

Gary Dunay Bonnie Miskel Scott Backman Eric Coffman Hope Calhoun
Dwayne Dickerson
Ele Zachariades
Matthew H. Scott

Christina Bilenki David F. Milledge Jeffrey Schneider Kristen Weiss Sara Thompson

APPLICATION FOR AMENDMENT TO THE LAND USE PLAN

Springdale Townhomes

7870 Margate Blvd. City of Margate

August 11, 2023

1. TRANSMITTAL INFORMATION

A. Letter of transmittal from municipal mayor or manager documenting that the local government took action by motion, resolution or ordinance to transmit a proposed amendment to the Broward County Land Use Plan, including the date that the local governing body held the transmittal public hearing. Please attach a copy of the referenced motion, resolution or ordinance. The local government's action to transmit must include a recommendation of approval, denial or modification regarding the proposed amendment to the Broward County Land Use Plan.

To be provided.

B. Name, title, address, telephone, facsimile number and e-mail of the local government contact.

Elizabeth Taschereau, Development Services Director City of Margate 901 NW 66 Avenue Margate, Florida 33063

Telephone: 954-884-3686

E-mail: etaschereau@margatefl.com

C. Summary minutes from the local planning agency and local government public hearing of the transmittal of the Broward County Land Use Plan amendment.

To be provided.

D. Description of public notification procedures followed for the amendment by the local government.

The public notification related to the proposed amendment will comply with Florida Statutes and the City of Margate Code of Ordinances. The Applicant will provide public notice of the public hearings for this amendment by posting a sign on the property and by providing mailed notice to property owners within 1,500 feet of the area that is subject to the land use plan amendment. The City of Margate will provide published notice in accordance with Florida Statutes.

- E. Whether the amendment is one of the following:
 - *Development of Regional Impact
 - *Small scale development activity (Per Florida Statutes)
 - *Emergency (please describe on separate page)
 - *Other amendments which may be submitted without regard to Florida statutory limits regarding amendment submittals (Brownfield amendments, etc.)

This amendment is not any of the following application types described above.

2. APPLICANT INFORMATION

A. Name, title, address, telephone, facsimile number and e-mail of the applicant.

Fimiani Development Corporation 5301 N. Federal Highway, Suite 350 Boca Raton, FL 33486

Contact: Michael Fimiani Telephone: 561-395-8882 E-mail: mike@fimiani.com

B. Name, title, address, telephone, facsimile number and e-mail of the agent.

Dunay, Miskel, & Backman, LLP Matthew H. Scott, Esq. 14 SE 4th Street, Suite 36 Boca Raton, Florida 33432

PH: (561) 405-3350

Email: mscott@dmbblaw.com

C. Name, title, address, telephone, facsimile number and e-mail of the property owner.

Margate Executive Golf Course, LLC 5301 N. Federal Highway, Suite 350 Boca Raton, FL 33486

Contact: Michael Fimiani Telephone: 561-395-8882 E-mail: mike@fimiani.com

D. Applicant's rationale for the amendment. The Planning Council requests a condensed version for inclusion in the staff report (about two paragraphs). Planning Council staff may accept greater than two paragraphs, if submitted in an electronic format.

The project consists of two parcels totaling +/- 21.96 gross acres and is generally located on the south side of Margate Boulevard between NW 76th Avenue and NW 79th Avenue ("Property") within the City of Margate ("City"). Previously developed as a 9-hole golf course which is now closed, the Property is identified by folio numbers 484135050030 ("Parcel 1") & 484135080010 ("Parcel 2"). Parcel 1 is 21.33 gross acres in size and is designated as Commercial Recreation within an Irregular 7.6 Residential Dashed Line Area on the City's Future Land Use Map and a designation of Recreation & Open Space within an Irregular 7.6 Residential Dashed Line Area on the Broward County Future Land Use Map. Parcel 2 is 0.63 gross acres in size and is designated as R(7) within an Irregular 7.6 Residential Dashed Line Area on the City's Future Land Use Map and a designation of Irregular Residential (7.6) within a Dashed Line Area on the Broward County Future Land Use Map.

The gross acreage of the Irregular 7.6 Residential dashed line area is 104.3 acres. Based on the maximum allowable density of 7.6 dwelling unit/acres, 792 dwelling units are permitted to be developed in the dashed line area. City staff confirmed that there are 742 dwelling units constructed in the dashed line area, leaving 50 remaining units that could be constructed on the Property. The

Applicant is proposing to develop 137 residential units ("Project") on the Property. This requires an amendment to the land use plan designation on the Property to add an additional 87 dwelling units to the overall dashed line area.

With the development of the Project, the Applicant is dedicating 1.21 net acres of land along Margate Blvd. to be redeveloped as public open space park area. This includes a portion of Parcel 1 and all of Parcel 2 (as identified on the site plan). This area of land will be dedicated for public use and will increase the City's total acreage of open space area towards meeting the City's Open Space Level of Service Standards of 3 acres per 1,000 residents. The City's current Community Parks Inventory tables indicate that there are 197.74 acres of open space existing in the City that can be used to meet the adopted level of service. The addition of this park area will increase the City's open space area to 198.95 net acres.

The proposed 1.21 net acres of public park space will be included within the residential development. As such, the 0.63 acres contained in Parcel 2 are not included in this amendment as the existing R(7) land use designation will remain in place. Therefore, the Applicant is requesting an amendment to change the land use plan designation on the 21.33 acres of land contained in Parcel 1 from Commercial Recreation to Residential (7) and change the dashed line area from Irregular 7.6 Residential to Irregular 8.43 Residential, allowing a total of 879 dwelling units within the dashed line area.

The number of golf courses in the U.S. has declined steadily since 2006. This golf course, which is near an 18-hole golf course, was a victim of the overall trend as it has experienced consistent reductions in the amount of play. For the past few years, the golf course was losing money to the point that it no longer made sense to keep the facility open for business. Therefore, the decision was made to close the golf course and pursue redevelopment.

The proposed development will revitalize an underutilized property with a new residential community which will increase the City's tax base and tax revenues. An economic impact study conducted by Econsult Solutions, Inc. (Exhibit A) demonstrates that the proposed new development will generate property tax revenues between \$717,000 to \$1,010,000. This is an increase of \$711,000 to \$1,004,000 beyond what the property is currently generating in property taxes (\$6,154). In addition, the Proposed Amendment will provide employment opportunities during construction and long-term tax revenues for the City.

3. AMENDMENT SITE DESCRIPTION

A. Concise written description of the general boundaries and gross acreage (as defined by BCLUP) of the proposed amendment.

The Property is located on the south side of Margate Boulevard west of NW 76th Avenue and consists of 21.33 gross acres. The dashed line area is 104.3 gross acres.

B. Sealed survey, including legal description of the area proposed to be amended.

The survey and legal description of the property is attached as Exhibit B.

C. Map at a scale clearly indicating the amendment's location, boundaries and proposed land uses.

A location map of the property showing the proposed land uses is attached as Exhibit C.

4. EXISTING AND PROPOSED USES

A. Current and proposed local and Broward County Land Use Plan designation(s) for the amendment site. If multiple land use designations, describe gross acreage within each designation. For Activity Center amendments, the proposed text indicating the maximum residential and non-residential uses must be included.

	Broward County	City of Margate
Current	21.33 gross acres of Recreation and Open Space in an Irregular (7.6) Residential dashed line area 0.63 acres of Irregular Residential	21.33 gross acres of Commercial/Recreation in the Irregular 7.6 Residential dashed line area
	(7.6) within a Dashed Line Area on the Broward County Future Land Use Map.	0.63 gross acres of R(7) within an Irregular 7.6 Residential Dashed Line Area
Proposed	21.96 gross acres of Irregular (8.43) Residential dashed line area	21.96 gross acres of Residential (7) within the Irregular 8.43 Residential dashed line area

B. Indicate if the flexibility provisions of the Broward County Land Use Plan have been used for adjacent areas.

To date, the flexibility provisions of the Broward County Land Use Plan have not been used for this Property or any adjacent areas.

C. Existing use of amendment site and adjacent areas.

Adjacent Properties:

Subject Property: Vacant / previously a 9-hole golf course

North: Multi-ta

North: Multi-family, Single-family in NE Corner

South: Multi-family

East: Single-story Villas, Multi-family West: Multi-family, Single Family

D. Proposed use of the amendment site including square footage (for analytical purposes only) for each non-residential use and/or dwelling unit count. For Activity Center amendments, also provide the existing square footage for each non-residential use and existing dwelling unit count within the amendment area.

The Applicant proposes to add an additional 87 dwelling units to the dashed line area, allowing a total of 879 dwelling units. The analyses provided throughout the application are based on the additional dwelling 87 dwelling units being added to the dashed line area.

E. Maximum allowable development per adopted and certified municipal land use plans under existing designation for the site, including square footage/floor area ratio/lot coverage/height limitations for each non-residential use and/or dwelling unit count.

The dashed line area currently allows a density of 7.6 dwelling units per acre. Based on a gross acreage of 104.3 for the entire dashed line area, this yields a total of 792 permitted residential units within the dashed line area. To date, 742 dwelling units have been developed within the dashed line area. The analyses provided throughout the application are based on the existing maximum number of dwelling units permitted within the dashed line area, 792.

5. ANALYSIS OF PUBLIC FACILITIES AND SERVICES

The items below must be addressed to determine the impact of an amendment on existing and planned public facilities and services. Provide calculations for each public facility and/or service. If more than one amendment is submitted, calculations must be prepared on an individual and cumulative basis.

A. Potable Water Analysis

1. Provide the potable water level of service per the adopted and certified local land use plan, including the adoption date of the 10 Year Water Supply Facilities Plan.

The potable water level of service per the adopted comprehensive plan is 335 gallons per day (gpd). The City adopted the 10-Year Water Supply Facilities Work Plan in March 2015.

2. Identify the potable water facility serving the service area in which the amendment is located including the current plant capacity, current and committed demand on the plant and planned plant capacity expansions, including year and funding sources. Identify the wellfield serving the area in which the amendment is located including the South Florida Water Management District (SFWMD) permitted withdrawal, including the expiration date of the SFWMD permit.

The City's potable water system consists of raw water supply, water treatment and distribution.

Plant Capacity:

The City's water treatment plant has a total permitted maximum day operating capacity of 13.5 mgd. The total permitted maximum day flow for 2018 is 6.766 MGD. The system includes two (2) above ground storage tanks with a combined capacity of 3.9 mgd and a remote storage facility with a capacity of 2 mgd. No plant improvements are proposed at this

time.

Wells:

The City has 12 raw water wells on and around the property where the water treatment plant is located. The City draws its water from the Biscayne Aquifer. The City's Consumptive Use Permit ("CUP") was issued on April 13, 2005 for 20-year duration and will expire April 13, 2025. (Permit No. 06-00121-W). The CUP authorizes an annual allocation of 9.3 million gallons per day (mgd) and stipulates a reduced annual allocation of 8.51 mgd, effective April 13, 2010.

Distribution System:

The City maintains a water distribution system consisting of approximately 225 miles of distribution mains and a remote 2-million gallon water storage tank. There is an existing 12" water main along Margate Boulevard that fronts the property.

3. Identify the net impact on potable water demand, based on adopted level of service, resulting from the proposed amendment. Provide calculations, including anticipated demand per square foot or dwelling unit.

Existing Use		
Development Intensity	Generation Rate	Demand
792 dwelling units	335 gpd/ERC	0.281 MGD
Proposed Use:		
Development Intensity	Generation Rate*	Demand
879 dwelling units	335 gpd/ERC	0.312 MGD
	Net Change: 0.031 MG	D

4. Correspondence from potable water provider verifying the information submitted as part of the application on items 1-3 above. Correspondence must contain name, position and contact information of party providing verification.

A letter from the City of Margate Engineering Department has been requested. The letter will be provided as Exhibit D (Water & Wastewater Letter) upon receipt.

B. Sanitary Sewer Analysis

1. Provide the sanitary sewer level of service per the adopted and certified local land use plan.

The adopted level of service standard for sanitary sewer service as identified in Policy 2.2.2 of the adopted Comprehensive Plan is 335 gallons per day (gpd) per equivalent residential connection (ERC).

2. Identify the sanitary sewer facility serving the area in which the amendment is located including the current plant capacity, current and committed demand on the plant and planned plant capacity expansions, including year and funding sources.

The Subject Property is within the service area of the City of Margate Wastewater Treatment Plant which consists of these major operating components:

- 1. A wastewater treatment plant, which provides secondary treatment.
- 2. A deep well injection effluent disposal system.
- 3. A series of gravity collection mains which serve specific geographical neighborhoods and which discharge into the wet wells of one or more sewage pumping stations strategically located in each area.
- 4. An integrated system of pumping stations that pump raw sewage into force mains and interceptors leading to the wastewater treatment plant.

There is an existing 12" gravity sewer main located in the Margate Boulevard right of way. This gravity sewer flows to lift station #24. A gravity sewer system will be constructed on the Subject Property that will flow to an onsite private lift station. A force main from the private lift station will connect to a gravity sewer manhole on Margate Boulevard.

The City's Comprehensive Plan indicates that the City's Wastewater Treatment Plant has adequate capacity for buildout of the City. The current statistics for the plant are provided below.

Design Capacity: 12.1 MGD

Permitted Operating Capacity 10.01 MGD

Current Demand: 6.519 MGD

3. Identify the net impact on sanitary sewer demand, based on the adopted level of service, resulting from the proposed amendment. Provide calculations, including anticipated demand per square foot or dwelling unit.

Existing Use						
Development Intensity	Generation Rate	Demand				
792 dwelling units	335 gpd/ERC	0.281 MGD				
Proposed Use						
Development Intensity	Generation Rate	Demand				
879 dwelling units	335 gpd/ERC	0.312 MGD				
	Net Change: 0.031 MGD					

4. Correspondence from sanitary sewer provider verifying the information submitted as part of the application on items 1-4 above. Correspondence must contain name, position and contact information of party providing verification.

A letter from the City of Margate Engineering Department has been requested. The letter will be provided as Exhibit D (Water & Wastewater Letter) upon receipt.

C. Solid Waste Analysis

1. Provide the solid waste level of service per the adopted and certified local land use plan.

According to Policy 4.1.4 of City's Comprehensive Plan, the adopted level of service for solid waste for residential dwelling units is 8.9 pounds per dwelling unit per day.

2. Identify the solid waste facility serving the service area in which the amendment is located including the landfill/plant capacity, current and committed demand on the landfill/plant capacity and planned landfill/plant capacity.

The Property is served by the Wheelabrator South Broward Waste to Energy Facility located at 4400 S. State Rd. 7, Fort Lauderdale, FL 33314. Per the Solid Waste Element of the Broward County Comprehensive Plan, the facility has a gross electrical generating capacity of approximately 66 megawatts. In anticipation of future disposal needs, Broward County has received certification for ultimate generating capacities of 96.1 megawatts.

3. Identify the net impact on solid waste demand, based on the adopted level of service, resulting from the proposed amendment. Provide calculations, including anticipated demand per square foot or dwelling unit.

Existing Use		
Development Intensity	Generation Rate	Demand
792 dwelling units	8.9 lbs/unit/day	7,048 lbs./day
Proposed Use		
Development Intensity	Generation Rate*	Demand
879 dwelling units	8.9 lbs./unit/day	7,823 lbs./day
		•

4. Correspondence from the solid waste provider verifying the information submitted as part of the application on items 1-3 above. Correspondence must contain name, position and contact information of party providing verification.

An e-mail correspondence from Bob Hely with Wheelabrator Technologies confirming the landfill capacity and a letter from Republic Services confirming capacity to service the project are attached as Exhibit E (Solid Waste Correspondences).

D. Drainage Analysis

1. Provide the drainage level of service per the adopted and certified local land use plan.

The adopted level of service standards for drainage facilities as contained in Policy 3.2.1 of the City's Comprehensive Plan are provided below.

Road protection. Residential streets not greater than fifty feet to have crown elevations no lower than the elevation for the respective area depicted on the ten year "Flood Criteria Map." Rights-of-way greater than fifty feet to have an ultimate edge of pavement no lower than the elevation for the respective area depicted on the ten-year "Flood Criteria Map."

Buildings. To have the lowest floor elevation no lower than the elevation for the respective area depicted on the "100-Year Flood Elevation Map."

Off-site discharge. Not to exceed the inflow limit of SFWMD primary receiving canal or the local conveyance system, whichever is less.

Storm sewers. Design frequency minimum to be three-year rainfall intensity off the State DOT Zone 10 Rainfall curves.

Floodplain routing. Calculated flood elevations based on the ten year and one-hundred-year return frequency rainfall of three-day duration shall not exceed the corresponding elevations of the ten year "Flood Criteria Map" and the "100 Year Flood Elevation Map."

Antecedent water level. The higher elevation of either the control elevation or the elevation depicted on the map "Average Wet Season Water Levels."

On-site storage. Minimum capacity above antecedent water level and below floodplain routing elevations to be design rainfall volumes minus off-site discharge occurring during design rainfall.

Best management practices (BMP). Prior to discharge to surface or ground water, BMPs will be used to reduce pollutant discharge.

The drainage system that is ultimately built on the Subject Property will also meet the Broward County and South Florida Water Management District drainage requirements.

2. Identify the drainage district and drainage systems serving the amendment area.

The Subject Property is within the C-14 basin. The requirements of the City of Margate, South Florida Water Management District ("SFWMD") and the Broward County Development Management and Environmental Review Section will be applied to the ultimate drainage system for the Subject Property.

A canal flows thru the site that more or less follows an existing flowage easement. The existing drainage flow and easement will be relocated and maintained as part of the proposed design. Parts of the existing canal are located on the property line and service the adjacent properties. The storm water from the adjacent townhomes and condominium properties flow into the on-site canals. This historical flow will be maintained as part of the proposed design.

3. Identify any planned drainage improvements, including year, funding sources and other relevant information.

Currently, there are no planned drainage improvements set forth by the City.

4. Indicate if a Surface Water Management Plan has been approved by, or an application submitted to, the SFWMD and/or any independent drainage district, for the amendment site. Identify the permit number(s), or application number(s) if the project is pending, for the amendment site. If an amendment site is not required to obtain a SFWMD permit, provide documentation of same.

No formal application has been made to the local drainage districts; but, preliminary surface water management calculations and plans were reviewed by Broward County Environmental Engineering and Permitting Division. Attached is an email confirming they are in agreement with the concept presented (Exhibit F). The onsite drainage system will be designed to meet all applicable levels of service standards.

5. If the area in which the amendment is located does not meet the adopted level of service and there are no improvements planned (by the unit of local government or drainage authority) to address the deficiencies, provide an engineering analysis which demonstrates how the site will be drained and the impact on the surrounding properties. The information should include the wet season water level for the amendment site, design storm elevation, natural and proposed land elevation, one hundred year flood elevation, acreage of proposed water management retention area, elevations for buildings, roads and years, storage and runoff calculations for the design storm and estimated time for flood waters to recede to natural land elevation.

The existing surface water management system for the Subject Property consists of series of water features constructed to provide drainage for the golf course and surrounding communities. The proposed design will consist of a combination of the existing canals and proposed lakes to provide on-site storage to meet the minimum flood designs. A crowned roadway with valley gutter curb on both sides of the street is proposed. The community will have positive drainage through inlets and pipes discharging into the lake and canal. An

existing culvert under Margate Boulevard will be maintained and extended to connect to the proposed lake pending the final site plan design. Existing drainage from the adjacent residential communities will be maintained and allowed to continue to flow through the property. Proper easements will be provided.

Water quality treatment and water storage will be provided in the proposed lakes as required by the permitting agencies. The developed area storm water management system will provide for attenuation of runoff from storm events including protection of interior roadways, buildings, and the adjacent areas.

6. Correspondence from local drainage district verifying the information submitted as part of the application on items 1-5 above. Correspondence must contain name, position and contact information of party providing verification.

A letter from the City of Margate Engineering Department has been requested. The letter will be provided as Exhibit G (Drainage Letter) upon receipt.

- E. Recreation and Open Space Analysis
 - 1. Provide the recreation and open space level of service per the adopted and certified local land use plan.

The City of Margate has adopted a level of service for parks/open space of 3 acres per 1,000 population.

2. For amendments which will result in an increased demand for "community parks" acreage, as required by the Broward County Land Use Plan, an up-to-date inventory of the municipal community parks inventory must be submitted.

The community parks inventory has been provided as Exhibit H.

3. Identify the net impact on demand for "community parks" acreage, as defined by the City Comprehensive Plan, resulting from this amendment.

Current Use		
Development Intensity	Generation Rate	Demand
792 Dwelling Units (2.5 per capita)	3 acres/1,000 people	5.94 acres
Proposed Use		
Development Intensity	Generation Rate	Demand
879 Dwelling Units (2.5 per capita)	3 acres/1,000 people	6.59 Acres
	NET CHANGE: +0.6	5 acres

4. Identify the projected "community parks" acreage needs based on the local government's projected build-out population.

The County projects that the City's population will be approximately 66,641 in 2040 and 68,660 in 2045. The certified community parks inventory tables indicate that there are 197.74 acres of open space existing in the City that can be used to meet the adopted level of service. Based on these figures, the City will be operating below level of service standards beginning in 2040, where 199.9 acres will be required and a total of 206 acres will be needed in 2045 to meet level of service standards.

While this Project is located on a golf course, only 15% of the City's total golf course acreage can be counted towards meeting the level of service standards. Per the adopted community parks inventory, the City has a total of 346.16 acres of golf course land. Of that, only 30.90 acres (15%) are counted towards meeting the level of service standards. Therefore, removing the 21.33 acres of golf course land will not reduce the 197.74 acres being counted for meeting the City's level of service standards.

To address the gap in the City's parks and open acreage in the long-range planning horizon, the Applicant is dedicating 1.21 net acres of land on the front of the Property to be used as a public park space. As shown in the table above, the Project generates a demand of an additional 0.65 acres of park and open space. The dedication of 1.21 acres is over and above the demand generated by the Project. Additionally, this dedication will increase the City's park acreage for community parks from 197.74 to 198.95, closing the gap in the deficiency of parks and open space for 2040 and 2045.

5. As applicable, describe how the local government and/or applicant are addressing Broward County Land Use Plan Policies 2.5.4 and 2.5.5 (a. through e.), regarding the provision of open space.

Policy 2.5.4: Broward County shall strongly encourage the preservation of open space areas. 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.

With the development of the Project, the Applicant is allocating 1.21 net acres of land along Margate Blvd. to be dedicated as public open space. This area of land will be dedicated for public use and will increase the City's total acreage of open space area towards meeting the City's Open Space Level of Service Standards of 3 acres per 1,000 residents. The proposed 1.21 acres is over and above the 0.65 acres generated by the project for open space. The additional 0.56 acres of public park space will help to mitigate the loss of open space by creating a public park that is over 1 acre in the western portion of the City, where there is only one park located west of Rock Island Road. The public park will provide passive walking paths with benches and picnic tables and 3 parking spaces for public parking. This will add an open space area that the neighborhood can use, whereas the prior golf course on

the property went out of business and is not accessible by the public.

Policy 2.5.5: 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.

As stated previously, the Applicant is allocating 1.21 acres of land along Margate Blvd. to be used as a public park. The proposed 1.21 acres is over and above the 0.65 acres generated by the project for open space. The additional 0.56 acres of public park space will help to mitigate the loss of open space by creating a public park that is over 1 acre in the western portion of the City, where there is only one park located west of Rock Island Road. The public park will provide passive walking paths with benches and picnic tables and 3 parking spaces for public parking. This will add an open space area that the neighborhood can use, whereas the prior golf course on the property went out of business and is not accessible by the public.

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.

Additional water surface area will be provided so the post development storage stages (10 year - 1 day, 25 year - 3 day, and 100 year-3 day) are lower than the predevelopment storm stages. Furthermore, the post development water quality elevation will be lower than the pre-development water quality elevation. Existing drainage from surrounding properties that currently drain onto and through the subject site will continue to be allowed to do so.

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.

Per a Wetland Assessment letter from WGI, (Exhibit I) there are no wetlands located on the Property. Additional surface water area will be created, reducing the post development storage stages (10 year - 1 day, 25 year - 3 day, and 100 year-3 day) to lower levels than under current conditions.

A tree survey conducted by a licensed arborist confirms there are no historic trees located on the Property. The tree survey information can be found on the survey (Exhibit B).

d. Mitigation of environmental contamination. The level of environmental contamination must be determined by conducting a Phase I environmental assessment. A Phase II environmental assessment may be required based upon the findings of the Phase I assessment.

A copy of a 2018 Phase II Environmental Site Assessment Report is attached as Exhibit J. Pursuant to the provisions of Chapter 27, Broward County Code, additional environmental analyses, including a Site Assessment Report, will be submitted to the Environmental Engineering and Permitting Division of the Department of Environmental Protection and Growth Management.

Additionally, an email correspondence from David Vanlandingham DAVID, P.E., (Exhibit K) the Director of the Broward County Resilient Environment Department confirming that an update to the 2018 Phase II Environmental Assessment is not required if a statement is provided that the use of the property has not changes since the assessment was conducted has been included with Exhibit K.

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.

The Project will integrate and tie into Margate Blvd. and the existing sidewalks located along Margate Blvd. The public will be able to access the public park along Margate Blvd. by utilizing the sidewalk or by vehicle through accessing the public parking lot along Margate Blvd.

F. Traffic Circulation Analysis

Please be advised, if required, that the Planning Council staff will request from the Broward Metropolitan Planning Organization (MPO), as per Policy 2.14.6 of the BCLUP, an analysis of the impacts of the amendment to the regional transportation network. The MPO will charge a separate cost-recovery fee directly to applicants for technical assistance requested by the Planning Council for the preparation and review of the land use plan amendment transportation analysis. Please contact the MPO for additional information regarding this fee.

1. Identify the roadways impacted by the proposed amendment and indicate the number of lanes, current traffic volumes, adopted level of service and current level of service for each roadway.

The roadway network that will be most impacted by the proposed amendment includes two (2) east-west facilities and one (1) north-south roadway. These three (3) roadways include Margate Boulevard, Atlantic Boulevard and Rock Island Road.

The number of lanes, current traffic volumes, adopted level of services, and current operating conditions (LOS) of the roadways located within the study area are documented in Tables 1a and 1b. Table 1a documents the existing conditions on all study roadways for daily conditions while Table 1b presents the current conditions during the critical PM peak hour.

2. Identify the projected level of service for the roadways impacted by the proposed amendment for the long-range planning horizon. Please utilize average daily and p.m. peak hour traffic volumes per Broward County Metropolitan Planning Organization (MPO) plans and projections.

Tables 2a and 2b document the projected level of service for the roadways located near the proposed amendment. The short-term horizon year was assumed to be the year 2025 while the long-term planning horizon was assumed to be the year 2045. The 2025 and 2045 projected traffic volumes (AADT) and PM peak hour volumes were based on information contained in Broward County's Roadway Level of Service Analysis for 2019/2040 and 2020/2045.

3. Planning Council staff will analyze traffic impacts resulting from the amendment. The applicant may provide a traffic impact analysis for this amendment – calculate anticipated average daily and p.m. peak hour traffic generation for the existing and proposed land use designations. If the amendment reflects a net increase in traffic generation, identify access points to/from the amendment site and provide a distribution of the additional traffic on the impacted roadway network for the long range planning horizons.

A trip generation comparison analysis was undertaken between the potential development under the current land use designation and the potential development under the proposed land use designation. The trip generation comparison analysis was based on the following assumptions:

MAXIMUM LAND USE AND INTENSITY – Existing Land Use Designation

• 792 Residential Units

TABLE 1a Existing Traffic Conditions (Daily Volumes)										
Roadway	From	То	Number of Lanes	Roadway Capacity	Current AADT	LOS				
Atlantic Boulevard	Riverside NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	6 6 6	59,900 59,900 50,000	41,500 41,500 53,500	C C F				
Margate Boulevard	Project Site NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	4 4 4	29,160 29,160 29,160	4,400 4,400 8,200	000				
Rock Island Road	Southgate Atlantic Blvd Margate Blvd	Atlantic Blvd Margate Blvd Royal Palm	4 4 4	37,810 37,810 37,810	42,000 31,500 31,500	F C C				

Source: Broward County Metropolitan Planning Organization

TABLE 1b Existing Traffic Conditions (PM Peak Hour Volumes)										
Roadway	From	То	Number of Lanes	Roadway Capacity	Current Peak Hour Volume	LOS				
Atlantic Boulevard	Riverside NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	6 6 6	5.390 5,390 4,500	3.943 3,943 5,083	C F				
Margate Boulevard	Project Site NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	4 4 4	2,628 2,628 2,628	418 418 779	000				
Rock Island Road	Southgate Atlantic Blvd Margate Blvd	Atlantic Blvd Margate Blvd Royal Palm	4 4 4	3,401 3,401 3,401	3,990 2,993 2,993	F C C				

Source: Broward County Metropolitan Planning Organization

TABLE 2a Future Traffic Conditions (Daily Volumes)										
			# of Lanes		•	<i>,</i>				
Roadway	From	То	2025/2045	AADT	LOS	S AADT	LOS			
Atlantic Boulevard	Riverside	NW 76 Ave	6/6	44,246	С	53,400	С			
	NW 76 Ave	Rock Island	6/6	44,246	С	53,400	С			
	Rock Island	SR 7	6/6	50,685	Е	41,300	D			
Margate Boulevard	Project Site	NW 76 Ave	4/4	4,031	С	2,800	С			
	NW 76 Ave	Rock Island	4/4	4,031	С	2,800	С			
	Rock Island	SR 7	4/4	10,438	С	17,900	D			
Rock Island Road	Southgate	Atlantic Blvd	4/4	42,508	F	44,200	F			
	Atlantic Blvd	Margate Blvd	4/4	31,846	С	33,000	С			
	Margate Blvd	Royal Palm	4/4	31,846	С	33,000	С			

Source: Broward County Metropolitan Planning Organization

		Future Traffic	TABLE Conditions (F		ur Volumes))	
			# of Lanes	Short	Term (2025)	Lon	g Term (2045)
Roadway	From	То	2025/2045	AADT	LOS	AADT	LOS
Atlantic Boulevard	Riverside	NW 76 Ave	6/6	4,204	F	5,073	С
	NW 76 Ave	Rock Island	6/6	4,204	D	5,073	С
	Rock Island	SR 7	6/6	4,816	C	3,924	D
Margate Boulevard	Project Site	NW 76 Ave	4/4	383	D	266	C
	NW 76 Ave	Rock Island	4/4	383	C	266	C
	Rock Island	SR 7	4/4	992	C	1,701	D
Rock Island Road	Southgate	Atlantic Blvd	4/4	4,038	C	4,199	F
	Atlantic Blvd	Margate Blvd	4/4	3,026	F	3,135	C
	Margate Blvd	Royal Palm	4/4	3,026	F	3,135	C

Source: Broward County Metropolitan Planning Organization

MAXIMUM LAND USE AND INTENSITY – Proposed Land Use Designation

• 879 Residential Units

Tables 3a and 3b on the following page present the results of the trip generation comparison analysis. The results of the trip generation comparison analysis indicate that the proposed 879 residential units generates approximately 558 new daily trips and approximately 38 new PM peak hour trips when compared against the 792 residential units.

4. Provide any transportation studies relating to this amendment, as applicable.

A transportation analysis is presented herein (refer to Tables 1a through 4b) and attached as Exhibit L. As indicated in Tables 4a and 4b, the project does not exceed the 3% significant impact threshold on any roadway segment located within the study area.

TABLE 3a Trip Generation Summary (Allowable Density - Existing Land Use)											
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour					
		Trips	Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound			
Residential Low Rise (LUC 220)	792	5,152	268	64	204	361	227	134			
Gross/Driveway/External Trips		5,152	268	64	204	361	227	134			

Source: ITE Trip Generation Manual (11th Edition)

TABLE 3b Trip Generation Summary (Allowable Density - Proposed Land Use)											
Land Use	Size	Daily	AM Peak H	our		PM Peak H	our				
		Trips	Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound			
Residential Low Rise (LUC 220)	879	5,710	295	71	224	399	251	148			
External Trips		5,710	295	71	224	399	251	148			

Source: ITE Trip Generation Manual (11th Edition)

TABLE 4a Project Impacts (Daily Volumes)										
			Number	Roadway	Project T	raffic = 4	415	Project Impacts		
Roadway	From	То	of Lanes	Capacity	Percent	Trips	C	% of Cap. Significa	ant	
Atlantic Boulevard	Riverside NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	6 6 6	59,900 59,900 50,000	22% 48% 35%	123 268 195	0.2 0.4 0.4	l% No		
Margate Boulevard	Project Site NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	4 4 4	29,160 29,160 29,160	100% 30% 15%	558 167 84	1.9 0.6 0.3	5% No		
Rock Island Road	Southgate Atlantic Blvd Margate Blvd	Atlantic Blvd Margate Blvd Royal Palm	4 4 4	37,810 37,810 37,810	13% 0% 15%	73 0 84	0.2 0.0 0.2)% No		

Source: Broward County Metropolitan Planning Organization

TABLE 4b Project Impacts (PM Peak Hour Volumes)									
			Number	Roadway	Project Traffic = 34 Proje		Project Ir	ect Impacts	
Roadway	From	То	of Lanes	Capacity	Percent	Trips	% of Cap	. Significant	
Atlantic Boulevard	Riverside NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7		5,390 5,390 4,500	22% 48% 35%	18 0	.2% .3% .3%	No No No	
Margate Boulevard	Project Site NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	4 4 4	2,628 2,628 2,628	100% 30% 15%	11 0	.4% .4% .2%	No No No	
Rock Island Road	Southgate Atlantic Blvd Margate Blvd	Atlantic Blvd Margate Blvd Royal Palm	4 4 4	3,401 3,401 3,401	13% 0% 15%	0 0	.1% .0% .2%	No No No	

Source: Broward County Metropolitan Planning Organization

G. Mass Transit

1. Identify the mass transit modes, existing and planned mass transit routes and scheduled service (headway) serving the amendment area within one-quarter of a mile.

The Broward County Mass Transit Division operates Broward County Transit (BCT), a fixed-route bus system servicing a significant percentage of the residents of the City of Margate. More specifically, the amendment area is served by one BCT route (Route 42) traveling east and west along Atlantic Boulevard. This transit route is accessible through bus stops located near the amendment area.

BCT route 42 travels east and west along Atlantic Boulevard. This route currently provides 45-minute headways Monday through Friday and 60-minute headways on weekends. There are bus stops for both northbound and southbound traveling patrons, both north and south of the project site. Sidewalks are provided on both sides of Margate Boulevard and on both sides of NW 76th Avenue. Moreover, pedestrian features (ramps, crosswalks, pedestrian push buttons and pedestrian signals) to safely cross Atlantic Boulevard are provided at the intersection of Atlantic Boulevard and NW 76th Avenue). Moreover, several bus stops are located on both sides of Atlantic Boulevard, both east and west of NW 76th Avenue for eastbound and westbound traveling transit riders.

2. Describe how the proposed amendment furthers or supports mass transit use.

The proposed amendment will allow for development of a residential project will marginally increase BCT ridership. The project site will be designed in a manner that provides safe movement of pedestrians within the site and will provide connectivity to existing sidewalks on the south side of Margate Boulevard. Therefore, future residents will have safe and adequate access to pedestrian sidewalks to connect to the various bus stops nearby.

3. Correspondence from transit provider verifying the information submitted as part of the application on items 1 and 2 above. Correspondence must contain name, position and contact information of party providing verification.

See Exhibit M (Mass Transit Letter).

H. PUBLIC EDUCATION ANALYSIS

Please be advised that the Planning County staff will request from The School Board of Broward County (SBBC), as per Policy 2.15.2 of the BCLUP, an analysis of the impacts of the amendment on public education facilities. Per SBBC Policy 1161, the applicant will be subject to a fee for the analysis and review of the land use plan application. The applicant should contact the Growth Management Section of the SBBC to facilitate this review and determine the associated fees.

1. Public School Impact Application (PSIA).

The SCAD letter is attached as Exhibit N.

2. The associated fee in the form of a check made payable to the SBBC.

The associated fee has been paid.

6. ANALYSIS OF NATURAL AND HISTORICRESOURCES

Indicate if the site contains, is located adjacent to or has the potential to impact any of the natural and historic resource(s) listed below, and if so, how they will be protected or mitigated. Planning Council staff will request additional information from Broward County regarding the amendment's impact on natural and historic resources.

A. Historic sites or districts on the National Register of Historic Places or locally designated historic sites.

The Property does not contain any historic sites or districts on the National Register of Historic Places or locally designated historical sites. In addition, no National Register historic sites are located adjacent to the Property.

B. Archaeological sites listed on the Florida Master Site File.

Based upon review of information on file with the State Historic Preservation Office, Division of Historical Resources Florida Master Site File, there are no previously recorded cultural resources within the Property.

C. Wetlands.

According to the current Broward County Wetlands Map there are no wetlands on the Subject Property. A wetland assessment of the Subject Property was conducted by a Professional Wetland Scientist, and the results concluded that there are currently no wetlands on the property (Exhibit I).

D. Local Areas of Particular Concern as identified within the Broward County Land Use Plan.

According to the Broward County LAPC's, ESL's, NRA's and Tree Resources Map dated March 2000, there are no Local Areas of Particular Concern (LAPC's) identified within the Property.

E. Priority Planning Area map and Broward County Land Use Plan Policy 2.21.1 regarding sea level rise.

Per Priority Planning Area Map provided in the Broward County Land Use Plan, the Property is not located in a Priority Planning Area.

F. "Endangered" or "threatened species" or "species of special concern" or "commercially exploited" as per the Florida Fish and Wildlife Conservation Commission (fauna), the U.S. Fish and Wildlife Service (flora and fauna), or the Florida Department of Agriculture and Consumer Services (fauna). If yes, identify the species and show the habitat location on a map.

A burrowing owl assessment was conducted by WGI and an opinion letter has been provided confirming the presence of one or more owl burrows (Exhibit O). The letter also states that an FWC permit will be required to excavate and collapse the burrows when they are inactive. To avoid unnecessary impacts, this permitting is done 6 months before construction and a burrowing owl survey is conducted prior to the permit submittal to ensure the most accurate information regarding the location of any burrows. As such, a survey will be conducted prior to submitting a permit to the FWC to excavate the burrows.

The Applicant is not aware of any endangered flora or fauna on the Property.

G. Plants listed in the Regulated Plant Index for protection by the Florida Department of Agriculture and Consumer Services.

The applicant is not aware of any plants on the property that are listed in the Regulated Plant Index for protection by the Florida Department of Agriculture and Consumer Services.

H. Wellfields – indicate whether the amendment is located within a wellfield protection zone of influence as defined by Broward County Code, Chapter 27, Article 13 "Wellfield Protection." If so, specify the affected zone and any provisions which will be made to protect the wellfield.

The Property is not located within a wellfield protection zone of influence.

I. Soils – describe whether the amendment will require the alteration of soil conditions or topography. If so, describe what management practices will be used to protect or mitigate the area's natural features.

According to the "Soil Survey of Broward County", the soils on the Subject Property include Immokalee Fine Sand (Map Unit Symbol 15) and Immokalee, Limestone Substratum-Urban Land Complex (Map Unit Symbol 16).

According to the soil survey, Immokalee Fine Sand soil consists of moderately deep, poorly drained soil with a high runoff potential. Depth to water table is typically 6 to 18 inches and the frequency for ponding and flooding is nonexistent. This soil is not listed as a hydric soil in Broward County, but may include minor components that may include hydric soils.

According to the soil survey, Immokalee, Limestone Substratum-Urban Land Complex soil type consists of deep, poorly drained soils with a high runoff potential. Depth to water table is typically 6 to 18 inches and the frequency for ponding and flooding is non-existent.

Prior to development, any identified soil contamination will be mitigated as required by Broward County. During site development soil will be added, as needed, to bring the elevation of the Subject Property to the appropriate elevation for flood protection.

Some existing surface waters will be filled, new lakes will be excavated, canal banks will be properly sloped, and the site will be regraded to accommodate the proposed project. Silt fences and turbidity barriers will be utilized to prevent soil migration off the site.

J. Beach Access – Indicate if the amendment site fronts the ocean or would impact access to public beaches. If so, describe how public beach access will be addressed.

The Property is not an oceanfront property. Thus, the proposed development will not affect any beach access.

7. AFFORABLE HOUSING

Describe how the local government is addressing Broward County Land Use Plan Policy 2.16.2, consistent with Article 5.

This policy is not applicable to the Project as it is adding less than 100 dwelling units the effective land use plan.

8. LAND USE COMPATIBILITY

Describe how the amendment is consistent with existing and planned future land uses in the area (including adjacent municipalities and/or county jurisdictions). Identify specific land development code provisions or other measures that have or will be utilized to ensure land use compatibility.

The Applicant's redevelopment plan will provide a quality residential development that fits within the character of the adjacent properties and the surrounding area. The proposed land use designation of R(7) is compatible with the land use and density of the surrounding properties within the Dashed Line Area; being bounded by R(7) & R(17) to the east, R(4) to the west, and R(17) to the south. The property to the north is not located within the Dashed Line Area and contains land use designations of R(16) and R(20). The proposed Project consisting of 137 townhome units with a density of 6.24 du/acre is compatible with the character of the adjacent single-family and multi-family residential use.

Furthermore, the Applicant has designed the Project to provide buffers between the adjacent properties with a lake provided along the western property line and landscaping and fencing provided along the perimeter of the Property. The proposed PUD master plan showing the proposed buffering has been provided as Exhibit P.

9. HURRICANE EVACUATION ANALYSIS

(Required for those land use plan amendments located in a hurricane evacuation zone as identified by the Broward County Emergency Management Division).

Provide a hurricane evacuation analysis based on the proposed amendment, considering the number of permanent and seasonal residential dwelling units (including special residential facilities) requiring evacuation routes and clearance times. The hurricane evacuation analysis shall be based on the best available data/modeling techniques as identified by the Broward County Emergency Management Division.

The Property is not located within an evacuation zone.

10. REDEVELOPMENT ANALYSIS

Indicate if the amendment is located in an identified redevelopment (i.e., Community Redevelopment Agency, Community Development Block Grant) area. If, so, describe how the amendment will facilitate redevelopment and promote approved redevelopment plans.

The Property is not located within a Community Redevelopment Area or Community Development Block Grant area.

11. INTERGOVERNMENTAL COORDINATION

Indicate whether the proposed amendment site is adjacent to other local governments. If so, please provide additional copies for the notification and/or review by adjacent local governments.

The Property is not located adjacent to another local government in Broward County.

12. CONSISTENCY WITH POLICIES OF THE CITY OF MARGATE LAND USE PLAN & HIGHLIGHTED REGIATIONAL ISSUES & POLICIES OF THE BROWRD COUNTY LAND USE PLAN

Broward County Land Use Plan

Per Section Two of the Broward County Land Use Plan, the proposed residential dwelling units are consistent with the permitted uses listed within the residential land use category. Additionally, the Proposed Amendment is consistent with the following policies of the County Land Use Plan:

Policy 2.10.2-The compatibility of existing and future land uses shall be a primary consideration in the review and approval of amendments to the Broward County and local land use plans. It is recognized that approved redevelopment plans aimed at eliminating or reducing blighted and deteriorating areas may appropriately promote the introduction of land use patterns in variance from existing land use patterns.

The Project will remove an abandoned golf course from the area and redevelop the Property with a use that is compatible with the surrounding neighborhood. The proposed land use designation of R(7) is compatible with the land use and density of the surrounding properties within the Dashed Line Area; being bounded by R(7) & R(17) to the east, R(4) to the west, and R(17) to the south. The property to the north is not located within the Dashed Line Area and contains land use designations of R(16) and R(20). The proposed Project consisting of 137 townhome units with a density of 6.24 du/acre is compatible with the character of the adjacent single-family and multi-family residential use.

Policy 2.10.3-In order to prevent future incompatible land uses, the established character of predominately developed areas shall be a primary consideration when amendments to the Broward County Land Use Plan are proposed.

As stated previously, this Project will redevelop an abandoned golf course with a low-density residential development that is compatible with the density and residential uses of the surrounding area. The proposed R(7) land use designation is less dense than the adjacent R(16), R(17) and R(20) developments and is also harmonious with the adjacent developments containing an R(7) and R(4) land use designation.

Policy 2.13.1-No unit of local government may grant an application for a building permit for the construction of a principal building on a parcel of land unless a plat including the parcel or parcels of land has been approved by the Broward County Commission and recorded in the official records of Broward County subsequent to June 4, 1953.

The Property was platted in 1972 as the Oriole Golf & Tennis Club Section Two plat.

Policy 2.14.2-To maintain those level of service standards identified within the Broward County Comprehensive Plan and local comprehensive plans, Broward County shall, prior to final action on amendments to the Broward County Land Use Plan, determine whether adequate public facilities and services will be available when needed to serve the proposed development.

The level of service analyses provided throughout this application confirm there is adequate capacity for all public facilities to service the Project.

Policy 2.11.2-In considering amendments to the Broward County Land Use Plan, analysis regarding the availability of potable water supply shall include a determination of whether such supply will be available as per the applicable adopted 10-Year Water Supply Facilities Work Plan and Capital Improvements Element.

The level of service analysis and responses to the Potable Water section in this application include information from the City's 10 Year Water Supply Facilities Work Plan and Capital Improvements Element. The information provided demonstrates that there is sufficient capacity to service the Project for potable water.

Policy 2.11.4-The availability of sanitary sewer service, or plans to extend or provide such service within a financially feasible capital plan, adopted by a local government, shall be a primary consideration when amendments to the Broward County Land Use Plan for increased densities and intensities are proposed.

The level of service analysis and responses to the wastewater section of this application demonstrates there is sufficient capacity to service the Project for wastewater.

City of Margate Land Use Plan

Per Policy 1.1.2(a) of the City's Future Land Use Element, the proposed residential dwelling units are consistent with the permitted uses listed within the residential land use category. Additionally, the Proposed Amendment is consistent with the following policies of the City's Comprehensive Plan:

Policy 1.2.2-The compatibility of existing and future land uses and the established character or predominantly developed areas shall be a primary consideration in the review and approval of amendments to the Future Land Use Plan in order to prevent incompatible uses. It is recognized that approved redevelopment plans aimed at eliminating or reducing blighted and deteriorating areas may appropriately promote the introduction of land use patterns in variance with existing land use patterns.

The Applicant's redevelopment plan will provide a quality residential development that fits within the character of the adjacent properties and the surrounding area. The proposed land use designation of R(7) is compatible with the land use and density of the surrounding properties within the Dashed Line Area; being bounded by R(7) & R(17) to the east, R(4) to the west, and R(17) to the south. The property to the north is not located within the Dashed Line Area and contains land use designations of R(16) and R(20). The proposed Project consisting of 137 townhome units with a density of 6.24 du/acre is compatible with the character of the adjacent single-family and multifamily residential use.

Furthermore, the Applicant has designed the Project to provide buffers between the adjacent properties with a lake provided along the western property line and landscaping and fencing provided along the perimeter of the Property.

Objective 4.2-Provide recreation and open spaces that meet the needs of residents and that are compatible with the character of the City.

This amendment provides a 1.21 net acre park located along Margate Blvd. This space will be dedicated to the public as park and open space use. The addition of this park will provide a public park within the western portion of the City, where there is only one park located west of Rock Island Road.

Policy 4.2.2-Level of service standards for parks shall be established to ensure adequate facilities exist to provide Margate's present and future population with a diversified and balanced parks and recreation system, as provided in the Recreation and Open Space element.

As stated previously in the Parks & Open Space section of this amendment, the City will be deficient in meeting the required level of service standards for parks and open space in the long-range planning horizon. This amendment will add an additional 1.21 net acres to the City's Community Parks Inventory, increasing the total parks and open space acreage to 198.95, decreasing the deficiency in meeting the level of standards for parks and open space in the long-range planning horizon.

Policy 5.1.1-Prior to approving increases in density or intensity of land uses, including amendments to the Future Land Use Map and Zoning maps, approvals of plats, and issuance of development orders, there shall be a finding that existing public facilities and services are available to serve the needs of the proposed development.

The level of service and capacity analyses provided herein demonstrate that there are sufficient public facilities to service the Project.

Policy 5.1.2-New development shall provide water storage capacity equal to that which existed under pre-development conditions consistent with the water management regulations and plans of the SFWMD, Broward County and independent drainage districts.

Additional surface water area is being provided with the proposed project to ensure that post development storm stages do not exceed pre-development storm stages. As stated above, a preliminary review of the plans and surface water management calculations was conducted by Broward County Surface Water Management Licensing.

Objective 5.3-Discourage urban sprawl by directing new development into areas where necessary regional and community facilities and services exist.

This project will redevelop an abandoned golf course into a residential townhome development consisting of 137 units. As a redevelopment project, the Property already has existing connections for water and wastewater that the Project will tie into. Additionally, the Property has connections to existing roadway system that has the capacity to hold the traffic generated by the Project.

Policy 5.4.2-The City shall utilize the highway capacity methodology endorsed by the Metropolitan Planning Organization and approved by the Broward County Commissioners to determine the capacities and levels of service on the regional roadway network.

The traffic analysis conducted for this amendment utilizes the highway capacity methodology endorsed by the Metropolitan Organization to determine the capacities and levels of service on the regional roadway network. The analysis demonstrates that the Project will have less than a 3% significant impact threshold on any roadway segment located within the study area.

13. ADDITIONAL SUPPORT DOCUMENTS

A. Other support documents or summary of support documents on which the proposed amendment is based.

None provided.

14. PLAN AMENDMENT COPIES

A. 3 hard copies and 10 digital copies (13 total) for the BCPC (Please include additional copies, if amendment site is adjacent to other municipalities and/or county jurisdictions). Additional copies may be requested by the Planning Council Executive Director after the initial application submittal.

To be provided upon transmittal to Broward County.

B. If requesting concurrent transmittal to DEO, 1 hard copy and 10 digital copies (11 copies total), as required by DEO, of the corresponding local land use plan amendment application, including transmittal letter from municipality to DEO.

To be provided upon submittal to Broward County.

Exhibits

- A. Economic Impact Study
- B. Survey & Legal Description
- C. Map of Proposed Land Use Designations
- D. Water & Wastewater Service Letter
- E. Solid Waste Correspondences
- F. Broward County EPD Email
- **G.** Drainage Service Letter
- **H.** Community Parks Inventory
- I. Wetlands Assessment Letter
- J. Phase II Environmental Assessment Report
- K. Broward County Phase II Environmental Assessment Report Email
- L. Traffic Analysis
- M. Mass Transit Letter
- N. SCAD Report
- O. Burrowing Owl Assessment Report
- P. Proposed Site Plan

Exhibit A Economic Impact Study

Fiscal Impact Study for Springdale Townhomes

Date: September 19, 2022

Submitted by Peter Angelides, Ph.D., AICP Submitted to Fimiani Development Corporation

DRAFT



Fimiani Development Corporation is proposing a 137-townhome community in Margate, Florida, on the site of the former Margate Executive Golf Course. The City requires a study of "The projected net fiscal impact on the tax base of the city." This study serves as the required analysis.

The fiscal impact calculation is based on the current and anticipated future assessed value of the former Margate Executive Golf Course, 7870 and 7705 Margate Boulevard, which consists of two parcels. The parcels' current combined assessed value of \$316,730 generates \$6,931 in total annual real estate taxes to the Broward County Government, Broward County School Board, SO Florida Water Management, and the City of Margate, based on 2021 millage rates (see Figure 1).¹

Figure 1: 2021 Millage Rates, Margate, Florida

	Millage Rate
Broward County Government	5.6690
Broward County School Board	6.4621
SO Florida Water Management	2.0041
City of Margate	7.7465
Total Millage	21.8817

Source: Broward County Property Appraiser (2022)

This analysis uses Broward County's Tax Roll to estimate the projected assessed value of the future townhome development.² According to this source, the median property value (for improvements only) for townhomes in Margate, Florida is \$222,910 overall, and \$310,280 for townhomes constructed in 2010 or later. These values are used for the low-end and high-end estimates of the baseline anticipated real estate taxes for the future development (see Figure 2). The land value is not considered, as that is assumed to be unaffected by development. Therefore, the incremental increase in property value is understood to be determined by the anticipated change in improvement value only.³

³ Parcel 4841 35 05 0030's 2022 land value is \$1,814,270 (compared to \$254,000 in 2021) and Parcel 4841 35 08 0010's 2022 land value is \$38,520 (compared to \$5,390 in 2021), although Florida limits the increase in assessed value that is possible from one year to the next. The improvement values for each parcel are the same from 2021 to 2022. These improvement values are used to calculate the anticipated incremental increase in real estate taxes associated with the development.



¹ Parcel 4841 35 05 0030 has a 2021 assessed value of \$281,260 (including \$254,000 in land value and \$27,260 in improvement value), for \$6,154.44 in real estate taxes in 2021. Parcel 4841 35 08 0010 has a 2021 assessed value of \$35,470 (including \$5,390 in land value and \$30,080 in improvement value), for \$776.14 in real estate taxes.

² The dataset (a Microsoft Access file) was purchased from the Broward County Property Appraiser's website on September 8, 2022.Properties are filtered by location (Margate, Florida) and use type and class (townhomes). Properties with building assessed values of less than \$1,000 are excluded from the analysis.

Figure 2: Median Assessed Values (Improvement Only), Townhomes in Broward County

	Properties	Median Land Value	Median Building Value	Median Overall Value
All Townhomes	1,955	\$16,400	\$222,910	\$239,310
Built 2010 or later	145	\$26,550	\$310,280	\$336,830

Source: Broward County Property Appraiser Tax Roll (2022)

Impact on Property Tax Revenue

With a assessed value for improvements (excluding land value) of approximately \$30.5 to \$42.5 million based on comparable townhome developments elsewhere in Margate, this development is expected to generate an increase in annual property tax revenues of approximately \$667,000 to \$928,000 beyond the amount currently generated by the property (see Figure 3).

Figure 3: Anticipated Tax Revenue Increase Associated with the Development (without exemptions)

	Current	Future	Future	Increase	Increase
Тах Туре	(improvement only)	(low end)	(high end)	(low end)	(high end)
County Government	\$325	\$173,124	\$240,980	\$172,799	\$240,655
County School Board	\$371	\$197,344	\$274,693	\$196,973	\$274,323
SO FL Water Management	\$115	\$61,203	\$85,191	\$61,088	\$85,076
City of Margate	\$444	\$236,568	\$329,291	\$236,124	\$328,847
Total	\$1,255	\$668,238	\$930,155	\$666,983	\$928,900

Source: Broward County Property Appraiser Tax Roll (2022), Econsult Solutions, Inc. (2022)

Homestead Exemption

Florida offers a homestead exemption of \$25,000 for school district taxes and \$50,000 for other real estate taxes (for properties assessed at \$75,000 or higher).⁴ Although not all properties would qualify for the homestead exemption, Figure 4 shows adjusted anticipated property values for properties with the homestead exemption.

⁴ Broward County Property Appraiser, https://bcpa.net/homestead.asp (accessed September 12, 2022).



Figure 4: Adjusted Anticipated Townhome Assessed Values (Improvement Only) for Fiscal Impact Calculations

	Median Value	Median Value with \$25,000 Exemption (School Board)	Median Value with \$50,000 Exemption (Other Taxes)	
All Townhomes	\$222,910	\$197,910	\$172,910	
Built 2010 or later	\$310,280	\$285,280	\$260,280	

Source: Broward County Property Appraiser (2022)

Applying the 2021 millage rates (Figure 1) to the adjusted assessed values for the 137 townhomes, the anticipated increase in real estate tax revenue would range from approximately \$539,000 to \$801,000 beyond the amount currently generated by the property, if all 137 properties were to receive the homestead exemption (see Figure 5).⁵

Figure 5: Anticipated Tax Revenue Increase Associated with the Development (with all 137 townhomes receiving the Homestead Exemption)

	Current	Future	Future	Increase	Increase
Тах Туре	(improvement only)	(low end)	(high end)	(low end)	(high end)
County Government	\$325	\$134,291	\$202,147	\$133,966	\$201,822
County School Board	\$371	\$175,211	\$252,561	\$174,841	\$252,190
SO FL Water Management	\$115	\$47,474	\$71,463	\$47,360	\$71,348
City of Margate	\$444	\$183,504	\$276,227	\$183,060	\$275,783
Total	\$1,255	\$540,481	\$802,398	\$539,226	\$801,144

Source: Broward County Property Appraiser Tax Roll (2022), Econsult Solutions, Inc. (2022)

⁵ For simplicity, the full amount of the homestead exemption is applied to the improvement value in this analysis. This provides a conservative estimate of the increased value with the homestead exemption in place.



Appendix A

About Econsult Solutions, Inc.

This report was produced by Econsult Solutions, Inc. ("ESI"). ESI is a Philadelphia-based economic consulting firm that provides businesses and public policy makers with economic consulting services in urban economics, real estate economics, transportation, public infrastructure, development, public policy and finance, community and neighborhood development, planning, as well as expert witness services for litigation support. Its principals are nationally recognized experts in urban development, real estate, government and public policy, planning, transportation, non-profit management, business strategy and administration, as well as litigation and commercial damages. Staff members have outstanding professional and academic credentials, including active positions at the university level, wide experience at the highest levels of the public policy process and extensive consulting experience.

https://econsultsolutions.com/



Appendix B

PETER A. ANGELIDES, PhD, AICP

Econsult Solutions, Inc. 1435 Walnut Street, 4th Floor Philadelphia, PA 19102 215-717-2777

Email: angelides@econsultsolutions.com

EDUCATION

University of Minnesota

Doctor of Philosophy in Economics, February 1998

Master of Science in Economics, December 1996

Thesis topic: "Auto Ownership and Mode Choice: A Structural Approach"

Fields: Industrial Organization, Financial Economics

University of Pennsylvania

Master of City Planning, May 1988

Bachelor of Arts - Major: Urban Studies (Honors); Minor: Mathematics, May 1987

WORK EXPERIENCE

CURRENT POSITIONS

Econsult Solutions, Inc., Philadelphia, PA – President (Principal, 2013 –)

• Real estate development, transportation, economic development, economic and fiscal impacts, and financial modeling.

Passyunk Avenue Revitalization Corporation – Chair 2021 (Board 2019-)

Racquet Club of Philadelphia—President (Board of Governors 2016-)

Urban Land Institute – Technical Assistance Program Council, 2013, (Co-Chair, 2017-2020)

PAST POSITIONS

Econsult Corporation, Philadelphia, PA, *Vice President and Director*, 2008 – 2012.

PricewaterhouseCoopers, Philadelphia, PA, Manager, Director, 2001 – 2008

 Provided economic and statistical modeling and analysis in business consulting, litigation and regulatory matters.



• Major work included litigation support in a variety of industries and case-types, setting prices for intellectual property and services, and evaluating the impact of royalty licensing agreements.

Charles River Associates, Senior Associate, Washington, DC, 1999-2001

• Provided economic analysis, primarily for Fortune 500 companies seeking Federal regulatory approval for mergers or joint ventures. Antitrust, commercial damages.

PHB Hagler Bailly / Putnam, Hayes & Bartlett, Consultant, Washington, DC, 1997-1999

• Economic and litigation consulting in the telecom, energy, pharmaceutical, and postal industries

Wallace Roberts & Todd, Philadelphia, PA, Urban and Environmental Planner, 1990-1992

- Provided planning services to private developers, state and county government, and the Washington Metropolitan Area Transportation Authority.
- Projects included preparation of county level master plans, analyzing the impact of statewide zoning changes, updating municipal zoning codes, and preparation of environmental impact statements.

Central Philadelphia Development Corporation, *Planner/Intern*, 1988-1990

• Supported the activities of CPDC committees and conducted numerous analyses in support of CPDC's initiative to create what became the Center City District.

Delaware Valley Smart Growth Alliance – Juror, Board member, Treasurer – 2012-2021

Design Advocacy Group – Steering Committee, 2014-2020

Healthy Rowhouse Project – Philadelphia, PA – Working Team, 2014-2015

Healthy Rowhouse Project – Strategic Vision Team, Philadelphia, 2016-2018

Transportation Research Board, Washington, DC – TCRP G-15 Panel Member, 2015

St. Peter's School – Finance Committee, 2010-2016

Mayor's Task Force on Historic Preservation, Philadelphia, 2017-2019

American Institute of Certified Planners – Exam question writing task force, 2012-2018 PenTrans – Board of Directors, 2015

TEACHING

University of Pennsylvania, Philadelphia, PA

Jefferson University, Philadelphia, PA

University of Minnesota, Minneapolis, MN



SELECTED PROJECTS

Consulting and Planning

- Economic Development and Retail Revitalization Plans
 - o Chester, PA Revitalization Plan for the Chester Transportation Center.
 - Coatesville, PA Economic Development Strategy
 - City of Coatesville, PA Vision plan and retail study as part of Coatesville's economic development strategy
 - City of Trenton, NJ Analyzed the impact of the potential reconfiguration of Rt. 29.
 - Marcus Hook Economic Development Agenda for Marcus Hook.
 - o Media Borough, PA Economic development, retail, and placemaking plan
 - Ohio City, Cleveland, OH Economic development and retail analysis and strategy
 - Regional Municipality of Wood Buffalo (Alberta, Canada) *Real Estate Solutions for the Regional Municipality*.
 - Rowan College at Gloucester County Market feasibility analysis for several development scenarios, including student housing, retail, and an academic building.
 - O Sussex County, DE Economic development, retail, and placemaking plan
 - o Williamsburg, VA Economic development, retail, and placemaking plan

• Economic Impact Studies

- o ARIPPA Economic and environmental impact of waste-coal fires power plants
- Kentucky Economic impact of a proposed coal mine on Kentucky.
- SEPTA Understanding SEPTA's Statewide Economic Impact.
- US Squash Evaluated the economic impact of the new US Squash headquarters in Philadelphia
- Virtua Health Evaluated the economic impact of a new hospital facility.
- Bethlehem Pedestrian Bridge Feasibility and Impact Study
- Marcal Paper plant New Jersey

Fiscal Impact Studies

- Chappaqua School District Evaluated the enrollment and fiscal impacts of proposed town zoning changes.
- Concord Township Evaluated fiscal impact of a proposed residential development on the host municipality and school district
- Camden Evaluated the fiscal impact of several development projects, including two
 phases of a mixed-use project on the waterfront and an industrial expansion
- South Fayette Township Evaluated fiscal impact of a proposed mixed use development. The analysis included a custom calculation of potential public school children likely to live in the development.
- Upper Darby Township Evaluated comminute impact of a proposed new middle school
- Walden Neighborhood



Market Studies

- o RAL Market study for 1300 Fairmount Avenue
- Camden, NJ Proposed market rate apartments
- Hoboken, NJ North End Redevelopment Plan
- State College Proposed condominiums
- Laurel Hill Cemetery Market analysis
- Willingboro Reuse of JFK high school

Affordable Housing

- New Jersey Municipalities Created a comprehensive methodology to assist municipalities calculate their "fair share" affordable housing obligations in Mt. Laurel cases in New Jersey, pursuant to the Mt. Laurel IV and Mt. Laurel V rulings in March 2015 and January 2017.
- New Jersey Housing and Mortgage Finance Agency (HMFA) Analyze the economic feasibility of multiple housing developments with and without tax credit assistance. (New Jersey). More than 40 projects evaluated since 2013.
- New Jersey League of Municipalities Analyzed a report quantifying each municipality's "fair share" of affordable housing under the Mt. Laurel IV court case.
- New Jersey Council On Affordable Housing (COAH)
 - Created a general real estate development feasibility model for COAH to review development proposals.
 - Analyzed housing and employment growth at the municipal level for purposes of determining affordable housing requirements in the state.
- New Jersey Housing Mortgage and Finance Agency (HMFA) Analysis of Four HOPE VI Development Proposals. Evaluated the appropriateness of development costs for several affordable housing projects. (New Jersey)

Gaming

 Commonwealth of Pennsylvania, Legislative Budget and Finance Committee - The Current Condition and Future Viability of Casino Gaming in Pennsylvania. Assessed the state of the casino industry in Pennsylvania, forecast future revenue for the state in the face of increasing competition from other states, identified profit enhancing regulatory changes, and estimated the value of potential additional forms of gaming.

Tax Analyses

- Philadelphia Growth Coalition Modeling impacts on Philadelphia employment, real estate values and tax revenues from proposed changes in Philadelphia's tax structure.
- Earned Income Tax Calculations: Estimated the value of potential tax receipts if a community implemented an Earned Income Tax. Conducted the analysis for several communities, including:
 - Middletown Township, Bucks County
 - Bensalem Township, Bucks County



- Falls Township, Bucks County
- Upper Darby Township, Delaware County
- Coalition for Main Street Fairness The Impact of Not Collecting Sales and Use Taxes from Internet Sales into Pennsylvania. Analyzed the economic consequences to Pennsylvania if it were able to collect sales tax from all internet retailers (Pennsylvania)
- Philadelphia Parking Association Analyzed impact of the Parking tax on the ability to construct new facilities profitably. Estimated the potential revenue from changes to meter rates, loading zone fees, and similar charges.
- Analyzed the impact of an increase in the statewide transfer tax on the overall level of sales before and after the imposition of the tax

General Real Estate

- Hoboken Performing Arts Center Feasibility Study
- Downtown DC BID Employment Study
- Lower Merion Township Property tax estimates for a large mixed-use development.
- Analyzed the potential for Tax increment Financing in a suburban Philadelphia municipality, including calculating financial benefits to the local jurisdictions.
- o Mantua township, NJ Analyzed the demand for a liquor license and restaurant
- University of Delaware Participated in the creation of a strategic plan for a large newly acquired parcel adjacent to its main campus. (Newark, DE)
- Philadelphia Water Department *Economic Analysis of Stormwater Fee Changes on* Philadelphia Businesses (Philadelphia, PA)
- King of Prussia Business Improvement District Development Incentives Package For the King of Prussia Business Improvement District (King of Prussia, PA)
- Studied strategic investments in commercial corridors in Philadelphia. The study combined extensive, locally unprecedented data gathering with thorough econometric analysis to investigate the drivers of commercial success for all 265 retail corridors in Philadelphia. The study included an examination of which City and non-profit based interventions in corridors were effective in improving corridor performance. The analysis also included a simulation tool to model and predict the impact of future interventions on corridors.
- o Lower Merion Township TOD Evaluated proposals for the mixed-use, transitoriented development in Ardmore, PA. Helped Lower Merion Township evaluate alternative development proposals for downtown Ardmore.
- Bureau of Labor Statistics Analysis of Possible Data Sources for the Estimation of Owner Equivalent Rent. Conducted four analyses for the BLS to help them improve calculation of the Consumer Price Index. (Washington, DC)
- Parkway Council Foundation Strategic plan (Philadelphia, PA)

Transportation



- Delaware Valley Regional Planning Commission Using Toll Revenue to Finance Highway and Transit Capital Improvements. Analyzed the ability of tolls on US 422 to finance roadway upgrades and the re-establishment of commuter rail service to Philadelphia. (Pennsylvania)
- Select Greater Philadelphia US 422 Improvements Potential Economic Impacts.
 Prepared an assessment of the potential economic impacts of restored passenger rail service and upgraded highway infrastructure in the US 422 corridor. (Pennsylvania)
- Central Philadelphia Development Corporation (CPDC) Fiscal Impacts of the Proposed 22nd Street Subway Station. Evaluated potential economic and fiscal impacts. (Philadelphia, PA).
- Prepared Environmental Impact Statements for the Washington Metropolitan Transportation Authority as it sought regulatory approval for the expansion of its heavy rail network.
- Examined alternatives for reconfiguring Eakins Oval in front of the Philadelphia Museum of Art and the intersection of 25th Street, Pennsylvania Avenue, Kelly Drive and Fairmount Avenue.
- Surveyed users of parking and loading zones on Washington Avenue (Philadelphia, PA)

Benefit-Cost Analysis

- Many of these BCA's were prepared for Transportation Investment Generating Economic Recovery (TIGER), Better Utilizing Investments to Leverage Development (BUILD) and similar grant programs:
- Akron Bicycle and Pedestrian improvements
- Atlantic Beach, South Carolina Road, bicycle and pedestrian improvements.
- Bronx River Alliance Bronx River Greenway multiuse trail (New York City). \$10 million awarded.
- Camden County Bicycle trails
- Central Philadelphia Development Corporation
 - Bicycle Lanes and Pedestrian Improvements to Market Street and JFK Boulevard (Philadelphia, PA)
 - Central Philadelphia Development Corporation Renovation of Dilworth Plaza (Philadelphia, PA). \$15 million awarded.
- Delaware River and Bay Authority Bridge abutments protection project
- Haddam and East Haddam Side path for a swing bridge (Connecticut)
- Hampton Roads transit New bus garage
- Hoboken Rebuild by Design Prepared a BCA for the proposed storm surge barrier in Hoboken, NJ. Submitted to the Army Corps of Engineers.
- King of Prussia New slip ramp from I-76 to First Avenue (King of Prussia, PA)
- Lower Merion Township Ardmore Transportation Center (Lower Merion, PA)
- New Haven (City) Downtown Crossing urban boulevard, Phase II (New Haven, CT)
- Norwalk Route 7 intersection redesign (Norwalk, CT)



- o PATCO Franklin Square station reopening (Philadelphia, PA). \$12 million awarded.
- Passaic County Paterson-Hamburg Turnpike Intersection at Alps Road
- o Passaic City infrastructure upgrades along Main Avenue
- Philadelphia Museum of Art Roadway and Pedestrian Concourse Improvements (Philadelphia, PA)
- Philadelphia Regional Port Authority
 - Infrastructure investment to improve capacity and warehousing (Philadelphia, PA)
 - Cargo capacity expansion
- Philadelphia City
 - Eakins Oval
 - Roosevelt Boulevard Infrastructure Improvements
 - Scattered Site Safety Improvements
- Sandusky, Ohio Riverfront Greenway
- Streetworks Quincy Green project (Quincy, MA)
- Waretown Roadway Improvements for a New Town Center (Waretown, NJ)
- Secaucus Brownfield Development Corporation Parking lot at the Lautenberg –
 Secaucus Train Station (Secaucus, NJ)
- Southeastern Pennsylvania Transportation Authority (SEPTA)
 - Track Segregation of the West Trenton line so CSX and SEPTA traffic does not intermix (Bucks County, PA). \$10 million awarded.
 - 19th and 37th Street stations ADA access.
 - 30th Street Station Rehabilitation. \$15 million awarded.
 - 5th Street Station Rehabilitation
 - Lawndale Grade Separation. \$5 million awarded.
 - Norristown Bridgeport viaduct replacement
 - Grade Crossing improvements
- Tobyhanna Township infrastructure improvements as part of the Pocono Summit Economic Development District
- Waterbury Connecticut Waterbury Green bicycle path, access improvements and other greening elements (Waterbury, CT) \$10 million awarded
- Wilmington Wilmington Riverfront Transportation Infrastructure Project. Full application. \$17 million awarded
- WILMAPCO 7th Street improvements

General Analysis

- o BWI Airport Underlying demand factors driving retail sales at BWI airport
- Delaware Valley Healthcare Funders The Economic and Fiscal Impacts of Medicaid Expansion in Pennsylvania. Conducted analysis regarding the incremental effect of Medicaid expansion from the baseline set by the Affordable Care Act.
- District of Columbia Staffed the 2015 District of Columbia Infrastructure Task Force.



- Evaluated the rates and claims experience of a health plan for a major health insurance company investigating the cause of an increase in claims from one of its clients.
- Reviewed the numerical advertising claims of a software company for accuracy and appropriateness.
- New York City Economic Development Corporation Assessed the competitiveness of trash collection market in New York City. (New York City Economic Development Corporation)

Litigation and Regulatory

Regulatory

- Analyzed the sales patterns of "premium cigars" by consolidating transaction level sales data from the leading online cigar retailers. (Submitted to the Food and Drug Administration)
- Electricity Markets market power analyses (Submitted to the Federal Energy Regulatory Commission)
 - Ancillary services for the California Independent System Operator on behalf of Pacific Gas & Electric and Southern Energy.
 - Market based rate authority for sale of ancillary services to ISO New England. (FERC Section 203)
 - Market power studies in support of the purchase by the Southern Company of several generating units in New England. (FERC Section 205)
 - Market power studies in support of the purchase by the Southern Company of several generating units in New York
- Postal Rate Commission
 - Analyzed the rate structure of the U.S. Postal Service in an omnibus postal rates case, focusing on parcel post
 - Analyzed U.S. Postal Service volume forecasts and rate design for media mail and submitted testimony.

Real Estate Litigation

- New Jersey Municipalities Created a comprehensive methodology to assist municipalities New Jersey Municipalities – Created a comprehensive methodology to assist municipalities calculate their "fair share" affordable housing obligations in Mt. Laurel cases in New Jersey, pursuant to the Mt. Laurel IV and Mt. Laurel V rulings in March 2015 and January 2017. Testified in trials in:
 - Mercer County
 - Middlesex County
 - Ocean County
- Economic hardship analysis before the Philadelphia Historical Commission Analyzed the financial feasibility of reusing historic structures.
 - Boyd Theater (2014)



- Royal Theater (2015)
- 1904-1920 Sansom Street (2015)
- Trinity Church Oxford (2017)
- St Laurentius (2020)
- 733 Chestnut (2022)
- 1206 Chestnut (2022)
- Evaluated the impact of water quality regulations on the feasibility of real estate developments in Monroe County, Pennsylvania
- Real Estate Tax Assessments analyzed real estate tax appeals made by school districts in Pennsylvania. Projects included analyses on behalf of school districts and on behalf of taxpayers.
 - Upper Merion School District
 - Lower Merion School District
 - Maple-Newtown School District
 - Delaware County
 - Chester County
 - Downingtown Area School District
 - Coatesville Area School District
 - Monroe County
- Calculate potential escalation in construction costs during litigation related delay
 - Institute for Advanced Study
 - 625 N. Broad Street Associates
 - Hankin Group Eagleview
 - Prickett Preserve at Edgewood
- Calculated potential damages to a real estate developer due to frivolous appeal of permits
- Calculated the value of an easement for a billboard in a property taking case.
- Analyzed the potential profitability of a real estate development as part of lawsuits between developers and their lenders
 - Single family home subdivision in the western suburbs of Kansas City
 - Single family home subdivision in the eastern suburbs of Kansas City
 - Vacation and primary residences in the Poconos Monroe County, PA
- Calculated the damages to the developer of a \$1 billion condominium building in New York of delay in selling units because of an error in condominium documentation.
- Calculated the profitability of commercial real estate development along the Philadelphia waterfront in the absence of tax incentives.
- Calculated the value of a ground lease to the owners of an undeveloped restaurant pad.
- Analyzed the likely impact of a shopping center redevelopment on a lead tenant in the center.
- Calculated the fiscal impact of a tax credit to a developer on a municipality.
- Assessed the impact of a marijuana dispensary on nearby properties



- Variance approval assessed the appropriateness of proposed developments.
- Calculated property value of cemeteries in assessment appeals cases.

Intellectual Property Litigation and Analysis

- Microsoft Royalties for Windows Server protocols. Determined the appropriate royalty program, including royalty rates, maximums, minimums and other terms, for sets of Windows Server protocols that the European Union required Microsoft to License as part of the remedy in an antitrust case against Microsoft.
- Microsoft Impact of licensing. The analysis included calculating royalties paid, assessing the markets for products based on the licensed technology, and determining the ways in which the licensees' products were complimentary or competitive to the licensor's products.
- Johnson & Johnson Defended patent validity in a case involving an over-the-counter medication.
- Determined damages in a copyright infringement case involving a luxury jewelry manufacturer and retailer.
- For a direct response television marketer, determined damages in a copyright infringement case against a competing firm.
- Analyzed a royalty distribution model used to determine payments to content creator in situations where no record of the originator of the content was kept.
- Conducted reasonable royalty calculations in a patent infringement case. The case involved both the review of the Georgia-Pacific factors to determine a reasonable royalty, and a critique of another calculation of a reasonable royalty.
- Modeled revenues for several pharmaceutical products in an intellectual property and breach of contract dispute.

General Litigation

- Reviewed, analyzed and critiqued an econometrically based damage analysis that estimated how quickly shares of stock in a publicly held company could sell on the London AIM market in a marital dissolution matter.
- Calculated damages by valuing the lost advertising value of missed appearances of an injured performed on a national television show.
- Calculated the damages from failure to divide proceeds from the sale of a business and the associated real estate evenly among the heirs of an estate.
- Determined the appropriate cram down interest rate in a bankruptcy proceeding.
- Assessed the ability of a private, for-profit, golf course to continue operations as a golf course by forecasting club profit and loss based on industry growth forecasts and financing commitments made by the owners of the course.
- Calculated the impact of a municipal regulation severely restricting the sale of cigars in packages of fewer than five cigars.
- Determined the appropriate discount rate to use in a marital dissolution matter.



- Assisted American Express in the preparation of its business interruption insurance claim related to damages suffered as a result of the September 11 attacks on the World Trade Center.
- Assisted a health insurance company investigate the impact of errors in claims processing on the appropriate purchase price of the company that made the errors
- Calculated damages to purchasers of variable universal life insurance, who allege they
 purchased policies based on misrepresentations made by the insurance agent.
- Calculated damages and analyzed opposing expert's report in a state-wide class action suit between a health insurance company and member pharmacies.
- Calculated damages to a not-for-profit organization from the allegedly wrongful actions of a local government.
- Calculated damages resulting from a company's withdrawal of its long-term care insurance products on its outside sales forces.
- For a large pharmaceutical company, evaluated the potential exposure of the company in a large class action lawsuit regarding drug pricing.
- Performed several analyses with respect to drug pricing for a large pharmaceutical company.
- In a suit alleging that an insurer with a retrospective workers compensation policy was overpaying claims, reviewed records of the largest claims to determine the appropriateness of the payments.
- Determined overcharges in a class-action dispute between resellers of toll-free 800 service and several Local Exchange Carriers.
- Conducted analyses, including a damages calculation, for an independent power producer in a breach of contract dispute with its host utility.
- Calculated damages in a breach of contract dispute between the owners of a chain of cell-phone kiosks in a major discount store with the host discount store.

Wage Arbitration

- City of Allentown Assisted the City of Allentown, Pennsylvania negotiate with its police union.
- Upper Darby Township Tax Base Analysis for Upper Darby Township. Conducted a
 tax base analysis and testified at arbitration for Upper Darby as part of its contract
 negotiations with its police union. (Upper Darby, PA)

• Antitrust and Securities Litigation

- o 10b-5 damages for a provider of services to internet and small-scale retailers.
- Evaluated the effect of the defendant's dealer-loyalty program on the ability of new entrants to gain market share.
- o 10b-5 damages against the auditors of a manufacturer of building supplies.
- CBS-Viacom Merger Review evaluated the effect on the broadcast advertising market, the market for the sale of first-run television programs to the networks, and



- the sale of syndicated shows to the local broadcast stations. (Federal Trade Commission)
- Coastal and El Paso Merger Review evaluated horizontal overlaps in several geographic regions. (Federal Trade Commission).
- El Paso and Southern Company Joint Venture review evaluated several market overlaps and investigated the validity of the government's anticompetitive theories, especially vertical exclusion issues (Federal Trade Commission).
- o Diageo, Pernod, and Seagrams merger review evaluated the effect of the combination of brands on the consumer. (Department of Justice)

RELEVANT SKILLS

COURSES TAUGHT

University of Pennsylvania, 2004-present

CPLN 502/633: Urban and Regional Economics

CPLN 502: Urban Redevelopment and Infrastructure Finance

CPLN 540: Introduction to Property Development

CPLN 705: Studio

GAFL 622/522: Economic Principals of Public Policy

GAFL 724/534: Infrastructure Investment and Economic Growth

URBS 456: Economics and Urban Affairs

Jefferson University, 2021

MRE 620: Urban Revitalization

University of Minnesota, 1993-1997

Cost - Benefit Analysis, Industrial Organization, Welfare Economics, Principals of Microeconomics, Intermediate Microeconomics, Principals of Macroeconomics, International Trade and Payments

STUDENTS SUPERVISED

Joshua Warner – Commercial Corridor Revitalization. University of Pennsylvania, PhD in City Planning, 2020



Fiscal Impact Study for Springdale Townhomes - DRAFT September $19,\,2022$

Mengke Chen – *Agglomeration Economies and High Speed Rail*. University of Pennsylvania, PhD in City Planning, Independent Study, 2012

Jonathan Broder – *New York City Highline*. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2011

University of Pennsylvania Studio – *Cost Benefit Analysis for High Speed Rail in the Northeast Corridor,* City Planning Studio, 2011

Allyson Randolph – *The Reinvestment Fund in Baltimore: A Model for CDFI Expansion*. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2009

Scott Zeigler – *Identifying Housing Bubbles: An Analytical Approach*. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2008

John Culbertson – Microfinance. University of Pennsylvania, Master of Liberal Arts, Capstone Paper, 2007

PROFESSIONAL MEMBERSHIPS

American Economics Association

American Planning Association

American Institute of Certified Planners

Urban Land Institute

Last updated August 2, 2022





1435 Walnut Street, 4th Floor, Philadelphia, PA 19102 Econsultsolutions.com | 215-717-2777

Exhibit B Survey

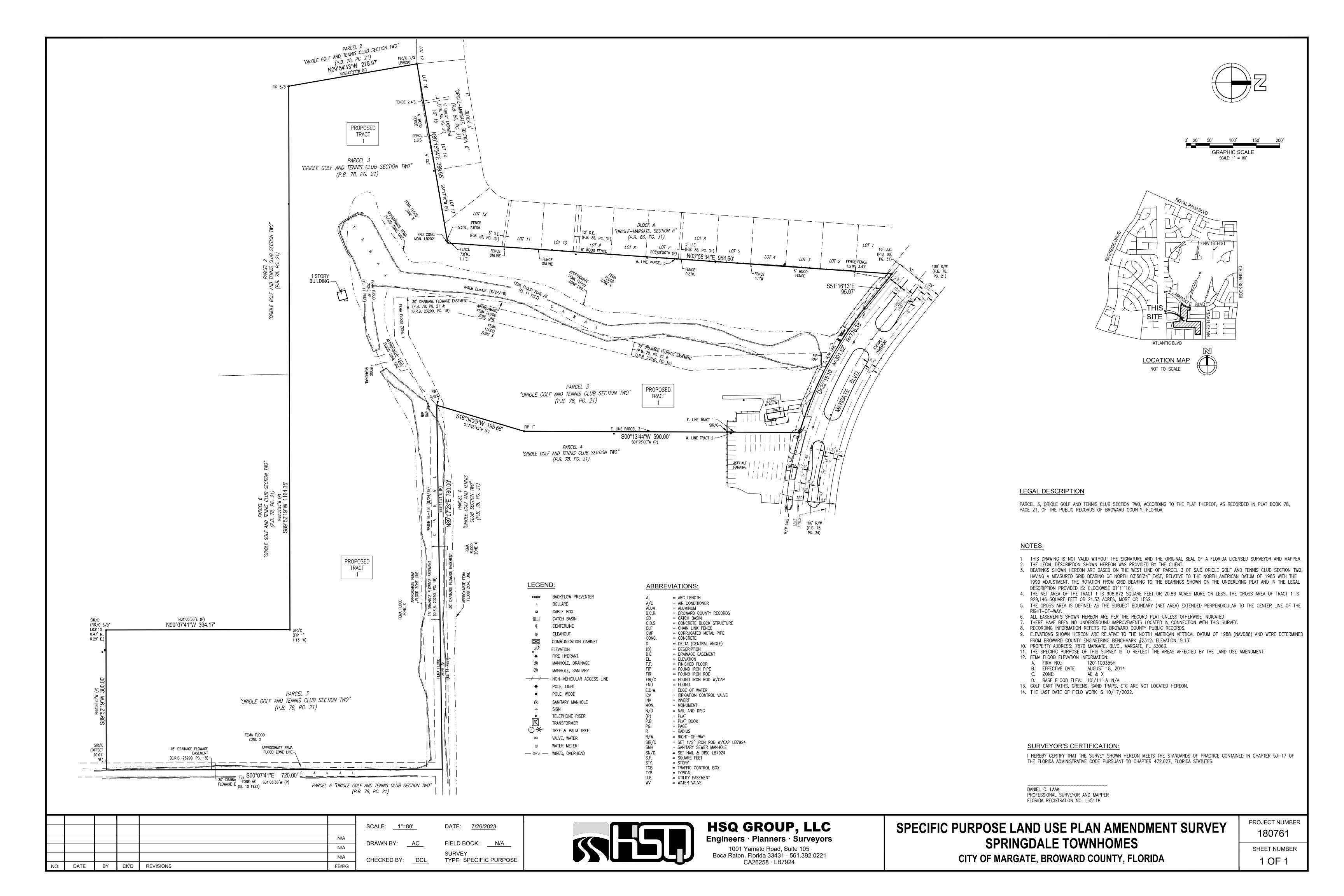


Exhibit C Map of Proposed Land Use Designations

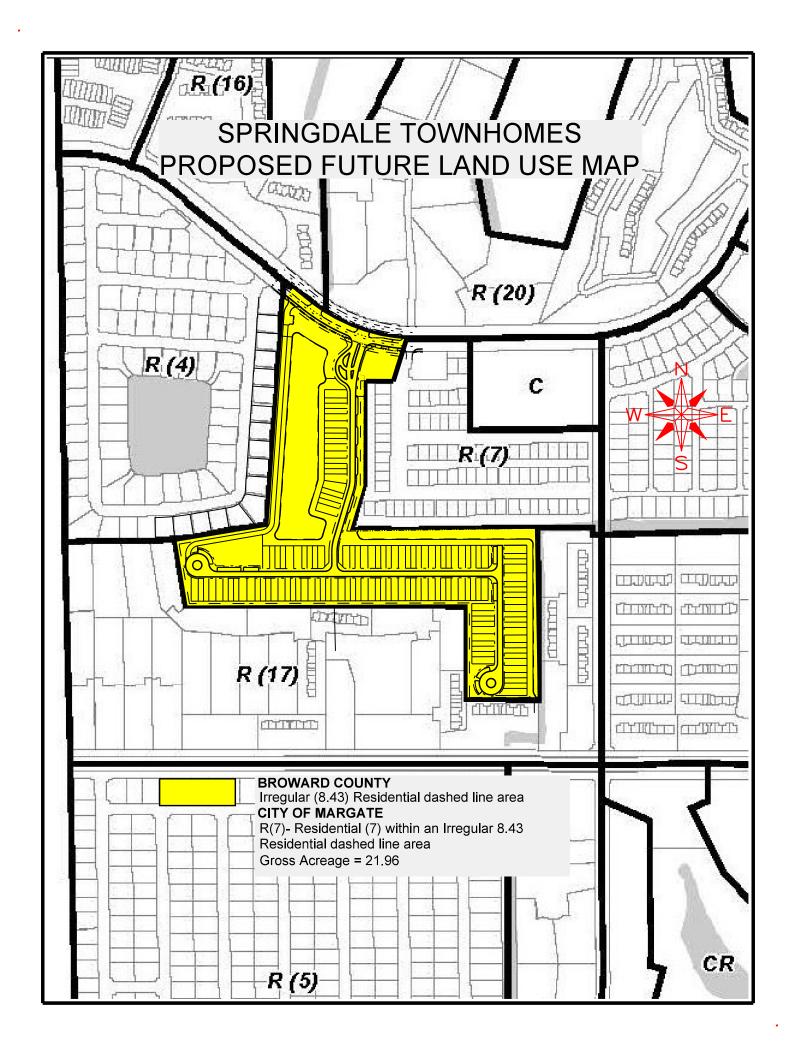


Exhibit D Water & Wastewater Letter To Be Provided Upon Receipt

Exhibit E Solid Waste Correspondences

Amanda Martinez

From: Robert Hely <rhely@win-waste.com>
Sent: Thursday, October 13, 2022 11:49 AM

To: Amanda Martinez

Subject: Re: Margate Land Use Plan Amendment-Capacity Conformation

Attachments: Solid Waste Letter Request.pdf

Win-waste innovations, formerly Wheelabrator, is the City of Margate's solid waste processor. We have capacity for 830,000 tons of solid waste per year, with a current demand it 775,000 tons per year. We have ample capacity to process the additional solid waste anticipated to be generated by your proposed development project. This proposed development and the solid waste anticipated to be generated will have no adverse impact on our facility or our operations.

Bob Hely, Market Manager

Tel (954) 581-6606 | Cell 954 980-6998 4400 South State Road 7 Fort Lauderdale, Florida 33314

Email: RHely@Win-Waste.com



On Oct 13, 2022, at 11:28 AM, Amanda Martinez <amartinez@dmbblaw.com> wrote:

*** EXTERNAL email. Please be cautious and evaluate before you click on links, open attachments, or provide credentials. ***
Hi Robert,

I have attached a request for a letter confirming the information for the landfill and the capacity to serve a proposed townhome development in the City of Margate. Can you please review the attached request and confirm the information is correct and that there is capacity to serve the project?

Thank you,

Amanda Martinez, Land Planner Dunay, Miskel and Backman, LLP 14 SE 4th Street, Suite 36 Boca Raton, FL 33432 Tel (direct): (954)304-7755 Tel(main): 561-405-3300

Fax: (561)409-2341

E-mail: amartinez@dmbblaw.com

CONFIDENTIALITY NOTICE: This message originates from WIN Waste Innovations. This message and any attachments are solely for the use of the intended recipient(s) and may contain privileged and/or confidential information or other information protected from disclosure. If you are not the intended recipient, you are hereby notified that you received this email in error and that any review, dissemination, distribution or copying of this

email and any attachment is strictly prohibited. If you have received this email in error, please contact the sender and delete the message and any attachments from your system. Privacy Policy



October 19, 2022

DMBB Law

Attn: Amanda Martinez

RE: 7870 Margate Blvd, Margate, FL

To Whom It May Concern,

This is to confirm that Republic Services, as the franchise hauler for the city of Margate, will provide trash and recycle services for Springdale Townhomes, at the referenced address.

We are proud to be the city's service provider and are available to answer any questions or provide further assistance.

Sincerely, Karen Morrison Territory Executive

- e kmorrison@republicservices.com
- o (954) 327-9540 c (954) 205-0720

Exhibit F Broward County EPD Email

Amanda Martinez

From: Perez Abeniacar, Tomas <TPEREZABENIACAR@broward.org>

Sent: Thursday, September 29, 2022 2:24 PM

To: Jeff Schnars; mike@fimiani.com
Cc: Narvaez, Johana; Adorisio, Carlos

Subject: RE: Margate Executive Golf Course property

Jeff,

Yes, I agree with the items described below based on the meeting on 8/24.

Thank you,



TOMAS PEREZ ABENIACAR, STAFF ENGINEER

Resilient Environment Department ENVIRONMENTAL PERMITTING DIVISION Surface Water Management Licensing

1 North University Drive, Mailbox 201, Plantation, FL 33324-2038

Office: (954) 519-1243

Broward.org/Environment | ePermits

We value your feedback as a customer. You can comment on the quality of service you received by completing our survey. Thank you!

From: Jeff Schnars < jeff@schnars.com>

Sent: Thursday, September 29, 2022 1:55 PM

To: Perez Abeniacar, Tomas <TPEREZABENIACAR@broward.org>; mike@fimiani.com

Cc: Narvaez, Johana <JNARVAEZ@broward.org>; Adorisio, Carlos <CADORISIO@broward.org>

Subject: RE: Margate Executive Golf Course property

External Email Warning

This email originated from outside the Broward County email system. Do not reply, click links, or open attachments unless you recognize the sender's email address (not just the name) as legitimate and know the content is safe. Report any suspicious emails to ETS Security by selecting the Phish Alert Report button.

Tomas / Johana,

Can you please provide confirmation that we are in agreement.

Thank you.

Jeff

Jeffrey T. Schnars, P.E.

President

jeff@schnars.com



947 Clint Moore Road Boca Raton, Florida 33487

Office: 561-241-6455 Fax: 561-241-5182 Toll Free: 888-285-3886

www.schnars.com

From: Jeff Schnars

Sent: Wednesday, September 07, 2022 8:47 AM

To: 'Perez Abeniacar, Tomas' < TPEREZABENIACAR@broward.org>; mike@fimiani.com

Cc: Narvaez, Johana <<u>JNARVAEZ@broward.org</u>>; Adorisio, Carlos <<u>CADORISIO@broward.org</u>>

Subject: RE: Margate Executive Golf Course property

Hi Tomas,

Please accept this email as a follow up to our conference call with everyone on this email.

First of all I wanted to thank everyone for their time with this pre-application request. It was helpful to confirm our direction so that we may proceed confidently with respect to drainage with the site plan process through the City of Margate. On our call, it was confirmed that we can proceed with the pre versus post surface water management analysis for the proposed project and the calculations and plan as submitted (concept plan is attached again for ease of reference) are acceptable in principle.

In summary,

- 1. The post development zero discharge storm stages will be lower than the pre development stages.
- 2. The post development water quality stage will be lower than the predevelopment stage.
- 3. The project will continue to accept drainage from adjacent properties to pass through the project.
- 4. New drainage / flowage easements will be granted to accommodate the pass thru drainage.
- 5. There is no control structure for the existing property. A control structure and 25 year berm will not be required for the new project.
- 6. The north south lake will be expanded to meet the dimensional criteria (minimum 100 foot average width).
- 7. The existing canals along the north and east side of the southeast portion of the property will generally remain at their existing width but the subject property side will be regraded to achieve a 4:1 minimum slope in a 20' LME.
- 8. We are having the surveyor check the existing lake water levels again to confirm design water level of 5.0 ft NAVD is appropriate.
- 9. We will use P = 18" for 100 year 3 day event.

Please confirm you agree with the above.

Thank you.

Jeff

Jeffrey T. Schnars, P.E.

President jeff@schnars.com



947 Clint Moore Road Boca Raton, Florida 33487

Office: 561-241-6455 Fax: 561-241-5182 Toll Free: 888-285-3886

www.schnars.com

From: Perez Abeniacar, Tomas <TPEREZABENIACAR@broward.org>

Sent: Friday, August 05, 2022 11:18 AM

To: Jeff Schnars < <u>jeff@schnars.com</u>>; <u>mike@fimiani.com</u>

Cc: Narvaez, Johana <<u>JNARVAEZ@broward.org</u>>; Adorisio, Carlos <<u>CAD</u>ORISIO@broward.org>

Subject: RE: Margate Executive Golf Course property

Good morning Jeff,

Our first available dates for pre-application meetings are 08/24 or 08/25 at 10 am. Let me know if these work for you.

Thank you,



TOMAS PEREZ ABENIACAR, STAFF ENGINEER

Resilient Environment Department
ENVIRONMENTAL PERMITTING DIVISION
Surface Water Management Licensing
1 North University Drive, Mailbox 201, Plantation, FL 33324-2038
Office: (954) 519-1243

Broward.org/Environment | ePermits

We value your feedback as a customer. You can comment on the quality of service you received by completing our survey. Thank you!

From: Jeff Schnars < jeff@schnars.com>
Sent: Thursday, August 4, 2022 2:33 PM

To: Perez Abeniacar, Tomas < TPEREZABENIACAR@broward.org >; mike@fimiani.com

Cc: Narvaez, Johana <JNARVAEZ@broward.org>; Adorisio, Carlos <CADORISIO@broward.org>

Subject: RE: Margate Executive Golf Course property

External Email Warning

This email originated from outside the Broward County email system. Do not reply, click links, or open attachments unless you recognize the sender's email address (not just the name) as legitimate and know the content is safe. Report any suspicious emails to ETS Security by selecting the Phish Alert Report button.

Hi Tomas,

See below in CAPS for a response to comments. Let's set up a conference call to discuss. Let me know when you are available.

Thanks.

Jeff

Jeffrey T. Schnars, P.E.

President

ieff@schnars.com



947 Clint Moore Road Boca Raton, Florida 33487

Office: 561-241-6455 Fax: 561-241-5182 Toll Free: 888-285-3886

www.schnars.com

From: Perez Abeniacar, Tomas < TPEREZABENIACAR@broward.org >

Sent: Wednesday, August 03, 2022 4:29 PM

To: Jeff Schnars < jeff@schnars.com >; mike@fimiani.com

Cc: Narvaez, Johana <<u>JNARVAEZ@broward.org</u>>; Adorisio, Carlos <<u>CADORISIO@broward.org</u>>

Subject: FW: Margate Executive Golf Course property

Mr. Schnars,

I have reviewed the attached documents for the project located at 7870 MARGATE BLVD MARGATE FL 33063 (https://bcpa.net/RecInfo.asp?URL_Folio=484135050030). It seems like there are a couple of Pre89 licenses (attached) which this project would modify. However, I couldn't find any ERPs or any conditions to these licenses yet. JOHANA HAD PREVIOUSLY SENT THOSE 2 EXHIBITS. LET ME KNOW IF YOU FIND ANYTHING ELSE.

Additionally, It seems like you would need to check in with Wetlands (lsunderland@broward.org) and EAR (EAR@broward.org) since plans propose to enlarge the lake areas and the golf course appears to have some Arsenic contamination. WE WILL DO THAT. THANK YOU.

Comments regarding the plans and calculations:

- The calcs used the water table at 5' NAVD. In our maps future WT is 4.5' NAVD but current WT is 5.5' NAVD. We use the highest of the two since we want projects to be resilient both now and in the future. AS WE DISCUSSED ON THE PHONE, ATTACHED IS A SURVEY FROM THAT SHOWS AN EXISTING WATER LEVEL OF 4.85 FT NAVD AS MEASURED IN AUGUST 2018.
- The calcs used 17" for the 100y 72h rainfall. We have 18" in our GIS. WE WILL CHANGE THIS TO 18".
- The calcs analyzed all pre vs post zero discharge. However, the site is connected to the canal. Please include Pre
 and Post discharge rates and detail of the control structure(s)/if any to the canal. THE POINT OF ENSURING THE
 POST ELEVATIONS ARE LOWER THAN THE PRE ELEVATIONS IS TO AVOID A 25 YEAR BERM AND CONTROL
 STRUCTURE. SURROUNDING PROPERTIES DRAIN THROUGH THE SUBJECT SITE, SO IT WOULD BE BEST IF THOSE
 CAN CONTINUE TO FLOW UNIMPEDED THROUGH THE PROPOSED PROJECT.
- There are areas where the lake width is lower than the minimum 100 ft. ACKNOWLEDGED. NONE OF THE EXISTING WATER BODIES WITHIN THE SITE MEET THE 100 WIDE CRITERIA AND WE ARE IMPROVING ON WHAT IS THERE. WE HAVE COME UP WITH AN ALTERNATE PLAN WHERE THE MAIN NORTH SOUTH LAKE MEETS THE DIMENSIONAL CRITERIA OF 100 FEET WIDE BUT THE CANALS ALONG THE NORTH AND EAST PROPERTY LINE OF THE SOUTH PORTION OF THE SITE WILL REMAIN LESS THAN 100 FEET WIDE. SEE ATTACHED. THE PRE AND POST DEVELOPMENT CALCS INCLUDE ALL WATER BODIES WITHIN THE PROEPRTY LIMITS. THIS NEW PLAN HAS AT LEAST AS MUCH LAKE AS THE PREVIOUS PLAN SO THE CALCULATIONS WOULD NOT BE SIGNIFICANTLY ALTERED FOR THE PURPOSE OF THIS DISCUSSION.

Let me know if you have any questions.

Regards,



TOMAS PEREZ ABENIACAR, STAFF ENGINEER

Resilient Environment Department ENVIRONMENTAL PERMITTING DIVISION Surface Water Management Licensing

1 North University Drive, Mailbox 201, Plantation, FL 33324-2038

Office: (954) 519-1243

Broward.org/Environment | ePermits

We value your feedback as a customer. You can comment on the quality of service you received by completing our survey. Thank you!

From: Jeff Schnars < jeff@schnars.com > Sent: Tuesday, July 19, 2022 2:45 PM

To: Narvaez, Johana < JNARVAEZ@broward.org; Adorisio, Carlos < CADORISIO@broward.org;

Cc: 'mike@fimiani.com' <mike@fimiani.com>

Subject: RE: Margate Executive Golf Course property

External Email Warning

This email originated from outside the Broward County email system. Do not reply, click links, or open attachments unless you recognize the sender's email address (not just the name) as legitimate and know the content is safe. Report any suspicious emails to ETS Security by selecting the Phish Alert Report button.

Johana,

As a follow up to our previous conversations and emails regarding the subject property, we would appreciate if you would do a review of the calcs and drainage exhibit to make sure we are headed down the right path. We are proposing to widen the canals that run through the site to provide additional water management area to compensate for the proposed development. Lake / canal dimensions are shown on the exhibit. The attached calcs demonstrate that the post development elevations (water quality and storm stages) are below the pre-development. There is no control structure on the property as adjacent properties flow through the site.

We are happy to attend a meeting to review together.

Thank you and call me with any questions or let me know if you need anything else.

Jeff

Jeffrey T. Schnars, P.E.

President jeff@schnars.com

SCHNARS ENGINEERING CORPORATION

947 Clint Moore Road Boca Raton, Florida 33487

Office: 561-241-6455 Fax: 561-241-5182 Toll Free: 888-285-3886

www.schnars.com

From: Narvaez, Johana < <u>JNARVAEZ@broward.org</u>>
Sent: Wednesday, February 09, 2022 10:44 AM

To: Jeff Schnars < jeff@schnars.com >; Adorisio, Carlos < CADORISIO@broward.org >

Cc: 'mike@fimiani.com' < mike@fimiani.com >

Subject: RE: Margate Executive Golf Course property

See Broward County Licenses attached.

Please do not hesitate to contact me if you have any questions.

Sincerely,



JOHANA NARVAEZ, M.S.E.E., ENVIRONMENTAL PROGRAM MANAGER

Resilient Environment Department ENVIRONMENTAL PERMITTING DIVISION Surface Water Management Licensing

1 North University Drive, Mailbox 201, Plantation, FL 33324-2038

Office: (954) 519-0318 Fax: (954) 519-1412

jnarvaez@broward.org

Broward.org/Environment | ePermits |

We value your feedback as a customer. You can comment on the quality of service you received by completing our survey. Thank you!

From: Jeff Schnars < jeff@schnars.com >
Sent: Thursday, February 3, 2022 4:27 PM
To: Adorisio, Carlos < CADORISIO@broward.org >

Cc: Narvaez, Johana <JNARVAEZ@broward.org>; 'mike@fimiani.com' <mike@fimiani.com>

Subject: RE: Margate Executive Golf Course property

External Email Warning: This email originated from outside the Broward County email system. Do not reply, click links, or open attachments unless you recognize the sender's **email address** (not just the name) as legitimate and know the content is safe. Report any suspicious emails to **ETSSecurity@broward.org**.

Carlos,

As requested below, please let me know when you are available to discuss.

Thank you.

Jeff

Jeffrey T. Schnars, P.E.

President

jeff@schnars.com



947 Clint Moore Road Boca Raton, Florida 33487

Office: 561-241-6455 Fax: 561-241-5182 Toll Free: 888-285-3886 www.schnars.com

From: Jeff Schnars

Sent: Thursday, January 27, 2022 1:39 PM **To:** Adorisio, Carlos <cadorisio@broward.org>

Cc: JOHANA NARVAEZ (jnarvaez@broward.org) <jnarvaez@broward.org>

Subject: Margate Executive Golf Course property

Hi Carlos / Johana:

We are looking into the subject property and I would like to speak to you regarding the drainage. Attached is a drainage atlas map I just got from the City and some information that was generated a few years ago before we got involved (a letter written by Jose in 2018, a proposed site plan by a prospective purchaser at the time, and a location map).

Let me know when you are available to discuss.

Thanks. Jeff

Jeffrey T. Schnars, P.E.

President jeff@schnars.com



947 Clint Moore Road Boca Raton, Florida 33487 Office: 561-241-6455

Fax: 561-241-5182
Toll Free: 888-285-3886
www.schnars.com

Under Florida law, most e-mail messages to or from Broward County employees or officials are public records, available to any person upon request, absent an exemption. Therefore, any e-mail message to or from the County, inclusive of e-mail addresses contained therein, may be subject to public disclosure.

Exhibit G Drainage Service Letter To Be Provided Upon Receipt

Exhibit H Community Parks Inventory

ty of Margate Public Community Parks	Net Acreage	Public Access	Signage	Private Recreation Open Space	Net Acreage	> 0.5ac	Deed	Zoned	Credit Allowed
Calypso Cove at Royal Palm Park	3.88	Yes	Yes	Aztec Rec Area	4.39	Yes	No	No	0.00
Centennial Park	4.05	Yes	Yes	Coconut Key Rec Area	0.60	Yes	No	No	0.00
Coral Gate Park	4.09	Yes	Yes	Colonies East Rec Area	2.53	Yes	No	No	0.00
David Park	5.50	Yes	Yes	Colonies West Rec Area	3.28	Yes	No	No	0.00
									0.00
Firefighters Park	9.00	Yes	Yes	Coral Cay Rec Facility	6.67	Yes	No	No	
Greenwald Park	0.13	Yes	No	Coral Gate Rec Area	3.76	Yes	No	No	0.00
Kaye Stevens Park	1.90	Yes	Yes	Holiday Springs Rec Area	6.43	Yes	No	No	0.00
Lemon Tree Lake Park	0.72	Yes	Yes	Holiday Springs Rec Facility	7.53	Yes	No	No	0.00
Legacy Park	0.34	Yes	Yes	Lakewood on the Green Rec Area	3.69	Yes	No	No	0.00
Margate Elementary(Park)	0.92	Yes	Yes	Lakewood on the Green Rec Facility	3.05	No	No	No	0.00
Margate Middle School - Andrews Park	10.11	Yes	Yes	Merrick Rec Area	0.17	Yes	No	No	0.00
Margate Sports Complex	12.03	Yes	Yes	Monte Carlo Rec Area	0.49	Yes	No	No	0.00
Oriole Park/Margate Marina	8.34	Yes	Yes	North/South Bay Park (less wetlands)	7.53	Yes	No	No	0.00
Rock Island Fitness	0.42	Yes	Yes	Oakland Hills Rec Area	2.52	Yes	No	No	0.00
Serino Park	2.15	Yes	Yes	Oakland Hills Rec Facility	3.26	Yes	No	No	0.00
Southeast Park	11.12	Yes	Yes	Palm Lakes Rec Area	0.68	Yes	No	No	0.00
Southgate Park	1.47	Yes	Yes	Paradise Gardens 1 Rec Facility	2.34	Yes	No	No	0.00
Veteran's Memorial Park	1.13	Yes	Yes	Paradise Gardens 2 Rec Facility	1.19	Yes	Yes	Yes	1.19
Vinson Park	6.93	Yes	Yes	Paradise Gardens 3 Rec Facility	2.31	Yes	No	No	0.00
Winfield Park	1.82	Yes	Yes	Paradise Gardens 4 Rec Facility	3.54	Yes	No	No	0.00
Total:	86.05			Peninsula at Coral Bay	1.06	Yes	No	No	0.00
				Royal Park Gardens Rec Area	2.83	Yes	No	No	0.00
Public Regional Parks	Net Acreage	Credit Allowed (max 10%, not to exceed 10 ac.)		The Courtyards Rec Area	0.97	Yes	No	No	0.00
				The Falls Rec Area	1.01	Yes	No	No	0.00
Fern Forest Nature Center	247.00	10.00		The Lakes Rec Area	1.05	Yes	No	No	0.00
Herman & Dorothy Shooster Preserve	19.83	1.98		The Laurels Rec Area	0.96	Yes	No	No	0.00
				The Laurels Rec Facility	0.80	Yes	No	No	0.00

y of Margate										
Public Regional Parks	Net Acreage	Credit Allowed (max 10%, not to exceed 10 ac.)			Private Recreation Open Space	Net Acreage	> 0.5ac	Deed	Zoned	Credit Allow
Total:	266,83	11.98			Townhomes of Oriole Rec Facility	1.23	Yes	No	No	0.00
					Woodlake Isles Rec Area	1.01	Yes	No	No	0.00
					Total:	76.88				1.19
Golf Courses	Net Acreage	Credit Allowed (max 15% of requirement)								
Carolina (18 holes)	191.99									
Oriole- Executive (9 holes)	20.82									
Oriole- Margate (18 holes)	115.90									
Palm Lakes (9 holes) [closed]	17.43									
Total:	346.14	30.90								
Community Lakes & Waterways	Net Acreage	Public Access	Signage	Credit Allowed	Private Conservation Wetlands	Net Acreage	Land Use	Deed Restricted	Credit Allowed	
Coral Gate Section 3 Lake	12.45	No	No	0.00	A. L. Williams Wetlands	1.54	Cons	No	1.54	
Lake Margate	11.20	No	No	0.00	Merrick Preserve Wetlands	8.00	AC	Yes	8.00	
Lemon Tree Lake	57.00	Yes	Yes	57.00	Newth Plat Wetlands	1.23	AC	No	0.00	
IBEC Addition No. 4 Lake	5.69	No	No	0.00	South Bay Park Wetlands	1.69	Park	No	0.00	
IBEC Addition No. 2 Lake	1.09	Yes	Yes	1.09						
Sunflower Lake	6.49	No	No	0.00	Total:	12.46			9.54	
Total:	93.92			58.09						

MARGATE RECREATION AND OPEN SPACE CALCULATIONS 2020-45

Level of Service Determination: Parks and Recreation Acreage 2020-2045	Population Forecast - Per Broward County PFAM 2017 Model	Broward County Min Standard: 3ac/1,000		Type of Facility - 2045	Total Acreage	% Avail	Acreage Applied	
2020	56,447	169.3		Public Community Parks	86.05	100%	86.05	
2025	59,654	179.0		Public Regional Parks	266.83	10%	11.98	
2030	62,187	186.6		Golf Courses	346.14	15%	30.90	
2035	64,663	194.0		Private Conservation Wetlands	8.00	100%	9.54	
2040	66,641	199.9		Private Recreation Open Space	76.88		1.19	
2045	68,660	206.0		Community Lakes and Waterways	58.09		58.09	
Source: Broward County Planning and Development Management Division				TOTAL	841.98		197.74	

Exhibit I Wetlands Assessment Letter



April 22, 2022

Michael Fimiani Margate Executive Golf Course, LLC 5301 North Federal Highway, Suite 350 Boca Raton, FL 33487

Mike@Fimiani.com

Re: Margate Executive Golf Course

Wetlands Assessment

Dear Mr. Fimiani,

This is an opinion on the presence or absence of wetlands for the Margate Executive Golf Course. WGI is providing this information to assist you with a land use plan amendment.

The subject property consists of approximately 20 acres and is located at 7870 Margate Boulevard in Margate, FL 33063 (**Figure 1**). The subject property is identified by the following Broward County Parcel ID Number: 4841-35-05-0030.

WGI reviewed the National Wetlands Inventory map (**Figure 2**). The National Wetlands Inventory indicates no wetlands on the Subject Property, only surface waters.

WGI reviewed the Broward County wetlands map (**Figure 3**). The Broward County wetlands map indicates no wetlands on the Subject Property.

WGI reviewed the National Resources Conservation Service soil map (**Figure 4**). The subject property has been mapped as Immokalee fine sand and Immokalee limestone substratum-Urban land complex. Neither of these soil types has a hydric soil classification (a hydric soil classification is an indicator of potential wetlands).

WGI conducted a field reconnaissance on April 21, 2022. The field reconnaissance was conducted by Rick Harman, PWS, CEP, who is a Professional Wetland Scientist. WGI did not find any areas that would likely be claimed as jurisdictional wetlands by the county, state, or federal regulatory agencies.

Based on the above, it is WGI's professional opinion that there are no wetlands on the Subject Property. If you have any questions, don't hesitate to contact me at john.abbott@wginc.com or 561-687-2220.

Sincerely,

John Abbott, PG, CEP

Director, Environmental Services

ec: Amanda Martinez; Dunay, Miskel and Backman, LLP Matthew Scott; Dunay, Miskel and Backman, LLP



Figure 1. Map of the Subject Property

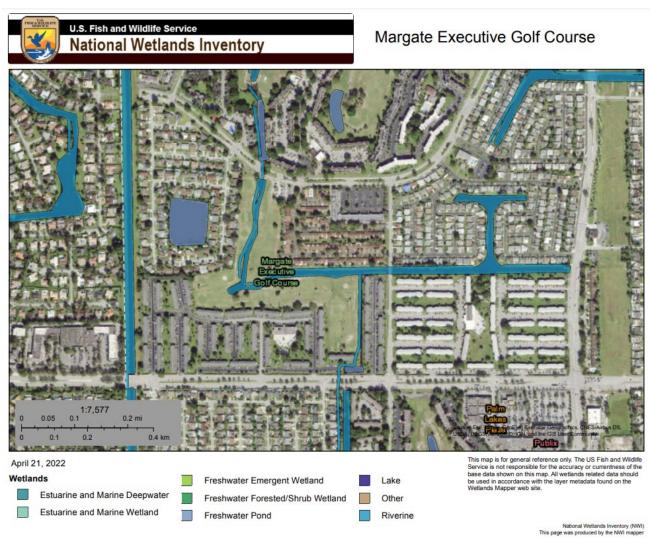
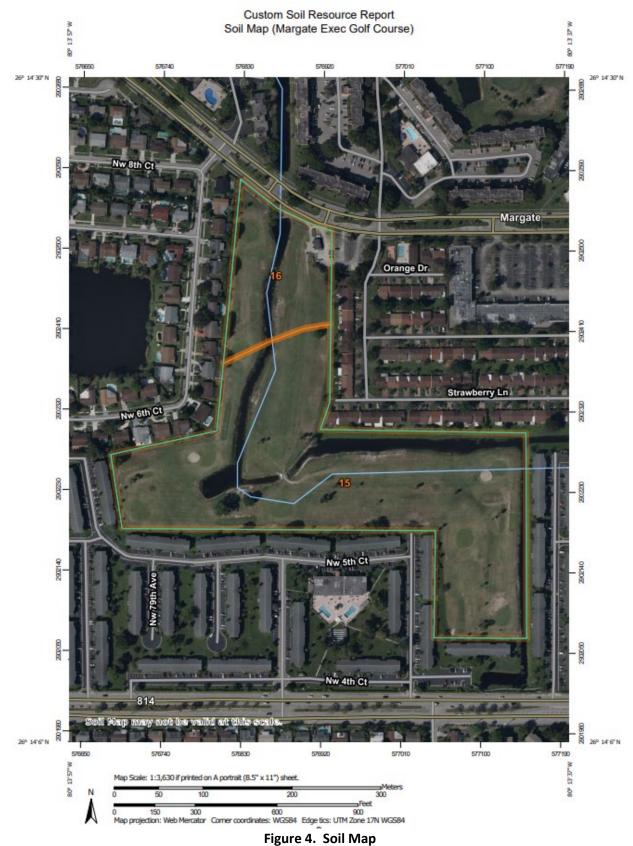


Figure 2. National Wetlands Inventory



Figure 3. Broward County Wetlands Map (map adopted 1/26/2021)

Blue areas are surface waters, not wetlands



15 = Immokalee fine sand, 0 to 2 percent slopes 16 = Immokalee, limestone substratum-Urban land complex

Exhibit J Phase II Environmental Assessment Report



PHASE II SUBSURFACE INVESTIGATION REPORT

Margate Executive Golf Course 7870 Margate Boulevard Margate, Florida 33063

> February 20, 2018 Partner Project Number: 18-206246.1

> > Prepared for:

Margate Executive Golf Course, Inc.

3501 North Federal Highway, Suite 350 Boca Raton, Florida 33487





February 20, 2018

Mike Fimiani Margate Executive Golf Course, Inc. 5301 North Federal Highway Boca Raton, Florida 33487

Subject: Phase II Subsurface Investigation Report

Margate Executive Golf Course

7870 Margate Boulevard Margate, Florida 33063

Partner Project Number: 18-206246.1

Dear Mike Fimiani:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the assessment performed on the above-referenced property. The following report describes the field activities, methods, and findings of the Phase II Subsurface Investigation conducted at the above-referenced property.

This assessment was performed utilizing methods and procedures consistent with good commercial or customary practices designed to conform to acceptable industry standards. The independent conclusions represent Partner's best professional judgment based upon existing conditions and the information and data available to us during the course of this assignment.

We appreciate the opportunity to provide these services. If you have any questions concerning this report, or if we can assist you in any other matter, please contact William Marcus at (904) 373-9264 or wmarcus@partneresi.com.

Sincerely,

Partner Engineering and Science, Inc.

will Shult

David Schulte, PG

Project Geologist

Michael Emilio

Senior Project Manager

michael Enilo

William Marcus Principal

TABLE OF CONTENTS

1.0	Introduction	2
1.1	Purpose	2
1.2	Limitations	
1.3	User Reliance	2
2.0	Site Background	
2.1	Site Description	
2.2	Site History	4
2.3	Geology and Hydrogeology	
3.0	Field Activities	
3.	1.1 Utility Clearance	5
3.	1.2 Health and Safety Plan	5
3.2	Drilling Equipment	5
3.3	Soil Sampling and Temporary Monitor Well Installation	6
3.4	Groundwater Sampling	6
4.0	Laboratory Analysis	
4.1	Laboratory Analysis	7
4.2	Laboratory Analytical Results	7
4.	2.1 Soil Sample Analytical Results	
4.	2.2 Groundwater Sample Analytical Results	
5.0	Discussion and Conclusions	
5.1	Regulatory Agency Guidance	9
5.2	Summary and Conclusions	9

ATTACHMENTS

Tables 1 Soil Analytical Summary

2. Groundwater Analytical Summary

Figures 1. Site Location Map

2. Topographic Map

3. Site Plan Map Showing Sample Locations

4. Soil Concentrations Map

5. Groundwater Concentrations Map

Appendices A. Boring Logs

B. Laboratory Analytical Reports



1.0 INTRODUCTION

1.1 Purpose

Based on historical and current use of the executive par 3 course, the potential for soil and groundwater impacts exist associated with the historical use of agrichemicals for standard golf course maintenance. As agreed, Partner will evaluate limited areas of the Site only for agrichemical soil and groundwater impacts. The purpose of this limited investigation is intended to provide representative soil and groundwater quality concentrations at the Site in relation to its current and past use as a golf course. This initial investigation will provide a general water quality evaluation, however is not interned to comply with requirements of Broward County Regulatory Site Assessment Reporting (SAR), but will serve as screening level assessment for future environmental planning and development purposes.

The Limited Phase II Soil and Groundwater Assessment was conducted in accordance with the authorized Partner proposal dated December 22, 2017.

1.2 Limitations

This report presents a summary of work conducted by Partner. The work includes observations of site conditions encountered and the analytical results provided by an independent third-party laboratory of samples collected during the course of the project. The number and location of samples were selected to provide the required information. However, it cannot be assumed that the limited available data are representative of subsurface conditions in areas not sampled.

Conclusions and/or recommendations are based on the observations, laboratory analyses, and the governing regulations. Conclusions and/or recommendations beyond those stated and reported herein should not be inferred from this document.

Partner warrants that the environmental consulting services contained herein were accomplished in accordance with generally-accepted practices in the environmental engineering, geology, and hydrogeology fields that existed at the time and location of work. No other warranties are implied or expressed.

1.3 User Reliance

Partner was engaged by Margate Executive Golf Course, Inc. (the Addressee), or their authorized representative, to perform this investigation. The engagement agreement specifically states the scope and purpose of the investigation, as well as the contractual obligations and limitations of both parties. This report and the information therein, are for the exclusive use of the Addressee. This report has no other purpose and may not be relied upon, or used, by any other person or entity without the written consent of Partner. Third parties that obtain this report, or the information therein, shall have no rights of recourse or recovery against Partner, its officers, employees, vendors, successors or assigns. Any such unauthorized user shall be responsible to protect, indemnify and hold Partner, the Addressee and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such



use. Unauthorized use of this report shall constitute acceptance of, and commitment to, these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted.

This report has been completed under specific Terms and Conditions relating to scope, relying parties, limitations of liability, indemnification, dispute resolution, and other factors relevant to any reliance on this report. Any parties relying on this report do so having accepted the Terms and Conditions for which this report was completed.



2.0 SITE BACKGROUND

2.1 Site Description

The subject property consists of a single parcel of land comprising approximately 20.82-acres located on the south side of Margate Boulevard within a residential area of the City of Margate. The subject property is currently developed with an executive Par 3 golf course, which was constructed in 1973 to 1974. The subject property is improved with a small golf course concession building with an adjacent asphalt-paved parking area, and associated landscaping.

The subject property is bound by Margate Golf & Tennis Club main golf to the north across Margate Boulevard, the Garden Patio Villas residential community to the east, the Margate Garden Condominiums to the south, and single-family residential homes to the west. Refer to Figure 1 for the site location.

2.2 Site History

Based on the historical and current use of the subject property as an executive par 3 golf course, the potential for soil and groundwater impacts exist associated with the historical use of agrichemicals for standard golf course maintenance. As agreed, Partner will evaluate limited areas of the subject property only for agrichemical soil and groundwater impacts.

The purpose of this limited investigation is intended to provide representative soil and groundwater quality concentrations at the Site in relation to its current and past use as a golf course. This initial investigation is not intended to comply with requirements of Broward County Regulatory Site Assessment Reporting (SAR). However, it will provide a general soil and ground water quality evaluation and serve as screening level assessment for future environmental planning and development purposes.

2.3 Geology and Hydrogeology

Based on a review of the United States Geological Survey (USGS) Fort Lauderdale, North, Florida Quadrangle topographic map, the subject property was situated at an elevation approximately 12 feet above mean sea level prior to development as a golf course. The current topography is contoured with long sloping fairways and mounded greens and tee boxes with elevations up to 20 feet above mean sea level. Refer to Figure 2 for a topographic map of the site vicinity.

Based on borings advanced during this investigation, the underlying subsurface consists predominantly of fine to medium-grained quartz sand from the ground surface to approximately 10 feet below ground surface (bgs). Refer to Appendix A for boring logs from this investigation.

Groundwater was encountered during this investigation between 4 and 5 feet bgs.



3.0 FIELD ACTIVITIES

The scope of the Limited Phase II Subsurface Investigation included the advancement of 8 soil borings (SB-1 through SB-8) for the collection of representative soil samples including the installation of 2 temporary well points for the collection of groundwater samples. Refer to Figure 3 for a site aerial map showing the golf course, surrounding properties and the sample locations.

3.1.1 Utility Clearance

Partner delineated the boring locations on January 18, 2018 with white spray paint and notified 811 One Call to clear public utility lines as required by law at least 72 hours prior to drilling activities. One Call issued ticket number 017802785 for the project. In addition, at the two locations were groundwater samples were collected, the hole was cleared with a hand auger to 6 feet in depth prior to installing the temporary PVC well screens.

3.1.2 Health and Safety Plan

Partner reviewed the site-specific Health and Safety Plan with on-site personnel involved in the project prior to the commencement of drilling activities.

3.2 Drilling Equipment

On January 22, 2018 Partner subcontracted with a state-licensed drilling contractor, JAEE Environmental Services, Inc. of Davie, Florida, to install the test borings. JAEE, under the direction of Partner, advanced soil borings SB-1 through SB-8 with a stainless-steel hand auger for the collection of soil samples and clearing the boring location at the two locations to a depth of six feet bgs to prevent impacting potentially unmarked utilities where groundwater samples were to be collected. Sampling equipment was decontaminated between soil samples and borings to prevent cross-contamination.

Soil borings SB-1, SB-5 and SB-8 were advanced at the edge of tee boxes. Soil boring SB-1 was installed at the edge of the short distance tee box with the longer distance tee box approximately 10 feet to the west. Soil borings SB-2, SB-3, SB-4, SB-6 and SB-7 were advanced at down slope edges of golf course greens. The golf course locations for each sampling point are summarized below:

- Soil Boring SB-1 / GW-1 situated on the west edge of #9 Tee Box
- Soil Boring SB-2 situated on the north edge of #8 Green
- Soil Boring SB-3 situated on the northeast edge of #7 Green
- Soil Boring SB-4 situated on the northeast edge of #5 Green
- Soil Boring SB-5 / GW-5 situated on the southeast edge of #2 Tee Box
- Soil Boring SB-6 situated on the east edge of #4 Green
- Soil Boring SB-7 situated on the south edge of #2 Green
- Soil Boring SB-8 situated on the southeast edge of #1 Tee Box



All test borings were advanced to terminal depths of 2 feet to collect soil samples. Test borings SB-1 and SB-5 were further advanced with the hand auger to a terminal depth 6 feet bgs, and groundwater was encountered in SB-1 and SB-5 at depths 4 feet and 5 feet bgs, respectively. Copies of the soil boring logs are provided in Appendix A.

3.3 Soil Sampling and Temporary Monitor Well Installation

Soil samples SB-1 through SB-8 were collected from the ground surface to a depth of 2 feet bgs utilizing a stainless-steel hand auger and placed in plastic bags for compositing. Soil samples were then placed into a laboratory supplied containers then into a cooler with ice, under chain-of-custody procedures and submitted to Jupiter Environmental Laboratories for analysis of arsenic via EPA Method 6020, and chlorinated pesticides via EPA Method 8081.

Following the advancement of the boring to a depth of 6 feet bgs, the direct-push drill rig was utilized to push a 2.5-inch diameter steel casing into the subsurface to a depth of 10 feet bgs. The steel casing was fitted with a disposable steel plug at the bottom that was ejected at the boring terminus using a 1" diameter Schedule 40 PVC well screen. The well screen was 5 feet long with 5 feet of Schedule 40 riser pipe. As the steel casing was lifted the temporary pvc well was set with the screen interval at five to 10 feet bgs. Once the steel casing was removed, fine sand was added to the well annulus as filter media and for stabilization of the well wall.

No significant amounts of derived wastes were generated during this investigation. Purge water was discharged to the surface and left over soil cuttings were returned to their respective borings.

3.4 Groundwater Sampling

On January 22, 2018, groundwater samples were collected from temporary monitor well locations GW-1 and GW-5 using a new 3/8-inch diameter polyethylene tubing and a peristaltic pump. Each temporary monitor well was purged using a peristaltic pump at approximately 0.12 gallons per minute until the groundwater appeared clear and free of sediment. After purging approximately 6 gallons from GW-1 the groundwater was still slightly turbid (~100 NTU). However, do to time constraints, groundwater samples were collected for analysis. After purging approximately 6 gallons from GW-5 the groundwater was very clear and groundwater samples were collected for analysis.

The arsenic groundwater samples were placed into containers with no preservatives so that the samples could be filtered in the laboratory prior to preservation. All samples were labeled for identification and stored in an iced cooler. The temporary monitor well screens were then removed from the subsurface and the boreholes were backfilled with a mixture of golf course sand with some bentonite chips.



4.0 LABORATORY ANALYSIS

4.1 Laboratory Analysis

Partner collected 8 soil samples and 2 groundwater samples on January 22, 2018, which were transported in an iced cooler under proper chain-of-custody protocol to Jupiter Environmental Laboratories, a state-certified laboratory (NELAP Number E86546) located in Jupiter, Florida. All soil samples were analyzed for arsenic via EPA Method 6020 and for Chlorinated Pesticides via EPA Method 8081. The groundwater samples were also analyzed for arsenic via EPA Method 200.8 and Chlorinated Pesticides via EPA Method 8081.

4.2 Laboratory Analytical Results

Laboratory analytical results are included in Appendix B and discussed below.

4.2.1 Soil Sample Analytical Results

As shown on Table 1 and on Figure 4, detectable concentrations of the Chlorinated Pesticides 4,4-DDE, 4,4-DDT, Dieldrin and Total Chlordane were reported in the soil samples. 4,4-DDE, 4,4-DDT soil concentrations were reported in the soil samples from soil borings SB-2 through SB-7. The concentrations ranged from 0.098 micrograms per kilogram (ug/kg) to 15.5 ug/kg. These concentrations do no exceed any of the Soil Cleanup Target Levels (SCTLs) as found in Chapter 62-780, Florida Administrative Code (F.A.C) (Contaminated Site Cleanup Criteria), Table II (Soil Cleanup Target Levels). For 4,4-DDE and 4,4-DDT, the SCTL based on residential exposure is 2,900 ug/kg.

Total Chlordane soil concentrations were reported in the soil samples from soil borings SB-2, SB-3, SB-4, SB-6 and SB-7. The concentrations ranged from 39 ug/kg to 290 ug/kg. These concentrations do no exceed any of the SCTLs as found in Chapter 62-780, F.A.C Table II (SCTLs). For Chlordane, the SCTL based on residential exposure is 2,800 ug/kg.

Dieldrin soil concentrations were reported in all 8 soil samples from each soil boring SB-1 through SB-8. The concentrations ranged from 0.248 ug/kg (SB-1) to 9.31 ug/kg (SB-7). These concentrations do not exceed the direct exposure residential or commercial exposure SCTLs as found in Chapter 62-780, F.A.C Table II (SCTLs) of 60 ug/kg and 300 ug/kg, respectively. However, the dieldrin soil concentrations in soil samples from test borings SB-2, SB-3, SB-4, SB-6 and SB-7 all exceeded its leachability SCTL of 2 ug/kg.

Arsenic soil concentrations were reported in all 8 soil samples from each soil boring SB-1 through SB-8. The concentrations ranged from 1.7 milligrams per kilogram (mg/kg (SB-1) to 22 mg/kg (SB-2). Except for the arsenic concentration at the SB-1 location, all the arsenic concentrations exceeded the residential direct exposure SCTL as found in Chapter 62-780, F.A.C Table II (SCTLs) of 2.1 mg/kg. For arsenic, the SCTL based on commercial direct exposure is 12 mg/kg, but the leachability SCTL is normally determined using specific leachability testing for each site.



4.2.2 Groundwater Sample Analytical Results

As shown on Table 2, there were no detectable concentrations of chlorinated pesticides in either of the groundwater samples (GW-1 and GW-5).

Arsenic groundwater samples were lab-filtered to remove fine-grained particles suspended in the groundwater, as metals such as arsenic have an affinity to bond within some fine-grained particles. Therefore, arsenic groundwater concentrations are representative of dissolved arsenic. The groundwater arsenic concentration reported from the GW-1 sample was 19 micrograms per liter (ug/l) and for the GW-5 sample was 64 ug/l. Refer to Figure 5 showing an aerial site plan with the arsenic groundwater concentrations. Both of these concentrations exceed the Groundwater Cleanup Target Level (GCTL) for arsenic as found in Chapter 62-780, F.A.C (Contaminated Site Cleanup Criteria), Table I (GCTLs) and the Florida Primary Drinking Water Standard.



5.0 DISCUSSION AND CONCLUSIONS

5.1 Regulatory Agency Guidance

The soil and groundwater analytical results were compared to regulatory cleanup levels as set forth in Chapter 62-780, F.A.C (Contaminated Site Cleanup Criteria), Table I (Groundwater Cleanup Target Levels (GCTLS)), and Table II (Soil Cleanup Target Levels (SCTLs)). The arsenic soil analytical results were compared to Direct Exposure levels for Residential of 2.1 milligrams per kilogram (mg/kg), and for Commercial/Industrial of 12 mg/kg. The groundwater analytical results were compared to Primary Drinking Water Standard referenced in Table I for arsenic of 10 micrograms per liter (ug/l), and to the Chapter 62-780, F.A.C (Contaminated Site Cleanup Criteria), Table I (Groundwater Cleanup Target Levels (GCTLS).

5.2 Summary and Conclusions

Partner conducted a Limited Phase II Subsurface Investigation at the subject property to evaluate the potential impacts to soil and groundwater as a consequence of the historical use of agrichemicals for golf course turf maintenance. The scope of the Phase II Subsurface Investigation included the advancement of 8 soil borings (SB-1 through SB-8) for the collection of representative soil samples including the installation of two temporary well points for the collection of groundwater samples.

The soil analytical results indicate the arsenic and dieldrin concentrations that exceeded one of their SCTLs. Most notedly for arsenic where the concentrations in 7 out of the 8 samples exceeded the SCTL based on residential exposure of 2.1 mg/kg. The Dieldrin soil concentrations in 6 out of the 8 samples exceeded the SCTL based on leachability to groundwater of 2 ug/kg. However, there were no chlorinated pesticides detected in either of the groundwater samples.

Arsenic groundwater concentrations in both groundwater samples GW-1 and GW-5 exceeded the Florida Primary drinking water standard of 10 ug/l (also referred in Chapter 62-780, F.A.C Table I (Groundwater Cleanup Target Levels).

Based on the Limited Subsurface Investigation, dieldrin soil impacts and arsenic soil and groundwater impacts are present on the subject property above regulatory standards. It should be noted that these exceedances at the subject property are not atypical of South Florida golf course turf conditions that have been treated with even small amounts of the herbicide Monosodium Methanearsonate (MSMA). Based on the exceedances, Partner advises that a further Site Assessment of the soil and groundwater impacts would be required to evaluate the potential remedial alternatives and costs that could be associated with redevelopment of the property. As such it is Partner's opinion, that the Broward County Environmental Protection and Growth Department (BCEPGD) and the Florida Department of Environmental Protection (FDEP), would require a complete Site Assessment to delineate the extent of the impacts per Chapter 62-780, F.AC. Additional assessment could also be used in support of the development of a Soil and Groundwater Management Plan and any potential future administrative or engineering controls on the subject property.



TABLES



TABLE 1 SOIL ANALTYCIAL RESULTS SUMMARY MARGATE EXECUTIVE GOLF COURSE

	Sample Id.			SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7	SB-8	
	epth Interval				0' to 2'	0' to 2'	0' to 2'	0' to 2'	0' to 2'	0' to 2'	0' to 2'	0' to 2'
Samp	le Collection Date		1/22/2018	1/22/2018	1/22/2018	1/22/2018	1/22/2018	1/22/2018	1/22/2018	1/22/2018		
	Location				W Edge of #9 Tee Box	_	NE Edge of #7 Green	_	SE Edge of #2 Tee Box	E Edge of #4 Green	S Edge of #2 Green	SE Edge of #1 Tee Box
Parameter	Reporting Units	62-777 Table 2 Soil Residential	62-777 Table 2 Soil Commercial Industrial	62-777 Table 2 Soil Leach Base GW Criteria								
GC Semivolatiles by 8081B												
4,4-DDD	ug/kg	4200	22000	5800	0.079 U	0.085 U	1.66	0.081 U	0.08 U	0.084 U	0.087 U	0.081 U
4,4-DDE	ug/kg	2900	15000	18000	0.085 U	15.5	4.03	2.13	.098 I	5.98	9.36	.098 I
4,4-DDT	ug/kg	2900	15000	11000	0.197 U	2.44	1.64	0.201 U	0.199 U	1.53	2.99	0.202 U
Aldrin	ug/kg	60	300	200	0.086 U	0.093 U	0.087 U	0.088 U	0.087 U	0.092 U	0.095 U	0.089 U
alpha-BHC	ug/kg	100	600	0.3	0.078 U	0.084 U	0.079 U	0.08 U	0.079 U	0.083 U	0.086 U	0.08 U
alpha-Chlordane	ug/kg	#	#	9600	0.108 U	34.1	59.7	16.4	0.109 U	18.9	22.5	0.111 U
beta-BHC	ug/kg	500	2400	1	0.106 U	0.114 U	0.107 U	0.108 U	0.107 U	0.113 U	0.116 U	0.109 U
delta-BHC	ug/kg	24000	490000	200	0.077 U	0.083 U	0.077 U	0.078 U	0.077 U	0.082 U	0.084 U	0.079 U
Dieldrin	ug/kg	60	300	2	0.248 I	8.66	6.02	2.26	0.28 I	7.31	9.31	0.428
Endosulfan I	ug/kg	450000	#	#	0.085 U	0.092 U	0.086 U	0.087 U	0.086 U	0.091 U	0.094 U	0.087 U
Endosulfan II	ug/kg	450000	#	#	0.118 U	0.128 U	0.119 U	0.121 U	0.119 U	0.126 U	0.13 U	0.121 U
Endosulfan sulfate	ug/kg	450000	#	#	0.162 U	0.175 U	0.164 U	0.165 U	0.163 U	0.173 U	0.178 U	0.166 U
Endrin	ug/kg	25000	510000	1000	0.094 U	0.101 U	0.095 U	0.096 U	0.095 U	0.1 U	0.103 U	0.096 U
Endrin aldehyde	ug/kg	#	#	#	0.094 U	0.101 U	0.095 U	0.096 U	0.095 U	0.1 U	0.103 U	0.096 U
Endrin ketone	ug/kg	#	#	#	0.181 U	0.196 U	0.183 U	0.185 U	0.183 U	0.193 U	0.199 U	0.186 U
gamma-BHC (Lindane)	ug/kg	700	2500	9	0.088 U	0.095 U	0.089 U	0.09 U	0.088 U	0.093 U	0.096 U	0.09 U
gamma-Chlordane	ug/kg	#	#	9600	0.084 U	11.9	26.9	5.07	0.085 U	8.70	7.20	0.086 U
Heptachlor	ug/kg	200	1000	23000	0.112 U	0.121 U	0.113 U	0.114 U	0.113 U	0.119 U	0.123 U	0.115 U
Heptachlor epoxide	ug/kg	100	500	600	0.072 U	0.078 U	0.073 U	0.073 U	0.072 U	0.077 U	0.079 U	0.074 U
Methoxychlor	ug/kg	420000	8800000	160000	0.124 U	0.134 U	0.125 U	0.127 U	0.125 U	0.132 U	0.136 U	0.127 U
Total Chlordane	ug/kg	2800	#	9600	0.192 U	103	290	39	0.194 U	49.7	47.4	0.197 U
Toxaphene	ug/kg	900	4500	31000	3.1 U	3.35 U	3.14 U	3.17 U	3.13 U	3.31 U	3.41 U	3.18 U
Metals by 6020 Series												
Arsenic	mg/kg	2.1	12	***	1.7	22	8.5	6.4	5.1	6	8.4	2.5

Notes:

Bolded Analytical Concentrations indicates the concentration exceeded the leachability SCTL

U - Indicates that the compound was analyzed for but not detected.

ug/kg - micrograms per kilogram mg/kg - milligrams per kilogram

= Soil Cleanup Target Level not published in Table 2.

^{***} Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present Yellow background indicates the concentration exceeds the residential SCTL

TABLE 2: GROUNDWATER ANALTYICAL RESULTS SUMMARY MARGATE EXECUTIVE GOLF COURSE

Sample	e ID	GW-1	GW-5	
Locat	ion			
Sample Collection D	ate	1/22/2018	1/22/2018	
Locat	ion		W Edge of #9 Tee Box	SE Edge of #2 Tee Box
Parameter	Reporting Units	FAC 62-780 GW Cleanup Target		
GC Semivolatiles by 8081A				
4,4'-DDD	ug/l	0.1	0.00056 U	0.00056 U
4,4'-DDE	ug/l	0.1	0.0014 U	0.0014 U
4,4'-DDT	ug/l	0.1	0.00095 U	0.00095 U
Aldrin	ug/l	0.002	0.00046 U	0.00046 U
alpha-BHC	ug/l	0.006	0.001 U	0.001 U
a[pha-Chlordane	ug/l	2	0.00064 U	0.00064 U
beta-BHC	ug/l	0.02	0.0013 U	0.0013 U
delta-BHC	ug/l	2.1	0.0011 U	0.0011 U
Dieldrin	ug/l	0.002	0.00055 U	0.00055 U
Endosulfan I	ug/l	NA	0.0011 U	0.0011 U
Endosulfan II	ug/l	NA	0.00077 U	0.00077 U
Endosulfan sulfate	ug/l	NA	0.00055 U	0.00055 U
Endrin	ug/l	2	0.00064 U	0.00064 U
Endrin aldehyde	ug/l	NA	0.00068 U	0.00068 U
Endrin ketone	ug/l	NA	0.0008 U	0.0008 U
gamma-BHC (Lindane)	ug/l	0.2	0.00052 U	0.00052 U
gamma-Chlordane	ug/l	2	0.00046 U	0.00046 U
Heptachlor	ug/l	0.4	0.00046 U	0.00046 U
Heptachlor epoxide	ug/l	0.2	0.0014 U	0.0014 U
Methoxychlor	ug/l	40	0.0012 U	0.0012 U
Total Chlordane	ug/l	2	0.001 U	0.001 U
Toxaphene	ug/l	3	0.046 U	0.046 U
Metals by 6010B				
Arsenic*	ug/l	10	19	64

Notes:

ug/l - micrograms/liter

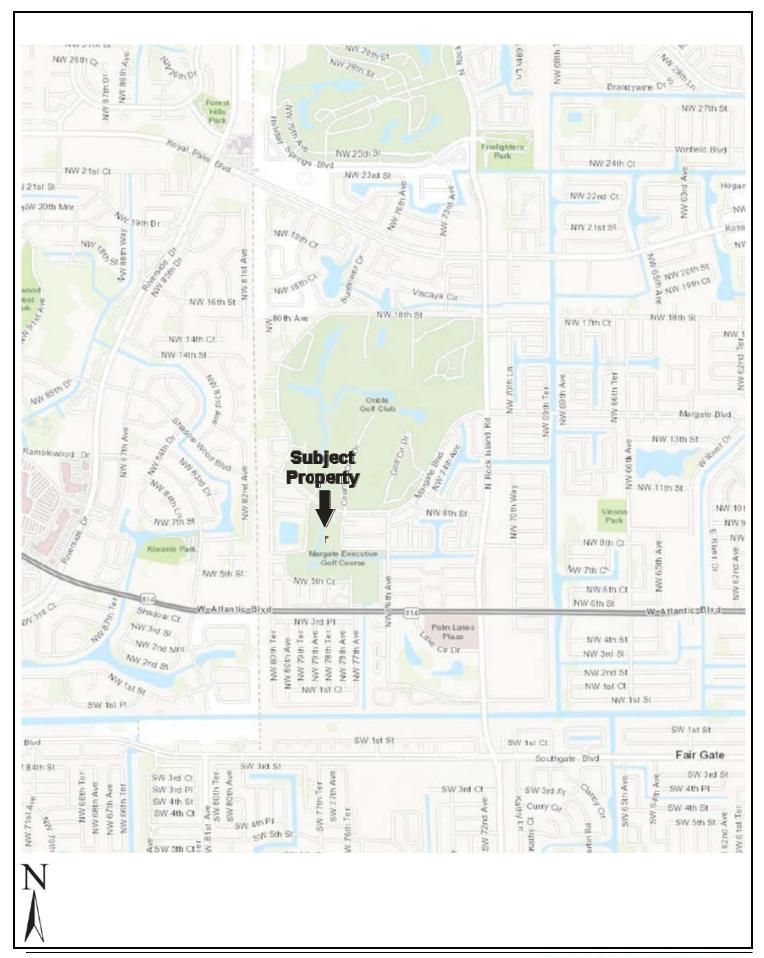
U - Indicates that the compound was analyzed for but not detected.

Bold text with yellow background in anallytical result indicates the analytical results exceeded the GCTL.

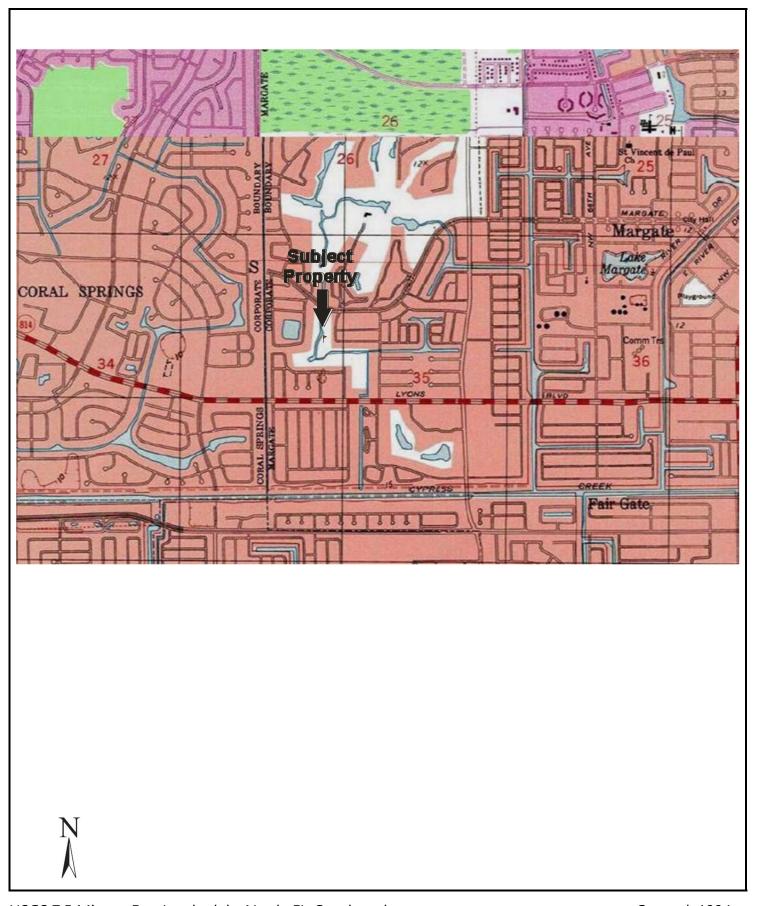
* - Lab filtered

FIGURES









USGS 7.5 Minute Fort Lauderdale, North, FL, Quadrangle

Created: 1994



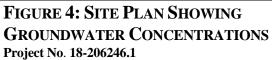














APPENDIX A: BORING LOGS



Boring N	umber:	SB-1				Page 1 of 8	
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018	
Site Addr	rocc:	7870 N	/largate	e Boulevard	Date Completed:	1/22/2018	
Site Addi	E33.	Marga	te, FL		Depth to Groundwater:	4 ft	
Project N	lumber:	18-206	246.1		Field Technician: D. Schulte		
Drill Rig	Гуре:	Geopro	obe		Partner Engineering a		
	Equipment:			I Hand Auger	2154 Torrance Bouleva		
Borehole	Diameter:	2 inche			Torrance, Californi	a 90501	
Depth	Sample	PID	USCS	Description	Notes		
2"	SB-1	NA	SW	Brown fine to medium grained quartz sand with grass and roots			
6"	SB-1	NA	SW	Brown fine to medium grained quartz sand with traces of roots			
18"	SB-1	NA	SW	Light tan fine to medium grained quartz sand with traces of silt			
24"	SB-1	NA	SW	Light tan fine to medium grained quartz sand with traces of silt	Soil Sample SB-1 (0'	to 2')	
36"				Light tan fine to medium grained quartz sand with traces of silt			
48"				Light tan fine to medium grained quartz sand with traces of silt			
60"				Light tan fine to medium grained quartz sand with traces of silt			
72"				Geoprobe pushed to 10' and 5 feet of PVC well screen and 5 feet of PVC riser installed.			
84"					Groundwater Sample GW-1 from -5	' to -10'	
96"					Groundwater slity light brown in col	lor with no odors.	
120"							
11'							
12'							
13'							
14'							
15'							
16'							
17'							
18'							
19'							
20'							

Boring N	umber:	SB-2				Page 2 of 8
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018
Site Addr	.000.			e Boulevard	Date Completed:	1/22/2018
		Marga			Depth to Groundwater:	5 ft
Project N						D. Schulte
Drill Rig		Geopro			Partner Engineering a	
	Equipment:			l Hand Auger	2154 Torrance Bouleva	
Borehole		2 inche			Torrance, Californi	a 90501
Depth	Sample	PID	USCS	Description	Notes	
2"	SB-2	NA	SW	Brown fine to medium grained quartz sand with grass and roots		
6"	SB-2	NA	SW	Brown fine to medium grained quartz sand with traces of roots		
18"	SB-2	NA	SW	Brown fine to medium grained quartz sand with traces of silt		
24"	SB-2	NA	SW	Brown fine to medium grained quartz sand with traces of silt	Soil Sample SB-2 (0'	to 2')
36"						
48"						
60"						
72"						
84"						
96"						
120"						
11'						
12'						
13'						
14'						
15'						
16'						
17'						
18'						
19'						
20'						

Boring N	umber:	SB-3				Page 3 of 8
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018
Site Addr	τΔςς.	7870 N	/largate	e Boulevard	Date Completed:	1/22/2018
		Marga			Depth to Groundwater:	5 ft
Project N		r: 18-206246.1 Field Technician:				D. Schulte
Drill Rig		Geopro			Partner Engineering a	
	Equipment:			l Hand Auger	2154 Torrance Bouleva	
Borehole		2 inche			Torrance, Californi	a 90501
Depth	Sample	PID	USCS	Description	Notes	
2"	SB-3	NA	SW	Brown fine to medium grained quartz sand with grass and roots		
6"	SB-3	NA	SW	Brown fine to medium grained quartz sand with traces of roots		
18"	SB-3	NA	SW	Tan fine to medium grained quartz sand with traces of silt		
24"	SB-3	NA	SW	Tan fine to medium grained quartz sand with traces of silt	Soil Sample SB-3 (0'	to 2')
36"						
48"						
60"						
72"						
84"						
96"						
120"						
11'						
12'						
13'						
14'						
15'						
16'						
17'						
18'						
19'						
20'						

Boring N	umber:	SB-4				Page 4 of 8
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018
Site Addr	-αςς·	7870 N	/largate	e Boulevard	Date Completed:	1/22/2018
		Marga			Depth to Groundwater:	5 ft
Project N		T: 18-206246.1 Field Technician:				D. Schulte
Drill Rig		Geopro			Partner Engineering a	
	Equipment:			l Hand Auger	2154 Torrance Bouleva	
Borehole		2 inche			Torrance, Californi	a 90501
Depth	Sample	PID	USCS	Description	Notes	
2"	SB-4	NA	SW	Brown fine to medium grained quartz sand with grass and roots		
6"	SB-4	NA	SW	Brown fine to medium grained quartz sand with traces of roots		
18"	SB-4	NA	SW	Tan fine to medium grained quartz sand with traces of silt		
24"	SB-4	NA	SW	Tan fine to medium grained quartz sand with traces of silt	Soil Sample SB-3 (0'	to 2')
36"						
48"						
60"						
72"						
84"						
96"						
120"						
11'						
12'						
13'						
14'						
15'						
16'						
17'						
18'						
19'						
20'						

Boring N	umber:	SB-5				Page 5 of 8
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018
Site Addr	.000			e Boulevard	Date Completed:	1/22/2018
Site Audi	C33.	Marga			Depth to Groundwater:	5 ft
Project N		18-206			Field Technician:	D. Schulte
Drill Rig 1	Гуре:	Geopro			Partner Engineering a	
	Equipment:			I Hand Auger	2154 Torrance Bouleva	
Borehole		2 inche			Torrance, Californi	a 90501
Depth	Sample	PID	USCS	Description	Notes	
2"	SB-5	NA	200	Brown fine to medium grained quartz sand with grass and roots		
6"	SB-5	NA		Brown fine to medium grained quartz sand with traces of roots and limestone rock fragments		
18"	SB-5	NA	SW	Tan fine to medium grained quartz sand with traces of silt and limestone rock fragments		
24"	SB-5	NA	SW	Tan fine to medium grained quartz sand with traces of silt	Soil Sample SB-5 (0'	to 2')
36"				Light tan fine to medium grained quartz sand with traces of silt		
48"				Light tan fine to medium grained quartz sand with traces of silt		
60"				Light tan fine to medium grained quartz sand with traces of silt		
72"				Geoprobe pushed to 10' and 5 feet of PVC well screen and 5 feet of PVC riser installed.		
84"					Groundwater Sample GW-5 from -5	' to -10'
96"					Groundwater clear no color and no	odors.
120"						
11'						
12'						
13'						
14'						
15'						
16'						
17'						
18'						
19'						
20'						

Boring N	umber:	SB-6				Page 6 of 8	
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018	
Sita Addı	racc.			e Boulevard	Date Completed:	1/22/2018	
					Depth to Groundwater:	5 ft	
	Address: Margate Executive Golf Course 7870 Margate Boulevard Margate, FL ect Number: 18-206246.1 Rig Type: Geoprobe Iding Equipment: Stainless Steel Hand Auger Inole Diameter: 2 inches SB-6 NA SW Brown fine to medium grained quartz sand with and roots and limestone rock fragments SB-6 NA SW Brown fine to medium grained quartz sand with of roots and limestone rock fragments SB-6 NA SW Tan fine to medium grained quartz sand with of limestone rock fragments Tan fine to medium grained quartz sand with of limestone rock fragments Tan fine to medium grained quartz sand with tra silt				Field Technician: D. Schulte		
_					Partner Engineering a		
				I Hand Auger	2154 Torrance Bouleva		
					Torrance, Californi	a 90501	
Depth	Sample	PID	USCS		Notes		
2"	SB-6	NA	SW	and roots and limestone rock fragments			
6"	SB-6	NA	SW	of roots and limestone rock fragments			
18"	SB-6	NA	SW	Brown fine to medium grained quartz sand with traces of limestone rock fragments			
24"	SB-6	NA	SW	Tan fine to medium grained quartz sand with traces of silt	Soil Sample SB-6 (0'	to 2')	
36"							
48"							
60"							
72"							
84"							
96"							
120"							
11'							
12'							
13'							
14'							
15'							
16'							
17'							
18'							
19'							
20'							

Boring N	umber:	SB-7				Page 7 of 8
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018
Site Addr	racc.			e Boulevard	Date Completed:	1/22/2018
		Marga			Depth to Groundwater:	5 ft
Project N		18-206246.1 Field Technician:				D. Schulte
Drill Rig		Geopro			Partner Engineering a	
	Equipment:			l Hand Auger	2154 Torrance Bouleva	
Borehole		2 inche			Torrance, Californi	a 90501
Depth	Sample	PID	USCS	Description	Notes	
2"	SB-7	NA	SW	Brown fine to medium grained quartz sand with grass and roots		
6"	SB-7	NA	SW	Brown fine to medium grained quartz sand with traces of roots		
18"	SB-7	NA	SW	Brown fine to medium grained quartz sand with traces of silt		
24"	SB-7	NA	SW	Brown fine to medium grained quartz sand with traces of silt	Soil Sample SB-7 (0'	to 2')
36"						
48"						
60"						
72"						
84"						
96"						
120"						
11'						
12'						
13'						
14'						
15'						
16'						
17'						
18'						
19'						
20'						

Boring N	umber:	SB-8				Page 8 of 8	
Location		Marga	te Exec	utive Golf Course	Date Started:	1/22/2018	
Site Addı	rocc.			e Boulevard	Date Completed:	1/22/2018	
Site Addi	ESS.	Marga	te, FL		Depth to Groundwater:	4 ft	
Project N	lumber:	18-206	246.1		Field Technician: D. Schulte		
Drill Rig		Geopre			Partner Engineering a		
				l Hand Auger	2154 Torrance Bouleva		
	Diameter:	2 inche			Torrance, Californi	a 90501	
Depth	Sample	PID	USCS	Description	Notes		
2"	SB-8	NA	SW	Brown fine to medium grained quartz sand with grass and roots			
6"	SB-8	NA	SW	Brown fine to medium grained quartz sand with traces of roots			
18"	SB-8	NA	SW	Tan fine to medium grained quartz sand with traces of silt			
24"	SB-8	NA	SW	Tan fine to medium grained quartz sand with traces of silt	Soil Sample SB-7 (0'	to 2')	
36"							
48"							
60"							
72"							
84"							
96"							
120"							
11'							
12'							
13'							
14'							
15'							
16'							
17'							
18'							
19'							
20'							

APPENDIX B: LABORATORY REPORTS





Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118 www.jupiterlabs.com clientservices@jupiterlabs.com

February 16, 2018

Mike Emilio Partner Engineering & Science 7820 Margate Blvd Jacksonville, FL

RE: LOG# 1855124

Project ID: Margate Executive Golf Course

COC# 1855124

Dear Mike Emilio:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, January 22, 2018. Results reported herein conform to the most current NELAC standards, where applicable, unless indicated by * in the body of the report. The enclosed Chain of Custody is a component of this package and should be retained with the package and incorporated therein.

Results for all solid matrices are reported in dry weight unless otherwise noted. Results for all liquid matrices are reported as received in the laboratory unless otherwise noted. Results relate only to the samples received. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

Samples are disposed of after 30 days of their receipt by the laboratory unless extended storage is requested in writing. The laboratory maintains the right to charge storage fees for archived samples. This report will be archived for 5 years after which time it will be destroyed without further notice, unless prior arrangements have been made.

Certain analyses are subcontracted to outside NELAC certified laboratories, please see the Project Summary section of this report for NELAC certification numbers of laboratories used. A Statement of Qualifiers is available upon request.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Releva lowrido

Rebecca Lourido for Kacia Baldwin V.P. of Operations

Report ID: 1855124 - 2066353

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 1 of 9



Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway

Jupiter, FL 33458

Phone: (561)575-0030 Fax: (561)575-4118

SAMPLE ANALYTE COUNT

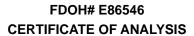
Workorder: 1855124

Project ID: Margate Executive Golf Course

Lab ID	Sample ID	Method	Analytes Reported
1855124001	GW-1	EPA 200.8 (Dissolved)	1
		EPA 8081 (GC)	24
1855124002	GW-5	EPA 200.8 (Dissolved)	1
		EPA 8081 (GC)	24

Report ID: 1855124 - 2066353

2/16/2018







Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118

SAMPLE SUMMARY

Workorder: 1855124

Project ID: Margate Executive Golf Course

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1855124001	GW-1	Aqueous Liquid	1/22/2018 10:40	1/22/2018 14:12
1855124002	GW-5	Aqueous Liquid	1/22/2018 11:30	1/22/2018 14:12

Report ID: 1855124 - 2066353

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS





ANALYTICAL RESULTS

Workorder: 1855124

Project ID: Margate Executive Golf Course

Lab ID: 1855124001 Date Received: 1/22/2018 14:12 Matrix: Aqueous Liquid

Sample ID: GW-1 Date Collected: 1/22/2018 10:40

19 ug/L

2.0

Parameters Results Units PQL MDL DF Prepared Ву Analyzed Qual Ву

Analysis Desc: EPA 8081 by GC (W) Preparation Method: EPA 3510C Analytical Method: EPA 8081 (GC)

50-130 Tetrachloro-m-xylene (S) 50 % 1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM

Semivolatiles by GC

Analysis Desc: EPA 8081 by GC (W) Preparation Method: EPA 3510C						
				Analytical Method: EPA 8081 (GC)		
Decachlorobiphenyl (S)	55 %	50-130		1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
4,4'-DDD	U ug/L	0.0019	0.00056	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
4,4'-DDE	U ug/L	0.0029	0.0014	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
4,4'-DDT	U ug/L	0.0019	0.00095	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Aldrin	U ug/L	0.0019	0.00046	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
a-BHC	U ug/L	0.0020	0.0010	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
a-Chlordane	U ug/L	0.0019	0.00064	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
b-BHC	U ug/L	0.0027	0.0013	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
d-BHC	U ug/L	0.0022	0.0011	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Dieldrin	U ug/L	0.0019	0.00055	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Endosulfan I	U ug/L	0.0022	0.0011	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Endosulfan II	U ug/L	0.0019	0.00077	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Endosulfan sulfate	U ug/L	0.0019	0.00055	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Endrin	U ug/L	0.0019	0.00064	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Endrin aldehyde	U ug/L	0.0019	0.00068	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Endrin ketone	U ug/L	0.0019	0.00080	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
g-BHC (Lindane)	U ug/L	0.0019	0.00052	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
g-Chlordane	U ug/L	0.0019	0.00046	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Heptachlor	U ug/L	0.0019	0.00046	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Heptachlor epoxide	U ug/L	0.0029	0.0014	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Methoxychlor	U ug/L	0.0023	0.0012	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Total Chlordane	U ug/L	0.0020	0.0010	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Total Toxaphene	U ug/L	0.092	0.046	1 1/23/2018 13:49 BFM 1/24/2018 21:20 BFM		
Analysis Desc: EPA 200.8 Dissolve	d Metals (W)			Preparation Method: EPA 200.2 mod.		
				Analytical Method: EPA 200.8 (Dissolved)		

Report ID: 1855124 - 2066353

2/16/2018

Arsenic

FDOH# E86546 **CERTIFICATE OF ANALYSIS**

0.65

4 1/23/2018 08:40

ZS

1/23/2018 11:26

ZS





ANALYTICAL RESULTS

Workorder: 1855124

Project ID: Margate Executive Golf Course

Lab ID: 1855124002 Date Received: 1/22/2018 14:12 Matrix: Aqueous Liquid

Sample ID: GW-5 Date Collected: 1/22/2018 11:30

Parameters Results Units PQL MDL DF Prepared Ву Analyzed Qual Ву

Analysis Desc: EPA 8081 by GC (W) Preparation Method: EPA 3510C Analytical Method: EPA 8081 (GC)

54 % 50-130 Tetrachloro-m-xylene (S)

64 ug/L

2.0

1 1/23/2018 13:49 BFM 1/24/2018 21:35 BFM

Semivolatiles by GC

Analysis Desc: EPA 8081 by GC (W)	Preparation Method: EPA 3510C						
				Analytical Method: EPA 80	81 (GC	;)	
Decachlorobiphenyl (S)	68 %	50-130		1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
4,4'-DDD	U ug/L	0.0019	0.00056	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
4,4'-DDE	U ug/L	0.0029	0.0014	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
4,4'-DDT	U ug/L	0.0019	0.00095	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Aldrin	U ug/L	0.0019	0.00046	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
a-BHC	U ug/L	0.0020	0.0010	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
a-Chlordane	U ug/L	0.0019	0.00064	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
b-BHC	U ug/L	0.0027	0.0013	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
d-BHC	U ug/L	0.0022	0.0011	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Dieldrin	U ug/L	0.0019	0.00055	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Endosulfan I	U ug/L	0.0022	0.0011	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Endosulfan II	U ug/L	0.0019	0.00077	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Endosulfan sulfate	U ug/L	0.0019	0.00055	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Endrin	U ug/L	0.0019	0.00064	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Endrin aldehyde	U ug/L	0.0019	0.00068	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Endrin ketone	U ug/L	0.0019	0.00080	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
g-BHC (Lindane)	U ug/L	0.0019	0.00052	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
g-Chlordane	U ug/L	0.0019	0.00046	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Heptachlor	U ug/L	0.0019	0.00046	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Heptachlor epoxide	U ug/L	0.0029	0.0014	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Methoxychlor	U ug/L	0.0023	0.0012	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Total Chlordane	U ug/L	0.0020	0.0010	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Total Toxaphene	U ug/L	0.092	0.046	1 1/23/2018 13:49	BFM	1/24/2018 21:35	BFM
Analysis Desc: EPA 200.8 Dissolved M	Metals (W)			Preparation Method: EPA	200.2 n	nod.	
				Analytical Method: EPA 20	0.8 (Di	ssolved)	

Report ID: 1855124 - 2066353

2/16/2018

Arsenic

FDOH# E86546 **CERTIFICATE OF ANALYSIS**

0.65

4 1/23/2018 08:40

ZS

1/23/2018 11:31

ZS





Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118

ANALYTICAL RESULTS QUALIFIERS

Workorder: 1855124

Project ID: Margate Executive Golf Course

PARAMETER QUALIFIERS

PROJECT COMMENTS

1855124

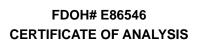
A reported value of U indicates that the compound was analyzed for but not detected above the MDL. A value flagged with an "i" flag indicates that the reported value is between the laboratory method detection limit and the

practical quantitation limit.

RR1|Revised Report, Revision #1 (see date below)

Report ID: 1855124 - 2066353

2/16/2018







QUALITY CONTROL DATA

Workorder: 1855124

Project ID: Margate Executive Golf Course

QC Batch: XXX/10687 Analysis Method: EPA 8081 (GC)

QC Batch Method: EPA 3510C

Associated Lab Samples: 1855097001 1855097002 1855097003 1855097004 1855097005 1855119001

1855120001 1855124001 1855124002

METHOD BLANK: 134087

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Semivolatiles by GC		·		
Tetrachloro-m-xylene (S)	%	60	50-130	
Decachlorobiphenyl (S)	%	84	50-130	
a-BHC	ug/L	U	0.0011	
g-BHC (Lindane)	ug/L	U	0.00056	
Heptachlor	ug/L	Ü	0.00049	
Aldrin	ug/L	U	0.00049	
b-BHC	ug/L	Ü	0.0014	
d-BHC	ug/L	Ü	0.0012	
Heptachlor epoxide	ug/L	Ū	0.0015	
Endosulfan I	ug/L	Ū	0.0012	
g-Chlordane	ug/L	U	0.00049	
a-Chlordane	ug/L	U	0.00068	
4,4'-DDE	ug/L	U	0.0016	
Dieldrin	ug/L	U	0.00059	
Endrin	ug/L	U	0.00069	
Endosulfan II	ug/L	U	0.00083	
4,4'-DDD	ug/L	U	0.00060	
4,4'-DDT	ug/L	U	0.0010	
Endrin aldehyde	ug/L	U	0.00073	
Endosulfan sulfate	ug/L	U	0.00059	
Methoxychlor	ug/L	U	0.0012	
Endrin ketone	ug/L	U	0.00086	
Total Chlordane	ug/L	U	0.0011	
Total Toxaphene	ug/L	U	0.049	

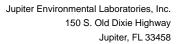
LABORATORY CONTROL S	SAMPLE & LCSD:	134088		134089)					
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Semivolatiles by GC										
Tetrachloro-m-xylene (S)	%				52	55	50-130	7	30	
Decachlorobiphenyl (S)	%				80	77	50-130	5	30	
a-BHC	ug/L	0.025	0.018	0.019	70	74	50-130	5	30	
g-BHC (Lindane)	ug/L	0.026	0.018	0.019	70	73	50-130	5	30	
Heptachlor	ug/L	0.025	0.016	0.017	63	67	50-130	6	30	

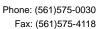
Report ID: 1855124 - 2066353

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS









QUALITY CONTROL DATA

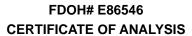
Workorder: 1855124

Project ID: Margate Executive Golf Course

LABORATORY CONTROL	L SAMPLE & LCSD:	134088		134089	9					
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Aldrin	ug/L	0.026	0.015	0.016	59	61	50-130	6	30	
b-BHC	ug/L	0.025	0.017	0.019	70	75	50-130	11	30	
d-BHC	ug/L	0.025	0.015	0.016	61	64	50-130	6	30	
Heptachlor epoxide	ug/L	0.025	0.020	0.021	81	83	50-130	5	30	
Endosulfan I	ug/L	0.025	0.021	0.022	85	88	50-130	5	30	
g-Chlordane	ug/L	0.025	0.020	0.021	81	83	50-130	5	30	
a-Chlordane	ug/L	0.025	0.019	0.020	77	79	50-130	5	30	
4,4'-DDE	ug/L	0.025	0.021	0.020	82	80	50-130	5	30	
Dieldrin	ug/L	0.025	0.021	0.022	86	87	50-130	5	30	
Endrin	ug/L	0.025	0.022	0.022	87	90	50-130	0	30	
Endosulfan II	ug/L	0.025	0.022	0.023	89	90	50-130	4	30	
4,4'-DDD	ug/L	0.025	0.019	0.020	77	79	50-130	5	30	
4,4'-DDT	ug/L	0.025	0.023	0.024	91	94	50-130	4	30	
Endrin aldehyde	ug/L	0.025	0.023	0.022	91	90	50-130	4	30	
Endosulfan sulfate	ug/L	0.025	0.024	0.029	96	114	50-130	19	30	
Methoxychlor	ug/L	0.025	0.021	0.022	84	87	50-130	5	30	
Endrin ketone	ug/L	0.025	0.024	0.024	95	95	50-130	0	30	
Total Chlordane	ug/L		U	U				0	30	
Total Toxaphene	ug/L		U	U				0	30	

Report ID: 1855124 - 2066353

2/16/2018







Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 1855124

Project ID: Margate Executive Golf Course

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
185512400	1 GW-1	EPA 3510C	XXX/10687	EPA 8081 (GC)	XGC/3445
1855124002	2 GW-5	EPA 3510C	XXX/10687	EPA 8081 (GC)	XGC/3445
1855124001	1 GW-1	EPA 200.2 mod.	MXX/9369	EPA 200.8 (Dissolved)	MMS/8399
1855124002	2 GW-5	EPA 200.2 mod.	MXX/9369	EPA 200.8 (Dissolved)	MMS/8399

Report ID: 1855124 - 2066353

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS



Jupiter Environmental Laboratories, Inc.

www.jupiterlabs.com 150 S. Old Dixie Highway, Jupiter, FL 33458 (561) 575-0030 • (888) 287-3218 • clientservices@jupiterlabs.com

J.E.L. Log #	1855124
P.O. #	

	THE PROPERTY OF SUCH STREET,	Quote #
Company Name Partner Engineering Science	LAB ANALYSIS	Requested Turnaround
Address	Codes	Note: Rush requests subject to
City Sayson Ville State M Zip Sampling Site Address 78 20 M + D) (M +	X (N)	acceptance by the laboratory Standard
Sampling Site Address 7870 Margato Blud, Margate Attn: Mile Emillo Email Project # Course Sampler Sampler	Parameters Cdicsolud SOS/	Expedited
Project Oriola Exc Golf Course Name Oriola Exc Project#		Due//
Name/Signature Pour Dolutto Bround School te	Field Field	to the re- are medial subresser or
# Sample Label Collected Collected Matrix # of Collect ID) Date Time Code* Cont		Comments
1 GW-1 /2/15/10:40GW 2	N &	Plane.
2 Gw-5 Y22/18/11:30 GW 2	XY	1. b Figher
_3		Ac com Man
_4		15 32 17 195
_5		
_6		
_7	The first section of the first	Ut plant a series
8		ate our ser of the or or or
_9		Some and a continue of the con-
0		el bar La reli Lati 1814
Matrix Codes* Pres Codes Relinquished by	Date Time Received by	Date Time
Soil/Solid Sediment SW Surface Water Ground Water SL Sludge B- HNO ₃ O- Other Waste Water O Other (Please Specify) Drinking Water O Other (Please Specify) B- HCI Z- ZnAc	Daulto 1/21/18/14/2 Males	1122115 14:12
QA/QC level with report None123 See price guide for applicable fees	C at 16 to a street and the second street an	A DECEMBER CHIPTODE DO SIS MORES
FDEP Dry Cleaning FDEP UST Pre-Approval Temp Control: SFWMD ADaPT DOT 48 °C	The state of the s	

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:

Client:

1855124

Level:

Partner

Req:

2895

Project:

Emilio

Date Rec'd:

1/22/2018 2:12:00 PM

Rec'd via: Client

Cooler Check

Security Tape

ID Temp

of samples

Present

Intact Method of Receipt

Comments

4.8

2

Checked By: MD

Sample Verification

Loose Caps?

No

All Samples on COC accounted For?

Yes

Broken Containers?

No

All Samples on COC?

Yes

pH Verified?

No

Written on Internal COC?

No

pH Strip Lot#

Sample Vol. Suff. For Analysis?

Yes Yes

Acid Preserved Samples Lot #

Samples Rec'd W/I Hold Time? Are All Samples to be Analyzed?

Yes

Base Preserved Samples Lot #

Client

Correct Sample Containers?

Yes

Soil Origin (Domestic/Foreign

Samples Received From

COC Comments written on COC?

Yes

Site Location/Project on COC?

Client Project # on COC?

Yes No

Samplers Initials on COC? Sample Date/Time Indicated?

Yes Yes

Project Mgr. Indicated on COC

Yes

TAT Requested:

STD

COC relinquished/Dated by Client?

Yes

Client Requests Verbal Results?

No

COC Received/Dated by JEL

Yes

JEL to Conduct ALL Analyses?

Yes

Subcontract Analysis

Parameter

Via

Lab Name

Comments



Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118 www.jupiterlabs.com clientservices@jupiterlabs.com

February 16, 2018

Mike Emilio Partner Engineering & Science 7820 Margate Blvd Jacksonville, FL

RE: LOG# 1855123

Project ID: Margate Executive Golf Course

COC# 1855123

Dear Mike Emilio:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, January 22, 2018. Results reported herein conform to the most current NELAC standards, where applicable, unless indicated by * in the body of the report. The enclosed Chain of Custody is a component of this package and should be retained with the package and incorporated therein.

Results for all solid matrices are reported in dry weight unless otherwise noted. Results for all liquid matrices are reported as received in the laboratory unless otherwise noted. Results relate only to the samples received. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

Samples are disposed of after 30 days of their receipt by the laboratory unless extended storage is requested in writing. The laboratory maintains the right to charge storage fees for archived samples. This report will be archived for 5 years after which time it will be destroyed without further notice, unless prior arrangements have been made.

Certain analyses are subcontracted to outside NELAC certified laboratories, please see the Project Summary section of this report for NELAC certification numbers of laboratories used. A Statement of Qualifiers is available upon request.

If you have any questions concerning this report, please feel free to contact me.

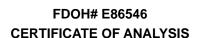
Sincerely,

Releva lourido

Rebecca Lourido for Kacia Baldwin V.P. of Operations

Report ID: 1855123 - 2066069

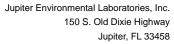
2/16/2018



This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 1 of 18





SAMPLE ANALYTE COUNT

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID	Sample ID	Method	Analytes Reported
1855123001	SB-1 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1
1855123002	SB-2 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1
1855123003	SB-3 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1
1855123004	SB-4 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1
1855123005	SB-5 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1
1855123006	SB-6 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1
1855123007	SB-7 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1
1855123008	SB-8 (0'-2')	EPA 6020	1
		EPA 8081 (GC)	24
		SM 2540G	1

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS





Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118

SAMPLE SUMMARY

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1855123001	SB-1 (0'-2')	Soil/Solid	1/22/2018 08:52	1/22/2018 14:12
1855123002	SB-2 (0'-2')	Soil/Solid	1/22/2018 09:01	1/22/2018 14:12
1855123003	SB-3 (0'-2')	Soil/Solid	1/22/2018 09:06	1/22/2018 14:12
1855123004	SB-4 (0'-2')	Soil/Solid	1/22/2018 09:11	1/22/2018 14:12
1855123005	SB-5 (0'-2')	Soil/Solid	1/22/2018 09:18	1/22/2018 14:12
1855123006	SB-6 (0'-2')	Soil/Solid	1/22/2018 09:22	1/22/2018 14:12
1855123007	SB-7 (0'-2')	Soil/Solid	1/22/2018 09:28	1/22/2018 14:12
1855123008	SB-8 (0'-2')	Soil/Solid	1/22/2018 09:40	1/22/2018 14:12

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS





ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID: 1855123001 Date Received: 1/22/2018 14:12 Matrix: Soil/Solid

Sample ID: SB-1 (0'-2') Date Collected: 1/22/2018 08:52

Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual		
Wet Chemistry										
Analysis Desc: 2540G Percent So	olids (Dryweight)			Analytical Method: SM 25	540G					
Percent Solids (Dryweight)	91.7 %	0.1		1		1/23/2018 12:17	BFM			
Arabaia Daga FDA 0004 by CC	· C/			Duananation Mathedu EDA	2545					
Analysis Desc: EPA 8081 by GC (5)			Preparation Method: EPA						
				Analytical Method: EPA 8	081 (GC	(2)				
Tetrachloro-m-xylene (S)	83 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Operation to title a large OO										
Semivolatiles by GC				D M. J. I. ED.	0545					
Analysis Desc: EPA 8081 by GC (5)			Preparation Method: EPA	3545					
				Analytical Method: EPA 8	081 (GC	()				
Decachlorobiphenyl (S)	87 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
4,4'-DDD	U ug/Kg	0.402	0.079	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
4,4'-DDE	U ug/Kg	0.426	0.085	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
4,4'-DDT	U ug/Kg	0.986	0.197	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Aldrin	U ug/Kg	0.438	0.086	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
a-BHC	U ug/Kg	0.389	0.078	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
a-Chlordane	U ug/Kg	0.548	0.108	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
b-BHC	U ug/Kg	0.536	0.106	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
d-BHC	U ug/Kg	0.389	0.077	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Dieldrin	0.248i ug/Kg	0.414	0.083	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Endosulfan I	U ug/Kg	0.426	0.085	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Endosulfan II	U ug/Kg	0.596	0.118	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Endosulfan sulfate	U ug/Kg	0.815	0.162	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Endrin	U ug/Kg	0.475	0.094	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Endrin aldehyde	U ug/Kg	0.475	0.094	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Endrin ketone	U ug/Kg	0.913	0.181	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
g-BHC (Lindane)	U ug/Kg	0.438	0.088	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
g-Chlordane	U ug/Kg	0.426	0.084	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Heptachlor	U ug/Kg	0.560	0.112	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Heptachlor epoxide	U ug/Kg	0.365	0.072	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Methoxychlor	U ug/Kg	0.621	0.124	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Total Chlordane	U ug/Kg	0.961	0.192	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Total Toxaphene	U ug/Kg	15.5	3.10	1 1/23/2018 16:30	BFM	1/24/2018 21:50	BFM			
Analysis Desc: EPA 6020 Metals \$	SCAN by ICP/MS (S)			Preparation Method: EPA	3050B					
				Analytical Method: EPA 6020						
Arsenic	1.7 mg/Kg	0.55	0.089	2 1/23/2018 10:33	ZS	1/23/2018 14:23	ZS			

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS





ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID: 1855123002 Date Received: 1/22/2018 14:12 Matrix: Soil/Solid

Sample ID: SB-2 (0'-2') Date Collected: 1/22/2018 09:01

	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual	
Wet Chemistry									
Analysis Desc: 2540G Percent S	Solids (Dryweight)			Analytical Method: SM 2	2540G				
Percent Solids (Dryweight)	87.3 %	0.1		1		1/23/2018 12:17	BFM		
Analysis Dans FDA 0004 by CC	(C)			Duamanation Mathedy C	N 0545				
Analysis Desc: EPA 8081 by GC	(5)			Preparation Method: EF	'A 3545				
				Analytical Method: EPA	8081 (G	C)			
Tetrachloro-m-xylene (S)	74 %	50-130		1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
Semivolatiles by GC	(0)			5					
Analysis Desc: EPA 8081 by GC	(S)			Preparation Method: EF	PA 3545				
				Analytical Method: EPA	8081 (G	C)			
Decachlorobiphenyl (S)	113 %	50-130		1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
1,4'-DDD	U ug/Kg	0.434	0.085	1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
1,4'-DDE	15.5 ug/Kg	4.60	0.921	10 1/23/2018 16:30) BFM	1/25/2018 16:10	BFM		
1,4'-DDT	2.44 ug/Kg	1.07	0.213	1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
Aldrin	U ug/Kg	0.474	0.093	1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
a-BHC	U ug/Kg	0.421	0.084	1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
a-Chlordane	34.1 ug/Kg	5.92	1.17	10 1/23/2018 16:30) BFM	1/25/2018 16:10	BFM		
o-BHC	U ug/Kg	0.579	0.114	1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
d-BHC	U ug/Kg	0.421	0.083	1 1/23/2018 16:30) BFM	1/24/2018 22:06	BFM		
Dieldrin	8.66 ug/Kg	0.447	0.089	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
Endosulfan I	U ug/Kg	0.460	0.092	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
Endosulfan II	U ug/Kg	0.644	0.128	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
Endosulfan sulfate	U ug/Kg	0.881	0.175	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
Endrin	U ug/Kg	0.513	0.101	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
Endrin aldehyde	U ug/Kg	0.513	0.101	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
Endrin ketone	U ug/Kg	0.986	0.196	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
g-BHC (Lindane)	U ug/Kg	0.474	0.095	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
g-Chlordane	11.9 ug/Kg	4.60	0.908	10 1/23/2018 16:30		1/25/2018 16:10	BFM		
Heptachlor	U ug/Kg	0.605	0.121	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
Heptachlor epoxide	U ug/Kg U ug/Kg	0.395 0.671	0.078	1 1/23/2018 16:30 1 1/23/2018 16:30		1/24/2018 22:06	BFM BFM		
Methoxychlor Total Chlordane	103 ug/Kg	1.04	0.134 0.208	1 1/23/2018 16:30		1/24/2018 22:06 1/24/2018 22:06	BFM		
Total Toxaphene	U ug/Kg	1.04	3.35	1 1/23/2018 16:30		1/24/2018 22:06	BFM		
σται Τολαρποπο	o ug/Ng	10.0	5.55	1 1/23/2010 10.30	ואווטי	1,27,2010 22.00	الاا ات		
Analysis Desc: EPA 6020 Metals	SCAN by ICP/MS (S)			Preparation Method: EF	A 3050B				
				Analytical Method: EPA 6020					
Arsenic	22 mg/Kg	0.57	0.094	2 1/23/2018 10:3		1/23/2018 14:27	ZS		

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 5 of 18



ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID: 1855123003 Date Received: 1/22/2018 14:12 Matrix: Soil/Solid

Sample ID: SB-3 (0'-2')		Dat	te Collected	1: 1/22/2018 09:06				
Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual
Wet Chemistry								
Analysis Desc: 2540G Percent	Solids (Dryweight)			Analytical Method: SM 2	2540G			
Percent Solids (Dryweight)	91.2 %	0.1		1		1/23/2018 12:17	BFM	
Analysis Desc: EPA 8081 by G0	C (S)			Preparation Method: EP	A 3545			
				Analytical Method: EPA	8081 (G	C)		
Tetrachloro-m-xylene (S)	92 %	50-130		1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Semivolatiles by GC								
Analysis Desc: EPA 8081 by G0	C (S)			Preparation Method: EP	A 3545			
				Analytical Method: EPA	8081 (G	C)		
Decachlorobiphenyl (S)	131 %	50-130		1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	J
4,4'-DDD	1.66 ug/Kg	0.406	0.080	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
4,4'-DDE	4.03 ug/Kg	0.430	0.086	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
4,4'-DDT	1.64 ug/Kg	0.996	0.199	1 1/23/2018 16:30		1/24/2018 22:36	BFM	
Aldrin	U ug/Kg	0.443	0.087	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
a-BHC	U ug/Kg	0.394	0.079	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
a-Chlordane	59.7 ug/Kg	5.53	1.09	10 1/23/2018 16:30) BFM	1/25/2018 16:40	BFM	
b-BHC	U ug/Kg	0.541	0.107	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
d-BHC	U ug/Kg	0.394	0.077	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Dieldrin	6.02 ug/Kg	0.418	0.084	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Endosulfan I	U ug/Kg	0.430	0.086	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Endosulfan II	U ug/Kg	0.603	0.119	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Endosulfan sulfate	U ug/Kg	0.824	0.164	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Endrin	U ug/Kg	0.480	0.095	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Endrin aldehyde	U ug/Kg	0.480	0.095	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Endrin ketone	U ug/Kg	0.922	0.183	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
g-BHC (Lindane)	U ug/Kg	0.443	0.089	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
g-Chlordane	26.9 ug/Kg	4.30	0.849	10 1/23/2018 16:30) BFM	1/25/2018 16:40	BFM	
Heptachlor	U ug/Kg	0.566	0.113	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Heptachlor epoxide	U ug/Kg	0.369	0.073	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Methoxychlor	U ug/Kg	0.627	0.125	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Total Chlordane	290 ug/Kg	9.72	1.94	10 1/23/2018 16:30) BFM	1/25/2018 16:40	BFM	
Total Toxaphene	U ug/Kg	15.7	3.14	1 1/23/2018 16:30) BFM	1/24/2018 22:36	BFM	
Analysis Desc: EPA 6020 Metal	Is SCAN by ICP/MS (S)			Preparation Method: EP	A 3050B			
				Analytical Method: EPA	6020			
A	0.5	0.55	0.000	0. 4/00/0040 40.00	70	4/00/0040 44 00	70	

Report ID: 1855123 - 2066069

8.5 mg/Kg

0.55

2/16/2018

Arsenic

FDOH# E86546 CERTIFICATE OF ANALYSIS

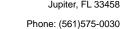
0.090

2 1/23/2018 10:33 ZS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



1/23/2018 14:32 ZS



Fax: (561)575-4118



ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID: 1855123004 Date Received: 1/22/2018 14:12 Matrix: Soil/Solid

- 1033123004		- Da			Matrix.	GOII/GOIIG		
Sample ID: SB-4 (0'-2')		Da	te Collected	d: 1/22/2018 09:11				
Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual
Wet Chemistry								
Analysis Desc: 2540G Percent	Solids (Dryweight)			Analytical Method: SM 2	2540G			
Percent Solids (Dryweight)	92.2 %	0.1		1		1/23/2018 12:17	BFM	
Analysis Desc: EPA 8081 by GC	C (S)			Preparation Method: EP	A 3545			
				Analytical Method: EPA	8081 (G0	C)		
Tetrachloro-m-xylene (S)	83 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Semivolatiles by GC								
Analysis Desc: EPA 8081 by GC) (S)			Preparation Method: EP	A 3545			
				Analytical Method: EPA	8081 (GC	C)		
Decachlorobiphenyl (S)	174 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	J2
4,4'-DDD	U ug/Kg	0.410	0.081	1 1/23/2018 16:30		1/24/2018 22:51	BFM	
4,4'-DDE	2.13 ug/Kg	0.435	0.087	1 1/23/2018 16:30		1/24/2018 22:51	BFM	
4,4'-DDT	U ug/Kg	1.01	0.201	1 1/23/2018 16:30		1/24/2018 22:51	BFM	
Aldrin	U ug/Kg	0.448	0.088	1 1/23/2018 16:30		1/24/2018 22:51	BFM	
a-BHC	U ug/Kg	0.398	0.080	1 1/23/2018 16:30		1/24/2018 22:51	BFM	
a-Chlordane	16.4 ug/Kg	5.60	1.11	10 1/23/2018 16:30	BFM	1/25/2018 16:56	BFM	
b-BHC	U ug/Kg	0.547	0.108	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
d-BHC	U ug/Kg	0.398	0.078	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Dieldrin	2.26 ug/Kg	0.423	0.085	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Endosulfan I	U ug/Kg	0.435	0.087	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Endosulfan II	U ug/Kg	0.609	0.121	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Endosulfan sulfate	U ug/Kg	0.833	0.165	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Endrin	U ug/Kg	0.485	0.096	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Endrin aldehyde	U ug/Kg	0.485	0.096	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Endrin ketone	U ug/Kg	0.933	0.185	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
g-BHC (Lindane)	U ug/Kg	0.448	0.090	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
g-Chlordane	5.07 ug/Kg	0.435	0.086	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Heptachlor	U ug/Kg	0.572	0.114	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Heptachlor epoxide	U ug/Kg	0.373	0.073	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Methoxychlor	U ug/Kg	0.634	0.127	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Total Chlordane	39.0 ug/Kg	0.982	0.196	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Total Toxaphene	U ug/Kg	15.9	3.17	1 1/23/2018 16:30	BFM	1/24/2018 22:51	BFM	
Analysis Desc: EPA 6020 Metals	s SCAN by ICP/MS (S)			Preparation Method: EP	A 3050B			
				Analytical Method: EPA	6020			
Arsenic	6.4 mg/Kg	0.54	0.089	2 1/23/2018 10:33	ZS	1/23/2018 14:37	ZS	

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 7 of 18

ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Environmental Laboratories, Inc.

Lab ID: 1855123005 Date Received: 1/22/2018 14:12 Matrix: Soil/Solid

Sample ID: SB-5 (0'-2') Date Collected: 1/22/2018 09:18

Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual
Wet Chemistry								
Analysis Desc: 2540G Percent S	Solids (Dryweight)			Analytical Method: SM 25	40G			
Percent Solids (Dryweight)	92.3 %	0.1		1		1/23/2018 12:17	BFM	
Analysis Desc: EPA 8081 by GC	(S)			Preparation Method: EPA	3545			
				Analytical Method: EPA 8	081 (GC	2)		
Tetrachloro-m-xylene (S)	85 %	50-130		1 1/23/2018 16:30		1/24/2018 23:07	BFM	
, , ,								
Semivolatiles by GC	(6)			Decreasion Mathed CDA	25.45			
Analysis Desc: EPA 8081 by GC	(5)			Preparation Method: EPA	3545			
				Analytical Method: EPA 8	081 (GC	(2)		
Decachlorobiphenyl (S)	98 %	50-130		1 1/23/2018 16:30		1/24/2018 23:07	BFM	
4,4'-DDD	U ug/Kg	0.405	0.080	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
4,4'-DDE	0.098i ug/Kg	0.430	0.086	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
4,4'-DDT	U ug/Kg	0.995	0.199	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Aldrin	U ug/Kg	0.442	0.087	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
a-BHC	U ug/Kg	0.393	0.079	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
a-Chlordane	U ug/Kg	0.553	0.109	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
b-BHC	U ug/Kg	0.541	0.107	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
d-BHC	U ug/Kg	0.393	0.077	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Dieldrin	0.280i ug/Kg	0.418	0.084	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Endosulfan I	U ug/Kg	0.430	0.086	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Endosulfan II	U ug/Kg	0.602	0.119	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Endosulfan sulfate	U ug/Kg	0.823	0.163	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Endrin	U ug/Kg	0.479	0.095	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Endrin aldehyde	U ug/Kg	0.479	0.095	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Endrin ketone	U ug/Kg	0.922	0.183	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
g-BHC (Lindane)	U ug/Kg	0.442	0.088	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
g-Chlordane	U ug/Kg	0.430	0.085	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Heptachlor	U ug/Kg	0.565	0.113	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Heptachlor epoxide	U ug/Kg	0.369	0.072	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Methoxychlor	U ug/Kg	0.627	0.125	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Total Chlordane	U ug/Kg	0.971	0.194	1 1/23/2018 16:30	BFM	1/24/2018 23:07	BFM	
Total Toxaphene	U ug/Kg	15.7	3.13	1 1/23/2018 16:30		1/24/2018 23:07	BFM	
Analysis Desc: EPA 6020 Metals	SCAN by ICP/MS (S)			Preparation Method: EPA	3050B			
				Analytical Method: EPA 6	020			
Arsenic	5.1 mg/Kg	0.54	0.089	2 1/23/2018 10:33	ZS	1/23/2018 14:41	ZS	

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 8 of 18



Jupiter, FL 33458 Phone: (561)575-0030

Fax: (561)575-4118



ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID: Date Received: 1/22/2018 14:12 Soil/Solid 1855123006 Matrix:

Sample ID: SB-6 (0'-2')		Da	te Collected	l: 1/22/2018 09:22				
Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual
Wet Chemistry								
Analysis Desc: 2540G Percent	Solids (Dryweight)			Analytical Method: SM 25	540G			
Percent Solids (Dryweight)	88.8 %	0.1		1		1/23/2018 10:21	BFM	
Analysis Desc: EPA 8081 by G0	C (S)			Preparation Method: EPA	3545			
				Analytical Method: EPA 8	081 (GC	C)		
Tetrachloro-m-xylene (S)	72 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Semivolatiles by GC								
Analysis Desc: EPA 8081 by G0	C (S)			Preparation Method: EPA	3545			
				Analytical Method: EPA 8	081 (GC	()		
Decachlorobiphenyl (S)	134 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	J2
4,4'-DDD	U ug/Kg	0.428	0.084	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
4,4'-DDE	5.98 ug/Kg	0.454	0.091	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
4,4'-DDT	1.53 ug/Kg	1.05	0.210	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Aldrin	U ug/Kg	0.467	0.092	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
a-BHC	U ug/Kg	0.415	0.083	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
a-Chlordane	18.9 ug/Kg	5.84	1.16	10 1/23/2018 16:30	BFM	1/25/2018 17:11	BFM	
b-BHC	U ug/Kg	0.571	0.113	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
d-BHC	U ug/Kg	0.415	0.082	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Dieldrin	7.31 ug/Kg	0.441	0.088	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Endosulfan I	U ug/Kg	0.454	0.091	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Endosulfan II	U ug/Kg	0.636	0.126	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Endosulfan sulfate	U ug/Kg	0.870	0.173	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Endrin	U ug/Kg	0.506	0.100	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Endrin aldehyde	U ug/Kg	0.506	0.100	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Endrin ketone	U ug/Kg	0.974	0.193	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
g-BHC (Lindane)	U ug/Kg	0.467	0.093	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
g-Chlordane	8.70 ug/Kg	0.454	0.090	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Heptachlor	U ug/Kg	0.597	0.119	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Heptachlor epoxide	U ug/Kg	0.389	0.077	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Methoxychlor	U ug/Kg	0.662	0.132	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Total Chlordane	49.7 ug/Kg	1.03	0.205	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Total Toxaphene	U ug/Kg	16.6	3.31	1 1/23/2018 16:30	BFM	1/24/2018 23:22	BFM	
Analysis Desc: EPA 6020 Metal	Is SCAN by ICP/MS (S)			Preparation Method: EPA	3050B			
				Analytical Method: EPA 6	020			
Arsenic	6.0 mg/Kg	0.56	0.092	2 1/23/2018 10:33	ZS	1/23/2018 14:46	ZS	

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 **CERTIFICATE OF ANALYSIS**

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 9 of 18



ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID: 1855123007 Date Received: 1/22/2018 14:12 Matrix: Soil/Solid

Sample ID: SB-7 (0'-2') Date Collected: 1/22/2018 09:28

Sample ID: SB-7 (0'-2')		Da	te Collected	: 1/22/2018 09:28				
Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual
Wet Chemistry								
Analysis Desc: 2540G Percent	Solids (Dryweight)			Analytical Method: SM 2	2540G			
Percent Solids (Dryweight)	86.2 %	0.1		1		1/23/2018 14:14	BFM	
Analysis Desc: EPA 8081 by G	C (S)			Preparation Method: EP	A 3545			
				Analytical Method: EPA	8081 (G	C)		
Tetrachloro-m-xylene (S)	76 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Semivolatiles by GC								
Analysis Desc: EPA 8081 by G	C (S)			Preparation Method: EP	A 3545			
				Analytical Method: EPA	8081 (G	C)		
Decachlorobiphenyl (S)	136 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	J
4,4'-DDD	U ug/Kg	0.441	0.087	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
4,4'-DDE	9.36 ug/Kg	0.468	0.094	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
4,4'-DDT	2.99 ug/Kg	1.08	0.217	1 1/23/2018 16:30		1/24/2018 23:37	BFM	
Aldrin	U ug/Kg	0.481	0.095	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
a-BHC	U ug/Kg	0.428	0.086	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
a-Chlordane	22.5 ug/Kg	6.02	1.19	10 1/23/2018 16:30		1/25/2018 17:26	BFM	
b-BHC	U ug/Kg	0.588	0.116	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
d-BHC	U ug/Kg	0.428	0.084	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Dieldrin	9.31 ug/Kg	0.455	0.091	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Endosulfan I	U ug/Kg	0.468	0.094	1 1/23/2018 16:30		1/24/2018 23:37	BFM	
Endosulfan II	U ug/Kg	0.655	0.130	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Endosulfan sulfate	U ug/Kg	0.896	0.178	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Endrin	U ug/Kg	0.522	0.103	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Endrin aldehyde	U ug/Kg	0.522	0.103	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Endrin ketone	U ug/Kg	1.00	0.199	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
g-BHC (Lindane)	U ug/Kg	0.481	0.096	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
g-Chlordane	7.20 ug/Kg	0.468	0.092	1 1/23/2018 16:30	BFM	1/24/2018 23:37	BFM	
Heptachlor	U ug/Kg	0.615	0.123	1 1/23/2018 16:30		1/24/2018 23:37	BFM	
Heptachlor epoxide	U ug/Kg	0.401	0.079	1 1/23/2018 16:30		1/24/2018 23:37	BFM	
Methoxychlor	U ug/Kg	0.682	0.136	1 1/23/2018 16:30		1/24/2018 23:37	BFM	
Total Chlordane	47.4 ug/Kg	1.06	0.211	1 1/23/2018 16:30		1/24/2018 23:37	BFM	
Total Toxaphene	U ug/Kg	17.1	3.41	1 1/23/2018 16:30		1/24/2018 23:37	BFM	
Analysis Desc: EPA 6020 Meta	Is SCAN by ICP/MS (S)			Preparation Method: EP	A 3050B			
				Analytical Method: EPA	6020			
A	0.4	0.50	0.005	0.4/00/0040.40.00	70	4/00/0040 4 4 5 4	70	

Report ID: 1855123 - 2066069

8.4 mg/Kg

0.58

2/16/2018

Arsenic

FDOH# E86546 CERTIFICATE OF ANALYSIS

0.095

2 1/23/2018 10:33 ZS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 10 of 18

1/23/2018 14:51 ZS



ANALYTICAL RESULTS

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID: 1855123008 Date Received: 1/22/2018 14:12 Matrix: Soil/Solid

Sample ID: SB-8 (0'-2') Date Collected: 1/22/2018 09:40

Parameters	Results Units	PQL	MDL	DF Prepared	Ву	Analyzed	Ву	Qual			
Wet Chemistry											
Analysis Desc: 2540G Percent	Solids (Dryweight)			Analytical Method: SM 25	40G						
Percent Solids (Dryweight)	93.5 %	0.1		1		1/23/2018 14:14	BFM				
Analysis Doss: EDA 9091 by GO	C (S)			Propagation Mothod: EDA	25/5						
Analysis Desc: EPA 8081 by G0	C (S)			Preparation Method: EPA 3545							
				Analytical Method: EPA 80	081 (GC	(2)					
Tetrachloro-m-xylene (S)	75 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Saminalatilaa hu CC											
Semivolatiles by GC	0 (0)			Daniel Co. Mathaul EDA	05.45						
Analysis Desc: EPA 8081 by G0	C (S)			Preparation Method: EPA	3545						
				Analytical Method: EPA 80	081 (GC	()					
Decachlorobiphenyl (S)	99 %	50-130		1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
4,4'-DDD	U ug/Kg	0.412	0.081	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
4,4'-DDE	0.098i ug/Kg	0.437	0.087	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
4,4'-DDT	U ug/Kg	1.01	0.202	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Aldrin	U ug/Kg	0.450	0.089	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
a-BHC	U ug/Kg	0.400	0.080	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
a-Chlordane	U ug/Kg	0.562	0.111	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
b-BHC	U ug/Kg	0.549	0.109	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
d-BHC	U ug/Kg	0.400	0.079	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Dieldrin	0.428 ug/Kg	0.425	0.085	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Endosulfan I	U ug/Kg	0.437	0.087	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Endosulfan II	U ug/Kg	0.612	0.121	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Endosulfan sulfate	U ug/Kg	0.837	0.166	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Endrin	U ug/Kg	0.487	0.096	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Endrin aldehyde	U ug/Kg	0.487	0.096	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Endrin ketone	U ug/Kg	0.936	0.186	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
g-BHC (Lindane)	U ug/Kg	0.450	0.090	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
g-Chlordane	U ug/Kg	0.437	0.086	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Heptachlor	U ug/Kg	0.574	0.115	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Heptachlor epoxide	U ug/Kg	0.375	0.074	1 1/23/2018 16:30		1/24/2018 23:52	BFM				
Methoxychlor	U ug/Kg	0.637	0.127	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Total Chlordane	U ug/Kg	0.986	0.197	1 1/23/2018 16:30		1/24/2018 23:52	BFM				
Total Toxaphene	U ug/Kg	15.9	3.18	1 1/23/2018 16:30	BFM	1/24/2018 23:52	BFM				
Analysis Desc: EPA 6020 Metal	Is SCAN by ICP/MS (S)			Preparation Method: EPA	3050B						
				Analytical Method: EPA 60	020						
	0.5	0.54	0.000	0.4/00/0040.40.00	70	4/00/0040 44.50	70				

Report ID: 1855123 - 2066069

2.5 mg/Kg

0.54

2/16/2018

Arsenic

FDOH# E86546 CERTIFICATE OF ANALYSIS

0.088

2 1/23/2018 10:33

ZS

1/23/2018 14:56 ZS





Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118

ANALYTICAL RESULTS QUALIFIERS

Workorder: 1855123

Project ID: Margate Executive Golf Course

PARAMETER QUALIFIERS

J2 Surrogate recovery was outside defined limits due to matrix interference.

PROJECT COMMENTS

1855123

A reported value of U indicates that the compound was analyzed for but not detected above the MDL. A value flagged with an "i" flag indicates that the reported value is between the laboratory method detection limit and the

practical quantitation limit.

RR1|Revised Report, Revision #1 (see date below)

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 12 of 18



QUALITY CONTROL DATA

Workorder: 1855123

Project ID: Margate Executive Golf Course

QC Batch: MXX/9371 Analysis Method: EPA 6020

QC Batch Method: EPA 3050B

Associated Lab Samples: 1855123001 1855123002 1855123003 1855123004 1855123005 1855123006

 1855123007
 1855123008
 1855128001
 1855129001
 1855130001
 1855131001

 1855132001
 1855132002
 1855133001
 1855133002
 1855133003

METHOD BLANK: 134197

Blank Reporting

Parameter Units Result Limit Qualifiers

Arsenic mg/Kg U 0.041

LABORATORY CONTROL SAMPLE & LCSD: 134198 134199

Spike LCS **LCSD** LCS LCSD % Rec Max **RPD RPD** Qualifiers Parameter Units Conc. Result Result % Rec % Rec Limit Arsenic 10 10 11 101 107 80-120 9.52 20 mg/Kg

MATRIX SPIKE SAMPLE: 134201 Original: 1855133003

Original Spike MS MS % Rec Parameter Units Result Conc. Result % Rec Limits Qualifiers mg/Kg 3.8 20 24 103 75-125 Arsenic

SAMPLE DUPLICATE: 134200 Original: 1855133003

Original DUP Max Parameter Units Result **RPD RPD** Qualifiers Result Arsenic mg/Kg 3.8 4.1 0 20

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS





QUALITY CONTROL DATA

Workorder: 1855123

Project ID: Margate Executive Golf Course

QC Batch: XXX/10691 Analysis Method: EPA 8081 (GC)

QC Batch Method: EPA 3545

Associated Lab Samples: 1855123001 1855123002 1855123003 1855123004 1855123005 1855123006 1855123007 1855123008 1855159001 1855159003 1855159005 1855159007

1855159009 1855159011 1855159015 1855159017

METHOD BLANK: 134243

_		Blank	Reporting	
Parameter	Units	Result	Limit	Qualifiers
Semivolatiles by GC				
Tetrachloro-m-xylene (S)	%	80	50-130	
Decachlorobiphenyl (S)	%	108	50-130	
a-BHC	ug/Kg	U	0.064	
g-BHC (Lindane)	ug/Kg	U	0.072	
Heptachlor	ug/Kg	U	0.092	
Aldrin	ug/Kg	U	0.071	
b-BHC	ug/Kg	U	0.087	
d-BHC	ug/Kg	U	0.063	
Heptachlor epoxide	ug/Kg	U	0.059	
Endosulfan I	ug/Kg	U	0.070	
g-Chlordane	ug/Kg	U	0.069	
a-Chlordane	ug/Kg	U	0.089	
4,4'-DDE	ug/Kg	U	0.070	
Dieldrin	ug/Kg	U	0.068	
Endrin	ug/Kg	U	0.077	
Endosulfan II	ug/Kg	U	0.097	
4,4'-DDD	ug/Kg	U	0.065	
4,4'-DDT	ug/Kg	U	0.162	
Endrin aldehyde	ug/Kg	U	0.077	
Endosulfan sulfate	ug/Kg	U	0.133	
Methoxychlor	ug/Kg	U	0.102	
Endrin ketone	ug/Kg	U	0.149	
Total Chlordane	ug/Kg	U	0.158	
Total Toxaphene	ug/Kg	U	2.55	

LABORATORY CONTROL S	AMPLE & LCSD:	134244		134245	134245					
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Semivolatiles by GC										
Tetrachloro-m-xylene (S)	%				80	88	50-130	10	30	
Decachlorobiphenyl (S)	%				106	103	50-130	2	30	
a-BHC	ug/Kg	1.25	1.11	1.14	88	92	50-130	3	30	
g-BHC (Lindane)	ug/Kg	1.3	1.13	1.18	87	91	50-130	4	30	

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 14 of 18



QUALITY CONTROL DATA

Workorder: 1855123

Project ID: Margate Executive Golf Course

LABORATORY CONTRO	L SAMPLE & LCSD:	134244		134245	5					
Parameter	Units	Spike Conc.	LCS Result	LCSD Result		LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Heptachlor	ug/Kg	1.25	1.18	1.23	94	98	50-130	4	30	
Aldrin	ug/Kg	1.3	1.21	1.29	93	99	50-130	6	30	
b-BHC	ug/Kg	1.25	1.11	1.15	89	92	50-130	4	30	
d-BHC	ug/Kg	1.25	0.953	0.982	76	79	50-130	3	30	
Heptachlor epoxide	ug/Kg	1.25	1.20	1.23	96	98	50-130	2	30	
Endosulfan I	ug/Kg	1.25	1.28	1.29	103	104	50-130	0.8	30	
g-Chlordane	ug/Kg	1.25	1.20	1.22	96	98	50-130	2	30	
a-Chlordane	ug/Kg	1.25	1.21	1.23	97	98	50-130	2	30	
4,4'-DDE	ug/Kg	1.25	1.27	1.27	102	101	50-130	0	30	
Dieldrin	ug/Kg	1.25	1.24	1.24	99	99	50-130	0	30	
Endrin	ug/Kg	1.25	1.31	1.30	105	104	50-130	0.8	30	
Endosulfan II	ug/Kg	1.25	1.32	1.25	106	100	50-130	5	30	
4,4'-DDD	ug/Kg	1.25	1.18	1.16	95	92	50-130	2	30	
4,4'-DDT	ug/Kg	1.25	1.49	1.48	119	119	50-130	0.7	30	
Endrin aldehyde	ug/Kg	1.25	1.31	1.28	105	102	50-130	2	30	
Endosulfan sulfate	ug/Kg	1.25	1.41	1.31	113	105	50-130	7	30	
Methoxychlor	ug/Kg	1.25	1.37	1.27	110	102	50-130	8	30	
Endrin ketone	ug/Kg	1.25	1.63	1.49	130	119	50-130	9	30	
Total Chlordane	ug/Kg		U	U				0	30	
Total Toxaphene	ug/Kg		U	U				0	30	

MATRIX SPIKE SAMPLE: 134246 Original: 1855123001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Semivolatiles by GC							
Tetrachloro-m-xylene (S)	%				80	50-130	
Decachlorobiphenyl (S)	%				117	50-130	
a-BHC	ug/Kg	0	1.46	1.44	99	50-130	
g-BHC (Lindane)	ug/Kg	0	1.51	1.44	95	50-130	
Heptachlor	ug/Kg	0	1.46	1.29	89	50-130	
Aldrin	ug/Kg	0	1.51	1.72	114	50-130	
b-BHC	ug/Kg	0	1.46	1.44	99	50-130	
d-BHC	ug/Kg	0	1.46	1.25	86	50-130	
Heptachlor epoxide	ug/Kg	0	1.46	1.53	105	50-130	
Endosulfan I	ug/Kg	0	1.46	1.52	104	50-130	
g-Chlordane	ug/Kg	0	1.46	1.5	103	50-130	
a-Chlordane	ug/Kg	0	1.46	1.42	97	50-130	
4,4'-DDE	ug/Kg	0	1.46	1.38	95	50-130	
Dieldrin	ug/Kg	0.227	1.46	1.67	99	50-130	
Endrin	ug/Kg	0	1.46	1.5	103	50-130	

Report ID: 1855123 - 2066069

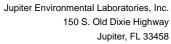
2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Jupiter Environmental Laboratories, Inc..



Page 15 of 18







QUALITY CONTROL DATA

Workorder: 1855123

Project ID: Margate Executive Golf Course

MATRIX SPIKE SAMPLE: 134246 Original: 1855123001

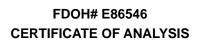
Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Endosulfan II	ug/Kg	0	1.46	1.51	104	50-130	
4,4'-DDD	ug/Kg	0	1.46	1.3	89	50-130	
4,4'-DDT	ug/Kg	0	1.46	1.46	100	50-130	
Endrin aldehyde	ug/Kg	0	1.46	1.6	110	50-130	
Endosulfan sulfate	ug/Kg	0	1.46	1.6	110	50-130	
Methoxychlor	ug/Kg	0	1.46	1.45	99	50-130	
Endrin ketone	ug/Kg	0	1.46	1.83	126	50-130	
Total Chlordane	ug/Kg						
Total Toxaphene	ug/Kg						

SAMPLE DUPLICATE: 134247 Original: 1855123002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Semivolatiles by GC						
Tetrachloro-m-xylene (S)	%	1.06		4	30	
Decachlorobiphenyl (S)	%	1.63		3	30	
a-BHC	ug/Kg	0	U	0	30	
g-BHC (Lindane)	ug/Kg	0	U	0	30	
Heptachlor	ug/Kg	0	U	0	30	
Aldrin	ug/Kg	0	U	0	30	
b-BHC	ug/Kg	0	U	0	30	
d-BHC	ug/Kg	0	U	0	30	
Heptachlor epoxide	ug/Kg	0	U	0	30	
Endosulfan I	ug/Kg	0	U	0	30	
Dieldrin	ug/Kg	7.57	11.7	30	30	
Endrin	ug/Kg	0	U	0	30	
Endosulfan II	ug/Kg	0	U	0	30	
4,4'-DDD	ug/Kg	0	U	0	30	
4,4'-DDT	ug/Kg	2.13	3.27	29	30	
Endrin aldehyde	ug/Kg	0	U	0	30	
Endosulfan sulfate	ug/Kg	0	U	0	30	
Methoxychlor	ug/Kg	0	U	0	30	
Endrin ketone	ug/Kg	0	U	0	30	
Total Chlordane	ug/Kg	89.7	127	21	30	
Total Toxaphene	ug/Kg	0	U	0	30	

Report ID: 1855123 - 2066069

2/16/2018







Jupiter Environmental Laboratories, Inc. 150 S. Old Dixie Highway Jupiter, FL 33458

> Phone: (561)575-0030 Fax: (561)575-4118

QUALITY CONTROL DATA

Workorder: 1855123

Project ID: Margate Executive Golf Course

SAMPLE DUPLICATE: 134247 Original: 1855123002

Parameter	Units	Original Result	DUP Result	RPD	Max RPD Qualifier	s
Semivolatiles by GC g-Chlordane	ug/Kg	10.4	12.2	2	30	
a-Chlordane 4,4'-DDE	ug/Kg ug/Kg	29.7 13.6	34.8 15.5	2 0.7	30 30	

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 1855123

Project ID: Margate Executive Golf Course

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
18551230	06 SB-6 (0'-2')	SM 2540G	WGR/3370		
18551230	01 SB-1 (0'-2')	SM 2540G	WGR/3371		
18551230	02 SB-2 (0'-2')	SM 2540G	WGR/3371		
18551230	03 SB-3 (0'-2')	SM 2540G	WGR/3371		
18551230	04 SB-4 (0'-2')	SM 2540G	WGR/3371		
18551230	05 SB-5 (0'-2')	SM 2540G	WGR/3371		
18551230	01 SB-1 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	02 SB-2 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	03 SB-3 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	04 SB-4 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	05 SB-5 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	06 SB-6 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	07 SB-7 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	08 SB-8 (0'-2')	EPA 3050B	MXX/9371	EPA 6020	MMS/8400
18551230	07 SB-7 (0'-2')	SM 2540G	WGR/3372		
18551230	08 SB-8 (0'-2')	SM 2540G	WGR/3372		
18551230	01 SB-1 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448
18551230	02 SB-2 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448
18551230	03 SB-3 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448
18551230	04 SB-4 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448
18551230	05 SB-5 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448
18551230	06 SB-6 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448
18551230	07 SB-7 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448
18551230	08 SB-8 (0'-2')	EPA 3545	XXX/10691	EPA 8081 (GC)	XGC/3448

Report ID: 1855123 - 2066069

2/16/2018

FDOH# E86546 CERTIFICATE OF ANALYSIS



Jupiter Environmental Laboratories, Inc.

www.jupiterlabs.com 150 S. Old Dixie Highway, Jupiter, FL 33458 (561) 575-0030 • (888) 287-3218 • clientservices@jupiterlabs.com

J.E.L. Log #	1855123
P.O. #	
0	

										Quote #	
company Name Partner Engineery + Screne							Requested Turns Time	iround			
Address	3/11/19	or mach no	noget boets etab	Pres Codes	ne ho enn la se's i		mail mail is			Note: Rush requests s	subject to boratory
City Topporv. Me State FLZip						damin'na Tumbrat	O en promise On	Stor communication in the	(X/N)	Stand	ard
Sampling Site Address 7820 Margate Blud, Margate			ers	notional years and annual	ne poope il Pro Calvery Algorita of a word out	ther teensol hetge and and etgen and an ac		55555555555	Expec	lited	
Attn: Miho Emil Email Project Name Oy 10 (e Exc Project # Sampler Name Signature Si			arameters	the vertice and bay or	o installed by	100 100 1 b	entro tally of a furning	Filtered	Due/_	1	
Name Opiole Exc Proje	ect#	te duticioni. Ton o en escellaci. Inte	organic productions	arai		incer in the man		referra memoralità senti		Due/	
Name/signature (20014 37)	noore	a comment of	in han you w	4	100 A				Field		
# Sample Label (Client ID)	Collected Coll Date Tim	ected Mar			7.00		10000			Comme	nts
15B-1Co'-z')	1/22/18 8	:52	3 1		20		origination			fycar samt aparteme Miller Kardall sin s	t 16 mani
25B-2(0'-2')	1 1	701	51		XX		1 1 1 1 1 1				10.000
3 SB-3Co'-21)	12/89	06	5 (XX				mad mad	of the Live of the state of the	77-10-7-11
4 SB-4(01-2')	1/2/18/9	:11	SI		XX						
5 SB-5(0'-1')	122180	:154	Si		XX						
6 SB-6(0'-2)	1/22/89	E 103	5 1		XX		7 II 10 10 5 TH SLOW OF	and a death or			idano di prof Na semenda
75B-7(0'-2')	1/2/18/9	28	5 1		XX		Jeen Bookers		271	in property of a state of the s	you wante
85B-8(0'-71)	1/2/1/8/9	40	5 1		XX		The second			ionin cross a labor	ore and
9	11/9/0	re newige you	index of males a	16						with sime account and color compared	on Dolvery scal fees On
0	or moves of the	io lecture 8	-30 William (Space This		en e	3 6 (3 E 3 T 1 C) C	Maria Caranta 1		o elui empa	Allega assembly all the con-	y lati other tre the subject to
Matrix Codes*	Pr	es Codes	Relinquished b	У		Date	Time	Received by		Date	Time
S Soil/Solid Sediment SW Surface W GW Ground Water SL Sludge WW Waste Water O Other (Ple DW Drinking Water	ase Specify) B- HN	O ₃ O- Other SO ₄ M- MeOH OH N - Na ₂ S ₂ O ₃	Pour		Inelle	1/22/1	8/4:12	my 2	ey_	1/22/18	14:12
QA/QC level with report None1_2_3 See pr	of Major to ruicklele	((socenny 15)	ile expression etc. Introducement o	ele Cler Grad to	neral Results will be at a color at the color of the	to time the	Resolution of the last of the	graps that effects prof.	afrance Is A Albrigati For	ni frami fri britance. Bedellar in head est	CATAL ENGIN
FDEP Dry Cleaning FDEP UST Pro	e-Approval 🗆	np Control:	malicongetto to	ni pens	ps of self-of hange so at 190 flore silements	m roughoo	problem for a	t ero tue uno lo aptirito a	oinae 5 jaar kar on lawa	and from the con-date.	Augrena des

Page___of__

855123

SAMPLE RECEIPT CONFIRMATION SHEET

Client Information

SDG:

1855123

Req:

2895

Client:

Partner

Emilio

Level:

Project:

Date Rec'd:

1/22/2018 2:12:00 PM

Rec'd via:

Client

Cooler Check

Security Tape

ID Temp # of samples

Present

Intact Method of Receipt

Comments

4.8

8

Checked By: MD

Sample Verification

Loose Caps?

No

All Samples on COC accounted For?

Yes

Broken Containers?

No

All Samples on COC?

Yes

pH Verified?

No

Written on Internal COC?

No

pH Strip Lot#

Sample Vol. Suff. For Analysis?

Yes

Acid Preserved Samples Lot #

Samples Rec'd W/I Hold Time? Are All Samples to be Analyzed? Yes

Base Preserved Samples Lot #

Correct Sample Containers?

Yes Yes

Soil Origin (Domestic/Foreign

Domestic

Client

COC Comments written on COC?

No

Site Location/Project on COC?

Yes

Samplers Initials on COC?

Client Project # on COC?

Samples Received From

No

Sample Date/Time Indicated?

Yes

Project Mgr. Indicated on COC

Yes

TAT Requested:

STD

COC relinquished/Dated by Client?

Yes

Client Requests Verbal Results?

No

COC Received/Dated by JEL

Yes

JEL to Conduct ALL Analyses?

Yes

Subcontract Analysis

Parameter

Via

Lab Name

Comments

Exhibit K Broward County Phase II Environmental Assessment Report Email

Amanda Martinez

From: Jeff Flairty <aydenenv@gmail.com>
Sent: Friday, April 8, 2022 9:56 AM

To: Amanda Martinez; Mike@fimiani.com

Cc: Matthew Scott

Subject: Fwd: EAR - License Application for 4500 S State Road 7 in Hollywood

Morning Amanda:

Here is the County official's response on teh adequacy of the 2018 Phase II for the LUPA review process.

Jeff Flairty, P.E.
President
Ayden Environmental LLC
954-707-2724
jeff@aydenenv.com



----- Forwarded message -----

From: Vanlandingham, David < <u>DVANLANDINGHAM@broward.org</u>>

Date: Fri, Apr 8, 2022 at 9:52 AM

Subject: RE: EAR - License Application for 4500 S State Road 7 in Hollywood

To: Jeff Flairty <aydenenv@gmail.com>

2018 Phase II would be okay as long as we have a statement saying that the use of the property has not changed since the Phase II was performed. If it has, then an update to the Phase I should be performed along with recommendations. I believe ASTM/AAI rules require an update after 6 months.

DV



DAVID VANLANDINGHAM, P.E., DIRECTOR

Resilient Environment Department

ENVIRONMENTAL PERMITTING DIVISION

1 N University Dr, Mailbox 201 | Plantation, Florida 33324

Office: 954.519.1478

www.broward.org

From: Jeff Flairty < aydenenv@gmail.com >

Sent: Friday, April 8, 2022 9:34 AM

To: Vanlandingham, David < <u>DVANLANDINGHAM@broward.org</u>>

Subject: Re: EAR - License Application for 4500 S State Road 7 in Hollywood

External Email Warning: This email originated from outside the Broward County email system. Do not reply, click links, or open attachments unless you recognize the sender's **email address** (not just the name) as legitimate and know the content is safe. Report any suspicious emails to ETSSecurity@broward.org.

I have gotten some pressure from the client on accelerating this, but I will drag my heels. Will two weeks suffice?

Also - I have a potential GC project (Margate Executive) that is starting the LUPA process. They have a 2018 Phase II and I wanted to know if that is current enough for your review, as it does confirm arsenic in the soil and GW?

Hope all is well and looking forward to hearing about your next living space!

Jeff Flairty, P.E.

President

Ayden Environmental LLC

954-707-2724

jeff@aydenenv.com

On Thu, Apr 7, 2022 at 11:15 AM Vanlandingham, David < DVANLANDINGHAM@broward.org > wrote:

Please take your time if you are able.



DAVID VANLANDINGHAM, P.E., DIRECTOR

Resilient Environment Department

ENVIRONMENTAL PERMITTING DIVISION

1 N University Dr, Mailbox 201 | Plantation, Florida 33324

Office: 954.519.1478

www.broward.org

From: Jeff Flairty < aydenenv@gmail.com > Sent: Thursday, April 7, 2022 11:13 AM

To: Vanlandingham, David < <u>DVANLANDINGHAM@broward.org</u>>

Subject: Re: EAR - License Application for 4500 S State Road 7 in Hollywood

External Email Warning: This email originated from outside the Broward County email system. Do not reply, click links, or open attachments unless you recognize the sender's **email address** (not just the name) as legitimate and know the content is safe. Report any suspicious emails to **ETSSecurity@broward.org**.

Morning David I have a draft completed and in finalizing now. I will have you the site assessment this weekend at the latest as well as the no further action with groundwater controls as a condition.

Sent from my iPhone

On Apr 7, 2022, at 11:01 AM, Vanlandingham, David < DVANLANDINGHAM@broward.org > wrote:

Jeff, is there an ETA on the completed SAR? I'm holding off to assign the case and issue the EAR License until it is submitted. Just want to make sure we did not let it fall through the cracks.

We will be onboarding another project manager within the next 3 weeks so this will be in good hands.

DV



DAVID VANLANDINGHAM, P.E., DIRECTOR

Resilient Environment Department

ENVIRONMENTAL PERMITTING DIVISION

1 N University Dr, Mailbox 201 | Plantation, Florida 33324

Office: 954.519.1478

www.broward.org

From: Jeff Flairty < aydenenv@gmail.com>
Sent: Wednesday, January 5, 2022 2:58 PM
To: Eric Metz < metz@metzreg.com>

Cc: Vanlandingham, David < <u>DVANLANDINGHAM@broward.org</u>>; Dawn Meyers (<u>dmeyers@bergersingerman.com</u>) < <u>dmeyers@bergersingerman.com</u>>; Anderson, Clyde < <u>CANDERSON@broward.org</u>>; Dimonnay, Amede < <u>ADIMONNAY@broward.org</u>>

Subject: Re: EAR - License Application for 4500 S State Road 7 in Hollywood

External Email Warning: This email originated from outside the Broward County email system. Do not reply, click links, or open attachments unless you recognize the sender's **email address** (not just the name) as legitimate and know the content is safe. Report any suspicious emails to ETSSecurity@broward.org.

Afternoon David.

Here is a Phase II ESA completed as part of previous due diligence efforts at the site. It documents vinyl chloride impacts to groundwater within a small region of the site exceeding the applicable GCTL (2.8 ug/L to 3.1 ug/L). The client has asked me to conduct additional soil and groundwater sampling to confirm and delineate these impacts onsite. We are at the point where a SAR can be prepared for submission, thus the EAR license application.

We will be looking forward to discussing this project more with your assigned PM.

Kindest Regards.

Jeff Flairty, P.E.

President

Ayden Environmental LLC

954-707-2724

On Wed, Jan 5, 2022 at 10:14 AM Eric Metz <emetz@metzreg.com> wrote:

Hello David!

jeff@aydenenv.com

Jeff Flairty is handling this site with Dawn and myself. I will let him respond.

Thank you,

Eric Metz

213-814-8829

emetz@metzreg.com

From: Vanlandingham, David < <u>DVANLANDINGHAM@broward.org</u>>

Sent: Wednesday, January 5, 2022 10:00:44 AM

To: Eric Metz < emetz@metzreg.com>

Cc: Dawn Meyers (dmeyers@bergersingerman.com) <dmeyers@bergersingerman.com>;

Anderson, Clyde <CANDERSON@broward.org>; Dimonnay, Amede

<a href="mailto: ADIMONNAY@broward.org

Subject: EAR - License Application for 4500 S State Road 7 in Hollywood

Eric,

Hope the new year finds you well and happy.

Our Department received the attached EAR License application and check, along with some other materials. However, I do not seem to have record that we've been notified of any contamination pursuant to Section 27-353 of BCC that would necessitate the EAR License.

If you do have documents that evidence contamination on the property, would you please provide them to us? We will then be happy to process the EAR License as well as assign it to a case manager within the next 60 days.

Thanks,

DV



DAVID VANLANDINGHAM, P.E., DIRECTOR

Resilient Environment Department

ENVIRONMENTAL PERMITTING DIVISION

1 N University Dr, Mailbox 201 | Plantation, Florida 33324

Office: 954.519.1478

www.broward.org

Under Florida law, most e-mail messages to or from Broward County employees or officials are public records, available to any person upon request, absent an exemption. Therefore, any e-mail message to or from the County, inclusive of e-mail addresses contained therein, may be subject to public disclosure.

Under Florida law, most e-mail messages to or from Broward County employees or officials are public records, available to any person upon request, absent an exemption. Therefore, any e-mail message to or from the County, inclusive of e-mail addresses contained therein, may be subject to public disclosure.

Under Florida law, most e-mail messages to or from Broward County employees or officials are public records, available to any person upon request, absent an exemption. Therefore, any e-mail message to or from the County, inclusive of e-mail addresses contained therein, may be subject to public disclosure.

Under Florida law, most e-mail messages to or from Broward County employees or officials are public records, available to any person upon request, absent an exemption. Therefore, any e-mail message to or from the County, inclusive of e-mail addresses contained therein, may be subject to public disclosure.

Margate Executive Golf Course 5301 North Federal Highway, Suite 350 Boca Raton, Florida 33487

October 27, 2022

Mr. David Vanlandingham, P.E., Director
Broward County Resilient Environmental Department
Environmental Permitting Division
1 North University Drive, Mailbox 201
Plantation, Florida 33324

Re: 7870 Margate Boulevard, Margate, Florida/Former Margate Executive Golf Course

Dear Mr. Vanlandingham:

We are in the process of submitting a LUPA application for the property listed above. This letter is to confirm that the use for the property has not changed since the Phase II report from 208 was completed.

Sincerely,

Michael Fimiani

Managing Member

Margate Executive Golf Course, LLC

Exhibit L Traffic Analysis



Springdale Townhomes

Margate, Florida 33063

prepared for:

Fimiani Development Corporation

LUPA Traffic Evaluation





ENGINEER'S CERTIFICATION

I, Hereby certify that I am a registered professional engineer in the State of Florida, practicing with Traf Tech Engineering, Inc., a Florida Corporation under Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statues, Professional License Number 44174, by the State of Florida, Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

Project: Springdale Townhomes Location: Margate, Florida 33063

Client: Fimiani Development Corporation

Report Prepared Traf Tech Engineering, Inc

8400 N. University Drive, Suite 309 by:

Tamarac, Florida 33321

I acknowledge that the procedures and references used to develop the results contained in this report are standards to the professional practice of transportation engineering as applied through professional judgement and experience.

Signature:

Name:

License No.

Date:

Joaquin E. Vargas, P.E.

FL 44174

February 24, 2023

February 24, 2023



INTRODUCTION

Traf Tech Engineering, Inc. has completed a traffic evaluation associated with the proposed Land Use Plan Amendment for the Springdale Townhomes located on the south side of Margate Boulevard just west of NW 76th Avenue in the City of Margate, Broward County, Florida. Figure 1 shows the location of the project site.

TRAFFIC EVALUATION

The traffic evaluation addresses four (4) questions under Section F – Traffic Circulation Analysis. These questions are addressed below.

1) Identify the roadways impacted by the proposed amendment and indicate the number of lanes, current traffic volumes, adopted level of service, and current level of service for each roadway.

The roadway network that will be most impacted by the proposed amendment includes two (2) east-west facilities and one (1) north-south roadway. These three (3) roadways include Margate Boulevard, Atlantic Boulevard and Rock Island Road.

The number of lanes, current traffic volumes, adopted level of services, and current operating conditions (LOS) of the roadways located within the study area are documented in Tables 1a and 1b. Table 1a documents the existing conditions on all study roadways for daily conditions while Table 1b presents the current conditions during the critical PM peak hour.

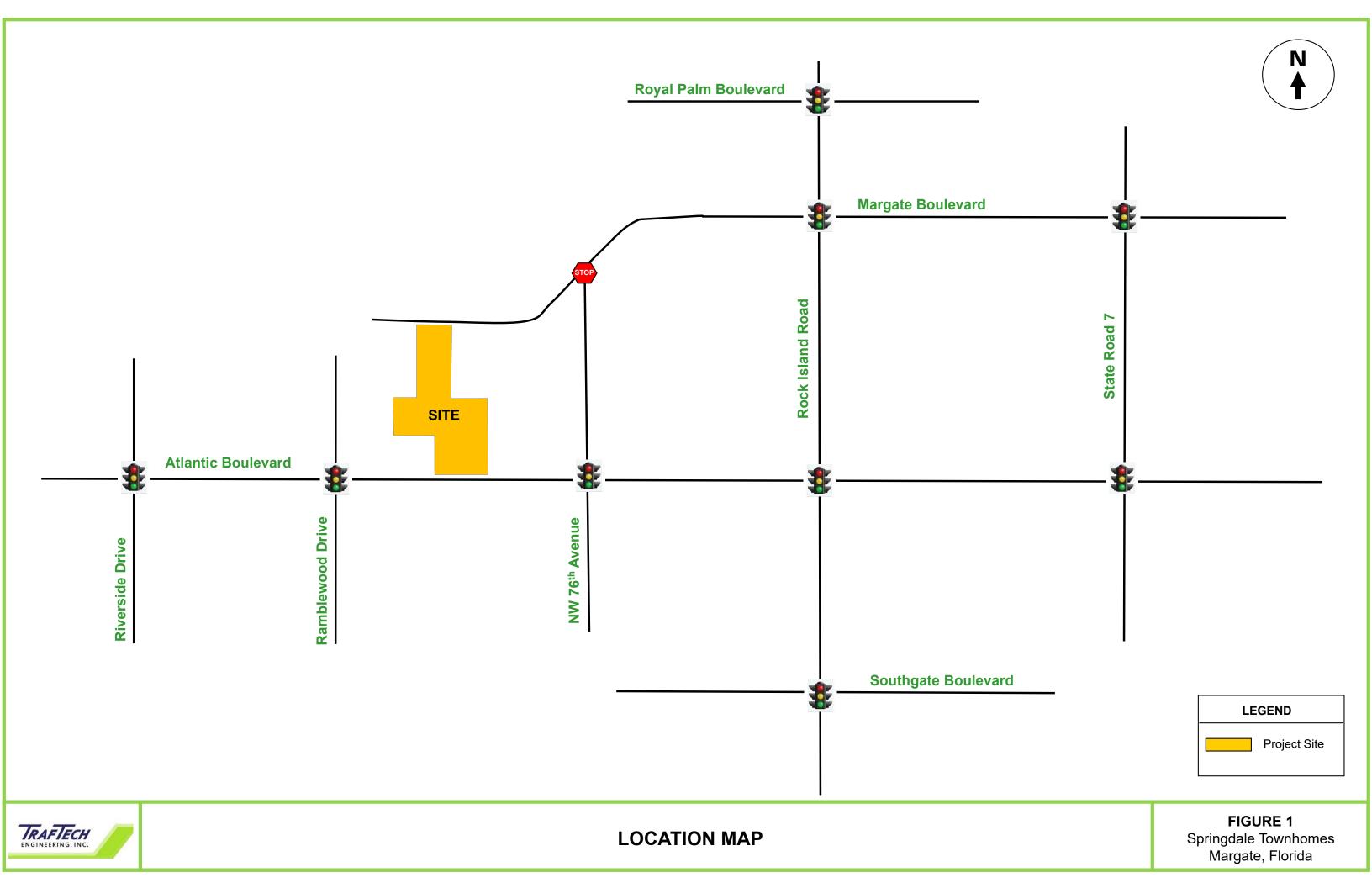


TABLE 1a Springdale Townhomes Existing Traffic Conditions (Daily Volumes)										
Number Roadway Current Roadway Current Roadway										
Atlantic Boulevard	Riverside NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	6 6 6	59,900 59,900 50,000	41,500 41,500 53,500	C C F				
Margate Boulevard	Project Site NW 76 Ave Rock Island	NW 76 Ave Rock Island SR 7	4 4 4	29,160 29,160 29,160	4,400 4,400 8,200	C C				
Rock Island Road	Southgate Atlantic Blvd Margate Blvd	Atlantic Blvd Margate Blvd Royal Palm	4 4 4	37,810 37,810 37,810	42,000 31,500 31,500	F C C				

Source: Broward County Metropolitan Planning Organization

TABLE 1b Springdale Townhomes Existing Traffic Conditions (PM Peak Hour Volumes)										
Roadway From To Number Roadway Current Peak LOS										
	1									
Atlantic Boulevard	Riverside	NW 76 Ave	6	5,390	3,943	С				
	NW 76 Ave	Rock Island	6	5,390	3,943	С				
	Rock Island	SR 7	6	4,500	5,083	F				
Margate Boulevard	Project Site	NW 76 Ave	4	2,628	418	С				
	NW 76 Ave	Rock Island	4	2,628	418	С				
	Rock Island	SR 7	4	2,628	779	С				
Rock Island Road	Southgate	Atlantic Blvd	4	3,401	3,990	F				
	Atlantic Blvd	Margate Blvd	4	3,401	2,993	С				
	Margate Blvd	Royal Palm	4	3,401	2,993	Ċ				

Source: Broward County Metropolitan Planning Organization





2) Identify the projected level of service for the roadways impacted by the proposed amendment for the short (2025) and long term (2045) planning horizons. Please utilize average daily traffic volumes and PM peak hour traffic volumes per Broward County Metropolitan Planning Organization plans and projections.

Tables 2a and 2b document the projected level of service for the roadways located near the proposed amendment. The short-term horizon year was assumed to be the year 2025 while the long-term planning horizon was assumed to be the year 2045. The 2025 and 2045 projected traffic volumes (AADT) and PM peak hour volumes were based on information contained in Broward County's Roadway Level of Service Analysis for 2019/2040 and 2020/2045.

3) Planning council staff will analyze traffic impacts resulting from the amendment. You may provide a traffic impact analysis for this amendment – calculate anticipated average daily traffic generation for the existing and proposed land use designations. If the amendment reflects a net increase in traffic generation, identify access points to/from the amendment site and provide a distribution of the additional traffic on the impacted roadway network and identify the resulting level of service change for the short (5 year) and long-range planning horizons.

A trip generation comparison analysis was undertaken between the potential development under the current land use designation and the potential development under the proposed land use designation. The trip generation comparison analysis was based on the following assumptions:

MAXIMUM LAND USE AND INTENSITY – Existing Land Use Designation o 792 Residential Units (low rise)

MAXIMUM LAND USE AND INTENSITY – Proposed Land Use Designation o 879 Residential Units (low rise)

Tables 3a and 3b on the following page present the results of the trip generation comparison analysis. The results of the trip generation comparison analysis indicate that the proposed 879 residential units generates approximately 558 new daily trips and approximately 38 new PM peak hour trips when compared against the 792 residential units.

TABLE 2a Springdale Townhomes Future Traffic Conditions (Daily Volumes)										
# of Lanes Short Term (2025) Long Term (2045)										
Roadway	From	То	2025/2045	AADT	LOS	AADT	LOS			
Atlantic Boulevard	Riverside	NW 76 Ave	6/6	44,246	С	53,400	С			
	NW 76 Ave	Rock Island	6/6	44,246	С	53,400	С			
	Rock Island	SR 7	6/6	50,685	E	41,300	D			
Margate Boulevard	Project Site	NW 76 Ave	4/4	4,031	С	2,800	С			
	NW 76 Ave	Rock Island	4/4	4,031	С	2,800	С			
	Rock Island	SR 7	4/4	10,438	С	17,900	D			
Rock Island Road	Southgate	Atlantic Blvd	4/4	42,508	F	44,200	F			
	Atlantic Blvd	Margate Blvd	4/4	31,846	С	33,000	С			
	Margate Blvd	Royal Palm	4/4	31,846	С	33,000	С			

Source: Broward County Metropolitan Planning Organization

- Year 2025/Year 2045

	Futi	Spring ure Traffic Cond	TABLE 2b Idale Townhon Itions (PM Pea		nes)		
			# of Lanes	Short Tern	n (2025)	Long Term	(2045)
Roadway	From	То	2025/2045	AADT	LOS	AADT	LOS
Atlantic Boulevard	Riverside	NW 76 Ave	6/6	4,204	F	5,073	С
	NW 76 Ave	Rock Island	6/6	4,204	D	5,073	С
	Rock Island	SR 7	6/6	4,816	С	3,924	D
Margate Boulevard	Project Site	NW 76 Ave	4/4	383	D	266	С
	NW 76 Ave	Rock Island	4/4	383	С	266	С
	Rock Island	SR 7	4/4	992	С	1,701	D
Rock Island Road	Southgate	Atlantic Blvd	4/4	4,038	С	4,199	F
	Atlantic Blvd	Margate Blvd	4/4	3,026	F	3,135	С
	Margate Blvd	Royal Palm	4/4	3,026	F	3,135	С

Year 2025/Year 2045



TABLE 3a Trip Generation Summary (Allowable Density - Existing Land Use) Springdale Townhomes									
		Daily	AM Peak Hour PM Peak Hour					•	
Land Use	Size	Trips	Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound	
Residential Low Rise (LUC 220)	792 units	5,152	268	64	204	361	227	134	
Gross/Driveway/External Trips		5,152	268	64	204	361	227	134	

Source: ITE Trip Generation Manual (11th Edition)

TABLE 3b Trip Generation Summary (Allowable Density - Proposed Land Use) Springdale Townhomes									
			Daily	Daily AM Peak Hour PM Peak Hour					
Land Use	Size	•	Trips	Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Residential Low Rise (LUC 220)	879	units	5,710	295	71	224	399	251	148
External Trips			5,710	295	71	224	399	251	148

Source: ITE Trip Generation Manual (11th Edition)

	Daily	AM Peak Hour			PM Peak Hour		
Difference in External Trips	Trips	Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Proposed - Existing	558	27	7	20	38	24	14





4) Provide any transportation studies relating to this amendment, as desired.

A transportation analysis is presented herein (refer to Tables 1a through 4b). As indicated in Tables 4a and 4b, the project <u>does not exceed</u> the 3% significant impact threshold on any roadway segment located within the study area.

CONCLUSIONS

The proposed Land Use Plan Amendment (LUPA) associated with the Springdale Townhomes will not significantly impact any roadway section within the project's study area. No degradation in level of service will occur as a result of the proposed increase in residential intensity from 792 low-rise units to 879 low-rise units. Finally, the proposed land use change will support the use of transit and increase ridership throughout the Atlantic Boulevard corridor.

TABLE 4a Springdale Townhomes Project Impacts (Daily Volumes)										
Number Roadway Project Traffic = 415 Project Impacts										
Roadway	From	То	of Lanes	Capacity	Percent	Trips	% of Cap.	Significant		
Atlantic Boulevard	Riverside	NW 76 Ave	6	59,900	22%	123	0.2%	No		
	NW 76 Ave	Rock Island	6	59,900	48%	268	0.4%	No		
	Rock Island	SR 7	6	50,000	35%	195	0.4%	No		
Margate Boulevard	Project Site	NW 76 Ave	4	29,160	100%	558	1.9%	No		
	NW 76 Ave	Rock Island	4	29,160	30%	167	0.6%	No		
	Rock Island	SR 7	4	29,160	15%	84	0.3%	No		
Rock Island Road	Southgate	Atlantic Blvd	4	37,810	13%	73	0.2%	No		
	Atlantic Blvd	Margate Blvd	4	37,810	0%	0	0.0%	No		
	Margate Blvd	Royal Palm	4	37,810	15%	84	0.2%	No		

Source: Broward County Metropolitan Planning Organization

TABLE 4b Springdale Townhomes Project Impacts (PM Peak Hour Volumes)										
Number Roadway Project Traffic = 34 Project Impacts										
Roadway	From	То	of Lanes	Capacity	Percent	Trips	% of Cap.	Significant		
Atlantic Boulevard	Riverside	NW 76 Ave	6	5,390	22%	8	0.2%	No		
	NW 76 Ave	Rock Island	6	5,390	48%	18	0.3%	No		
	Rock Island	SR 7	6	4,500	35%	13	0.3%	No		
Margate Boulevard	Project Site	NW 76 Ave	4	2,628	100%	38	1.4%	No		
J	NW 76 Ave	Rock Island	4	2,628	30%	11	0.4%	No		
	Rock Island	SR 7	4	2,628	15%	6	0.2%	No		
Rock Island Road	Southgate	Atlantic Blvd	4	3,401	13%	5	0.1%	No		
	Atlantic Blvd	Margate Blvd	4	3,401	0%	0	0.0%	No		
	Margate Blvd	Royal Palm	4	3,401	15%	6	0.2%	No		

Source: Broward County Metropolitan Planning Organization

NOTE: Significant is defined as project impacts equal or greater than 3% of the roadways Capacity.



Exhibit M Mass Transit Letter



TRANSPORTATION DEPARTMENT

1 N. University Drive, Suite 3100A • Plantation, Florida 33324 • 954-357-8300 • FAX 954-357-8305

Site Plan Review

DATE: October 27, 2022

TO: Amanda Martinez, Land Planner

Dunay, Miskel and Backman, LLP

FROM: Jason McKoy, P.M. Capital Programs, Transportation Dept.

SUBJECT: Springdale Townhomes – Land Use Plan Amendment Analysis

Broward County Transportation Department, Capital Programs staff have reviewed the site plan for the Springdale Townhomes, in the city of Margate and offers the following:

- 1. The Broward County Transportation fixed route bus service running adjacent to the proposed Springdale Townhomes site is the route 42 running in both east / west direction along Atlantic Blvd. to the south of the site boundary. This would also serve as the main service available to the future development.
- 2. The adjacent bus stops within the project scope are bus stops ID# 1439, 1438, 3484 eastbound. ID# 1449, 1450, 1437 westbound. Within a ¼ mile radius of the site limits.
- 3. The scheduled times for the main fixed route 42 transit bus service along with the transit community shuttle services is as follows -

4. Route 42 -

<u>Weekday</u>	530a -1035p	42 min Frequency
<u>Saturday</u>	540a -1027p	34 min Frequency
<u>Sunday</u>	845a -824p	24 min Frequency

5. Community Shuttles

Margate Route A	753	Monday - Friday	7:30am - 4:30pm	60 min
AS	754	Saturday	7:30am - 4:47pm	70 min
Margate Route C	710	Monday - Friday	7:30am - 4:30pm	60 min
Margate Route D	711	Monday - Friday	7:20am - 4:20pm	60 min

6. In the event that any project is to impact any future bus stop, coordinate the temporary relocation of the bus stop or bus stops with Kurt Petgrave at 954-357-6793, kpetgrave@broward.org at least 2 weeks before start of construction.

Thank you for considering BCT's comments.

If you should have any questions, please contact Jason McKoy at (954) 357-8856 or Kurt Petgrave at 954-357-6793.

Regards.

Cc: Arethia Douglas, P.E. Project Manager, Broward County Transportation Department

Exhibit N SCAD Report

The School Board of Broward County, Florida SCHOOL CONSISTENCY REVIEW REPORT

LAND USE SBBC-3446-2022 County No: TBD Springdale Townhomes

October 28, 2022

Growth Management
Facility Planning and Real Estate Department
600 SE 3rd Avenue, 8th Floor
Fort Lauderdale, Florida 33301
Tel: (754) 321-2177 Fax: (754) 321-2179
www.browardschools.com

SCHOOL CONSISTENCY REVIEW REPORT - I AND USE

			<u> </u>	./ \\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
PROJECT INFORMATION	IMPAC	IMPACT OF PROPOSED CHANGE				INFORMATION
Date: October 28, 2022	Units Permitted	0	Units Proposed		87 Existing Land Use:	commercial recreation
Name: Springdale Townhomes		NGE (UNIT:			Proposed Land Use:	
SBBC Project Number: SBBC-3446-2022		Permitted		NET CHAN	C	s-1
County Project Number: TBD	Elem	0	12	12		PUD
Municipality Project Number: TBD	Mid	0	5	5	Section:	35
Owner/Developer: Fimiani Development Corporation	High	0	9	9	Township:	48
Jurisdiction: Margate	Total	0	26	26	Range:	41

SHORT RANGE - 5-YEAR IMPACT

			0.41 10 114		/ (
Currently Assigned Schools	Gross Capacity	LOS* Capacity	Benchmark** Enrollment	Over/Under LOS	Classroom Equivalent Needed to Meet LOS	% of LOS*** Capacity	diturna gelogik ere Kusa sesse a Las desita
Atlantic West Elementary	1,009	1,009	633	-376	-17	62.7%	
Margate Middle	1,328	1,439	1,202	-237	-8	83.5%	
Coconut Creek High	2,884	2,884	1,916	-968	-19	66.4%	

	Adjusted	Over/Under LOS-Adj.	% LOS Capacity		Pro	jected Enro	Ilment	
Currently Assigned Schools	Benchmark	Benchmark Enrollment	Adjusted Benchmark	22/23	23/24	24/25	25/26	26/27
Atlantic West Elementary	635	-374	62.9%	602	591	580	559	548
Margate Middle	1,207	-232	83.9%	1,197	1,237	1,176	1,166	1,206
Coconut Creek High	1,931	-379	67.0%	1,914	1,822	1,830	1,838	1,846

Students generated are based on the student generation rates contained in the currently adopted Broward County Land Development Code.

A traditional cohort survival methodology is used to project school-by-school District traditional school enrollment out over the next five years, and a proportional share of charter school enrollment is used to project future charter school enrollment by school level Districtwide. For more information: http://www.broward.k12.fl.us/dsa/EnrollmentProj.shtml. The annual benchmark enrollment is used to apply individual charter school enrollment impacts against school facility review processes.

* This number already represents the higher of 100% gross capacity or 110% permanent capacity. ** The first Monday following Labor Day. *** Greater than 100% represents above the adopted Level Of Service (LOS)

^{*} See comments for additional Impacted Planning Area information School Consistency Review Report - Prepared by the Facility Planning and Real Estate Department - The School Board of Broward County, Florida

LONG RANGE - TEN-YEAR IMPACT

TOTAL TOTAL TENT ACT								
Impacted Planning Area	Schoo	Aggregate Projected Enrollment						
	Aggregate School Capacity	Aggregate Enrollment	Aggregate Over/(Under) Enrollment	26/27	27/28	28/29	29/30	30/31
Area 7 - Elementary	17,758	11,804	-5,934	10,512	10,321	10,118	9,919	9,719
Area 7 - Middle	7,885	6,326	-1,559	6,477	6,549	6,582	6,616	6,649
Area 7 - High	11,157	8,648	-2,509	8,415	8,244	8,185	8,126	8,068
* See comments for additional Impacted Planning Area information								

CHARTER SCHOOL INFORMATION

Charter Schools within 2-mile radius	2021-22 Contract	2021-22 Benchmark**	Over/(Under)	Projected Enrollment		
The radius	Permanent Capacity	Enrollment		22/23	23/24	24/25
Eagles Nest 6-8	800	57	-743	57	57	57
Panacea Prep Charter School	348	85	-263	85	85	85
Renaissance Charter School At University	1.504	1.454	-50	1.454	1.454	1.454
Somerset Academy Riverside Elementary	750	291	-459	291	291	291
Somerset Academy Riverside Middle	525	124	-401	124	124	124
Somerset Prep Charter @ N Lauderdale	1.000	723	-277	723	723	723
Somerset Prep Charter @ N Lauderdale 9-12	1.000	340	-660	340	340	340

Students generated are based on the student generation rates contained in the currently adopted Broward County Land Development Code.

A traditional cohort survival methodology is used to project school-by-school District traditional school enrollment out over the next five years, and a proportional share of charter school enrollment is used to project future charter school enrollment by school level Districtwide. For more information: http://www.broward.k12.fl.us/dsa/EnrollmentProj.shtml. The annual benchmark school enrollment is used to apply individual charter school enrollment impacts against school facility review processes.

^{**}The first Monday following Labor Day INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF REVIEW

^{*} See comments for additional Impacted Planning Area information School Consistency Review Report - Prepared by the Facility Planning and Real Estate Department - The School Board of Broward County, Florida

PLANNED AND FUNDED CAPACITY ADDITION IN THE ADOPTED DISTRICT EDUCATIONAL FACILITIES PLAN (Years 1 - 5)

School(s)	Description of Capacity Additions				
Atlantic West Elementary	There are no capacity additions scheduled in the ADEFP that would increase the reflected FISH capacity of the school.				
Margate Middle	There are no capacity additions scheduled in the ADEFP that will increase the reflected FISH capacity of the school.				
Coconut Creek High	There are no capacity additions scheduled in the ADEFP that will increase the reflected FISH capacity of the school.				
<u> </u>					

PLANNED CAPACITY ADDITION IN THE ADOPTED DISTRICT EDUCATIONAL FACILITIES PLAN (Years 6 - 10)

Capacity Additions for Planning Area 7				
School Level	Comments			
Elementary	None			
Middle	None			
High	None			

INFORMATION CONTAINED HEREIN IS CURRENT AS OF THE DATE OF REVIEW

Comments

Information contained in the application indicates that the approximately 20.73-acre site is generally located south of Margate Boulevard between NW 79th Avenue and Poinsettia Way in the City of Margate. The current land use designation for the site is Commercial Recreation within a Dashed Line Area of Irregular 7.6, which allows no residential units. The applicant proposes to change the land use designation to Residential (7) within a Dashed Line Area of Irregular 8.43 to allow 87 townhouse (all three or more bedroom) residential units, which is anticipated to generate an additional 26 students (12 elementary, 5 middle, and 9 high) into Broward County Public Schools.

This application was reviewed based on its location in the School District's Long Range Seven Planning Areas, and Ten-Year Long Range Plan contained in the Adopted District Educational Facilities Plan (DEFP). However, the statistical data regarding the Level of Service (LOS) standard status of the actual schools impacted by this land use application in the initial five years of the ten-year period is depicted herein for informational purposes only. Please be advised that this application was reviewed utilizing 2021-22 school year data because the current school year (2022-23) data will not be available until updates are made utilizing the Benchmark Day Enrollment Count.

Schools serving the amendment site in the 2021-22 school year were Atlantic West Elementary, Margate Middle, and Coconut Creek High. The same schools are serving the site in the 2022-23 school year. Based on the District's Public School Concurrency Planning Document, all the schools are operating below the adopted LOS of the higher of 100% gross capacities or 110% permanent capacities in the 2021-22 school year. Incorporating the cumulative students anticipated from approved and vested developments anticipated to be built within the next three years (2021-22 – 2023-24), all the schools are expected to operate below the adopted LOS of the higher of 100% gross capacities or 110% permanent capacities through the 2023-24 school year. It should be noted that the school capacity or Florida Inventory of School Houses (FISH) first three years of the Five-Year Adopted DEFP, FY 2022-23 – 2026-27. In addition, to ensure maximum utilization of the impacted Concurrency Service Areas, the Board may utilize other options such as school boundary changes to accommodate students generated from developments in the County. Charter schools located within a two-mile radius of the subject site in the 2021-22 school year are depicted herein.

Capital Improvements scheduled in the long-range section of the currently Adopted DEFP Fiscal Years 2022-23 – 2026-27, regarding pertinent impacted schools are depicted above. Based on the School District's Seven Long Range Planning Areas, the amendment site is located within School District Planning Area 7. The elementary, middle, and high schools currently serving Planning Area 7 and their cumulative student enrollments, cumulative capacities, and pertinent student enrollment projections are depicted herein. Therefore, Planning Area 7 is anticipated to have sufficient excess capacity to support the students generated by the residential units proposed in the Planning Area.

Please be advised that if approved, the units from this project will be subject to a public school concurrency review at the plat, site plan (or functional equivalent) phase of development review, whichever comes first.

The School Board of Broward County, Florida SCHOOL CONSISTENCY REVIEW REPORT

PROJECT NUMBER: SBBC-3446-2022

OCTOBER 28, 2022 Date

Reviewed By:

Signature

Mohammed Rasheduzzaman, AICP

Name

Planner

Title

^{*} See comments for additional Impacted Planning Area information School Consistency Review Report - Prepared by the Facility Planning and Real Estate Department - The School Board of Broward County, Florida

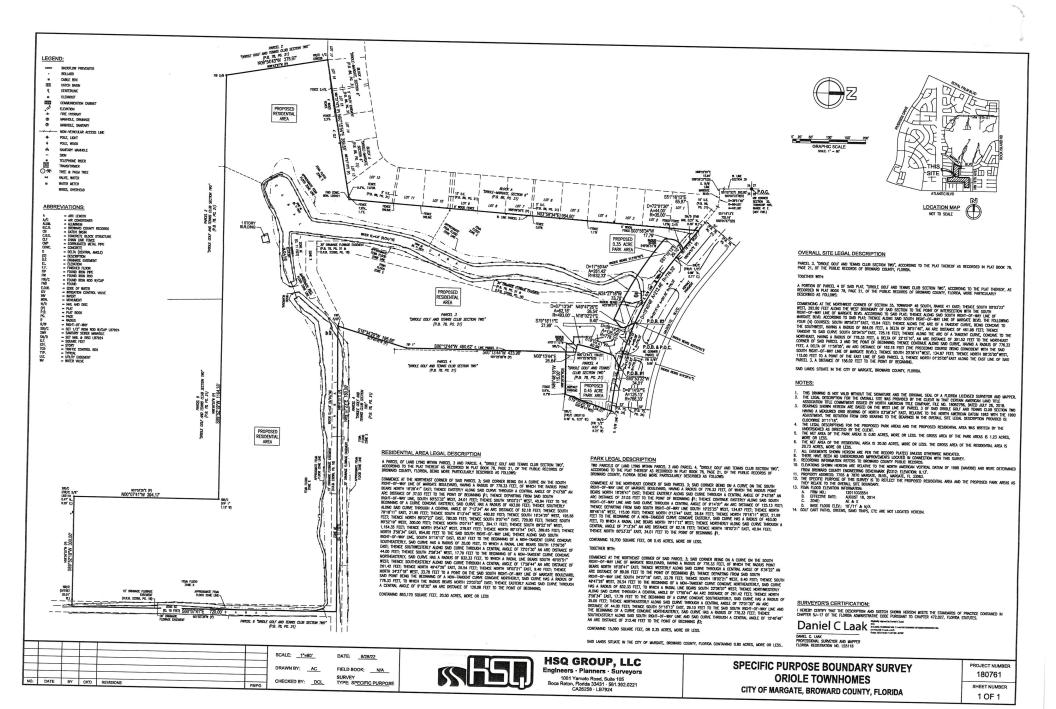


Exhibit O Burrowing Owl Assessment Report



April 22, 2022

Michael Fimiani Margate Executive Golf Course, LLC 5301 North Federal Highway, Suite 350 Boca Raton, FL 33487

Mike@Fimiani.com

Re: Margate Executive Golf Course Burrowing Owl Assessment

Dear Mr. Fimiani,

This is an opinion on the presence or absence of Florida burrowing owls (*Athene cunicularia floridana*) at the Margate Executive Golf Course. This letter also summarizes the process and timing for burrowing owl permitting and relocation. WGI is providing this information to assist you with a land use plan amendment.

The subject property consists of approximately 20 acres and is located at 7870 Margate Boulevard in Margate, FL 33063 (**Figure 1**). The subject property is identified by the following Broward County Parcel ID Number: 4841-35-05-0030.

WGI conducted a field reconnaissance on April 21, 2022. The field reconnaissance was conducted by Rick Harman, PWS, CEP, who is a Certified Environmental Professional. WGI found that portions of the golf course provide suitable habitat for burrowing owls, and WGI observed one or more owls and burrows.

Florida burrowing owls, active nests, eggs, and young are protected under the federal Migratory Bird Treaty Act, state Rule 68A-16.001 Florida Administrative Code (F.A.C.), and state rule 68A-4.001, F.A.C. The Florida Fish and Wildlife Conservation Commission (FWC) has established Species Conservation Measures and Permitting Guidelines for burrowing owls. These guidelines include avoidance measures, such as protective buffer zones, and guidance for permitting. If avoidance measures cannot be implemented, an FWC Incidental Take Permit will be required for unavoidable impacts. An FWC permit with associated mitigation fee can allow burrow excavation and collapse when the burrows are inactive. Burrows are inactive typically during the nonnesting season from July 11 until February 14 but the actual dates depend on the specific nesting activity at each burrow.

For unavoidable impacts, the process for permitting and destruction of inactive burrows begins approximately 6 months before construction starts. A burrowing owl survey is conducted and the permit application is submitted within 3 to 6 months of the start of construction. The permit, once issued, will be valid for one year. But the FWC permit will specify that burrow destruction can only occur immediately prior to construction – within 48 hours of clearing / grading, utility installation, and similar work. This requirement reduces the likelihood that the owls will return to the site. It also avoids repeated disturbance of the owls which would likely be considered harassment and may include notices of violation and enforcement action from FWC.

Based on our understanding of the project schedule, it appears too early at this time to begin the FWC permitting process.

We appreciate your commitment to managing Florida's natural resources in accordance with the state guidelines. If you have any questions, don't hesitate to contact me at john.abbott@wginc.com or 561-687-2220.

Sincerely,

John Abbott, PG, CEP

Director, Environmental Services

FWC Registered Agent for Burrowing Owls

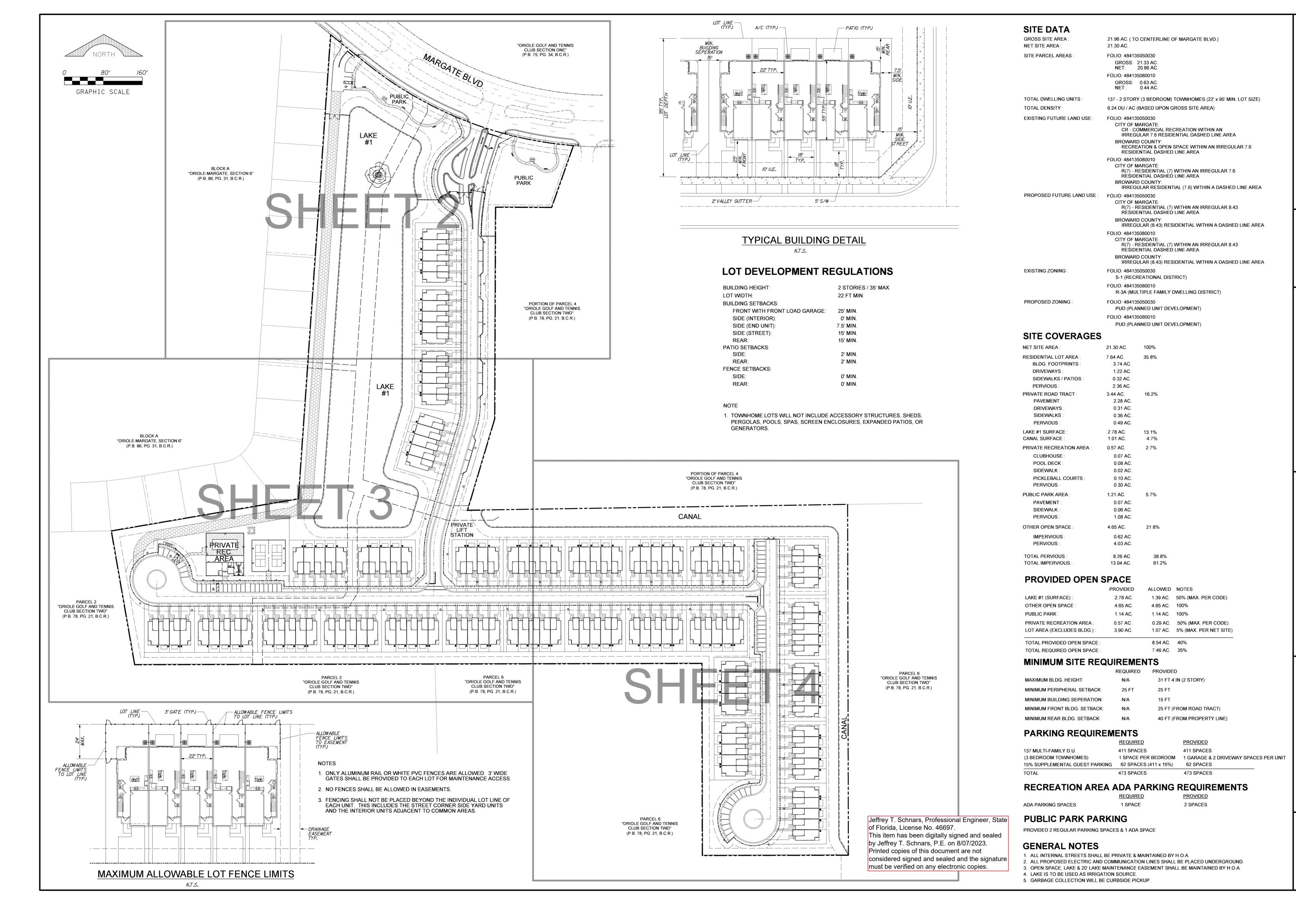
ec: Amanda Martinez; Dunay, Miskel and Backman, LLP

Matthew Scott; Dunay, Miskel and Backman, LLP



Figure 1. Map of the Subject Property

Exhibit P Proposed Site Plan



RE 2 2 4

SITE

S MA **OWNHOM** DAL PRING

Jeffrey T. Schnars, P.E. Civil Engineer Florida Registration No. 46697 (FOR THE FIRM)

JOB NO._ RADDRAWN. JTS DESIGNED. CHECKED