

Jacksonville Tree Commission

Thursday, March 14, 2019 – 12:00 PM

117 West Duval Street, Third Floor, Conference Room C

Commissioners:	John Crescimbeni, Chair	Advisors:	Susan Grandin
	Curtis Hart, Vice Chair		Richard Leon
	Chris Flagg		Kathleen McGovern
	Aaron Glick		Joel Provenza
	John Pappas		
	Rhodes Robinson	Staff:	Cindy Chism
	Mike Robinson		

AGENDA

Order of Agenda is Subject to Change

A. Call to Order and Verification of Quorum

1. Roll Call
2. Submittal of Speaker's Cards
3. Approval of minutes from February 14, 2019 meeting
4. Fund balance and encumbrance report for 15(F), 15(N) and BJP – Joel Provenza
5. Status of Pending Tree Projects – Kathleen McGovern
6. Level 1 and Level 2 Projects – Kathleen McGovern
7. Status of Countywide Tree Planting Contract – Dave McDaniel

B. New Business

1. Committee on Unauthorized Tree Pruning/Removal – M. Robinson

C. Public Comment

D. Adjournment – the next meeting is scheduled for April 11, 2019.

Jacksonville Tree Commission
Meeting Minutes March 14, 2019
Approved April 11, 2019

Commissioners Present:	John Crescimbeni, Chair Curtis Hart, Vice Chair Rhodes Robinson John Pappas Aaron Glick Mike Robinson	Staff:	Cindy Chism
Advisors:	Susan Grandin, OGC Kathleen McGovern, City Arborist Joel Provenza, Accounting Richard Leon, Urban Forest Manager	Public:	Kevin Kuzel, ECA District 4 John November, Public Trust Joe Anderson, JEA Fred Pope, Public Works Leslie Pierpont, Late Bloomers Dave McDaniel, Public Works Jacob Caldwell Anastasia Caldwell

- A. Meeting was called to Order by Chair at 12:02 PM.
1. All present introduced themselves for the record.
 2. Submittal of Speaker's Cards.
 3. Motion made by Mr. Hart, seconded by Mr. R. Rhodes, for approval of minutes from February 14, 2019 meeting. None opposed.
 4. Fund balance and encumbrance report for 15(F), 15(N) and BJP (Attachment A) – Joel Provenza.
 5. Status of Pending Tree Projects including Levels 1 and 2 (Attachment B) – Kathleen McGovern.
 - a. The Level 2 list has not changed since the last meeting. The new Level 1 list is a printout of all CARE issues requesting a tree be planted in City right of way. CM Crescimbeni pointed out that some of the issues are from 2017. Mr. Leon said some of the older requests have been added to existing projects such as the Springfield planting project and/or the Riverside Avondale Preservation Releaf project. **Ms. McGovern said the requests will be inspected before the next meeting and the list will be updated.**
 - b. CM Crescimbeni asked about the issue from 2017 that requests replacement of trees in a median. Mr. Leon answered that some of these requests were entered before there was a process in place for routing them. CM Crescimbeni said that they need to be sure the legislation supports replacing trees in medians. Ms. Grandin said that she believes there was a discussion about allowing planting as far away as across the street. She will verify what is listed in the legislation. Mr. McDaniel pointed out that the Remove and Replace legislation would work in this instance. The Tree Commission has given the tools to the Mowing and Landscape Division to accomplish the tasks we have. CM Crescimbeni asked **Ms. Grandin to work with Public Works to ensure the boundaries are being observed of what's authorized by the ordinance. If other mechanisms are required, there will be a need to revise the legislation or create something else.**

6. Status of Countywide Tree Planting Contract – Dave McDaniel

- a. Mr. McDaniel said they received two bid tabs: one from Fernandina Mulch & Stone, LLC (doing business as Liberty Landscape Supply), and one from Davey Tree Expert Company. Each bid had three parts and Liberty Landscape Supply was low on all three. A discussion is scheduled with Mr. Pappas, Ms. McGovern and Mr. McDaniel to award all three parts to Liberty Landscape Supply. For 15 gallon and two inch trees, Liberty Landscape Supply's bid is lower than Davey Tree's across the board.
- b. CM Crescimbeni asked how Liberty's prices compared with the bids they submitted for the Mandarin and Springfield projects. Ms. McGovern said the prices were lower for the projects than for the Countywide Contract.

B. New Business

1. Committee on Unauthorized Tree Pruning/Removal (Attachment C)– M. Robinson

- a. 3.a. 656.1212(a) - Mr. Pappas asked, with regard to the suggested revision, how it could be tracked? How could they track the trees that are smaller than what requires mitigation? Is there anything that tracks trees saved as part of a previous permit? Mr. Hart said his company numbers every tree to be saved and notes it on the 10-Set. The information should be easy to track from that data, which carries over on the 17 Inspection. CM Crescimbeni pointed out that Mr. Hart develops residential; these requirements may or may not be applied to commercial property. Ms. Grandin said that if there is a mitigated tree on any property, one of the subcommittee's suggestions is to make that a protected tree, no matter what size. **Question for Mr. Goldsbury: Are commercial developers keeping records of mitigated trees and how are the records kept? Is there a way to check other than pulling the physical drawings and making site visits?**
- b. CM Crescimbeni asked Ms. Grandin if she believed the Ordinance Code was vague regarding this requirement and if the Charter Amendment specifically exempts single family homes. Ms. Grandin confirmed that the Charter Amendment does exempt single family homes; the Ordinance Code is the standard.
- c. Ms. Grandin pointed out that the 10 Sets are stored digitally, which should help with the research portion.
- d. 3.b.656.1203 - Mr. Hart asked the subcommittee if this also applies to any trees protected under a Planned Unit Development (PUD). Mr. M. Robinson said it was not considered. Mr. Glick pointed out that the ordinance said the PUD uses the language "consistent with Part 12." Ms. Grandin said "protected by PUD" should be added to the definition of protected trees.
- e. 4. through 7. - Fall under redefining "protected trees" as well as adding "conservation easements" under the definition.
- f. 8. is an addition – If a "protected tree" is removed by a homeowner, a \$25 fee is supposed to be charged but this rarely happens. Ms. Grandin suggested using the process to document the removal of the tree. There is no fee as long as the tree is diseased, dying, or an invasive species.

What are the criteria that arborists use to decide to eliminate trees? Mr. Leon asked if the City Arborist makes that determination. Mr. Hart said it is made by an arborist approved by the City. Mr. R. Robinson suggested that the designation of an affected tree must be made by a certified arborist. The City then does a follow-up. The determination is turned in to the Public Building Inspection Division when filing for their removal permit.

- g. 9. 656.1206(e) - Mr. M. Robinson said perhaps what Mr. R. Robinson is suggesting is part of this section's 14-point analysis which is more detailed and includes things like safety hazard to buildings, pedestrians, etc. Mr. Leon asked if trees planted as part of the initial development now have residents complaining about them being a hazard because of lifted sidewalks. These are private protected trees. Since they were planted at the development stage, does the hazard have to be the tree or as a result of the tree? Ms. Grandin said under exceptions, it is "any tree which poses imminent danger to public health, welfare or safety and requires immediate removal without delay." This probably pertains to a tree that is about to fall down. Not sure about heaving up sidewalks. **Question for Mr. Goldsbury: Is the 14 point analysis listed in 656.1206(e) being done?**
- h. 10. – The penalty for removing a tree should be based on an appraisal of the removed tree by a Certified Arborist. That is then approved or disapproved by a Hearing Officer so the penalty is commensurate with the offense.
- i. 11. – Over-pruning penalties should not be as great as removal penalties. However, in addition to penalties, there should be a plan in place for rehabilitation of the tree and future inspections.

Ms. Grandin pointed out items 10 and 11 (h. and i.) require a Hearing Officer as well as an Arborist that can perform tree evaluations. The standards for assigning a dollar value to a tree are not just based on the amount of inches and the cost of a tree that size. CM Crescimbeni said for tree evaluations a Special Magistrate would hear the case and the City Arborist would provide the cost estimate. The defendant would likely have his own arborist, possibly with a different opinion from the City's Arborist. The Magistrate must then determine which report is the most reliable. Mr. Pope offered another scenario: Once a violation has been established, a certified arborist with that skill-set would be pulled randomly from an existing list and sent to do the evaluation. The landowner is required to pay for the evaluation from the arborist. CM Crescimbeni agreed and asked Ms. Grandin to ensure no due process rights would be violated. Mr. Leon suggested a standard practice should be adopted. For instance, the Council of Tree and Landscape Appraisers have a method with a standard formula. Some numbers are somewhat subjective regarding health, but it would be a good idea to adopt official standards. CM Crescimbeni asked if all protected trees would be treated equally under these scenarios and if there is a difference between a protected tree versus one that was required to be planted as mitigation. Ms. Grandin said it is a policy decision if they change the definition of protected tree to include any tree planted as part of a requirement as mitigation, landscape code, a PUD, or with Tree Fund monies. Ms. Grandin added that in the case of over-pruning, a standard would have to be given to the Hearing Officer on whether the over-pruning was done intentionally or out of ignorance.

- j. 12. – Change drip line to root zone. Root zone is determined by 1.5 feet radius for every inch of diameter of tree.
- k. 13. – Barricades should be placed at the root zone. Mr. Pappas asked how we would know the bad health of a tree is due to root damage from years ago. Mr. M. Robinson replied it would require a site review after the fact and in most cases you can tell. Mr. Leon added that it happens frequently but you can't tell until the tree begins to fail. Ms. Grandin said that if the barricades are placed as suggested (at the root zone), this should help alleviate some of the damage.
- l. 14. – **Ms. Grandin will correct the formula (diameter or radius) and research what other cities are doing.**
- m. 15. & 16. – Liability will include the property owner and contractor.
- o. 17. – Is \$50,000 enough for clearing an acre with no permit? Mr. November added that Mr. Goldsbury requested this be the amount during mediation. Mr. Hart pointed out that if there were only four trees, ten inches each, \$50,000 is too much. Mr. R. Robinson added that if there is no way to prove what was there before, it's difficult to assess it; there needs to be a deterrent. **CM Crescimbeni asked the Commissioner's to review 656.1208(c)(4) (Attachment D).**
- p. 18. – Correct and make consistent throughout the ordinance(s) which standards are referenced, i.e, American National Standards for Tree Care Operations (ANSI).

C. Public Comment

Joe Anderson – I want the Tree Commission to see a copy of the permit JEA obtains for pruning within the City right-of-way (Attachment E). This document shows that JEA recognizes trees as part of infrastructure, and the authority of the City, for ownership and maintenance of those trees. This permit is obtained annually for routine cycle trimming and does not include capital improvement projects. It covers the contractor that works for JEA. Also provided is a JEA brochure which discusses utility pruning along the City right-of-way. 'Council Quarterly' (the Urban Forestry Council newsletter) contains an article about street soil volume that discusses suspended pavements.

Jacob Caldwell – Here on behalf of John Gory Building. We border Barr Street on College Street and Stockton Street. We are transitioning from a 100 year old school to a Condominium and there are some 90 year old trees on the City right-of-way and they would like to know how to maintain them. There are also questions about the maintenance of eight trees along College Street that were a gift from Mrs. Weaver. **Ms. McGovern will respond to Mr. Caldwell.**

John November – Pleased at the amount of effort the Tree Commission has put into this process. If a project is under \$100,000, does the Tree Commission have the option to waive the bond requirement? Ms. Grandin said they do have the option, per Florida Statute.

D. Action Items

Ms. McGovern said the requests will be inspected before the next meeting and the list will be updated.

Ms. Grandin will work with Public Works to ensure the boundaries are being observed of what's authorized by the Remove & Replace ordinance. If other mechanisms are required to replace trees in medians, they will revise the legislation or create something else.

Questions for Tom Goldsbury: Attachment C, items 3. and 9. What other entities are authorized for an annual pruning permit? Are commercial developers keeping records of mitigated trees and how are the records kept? Is there a way to check other than pulling the physical drawings and making site visits? : Is the 14 point analysis listed in 656.1206(e) being done?

Ms. Grandin will begin drafting changes to the Ordinance Code on items that are ready and do not require further discussion (everything except those questions for Tom Goldsbury and the root zone questions 10 – 14).

Ms. Grandin will review the Ordinance for street-scaping and change 'impervious' to 'pervious', especially on public plantings.

Ms. Grandin will correct the formula (diameter or radius) and research what other cities are doing.

Commissioner's please review the Level 3 application, instructions and grant agreement that was circulated. Prepare comments for discussion at the next meeting.

Ms. McGovern will respond to Mr. Caldwell.

E. Adjourned 1:32pm.

INDEX CODE	Index Code Titles	BUDGET	Actual	Encumbrance	Unencumbered Budget Balance	Reserves	Unencumbered Balance net of Reserves
	Subfund 15F Revenue						
PWOD15FTP	TREE PROTECTION & RELATED EXPENSES	29,858,755	42,816,808	-	12,958,053	-	12,958,053
JXSF15FPW	TREE PROTECTION & RELATED EXPENDITURES	7,923,308	8,853,755	-	930,447	-	930,447
JXSF15F	TREE PROTECTION & RELATED EXPENDITURES	-	8,580	-	8,580	-	8,580
TRIN15FR31R	TRF TO 15F TREE PROTECTION FR 31F	392	392	-	-	-	-
	CONVERSION AND NOINCASH REVENUE ENTRIES		338,836	-	338,836	-	338,836
	Total Subfund 15F Revenue	37,782,456	52,018,372	-	14,235,916	-	14,235,916
	* Subfund 15F Expenditures						
PWOD15FFSAS	FORREST STREET ASH SITE TREE/PLANTING	587,850	581,856	5,995	-	-	-
PWOD15FNMS	NORTH MAIN STREET LANDSCAPING	62,057	50,321	11,736	-	-	-
PWOD15FBDas	BROWN'S DUMP ASH SITE TREE/PLANTING	364,730	342,361	22,370	-	-	-
PWOD15FFCAs	5TH & CLEVELAND ASH SITE TREE/PLANTING	494,215	376,792	117,423	-	-	-
PWOD15FDcS	DUAL COUNTY SCHOOL BOARD PROPERTY	125,000	32,757	-	92,244	-	92,244
PWOD15FDTP	DOWNTOWN TREE PLANTING	38,822	32,568	6,254	-	-	-
PWOD15FZLAE	ZOO LANDSCAPING-ASIAN EXHIBIT	1,824,408	792,976	1,031,432	-	-	-
PWOD15FBCL	INTERSEC,BRIDGE,MISC 09/10 LANDSCAPING	100,000	80,714	819	18,468	-	18,468
PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY	4,979,980	4,625,562	173,365	181,053	-	181,053
PWML15F	TREE MAINTENANCE	2,149,689	2,114,694	290	34,704	-	34,704
PWOD15FATPP	AVONDALE TREE PLANTING PLAN	31,233	24,986	6,247	-	-	-
PWOD15FKSCP	KING ST. PLANTING COLLEGE TO PARK	85,366	60,061	25,305	-	-	-
PWOD15FHAMM	HAMMOND BLVD PROJECT	175,761	-	-	175,761	-	175,761
PWOD15FVPP	COUNTY-WIDE TREE PROG-PRESERVATION PARKS	1,000,000	485,146	-	514,854	-	514,854
PWOD15FVAP	COUNTY-WIDE TREE PROG-ACTIVE PARKS	1,151,965	619,420	-	532,545	-	532,545
PWOD15FOSABP	OLD ST.AUG AT BARTRAM PARK	18,364	14,691	3,673	-	-	-
PWOD15FLAVC	LENOX AVE.PLANTING VERNIA TO CASSAT	26,436	21,149	5,287	-	-	-
PWOD15FPRBB	PATTON RD AND BEACH BLVD TREE PLANTING	32,203	-	32,203	0	-	0
PWML15F63OCT	630-CITY TREE PLANTING PROG	200,000	-	-	200,000	-	200,000
PWOD15FMANRD	MANDARIN ROAD TREE PLANTING	103,840	-	29,239	74,601	-	74,601
PWOD15FSPRTR	SPRINGFIELD PRESERVATION TREE PLANTING	278,872	-	81,923	196,949	-	196,949
PWOD15FTP	TREE PROTECTION & RELATED EXPENSES	3,548,513	2,097,444	-	1,451,069	-	1,451,069
JXSF15FPW	TREE PROTECTION & RELATED EXPENDITURES	2,000,635	-	-	2,000,635	-	2,000,635
JXSF15F	TREE PROTECTION & RELATED EXPENDITURES	1,865,741	-	-	1,865,741	-	1,865,741
	Subfund 15F Expenditures	21,245,679	12,353,495	1,485,812	7,386,624	5,315,481	2,023,143
	* Includes accounts with encumbrances and budget balances						
	Unencumbered Budget Balance						
	Revenues						14,235,916
	Expenditures						7,338,624
	Unencumbered Balance net of Reserves						(2,023,143)
	Subfund 15F Available to Appropriate (Budget less Actual less Encumbrance less Unencumbered Budget balance)						19,551,397

INDEX CODE	Index Code Titles	BUDGET	Actual	Encumbrance	Unencumbered Budget Balance	Reserves	Unencumbered Balance net of Reserves
PWOD15N1M	Subfund 15N Revenue	305,139	4,905,089	-	4,599,951	-	-
	TREE MITIGATION & RELATED EXPENSES	305,139	4,905,089	-	4,599,951	-	-
	Total Subfund 15N Revenue	305,139	4,905,089	-	4,599,951	-	4,599,951
	*Subfund 15N Expenditures						
PWOD15NHR	HARTS ROAD TREE PLANTING	7,548	1,294	6,253	-	-	-
JXSF15N	TREE MITIGATION & RELATED EXPENSE	1	-	-	1	1	-
	MANDARIN ROAD TREE PLANTING	62,205	-	16,607	45,598	-	45,598
PWOD15FPR8B	PATTON RD AND BEACH BULD TREE PLANTING	62,080	-	62,080	-	-	-
	Subfund 15N Expenditures	131,834	1,294	84,941	45,599	1	45,598
	* Includes accounts with encumbrances and budget balances						
	Subfund 15N Available to Appropriate (Budget less Actual less Encumbrance less Unencumbered Budget balance)						4,599,952
PWCP351MIT	Better Jacksonville Plan	1,717,826	-	-	1,717,826	-	1,717,826
	TREE MITIGATION PROJECT						
	Better Jacksonville Plan (for Tree Mitigation) Available to Appropriate (Budget less Actual less Encumbrance less Unencumbered Budget balance)						1,717,826
	Total 15F and 15N Funds						24,151,348
	Better Jacksonville Plan - TREE MITIGATION PROJECT						1,717,826
	Grand Total 03/13/2019						25,869,174
	Grand Total 02/11/2019						25,757,139
	Difference						112,035

3/13/19

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TREE MITIGATION
CITY OF JACKSONVILLE

TREE REMOVAL PERMIT INFORMATION

Click here to search detailed information on Site Clearing and Tree Removal Permits. In reviewing tree removal information on a specific permit, for "B" permits click on the Spec 2 tab, for "L" permits click the Tree Mitigation tab

TREE FUND CITY PLANTING PROJECTS

Click here to search detailed information about City Tree Fund Planting Projects

AVAILABLE FOR APPROPRIATION

15F (Ordinance) \$10,551,306.74
15N (Charter) \$4,599,951.71
Baker Jacksonville Plan - Tree Mitigation Project \$1,717,826.00
Total: \$16,869,084.45

FILE AN ISSUE

Click here to report site clearing or tree removal without a permit, or to request tree maintenance on public property. In the CARE System, select "Tree Damage or Landscape Violation" from the dropdown.

Disclaimer: The AVAILABLE FOR APPROPRIATION information shown on this page is updated nightly from the City's financial records, but does not include any pending appropriations, or other financial transactions of the funds which have not been completed.

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3

03/13/19

FY 2018 Revenues by month

	FY2018 April	FY2018 May	FY2018 June	FY2018 July	FY2018 August	FY2018 September	FY 2019 October	FY 2019 November	FY 2019 December	FY 2019 January	FY 2019 February	FY 2019 March
34375 TREE MITIGATION FUNDS - ARTICLE 25	67,398	63,240	28,520	15,035	78,707	34,100	48,100	112,999	96,792	54,168	26,146	1,036
361101 INVESTMENT POOL EARNINGS	29,738	33,435	19,610	40,772	40,877	45,812	-	27,825	31,552	39,249	42,747	-
36602 CONTRIBUTIONS FROM PRIVATE SOURCES	221,340	184,915	198,555	31,240	52,700	(120,465)	215,352	794,660	181,300	215,544	30,044	1,332
(15F) TREE PROTECTION & RELATED EXPENDITURES	318,476	281,590	246,685	87,047	172,284	(40,553)	263,452	935,484	309,644	308,961	98,936	2,368
34375 TREE MITIGATION FUNDS - ARTICLE 25	158,550	42,000	125,245	15,620	103,331	23,325	52,875	152,212	45,675	198,209	15,905	3,450
361101 INVESTMENT POOL EARNINGS	5,203	5,982	3,539	7,409	7,695	8,828	-	5,404	6,137	7,646	8,450	-
(15N) TREE MITIGATION & RELATED EXPENSE	163,753	47,982	128,784	23,029	111,026	32,153	52,875	158,591	51,812	205,855	24,356	3,450
	482,229	329,572	375,468	110,076	283,310	(8,400)	316,327	1,094,075	361,456	514,816	123,292	5,818

FY	DOC_NO	DOC_SUFFIX	SUBFUND	VENDOR_NO	VENDOR_SUFFIX	VENDOR_NAME	Amount	INDEX_CODE	Index Code Title
2019	CTPW07000014	01	15F	591319010	01	ZOOLOGICAL	1,031,432.38	PWOD15FZLAE	ZOO LANDSCAPING-ASIAN EXHIBIT
2019	PO3019740001	04	15F	340176110	07	EXPERT	29,663.46	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO3019740003	02	15F	340176110	07	EXPERT	5,994.50	PWOD15FFSAS	FORREST STREET ASH SITE TREE/PLANTING
2019	PO3019740004	02	15F	340176110	07	EXPERT	22,369.50	PWOD15FBDAS	BROWN'S DUMP ASH SITE TREE/PLANTING
2019	PO3019740005	02	15F	340176110	07	EXPERT	117,423.00	PWOD15FFFCAS	5TH & CLEVELAND ASH SITE TREE/PLANTING
2019	PO7A02942006	01	15F	340176110	06	EXPERT	11,735.94	PWOD15FNMS	NORTH MAIN STREET LANDSCAPING
2019	PO7A02942017	01	15F	340176110	06	EXPERT	6,254.01	PWOD15FDTP	DOWNTOWN TREE PLANTING
2019	PO7A02942018	01	15F	340176110	06	EXPERT	3,672.84	PWOD15FOSABP	OLD ST.AUG AT BARTRAM PARK
2019	PO7A02942019	01	15F	340176110	06	EXPERT	25,305.09	PWOD15FKSCP	KING ST. PLANTING COLLEGE TO PARK
2019	PO7A02942021	01	15F	340176110	06	EXPERT	6,246.52	PWOD15FATPP	AVONDALE TREE PLANTING PLAN
2019	PO7A02942023	01	15F	340176110	06	EXPERT	5,287.17	PWOD15FLAVC	LENOX AVE.PLANTING VERNA TO CASSAT
2019	PO7A02942025	01	15N	340176110	11	EXPERT	6,253.17	PWOD15NHR	HARTS ROAD TREE PLANTING
2019	PO7A02942026	01	15F	340176110	11	EXPERT	32,202.87	PWOD15FPRBB	PATTON RD AND BEACH BLVD TREE PLANTING
2019	PO7A02942026	02	15N	340176110	11	EXPERT	62,080.49	PWOD15NPRBB	PATTON RD AND BEACH BLVD TREE PLANTING
2019	PO8A01798017	01	15F	161004851	05	SERVICE, INC.	290.35	PWML15F	TREE MAINTENANCE
2019	PO8A01798019	01	15F	161004851	05	SERVICE, INC.	88,946.82	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A04239000	02	15F	260435658	02	IRRIGATION	49,780.00	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A04605000	01	15F	260435658	02	IRRIGATION	818.50	PWOD15FIBCL	INTERSEC, BRIDGE, MISC 09/10 LANDSCAPING
2019	PO9A04607000	01	15F	260435658	02	IRRIGATION	1,912.50	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A04615000	01	15F	260435658	02	IRRIGATION	1,912.50	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A05119000	01	15F	260435658	02	IRRIGATION	1,150.00	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A05520000	01	15F	462419683	01	MULCH & STONE,	29,239.00	PWOD15FMANRD	MANDARIN ROAD TREE PLANTING
2019	PO9A05520000	02	15N	462419683	01	MULCH & STONE,	16,607.43	PWOD15NMANRD	MANDARIN ROAD TREE PLANTING
2019	REQ250271	01	15F				81,922.79	PWOD15FSRPTP	SPRINGFIELD PRESERVATION TREE PLANTING

1,638,500.83

CITY OF JACKSONVILLE TREE PLANTING PROJECTS - ACTIVE

Attachment B

Visit https://pg-cloud.com/jacksonville/ for City of Jacksonville Tree Project Maps											
Visit http://jacksonville.fl.gov for links to legislation and planting details											
CD	Project Title	Project Scope	Project or Ordinance Number	Division/Project Manager	Estimated Cost	Actual Cost	Anticipated Start Date	Actual Start Date	Anticipated Completion Date	Actual Completion Date	Status
7	Main Street	Tree removal and planting on N. Main St. between 1st St. and 7th St.	2017-0111-E	Public Works - Mowing and Landscape Richard Lenoir/Fred Page	\$22,057.00	\$20,176.85	8/20/2018	8/20/2018	9/17/2018	10/18/2018	Complete
9	Harts Rd & Dunn Ave. Streetscape in Downtown Jacksonville	5 Date Palms to be planted on two medians on Harts Rd at the cross street of Dunn Ave. (Phase 1) 8 Date Palms to be planted as replacements in Downtown 1st St on Riverside Ave. - 2 on Adam St. W. 1 on Forsyth St. W. 1 on Monroe St. (Phase 2) 13 Date Palms total. Includes removal of existing Date Palms in city street planting boxes. Introduced by CM Gaffney. Appropriation from Tree Fund 15F	2018-0007-E	Public Works - Mowing and Landscape Richard Lenoir/Kathleen McGovern	\$62,540.03	\$62,540.03	Phase 1 4/10/2018 Phase 2 4/25/18	Phase 1 3/23/2018 Phase 2 4/20/18	Phase 1 6/11/18 Phase 2 6/11/18	6/11/2018	Complete
6	Old St. Augustine Rd Medians	Two median tree plantings on Old St. Augustine Rd from Bantam Park Blvd to entrance of Palmetto Leaves Park South (to be removed). Introduced by CM Schlegelberg. Appropriation from Tree Fund 15F	2018-0043-E	Public Works - Mowing and Landscape Richard Lenoir/Kathleen McGovern	\$18,364.21	\$18,364.21	4/20/2018	6/11/2018	8/8/2018	10/18/2018	Complete
14	King Street	King St. from College St. to Park St. - replacement planting on north medians and sidewalk cut outs. Introduced by CM Love. Appropriation requested from 15F	2018-0158-E	Public Works - Mowing and Landscape Richard Lenoir/Kathleen McGovern	\$85,366.23	\$73,813.92	5/11/2018	5/11/2018	8/20/2018	10/18/2018	Complete
4	Palmetto Rd/Beach Blvd - Southside	Right of Way Plantings on two adjacent sides at the intersection of Palmetto Rd. and Beach Blvd. (no removal) and residential right of way planting. Introduced by CM Scott. Whitten and through stream request. Appropriation requested from 15F (\$312,202.87) and 15M (\$62,080.43)	2018-0190-E	Public Works - Mowing and Landscape Dave McDaniel/Kathleen McGovern	\$94,283.46		12/15/2018	2/20/2019	3/14/2019	3/14/2019	Complete pending initial inspection
14	Avondale Neighborhood Tree Planting Plan	Tree Planting in City ROW on residential streets in Avondale replace dead/storm damaged trees. Introduced by CM Love. Appropriation requested from 15F	2018-0273-E	Public Works - Mowing and Landscape Richard Lenoir/Kathleen McGovern	\$31,232.60	\$31,232.60	7/19/2018	7/19/2018	8/20/2018	12/20/2018	Complete
3	Lenox Ave. Tree Planting	Tree Planting in City ROW tree planting (no removal) on Lenox Ave from Shen Ave to Cassi Ave. Introduced by CM Dennis. Appropriation requested from 15F	2018-0307-E	Public Works - Mowing and Landscape Dave McDaniel/Kathleen McGovern	\$26,435.84	\$26,435.84	10/12/2018	10/15/2018	10/26/2018	12/20/2018	Complete
7	Harts Rd. N Medians and Right of Way	Tree Planting in City ROW and medians. Introduced by CM Gaffney	2018-0369-E	Public Works - Mowing and Landscape Dave McDaniel/Kathleen McGovern	\$31,265.81	\$31,265.81	9/12/2018	9/12/2018	10/27/2018	12/20/2018	Complete
6	Mandarin Rd/Tree Planting	Tree Planting in City ROW tree planting along rail/trail/paths with replacement for living medians. (65 trees and MDI) Introduced by CM Schlegelberg. Appropriation requested from 15M and 15F	2018-0791-E	Public Works - Mowing and Landscape Richard Lenoir/Kathleen McGovern	\$166,104.00		3/7/2019				In progress/trees on order
7	Springfield Neighborhood Tree Planting - SPAN collaboration	Tree Planting in City ROW on residential streets and businesses in Springfield for tree planting requests and to replace dead/storm damaged trees. (345 trees) Introduced by CM Gaffney. Appropriation requested from 15F	2018-0792-E	Public Works - Mowing and Landscape Richard Lenoir/Kathleen McGovern	\$278,872.00		1/25/2019				In progress/trees on order
34	RAP Relief Neighborhood Tree Planting - RAP collaboration	Tree Planting in City ROW on residential streets and businesses in District 14 for tree planting requests and to replace dead/storm damaged trees. (34 trees) Introduced by CM Love. Appropriation requested from 15F	2019-0044-E	Public Works - Mowing and Landscape Richard Lenoir/Kathleen McGovern	\$781,748.00						Expected/BIH Quarterly 3/20

LEVEL 1 TREE PLANTING PROGRAM - 630-CITY

2017-138423	6/5/2017	Tree - Plant New Tree	CRYSTAL SPRINGS RD / SUMMIT OAKS DR	2 oak trees in the median of Crystal Springs Rd near Summit Oaks were apparently run over. Please replace trees. Thanks so much!	Public Works / Mowing & Landscape Maintenance	2/2/2019	TCobert
2019-5010570	1/16/2019	Tree - Plant New Tree	335 10 STE E	Had been notified there is room in my right of way for a tree during a SPAR tree planting project, but was left off the final list. The area receives a lot of direct sunlight. We would prefer the smaller, flowering trees (crepe myrtles, fringe trees, Vitex, etc), but we'll leave it to you experts to decide what will do best here. Thank you for your help!	Public Works / Mowing & Landscape Maintenance	6/30/2020	ecare
2019-5010033	1/10/2019	Tree - Plant New Tree	1628 EDGEWOOD AV S	I'd like a couple of crepe myrtles in ROW. City cut down a tree a few years back and left slump, so that should be removed also. Property in name of wife Hilary. Her number is 434-1078	Public Works / Mowing & Landscape Maintenance	6/24/2020	ecare
2019-82491	3/1/2019	Tree - Plant New Tree	CYPRESS LANDING DR / ASSISI LA	The customer is interested in getting some trees planted in this area. Please contact Ms. Benham.	Public Works / Mowing & Landscape Maintenance	8/12/2020	ENixon
2019-73112	2/13/2019	Tree - Plant New Tree	1149 TALBOT AV	Caller called and requested tree be planted in ROW. Creating ticket for city arborist.	Public Works / Mowing & Landscape Maintenance	7/28/2020	Rleon
2019-71461	2/11/2019	Tree - Plant New Tree	316 5TH ST W	Caller states he would like to be contacted about a replacement tree.	Public Works / Mowing & Landscape Maintenance	7/24/2020	TAddison
2019-69435	2/6/2019	Tree - Plant New Tree	3007 TIGER HOLE RD	Please put a tree.	Public Works / Mowing & Landscape Maintenance	7/2/2020	TSharpe
2019-64133	1/28/2019	Tree - Plant New Tree	1430 AVONDALE AV	Caller requesting to have dead trees replaced located in the front of her home. Please replace with the same type tree.	Public Works / Mowing & Landscape Maintenance	7/10/2020	LewSD
2019-57015	1/14/2019	Tree - Plant New Tree	BALTIC ST / CHEROKEE AV	Caller states that she need more information about the RELEAF PROGRAM (for planting trees in Ortega Park).	Public Works / Mowing & Landscape Maintenance	6/26/2020	LWarran
2018-5028710	6/13/2018	Tree - Plant New Tree	8544 RUCKMAN AV	I would like to have native trees planted in the right of way in front of my house that will provide shade for my front yard	Public Works / Mowing & Landscape Maintenance	3/6/2019	ecare
2018-199945	8/20/2018	Tree - Plant New Tree	11634 SUMMERBROOK CT	Trees lost in median need to be replaced - Greenland rd. at Summer Haven Blvd.	Public Works / Mowing & Landscape Maintenance	5/10/2019	KMcGovern
2018-186971	7/31/2018	Tree - Plant New Tree	4602 LAWNVIEW ST		Public Works / Mowing & Landscape Maintenance	4/22/2019	MMwade
2018-163753	6/29/2018	Tree - Plant New Tree	2429 SUMMER TREE RD E	Caller request Crepe Myrtle Tree be planted in front of property. No email	Public Works / Mowing & Landscape Maintenance	3/22/2019	WillAdams
2018-106341	4/5/2018	Tree - Plant New Tree	GREENLAND RD / OLD ST AUGUSTINE RD	Citizen requesting the trees and vegetation be replaced on Greenland Road from Old St Augustine Road to the 195 overpass.	Public Works / Mowing & Landscape Maintenance	12/11/2019	RKey

LEVEL 1 TREE PLANTING PROGRAM - 630-CITY

<u>2017-150466</u>	6/22/2017	Tree - Plant New Tree	BELFORT RD / SECRET COVE DR	There was a traffic accident taking out 3 crepe myrtles trees on Belfort near Secret Cove. They are now growing as bushes, and it is blocking the view as they grow bigger. Can they be removed and replaced with trees?	Public Works / Mowing & Landscape Maintenance	4/23/2019	WStrapp
<u>2017-145052</u>	6/15/2017	Tree - Plant New Tree	WHITNEY NICOLE LA / IBACH RD	Several previously removed in the median and they would like to have something replaced. Preferably a flowering shade tree if possible.	Public Works / Mowing & Landscape Maintenance	3/7/2019	JaimieH
<u>2017-121352</u>	5/4/2017	Tree - Plant New Tree	LONE STAR RD / LILLIAN RD	The customer reported the tree wasn't replaced in the Island in the median. The tree was knocked down by a vehicle and was never replaced.	Public Works / Mowing & Landscape Maintenance	7/24/2019	CCJones

CITY OF JACKSONVILLE LEVEL 2 TREE PLANTING PROJECTS - ACTIVE

Visit <https://pg-cloud.com/JacksonvilleFL/> for City of Jacksonville Tree Project Maps

Visit jaxtreemitigation.coj.net - Tree Fund City Projects for links to legislation and planting details

Requesting Entity	Project Scope	Status
Kensington Association HOA Director	30-50 trees requested within Kensington Lakes city right of ways along Kensington Gardens Blvd. and Kensington Lakes Dr to replace trees lost due to storm damage/disease; may include removals. Planting Plan pending.	In Development
St. Johns Episcopal Church Cathedral District Tree Planting	50+ trees requested as Cathedral District (CD7) tree planting, may include removal of damaged/diseased trees. City right of way tree plantings within general proximity but not limited to State St to Catherine St. to Main St. to Adams St.; site evaluation scheduled	In Development
Executive Director, Tree Hill Nature Center	22 trees requested in Tree Hill amphitheater parking area; site plan complete; no removals required; ready for review pending cost estimate per new countywide tree planting contract.	Ready for Review pending cost estimate
San Marco Preservation Society and Greenscape, San Marco Tree Planting	50-100 Trees requested in city right of ways within District 5, includes removal of damaged/diseased trees; site evaluation scheduled	In Development
Sheffield Elementary School PTA President	10 Trees requested to provide shade for existing play area/field at Sheffield Elementary School; site visit complete - pending design and review.	In Development

TREE COMMISSION COMMITTEE ON UNAUTHORIZED TREE PRUNING/REMOVAL

CONFERENCE WITH SUSAN GRANDIN, TRACEY ARPEN AND MIKE ROBINSON,

JANUARY 15, 2019, JANUARY 23, 2019, and February 13, 2019

Subject: Suggested requirements and penalties for removing or damaging trees without a permit.

Background: Trees required as part of the Landscape Requirements of Subpart C were pruned by topping or hatracking in order to provide visibility to a Clear Channel billboard. Also, 10 trees were removed without a permit in front of a Burger King that former Councilman Dick Kravitz had saved as part of the PUD criteria for a rezoning.

Note: In order to adequately get to the issue of what constitutes over pruning and how to treat the violations, it was necessary to expand the scope to what trees are "protected" in the first place, and how they are protected during development. Additionally, for requirements and violations to be effective in both Subparts B (Tree protection) and C (Landscaping Requirements), Subpart A (General Provisions) should be expanded.

Discussion:

1. Tree removal is regulated, but damage caused by over-pruning is not adequately regulated.
2. Description of what constitutes "over-pruning" should be provided in the Code graphically, general ideas by text, as well as referencing manuals on pruning. (Add to General Provisions)
3. Currently, the definition of "Protected Tree" does not specifically include trees planted as required by Subpart C (Landscape Requirements), or as mitigation required by Subpart B, unless they have grown to the size of an otherwise "Protected Tree". The result is that a landowner could have planted 2" Maples throughout a large parking lot, and once the Maples grow to 11" dbh, they can be permitted to be removed either because they are not Protected Trees, or by replacing with each Maple with one 4" tree. This is capable of happening over and over and may be desired to keep the view to signage clear.
 - a. In the Landscaping Requirements Subpart C, the owner is required to "maintain the required landscape areas", but this does not directly address removal of trees that were retained or provided as part of the landscaping requirements. Suggest revision to subsection 656.1212(a) to: change the heading to be "Maintenance of Required Landscaping"; strike the term "landscape areas" and insert "landscaping" which is a defined term that includes combination of living plants, including trees; and add "in the opinion of the Chief" as to whether the replacement trees will fit on the site.
 - b. The definition of Protected Tree should be revised to specifically address the trees retained or provided to meet landscape requirements. Suggest revision to Sec. 656.1203 (Definitions) to add to the definition of "Protected tree" an additional subparagraph (4) "Any tree, regardless of size, planted or preserved to meet mitigation

or landscape requirements, or planted utilizing Tree Protection and Related Expenses Trust Fund monies. Cross reference subsection 656.1206(g)(7).

- c. Should definitions be identified in the body of the ordinance as defined terms signaled by the capitalization of the word or words?
4. What trees are exempt from being "Protected Trees" is confusing and should be reorganized.
5. Add conservation easements to definition of Public Protected Tree.
6. Diseased trees should not be classified as "Protected".
7. Exclude invasive, exotic species from definition of Exceptional Specimen Tree.
8. Protected Trees that are "exempted" from that definition should have a "Certificate of Exemption from Classification as a Protected Tree" issued by the Chief. This should be required as an administrative function with no "permit fee" associated, but there should be a paper trail.
9. Where is the 14-point analysis as required by 656.1206(e) done by the BID? Are all requests for tree removal granted no matter what?
10. The penalties for unpermitted removal of trees do not match the loss of the tree in some cases, such as the unpermitted removal of a 36" Laurel Oak, which would have a very large canopy is currently only required to be replaced with six 4" Laurel Oaks.
 - a. Suggest aligning penalty for unauthorized tree removal with the loss of value of the tree as appraised by a professional arborist with that skill-set, and as determined by a hearing officer.
11. The penalty for over-pruning trees should not be as great as the penalty for totally removing the tree. This violation should be sent to a hearing officer who could hear from professional arborist that would recommend either:
 - a. removing the tree and paying for its value along with other costs such as consulting fee, the cost of removal, and a fine; or
 - b. set up a plan to rehabilitate the tree through some time period of growth and pruning, with an inspection at the end of the period.
12. Damage to the root system within the drip line should be specifically mentioned as a form of unauthorized pruning or damage.
 - a. The use of the term "drip line" does not adequately encompass the root zone of a tree. Suggest changing area protected to "root zone". (General Provisions)
13. Barricades need to be at the root zone, and enforcement needs to happen.
14. A standard for barricades is 1.5 feet in diameter for each inch of dbh.
 - a. So, a 10" tree would have at least a 15' diameter root zone barricade built around the tree, with the tree in the center.
 - b. Suggest requiring the root zone protection and the area required to plant trees be revised to cubic feet rather than square feet. The depth to which new soil should be provided is 18", so 1.5' X the area required.
15. Create joint and several liability for Violator. Do not limit liability to property owner. (General Provisions)
16. Define "person" if not already in general definition in Code. Definition in Sec. 1.102 is *Person*. The term "person" means any human being, any governmental or political subdivision or public agency, any public or private corporation, any partnership, any firm, association or other organization.

any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing or any other legal entity.

17. Is \$50,000 the right amount today for clearing an acre without a permit? What if the acre was covered with large live oaks or long leaf pines?
18. In an initial phone conference with Chris McCormick of GIC, most codes reference the ISA standards for tree pruning, and consider it a violation of the code if those recommendations are not followed.
 - a. Check ISA to make sure it meets our needs. No, use ANSI A300, and for work in public right-of-way, also use ANSI Z133 which is a safety standard.
 - b. Suggest subsection 656.1212(c) be revised to say "Required trees may be pruned in compliance with ANSI A#), but shall be allowed to develop into their natural habit or growth and shall not be topped,"
 - c. Suggest looking at other codes to determine a standard for penalties and how enforcement is accomplished.

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PART 12. - LANDSCAPE AND TREE PROTECTION REGULATIONS**SUBPART A. - GENERAL PROVISIONS****Sec. 656.1201. - Short Title; Charter Cross-Reference.**

Part 12 shall be known and may be cited as the Landscape and Tree Protection Regulations. All requirements in Article 25 of the Charter of the City of Jacksonville, *Minimum Standards for Tree Protection, Conservation and Mitigation During Development* shall be met *in addition* to the Landscape and Tree Protection Regulations in this Part 12.

(Ord. 91-59-148, § 1; Ord. 2008-910-E, § 1)

Sec. 656.1202. - Declaration of legislative intent and public policy.

It is the intent of these regulations to promote the health, safety and welfare of the current and future residents of the City of Jacksonville by establishing minimum standards for the conservation of water, the protection of natural plant communities, the installation and continued maintenance of landscaping, and the protection of trees within the City of Jacksonville in order to:

- (a) Improve the aesthetic appearance of commercial, governmental, industrial, and residential areas through the incorporation of landscaping into development in ways that harmonize and enhance the natural and manmade environment;
- (b) Improve environmental quality by recognizing the numerous beneficial effects of landscaping upon the environment, including:
 - (1) Improving air and water quality through such natural processes as photosynthesis and mineral uptake;
 - (2) Maintaining permeable land areas essential to surface water management and aquifer recharge;
 - (3) Reducing and reversing air, noise, heat and chemical pollution through the biological filtering capacities of trees and other vegetation;
 - (4) Promoting energy conservation through the creation of shade, thereby reducing heat gain in or on buildings or paved areas;
 - (5) Reducing the temperature of the microclimate through the process of evapotranspiration; and
 - (6) Encouraging the conservation of water through the use of site specific plants, various planting and maintenance techniques, and efficient watering systems.
- (c) Provide direct and important physical and psychological benefits to human beings through the use of landscaping to reduce noise and glare, and to break up the monotony and soften the harsher aspects of urban development;
- (d) Establish procedures and standards for the administration and enforcement of this Part;
- (e) Promote the creative site development concepts in order to promote water and energy conservation;
- (f) Increase and maintain the value of land by requiring a minimum amount of landscaping to be incorporated into development;
- (g) Preserve existing natural trees and vegetation and incorporate native plants, plant communities and ecosystems into landscape design where possible;

- (h) Promote landscaping methods that provide for the preservation of existing plant communities, re-establishment of native plant communities, use of site specific plant materials, use of pervious paving materials, and Florida-Friendly concepts in order to promote water conservation.
- (i) Assist in public information, the education of its citizens, and the effective implementation of this Part.
- (j) Promote Best Management Practices (BMPs) by establishing standards for irrigation systems without inhibiting creative landscape design.
- (k) Facilitate the implementation of Florida-Friendly concepts by offering flexibility and incentives in Florida-Friendly landscape design for new single-family residential developments.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2009-864-E, § 1; Ord. 2011-74-E, § 1)

Sec. 656.1203. - Definitions.

For purposes of this Part, in addition to the following terms or words, the definitions provided for in Part 16 shall apply. If the definitions contained in this Section at any time conflict with the definitions contained in Part 16, the more restrictive definition(s) shall apply. As used in this Part:

- (a) *Annual consumptive use* means the yearly amount of water applied to the landscape.
- (b) *Automatic controller* means a mechanical or electronic timer, capable of operating valve stations to set the days and length of time of a water application.
- (c) *Bona-fide agricultural purposes* means the use of land for bona fide agricultural purposes as described in F.S. § 193.461, provided the land is classified for assessment purposes by the property appraiser as "agricultural", pursuant to F.S. Ch. 193.
- (d) *Buffer yard or strip* means a strip of land, identified on a site plan or by zoning ordinance requirement, established to protect one type of land use from another land use that may be incompatible. The area is landscaped, maintained and kept in open space.
- (e) *Caliper* means the trunk diameter of planted trees. Caliper shall be measured six inches above the ground for trees up to and including four inches in caliper, and measured 12 inches above the ground for trees exceeding four inches in caliper. If the tree has a very enlarged irregular base, then the caliper measurement shall be taken up where the trunk has a more regular circumference, but in no case higher than four and one-half feet above the ground. If the tree forks between ground level and one foot above ground level, then the tree shall be considered a multi-trunked tree. Caliper for multi-trunked trees shall be determined by measuring each trunk immediately above the fork and adding the total caliper of the four largest trunks. (See also and compare definition of DBH in subsection (nn) of this Section.)
- (f) *Cultivated landscape area* means planted areas that are frequently maintained by mowing, irrigating, pruning, fertilizing, etc.
- (g) *Development* means any proposed material change in the use or character of the land, including, but not limited to, land clearing associated with new construction, the placement of any structure or site improvement on the land, or expansion of existing buildings.
- (h) *Drip line* means a vertical line extending from the outermost branches of a tree to the ground.
- (i) *Ecosystem* means a characteristic assemblage of plant and animal life with a specific physical environment, and all interactions among species and between species and their environment.
- (j) *Emitter devices* means devices which are used to control the applications of irrigation water. This term is primarily used to refer to the low flow rate devices used in microirrigation systems.
- (k) *Ground cover* means a low-growing herbaceous or woody plant other than turf, not over two feet high, used to cover the ground.

- (l) *Hedge* means a landscape barrier consisting of a continuous, dense planting of shrubs.
- (m) *Infiltration rate* means the rate of water entry into the soil expressed as a depth of water per unit of time (inches per hour).
- (n) *Irrigation system* means a permanent, artificial watering system designed to transport and distribute water to plants.
- (o) *Landscaped area* means the entire parcel less the building footprint, driveway, nonirrigated portions of parking lots, hardscapes such as decks and patios, and other nonporous areas. Water features are included in the calculation of the landscaped area.
- (p) *Landscaping* means any combination of living plants (such as grass, groundcover, shrubs, vines, hedges, or trees) and nonliving landscape material (such as rocks, pebbles, sand, mulch, walls or fences).
- (q) *Microirrigation (low volume)* means the frequent application of small quantities of water directly on or below the soil surface, usually as discrete drops, tiny streams, or miniature sprays through emitters placed along the water delivery pipes (laterals). Microirrigation encompasses a number of methods or concepts including drip, subsurface bubbler, and spray irrigation.
- (r) *Mulch* means nonliving organic materials customarily used in landscape design to retard erosion and retain moisture.
- (s) *Native vegetation*. See Vegetation, native.
- (t) *Naturally occurring existing plant communities*. See Vegetation, native.
- (u) *Open space* means all areas of natural plant communities or areas replanted with vegetation after construction, such as revegetated natural areas; tree, shrub, hedge or ground cover planting areas; and lawns, and all other areas required to be provided as natural ground and landscaping pursuant to the Zoning Code.
- (v) *Perimeter landscape* means a continuous area of land which is required to be set aside along the perimeter of a lot in which landscaping is used to provide a transition between and to reduce the environmental, aesthetic and other impacts of one type of land use upon another.
- (w) *Pervious paving materials* means a porous asphaltic or concrete surface and a high-void aggregate base which allows for rapid infiltration and temporary storage of rain on, or runoff delivered to, paved surfaces.
- (x) *Plant community* means a natural association of plants that are dominated by one or more prominent species, or a characteristic physical attribute.
- (y) *Preserve areas* means vegetative areas required to be preserved under the jurisdiction of the Florida Department of Environmental Regulation, St. Johns River Water Management District and/or the United States Army Corps of Engineers or other regulatory agencies.
- (z) *Reserved*.
- (aa) *Runoff water* means water from rainfall and irrigation systems which is not absorbed by the soil or landscape to which it is applied and flows from the area, often contaminated with pesticides, fertilizers, and other pollutants.
- (bb) *Protected tree* includes all of the following:
 - (1) *Private protected tree* means any tree with a DBH of six inches or more located on any lot within 20 feet of a street right-of-way (including an approved private street or other access easement) or a tree with a DBH of eight inches or more located within ten feet of any other property line, or a tree with a DBH of 11.5 inches or more located elsewhere on the lot.
 - (2) *Public protected tree* means any tree located on lands owned by the City, or other governmental agencies or authorities, or any land upon which easements are imposed for the benefit of the City, or other governmental agencies or authorities, or upon which other

ownership control may be exerted by the City, or other governmental agencies or authorities, including rights-of-way, parks, public areas and easements for drainage, sewer, water and other public utilities, with:

- (i) A DBH of six inches or more located within a City or other governmental right-of-way, or
- (ii) A DBH of six inches or more and located on any lot within 20 feet of a street right-of-way, or
- (iii) A DBH of eight inches or more located on any lot within ten feet of any other property line, or
- (iv) A DBH of 11.5 inches or more located elsewhere on the lot.

(3) *Exceptional specimen tree* means any hardwood tree with a DBH of 24 inches or greater.

- (cc) *Scenic and historic corridors* means any street right-of-way, including approved private streets, which is so designated by the Council, pursuant to the procedures hereinafter established and adopted by Council, as a result of its special historic, architectural, archaeological, aesthetic or cultural interest and value to the citizens of Jacksonville. The Chief shall maintain a list which specifies the location and boundaries of all corridors so designated.
- (dd) *Shrub* means a self-supporting woody perennial plant characterized by multiple stems and branches continuous from the base naturally growing to a mature height between two and 12 feet.
- (ee) *Site specific plant* means a selection of plant material that is particularly well suited to withstand the physical growing conditions that are normal for a specific location.
- (ff) *Soil texture* means the classification of soil based on the percentage of sand, silt, and clay in the soil.
- (gg) *Tree* means a self-supporting woody plant having a single trunk or a multi-trunk of lower branches, growing to a mature height of at least 12 feet in northeast Florida.
- (hh) *Tree palm* means an evergreen plant of the Palmaceae family cold hardy in northeast Florida having a single trunk and terminal crown of large pinnate or fan-shaped leaves.
- (ii) *Turfgrass* means continuous plant coverage consisting of grass species suited to growth in the City of Jacksonville.
- (jj) *Understory* means assemblages of natural low-level woody, herbaceous, and ground cover species which exist in the area below the canopy of the trees.
- (kk) *Vegetation, native* means any plant species with a geographic distribution indigenous to all or part of the State of Florida.
- (ll) *Water use zone* means a grouping of sprays, sprinklers, or microirrigation emitters so that they can be operated simultaneously by the control of one valve according to the water requirements of the plants used.
- (mm) *Florida-Friendly* means a type of landscaping that maximizes the conservation of water by the use of site-appropriate plants - right plant in the right place methodology, efficient watering systems, appropriate fertilization, mulching, attraction of wildlife, responsible management of pests, recycling of yard waste, reduction of stormwater runoff, and waterfront protection. The principles include planning and design, appropriate choice of plants, soil analysis, the use of solid waste compost, practical use of turf, efficient irrigation, appropriate use of mulches, and proper maintenance.
- (nn) *DBH (Diameter Breast Height)* means the trunk diameter of an existing tree measured four and one-half feet above the average ground level at the tree base. If the tree forks between four and one-half and two feet above ground level, DBH is measured below the swell resulting from the fork. Trunks that fork below two feet, shall be considered multi-trunk trees. DBH for multi-

trunk trees shall be determined by measuring each trunk immediately above the fork and adding the total diameters of the four largest trunks. (See also and compare definition for caliper in subsection (e) of this Section.)

- (oo) *Chief* means the Chief as designated by the Director of the Planning and Development Department.
- (pp) *Shade tree* means a species having a height at maturity of at least 45 feet and an average mature crown spread of no less than 30 feet, or trees having an average mature crown spread of less than 30 feet grouped so as to create a total average mature crown spread of no less than 30 feet.
- (qq) *Sensor Device* means
 - (1) *Rain sensor device* - a low voltage electrical or mechanical component placed in the circuitry of an automatic turfgrass irrigation system which is designed to turn off a sprinkler controller when precipitation has reached a pre-set quantity.
 - (2) *Soil Moisture sensor device* - a low voltage electrical or mechanical component placed in the landscape of an automatic turfgrass irrigation system which is designed to suspend a sprinkler controller from operation when adequate soil moisture is present.
 - (3) *Weather sensor device* - a low voltage electrical or mechanical component placed in the circuitry, either directly or remotely, of an automatic turfgrass irrigation system which is designed to estimate plant water need and adjust a compatible sprinkler controller to apply the appropriate amount of supplemental irrigation.
- (rr) *Best Management Practices (BMP)* means turf and landscape practices or a combination of practices, based on research, field testing, and expert review, determined to be most effective and practicable on-location means, including economic and technological considerations, for improving water quality, conserving water supplies and protecting natural resources.
- (ss) *Pressure Regulating Device* means a device that maintains a constant flow and pressure for increased efficiency of irrigation systems. This device shall have a pressure regulating device built into the stem of head or provided in conjunction with the valve. If pressure regulation is derived through the head, it shall be identifiable from the top of the head.
- (tt) *Hardscape* means areas such as patios, decks, driveways, in-ground swimming pools, paths and sidewalks that do not require irrigation.
- (uu) *As-Constructed Sketch* means a legible drawing indicating the date of the irrigation system installation, the number of zones, locations of zones, backflow prevention devices, valves, emitter types and locations, controller(s), pressure regulating devices and sensor device(s). The drawing shall represent the irrigation system as it exists at the time of irrigation system completion and shall be prepared by or at the direction of the person installing the system.
- (vv) *Irrigation Zone* means a grouping of rotors or sprinkler heads or pop-up sprays or micro irrigation emitters or other irrigation system equipment operated simultaneously by the control of one valve.
- (ww) *Low Maintenance Zone* means an area a minimum of six feet wide adjacent to water courses which is planted and managed in order to minimize the need for fertilization, watering and mowing. See Chapter 366 Part 6 (Fertilizer Application), Ordinance Code.
- (xx) *Efficient Irrigation System* means irrigation system design, installation, and maintenance that incorporate water efficient strategies and components, including, but not limited to, pressure regulation devices, sensor devices, correct head spacing, minimum areas of zones of matched precipitation rates and BMP.
- (yy) *Water Wise Principles* means appropriate planning and design, proper choice of plants, soil analysis that may include the use of solid waste compost, efficient irrigation, practical use of turf, appropriate use of mulches, and proper maintenance consistent with Florida Statutes.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 97-192-E, § 1; Ord. 1999-775-E, § 1; Ord. 2008-910-E, § 1; Ord. 2009-864-E, § 1)

SUBPART B. - TREE PROTECTION

Sec. 656.1204. - Applicability.

The provisions of Subpart B shall apply to all protected trees within the City, unless specifically exempted herein. All requirements in Article 25 of the Charter of the City of Jacksonville, *Minimum Standards for Tree Protection, Conservation and Mitigation During Development* shall be met in addition to the provisions of this Subpart B.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2008-910-E, § 1)

Sec. 656.1205. - Removal of protected trees prohibited; exceptions.

- (a) No person, organization, society, association or corporation, or any agent or representative thereof, directly or indirectly, shall cut down, remove, damage or destroy, or shall authorize the cutting down, removal, damage, or destruction of any protected tree, as defined in Section 656.1203(bb) hereof, or shall commit any act or authorize the commission of any act which physically removes a protected tree or causes a tree to die, such as damage inflicted upon the root system by heavy machinery, chemicals or paving, changing the natural grade above the root system and tree damage permitting infection or pest infestation, without first having obtained a permit as herein provided.
- (b) The following protected trees are exempted from the provisions of subsection (a). Where an exemption is claimed, an applicant must obtain a permit pursuant to Section 656.1206 for a fee as found in www.coj.net/fees, and provide supporting evidence that the applicant is entitled to the exemption, as requested by the Building Inspection Division:
 - (1) Any tree located on an individual lot on which either a single-family dwelling or a mobile home is located, provided:
 - A. The lot is not capable of further subdivision under applicable law; and
 - B. The single-family dwelling or mobile home is:
 - (i) Occupied and used for residential purposes, or
 - (ii) Capable of occupancy in compliance with applicable law.
 - (2) Any tree of the palm family, other than the Cabbage Palm (*Sabal palmetto*), or the pine family, other than the Long Leaf Pine (*Pinus palustris*) located on that portion of a lot which is more than 20 feet from a street right-of-way (including an approved private street or other access easement), or more than ten feet from any other property line.
 - (3) Any tree located in botanical gardens or in state-approved or government nurseries and groves which are grown for sale or public purpose.
 - (4) Any tree that poses imminent danger to the public health, welfare or safety, and requires immediate removal without delay. In such instances, verbal authorization to remove a protected tree may be given by the Chief.
 - (5) Any tree in a land area located within a City drainage easement, a City drainage right-of-way, and/or a City access way right-of-way (excluding road rights-of-way, or road easements requiring drainage) where trees must be removed, as reasonably necessary, to provide access to, or maintenance and/or construction of, the City's drainage ditches and drainage-related facilities.

- (6) Any tree located within an existing or proposed street right-of-way and/or easement shown on a set of approved final construction plans for required improvements within an approved single-family or mobile home subdivision which has been platted or is in the process of being platted and has received preliminary sketch plan approval pursuant to Chapter 654, Ordinance Code (Code of Subdivision Regulations), may be removed during construction of such improvements.
 - (7) Any tree other than an exceptional specimen tree, as defined in Section 656.1203(bb)(3), located on property that has been subdivided for residential development by a plat of record or that is in the process of being platted and as received preliminary sketch plan approval pursuant to Section 654.108, Ordinance Code. Property with trees that are exempt under this subsection (8) must comply with the buffer requirements for residential subdivisions of Section 656.1222.
 - (8) The following nuisance and invasive species of trees: Pond Willow (*Salix caroliniana*), Chinese Tallow (*Sapium sebiferum*), Paper Mulberry (*Broussonetia papyrifera*), Chinaberry (*Melia azedarach*), Camphor (*Cinnamomum camphora*), Wax Myrtle (*Myrica cerifera*), Golden Raintree (*Koelreuteria bipinnata*) and Cherry Laurel (*Prunus caroliniana*).
 - (9) Any tree located on an individual cemetery plot and removed at the request and with the consent of an individual cemetery plot owner; provided, however, that this exemption shall not apply to the expansion of existing cemeteries. As used in this subsection, *cemetery plot* shall mean a lot in any cemetery designated and maintained for the interment of a human body, or bodies or remains thereof and for no other purpose. As used in this subsection, *cemetery plot owner* shall mean a person, or his representative, in whose name a plot is listed in a cemetery organization's office as the owner of the exclusive right of sepulture; or who holds from a cemetery organization, a certificate of ownership or other instrument of conveyance of the exclusive right of sepulture in a particular plot in the organization's cemetery.
 - (10) Any tree determined to be a danger to traffic flow or traffic site visibility by the City Traffic Engineer.
 - (11) Any tree determined to be in a required fire break by the Chief of Mowing and Landscape Maintenance Division.
- (c) During the period of an emergency such as a hurricane, flood or any other natural disaster, the requirements of this Section may be temporarily waived by the Chief, so that private or public work to restore order in the city will in no way be hampered.
 - (d) Exceptional specimen trees, except for exceptional specimen trees located on property upon which either a single-family dwelling or a mobile home is located and/or is exempt under Section 656.1205(b)(1), or which is in use for bona fide agricultural operations and is exempt under Section 656.1205(b)(2), or which is exempt under Section 656.1205(b)(7), are specifically excluded from the exemptions listed hereinabove, and a permit is required to be obtained prior to any cutting down or removal of the trees. In addition, the provisions of Section 656.1206(h) concerning replacement of protected trees shall also apply to the cutting down or removal of exceptional specimen trees with a replacement of one inch to one inch removed, however, no replacement is required for exceptional specimen trees which have been determined by the Chief to be diseased or dying. Under no circumstances whatsoever shall this subsection be construed to require the owner of a single-family dwelling or mobile home which is occupied or capable of occupancy to obtain a permit to remove any protected tree.
 - (e) This Section shall not apply to the removal of trees (1) on land classified as agricultural land pursuant to Section 193.461, Florida Statutes, if the removal of such trees is regulated through Best Management Practice criteria formally adopted into the Florida Administrative Code by the Florida Department of Agriculture and Consumer Services; or (2) land for use as a salt water mitigation bank pursuant to a permit issued by the St. Johns River Water Management District, the Florida Department of Environmental Protection, or the United States Army Corps of Engineers, so long as no horizontal or vertical hardscape construction improvements are made on any portion thereof.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 95-212-154, § 1; Ord. 1999-152-E, § 1; Ord. 1999-775-E, § 2; Ord. 2001-161-E, § 1; Ord. 2001-1327-E, § 1; Ord. 2008-910-E, § 1; Ord. 2013-590-E, § 1; Ord. 2013-209-E, § 17; Ord. 2016-705-E, § 1; Ord. 2017-665-E, § 29)

Sec. 656.1206. - Permit procedure and criteria for tree removal, relocation and replacement of protected trees.

- (a) Permits for site clearing and the removal or relocation of a protected tree shall be obtained by filing an application with the Chief. Approval of the application and issuance of a permit by the Chief shall be required prior to any land clearing or grubbing, prior to any disturbance of the root system or site development, or prior to the occurrence of any changes to an existing developed site. The site shall be inspected to insure compliance with the approved site plan prior to any additional permits being issued. Applications for site clearing and tree removal or relocation shall include the following:
 - (1) A site plan, at a scale which clearly illustrates the requirements of this Part, showing the lot configuration; the location and identification of existing and proposed improvements, if any, including structures, water retention areas, paving, grade changes, utilities, easements, and street rights-of-way or approved private streets; the location and identity by botanical or common name and DBH, of protected trees to be removed, relocated or retained and of preserved understory vegetation; and preserve areas. In areas where groups of trees are to remain and no soil is to be disturbed, the tree group may be identified by general species; and
 - (2) A statement explaining why the protected tree is proposed to be removed or relocated.
- (b) An application for a permit for the removal or relocation of a protected tree shall be reviewed by the Chief and a decision shall be made thereon within ten working days after receipt of such application; provided, however, that if the Chief determines that a comprehensive study of a development plan or public improvement program is needed to assure the protection of a significant number of trees, he shall refer the application to the Planning and Development Department for a detailed study and recommendation and shall advise the applicant of this action within the ten day period hereinabove specified. The Planning and Development Department shall provide the Chief and the applicant with its report within ten working days after referral of the application.
- (c) Any person, organization, society, association, corporation or agent thereof who intends to trim, prune, cut, disturb roots, or to destroy or remove any tree from a public easement, public property or right-of-way shall obtain a permit from the Chief. All work shall be conducted in strict accordance with the National Arborist Association Pruning Standards for Shade Trees, the American National Standards for Tree Care Operations (ANSI #Z133.1), and any additional conditions of such permit.
- (d) Any department or division of the City of Jacksonville, any independent authority or agency of the City of Jacksonville, and any provider or utility service may obtain an annual permit to trim or remove trees for maintenance purposes, for the installation of new facilities, or to maintain proper clearance on existing facilities upon the submission of an operational manual, procedures and/or standards for such work within the service area of the utility, which manual, procedures and/or standards shall be subject to the review and approval of the Chief. A separate annual permit shall be obtained for areas designated as scenic and historic corridors established pursuant to Section 656.1219, which permit shall include the procedures, standards and conditions imposed by council, if any, in the ordinance designating the corridor. All work shall be conducted in strict accordance with the permit; provided, however, that the requirements of this Section shall not restrict in any manner whatsoever or prohibit any provider of utility service from taking any action to trim or remove trees which is reasonably required in order to restore utility service. The permit holder shall make every reasonable effort to minimize the impact on the environment, including consideration of alternatives for the provision of service.
- (e) The approval, conditional approval or denial by the Building Inspection Division of an application for a tree removal permit, as required by this Section, shall be based on the following criteria:

- (1) The extent to which tree removal decreases aesthetic and environmental quality, land values and physical benefits to human beings;
 - (2) The necessity to remove trees which pose a safety hazard to pedestrian or vehicular traffic or threaten to cause disruption to public services;
 - (3) The necessity to remove trees which pose a safety hazard to buildings;
 - (4) The necessity to remove diseased trees or trees weakened by age, weather, storm, fire or acts of God or which are likely to cause injury or damage to people, buildings or other improvements on a lot or parcel of land;
 - (5) The extent to which tree removal is likely to result in damage to the property of other owners, public or private, including damage to lakes, ponds, streams or rivers through runoff or erosion;
 - (6) The proposed landscaping, including plans whereby the applicant has planted or will plant perennial vegetative cover to replace those trees which are proposed to be cleared;
 - (7) The topography of the land and the effect of tree removal on erosion, soil retention and the diversion or increased flow of surface water;
 - (8) The necessity to remove trees in order to construct proposed improvements to allow access around the proposed structure for construction equipment, access to the building site for construction equipment, or essential grade changes;
 - (9) The land use and natural vegetative ground coverage of surrounding property;
 - (10) The extent of any damage or hardship to the applicant resulting from a denial of the requested permit;
 - (11) The species and size of the tree proposed for removal;
 - (12) Whether the tree to be removed is an exceptional specimen tree;
 - (13) Whether the tree is located within a scenic and historic corridor; and
 - (14) Areas to be converted to mitigated wetlands as required by federal, state and local agencies which regulate wetlands.
- (f) Any relocation of trees in compliance with this Subpart shall be performed in accordance with accepted industry practices, including watering to insure survival of transplanted stock.
- (g) Protected trees identified for removal on the site clearing or tree removal permit application shall be replaced with new planted trees, unprotected trees or transplanted trees. Protected live oaks (*quercus virginiana*) removed shall be replaced only with live oaks. The total caliper inches of replacement live oaks shall equal the total caliper inches of protected live oaks removed; for other removed protected trees, the total caliper inches of replacement trees shall equal one-third the total caliper inches removed. A waiver of this replacement requirement may be approved by the Chief if the tree removal was for the purpose of removing dead, diseased, dying or trees of similar condition or for trees whose roots are causing severe damage, as determined in the sole discretion of the Chief, to an adjacent structure. No waiver shall be allowed for the removal of any tree whose continued existence was necessary for compliance with the City's Landscape Code, for receiving credit for conservation mitigation, or for any tree which was planted as part of a mitigation requirement. The total caliper inches for replacement of exceptional specimen trees shall equal the total caliper inches of exceptional specimen trees removed pursuant to Section 656.1205(d). When there are more than an average of two exceptional specimen trees per acre removed on a particular site, the required mitigation shall be increased by twice the minimum caliper of all exceptional specimen trees lost in order to compensate for that loss. If multi-trunked trees are used as replacement trees, then the total caliper of the four largest trunks shall equal the replacement caliper. Palms may be used only to replace protected palms removed. Replacement species used shall be approved by the Chief. Additionally, the following provisions shall apply:
- (1) No replacement will be required for protected trees which are determined by the Chief to be dead or deteriorated as a result of age, insects, disease, storm, fire, lightning or other acts of

nature. Trees that require trimming or other simple forms of abatement to remain viable shall not be exempt pursuant to this subsection. An exemption pursuant to this subsection requires the following:

- (i) Sufficient documentation supporting the exemption in a form approved by the Chief; and
 - (ii) Verification of the dead or deteriorated status of the tree by a Certified Arborist; and
 - (iii) Evaluation of the tree based upon the current site conditions and viability of the tree, not considering potential impacts of construction.
- (2) New replacement trees shall meet the minimum standards for landscape materials established by Section 656.1211(e).
 - (3) Existing trees, two-inch caliper or greater, which are not protected trees but which are preserved or transplanted, except those trees located in preserve areas, may be utilized to satisfy tree replacement requirements, subject to the conditions stated in Sections 656.1207 and 656.1213(b) and (d).
 - (4) New, preserved nonprotected, or transplanted exceptional specimen trees or live oaks used as replacement for removed exceptional specimen trees or protected live oaks shall be four-inch caliper or greater.
 - (5) Existing protected trees which would otherwise be removed from the site because of development, may be utilized to satisfy tree replacement requirements if transplanted to a location on the site which meets the requirements of Sections 656.1207 and 656.1213(b) and (d).
 - (6) If protected tree removal is associated with new development, the name, size and location of all replacement trees shall be shown on the required landscape plan and such trees shall be installed prior to the final building inspection. Otherwise, the name, size and location of the required replacement trees shall be shown on the site plan required for site clearing or tree removal and such trees shall be installed within the time limit stated on the site clearing or tree removal permit.
 - (7) Existing nonprotected trees, transplanted trees and new trees used for replacement become protected trees.
 - (8) Replacement trees shall be maintained pursuant to the requirements of Section 656.1212.
 - (9) Replacement trees may be used to satisfy the tree requirements of Subpart C, landscaping requirements.
 - (10) A tree used for replacement shall be at least ten feet from any other tree planted, transplanted or preserved. Greater spacing may be required, based on a tree survey, to ensure survivorship of a tree.
 - (11) Replacement trees shall be suitable to the site at which they are planted as determined by the Chief.
 - (12) Replacement trees for protected trees larger than 11.5 inches DBH shall be shade trees as required by Article 25 of the Charter of the City of Jacksonville, *Minimum Standards for Tree Protection, Conservation and Mitigation During Development*.
 - (13) Trees planted within an area of an onsite wetland created for mitigation of wetlands removed or relocated on the same site may be used satisfy the requirements of this Subpart.
 - (14) If the applicant demonstrates to the satisfaction of the Chief that the site cannot accommodate the total number of required replacement trees as a result of insufficient planting area, the applicant shall provide a monetary contribution to the Tree Protection and Related Expenses Trust Fund. The amount of such contribution shall be determined as follows: For every two caliper inches, or fraction thereof, of replacement trees which would otherwise be required, the contribution shall be equal to the retail value of a planted two-inch caliper nursery grown shade tree. The retail value shall be calculated by taking the average of the median current wholesale

price, published by North Florida nurseries, for a container grown, and a balled and burlapped two-inch caliper live oak, multiplied by two. The retail value shall be recalculated and adjusted annually on October first.

- (15) As an alternative to providing a monetary contribution to the Tree Protection and Related Expenses Trust Fund, an applicant may, under the conditions set forth in this subsection, provide mitigation in certain off-site locations. In such cases, the applicant shall install the required replacement trees at another location (the "alternative site") which is not a residential lot and which meets all of the following criteria:
- (i) The alternative site must be located within the same planning district as the applicant's property, as such districts are defined in the City's Comprehensive Plan approved by the City Council. Applicants are encouraged to coordinate with, and seek input from, Planning District Citizen Planning and Advisory Committees in selecting alternative sites for tree mitigation. A location in the proximity of the applicant's property is preferred;
 - (ii) The alternative site must be owned or leased by the applicant or by a governmental entity which has authorized the installation of the trees, or is privately owned and nonconforming with respect to the requirements of this Part and the owner has consented to the use of his property as an alternative site; provided, however, that governmental entities providing off-site mitigation may do so only on property owned or leased by a governmental entity;
 - (iii) The installation of the trees at the alternative site will provide aesthetic benefits to many of the same citizens which would have benefited from the installation of the landscaping on the applicant's property; and
 - (iv) The alternative site is determined by the Landscape Architect to be a location where the trees are likely to survive.

If the applicant elects to install the required trees at the alternative site, the applicant must submit plans for the alternative site for review and approval of the Landscape Architect prior to the issuance of the site clearing permit. Any trees planted at the alternative site pursuant to this Section shall be in addition to, and not in lieu of, the requirements of this Chapter. Irrigation and maintenance of the replacement trees in accordance with the requirements of this Chapter are the responsibility of the applicant, and failure to comply with these requirements is a violation of this Chapter.

- (16) As a further alternative to providing a monetary contribution to the Tree Protection and Related Expenses Trust Fund, an applicant may, in limited circumstances and under the conditions set forth in this subsection, provide mitigation of the required mitigation amount through conveyance of certain lands to the City of Jacksonville. A conveyance of land in lieu of a monetary contribution to the Tree Protection and Related Expenses Trust Fund, must meet all of the following criteria:
- (i) The property to be conveyed to the City must be property the City is willing to accept pursuant to this subsection and maintain as open space;
 - (ii) The property to be conveyed to the City must be of a type and in a condition that will result in the preservation of open space and provide the opportunity for substantial tree planting and increase in tree canopy on the site;
 - (iii) The value of the property being conveyed to the City, as established in an appraisal acceptable to the City's Real Estate Division or the land value of which was established in an eminent domain proceeding within the previous five years, must equal or exceed the amount of the monetary contribution which would be made under this section;
 - (iv) The property being conveyed to the City must be free from environmental contamination, as established in environmental audits and studies acceptable to the City;
 - (v) The property being conveyed to the City must have clear title and be free and clear of any outstanding liens or unpaid taxes;

- (vi) Prior to conveyance to the City the owner shall furnish to the City, at no expense to the City, a landscape plan acceptable to the City for the City's use in planting trees on the property and a boundary survey of the property prepared by a licensed surveyor;
- (vii) Prior to conveyance to the City the property shall have been rezoned to Conservation (CSV) zoning district;
- (viii) The property being conveyed to the City must be located within a one-mile radius of the property from which protected trees were removed creating the requirement for mitigation under this section;
- (ix) The property being conveyed to the City shall be contiguous to a City right-of-way or City-owned land;
- (x) The property being conveyed to the City should be a minimum size of approximately 1.25 acres;
- (xi) The property being conveyed to the City shall not be land protected from development by other restrictions, such as subdivision buffer areas or St. Johns River Water Management District conservation easements;
- (xii) The property being conveyed to the City shall be free from easements which would limit tree planting such as overhead or underground utility, drainage or access easement which would, in the opinion of the City, unduly limit the ability of the City to plant trees on the site; and
- (xiii) The land being conveyed to the City shall be upland areas suitable for tree planting.

In the event that any portion of this subsection is declared invalid, unenforceable, unconstitutional or void, or is permanently enjoined, or if the existence of this subsection would result in any other portion of Chapter 656, Part 12, or Article 25 of the Charter being held to be invalid, unenforceable, unconstitutional or void, then thereafter no conveyance of land as mitigation shall be accepted pursuant to this subsection and all mitigation requirements shall be satisfied as otherwise allowed in this section.

(Ord. 91-59-148, § 1; Ord. 91-761-410, § 1; Ord. 93-718-395, § 1; Ord. 97-192-E, § 2; Ord. 97-434-E, § 1; Ord. 2001-161-E, § 2; Ord. 2001-424-E, § 1; Ord. 2002-868-E, § 1; Ord. 2002-1119-E, § 1; Ord. 2005-1019-E, § 1; Ord. 2006-269-E, § 1; Ord. 2008-910-E, § 1; Ord. 2017-396-E, § 1)

Sec. 656.1207. - Tree protection during development.

All protected trees, preserved understory vegetation, and trees retained for tree credit, pursuant to Section 656.1213 hereunder, shall be protected from injury during any land clearing or construction in the following manner:

- (a) Prior to any land clearing operations, tree limbs which interfere with construction shall be removed and temporary barriers shall be installed around all trees and other understory vegetation to remain within the limits of land clearing or construction and shall remain until the completion of the work. The temporary barrier shall be at least three feet high, shall be placed at least six feet away from the base of any tree, shall include at least 50 percent of the area under the dripline of any protected tree or trees retained for tree credit pursuant to Section 656.1213, and the barrier shall consist of either a wood fence with two by four posts placed a maximum of eight feet apart, with a two by four minimum top rail, or a temporary wire mesh fence, or other similar barrier which will limit access to the protected area. Tree protection shall comply with the guidelines in the Tree Protection Guide for Builders and Developers by the Florida Division of Forestry and any other reasonable requirements deemed appropriate by the Chief to implement this Part.

- (b) No materials, trailers, equipment or chemicals shall be stored, operated, dumped, buried or burned within the protected areas. No attachment, wires (other than protective guy wires), signs or permits shall be attached to a protected tree.
- (c) When removing branches from protected trees to clear for construction or pruning to restore the natural shape of the entire tree, the guidelines in the National Arborist Association Pruning Standards for Shade Trees and the American National Standards for Tree Care Operations (ANSI #Z133.1) shall be followed. Protected trees shall be pruned to remove dead or damaged limbs and to restore this natural shape and fertilized as necessary to compensate for any loss of roots and to stimulate root growth. Any damage to tree crowns or root systems shall be repaired immediately after damage occurs.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1)

Sec. 656.1208. - Enforcement; violations and penalties; stopping work, correction of violation.

- (a) *Notice of violations.* Whenever the Chief has evidence that a violation of any provision of this Subpart has been or is being committed, he shall issue a written Notice of Violation or order upon the person or persons responsible for the violation, which may include, but not be limited to, the property owner, permit holder, and contractor (if known and if different person(s) or entities) by personal service or certified mail or, if these forms of service are ineffective, by posting a copy in a conspicuous place on the premises where the violation has occurred or is occurring. The notice shall briefly set forth the general nature of the violation and specify the manner and that the violation shall be corrected within 90 days from the date of the Notice of Violation, which may be extended by the Chief for good cause.
- (b) *Stopping work.* Whenever, in the opinion of the Chief, by reason of a violation of any provision of this Subpart, the continuance of work is contrary to the public welfare, he shall order, in writing, all further work to be stopped and may require suspension of all work until the violation is corrected.
- (c) *Correction of violation.* A violation of this Subpart shall be corrected as follows:
 - (1) When there is work done without a permit, the property owner shall pay the permit fee due the City for the work, which permit fee shall be twice the amount of the regular permit fee specified in Section 320.409(a)(15) which would have been due had the permit been obtained prior to commencing work, and by replacing the protected trees removed without a permit with new planted trees, unprotected trees or transplanted trees. The total caliper inches of the replacement trees shall equal twice the amount of total caliper inches required to be planted, pursuant to Section 656.1206(h). The property owner shall also submit a tree replanting plan showing how the damage caused to the site by the violation will be mitigated shall be subject to the review and approval of the Chief and the trees installed within the time limit stated on the permit. Replacement trees shall meet the requirements of Section 656.1206, except that the minimum caliper of all replacement trees shall be four inches, and the plan shall meet the requirements of Section 656.1217, to the extent applicable; or
 - (2) When there is no permit, the violator shall pay the permit fee due the City for the work, which permit fee shall be twice the amount of the regular permit fee specified in Section 320.408(a)(15), which would have been due had the permit been obtained prior to commencing work, and by making a contribution to the Tree Protection and Related Expenses Trust Fund to compensate for each replacement tree which is not planted. The amount of such contribution shall be twice the required amount, pursuant to the formula described in Section 656.1206(h)(14). For each subsequent violation by the property owner, the amount of such contribution shall be triple the required amount, pursuant to the formula described in Section 656.1206(h)(14).
 - (3) When there has been a permit issued for the proposed work, any property owner who removes more caliper inches than the number of caliper inches approved in their permit as identified in

the final landscape inspection is required to pay triple the required amount for those caliper inches that were not permitted pursuant to the formula described in Section 656.1206(h)(14).

- (4) If the site has been cleared and the trees have been removed from the site so that the Chief is unable to determine with reasonable certainty the number of protected trees removed in violation of this Subpart, the violation shall be corrected by making a contribution to the Tree Protection and Related Expenses Trust Fund equal to \$50,000 per acre, or fraction thereof per each acre, of land cleared, which fine shall be assessed by the Chief. In the event the Chief assesses such a fine, the Chief shall provide the following information in the Notice of Violation, pursuant to subsection (a), to the property owner: the amount of acres presumed to be impacted by the site clearing without a permit, the total fine assessed, and any other information or documents the Chief relied upon to calculate the fine ("preliminary assessment of fine"). The property owner shall have the ability to appeal the preliminary assessment of fine as follows:
 - (i) The property owner has the burden of proving the preliminary assessment of fine should be reduced. The property owner shall have 30 days from the receipt of the Notice of Violation to dispute the assessment. The notice of dispute shall be in writing and sent to the Chief via electronic mail and by either hand delivery or certified mail, and contain the following information (if applicable): evidence of the species of trees removed, the total caliper inches removed, the application of any exception or exemption to the trees removed as provided for in this Part, and any other relevant information used to dispute the preliminary assessment of fine. All evidence relied upon to support the dispute, including expert analysis and geographical data, shall also be provided in the notice of dispute.
 - (ii) The Chief shall have 30 days to respond to the notice of dispute. The response shall be in writing and shall be sent to the property owner, or his agent, via electronic mail and either hand delivery or certified mail, and shall provide the Final Assessment of Fine based on one of the following determinations: (1) the Chief rejects the basis for the notice of dispute and applies the preliminary assessment of fine as the Final Assessment of Fine; or (2) the Chief accepts all or a portion of the notice of dispute and adjusts the preliminary assessment of the fine, an explanation of the adjustment shall be provided. When the Chief accepts all or a portion of the notice of dispute, the minimum contribution shall be \$5000 for each acre plus twice the contribution amount required for those caliper inches that were removed pursuant to the formula described in Section 656.1206(h)(14).
 - (iii) The property owner may appeal the Final Assessment of Fine to the Planning Commission pursuant to the provisions of Section 656.135. For the purposes of this subsection, the use of the term "Director" shall mean "Chief" and "written interpretation" shall mean "Final Assessment of Fine" as such terms are used in Section 656.135.
 - (iv) In the event the property owner does not dispute the preliminary assessment of fine within the 30 days as provided for in subparagraph (i), the preliminary assessment of fine shall be the Final Assessment of Fine and shall be deemed the final action of the city and shall be subjected to no further appeal.
- (5) In the event the contractor responsible for the site clearing in violation of this subpart is different than the property owner, in addition to the penalties listed in subparagraphs (2) and (3), above, the contractor shall also be subject to a civil penalty of \$1,000.00 for the first violation, \$2,000.00 for the second violation, and \$3,000.00 for every subsequent violation. Each parcel where the contractor conducts site clearing work without a permit shall be considered a separate violation.
- (6) The contribution assessed under this subsection shall be payable to the Tax Collector within seven days after the non-appealable Final Order is issued. All amounts received by the City pursuant to this subsection shall be deposited into the Tree Protection and Related Expenses Trust Fund established under Section 111.760, except that the Building and Inspection Division shall receive up to \$1,000 per acre for the enforcement of this subsection. No work shall continue on the site until the tree replanting plan has been approved or the contribution or fine has been collected.

- (d) *Appeals.* A person aggrieved by an administrative order, determination or decision of the Chief may appeal the order, determination or decision to the Planning Commission pursuant to the provisions of Section 656.135.
- (e) *Violation and penalties.* A person who violates any provision of this Subpart, and fails to correct the violation as provided herein shall, upon conviction thereof, be guilty of a class D offense and punished accordingly. A separate offense shall be deemed to have been committed for each tree removed, damaged or destroyed contrary to the provisions of this Subpart.
- (f) *Judicial remedy.* In addition to other remedies and notwithstanding the existence of an adequate remedy at law, the City of Jacksonville may seek injunctive relief in the Circuit Court to enforce the provisions of this Subpart. The City shall be entitled to reasonable attorney's fees and costs, including appellate fees and costs in an action where the City is successful in obtaining affirmative relief.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2006-422-E, § 124; Ord. [2017-396-E](#), § 1)

SUBPART C. - LANDSCAPING REQUIREMENTS

Sec. 656.1209. - Applicability.

This Subpart shall be applicable to all new landscapes and irrigation systems for public agency projects and private development projects, including, but not limited to, industrial, commercial, recreational, multi-family residential developments and single family residential developments that have not had a plat recorded and have not been accepted for maintenance by the City before April 4, 2011, or to the expansion or renovation of any existing development, including property in government use. Within any three-year period, when the total cumulative renovation of existing development is equal to at least 50 percent of the assessed value of the lot improvements on the start of the three-year period, according to the Property Appraiser, or the total square footage of a structure is expanded to 50 percent or greater, as well as any cumulative square footage expansions totaling 50 percent, the project will be deemed a Qualified Project then this Subpart shall be applicable to existing development and the expansion. If the Qualified Project includes alterations to parking areas or exterior areas where landscaping improvements are required, the area where such project is planned shall also be brought into full compliance with this Subpart. For all other Qualified Projects, 20 percent of the project cost shall be applied to meet the requirements of this Subpart. If full compliance with this Subpart is not achieved through the improvements described herein, priority for improvements shall be given to areas that are visible from public rights-of-way and other public areas and improvements providing internal parking lot shade. All property used for right-of-way is specifically exempted from the provisions of this Subpart. No building permit shall be issued in violation of any of the provisions hereof. Landscape materials installed in addition to the minimum requirements of this Subpart, shall meet all criteria of this Subpart except for plant size and quantity. Property located in any single-family Residential District (RR, RLD, or single family residential portion of a PUD) and used as such or property used for agriculture or single-family residential in an Agriculture (AGR) district is excluded from the requirements of Sections 656.1214, 656.1215 and 656.1216. Owners of single family residences within residential subdivisions that have not had a plat recorded and have not been accepted for maintenance by the City before April 4, 2011 shall follow the Best Management Practices for Florida-Friendly landscape, Efficient Irrigation and Water Wise Principles, but shall have flexibility in meeting the requirements as set forth in this Subpart.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2008-910-E, § 1; Ord. 2009-865, § 2; Ord. 2011-74-E, § 2; Ord. [2015-837-E](#), § 1)

Sec. 656.1210. - Landscaping requirements related to Comprehensive Plan policies.

- (a) The preservation of native habitat vegetation during land development activities is required, either through maintenance of natural vegetation on the project site, or through the planting of native

vegetation. If through planting, at least 50 percent of all plantings incorporated in an approved landscape plan for any project site shall consist of native vegetation suitable to that site, and at least 60 percent of all post-development vegetation shall be indigenous to the City.

- (b) All new developments shall provide for the conservation and preservation of environmentally sensitive lands, native plant communities and wildlife habitat to maintain the natural ecological types and sustainable populations of wildlife native to the City consistent with the provisions of Objective 3.3, Policy 2.3.7 and associated policies of the Conservation/Coastal Management Element of the Comprehensive Plan.
- (c) All nonresidential land uses except in the CCBD District shall provide a minimum of ten percent of the lot in open space.
- (d) All multiple-family dwellings of 100 dwelling units or more shall be required to provide 150 square feet of recreation open space per dwelling unit.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 96-363-234, § 1; Ord. 2009-865, § 2)

Sec. 656.1211. - Florida-Friendly Landscape and Irrigation design standards.

- (a) All landscapes shall be designed to achieve water efficiency by:
 - (1) Preserving existing plant communities;
 - (2) Re-establishing of native plant communities per Comprehensive Plan objectives and polices;
 - (3) Using Florida-Friendly plant materials which are appropriate for the site conditions;
 - (4) Grouping plant material with similar irrigation requirements;
 - (5) Using pervious paving materials; and
 - (6) Using highly drought tolerant grass species per BMPs.

Existing plant communities should be preserved and native plant communities be re-established wherever possible. Landscaped areas requiring irrigation shall be designed to group trees, shrubs, ground cover and turfgrass together into water use zones. The water use zones are as follows:

High Water Use Zone—areas of the site limited to a maximum of 30 percent of the total landscaped area with plants and turf types which, within this area, are associated with moist soils and require supplemental water in addition to natural rainfall to survive. This zone includes nondrought tolerant turfgrass varieties.

Moderate Water Use Zone—areas of the site with plants, including drought tolerant turfgrass varieties, which survive on natural rainfall with supplemental water during seasonal dry periods.

Low Water Use Zone—areas of the site which shall be designed with a minimum 30 percent of the total landscape area provided with plants which survive on natural rainfall without supplemental water. Because of the tendency to maintain turfgrass with supplemental watering, turfgrass shall not be permitted in this zone. The minimum Low Water Use Zone area required for a single-family residential lot may be reduced one percent for every one percent reduction below the maximum High Water Use Zone area provided on the lot.

Plants with similar water and cultivation requirements (soil, climate, sun and light) shall be grouped together and irrigated according to their water requirements.

- (b) Trees shall not be placed where they interfere with site drainage or where they shall require frequent pruning in order to avoid interference with overhead power lines. Unless otherwise provided in this Section, a minimum number of trees shall be planted or preserved upon each site, pursuant to

the following standards which are the minimum requirements for landscaping within the City of Jacksonville.

- (1) Minimum tree planting requirements for all property upon which either a single-family dwelling or a mobile home on an individual lot is located or to be located: One four-inch caliper tree or multiple two-inch minimum caliper trees totaling four caliper inches shall be planted and/or preserved for every 5,000 square feet of lot area, plus an additional two caliper inches for every 2,500 square feet of lot area (but not a portion thereof) in excess of 5,000 square feet, excluding therefrom preserve areas and water bodies. Trees planted shall meet the general criteria specified in subsection (e)(3) hereunder.
- (2) Minimum tree planting requirements for all property other than property upon which either a single-family dwelling or a mobile home on an individual lot is located:
 - (i) One tree shall be planted and/or preserved for every 5,000 square feet of lot area, or portion thereof, which is located in any residentially-zoned district, AGR (Agricultural) District, PBF-2 (Public Buildings and Facilities) District, excepting public facilities), CRO (Commercial Residential Office) District, RO (Residential Office) District, CN (Commercial Neighborhood) District, CCG-1 (Commercial Community General) District, excluding therefrom preserve areas and water bodies.
 - (ii) One tree shall be planted and/or preserved for every 8,000 square feet of lot area or portion thereof, excluding therefrom preserve areas and water bodies in all commercial districts, except as otherwise provided herein.
 - (iii) One tree shall be planted and/or preserved for every 10,000 square feet of lot area or portion thereof, excluding therefrom preserve areas and water bodies in any industrial district or Public Facilities (PBF) District (except private facilities in each district).
- (c) Trees, excluding palm trees, which are larger than the minimum size may be credited as indicated in Table 1. A minimum of 50 percent of all required trees shall be shade trees.
- (d) Trees required for vehicular use area landscaping may be used to fulfill the tree requirements of this Section.
- (e) Standards for landscape materials.
 - (1) *Quality of plants:* All plant material shall be a minimum of Florida Number One as defined in the most current edition of the Grades and Standards for Nursery Plants, Part I and II, published by the Florida Department of Agriculture and Consumer Services.
 - (2) *Appropriate plant selection:* Plants shall be selected that are best suited to withstand the soil and physical growing conditions which are found in the microclimate of each particular location on a site. Plant species that are freeze and drought tolerant are preferred. Plants having similar water needs shall be grouped in distinct water use zones. Protection and preservation of native species and natural areas shall be provided. The planting of invasive plant species and controlled plant species is prohibited. Information regarding plants classified as prohibited, invasive, exotic, controlled or Florida-Friendly can be obtained from the Florida Department of Environmental Protection, the University of Florida/IFAS Duval County Extension Office and the City of Jacksonville, Building Inspection Division, Landscape Section.
 - (3) *General criteria for trees :* Trees shall be a species having an average mature crown spread of no less than 15 feet in northeast Florida. Trees having a mature crown spread of less than 15 feet, if grouped to create an equivalent 15 foot spread, may be substituted for the required tree. Single-trunk trees shall be a minimum of two inch caliper and a minimum of ten feet overall height. Multi-trunk trees shall be a minimum of three trunks eight feet high. Trees shall be planted in no less than 16 square feet of planting area, with a minimum dimension of four feet on any side. Trees shall not be planted closer than two feet from any pavement edge or right-of-way line, as measured from center of trunk. Architectural planters for trees shall be no less than four feet by four feet in width and no less than 24 inches deep. Credits for the use of trees larger

than the minimum size will be calculated as indicated in Table 1. Fractional measurements shall be attributed to the next lowest category.

- (i) *Shade trees:* Shade trees shall be a species having an average mature crown spread of no less than 30 feet; provided, trees having an average mature crown spread of less than 30 feet may be grouped so as to create a total average mature crown spread of no less than 30 feet and used in lieu of a shade tree. Shade trees at the time of planting shall be a minimum of two inch caliper and ten feet high. Shade trees shall be planted in no less than 150 square feet of planting area, with a minimum dimension on any side of eight feet. Shade trees shall not be planted closer than four feet from any pavement edge or right-of-way line, as measured from center of trunk. Those species of trees whose roots are known to cause damage to pavement shall not be planted closer than six feet to such pavement.
 - (ii) *Palm trees:* Palms shall be a minimum clear trunk height of eight feet, measured from the ground level to the base of the palm fronds. Palms may be substituted for the required trees at the ratio of two palms for each required tree or four palms for each required shade tree, except as provided below for Phoenix Palm. Each palm shall be planted in no less than 16 square feet of planting area, with a minimum dimension of four feet. Phoenix Palm may be used as a non-shade tree without meeting the ratios for other types of palms if the palm has a fifteen foot spread at maturity and a minimum clear trunk height of eight feet.
- (4) *Criteria for shrubs, vines and ground covers:* Hedges and shrubs used to form an opaque screen shall be no less than three-gallon container grown material or equivalent balled and burlap material. All other shrubs, dwarf shrubs and groundcover shall be of a size and spaced in such a manner so as to provide 85 percent coverage within two years after planting. Vines shall be evergreen and shall have a minimum of four stems 12 inches long immediately after planting.
 - (5) *Turfgrass:* The species and location of turfgrass areas shall be selected in the same manner as with all other planting regarding BMPs. Turfgrass areas shall be placed so as to be irrigated using separate zones from non-turf plantings. Turfgrass may be sodded, plugged, sprigged or seeded, except that solid sod shall be used on grass areas within street rights-of-way disturbed by construction, in swales, on slopes of four to one or greater, and on other areas subject to erosion. When permanent seed is sown during its dormant season, an annual winter grass shall also be sown for immediate effect and protection until permanent coverage is achieved.
 - (6) *Mulch:* A layer of organic mulch shall be applied and maintained in all tree, shrub, ground cover planting areas and bare preserved natural areas. The mulch layer shall not exceed three inches. The use of sustainably harvested mulches such as melaleuca, eucalyptus, recycled organic mulch; dead leaves and pine straw are highly recommended. Gravel mulch is prohibited in plant beds and shall be used only if required by the National Electric Safety Code or in the bottoms of swales, catchment basins and retention areas. Upon review and approval by the Chief, gravel applied in a maximum 24 inch width may be applied at the foundation of buildings for drainage.
 - (7) *General clean up:* At the completion of work, construction trash and debris shall be removed and disturbed areas shall be fine-graded and landscaped with shrubs, groundcover, grass or two inches of mulch.
 - (8) *Landscaping materials not required by Subpart C:* Landscaping materials not required by Subpart C shall meet all criteria of Subpart C except for plant size and quality.

Table 1.
Tree and Understory Vegetation Credits—
Landscape Regulations

Table 1 identifies credits for landscaping under Subpart C only. Table 1 does not identify credits for mitigation required by Subpart B.

Tree Credits for Existing Trees		Tree Credits for New Trees	
Trunk DBH	No. of Trees Credited	Single Trunk Trunk Caliper	No. of Trees Credited
2 inch and above	1	2 inch and above	1
4 inch and above	2	4 inch and above	2
6 inch and above	3	6 inch and above	3
12 inch and above	4		
18 inch and above	4		

Tree Credits for Existing Trees		Tree Credits for New Trees	
Trunk DBH	No. of Trees Credited	Multi-Trunk Tree Height	No. of Trees Credited
24 inch and above	6	8 feet	1
30 inch and above	7	12 feet	2

Understory Vegetation Credits

Area of Preserved Existing Understory	Landscape Area Credited
1 square foot	1½ square feet

(f) *Standards for efficient irrigation design.* The irrigation system may consist of an automatic underground system, micro irrigation, quick coupling valves, or hose bibs located within 75 feet of any landscaped area. The irrigation system shall be installed according to the landscape plan approved pursuant to Section 656.1217. The Chief may waive any irrigation system requirement where it can be shown that this requirement is not necessary to ensure proper irrigation of the area or that other natural or manmade sources of irrigation are sufficient to provide the required irrigation system. Whenever not required, it is strongly recommended that the design requirements of Part 12, which include the BMP, Water Wise Principles and Efficient Irrigation, be followed for single family residential. These standards include, but are not limited to, the following:

- (1) Irrigation systems shall be designed to meet the needs of the plants in the landscape and to separately serve turfgrass and non-turfgrass areas; the plans and specifications shall identify the materials to be used and the construction methods;
- (2) The system design shall consider soil, slope, and other site characteristics in order to minimize waste water, including overspray on hardscape and other impervious surfaces and off-site runoff;
- (3) Automatic irrigation controllers, when utilized, shall contain a functional sensor device for rain or soil moisture which shall be capable of being set for one minute run times, days of the week, seasons, and time of day, and which shall maintain a battery backup capability to retain programming in the event of a power failure. The controller shall operate all zones of different precipitation rates independently;
- (4) Sensor devices, when utilized, shall be placed on a stationary structure, free and clear of any overhead obstructions and above the height of the irrigation sprinkler coverage;
- (5) Irrigation zones shall be divided according to available flow rate and matched precipitation rates (inches per hour) for heads within each zone, so that spray heads, rotors, and micro irrigation shall not be mixed on the same zone; pipelines shall be designed to provide the system with the appropriate pressure required for maximum irrigation uniformity; sprinkler heads in turfgrass areas shall be spaced for head-to-head coverage. Whereby head spacing will not exceed 50 percent spray diameter; irrigation areas shall be no less than four feet wide except when adjacent to a contiguous property or when utilizing micro or drip irrigation;
- (6) Irrigation systems shall be fitted with backflow prevention to protect the water source against backflow using a pressure regulating device;
- (7) Irrigation systems shall not be required for preserved plant communities that are maintained in their natural state and barricaded and not impacted by development. The location and technique for barricading of these areas shall be shown on the site clearing plan. Manual or controlled irrigation systems shall be required on a temporary basis during the re-establishment of native plant communities. Once the native plants are re-established, the system may be removed or abandoned.
- (8) Irrigation systems shall be designed to use the lowest quality water feasible.

(Ord. 91-59-148, § 1; Ord. 91-761-410, § 1; Ord. 93-718-395, § 1; Ord. 97-192-E, § 3; Ord. 1999-775-E, § 3; Ord. 2008-910-E, § 1; Ord. 2009-864-E, § 2; Ord. 2011-74-E, § 2; Ord. 2015-338-E, § 1)

Sec. 656.1212. - Maintenance and protection of landscaping and irrigation systems.

(a) *Maintenance of Landscape.* The property owner shall be responsible for the maintenance of all landscaped areas, which shall be maintained in good condition so as to present a healthy, neat and orderly appearance, free of refuse, debris and weeds. The property owner should refer to the Low

Maintenance Zone for additional maintenance requirements and proper use of fertilizers and pesticides pursuant to Chapter 366 Part 6 (Fertilizer Application), Ordinance Code. Failure to maintain required landscaped areas or to replace, within a reasonable period of time, required landscaping which is dead, irreparably damaged, or fails to meet the standards of this Part, shall be deemed a violation of the Zoning Code. If there is insufficient area to replant the replacement trees on site, the property owner shall provide for mitigation of such trees pursuant to Section 656.1206(h).

- (b) *Maintenance of Irrigation Systems.* The installer shall provide the property owner and users with the manufacturer's guide for the controller and all other equipment provided. If the plans are different from the approved permitted plans, an as-constructed sketch of the installation will be provided to the Owner and the City of Jacksonville Building Inspection Division. All controllers shall be programmed to the appropriate level of water conservation per the St. Johns River Water Management District landscape irrigation rule. Installer shall include a watering schedule which meets the local codes for establishment of plant material and instructions on adjusting the system to apply less water after the landscape is established. The watering schedule shall meet the requirements set forth in Section 656.1217, Ordinance Code.
- (c) *Tree pruning.* Required trees shall be allowed to develop into their natural habit of growth and shall not be topped, pleached or pruned into topiary, espalier or other unnatural shapes. Trees may be pruned to maintain health and vigor by removal of dead, weak, damaged or crowded limbs, diseased and insect infested limbs, and branches which rub other branches. If trees are pruned in a manner which would prevent them from reaching the mature crown spread required by Section 656.1211(e)(3), or if mature trees are pruned to a height or canopy spread below the requirements of Section 656.1211(e)(3), then the property owner shall provide for mitigation of such trees pursuant to Section 656.1206(h).
- (d) *Protection of Landscape and irrigation systems.* To prevent encroachment by parked or moving vehicles provide wheel stops, landscape timbers, curbs, bollards (if in areas with large truck traffic) or other materials [may be] used for protection. Material selection is subject to the approval of the Chief. Paving, treating or covering a required landscaped area in a way that renders it impervious is prohibited. Shrub risers shall be set back at least two and one-half feet from any edge of pavement.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2008-910-E, § 1; Ord. 2009-864-E, § 2)

Sec. 656.1213. - Credit for existing trees and understory.

Whenever the provisions of this Subpart require trees and other landscaping, such requirement may be satisfied by the preservation of existing trees and understory, located in uplands or upland buffer areas, as specified herein, provided all other requirements are met. Trees planted in wetlands and wetland creation areas may also be credited toward mitigation pursuant to Section 656.1206(h)(13).

- (a) Existing trees, except palm trees, may be used to satisfy any requirement for trees pursuant to Table 1.
- (b) Existing trees, including trees located in preserve areas, may be utilized to satisfy any requirement for trees, subject to the following conditions:
 - (1) An area within the dripline of the tree or trees at least one foot in diameter for each inch of trunk diameter shall be preserved in its natural state or covered with pervious landscape material; provided, however, that the minimum area preserved shall be at least 150 square feet for shade trees and at least 25 square feet for all other trees. Such area shall be maintained at its original grade with no trenching or cutting of any roots and there shall be no storage of fill, compaction of soil or any concrete, paint, chemicals or other foreign substance in or on the soil;
 - (2) The tree or trees shall not be damaged from skinning, barking, bumping, and the like;
 - (3) The tree or trees shall be healthy, free from disease, damage and active insect infestation potentially lethal to the tree;

- (4) Each tree or trees in an existing hammock may be used to satisfy any requirement for trees;
- (5) If the Chief determines that the requirements relating to the damage or disease of any tree have not been met, such tree may nonetheless be utilized under this Section upon certification from the Urban Forester, Florida Department of Agriculture and Consumer Services, Division of Forestry, satisfactory to the Chief that such tree is healthy and has a reasonably good chance of survival.
- (c) Preserved existing understory vegetation may be utilized to fulfill the landscape area requirement pursuant to Table 1, so long as at least 90 percent of the credited area is covered by natural understory vegetation.
- (d) If, at any time within one year after all associated land alteration and construction activities are completed, a tree or understory vegetation for which credit was given according to Table 1 is dead or irreparably damaged or unhealthy as a result of these activities, then the tree or understory vegetation shall be removed and replaced with a tree or trees or such understory vegetation as would have originally been required.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 97-434-E, § 1; Ord. 2008-910-E, § 1)

Sec. 656.1214. - Vehicular use area interior landscaping.

- (a) Vehicular use areas open to the public: Except for those uses described in Sections 656.604(e)(1) and 656.604(f)(1), ten percent of vehicular use areas (VUA's) used for off-street parking, employee parking, auto service stations, outdoor retail display and sale of motor vehicles, service drives, and access drives within property located in multifamily, residential, commercial, industrial, and public facilities use zoning districts shall be landscaped. For those uses described in Sections 656.604(e)(1) and 656.604(f)(1), all vehicle use area landscaping shall satisfy the requirements set forth in the Parking Lot Landscaping Matrix, Figure B, set forth in Section 656.607(j). In the event the landscaping required under this section exceeds the requirements set forth in the Parking Lot Landscaping Matrix, Figure B of Section 656.607(j), the requirements of this section shall be relaxed to the extent necessary to comply with the Parking Lot Landscaping Matrix.
- (b) Specialized vehicular use areas closed to the public: Five percent of VUA's used for storage areas for new, used or rental vehicles and boats, bus terminals, motor vehicle service facilities, motor freight terminals, and other transportation, warehousing and truck operations not generally open to the public shall be landscaped.
- (c) Criteria for distribution: Landscape areas shall be distributed throughout the VUA in such a manner as to provide visual and climatic relief from broad expanses of pavement and at strategic points to channelize and define vehicular and pedestrian circulation. Landscape areas shall contain the following:
 - (1) At least 25 percent of the landscape areas shall be covered with shrubs; the remainder in shrubs, groundcover, mulch or grass, except that mulch shall cover no more than 25 percent of the landscape areas. Plants shall be spaced so as to achieve 90 percent coverage of the landscape areas within two years. Preserved existing understory vegetation may be used to fulfill the landscape area requirement so long as the vegetation meets the height and coverage requirement of the required landscaping;
 - (2) Not less than one tree for every 4,000 square feet, or fraction thereof, of the VUA. At least 50 percent of the trees shall be shade trees. Trees shall be distributed so that all portions of the VUA are within a 55-foot radius of any tree.
- (d) Each row of parking spaces shall be terminated by a landscape island with inside dimensions of not less than five feet wide and 17 feet long, or 35 feet long if a double row of parking. Each terminal island shall contain one tree. Each side of the terminal island adjacent to a travel lane shall have a

continuous six inch high curb of concrete or other appropriate permanent material. Terminal islands will be credited toward the satisfaction of the landscape area requirements of this Section;

- (e) If it can be shown to the satisfaction of the Chief that the strict application of this Section will seriously limit the function of the property, he may approve the location of the required interior landscape area near the perimeter of the VUA or adjacent to a building on the property, so long as the landscape area is within 20 feet of the perimeter of the VUA.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2009-907-E, § 4; Ord. 2010-449-E, § 3)

Sec. 656.1215. - Perimeter landscaping.

- (a) Perimeter landscaping adjacent to streets: For those uses described in Sections 656.604(e)(1) and 656.604(f)(1), all perimeter landscaping shall also satisfy the requirements set forth in the Parking Lot Landscaping Matrix, Figure B, set forth in Section 656.607(j). In the event the landscaping required under this section exceeds the requirements set forth in the Parking Lot Landscaping Matrix, Figure B of Section 656.607(j), the requirements of this section shall be relaxed to the extent necessary to comply with the Parking Lot Landscaping Matrix. All VUA's which are not entirely screened by an intervening building from any abutting dedicated public street or approved private street, to the extent such areas are not so screened, shall contain the following:
- (1) Except for those uses described in Sections 656.604(e)(1) and 656.604(f)(1), a landscaped area of not less than ten square feet for each linear foot of VUA street frontage, 50 percent of which shall be at least a five-foot wide strip abutting the street right-of-way except for driveways. For those uses described in Sections 656.604(e)(1) and 656.604(f)(1), the landscape area is determined by the total number of parking spaces provided and the parking rate. All perimeter landscaping shall conform to Section 656.607(j), Parking Lot Landscaping Matrix, Figure B. Landscaped area calculations shall be met exclusive of any driveway width. The remaining required landscape area shall be located within 30 feet of the street right-of-way;
 - (2) A durable opaque landscape screen along at least 75 percent of the street frontage excluding driveways. Shrubs, walls, fences, earth mounds and preserved existing understory vegetation, or combination thereof, may be used so long as the screen is no less than three feet high measured from the property line grade two years after installation. Shrubs and preserved existing understory vegetation shall be evergreen, a minimum of 18 inches in height and spaced so that 85 percent opacity is achieved within two years. Shrubs located within three feet of a directional sign as defined in Section 656.1302(e) are not required to meet the minimum height requirements of this subsection. Walls or fences shall be no more than four feet in height and of wood or masonry at least 85 percent opaque. Earth mounds shall not exceed a slope of three to one. No less than 25 percent of street side frontage of walls or fences shall be landscaped with shrubs or vines;
 - (3) No less than one tree, located within 25 feet of the street right-of-way, for each 50 linear feet, or fraction thereof, of VUA street frontage. The trees may be clustered, but shall be no more than 75 feet apart. At least 50 percent of the trees shall be shade trees. If an overhead power line abuts the street frontage, then the required trees reaching a mature height greater than 25 feet shall be located at least 20 feet away from the power line;
 - (4) The remainder of the landscape area shall be landscaped with trees, shrubs, groundcovers, grass, or mulch, except that mulch shall not exceed 25 percent of the total landscape area;
 - (5) Landscape areas required by this Section shall not be used to satisfy the interior landscape requirements. However, the gross area of the perimeter landscaping which exceeds the minimum requirements may be used to satisfy the interior landscape requirements;
 - (6) If a railroad or utility right-of-way separates the VUA from the public street or approved private street, the perimeter landscaping requirements of this Section shall still apply.

- (b) Perimeter landscaping adjacent to abutting properties: For those uses described in Sections 656.604(e)(1) and 656.604(f)(1), all perimeter landscaping shall also satisfy the requirements set forth in the Parking Lot Landscaping Matrix, Figure B, set forth in Section 656.607(j). In the event the landscaping required under this section exceeds the requirements set forth in the Parking Lot Landscaping Matrix, Figure B of Section 656.607(j), the requirements of this section shall be relaxed to the extent necessary to comply with the Parking Lot Landscaping Matrix. All vehicular areas which are not entirely screened by an intervening building from an abutting property, to the extent such areas are not screened, shall contain the following:
- (1) A continuous landscape area at least five feet wide between the VUA's and the abutting property, landscaped with shrubs, groundcovers, preserved existing vegetation, mulch and grass.
 - (2) No less than one tree, located within 25 feet of the outside edge of the VUA, for every 50 linear feet, or fraction thereof, of the distance the VUA abuts the adjacent property. Trees may be clustered but shall be no more than 75 feet apart. At least one-half of the required number of trees shall be shade trees.
 - (3) A buffer wall between incompatible land uses as required by Section 656.1216, if applicable.
 - (4) If an alley separates the VUA from the abutting property, the perimeter landscaping requirements shall still apply.
- (c) Existing landscape screen: If an existing landscape screen has been established on abutting property, then it may be used to satisfy the requirements of this Section, so long as the existing landscape screen is abutting the common property line, and it meets all applicable standards of this Subpart.
- (d) Driveways to streets: The maximum width of any driveway not containing a landscaped island through the perimeter landscape area shall be 36 feet. The maximum width of any driveway containing a landscaped island through the perimeter landscape area shall be 48 feet and the driveway shall contain a landscaped island which measures not less than eight feet in width (from back of curb to back of curb) and 18 feet in length, surrounded by a six inch continuous raised curb, or other alternative approved by the Chief. The maximum combined width of all driveways through the perimeter landscape area shall be no more than 48 feet for properties with 100 feet or less of street frontage. For properties with more than 100 feet of street frontage, an additional one foot of driveway through the perimeter landscape area may be constructed for each four feet of street frontage in excess of 100 feet. In no event shall more than 50 percent of any street frontage be paved, nor shall the provisions of this Section be applied to reduce the permitted driveway width to less than 24 feet.
- (e) Driveways to adjoining lots: Driveways may be permitted by the Chief to adjoining lots of compatible use. The maximum number of driveways which may be allowed shall be determined by first calculating the total length of the VUA perimeter adjacent to property lines of compatible use, less the portion of the VUA separated from the common property line by a building and less the portion of the perimeter VUA separated from the compatible use by a jurisdictional wetland or waterbody and then applying the following criteria:

Net Length of Perimeter VUA	Maximum Number of Driveways
50—149 feet	2
150—299 feet	3

300—599 feet	4
For each additional 500 feet	1 additional driveway

The maximum width of any driveway to an adjacent lot shall be 24 feet. The area of the continuous five feet wide perimeter landscape strip normally required where each driveway occurs shall be incorporated into the required perimeter landscape area to each side of the driveway.

- (f) If a joint driveway easement is provided between adjacent property, then the required perimeter landscaping for each property shall be provided between the drive and any other vehicular use areas. That portion of the drive on each property shall be counted as part of the VUA of each property.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2008-910-E, § 1; Ord. 2009-907-E, § 4; Ord. 2010-449-E, § 3)

Sec. 656.1216. - Buffer standards relating to uncomplementary land uses and zoning.

- (a) Where uncomplementary land uses or zoning districts are adjacent, without an intervening street, a buffer strip shall be required between the uses or zoning districts. Such buffer strip shall be at least ten feet, except as set forth in the Parking Lot Landscaping Matrix, Figure B, set forth in Section 656.607(j), in width the entire length of all such common boundaries. The following shall constitute uncomplementary uses and zoning districts:

- (1) Multiple-family dwelling use or zoning districts (three or more attached units) when adjacent to single-family dwelling(s) or lands zoned for single-family dwellings.
- (2) Office use or zoning districts, when adjacent to single-family or multiple-family dwellings, mobile home parks or subdivisions or lands zoned for single-family or multiple-family dwellings, mobile home parks or subdivisions.
- (3) Mobile home park use or zoning districts, when adjacent to single-family dwellings, multiple-family dwellings and office uses, or lands zoned for single-family dwellings, multiple-family dwellings or offices.
- (4) Commercial and institutional uses or zoning districts, when adjacent to single-family dwellings, multiple-family dwellings or mobile home parks or mobile home subdivision uses or lands zoned for single-family dwellings, multiple-family dwellings or mobile home parks or mobile home subdivision.
- (5) Industrial uses or zoning districts, when adjacent to any nonindustrial uses or zoning districts other than agricultural land uses or zoning districts.
- (6) Utility sites such as transmission or relay towers, pumping stations, electrical sub-stations, telephone equipment huts or other similar uses when adjacent to single-family dwellings, multiple-family dwellings, mobile homes, offices, institutional uses or zoning districts or adjacent to public or approved private streets.
- (7) On property zoned for government use, the proposed government use most similar to the land uses or zoning districts specified above shall determine the buffer standards.

- (b) Buffer material requirements shall be as follows:

- (1) *Tree count.* The total tree count required within the buffer strip shall be determined by using a ratio of one tree for each 25 linear feet of required buffer strip, or majority portion thereof, with a minimum of 50 percent of the trees being shade trees. Trees shall be spaced so as to allow mature growth of the trees, but spaced no greater than 40 feet on center.
 - (2) *Ground cover.* Grass or other ground cover shall be planted on all areas of the buffer strip required by this Section which are not occupied by other landscape material.
 - (3) *Visual screen.* A visual screen running the entire length of common boundaries shall be installed within the buffer strip, except at permitted access ways. The visual screen may be a wood, wood composite, or masonry wall, PVC fence, landscaping, earth mounds or combination thereof so long as such strips shall provide at the time of installation a minimum of 85 percent opacity for that area between the finished grade level at the common boundary line and six feet above such level and horizontally along the length of all common boundaries. Plants or preserved vegetation shall be evergreen, a minimum of five feet tall at the time of installation, and spaced so that 85 percent opacity is achieved within two years. Earth mounds shall not exceed a slope of three to one. If a visual screen, which satisfies all applicable standards, exists on adjacent property abutting the property line or exists between the proposed development on the site and the common property line, then it may be used to satisfy the visual screen requirements. Except for industrial uses or ones, whenever a preserve area or water body at least 100 feet wide when measured perpendicular to the property line separates the uncomplementary uses, then the visual screen height requirement shall be reduced to three feet and the buffer strip width shall be reduced to five feet, when measured from the top of the lake bank or the jurisdictional wetland edge. If a plant is used for the visual screen, it shall be a minimum height of 24 inches at the time of installation.
 - (4) *Prevailing requirement.* Whenever parcels of land fall subject to both the perimeter landscaping requirements and the uncomplementary land use buffer strip requirements of the article, the latter requirements shall prevail.
 - (5) *Hardship.* If the Chief determines that the construction of a landscape buffer area required by this article would create a hardship for the existing structures or vehicular use areas, the Chief may approve a buffer area with a width no less than five feet, provided such buffer area meets the visual screening requirements of this article.
- (c) The buffer strip shall not be used for principle or accessory uses and structures, vehicular use areas, dumpster pads, signs, equipment, storage. Slopes within buffer strips shall not exceed four to one.
 - (d) If a water body exists along the common property line between uncomplementary uses which is less than 100 feet wide when measured perpendicular to the property line then the buffer strip shall be established between the use and the water body. Preserve areas may be used as buffer strips, so long as the tree and visual screen requirements can be satisfied.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2008-910-E, § 1; Ord. 2010-449-E, § 3)

Sec. 656.1217. - Landscape and Irrigation system plans required.

- (a) Prior to the issuance of any building permit or paving permit, a landscape plan shall be filed with, reviewed by, and approved by the Chief. The landscape plan shall be prepared by either the owner, if for minor work or for a single-family residential lot, or a licensed, registered landscape architect, bearing his seal, or shall be otherwise prepared by persons authorized to prepare landscape plans or drawings pursuant to F.S. Ch. 481, Pt. II (Landscape Architecture).
- (b) The landscape plan required hereunder shall be drawn to scale, including dimensions and distances and shall:
 - (1) Delineate the vehicular use areas, access aisles, driveways, and similar hardscape features;

- (2) Include either a quick coupler, hose bib or irrigation system plan as part of the landscape plan submittal;
 - (3) Include plans for a quick coupler or hose bib systems; include the point of connection, well, water meter or other approved water source, backflow prevention device, pipe sizes and locations, sleeve sizes and locations and detail of quick coupler, valves and hose bibs; a hose vacuum breaker is required at each hose bib;
 - (4) Include plans for an automatic irrigation system - Refer to part (c) of this section for the plan requirements;
 - (5) Indicate the location and identify by botanical or common name, the existing vegetation;
 - (6) Designate by name and location the plant material to be installed or preserved in accordance with the requirements of this Part;
 - (7) Identify and describe the location and characteristics of all landscape materials to be used; for calculation purposes identification of all native and Florida-Friendly plant materials shall be shown in the plant schedule.
 - (8) Show all landscape features, including areas of vegetation required to be preserved by law, in context with the location and outline of existing and proposed buildings and other improvements upon the site if any;
 - (9) Provide an analysis of the existing soil. The analysis shall include but not be limited to the determination of soil texture with an indication of the percentage of organic matter; measurement of pH, total soluble salts and the estimated filtration rate; if required, it should include an approach for appropriate soil amendments;
 - (10) Include a tabulation clearly displaying the relevant statistical information necessary for the Chief to evaluate compliance with the provisions of this Part. This includes gross acreage, square footage of preservation areas, number of trees to be planted or preserved, protected tree removals and mitigation calculations, square footage of paved areas, and such other information as the Chief may require;
 - (11) Contain such other information, as may be required by the Chief, to the extent such information is reasonable and necessary to a determination that the landscape plan meets the requirements of this Part; and
 - (12) Indicate all overhead and underground utilities located on the property and in the right-of-way adjacent to the property to which the landscape plan applies. This shall include overhead and underground electric service lines to all proposed buildings.
 - (13) Identify the location, size and height of any signs, other than temporary signs, located or to be located on the property.
- (c) The required automatic, quick coupler or hose bib irrigation system plan shall be provided prior to the issuance of the building permit or other City issued permit. If an automatic irrigation system is provided in lieu of an approved quick coupler or hose bib plan and the plans were not part of the approved building permit, then the automatic irrigation system plans must be submitted to the Building Inspection Division for review and approval prior to the issuance of a Certificate of Occupancy. The plans must be drawn to scale, including dimensions and distances, and shall include:
- (1) Irrigation point(s) of connection (POC) and design capacity; water meter or well size and location; type of water, potable or reclaimed; backflow prevention device at each POC as may be required by local codes;
 - (2) Location of main line and all lateral pipes with sizes; location of control valves with sizes and zone number clearly identified; automatic controller, sensor devices; specific irrigation heads by type; location of pump;

- (3) Delineation of high water use zones, moderate use zones and low water use zones, as set forth in Section 656.1211;
 - (4) Watering schedule with precipitation rates in inches per hour and minutes per zone which shall not exceed maximums set by the St. Johns River Water Management District, with all of the product data sheets for deriving precipitation rates for each valve circuit attached;
 - (5) Irrigation legend with the following elements: separate symbols for all irrigation equipment with different spray patterns and precipitation rates and pressure compensating devices; general description of equipment; manufacturer's name and model number for all specified equipment; recommended operating pressure per nozzle and bubbler and low flow emitter; manufacturer's recommended over-head and bubbler irrigation nozzle rating in gallons per minute (gpm), or gallons per hour (gph) for volume point applicators; minimum (no less than 75 percent of maximum spray radius) and maximum spray radius per nozzle; and manufacturer's rated precipitation rate per nozzle at specified psi.
- (d) Prior to the issuance of any building permit or paving permit, a landscape and irrigation system plan shall be required for any residential subdivision that has not had a plat recorded and has not been accepted for maintenance by the City. In lieu of submitting an individual landscape and irrigation system plan for each residential lot, one or more typical landscape and irrigation system plans may be submitted that govern the landscaping and irrigation systems for the residential lots within the development. All landscaping and irrigation systems within the residential subdivision shall be developed and installed in accordance with the submitted typical landscape and irrigation system plan or plans for that residential subdivision.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2008-910-E, § 1; Ord. 2009-864-E, § 2; Ord. 2011-74-E, § 2)

Sec. 656.1218. - Intersection visibility.

Where an accessway intersects with another accessway within a vehicular use area, where an accessway is located within a vehicular use area, or where an accessway intersects with a street right-of-way, cross visibility within the triangular areas described below shall be unobstructed at a level between two and eight feet above elevation of adjacent pavement. Only trees with trunks free of vegetation and limbs within the cross-visibility area, other landscaping, wall and earth mounds not exceeding a height of two feet, utility poles, and traffic signs shall be allowed with the triangular areas. No parking shall be allowed within the triangular areas. The triangular areas are:

- (a) The area of property on both sides of an accessway which intersects with another accessway within a vehicular use area. Two sides at each triangle shall extend six feet each way from the point of intersection, the third side being a line connecting the ends of the other two sides;
- (b) The area of property on both sides of an accessway where the accessway intersects with a street right-of-way. Two sides of each triangle shall extend ten feet each way from the point of intersection, the third side being a line connecting the ends of the other two sides;
- (c) The area of property located at the corner formed by the intersection of two or more street rights-of-way. Two sides of each triangle shall extend 25 feet along the right-of-way lines, measured from their point of intersection, the third side being a line connecting the ends of the other two sides.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1)

Sec. 656.1219. - Scenic and historic corridors.

Notwithstanding the provisions of this Part, the Council may designate by ordinance, scenic and historic corridors which may establish conditions, procedures and/or standards on any street right-of-way

including approved private streets in order to protect their special historic, architectural, archaeological, aesthetic or cultural interest. Upon designation of any scenic and historic corridor by Council, all plans, permits, improvements including maintenance, etc. thereon shall be in strict accordance with the conditions, procedures and/or standards imposed by Council.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1)

Sec. 656.1220. - Modification to landscaping requirements.

A modification to the landscaping requirements of this Subpart B may be permitted on a lot if the landscape plan has been approved by the Planning Department in accordance with the site plan review procedures of Section 656.404. Modifications to the landscaping requirements of this Subpart B which are found not to be contrary to the public interest and without which, owing to special conditions, a literal enforcement of the landscape provisions would result in unnecessary and undue hardship may be permitted by the Planning Department, provided that the landscape modification meets the spirit and intent of this Subpart and is a relocation, not an overall reduction, of the landscape requirements within the property.

(Ord. 91-59-148, § 1; Ord. 93-718-395, § 1; Ord. 2002-714-E, § 4)

Sec. 656.1221. - Education.

To assist in public information, the education of its citizens, and the effective implementation of this ordinance, the City will coordinate its efforts with those of the St. Johns River Water Management District and the Duval County Agricultural Extension Service or other agencies. In conjunction with the agencies, the City will jointly sponsor workshops and/or short courses on the design principles and standards of water-efficient landscaping.

(Ord. 93-261-143, § 1)

Sec. 656.1222. - Buffer requirements for residential subdivisions.

- (a) *Tree survey required.* A tree survey of the site which shows all protected trees 11.5 inches DBH or greater shall be provided. The tree survey shall be prepared by a licensed registered surveyor, landscape architect, or arborist, however other professionals such as a wetland scientist or environmental professional may also submit a tree survey. Where the applicant believes that no protected trees 11.5 inches DBH or greater exist on the site, he may submit a "No Tree Verification" Affidavit stating that no protected trees 11.5 inches DBH or greater exist on the site, together with the required permit fee. If the affidavit is substantiated by an inspection of the site, a "No Tree Verification" Authorization shall be issued. If it is determined upon inspection that a tree or trees requiring a permit are found on the property, the permit fee shall be quadrupled.
- (b) *Buffer required.* An average 20-foot natural buffer area is required along all perimeters of the site adjacent to any public or approved private right-of-way. The buffer area shall run the entire length of the right-of-way, shall not be less than 15 feet wide, and shall be subject to the standards of the Land Development Procedures Manual. The Chief may approve a buffer strip of less than 15 feet in instances when there is a unique hardship or circumstances that do not provide for any other practical alternative. Notwithstanding this subsection, the buffer area shall not exceed ten percent of the actual developable acreage of the site.
- (c) *Additional buffer standards along rights-of-way classified as collector or higher.* In addition to the requirements in subsection (b), if property abuts a right-of-way classified as a collector or higher on the City of Jacksonville Functional Highway Classification Map, then additional screening shall be provided as provided in this subsection (c).

- (1) *Type of screening* . Screening may be a berm, brick wall, landscaping, masonry wall, natural buffer, ornamental metal fencing, stucco wall, vinyl fencing, or other composite material subject to all provisions of this subsection. A combination of these screening types is permitted. If wood fencing is used, it shall be located at the inside edge of the buffer required by subsection (b).
- (2) *Minimum Standards* . Conservation areas, amenity areas, and aesthetically designed stormwater retention areas may not be subject to the minimum standards of this subsection, and transparency in these areas shall be subject to review and approval by the Planning and Development Department. For all other areas, the following minimum standards shall apply without exception:
 - (i) *Height*. Screening shall be a minimum of six feet in height and height shall be measured from the design grade adjacent to the screening.
 - (ii) *Location and setback*. Required landscaping and tree planting shall always be located on the right-of-way side of any wall or fence. Screening requirements within the buffer other than landscaping, shall be set back between 10 feet and 20 feet from the right-of-way. Screening shall be at least four feet from any sidewalk.
 - (iii) *Opacity*. Screening shall be 85 percent opaque, unless otherwise permitted by definition.
 - (iv) *Relief*. Fence or wall screening shall contain one relief every 100 feet, as the term relief is defined in subsection (3). Exceptions for relief along a wall or fence shall not be deducted from meeting the average 20-foot required setback.
- (3) *Definitions*. For the purposes of this Section, the following definitions and limitations apply:
 - (i) *Berm* means a mound or embankment of earth and subject to subsection (2).
 - (ii) *Brick* means a molded rectangular block of clay baked by the sun or in a kiln until hard and used as a building and paving material and subject to subsection (2).
 - (iii) *Composite material* means any combination of soft material like polyethylene, hard plastic like polypropylene, and hard wood, which is combined to produce a durable, long-lasting end product, subject to subsection (2).
 - (iv) *Landscaping* means planting materials including, but not limited to, trees, shrubs, ground covers, grass, flowers, and other similar materials, all subject to subsection (2). If landscaping is used without any other screening options, then the plants used for landscaping shall be sized at least five gallon, evergreen, and spaced so that 85 percent opacity and the height requirement in subsection (2) is achieved within two years.
 - (v) *Masonry* means stone, concrete, or other similar material other than brick and subject to subsection (2).
 - (vi) *Natural Buffer* means an area set aside for the preservation of natural vegetation and subject to subsection (2). This term does not preclude the clearing of understory/secondary vegetation. Trees that are three inches DBH or more are considered protected trees within a natural buffer. Any tree removed from a natural buffer shall be mitigated for within the natural buffer. Replacement trees mitigated for within a natural buffer shall be at least three inches DBH and shall not count towards meeting other tree planting requirements as described in 656.1222(e) or individual planting requirements on a residential lot.
 - (vii) *Ornamental metal* means a screening made of various weather resistant iron, metal, or similar materials. Ornamental metal may be less than 85 percent opaque subject to review by the Department.
 - (viii) *Relief* means a projection or recess of at least 24 inches from the screening plane to provide visual differentiation along the plane. Landscaping may not be used to meet the relief requirement. Projections may be located within the required buffer and do not add additional feet to any buffer requirement.

- (ix) *Stucco* means a durable finish made from cement, sand, and lime or other similar materials and may be placed over a commercial grade foam core or other similar material and subject to subsection (2).
- (x) *Vinyl fencing* means any screening made of any of various tough plastics and subject to subsection (2).
- (d) *Platting, maintenance, and open space credit.* The buffer area and any additional screening shall be recorded on the plat and may be part of a lot or a separate tract. If part of a lot, the buffer area and any additional screening shall be maintained by the lot owner. If part of a separate tract, the buffer area and any additional screening shall be maintained by the homeowners' association in perpetuity. If the buffer area and additional screening is recorded as a separate tract on the plat then the site shall receive the equivalent area as a credit towards meeting recreation and open space requirements, not to exceed 25% of the required recreation and open space requirement.
- (e) *Removal of trees in required buffer.* Trees within the required buffer area may be removed, subject to the permit requirements of Section 656.1206, Ordinance Code. Trees mitigated within the buffer shall be replaced within the buffer. At least one tree, a minimum of four inches DBH, shall be planted or preserved every 40 feet on center along perimeters of the site which are adjacent to roadways. If trees cannot be planted every 40 feet because of conditions including, but not limited to, drainage easements, the Chief may approve an alternative visual screen, consistent with subsection (c) regardless of the classification of the abutting right-of-way.
- (f) *Improvements permitted in buffer .* No new structures, impervious surfaces, unpaved vehicular use areas or other improvements shall be constructed within the designated buffer area other than fences, gates, mailboxes, necessary driveways, necessary sidewalks, and permitted signs.

(Ord. 1999-775-E, § 4; Ord. 2006-23-E, § 1; Ord. 2008-910-E, § 1)

Sec. 656.1223. - JEA Neighborhood Below Ground Pump Stations.

- (a) *Landscape Performance Standards* The visual impacts of the below ground pump stations sites shall be mitigated through the use of a landscaping buffer outside the security fence. The buffer shall be a minimum 5' at the street frontage and a minimum of 10' on all other sides and subject to and consisting of the following:
 - (1) A row of shade trees, beginning at the halfway point along each side fence and across the back, with no trees allowed in the front of the pump station, planted a minimum of 25' on center. At the time of planting, the trees shall be a minimum 10' tall with a 2" caliper; and
 - (2) A row of evergreen shrubs such as viburnum, ligustrum, holly or juniper, or any other evergreen shrub permitted by Section 656.1223, a minimum of 3' tall at time of planting, planted at 3' on center; and
 - (3) A 6' tall privacy fence with black vinyl privacy slats and a minimum 10' wide privacy gate; and
 - (4) The required landscaping shall be properly maintained through an irrigation system with rain sensor.
- (b) Deviations from the standards in subsection (a) must be reviewed and approved by JEA and by the City's Landscape Architect.

(Ord. 2008-910-E, § 1)



**BUILDING INSPECTION DIVISION
CITY OF JACKSONVILLE, FLORIDA**

Attachment E

SITE WORK PERMIT: L-18-137551.000

DATE ISSUED: 11/1/2018

CONTRACTOR: 2222222222222222 -

FOR: JEA-Jacksonville Electric Authority

LOT: LOTS 1,2,3,4,6,7 BLOCK: LOTS 1,2,3,4,6,7,8,S

CITY INSPECTOR: Stiltner, Stephen Phone: 255-8379

PERMIT FEE: \$100.00

MITIGATION PAID: \$0.00

D.B.A.: LICENSED NOT REQUIRED

AT: 21 CHURCH Street West

SUBDIVISION: JAX HARTS MAP

JOB COST: \$100.00

DESCRIPTION: Annual permit to trim and remove trees to include work within historic corridors and districts.

TREE MITIGATION:

Live Oak	Non Shade	Shade	Total Required Inches
0	0	0	0

STANDARD COMMENTS:

ADDITIONAL COMMENTS

TO SCHEDULE AN INSPECTION CALL 630-1100

- OR -

<http://Buildinginspections.coj.net>

THE WORK DESCRIBED HEREIN SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, LOCAL ZONING CODE, AND OTHER APPLICABLE REGULATIONS OF THE CITY OF JACKSONVILLE, STATE OF FLORIDA, AND FEDERAL GOVERNMENT. IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THE PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORD OF THE COUNTY (CITY), AND THERE MAY BE ADDITIONAL PERMITS REQUIRED. IF NO WORK IS DONE ON THE PERMIT DURING A SIX MONTH PERIOD, PERMIT MAY BECOME VOID. THE PERMIT HOLDER MUST CONTACT SUNSHINE ONE CALL (1-800-432-4770) PRIOR TO COMMENCING ANY EXCAVATION OR SITE CLEARING. A SEPARATE PERMIT IS REQUIRED TO WORK IN THE CITY'S RIGHT OF WAY OR EASEMENT, CONTACT THE DEVELOPMENT MANAGEMENT GROUP, 630-1105. THE PERMIT HOLDER SHALL DELIVER A COPY OF THIS PERMIT AND ALL FORMS RECEIVED WITH THIS PERMIT TO THE REAL PROPERTY OWNER.

COPIES OF THIS PERMIT, A SET OF APPROVED PLANS (IF ANY), MUST BE POSTED IN A CONSPICUOUS PLACE ON THE JOB SITE FOR VERIFICATION BY OUR INSPECTORS.

BELOW IS A LIST OF THE MINIMUM REQUIRED INSPECTIONS FOR THIS PERMIT ONLY. THERE MAY BE OTHER INSPECTIONS REQUIRED. FAILURE OF THIS LIST TO INCLUDE A REQUIRED INSPECTION DOES NOT GRANT YOU PERMISSION TO PROCEED WITHOUT OBTAINING INSPECTIONS REQUIRED BY THE FLORIDA BUILDING CODE. THIS LIST DOES NOT INCLUDE REQUIRED INSPECTIONS FOR SUBCONTRACTOR'S ASSOCIATED PERMITS. IF THIS IS A BUILDING PERMIT, THE LIST WILL INCLUDE A LISTING OF OTHER REQUIRED PERMITS. REQUIRED INSPECTIONS FOR THOSE PERMITS WILL BE LISTED ON THOSE INDIVIDUAL PERMITS. THE ORDER IN WHICH THE INSPECTIONS ARE LISTED ARE NOT NECESSARILY THE ORDER THEY NEED TO BE REQUESTED.

REQUIRED INSPECTIONS ARE MARKED WITH AN 'X'

- () 03 TREE BARRICADE
- () 17 LANDSCAPE
- (X) 09 FINAL
- () 34 HANDICAP ACCESSIBILITY INSPECTION
- () 15 CONSULTATION

Stewardship and service are important goals for JEA when we trim trees. We also strive to balance common community concerns for aesthetics, tree health, safety and electric reliability.

Tree Trimming Honors



JEA is a Tree Line USA utility, a designation awarded by the Arbor Day Foundation. Only a select few utilities have this prestigious designation in Florida.

- Quality tree care
- Annual worker training
- Tree-based energy conservation program
- Arbor Day Celebration
- Tree planting and public education.

JEA's Urban Forestry Team

JEA has degreed foresters and certified arborists supervising and inspecting the tree trimming work around its power lines. Our team has taken its experience in utility vegetation management and successfully positioned itself as a leader in the industry.



Trimming Today Maintains Power Tomorrow



Why Do We Trim Trees?

We trim trees to prevent power outages, especially during storms. We don't want hazardous branches to hit our electric lines and cause an outage. It's our job to establish a safe distance between the lines, trees and other objects. Trimming trees today maintains your power tomorrow.

We trim around electric lines to a clearance of 10 feet every 2.5 years. We also remove hazardous branches when necessary. We proudly follow strict national standards for tree care operations.

V-Cut Trimming: The center branches are removed to allow the power line to pass above and through.



Side Trimming: The tree growth is steered away from the power line by removing branches on just one side.



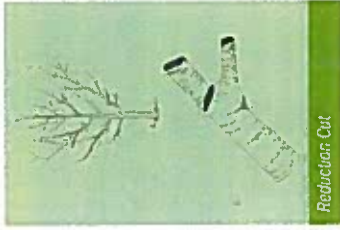
Crown Reduction: When neither of the first two methods above will work, trimming the tree from its top may be an option.



The Art of Tree Pruning

We also use directional pruning when possible. This "trains" trees to grow away from power lines by using:

- Reduction cuts to shorten the length of a stem by pruning back to a smaller limb.
- Removal cuts to prune a branch back to the trunk or parent branch.
- Prudent pruning practices may result in clearances that are not exactly 10 feet.



A Proud Partnership: Green Release

JEA contributes to the health of our urban forest by planting trees. Through a proud partnership called Green Release, JEA works with Greenscape of Jacksonville to provide free trees to schools, parks and neighborhood organizations to improve the urban forest. The trees must be planted on public property, which may also include utility easements and street medians.



Right Tree. Right Place.

By selecting the right tree for the right place, you'll provide trouble-free beauty for years to come. You'll also reduce fire hazards, limit the need for frequent pruning, increase your property value and help beautify the community. If we need to remove a tree, that's planted too close to a power line, we'll work with you on a case-by-case basis to replace the tree with a species that follows the Right Tree, Right Place guidelines.

And while we're on the subject of Right Tree, Right Place near power lines, please plant the right shrubs around JEA transformers, too.

Woody plants, ornamental grasses, shrubs and trees must be kept at least 15 feet from the front of the pad and at least 3 feet from the sides and back of the pad. This allows our crews to inspect and maintain transformers. It also allows us to restore your power faster in an emergency.



PLANT THE RIGHT TREE IN THE RIGHT PLACE

Plant taller trees away from overhead



Arbor Day Foundation
arborday.org



The Council Quarterly

Quarterly Newsletter of the Florida Urban Forestry Council

2018 Issue Four

The Council Quarterly newsletter is published quarterly by the Florida Urban Forestry Council and is intended as an educational benefit to our members. Information may be reprinted if credit is given to the author(s) and this newsletter. All pictures, articles, advertisements, and other data are in no way to be construed as an endorsement of the author, products, services, or techniques. Likewise, the statements and opinions expressed herein are those of the individual authors and do not represent the view of the Florida Urban Forestry Council or its Executive Committee. This newsletter is made possible by the generous support of the Florida Department of Agriculture and Consumer Services, Florida Forest Service, Nikki Fried Commissioner.

GROW BENEFITS AND TRIM RISKS IN OUR MUNICIPAL FORESTS – URBAN FOREST INVENTORIES

Submitted by Will Liner, Urban Forestry Program Manager - Florida Forest Service

Like Yogi Berra famously said, "You've got to be very careful if you don't know where you're going, because you might not get there." A community tree inventory is the first step towards an active management program that can effectively maximize tree benefits while mitigating risks to the community. With a growing urban population and an expanding need for urban infrastructure, communities cannot afford the loss of trees and the benefits they provide. The municipal tree canopy is a valuable public asset, but it is not devoid of risks. The risks are very real regarding property damage,

personal injuries, and, unfortunately, fatalities. Proper urban forest management can help to identify and mitigate risks.

Knowing what you have is an important part of managing any asset, and the community forest is no exception. An up-to-date urban forest inventory is one of the most valuable resources a city arborist can have in his or her toolkit. The municipal forest requires careful planning and thoughtful action. Having an inventory allows the urban forest manager to confidently make informed decisions. There are many different types of inventories, ranging from citizen volunteers

armed with smartphones to professional companies creating a city-specific database. Choosing an inventory that is right for your community is an in-depth topic. Still, any inventory with reliable data is better than no inventory at all.

To be effective, an inventory needs to have three pieces of basic information: location, species, and condition. There are many other useful fields of data, but these are the three crucial data points. This information sets the foundation for critical activities, such as creating a maintenance schedule, identifying future planting sites, and, over time, identifying the species that struggle or thrive throughout your community. Additionally, combining the data fields together allows urban foresters and tree care specialists to answer important questions. Where are the trees in poor condition that could

continues on pg. 2



INSIDE:

Grow Benefits and Trim Risks in Our Municipal Forests - Urban Forest Inventories	1 - 2
President's Message	2
Stump the Forester	5
Street Tree Soil Volume for Urban Foresters	6 - 8
What Does It Take to be a Champion?	10 - 11
Fort Lauderdale's Bicentennial Liberty Live Oak Tree	12 - 13
Members	14
Request for Articles	15

STREET TREE SOIL VOLUME FOR URBAN FORESTERS

Submitted by Al Key, Vice President – DeepRoot Green Infrastructure, LLC

Urban foresters today face a number of challenges regarding street trees, including the lack of available soil in high-density areas. One of the strategies employed is the Street Tree Soil Volume Mandate. There are many guidelines which stipulate volumes, but a mandate is a requirement. Developers are required to provide a certain amount of planting soil per tree. Requirements must be met before a Certificate of Occupation can be issued. A new building is useless without a Certificate of Occupation.

The soil requirement can be used for several complementary goals, be it large tree growth, stormwater bioretention, heat island reduction, or urban greening. Regardless of the reason, the resulting inner-city flora will have the added benefit of increasing real-estate value—a goal of most developers.

How much soil should be mandated? The mature tree size determines the volume of soil needed to sustain that species into maturity. Research completed by Pat Lindsey and Nina Bassuk (Journal of

Arboriculture June 1991 Volume 17 No. 6) at Cornell's Urban Horticulture Institute found that "For a general estimate, 2ft³ for every square foot of crown projection is recommended." This

recommendation, and others was popularized by Jim Urban, FASLA (Journal of Arboriculture 18 (2): March 1992) and culminating in the Landscape Architectural Graphic Standards of 2006. This is the text book that licensed Landscape Architects now use as a reference and is the basis for Municipal soil volume standards throughout the United States.

"The mature tree size determines the volume of soil needed to sustain that species into maturity."

Bassuk and Lindsey's recommendation indicates that the volume of rootable soil required by a large tree with a 50-foot crown spread is about 4,000 cubic feet of loamy planting soil (a silt loam was used in the paper). Such abundant soil volumes are generally only found in non-urban settings. Urban foresters don't have the space to achieve these kinds of volumes, and trees are often shoe horned into "Amenity Zones" in the shared public right-of-way. In tight urban situations, there are three choices to achieve canopy cover for soils volume: custom support systems, structural soils and suspended (supported) pavements.

The beauty of having a soil volume mandate in place is that someone (the developer) is responsible for how it's achieved. As an Urban Forester, you could maintain your impartiality.

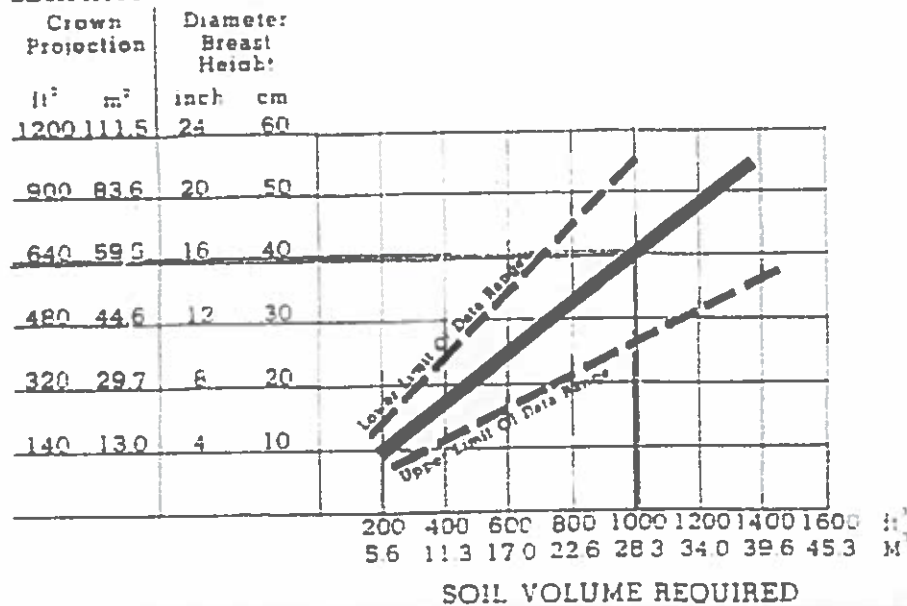
Mandates versus Recommendations

Toronto, Canada has been at the forefront for urban forestry initiatives. They have set minimum soil volumes for street trees of 30 cubic meters per tree, and 15 cubic meter per tree in shared rooting volumes. They have also set a goal of increasing their overall tree canopy from 17 percent to 40 percent, and they realize they will not get there without soil volume.

Washington, DC is another leader in the effort to give trees the soil they need in urban environments. There, a sliding scale for small, medium and large trees is used. Large Trees: 1,500 cubic feet of soil within a 27-foot radius. Medium Trees: 1,000 cubic feet of soil within a 22-foot radius. Small Trees: 600 cubic feet of soil within a 16-foot radius. They also have a 25% reduction in volumes when the soil is shared between trees.

Of course, standards in Florida should be dissimilar to northern standards. A healthy root system is one of the most critical factors enabling trees to withstand hurricane-force winds. In urban landscapes space for root growth is often limited. Recommendations on rooting volumes for tree health and wind resistance have been

ULTIMATE TREE SIZE



Research completed by Pat Lindsey and Nina Bassuk
(Journal of Arboriculture June 1991 Volume 17 No. 6)
at Cornell's Urban Horticulture Institute

developed by the University of Florida (<http://hort.ufl.edu/woody/documents/EP309.pdf>). Ed Gilman and Traci Partin set out areas of soil with a 3-foot depth depending on the size of the tree:

- Small (< 30' in height) 10x10' 300 ft³ of volume
- Medium (height or spread 30-50') 20x20' 1200 ft³ of volume
- Large: (height of spread >50') 30x30' 1800 ft³ of volume

Table 1. Soil requirements for trees based on their size at maturity.

TREE SIZE AT MATURITY	TOTAL SOIL AREA*	DISTANCE FROM PAVED SURFACE
SMALL Height: shorter than 30 ft	10 ft x 10 ft	2 ft
MEDIUM Height or spread: lesser than 50 ft	20 ft x 20 ft	6 ft
LARGE Height or spread: greater than 50 ft	30 ft x 30 ft	10 ft

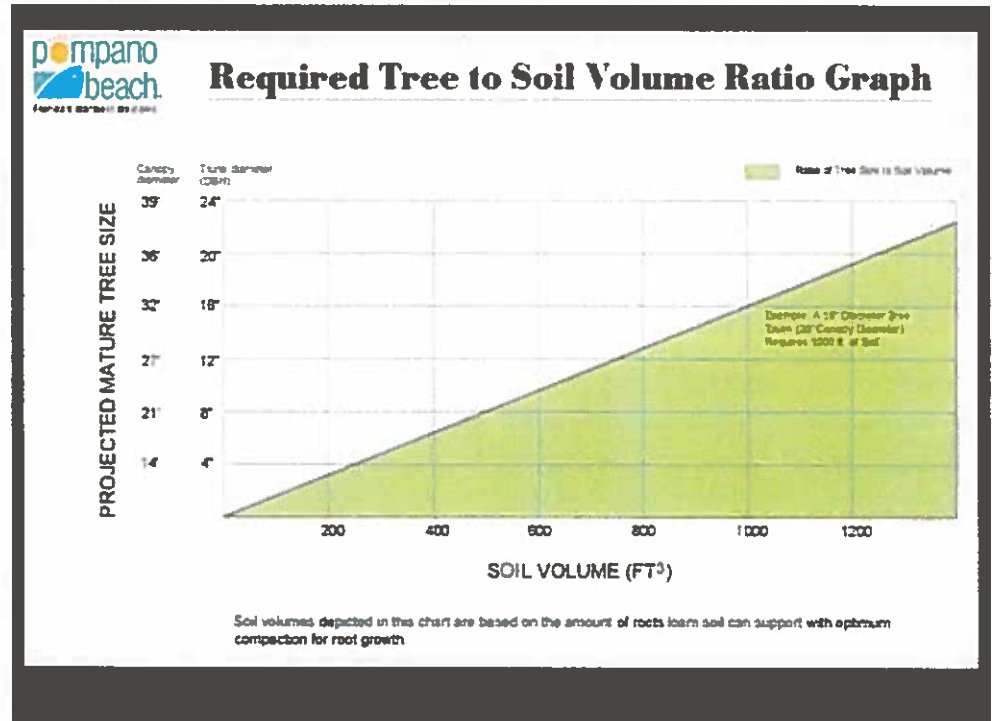
* Measurements for when rootable soil depth is 3 feet or greater. For soil less than 3 feet deep, smaller maturing trees are recommended.

The recommended volumes are larger than in DC and Toronto. This is a general rule of thumb. It is based on research and is applicable to urban environments.

Miami-Dade's area recommendations outlined in their tree guide book (https://www.miamidade.gov/parks/library/guide_tree_book.pdf) are considerably smaller - Very Small Canopy: 5x5; Small Canopy 10x10; Medium Canopy 15x15; Large Canopy 20x20. The guidebook has a discussion of soil volume, but no recommended depth so volumes are a moving target. Note that this book is a recommended minimum, and not a soil volume mandate. So, while the volumes will likely be larger than this, there are no teeth in the recommendation to enforce developers to install a given amount of soil.

City of Pompano Beach has a new standard which does mandate soil volumes for their new Transit Oriented development districts. In addition to the landscaping standards within Part 2, of Article 5, properties within the TO district shall comply with the following additional landscaping standards:

- a. Suspended pavement systems must be specified for trees in landscape areas directly abutting paved areas. Required tree soil volume shall be provided in accordance with Figure 155.3501.J.3.a: Required Tree to Soil Volume Ratio Graph below.



It's simple. Property owners are required to install enough soil for a tree to grow and be wind stable. They can't occupy the building without providing the soil for the tree.

Next Steps

As impartial arbiters for tree soils, urban foresters cannot mandate products or

designs. They can however require healthy volumes of tree soil. Not only should volumes be required, but soil quality should be codified as well. Municipalities that are rethinking the vital role trees play in the health of our communities, the overall quality of life, and are creating the rules and recommendations to support trees and a resilient tree canopy are to be commended.

Urban foresters today face a number of challenges regarding street trees. Are you involved, is your community involved, with the promotion of policies and projects that set trees up for long-term success and environmentally meaningful contribution?



FUFC PAST PRESIDENTS

Steve Graham.....	(1990-1991)
Ed Gilman.....	(1991-1992)
Bill Reese.....	(1992-1993)
Andy Kittsley.....	(1993-1994)
Jeffrey Siegel.....	(1994-1995)
Norm Easey.....	(1995-1996)
John Tamsberg.....	(1996-1998)
Mike Conner.....	(1998-1999)
Julie looss.....	(1999-2000)
Anna Dooley.....	(2000-2001)
Howard Jeffries.....	(2001-2002)
Mike Greenstein.....	(2002-2003)
Mike Robinson.....	(2004-2005)
Celeste White.....	(2006-2007)
Earline Luhrman.....	(2008-2009)
John Holzaepfel.....	(2010)
Jerry Renick.....	(2011)
Mary Lou Hildreth.....	(2012)
Elizabeth Harkey.....	(2013)
Ken Lacasse.....	(2014)
Justin Freedman.....	(2015)
Linda Seufert.....	(2016-2017)



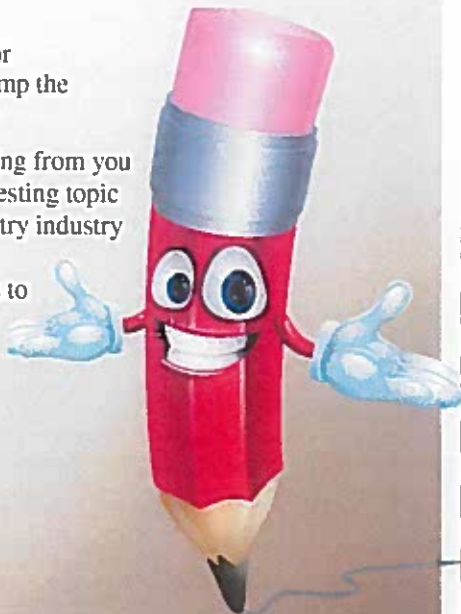
REQUEST FOR ARTICLES

Please let us know what urban forestry projects you have going on in your neck of the woods. The Florida Urban Forestry Council would greatly appreciate the opportunity to share your information in our newsletter. These articles can include:

- New trends in the industry
- News about tree advocacy groups
- Volunteer projects
- City tree programs
- Letters to the Editor
- Questions for "Stump the Forester"

We look forward to hearing from you on this or any other interesting topic related to the urban forestry industry and profession. Please send any articles or ideas to Joe Anderson, FUFC newsletter editor, at andejs@jea.com.

Thanks for contributing!



MEMBERSHIP APPLICATION

(Dues are effective for the calendar year of January 1 - December 31)

Make check or money order payable to FUFC and mail to:
Post Office Box 547993, Orlando, FL 32854-7993

Categories (please check one):

- Professional @ \$25.00**
(Professional membership is open to anyone who is actively working in the profession of Urban Forestry or any related profession.)
- Tree Advocate @ \$20.00**
(Tree Advocate membership is granted to those volunteers who are members of a tree board, beautification committee or other Urban Forestry volunteer group, and/or an interested citizen.)
- Supporting @ \$200.00**
(Supporting membership is granted to those individuals, groups or other entities expressing a desire for a strong supportive role in the Council. Membership will be granted for up to five individuals of an organization or business.)
- Government/Non-Profit Agency @ \$100.00**
(Government/Non-Profit Agency membership is granted to those individuals, groups or other entities actively working in the profession of Urban Forestry or any related profession. Membership will be granted for up to five individuals within the agency.)
- Student @ \$10.00**
(Student membership is granted to anyone who is actively enrolled as a full-time student and who is considering pursuing a career in Urban Forestry.)

Name: _____

Title: _____

Firm: _____

Address: _____

City: _____

State: _____

Zip: _____

Telephone: (____) _____

FAX: (____) _____

E-mail: _____

Amount Enclosed: _____ Date: ____/____/____

Would you be interested in further information regarding serving on a Council subcommittee? Yes No

Area of interest: _____

TREE COMMISSION COMMITTEE ON UNAUTHORIZED TREE PRUNING/REMOVAL

CONFERENCE WITH SUSAN GRANDIN, TRACEY ARPEN AND MIKE ROBINSON,

JANUARY 15, 2019, JANUARY 23, 2019, and February 13, 2019

Subject: Suggested requirements and penalties for removing or damaging trees without a permit.

Background: Trees required as part of the Landscape Requirements of Subpart C were pruned by topping or hatracking in order to provide visibility to a Clear Channel billboard. Also, 10 trees were removed without a permit in front of a Burger King that former Councilman Dick Kravitz had saved as part of the PUD criteria for a rezoning.

Note: In order to adequately get to the issue of what constitutes over pruning and how to treat the violations, it was necessary to expand the scope to what trees are “protected” in the first place, and how they are protected during development. Additionally, for requirements and violations to be effective in both Subparts B (Tree protection) and C (Landscaping Requirements), Subpart A (General Provisions) should be expanded.

Discussion:

1. Tree removal is regulated, but damage caused by over-pruning is not adequately regulated.
2. Description of what constitutes “over-pruning” should be provided in the Code graphically, general ideas by text, as well as referencing manuals on pruning. (Add to General Provisions)
3. Currently, the definition of “Protected Tree” does not specifically include trees planted as required by Subpart C (Landscape Requirements), or as mitigation required by Subpart B, unless they have grown to the size of an otherwise “Protected Tree”. The result is that a landowner could have planted 2” Maples throughout a large parking lot, and once the Maples grow to 11” dbh, they can be permitted to be removed either because they are not Protected Trees, or by replacing with each Maple with one 4” tree. This is capable of happening over and over and may be desired to keep the view to signage clear.
 - a. In the Landscaping Requirements Subpart C, the owner is required to “maintain the required landscape areas”, but this does not directly address removal of trees that were retained or provided as part of the landscaping requirements. Suggest revision to subsection 656.1212(a) to: change the heading to be “Maintenance of Required Landscaping”; strike the term “landscape areas” and insert “landscaping” which is a defined term that includes combination of living plants, including trees; and add “in the opinion of the Chief” as to whether the replacement trees will fit on the site.
 - b. The definition of Protected Tree should be revised to specifically address the trees retained or provided to meet landscape requirements. Suggest revision to Sec. 656.1203 (Definitions) to add to the definition of “Protected tree” an additional subparagraph (4) “Any tree, regardless of size, planted or preserved to meet mitigation

or landscape requirements, or planted utilizing Tree Protection and Related Expenses Trust Fund monies. Cross reference subsection 656.1206(g)(7).

- c. Should definitions be identified in the body of the ordinance as defined terms signaled by the capitalization of the word or words?
4. What trees are exempt from being “Protected Trees” is confusing and should be reorganized.
5. Add conservation easements to definition of Public Protected Tree.
6. Diseased trees should not be classified as “Protected”.
7. Exclude invasive, exotic species from definition of Exceptional Specimen Tree.
8. Protected Trees that are “exempted” from that definition should have a “Certificate of Exemption from Classification as a Protected Tree” issued by the Chief. This should be required as an administrative function with no “permit fee” associated, but there should be a paper trail.
9. Where is the 14-point analysis as required by 656.1206(e) done by the BID? Are all requests for tree removal granted no matter what?
10. The penalties for unpermitted removal of trees do not match the loss of the tree in some cases, such as the unpermitted removal of a 36” Laurel Oak, which would have a very large canopy is currently only required to be replaced with six 4” Laurel Oaks.
 - a. Suggest aligning penalty for unauthorized tree removal with the loss of value of the tree as appraised by a professional arborist with that skill-set, and as determined by a hearing officer.
11. The penalty for over-pruning trees should not be as great as the penalty for totally removing the tree. This violation should be sent to a hearing officer who could hear from professional arborist that would recommend either:
 - a. removing the tree and paying for its value along with other costs such as consulting fee, the cost of removal, and a fine; or
 - b. set up a plan to rehabilitate the tree through some time period of growth and pruning, with an inspection at the end of the period.
12. Damage to the root system within the drip line should be specifically mentioned as a form of unauthorized pruning or damage.
 - a. The use of the term “drip line” does not adequately encompass the root zone of a tree. Suggest changing area protected to “root zone”. (General Provisions)
13. Barricades need to be at the root zone, and enforcement needs to happen.
14. A standard for barricades is 1.5 feet in diameter for each inch of dbh.
 - a. So, a 10” tree would have at least a 15’ diameter root zone barricade built around the tree, with the tree in the center.
 - b. Suggest requiring the root zone protection and the area required to plant trees be revised to cubic feet rather than square feet. The depth to which new soil should be provided is 18”, so 1.5’ X the area required.
15. Create joint and several liability for Violator. Do not limit liability to property owner. (General Provisions)
16. Define “person” if not already in general definition in Code. Definition in Sec. 1.102 is *Person*. The term “person” means any human being, any governmental or political subdivision or public agency, any public or private corporation, any partnership, any firm, association or other organization,

any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing or any other legal entity.

17. Is \$50,000 the right amount today for clearing an acre without a permit? What if the acre was covered with large live oaks or long leaf pines?
18. In an initial phone conference with Chris McCormick of GIC, most codes reference the ISA standards for tree pruning, and consider it a violation of the code if those recommendations are not followed.
 - a. Check ISA to make sure it meets our needs. No, use ANSI A300, and for work in public right-of-way, also use ANSI Z133 which is a safety standard.
 - b. Suggest subsection 656.1212(c) be revised to say “Required trees may be pruned in compliance with ANSI A#), but shall be allowed to develop into their natural habit or growth and shall not be topped,”
 - c. Suggest looking at other codes to determine a standard for penalties and how enforcement is accomplished.

INDEX CODE	Index Code Titles	BUDGET	Actual	Encumbrance	Unencumbered Budget Balance	Reserves	Unencumbered Balance net of Reserves
Subfund 15F Revenue							
PWOD15FTP	TREE PROTECTION & RELATED EXPENSES	29,858,755	42,816,808		12,958,053		12,958,053
JXSF15FPW	TREE PROTECTION & RELATED EXPENDITURES	7,923,308	8,853,755		930,447		930,447
JXSF15F	TREE PROTECTION & RELATED EXPENDITURES	-	8,580		8,580		8,580
TRIN15FFR31R	TRF TO 15F TREE PROTECTION FR 31F	392	392		-		-
	CONVERSION AND NONCASH REVENUE ENTRIES		338,836		338,836		338,836
Total Subfund 15F Revenue		37,782,456	52,018,372	-	14,235,916		14,235,916
* Subfund 15F Expenditures							
PWOD15FFSAS	FORREST STREET ASH SITE TREE/PLANTING	587,850	581,856	5,995	-	-	-
PWOD15FNMS	NORTH MAIN STREET LANDSCAPING	62,057	50,321	11,736	-	-	-
PWOD15FBDAS	BROWN'S DUMP ASH SITE TREE/PLANTING	364,730	342,361	22,370	-	-	-
PWOD15FFCAS	5TH & CLEVELAND ASH SITE TREE/PLANTING	494,215	376,792	117,423	-	-	-
PWOD15FDCS	DUVAL COUNTY SCHOOL BOARD PROPERTY	125,000	32,757	-	92,244	-	92,244
PWOD15FDTP	DOWNTOWN TREE PLANTING	38,822	32,568	6,254	-	-	-
PWOD15FZLAE	ZOO LANDSCAPING-ASIAN EXHIBIT	1,824,408	792,976	1,031,432	-	-	-
PWOD15FIBCL	INTERSEC,BRIDGE,MISC 09/10 LANDSCAPING	100,000	80,714	819	18,468	-	18,468
PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY	4,979,980	4,625,562	173,365	181,053	-	181,053
PWML15F	TREE MAINTENANCE	2,149,689	2,114,694	290	34,704	-	34,704
PWOD15FATPP	AVONDALE TREE PLANTING PLAN	31,233	24,986	6,247	-	-	-
PWOD15FKSCP	KING ST. PLANTING COLLEGE TO PARK	85,366	60,061	25,305	-	-	-
PWOD15FHAMM	HAMMOND BLVD PROJECT	175,761	-	-	175,761	-	175,761
PWOD15FVPP	COUNTY-WIDE TREE PROG-PRESERVATION PARKS	1,000,000	485,146	-	514,854	-	514,854
PWOD15FVAP	COUNTY-WIDE TREE PROG-ACTIVE PARKS	1,151,965	619,420	-	532,545	-	532,545
PWOD15FOSABP	OLD ST.AUG AT BARTRAM PARK	18,364	14,691	3,673	-	-	-
PWOD15FLAVC	LENOX AVE.PLANTING VERNA TO CASSAT	26,436	21,149	5,287	-	-	-
PWOD15FPRBB	PATTON RD AND BEACH BLVD TREE PLANTING	32,203	-	32,203	0	-	0
PWML15F630CT	630-CITY TREE PLANTING PROG	200,000	-	-	200,000	-	200,000
PWOD15FMANRD	MANDARIN ROAD TREE PLANTING	103,840	-	29,239	74,601	-	74,601
PWOD15FSPRTR	SPRINGFIELD PRESERVATION TREE PLANTING	278,872	-	81,923	196,949	-	196,949
PWOD15FTP	TREE PROTECTION & RELATED EXPENSES	3,548,513	2,097,444	-	1,451,069	1,449,105	1,964
JXSF15FPW	TREE PROTECTION & RELATED EXPENDITURES	2,000,635	-	-	2,000,635	2,000,635	-
JXSF15F	TREE PROTECTION & RELATED EXPENDITURES	1,865,741	-	-	1,865,741	1,865,741	0
Subfund 15F Expenditures		21,245,679	12,353,495	1,485,812	7,338,624	5,315,481	2,023,143

* Includes accounts with encumbrances and budget balances

Unencumbered Budget Balance
 Revenues
 Expenditures
 Unencumbered Balance net of Reserves

14,235,916
 7,338,624
 (2,023,143)

INDEX CODE	Index Code Titles	BUDGET	Actual	Encumbrance	Unencumbered Budget Balance	Reserves	Unencumbered Balance net of Reserves
Subfund 15F Available to Appropriate (Budget less Actual less Encumbrance less Unencumbered Budget balance)							19,551,397
Subfund 15N Revenue							
PWOD15NTM	TREE MITIGATION & RELATED EXPENSES	305,139	4,905,089	-	4,599,951		
	Total Subfund 15N Revenue	305,139	4,905,089	-	4,599,951	-	-
*	Total Subfund 15N Revenue	305,139	4,905,089	-	4,599,951		4,599,951
*Subfund 15N Expenditures							
PWOD15NHR	HARTS ROAD TREE PLANTING	7,548	1,294	6,253	-	-	-
JXSF15N	TREE MITIGATION & RELATED EXPENSE	1	-	-	1	1	-
	MANDARIN ROAD TREE PLANTING	62,205		16,607	45,598		45,598
PWOD15FPRBB	PATTON RD AND BEACH BULD TREE PLANTING	62,080	-	62,080	-	-	-
	Subfund 15N Expenditures	131,834	1,294	84,941	45,599	1	45,598
* Includes accounts with encumbrances and budget balances							
Subfund 15N Available to Appropriate (Budget less Actual less Encumbrance less Unencumbered Budget balance)							4,599,952
Better Jacksonville Plan							
PWCP351MIT	TREE MITIGATION PROJECT	1,717,826	-	-	1,717,826	-	1,717,826
Better Jacksonville Plan (for Tree Mitigation) Available to Appropriate (Budget less Actual less Encumbrance less Unencumbered Budget balance)							1,717,826
Total 15F and 15N Funds							24,151,348
Better Jacksonville Plan - TREE MITIGATION PROJECT							1,717,826
Grand Total 03/13/2019							25,869,174
Grand Total 02/11/2019							25,757,139
Difference							112,035

FY	DOC_NO	DOC SUFFIX	SUBFUND	VENDOR_NO	VENDOR_SUFFIX	VENDOR_NAME	Amount	INDEX_CODE	Index Code Title
2019	CTPW07000014	01	15F	591319010	01	ZOOLOGICAL	1,031,432.38	PWOD15FZLAE	ZOO LANDSCAPING-ASIAN EXHIBIT
2019	PO3019740001	04	15F	340176110	07	EXPERT	29,663.46	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO3019740003	02	15F	340176110	07	EXPERT	5,994.50	PWOD15FFSAS	FORREST STREET ASH SITE TREE/PLANTING
2019	PO3019740004	02	15F	340176110	07	EXPERT	22,369.50	PWOD15FBDAS	BROWN'S DUMP ASH SITE TREE/PLANTING
2019	PO3019740005	02	15F	340176110	07	EXPERT	117,423.00	PWOD15FFCAS	5TH & CLEVELAND ASH SITE TREE/PLANTING
2019	PO7A02942006	01	15F	340176110	06	EXPERT	11,735.94	PWOD15FNMS	NORTH MAIN STREET LANDSCAPING
2019	PO7A02942017	01	15F	340176110	06	EXPERT	6,254.01	PWOD15FDTP	DOWNTOWN TREE PLANTING
2019	PO7A02942018	01	15F	340176110	06	EXPERT	3,672.84	PWOD15FOSABP	OLD ST.AUG AT BARTRAM PARK
2019	PO7A02942019	01	15F	340176110	06	EXPERT	25,305.09	PWOD15FKSCP	KING ST. PLANTING COLLEGE TO PARK
2019	PO7A02942021	01	15F	340176110	06	EXPERT	6,246.52	PWOD15FATPP	AVONDALE TREE PLANTING PLAN
2019	PO7A02942023	01	15F	340176110	06	EXPERT	5,287.17	PWOD15FLAVC	LENOX AVE.PLANTING VERNA TO CASSAT
2019	PO7A02942025	01	15N	340176110	11	EXPERT	6,253.17	PWOD15NHR	HARTS ROAD TREE PLANTING
2019	PO7A02942026	01	15F	340176110	11	EXPERT	32,202.87	PWOD15FPRBB	PATTON RD AND BEACH BLVD TREE PLANTING
2019	PO7A02942026	02	15N	340176110	11	EXPERT	62,080.49	PWOD15NPRBB	PATTON RD AND BEACH BLVD TREE PLANTING
2019	PO8A01798017	01	15F	161004851	05	SERVICE, INC.	290.35	PWML15F	TREE MAINTENANCE
2019	PO8A01798019	01	15F	161004851	05	SERVICE, INC.	88,946.82	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A04239000	02	15F	260435658	02	IRRIGATION	49,780.00	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A04605000	01	15F	260435658	02	IRRIGATION	818.50	PWOD15FIBCL	INTERSEC,BRIDGE,MISC 09/10 LANDSCAPING
2019	PO9A04607000	01	15F	260435658	02	IRRIGATION	1,912.50	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A04615000	01	15F	260435658	02	IRRIGATION	1,912.50	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A05119000	01	15F	260435658	02	IRRIGATION	1,150.00	PWOD15FROW	COUNTY-WIDE TREE PROG-RIGHT OF WAY
2019	PO9A05520000	01	15F	462419683	01	MULCH &	29,239.00	PWOD15FMANRD	MANDARIN ROAD TREE PLANTING
2019	PO9A05520000	02	15N	462419683	01	MULCH &	16,607.43	PWOD15NMANRD	MANDARIN ROAD TREE PLANTING
2019	REQ250271	01	15F				81,922.79	PWOD15FSPRTP	SPRINGFIELD PRESERVATION TREE PLANTING

1,638,500.83



TREE MITIGATION CITY OF JACKSONVILLE



TREE REMOVAL PERMIT INFORMATION

Click here to search detailed information on Site Clearing and Tree Removal Permits. In reviewing tree removal information on a specific permit, for "B" permits click on the Spec 2 tab; for "L" permits click on the Tree Mitigation tab.



TREE FUND CITY PLANTING PROJECTS

Click here to search detailed information about City Tree Fund Planting Projects.



AVAILABLE FOR APPROPRIATION

15F (Ordinance):	\$19,551,396.74
15N (Charter):	\$4,599,951.71
Better Jacksonville Plan - Tree Mitigation Project:	\$1,717,826.00
Total:	\$25,869,174.45



FILE AN ISSUE

Click here to report site clearing or tree removal without a permit, or to request tree maintenance on public property. In the CARE System, select "Tree Remove or Landscape Violation" from the dropdown.

Disclaimer: The AVAILABLE FOR APPROPRIATION information shown on this page is updated nightly from the City's financial records, but does not include any pending appropriations, or other financial transactions of the funds which have not been completed.



If you experience difficulty viewing or accessing the documents provided on this site, or navigating this application's table features, using any assistive technology please contact the Disabled Services Division at 904-630-4940 or 904-630-4933 (TTY) to request an accommodation.

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Version: 1.0.0.6

03/13/19

	FY2018	FY2018	FY2018	FY2018	FY2018	FY2018	FY 2019	FY 2019	FY 2019	FY 2019	FY 2019	FY 2019
<u>FY 2018 Revenues by month</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>	<u>January</u>	<u>February</u>	<u>March</u>
34375 TREE MITIGATION FUNDS - ARTICLE 25	67,398	63,240	28,520	15,035	78,707	34,100	48,100	112,999	96,792	54,168	26,146	1,036
361101 INVESTMENT POOL EARNINGS	29,738	33,435	19,610	40,772	40,877	45,812	-	27,825	31,552	39,249	42,747	-
36602 CONTRIBUTIONS FROM PRIVATE SOURCES	221,340	184,915	198,555	31,240	52,700	(120,465)	215,352	794,660	181,300	215,544	30,044	1,332
(15F) TREE PROTECTION & RELATED EXPENDITURES	318,476	281,590	246,685	87,047	172,284	(40,553)	263,452	935,484	309,644	308,961	98,936	2,368
34375 TREE MITIGATION FUNDS - ARTICLE 25	158,550	42,000	125,245	15,620	103,331	23,325	52,875	152,212	45,675	198,209	15,905	3,450
361101 INVESTMENT POOL EARNINGS	5,203	5,982	3,539	7,409	7,695	8,828	-	5,404	6,137	7,646	8,450	-
(15N) TREE MITIGATION & RELATED EXPENSE	163,753	47,982	128,784	23,029	111,026	32,153	52,875	158,591	51,812	205,855	24,356	3,450
	482,229	329,572	375,468	110,076	283,310	(8,400)	316,327	1,094,075	361,456	514,816	123,292	5,818