESTED

Motion approving the following:

- City vouchers with an ending date of January 12, 2017 in the amount of \$ 1,698,375.94 and
- Payroll dated January 6, 2017 in the amount of \$ 358,798.43 and payments of the various payroll deductions in the amount of \$ 203,371.16, plus City matching payments and
- Estimated payroll dated January 20, 2017 in the amount of \$ 420,000.00 and payments of the various payroll deductions in the amount of \$ 373,000.00, plus City matching payments and
- Estimated payroll dated February 3, 2017 in the amount of \$ 377,000.00 and payments of the various payroll deductions in the amount of \$ 208,000.00, plus City matching payments and
- Property Tax refunds with an ending date of January 12, 2017 in the amount of \$ 56,219,588.62.