



**Minutes of the
Crystal River City Council
Regular Council Meeting
Monday, August 13th, 2018 @ 7:00 p.m.
Council Chamber, City Hall**

1. CALL TO ORDER

Vice Mayor Brown called the meeting to order at 7:00 p.m.

Council members Present: Vice Mayor Brown, Council member Gudis, Council member Fitzpatrick, Council member Holmes.

Council members absent: Mayor Farley

Staff Present: City Manager Burnell, City Attorney Rey, City Clerk Fink, Assistant City Manager Jack Dumas, Finance Director Michelle Russell, Public Works Director Beau Keene, and Planning and Development Services Director Jackie Gorman.

Council member Holmes led the invocation and Vice Mayor Brown led in the Pledge of Allegiance. Vice Mayor Brown recognized County Commissioner Jeff Kinnard and City of Crystal River Mayor-Elect Joe Meek, both of whom were in attendance.

2. ADOPTION OF AGENDA

Motion to adopt the agenda was made by Council member Fitzpatrick; seconded by Council member Gudis. Motion carried 4-0.

3. PRESENTATIONS

A. *Purple Heart Day Proclamation.....Commander Bud Allen*

Vice Mayor Brown presented the proclamation to Commander Bud Allen, who accepted the proclamation, discussed the history behind Purple Heart Day and mission and efforts of the Military Order of the Purple Heart and invited fellow Chapter 776 members and other attendees to join in a photo. Council member purpose Gudis also commented on his attendance to their annual breakfast.

B. *Backflow and Grease Ordinance Presentation.....Mittauer & Associates, Inc. Consulting Engineers*

Greg Lang presents "Introduction of Proposed Ordinances: Cross Connection Control, FOG- Fats, Oils & Grease" (Attachment "A") and advised Council members on the scheduling of a public workshop to consider adoption of policies to address related issues.

4. UNFINISHED BUSINESS

5. APPROVAL OF CONSENT AGENDA

A. Motion to approve minutes from the Regular Council Meeting held July 9th, 2018 and Special Council Meeting held July 19th, 2018

- B. Motion to approve the scheduling of a Public Workshop for development of backflow prevention and grease control ordinances for Thursday, September 6, 2018 at 1:00 p.m. to be held in the Council Chambers

Background: [Agenda Sheet **Requested Motion:** **Motion to approve the scheduling of a Public Workshop for development of backflow prevention and grease control ordinances for Thursday, September 6, 2018 at 1:00 p.m. to be held in the Council Chambers.**

Summary: On December 11, 2017 Council authorized Mittauer & Associates to develop draft backflow prevention and grease control ordinances; the first drafts have been completed and are ready for comment and input from Council and the public.

This item is companion to a presentation which is scheduled to occur at the beginning of this agenda session. Mittauer will present the initial findings and recommendations generically so as to provide a starting point for open discussion.

Since these ordinances have the potential to result in direct financial impacts to existing and proposed residences, businesses, builders, etc., Staff deems it especially important to solicit input from stakeholders.

As such, Staff is requesting authorization to schedule a Public Workshop for development of backflow prevention and grease control ordinances for Thursday, September 6, 2018 at 1:00 p.m. to be held in the Council Chambers.

Staff Recommendation: Approval of the meeting for the place, time, and date listed above.
End of Agenda Sheet]

- C. Motion to approve an Inter-local agreement with the Citrus County Board of County Commissioners for disposal of solid waste for the 2018/2019 fiscal year beginning October 1, 2018

Background: [Agenda Sheet **Requested Motion:** **Motion to approve an Inter-local agreement with the Citrus County Board of County Commissioners for disposal of solid waste for the 2018/2019 fiscal year beginning October 1, 2018.**

Summary: Every year the City and Citrus County enter into an Inter-local agreement to establish the solid waste disposal rates for the upcoming fiscal year. For FY19, the Citrus County Board of County Commissioners voted to keep the rates unchanged for municipalities:

Solid Waste – City Contract Haulers	\$32.23Per ton
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Staff Recommendation: Staff recommends approval of the FY2019 Inter-local Agreement for Solid Waste Disposal.
End of Agenda Sheet]

- D. Update regarding status of M.O.U. for Debris Removal and Monitoring Services

Background: [Agenda Sheet **Requested Motion:** **None- Update regarding status of M.O.U. for Debris Removal and Monitoring Services**

Summary:
The City and Citrus County have a Memorandum of Understanding (MOU) for debris removal and monitoring services in the event of a major or catastrophic storm. This MOU was signed in August 2012 and

will automatically renew each year unless one of the parties cancels the MOU. Staff confirmed the status of the MOU on July 12, 2018 via the Citrus County Public Works Department.

Staff Recommendation: Information only.

End of Agenda Sheet]

E. Motion to approve a Special Event Permit for the Manatee Fun Run

Background: [Agenda Sheet **Requested Motion: Motion to approve the special events permit and road closure request submitted by Jordan Kimball for the Manatee 5K Fun Run.**

Summary: Jordan Kimball, a local resident who has recently found fame on TV, submitted a special event application for a new event, the Manatee 5K Fun Run to be held on Saturday, August 25, 2018 from 9:00am-1:00pm to raise awareness of and benefit Anna's Foundation. The event will take place and begin from the vacant property next to Margarita Breeze and will include: a Fun Run, food truck, vendors, and meet and greets with Jordan. The run will begin at Margarita Breeze and head East on Paradise Point Road, turn North on Three Sisters Springs Trail, turn West on Kings Bay Drive and loop back to Margarita Breeze. The road closure request is for all of these roads long enough for the runners to get through. CCSO will assist in the road closures.

Staff Recommendation: Staff recommends approval.

End of Agenda Sheet]

F. Motion to approve waivers of open container and Road Closures for Scarecrow Fest

Background: [Agenda Sheet **Requested Motion: Motion to approve the road closure request and waiver of open container for the 2018 Scarecrow Festival.**

Summary: The Special Events Department is requesting a road closure and waiver of open container for the 31st annual Scarecrow Festival to be held on Saturday, October 13, 2018 from 10:00am-7:00pm. The festival will take place on North Citrus Avenue and on the grounds of Heritage Village. The road closure request is for North Citrus Avenue from Crystal Street to Highway 19 and NW 7th Avenue from NW 1st Avenue to North Citrus Avenue. The events department is partnering with Heritage Village to expand this event to include beer and wine, live entertainment, and an expansion of vendors.

Staff Recommendation: Staff recommends approval

End of Agenda Sheet]

G. Motion to approve waivers of open container for Music Under the Stars

Background: [Agenda Sheet **Requested Motion: Motion to approve the special events permit and road closure request submitted by Bayfront Health Seven Rivers and Citrus Road Runners, Inc. for the Bayfront Health Seven Rivers Kings Bay 5K race.**

Summary: Citrus Road Runners and Bayfront Health Seven Rivers have submitted a special event application to hold their annual 5k and 1 mile walk on Saturday, October 20, 2018 from 6:00am-10:00am. They will begin set up at 5:30am at Hunter Springs Park. They are requesting several road closures including: NE 1st Ave., NE 2nd St. (East of NE 1st Ave.) and NE 2nd Court (from NE 3rd Street to Kings Bay Drive) from 6:30am-8:30am. CCSO will assist with the road closures. This is an annual event that typically occurs the same day as the Stone Crab Jam but they have changed the date this year.

Staff Recommendation: Staff recommends approval.

End of Agenda Sheet]

- H. Motion to approve a purchase from Barney's Pumps in the amount of \$10,520.00 for two (2) replacement sewage pumps for Lift Station #W-21

Background: [Agenda Sheet

Requested Motion: Motion to approve a purchase from Barney's Pumps in the amount of \$10,520.00 for two (2) replacement sewage pumps for Lift Station #W-21

Summary: Lift Station #W-21 is a master lift station serving a significant portion of Woodland Estates. One of the two pumps recently failed due to age and the station is down to one pump. Since the pumps are over 35 years old, Staff recommends replacing both pumps at this time.

Staff requests the approval of a tax-exempt purchase from Barney's Pumps in the amount of \$10,520.00 for direct replacement Hydromatic pumps.

Barney's is the sole-source distributor to the City for Hydromatic Pumps.

Staff Recommendation: Approve the requested motion.

End of Agenda Sheet]

Motion to approve the consent agenda was made by Council member Gudis; seconded by Council member Holmes. Motion carried 4-0.

6. PUBLIC INPUT

(Time Limit of Three Minutes)

Chris Gregoriou, Chair of Ad Hoc Coordinating Committee for Veteran's Appreciation Week- Thanked Council for Purple Heart Proclamation and consideration of item 9C and distributed an agenda for Veteran's Appreciation Week. (Attachment "B").

Council member Gudis recognized Mr. Gregoriou's efforts to initiate American flag displays throughout the City.

Pete Langolois- 3rd Ave SE- Expressed concerns regarding conflicting city ordinances related to noise and resulting law enforcement difficulty, described recent a noise related incident and distributed email containing City code references in conflict (Attachment "C").

Joe Meek-Mayor-Elect- City of Crystal River-Addressed Council regarding his upcoming term as Mayor and the opportunity to work with council and staff.

Pete Langolois- Save Crystal River, Inc. - Reported on recent motion passed by the Save Crystal River, Inc. Board to request for government support for the purchase of signage to address issues related to damage of water bottoms from anchors and props.

Council discussion was held regarding educating the public on vegetation replanting efforts.

Phil Jannarone-1405 SE 5th Avenue- Commented on a discussion held with Gator Dredging staff regarding cage design and damage caused by anchors.

Phillis Rosetti- Reported on a Waterfronts Advisory Board agenda item to discuss the use of power poles and protection of grass plantings.

Discussion was held regarding cost of power poles and potential ways to incentivize their use.

7. PUBLIC HEARING

A. Consideration of approval of Ordinance No. 18-O-07 rezoning 61.63 acres for Kingwood Crystal River Resort from High Intensity Commercial (CH) and Medium Density Residential (R-2) to a Planned Unit Development (PUD) on Final Reading **QUASI-JUDICIAL**

AN ORDINANCE AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF CRYSTAL RIVER, FLORIDA, CHANGING THE ZONING ON PROPERTIES OWNED BY KINGWOOD CRYSTAL RIVER RESORT CORPORATION, 400 CURIE DRIVE, ALPHARETTA GA 30005 (61.63 ACRES MOL), PARCELS 17E18S33 41300, 17E18S33 42000 0060, AND A PORTION OF 17E18S33 14000 0050 IN THE RECORDS OF THE CITRUS COUNTY PROPERTY APPRAISER FROM MEDIUM DENSITY RESIDENTIAL (R-2) AND HIGH INTENSITY COMMERCIAL (CH) TO PLANNED UNIT DEVELOPMENT (PUD) AS DESCRIBED IN SECTION 3; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

Background: [Agenda sheet] **Requested Motion: Motion to approve Ordinance No. 18-O-07 rezoning 61.63 acres for Kingwood Crystal River Resort from High Intensity Commercial (CH) and Medium Density Residential (R-2) to a Planned Unit Development (PUD) on Final Reading.**

Summary: The proposed Plantation Outpost Club and Resort consists of 61.63 acres located off of Ft. Island Trail. As shown on the attached map this property makes up a part of the Plantation Golf Course.

Attached you will find Ordinance 18-O-07 that changes the zoning from High Intensity Commercial (CH) to a Planned Unit Development (PUD). The project will consist of a 294-RV lots, a guard house and sales center, clubhouse and pool, a canoe house and storage, gazebos, tennis courts, volleyball courts, guard house, bath house, and laundry building to be completed in 5 Phases over a period of 9 years (Phasing changed since the first reading) as follows:

DEVELOPMENT PHASING SCHEDULE (ESTIMATE) –

- PHASE 1 - 64 LOTS COMPLETED 2018
- PHASE 2 - 78 LOTS COMPLETED 2021 (3 YEARS)
- PHASE 3 - 51 LOTS COMPLETED 2023 (5 YEARS)
- PHASE 4 - 51 LOTS COMPLETED 2025 (7 YEARS)
- PHASE 5 - 50 LOTS COMPLETED 2027 (9 YEARS)

During the Public Hearing for 1st Reading we were asked to clarify the following issues:

1. Public concern with fertilizers/contamination.

Response from Developer - We utilize 100% environmentally friendly products on the golf course.

2. The photos on the plan indicated two (2) RV Parking pads.

Response from Developer - We have two options for the lots – one for the park model units with a RV and one for the outside storage and outdoor kitchen with a RV. The Developer plans to have 100 of the lots utilizing park models.

3. Kimley Horn had “6 two-story condominiums” in the staff report.

Response from Developer - The area listed as condominiums are a town center and the plans have been revised to reflect same.

Attached please find the process outlined for the approval process of the PUD once the zoning is approved. You will see that this development will need to obtain several approvals as it moves forward with construction.

The proposed Kingwood Crystal River Resort requires the following relief from the City's LDC for High Intensity Commercial Zoning Districts:

*Setbacks for each lot will deviate from the required setbacks –

For RV's Proposed: 15' front; 5' rear; 5' side
 Required: 25' front; 25' rear; 10' side

For Commercial Town Center setbacks:

 Proposed: 40' front; 25' rear; 15' side
 Required: 25' front; 25' rear; 10' side

*RV Lot dimensions –

 Proposed: 2,970 SF min
 Required: 12,000 SF minimum lot size

*Maximum Impervious

 Proposed: 65%
 Required: 65% Waterfront

It is important to understand that during this phase of the PUD we are requesting zoning approval. Extensive review of the site plan will take place during each phase; this includes addressing issues raised by regulatory agencies and including their comments, if any, in the Development Agreement.

We will have a representative from the Developer attending the meeting along with Kimley Horn who has been retained by the City to assist with this review.

Staff Recommendation: Approval

End of Agenda Sheet]

The City Clerk swore in all individuals wishing to testify on all Quasi-Judicial matters being heard.

Vice Mayor Brown called for disclosure of any conflicts of interest or ex parte communications.

Conflict of Interest: There was none.

Ex Parte Communications: All Council members present disclosed receipt of letter from Sandra and Anthony Mozo. (ATTACHMENT A).

Staff Presentation: Ms. Gorman presented the staff report, entering it into the record and noting changes made to the phasing schedule since the first public hearing and inclusion of the platting process for Council; reference.

Vice Mayor Brown expressed concerns regarding soil testing and Ms. Gorman and City Attorney Rey clarified that the zoning was the matter under consideration rather than site plan. Discussion was held regarding the various approval phases of a Planned Unit Development and the Commercial Land Use status of the property.

Gene Lacedo- Kimley-Horn- 101 E Silver Springs Blvd- Professional Engineer (Licensed in the State of Florida- #75547) Confirmed his review of the zoning application on behalf of the City and offered to address any questions. Mr. Lacedo confirmed that the matter before Council is consideration of rezoning the parcel.

Applicant's Presentation:

Jason Smith- JM Smith Engineering- 1555 Clarkesville Street- Cornelia, GA- Offered to address any questions, outlined the variety of studies conducted as part of the process, including traffic, environmental assessment, etc., noted awareness of existing concerns and confirmed that soil sampling would be conducted. He also confirmed that there were no existing issues related to the property.

Public Hearing:

Phil Jannarone- 1405 SE 5th Avenue- Confirmed that approval was recommended by the Planning Commission.

Anthony Mozo- 9564 W. Plantation Lane- Spoke in opposition of the ordinance, noting incompatibility with existing zoning with in the neighborhood density concerns, and environmental concerns. He also suggested that City staff seek guidance from County staff that has had experience in closing golf courses with soil contamination issues.

Applicant Rebuttal: There was none.

Motion to approve Ordinance No. 18-O-07 rezoning 61.63 acres for Kingwood Crystal River Resort from High Intensity Commercial (CH) and Medium Density Residential (R-2) to a Planned Unit Development (PUD) (based on the facts presented) on Final Reading was made by Council member Fitzpatrick; seconded by Council member Holmes. Motion carried unanimously.

- B. Consideration of approval of Ordinance No. 18-O-12 for a Small Scale Land Use Amendment for 1.49 Acres MOL of property owned by Centerstate Bank of Florida NA, located between NE 5th Street & NE 3rd Street and between NE 9th Avenue and NE 10th Avenue, Crystal River, FL on first reading and setting a public hearing for August 29, 2018 **QUASI-JUDICIAL**

ORDINANCE 18-O-12 - AN ORDINANCE OF THE CITY OF CRYSTAL RIVER, FLORIDA, PROVIDING FOR A SMALL-SCALE AMENDMENT TO THE FUTURE LAND USE MAP OF THE COMPREHENSIVE PLAN, RECLASSIFYING 1.49 ACRES (MOL) OF PROPERTY OWNED BY CENTERSTATE BANK OF FLORIDA NA, LOCATED BETWEEN NE 5TH STREET AND NE 3RD STREET AND BETWEEN NE 9TH AVENUE AND NE 10TH AVENUE AS DESCRIBED IN THE RECORDS OF THE CITRUS COUNTY PROPERTY APPRAISER (17E18S220020 3320) , FROM HIGH DENSITY RESIDENTIAL (HDR) LAND USE TO HIGHWAY COMMERCIAL (HC) LAND USE; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

Background: [Agenda Sheet Requested Motion: Motion to approve Ordinance No. 18-O-12 for a Small Scale Land Use Amendment for 1.49 Acres MOL of property owned by Centerstate Bank of

Florida NA, located between NE 5th Street & NE 3rd Street and between NE 9th Avenue and NE 10th Avenue, Crystal River, FL on First Reading and setting a public hearing for August 29, 2018.

Summary: Attached you will find Ordinance #18-O-12 for a Small Scale Land Use Amendment concerning 1.49 acres MOL for property owned by Centerstate Bank of Florida NA.

The staff report (also attached) demonstrates the change from residential to commercial which is compatible with properties on the east and west side even though they currently have an incorrect land use and zoning classification for the existing use. The rear portion of the lot to the east is the back side of AutoZone and a portion of the property to the west is Chuck's Car Care.

Both properties will currently remain medium density residential which is acceptable as transitional zoning for properties abutting a commercial use. We will attempt to reach out to the owners of these properties and request that they submit a land use and zoning amendment.

Property owners within 300' have been notified and a Notice was published in the Chronicle. The Planning Commission recommended approval by a vote of 7 – 0 on August 2, 2018.

Staff Recommendation: Approval

End of Agenda Sheet]

Vice Mayor Brown called for disclosure of any conflicts of interest or ex parte communications.

Conflict of Interest: There was none.

Ex Parte Communications: There was none.

Staff Presentation: Ms. Gorman presented the staff report, entering it into the record for items 7B and 7C, noting split zoning on an adjacent property to be addressed, and discussing existing and proposed uses. Ms. Gorman also addressed questions regarding ownership and resident feedback.

Applicant Presentation:

Ronnie Hicks- 6758 SW County Road, Bell, FL- Addressed Council regarding desire to develop a boat and R.V. storage facility.

Public Hearing: No one spoke for or against the proposed ordinance.

Applicant Rebuttal: There was none.

Motion to approve Ordinance No. 18-O-12 for a Small Scale Land Use Amendment for 1.49 Acres MOL of property owned by Centerstate Bank of Florida NA, located between NE 5th Street & NE 3rd Street and between NE 9th Avenue and NE 10th Avenue, Crystal River, FL on First Reading and setting a public hearing for August 29, 2018 was made by Council member Fitzpatrick; seconded by Council member Holmes. Motion carried 4-0.

- C. Consideration of approval of Ordinance No. 18-O-13 for an amendment to the City of Crystal River Zoning Map for 1.49 Acres MOL of property owned by Centerstate Bank of Florida NA, located between NE 5th Street & NE 3rd Street and between NE 9th Avenue and NE 10th Avenue, Crystal River, FL on first reading and setting a public hearing for August 29, 2018 **QUASI-JUDICIAL**

ORDINANCE 18-O-13 - AN ORDINANCE AMENDING THE OFFICIAL ZONING MAP OF THE CITY OF CRYSTAL RIVER, FLORIDA, CHANGING THE ZONING ON 1.49 ACRES (MOL) ON PROPERTIES OWNED BY CENTERSTATE BANK OF FLORIDA NA, LOCATED BETWEEN NE 5TH STREET AND NE 3RD STREET AND BETWEEN NE 9TH AVENUE AND NE 10TH AVENUE AS DESCRIBED IN THE RECORDS OF THE CITRUS COUNTY PROPERTY APPRAISER (17E18S220020 3320), FROM R-2 (RESIDENTIAL) TO HIGH INTENSITY COMMERCIAL (CH); PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

Background: [Agenda Sheet Requested Motion: Motion to approve Ordinance No. 18-O-13 for an amendment to the City of Crystal River Zoning Map for 1.49 Acres MOL of property owned by Centerstate Bank of Florida NA, located between NE 5th Street & NE 3rd Street and between NE 9th Avenue and NE 10th Avenue, Crystal River, FL and setting a public hearing for August 29, 2018.

Summary: Attached you will find Ordinance #18-O-13 to amend the City's Zoning Map for 1.49 acres MOL of property owned by Centerstate Bank of Florida NA.

As previously explained during the land use amendment, the staff report (also attached) demonstrates the change from residential to commercial which is compatible with properties on the east and west side even though they currently have an incorrect land use and zoning classification for the existing use. The rear portion of the lot to the east is the back side of AutoZone and a portion of the property to the west is Chuck's Car Care.

Both properties will currently remain residential with the land use being acceptable as transitional zoning for properties abutting a commercial use. We will attempt to reach out to the owners of these properties and request that they submit a land use and zoning amendment.

Property owners within 300' have been notified and a Notice was published in the Chronicle. The Planning Commission recommended approval by a vote of 7 – 0 on August 2, 2018.

Staff Recommendation: Approval.

End of Agenda Sheet]

Vice Mayor Brown called for disclosure of any conflicts of interest or ex parte communications.

Conflict of Interest: There was none.

Ex Parte Communications: There was none.

Staff Presentation: Ms. Gorman requested the staff report be entered into the record for item 7C.

Applicant Presentation: There was none.

Public Hearing: No one spoke for or against the proposed ordinance.

Applicant Rebuttal: There was none.

Motion to approve Ordinance No. 18-O-13 for an amendment to the City of Crystal River Zoning Map for 1.49 Acres MOL of property owned by Centerstate Bank of Florida NA, located between NE 5th

Street & NE 3rd Street and between NE 9th Avenue and NE 10th Avenue, Crystal River, FL and setting a public hearing for August 29, 2018 was made by Council member Holmes; seconded by Council member Fitzpatrick. Motion carried 4-0.

- D. Consideration of approval of Ordinance No. 18-O-09 amending the Code of Ordinances, City of Crystal River, specifically Chapter 4, Article 1, by Creating Section 4-16 to allow Chickens on single family residential properties on first reading and setting a public hearing for August 29, 2018

Motion to read the ordinance by title only was made by Council member Holmes; seconded by Council member Gudis. Motion carried 4-0.

AN ORDINANCE THE CITY COUNCIL OF THE CITY OF CRYSTAL RIVER, FLORIDA; AMENDING CHAPTER 4, ARTICLE I, BY CREATING SECTION 4-16 TO ALLOW CHICKENS ON DETACHED SINGLE-FAMILY RESIDENTIAL PROPERTIES WITHIN CERTAIN ZONING DISTRICTS AND CREATING TERMS AND CONDITIONS CONCERNING THE KEEPING OF CHICKENS; PROVIDING FOR CONFLICTS; PROVIDING FOR INCLUSION IN THE CODE OF ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

Background: [Agenda Sheet Requested Motion: Motion to Approve Ordinance 18-O-09 Amending the Code of Ordinances, City of Crystal River, Chapter 4, Article 1, by creating Section 4-16 allowing chickens on single family residential properties on First Reading and setting a public hearing for August 29, 2018.

Summary: Attached you will find proposed Ordinance 18-O-09 of the City's Code concerning Animals and Fowl. If you will recall, staff brought the proposed Ordinance to Council on June 11, 2018 and it was recommended that a more simplified Ordinance be taken back to the Planning Commission.

Attached you will find Ordinance 18-O-09 that has been revised to reflect the minimum requirements for having chickens as follows:

Section 4-16. -Keeping or Harboring of Chickens

The keeping or harboring of chickens on improved single family residential lots with a single family residential dwelling upon the lot; and expressly prohibits coops on commercial, multi-family units, apartments, condominiums or unimproved properties/vacant lots within the City of Crystal River is as follows:

- a) Residents shall be allowed to keep one (1) backyard hen (*Gallus domesticus*) per one-thousand six-hundred fifty square feet (1,650) total lot area on single family residential use lots not less than a minimum of 5,000 square feet and the total number of hens is not to exceed a total 6 at any residential property, if all other requirements in this section are met.
- b) Roosters (defined as a male chicken of any age and generally characterized by an ability to crow) and any other crowing chickens are prohibited in the city limits of the City of Crystal River and are subject to the nuisance provision set forth in Chapter 12, Article 1, Section 12-10(2) of the City Ordinance
- c) No backyard hens or male chickens shall be slaughtered on-site.

- d) The backyard coop must provide for no less than two (2) square feet per chicken.
- e) The backyard coop and chicken run area must be impermeable to rodents, snakes, wild birds and including dogs and bears and adequately contain the backyard hens.
- f) Chickens shall at all times be kept in the rear yard in either a fenced area or covered enclosure. Covered enclosures shall meet the setback requirements for an accessory structure.
- g) Backyard coops and covered enclosures may not be located in the front yard, or seen from the right-of-way.
- h) Backyard coops shall provide for protection from the elements such as shelter from rain or extreme hot/cold temperatures, provide for access to food and water and provide for the good health and prevent unnecessary or unjustified suffering.
- i) No backyard coop shall be built onto any fence.
- j) Odors from chickens, their manure, or any related substances shall not be detectable at the property boundaries.
- k) Backyard coops and enclosures shall be kept in a neat and sanitary condition including provision of clean, dry bedding materials and regular removal of waste materials. All manure not used for composting or fertilizing must be removed promptly.
- l) All feed or other items associated with the keeping of chickens shall be kept in secure containers or otherwise protected to prevent rodents, bears and other pests from gaining access.
- m) Code Enforcement staff shall be permitted the right of entry to the property to inspect the backyard coop or its conditions in the rear yard of a home.

Staff took the most relevant information from the former draft ordinance for your consideration. The Planning Commission met on August 2, 2018 and voted 4-3 recommending approval to the City Council.

Staff Recommendation: The Planning Board and staff have worked to make the revised ordinance for owning chickens as simple as possible while still containing reasonable requirements to prevent disruption to neighbors and protecting the chickens. Presently there are no controls on chickens in the current City Ordinances and with the growing desire for people to raise chickens this Ordinance Revision accomplishes these goals. Approval Requested. End of Agenda Sheet]

Jackie Gorman reviews staff report

Council Discussion:

Discussion was held regarding the benefit of adoption, with no current regulation on chickens in place.

Phil Jannarone-1405 SE 5th Avenue- Reported the majority of Planning Commission members present during the previous meeting were in favor of prohibiting chickens.

Keith Raym- 1290 NW 9th Court- Clarified that the Planning Commission vote was 4-3 in favor of recommending, however one Commissioner undecided and went with staff recommendation. Mr. Raym then discussed articles presented during planning commission regarding health risks associated with the keeping of chickens in urban areas, including disease and odor.

Vice Mayor Brown inquired about distance between coup and neighbor and Council member Holmes confirmed established setbacks for accessory structures applied. Ms. Gorman offered to include more information and bring item back and Council member Holmes suggested inclusion of a sunset clause.

Public Hearing:

Keith Raym- 1290 NW 9th Court- Commented on the time taken by Planning Commission to discuss the ordinance, and noted potential impacts to commercial retailers that may be impacted. Staff confirmed that language could be added to add clarity regarding the commercial aspect.

Motion to Approve Ordinance 18-O-09 Amending the Code of Ordinances, City of Crystal River, Chapter 4, Article 1, by creating Section 4-16 allowing chickens on single family residential properties on First Reading and setting a public hearing for August 29, 2018 (with requested amendment to not include businesses currently engaged in lawful sale of chickens) was made by Council member Fitzpatrick; seconded by Council member Holmes. Motion carried 4-0.

- E. Consideration of approval of Ordinance No. 18-O-01 amending the City of Crystal River Land Development Code, specifically Chapter 5, Accessory Temporary and Special Use Situations, Section 5.01.02 Accessory Buildings and Structures in all Residential Districts and Section 5.01.11 Fences, Hedges and Walls allowing fences on vacant properties on first reading and setting a public hearing for August 29, 2018

Motion to read the ordinance by title only was made by Council member Holmes; seconded by Vice Mayor Brown. Motion carried 4-0.

AN ORDINANCE OF THE CITY OF CRYSTAL RIVER, FLORIDA, AMENDING THE CITY OF CRYSTAL RIVER LAND DEVELOPMENT CODE, CHAPTER 5 - ACCESSORY TEMPORARY, AND SPECIAL USE SITUATIONS, SECTION 5.01.02 ACCESSORY BUILDINGS AND STRUCTURES IN ALL RESIDENTIAL DISTRICTS BY ADDING FOOTNOTE 2 EXCLUDING FENCES FROM THE LIST OF ACCESSORY STRUCTURES REQUIRING A MAIN STRUCTURE WITH CONDITIONS; AND SECTION 5.01.11 FENCES, HEDGES AND WALLS BY REMOVING 5.01.11(I) IN ITS ENTIRETY AND REPLACING THIS SECTION WITH LANGUAGE FOR INDUSTRIAL FENCING AND COMMERCIAL FENCING WITH PROPER APPROVAL; AND ADDING SECTION (L) LISTING CONDITIONS FOR ALLOWING A FENCE ON A VACANT PROPERTY(S); PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

Background: [\[Agenda sheet\]](#) **Requested Motion: Motion to approve Ordinance No. 18-O-01 amending the City of Crystal River Land Development Code, specifically, Chapter 5 Accessory Temporary and Special Use Situations, Section 5.01.02 Accessory Buildings and Structures in all Residential Districts and Section 5.01.11 Fences, Hedges and Walls allowing fences on vacant properties on First Reading and Setting a Public Hearing for August 29, 2018.**

Summary: On March 1, 2018 the Planning Commission recommended approval of Ordinance 18-O-01 amending the City's Land Development Code to allow fences to be placed on the property with the condition that it be removed if the lot is sold.

This was the result of a request by Clark Stillwell who is representing a resident that received a Code violation for constructing a fence without a permit. In this case the owner had two (2) separate lots and did not want to combine these lots for the fence.

The proposed text would have protected the City by requiring documents to be filed in the public records, (1) affidavit of joint use; and (2) termination of use and removal of accessory structures at sale or termination. With having these documents recorded, buyers are on notice by such filings.

As a result of the Council meeting dated March 12, 2018, staff was asked to revise the proposed Ordinance clarifying specifically what accessory structures would be prohibited on the adjacent lot. A Revised Ordinance was prepared reflecting these changes.

During the April 5, 2018 Planning Commission meeting staff was directed to revisit the Fence Ordinance and bring back a recommendation allowing fences on vacant properties that would be less difficult to manage than what was proposed by Mr. Stillwell and Council. The Planning Commission, after lengthy discussion, recommended approval during the August 2, 2018 meeting.

Attached please find Ordinance 18-O-01 that has been modified to allow fences on vacant properties as follows:

Purpose Statement:

The City of Crystal River and its residents take pride in the prestigious appearance presentation, and safety of our community. Vacant lots can create a safety hazard which can be mitigated through proper maintenance and the construction of a fence that will protect the property owner from unauthorized uses.

SECTION 5.01.11 – Fences, hedges and walls

I. No barbed wire or electric fences in any form shall be permitted in any Zoning District. However, a security fence in an Industrial Zoning District may use barbed wire, provided that the fence shall not exceed eight (8) feet in height and the barbed wire on top of the fence shall not exceed an additional (1) foot. A Commercial Zoning District may apply for the same type fencing with approval by the City Manager.

L. Classification of Fences on Vacant Properties (Properties within the CRA District must comply with Chapter 4 of the Land Development Code for appearance.)

A. On lots with a main structure that has a vacant adjacent lot under the same ownership, the fence must meet all applicable codes. No accessory structure other than a fence may be constructed on an adjacent vacant property. The maximum height in the front cannot exceed 4' from grade, must be a minimum of 50% transparent and the fence must be constructed along the entire vacant lot (all sides). Adjacent vacant lot must be maintained at all times.

B. Vacant lots (stand-alone): 4' maximum height measured from grade. Materials must meet fencing criteria for 50% transparency. No accessory structure or use other than a fence is allowed on stand-alone vacant properties. The property must be maintained at all times.

Staff recommends moving forward with these revisions which will provide a mechanism for our citizens to protect their properties from illegal uses by others (i.e. boat trailer parking, trespassing, etc.).

Staff Recommendation: Approval

End of Agenda Sheet]

Ms. Gorman presented the staff report to Council and touched on some background.

Public Hearing:

David Street- 102 NE 3rd St. Requested Council delay decision, noting potential impact on efforts to fence two parcels of property.

Discussion was held regarding the difference between fencing two adjacent vacant lots without the need to combine.

Mr. Street discussed issues with fencing his property and Ms. Gorman assured that staff would work to assist him in those efforts.

Motion to approve Ordinance No. 18-O-01 amending the City of Crystal River Land Development Code, specifically, Chapter 5 Accessory Temporary and Special Use Situations, Section 5.01.02 Accessory Buildings and Structures in all Residential Districts and Section 5.01.11 Fences, Hedges and Walls allowing fences on vacant properties on First Reading and Setting a Public Hearing for August 29, 2018 was made by Council member Holmes; seconded by Council member Fitzpatrick. Motion carried 4-0.

8. CITY ATTORNEY

A. 3SSR Agreement Update

City Attorney Rey provided a status update on Three Sisters Springs Management agreement negotiations, confirming that the current draft plan and agreement were under review by USFWS and SWFWMD with a response anticipated within the week, with a meeting scheduled for Monday.

B. Review and Discussion of Variance Criteria

City Attorney Rey addressed Council regarding a request to review current city variance criteria, confirming that the provisions are standard criteria and offering further legal review to provide guidance on potential revisions.

9. CITY MANAGER

- A. Motion to approve a piggyback contract off Pasco County with U.S. Water Services Corporation for the rehabilitation of Lift Station #11 in an amount not to exceed \$53,000.00 and approve a tax-exempt direct purchase for the pump and rail package from Barney's Pumps in the amount of \$12,000.00

Background: [Agenda Sheet Requested Motion: Motion to approve a piggyback contract off Pasco County with U.S. Water Services Corporation for the rehabilitation of Lift Station #11 in an amount not to exceed \$53,000.00 and approve a tax-exempt direct purchase for the pump and rail package from Barney's Pumps in the amount of \$12,000.00

Summary: The City does regular upgrades that are typically required for the operation of the City's lift stations. Lift Station #11 was constructed in 1967 and is the only wetwell/drywell type remaining of the Utility's 68 stations (all others are the wetwell/submersible pump type).

The design of this station is antiquated and has been phased out in recent decades. The design compromises safety as technicians are required to enter the confined space of the drywell each time service is required (whereas with stations using submersible pumps, the pumps can be pulled using a rail system and all the valves are conveniently located outside of the wetwell).

This important lift station is located behind the former Wally's gas station and handles approximately 15% of the City's total sewage flows. The station serves the majority of the downtown area including the middle school and Heritage Village area on the other side of US-19. The station requires extensive work due to age and deterioration and is currently operating on only one pump. During the recent rains, that pump ran 20 hours a day on average to keep up with the high flows. There is concurrence among staff to retrofit the entire lift station rather than repair which would only serve as a temporary solution. Staff considers this an emergency purchase for this critical lift station.

In lieu of a lengthy bidding process, Staff is proposing to piggyback off an existing contract to expedite the rehabilitation. In 2017, Pasco County solicited competitive-pricing bids for "As Needed Pump Stations Rehabilitation Program" services and awarded a continuing services contract to U.S. Water Services Corporation as the low bidder. U.S. Water has submitted a proposal based on the unit prices established in the Pasco Contract (see attached). Note that the amount includes an allowance of \$11,000 for unforeseen circumstances, asphalt restoration, and upgrade to a traffic-rated lid and hatch for the wetwell (which lies within the roadway),

For the pump and rail package, a direct purchase from Barney's Pumps for Hydromatic Pumps in the amount of \$12,000.00 is proposed to save sales tax and contractor markup; Barney's is our area sole-source distributor for Hydromatic Pumps which are used in the majority of the City's lift stations.

Staff Recommendation: This is a required replacement in order to manage continuous service of the lift station and for the protection of workers servicing this aging unit. End of Agenda Sheet]

City Manager Burnell provided a brief overview of the item.

Motion to approve a piggyback contract off Pasco County with U.S. Water Services Corporation for the rehabilitation of Lift Station #11 in an amount not to exceed \$53,000.00 and approve a tax-exempt direct purchase for the pump and rail package from Barney's Pumps in the amount of \$12,000.00 was made by Council member Fitzpatrick; seconded by Council member Gudis. Motion carried 4-0.

- B. Motion to award a contract to LRE Ground Services, Inc. in an amount not to exceed \$30,000.00 for soil stabilization using grout injection at Lift Station #1

Background: [Agenda Sheet Requested Motion: Motion to award a contract to LRE Ground Services, Inc. in an amount not to exceed \$30,000.00 for soil stabilization using grout injection at Lift Station #1.

Summary: The soils in the area of Lift Station #1 are very loose and unstable. In 2011, the control panel rack started listing noticeably and the City hired StableSoils to inject polyurethane grout along the perimeter of the top concrete slab in an effort to densify the very weak soils. Although that effort may have improved the subsurface conditions to an extent, the slab continues to experience differential settlement and voids under the slab are readily visible along the north and east edges.

This lift station is one of the higher volume stations and the underground water flow around and under it is active, causing the material used to backfill the lift station originally to migrate away overtime causing this movement. This repair may not be a permanent solution and additional rehab may be required over time. The problem at this time does not warrant relocating and/or replacing the lift station because of the high cost to do so.

A geotechnical investigation was recently completed and the engineer's professional opinion is that the soils along the lift station need to be remediated with grout injection using a cement-based, low strength slurry grout. The engineer is calling for 65 grout injection points down to 25' and estimates 35 cubic yards of grout will be used.

Staff has solicited quotes from three separate contractors --- LRE Ground Services (\$28,450.00), RamJack (\$35,530.00), and Foundation Services (\$42,290.00). Staff recommends awarding to low-bidder LRE Ground Services.

Since the quantity of grout required is only an estimate, Staff is asking for an allowance of roughly \$1,500.00 for additional grout.

Staff Recommendation: Approve the requested motion.

End of Agenda Sheet]

City Manager Burnell provided a brief overview of the item.

Motion to award a contract to LRE Ground Services, Inc. in an amount not to exceed \$30,000.00 for soil stabilization using grout injection at Lift Station #1 was made by Council member Gudis; seconded by Council member Fitzpatrick. Motion carried 4-0.

C. Discussion regarding "Remembering Our Fallen" travelling photographic war monument

Background: [Agenda Sheet Requested Motion: Discussion regarding "Remembering Our Fallen" travelling photographic war monument.

Summary: Staff was contacted by Citrus County Veterans Services related to a traveling monument that honors those who have died from wounds in a war zone since 9/11/2001. It includes both military and personal photos, and a Gold Star Mother travels with the monument and speaks. It is also the Citrus County Veterans Services theme for the year. To host the Memorial costs \$7,500.00; the area needed to display the memorial is the size of a basketball court or 230' to display the 31 towers that are 10' tall and 6' in circumference. There is a short amount of time to pay the hosting fee. The Citrus County Veterans Services has reached out to several agencies such as Crystal River, City of Inverness and the TDC to attempt to raise the funds and split the costs of hosting the travelling monument. The monument may be located at Liberty Park or Bicentennial on baseball field behind the Fallen Heroes Monument. The location of the monument placement during the time it is hosted will be determined by those who contribute to host fee. The Veterans Services will facilitate marketing for the traveling monument. Currently, there is no other stop in Florida for the tour of this memorial. Veteran's Services hopes to have the travelling memorial here for the week of October 26th – October 31st.

Staff Recommendation: None.

End of Agenda Sheet]

Council member Gudis provided a brief overview of the item and discussion was held regarding covering costs to host the memorial. Motion to approve covering the hosting fee for the "Remembering Our Fallen" travelling photographic war monument was made by Council member Gudis; seconded by Council member Holmes.

Discussion was held regarding cost sharing, details regarding the event, time constraints and unexpended funding in the Council budget that could be utilized.

Motion carried unanimously.

- D. Motion to adopt Resolution No. 18-R-24 and issue a Notice to Proceed to SV-3 General Contractor, Inc. under "Continuing Contract for Miscellaneous Concrete Flat Work, Solicitation 18-B-02" in an amount not to exceed \$65,000.00 for sidewalk construction on the north side of NW 19th St. in the Woodland Estates area and to allow for up to \$10,500.00 for staking of the right-of-way line, crosswalk pavement markings, and demolition/sod restoration of the existing sidewalk

Background: [Agenda Sheet **Requested Motion: Motion to adopt Resolution No. 18-R-24 and issue a Notice to Proceed to SV-3 General Contractor, Inc. under "Continuing Contract for Miscellaneous Concrete Flat Work, Solicitation 18-B-02" in an amount not to exceed \$65,000.00 for sidewalk construction on the north side of NW 19th St. in the Woodland Estates area and to allow for up to \$10,500.00 for staking of the right-of-way line, crosswalk pavement markings, and demolition/sod restoration of the existing sidewalk.**

Summary: The existing sidewalk on the south side of NW 19th St. leading into Woodland Estates has deteriorated and due to its proximity to the roadway, creates an unsafe condition and maintenance challenges.

Staff is requesting authorization to construct a replacement sidewalk on the north side of NW 19th St. as shown on the attached exhibit. The proposed 5' wide sidewalk will be placed near the northerly right-of-way (R/W) line to maximize the separation to the road for safety purposes. There are a couple of locations where the sidewalk will have to diverge from the R/W line to avoid existing obstacles (e.g. the Woodland Estates neighborhood sign) but in those areas, the sidewalk will be further from the edge-of-pavement than the existing sidewalk is.

To ensure the sidewalk will not encroach onto private property, Staff proposes to have Coastal Engineering (who is under a continuing services contract) stake lath along the R/W line every 150' or so to serve as a guide to the contractor during forming.

Upon completion, DPW crews will demo the existing sidewalk and restore with sod and install preformed thermoplastic markings for crosswalks at the side street crossings.

Staff Recommendation: This is the most cost effective way to handle the issues of the existing sidewalk. This proposal improves safety of people on the sidewalk but in several areas it does move closer to the road for brief periods, similar to present conditions. End of Agenda Sheet]

City Manager Burnell provided a brief overview of the item.

Motion to adopt Resolution No. 18-R-24 and issue a Notice to Proceed to SV-3 General Contractor, Inc. under "Continuing Contract for Miscellaneous Concrete Flat Work, Solicitation 18-B-02" in an amount not to exceed \$65,000.00 for sidewalk construction on the north side of NW 19th St. in the Woodland Estates area and to allow for up to \$10,500.00 for staking of the right-of-way line, crosswalk pavement markings, and demolition/sod restoration of the existing sidewalk was made by Council member Fitzpatrick; seconded by Council member Gudis. Motion carried 4-0.

- E. Motion to approve an Exemption Audit Services Contract between Citrus County Property Appraiser, Tax Collector and the City of Crystal River

Background: [Agenda Sheet Requested Motion: Motion to approve an Exemption Audit Services Contract between Citrus County Property Appraiser, Tax Collector and the City of Crystal River.

Summary: The Citrus County Property Appraiser and Citrus County Tax Collector are to contract with Tax Management Associates, Inc. for an audit to identify properties with undeserved Personal Exemptions for the purpose of collecting taxes due on those properties, which would otherwise be unavailable to the taxing authority. The Parties to the proposed agreement recognize that there may be property owner on Citrus County tax rolls claiming undeserved and/or fraudulent personal exemptions which reduce the property tax revenue and unfairly shifts the property tax burden to other property owners. The services provided to recoup funds will be funding through the recouped money. This service will be provided with no cost to the City. Tax Management Associates will receive 30% of the recouped funds from the Tax Collector's Office after funds are collected. The City of Inverness's City Manager and Crystal River's City Manager are in agreement that this is a needed service and will benefit the residents of their cities respectively.

Staff Recommendation: Recommend Approval

End of Agenda Sheet]

City Manager Burnell provided a brief overview of the item.

Motion to approve an Exemption Audit Services Contract between Citrus County Property Appraiser, Tax Collector and the City of Crystal River Council member Holmes; seconded by Council member Fitzpatrick.

City Manager Burnell addressed a question regarding fee collection method.

Motion carried 4-0.

- F. Motion to adopt Resolution No. 18-R-26 supporting use of TDC funding for design of a multi-use path to connect the Citrus County Multi-Use Trail to the City of Crystal River Crosstown Trail

Background: [Agenda Sheet Requested Motion: Motion to allow the City Manager to enter into an agreement with Citrus County, in order to fund 50% of the cost for preliminary engineering analysis of Alternative Routes to connect the City's existing Cross-Town Trail to existing Citrus County Multi-Use Trail associated with County Road 486 and approving Resolution No. 16-R-17 appropriating a total amount of \$15,750.00.

Summary: A joint effort set forth by Council Member Andy Houston and County Commissioner Joe Meek including a meeting with Citrus County Public Works senior staff to determine the feasibility of connecting the City's Cross-town Trail and Citrus County's Multi-Use Trail running perpendicular to County Road 486. The desire to make this multimodal connection is to link the City of Crystal River to the Withlacoochee Trail and ultimately to the Coast to Coast Trail currently in development as a key Multimodal State project. The need to complete a preliminary study is to determine the best route for this connection. There are three possible routes evident at this time but they all have a complicated set of factors that need engineering evaluation by a firm that is experienced in Multi-Use Path development and traffic management. The attached memorandum does layout some of the known issues in more detail.

Kimberly Horn which is an approved professional services firm for both governmental agencies and presently doing a congestion study for Hernando/Citrus MPO for downtown Crystal River along Highway 19 is the desired vendor for this project.

The City of Crystal River and Citrus County have evaluated a multi-use path route to connect RT. 491 with the Crystal River Crosstown Trail.

Both entities have agreed on one specific Route.

It is on the MPO list to be constructed in the future.

The State is supporting multimodal projects like this but there project development schedule is long.

Presently the timeline is likely to approach 10 years to complete.

Citrus County Staff determined that TDC funding could be used to design the route, this could expedite the final construction by many years 2- 4 years.

TDC collects 1% of hotel tax receipts for the purpose of capital projects to develop tourism.

This project is part of the attempt to tie the east and west coasts of Florida and connects the southern route from Tampa to Kings Bay and Three Sister Springs and later to the gulf.

The City supports the use of TDC funds and their unanimous vote to use the TDC funds to reduce the time table of its completion in order to maximize the benefit of the project.

Staff Recommendation: Staff supports approval to fund this important long-term multi-use path connection to the rest of the County and later the State End of Agenda Sheet]

City Manager Burnell provided a brief overview of the item.

Vice Mayor Brown made note of communications with citizens in favor of the item, and the added recreational element. Council member Gudis, member of TDC, confirmed that it was the first time the TDC voted to utilize revenues from that particular funding stream (1%).

Motion to allow the City Manager to enter into an agreement with Citrus County, in order to fund 50% of the cost for preliminary engineering analysis of Alternative Routes to connect the City's existing Cross-Town Trail to existing Citrus County Multi-Use Trail associated with County Road 486 and approving Resolution No. 16-R-17 appropriating a total amount of \$15,750.00 was made by Vice Mayor Brown; seconded by Council member Gudis. Motion carried 4-0.

10. CITY COUNCIL

- A. Motion to approve the Waterfronts Advisory Board's Straw-Free Initiative and funding in the amount of \$ for the printing of 200 decals for participating restaurants and businesses

Background: [Agenda Sheet Requested Motion: Motion to approve the Waterfronts Advisory Board's Straw-Free Initiative and funding in the amount of \$292.00 for the printing of 200 decals for participating restaurants and businesses.

Summary: The Waterfronts Advisory Board is proposing to award local businesses with a decal to be posted at the restaurant or business that shows the entity's commitment to being plastic straw free. The Waterfronts Advisory Board Members would individually present information to local establishments and encourage the business to commit to being plastic straw free. If the business commits the business would

receive a decal for posting and a copy of the Straw Free Proclamation which was presented on July 9, 2018. Dive Patches International can print the decals for \$292.00, Homosassa Printing can produce the decals for \$600.00 and Kustom Glass can print the decals for \$390.00.

Staff Recommendation: None.

End of Agenda Sheet]

Council member Gudis provided a brief overview of the item and presented an example of an alternative straw material (pasta straws). Vice Mayor Brown commented on Seafood Seller's new policy of provided straws upon request only as a result of a suggestion he made.

Motion to approve the Waterfronts Advisory Board's Straw-Free Initiative and funding in the amount of \$292.00 for the printing of 200 decals for participating restaurants and businesses (provided a new logo design is completed by staff) was made by Council member Gudis; seconded by Council member Fitzpatrick. Motion carried 4-0.

11. COMMITTEE REPORTS

- A. Mayor Farley
 - *Waterfronts Advisory Board*

- B. Vice Mayor Brown
 - *Withlacoochee Regional Water Supply Authority*
 - *Crystal River Main Street-* Commented on the upcoming Pumphouse Open House Event.

- C. Council member Fitzpatrick
 - *Metropolitan Planning Organization*
 - *Three Sisters Springs Coordination Committee*

- D. Council member Gudis
 - *Tourist Development Council* – Commented on the vote to provide \$400,000 in funding to connect the Crosstown Trail with the Citrus County Multi-Use Path.
 - *Library Governing Advisory Board* – Reported on recent approval of library budget.
 - *Florida League of Cities*
 - *Citrus County Community Charitable Foundation Board*

- E. Council member Holmes
 - *Keep Citrus County Beautiful*
 - *Springs Coast Steering Committee*

12. COMMUNICATIONS

Council member Fitzpatrick commented on the success of the eel grass replanting project and resulting water clarity.

13. COUNCIL MEMBER REPORTS

- A. Mayor Farley

- B. Vice Mayor Brown

- C. Council member Fitzpatrick
- D. Council member Gudis
- E. Council member Holmes- Commented on success of the eel grass replanting project.

Council member Gudis commented on red tide not affecting the area.

14. PUBLIC INPUT

(Five Minute Time Limit)

Dee Atkins-3851 N. Nokomis Point- Requested that a resident member be appointed to the CRA Board.

Keith Raym- 1290 NW 19th Court- Commented on approval of the item 9D and requested detail and information regarding the route, which City Manager Burnell described.

Joyce Palmer- Refuge Manager- CRNWR- Provided an update on management plan and agreement negotiations, including coordination committee meetings, efforts to finalize funding and scope of work with a federal contractor, station funds spent on the area, completion of Environmental Assessment and upcoming FONSI announcement, completion of road resurfacing, and work started by the Invasive and Exotic Plant contractor that began work. She also noted that the Friends group has completed preliminary design for overlooks.

Council member Brown inquired about recent FWC activity on a vacant lot and Ms. Palmer confirmed recent efforts by USFWS to stop the pursuit of manatees. She also reported that seven interpretive signs had been installed.

Peter Langlois-Save Crystal River Inc.- Invited Council members to submit testimonials on the Kings Bay Restoration project's success for inclusion on their new website, noting \$2.9 million dollars in grant funding recently applied for.

15. ADJOURNMENT

Vice Mayor Brown adjourned the meeting at 9:42 p.m.

CITY OF CRYSTAL RIVER

ATTEST:



MIA FINK, CITY CLERK



KEN BROWN, VICE MAYOR



ATTACHMENT "A"

Introduction of Proposed Ordinances

August 13, 2018

1. Cross Connection Control
2. FOG – Fats, Oils & Grease

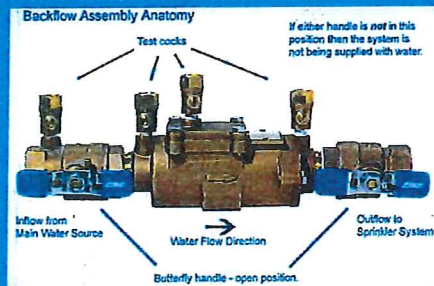


Prepared by Mittauer & Associates, Inc. Consulting Engineers

1

Cross Connection Control

- Ordinance is required by FDEP
- Prevents backflow contamination from entering the drinking water distribution system



2

Cross Connection Control

- The City is considering installing backflow prevention devices on all residential connections.
- Funding will be from the FL DEP and the rate base.
- Commercial customers will supply their own devices



3

Why regulate FOG?



Grease that was poured down kitchen drains & from poorly maintained grease traps

- Clogs sewer pipes & pump stations
- Causes backups and overflows
- Can create serious problems at sewer treatment facility
- Costly to City



4

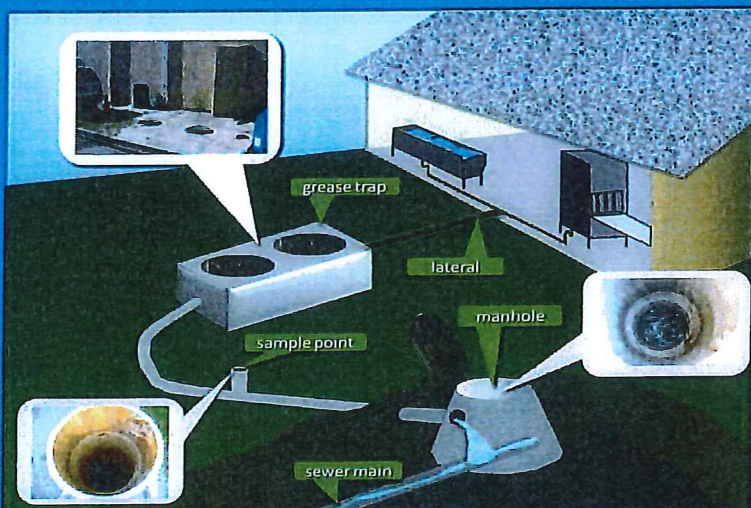
FOG Ordinance may include

- Scheduled clean-out of grease traps
- Periodic Inspections
- Design requirements
- Transition time for existing facilities
- Education program for businesses, residents and visitors



5

Typical Commercial Grease Trap Layout



6



City of Crystal River

FOG & Cross Connection Ordinance Considerations

August 13, 2018

FOG/GREASE INTERCEPTORS	
ISSUE	OPTIONS
Inspections	Fee Or performed free by City
Permitting	Require a permit for every grease trap Or only require as a part of building permit
When FOG device fails / compliance schedule	Allow 7 days for repair 30 days for plans/corrective action plan 90 days for installation Or as required by City based on conditions
Unlawful discharge – not meeting schedule	Cease discharge or get water cut off
All existing facilities	Provide as-built plans within 90 days
Existing facilities whose design doesn't meet code	90 days for plans 180 days for construction Alternatively: more frequent pup-outs
Frequency of cleaning	Every 60 days Or as needed By licensed hauler
Frequency of full pump-out	Minimum 1/year Or minimum 180 days
Record keeping	Kept by owner Or maintained by City if reporting is required
Reporting of cleaning, repairs	Sent to City (possibly online) Or kept onsite
Training	Required and must be reported Or left up to owner
Grease traps connected to septic system	Included in ordinance?

CROSS CONNECTION CONTROL	
ISSUE	OPTIONS
Inspections - residential	City to provide for residential
Inspections - commercial	Owner must provide
Installation - residential	City to provide
Installation - commercial	Owner must provide
Recordkeeping	City for residential Owner for commercial
Education	Frequently Asked Questions on Website, mailers in bills, outreach to restaurants,

ATTACHMENT "B"

TWENTY-SIXTH VETERANS APPRECIATION WEEK
AD HOC COORDINATING COMMITTEE
Citrus County Honors Our Gold, Blue and Silver Star Families
October 27 – November 14

AGENDA AUGUST 15, 2018

1. **Veterans Appreciation Concert**, Saturday, Oct. 27, 2:30 p.m., Citrus Springs Community Center; Sunday, Oct. 28, 2:30 p.m., Cornerstone Baptist Church: Cindy Hazzard, 352-601-7394, nccommunityband@earthlink.net.
2. **Veterans in the Classroom**, Monday, Oct. 29 – Friday, Nov. 9, MOAA: Mark Bodenheim, 201-9995, markboden@hotmail.com; Tim Holme, 597-3884, tholme@tampabay.rr.com.
3. **Motorcycle Run to Homosassa Veterans Monument**, Saturday, November 3, Staging 8:45 a.m. at; AL Post 155, American Legion Riders 155: Police escort to Homosassa Veterans Monument ceremony 10:00 a.m. Tom Voelz, 795-2884; tvoelz816@gmail.com.
4. **Veterans Ceremony**, Saturday, Nov. 3, 10:00 a.m., VFW Post 8189, Homosassa Veterans Monument: Mark Long, 212-9359, longmanatee@gmail.com.
5. **Veterans Family Appreciation Program & Ice Cream Social**, Sunday, Nov. 4, 6:00 p.m., Cornerstone Baptist Church, Inverness: Ray Michael, 637-3265, rmichael5@tampabay.rr.com; Don Harrelson, 304-0436. Uniforms encouraged.
6. **Veterans Flea Market**, Wednesday, Nov. 7, 7:00 a.m. – 2:00 p.m., Stokes Flea Market, 5220 W. Gulf to Lake Hwy, Lecanto, FL 34461: Curt Ebitz, 382-3847, curt247@tampabay.rr.com. To schedule free tables call Dinah, 746-7200, NLT two weeks prior to Nov.7.
7. **Veterans Program**, Thursday, Nov. 8, 2:00 p.m., Inverness Primary School: Mary Tyler, 726-2632, tylerm@citrus.h12.fl.us. Uniforms encouraged.
8. **Veterans Social**, Friday, Nov. 9, 5:00 p.m. – 6:30 p.m., 40 & 8, AL Post 155: John Kaiserian, 746-1959, johnk40and8@yahoo.com. Fried fish, \$8. Public cordially invited.
9. **Dragon Boat Festival Veterans Fair**, Saturday, Nov. 10, 8:00 a.m. – 3:00 p.m., Lake Hernando, Hernando: Andy Smith, 201-6500, eventsinmotion@outlook.com; Kim Menster, VSO, 527-5918, kimberly.menster@citrusbocc.com. Veterans Service Organization set up Nov. 9, 4:00 p.m. – 8:00 p.m. Area will be secured overnight by sheriff deputies.
10. **Marine Corps Ball**, Saturday, Nov. 10, 6:00 p.m., Citrus Hills Country Club, Marine Corps League Det. 1139: Chris Gregoriou 302-9777, allprestige@yahoo.com. Tickets \$45.00. Guest speaker: TBD. Veterans of all branches of the armed services and their guests are cordially invited.
11. **Free Veterans Breakfast**, Sunday, Nov. 11, 8:00 a.m. – 12:00 p.m., Inverness Elks Lodge #2522: Mike Orndorff, 697-0139, orndcons@aol.com.
12. **Massing of the Colors**, Sunday, Nov. 11, 1:00 p.m. First Lutheran Church, Inverness, Flag bearers arrive 12:30 p.m. Inverness Elks Lodge #2522: Mike Orndorff, 697-0139, orndcons@aol.com; Juanita Emrich, 270-5055; jfemrich@tampabay.rr.com.

13. **Motorcycle Run to Fallen Heroes Monument**, Sunday, Nov. 11, Staging for MC 12:00 noon, American Legion Riders 155: Tom Voelz, 795-2884; tvoelz816@gmail.com. Police escort from Massing of the Colors Ceremony to Fallen Heroes Monument. Guest Speaker: Gold Star family members.

14. **Veterans Day Parade**, Monday, Nov 12, 10:00 a.m., Inverness: Chris Gregoriou, 302-9777, allprestige@yahoo.com; Grand Marshal: Richard Hunt, Past MOPH Patriot of the Year & Dept. of Florida Commander; Honorary Marshals: Gold, Blue & Silver Star families.

15. **Memorial Service**, Monday, Nov 12, following parade, Old Courthouse Heritage Museum, Inverness: Mac McLeod. 746-1384, cmcleod670@earthlink.net. Keynote Speaker, Grand Marshal; Richard Hunt; MC, J.J. Kenney; Color Guard, Nature Coast Community Band; Young Marines; DAR.

16. **Veterans Day Luncheon**, Monday, Nov 12, following memorial service, VFW 4337 Inverness: John Lowe, 344-4702, thelowes@tampabay.rr.com.

17. **Woman Veterans Luncheon**, Wednesday, Nov. 14, 12:00 Noon, Crystal River Woman's Club 320 N. Citrus Ave: Leslie Martineau 746-2396, lmartineau_2001@yahoo.com. Guest Speaker: Cynthia Holden.

18. **Parade Certificates:**

- Best Veterans Service Organization
- Best Veterans Organization Color Guard
- Best Auxiliary
- Best Auxiliary Color Guard
- Best Junior Military
- Best Junior Military Color Guard
- Best School Band
- Best Community Organization
- Best Theme
- Most Patriotic Entry, Judges' Choice

19. **Commemorative Pins:** \$3, volume discounts available; John Seaman 860-0123; john_d_seaman@yahoo.com.

20. **Administrative Support/Publicity:** Curt Ebitz 382-3847; curt247@tampabay.rr.com.

21. **Parade Marshals:** POC Tim Holme, 597-3884, tholme@tampabay.rr.com; Mark Bodenheimer, 201-9995, markboden@hotmail.com. Meeting at Hen House, Inverness, 6:30 a.m. prior to parade to assign marshal positions.

22. **Open Discussion and Adjournment:** Next Meeting, September 19, 1:30 p.m.

AD HOC CMTE CHAIRMAN: Chris Gregoriou 302-9777, allprestige@yahoo.com

ATTACHMENT "C"



From: Peter Langlois pete@novanetco.com
Subject: Noise ordinance and enforcement challenges
Date: August 8, 2018 at 12:46 PM
To: Gudis Mike moneymike@mindspring.com
Cc: Burnell David dburnell@crystalriverfl.org

Hello Mike

I wanted to follow up with you on the subject of an apparent conflict in our civil code regarding noise. It's not just a matter of day and night. It's a matter of overlapping and ambiguous law.

We have a number of sections of code that deal with noise. I am including them here for reference. Please see my discussion of the topic below the code references.

Sec. 12-8. - Noise—At night.

No person shall, between the hours of 10:00 p.m. and 7:00 a.m., ring bells, yell, shout or make any other noise that shall disturb the peace and tranquility of the neighborhood or break the rest or annoy residents of the community.

(Code 1964, § 15-23; Ord. No. 88-0-20, § 1, 11-28-88)

Cross reference— Specific noise prohibitions [§ 12-70](#).

Sec. 12-10. - Same—Certain acts prohibited.

The following acts are hereby declared to be loud, disturbing and unnecessary noises in violation of [section 12-9](#), but this enumeration shall not be deemed to be exclusive:

- (1) *Horns and signal devices.* The sounding of any horn or signal device on any automobile, motorcycle, bus or other vehicle while not in motion, except as a danger signal; or if in motion, only as danger signal after or as brakes are being applied and deceleration of the vehicle is intended; the creation by means of any such signal device of any unreasonably loud or harsh sound; and the sounding of such device for an unnecessary and unreasonable period of time.
- (2) *Certain animals and birds.* The keeping of any animal or bird which, by causing frequent or loud continued noise, shall disturb the comfort and repose of any person in the vicinity.

Cross reference— Animals and fowl, Ch. 4.

- (3) *Radios, phonographs and musical instruments.* The playing of any radio, phonograph or musical instrument in such a manner or with such volume, particularly between the hours of 10:00 p.m. and 7:00 a.m., also between the hours of 11:00 p.m. on Saturday and 7:00 a.m. on the following Monday, so as to annoy or disturb the quiet, comfort or repose of any person.
- (4) *Exhaust of engines.* The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor vehicle or motor boat engine except through a muffler or other device which will effectively prevent loud or explosive noises therefrom.
- (5) *Adjacent to church, school, court or hospital.* The creation of any excessive noise on any street, adjacent to any church, school, institution of learning or court while the same are in session, or adjacent to any hospital, which unreasonably interferes with the workings of such institutions; provided conspicuous signs are displayed on such streets indicating that the same is a church, school, hospital or court street.
- (6) *Drums, horns, etc.* The use of any drum, pan, pail, bell, horn, trumpet or other instrument or device for the purpose of attracting attention to any performance, show, sale or display of merchandise.
- (7) *Loudspeakers.* The use of megaphones, loudspeakers or amplifiers whether on trucks, airplanes or other vehicles or otherwise for advertising or other purposes.

ARTICLE IV. - NOISE

Sec. 12-60. - Purposes and goals.

The city council hereby finds that excessive and unnecessary noise, vibration and noise pollution interferes with the comfort of the public and the enjoyment of private property, and impairs the economic welfare of adjoining properties. The intent of this section is to protect the health, safety and welfare, and to protect the aesthetic and property values of properties within the City of Crystal River by providing for abatement of such conditions.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-61. - Definitions.

For the purposes of this section the following words, terms and phrases shall have the meanings ascribed to them as follows, except where otherwise expressed herein or the context clearly indicates a different meaning:

A-weighted sound level shall mean the sound pressure level in decibels as measured on a sound level meter using the A-weighted network.

Ambient noise shall mean the all-encompassing noise associated with a given environment, being usually composed of sound from many sources near and far.

ANSI shall mean American National Standards Institute or its successor.

Daytime shall mean the hours between 7:00 a.m. and 9:00 p.m. of the same day.

Decibel (dBA) shall mean a unit of measuring the intensity of a sound, the mathematical formula for which is expressed as the volume of a sound which is equal to ten times the logarithm of the ratio of the intensity of the sound to the intensity of a specified standard sound.

Emergency shall mean any occurrence or set of circumstances involving actual or imminent physical trauma or property damage which demands immediate action.

Emergency work shall mean any work performed for the purpose of preventing or alleviating physical trauma or property damage threatened or caused by an existing or imminent peril.

Enforcement officer shall mean any employee of City of Crystal River appropriately designated as a code enforcement officer or an officer of the City of Crystal River Police Department.

L10 shall mean a measurement which represents the noise level exceeded ten (10) percent of the time.

Motor vehicle shall mean any vehicle defined as a "motor vehicle" by F.S. § 320.01(1).

Multiple-family dwelling unit shall mean any apartment, condominium, townhouse, duplex or other multiple-dwelling unit containing two or more living units within a single building.

Nighttime shall mean the hours between 9:00 p.m. and 7:00 a.m. of the next day.

Noise shall mean any sound that which causes or tends to cause an adverse effect on humans.

Noise level shall mean the sound pressure level as measured in dB(A) by a sound level meter.

Noise sensitive zone shall mean a quiet zone where serenity and quiet are of extraordinary significance, which is open or in session, and which is demarcated by conspicuous signage identifying it as a noise-sensitive or quiet zone. Noise-sensitive zones may include hospitals, nursing homes, schools, courts, public libraries, houses of worship, and any other areas which may be defined by a resolution adopted by the city council.

Operator shall mean any employee of City of Crystal River appropriately designated as a code enforcement officer or any officer of the City of Crystal River Police Department charged with the responsibility of taking noise measurements provided herein.

Person shall mean any individual, association, firm, sole proprietorship, partnership, corporation, unincorporated association or any other entity.

Plainly audible shall mean clearly or understandably loud enough to be heard through perception of the human ear. In such cases the location of the source of the noise and the type of the noise being generated can be easily described.

Real property line shall mean an imaginary line along the surface, and its vertical plane extension, which separates the real property owned, rented or leased by one person from that owned, rented or leased by another person, excluding intra-building real property divisions.

Reasonable time shall mean such length of time as may fairly, properly and reasonably be allowed or required to eliminate or abate a noise found to be in violation of this chapter, after warning has been issued. The duration of time shall be dependent upon the source of the noise and what action can be taken to eliminate the noise causing said violation.

Residential areas shall mean recorded and unrecorded subdivisions and those areas in which there is a concentration of residential dwelling units.

Sound shall mean an oscillation in pressure, stress, particle displacement, particle velocity or other physical parameter, in a medium with internal forces. The description of sound may include any characteristic of such sound, including duration, intensity and frequency.

Sound level shall mean the sound pressure level obtained by the use of a sound level meter using weighting A, B or C as specified in ANSI S1.4-1971, or successor publications. If the weighting employed is not indicated, the A-weighting shall apply.

Sound level meter shall mean an instrument including a microphone, an amplifier, and output meter, and frequency weighting networks for the measurement of noise and sound levels in a specified manner.

Sound pressure shall mean the instantaneous difference between the actual pressure and the average or barometric pressure at a given point in space, as produced by the presence of sound energy.

Sound pressure level shall mean in decibels of sound, twenty (20) times the logarithm to the base ten (10) of the ratio of the pressure of the sound to the reference pressure. The reference is 0.0002 microbar.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-62. - Enforcement; remedies.

Unless otherwise provided, violations of this chapter shall be enforced by the City of Crystal River Code Enforcement and Crystal River Police Departments. In addition to any remedy provided for in this chapter, the city may enforce the provisions herein by any other lawful means.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-63. - Prohibition.

It shall be a violation of this article for any person to make, cause, or allow the making of any noise or sound within the city that exceeds the noise levels as set forth in this article.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-64. - Terminology.

All technical acoustical terminology and standards used in this article shall be read or construed in conformance with the American National Standards Institute, Inc. (ANSI) publication entitled "Acoustical Terminology," designated as ANSI S1.1-1960, or its successor publications.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-65. - General standards.

- (a) Noise generated across real property lines or interior noise within multiple-family dwelling units shall conform to the sound level limits as set forth in Tables I and II, respectively, of section 12-66. The minimum measurement period shall be ten minutes. Sound shall be measured pursuant to section 12-69. Exceeding the standard for more than ten percent of the measuring period (more than one minute) shall constitute a violation.
- (b) Maximum instantaneous sound levels shall conform to the sound level limits as set forth in Table III of section 12-66. The minimum measurement period shall be ten (10) minutes. Sound shall be measured pursuant to section 12-69. A single "instantaneous" occurrence above the maximum sound level shall constitute a violation.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-66. - Sound level limits.

- (a) Noise generated across real property lines. The noise from any activity shall be deemed a violation if the total noise level as measured on the A-scale, due to both ambient noise, and the alleged source of the offensive noise exceeds the noise levels which are prescribed in Table I, the measurement of which is based upon decibels. All such measurements as well as the method employed shall be consistent with section 12-69, and shall represent the A-weighted sound pressure level which is exceeded ten percent of the time (L10) during the observation period.

Table I

Receiving Land Use District	Time	Sound Level Limit dB(A)
Residential	Daytime/Nighttime	60/55
Government-owned buildings or property, institutional or recreational	Daytime/Nighttime	55/50
Commercial or business	Daytime/Nighttime	65/60
Industrial or manufacturing	Daytime/Nighttime	75/75

Marine	Daytime/Nighttime	75/75
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- (b) Interior noise within multiple-family dwelling units. Notwithstanding any other provisions of this chapter, it shall be unlawful for any person to create, maintain or cause to be maintained any sound for any period of time within the interior of any multiple-family dwelling unit which causes the noise level to exceed those limits prescribed in Table II. All such measurements as well as the method employed shall be consistent with [section 12-69](#).

Table II

Multiple-Family Dwelling Units	Allowable Interior Sound Level Limit dB(A)
Daytime	55
Nighttime	45

- (c) Maximum instantaneous sound level. The noise from any activity shall be deemed a violation if the noise level exceeds the limits set forth in Table III at any time during the measurement period. The minimum measurement period shall be ten minutes. Sound shall be measured pursuant to [section 12-69](#).

Table III

Receiving Land Use District	Time	Sound Level Limit dB(A)
Residential	Daytime/Nighttime	70/60
Government-owned buildings or property, institutional or recreational	Daytime/Nighttime	65/55
Commercial or business	Daytime/Nighttime	75/65
Industrial or manufacturing	Daytime/Nighttime	85/85
Marine	Daytime/Nighttime	85/85
Multiple-family dwelling units	Daytime/Nighttime	60/50

(Ord. No. 07-O-05, 2-26-2007)

Sec 12-67 - Noise sensitive zones

Sec. 12-67. - Noise sensitive zones.

It shall be a violation of this article to create, maintain or cause to be maintained any sound within or adjacent to any noise sensitive zone so as to exceed fifty-five (55) dB(A) at any time when measured at a distance of at least twenty-five (25) feet from the sound source, provided that conspicuous signs are displayed indicating the presence of the zone to read "quiet zone" and if applicable the location is open or in session.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-68. - Noise exposure.

The lawful operation of any loudspeaker or other source of sound in any place of public entertainment that exceeds levels shown in Table IV at any point when normally occupied by a customer shall require the placement of a conspicuous and legible sign as follows: "WARNING. SOUND LEVELS WITHIN MAY CAUSE PERMANENT HEARING IMPAIRMENT."

Table IV

Duration Per Day Continuous Hours	Noise Level dB(A)
8 hours	90
6 hours	92
4 hours	95
3 hours	97
2 hours	100
1 ½ hours	102
1 hour	105
½ hour	110
¼ hour or less	115

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-69. - Measurement of sound.

- (a) The measurement of sound or noise shall be made with a sound level meter meeting the standards prescribed by the American National Standards Institute (ANSI), S1.4 American National Standard Specifications for Sound Level Meters, or successor publications. The instruments shall be maintained in calibration and good working order. A calibration check shall be made of the system at the time of any noise measurement, both before and after the measurement is taken.
- (b) Measurements shall be taken so as to provide a proper representation of the noise source. The microphone during measurement shall be positioned so as not to create any unnatural enhancement or diminution of the measured noise. No individual other than the operator shall be within ten (10) feet of the sound level meter during the sample period. A windscreen for the microphone shall be used at all times.
- (c) The sound level meter shall be of at least two (2) ANSI requirements. The sound level meter shall utilize the A-weighted network when measurements are taken. The microphone shall be oriented in accordance with instrument

manufacturer's instructions.

- (d) The measurement shall be made at the nearest adjacent real property line from the property on which the **noise** source is located for outside measurements. Such **noise** measurements shall be made at least four (4) feet above the ground and at a point at least ten (10) feet away from any walls, barriers, or other obstructions. For inside measurements concerning multifamily dwelling units, measurements shall be at least three (3) feet from any wall, ceiling or partition.
- (e) All **noise** measurements provided for in this chapter will be made by designated enforcement officers and officers of the city who are qualified to operate the apparatus used to take the measurements as provided for in this article.
- (f) The operator conducting **noise**-measurement tests shall document all **noise**-measurement results in a written record. Said record shall include the following:
 - (1) The instrumentation used, including name, make, type, and serial number.
 - (2) Date of last laboratory calibration.
 - (3) On-site calibration verification before and after each series of measurements.
 - (4) Name and location of the measuring area.
 - (5) A detailed sketch of the measuring area.
 - (6) Time and date of measurements.
 - (7) Names of observers.
 - (8) General weather conditions.

(Ord. No. 07-O-05, 2-26-2007)

Sec. 12-70. - Specific **noise** prohibitions.

In addition to those general standards set forth in [section 12-66](#), and unless otherwise exempted in this article, the following acts, and the causing thereof, are declared to be a violation of this section:

- (1) *Horns and signal devices.* The sounding of any horn or audible signaling device of a motor vehicle, boat, engine, machine, or stationary boiler continuously or intermittently for a period in excess of sixty (60) seconds, except as a danger or emergency warning.
- (2) *Radios, televisions, electronic audio equipment, musical instruments, and similar devices.*
 - a. The use, operation or playing of any radio, television, phonograph, stereo set, tape player, sound amplifier, musical instrument or similar device which produces or reproduces sound in a manner as to be plainly audible at a distance of fifty (50) feet or more away from the real property line of the source of the sound, to any person in a commercial, industrial, or residential area, or in or at a government-owned building or property. For multiple-family dwelling units on a common property, it shall be a violation if such is plainly audible fifty (50) feet from the source of the sound.
 - b. The operation or playing of any radio, musical instrument, or similar device which produces sound on the public right-of-way in such a manner as to be plainly audible to any person at a distance of fifty (50) feet from the source of the sound.
- (3) *Loudspeakers and devices for advertising.*
 - a. The use, operation, or playing of any loudspeaker system, sound amplifier or other similar device which produces or reproduces sound which is cast or emitted upon public rights-of-way for the purpose of commercial advertising or for attracting the attention of the public to any building, structure, vehicle or activity, which is being carried on thereon.
 - b. The use, operation, or playing of any loudspeaker system, sound amplifier or other similar device between the hours of 9:00 p.m. and 7:00 a.m. the following day in such a manner so as to cause a **noise** disturbance across a residential real property boundary. This section shall not apply to public school activities.
- (4) *Explosives, firearms or similar devices.* The use or firing of explosives, firearms anywhere within the corporate limits of the city, unless in accordance with section 12-4 of this chapter.
- (5) *Loading and unloading.* The loading, unloading, closing or other handling of boxes, crates, containers, building materials, or similar objects between the hours of 9:00 p.m. and 7:00 a.m. the following day so as to cause a **noise** disturbance across a residential real property boundary.
- (6) *Construction and demolition activity.* The operation of any equipment used in construction work, building, excavation, grading, pile driving, pneumatic hammering, demolition, dredging, building alteration or repair work between the hours of 9:00 p.m. and 7:00 a.m. of the next day, except for emergency work.
- (7) *Fixed mechanical equipment.* The use or operation of any **noise**-creating air conditioner, heater, compressor unit, power fan or blower, fixed electrical motor or engine which causes excessive and unnecessary **noise**, unless such mechanical equipment is functioning in accord with the manufacturers' specifications and with all manufacturers' mufflers and **noise** reducing equipment in proper operating condition.
- (8) *Portable mechanical equipment and domestic power tools.* The use or operation of any power tools or portable mechanical equipment, including a power saw, sander, drill, grinder, lawn mower, leaf blower, garden tool, or similar device, used outdoors in residential areas between the hours of 9:00 p.m. and 7:00 a.m. the following day so as to cause a **noise** disturbance across a residential real property boundary.
- (9) *Vehicle and motorboat repair and testing in residential areas.* The repairing, rebuilding or testing of any motor vehicle or motorboat within any residential areas between the hours of 9:00 p.m. and 7:00 a.m. the following day so as to cause a **noise** disturbance across a residential real property boundary.
- (10) *Refuse collection.* The collection of refuse with a refuse collection vehicle between the hours of 7:00 p.m. and 7:00 a.m. the following day in a residential, or **noise** sensitive zone.
- (11) *Testing of emergency signaling device*

(11) *Testing of emergency signaling devices.*

- a. The intentional sounding or permitting the sounding of any fire, burglar, or civil defense alarm, siren, whistle, or similar stationary emergency signaling device between the hours of 9:00 p.m. and 7:00 a.m. the following day.
 - b. Any testing shall use a minimum cycle test time. In no case shall such test exceed sixty (60) seconds.
 - c. Testing of a complete emergency signaling system, including functioning of the signaling device and personnel response to the signaling device shall not occur between the hours of 9:00 p.m. and 7:00 a.m. of the following day. The testing of a complete emergency signaling system shall be exempt from the time limit specified in subsection b. above.
- (12) *Fixed building or vehicular alarms.* Except as permitted by [section 12-70](#) the use of fixed building or vehicular alarms unnecessarily or for an unreasonable period of time. Specifically, when sounded for false alarms or sounded for a period in excess of fifteen (15) minutes.
- (13) *Electronically amplified signals.* The sounding of any electronically amplified signal from any stationary bell, chime, siren, whistle or similar device intended primarily for non-emergency purposes from any place for more than ten (10) seconds in any hourly period.
- (14) The operation of any vessel on the waterways of the city in such a manner as to create a level of **noise** which is disturbing of the peace and tranquility, and plainly audible within one hundred (100) feet, or creates a level of measured sound, which exceeds the limits as set forth in Tables I, III, and IV.

(Ord. No. 07-O-05, 2-26-2007)

Cross reference— Same—Certain acts prohibited, [§ 12-10](#).

DISCUSSION

Noise at night is particularly ambiguous, but I believe the standard for law is to enforce the most restrictive case, when two laws have different tolerances, unless one specifically precludes the other.

Nighttime is defined as follows:

12-8 "between the hours of 10:00 p.m. and 7:00 a.m." This ordinance refers to "ring bells, yell, shout" and seems to go back to a time before the invention of digital devices. Those obnoxious bell ringers are under control.

12-61 "Nighttime shall mean the hours between 9:00 p.m. and 7:00 a.m. of the next day.

Neither of these preclude specifically prohibited acts:

12-10 (7) *Loudspeakers.* The use of megaphones, loudspeakers or amplifiers whether on trucks, airplanes or other vehicles or otherwise for advertising or other purposes.

12-70 (2) and (3)

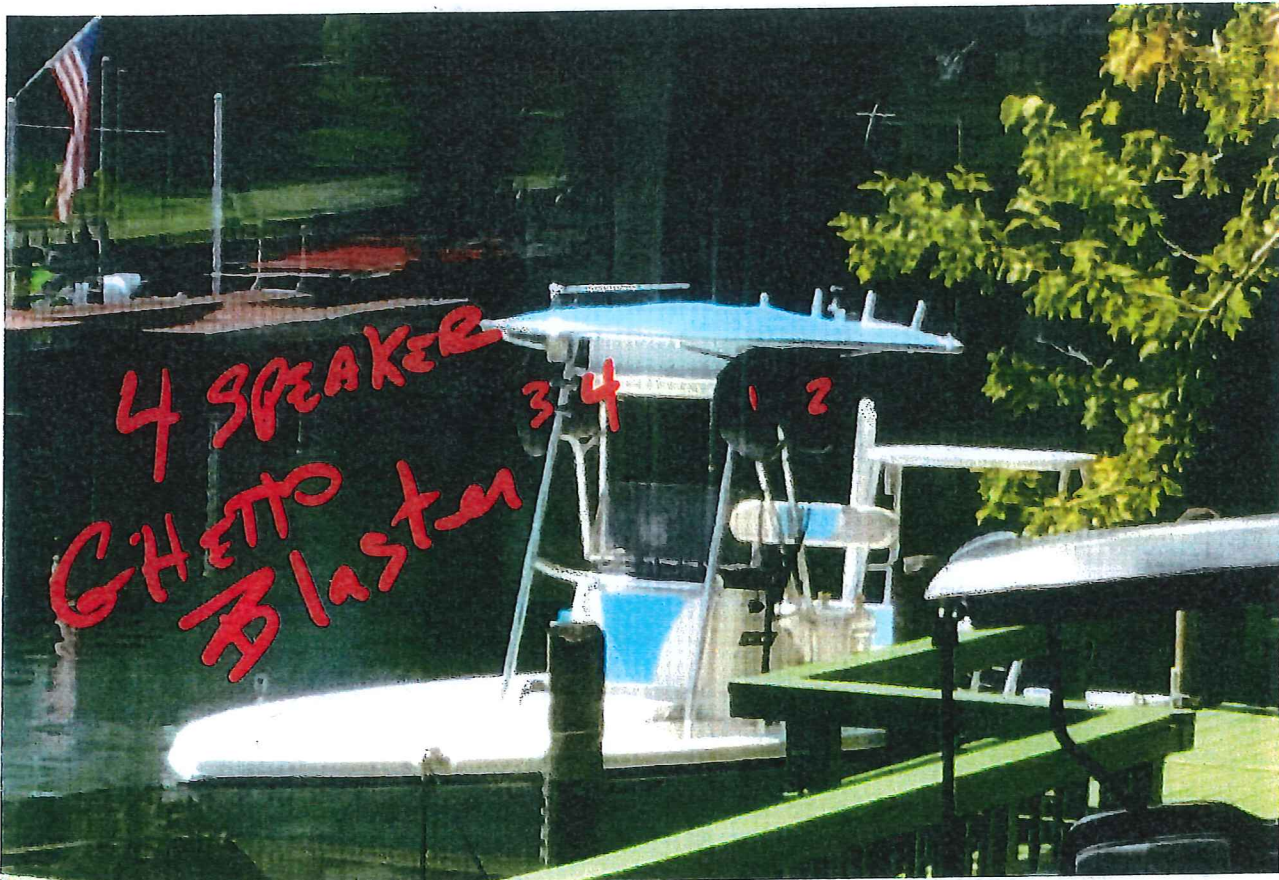
Radios, televisions, electronic audio equipment, musical instruments, and similar devices.

- a. The use, operation or playing of any radio, television, phonograph, stereo set, tape player, sound amplifier, musical instrument or similar device which produces or reproduces sound in a manner as to be **plainly audible at a distance of fifty (50) feet or more away from the real property line of the source of the sound**, to any person in a commercial, industrial, or residential area, or in or at a government-owned building or property. For multiple-family dwelling units on a common property, it shall be a violation if such is plainly audible fifty (50) feet from the source of the sound.
 - b. The operation or playing of any radio, musical instrument, or similar device which **produces sound on the public right-of-way in such a manner as to be plainly audible to any person at a distance of fifty (50) feet from the source of the sound.**
- (3) *Loudspeakers and devices for advertising.*
- a. The use, operation, or playing of any loudspeaker system, sound amplifier or other similar device which produces or reproduces sound which is cast or emitted upon public rights-of-way for the purpose of commercial advertising or for attracting the attention of the public to any building, structure, vehicle or activity, which is being carried on thereon.
 - b. The use, operation, or playing of any loudspeaker system, sound amplifier or other similar device between the hours of **9:00 p.m. and 7:00 a.m. the following day in such a manner so as to cause a **noise** disturbance across a residential real property boundary.** This section shall not apply to public school activities.

The specific case I am referencing is a visitor to our community who outfits his boat with a set of loudspeakers.

Here is a photograph of that ship:





The owners of this vessel can turn up the bass on this system so that 5 or 6 houses down the canal, people can feel the vibrations in their homes. This is precisely what I experienced on Saturday August 4 at 9:30 PM. A user of a public right of way was sharing his window rattling music choice at high volume with hundreds of my neighbors. Clearly this isn't a fishing vessel. It would scare away fish for miles. The department of defense is now deploying sound technology, weaponizing sound, like this person did. It is an offense under many parts of 12-66 table III, and prohibitions against residential night noise, as well as against loudspeakers and noises more than 50 feet. IT WAS AN OFFENSE by at least four different code criteria.

I went out and called to them to turn that stuff down, and informed them that this was a residential area, and that they could not behave that way.

I had encountered the same ship at 10:40 PM a few weeks before. At that time I told them there was an ordinance, and that if they didn't respect us I would have them fined. They turned down the music then.

I would like these actions taken by the City of Crystal River:

Please send a summary of the noise ordinance to the Citrus County Sheriff's Office for distribution to their Deputies. The deputy who I called out last Saturday did not seem to understand the laws to be enforced. He was mostly focusing on the aggressive nature of the violators. His interest in law was secondary to his interest in conflict resolution.

Please publish a noise ordinance flier to be distributed to residents and particularly those non residents who chose to make their properties for hire. We can circulate these through the Realtor's Association of Citrus County. All of our city fliers should be digitally accessible on the City website. It is a snap to put a PDF up on a website.

Amend the City Code to remove ambiguity. It appears that 12-8 is a vestige of a time when bells were a serious threat to peace.

- Let's remove that whole section (12-8).
- Please add language stating "notwithstanding any definitions to the contrary elsewhere in the City of Crystal River Code, the definition of day and night within 12 - 61 shall prevail."

It is evident that the Attorney who counseled the City Council did not rationalize the time elements of 12 - 61 with 12 - 8. **Recoup fees from that attorney or firm** for poor performance. We could use those funds to good effect elsewhere.

I'll conclude by letting you know that the renter who I first warned, and later asked for enforcement against, threatened "Keep calling the Sheriff and you'll see what happens." I would be happy to swear an affidavit to that effect. I am sure that fear of retribution is keeping our citizens from acting to curtail this kind of uncivil behavior.

Using enforcement should be supported by our public officials, and the latitude of the Deputy to enforce a law should be based on knowledge. At this time is it evident that the noise ordinances for Crystal River are unknown to Deputies. Please rectify that problem.

Thank you for your service to our community.

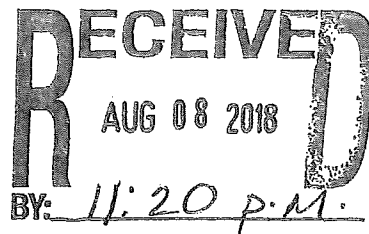
Peter Langlois
Managing Partner, CEO

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ATTACHMENT "D"



August 8, 2018

City of Crystal River, Florida
123 North West Highway 19
Crystal River, Florida 34428
Attn: Jim Farley, Honorable Mayor of Crystal River, Florida

Subject: Proposed Zoning Amendment for Property Owned by Kingwood Crystal River Resort Corporation (Re-zoning of Plantation Golf Course Property)

Mayor Farley:

The purpose of this letter is to make you and the other City Council members aware of our concerns relative to the proposed re-zoning of the Lagoon Course section of the Plantation Golf Course property (The Property) to allow a change in use of The Property from its current use as a golf course to a Planned Unit Development Recreational Vehicle Travel Park (RV Park).

In order to facilitate this process and in an effort to eliminate redundancy, we have attached to this letter four documents that underscore our concerns. Those concerns are summarized as follows:

-Attachment A. A copy of our original letter to Jackie Gorham dated April 30, 2018. The letter discussed several issues with re-zoning of The Property including potential flooding of surrounding properties, stormwater retention and possible run off from The Property negatively impacting surface waters and springs and the probability of soil contamination on The Property.

-Attachment B. Collier County, Florida Land Development Code.
Collier County appears to be on the forefront of addressing golf course conversion issues and has implemented a section of their code to deal with this type of re-development. We call your attention to areas of the code in bold font, underlined and italicized.

We apologize for those sections that did not print as our printer is not functioning properly. The affected sections are citations to other areas of the code.

-Attachment C. Broward County Golf Course Conversion Study.
A similar theme to Collier County. Stormwater issues, environmental contamination, loss of natural resources and land use compatibility.

-Attachment D. Public Health Assessment for the former Ponce DeLeon Golf Course in St. Augustine, Florida prepared by the U.S. Department of Health and the Florida Department of Health. We “only” printed out the summary of the report which is 20 pages. However, the summary is printed in the entirety for continuity purposes.

We call your attention to the highlighted areas of the document on pages 4, 5, 6, 8, 9, 10, 16 and 17 (Child Health Considerations) and 18.

Given the complexity of this issue and the high likelihood that this will not be the last golf course conversion in Citrus County, we believe that Citrus County government should be brought in to review the process and corresponding analyses. This will allow for the current process to be utilized in the future as a template.

We trust that copies of this letter and attachments will be distributed to other members of the City Council and to appropriate City staff.

Thank you for your time and assistance.

Sincerely yours,


Sandra and Anthony Mozo

9564 W. Plantation Lane
Crystal River, Florida 34429

awmsm57@gmail.com

Sandra's phone- 321-480-0199

Anthony's phone- 321-242-3465

ATTACHMENT A

April 30, 2018

City of Crystal River, Florida
123 North West Highway 19
Crystal River, Florida 34428
Attn: Jackie Gorman, Director of Planning and Community Development

Subject: Proposed Zoning Amendment for Property Owned by Kingwood Crystal River Resort Corporation (Re-zoning of Plantation Golf Course Property)

Ms. Gorman:

Based on your suggestion during our meeting on April 6, 2018 (attendees were Ms. Gorman, Sandra and Anthony Mozo), this letter will detail our concerns, questions and observations relative to the proposed re-zoning of the Lagoon Course section of the Plantation Golf Course property (The Property) to allow a change in use of The Property from its current use as a golf course to a Planned Unit Development Recreational Vehicle Travel Park (RV Park).

Our concerns, questions and observations are as follows:

1) Concern-Traffic Management:

A) One major concern is the plan to have one of the ingress/egress points into and out of the RV Park on Plantation Lane. This area is primarily single family residential and is not suited for the kinds of traffic and heavy vehicles that will utilize the RV Park. We (Sandra and Anthony) both recall from our April 6, 2018 discussion that you shared those same traffic management concerns and would be bringing those concerns to the attention of the Crystal River, Florida Planning Commission. We also believe that Plantation Lane is under Citrus County jurisdiction.

B) The RV Park plans call for primary ingress/egress using Fort Island Trail. It is our understanding that Citrus County has jurisdiction and responsibility for the maintenance of Fort Island Trail.

Questions/Observations-Traffic Management:

C) Ms. Gorman: Were you able to convey yours and our concern to the Planning Commission relative to the Plantation Lane ingress/egress issue?

D) Will Citrus County be involved in the City of Crystal River review process for the RV Park to address potential issues relative to the increased traffic and road stress from heavy vehicles using Fort Island Trail and possibly Plantation Lane? The weight and amount of RV Park vehicles may further stress Fort Island Trail and Plantation Lane roadways necessitating budgetary adjustments by the County.

2) Concern-Soil Contamination:

A) Another of our major concerns is the condition of the soil within the planned RV Park. Plantation Golf Course has been in operation in the same location for over 50 years. During that time it is quite possible that a considerable amount of pesticides, fertilizers, fungicides and other chemicals have been applied to the golf course greens, fairways, roughs and other course components. In addition to the amount of chemicals applied to the golf course during the 50 plus years of operation, there are some chemicals that are now banned from use. Some of those banned chemicals may have been used at Plantation Golf Course prior to the ban. As the area of the planned RV Park has numerous elevation changes, it is possible that those chemicals may be disturbed during development of the RV Park and leach into surface waters. Canals and ponds located within the planned RV Park are connected to canals and other tributaries which flow into Kings Bay, Crystal River and surrounding springs.

Question/Observations-Soil Contamination:

B) Will soil test be conducted to determine the amount (if any) of contaminants contained in The Property soil?

C) If tests will be conducted, who will be the responsible party for ensuring the tests are independent; the tests will be a random representative sampling of The Property; will be of an appropriate depth to capture all relevant data of the presence of contaminants (if any) contained in the soil of The Property?

D) If the soil is found to be contaminated, what methodologies will be utilized to remove the contaminants from the soil?

E) Given the large amount of funding for research, project implementation and volunteer efforts that have been utilized (primarily through partnerships) to restore Kings Bay, Crystal River, surrounding tributaries and springs, what agencies (governmental, for profit and non-profit, etc) will be notified of the proposed changes in use of The Property?

F) Will applicable Best Management Practices (BMPs) and/or other methodologies be mandated during development of The Property and what agency will be assigned the responsibility to ensure the mandate(s) are followed?

(3) Concern-Stormwater, Flooding:

A) The proposed change in use of The Property will result in a considerable amount of impervious surface added to the property in the form of infrastructure and other development.

B) Because of the increase of impervious surface for development of the RV Park the potential for flooding of surrounding properties and consequential damage to real and personal property may be increased.

C) The size of the proposed development is 29.68 acres; it is our understanding that Southwest Florida Water Management District will have regulatory authority over certain aspects of the development of The Property.

Question/Observations-Stormwater, Flooding:

D) With the impervious surface added to The Property to develop the RV Park, how will the additional stormwater runoff be stored at The Property during and after development? If this runoff is not stored on site at The Property, there is a possibility of further degradation of Kings Bay, surrounding tributaries and springs due to the increased run-off from The Property during and after development of the RV Park. This possibility must be considered and all applicable BMP's and other methodologies utilized to eliminate any potential damage caused to surface waters by stormwater run-off. Considering the investment of public funds for restoration, there is no logical reason to allow for any further degradation of Kings Bay, Crystal River, surrounding tributaries and springs by development.

E) If a certain amount of runoff is permitted during and after development of the RV Park, what impact will that runoff have on established Total Maximum Daily Loads (TMDL's) on Kings Bay, surrounding tributaries and springs?

F) What methodologies are being planned to prevent flooding of surrounding properties?

G) Has Southwest Florida Water Management District been notified of the proposed change in use and potential development of the RV Park?

4) Concerns-Noise:

A) The RV Park has the potential to generate a substantial amount of noise such as use of generators, planned and unplanned events, and the maintenance and service of vehicles.

Question/Observations-Noise:

B) Does the City of Crystal River have ordinances in place to restrict the use of generators to those times when power is lost?

C) Does the City of Crystal River have ordinances in place to restrict the times that planned and unplanned events may occur?

D) Does the proposed plan for the RV Park include service and maintenance of vehicles? If so, does the City of Crystal River have ordinances in place that regulate areas for service and maintenance of vehicles and establishing the methodologies for disposition of hazardous materials?

To summarize our concerns, the proposed RV Park development is without question high density and is not compatible with contiguous neighborhoods. However, we realize that ship has sailed and therefore any and all negative impacts the RV Park will have on surrounding properties, public lands and waterways must at the very least be minimized and if possible, completely eliminated.

Ms. Gorman, in the interest of full disclosure, copies of this letter have been sent to the following:

US Fish and Wildlife Service
Save Crystal River
Southwest Florida Water Management District
Citrus County Commission Chairman Ronald Kitchen
Citrus County Chronicle

I trust that you will distribute copies of this letter to appropriate City of Crystal River staff.

Thank you for your time and assistance.

Sincerely yours,

Sandra and Anthony Mozo
9564 W. Plantation Lane
Crystal River, Florida 34429
awmsm57@gmail.com
Sandra's phone- 321-480-0199
Anthony's phone- 321-242-3465

Attachment B- Collier County Florida Land Development Code

5.05.15 - Conversion of Golf Courses

A.

Purpose and Intent. The purpose of this section is to assess and mitigate the impact of golf course conversion on real property by requiring outreach with stakeholders during the design phase of the conversion project and specific **development** standards to ensure **compatibility** with the existing land uses. For the purposes of this section, property owners within 1,000 feet of a golf course shall hereafter be referred to as stakeholders.

1.

Stakeholder outreach process. The intent is to provide a process to cultivate consensus between the **applicant** and the stakeholders on the proposed conversion. In particular, this section is designed to address the conversion of golf courses surrounded, in whole or in part, by residential uses or lands zoned residential.

2.

Development standards. It is the intent of the specific **development** standards contained herein to encourage the **applicant** to propose a conversion project with land uses and amenities that are compatible and complementary to the existing neighborhoods. Further, the **applicant** is encouraged to incorporate reasonable input provided by stakeholders into the **development** proposal.

B.

Applicability. The following zoning actions, Stewardship Receiving Area Amendments, and **Compatibility** Design Review petitions, hereafter collectively referred to as "conversion applications," shall be subject to LDC section 5.05.15. A conversion application shall be required when an **applicant** seeks to change a constructed golf course to a non-golf course use. However, where a permitted, **accessory**, or **conditional use** is sought for a golf course zoned Golf Course and Recreational Uses (GC), the **applicant** shall be exempt from this section except for LDC section 5.05.15H.

1.

Zoning actions. This section applies to a golf course constructed in any zoning district where the proposed use is not permitted, **accessory**, or **conditional** in the zoning district or **tract** for which a zoning change is sought. Zoning actions seeking a PUD rezone shall be subject to the minimum area requirements for PUDs established in LDC section 4.07.02; however, the proposed PUD shall not be required to meet the contiguous acres requirement so long as the PUD rezone does not include lands other than the constructed golf course subject to the conversion application.

2.

Stewardship Receiving Area Amendments. This section applies to a golf course constructed on lands within a Stewardship Receiving Area where the proposed use is not permitted, **accessory**, or **conditional** in the context zone for which the change is sought.

3.

Compatibility Design Review. This section applies to a golf course constructed in any zoning district or designated as a Stewardship Receiving Area that utilize a non-golf course use which is a permitted, **accessory** or **conditional use** within the existing zoning district or designation. **Conditional uses** shall also require **conditional use** approval subject to LDC section 10.08.00.

C.

Application process for conversion applications.

1.

Intent to Convert application. The **applicant** shall submit an "Intent to Convert" application to the County prior to submitting a conversion application. The following is required of the **applicant** :

a.

Application. The Administrative Code shall establish the procedure and application submittal requirements, including: a title opinion or title commitment that identifies the current owner of the property and all encumbrances against the property; the Developer's Alternatives Statement, as provided for below; and the public outreach methods to be used to engage stakeholders at the Stakeholder Outreach Meetings, as established below.

b.

Public Notice. The **applicant** shall be responsible for meeting the requirements of LDC section 10.03.06.

2.

Developer's Alternatives Statement requirements. The purpose of the Developer's Alternatives Statement (DAS) is to serve as a tool to inform stakeholders and the County about the **applicant's development** options and intentions. It is intended to encourage communication, cooperation, and consensus building between the **applicant** , the stakeholders, and the County.

b.

Alternatives. The DAS shall be prepared by the **applicant** and shall clearly identify the goals and objectives for the conversion project. The DAS shall address, at a minimum, the three alternatives noted below. The alternatives are not intended to be mutually exclusive; the conceptual **development plan** described below may incorporate one or more of the alternatives in the conversion project.

i.

No conversion: The **applicant** shall examine opportunities to retain all or part of the golf course. The following considerations are to be assessed:

a)

Whether any of the existing property owners' association(s) reasonably related to the golf course are able to purchase all or part of the golf course; and

b)

Whether any of the existing property owners' association(s) and/or any new association reasonably related to the golf course can coordinate joint control for all or part of the golf course.

ii.

County purchase: The applicant shall coordinate with the County to determine if there is interest to donate, purchase, or maintain a portion or all of the property for a public use, such as a public park, open space , civic use, or other public facilities. This section shall

not require the County to purchase any lands, nor shall this require the property owner to donate or sell any land.

iii.

Conceptual **development** plan: The **applicant** shall prepare one or more proposed conceptual **development** plans, consistent with the **development** standards established in LDC section 5.05.15 G, depicting the proposed conversion. The **applicant** shall share the conceptual **development** plan with the stakeholders at the Stakeholder Outreach Meetings as described below. The conceptual **development** plan shall include a narrative describing how the plan implements and is consistent with the goals and objectives identified in the DAS. The conceptual **development** plan shall depict the retained and proposed land uses, including residential, non-residential, and preserve areas; existing and proposed roadway and pedestrian systems; existing and proposed trees and landscaping; and the proposed location for the greenway, including any **passive recreational** uses. The narrative shall identify the intensity of the proposed land uses; how the proposed conversion is compatible with the existing surrounding land uses and any methods to provide benefits or mitigate impacts to the stakeholders. Visual exhibits to describe the conceptual **development** plan and amenities, including the greenway, shall also be provided.

3.

Stakeholder Outreach Meetings (SOMs) for conversion applications. The SOMs are intended to engage the stakeholders early in the conversion project and inform the **applicant** as to what the stakeholders find important in the neighborhood, what the stakeholders consider compatible with the neighborhood, and what types of land uses they would support to be added to the neighborhood. An assigned County planner shall attend the SOM and observe the process. The following is required of the **applicant** :

a.

The Administrative Code shall establish the procedure and application submittal requirements.

b.

The **applicant** shall conduct a minimum of two in-person SOMs and a minimum of one web-based visual survey on the proposed conceptual **development** plan(s). The web-based survey web address shall be incorporated in the mailings notifying the stakeholders of the in-person SOMs.

c.

At the SOMs, the **applicant** shall provide information to the stakeholders about the purpose of the meeting, including a presentation on the goals and objectives of the conversion project, the conceptual **development** plan, the greenway concept, and the measures taken to ensure **compatibility** with the existing surrounding neighborhood. A copy of the full Developer's Alternative Statement shall also be made available at each SOM. The **applicant** shall facilitate discussion on these topics with the stakeholders using one or more public outreach method(s) identified in the Administrative Code.

d.

SOM report for conversion applications. After completing the SOMs the **applicant** shall prepare a SOM report. The report shall include a list of attendees, a description of the public outreach methods used, photos from the meetings demonstrating the outreach process, results from outreach methods, and copies of the materials used during the SOMs. The **applicant** shall also include a point-counterpoint list, identifying input from the stakeholders and how and why it was or was not incorporated in the conversion application. The report shall be organized such that the issues and ideas provided by the stakeholders are clearly labeled by the **applicant** in the list and the conversion application.

4.

Conversion application procedures. An **applicant** shall not submit a conversion application (e.g. rezone, PUDA, SRAA, **Compatibility** Design Review) until the Intent to Convert application is deemed completed by County staff and the SOMs are completed. Thereafter, the **applicant** may proceed by submitting a conversion application with the County as follows:

a.

Zoning actions. For projects subject to 5.05.15 B.1., the **applicant** shall file a PUDA or rezone application, including the SOM report. Deviations to LDC section 5.05.15 shall be prohibited; further, deviations to other sections of the LDC shall be shared with the stakeholders at a SOM or NIM.

b.

Stewardship Receiving Area Amendments. For projects subject to 5.05.15 B.2., the **applicant** shall file a Stewardship Receiving Area Amendment application, including the SOM report. Deviations to LDC section 5.05.15 shall be prohibited; further, deviations to other sections of the LDC shall be shared with the stakeholders at a SOM or NIM.

c.

Compatibility Design Review. For projects subject to 5.05.15 B.3., the **applicant** shall file a **Compatibility** Design Review application, including the SOM report.

D.

Criteria and staff report for conversion applications. In addition to the requirements established in LDC sections 10.02.08, 10.02.13 B., or 4.08.07, as applicable, the staff report shall evaluate the following:

1.

Whether the **applicant** has met the requirements established in this section and **development** standards in the LDC. In particular, that the proposed design and use(s) of the greenway, as applicable, meet the purpose as described 5.05.15 G.2.

2.

Whether the SOM report and point-counterpoint list described above reflect the discussions that took place at the SOMs.

3.

Whether the **applicant** incorporated reasonable input provided by the stakeholders to address impacts of the golf course conversion on stakeholders' real property.

4.

Whether the **applicant** provided an explanation as to why input from the stakeholders was not incorporated into the conceptual **development** plan.

E.

Supplemental review and approval considerations for zoning actions and Stewardship Receiving Area Amendments. The report and recommendations of the Planning Commission and Environmental Advisory Council, if applicable, to the Board shall show the Planning Commission has studied and considered the staff report for conversion applications, reasonable input from the stakeholders, the criteria established in LDC section 5.05.15 D, as well as the criteria established in LDC sections 10.02.08 F, 10.02.13 B, or 4.08.07, as applicable. In particular, the Planning Commission shall give attention to the design of the greenway and how it mitigates impacts to real property. Further attention shall be given to who can use the greenway. The Board shall consider

the criteria in LDC section 5.05.15 D, as well as the criteria established in LDC sections 10.02.08 F, 10.02.13 B, or 4.02.07, as applicable, and Planning Commission report and recommendation.

F.

Compatibility Design Review. For projects subject to 5.05.15 B.3., this section is intended to address the impact of golf course conversion on real property by requiring the conceptual **development** plan to be reviewed for **compatibility** with the existing surrounding uses. The following is required:

1.

Application. The Administrative Code shall establish the submittal requirements for the compatibility design review application.

2.

Public Notice. The **applicant** shall be responsible for meeting the requirements of LDC section 10.03.06.

3.

Compatibility Design Review. The Planning Commission shall review the staff report as described in 5.05.15 D, the Compatibility Design Review application, and make a recommendation to the Board based on the following criteria:

a.

Whether the applicant has met the applicable requirements established in this section and reasonably addressed the concepts identified in LDC section 5.05.15 D.2. - D.4.

b.

Whether the conceptual design is compatible with the existing surrounding land uses.

c.

Whether a view of open space is provided that mitigates impacts to real property for the property owners that surround the golf course.

d.

Whether **open space** is retained and available for passive recreation.

4.

The Board shall consider the criteria in LDC section 5.05.15 F.3., above, the staff report and the Planning Commission report and approve, approve with conditions, or deny the application. Upon approval of the application, the applicant shall obtain approval of any additional required **development order**, such as a SDP, construction plans, or **conditional use**.

G.

Development standards. The following are additional minimum design standards for zoning actions and Stewardship Receiving Area Amendments. The **Compatibility Design Review** process shall only be subject to LDC section 5.05.15 G.6.

1.

Previously approved **open space**. Golf course acreages utilized to meet the minimum **open space** requirements for a previously approved project shall be retained as **open space** and shall not be included in **open space** calculations for any subsequent conversion projects.

2.

Greenway. The purpose of the greenway is to retain an open space view for stakeholders, support passive recreational uses, and support existing wildlife habitat. For the purposes of this section the greenway shall be identified as a continuous strip of land set aside for passive recreational uses, such as: open space , nature trails, parks, playgrounds, golf courses, beach frontage , disc golf courses, exercise equipment, and multi-use paths. The Board may approve other passive recreational uses that were vetted at the Stakeholder Outreach Meetings. The greenway shall not include required yards (setbacks) of any individual lots .

a.

The greenway shall be contiguous to the existing residential properties surrounding the golf course and generally located along the perimeter of the proposed development . The Board may approve an alternative design that was vetted at the Stakeholder Outreach Meetings, as provided for in LDC section 5.05.15 C.3.

b.

A minimum of 35 percent of the gross area of the conversion project shall be dedicated to the greenway. The greenway shall have a minimum average width of 100 feet and no less than 75 feet at any one location.

c.

Maintenance of the greenway shall be identified through the zoning or and Stewardship Receiving Area Amendment process.

d.

The greenway may be counted towards the **open space** requirement for the conversion project as established in LDC section 4.02.00 except as noted in G.1. above.

e.

Existing trees and understory (shrubs and groundcover) shall be preserved and maintained within the greenway, except where minimal improvements are needed that provide a **passive recreational** use. At a minimum, canopy trees shall be provided at a ratio of 1:2,000 square feet within the greenway. Existing trees may count toward the ratio; however, trees within preserves shall be excluded from the ratio.

f.

A wall or fence is not required between the greenway and the proposed **development** ; however, should a wall or fence be constructed, the fence shall provide habitat connectivity to facilitate movement of wildlife in and around the greenway.

g.

A portion of the greenway may provide stormwater management; however, the greenway shall not create more than 30 percent additional lake area than exists pre-conversion in the greenway. Any newly developed lake shall be a minimum of 100 feet wide.

h.

The **applicant** shall record a restrictive covenant in the County's official records describing the use and maintenance of the greenway as described in the zoning action or SRA Amendment.

3.

Preserve requirements. The following preserve standards supplement those established in LDC section 3.05.07.

a.

Where small isolated areas (of less than 1/2 acre in size) of **native vegetation** (including planted areas) exist on site they may be consolidated into a created preserve that may be greater than 1/2 acre in size in the aggregate to meet the preserve requirement.

b.

Existing County approved preserve areas shall be considered as follows:

i.

Golf courses within a conventional zoning district. All County approved preserve areas shall be retained and may be utilized to meet the preserve requirements for the conversion project.

ii.

Golf courses within a PUD. All County approved preserve areas shall be retained. Preserve areas in excess of the PUD required preserve acreage may be used to meet the preserve requirement for the conversion project.

4.

Stormwater management requirements. The applicant shall demonstrate that the stormwater management for the surrounding uses will be maintained at an equivalent or improved level of service . This shall be demonstrated by a pre versus post development stormwater runoff analysis.

5.

Floodplain compensation. In accordance with LDC section 3.07.02 floodplain compensation shall be provided.

6.

Soil and/or groundwater sampling. In addition to the soil and/or ground water sampling requirements established in LDC section 3.08.00 A.4.d., the applicant shall conduct soil and/or groundwater sampling for the pollutants as follows: managed turf, chemical storage/mixing areas, and maintenance areas (i.e. equipment storage and washing areas, fueling and fuel storage areas) shall be tested for organophosphate, carbamate, triazine pesticides, and chlorinated herbicides. In addition, maintenance areas, as described above, shall be tested for petroleum products. The County shall notify the Department of Environmental Protection where contamination exceeding applicable Department of Environmental Protection standards is identified on site or where an Environmental Audit or Environmental Assessment has been submitted.

7.

All other **development** standards. The conversion of golf courses shall be consistent with the **development** standards in the LDC, as amended. Where conflicts arise between the provisions in this section and other provisions in the LDC, the more restrictive provision shall apply.

H.

Design standards for lands converted from a golf course or for a permitted use within the GC zoning district shall be subject to the following design standards.

1.

Lighting. All lighting shall be designed to reduce excessive glare, light trespass and sky glow. At a minimum, lighting shall be directed away from neighboring properties and all

light fixtures shall be full cutoff with flat lenses. Lighting for the conversion project shall be vetted with stakeholders during the SOMs and the public hearings, as applicable.

2.

Setbacks. All non-golf course uses, except for the greenway, shall provide a minimum average 50-foot setback from lands zoned residential or with residential uses, however the setback shall be no less than 35 feet at any one location.

ATTACHMENT C

Broward County Golf Course Conversion Study

June 12, 2007

**Prepared by:
Broward County Urban Planning
And Redevelopment Department, Planning Services Division**

Broward County Board of County Commissioners

TABLE OF CONTENTS

CHAPTER 1- Data and Analysis	1
Introduction	
Golf Courses in Broward County	
Golf Course Redevelopment	
Redevelopment Issues	
Current Policy	
CHAPTER 2 - Recommendations	4
Goals, Objectives and Policies	
Definitions	
APPENDIX	
Appendix A: Golf Course Inventory	6
Appendix B: Map of Broward County Golf Courses	7
Appendix C: Golf Course Land Use Breakdown	8

Chapter I - Data and Analysis

Introduction

At their December 2006 land use plan amendment hearings, the Broward County Commission, in response to several land use plan amendment proposals to convert golf courses to residential development, directed County staff to study the implications of golf course conversions and develop recommendations and policies regarding such conversions.

This study was prepared by Urban Planning and Redevelopment Department in response to the Commission direction. The study assesses the status of golf courses in Broward County; analyzes the issues involved in golf course redevelopment; identifies the current policies and plan requirements affecting golf courses; and, recommends policy changes to govern future land use plan amendments involving golf courses.

Golf Courses in Broward County

Golf is a popular form of recreation in Broward County owing to the subtropical climate and corresponding opportunity to play golf year round. Golf is an integral part of the County's tourist economy as the 55 operating golf courses host tens of thousands of rounds of golf every year. Golf courses are also an important component of the County's open space system as they represent over half of all lands designated for Commercial Recreation and Recreation and Open Space use within the Broward County Land Use Plan. Appendix A is a list of all golf courses in Broward County with addresses and other pertinent information. A map of the courses is included as Appendix B. Following is a brief summary of the characteristics of golf courses in Broward County.

There are 55 operating golf courses totaling approximately 8,500 acres

Most of the courses are 100 acres or more in size

Most of the courses (67%) are open to the public with the remainder limited to private membership

Only a few of the golf courses, 7 courses, are publicly owned

Golf Course Redevelopment

As Broward County builds out of the developable vacant land within the urbanized area, few large tracts of land remain available for development. Golf courses represent a significant portion of the remaining open space and thus, have experienced increasing pressure for redevelopment. In the last few years, nine golf courses have closed totaling nearly 700 acres. Broward County Land Use Plan amendments have either been approved or are in progress to redevelop 4 of these courses primarily for residential use. The remaining 5 courses have not submitted proposed land use changes to the County at this time.

Table 1: Closed Golf Courses in Broward County

Golf Course	City	Land Use Amendment Approved	Land Use Amendment in Progress	No Amendment Submitted	Acres
Monterey Golf Course	Tamarac	X			56
Sabal Palm Golf Course	Tamarac	X			120
Eaglewoods Golf & Country Club	Miramar		X		132
Hillcrest Golf & Country Club (9 of 27 holes)	Hollywood		X		30
Broken Woods Golf Club	Coral Springs			X	84
Inverarry Executive Course	Lauderhill			X	60
American Golf Club	Ft. Lauderdale			X	72
Eagle Lakes Golf Course	Margate			X	17
Tam O'Shanter Country Club	Deerfield Beach			X	97
Total		2	2	5	668

Redevelopment Issues

Golf course conversions pose difficult issues for Broward County residents and local governments including the loss of open space; potential decrease in tourism and corresponding tourist revenues; environmental contamination; loss of valuable natural resources; and, incompatible development which may not be well integrated with the surrounding community. Following is an overview of the issues.

Loss of Open Space. Golf courses represent a significant portion of the open space in the urban area of Broward County providing relief from urban development and also reducing potential traffic congestion and the demand for many public services. Golf courses also serve as open space for the surrounding neighborhoods and positively impact neighborhood property values, especially for residences directly fronting the courses.

Decrease in Tourism. Golf courses are a major attraction for year round residents, tourists and seasonal residents. In 2006, an estimated 10 million people visited the Greater Fort Lauderdale area generating an estimated collective economic impact of \$8.76 billion. The continuing loss of golf courses in Broward County could negatively impact the County's attractiveness as a tourist destination.

Environmental Contamination. Golf courses are prone to environmental contamination resulting from years of storage and heavy use of pesticides and herbicides, especially arsenic-based herbicides. During the due-diligence process of finance approval for land acquisition or development, environmental assessments are typically completed to determine financial risk. Also, if land owners or golf course operators are aware of contamination, they are required to report the contamination to the Broward County Environmental Protection Department. However, there is no specific requirement to conduct environmental audits during the land use plan amendment or development permitting process.

Loss of Natural Resources. Golf courses contain a variety of natural resources including wetlands, lakes and tree canopy which have become scarce with the urbanization of eastern Broward County. These resources serve as valuable habitat for endangered and threatened species. Golf courses also serve as aquifer recharge areas and often are an integral part of the storm water management system helping to prevent flooding of the surrounding development.

Land Use Compatibility. As golf courses are redeveloped, it may be difficult to achieve compatibility with the surrounding neighborhood. One problem unique to the redevelopment of golf courses is that golf course design often makes it difficult to integrate the development of fairways and greens with the existing neighborhood street and sidewalk system.

Current Policy

The Broward County Land Use Plan does not specifically address the protection or retention of golf courses. The protection of open space is addressed within Goal 5.00.00 of the Plan, but golf courses are not specifically identified as an open space use. The Implementation Requirements section of the Plan identifies the land use categories where golf courses are permitted. Golf courses are permitted in almost all land use categories, but nearly all courses are designated within three categories-the Commercial Recreation (63%), Recreation and Open Space (16%) and Residential (20%) categories (Table 2). Of these categories, the Recreation and Open Space category provides the most protection from development specifically stating that only golf courses intended to remain permanently may be designated for Open Space use. The Commercial Recreation category also provides protection, but allows other uses such as stadiums, marinas, dog and horse tracks and hotels. However, these other uses are often not practical on golf courses and golf course redevelopment usually requires a plan amendment to another category. The Residential category provides little protection as a plan amendment would not be required for development unless additional density is being sought for a development project. Appendix C identifies the land use designations of Broward County golf courses.

Table 2 - Land Use Designations for Broward County Golf Courses

Land Use Category	Sum of Acres	Percent
Commercial Recreation	5,353	63
Recreation and Open Space	1,405	16
Residential Irregular	1,313	15
Low 3 Residential	329	4
Estate Residential	118	1
Low Medium Residential	9	0
Commercial	14	0
Medium High Residential	4	0
Low 5 Residential	2	0
Total	8,547	

Golf courses in Broward County, especially those that are integral parts of golf course communities, may also be subject to deed restrictions limiting future changes in use. For example, the Weston Hills Country Club is subject to deed restrictions requiring the maintenance of two (2) 18 hole golf courses.

Staff initiated research to determine how many courses in Broward County were subject to such deed restrictions, but determined that this would require extensive title research and review of homeowner association documents beyond the scope of this study.

The Broward County Land Use Plan also allows golf courses to be used to satisfy the Community and Regional Parks requirements of the Plan subject to certain conditions. The Plan requires that municipalities provide a minimum of 3 acres of community parks per thousand residents, while the County is required to provide a minimum of 3 acres of regional parks per thousand residents. Golf courses may be counted towards either requirement, limited to 50 percent of the golf course acreage, but only if they are protected through zoning and other legal restrictions. Golf course acreage also may not count for more than 15 percent of the total community parks requirement for a municipality or 15 percent of the regional parks requirement.

Chapter II - Recommendations

Given the redevelopment pressures affecting golf courses and their value as open space, natural resource areas and tourist attractions, the Broward County Land Use Plan should be amended to enhance the protection of existing golf courses. Staff recommends the Goals, Objectives and Policies of the Plan be amended to specifically define golf courses as part of the County's open space system and discourage the loss of open space. Also, policies and associated definitions should be added to ensure that proposed plan amendments involving golf course conversions address the issues outlined in this report. Following are the recommended plan amendments.

Goals, Objectives and Policies

Revise Objective 5.04.00 and add new policies under the Objective as follows:

Objective 5.04.00 Provision of Open Space: Establish an extensive system of public and private open space areas including natural reservations, parks, beaches, scenic vistas, golf courses, and waterways compatible with the tropical and resort character of Broward County.

New Policies:

Policy 5.04.03 Amendments to the Broward County Land Use Plan which would result in the loss of open space shall be strongly discouraged and be required to address how open space and recreation needs of the existing and projected residents of the community will be met, including how the negative impacts of the loss of open space on surrounding neighborhoods will be minimized or mitigated.

Policy 5.04.04 Amendments to the Broward County Land Use Plan containing golf courses, including closed golf courses, shall address the following:

a. The impact of the loss of open space on the surrounding residential areas. The loss of open space must be mitigated through provision of parks and open space to serve the surrounding neighborhood.

b. Management of storm water retention taking into account the extent to which the golf course provided storm water retention for the surrounding development and how this will be mitigated, along with any additional storm water impacts created by the new development.

c. Minimization of the impact on natural resources including wetlands, lakes, aquifer recharge areas and the tree canopy, including any historic trees on the site.

d. Mitigation of environmental contamination. The level of environmental contamination must be determined by conducting a Phase 1 and Phase 2 environmental assessment.

e. Integration of the proposed development with the surrounding areas including how the development will tie into the existing neighborhoods through roads, sidewalks, parks/open space and greenways.

Definitions

Add the following definitions to the Plan Implementation Requirements Section:

Historic Trees- includes trees designated by the Broward County Board of County Commission pursuant to Chapter 27 of the Broward County Code which are (1) located on historically significant property and related to an historic event; (2) uniquely related to the heritage of Broward County; or (3) at least seventy-five (75) years old. Requests for designation can be made by State, County, Municipality, Historical Preservation Group, or by the Property Owner. Removal of a tree designated as "Historic" requires the approval of the County Commission. (Chapter 27-412 Broward County Code)

Phase 1 Environmental Assessment- means a thorough evaluation of the present and past uses and environmental condition of a property. It includes a database search, review of property history, site inspection and comprehensive report (no collection of physical samples).

Phase 2 Environmental Assessment- a thorough evaluation and report of the present environmental condition of a property based on physical samples used for various evaluations. This may include evaluation of soil, ground water, underground tanks, and material samples that can be used to check for asbestos, lead, hazardous chemicals and biological agents, such as bird droppings, mold and bacteria.

ATTACHMENT D

Former Ponce de Leon Golf Course
Public Health Assessment
Final Release



Summary and Statement of Issues

The 400-acre former Ponce de Leon Resort and Convention Center is on the eastern side of U.S. Highway 1, about one-half mile south of the St. Augustine Airport, in St. Augustine, Florida. In the past, the property included an 18-hole golf course and associated buildings, a Radisson hotel and convention center, a St. Augustine city water treatment plant (within an easement), and undeveloped wooded land. The site was a golf course from 1916 until 2003. The City of St. Augustine's planning and zoning board recently approved the new site owners' (Ponce Associates, Limited Liability Company [LLC]) plans to redevelop most of the site into 749 residential properties. Contractors demolished the older of the two golf course maintenance facilities on the property and removed over 800 tons of impacted soil from around it. The contractors disposed of the building and contaminated soil at a landfill. Post-removal soil analyses show some areas still have elevated levels of arsenic and the owners plan further remedial efforts for this area. Contractors also demolished the resort facility.

DOH categorizes this site as an "*indeterminate public health hazard*" because assessment of the site is incomplete. The owners are cleaning up the site under the Florida Department of Environmental Protection (DEP) Contamination Site Cleanup program. The owners have a signed Consent Order, which directs their activities. Predevelopment activities include determining the locations and levels of site contaminants. Remedial actions will be approved by DEP and will include the plans the certified contractors will carry out to either meet state standards for residential land use or otherwise prevent future exposures to contaminated media.

Soil—DEP will require a pilot test of any proposed soil remediation methods to show the "Conceptual Remedial Approach" will meet the Soil Cleanup Target Levels (SCTLs) for any measured contaminants.

While the areas of greatest arsenic contamination (areas around the old maintenance barn and the 9th fairway) may be the most likely to contain other turf management chemicals, other potential areas of soil contamination (or other contaminants) were not addressed by the Contamination Assessment Report (CAR). Therefore, DOH had recommended contractors should test soils from the following areas for volatile organic compounds[†], pesticides, herbicides and metals:

- old maintenance barn,
- old maintenance barn dump,
- 9th fairway,
- hotel maintenance area,
- new golf course maintenance area,
- dump west of the 15th hole, and
- older golf course layout (Dominion 2004).

Only very limited data on persistent organic chemicals used in turf management is currently available.

While the engineering building, and associated storage tanks have been demolished and removed from the site, contractors should test stained soil near the former location of the engineering

[†]Volatile Organic Compounds could be related to spilled or leaked gas or diesel fuel, or solvents for turf management chemicals.

building for volatile organic compounds, semi-volatile organic compounds, and metals. Tests of groundwater in this area revealed VOCs, but none exceeded their groundwater cleanup target levels (reference accorded to Paul Laymon of Dominion, in HSWMR letter 2005). Contractors should test soil near the former location of the engineering building outdoor battery storage area for lead and antimony.

Groundwater—the limited available information indicates areas of shallow groundwater contamination. No potable wells are developed in the contaminated shallow groundwater; so ingestion of contaminated shallow groundwater is not a current exposure pathway. Under the Contamination Site Cleanup program, the developer can propose restrictive covenants to limit people's access to contaminated shallow groundwater. The developer will also address groundwater discharge to surface water and/or the potential for groundwater discharge to affect sediments. There are four irrigation wells developed into the deeper confined Floridan aquifer, and one in the semi-confined intermediate aquifer. DEP noted the developer plans to supply all the homes with city water and to abandon the existing irrigation wells.

Surface water—surface water on and near the site has mainly been tested for arsenic. Surface water from seven ponds was tested for organophosphate pesticides. Based on sampling at other Florida golf courses, both surface and groundwater might also contain elevated levels of nitrates or chemicals[†] from other chemical compound groups. Contaminated groundwater could discharge to surface water ponds on the site or to the off-site marshes. The owners will have a stormwater management plan approved by the St. Johns River Water Management District before they begin developing the site. This plan will show, with appropriate test results, that the stormwater runoff will meet Florida's surface water standards, which are often stricter than potable water standards.

Sediments—testing should demonstrate that remediation plans for sediments would meet state standards for all turf management chemicals. DOH recommends contractors test sediments from the grass-dump in the marshes near the 18th hole and the areas in Robinson Creek nearest the former maintenance barn for volatile organic compounds, pesticides including herbicides, and metals.

At this time, site access is not restricted. However, the potential for trespassers to incidentally ingest contaminated soil or inhale contaminated dust from the specific areas with the highest measured levels of arsenic could be limited by vegetation and by the 400-acre size of the site. Nonetheless, until site assessment and remediation are complete, the following precautions should be taken.

1. Persons, most likely workers at this time, should avoid dust inhalation or hand-to-mouth contact with contaminated surface soil especially near the old maintenance barn, and
2. Workers should control dust generation if soil conditions are dry. DEP may require monitoring air quality for arsenic during any future clean up or remodeling, utilities

[†] The USGS, DACs, and DEP have found simazine (a triazine pesticide), acephate (an orthophosphate pesticide [OP]), ethoprop (OP) and fonophos (OP) above drinking water standards or other guidance levels in golf course surface water. The additional chemicals the USGS most commonly identified were atrazine (a triazine pesticide), fenamiphos (OP), fenamiphos sulfoxide (OP), and diuron (a urea-substituted herbicide). The USGS also measured ametryn (a triazine pesticide), bromocil (a urea-substituted herbicide), chlordane (OP), diazinon (OP), diuron (a urea-substituted herbicide), isofenphos (OP), malathion (OP), methamidophos OP), oryzline (a nitro-amide pesticide), oxydiazon (an organochlorine herbicide), and pronamide (an amide pesticide). DEP and DACs also measured nitrates. For a synopsis of these studies and references, see Appendix C.

installation, construction, or other activities that would disturb soil or remove vegetation, especially near the former maintenance barn on the southern part of the site.

DOH made the Public Comment draft of this document available in early and mid-2005. We mailed the involved agency personnel (EPA, DEP and CHD), community contacts, and the development company's contractor copies of the document on March 22, 2005. Community Involvement staff mailed out about 300 fact sheets to the nearby residents announcing the availability of the report the last week of June 2005. The fact sheet summarized the findings of the report and gave our web site for a complete copy of the Public Comment Draft: <http://www.myfloridaeh.com/community/SUPERFUND/PHA.htm>. The fact sheet also contained a comment sheet asking for comments and questions. DOH responses to these comments and questions are included in Appendix D.

DOH will evaluate any additional test results. If additional chemicals are found at levels above their target cleanup values, DOH will re-evaluate exposure pathways and will work with DEP to assure engineering controls, deed restrictions, and other remediation options adequately address public health and future residential land use.

Purpose

The Florida Department of Health (DOH) evaluates the public health significance of hazardous waste sites through a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR) in Atlanta, Georgia. This health assessment contains DOH's evaluation of the public health threat from chemicals found in soil, sediment, groundwater and surface water samples from the former Ponce de Leon Resort and Convention Center site in St. Augustine. DOH performed this health assessment at the request of the Florida Department of Environmental Protection (DEP).

Background

Site Description and History

The 400-acre former Ponce de Leon Resort and Convention Center is on the eastern side of U.S. Highway 1, about one-half mile south of the St. Augustine Airport, in St. Augustine (St. Johns County, Florida (Figures 1 and 2)). Ponce Associates Limited Liability Company (LLC) owns the site. In the past, the property included an 18-hole golf course and associated buildings, a Radisson hotel and convention center, a St. Augustine city water treatment plant (within an easement), and undeveloped wooded land (Figure 3). The site was a golf course from 1916 until 2003. The city of St. Augustine's planning and zoning board recently approved the site owners' plans to redevelop most of the site into 749 residential properties.

Contractors for Ponce Associates LLC prepared three environmental site assessment reports prior to Ponce Associates LLC's purchase of the site (Environmental Sciences, Inc. prepared the reports referred to as Phases I and II). Conclusions and data from these Phase I and II reports are included in the Site Assessment Report (Dominion 2003a), which also includes additional data collected by Dominion. Information in the Site Assessment Report identified the following potential sources of contamination:

Chemical Storage and Mixing Areas

- Insecticides and herbicides were reportedly mixed outside of the south-central maintenance barn on the ground near a spigot. This barn was used for maintenance until the late 1980s.
- The new northwest maintenance building was used from the late 1980s until the golf course closed. Water from equipment washing drained to a north-central retention pond.
- Maintenance operations were carried out at the northern wing of the hotel complex.

Underground and Aboveground Storage Tanks

- The new maintenance building has a 150-gallon aboveground storage tank (AST), an empty AST, a hydraulic fluid AST, a 500-gallon unleaded gas AST, and a 750-gallon AST. The environmental site assessment reports found the concrete floor and concrete block walls of the secondary containment structure around the gas and diesel tanks did not have the required sealant.
- Stained soils were noted near the 55-gallon waste oil drums and the mineral spirits AST near the engineering/housekeeping building.

Trash Dumps

- Solid waste dumps near the south-central maintenance barn include an open equipment storage area north of the barn and nearby wooded areas along Robinson Creek.
- Vinyl siding, fertilizer bag remnants, metal, cans, bottles, and plastic lawnmower parts were noted in the central wooded area, west of the 15th hole.

Chemical Residues

- Uncapped batteries stored on an outdoor shelf near the engineering/housekeeping building were open to the rain. Lead- and antimony-contaminated fluids from these batteries may have leaked onto nearby soil.

The Phase III report noted that contamination (associated with the following site features) was addressed (Dominion 2003a).

Underground and Aboveground Storage Tanks

- Gasoline contamination associated with two tanks located south of the southern maintenance barn was resolved by a tank removal and site rehabilitation order with the Florida DEP. The groundwater monitoring wells and the remediation wells were noted in Environmental Science, Incorporated's Phase I and II letter dated October 9, 2002 included in Dominion 2003a, as their Appendix A.
- Propane-fueled water-heating units and liquid propane tanks replaced two underground fuel-oil storage tanks near the hotel. The smaller 2,000-gallon tank was removed, and the larger 3,000-gallon tank was abandoned in place. According to the Dominion Inc. project manager, neither had shown evidence of leaking. These features, along with the hotel and conference center, have since been removed.
- A 3,000-gallon underground fuel oil storage tank (next to the hotel kitchen) had been replaced with a 250-gallon fuel oil AST. This fuel heats water for the boilers and guests' hot water. These features have also since been demolished.

Ponce Associates LLC is remediating the site under the Florida Department of Environmental Protection's (DEP) Contamination Site Cleanup program. Ponce Associates LLC's former

contractor, Dominion, Inc., submitted a Contamination Assessment Report (CAR) to DEP (Dominion, 2004). The CAR states that arsenic was measured at higher levels than the rest of the course in soil on the 9th fairway. In the past, the required method for equipment cleanup following application of arsenic-based herbicides was triple rinsing. The equipment operator would treat the rough on the 9th hole with arsenical-herbicide, fill the tank with water at the nearby water supply well and then drain the tank on the same rough; repeating this process two or more times. Additional testing will show whether this tank-cleaning method was used with the application of other turf management chemicals.

When the Contamination Assessment Report characterizes site contamination and meets other statutory requirements, DEP will accept it. The contractor will then prepare a Remedial Action Plan, which DEP will accept, when the RAP meets statutory requirements. The owners will develop an approved stormwater management plan with the St. Johns River Water Management District. This plan must demonstrate that stormwater runoff will meet DEP's surface water standards, which can be ten times lower than potable water standards.

For future residential use of the site, the information currently available indicates that engineering or institution controls will be needed in some areas to prevent exposures to low levels of contaminants in soil and shallow groundwater. Any proposed controls will need to meet Contamination Site Cleanup program requirements.

Contractors demolished the older of the two maintenance facilities on the property. They removed over 800 tons of arsenic-impacted soil from around it this facility and disposed of the building and soil at a landfill. Post soil-removal analyses show some areas still contain elevated levels of arsenic. The owners plan further remedial efforts for these and other areas. The contractors have also demolished the resort facility.

Demographics

In 2000, about 2,743 people lived within a 1.5-mile radius of a point in the center of the site. Approximately 90% were white, and 6% were black. All other racial/ethnic groups made up about 6% of the total, with about 2% being two or more races (Bureau of the Census 2000). The nearest residences are on Poinciana Avenue and Mi Hogar Avenue, south of the site; on Ocean Boulevard, DeLeon Point, and 3rd and 4th Avenues north of the site; and on Avenue A west of Dixie Highway west of the site.

Land Use

The site is relatively flat and about 5 feet above sea level. One-half mile of salt marshes separate the site from the Tolomato River to the east. The Tolomato River is tidal and flows into the Atlantic Ocean about 2 miles to the southeast, through a break in the barrier islands. Several residential streets separate the property from the St. Augustine airport north of the site. A restaurant is located north of the site on U.S. Highway 1. West of the site across Highway 1 are offices for St. Johns County and some commercial establishments including offices for mobile home sales and offices for Florida East Coast railroad maintenance (the former Miller Shops). Florida DEP indicated that waste investigations are ongoing at the former Miller Shops. Poinciana Avenue, several residential streets, a Harley-Davidson store, and salt marshes lie to the south. A condominium out-parcel is present east of the hotel; this out-parcel is privately held land that is not part of the former Ponce Golf Course site.

Northrup Grumman, about a mile northwest of the site, is on EPA's Toxic Release Inventory (TRI) list and hazardous waste generating facilities list. The former Washac Industries, Incorporated, property, one-half mile northwest of the site, is an EPA CERCLA site but is not on the National Priorities List.

Schools near the former Ponce de Leon Resort and Convention Center include

- Douglas Hartley Elementary, 1 mile south of the site, and
- St. Augustine High School, 1 mile southwest of the site.

Florida DOH did not locate any hospitals or day care centers within 1 mile of the site.

Natural Resource Use

Groundwater in the surficial aquifer under the site is generally 5 feet or less below the land surface. Residences bordering the northern side of the site (up gradient) use private wells. St. Johns County Health Department personnel sampled five private wells on the streets closest to the northern part of the site in December 2003. Groundwater samples from these wells were analyzed for metals, pesticides, herbicides, and nitrates. No chemicals were measured above drinking water screening levels. City water is available for commercial, industrial, and residential use west and south of the site. No city of St. Augustine municipal water wells are down gradient of the site.

Community Health Concerns

Nearby residents are concerned that if the property is developed for residential use, people living on the site may be at increased risk for illness from exposure to soil contaminated with arsenic (<http://www.savetheponce.org/>).

Addressing Community Health Concerns

Existing environmental data are inadequate to assess the public health threat from future residential use of this site. While additional testing is necessary to delineate types and extents of contamination, the limited available data support DOH's recommendations for deed restrictions preventing the use of shallow groundwater for drinking or other purposes, and taking remedial actions in some soil areas. In the following section, we discuss the available data and evaluate possible health effects, which might occur from residential land use if the *soils are not remediated* before residences are built.

From May through September 2005, the extended Public Comment period, DOH received comments on this document. We list and address these comments in Appendix D.

Discussion

In this section, DOH reviews the available groundwater, surface water, and soil and sediment data to identify current levels of chemicals released on (or near) the site in the past. Next, we review possible ways people might be exposed to chemicals from past releases at the site. Finally, we determine whether the measured levels of chemicals might cause adverse health effects if people are exposed to them.

Public health assessments attempt to moderate the uncertainties inherent in the health assessment process by using conservative but realistic assumptions when estimating or interpreting health risks. Also, the health-based values (established by ATSDR, EPA, and DEP) that DOH uses to screen the data include wide margins of safety. The assumptions, interpretations, and recommendations made in this public health assessment are intended to protect public health.

Environmental Contamination

In this section, we review environmental data collected at and near the site since 2001. We evaluate the sampling adequacy and discuss the chemicals measured on the site. In this section, we refer to tables that list the maximum arsenic concentrations measured in groundwater and soil. While limited surface water and sediment testing was carried out, most of this data is difficult to use for site evaluation because location information is lacking. No air data were available. We selected arsenic as the contaminant of concern mainly because soil and groundwater samples were analyzed for it. DEP also asked for soil lead sampling, but the measured lead levels did not exceed the residential Soil Cleanup Target Levels. As additional information becomes available, we will also consider the following criteria:

1. Concentrations of contaminants found on the site. Contaminants are eliminated from further consideration if the typical concentrations at unpolluted areas of the site (background concentrations) and the measured on-site concentrations are below standard comparison values established by ATSDR, EPA, and DEP.
2. Field-data quality, laboratory-data quality, and sample design.
3. Community health concerns. These are concerns expressed by members of the nearby community about possible adverse health effects from exposure to site contaminants.
4. Comparisons of the maximum concentrations of contaminants identified at the site to ATSDR-published standard comparison values for contaminated environmental media for which a completed exposure pathway, or potential exposure pathway, is found to exist at the site. Standard comparison values are specific to the type of environmental media (water, soil, sediment) that is contaminated. These standard comparison values are used to select site contaminants for further evaluation. These values are not used to predict health effects or to establish clean-up levels. When site contaminants are found to have media concentrations that are above ATSDR's chemical-specific standard comparison values, the contaminant is selected for further evaluation. This does not necessarily mean that a contaminant represents a health risk. Site contaminants that fall below an ATSDR chemical-specific standard comparison value are unlikely to be associated with illness and consequently are not evaluated further unless the community has expressed a specific concern about the contaminant.
5. Comparisons of doses estimated from maximum site concentrations found in completed and potential exposure pathways to toxicological information published in ATSDR's chemical-specific toxicological profiles (available on the internet at <http://www.atsdr.cdc.gov/toxpro2.html#-A->). These chemical-specific profiles summarize information about the toxicity of chemicals from the scientific literature.

We used the ATSDR standard comparison values (ATSDR 1992, 2003), in order of priority, to select arsenic as the contaminant of concern.

1. Environmental media evaluation guide (EMEG). An EMEG is derived from the ATSDR-established minimal risk level (MRL), using standard exposure assumptions (e.g., ingestion of 2 liters of water per day and body weight of 70 kilograms for adults). Chronic MRLs are estimated levels of daily human exposure to a chemical for a period of 1 year or longer which is likely to be without any appreciable risk of noncancerous illnesses.
2. Cancer risk evaluation guide (CREG). A CREG is the contaminant concentration estimated to result in no more than 1 excess case of cancer per 1 million persons exposed during a lifetime (i.e., 70 years). CREGs are calculated from the EPA-established cancer slope factors.
3. Soil Target Cleanup Values (SCTLs). DEP developed these Soil Cleanup Target Levels for use on contaminated sites (DEP 2005).

The levels of arsenic at the former Ponce de Leon Golf Course are evaluated in the following section, along with a discussion of whether long-term, daily exposures would be likely to pose an increased risk for illness or to increase the statistical risk of cancer.

The following sections primarily discuss on-site contamination. Groundwater analyses from private wells and a few sediment samples from the adjoining marshes are the only off-site data DOH evaluated.

On-Site Contamination – For this public health assessment, *on-site* is defined as the area within the former Ponce de Leon Golf Course property boundaries (Figure 2, Appendix A).

On-Site Groundwater – Between 2001 and 2003, contractors for Ponce Associates collected 24 groundwater samples from 18 on-site monitoring wells and analyzed the samples for arsenic, insecticides, and herbicides (Dominion 2003a)¹. Figure 4 shows the approximate locations of the monitoring wells where arsenic was measured in groundwater samples above 10 µg/L.

The groundwater samples included:

- 17 samples from 11 wells located near the southern maintenance barn, and
- 7 samples from 7 temporary monitoring wells on the golf course.

Seven groundwater samples from seven monitoring wells near the engineering building were sampled for volatile organic compounds. Two groundwater samples from two monitoring wells near the southern maintenance barn were sampled for arsenic. No chemicals were measured at levels above their drinking water standards. Table 1 summarizes arsenic levels in groundwater.

In April 2004, Dominion sampled six temporary wells where previous analyses had shown the highest levels of arsenic in soil (Dominion 2004). They located a seventh temporary well near the former maintenance building. Dominion collected five additional groundwater samples at

¹ Assessment activities at this site were performed in several stages. Environmental Site Inspections (ESI) conducted the Phase I and Phase II investigations. Strata Environmental, Strata and ESI together, and Dominion conducted follow-up activities. DOH used a summary of these studies compiled by Dominion (Dominion 2003a).

locations with the greatest potential for discharge to the marshes. These areas had elevated soil arsenic levels in the uplands and a swale that created a drainage path to the marshes.

The limited groundwater data are sufficient to determine that shallow groundwater on some areas of the site area are unsuitable for drinking or other purposes. However, additional analyses, for samples taken in other areas, or for samples taken from existing monitoring wells but including analyzes for nitrates and other turf management chemicals, could better characterize shallow groundwater contamination.

On-Site Surface Soil – Between 2001 and 2003, contractors for Ponce Associates sampled and analyzed 254 soil samples from 94 locations for arsenic (Dominion 2003b)². The sample locations included:

- 48 background samples at 14 locations,
- Three samples at three locations near the engineering building,
- 48 samples at 20 locations near the south (old) maintenance barn, and
- 155 samples at 57 locations on the golf course.

Dominion collected another 214 soil samples from about 70 locations on the golf course, pitch and putt, and practice holes and had the soil samples analyzed for arsenic. Dominion took these samples to provide additional information for areas where arsenic had been detected above the DEP residential soil target clean-up level in earlier analyses (Dominion 2003b). Eleven of these were composite samples to show what might be encountered in an excavation, such as for a swimming pool. Table 2 summarizes arsenic concentrations in surface soil (0-2 feet). We call these soil samples “surface soil” samples throughout the document.

For these initial samples, contractors analyzed most of the non-background soil samples for arsenic alone. They only analyzed the few following samples for other chemicals:

- Four golf course soil samples and seven pond sediment samples (from one pond) for herbicides and insecticides, and
- Two soil samples from a dump near the old maintenance barn for metals, herbicides, insecticides, and volatile organic compounds.

In February and March of 2004, Dominion sampled 74 additional soil locations to increase the areal sampling location density and better delineate areas where arsenic was above the Florida residential Soil Cleanup Target Level. Dominion took duplicate samples at 18 locations, for 92 total additional soil samples. They analyzed all 92 samples for lead and arsenic (Dominion 2004).

During the Public Comment period, one of the developer’s contractors sent DOH a summary table of persistent organic pollutants that had been analyzed for in site soil samples collected between January and May of 2005. While only a maximum value and number of samples above the soil SCTL are listed for each chemical, the summary list indicates that between 15% and 19% of the 359 soil samples analyzed had chlordane, dieldrin or heptachlor epoxide above their SCTLs.

² See comment in previous footnote.

DEP will require pilot tests of any remediation methods the contractors propose to show the “Conceptual Remedial Approach” can meet the residential Soil Cleanup Target Levels for any identified chemicals. DOH recommends the pilot tests include chemical measurements for pesticides, herbicides, and metals, so they can use these results to address potential soil exposures for future residential site use. This could be particularly important for the area around the southern maintenance barn (OMB) where there are likely to be other turf management chemicals in the soil.

In addition to soil contamination of the golf course by turf management chemicals, the Phase I, II and III assessments identified other potential sources of soil contamination that were not addressed in the CAR. There could be other chemicals on the site, including:

1. lead and antimony in surface soil near the engineering building,
2. metals and volatile organic compounds in stained surface soil near the engineering building,
3. volatile organic compounds, pesticides, herbicides and metals in surface soil in the hotel maintenance area and the new golf maintenance area in the northwestern part of the site, and insecticides, herbicides, and metals associated with soil in the former layout of the golf course (Dominion 2003a).

On-Site Subsurface Soil – DOH compiled maximum chemical concentrations of arsenic detected in on-site subsurface soil samples (Table 3). Table 3 summarizes the 14 recent subsurface soil test results in row one, Dominion took these samples after the soil removal near the former maintenance barn (Teaf, 2004). We summarize the remaining data in row two; these *116 results are from samples taken prior to preparation of the Contamination Assessment Report (Dominion 2003a) and the removal of the former maintenance building and nearby soil.* In general, most of the arsenic values measured for subsurface soil were less than the arsenic levels measured in surface soil.

On-Site Surface Water – Between 2001 and 2003, contractors for Ponce Associates sampled and analyzed three on-site surface water samples for arsenic. Their laboratories did not detect arsenic in the creek outfall sample from the water retention pond (northern part of the site) or in a second sample taken in Robinson Creek near the end of Ponce Island Drive Bridge. Dominion did not report analytical results for a third surface water sample taken in a salt marsh east of the 5th hole (Dominion 2003b). In 2004, Dominion sampled surface water in 13 additional ponds on the site for the CAR. They analyzed these samples for arsenic; only one sample from a pond between the 6th and 7th holes had arsenic above the current Primary Drinking Water standard (10 µg/L).

HSWMR (2005) sent DOH the surface water data for seven ponds Dominion Inc. sampled for organochlorine pesticides. None of these analyses detected organochlorine pesticides above the surface water target cleanup levels and no locations were given for the samples except an aerial photo with labeled surface water bodies. The outfall pond for the second maintenance-building parking lot was also reportedly sampled, but neither the results nor sample locations were available to DOH.

For the purpose of this public health assessment, the site owners have not adequately characterized surface water quality. Surface water exposure is not likely at this time, since the site is under development. Surface water samples from marsh outfalls, and Robinson Creek should be analyzed for insecticides, herbicides, metals, and volatile organic compounds.

According to DEP, the developers will need to obtain an approved stormwater management plan with the St. Johns River Water Management District. This plan will need to demonstrate that the stormwater runoff will meet the appropriate Florida surface water standards (freshwater or marine), which often differ from potable water standards.

On-Site Sediment – Between 2001 and 2003, contractors for Ponce Associates sampled seven sediment samples from a pond in the northern part of the site for pesticides and herbicides. None was present above residential SCTLs. For the CAR, Dominion sampled 26 on-site pond sediment locations for arsenic. None showed arsenic above the Sediment Quality Assessment Guideline threshold effect level (TEL)—9.8 mg/kg for benthic organisms in inland waters. Additional sampling could demonstrate that other persistent organic pollutants or metals are not present in these ponds.

On-Site Air – DOH is unaware of any current or previous on-site air monitoring data.

Off-Site Contamination – For this public health assessment, DOH defines *off-site* as the area outside the former Ponce de Leon Golf Course property boundaries (Figure 2).

Off-Site Groundwater – On December 29, 2003, St. Johns County Health Department staff sampled five private wells north of the site. The sampler reported sampling two wells on 3rd Street, two wells on 4th Street, and one on the corner of 4th Street and Ocean Boulevard. The sampler reported the wells are less than 100 feet deep and are screened into a shell bed in the surficial aquifer. The wells on 3rd Street and 4th Street supply rental housing. The DOH laboratory analyzed these samples for metals, pesticides, herbicides, and volatile organic chemicals. The laboratory did not detect any of the chemicals analyzed for at levels above the health-based screening values. Additional testing on the site to delineate groundwater contamination plumes will indicate whether further off-site testing of groundwater is needed. However, for public health purposes, off-site groundwater testing is adequate for this health assessment.

Off-Site Sediment – For the Contamination Assessment Report, Dominion (2004) sampled wetland sediments at 18 locations bordering the site; 12 of the locations are associated with the Tolomato River, 4 with Robinson's Creek, and 2 unknown. Dominion analyzed these samples for arsenic. Only two samples on Robinson's Creek were above the arsenic residential SCTL (MS-12 near the ninth fairway former cart path and MS-15 near the 18th fairway). MS-15 was the only sample location where arsenic was also above the guideline for aquatic organisms (the Sediment Quality Assessment Guideline, Threshold Effect Level, or SQAG TEL — 7.2 mg/kg for coastal waters). The CAR describes this location as a 20 by 20 foot area in the marshes where grass clippings were dumped. It is unclear how Dominion decided the size of the impacted area. Additional sampling could demonstrate that other persistent organic pollutants are not present in these off-site sediments.

Quality Assurance and Quality Control – The completeness and reliability of the referenced environmental data determine the validity of the analyses and the conclusions we draw for this public health assessment. DOH used existing environmental data to prepare this public health assessment. We assumed that these data are valid. Governmental agencies oversee the consultants and laboratories that collect and analyze these samples. Dominion did not report all of its analytical results nor did it show all of its sampling locations. Nonetheless, DOH did consider Dominion's analytical data when evaluating the site.

Exposure Pathways

Chemical contaminants in the environment can only be harmful to public health if people are exposed to them. It is essential to determine or estimate the frequency of contact people could have with hazardous substances to assess the public health significance of the contaminants.

To determine whether people can be exposed to contaminants at or from a site, human exposure pathways are examined. An exposure pathway has five parts:

1. a contaminant source,
2. an environmental medium like groundwater or soil that can hold or move the contaminants,
3. a point at which people come into contact with a contaminated medium, for example, a drinking water well or garden soil,
4. a route of exposure, such as drinking contaminated water from a well or eating contaminated soil on homegrown vegetables, and
5. a population that might be exposed to the contaminants.

An exposure pathway is eliminated from consideration if one or more of these five parts is not present and is unlikely to be present ever.

Completed Exposure Pathways

Completed exposure pathways have all five parts present, and exposure to a contaminant has occurred in the past, is occurring in the present, or will occur in the future. Former turf maintenance workers or others may have handled or transported pesticides or soil with pesticide residues. Exposures could have been through the skin, incidental soil ingestion, or inhalation of dust or other air components (Table 4).

Workers may have been exposed to arsenic, especially in the distant past, before such exposures were regulated. DOH does not have any personal monitoring data from 1916 to the present from which to ascertain whether working conditions presented conditions hazardous to workers' health.

Potential Exposure Pathways

Potential exposure pathways have one or more of the five parts missing now, but could become a completed pathway in the future, or could have been a completed pathway in the past. Remediation, construction, or landscaping workers could be exposed to arsenic through incidental ingestion or skin contact with on-site surface soil, or through inhalation of dusts, currently, or in the future. Clean-up work, construction, or other activities such as mowing might provide incidental exposure to contaminants in surface soil or dust especially near the old maintenance building (Table 5).

Site contamination has not been completely characterized. With testing for additional chemicals, in additional locations, more chemicals may be identified. When remediation begins, additional areas of contamination (for example—forgotten or buried dumps) may be identified. Therefore, DOH recommends workers follow proper industrial hygiene safety measures for remediation of the site.

To demonstrate the necessity of carrying through site remediation, DOH calculated people's exposures as if the site were not remediated before residences were built. If the site was not remediated, future residents could accidentally eat small amounts of contaminated soil they get on their hands or on homegrown vegetables, or they could have skin exposure to soil contaminants. Future residents could theoretically breathe contaminated dust from soil and sediment, if these media are not adequately characterized and remediated.

Site access is not currently restricted, and children might trespass on the site. However, such trespassing exposures would have been more likely during the period beginning when the course closed in 2003 and ending when site remediation began, as staff and contractors are more likely to be present on the site currently. In addition, the potential for repeated trespass visits to the exact spot having the greatest amounts of measured contamination is unlikely because the site is very large.

DOH recommends the use of deed restrictions prohibiting the use of shallow groundwater for drinking or other purposes, in addition to further investigation of the type(s) and extent of groundwater contaminants. Such deed restrictions will assure that if site use changes, people will not use contaminated groundwater for drinking or otherwise be exposed to contaminants in the groundwater, via aeration, or through incidental ingestion of contaminated vegetables or fruit.

Because the site developers have not adequately characterized the extent of contamination in all environmental media (or the data was not available when this draft was released for soil, groundwater, sediments or surface water), we categorize some pathways as "incomplete" (Table 6). Inadequate site media information, when addressed, *could show whether additional areas or types of contamination exist on the site*. The Recommendations section contains our recommendations for additional testing.

Public Health Implications

Although site assessment is incomplete, the following sections discuss exposure levels and possible health effects that might occur if people were exposed daily to the highest measured levels of arsenic found on and off the site. We discuss arsenic exposure levels in tiers and by medium; arsenic levels below the screening value are not discussed. Our assessment of the limited data shows that the remediation options, deed restrictions, and engineering controls DEP allows with Consent Order remediation should be used to prevent future exposures based on anticipated future residential land use. Workers currently on the site should avoid working in dusty conditions and should limit hand-to-mouth behaviors that could increase their inhalation and incidental ingestion exposures.

Because of Consent Order remediation requirements, DOH does not expect the residential exposure assumptions we made to evaluate public health risks to be valid for future residential and/or industrial/commercial land use. We evaluate theoretical long-term daily exposure outcomes to demonstrate the need for fulfilling the Consent Order remediation requirements. Insufficient information on the following parameters might limit this evaluation:

- Environmentally persistent organic chemicals other than arsenic that were used on the site,
- Areas where environmentally persistent organic chemicals were used, and
- Exposure pathways that we might not know about.

Toxicological Evaluation

This subsection discusses exposure levels and possible health effects that might occur in people exposed to the highest levels of arsenic measured at the site. We also discuss general ideas, such as the risk of illness, dose response and thresholds, and uncertainty in public health assessments.

To evaluate exposure to arsenic at the site, DOH estimated a daily dose for children and for adults. Kamrin (1988) explains the concept of dose in the following manner:

... all chemicals, no matter what their characteristics, are toxic in large enough quantities. Thus, the amount of a chemical a person is exposed to is crucial in deciding the extent of toxicity that will occur. In attempting to place an exact number on the amount of a particular compound that is harmful, scientists recognize they must consider the size of an organism. It is unlikely, for example, that the same amount of a particular chemical that will cause toxic effects in a 1-pound rat will also cause toxicity in a 1-ton elephant.

Thus instead of using the amount that is administered or to which an organism is exposed, it is more realistic to use the amount per weight of the organism. Thus, 1 ounce administered to a 1-pound rat is equivalent to 2,000 ounces to a 2,000-pound (1-ton) elephant. In each case, the amount per weight is the same; i.e., 1 ounce for each pound of animal.

This amount per weight is the *dose*. Dose is used in toxicology to compare the toxicity of different chemicals in different animals. The units of milligrams (mg) of contaminant per kilogram (kg) of body weight per day (mg/kg/day) are used to express doses in this public health assessment. A milligram is 1/1,000 of a gram (a gram weighs about what a raisin or paperclip weighs); a kilogram is approximately 2 pounds.

To calculate the daily dose of each contaminant, we used standard assumptions for body weight, ingestion and inhalation rates, duration of exposure (period), and other factors (ATSDR 1992, EPA 1997). *To calculate future theoretical doses*, we assumed that people are exposed daily to the maximum concentration measured at the site for each contaminant in each environmental medium. ATSDR's toxicological profiles on contaminants separate exposures into three exposure routes—inhalation, ingestion, and dermal (skin) exposure. For each of these exposure routes, ATSDR also groups health effects by duration (length of time) of exposure. Acute exposures are those with duration of 14 days or less; intermediate exposures are those with duration of 15–364 days; and chronic exposures are those that occur for 365 days or more (or an equivalent period for animal exposures). ATSDR's toxicological profiles also provide information on the environmental transport and regulatory status of contaminants.

To estimate exposure from incidental ingestion of contaminated soil or groundwater, DOH used the following assumptions (EPA 1997):

1. children 1–4 years of age ingest an average of 200 mg of soil and an average of 1 liter of water per day,
2. adults ingest an average of 100 mg of soil and an average of 2 liters of water per day,
3. children 1–4 years of age weigh an average of 15 kg,
4. adults weigh an average of 70 kg, and

5. children and adults ingest contaminated soil at the maximum concentration measured for each contaminant.

Site workers may have been exposed to soil, dust, or products that contained arsenic or other chemicals in the past. However, because no air monitoring or other personal-exposure data exist for workers at this site, determining the probability for illness from past exposures would be difficult. Proper use of the site Health and Safety plan should assure current workers are not exposed to elevated levels of chemicals.

We interpret the potential health risks of residential exposures in the following sections. Tables 7 through 9 show the maximum estimated exposure doses for measured levels of arsenic, assuming people would have daily, long-term exposures in a setting where they might be exposed to contaminated soil or contaminated shallow groundwater.

Arsenic

Long-term ingestion of contaminated shallow groundwater with the highest measured levels of arsenic (from near the old maintenance barn), as drinking water, would result in the highest exposure levels to on-site contamination. There are no potable wells currently developed in this shallow groundwater. As discussed previously, these evaluations were performed to support the recommendation that deed restrictions be implemented prohibiting the future use of shallow groundwater for potable and other uses.

If children or adults were to drink water contaminated with the highest measured level of arsenic, daily, for a year or more, they could become ill. Health effects from daily, long-term ingestion, at the doses we calculated for the highest measured arsenic levels in groundwater, might include the following diseases or symptoms:

- nausea, stomach cramps, or pain,
- weight loss,
- precancerous patchy increases and decreases in skin pigmentation,
- bronchitis,
- blackfoot disease,
- gangrene,
- increased risk of ischemic heart disease³,
- increased disease of the blood vessels of the brain,
- stroke in the blood vessels of the brain,
- constriction of blood vessels to the hands and feet (Raynaud's Disease),
- blood clots (thrombosis),
- high blood pressure in the liver,
- swollen liver,
- bleeding of the esophageal varices⁴,
- vomiting blood, or
- bloody stools.

³ Decreased blood flow to the heart due to circulatory problems.

⁴ Longitudinal venous enlargement at the lower end of the esophagus that may develop due to high blood pressure in the liver. Esophageal varices also may burst and bleed.

Long-term ingestion of water with the highest measured arsenic level might result in a moderate to high increased cancer risk. Children's increased cancer risk might be moderate (2 additional cases in 1,000 persons) and adult's increased risk might be high (7 additional cases in 1,000 persons which rounds up to 1 in 100). From lowest to highest dose cancer effect levels, chronic arsenic exposures have been linked to lung cancer, basal and squamous cell skin cancers, liver cancer (haemangioendothelioma), urinary tract cancers (bladder, kidney, ureter, and all urethral cancers), and intraepidermal cancers (ATSDR 2000).

With residential land use, the next highest exposure levels could come from surface soil near the old maintenance barn. We calculated exposure levels to soil for children and adults using the highest measured current arsenic levels (Table 7) [Teaf 2004]. We express exposure levels as doses. While, the adult dose is not likely to increase risk for non-cancer illness, the children's dose could pose an increased risk for neurological symptoms: fatigue, headache, dizziness, insomnia, nightmares, and numbness. Increases in cancer risks for both children and adults having daily, long-term exposures to the highest level of arsenic measured in soil might be low: an estimate of 1 increased case in 10,000 persons. The increased risk of cancer from dust inhalation might be 6:1,000,000 for children and 1:100,000 for adults.

The chronic soil ingestion dose we calculated for children (*for the highest level of arsenic measured on the rest of the property—the pitch and putt range*) was slightly greater than the No Observed Adverse Effect Level (NOAEL) from a human medical study showing gastrointestinal irritation, diarrhea and nausea as symptoms. That is, the dose we calculated was between the NOAEL and the LOAEL—the *Lowest Observed Adverse Effect Level*, and was closer to the NOAEL. The dose we calculated was also equal to or below NOAELs from all other reported studies reporting non-cancer health effects. The theoretical increased risk for cancer for children and adults, (for daily, long-term exposure to the highest arsenic level measured on the pitch and putt range and to subsurface soil at the old maintenance barn) are 4 and 5 additional cases in 100,000, respectively. Daily inhalation of dust with the highest measured arsenic level could increase theoretical cancer risks by 2 in 1 million for children and adults.

We only estimated dermal exposure for skin contact with groundwater. Adverse effects from dermal exposure to organic or inorganic arsenicals have not been extensively investigated. ATSDR's arsenic toxicological profile located three animal studies (ATSDR 2000). Skin contact is a concern at high arsenic exposure levels in humans. These studies indicate that low levels of arsenic exposure, like those expected from the amounts measured on most of the site, are not likely to pose an increased risk for significant skin irritation. Moreover, as no one is currently using contaminated groundwater from the site, dermal exposure to arsenic-contaminated groundwater is not a pathway of concern.

Child Health Considerations

ATSDR and DOH recognize that the unique vulnerabilities of infants and children demand special attention (ATSDR 1998). Children's smaller sizes result in higher doses of chemical exposure per body weight than for adults. DOH recognized this in the Public Health Implications sections, wherein children's theoretical exposures were presented as having the most significant potential noncancer health effects. If toxic exposures occur during critical growth stages, children's developing body systems can sustain permanent damage. Children breathe dust, soil, and heavy vapors closer to the ground than adults do. Because they play outdoors and because they often carry food into contaminated areas, children are more likely to be exposed to

contaminants in the environment. Probably most important, however, is that children depend on adults for risk identification and risk management, housing, and access to medical care. Thus, adults should be aware of public health risks, so they can guide their children accordingly.

In recognition of these concerns, ATSDR developed the chemical screening values for children's exposures that were used in preparing this report.

Other susceptible populations may have different or enhanced responses to toxic chemicals than will most persons exposed to the same levels of that chemical in the environment. Reasons may include genetic makeup, age, health, nutritional status, and exposure to other toxic substances (such as cigarette smoke or alcohol). These factors may limit that person's ability to detoxify or excrete harmful chemicals or may increase the effects of damage to their organs or systems.

Health Outcome Data

DOH has not investigated health outcome data for the area near the site. The levels of chemicals on the site are being investigated because the land use is changing, not because chemicals were thought to have been improperly used on the site or because they were known to have migrated off the site. While nearby residents did not ask DOH to investigate the cancer rates for their neighborhood, if they had, such an investigation would have been problematic because we do not have information that shows there would have been off-site exposure pathways or points of exposure, to elevated levels of chemicals.

Conclusions

DOH categorizes the former Ponce de Leon Golf Course as an "indeterminate public health hazard" for past, current, and future exposures as potential areas of contamination identified in scoping documents (the Phase I, II, and III site assessments) have not been addressed. Nevertheless, arsenic could be a "public health hazard" if the arsenic found in the soil were not cleaned up and land use changed to residential. Only very limited data on persistent organic chemicals used in turf management is currently available. Nonetheless, DOH evaluated the available site analytical data in the context of future residential development. Even based on incomplete site contamination information, we recommend the use of engineering or institutional controls to prevent future exposures to contaminated soil and contaminated shallow groundwater consistent with DEP's requirements for cleanup of contaminated sites. Under DEP's direction, some of the most contaminated soil has already been removed from the site.

To evaluate the available data, DOH estimated residential exposure levels (in amount per body weight) assuming daily contact with the highest currently measured arsenic levels on the site. We refer to these estimated exposure levels as "doses". The adult soil dose is not expected to cause non-cancer illness, but the child soil dose *could pose an increased risk of illness for children having daily, long-term exposures*. Shallow groundwater is not currently used, and we do not know if it was used in the past (or if it was used, if it could have been contaminated at that time).

Remediation Cleanup Target Levels for soil will likely be residential for most areas of the site, and commercial or industrial for limited areas, based on future development plans. The owners' development company is assessing the site contamination and planning site remediation under the terms of a Consent Order with the DEP. At this time, DEP has requested analysis of site

media to supplement the Contamination Assessment Report. The developer may use a variety of actions to remediate the site. These could include engineering controls, soil remediation, and deed restrictions to assure future residents or industrial or commercial workers are not exposed to contaminated soil, sediments, surface water or groundwater.

The Contamination Assessment Report does not make it clear that potential areas of contamination identified in the Phase I, II and III assessments have been addressed. We list specific potential areas of contamination, specific media, and potential chemicals or chemical groups that media in these areas should be analyzed for, in the following recommendations section.

Currently, site access is not restricted, and persons might trespass on the site. Vegetative soil covering and the expanse of the site limit the likelihood that trespassers would have repeated exposures to soil having the highest levels of contamination.

The St. Johns County Health Department sampled the nearest private drinking water wells, located north of the site, in December 2003. They had the samples analyzed for metals, pesticides, volatile organic compounds, and nitrates. The DOH laboratory did not detect any chemicals at levels above their drinking water screening or guidance levels. Water from St. Augustine Public Water System wells is available to residents south and west of the site. The developer says future site residents will use public water.

Recommendations

Site remediation involves determining the location and level of site contaminants, and then planning to bring the contaminated media to acceptable levels with respect to human health (for residential land use) or developing alternative ways for preventing people's future exposures. Remediation occurs when the approved plans are carried out.

The developer will characterize locations and levels of contaminants on the site. Surface water on and near the site has mainly been tested for arsenic and needs to be tested for other turf management chemicals[†]. Based on sampling at other golf courses, surface water could contain elevated levels of nitrates and other chemicals (Swancar 1966, DERM 2002). DEP may not require further characterization of groundwater if the developer can show that groundwater does not discharge to offsite surface water and that deed restrictions will prevent on-site exposures.

If the developer plans to mix clean soil with the contaminated soil to reach the residential Soil Cleanup Target Level for arsenic, DEP and the developer will verify that the soil meets residential Soil Cleanup Target Levels, which are health-based. The areas of greatest arsenic contamination may be the most likely to contain other persistent turf management chemicals. These areas include the 9th fairway and the areas around the (former) old maintenance barn. Sediment remediation should also address environmentally persistent turf management chemicals used in the past and testing should demonstrate the remediated sediments meet state guidelines for all contaminants. Specific areas of concern include the grass-dump in the marshes near the 18th hole and areas in Robinson Creek nearest the (former) old maintenance barn.

[†] Pesticides, herbicides, metals, nitrates and volatile organic compounds may be used in turf management.

DOH recommends additional sampling should address potential contamination areas identified in the Phase I, II, and III assessments. Ponce Associates LLC's contractors should:

- test soil and groundwater near the engineering building outdoor battery storage for lead and antimony,
- test stained soil near the engineering building for volatile organic compounds, semi-volatile organic compounds, and metals,
- test soil and groundwater from the hotel maintenance area and the new maintenance area for volatile organic compounds, pesticides, herbicides, and metals,
- test surface water from the new maintenance area drainage pond for volatile organic compounds, pesticides, herbicides, and metals, and
- test soil and groundwater near the old maintenance building and the old maintenance building dump, the dump west of the 15th hole, and the older golf course layout (Dominion 2004, Attachment A) for nitrates and other turf management chemicals.

At this time, site access is not restricted. However, although the potential for trespassers to incidentally ingest contaminated soil or inhale contaminated dust from the specific areas with the highest measured levels of arsenic could be limited by vegetation and by the 400-acre size of the site, DOH's evaluation of actual health risks is limited by incomplete site assessment. As a result, until site assessment and remediation are complete, DOH recommends the following precautions:

1. Persons, but probably more accurately current workers, should avoid dust inhalation or hand-to-mouth contact with contaminated surface soil near areas of known arsenic contamination, and
2. Workers should control dust generation and monitor air quality for arsenic during any future clean up or remodeling activities, utilities installation, or construction or other work that would disturb soil or remove vegetation in known areas with elevated arsenic, or areas of potential contamination.

Public Health Action Plan

This section describes what DOH and ATSDR plan to do at this site. The purpose of a public health action plan is to reduce any existing health hazards and to prevent any from occurring in the future. DOH will do the following.

1. Evaluate additional test results for public health implications.
2. If the owner's contractor finds additional chemicals at levels above their Cleanup Target or other guidance levels, DOH will re-evaluate exposure pathways and will work with DEP to assure that engineering controls, deed restrictions, and remediation options adequately address public health and changes in future land use.

Public Comment Period

Florida DOH provided an opportunity for the public to comment on this public health assessment and proposed activities. DOH mailed fact sheets announcing the report in early May 2005 and we received most comments by the end of June. DOH did address comments received as late as



October 2005. The public comment period provides residents near the site an opportunity to comment on the public health findings contained in the public health assessment, allows DOH to evaluate whether we have adequately addressed the community health concerns, and allows DOH to gather additional information on potential or completed exposure pathways. In Appendix D of this document, we address the comments and questions we received.