



City Council
COMMITTEE OF THE WHOLE
City of Belvidere, Illinois

Alderman Clayton Stevens	Vice Chairman Public Works
Alderman Tom Porter	Chairman Building, Planning & Zoning
Alderman Daniel Snow	Co-Chairman City-County
Open Seat	Vice-Chairman Finance and Personnel
Alderman Wendy Frank	Vice Co-Chairman City-County
Alderman Thomas Ratcliffe	Chairman Finance and Personnel
Alderman George Crawford	Chairman Public Safety
Alderman Mike McGee	Vice Chairman Building, Planning & Zoning
Alderman Marsha Freeman	Chairman Public Works
Alderman Ric Brereton	Vice Chairman Public Safety

AGENDA

February 10, 2020
6:00 p.m.
City Council Chambers
401 Whitney Blvd., Belvidere, Illinois

Call to Order – Mayor Mike Chamberlain.

Roll Call:

Public Comment:

Public Forum:

Reports of Officers, Boards, and Special Committees:

1. Building, Planning & Zoning, Unfinished Business: None.
2. Building, Planning & Zoning, New Business:
 - (A) Community Development Budget Presentation.

3. **Public Works, Unfinished Business: None.**
4. **Public Works, New Business:**
 - (A) **Proposed 2020 MFT Street Maintenance Program.**
 - (B) **WWTP Sluice Gate Replacement - Bid Tabulation.**
 - (C) **WWTP Sluice Gate Replacement – Engineering Services.**
 - (D) **Tree Ordinance Update.**
 - (E) **Public Works Budget Presentation.**
5. **Other:**
 - (A) **Appointment of Trustee to the Ida Public Library Board of Trustees.**
6. **Adjournment:**

CITY OF BELVIDERE

Community Development



BUILDING DEPARTMENT

PLANNING DEPARTMENT

401 WHITNEY BLVD. SUITE 300 BELVIDERE, IL 61008 * PH (815)547-7177 FAX (815)547-0789

The mission of the Department of Community Development is to implement a vision of balanced and intelligent growth for the City of Belvidere through effective measures of planning, design review, construction plan approval, and code compliance to preserve and enhance the quality of life for the residents of the City of Belvidere. We communicate that vision to the citizens while engaging the public and promoting community spirit by assisting with festivals, community activities and events.

2018/2019 Accomplishments

1. Maintained an efficient office environment
2. Created updated builders' packets for the City of Belvidere website
3. Continued serving as planning consultants for the Village of Poplar Grove
4. Continued updating of planning files and linking to GIS
5. Continued scanning plats for county clerk's office, and plans for the general public
6. Participated in the planning and execution of Heritage Days, Chili Cook-off and Hometown Christmas
7. Provided a good level of health and safety for all Belvidere residents
8. Continued effort to build and maintain relationships with local business owners and developers

2019/2020 Objectives

1. Assist with the 2020 Census
2. Continue cross-training of staff for a more efficient department
3. Continue to process planning, zoning and subdivision applications as well as Zoning Ordinance text amendments for the City of Belvidere
4. Work closely with Growth Dimensions for economic development
5. Continue participation in the planning and execution of Heritage Days, Chili Cook-off and Hometown Christmas
6. Continue working with and developing the Belvidere Historic Preservation Commission
7. To have an IASFM certified Floodplain manager on staff
8. To continue working relationships with the Fire Department, Public Works, Police Department, County Health Department, County Administration, Design Professionals and property owners
9. Continue the effort to build and maintain relationships with local business owners and developers

The Department of Community Development currently operates with four full-time personnel, a part time plans examiner/inspector, a part time GIS specialist and a part time electrical inspector.

Memo

To: Mayor and City Council
From: Brent Anderson, Director of Public Works
Date: 1/8/2020
Re: 2020 MFT Street Maintenance Program

The City's annual MFT Street Maintenance Program will be expanding due to the City's share of the gas tax increase recently instituted by the State. We are projecting an additional annual allotment of \$420,000, based on the increases received to date.

The following is the proposed MFT Street Maintenance Program for 2020:

Arterial & Collector Street Overlays:

<u>Street</u>	<u>From</u>	<u>To</u>	<u>Ward</u>	<u>Quantity</u>	<u>Distance</u>
South State Street	Logan	US 20	5	21,956 SY	5,200 LF
South Appleton Road	Locust	US 20	1	29,622 SY	5,670 LF

Residential Overlays:

<u>Street</u>	<u>From</u>	<u>To</u>	<u>Ward</u>	<u>Quantity</u>	<u>Distance</u>
10 th Ave	5 th St	End	1	1,711 SY	770 LF
W 5 th St	7 th Ave	Columbia	1	3,667 SY	1,500 LF
W 9 th St	14 th Ave	End	1	3,733 SY	1,200 LF
Strawberry Lane	Jackson	Harrison	2	1,022 SY	480 LF
W Marshall St	State	Strawberry	2	1,822 SY	820 LF
Oakley St	Harrison	End	2	1,711 SY	770 LF
King St	Lincoln	End	2	2,738 SY	1,120 LF
E Locust St	Main	Gilman	3	2,756 SY	1,240 LF
E 3 rd St	East	Adams	3	1,244 SY	560 LF
Washington St	2 nd St	5 th St	3	1,667 SY	750 LF
Adams St	3 rd St	5 th St	3	1,178 SY	530 LF
Jefferson St	2 nd St	4 th St	3	1,436 SY	380 LF
East Ave	Logan	Willow	3	3,178 SY	1,100 LF
Fairview St	Lincoln	North	4	2,371 SY	970 LF
Webster St	Lincoln	Boone	4	4,911 SY	1,300 LF
Davis Dr	Highline	Van Epps	4	5,133 SY	1,540 LF
W 5 th St	Pearl	5 th Ave	5	3,360 SY	1,260 LF
E 7 th St	State	Fremont	5	2,056 SY	925 LF
Chrysler Dr	Pearl	End	5	9,200 SY	3,450 LF

Current MFT regulations require that ADA compliant sidewalk returns at all intersections of the streets being overlaid must be in place or installed in conjunction with the overlay project.

There is \$935,000 budgeted in MFT for the Street Maintenance Program.

Memo

To: Mayor and City Council
From: Brent Anderson, Director of Public Works
Date: February 5, 2020
Re: WWTP Gate Replacement Project – Bid Tabulation

The following bids were opened today for the WWTP Gate Replacement Project:

- | | |
|--|--------------|
| 1. Leander Construction Company
P.O. Box 345
Canton, IL 61520 | \$214,700.00 |
| 2. Nelson Carlson Mechanical Contractors
1417 22 nd Street
Rockford, IL 61110 | \$268,900.00 |
| 3. Dahme Mechanical Industries, Inc
610 South Arthur Avenue
Arlington Heights, IL 60005 | \$529,999.99 |

I would recommend approval of the low bid from Leander Construction, in the amount of \$214,700, for the WWTP Gate Replacement Project. This work will be paid for from Sewer Depreciation Funds.

Memo

To: Mayor and City Council
From: Brent Anderson, Director of Public Works
Date: 2/5/2020
Re: WWTP Sluice Gate Replacement Project – Construction Services Work Order

Attached to this memo is a work order from Baxter and Woodman for the construction services portion of the Sluice Gate Replacement Project. The awarded construction cost for this project is \$214,700 with the construction services cost not-to-exceed \$18,900.00, which is 8.8% of the construction cost.

I would recommend approval of the construction services work order from Baxter & Woodman, in an amount not-to-exceed \$18,900.00, for the Sluice Gate Replacement Project at the WWTP. This work will be paid for from the Sewer Depreciation Account.

**CITY OF BELVIDERE, ILLINOIS
WASTEWATER TREATMENT PLANT IMPROVEMENTS -
GATE REPLACEMENT
CONSTRUCTION ENGINEERING SERVICES
WORK ORDER**

ENGINEERS' PROJECT No. 170648.60

Project Description:

The Project consists of construction engineering for replacement of five sluice gates in the grit and screen channels of the lower level of the Main Equipment Building . The Project is more specifically described in Attachment A of this Work Order.

Engineering Services:

The general provisions of this contract are enumerated in the Professional Engineering Services Agreement between the City and Engineers dated September 22, 2009. A detailed scope of services for this Project is listed in Attachment A of this Work Order.

Compensation:

Compensation for the services to be provided under this Work Order will be in accordance with the Engineering Services Agreement dated September 22, 2009. The Engineers' fee shall be computed on the basis of their standard hourly billing rates for actual work time performed plus reimbursement of out-of-pocket expenses including travel, which in total amount will not exceed \$18,900.00.

Submitted by: **Baxter & Woodman, Inc.**

By: Deaf Walsh

Title: Vice President

Date: February 5, 2020

Approved by: **City of Belvidere, Illinois**

By: _____

Title: _____

Date: _____

Additional Comments and Conditions:

Project Description

The Project consists of construction engineering services required for the replacement of five sluice gates in the Main Equipment Building Lower Level Screen and Grit Channels. The sluice gates that will be replaced are identified below.

- 1 - 24" X 24" Sluice Gate in the Influent Chamber
- 2 - 42" X 48" Sluice Gates in the Influent Chamber, upstream on the mechanically cleaned Bar Screen No. 1 and No. 2.
- 2 - 18" X 24" Sluice Gates in the Effluent Chamber at the outlets to both Wet Wells.

The Project will consider temporary pumping, to allow construction and maintain the influent flow to the treatment plant.

Scope of Services

The following scope of services details the anticipated tasks necessary to successfully complete this Project.

CONSTRUCTION SERVICES

1. Act as the Owner's representative with duties, responsibilities and limitations of authority as assigned in the construction contract documents.
2. **PROJECT INITIATION**
 - A. Prepare Award Letter, Agreement, Contract Documents, Performance/Payment Bonds, and Notice to Proceed. Review Contractor insurance documents.
 - B. Attend and prepare minutes for the preconstruction conference, and review the Contractor's proposed construction schedule and list of subcontractors.
3. **CONSTRUCTION ADMINISTRATION**
 - A. Attend one (1) construction progress meeting, anticipated after sluice gates have been ordered and delivered to the site, but prior to the start of the Work by the Contractor, to discuss the Contractor's schedule, plans, and Village and Engineer expectations.
 - B. Shop drawing and submittal review by Engineer shall apply only to the items in the submissions and only for the purpose of assessing, if upon installation or incorporation in the Project, they are generally consistent with the construction documents. Owner agrees that the contractor is solely responsible for the submissions (regardless of the format in which provided, i.e. hard copy or electronic transmission) and for compliance with the contract documents. Owner further agrees that the Engineer's review and action in relation to these submissions shall not

constitute the provision of means, methods, techniques, sequencing or procedures of construction or extend to safety programs or precautions. Engineer's consideration of a component does not constitute acceptance of the assembled item.

- C. Review construction record drawings for completeness prior to submission to CADD.
 - D. Prepare one (1) construction contract change order or work directive, if required, when authorized by the Owner.
 - E. Review one (1) Contractor's requests for payments as construction work progresses, and advise the Owner of amounts due and payable to the Contractor in accordance with the terms of the construction contract documents.
 - F. Research and prepare written response by Engineer to request for information from the Owner and Contractor.
 - G. Project manager or other office staff visit site as needed.
4. **FIELD OBSERVATION – PART TIME**
- A. Engineer will provide a Resident Project Representative at the construction site on a periodic part-time basis from the Engineer' office of not more than eight (8) hours per regular weekday, not including legal holidays (approximately 12 hours per week, for up to 64 hours) as deemed necessary by the Engineer, to assist the Contractor with interpretation of the Drawings and Specifications, to observe in general if the Contractor's work is in conformity with the Final Design Documents, and to monitor the Contractor's progress as related to the Construction Contract date of completion.
 - B. Through standard, reasonable means, Engineer will become generally familiar with observable completed work. If the Engineer observes completed work that is inconsistent with the construction documents, that information shall be communicated to the contractor and Owner to address. Engineer shall not supervise, direct, control, or have charge or authority over any contractor's work, nor shall the Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at the site, nor for any failure of any contractor to comply with laws and regulations applicable to such contractor's furnishing and performing of its work. Engineer neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform the work in accordance with the contract documents, which contractor is solely responsible for its errors, omissions, and failure to carry out the work. Engineer shall not be responsible for the acts or omissions of any contractor, subcontractor, or supplier, or of any of their agents or employees or any other person, (except Engineer's own agents, employees, and consultants) at the site or otherwise furnishing or performing any work; or for any decision made regarding the contract documents, or any application, interpretation, or clarification, of the contract documents, other than those made by the Engineer.

- C. Part-Time Field Observation provides that the Resident Project Representative will make intermittent site visits to observe the progress and quality of Contractor's executed Work. Part-Time Field Observation does not guarantee the Engineer will observe or comment on work completed by the contractor at times the Resident Project Representative is not present on site. Such visits and observations by the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of Contractor's Work in progress or to involve detailed inspections of Contractor's Work in progress beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment as assisted by the Resident Project Representative, if any.
 - E. Keep a daily record of the Contractor's work on those days that the Engineers are at the construction site including notations on the nature and cost of any extra work.
- 5. SUBSTANTIAL COMPLETION OF PROJECT**
- A. Provide construction inspection services when notified by the Contractor that the Project is substantially complete. Prepare written punch lists during substantial completion inspections.
 - B. Prepare Certificate of Substantial Completion.
- 6. COMPLETION OF PROJECT**
- A. Provide construction inspection services when notified by the Contractor that the Project is complete. Prepare written punch lists during final completion inspections.
 - B. Review the Contractor's written guarantees and issue a Certificate of Completion for the Project.
 - C. Review the Contractor's requests for final payment, and advise the Owner of the amounts due and payable to the Contractor in accordance with the terms of the construction contract documents.
 - D. Prepare construction record drawings which show field measured dimensions of the completed work which the Engineers consider significant and provide the Owner with CD or electronic copy within ninety (90) days of the Project completion.
- 7. PROJECT CLOSEOUT – Provide construction-related engineering services including, but not limited to, General Construction Administration and Resident Project Representative Services.**

**City of Belvidere, Illinois
WWTP Improvements- Gate Replacement
Construction Engineering Services
Work Order 170648.60**

Attachment A

ESTIMATED MANHOUR AND FEE SUMMARY

Scope and Dates for Services	Hours	Fee
Project Initiation (02/17/20 to 03/05/20)	13	\$1,965
Construction Administration (03/09/20 to 06/25/20)	23	\$3,415
Designer Reviews (03/23/20 to 04/02/20)	12	\$2,130
Field Observation (05/25/20 to 06/25/20)	64	\$9,730
Project Closeout (06/29/20 to 07/23/20)	12	\$1,710
TOTAL ALL SERVICES	124	\$18,950

E:\Crystal Lake\BELVD\170648-Gate Replacement\Contract\Work\60_Construction\170648.60 GateReplacementWO_CS.doc

Memo

To: Mayor and City Council
From: Brent Anderson, Director of Public Works
Date: 2/6/2020
Re: Tree Ordinance Update

The 2019 Urban and Community Forestry Grant that the City has received requires us to have an updated tree preservation ordinance. Included with this memo is a copy of the proposed revisions to Article II of Section 118 Vegetation of the Ordinance Code for your review and approval. The revisions include the recommendations from the Illinois Department of Natural Resources and the U.S. Forest Service.

I would recommend approval of the revisions to Article II of Section 118 of the Ordinance Code and refer them to the City Attorney for drafting of the necessary ordinance.

ARTICLE II. – TREE PRESERVATION

Sec. 118-31. - STATEMENT OF PURPOSE

This Section of the Code is structured to preserve, protect and enhance critical infrastructure – the urban forest that is located on public land. The complete urban forest is comprised of trees across all land uses and ownership. This Section will regulate public property trees but recognizes that trees on private property are part of the collective community resource.

The purpose of this Section is to recognize the services and function that trees provide as a collective asset to the entire community and to state the City's goals with respect to the protection, preservation, care and planting of trees on public lands.

Specific goals of this section are to:

- A. Protect, preserve and enhance the quality of life and general welfare of Belvidere, its residents, and property owners; and conserve and enhance the City's natural, physical and aesthetic environment.
- B. Preserve, protect and enhance the urban forest to ensure that trees are properly planted and maintained within the City so that trees can protect, enhance and preserve the quality of life for people within our community.
- C. Recognize that trees are an integral part of the infrastructure of Belvidere and as such should be preserved, protected and cared for as other critical infrastructure in our community.
 - a. Trees absorb pollution from the air;
 - b. Trees absorb and sequester carbon dioxide;
 - c. Trees absorb and filter pollution from stormwater run-off;
 - d. Trees produce oxygen;
 - e. Trees reduce flooding;
 - f. Trees stabilize soils and reduce erosion;
 - g. Trees cool the surrounding area helping to reduce impacts due to heat islands;
 - h. Trees reduce energy consumption by shielding structures from harsh winds and sun;
 - i. Trees provide a buffer and screen against noise, light and pollution;
 - j. Trees improve property values;
 - k. Trees improve commercial district buyer traffic;

- l. Areas with trees have lower crime rates;
 - m. Areas with trees have higher levels of community interaction;
 - n. Trees provide important habitat for birds and other wildlife; and
 - o. Trees protect and enhance our quality of life.
- D. Trees provide collective benefits that extend beyond property boundaries throughout the entire Community.
- E. Recognize that larger trees provide larger benefits. When a large tree is removed and replaced with a smaller tree the benefits and services are reduced.
- F. Regulate and control the planting of trees in the city in order to eliminate and guard against dangerous conditions that may result in injury to persons using the streets, alleys, sidewalks, or property of the city; and to prevent damage to street, curb, sidewalk or other public property.

118-32. - DEFINITIONS

APPLICANT	An owner of a lot, parcel or tract of land for which an application has been filed for a permit, subdivision, or any activity requiring the issuance of a permit. A contractor is an agent, acting on behalf of the Applicant – the landowner.
ARBORIST	Any individual experienced in the profession of forestry or a related field and is licensed or certified in forestry by an accredited forestry industry body, e.g. International Society of Arboriculture.
BUCKTHORN	An undesirable exotic invasive ornamental shrub introduced to North America. This species inhabits woodlands and savannas where it dominates the landscape prohibiting the development of native trees and plants. There are six species of buckthorn listed in the Illinois Exotic Weed Act, which prohibits the sale, distribution or planting of this species, Rhamnus cathartica, davurica, frangula, argula, utilis, and japonica.
BUILDING ACTIVITY AREA	The portion of a property within which development activity, including grading, excavation, storage of materials, construction access and construction of both main buildings and unattached structures occurs.
CANOPY	The upper portion of a tree sometimes called the crown. This section of the tree usually contains branches and leaves.

**CONSERVANCY OR
PRESERVATION AREA
(EASEMENT)**

An area under legal restriction within which the following requirements are enforced:

1. all existing vegetation shall be preserved for the purpose of retaining the natural character or special environmental state or control;
2. any area with a special designation providing screening from adjacent uses or a public or private street;
3. no plant material shall be removed from or planted in a Conservancy or Preservation Area without a permit from the City authorizing removal or planting;
4. Conservancy or Preservation Areas may be established as part of the subdivision process or through council action;
5. no undesignated structures, including fencing shall be located in a Conservancy or Preservation Area;
6. other restrictions as defined on the plat; and
7. in all instances the approved language on the plat shall prevail.

CRITICAL ROOT ZONE

An area on the ground extending out from the trunk of the tree in all directions a distance of at least one foot for every inch DBH

CUTTING

1. Felling or removal of a tree, or any procedure that results in the death or substantial destruction of a tree.
2. Cutting does not include normal pruning or trimming of trees consistent with good forestry practices.

DAMAGE

Impact or loss of function to any tree including but not limited to: removal, root compaction, root removal, girdling, soil contamination, topping, pruning more than 20% of the trees, canopy removal, bark removal, poisoning and or/ actions resulting in the decline or death of a tree.

DECIDUOUS TREE

A deciduous tree is one that loses most or all of its leaves for part of the year.

DEVELOPMENT

Any proposed change in the use or character of land, including, but not limited to the replacement of any structure or site improvements, e.g. irrigation installation, driveway replacement, installation of a retaining wall among others. When appropriate to the context, development may refer to the receipt or necessity of any building, tree or site work permit.

DIAMETER AT BREAST HEIGHT	The diameter of the trunk of the tree measured in inches at a point 4.5 feet above ground line. This forestry standard measurement is used for established and mature trees and is referred to as "DBH". All reference to diameter size shall be to the DBH.
ENVIRONMENTAL PROFESSIONAL	A degreed environmental scientist, biologist, botanist, forester, other similarly degreed and/or licensed plant professional with at least five years' experience in planting and maintaining native plants and their associated natural ecosystems.
EVERGREEN TREE	A tree that retains most of its leaves for most of the year.
FOREST MANAGEMENT PLAN	A detailed plan developed and approved by the City under the direction of a certified arborist or forester which protects this valuable infrastructure and outlines strategies for tree planting, selection, care and preservation for the City and complies with recognized national standards.
FORESTER	An individual trained and experienced in the profession of forestry who has a forestry degree from an institution of advanced education.
INFRASTRUCTURE	The basic underlying framework or features that provide collective services, including but not limited to roads, waterlines, storm sewers, bioswales, and trees.
INVASIVE SPECIES	An introduced or exotic species that significantly modifies or disrupts the ecosystem in which it colonizes (e.g. buckthorn).
LANDSCAPE CONTRACTOR	A company or individual contracted to perform landscape services.
LANDSCAPE PLAN	A plan approved by the Governmental Entity defining the location and species of plants and associated hardscape including grading.
LANDSCAPE MANAGEMENT PLAN	A plan approved by the City outlining the strategies for care and management of a specific type of landscape.
LANDSCAPING PROFESSIONAL	A registered landscape architect, horticulturalist or other similarly degreed, experienced and/or licensed plant professional.
NATURAL AMENITY EXCEPTION	A landscape and preservation plan intended as a substitute for the replacement requirements of this Section.

NUISANCE TREES	Nuisance trees are trees that may provide potential impacts to other trees, people or structures. This would include, but not be limited to, diseased, infested, structurally unsound trees or known invasive species.
PARCEL	A single parcel shall mean any lot of record, zoning lot or any grouping of adjacent lots under single ownership, serving a principal structure or use.
PREFERRED TREE LIST	A listing of tree species preferred to be planted by the City.
PROPERTY OWNER	An individual or organization who owns property located within the corporate limits of Belvidere.
REAR YARD	Rear yard as used in this Section, shall have the same meaning as ascribed to in the Zoning Code.
REGULATED ARTICLES	Any insects at any living stage of development, any quarantined materials such as wood products including, but not limited to chips, limbs, lumber, firewood, contaminated soils, or any other product or means of conveyance which may be determined by Federal or State departments of agriculture to pose a risk of spread of any infestation or infection.
SITE	That parcel of land for which a permit for tree removal is sought.
STREET TREE	Any tree located on or within the public right-of-way or easement.
TRANSPLANTING	The removal of any tree for replanting elsewhere.
TREE	Any self-supporting woody plant, together with its root system, trunk and canopy; growing upon the earth usually with one trunk, or a multi-stemmed trunk system, supporting a definitely formed crown.
TREE BANK	A bank account established to receive and hold deposits for trees which were damaged and/or removed. These funds, if not returned to the Applicant, may be used to purchase and care for trees throughout the City.
TREE PERMIT	A written authorization from the City authorizing the applicant to conduct work which may or may not impact a tree.
TREE PRESERVATION PLAN	A document required by a permit which identifies, by common name and/or scientific name, certain species of trees of a specified DBH within a particular area. The plan shall list all existing and proposed trees and shall specifically state how each tree is proposed to be destroyed, relocated, replaced, preserved at its present location, introduced into the site from an off-site source, and whether the tree is to receive remediated actions due to construction impacts, e.g. root pruning. The City may provide that the tree preservation plan excludes those portions of the site which it determines will not be affected by the activity. Any

tree preservation plan required by this Section must be reviewed and approved by the City prior to work beginning.

TREE REMOVAL

The cutting down, destruction, removal or relocation of any tree, including damaging by poison or other direct or indirect action.

VIABLE

A tree, which in the judgment of the City, is capable of sustaining its own life processes, unaided by man, for a reasonable period of time.

118-33. - PRESERVATION

- A. The City shall have at least one certified arborist on staff or consult with a certified arborist to provide direction and oversight of urban forestry practices within the City for the proper care and management of the urban forest.
- B. The City shall set a goal and timeline for the completion of an urban forest inventory.
- C. The City shall set a goal and timeline to develop and implement an urban forest management plan based on an urban forest inventory. This plan shall include clear direction for the protection, preservation and planting of the urban forest and shall be based on the U.S. Forest Service Sustainable Urban Forest Guide. (provide link or in appendix)
- D. The City shall require that any Contractor who may interact or have impact on that portion of the urban forest on public property utilize a certified arborist for all work pertaining to trees, including but not limited to removal, pruning and planting activities.
- E. All tree planting, selection and management shall be in accordance with City requirements.
- F. It is recognized that diverse species of urban trees throughout the City is critical to the health of the forest structure and protects the City from catastrophic loss. All tree planting shall comply with diversity requirements of not more than 5% of any one species, 10% of any one genus or 15% of any one family and shall be conducted in accordance with the most recent edition of American National Standards Institute. (provide link or in appendix)
- G. It is recognized that diverse age structure of trees throughout the City is critical to the health of the forest structure and protects the City from catastrophic loss. Proper care and management of the urban forest is critical for increased longevity of urban trees and shall be in accordance with the most recent edition of American National Standards Institute.

118-34. - PLANTING

- A. The City shall plant and maintain a healthy diverse urban forest to improve the natural resources and quality of life for its residents.

- B. The City shall plant diverse species with the ratio of not more than 15% of any one family, 10% of any one genus or 5% of any one species. Diverse species composition protects from catastrophic loss.
- C. All trees planted by the City or their agent shall be planted consistent with the most current edition of American National Standards Institute.
- D. Trees purchased by the City shall be of a quality consistent with the most current American Standards for Nursery Stock as approved by the most current American National Standards Institute.
- E. It shall be unlawful to plant any tree or shrub in the public right-of-way, or on other publicly owned property or Conservation or Preservation Area, without prior approval from the City and, in the instance of the Conservation or Preservation Area, the language on the recorded plat shall prevail.
- F. The spacing of street trees will be in accordance with the three species size classes listed below. No trees may be planted closer together than the following, except in special plantings designed or approved by a landscape architect:

- Small Trees (20' to 35' in height): 30 feet
- Medium Trees (30' to 50' in height): 40 feet
- Large Trees (50' and greater in height): 50 feet

- G. The distance trees may be planted from curbs or curblines and sidewalks will be in accordance with the three species size classes listed above. No trees may be planted closer to any curb or sidewalk than the following:

- Small Trees: 2 feet
- Medium Trees: 3 feet
- Large Trees: 4 feet

- H. No street tree shall be planted closer than 35 feet of any street corner, measured from the point of nearest intersecting curbs or curblines. No street tree shall be planted closer than ten feet to any fire hydrant.
- I. No street trees other than those species of small trees may be planted under or within five lateral feet of any underground water line, sewer line, transmission line or other utility.
- J. The City should provide education and outreach to private landowners on the need for species and age diversity, proper selection and planting practices, and how to select species for particular sites.

118-35. - TREE CARE

The City shall have the right to plant, prune, maintain and remove trees, within the lines of all streets, alleys, avenues, lanes, squares and public grounds, as may be necessary to ensure public safety or to preserve or enhance the symmetry and beauty of public grounds. The standard of care provided shall be in accordance with International Society of Arboriculture practices, where possible. This would include but not be limited to:

- a. At a minimum, have an established watering program for implementation during periods when natural rain fall is not adequate to meet the needs of newly planted trees. Newly planted trees are any trees planted within five years of the inadequate rainfall.
- b. Have an established pruning program that places all trees on public property on a ten year pruning cycle. Pruning is to be accomplished under the direction of a certified arborist and in compliance with American National Standards Institute. Care should be taken to follow best management practices including but not limited to good sanitation practices to reduce spread of infectious conditions and restriction of pruning based on species needs, e.g. oaks should only be pruned when dormant.
- c. It is recommended that during the pruning cycle, trees to be pruned be identified by species, size and location and be rated for health and hazard potential. A record of this report should be used as a guide for City staff to address problems and provide care as needed.

118-36. - TREE PROTECTION

This Section applies to any work being conducted which may impact public property trees.

- A. Unless otherwise authorized by this Section, it shall be unlawful for any person to remove, injure or undertake any procedure which will cause death, substantial damage, or create a hazard, to any public property tree without first obtaining a permit from the City. In the case of tree management practices, these practices shall comply with the most recent edition of the American National Standards Institute.
- B. In the event of any site improvement which may impact public property trees, a Tree Preservation Plan is required, must be approved, and implemented prior to the start of any work or delivery of any materials to the Building Activity Area. The approved Tree Preservation Plan shall be available on the site throughout the entire construction period until final approvals for all site work shall be received in writing.
- C. In instances where construction or site work that requires heavy equipment and that may impact trees on public or private property, all appropriate tree protection measures must be taken and identified in the Tree Preservation Plan.
 1. Protective fencing is required for protection of any tree to be preserved in place. Fencing shall be installed at a minimum distance of one-foot, for every inch DBH of the tree, from

the trunk of the tree. In the instances of tree pits, fencing shall be located at the edge of pavement.

2. All protective fencing shall be in place before any construction or material delivery is to take place. All protective fencing shall remain in place until final approval of all site conditions is given in writing.
3. No equipment or materials shall be parked, driven or stored within the protective fencing area or on the root zone of any tree.
4. For projects requiring the use of heavy equipment, such as anything on which a person would ride with the exception of a riding mower, protective tree fencing shall be required. This fencing shall be orange snow type fencing, a minimum of 4 feet in height and held in place by metal posts driven into the ground no more than 10 feet apart. Fencing shall not be removed or relocated unless authorized in writing by the City.
5. No tree shall be impacted within the protective fencing area, including the tree canopy.
6. All measures shall be taken to maintain the health of trees which are transported to the replacement site and shall meet or exceed the requirements of the most current American National Standards Institute.

118-37. - TREE REMOVAL

Tree removals are considered an impact to the entire community, whether on public or private land. It is clearly documented that larger trees provide larger benefits and as such, efforts should be made to preserve and protect trees where they are growing.

- A. It shall be unlawful to remove or cut down any tree or portion thereof in any street, parkway or other public place without having first secured a permit therefore. Applications for such permits shall be made to the City Clerk and shall be referred by the clerk to the Director of Public Works before permission shall be granted.
- B. An applicant receiving a permit to remove a healthy (as determined by the City) tree shall pay the entire cost of removing said tree in its entirety and shall plant a new tree, for every tree removed, in a location acceptable to the city. Any such replacement tree shall be of an approved species as set forth in this chapter.
- C. Any tree that overhangs any sidewalk, street or other public place in the city at a less height than eight feet or in such a way as to impede or interfere with traffic or travel on such public place shall be trimmed by the owner of the abutting premises or of the premises on which such tree grows, so that the obstruction shall cease. Any limb of a tree that is dead or is likely to fall on or across any public way or place shall be removed by the owner of the premises on which such tree grows or stands.
 1. Any tree or limb described above that the owner refuses or neglects to trim or remove is hereby declared debris and may be removed by the City.

2. If the City removes from any lot or parcel of land in the city any tree or limb pursuant to this section that is determined to be debris, the assessment of the cost of the work done by the city against the owner of the lot or parcel of land involved shall be in addition to any penalties imposed herein or any violation or noncompliance with any provision of this chapter. There shall be no assessment against the property owners for trees removed from the city right-of-way.

- D. It shall be unlawful to injure any tree planted in any public place.
- E. It shall be unlawful to attach any sign, advertisement or notice to any tree in any street, parkway or other public place.
- F. It shall be unlawful to attach any wires or rope to any tree in any public street, parkway or other public place without permission of the city.
- G. Any tree removed from a parcel or transplanted offsite must be replaced according to the regulations outlined in this Section.
- H. All stump removals shall require underground utility locations prior to any action.
- I. If a tree is removed or damaged which is not on the permit it must be replaced as set forth in this Section.
- J. Removal of invasive woody plants such as buckthorn do not require a permit and in fact, are encouraged. These invasive plants can quickly colonize an area reducing the health and vitality of non-invasive plants. (A list of invasive woody plants is provided in the Appendix.)

118-38. - TREE REPLACEMENT

- A. It is required that tree replacement species come from the Preferred Species List. (See list attached to this Section.)
- B. Any tree species removed, 6" DBH or 6" group of trees, which is not identified on the invasive species list, but is identified on the Preferred Species List, is required for replacement by this Section. These trees shall be replaced based on the calculation provided on the Preferred Species List with a species identified on that list. All replacements shall be located appropriately as confirmed by a certified arborist and as approved by the city.
- C. When a tree removal is required as a result of any project, tree replacement shall occur within the landscape season. In the event of weather conditions or species specific needs, which prohibit proper replacement of a tree, the City may issue a written notice of an extension of up to 180 days upon written request by the Applicant. If an extension is awarded to the Applicant, the Applicant shall notify the city when replacement is complete. If, after the 30 day or awarded 180-day extension, the tree is not replaced or the Applicant has not notified the city that installation is complete, all bonds shall be forfeited.

- D. All tree replacement plantings shall require an underground utility location prior to planting.
- E. If the property where a removal has taken place does not have adequate space to plant a replacement tree, then the Applicant shall be required to plant the replacement tree on public property as directed by the city.
- F. It shall be encouraged that any species identified on the invasive species list be removed. There is no replacement requirement for these removals.

118-39. - DISEASED TREES

Infected, Infested Trees Due to a Pest or Pathogen Are Defined as a Nuisance. These trees may be located on public or private property.

- A. Any tree which is in a state of irreparable or untreatable decline due to heavy infestation or disease is included in the definition of a nuisance. Infested or infected trees, which are identified by Federal or State Departments of Agriculture to be in quarantine or can potentially infect or infest other trees are defined as a nuisance. This would include but not be limited to Ash (*Fraxinus*) trees infested with emerald ash borer which are not being treated or whose treatment is ineffectual, or Elm trees (*Ulmus*) infected with Dutch elm disease.
 - 1. The city shall enforce State and Federal regulations governing quarantine zone boundaries, and regulated articles.
 - a. For the purposes of this Section, "Regulated Articles" are hereby defined as any insects at any living state of development, any quarantined materials such as wood products including, but not limited to chips, limbs, lumber, firewood or any other product or means of conveyance which may be determined by Federal or State departments of agriculture to pose a risk of spread of any infestation or infection.
 - b. It shall be illegal to move out of established quarantine zone(s) regulated articles unless those articles have met all requirements of the local, Federal and State regulatory agencies.
 - c. It shall be illegal for any person or entity to transfer from a quarantine zone into a non-quarantine zone, including the city, any regulated articles.
 - d. Any person or entity found to be in violation of any local, State or Federal regulations related to tree infestations or infections shall be prosecuted to the full extent of the law.
 - e. All contractors working within and near any quarantine zone(s) are required to comply with the quarantine regulations and supply records that may be required for inspection to the City, County, State or Federal agencies upon request.

118-40. - INVASIVE SPECIES CONTROL

A. INVASIVE WOODY PLANTS

Invasive plants cause ecological disruption to natural ecosystems. The type of impact varies based on the species and the traits of that species. The Woody Invasive Species List, attached to this Section identifies species which shall not be planted and which should be removed and controlled to reduce impacts to other vegetation.

- 1. Typical impacts include:**
 - a. Chemical disturbance to the soil limiting development of other species;**
 - b. Dense plant growth limiting light to soil surface resulting in exposed soil allowing erosion;**
- 2. Displacement of naturally occurring species resulting in a monoculture of invasive species and aggressive tendencies.**
- 3. Private Property Owner Outreach**

The city shall develop and implement an outreach plan to educate property owners of the potential impacts and remediation strategies, including a suggested planting list of alternative species to assist property owners in dealing with the problem.

B. INVASIVE DISEASES AND INSECTS

1. Impacts to Trees

Invasive diseases and insects can create significant stress to trees and in some instances kill trees. Attached to this section, the city has developed a list of Invasive Diseases and Insects that pose significant threats to trees from information identified by State and Federal Departments of Agriculture.

2. Invasive Species Management Plan

The city shall adopt an action strategy to deal with any of these diseases or insects and take action to remove the pest, forestall impacts to the trees through treatments or other means or develop a removal and replacement strategy for remediation of the problem.

3. Private Property Owner Outreach

The city shall adopt an outreach plan to educate property owners of the potential impacts and remediation strategies to help property owners in dealing with pests or pathogens.

Whoever violates any provision of this article, for which no penalty is otherwise provided, shall be subject to punishment as provided in Section 1-9. A separate violation shall be deemed committed on each day on which a nuisance continues unabated after ten days from receipt of notice to abate. Nothing in this section shall prevent the city from summarily abating a nuisance or from seeking equitable relief in appropriate cases.

ATTACHMENTS:

Preferred species list

Non-preferred species list

Invasive Woody Species list

CITY OF BELVIDERE PREFERRED TREE PLANTING LIST

<u>Common Name</u>	<u>Botanical Name</u>
Alder, European White	<i>Alnus incana</i>
Alder, seaside	<i>Alnus maritima</i>
Aspen, quaking	<i>Populus tremuloides</i>
Basswood, American	<i>Tilia Americana</i>
Beech, European	<i>Fagus sylvatica</i>
Birch, gray	<i>Betula populifolia</i>
Buckeye, Ohio	<i>Aesculus glabra</i>
Crabapple, Marilee	<i>Malus Jarmin</i>
Crabapple, Spring Snow	<i>Malus Spring Snow</i>
Dogwood, Kousa	<i>Cornus kousa</i>
Elm, Accolade	<i>Ulmus davidiana</i>
Ginkgo	<i>Ginkgo biloba (male only)</i>
Hackberry	<i>Celtis occidentalis</i>
Hawthorn, Thornless Cockspur	<i>Crataegus crus-galli var. inermis</i>
Honey Locust, thornless	<i>Gleditsia triacanthos f. inermis</i>
Hornbeam, European	<i>Carpinus betulus</i>
Ironwood	<i>Ostrya virginiana</i>
Katsura Tree	<i>Cercidiphyllum japonicum</i>
Lilac, Japanese Tree	<i>Syringa reticulata</i>
Linden, little leaf	<i>Tilia cordata</i>
Maple, black	<i>Acer nigrum</i>
Maple, Freemanii	<i>Acer x freemanii</i>
Maple, State Street	<i>Acer x miyabei</i>
Oak, northern red	<i>Quercus rubra</i>
Serviceberry, Robin Hill	<i>Amelanchier grandiflora 'Robin Hill'</i>
Tulip Tree	<i>Liriodendron tulipifera</i>
Tupelo (Black Gum)	<i>Nyssa sylvatica</i>
Yellowwood	<i>Cladrastis kentukea</i>

CITY OF BELVIDERE NON-PREFERRED TREE PLANTING LIST

<u>Common Name</u>	<u>Botanical Name</u>
Ash, black	Fraxinus nigra
Ash, green	Fraxinus pennsylvanica
Ash, white	Fraxinus americana
Birch, Asian white	Betula platyphylla
Birch, European white	Betula pendula
Box Elder	Acer negundo
Butternut	Juglans cinerea
Elm, American	Ulmus Americana
Elm, slippery	Ulmus rubra
Maple, silver	Acer saccharinum
Pine, Austrian	Pinus nigra
Pine, Scots	Pinus sylvestris
Poplar, black	Populus nigra

CITY OF BELVIDERE WOODY PLANT INVASIVE SPECIES LIST

<u>Common Name</u>	<u>Botanical Name</u>
Buckthorn	Rhamnus cathartica
Burning Bush	Euonymus alatus
Honeysuckle	Lonicera
Locust, black	Robinia pseudoacacia
Pear, callery	Pyrus calleryana
Tree of Heaven	Ailanthus altissima