FILED 6/26/2020 DOCUMENT NO. 03378-2020 FPSC - COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Application for Original Certificate of Authorization and Initial Rates and Charges for Water and Wastewater Service in Duval, Baker and Nassau Counties, Florida by FIRST COAST REGIONAL UTILITIES, INC. DOCKET NO. 20190168-WS

FILED:

NOTICE OF FILING

JEA, by and through its undersigned attorneys, hereby gives notice of filing its Prefiled

Direct Testimony of Susan West in the above-referenced docket.

Respectfully submitted this 26th day of June, 2020.

/s/ Thomas A. Crabb

Thomas A. Crabb, FBN 25846 Susan F. Clark, FBN 179580 Radey Law Firm 301 South Bronough Street, Suite 200 Tallahassee, FL 32301 (850) 425-6654 tcrabb@radeylaw.com sclark@radeylaw.com *Attorneys for JEA*

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished via electronic mail

to the following this 26th day of June, 2020.

Melinda Watts Kristen Simmons Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 mwatts@psc.state.fl.us ksimmons@psc.state.fl.us William E. Sundstrom Robert C. Brannan Sundstrom & Mindlin, LLP 2548 Blairstone Pines Drive Tallahassee, FL 32301 wsundstrom@sfflaw.com rbrannah@sfflaw.com

/s/ Thomas A. Crabb

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FIRST COAST REGIONAL UTILITIES,
INC.

DOCKET NO. 20190168-WS

FILED:

DIRECT TESTIMONY OF

SUSAN R. WEST

ON BEHALF OF JEA

- 1 **O**. Please state your name and current employment. 2 A. My name is Susan R. West and I am currently employed by JEA as a Consulting 3 Engineer in the Water/Wastewater Planning and Development Group. 4 5 Q. Please describe your educational background and professional experience. 6 A. I have a Bachelor of Science Degree and Master of Engineering Degree in 7 Environmental Engineering from the University of Florida and I am licensed as a 8 Professional Engineer. I have over 20 years engineering experience that includes experience 9 in water and sewer design, stormwater design, project management, construction service, and 10 land developments. My current CV is attached as Exhibit SRW-1. 11 12 What are your responsibilities at JEA? **Q**. 13 A. I am primarily responsible for water and wastewater grid planning. In that capacity I 14 am responsible for evaluating infrastructure needs, prioritizing projects and establishing 15 JEA's 5-year capital plan for water and wastewater projects, coordinating with other JEA 16 departments, and working with private development representatives to determine project 17 connection points and coordinate developer agreements. 18 19 What is the purpose of your testimony? **Q**. 20 A. The purpose of my testimony is to present information regarding the 2030 21 Comprehensive Plan of the City of Jacksonville ("Comp Plan") and City of Jacksonville 22 Ordinance 2010-874, which is the Planned Unit Development Ordinance ("PUD Ordinance") 23 for the 301 Capital Partners Development ("301 Development"), to highlight provisions of
- 25 wastewater service throughout Duval County and to show how the provision of service by

24

2

the Comp Plan and PUD Ordinance that address JEA's responsibilities to provide water and

1 the applicant, First Coast Regional Utility ("First Coast") would be inconsistent with the

2 Comp Plan and contrary to the PUD Ordinance.

3

3					
4	Q.	Are you sp	onsoring any exhibits?		
5	A.	Yes. I spor	nsor the following exhibits:		
6		SRW-1	Susan R. West Curriculum Vitae		
7		SRW-2	City of Jacksonville Ordinance 2010-874 ("PUD Ordinance")		
8		SRW-3	Report of the Planning and Development Department for Application		
9			for Rezoning 2010 to Planned Unit Development		
10		SRW-4	City of Jacksonville Comprehensive Plan Infrastructure Element		
11		SRW-5	August 9, 2019 JEA Proposal to 301 Partners		
12					
13	Q.	Please sum	marize your testimony.		
14	A.	The City of	Jacksonville ("City" or "COJ") passed a PUD Ordinance for this 301		
15	Development property that requires the developer to build water and wastewater facilities at				
16	its own expense and then dedicate the facilities to JEA for operation and maintenance. First				
17	Coast proposes an alternative to the PUD Ordinance service provisions by attempting to				
18	build the water and wastewater facilities and then own and operate the facilities itself, rather				
19	than dedicating them to JEA. The Application is inconsistent with the COJ Comp Plan in				
20	that JEA would not be the provider and the facilities installed would not be a regional				
21	syster	n.			
22					
23	Q.	Please iden	tify the City's PUD Ordinance for the Development.		
24	A.	The 301 De	evelopment is subject to PUD ordinance 2010-0874, approved by the City		

on February 1, 2011. A copy of the PUD Ordinance is provided as Exhibit SRW-2.

1

Q. What requirements does the PUD Ordinance place on the Developer's provision of water and wastewater service to the Development?

4 The PUD Ordinance on page 26 states that the Developer "shall provide, at its A. 5 expense, on-site treatment capacity to serve the needs of this Rural Village PUD for potable 6 water, wastewater, and reuse water at levels and to standards acceptable to JEA, to be 7 dedicated to JEA for operation and maintenance or for contract operation." Under the PUD 8 Ordinance, the Developer must then: 1) provide the water and wastewater facilities at the 9 Developer's expense, 2) build the facilities to standards acceptable to JEA, and then 3) 10 dedicate the facilities to JEA for JEA's operation and maintenance, or for contract 11 operations. 12 When the PUD was being considered, the owner stated JEA would be the provider of 13 water and wastewater service. The report of the Planning and Development Department for 14 Application For Rezoning 2010-874 To Planned Unit Development (Jan. 27, 2011) which 15 recommended approval of the PUD Ordinance, states that "[t]he owner is coordinating with

JEA to provide water, sewer, and electric to the area." Exh. SRW-3, p. 5. It is only recently
that the Developer has deviated from the PUD Ordinance and expressed a desire to provide
water and wastewater service itself.

19

20 Q. How is First Coast's Application for a certificate contrary to the PUD

21 Ordinance?

22 A. The Developer/Applicant First Coast desires to build the water and wastewater

23 facilities and then own and operate the facilities itself, rather than dedicate them to JEA. The

- 24 fact that dedication is a requirement of the Developer under the PUD Ordinance is further
- borne out by the requirement that the facilities have to be built to JEA standards.

1

2 Q. Is the PUD Ordinance in harmony with the City's Comprehensive Plan?

A. Yes. It is in harmony with both the Sanitary Sewer and Potable Water sub-elements
of the Comprehensive Plan.

5

6 Q. How is the PUD Ordinance in harmony with the Sanitary Sewer sub-element of 7 the Comp Plan?

8 A. First, consistent with the exclusive franchise agreement between JEA and the COJ, 9 this sub-element of the Comp Plan contemplates JEA as the sole provider of wastewater 10 service. Goal 1 of the Sanitary Sewer sub-element is that "JEA shall provide for 11 economically and environmentally sound regional wastewater collection and treatment 12 systems which protect the public health and investment in existing facilities, promote 13 beneficial land use and growth patterns, and discourage urban sprawl." Exh. SRW-4, p. S2. 14 It states that "JEA shall provide . . ." service, not that "JEA and/or other wastewater utilities 15 shall provide . . ." 16 Second, this same Goal 1 states that the provision shall be for "regional wastewater 17 collection and treatment systems" Exh. SRW-4, p. S2. It does not contemplate small,

development-specific package plants like the one proposed by the Applicant as a permanentsolution.

Third, Policy 1.1.3 states that "The JEA shall not invest in sanitary sewer facilities in the Rural Area as defined in the Future Land Use and Capital Improvements Element, except where necessary to protect the public health or safety, or encourage mixed use or regional economic development." Exh. SRW-4, p. S2. In Rural Areas, such as this Development, the Comp Plan generally prohibits JEA from investing in sanitary sewer facilities. The PUD Ordinance is therefore consistent with this Policy 1.1.3 by requiring the Developer to pay for

- 1 the wastewater treatment facilities as part of its development costs.
- 2

3	Q. How then is the Application inconsistent with the Sanitary Sewer sub-eleme	nt of
4	the Comp Plan?	
5	A. JEA would not be the provider of wastewater service (Goal 1) and the facilities	
6	installed would not be a regional system (also in Goal 1).	
7		
8	Q. How is the PUD Ordinance in harmony with the Potable Water sub-elemen	t of
9	the Comp Plan?	
10	A. The Comp Plan Potable Water Goal 1 calls for regional facilities from JEA: "JE	4
11	shall regionalize water facilities in a manner which adequately corrects existing deficier	cies,
12	accommodates future growth, increases system capacity, acquires investor owned system	ns
13	and incorporates private package plants into the regional system, and interconnects wate	r
14	systems where required while complying with all federal, State, regional and local	
15	regulations." Exh. SRW-4, p. PW2. This language calls for JEA, not the Developer, to	
16	regionalize facilities and for the phase out of any existing private package plants.	
17	Similarly, Policies 1.1.5 and 1.1.6 provide that "[n]on-regional utility water treated	ment
18	facilities shall continue to be phased-out and systems intertied to regional water treatme	nt
19	facilities" and that "JEA shall continue to acquire community and/or investor-owned pu	olic
20	utility companies and integrate the systems into the regional network" Exh. SRW-	4, p.
21	PW2. Both the PUD Ordinance and Comp Plan state that JEA should be the provider.	
22		
23	Q. How then is the Application inconsistent with the Potable Water sub-elemen	ıt of
24	the Comp Plan?	

25 A. JEA would not be the provider and the water treatment facility would remain

1 indefinitely as a non-regional standalone facility.

3	Q. Does the Comp Plan provide any alternatives for developers in this situation?
4	A. Yes, for water. Potable Water Policy 1.1.14 provides that "New non-regional water
5	facilities may be allowed as appropriate interim facilities, provided the following
6	requirements are satisfied: 1. The facility meets all federal, State, regional and city
7	environmental regulations; 2. The developer provides for all operation and maintenance
8	costs; 3. The developer provides for phase out costs where appropriate; 4. The developer
9	enters into an agreement with JEA specifying the date and manner of phase out; 5. The
10	facility operator will reimburse JEA for costs of enforcement of violations of water quality
11	standards; and 6. Minimum fire protection levels of service as specified in Policy 1.3.1 are
12	provided for." Exh. SRW-4, pp. PW3-PW4.
13	
14	Q. Did JEA offer the Developer this type of alternative?
14 15	 Q. Did JEA offer the Developer this type of alternative? A. Yes. JEA proposed the construction of an initial treatment plant at the Developer's
15	A. Yes. JEA proposed the construction of an initial treatment plant at the Developer's
15 16	A. Yes. JEA proposed the construction of an initial treatment plant at the Developer's expense, followed by the transition to an expanded regional plant to be constructed at JEA
15 16 17	A. Yes. JEA proposed the construction of an initial treatment plant at the Developer's expense, followed by the transition to an expanded regional plant to be constructed at JEA expense when the development progressed. See Exhibit SRW-5 for the details of this
15 16 17 18	A. Yes. JEA proposed the construction of an initial treatment plant at the Developer's expense, followed by the transition to an expanded regional plant to be constructed at JEA expense when the development progressed. See Exhibit SRW-5 for the details of this proposal, which was rejected by the Developer/Applicant. In his testimony, JEA witness
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SUSAN R. WEST, P.E.

904-665-7980 <u>westsr@jea.com</u>

SUMMARY STATEMENT

Over 20 years in the Land Development Community focusing on engineering design and project management. Experienced team manager providing leadership, guidance, and supervision.

JEA SPECIFIC EXPERIENCE

Water/Wastewater Planning and Development Group with primary position responsibilities of water and sewer grid planning. Primary tasks include:

- Coordination with various JEA departments including Joint Projects, Operation & Maintenance, Construction, Development and Real Estate;
- Evaluate existing infrastructure needs, prioritize project needs, and establish the 5 year Capital Plan for Grid Projects;
- Prepare Project Funding Requests and Project Descriptions for Capital Improvement Projects;
- Coordinate connection points and development special conditions with private developers and engineers including developer agreements and cost participation agreements.

EDUCATION

University of Florida, Gainesville, Florida

Master of Engineering in Environmental Engineering, 1996 Bachelor of Science in Environmental Engineering, 1994

PROFESSIONAL AREAS OF EXPERTISE

Water and Sewer Design: Design of potable water mains to meet service requirements. Gravity sewer design and creation of profile drawings. Utility conflict review and accommodation. Sewer pump station design, pump selection and force main design. Fire flow calculations for water main hydrants for looped and dead-end systems. Dry hydrant design and water supply calculations. Design of septic tank and drainfield systems.

Stormwater Design: Preliminary site inspection and background document review to establish existing drainage patterns. Preparation of post-development site grading plans for master planning the project layout. Determine drainage basin parameters for use in hydrologic modeling applications. Sizing and design of stormwater management facilities to meet the established treatment efficiencies. Typical treatment facilities include wet detention pond, dry retention pond, treatment swales, dry detention, stormwater underdrain and vegetated natural buffers. Final site grading of improved areas, determine finished floor elevations for buildings, and roadway grading.

Project Management: Preparation of due diligence and site feasibility analyses. Support throughout rezoning and concurrency management. Coordination of other project consultants such as legal, survey, environmental, geotechnical and traffic engineering. Maintain interaction between client and regulatory agencies. Set project timeline and track progress. Prepare construction cost estimates at preliminary and final design stages. Perform QA/QC review of design plans and calculations. Value engineer designs for optimum design and cost efficiency. Negotiate with permitting agencies on the behalf of the client. Experienced with City of Jacksonville, Clay County, Nassau County, St. Johns County, SJRWMD, DEP, EQD, Army COE, and FEMA.

Construction Services: Preparation of project packages and bidding forms for construction. Inspection of horizontal improvements such as stormwater management facilities, drainage structures, potable water distribution systems, sanitary sewer gravity collection systems, sewer lift stations and force mains. Preparation and submittal of final certification documents for local, state and federal permitting agencies.

Environmental Remediation: Project work on a number of government groundwater remediation and monitoring projects with the US Air Force and the US Navy. Responsible for compiling all necessary data and documents for contract deliverables. Report preparation and submittals including Work Plans and Sampling and Analysis Plans. Actively involved with coordination and scheduling of sampling events.

Land Development: Application of design skills for residential and non-residential development themes. Projects include single family subdivisions, townhomes, condominium, apartment complexes, commercial centers, mini-warehouse, and industrial use complexes.

Business Management: Human resource and administrative duties included conducting interviews and evaluating applicants, administering annual performance reviews, determining salary raises and bonuses. Delegation of work assignments and responsibilities for other team members. Proposal preparation for new projects. Mentor junior staff on design principles and professional growth.

PROFESSIONAL EXPERIENCE

2014 – Present **Consulting Engineer,** JEA, Jacksonville, FL Member of Water Wastewater Planning group serving as the grid planner.

2013 – 2014 **President**, West & Company, LLC, Jacksonville Beach, FL Self startup company for land development design engineering and construction management.

2012 – 2013 **Engineer 1**, Reynolds, Smith & Hills, Inc., Jacksonville, FL Provide design engineering for drainage, water and sewer infrastructure for Transportation Group projects. Prepare cost estimates.

2010 – 2011 **Senior Project Manager**, Hill, Boring & Associates, Inc., Jacksonville, Florida Lead engineer position to direct all staff on all in-house projects. Responsible for entire office quality control and assurance. Prepare all design calculations, reports and project submittals.

2008 – 2010 **President**, West & Company, LLC, Jacksonville Beach, FL Self startup company for land development design engineering and construction management.

1997 – 2008 **Senior Project Manager**, Hill, Boring, Dunn & Associates, Inc., Jacksonville, FL Progressive engineering positions to lead engineer position. Directed 6 member design team in daily assignments in pursuit of multiple project objectives including preliminary due diligence, rezoning, concurrency, site plan approval, horizontal infrastructure design, permitting, construction and final certification.

1996 - 1997 **Staff Engineer**, J. A. Jones Environmental Services, Inc., Jacksonville, Florida Short-term assignment primarily to organize and prepare large scale basewide water monitoring report consisting of 17 volumes for Tinker Air Force Base. Received verbal commendation from Air Force commander for exemplary report preparation and adherence to project directives.

1988 - 1992 **Office Representative**, State Farm Insurance Agency, Orange Park, Florida Licensed insurance agent for auto, homeowners, life, health and variable annuity insurance policies.

ORDINANCE 2010 - 874

Legal Description

Rural Village

A portion of Sections 31 and 32, Township 2 South, Range 23 East, together with all of Sections 7, 8, 9 and 17, and portions of Sections 3, 4, 5, 6, 10, 15, 16, 18, 19, 20 and 21, Township 3 South, Range 23 East, all lying in Duval County, Florida, also being a portion of those lands described and recorded in Official Records Book 13262, page 46 and Official Records Book 13540, page 344 of the current public records of said county, being more particularly described as follows.

For a Point of Reference, commence at the Northwest corner of said Section 6, thence South 00°29'36" West, along the Westerly line of said Section 6, a distance of 88.85 feet to the Point of Beginning.

From said Point of Beginning, thence South 89°30'31" East, departing said Westerly line of Section 6, a distance of 481.03 feet; thence North 85°51'03" East, 515.22 feet; thence North 31°57'47" East, 454.05 feet; thence South 81°59'01" East, 881.05 feet; thence South 26°02'28" East, 1194.55 feet; thence North 67°29'41" East, 1581.33 feet; thence North 17°23'14" East, 856.58 feet; thence North 47°24'42" East, 797.91 feet; thence North 06°41'46" West, 1390.97 feet; thence North 04°11'49" West, 383.29 feet; thence North 58°05'32" East, 649.87 feet; thence North 10°07'47" West, 1181.01 feet to a point lying on the Southerly right of way line of Interstate Highway 10 (State Road 8), a variable width right of way as presently established; thence North 79°12'10" East, along said Southerly right of way line, 1989.80 feet to the point of curvature of a curve concave Southerly, having a radius of 22768.31 feet; thence Easterly, continuing along said Southerly right of way line, and along the arc of said curve, through a central angle of 01 °29'07", an arc length of 590.27 feet to a point on said curve, said arc being subtended by a chord bearing and distance of North 79°56'44" East, 590.25 feet; thence South 01°58'39" East, departing said Southerly right of way line, 1132.10 feet; thence South 44°44'35" East, 839.61 feet; thence South 03°19'45" East, 778.69 feet; thence South 46°40'00" West, 1330.39 feet; thence South 19°38'06" East, 1238.05 feet; thence South 87°52'14" East, 751.27 feet; thence South 85°42'17" East, 1067.02 feet; thence South 85°09'34" East, 183.99 feet; thence South 50°11'13" East, 1030.34 feet; thence North 42°01'54" East, 22.65 feet; thence South 67°00'48" East, 1758.97 feet; thence South 35°13'02" East, 806.99 feet; thence North 45°19'04" East, 1144.21 feet; thence North 45°07'13" East, 1086.13 feet; thence South 39°37'31" East, 2053.41 feet; thence South 39°41'01" East, 132.52 feet; thence South 30°08'29" East, 165.96 feet; thence North 78°50'18" East, 1052.28 feet; thence South 73°29'44" East, 651.84 feet; thence South 72°34'54" East, 247.45 feet; thence South 38°39'40" East, 59.29 feet; thence South 67°12'08" East, 112.20 feet; thence South 75°36'36" East, 141.75 feet; thence South 80°10'48" East, 753.14 feet to a point lying on the Westerly right of way line of U.S. Highway 301, a variable width right of way as currently established; thence Southwesterly and Northwesterly, along said Westerly right of way line

Oct 15, 2010 EXHIBIT 1 Page / of

Docket No. 20190168-WS COJ Ordinance 2010-874 (PUD) Exhibit SRW-2, Page 2 of 30

ORDINANCE 2010-874

Legal Description

Rural Village (cont.)

the following four courses: Course 1, thence South 18°55'47" West, 5679.90 feet; Course 2, thence South 18°56'27" West, 1781.26 feet; Course 3, thence North 71°02'55" West, 32.00 feet; Course 4, thence South 18°57'05" West, 1024.91 feet to a point lying on the Easterly line of those lands described and recorded in Official Records Book 10507, page 1524 of said current public records; thence North 00°30'52" East, departing said Westerly right of way line and along said Easterly line, 459.40 feet to a point lying on the Northerly line of said Section 15; thence North 89°30'18" West, departing said Easterly line and along said Northerly line, 105.00 feet to the Southeast corner of those lands described and recorded in Deed Book 144, page 318 of said current public records; thence Northerly, Westerly and Southerly along the boundary of said lands, the following three courses: Course 1, thence North 01°10'37" East, departing said Northerly line, 225.00 feet; Course 2, thence North 89°30'18" West, 225.00 feet to a point lying on the Westerly line of said Section 10; Course 3, thence South 01°10'37" West, along said Westerly line, 225.00 feet to the Northwest corner of said Section 15, said corner also being the Southwest corner of said lands; thence South 00°30'52" West, along the Westerly line of said Section 15, a distance of 990.00 feet to the Southwest corner of said lands of Official Records Book 10507, page 1524; thence South 89°30'18" East, departing said Westerly line and along the Southerly line of said lands, 153.09 feet to a point lying on said Westerly right of way line of U.S. Highway 301; thence South 18°57'05" West, along said Westerly right of way line, 3385.74 feet; thence North 87°53'50" West, departing said Westerly right of way line, 2395.53 fee t; thence South 39°59'58" West, 670.23 feet; thence South 16°08'27" East, 743.23 feet; thence North 86°27'44" West, 528.65 feet; thence South 22°12'49" West, 575.53 feet; thence South 35°22'41" East, 425.02 feet; thence South 18°08'51" West, 506.15 feet; thence South 43°22'47" East, 737.79 feet; thence South 16°13'30" West, 209.51 feet; thence South 15°20'31" West, 351.94 feet; thence North 74°55'56" West, 1297.70 feet; thence South 24°32'55" West, 248.20 feet; thence North 58°48'37" West, 1692.45 feet; thence North 02°17'30" East, 95.11 feet; thence North 65°01'37" West, 523.33 feet; thence North 69°51'31" West, 1844.55 feet; thence North 74°19'52" West, 1818.60 feet; thence North 89°09'40" West, 370.33 feet to a point lying on the Northerly line of those lands described and recorded in Official Records Book 7245, page 1751 of said public records; thence along said Northerly line the follow three courses: Course 1, thence North 00°52'24" East, 132.30 feet to a point lying on the Southerly line of said Section 18; Course 2, thence North 00°54'53" East, departing said Southerly line, 4625.67 feet; Course 3, thence North 89°40'53" West, 4665.83 feet to a point lying on the Westerly line of said Section 18; thence North 00°29'20" East, departing said Northerly line and along said Westerly line, 596.05 feet to the Southwest corner of said Section 7; thence North 00°29'36" East, along the Westerly line of said Section 7, and along the Westerly line of said Section 6, a distance of 9808.18 feet to the Point of Beginning.

Containing 5520.42 acres, more or less.

. . .

Oct 15, 2010 EXHIBIT 1 Page 2 of 2

Docket No. 20190168-WS COJ Ordinance 2010-874 (PUD) Exhibit SRW-2, Page 3 of 30

2010-874

EXHIBIT "D" PUD Written Description

ICI Rural Villages Revised December 8, 2006 Revised February 1, 2011

Current Land Use Designation: AGR Current Zoning District: PUD-SC and AGR Requested Zoning District: PUD-SC

1.0 Summary

ICI Homes proposes to modify the ICI Villages PUD-SC adopted by Ordinance 2006-1203-E. ICI Homes seeks to rezone approximately 5,520 acres from Agricultural (AGR) to PUD-SC under the Rural Village criteria for Agricultural land uses. ICI Villages (the Property) consists of land located in western Duval County, approximately 1.7 miles south of I-10 and west of US 301, with approximately 12,000 feet of direct frontage on US 301. The modified Master Plan emphasizes environmental protection and enhancement through design in an area containing regionally significant resources, such as connected wetlands and Deep Creek with its associated tributaries and watersheds. Not more than 75% of the Property may be developed with residential units, commercial businesses and offices, and similar community development. The remaining portion of the Property will be composed of parklands, recreation areas, golf courses, conservation areas of uplands and wetlands, trails, and the Primary Project Parkway. The Property is more particularly described by the legal description (Attachment I) and is shown on the attached vicinity map designated as Attachment II. PUD-SC district is being requested to permit development of the Property for a mixture of land uses serving both the future residences as well as providing essential services for the surrounding area all under the criteria and requirements for a Rural Village

The property is currently an Agricultural (AGR-1 & AGR-2) land use and is currently undeveloped and under silvicultural management. The surrounding land uses also consist of undeveloped silvicultural lands, except for a small residential parcel fronting on US 310. A Florida Power and Light (FPL) overhead power line easement transverses the Property parallel to US 301. Subject to FPL approval portions or all of the FPL easement may be relocated. The Property consists primarily of pine plantations and scattered wetlands. Deep Creek and associated wetlands run generally south to north direction through The Property and is the only notable wetland system on the Property. The land is generally flat with no significant grade differences. An overall environmental assessment was prepared on the Property by Dennis Breedlove and Associates and is provided as an appendix to this application.

The Rural Village is a proposed master planned community with extensive amenities and services for its residents, including athletic complex, neighborhood parks, village green; school; neighborhood shopping center; professional offices; extensive pathway system; open space corridor and wetland preservation lands; environmental interpretive and education program and civic uses. Additionally, the community will provide for a mixture of residential housing types and may include one or more golf courses. All the proposed uses are compatible with the adjacent pine plantation lands and conservation lands, thus protecting the character of the rural landscape. This vision is in keeping with the guiding themes of the Southwest Vision Plan.



2.0 Project Access

ICI Villages will have direct access to US 301, a major north/south arterial. US 301 is currently a divided four-lane roadway providing direct access to I-10, approximately 1.7 miles north of the Property.

As shown in the PUD Master Plan, one Primary Project Parkway is proposed with three additional ingress/egress points. These access points to The Property will occur at the existing median openings on US 301. Other right-in and right-out access points may be proposed subject to FDOT approvals.

The primary project entry provides access and egress to the main vehicular thoroughfare for the project. Provisions for up to a two-hundred (200) foot right of way will be made to accommodate this roadway dependent upon the current and future projected traffic intensities.

3.0 Project Description

3.1 The Master Plan

The Master Plan was based on both the criteria required for a Rural Village and a combination of conventional and traditional master planning principals. To create a mobility-friendly community, the project design links good urban design with an appropriate intensity and density of development that is interconnected through a network of pedestrian amenities and roadway network. The plan seeks to reduce the travel distance necessary for day-to-day activities. The plan consists of villages, all generally surrounding a village center. Each village will have multiple residential neighborhoods connected to one or more neighborhood centers that will support the villages. These neighborhood centers consist of village greens, neighborhood parks, community recreational facilities such as swim and fitness centers and athletic facilities and/or other civic uses. The villages will be linked to the village center by roadways and a pedestrian system consisting of sidewalks and multi-purpose paths. A central boulevard from US 301 will access the four Villages as well as the Village Center. This roadway will be a divided boulevard with multi-purpose pathways on at least one side with an extensive street tree and landscape treatment. The multi-purpose path will be a minimum of 10 feet in width. A gate house may be permitted on this boulevard beyond the commercial and other public facilities which may serve the project.

3.2 The Village Center and Neighborhood Centers

The Village Center is centrally located to serve the residents of ICI Villages, while providing essential services to the area. The Village Center shall incorporate a mix of uses, which may include commercial retail, restaurants, office space (both small and large scale) and higher density residential. An extensive pathway system will connect the various villages to each other and to the neighborhood centers and the village center. The village center, with its recreational, civic and commercial uses, as well as various housing options, will ultimately be a community focal point and provide an identity for the project as well as a community gathering destination for its residents. The site design of the Village Center will generally be in a more traditional form. Specifically, the village center and each neighborhood center may include the following uses:

REVISED EXHIBIT 2 Page 2 of 28

- Community swim and fitness center
- Tennis center
- · Athletic complex and facilities
- Neighborhood commercial
- Village Green
- Professional office
- Institutional uses, such as schools, churches, etc.
- Civic facilities

- A variety of residential product types
- Neighborhood parks
- Structured parking which may be incorporated into the first or second floor of multi-family buildings
- Community support facilities

The actual location of the Village Center may vary slightly from the location depicted on the site plan, but will comply with the following criteria:

- 1. The Village Center will be centrally located within the Rural Village.
- The Village Center will be located adjacent to a major roadway within the Rural Village.
- The Village Center location will be consistent with the Rural Village criteria contained within the 2030 Comprehensive Plan.

3.3 Villages

The villages consist mainly of residential and associated support uses. Contained within each village shall be a Neighborhood Center described in 3.2 above. Permitted uses include single family, duplex and townhouse residential units; condominium, apartment, rowhomes, community support, amenities, churches, town halls, community support facilities, golf course(s) and associated support uses, recreational and community structures including active and passive parks; amenity and recreational centers including pools, tennis courts, clubhouses and health fitness facilities; golf courses and maintenance facilities; and similar uses. Rear loaded residential units with alleys are permitted.

3.4 Open Space

In addition to the parks and recreational areas, an extensive system of wetlands will be preserved within the community. These wetlands will be preserved in corridors created in such a manner to provide a permanent greenway connection throughout the property. Some of the wetlands will be part of an overall environmental interpretive system and associated environmental educational facility.

Greenways/pathway systems shall not count toward the required recreation acreage. Parks and recreation areas combined area will meet or exceed recreation requirements defined by the Comprehensive Plan and the City of Jacksonville Ordinance Code, as effective at the time of the adoption of this PUD. At a minimum, 125.4 acres of active recreation areas will be provided.

The active recreation areas within this PUD shall include no fewer than eighteen (18) athletic fields and fifteen (15) athletic courts. Recreation areas and facilities serving individual neighborhoods shall be completed and operational not later than 40% of that neighborhood's residential units being constructed. Community-wide recreation facilities shall be provided in proportion to the number of residential dwelling units built. In determining the type of fields and courts to include within this PUD, the Applicant shall

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consult with the Parks, Recreation, and Entertainment Department to determine what types of fields and courts are available or programmed as public facilities to serve residents within the PUD.

3.5 Land Use Summary

The physical and functional characteristics of the PUD shall promote and promulgate reduced vehicle trips and discourage use of single-occupancy vehicles. Specifically,

- A compact and interconnected mix of uses including office, commercial, and residential adjacent or in close proximity to one another, encouraging internal capture of trips.
- Utilization of several design standards prescribed in the Jacksonville Design Guidelines and Best Practices Handbook.
- A range of residential densities and dwelling types avoiding the appearance of any single housing style or monotonous vernacular of the community.
- Having new businesses locate within an area of higher population concentration than the surrounding area resulting in fewer or shorter daily vehicle trips.
- The density and intensity of the PUD will be arranged in a manner which supports a variety of transportation options, including walking and biking.
- Safe and efficient interactions between and among pedestrians, bicyclists, transit riders, and automobile passengers.
- Provision of a functioning sidewalk and bicycle facilities linking them with transit stops and the recreation and open/space areas.

The City is currently in the process of adopting a Mobility Plan as part of the 2030 Comprehensive Plan and an implementing ordinance. Within that Mobility Plan will be a listing of factors (including potential vehicle trip adjustments to a mobility fee) which may be used to measure or assess the extent to which development implements mobility concepts such as those identified above. To promote mobility, within six (6) months after the City's adoption of the Mobility Plan, the Applicant, working with the Planning and Development Department staff, will seek an administrative modification to this PUD which shall provide and incorporate into the this PUD a metric or measurable guidelines by which the Planning and Development Department may determine the consistency of each development site plan within the PUD with the mobility concepts contained in the Mobility Plan and those identified above.

The PUD shall not be developed with only a single land use. The Developer shall be allowed to develop any portion of the PUD at any time (several construction phases). The table on the following page contains the anticipated development program. In the event market conditions do not support the construction of non-residential uses, the Developer may enter the next phase so long as the infrastructure for the non-residential development has been constructed enabling the non-residential site ready to develop when market conditions warrant.

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Land Use	Phase 1	Phase 2 (cumulative)	Phase 3 (cumulative)
Single Family Residential (DU)	2,500	8,250	11,250
Multi-family Residential (DU)	1,400	2,200	3,750
Commercial (GSF)	125,000	475,000	750,000
Office (GSF)	50,000	140,500	300,000

ICI Villages will contain four (4) distinct residential neighborhoods: East Village, South Village, Central Village, and North Village. The maximum residential density of each neighborhood is 7 units per gross acre for single-family and 15 units per gross acre for multi-family. Between 50% and 90% of each neighborhood's land area may be residential.

There will be a mixture of varying lot types for single family detached products. Multifamily attached products will vary with ranges facilitating condominiums, row houses, townhomes and/or apartments. There will be at least three different residential lot types with no single lot type comprising more than 50% of the project total.

Each neighborhood will contain a Neighborhood Center comprised of not more than ten (10) acres in size. Neighborhood Centers should be centrally located within each Village. Neighborhood Center uses may include civic and institutional uses, places of worship, convenience goods, personal services, veterinarians, filling stations and other low intensity retail and office – professional commercial uses developed in freestanding or shopping center configurations.

The maximum non-residential floor area ratio (FAR) is 80% within the Village Center and 50% within each Neighborhood Center. The maximum non-residential intensity within individual parcels is 7,500 Retail square feet per net acre and 12,000 Office square feet per net acre.

3.6 Recreation

A minimum 10-acre athletic complex and park within the Village Center will be constructed by the Developer and owned and maintained by the CDD, Developer or Homeowners Association for use by the residents. A minimum 1-acre Village Green or Town Square shall also be constructed by the Developer in the Village Center. One or more golf courses may be located within ICI Villages. An internal trail system will link the Rural Village to neighboring open space and recreational uses permissible in the AGR future land use category (e.g., dude ranches, golf courses, camping grounds, etc.).

3.7 Pedestrian Environments

Personal interaction shall be encouraged within ICI Villages through logical and aesthetically congruent pedestrian routes. Pedestrian interconnections shall be provided between adjacent land uses where it is functionally feasible and maintains the highest level of pedestrian safety.

A. The use of architectural design elements, such as canopies, awnings, umbrellas, site furniture, pedestrian scale lighting, water and fountain features, decorative paving, colored paving, building placement and façade articulation are all elements that are

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encouraged to help build the pedestrian environment and create a "sense of place" for each individual project and, in many cases, are a specific node within a project.

- B. The use of plaza spaces to interconnect various pedestrian routes is strongly encouraged. Pedestrian spaces should be designed as multi-functional use spaces that encourage social gathering and interaction. Consideration should be made to incorporate adequate pedestrian seating, landscape and shade cover as well as special visual focal elements within the spaces.
- C. All site furnishings shall be constructed of durable permanent material, excluding plastic. Wood site furniture shall be discouraged due to maintenance requirements; however, this is discretionary based on individual project theme and maintenance program.
- D. Site furnishings shall not be used for advertising in any form, wither by direct or indirect mounting of signs or dramatically bright paint patterns or colors.
- E. The defined pedestrian route shall be kept free of all permanent signage, site furnishing or other physical obstructions. All site furnishing shall be placed within a four-foot (4') wide landscape planter zone.
- F. All pedestrian crosswalks and traffic calming devices shall be clearly defined by unique paving materials.
- G. Pavement within pedestrian routes shall be designed to accentuate the pedestrian experience through use of materials, colors, textures and patterning. Due to the highly reflective nature of concrete, plain white concrete shall be discouraged in areas of high pedestrian traffic and areas that are not protected, either by tree canopy or architectural cover, from solar reflection. Alternative materials such as pavers, colored concrete or stamped concrete are encouraged.
- H. The following chart establishes the required dimensional relationships required for the Village Center streetscapes.

	Min-Building			Planter and Street Furniture Zone		
Roadway	Setback	Pedestrian Zone-	Recovery Zone	With on-street	No on street parking	
0-35 mph	15'	10'	3'	7'	10'	
36-45 mph	20'	12'	3'	10'	13'	



4.0 Land Use and Zoning

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1.

4.1 Commercial Parcels

- A. Permitted Uses (Village Center only):
 - Restaurants, including those which include the sale of all alcoholic beverages inside and outside, including liquor, beer and wine, for on premises consumption.
 - Restaurants with the outside sale and service of food; including drive-through and drive-up facilities, with drives and connections designed and configured for safe access, subject to the review and approval of the Planning and Development Department.
 - 3. Business and professional offices.
 - 4. Medical, dental and chiropractic offices or clinics.
 - Banks, savings and loans, and other financial institutions and similar uses; including drive-through and drive-up facilities, with drives and connections designed and configured for safe access, subject to the review and approval of the Planning and Development Department
 - 6. Hotels and motels
 - 7. Service Station with car wash
 - Retail sales and service establishments permitted in the CCG-1 category shall be permitted in single or multi-tenant buildings.
 - 9. Commercial indoor recreational or entertainment facilities, such as bowling alleys, skating rinks, theaters and similar uses
 - 10. Art galleries, museums, community centers, and dance, art or music studios
 - 11. Day care centers meeting the requirements of City of Jacksonville Ordinance Code, Chapter 656, Part IV
 - 12. Essential services, including water, sewer, gas, telephone, radio and electric, meeting the performance standards and development criteria in Section 5.10.2 below.
 - 13. Institutional uses such as churches, schools, etc.
- B. Permitted Uses (Neighborhood Centers only):
 - 1. Restaurants, including those which include the sale of all alcoholic beverages inside and outside, including liquor, beer and wine, for on premises consumption.
 - 2. Business and professional offices.
 - 3. Medical, dental and chiropractic offices or clinics.
 - 4. Hotels and motels
 - 5. Service Station with car wash
 - Retail sales and service establishments permitted in the CCG-1 category shall be permitted in single or multi-tenant buildings.

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- 7. Commercial indoor recreational or entertainment facilities, such as bowling alleys, skating rinks, theaters and similar uses
- 8. Art galleries, museums, community centers, and dance, art or music studios
- 9. Day care centers meeting the requirements of City of Jacksonville Ordinance Code, Chapter 656, Part IV
- Essential services, including water, sewer, gas, telephone, radio and electric, meeting the performance standards and development criteria in Section 5.10.2 below.
- 11. Institutional uses such as churches, schools, etc.
- C. Minimum lot requirement (width and area). None.
- D. Maximum lot coverage by all buildings. None.
- E, Minimum yard requirements. For the purpose of these requirements, "lot" refers to the parcel within which the commercial use is located and "yard" refers to distance from the parcel boundary.
 - 1. Front -- For U.S. Highway 301 Twenty (20) feet; for others none.
 - 2. Side none.

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- 3. Rear ten (10) feet.
- Except for TND-style development within the Village Center, where a commercial parcel abuts a single-family or multi-family residential parcel, side and rear yards shall be twenty (20) feet with a buffer meeting Section 656.1216 of the Zoning Code.
- F. Maximum height of structure.

Sixty (60) feet, however height may be unlimited where the building is set back on all sides of the project boundaries no less than one horizontal foot for each six (6) vertical feet in excess of the height limitations identified above.

Building massing shall provide façade "step backs" for all building facades that exceed forty feet (40') in height, whereby a minimum ten-foot (10') building façade "step back" shall be provided for all floors above a two-story level (see illustration below). This provision may be waived for freestanding commercial office buildings as long as the building facades provide a significant amount of exterior material column, and wall fenestration so as to provide physical and visual breaks in the building facades.

The building masses of "Big Box" retailers within the Village Center shall be oriented in such a way to create a more clustered organization rather than single free-standing boxes surrounded by parking. The placement of buildings shall provide for a logical organization of both vertical and pedestrian circulation patterns and prevent the need, to the largest extent possible, for a user to have to "re-park" due to excessive internal pedestrian walking distances.

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Source: Jacksonville Design Guidelines and Best Practices Handbook

Interior commercial building lengths shall not exceed three hundred linear feet (300') without a physical break or pedestrian accessway from parking behind. It is strongly encouraged to integrate plaza spaces and/or incorporate public green spaces where building breaks occur.

F. Lighting requirements.

Lighting shall be designed and installed so as to be directed downward and reflect back to the subject property prevent glare and/or excessive light onto surrounding property. Pole fixtures shall be flush mounted, with full cut-offs. Light fixtures mounted on canopies shall be recessed so that the lens cover is flush with the bottom surface (ceiling) of the canopy. The applicant shall submit a lighting plan for the entire site, including fixture types and foot-candle illumination for review and approval by the Planning and Development Department.

4.2 Condominiums/Apartments

- A. Permitted Uses and structures.
 - 1. Condominiums and Apartments.
 - Amenity/Recreation center, which may include a pool, cabana, clubhouse, health/exercise facility, and similar uses.
 - Structured parking when part of a residential structure and meeting the standards established in Section 5.5(E) below.
 - Live-Work uses meeting the performance standards and development criteria in Section 5.9 below.
 - 5. Parks, playgrounds, playfields and recreational/community structures.
 - Essential services, including water, sewer, gas, telephone, radio and electric, meeting the performance standards and development criteria in Section 5.10.2 below.
- B. Minimum lot width, Maximum density, Maximum lot coverage by all buildings, Minimum yard requirements, and Maximum height of structures for each Condominium use. Development standards for Condominiums and Apartments are detailed in Table 1. For the purpose of these requirements, "lot" refers to the parent property within which the proposed condominium buildings are located and "yard" refers to distance from the parent property boundary. These requirements permit at



least three types of condominiums/apartments configurations: structured parking under the units; front street access with common parking; rear alley access.

- C. Development standards for all residential uses, including the five (5) single-family and duplex lot types, are detailed in Table 1 below.
 - Modifications to the yards for any phase of a use in a parcel may be permitted within the PUD as a minor modification subject to the review and approval of the Planning and Development Department.
 - Patios and porches. Patios and porches, including screened patios with a structural roof, outdoor dining, terraces, courtyards, or similar exterior structures shall be permitted for each unit.

4.3 Townhouses/Row Houses

- A. Permitted Uses and structures.
 - 1. Townhouses and Row Houses (fee simple or condominium ownership).
 - Amenity/Recreation center, which may include a pool, cabana, clubhouse, health/exercise facility, and similar uses.
 - 3. Structured parking.
 - Live-Work uses meeting the performance standards and development criteria in Section 5.9 below.
 - Essential services, including water, sewer, gas, telephone, radio and electric, meeting the performance standards and development criteria in Section 5.10.6 below.
- B. Minimum lot width, Maximum density, Maximum lot coverage by all buildings, Minimum yard requirements, and Maximum height of structures for each Townhouse use. Development standards for residential uses are detailed in Table 1. These requirements permit at least three types of townhouse configurations: front street access with garages; front street access with common parking; rear alley access.
- C. Development standards for all residential uses, including the five (5) single-family and duplex lot types, are detailed in Table 1 below.
 - Modifications to the yards for any phase of a use in a parcel may be permitted within the PUD as a minor modification subject to the review and approval of the Planning and Development Department.
 - Patios and porches. Patios and porches, including screened patios with a structural roof, outdoor dining, terraces, courtyards, or similar exterior structures shall be permitted for each unit.
- D. Common Landscape Maintenance. The proper maintenance of all common areas, lawns, and landscaping by means of a common lawn and landscaping company shall be funded by an owners' association with mandatory association dues.
- E. Parking requirements Two spaces (2) spaces per unit, which may be met within garages, driveways or common parking areas.



F. Townhouse provisions. The development criteria for Townhouse uses within this PUD supersedes those requirements set forth in Section 656.414 of the Zoning Code.

4.4 Single Family and Duplexes

- A. Permitted Uses and structures.
 - 1. Single family detached dwellings.
 - 2. Attached duplexes.
 - 3. Amenity/Recreation center, which may include a pool, cabana, clubhouse, health/exercise facility, and similar uses.
 - 4. Parks, playgrounds, playfields and recreational/community structures.
 - Essential services, including water, sewer, gas, telephone, radio and electric, meeting the performance standards and development criteria in Section 5.10.2 below.

B. Development standards for all residential uses, including the five (5) single-family and duplex lot types, are detailed in Table 1 on the following page.

- Modifications to the yards for any phase of a use in a parcel may be permitted within the PUD as a minor modification subject to the review and approval of the Planning and Development Department.
- Patios and porches. Patios and porches, including screened patios with a structural roof, outdoor dining, terraces, courtyards, or similar exterior structures shall be permitted for each unit.

4.5 Community Support and Amenities

- A. Permitted Uses and structures.
 - Amenities and related facilities to be owned and operated by the developer or homeowners' association, which may include tennis courts, pools, cabanas/clubhouses, soccer or ball fields, health/exercise/fitness spa or facility, theater or screening room, and similar uses and facilities.
 - 2. Parks, playgrounds, playfields and recreational and community structures.
 - Community Support uses may be integrated vertically or horizontally with multifamily residential uses.
 - 4. Parks, playgrounds, playfields and recreational and community structures.
 - Essential services, including water, sewer, gas, telephone, radio and electric, meeting the performance standards and development criteria in Section 5.10.2 below.
- B. Minimum lot width, Maximum density, Maximum lot coverage by all buildings, Minimum yard requirements, and Maximum height of structures for each Amenity and Community Support Use.
 - 1. Minimum lot width. None.



- 2. Minimum lot area. None.
- 3. Maximum lot coverage by all buildings. None
- 4. Maximum height of structure. Forty-five (45) feet.

4.6 Conservation/Open Space

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- A. Permitted uses and structures.
 - Stormwater, surface water management and flood control improvement, as permitted by the applicable regulatory agencies.
 - Wetland preservation, mitigation, and restoration, as permitted by the applicable regulatory agencies. As minor encroachments deemed necessary in final design and engineering, other uses are permitted, governed by the development criteria above and as permitted by the applicable regulatory agencies.
 - 3. Golf courses.
 - Passive recreation, including pedestrian walkways, walking trails, benches, picnic tables, informational displays, and viewing areas.
 - Essential services, including water, sewer, gas, telephone, radio and electric, meeting the performance standards and development criteria in Section 5.10.2 below.
- B. Minimum lot requirement (width and area). None.
- C. Maximum lot coverage by all buildings. None.
- D. Minimum yard requirements. None
- E. Maximum height of structure. None

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				Table 1 Re	sidential Development St	andards				
	CR LAND	Min. Lot	Min. Lot	Front //Side //F	Rear Setbacks (ft)	Max. Lot	Coverage	1	Max Acc.	Reg'd Pkg.
Туре	Permitted Location	Width (ft)	Area (sf)	Front Facing Garages	Rear Garages	NC & VC	Villages	Max. Bldg. Ht. (ft)*	Bldg. Ht. (ft),	per unit (spaces)
SF-A	NC & VC only	35	3,500	n/a	10 / 5 / 5 from bldg face to alley ROW or easement	70%	NA	40	27	2
SF-B	All areas	50	5,000	20 from garage face to ROW and/or 15' from bldg face to ROW / 5 / 10	10 / 5 / 5 from bldg face to alley ROW or easement	65%	45%	40	27	2
SF-C	All areas	60	6,000	20 from garage face to ROW and/or 15' from bldg face to ROW / 5 / 10	10 / 5 / 5 from bldg face to alley ROW or easement	60%	45%	40	27	2
SF-D	All areas	70	7,000	20 from garage face to ROW and/or 15' from bldg face to ROW / 5 / 10	10 / 5 / 5 from bldg face to alley ROW or easement	50%	45%	40	27	2
SF-E	Villages Only	80	8,000	20 from garage face to ROW and/or 15' from bldg face to ROW / 5 / 10	10 / 5 / 5 from bldg face to alley ROW or easement	40%	40%	40	27	2
Duplex	All areas	32	2,900	20 / 8 / 10	20 / 10 / 10	65%	70%	45	27	2
Row House	NC & VC only	16	900	n/a	0/0/0	NA	NA	45	27	2
Town- house	All areas	16	1,200	20 from garage face to sidewalk or to back of curb where there is no sidewalk / 10 / 10	10 / 10 except for corner lots (5) / 5 from bldg face to alley ROW or easement	70%	70%	45	27	2
				NC & VC	Residential Villages					
Condo or Apt.	All areas	eas n/a	n/a n/a	Where adjacent to ROW & not abutting SF lots: 20 / 0 / 0	Where not abutting SF lots: 20 / 10 / 10	75%	75% 75% additiona	Max. 6 residential floors over 2 levels of parking, w/1' of additional setback provided for each 3'	27	2
			į.	Where abutting SF & height does not exceed 35': 20 / 20 / 20	Where abutting SF lots: 20 / 20 / 20			of building height over 35'		

NC - Neighborhood Centers; VC - Village Center *Building height means the vertical distance from the finished floor to the peak of the roof, provided however that height may be measured from up to three feet above the required finished floor elevation or up to three feet above the existing grade. Spires, belfries, cupolas, and chimneys that are not intended for human occupancy shall not count towards height measurement. Other rooftop appurtenance and mechanical equipment not intended for human occupancy may be placed above the roofline provided it is not visible from an adjacent ROW.

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4.7 Signage

The purpose of these sign criteria standards is to establish a coordinated signage program that provides for directional communication in a distinctive and aesthetically pleasing manner. All project identity and directional signs shall be architecturally compatible with the community.

A summary table of the proposed sign regulations is shown in Table 2.

A. Community Identification Monument Signs at Major Entrances.

Community identification monument signs will be permitted at the major entrances to the PUD. These signs may be two sided and externally or internally illuminated. These signs shall be oriented to US Highway 301. These signs will identify the PUD community.

B. Commercial Uses: Identity Monument Signs.

Identity monument signs are permitted for each Commercial use not otherwise identified by a monument sign as provided above. Each such use will be permitted one (1) externally or internally illuminated identity monument sign with two sides. These signs will be oriented to the street on which the lot has frontage, identifying the building (tenant) as a whole and/or its predominant use. Multiple tenants within one building or a connected series of buildings on a lot may be identified with one shared monument sign.

C. Commercial Uses: Elevated Signs.

No pylon signs are permissible. A maximum of two (2) identity elevated signs will be permitted for Commercial uses fronting U.S. Highway 301. These signs may be two sided and externally or internally illuminated. These signs shall be oriented to U.S. Highway 301 identifying the building (tenant) as a whole and/or its predominant use. Multiple tenants within one building or a connected series of buildings on a lot may be identified with one shared sign.

As part of verification of substantial compliance with this PUD, prior to commencement of Commercial use which proposes an elevated sign, the applicant shall submit to the Planning and Development Department for its review and approval a plan showing the location, height, size, and design of the sign and the locations of any existing elevated signs within two hundred (200) feet of the parcel.

D. <u>Residential Uses: Identity Monument Signs</u>. Residential use Identity Monument signs are perr

Residential use Identity Monument signs are permitted for each residential development (Apartments, Condominium, Townhome, Single Family, and Traditional Neighborhood Single Family). Each development will be permitted one (1) externally illuminated identity sign with two sides (or two single faced signs). These signs will be oriented to the street on which the development has frontage.

E. Commercial, Office, and Institutional Uses: Other Signs.

Wall signs are permitted and shall not exceed ten (10) percent of the square footage of the occupancy frontage or respective sides of the building facing the public rightsof-way.

In addition to wall signs, awning signs are permitted and shall not exceed ten (10) percent of the square footage of the occupancy frontage or respective sides of the building facing the public rights-of-way; provided, any square footage utilized for an

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awning sign shall be subtracted from the allowable square footage that can be utilized for wall signs.

Under canopy signs are permitted. One (1) under the canopy sign per occupancy is permitted not exceeding a maximum of twenty (20) square feet in area per side; provided, any square footage utilized for an under the canopy sign shall be subtracted from the allowable square footage that can be utilized for wall signs.

Directional signs indicating major buildings, common areas, various building entries, will be permitted. The design of these signs should reflect the character of the use identity signs and may include the project logo and name. For predominately vehicle directional signage, such signs shall be a maximum of four (4) square feet in area per sign face. For pedestrian directional signage, such as "informational side walk kiosks", 1, 2, 3 or 4 sided (or cylindrical), such signs shall be a maximum of twenty (20) square feet per side and a maximum of twelve (12) feet in height. All Vehicular Control Signs shall meet the requirements of the Manual on Uniform Traffic Control Devices with decorative post(s) and finials.

Real estate and construction signs are permitted. Signs of a maximum of thirty-two (32) square feet in area and twelve (12) feet in height for model homes also shall be permitted.

Because all identity and directional signs are architectural features intended to be compatible with and complimentary of the buildings in the PUD, they may be located in structures or frames that are part of the architecture of the project. Accordingly, sign area for all such signs as well as wall, awning, and under the canopy signs, shall be computed on the basis of the smallest regular geometric shape encompassing the outermost individual letters, words, or numbers on the sign.

Banner signs will be permitted not to exceed fifty (50) square feet in area. The banners shall be permitted to display logos and/or the name of the project and/or owner or developer and identify sales activities. Festival banners placed on street light poles are permitted.

Signs required by environmental permitting to be posted in common areas such as stormwater facilities shall be permitted.

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Sign Type	· General Location	Quantity	Max Area Per Side (sq ft)	Max Height (ft)	Min Dist Btwn Signs (ft):
Community Identification Monument Signs	Major Entrance(s)	1 Per Entrance	150	35	200
Commercial Identity Monument Signs		1 Per Parcel	50	20	100
Commercial Elevated Signs	On US Highway 301	2 max	200	35	200
Residential Identity Monument Signs	Condominium, Townhome, and Single Family Uses	1 per Parcel	32	8	
Wall Signs	Project Wide		10% of s	q ft of occupanc	y frontage
Awning Signs	Project Wide		10% of s	q ft of occupanc	y frontage
Under Canopy Signs	Project Wide	1 Per Occupancy	20		
Directional Signs	Project Wide		4		
Information Kiosks	Project Wide		20	12	

Table 2 Signage Guidelines

5.0 Additional PUD Conditions

5.1 Accessory Uses and Structures

Accessory uses and structures are permitted if those uses and structures are of the nature customarily incidental and clearly subordinate to a permitted principal use or structure and these uses and structures are located on the same lot (or contiguous lot in the same ownership as the principal use. Whether attached or detached to a building structure containing the principal use, the accessory structure shall be considered as a part of the principal building. Accessory uses shall not involve operations or structures not in keeping with character of the district where located and shall be subject to the following:

- 5.1.1 Accessory uses shall not be located in required front or side yards except as follows:
 - A. Detached accessory structures such as covered parking, or garages which are separated from the main structure may be located in a required side or rear yard but not less than three (3) feet from a lot line. If bonus rooms are located above such an accessory structure, then such structure shall be not less than five (5) feet from a lot line.
 - B. Air conditioning compressors or other equipment designed to serve the main structure or accessory uses may be located in a required yard and may be located not less than three (3) feet to the property line.



- C. Swimming pools and associated screened enclosures may be located in a required rear or side yard but may not be located less than five (5) feet from the property line or top of the bank of a pond, whichever is applicable. Also, screened enclosures, pools and\or recreational decks do not constitute "buildings" in calculating maximum lot coverage.
- 5.1.2 Accessory uses and structures in a residential parcel shall include private garages and private boathouses or shelters, toolhouses and garden sheds, garden work centers, children's play areas and play equipment, private barbecue pits and swimming pools. Any structure under a common roof and meeting all required yards is a principal structure. Within the Village Center and Neighborhood Centers, accessory structures shall not exceed thirty-five (35) feet in height. Within all other areas of the Rural Village, accessory structures may not exceed fifteen (15) feet in height.
- **5.1.3** Land clearing and processing of land clearing debris shall be accessory uses in all zoning districts; provided, however, land clearing debris may be processed only in conformity with applicable fire codes and other chapters of the City code to the extent those chapters are applicable.

5.2 Construction offices/model units/real estate sales

On-site, temporary construction offices/model homes/sales offices will be permitted in any commercial parcel or residential "unit" or "phase" until that parcel or "unit" or "phase" is built out. Real estate sales activities are permitted throughout the development. Associated parking for sales activities is permitted adjacent to model homes. Upon the approval of construction plans for the infrastructure improvements for any "unit" or "phase" of detached residential development within the PUD, the Applicant may seek and obtain building permits for the construction of up to twenty percent (20%) of the residential units and for the construction plat(s) for the recreational amenities within that "unit" or "phase" prior to the recordation of the subdivision plat(s) for the residential lots. Upon the approval of construction of all residential buildings and recreational amenities within that "unit" or "phase" of attached residential development within the PUD, the Applicant may seek and obtain building permits for the infrastructure improvements for any "unit" or "phase" of attached residential development within the PUD, the Applicant may seek and obtain building permits for the construction of all residential buildings and recreational amenities within that "unit" or "phase" prior to the recordation of the residential buildings and recreational amenities within that "unit" or "phase" prior to the recordation of the subdivision plat(s) for the residential lots.

5.3 Landscaping

Landscape and tree protection will be provided in accordance with Part 12 of the City's Zoning Code (Landscape and Tree Protection regulations) with the following additional provisions:

A. For Commercial, Office, and Institutional uses, landscaping standards shall be applied taking into consideration the entire use or development at issue. For individual lots within a larger development which may own their sites in fee simple, required landscaping may be provided "off-site" within the development and may be shared with other uses, so long as the development at issue in its entirety provides sufficient landscaping for all proposed uses therein. Landscape standards shall be applied within each development without regard to property ownership boundaries, which may exist among individual uses.

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- B. A modification from the requirements of Part 12 of the Zoning Code (Landscape and Tree Protection Regulations) may be permitted within the PUD as an administrative modification to the PUD subject to the review and approval of the Planning and Development Department.
- C. All right-of-way buffers shall be designed to provide a distinct visual appearance for the PUD. Large canopy trees shall be set back a minimum of twenty feet (20') from all overhead utility wires.
- D. All primary access drives entering the Village Center from a public right-of-way shall provide a minimum of ten feet (10') of landscape buffer between the drive and the adjacent parking or buildings. All landscape buffer widths are exclusive of any car overhangs.
- E. All parking aisles shall be terminated by a terminal landscape island. All terminal islands shall be a minimum of fifteen feet (15') in width, as measured from the back of curb. If a radial terminal island is proposed, the fifteen-foot (15') dimension shall be measured form the midpoint of the adjacent parking space. No car overhangs shall be permitted over terminal islands.
- F. Interior parking islands shall be provided every twenty (20) spaces. All interior parking islands shall be a minimum width of ten feet (10'). Each interior and terminal planter island shall be planted with a minimum of one (1) canopy shade tree (per parking row) measuring twelve feet high with a six foot (6') spread as selected from the City's approved plant list.
- G. The maximum height of any shrub material in all terminal planter islands shall not exceed thirty-six inches (36") at maturity.

5.4 Modifications

Amendment to this approved PUD district may be accomplished through either an administrative modification, minor modification to the PUD, or by filing an application for rezoning as authorized by this PUD or by Section 656.341 of the Zoning Code.

PUD amendments, including administrative deviations, administrative or minor modifications, or rezonings, may be sought for individual parcels or access points within the PUD. Such PUD amendments may be sought by the owner of the parcel which is the subject of the amendment and without the consent of other PUD owners.

5.5 Parking

Off street parking will be provided in accordance with Part 6 of the City's Zoning Code (Offstreet Parking and Loading Regulations) with the following additional and superseding provisions:

- A. Parking shall be provided in accordance with the following standards (based upon parking generation studies conducted by the Urban Land Institute--ULI):
 - 1. Commercial: 4.0 spaces per 1,000 s.f. GLA
 - 2. Office: 3.0 spaces per 1,000 s.f. GLA



3.	Hotel:	1.0 space per room
4.	School:	1 space per 3 student stations
5.	Live/Work:	2 spaces per dwelling unit 2 spaces per 1,000 s.f. GLA

- B. All parking spaces abutting terminal or interior parking islands shall be ten feet (10') in width to allow for door swing and pedestrian step out without encroaching in the landscape island.
- C. Along the primary entry roads in the Village Center, all mass surface parking lots shall be located behind buildings. Pedestrian access between or through buildings shall be provided and designed in such a way as to reinforce the pedestrian sense of arrival to the primary streetscape.
- D. Where surface parking lots must abut the public rights-of-way, a minimum thirty-six inch (36"), one hundred percent (100%) visually opaque landscape and/or buffer wall combination shall be provided. If a landscape buffer is to be used, the buffer material shall be thirty-six inch (36") in height at the time of installation (see illustration below).



- E. Where residential parking or driveway tracts abut an internal drive or road, or where it may abut a public right-of-way, a thirty-six inch (36") visually opaque screen wall and landscape buffer shall be provided.
- F. On-street parallel parking shall be permitted along internal drives and roadways but must be set back a minimum of twenty linear feet (20') from any pedestrian crosswalk.



- G. A modification from the requirements of Part 6 of the Zoning Code (Off-street Parking and Loading Regulations) may be permitted within the PUD as an administrative modification to the PUD subject to the review of the Planning and Development Department. Grounds for such modifications include the sharing of parking among uses with parking demands at different times, such as residential and non-residential uses within a development with integrated uses.
- H. Lighting on the top floor of any parking deck may not extend above the parapet wall.
- I. Structured parking is permissible only as part of another use; free-standing parking structures are not permitted within this Rural Village.
- J. Parking requirements associated with Village Center and Neighborhood Center uses may be satisfied through any combination of on-street parking and off-street parking configurations.
- K. Large parking areas shall be divided into "sub-lots" containing no more than three hundred and sixty (360) spaces per lot. Sub-lots shall be defined and separated by landscaped pedestrian accessways that measure no less than twenty-two feet (22') in width, as measured from the back of curb. No parking overhang shall be permitted within this area. The use of wheel stops in parking spaces that abut pedestrian accessways are required to prevent encroachment.
- L. Large expansive parking fields containing more than 2,000 parking spaces shall provide secondary access routes, independent of internal circulation drives, that allow for through-access without being encumbered by parking movement conflicts. These internal secondary drives shall provide a minimum fifteen-foot (15') separator landscape median, as measured from the back of the curb. No parking overhang shall be permitted within this area. The use of wheel stops is required to prevent encroachment.
- M. All parking lots shall have a minimum of two (2) vehicular ingress and egress points.
- N. To limit unnecessary parking, a maximum of ten percent (10%) of the total required parking shall be permitted to be constructed in a surface parking lot or as on-street parking. If additional parking can be accommodated in the form of structured parking, this percentage may be exceeded. At no point in time shall public green space, pedestrian gathering areas or pedestrian zones be reduced or impacted to create additional surface parking.

5.6 Community Development District

Nothing in this PUD shall be construed as prohibiting or limiting the ability of an owner within the PUD to establish a Community Development District (CDD) for the ownership, development, operation and maintenance of common facilities and infrastructure.

5.7 Silviculture Uses

Silviculture operations are a permitted use in the PUD and may continue at this site until build-out.



5.8 Donation of Sites for School and for Fire/Rescue Purposes

- 5.8.1 The Applicant shall make available for donation to the Duval County School Board a site within the area bounded by U.S. Highway 301 to the east, Beaver Street to the North, and the Duval County line to the west and south for a public high school and/or middle school, including sports and recreational facilities which are to be used by the school(s) and which may be made available to the public pursuant to any joint use agreement between the School Board and the City.
 - A. Prior to the commencement of construction of residential structures (excluding model homes) within this PUD, the Applicant shall provide written notice to the School Board and the Planning and Development Department of the availability of the site for donation. The applicant will coordinate with the School Board, the Planning and Development Department, and the Parks, Recreation, and Entertainment Department regarding the location and configuration of the site within the area described above. The site shall be located on a road which is existing or proposed (and committed for funding by parties other than the School Board) and is classified as a collector or higher. The site shall be a minimum of seventy-five (75) buildable contiguous acres.
 - B. If, within five (5) years after such written notice is provided, the School Board notifies the Applicant in writing that the School Board wishes to accept the donation, the site shall be conveyed to the School Board. The deed of conveyance shall contain covenants and restrictions insuring that the site will be used for school purposes for the protection of the surrounding property. At the time of conveyance, the Applicant also will provide to the School Board and the Planning and Development Department an appraisal, prepared by a licensed MRI appraiser, stating the value of the site at the time of conveyance. The Applicant thereafter shall be entitled to credit for such value against any future exactions such as school concurrency proportionate share mitigation, impact fees, or Development of Regional Impact mitigation (in the event the PUD becomes part of a Development of Regional Impact).
 - C. If no such notice is provided within the five-year period, then the availability of the site for donation will be withdrawn, this condition will be deemed fulfilled, and, if the site is within this PUD, the site may be used for any uses permitted on any parcel adjoining the site within the PUD subject to the provisions governing such use in the PUD.
 - D. The School Board shall be responsible for all costs relating to the permitting and development of the site for school uses.
- **5.8.2** The Applicant shall make available for donation to the City a site within the area bounded by U.S. Highway 301 to the east, Beaver Street to the North, and the Duval County line to the west and south for fire and rescue purposes.
 - A. Prior to the commencement of construction of residential structures (excluding model homes) within this PUD, the Applicant shall provide written notice to the Fire and Rescue Department and the Planning and

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Development Department of the availability of the site for donation. The applicant will coordinate with the Fire and Rescue Department regarding the location of the site within the area described above. The site shall be a minimum of three (3) buildable contiguous acres.

- B. If, within five (5) years after such written notice is provided, the Fire and Rescue Department notifies the Applicant in writing that the City wishes to accept the donation, the site shall be conveyed to the City. The deed of conveyance shall contain covenants and restrictions insuring that the site will be used for fire and rescue purposes for the protection of the surrounding property. The Applicant thereafter shall be entitled to credit for such value against any future exactions, including Development of Regional Impact mitigation (in the event the PUD becomes part of a Development of Regional Impact).
- C. If no such notice is provided within the five-year period, then the availability of the site for donation will be withdrawn, this condition will be deemed fulfilled, and, if the site is within this PUD, the site may be used for any uses permitted on any parcel adjoining the site within the PUD subject to the provisions governing such use in the PUD.
- D. The City shall be responsible for all costs relating to the permitting and development of the site for fire and rescue purposes.

5.9 Live-Work / Home Occupation Requirements

- **5.9.1** The use of the premises for the home occupation shall be incidental and subordinate to its use for residential purposes by its occupants and shall, under no circumstances, change the residential character thereof.
- **5.9.2** There shall be no change in the outside appearance of the building or premises or other visible evidence of the conduct of the home occupation.
- **5.9.3** There shall be no equipment or process used in the home occupation which creates excessive noise, vibration, glare, fumes odors or electrical interference detectable to normal senses off the lot.
- 5.9.4 In the case of electrical interference, no equipment shall be used which creates visual or audible interference in the radio or television receiver off the premises or causes fluctuations in line voltage off the premises.
- 5.9.5 Home occupations in Condominiums in the Village Center parcel shall not be subject to the conditions set forth in 5.9.2 and 5.9.3 above when located in a building which is designated for Live-Work uses. Such buildings shall be so designated as part of verification of substantial compliance with this PUD. The location of such buildings and the signage and parking for such Live-Work uses shall be subject to the review and approval of the Planning and Development Department
- **5.9.6** Home occupations are not subject to the setback requirements established in Section 4.1.D.4 of this document.



5.10 Additional Design Criteria for Neighborhood and Village Centers

- **5.10.1** Combined off-street parking lots (shared parking) are not required to provide buffers where shared parking areas interface property lines.
- 5.10.2 Essential services (utility systems) shall be allowed as a permitted use subject to the following conditions:
 - A. Central water systems, sewerage systems, utility lines, and easements shall be provided in accordance with the appropriate sections of the Jacksonville Municipal Code.
 - B. Water pipelines shall be of sufficient size and located appropriately to provide adequate fire protection for all structures in the development.
 - C. Stormwater management facilities shall be constructed in a manner that enhances its visual appeal.

5.11 Buffering and Screening

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- **5.11.1** Where residential uses abut U.S. 301, a buffer thirty (30) feet in width will be located along the right-of-way. The buffer may consist of fencing, landscaping, berm, and/or natural vegetation.
- **5.11.2** Outside of the Village Center and Neighborhood Centers, where residential uses abut non-residential uses within the PUD, a buffer twenty (20) feet in width will be located along the right-of-way. The buffer may consist of fencing, landscaping, berm, and/or natural vegetation.
- 5.11.3 All service areas and loading docks shall be prohibited from locations adjacent to any public or private external roadway, unless they are enclosed on all sides by the required screening materials.
- **5.11.4** All screening materials shall be a minimum of six feet (6') in height for all refuse/dumpster enclosure areas and a minimum of eight feet (8') in height for all service loading areas. This height may be increased at the request of the City to sufficiently screen any activity.
- **5.11.5** All service areas shall have a one hundred percent (100%) visually opaque gate equal in height to the masonry screen structure. Chain link fence or barbed wire fence shall not be used in any screen enclosure or gate structure.
- 5.11.6 Adjacent to the southwestern boundary of the Property is a solid waste disposal facility known as the Trail Ridge Landfill. Where the PUD boundary abuts the adjoining property on which the Trail Ridge Landfill is located, a 200-foot setback shall be provided, consisting of (i) a 50-foot undisturbed buffer immediately abutting the Trail Ridge Landfill property and (ii) and an additional 150-foot setback within which residential structures shall be prohibited and within which non-residential and recreational uses and structures, including stormwater facilities, utilities, and roads, are permitted.



- 5.11.7 Within sixty (60) days after the adoption of this PUD, the Applicant shall record in the public records of Duval County, Florida, covenants and restrictions burdening the Property governed by this PUD which (i) provide notice and disclosure to successors and assigns of the Applicant and Owner that the Property is located adjacent to the Trail Ridge Landfill and related operations, including related soil and stormwater facilities, and (ii) prohibit the Applicant and Owner and its successors and assigns from interfering with, filing any objections to, opposing, delaying, or obstructing activities at the Trail Ridge Landfill, including applications for permits submitted by the City or any of its agencies, contractors, or agents, so long as such activities have been or are being properly permitted and performed in accordance with all applicable laws and regulations. The covenants and restrictions shall provide that the City, Applicant, and Landfill Operator and/or Permittee shall have the right to enforce the covenants and restrictions. The Applicant shall deliver a copy of the recorded covenants and restrictions to the Planning and Development Department.
- 5.11.8 Site plans for any Village or Phase which abuts the 200-foot setback from the landfill site shall be reviewed by the Planning and Development Department for compatibility with the landfill.

5.12 Silviculture Uses May Continue

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Silviculture operations are a permitted use in this PUD and may continue at this site until build-out.

5.13 Stormwater Retention Design and Placement

The following design guidelines are focused on improving the visual quality of stormwater design systems as they relate to overall site design.

- A. Wet stormwater ponds shall be designed as integral visual site amenities. Sufficient pond slopes and maintenance easements shall be provided to prevent the fencing of the proposed ponds. Where absolutely necessary, due to safety concerns, the City may waive this requirement.
- B. Stormwater ponds shall be designed to have the appearance of natural water bodies to the largest extent possible. Ponds shall be designed to have curvilinear perimeters and shall not be designed to be square or rectilinear in shape or appearance.
- C. Wet stormwater ponds shall be designed to hold water at a controlled elevation that maintains a consistent aesthetic appearance. Ponds shall not be designed to have radical fluctuations in maintained water level.
- D. The design of the stromwater pond system should, to the largest extent possible, attempt to create fewer but larger wet stormwater ponds and minimize the development of small "pocket" ponds.
- E. All outparcel stormwater systems shall be designed to be collected and treated as part of the master stormwater system for the overall PUD instead of being stored onsite in small "pocket" ponds or swales.


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- F. Stormwater trench ponds, or swales, are not permitted to be located along the perimeter of any property that abuts a public right-of-way.
- G. Due to the visually aesthetic limitations of dry stormwater ponds, all dry stormwater ponds shall be located away from any PUD entrance or major pedestrian activity area. In the event that these ponds are within public view, the ponds shall be designed to present an aesthetic physical visual amenity appearance utilizing trees, shrubs, wetland plants and/or other materials. Sufficient pond sizing and volume, both on the pond bank and pond bottom shall accommodate landscape materials.
- H. All stormwater out-flow structures shall be located and designed to minimize public view. The inclusion of littoral plantings and wetland trees placed around the structure is strongly encouraged to assist in mitigating the visual appearance of these structures.
- All screen areas shall be designed to completely drain and be interconnected to the strom drainage system, unless otherwise prohibited. All dumpster, compactor areas and service yard areas shall be provided with permanent water source hose bib connections to allow fro regular cleaning of the service areas.

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6.0 Summary of Zoning Compliance and Minimum PUD Requirements

6.1 Rural Village Checklist

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Requirement	ICI Villages	
Location Restrictions: No closer than 1 mile to other Rural Villages	Nearest Rural Village is over 2 ¼ miles away	
Direct Access to Arterial	Access to US 301	
Include Public Infrastructure (potable water and sewer)	The Applicant shall provide, at its expense, on-site treatment capacity to serve the needs of this Rural Village PUD for potable water, wastewater, and reuse water at levels and to standards acceptable to JEA, to be dedicated to JEA for operation and maintenance or for contract operation.	
Size and Density: Size (min 500 ac)	5,520 ac	
Minimum 2 Residential Neighborhoods	Minimum 4	
Village Center Required	Village Center provided	
Gross Density	7.0 du/ac (single family); 15.0 du/ac (multi-family)	
Land Use Mix:		
Minimum three land uses	 Residential Commercial Retail Office Public (school, fire stations, etc.) 	
50-90% of land area for residential uses	Will comply, currently estimated at 60%	
Requirement for Town Square	Provided in Village Center	
Vehicles/Pedestrian/Bicycle Access	Will be provided throughout the community	
Rural Village to PUD-SC	PUD-SC zoning requested	
Maximum size of Neighborhood Centers: 10 ac	Will comply	
Village Center Range from 20-150 ac	Will comply	

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6.2 Checklist of Minimum PUD Requirements

In addition to the above Rural Village compliance criteria, the ICI Villages PUD-SC will comply with the following minimum standards.

Land Use and Design Elements

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- Minimum 75 acre school site shall be made available to the Duval County School Board for use as an elementary, middle, or high school, or any combination thereof.
- A minimum 10 acre athletic complex and park within the Village Center shall be constructed and maintained by the Developer, CDD and/or Homeowners Association for use by the residents.
- A maximum 3 acre site shall be made available for use by the City of Jacksonville for future public safety site(s) within the Village Center
- A minimum one acre village green or town square shall be constructed within the Village Center by the Developer.

The Developer retains the right to offer funding to the City of Jacksonville or the Duval County School Board for additional architectural upgrades towards the elementary school or fire station, subject to governmental approvals.

- All residential units and structures shall be within ½ mile to a neighborhood park, clubhouse, green or commons or other passive or active recreational facility.
- A Street tree program shall be implemented for the entire community, including the installation of street trees on both sides of all streets, except in the situations where streets abut wetlands or natural areas or other aesthetic considerations warrant a deviation to this requirement.

Environmental

- A Greenway system shall be established for the Deep Creek and associated wetlands as depicted on the PUD Master Plan.
- Boardwalks and other pedestrian crossings are permitted. Environmental interpretive educational elements including signage and kiosks shall be provided within the community identifying and describing the Deep Creek ecosystem.

Circulation

- The access roadway serving the Property shall consist of a divided boulevard with a landscape median and turn lanes and signalization at US 301 as may be required by the City of Jacksonville and FDOT. This boulevard shall have, at a minimum, a multi-purpose pathway on one side and a minimum 6 ft. sidewalk on the other side. Bike lanes shall be constructed as part of the roadway section.
- All subdivisions shall have a minimum 5 ft. sidewalk on at least one side of the roadway, except in those areas where its usage would be expected to be minimal or in areas to reduce wetland or environmental impact.
- The multi-pathway system shall be linked throughout the community providing an interconnected system for pedestrians and cyclists. (10' wide minimum)

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Docket No. 20190168-WS Report of Planning Development Exhibit SRW-3, Page 1 of 6

> 2010-0874 AAG

REPORT OF THE PLANNING AND DEVELOPMENT DEPARTMENT FOR

APPLICATION FOR REZONING 2010-874 TO PLANNED UNIT DEVELOPMENT

JANUARY 27, 2011

The Planning and Development Department hereby forwards to the Planning Commission, Land Use and Zoning Committee and City Council its comments and recommendation regarding Application for Rezoning **2010-0874** to Planned Unit Development.

Location:	West side of US 301, south of I-10 Between Interstate 10 and Gilridge Road
Real Estate Number:	000974-0000
Current Zoning District:	Planned Unit Development (PUD 2006-1203-E)
Proposed Zoning District:	Planned Unit Development - Satellite Community (PUD-SC)
Current Land Use Category:	Agricultural-I, Agricultural-II
Proposed Land Use Category:	N/A
Planning District:	Southwest, District 4
City Council District:	The Honorable Ray Holt, District 11
Applicant/Agent:	Anthony S. Robbins, AICP Prosser Hallock, Inc. 13901 Sutton Park Drive South, Suite 200
Owner:	ICI Villages, LLC 2379 Beville Road Daytona Beach, Florida 32119

Staff Recommendation:

APPROVE WITH CONDITIONS

GENERAL INFORMATION

Application for Planned Unit Development 2010-0874 seeks to rezone approximately 5,520 acres of land from AGR and PUD to PUD-SC. The rezoning to PUD-SC is being sought so that the property can be developed as rural village master planned community. The original PUD contemplated a 2,250 acre rural village master planned community approved in 2006. The purpose of this rezoning is to add acreage to the overall development plan. The development will contain single-and multi-family dwellings as well as offices, retail commercial and parks. A maximum of 15,000 dwelling units, 750,000 square feet of commercial and 300,000 square feet of offices is proposed. There will be at least three residential types with no single lot type comprising more than 50% of the project total.

CRITERIA FOR REVIEW

Pursuant to the provisions of Section 656.125 of the Zoning Code, the Planning and Development Department, Planning Commission and City Council (including the appropriate committee) shall evaluate and consider the following criteria of an application for rezoning to Planned Unit Development.

(1) Is the proposed zoning district consistent with the 2030 Comprehensive Plan?

Yes. The Planning and Development Department finds that the subject property is located in the Agriculture-i (AGR-i) and Agriculture-ii (AGR-ii) functional land use categories as defined by the Future Land Use Map series (FLUMs) contained within the Future Land Use Element (FLUE) adopted as part of the 2030 Comprehensive Plan. The AGR functional land use category permits housing developments in a gross density range of up to seven (7) dwelling units per acre when full urban services are available to the site. The proposed PUD proposes a gross density of less than 3 dwelling units to the acre and will have full urban services available to the site. Therefore, the proposed rezoning is consistent with the FLUMs adopted as part of the 2030 Comprehensive Plan pursuant to Chapter 650 Comprehensive planning for future development of the Ordinance Code.

(2) Does the proposed rezoning further the goals, objectives and policies of the <u>2030</u> <u>Comprehensive Plan</u>?

Yes. The evaluation of the goals, objectives and policies of the Comprehensive Plan can be found later in this report.

(3) Does the proposed rezoning conflict with any portion of the City's land use Regulations?

No. The written description and the site plan of the intended plan of development meet all portions of the City's land use regulations and further their intent by providing specific development standards.

Furthermore, pursuant to the provisions of Section 656.341(d) of the Zoning Code, the Planning and Development Department, Planning Commission and City Council (including the appropriate committee) shall evaluate and consider the following criteria for rezoning to Planned Unit Development district as follows:

(1) Consistency with the 2030 Comprehensive Plan

Yes. In accordance with Section 656.129 Advisory recommendation on amendment of Zoning Code or rezoning of land of the Zoning Code, the subject property is within the following functional land use categories as identified in the Future Land Use Map series (FLUMs): Agricultural (AGR).

This proposed rezoning to Planned Unit Development is consistent with the <u>2030</u> <u>Comprehensive Plan</u> including the following goals, objectives and policies:

FLUE 1.1.6 Permit development only if it does not exceed the densities and intensities established in the Future Land Use Element as defined by the Future Land Use map category description and their associated provisions.

FLUE 1.1.8 Require that all new non-residential projects be developed in nodal areas, in appropriate commercial infill locations, or as part of mixed or multi-use developments such as Planned Unit Developments (PUDs), cluster developments, Traditional Neighborhood Design (TND) developments, and Locally Designated Historic Preservation Districts, as described in this element.

FLUE 1.1.10 Promote the use of Planned Unit Developments (PUDs), cluster developments, and other innovative site planning and smart growth techniques in all commercial and residential plan categories, in order to allow for appropriate combinations of complementary land uses, and innovation in site planning and design.

FLUE 1.1.11 Ensure that mixed and multi-use projects enhance, rather than detract from, the character of established developed areas by requiring site plan controlled zoning such as Planned Unit Developments (PUDs) for all mixed and multi-use projects and conforming with the following criteria:

1. The type of land use(s), density, and intensity is consistent with the provisions of the land use category, particularly the category's predominant land use;

2. The proposed development is in conformity with the goals, objectives, policies, and operative provisions of this and other elements of the 2030 Comprehensive Plan; and

3. The proposed development is compatible with surrounding existing land uses and zoning.

FLUE 1.2.1 The City shall ensure that the location and timing of new development will be coordinated with the ability to provide public facilities through the implementation of growth management measures such as development phasing, programming and appropriate oversizing of public facilities, and zoning and subdivision regulations.

Therefore, proposed rezoning to Planned Unit Development, as conditioned, is consistent with the <u>2030 Comprehensive Plan</u>, and further the following goals, objectives and policies contained therein.

(2) Consistency with the Concurrency Management System

Pursuant to the provisions of Chapter 655 *Concurrency Management System* of the Ordinance Code, the development will be required to comply with all appropriate requirements of the Concurrency Management System Office (CMSO) prior to development approvals.

(3) Allocation of residential land use

This proposed Planned Unit Development intends to utilize lands for a single-family, multifamily and commercial development. This proposed development will not exceed the projected holding capacity reflected in Table L-20, *Land Use Acreage Allocation Analysis For 2030* <u>Comprehensive Plan's Future Land Use Element</u>, contained within the Future Land Use Element (FLUE) of the 2030 Comprehensive Plan.

(4) Internal compatibility

This proposed PUD is consistent with the internal compatibility factors with specific reference to the following:

<u>The treatment of pedestrian ways</u>: The residential villages and commercials village centers will be linked by pedestrian pathways. A 10 foot wide multi-purpose path is proposed connecting different areas.

The use of topography, physical environment and other natural features: The written description and site plan indicate that significant wetlands will be preserved on the site and incorporated into a passive recreation area with trails.

The use and variety of building setback lines, separations, and buffering: The written description uses separate development standards for the Village Center (VC), Neighborhood Center (NC) and the Residential Villages (RV). This division allows for a "traditional neighborhood design" of higher densities in the VC and NC while allowing for lower density in the RVs.

<u>The variety and design of dwelling types:</u> The written description provides for five single-family lots sizes ranging from 35 feet in width to 80 feet in width. Duplex, Row House, Town House, and Condo/Apt development standards are provided. Town Houses and Condo/Apts will be permitted in all development areas (Commercial, VC and NC).

The particular land uses proposed and the conditions and limitations thereon: The written description contains additional limitations on lighting and other items that may impact surrounding uses. These limitations allow for intensive commercial uses such as a filling station to be compatible with medium density residential without adversely impacting the residential.

<u>Compatible relationship between land uses in a mixed use project</u>: The written description includes uses that will serve the community without acting as a draw for residents outside the community.

(5) External Compatibility

Based on the written description of the intended plan of development and site plan, the Planning and Development Department finds that external compatibility is achieved by the following:

The type, number and location of surrounding external uses: The proposed development is currently undeveloped and is under silviculture management. Surrounding the property is pine plantation and scattered wetlands. To the southwest is PBF zoned land owned by the City of Jacksonville.

The Comprehensive Plan and existing zoning on surrounding lands: The adjacent uses, zoning and land use categories are as follows:

Adjacent Property	Land Use Category	Zoning District	Current Use(s)
North	AGR	AGR	Undeveloped
South	PBF	PBF-1	County owned/Government
East	AGR	AGR	Undeveloped
West	PBF	PBF-1	County owned/Government

(6) Intensity of Development

The proposed development is consistent with the AGR functional land use category and is a mixed use development to include single-family and multi-family which is not to exceed 5,520 dwelling units. The PUD is appropriate at this location because it will offer office and commercial and institutional uses to support the proposed residential development.

<u>The availability and location of utility services and public facilities and services</u>: The owner will donate up to 75 acres to the Duval County School Board for use as a high school and will donate a 3 acre parcel to the City of Jacksonville for a public use.

The owner is coordinating with JEA to provide water, sewer and electric to the area.

The access to and suitability of transportation arteries within the proposed PUD and existing external transportation system arteries: The Traffic Engineer will require a traffic study for all proposed access points on US 301.

(7) Usable open spaces plazas, recreation areas.

The written description discusses at length the proposed recreation facilities and open space.

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(8) Impact on wetlands

Surveying of a 1995 Geographical Information Systems shape file did identify wetlands on-site. However, any development impacting wetlands will be permitted pursuant to local, state and federal permitting requirements.

(9) Listed species regulations

The wildlife survey performed by Breedlove, Dennis & Associates, Inc., dated July 7, 2006 indicated the project limited habitat for listed species due to the altered site conditions and intensive use for short rotation pine plantation.

(10) Off-street parking including loading and unloading areas.

The written description provides parking ratios that are similar to Part 6 of the Zoning Code. These ratios have been used in other developments without any adverse impact.

(11) Sidewalks, trails, and bikeways

The project will contain a pedestrian system that meets the <u>2030 Comprehensive Plan</u>. In addition a 10 foot wide multi-purpose trail will be constructed along one side of the major road.

SUPPLEMENTAL INFORMATION

Applicant submitted photos that the signs were posted

RECOMMENDATION

Based on the foregoing, it is the recommendation of the Planning and Development Department that Application for Rezoning **2010-0874** be **APPROVED** with the following conditions:

- 1. The development shall be subject to the original legal description dated October 15, 2010.
- 2. The development shall be subject to the revised written description dated January 21, 2010.
- 3. The development shall be subject to the original site plan dated October 25, 2010.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE

ELEMENT



November 2010

The Honorable Lenny Curry Mayor William B. Killingsworth Director of Planning & Development

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT 214 North Hogan Street, Suite 300, Jacksonville, Florida 32202

CITY OF JACKSONVILLE The Honorable Lenny Curry, Mayor

CITY COUNCIL MEMBERS 2015-2019

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INTRODUCTION

Pursuant to the requirements of Chapter 163, Part II, Florida Statutes (F.S.) and Chapter 9J-5, Florida Administrative Code (FAC), the City of Jacksonville adopted the 2010 Comprehensive Plan, which included an Infrastructure Element, on September 1990. Section 163.3191, F.S. requires that the plan be updated periodically. Prior to the update of the plan, the local governments are required to prepare an Evaluation and Appraisal Report (EAR) on the adopted plan. The City of Jacksonville's first EAR was submitted to the Florida Department of Community Affairs (DCA) for review on September 1, 1997 and determined to be sufficient on October 31, 1997. The City of Jacksonville's second EAR was submitted to the DCA on October 1, 2008.

The first EAR for the 2010 Comprehensive Plan comprises the 1990-1995 period and the second EAR comprises the 2000-2007 period. The second EAR identifies major issues of concern to Jacksonville residents, reviews implementation of the plan since the last EAR, assesses achievements, successes and shortcomings of the Plan, identifies necessary changes and provides updated population projections.

The update of the Infrastructure Element, presented in the following pages, reflects changes recommended in the second EAR. New policies have been added as recommended in the EAR and mandated by updates to the Florida Statutes and Florida Administrative Code, including extending the planning time frame to 2030 and renaming the plan the 2030 Comprehensive Plan. Issue statements have been removed in an effort to streamline the element and to remove text not belonging in the Goals, Objectives and Policies Section of this document. Various editorial, organizational and other appropriate agency or reference name changes have been made as well.

In addition to the aforementioned revisions, the Background Report of this document has also been updated to support the amended Goals, Objectives and Policies.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT

NATURAL GROUNDWATER AQUIFER RECHARGE SUB-ELEMENT



GOALS, OBJECTIVES AND POLICIES

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

GOALS, OBJECTIVES AND POLICIES

GOAL 1

Manage the fresh groundwater resources in the City to assure an adequate quantity and quality of water for potable, commercial, industrial, utility and agricultural uses. Such City management shall be in compliance with all State, regional and federal rules, regulations, laws and mandates as applicable.

<u>Objective 1.1</u> The City shall quantify at least once every five years the existing uses and project the future uses of fresh groundwater resources.

Policies 1.1.1

The City's Environmental Quality Division (EQD) shall request from the St. Johns River Water Management District (SJRWMD) existing permitted users of water with approved future increases in fresh groundwater allocations for the duration of existing consumptive use permits, and the identification of the area location and producing zone of the hydrogeologic regime from which the withdrawals are made.

1.1.2

Reserved

1.1.3

JEA shall utilize the projected land uses, population, and other industry forecasts as applied to accepted unit water consumption rates to identify by area the projected demand within the City and to quantify potential future water requirements.

1.1.4

The Environmental Quality Division (EQD), and JEA shall annually review processes to coordinate City regulations regarding water use to ensure consistency with all applicable laws and regulations including Chapter 366 of the City of Jacksonville Municipal Code.

1.1.5

JEA shall maintain, as a component of the City's water master plan, a Total Water Management Plan and an Annual Water Resource Master Plan, which ensures adequate available City wide resources and that water withdrawals comply with City standards.

1.1.6

The Air and Water Quality Division (EQD) shall coordinate with JEA in order to compare projected water demand with best current groundwater resource assessments to determine if adequate capacity is available and shall update this analysis every five (5) years.

<u>Objective 1.2</u> The City will rely on the St. Johns River Water Management District's (SJRWMD) most current water supply management and GIS coverages for hydrologic and geologic data.

Policies 1.2.1

The City shall utilize SJRWMD water supply management and GIS coverages for hydrologic and geologic data for groundwater resource management and planning purposes.

1.2.2

The EQD and the JEA shall follow the SJRWMD and the Total Water Management Plan delineation of site specific areas in the groundwater basin deemed prone to contamination or overdraft resulting from current or projected development, and establish the best management practices for implementation to mitigate or avoid resource degradation within two years of the SJRWMD determination.

1.2.3

The City shall continue to coordinate with the SJRWMD and utilize the best available resources and information including the latest update of the Floridian Aquifer Recharge GIS grid coverage to protect the functions of the natural groundwater aquifer recharge areas and to discourage urban sprawl.

1.2.4

Within one year of receipt, the EQD shall adopt the criteria and inventory developed by the SJRWMD and the Water Resources Management Plan establishing minimum seasonal surface and groundwater levels within the City.

1.2.5

In accordance with the District Water Supply Plan and related policies under CCME Goal 6, EQD and JEA should implement water resources projects to protect resources and meet future needs.

1.2.6

JEA shall continue to study existing sources of wastewater discharge suitable for reuse, sources of potable water, conservation, and other integrated water management strategies to meet future demand, conserve water, and remove nitrogen loading to the Lower St. Johns River.

1.2.7

JEA shall continue to determine potential quantities of water available for consumptive use by the City to assure that adequate resources are developed. The City shall utilize water conservation and water reuse practices to supplement and increase the effective life of its groundwater resources.

1.2.8

Within two years of establishment by the SJRWMD and the Water Resources Management Plan of prime recharge areas for the Floridian Aquifer, the Planning and Development Department shall prepare maps of such designated areas showing the special zoning and land use consideration the City has established for such areas as designated by the latest update of the Floridian Aquifer Recharge GIS grid coverage.

1.2.9

The City, in coordination with JEA, shall support the development of reuse water and other alternative supplies. Pursuant to requirements imposed by JEA's water supply consumptive use permits, the City shall require the use of reclaimed water where economically feasible pursuant to the City of Jacksonville's Chapter 752. In addition, the City shall require the following reuse practices, where economically feasible:

- A. Installation of reuse supply lines;
- B. Connection of new development or substantial redevelopment to a reuse system to supply uses that do not require potable water, unless the use of a lower quality source is otherwise authorized by SJRWMD;
- C. Installation of dual water distribution lines that will initially use the existing water source or stormwater until the reclaimed water source is available;
- D. Installation of meters for individual connections to the reclaimed water system; or
- E. Reuse water to be used for irrigation and other non-potable needs in public areas owned by the City.

1.2.10 Reserved

1.2.11

The Environmental Quality Division (EQD) shall utilize the SJRWMD Water Supply Assessment, SJ2006 F.S. to establish a guideline water use budget for the City in light of existing and future needs in comparison with resource condition assessments.

1.2.12

Upon identification by the SJRWMD, the City shall give high priority status to prime aquifer recharge areas identified by SJRWMD as of importance, by giving extra matrix ranking points to sites located in such areas in comparison with other sites being considered in local land acquisition programs and request the SJRWMD to do this or mandate this for areas outside the City.

Objective 1.3 Maintain a City well head protection and regulation program.

Policies 1.3.1

The City has adopted and implemented a wellhead protection program in accordance with Subsection 1428(a) of the Safe Drinking Water Act and in conjunction with the FDEP, SJRWMD, USGS and related agencies.

1.3.2

Reserved

1.3.3

JEA shall comply with applicable federal regulations for wellhead protection as amended or revised by Public Law 93-523 and assist the City by further developing guidelines for the delineation of wellhead protection areas.

1.3.4

The EQD shall develop and maintain a groundwater resource management program which is designed to protect the Floridian Aquifer such that the fresh water quality is not degraded beyond acceptable raw water characteristics for associated treatment facilities required to meet Chapter 366 City of Jacksonville Municipal Code, Chapter 17-550, F.A.C. as amended, Chapter 62, F.A.C. as amended, and/or the Federal Safe Drinking Water Act requirements.

1.3.5

The EQD shall continue the City well permitting program which requires permits for drilling and operation; and for capping, filling and plugging of abandoned well; and which requires valves on all free flowing wells which are required to be closed when not in use pursuant to Chapter 366 City of Jacksonville Municipal Code and EPB Rule-8.

1.3.6

The EQD and the JEA shall jointly protect the areas within the existing public supply wellhead protection areas pursuant to Chapter 366 City of Jacksonville Municipal Code and EPB Rule-8 by implementing:

- a) a program to inventory contaminated sites;
- b) best management practices for contamination control; and best management practices to remove or limit existing pollution sources in the areas delineated.

1.3.7

The City of Jacksonville, JEA, EQD and the JEA shall continue to work with the SJRWMD, Northeast Florida Regional Council (RC), and JPDD (including PUD and DRI processes) to ensure that water for nonpotable uses be obtained from the lowest quality water source, in proximity to the demand, consistent with the intended use in compliance with the State Water Policy, Chapter 17-40, F.A.C. and Chapter 62, F.A.C.

1.3.8

The City shall incorporate freshwater demand reduction practices as appropriate within the City Building Code. New freshwater conservation methods or technologies shall be distributed to City water users through the water conservation education program of JEA.

1.3.9

JEA shall, continue to maintain, develop pricing, rates and/or charges to equitably recover costs and not provide volume discounts for customer class utilization in excess of the water need.

1.3.10A

The City shall ensure that its Ordinance Code implements the landscape irrigation provisions in SJRWMD Rule 40C-2.042(2), F.A.C. and does, in any other manner, regulate the consumptive use of water.

1.3.10B

The City shall cooperate with SJRWMD, in accordance with the SJRWMD Water Shortage Plan, during declared water shortage emergencies by conserving water resources and by assisting with enforcement of water shortage emergency declaration, orders, and plans.

1.3.11

The EQD shall develop a Groundwater Recharge Area Protection Program to achieve protection of the City's groundwater aquifer recharge areas as identified by the SJRWMD.

1.3.12

The EQD shall establish legal descriptions and mapping for SJRWMD delineated prime aquifer recharge areas within two (2) years of SJRWMD determination of such areas in the City.

1.3.13

The City shall continue to monitor the SJRWMD identified areas of critical concern considering regional groundwater flow for areas containing:

- a) aquifer recharge;
- b) aquifer contamination; and
- c) aquifer saltwater encroachment.

1.3.14

The Planning and Development Department in conjunction with the EQD and the JEA, and the Public Works Department, shall develop land use, drainage, development criteria and other revisions to the Land Development Regulations in compliance with Section 163.3202(1), F.S., to protect the prime aquifer recharge areas and to a lesser extent the areas of critical concern which buffer the prime aquifer recharge areas within one (1) year of such designation.

1.3.15

The EQD shall develop and implement an aquifer recharge plan for principal aquifers which protects and/or enhances the contributory water quality and maintains or increases the volume of freshwater available for recharge.

1.3.16

Within 2 years after the determination by the SJRWMD of Floridian Aquifer Prime Recharge Areas the EQD shall submit revisions to City's Ordinance Code which protect and conserve the recharge areas of the Floridian Aquifer deemed to be sensitive within the City's jurisdiction as the City's primary source of potable water.

1.3.17

The City will prohibit, in areas determined to be prime Floridian Aquifer Recharge Lands, industrial activities, septic tank use in subdivisions, and commercial activities utilizing or producing hazardous materials as identified by the Florida Department of

Environmental Protection and pursuant to Chapters 470 & 366 (Septic Ordinance/Fertilizer Ordinance) City of Jacksonville Municipal Code.

1.3.18

The EQD shall develop and implement regulations for irrigational practices, fertilization practices, and pesticide/biocide application practices within sensitive prime aquifer recharge areas and areas of critical concern to minimize leaching of contaminants into the fresh groundwater regime pursuant to Chapter 366 City of Jacksonville Municipal Code.

1.3.19

Reserved

1.3.20

The City shall request the SJRWMD to investigate the feasibility and/or desirability of such practices as recharge enhancement through water detention, retention ponds, flow diversion, swale systems, effluent reuse and other techniques.

1.3.21

The EQD shall implement a system of incentives and deterrents for the development of potential prime recharge areas, buffer areas, well head protection areas and non-protected areas.

1.3.22

The EQD shall request the SJRWMD to study the potential of the development of salinity barriers with storm water and/or reclaimed water to effect a repressurization of the aquifers and increase the thickness of the freshwater lens.

<u>GOAL 2</u>

Manage and conserve potable water resources in the City through conservation and water reuse programs.

<u>Objective 2.1</u> JEA shall, implement the water reuse ordinance (Chapter 752 733, City of Jacksonville Ordinance Code) in compliance with the City's consumptive use permit requirements issued by the SJRWMD.

Policies 2.1.1

The reuse ordinance includes the following:

1. Designated reuse zones as identified by the SJRWMD.

- 2. A requirement that all new development within reuse zones shall include a reclaimed water irrigation system constructed to applicable standards. The reuse ordinance defines the types and sizes of development which are appropriate to be served by a reclaimed water irrigation system.
- 3. A definition of the users required to accept and utilize reclaimed water when made available by the City.
- 4. The registration and permitting of wells of all sizes located within the SJRWMD identified reuse zones.
- 5. The requirement of return flow wells for heat pump discharges.

2.1.2

The City shall request that SJRWMD require all non-potable consumptive use permits holders in the City to accept and utilize reuse water when made available by the City.

<u>Objective 2.2</u> JEA shall continue and expand the City's water conservation and demand reduction program in order to reduce per capita consumption of potable water by up to 10% by 2013.

Policies 2.2.1

JEA shall continue to utilize potable water conservation strategies and techniques in the operation of the City's water facilities.

2.2.2

The City shall require demand reduction fixtures and low water use building techniques.

2.2.3

The approval of new water system connections shall be conditioned upon compliance with City Code to assure the use of water conservation practices and techniques.

2.2.4

The City's landscape and tree protection regulations require low water use features and vegetation and water conserving irrigation practices.

2.2.5

The City shall enact a water conservation ordinance.

2.2.6

JEA in cooperation with other departments shall implement a water conservation public education program.

2.2.7

The City shall enforce Chapter 752 City of Jacksonville Municipal Code relating to the reuse of reclaimed water program.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT NATURAL GROUNDWATER

AQUIFER RECHARGE SUB-ELEMENT

B

DEFINITIONS

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

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DEFINITIONS

<u>Artesian Well</u> - a well that penetrates a confined aquifer in which the water level in that veil rises above the top of that aquifer.

<u>Conservation</u> - actions which result in a reduction of water demand or protection or preservation of the quality or quantity of the water supply source, classified as either user conservation or resource conservation.

<u>Demand Conservation</u> - water conservation activities such as; pricing structures, public education, water reuse systems, water saving fixtures, or other regulation.

<u>Development</u> - a material change in the use of character of the land including, but not limited to, the placement of any structure or site improvements on the land.

<u>Domestic Consumption</u> - water used in direct human contact for drinking, cooking, bathing, and cleaning purposes inside a residential or commercial establishment.

- <u>EPB</u> City of Jacksonville Environmental Protection Board.
- <u>EPA</u> United States Environmental Protection Agency.
- <u>EQD</u> Environmental Quality Division
- FAC Florida Administrative Code.
- *FDEP* Florida Department of Environmental Protection.
- FGS Florida Geological Survey

<u>Floridan Aquifer</u> - those earth materials first penetrated at varying depths greater than two hundred fifty feet (76.3m) below the ground surface in the City and that compose one or more of the following stratigraphic formations: limestone of the Ocala Group, Avon Park Limestone, Lake City Limestone or Oldsmar Limestone. The approximate depth to which wells first penetrate the Floridan Aquifers is shown in the 1978 Water Resources Investigation report, 77-144, prepared by the United States Geological Survey, or as revised.

<u>Free Flowing Wells</u> - those wells which are uncapped or leaking and which are releasing groundwater under pressure from an aquifer to flow freely to grade level.

<u>F.S.</u> - Florida Statutes.

<u>FSDWA</u> - Florida Safe Drinking Water Act

<u>Groundwater</u> - water beneath the surface of the ground, whether or not flowing through known definite channels.

<u>Groundwater Resource Management</u> - all actions which are necessary to accomplish the objectives of the City's Ordinance Code associated with protection of Jacksonville's groundwater resources.

<u>GWBRAI</u> - Ground Water Basin Resource Availability Inventory project directed by the St. Johns River Water Management District.

High Recharge Areas - Areas with recharge rates of 12 or more inches per year.

<u>Irrigation</u> - the method by which water is artificially applied to land surfaces, for the purpose of supplementing natural rainfall.

<u>JEA</u> – Water, Sewer, and Electric Utility serving community in and around Duval County; previously known as the Jacksonville Electric Authority.

<u>Monitoring Well</u> - an artificial excavation having a permanent casing which is only used for locating and sampling groundwater quality and/or quantity.

<u>Natural Drainage Features</u> – the naturally occurring features of an area which accommodate the flow of significant amounts of stormwater, such as streams, rivers, lakes, sloughs, floodplains and wetlands.

<u>Natural Drainage Flow</u> – the pattern of surface and storm water drainage through or from a particular site before the construction or installation of improvements or prior to regrading.

<u>Non-Potable water</u> - water which is not approved as meeting health standards applicable to potable water or which is generally undesirable for domestic use.

<u>*Piezometer Well*</u> - an artificial excavation not having a permanent casing which is only used on a temporary basis, maximum three months, to locate groundwater levels or identify areas of groundwater contamination.

<u>Potable Water</u> - water used for drinking, culinary purposes, personal hygiene or other domestic purposes which is approved as meeting the standards contained in F.A.C. Rules 100-4, 17-550, or 17-555, F.A.C.

<u>Potable Water Wellfield</u> – The site of one or more water wells which supply potable water for human consumption to a water system which serves at least 15 service connections used by yard-round residents or regularly serves at least 25 year-round residents.

<u>Prime Recharge Area</u> - An area so designated by the appropriate water management district governing board. Recommended prime ground water recharge areas to the Floridian aquifer are areas that contribute the greatest volume of water per unit area to the Floridian aquifer in a ground water basin. Prime recharge areas are those areas mapped as high recharge areas. High recharge and prime recharge areas shall receive a level of protection commensurate with their significance to natural systems or their status as current or future sources of potable water.

<u>Public Water Supply System</u> - any water system meeting the requirements of either F.A.C. Rules 17-550, 17-555, or 17-560, F.A.C., for "community or non-community" or F.A.C. Rule 100-4, for "other public" categories. Such systems serve more than four private residences, or commercial facilities serving the public at least sixty (60) days per year.

<u>Reasonable Beneficial Use</u> - the use of water in accordance with Chapter 373, F.S. and standards promulgated by the SJRWMD.

<u>Recharge Area</u> - location where the replenishment of groundwater in an aquifer occurs, primarily as a result of rainfall infiltration and secondarily by the movement of water from adjacent aquifers or surface water bodies. Such areas have been classified as having generally no recharge, low to moderate recharge, <u>or</u> high recharge. or prime recharge (also see Prime Recharge).

<u>RESD</u> - Regulatory and Environmental Services Department.

<u>Resource Conservation</u> - actions necessary to protect the City's water supply sources such as well head protection, identification of and protection from groundwater contamination or degradation by such as salt water intrusion, developing alternative water supply sources and encouraging their use.

<u>Shall</u> - the word "shall" is used to indicate a mandatory action.

<u>Should</u> - the word "should" is used to indicate an action that is strongly advised.

SJRWMD - St. Johns River Water Management District.

<u>Supply Conservation</u> - water conservation activities such as water metering, leak detection and repair, utility water audits, pressure reduction and wellfield management.

<u>*Tent Well*</u> - wells used for monitoring, sampling, location or improving groundwater quality and resolving groundwater pollution problems (also see Monitor Well).

<u>User Conservation</u> - functions generally recognized as the responsibility of the water user or water supplier. These functions are classified as either supply conservation or demand conservation.

<u>USGS</u> - United States Geological Survey.

<u>*Waste*</u> - the flow of water as defined in Section 373.203(4), F.S., and as further defined by the Board in a manner consistent with Section 373.203(4), F.S.

<u>Water Source Heat Pump</u> - includes single or reverse cycle mechanical devices for heating or cooling which require the use of water as a medium for heat transfer.

<u>*Well*</u> - any artificial excavation on submerged or unsubmerged land, excepting wells covered by Chapter 377, F.S., pertaining to oil and gas well, having a diameter of not more than 120 inches (304.3 cm) the intended use of which is for the location, acquisition, development or artificial recharge of water.

<u>Well Head Protection Area</u> - An area consisting of a 750-foot radial setback distance around a Public Potable Water well or Wellfield where the most stringent measures are provided to protect the ground water source for a potable water well and includes the surface and subsurface area surrounding the well.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT

DRAINAGE SUB-ELEMENT

A

GOALS, OBJECTIVES AND POLICIES

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

GOALS, OBJECTIVES, AND POLICIES

GOAL 1

The Public Works Department shall provide a stormwater management system which will increase the efficiency of the existing systems, create regional facilities where appropriate and improve water quality by reducing non-point sources of pollution.

<u>Objective 1.1</u> The City shall develop a Geographic Information System (GIS) with the capability to include data regarding the existing drainage system, land use, soil types, and topographic information.

Policies 1.1.1

The City shall maintain an inventory of all drainage systems in conjunction with the National Pollutant Discharge Elimination System (NPDES).

1.1.2

The Public Works Department shall prepare base maps showing the existing infrastructure and natural drainage system in conjunction with the National Pollutant Discharge Elimination System (NPDES).

1.1.3

Upon implementation of the GIS, the Public Works Department shall require the submittal of "as-built" data in a format compatible with the GIS to facilitate the up-date of the system.

<u>Objective 1.2</u> The City has completed a Master Stormwater Management Plan (MSMP). The information in the plan will be utilized in the development of operational criteria for the drainage system. Through this process, the Public Works Department will analyze its existing stormwater management system and correct existing deficiencies by coordinating the increase in the capacity of the system, thereby encouraging infill development in the Urban Area. With completion of each phase of the MSMP, the City shall amend the 2030 Comprehensive Plan to include changes recommended in design standards and revise the Capital Improvements Element as necessary.

Policies 1.2.1

The City shall revise the 2030 Comprehensive Plan to implement the results of the MSMP.

1.2.2

Based on the recommendations in the MSMP, the City shall reassess projects for stormwater improvements in the Capital Improvements Element and annually revise the Five Year Capital Improvement Program accordingly.

1.2.3

The Subdivision Standards and Policy Advisory Committee shall revise the Land Development Procedures Manual to incorporate special basin criteria, recommended as part of the MSMP.

1.2.4

The City shall establish and continue to utilize the three Levels of Service (LOS) standards for drainage facilities. These Levels of Service (LOS) standards define the depth of flooding allowed within and adjacent to the street rights of way. The design storm, which shall be used, will be a 5-year design storm.

- LOS A for new systems: Hydraulic gradeline at or below inlet grate.
- LOS B for retrofitted new systems: Flooding of streets and some yard area.
- LOS C for existing systems: Flooding up to the structures.

Where:

<u>Service Level A</u> is the most advanced level of stormwater protection available and comprises the complete removal of stormwater from street surfaces during the design rainfall event. All stormwater is captured by the collection system and overland flow and street storage conditions are eliminated. Significant ponding does not occur and confined areas are drained without surcharge. This level of service obviates the health and safety concerns associated with minor flooding, eliminates transportation hazards and prevents vehicular flooding. The hydraulic grade line is generally at or below the inlet throat.

<u>Service Level B</u> is the next level of protection and comprises the prevention of significant levels of yard flooding but includes some flooding of street and yard areas. The sources of Level B flooding are overland flow of off-site stormwaters, surcharging of the stormwater collection system, or the ponding of confined waters. The impacts on residents in Level B service areas are primarily nuisance flooding problems related to temporary impassability of streets. The flooding of major roadways is limited to the outer lane areas but which does not prevent travel. There may be flooding of a limited duration along minor streets and flooding of yards is generally limited to 50% of the grassed area between street and structure. There is no flooding of structures. The hydraulic grade line is at or slightly above the inlet throat.

<u>Service Level C</u> is the minimum level of stormwater protection provided and comprises the prevention of flooding in structures or appurtenant components of residential, commercial or institutional structures. Sources of flooding in Level C situations are via overland flow, surcharging of the stormwater collection system, or

ponding of confined waters. Flooding of major roadways precludes the use of outer traffic lanes while travel in inner lanes is possible but difficult. Flooding of minor streets precludes travel and flooding of front yards up to the front face of the structure, but no structure flooding is indicated based on a five year storm frequency. The hydraulic grade line is significantly above the inlet throat.

1.2.5

The Public Works Department shall ensure that developments will not affect the existing drainage facilities by requiring pre/post development discharge restrictions or providing an analysis on the existing drainage facility to prove no adverse impacts.

<u>Objective 1.3</u> Stormwater runoff from new development shall be treated in accordance with all applicable federal, State, regional and local standards. Stormwater from existing systems, which are retrofitted, shall be treated to the best available technology.

Policies 1.3.1

The City shall require stormwater treatment on all new developments. Treatment volume shall be based on Chapter 17.40.420, *Florida Administrative Code (F.A.C)* or current St. Johns River Water Management District (SJRWMD) rules. The City reserves its right to participate in all SJRWMD permitting, administrative and judicial appellate procedures; however, a SJRWMD issued permit, which is administratively and judicially final, will be accepted as demonstrating compliance with SJRWMD rules.

1.3.2

In existing areas stormwater retrofitting, is proposed in the MSMP, and in which traditional treatment methods are impractical, other "best management practices" shall continue to be utilized.

1.3.3

The City shall utilize construction standards for stormwater treatment facilities contained in the Land Development Procedures Manual.

1.3.4

The City shall continue to require annual reports from the maintenance entities of all stormwater treatment facilities to ensure their proper operation.

<u>Objective 1.4</u> The City shall maximize the efficiency of operations of its stormwater facilities through scheduled and proper maintenance.

Policies 1.4.1

The City shall maintain a method for financing the operation and management of stormwater facilities. The funding shall be used to reduce existing flooding, improve water quality, and preserve or restore the values of the natural systems.

1.4.2

The funding established pursuant to Policy 1.4.1 shall be used in part to ensure continued proper operation, maintenance, and functioning of stormwater facilities.

<u>Objective 1.5</u> The City shall continue to protect existing streams, rivers, and floodways through its development review process to ensure that no harm is done to the natural drainage system.

Policies 1.5.1

The Public Works Department shall continue to review each proposed new development and determine if it may do harm to the natural drainage system.

1.5.2

The Public Works Department shall continue to deny permits to any new development that fills a flood plain without compensation for the fill by excavating an equal volume or improvement to the drainage system or a combination of both.

<u>Objective 1.6</u> The City shall coordinate extension of its drainage facilities through new developments as part of its current permitting process.

Policies 1.6.1

The Public Works Department shall require that proposed development drainage facilities are adequate in capacity to serve the proposed development along with any contributing off-site drainage.

1.6.2

The Public Works Department shall continue to require that the drainage systems downstream of a proposed development have the capacity or hydraulic gradient to accept the proposed development's discharge, or that the proposed development improves the downstream drainage system.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT

DRAINAGE SUB-ELEMENT

B

DEFINITIONS

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

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DEFINITIONS

Attenuation - To limit stormwater flow to reduce downstream impacts. (See also Detention).

<u>Best Management Practices (BMPs)</u> - Means whereby pollutant loading to downstream elements are reduced. BMPs can be either structural (see Stormwater Treatment Facility) or non-structural practices. Non-structural practices include but are not limited to inlet cleaning, street sweeping, and detention pond maintenance.

<u>Capacity Analysis</u> - A determination of a stormwater management facility's ability to provide a given level of service.

<u>Capital Improvement Plan or Program</u> - A projected schedule of capital projects based on estimated costs and expected funding levels.

<u>Conveyance</u> - Transport of stormwater via pipe and/or open channel system(s).

<u>Coastal High Hazard Areas</u> – The Coastal High Hazard Area (CHHA) is the area below the elevation of the Category 1 storm surge line as established by the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model as established by the most current Northeast Florida Hurricane Evacuation Study. It is shown on Map C-18. A property shall be deemed to be within the CHHA as depicted on Map C-18 unless site specific, reliable data and analysis demonstrates otherwise.

<u>Design Capacity</u> - The amount of flow a storm sewer system is designed to manage, usually expressed in cubic feet per second for flow and cubic feet or acre feet for storage.

<u>Detailed Basin Plan or Study</u> - An in-depth investigation into the drainage needs of a particular drainage basin. Usually limited to large basins where the expected improvements will entail large expenditures and phasing.

<u>Detention or To Detain</u> - To temporarily store stormwater in such a way as to limit its flow, either to limit downstream impacts or provide treatment for water quality.

<u>Detention Basin</u> - A stormwater facility designed to capture and limit stormwater flow (by releasing it at a reduced rate) in order to reduce downstream impacts or to treat stormwater to improve its quality.

<u>Ditch</u> - An open stormwater conveyance facility with side slopes steeper than three units horizontally to one unit vertically.

<u>Drainage Basin</u> - Any land area from which the runoff collects at a common point or receiving water.

<u>*Exfiltration Trench*</u> - A subsurface facility designed to convey stormwater into the underlying soil, providing treatment through filtration and volume reduction.
<u>Flood- Prone Area</u> - Areas which flood which may not be identified on the FEMA FIRM maps.

<u>Impervious</u> - Land surfaces which do not allow (or minimally allow) the penetration of water. An increase in the amount of impervious area will increase the rate and volume of runoff from a given drainage basin.

Inlet - A structure which allows stormwater to flow into a conveyance system.

<u>Level of Service (LOS)</u> - An indicator of the extent of or degree of service provided by, or proposed to be provided by, a facility based on and related to the operational characteristic of the facility. The LOS shall indicate the capacity per unit of demand for each facility.

<u>Master Stormwater Management Plan (MSMP)</u> - A comprehensive plan detailing water quantity and quality issues on the primary drainage system.

<u>Models</u> - Approximations of the hydraulics and hydrology of a drainage basin based upon mathematical derivations of quantifiable relationships between various factors. These factors usually include, but are not limited to, area, slope, drainage system characteristics, rainfall and land use.

<u>Natural Drainage Features</u> - Naturally occurring features of an area which accommodate the flow of a significant amount of stormwater, such as streams, rivers, lakes, sloughs, floodplains and wetlands.

<u>Natural Drainage Flow</u> - The pattern of surface and stormwater drainage through or from a particular site before the construction or installation of improvements or prior to regrading.

<u>*Outfall*</u> - Location where stormwater flows out of a given system. The ultimate outfall of a system is usually a "receiving water".

Percolation - The ability of water to pass through a porous medium; in most cases, the soil.

<u>*Pervious*</u> - Land surfaces which allow the penetration of water. A decrease in pervious area will increase the rate and volume of runoff from a given drainage basin.

<u>Receiving Water</u> - A body of water which serves as the receptacle for stormwater flow. Generally defined as lakes, rivers, bays and oceans.

<u>Retention or To Retain</u> - To store stormwater to prevent its discharge into receiving waters or to provide a storage facility for stormwater where no outfall is available.

<u>Retention Basin</u> - A stormwater facility which has no structural outfall and the discharge from which is limited to percolation, evaporation and evapotranspiration.

<u>Storm Sewer Capacity</u> - The ability of a storm sewer system to manage runoff, expressed in cubic feet per second for flow and cubic feet or acre feet for storage.

<u>Stormwater</u> - Flow of water which results from and which occurs immediately after a rainfall event.

<u>Stormwater Solid Waste Facilities</u> – Structures or systems designed for the collection, processing or disposal of solid wastes, including hazardous wastes, and includes transfer stations, processing plants, recycling plants, and disposal system.

<u>Stormwater Management System</u> - A system which has the meaning described in Rule 17-40.210(21) F.A.C. (1992)

<u>Stormwater Treatment Facility</u> - A structural "best management practice" (BMP) designed to reduce pollutant loading on a receiving water by either reducing the volume of flow; biological uptake of pollutants, the limiting the loading of pollutants or by allowing pollutants to settle out of stormwater flow. Structural BMPs include but are not limited to detention basins, retention basins, open bottom inlets, undercut ditches, exfiltration trenches and swales.

<u>Surcharge</u> - Flow out of a stormwater facility resulting from flow in excess of its designed capacity at a point upstream from the outfall.

<u>Swale</u> - An open stormwater conveyance facility with side slopes equal to or greater than three units horizontally to one unit vertically (generally very shallow).

<u>Shall</u> - The word "shall" is used to indicate a mandatory action.

<u>Should</u> - The word "should" is used to indicate an action that is strongly advised.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT

SANITARY SEWER SUB-ELEMENT

A

GOALS, OBJECTIVES AND POLICIES

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

City of Jacksonville 2030 Comprehensive Plan Infrastructure Element Revised November 2010

GOALS, OBJECTIVES AND POLICIES

GOAL 1

JEA shall provide for economically and environmentally sound regional wastewater collection and treatment systems which protect the public health and investment in existing facilities, promote beneficial land use and growth patterns, and discourage urban sprawl.

<u>Objective 1.1</u> In order to discourage urban sprawl, and correct existing deficiencies, JEA shall provide regional wastewater facilities in concert and conformance with the Public Facilities Map as adopted in the Capital Improvements Element.

Policies 1.1.1

JEA shall provide for regional wastewater facilities associated with development within the Urban Area as defined in the Future Land Use and Capital Improvements Element, excluding improvements within the service area of an investor-owned public utility company of regional status.

1.1.2

JEA shall provide regional wastewater facilities associated with development within the Suburban Area as defined in the Capital Improvements Element excluding improvements within the service area of an investor-owned public utility company of regional status.

1.1.3

The JEA shall not invest in sanitary sewer facilities in the Rural Area as defined in the Future Land Use and Capital Improvements Element, except where necessary to protect the public health or safety, or encourage mixed use or regional economic development. The JEA and the Department of Planning and Development shall coordinate on the placement of these lines to ensure compliance with the City's Comprehensive Plan and its urban and suburban boundaries.

1.1.4

Appropriate interim facilities will be permitted within the City as provided in Objective 1.2 and associated policies.

1.1.5

The City shall, through its Land Development Regulations, preserve utility corridors so that future development can be served in a cost effective manner.

1.1.6

All City owned wastewater facilities shall be constructed in accordance with the City's Utility Standards and Specifications, Land Development Procedures Manual, FDEP regulations and other applicable requirements.

1.1.7

The City shall incorporate incentives in its Land Development Regulations which encourage development, and redevelopment in areas where the public wastewater system has or will have adequate capacity. Developments which qualify for mixed use and/or regional economic development must also undergo land use amendments to expand the suburban boundaries to incorporate these areas.

<u>Objective 1.2</u> In order to discourage urban sprawl and prevent adverse impacts to groundwater, surface water, and quality of life, the City will require that all nonregional wastewater treatment facilities identified pursuant to Environmental Protection Board (EPB) Rule 3 discontinue operation by 2010. Additionally, the City shall continue to regulate the use of on-site disposal facilities to assure compliance with federal, State, regional, and local regulations, and install regional facilities in accordance with the Capital Improvements Element in order to reduce the number of septic tanks in new developments.

Policies 1.2.1

JEA shall continue its efforts toward the acquisition of nonregional investor or community owned public utility companies where analysis of the acquisition indicates that the costs of acquiring, integrating, and upgrading the facilities to City standards will be offset by the existing and projected rate base of the utility.

1.2.2

No new wastewater treatment facility discharges shall be permitted to the tributaries, mainstem, and mouth of the St. Johns River within the City unless otherwise physically or financially unfeasible.

1.2.3

The City shall not permit septic tanks for the disposal or discharge of industrial wastes.

1.2.4

Existing septic tanks for estimated wastewater flows of 600 or less gallons per day (gpd) shall connect to the collection system of a regional utility company provided that gravity service is available via a facility within a right-of-way or easement, which abuts the property.

1.2.5

Existing septic tanks for estimated wastewater flows exceeding 600 gallons per day (gpd) shall connect to the collection system of a regional utility company provided that a facility abuts or is within 50 feet of the property.

1.2.6

Within the Suburban Boundary Map as defined in the Future Land Use and Capital Improvements Elements, new septic tanks will be forbidden pursuant to the Septic Environmental Protection Board – Rule 3; however, they may be permitted as interim facilities, provided the following requirements are satisfied:

- 1. Single family/commercial (estimated flows of 600 gpd or less):
 - a. Requirements of Chapter 64E-6, Florida Administrative Code (F.A.C.) are accommodated.
 - b. The collection system of a regional utility company is not available through gravity service via a facility within a right-of-way or easement which abuts the property.
- 2. Commercial (above 600 gpd)
 - a. Requirements of Chapter 64E-6, F.A.C. are accommodated.
 - b. The collection system of a regional utility company is not within 50 feet of the property.
- 3. Subdivision (commercial or single family):
 - a. Requirements of Chapter 64E-6, F.A.C. are accommodated.
 - b. The collection system of a regional utility company is greater than 1/4 mile from the proposed subdivision.
 - c. Each lot is a minimum of 1 acre unsubmerged property.
 - d. Alternative (mounded) systems are not required.

1.2.7

Subdivisions permitted under the criteria of Policy 1.2.6 above shall be required to install dryline sewer systems when programmed improvements are identified in the Capital Improvements Element which will make connection to the JEA Collection System available within a five (5) year period.

1.2.8

The City shall continue the effort to phase out septic tanks in defined failure areas in conformance with Chapter 751, Ordinance Code (Septic Tank Superfund).

1.2.9

Septic tanks shall be permitted in Rural Areas, provided they meet the requirements of Chapter 64E-6, F.A.C., and that all lots created after shall have a minimum of 1 acre of unsubmerged property.

1.2.10

Nonregional wastewater facilities may be permitted as interim facilities, provided all of the following requirements are satisfied:

- 1. The facility meets all federal, state, regional, and local environmental regulations.
- 2. The developer shall operate and maintain the facilities
- 3. The developer provides for phase out costs where appropriate.
- 4. The developer enters into an agreement with the City, specifying the date and manner of phase out.
- 5. The facility operator will reimburse the City for costs of enforcement of violations of water quality standards and effluent limitations.
- 6. Wastewater facilities must provide at least 1.0 MGD of capacity.

1.2.11 Testing

<u>Objective 1.3</u> JEA shall provide adequate wastewater facility capacity to meet future needs.

Policies 1.3.1

To assure an adequate Level of Service, wastewater facilities within the City shall meet the following standards:

- 1. Effluent discharge from wastewater treatment plants shall meet all federal, State, and local standards.
- 2. Existing and proposed wastewater collection, transmission, treatment, and disposal facilities shall be designed and constructed to maintain the capacity associated with reasonably expected wastewater generation rates consistent with all federal, State, and local standards.

Residential - 100 Gallons per capita per day (GPCD) (includes an Infiltration/Inflow factor of 25 GPCD)

Non-Residential - flows to be evaluated on a site-specific basis using Section 10D-6 48(1), F.A.C.

Peak Flows will be determined in accordance with "Recommended Standards for Sewage Works", latest edition (Ten State Standards) and the Water Environment Federation Manual of Practice #9.

1.3.2

No development order authorizing new development or a significant expansion of an existing user shall be issued for any area of the City served by a wastewater facility which does not meet the standards in Chapter 9J-5.0055(2)a 1.-3., F.A.C. Specifically, the necessary facilities are in place, the necessary facilities will be in place when the development impacts occur, the necessary facilities are under construction or the necessary facilities are guaranteed by an enforceable development agreement.

1.3.3

JEA shall monitor the Levels of Service of each facility and determine the impact of a proposed development or redevelopment on the adopted Level of Service (LOS) for use by agencies which issue development orders or permits

<u>Objective 1.4</u> JEA shall plan and provide for regional facilities to accommodate the ultimate needs of the community through implementation of JEA related projects listed in the Capital Improvements Element.

Policies 1.4.1

Wastewater system improvements will be evaluated for funding in accordance with the following general criteria:

- 1. Improvements which are necessary to protect the health, safety and environmental integrity of the community, consistent with the policies of this Comprehensive Plan and applicable federal, state, regional and local regulatory requirements.
- 2. Improvements which are necessary to meet existing deficiencies in capacity or in performance. These include the retrofit of deteriorating facilities which fail or threaten to fail to meet health, safety or environmental standards.
- 3. Improvements which extend regional service to previously unserved developed areas within the Urban and Suburban Areas as identified in the Capital Improvements Element.
- 4. Improvements which have been identified in adopted functional plans and which address system details beyond the scope of this Subelement, but which are consistent with the goals, objectives and policies of this Comprehensive Plan.
- 5. Cost-effective improvements to expand capacity, maximize operational efficiency, and increase productivity.

1.4.2

Wastewater facility improvements shall be undertaken in conformance with the schedule included in the Capital Improvements Element.

<u>Objective 1.5</u> JEA shall provide regional wastewater treatment facilities to accommodate the adopted Level of Service standards.

Policy 1.5.1

JEA, through its Industrial Pretreatment Group, shall protect existing treatment facilities from adverse impacts due to discharge of deleterious wastewater to the system, by vigorous enforcement of Chapter 750, Ordinance Code, as it pertains to "Use of Public Sewers".

<u>Objective 1.6</u> The JEA shall maintain existing collection systems, and inspect new construction in order to ensure compliance with the adopted Level of Service standards and maximize the use of existing facilities.

Policies 1.6.1

JEA shall maintain an inventory of all facilities which identify location, physical characteristics, age, service condition and structural condition.

1.6.2

JEA shall continue the rehabilitation and replacement program directed at the older portions of the existing system.

1.6.3

All required federal, State, regional and local permits shall be obtained before JEA undertakes or authorizes a contractor to undertake construction and/or operation of facilities.

1.6.4

The City shall inspect construction of all new facilities to be dedicated to the City to ensure the use of the best construction methods.

1.6.5

The City shall annually evaluate the JEA Standards and Specifications and the Land Development Procedures Manual.

1.6.6

JEA will not allow connections directly into its major force main system, as defined in the Wastewater Master Plan, in a manifolding manner except as designated in the plan.

1.6.7

JEA shall maintain an automated wastewater management information system for facility records, mapping, Geographical Information System, preventive maintenance, stock and inventory control and other related functions.

<u>Objective 1.7</u> JEA shall provide adequate sludge utilization/disposal facilities capable of handling all sludge generated at JEA wastewater treatment facilities.

Policies 1.7.1

JEA shall monitor current sludge volumes and future population projections to predict future needs.

1.7.2

JEA shall schedule and design construction projects for sludge management facilities to meet identified needs.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT

SANITARY SEWER SUB-ELEMENT

B

DEFINITIONS

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

City of Jacksonville 2030 Comprehensive Plan Infrastructure Element Revised November 2010

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DEFINITIONS

<u>Best Construction Methods</u> - Those methods delineated in the City standards and specifications.

<u>Biochemical Oxygen Demand (BOD)</u> - The quantity of oxygen used in the aerobic stabilization of wastewaters and polluted waters. The standard 5-day BOD value is commonly used to define the strength of municipal wastewaters, to evaluate the efficiency of treatment by measuring oxygen demand remaining in the effluent and to determine the amount of organic pollutant in surface waters.

<u>Community Owned Public Utility Company</u> - A water or sewer utility owned by nonprofit corporations providing service to members who own and control such nonprofit corporations, associations, or cooperatives.

<u>Development</u> - Has the meaning described in §380.04, Florida Statutes.

<u>Domestic Waste</u> - Human body waste and household - type wastes, including bath and toilet type wastes, laundry wastes, kitchen wastes, and other similar wastes from household or established appurtenances.

<u>Effluent</u> - Wastewater or other liquid discharged from a treatment process or treatment plant.

<u>EPB</u> - Jacksonville Environmental Protection Board.

<u>Exfiltration</u> - Sewage leaving sewers through defective joints and cracks in pipes and manholes.

<u>Industrial Wastes</u> - Wastewater not otherwise defined as domestic sewage waste. Includes wastewater from floor drains in buildings and industrial or manufacturing parks, commercial laundry facilities, wastewater from animal holding facilities, etc.

<u>*Infiltration/Inflow*</u> - Groundwater entering sewers and building connections through defective joints and cracks in pipes and manholes.

<u>Inflow</u> - Water discharged into service connections and sewer pipes from foundation and roof drains, outdoor paved areas, cooling water from air conditioners, and unpolluted discharges from businesses and industries.

<u>*Influent*</u> - Wastewater or other liquid (raw or partially treated) flowing into a reservoir, basin, treatment process, or treatment plant.

<u>Interceptors</u> - Mean conduits which carry flows from the collector sewers to the point of treatment or disposal of the wastewater.

<u>Investor Owned Public Utility Company</u> - A water or sewer utility which, except as provided in Section 367.022, F.S. is providing, or proposes to provide, water or sewer service to the public for compensation.

<u>JEA</u> – Water, Sewer & Electric Utility serving community in and around Duval County previously known as Jacksonville Electric Authority.

<u>Level of Service</u> - An indicator of the extent or degree of service provided by, or proposed to be provided by a facility based on and related to the operational characteristics of the facility. Level of service shall indicate the capacity per unit of demand for each public facility.

Lift Station - A pumping facility which discharges flow directly into a gravity conduit.

<u>Local Collection Mains</u> - Conduits which gather flows from individual buildings and transport the material to an interceptor or main sewer.

<u>NPDES</u> - National Pollution Discharge Elimination System

<u>Parshall Flume</u> - A critical depth meter which establishes a mathematical relationship between the stage 'h' and the discharge 'Q'. It is for measuring the flow in open channels.

Point Source - Specific point of discharge of a pollutant.

<u>Point Source Pollution</u> - Any source of water pollution that constitutes a discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

<u>Primary Treatment</u> - The removal of between 30 to 35 percent of the organic materials and up to 50 percent of the solids from the sewage. This is commonly referred to as physical treatment because screens and settling tanks are the most common methods of removal.

<u>PSC</u> - Public Service Commission.

<u>Regional Wastewater Facilities</u> - Those facilities identified in the WSBU Wastewater Master Plan.

<u>Sanitary Sewer Facilities</u> - Structures or systems designed for the collection, transmission, treatment, or disposal of wastewater and includes trunk mains, interceptors, treatment plants and disposal systems.

<u>Secondary Treatment</u> - Secondary treatment processes remove between 80 and 90 percent of total organic materials and suspended solids from sewage. This level of treatment generally requires multiple steps involving one biological process and one or more processes for removal of suspended solids.

<u>Septic Tank</u> - Any in-ground or above-grade wastewater treatment facility discharging an effluent to the ground or surface waters of under 5,000 gallons per day (gpd). Or an underground tank used for the deposition of domestic-type wastes. Bacteria in the waste decomposes the organic matter, and the sludge settles to the bottom. The effluent flows through drains into the ground. Sludge must be pumped out at regular intervals.

<u>Shall</u> - the word "shall" is used to indicate a mandatory action.

<u>Should</u> - the word "should" is used to indicate an action that is strongly advised.

<u>Sludge</u> - The accumulated solids separated from liquids during processing, or the precipitate resulting from chemical treatment, coagulation, or sedimentation of wastewater.

<u>STS</u> - Septic Tank Superfund.

<u>Total Suspended Solids</u> - The sum of all solids that float on the surface of, or are in suspension in wastewater and that are largely removable by treatment processes.

<u>*Urban Sprawl*</u> – A land use pattern typically characterized by the following:

- Premature conversion of agricultural areas beyond urban and suburban service boundaries into urban uses beyond the planning time frame horizon covered in the City's Comprehensive Plan.
- "Leapfrog" development patterns
- Large areas of low-density, single-use development

Development may occur beyond urban and suburban boundaries provided that it is mixeduse in nature. Otherwise, development beyond such boundaries is considered urban sprawl and is to be discouraged.

<u>*Wastewater*</u> - A combination of the liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions, together with any groundwater, surface water, and storm water that may be infiltrated.

<u>Wastewater Facilities</u> - Structures or systems designed for the collection, transmission, treatment or disposal of wastewater and includes trunk mains, interceptors and treatment plants.

Docket No. 20190168-WS COJ Comprehensive Plan Exhibit SRW-4, Page 40 of 63 **2030 COMPREHENSIVE PLAN**

INFRASTRUCTURE ELEMENT

SOLID WASTE SUB-ELEMENT

A

GOALS, OBJECTIVES AND POLICIES

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

City of Jacksonville 2030 Comprehensive Plan Infrastructure Element Revised November 2010

GOALS, OBJECTIVES, AND POLICIES

GOAL 1

The City of Jacksonville shall provide for an integrated solid waste management system which protects the public health, sanitation, and environment and provides for operational efficiency and beneficial land use and growth patterns.

<u>Objective 1.1</u> The Solid Waste Division shall plan and implement an integrated solid waste management system to reduce the volume of solid waste disposed in landfills in Jacksonville. An integrated solid waste management system consists of a combination of solid waste management and disposal options which work together to meet the community's needs for safe and effective solid waste disposal.

Policies 1.1.1

Landfills shall be designated to receive those items that cannot be reused, composted, recycled, or processed for volume reduction in a technologically reasonable and economically practical manner.

1.1.2

The integrated solid waste management program shall focus on the proper management of solid waste, conservation of resources and optimize landfill capacity.

<u>Objective 1.2</u> Solid Waste Division shall meet and exceed the state recycling goal. The Solid Waste and Resource Management Department shall maintain a recycling, reuse and reduction programs for the residential, commercial, and industrial sectors.

Policies 1.2.1

The Solid Waste Division shall maintain the residential recycling program to include all residences within the City.

1.2.2

Recycling programs designed to separate newspaper, glass, plastics, and metal products; office papers, paperboard, corrugated papers and organic materials from the solid waste generated by commercial and industrial businesses shall be implemented by the private sector.

1.2.3

The Solid Waste Division shall continue to develop programs for the commercial/industrial sectors to examine their individual waste streams to determine those materials which may be reused, recycled or composted.

1.2.4

The Solid Waste Division shall continue to implement public education and awareness programs contingent upon the availability of State grant funding to inform both the

residential and the commercial/industrial sectors of the City of the need to reduce, recycle, reuse, and compost solid waste.

1.2.5

The Solid Waste Division shall maintain a program for the mulching/composting of organic materials. The Solid Waste and Resource Management Department shall encourage back yard composting through public education and awareness programs contingent upon the availability of State grant funding.

1.2.6

The City of Jacksonville shall continue to follow procurement procedures that promote a greater use of recycled paper.

1.2.7

The Solid Waste Division shall apply for grant funds and such other revenue sources that may be available when needed for development of recycling, reuse, and reduction programs.

1.2.8

The Solid Waste Division shall continue to develop, improve, and expand the waste reduction, reuse, and recycling programs to include additional materials, methods, or technologies.

1.2.9

The City shall continue to implement the existing mandatory residential recycling program to separate newspaper, glass, plastics, and metal products, and subject to the availability of markets, a residential recycling program for paperboard, corrugated papers, and mixed papers. The residential recycling program shall permit the resident to market his or her own recyclable materials.

<u>Objective 1.3</u> The Solid Waste Division shall continue to operate solid waste management facilities in compliance with applicable air, groundwater, and surface water pollution standards established by federal, State, and local laws, regulations and guidelines.

Policies 1.3.1

The Solid Waste Division shall identify, plan, and implement improvements to solid waste management facilities which are necessary to meet environmental performance standards and other applicable regulations.

1.3.2

The Solid Waste Division shall close and monitor the City's completed landfills in compliance with standards established by federal, state, and local laws, regulations, and guidelines.

1.3.3

The Solid Waste Division shall continue to implement a public education program on the proper disposal of potentially hazardous wastes with the purpose of reducing the amount of these wastes entering the solid waste stream.

1.3.4

The Solid Waste Division shall continue to implement a permanent local "Amnesty Days" program to facilitate proper collection and disposal of household hazardous wastes.

1.3.5

The Solid Waste Division shall continue to operate a training program for landfill operations personnel to improve identification and proper handling of potentially hazardous materials.

1.3.6

The Solid Waste Division shall require a training program for landfill operations personnel to improve the operation and management of the City's landfills.

1.3.7

By 2002 the Solid Waste Division shall develop criteria for identifying and establishing the priority for cleanup of old dump sites within the City's jurisdiction

1.3.8

The Solid Waste and Division shall coordinate with the Regulatory and Environmental Services Department (RESD) and other State and local agencies when implementing hazardous waste programs by regularly scheduled meetings and correspondence between the appropriate Departments.

1.3.9

The City shall adopt Land Development Regulations that prohibit new development in the vicinity of solid waste management facilities which is incompatible with the operation of such facilities. Section 656.401 Ordinance Code of the City of Jacksonville now contains performance standards, guidelines, and criteria for these regulations.

1.3.10

Peripheral buffers and landscaping shall be required at new or expanding solid waste facilities to minimize impacts to the surrounding area.

<u>Objective 1.4</u> The Solid Waste Division shall plan solid waste management facility additions, expansions, and improvements to meet the present needs and support the anticipated future growth.

Policies 1.4.1

The Solid Waste Division shall establish a long-range planning program to address the available capacity of solid waste management facilities for a minimum 20-year planning period.

1.4.2

The Solid Waste Division shall conduct an annual review of solid waste generation, disposal rates, and facility capacity to evaluate future needs.

1.4.3

The Solid Waste Division shall identify and evaluate funding alternatives for the continued development and operation of the integrated solid waste management system.

1.4.4

The City shall operate all of its solid waste management facilities in a manner that will protect the public health, welfare and safety, and control costs and performance. The City shall establish regulations to require all private solid waste management facilities to be operated in a manner that will protect the public health, welfare and safety and control costs and performance.

1.4.5

The City shall identify solid wastes generated within and outside of Duval County, and adopt controls using waste flow legislation to direct components of the waste stream to processing facilities prior to final disposal consistent with Policy 1.1.1 of this element. The City may opt not to accept for disposal at City owned landfills waste generated outside of the County. Waste that is dedicated to joint ventures with adjacent counties pursuant to an interlocal agreement, shall be accepted for disposal at a rate to be established.

1.4.6

The City's adopted Level of Service (LOS) standard for solid waste disposal shall be a solid waste generation rate of 6.7 lbs. per capita per day.

1.4.7

No development order shall be issued for any area of the City served by a solid waste disposal facility which does not meet the standards of Chapter 9J-5.0055, F.A.C. Specifically, the necessary facility is in place at the time the development permit is issued; or a development permit is issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or the necessary facilities and services are guaranteed in an enforceable development agreement which guarantees that the necessary facilities will be in place when the impacts of the development occur.

<u>Objective 1.5</u> The City shall continue to implement programs to address the problems of illegal dumping of both hazardous and non-hazardous waste materials.

Policies 1.5.1

The City shall improve the enforcement of existing City ordinances, Florida Statutes, and federal laws concerned with illegal dumping by increasing the enforcement staff.

1.5.2

The City shall continue to operate a comprehensive program-concerning illegal dumping which includes education, public awareness, and enforcement penalties.

Docket No. 20190168-WS COJ Comprehensive Plan Exhibit SRW-4, Page 45 of 63 **2030 COMPREHENSIVE PLAN**

INFRASTRUCTURE ELEMENT

SOLID WASTE SUB-ELEMENT

B

DEFINITIONS

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

City of Jacksonville 2030 Comprehensive Plan Infrastructure Element Revised November 2010

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DEFINITIONS

<u>Aerobic Composting</u> - The activity of aerobic microbes (requiring the presence of oxygen) during the composting process.

<u>Anaerobic Bioconversion</u> - The conversion of biodegradable organic matter into biogas, composed of methane and carbon dioxide, through the activity of bacteria in an anaerobic (no oxygen present) environment.

<u>Anaerobic Composting</u> - The activity of anaerobic bacteria (requiring the exclusion of oxygen from the process) during the composting process.

<u>Commercial Wastes</u> - Wastes generated by the commercial and institutional sectors. Physical characteristics of these wastes are similar to those of residential wastes, in that they consist largely of combustible materials in the form of paper and food waste from offices, restaurants, retail establishments, schools, hospitals, motels and churches.

<u>*Composting*</u> - The process by which biological decomposition of the organic constituents of solid waste under controlled conditions occurs.

<u>Development</u> - Has the meaning described in §380.04, Florida Statutes.

<u>Facility Availability</u> - Whether or not a facility is available in a manner to satisfy the Concurrency Management System.

<u>Hazardous Waste</u> - A solid waste, or a combination of solid wastes which, because of its quantity, concentration, or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported, disposed of, stored, treated or otherwise managed.

<u>Industrial Wastes</u> - Wastes generated by industrial processes and manufacturing operations, excluding hazardous wastes. These wastes also include general industrial housekeeping and support activity wastes.

<u>Integrated Solid Waste Management System</u> - A combination of solid waste management and disposal options which meet the community's needs for safe and cost-effective solid waste disposal.

<u>Landfill or Sanitary Landfill</u> - Land on which solid waste is accepted for disposal in accordance with Chapter 62-701, FAC.

<u>Level of Service (LOS)</u> - An indicator of the extent or degree of service provided by, or proposed to be provided by, a facility based on and related to the operational characteristics of the facility. Level of Service shall indicate the capacity per unit of demand for each public facility.

<u>*Recycling*</u> - Any process by which solid waste, or materials which would otherwise become solid waste, are collected, separated, or processed and reused or returned to use in the form of raw materials or products.

<u>Residential Wastes</u> - Mixed household wastes generated by the general population.

Shall - Used to indicate a mandatory action.

<u>Should</u> - Used to indicate an action which is strongly advised.

<u>Solid Waste</u> - Sludge from a waste treatment works, water supply treatment plant, or air pollution control facility or garbage, rubbish, refuse, or other discarded material including solid, liquid, semisolid or contained gaseous material resulting from domestic, industrial, commercial, mining, agricultural or governmental operations.

<u>Solid Waste Facility</u> - Structures or systems designed for the collection, processing or disposal of solid waste, including hazardous wastes and includes transfer stations, processing plants, recycling plants and disposal systems.

<u>Solid Waste Management Facility</u> - Any solid waste disposal area, volume reduction plant, transfer station, or other facility, the purpose of which is resource recovery or the disposal, recycling, processing or storage of solid waste.

<u>Special Wastes</u> - Wastes having special characteristics or requiring special handling. These wastes include tires, oversize bulky wastes, asbestos, liquids, sludges, containers, and materials generated in demolition and construction projects.

<u>Yard Wastes</u> - Vegetative matter resulting from landscaping maintenance and land clearing operations. These wastes are generated in both the residential, commercial and industrial sectors.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT

POTABLE WATER SUB-ELEMENT

A

GOALS, OBJECTIVES AND POLICIES

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

City of Jacksonville 2030 Comprehensive Plan Infrastructure Element Revised November 2010

GOALS, OBJECTIVES AND POLICIES

GOAL 1

JEA shall regionalize water facilities in a manner which adequately corrects existing deficiencies, accommodates future growth, increases system capacity, acquires investor owned systems and incorporates private package plants into the regional system, and interconnects water systems where required while complying with all federal, State, regional and local regulations.

<u>Objective 1.1</u> In order to discourage urban sprawl, to maximize the use of existing facilities, and to coordinate the increase in the capacity of facilities to meet future needs of the City, the JEA shall provide regional water facilities in concert and conformance with the Development Areas Map (Map CI-1) as adopted in the Capital Improvements Element.

Policies 1.1.1

JEA shall provide for regional water facilities associated with development within the Urban Area as defined in the Capital Improvements Element, excluding improvements within the service area of an investor-owned public utility.

1.1.2

JEA shall provide for regional water facilities associated with development within the Suburban Area, as defined in the Capital Improvements Element, excluding improvements within the service area of an investor-owned public utility. The Suburban Areas should be reviewed in the development of the 2030 Comprehensive Plan.

1.1.3

When requested by the Duval County Health Department and where the public water system is available to provide service, the JEA shall inter-tie with private water systems whose water treatment facilities are not in compliance with federal, State, or local regulations.

1.1.4

Investor-owned public utilities, and all parties connecting to them, shall be required to install facilities in compliance with Chapters 654 and 750, Ordinance Code.

1.1.5

Non-regional utility water treatment facilities shall continue to be phased-out and systems intertied to regional water treatment facilities.

1.1.6

JEA shall continue to acquire community and/or investor-owned public utility companies and integrate the systems into the regional network, where analysis of the acquisition indicates that the costs of acquiring, interconnecting and upgrading the facilities to current standards will be offset by the existing and projected rate base of the utility.

1.1.7

All public water supply systems shall be constructed and operated in accordance with all applicable federal, State, regional and local regulations which apply to potable water systems.

1.1.8

All community and/or investor-owned public utility systems involved in the purchase and sales transactions shall be inspected for compliance with existing federal, State, regional and local health and regulatory standards. The acquiring entity shall be notified of all system deficiencies prior to acquisition.

1.1.9

JEA shall prepare an annual report summarizing existing capacity and demand information for the water system.

1.1.10

JEA shall continue to allocate sufficient funding to support staffing, equipping and monitoring of water quality standards in order to maintain compliance with all federal, State and regional requirements.

1.1.11

JEA shall continue to inventory, classify and determine the useful life of its existing water system assets and renew and replace these assets when they become outdated, inefficient, or unusable.

1.1.12

All JEA water systems within the City shall be constructed in accordance with JEA Standards and Specifications, Land Development Procedures Manual, Florida Department of Environmental Protection (FDEP) regulations and other applicable requirements.

1.1.13

JEA shall implement the Five-Year Water System Capital Improvement Program which shall be updated annually and amended as appropriate.

1.1.14

New non-regional water facilities may be allowed as appropriate interim facilities, provided the following requirements are satisfied:

- 1. The facility meets all federal, State, regional and city environmental regulations;
- 2. The developer provides for all operation and maintenance costs;
- 3. The developer provides for phase out costs where appropriate;
- 4. The developer enters into an agreement with JEA specifying the date and manner of phase out;
- 5. The facility operator will reimburse JEA for costs of enforcement of violations of water quality standards; and

6. Minimum fire protection levels of service as specified in Policy 1.3.1 are provided for.

1.1.15

The City shall amend the 2030 Comprehensive Plan to continue implementation of the Water Supply Plan. The City shall continue to identify and implement traditional and alternative water supply projects, including conservation and water reuse, that are consistent with the SJRWMD District Water Supply Plan to meet the that City's water supply needs.

<u>Objective 1.2</u> JEA shall develop and maintain a comprehensive water resources management plan for the City's present and future service areas, with the primary objective being the provision of an adequate supply of high-quality water, carefully planned and properly managed with due regard for the environment.

Policies 1.2.1

JEA shall analyze the water quality of its existing water supply wells and implement improvements, modifications, and/or operational strategies to improve the developed raw water quality.

1.2.2

JEA shall investigate the water resources of the City and identify areas for new water supply development in order to meet the City's future water supply requirements. The program shall be coordinated with the St. Johns River Water Management District.

1.2.3

The City shall implement the Wellhead Protection Ordinance to protect its potable water supply source. Improperly constructed or maintained Hawthorne Group and Floridan Aquifer private wells in proximity to a Public Potable Water well within Duval County are potentially harmful to the drinking water supply of the City of Jacksonville. A Pathway Focused Approach to prevent migration of contamination from the shallow aquifer into the Floridan aquifer is reasonable and prudent to protect public water supplies. The intent of this policy is to protect and safeguard the health, safety and welfare of the residents of Duval County by establishing a Pathway Focused Approach to wellhead protection that safeguards the Floridan aquifer from intrusion of any contaminants that may jeopardize present and future public water supply wells.

Within Wellhead Protection Areas, the following shall apply:

- 1. Within a 500-foot radius around an existing Public Potable Water well, those actions and uses established by the Florida Department of Environmental Protection in Rule 62-521.400, Fla. Admin. Code shall be prohibited.
- 2. Pursuant to Chapter 366 City of Jacksonville Municipal Code, no existing private wells shall be deepened and no new wells shall be constructed within designated Wellhead Protection Areas that penetrate a portion of the Hawthorne Group or

the Floridan Aquifer without first obtaining a well construction permit from the City of Jacksonville Environmental Quality Division (EQD) as provided in Environmental Protection Board Rule 8 and including a review of areas of known contamination at or near the proposed or existing well location. All new wells within such areas must be fully grouted.

3. Pursuant to Chapter 366 City of Jacksonville Municipal Code, abandonment of existing wells shall be in accordance with applicable SJRWMD requirements and a copy of the plugging and abandonment report shall be submitted to the EQD.

1.2.4

JEA shall acquire land to obtain water and water rights for municipal uses and purposes. Such acquisition shall be conducted in areas that are selected to produce high quality and quantity of water, with minimal impact to the resource and with consideration given to reasonable cost of development. Such future supplies shall be developed in a manner as will give priority to reducing environmental effects of excessive withdrawals from concentrated areas. JEA shall request that the SJRWMD conduct investigations and develop data for use by the City in conducting this program.

1.2.5

JEA shall identify, evaluate, and select the most cost-effective means of ensuring an adequate water supply including groundwater supply, reuse of treated wastewater, surface water supply, demand reduction, conservation, and peak saving through system integration. This evaluation shall be conducted as a part of the Water System Master Plan Update and in conjunction with the SJRWMD.

1.2.6

Lands currently owned by the City and its various agencies shall be utilized to the maximum extent possible for water resource development prior to acquiring additional lands.

1.2.7

The transfer of water within the public utility system for purposes of water supply, water quality and/or water management shall be carried out in place of the construction of new treatment facilities which have higher capital or operating costs than the transfer facilities.

1.2.8

The water supply needs of areas from which water is withdrawn by JEA must be provided for in all future water resource development projects.

<u>Objective 1.3</u> JEA shall provide adequate water facility capacity to meet future needs.

Policies 1.3.1

To assure that an adequate Level of Service is provided by water facilities within the Water Service Area, the following standards shall be met:

1. Existing and proposed water facilities shall be designed and constructed in such a manner as to maintain the capacity associated with reasonably expected water demand consistent with all federal, State, and local standards. The capacity shall be based on the following minimum water consumption rates:

Residential - 100 gallons per capita per day (GPCD)

Non-Residential - As it applies to non-residential land uses, demand for potable water will be evaluated on a site specific basis, in accordance with Table PW-1.

GPD
3-5
60
10
50
15
100-150
50
35
50
50
100
25
-

¹ Goodman, Alvin S. "Principals of Water Resource Planning", Prentice Hall copyright 1984

TABLE PW-1 COMMERCIAL WATER DEMAND IN THE UNITED STATES ¹	
TYPES OF ESTABLISHMENTS	GPD
Boarding houses (per boarder)	50
Additional kitchen requirements for non-resident boarders	10
Luxury (per person)	100-150
Multiple family apartments (per resident)	40
Rooming houses (per resident)	60
Single family (per resident)	50-75
Estates (per resident)	100-150
Factories (gal. Per person per shift)	15-35
Hotels with private baths (two persons per room)	60
Hotels without private baths (per person)	50
Institutions other than hospitals (per person)	5-125
Hospitals (per bed)	250-40
Laundries, self-service (gal. Per washing, per customer)	50
Motels with bath, toilet and kitchen facilities (per bed space)	50
Motels with bed and toilet (per bed space)	40
Parks:	
Overnight with flush toilets (per camper)	25
Trailers with individual bath units (per camper)	50
Picnic Areas:	
With bath houses, showers, and flush toilets (per picnicker)	20
With toilet facilities only (gal. Per picnicker)	10
Restaurants with toilet facilities (per patron)	7-10
Without toilet facilities (per patron)	21-23
With bar and cocktail lounge (additional quantity (per patron)	2
Schools:	

TABLE PW-1 COMMERCIAL WATER DEMAND IN THE UNITED STATES ¹		
TYPES OF ESTABLISHMENTS	GPD	
Boarding (per pupil)	75-100	
Day with cafeteria, gymnasium and showers (per pupil)	25	
Day with cafeteria, but no gymnasiums or showers (per pupil)	20	
Day without cafeteria, gymnasiums or showers (per pupil)	15	
Service stations (per vehicle)	10	
Stores (per toilet room)	400	
Swimming pools (per swimmer)	10	
Theaters:		
Drive-in (per car space)	5	
Movie (per auditorium seat)	5	
Workers:		
Construction (per person per shift)	50	
Day (school or offices per person per shift)	15	

- 2. The water supply system within the City shall operate with a rated capacity which is no less than 5 percent above the historical maximum daily flow.
- 3. Minimum Pressure--All systems and grids:

CONDITION	PRESSURE
Minimum	20 psi
Normal Operations	40 to 80 psi

- 4. Storage Volume
 - a. System-wide storage capacity for the regional system for finished water shall equal no less than 17 percent of system-wide average daily demand.
 - b. Nongrid systems without ground or elevated storage reservoirs shall provide for ten (10) minute retention time within the hydropneumatic tank and adequate and redundant well capacity to meet the fire peak demand condition of the system.

- 5. Fire Flow
 - a. Unless otherwise stipulated by the City Public Safety Department, minimum fire flows based on land use shall be maintained as follows:

LAND USE	GALLONS PER MINU	<u>ГЕ (GPM)</u>
Single Family		500
2-family homes and N	Mobile Homes	750
Multi-family Resident	ial, and Commercial	1,500
Institutional and Indus	strial	2,000

1.3.2

No development order authorizing new development or a significant expansion of an existing user shall be issued for any area of the City served by a water facility which does not meet the standards in Chapter 9J-5.0055 (3)(a) 1, 2., F.A.C. Specifically, the necessary facilities, including adequate water supplies, will be in place and available to serve the new development when the development impacts occur, or the necessary facilities are guaranteed by an enforceable development agreement, issued pursuant to Chapter 163.3220, *F.S.*; or Chapter 380, *F.S.* Prior to approval of a building permit or its functional equivalent, the City shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance of a certificate of occupancy or its functional equivalent

1.3.3

The City shall establish procedures and programs to monitor Levels of Service (LOS) of each facility for use by agencies which issue development orders or permits within the time required by Section 163.3202, F.S.

1.3.4

All improvements for replacement, expansion or increase in capacity shall be compatible with the adopted Level of Service standards for water usage.

1.3.5

Through permit review and enforcement of State and local laws, JEA shall ensure the continued distribution of potable water through both public and private water systems in compliance with the above specified Level of Service (LOS) standards.

<u>Objective 1.4</u> JEA shall plan and provide regional facilities to accommodate the ultimate needs of the community through implementation of JEA related the projects listed in the Capital Improvements Element.

Policies 1.4.1

Water system improvements will be evaluated for funding in accordance with the following general criteria:

- 1. Improvements which are necessary to protect the health, safety and environmental integrity of the community which are consistent with the policies of the 2030 Comprehensive Plan and the applicable federal, State, regional and local regulatory requirements.
- Improvements which are necessary to meet existing deficiencies in capacity or performance or reliability. These include the rehabilitation or replacement of deteriorating facilities which fail or threaten to fail to meet health, safety or environmental standards.
- 3. Improvements which extend regional service to previously unserved areas within the Urban and Suburban Areas as defined in the Future Land Use Element.
- 4. Improvements which have been identified in adopted functional plans and address system details which are beyond the scope of the comprehensive plan for water facilities and are consistent with the goals, objectives and policies of the 2030 Comprehensive Plan.
- 5. Cost-effective improvements to expand capacity, maximize operational efficiency and increase productivity.
- 6. JEA shall attempt to optimize use of existing facilities through improvements, expansion and modification of process control system and improvements to operational procedures before spending additional public funds for new facilities.

1.4.2

Water facility improvements will be undertaken in conformance with the schedule included in the Capital Improvements Element.

<u>Objective 1.5</u> JEA shall provide regional water supply and treatment capacity to maintain the adopted Level of Service standards.

Policy 1.5.1

JEA's water treatment facilities shall supply water which meets all applicable federal, State, regional and local standards.

<u>Objective 1.6</u> JEA shall maintain the existing transmission and distribution system, and provide inspection on new construction so as to ensure the maintenance of the adopted Level of Service standards.

Policies 1.6.1

JEA shall maintain an inventory of all water treatment facilities which identifies location, physical characteristics, age, service condition and structural condition.

1.6.2

JEA shall continue an aggressive rehabilitation and replacement program directed at the older portions of the utility's existing system.

1.6.3

All required federal, State, regional and local permits shall be obtained before JEA undertakes, or authorizes contractors to undertake, construction and/or operation of new facilities.

1.6.4

JEA shall provide for the inspection of new water facilities construction to insure that the City standards are enforced.

1.6.5

JEA shall install utility transmission mains of a size adequate for projected future needs along the major water demand corridors.

1.6.6

The City shall, through modifications to Building and Zoning Codes and Land Development Procedures Manual, pursue redevelopment and renewal in areas already serviced by utilities to attain the optimum use of existing services and promote urban infill.

1.6.7

JEA shall continue and expand existing beneficial water system programs which may include but are not limited to:

- 1. Backflow prevention program
- 2. Leak detection program
- 3. Valve and hydrant operation, marking and testing program
- 4. Meter testing program
- 5. Instrumentation and control systems replacement program
- 6. Operator training program
- 7. Water conservation program

1.6.8

JEA shall continue to utilize a system-wide, computer-based hydraulic analysis program for the determination of facility and growth needs and shall recalibrate the model every five years as part of the update of the water system master plan.

1.6.9

JEA shall conduct a water system audit periodically to minimize unaccounted for water and improve water records and accountability within its water system.

1.6.10

JEA shall on a continuing basis loop appropriate water mains to reduce dead ends, improve system water quality, increase reliability, and enhance pressure and fire protection capabilities.

1.6.11

JEA shall continue to evaluate its emergency power capability in order to ensure compliance with accepted engineering practices, utility standards and regulatory requirement.

1.6.12

JEA shall develop and maintain an automated water system management information system for its water facility records, mapping, preventive maintenance, stock and inventory control and other related functions.

<u>Objective 1.7</u> JEA and the City shall continue to enforce the City's reuse ordinance in compliance with the City's consumptive use permit requirements as issued by the SJRWMD.

Policies 1.7.1

JEA and the City shall periodically evaluate its reuse ordinance to ensure its effectiveness.

1.7.2

The City shall request that SJRWMD amend all non-potable consumptive use permits in Jacksonville issued by the SJRWMD to require that the permit holder accept and utilize reuse water when made available by the City.

1.7.3

In order to conserve fresh water, JEA, subject to permitting requirements of state law, shall have first priority of reclaimed municipal water use for electrical power production-related purposes, such as cooling water for generating units, because they constitute essential public infrastructure; provided, however, that following such use the remainder of such water, if any, shall be returned to the JEA reclaimed water system for further reuse so long as all water quality requirements are met.

<u>Objective 1.8</u> JEA shall continue and expand the Citywide water conservation and demand reduction programs in order to reduce per capita consumption of potable water by up to ten percent (10%) by 2013, through implementation of effective water conservation measures and demand reduction program as reflected in Aquifer Recharge Sub-Element - Objective 2.1 and 2.2

Policies 1.8.1

JEA shall continue to establish and utilize potable water conservation strategies and techniques in the operation of City potable water facilities.

1.8.2

The approval of new water system connections shall be conditioned upon compliance with the Building Code requirements to assure the use of water conservation practices and techniques.

1.8.3

The City shall continue to implement requirements for low water use features and vegetation and water conserving irrigation practices in its landscape and tree protection regulations.

1.8.4

The City shall continue to implement its water conservation ordinance.

1.8.5

JEA in cooperation with other departments shall establish and maintain a water conservation public education program.

1.8.6

The City shall request that SJRWMD amend all non-potable consumptive use permits in Jacksonville issued by the SJRWMD to require that the permit holder accept and utilize reuse water when made available by the City.

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2030 COMPREHENSIVE PLAN

INFRASTRUCTURE ELEMENT

POTABLE WATER SUB-ELEMENT

B

DEFINITIONS

JACKSONVILLE PLANNING AND DEVELOPMENT DEPARTMENT

City of Jacksonville 2030 Comprehensive Plan Infrastructure Element Revised November 2010

DEFINITIONS

<u>Coastal High Hazard Areas</u> – The Coastal High-Hazard Area is the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model as established by the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model as established by the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model as established by the most current Northeast Florida Hurricane Evacuation study. It is shown on Map C-18. A property shall be deemed to be within the CHHA as depicted on Map C-18 unless site specific, reliable data and analysis demonstrates otherwise.

<u>Community Owned Public Utility Company</u> - A water or sewer utility owned by non-profit corporations providing service solely to members who own and control such non-profit corporations, associations or cooperatives.

<u>Community Water System</u> - A public water system which regularly serves twenty-five year round residents.

<u>Cone of Influence</u> - An area around one or more major waterwells, the boundary of which is determined by the government agency having specific statutory authority to make such a determination based on groundwater travel or draw down depth.

<u>Conservation Uses</u> - Activities within land areas designated for the purpose of conserving or protecting natural resources or environmental quality and includes areas designated for such purposes as flood control, protection of quality or quantity of groundwater or surface water, flood plain management, fisheries management, or protection of vegetative communities or wildlife habitats.

<u>CUP - Consumptive Use Permit</u> - A permit for any use of water which reduces the supply from which it is withdrawn or diverted. A consumptive use permit must be obtained from the Governing Board of the St. Johns River Water Management District before withdrawal of water shall be commenced for quantities set forth in Chapter 40D-2.031, F.A.C.

<u>DCHD</u> - Duval County Health Department

<u>FDEP</u> - Florida Department of Environmental Protection

<u>GPCD</u> - Gallons Per Capita Per Day

<u>Investor Owned Public Utility Company</u> - A water or sewer utility company which, except as provided in Section 367.022, F.S., is providing or is proposed to provide, water or sewer service to the public for compensation.

<u>JEA</u> – Water, Sewer & Electric Utility serving community in and around Duval County; previously known as Jacksonville Electric Authority.

<u>MG</u> - Million Gallons

<u>MGD</u> - Million Gallons Per Day

<u>Non-Community Water System</u> - A public water system which provides water for human consumption and serves at least 25 individuals at least 60 days out of the year, but which is not a community water system.

<u>PSC</u> - Florida Public Service Commission

Potable Water - Water satisfactory for drinking, culinary, and domestic purposes.

<u>Potable Water Facilities</u> - A system of structures designed to collect, treat, or distribute potable water, and includes water wells, treatment plants, reservoirs, and distribution mains.

<u>Potable Water Well Fields</u> - The site of one or more water wells which supply potable water for human consumption to a water system which serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents.

<u>*PSI*</u> - Pounds per square inch, a measure of pressure

<u>Public Water System</u> - A system that provides water for human consumption to at least twenty-five individuals at least sixty days out of the year.

Shall - The word "shall" indicates a mandatory action

<u>Should</u> - The word "should" indicates an action that is strongly advised.

<u>SJRWMD</u> - St. Johns River Water Management District, Chapter 373 Florida Statutes

<u>Water Recharge Areas</u> - Lands or water areas through which groundwater is replenished.

<u>Water Wells</u> - Wells executed, drilled, dug, or driven for the supply of industrial, agricultural or potable water for general public consumption

<u>Wellhead Protection Area</u> - An area consisting of a 750-foot radial setback distance around a Public Potable Water well or Wellfield where the most stringent measures are provided to protect the ground water source for a potable water well and includes the surface and subsurface area surrounding the well.

Docket No. 20190168-WS JEA Proposal to 301 Partners Exhibit SRW-5, Page 1 of 4

21 West Church Street Jacksonville, Florida 32202-3139

August 9, 2019



Draft Terms:

Water System		
Торіс	301 Partners LLC	JEA
Initial Water Treatment Plant	 Design, permits and constructs to JEA standards, Phasing TBD Provide CUP to serve total proposed development Dedicates to JEA for O&M. Guarantees available Real Estate for initial plant capacity as well as that needed for future expansion (x upland acres). 	 Plan review, construction inspection according to JEA policies and procedures. Purchases property in accordance with JEA real estate policy for initial plant capacity with option to buy for future expansion. Own plant and provides 0&M Waives capacity fees for [X,XXX] ERCs.
Water Treatment Plant Expansion	• Guarantees available Real Estate for future expansion ([XX] upland acres).	 Design, permits, constructs, owns, operates and maintains. Purchases property in accordance with JEA real estate policy. JEA has option to expand Initial WTP or connect water onsite distribution piping to the offsite JEA water grid, or combination thereof. Needs to be determined by JEA Planning or When 50% of the ERCs are issued meters, then permitting commences, at 75% construction commences, at 90% construction is complete and infrastructure is in operation
Water Storage and Re-pump	 Guarantees available Real Estate for future expansion ([XX] upland acres) internal to the development property. Coordinates project phasing with JEA so locations and needs may be evaluated. 	Design, permits, constructs, owns, operates and maintains. Purchases property in accordance with JEA real estate policy.
Water Onsite Distribution Piping	 Design, permits and constructs to JEA standards. Dedicates to JEA for O&M. 	 Plan review, construction inspection according to JEA policies and procedures. Owns and provides O&M

Wastewater System			
Торіс	301 Partners LLC	JEA	
Initial Wastewater Treatment Plant (Package Plant for first phase)	 Design, permits and constructs to JEA standards Dedicates to JEA for O&M. Guarantees available Real Estate for initial plant capacity as well that needed for future expansion ([XX] upland acres). 	 Plan review, construction inspection according to JEA policies and procedures. Purchases property in accordance with JEA real estate policy for initial plant capacity with option to buy for future expansion. Own plant and provides O&M Waives capacity fees for [X,XXX] ERCs. 	
Regional Reclamation Facility and Offsite Force Main	 Design, permits and constructs to JEA standards offsite force main and master pump station for conveyance of flow to the Regional WRF. Sizing to be based on development build-out flows. Dedicates to JEA for O&M. 	• Design, permits, constructs, owns, operates and maintains Regional WRF. Determines site location and responsible for all real estate needs	
Wastewater Onsite Collection Piping/ Pump Stations	 Design, permits and constructs to JEA standards. Dedicates to JEA for O&M. 	 Plan review, construction inspection according to JEA policies and procedures. Owns and provides O&M 	

Reclaimed Water System			
Торіс	301 Partners LLC	JEA	
Reclaim Water Storage and Re-pump (Future)	 Guarantees available Real Estate for facility (x upland acres) internal to the development property. Coordinates project phasing with JEA so location and needs may be evaluated. 	 Design, permits, constructs, owns, operates and maintains. Purchases property in accordance with JEA real estate policy. 	
Reclaim Water Augmentation Supply	 Provide storage and augmentation capacity during the initial phases of development 	NA	
Reclaim Water Transmission Piping	NA	• Reclaimed main from 301 to Regional WRF. Min size to meet the needs for buildout of the 301 development. Design, permits, constructs, owns, operates and maintains.	
Reclaim Water Distribution Piping	 Design, permits and constructs to JEA standards. Dedicates to JEA for O&M. System may be served by potable jumper as needed. 	 Plan review, construction inspection according to JEA policies and procedures. Owns and provides O&M 	