

City of St. Petersburg  
**Housing, Land Use, & Transportation Committee**  
May 11, 2023 – 8:00 AM  
City Hall, Room 100

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Members: Chair Richie Floyd, Vice Chair Gina Driscoll, Council Member Brandi Gabbard, Council Member John Muhammad

Alternate: Council Member Copley Gerdes

Support Staff: Bryan Casañas-Scarsella– City Council Legislative Aide

**1) Call to Order**

**2) Approval of Agenda**

**3) Approval of the April 13, 2023 Minutes**

**4) New Business – May 11, 2023**

- a) *Percentage of required permeable green space for yards abutting streets* (CM Gerdes)—  
Corey Malyszka, Zoning Official Manager.

**Attachments:**

PowerPoint

**Upcoming Meeting Dates & Tentative Agenda Items**

June 8, 2023–

- Draft Consolidated Plan and Proposed Budget. Approval of Draft for Publication and Comment
- Annual update on the City of St Petersburg Employee Assisted Housing Program

**General Attachments:**

- Minutes of the April 13, 2023, HLU Committee Meeting  
Pending and Continuing Referral List
- Agenda Item Support Material

**Informational Attachments:**

- 10-Year Housing Plan Multi Family (including outstanding commitments)
- Matrix of Accomplishments Over a 3-Year Period (FY '21-23)
- 2019-2023 Vacant and Boarded Report Comparison
- Consolidated Plan Budget to Actual (FY '22-23)
- March 2023 Forward Pinellas Board Meeting Summary

City of St. Petersburg  
**Housing, Land Use, & Transportation Committee**  
**Minutes**  
April 13, 2023 – 8:00 AM  
City Hall, Room 100

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Members: Chair Richie Floyd, Vice Chair Gina Driscoll, Council Member John Muhammad

Alternate: Council Member Copley Gerdes

Also present: Rob Gerdes, City Administrator, Bradley Tennant, Assistant City Attorney, Amy Foster, Community and Neighborhood Affairs Administrator.

Support Staff: Bryan Casañas-Scarsella– City Council Legislative Aide

**1) Call to Order**

**2) Approval of Agenda—Council Member Muhammad moved approval; motion passed unanimously.**

**3) Approval of the March, 2023 Minutes—Council Member Gerdes moved approval; motion passed unanimously.**

**4) New Business – April 13, 2023**

a) Three-year update on the City of St. Petersburg’s Housing Plan (Council Chair Gabbard)—Amy Foster, *Community and Neighborhood Affairs Administrator*

Amy Foster, the Community and Neighborhood Affairs Administrator, provided an update on demographics and the housing market in St. Petersburg, followed by an update on the strategic plan and each housing goal and the progress achieved on those goals; she also touched on Mayor Welch’s new expanded strategic plan. Ms. Foster then showcased the city’s test page for housing, which lists tenants’ rights and resources, programs to help residents stay in their homes, and outlines actions taken by Council regarding zoning, permitting and other programs to help with the housing crisis. She explained that she expects that 1,050 units will be added to the original goals.

b) Creation of a regularly updated public-facing dashboard detailing our affordable housing status and goals (Committee Chair Floyd)—Amy Foster, *Community and Neighborhood Affairs Administrator*

Concluding her presentation, Ms. Foster provided a preview to the Committee on the new affordable housing dashboard that was created and recently launched in partnership with the St. Petersburg Downtown Partnership.

Council Member Driscoll then asked about the figures on Slide 16 related to the Namaste Development and two different names that appear in the presentation. Ms. Foster replied that she believes both names refer to the same development and it is not being counted twice. Rob Gerdes, City Administrator, said that building townhomes in an affordable way can be challenging and that they are working on the developer with a possible amendment to the agreement that will be coming before Council. He also mentioned the Arya development on

54th Avenue North between First and Fourth Street that will include 125 workforce units, mixed with market rate units, remarking that it is the first project that the city did under the Economic Stability Loan Program. He also highlighted Lake Maggiore Apartments, with 66 workforce housing units, which is also under construction. Council Member Driscoll then pointed out that that the Lake Maggiore Apartments project is not utilizing city funding but the number of affordable units was reduced due to challenges with changing costs. So, she asked if perhaps the city could help incentivize builders in similar scenarios to retain the original number of affordable units. Mr. Gerdes said that the city made an effort with that development, and they did not qualify for Penny for Pinellas funding from the County due to there not being 30 percent of the units designated as affordable and that an offer was made by the city but they ultimately chose to not take it. Council Member Driscoll then remarked on elevating and expanding the N-Team and other programs to help residents remain in their homes.

Council Member Muhammad commented that the demolition numbers in the presentation seemed low and Mr. Gerdes said that the numbers shown were averages. Council Member Muhammad then asked what challenges builders are having to bring projects to completion under the lot disposition program. Ms. Foster explained that nonprofits were given priority at first but later that changed because they were struggling with funding. She also replied that some of the lots are in the program because they are challenging in and of themselves, such as being in a flood zone or being a unique size. Mr. Gerdes then mentioned some design changes for certified affordable housing that were made by Council. Council Member Muhammad then asked about challenges hiring maintenance workers. Mr. Gerdes said he is open to solutions but he has had a hard time identifying a single solution to solve the problem; he went on to explain that they have started having job fairs and they have placed individuals within departments responsible for hiring, as well as doing outreach, contracting with a new labor firm, banning the box, and raising the minimum pay. He went on to say that they are starting to turn a corner on the hiring issues and are seeing more success. He emphasized that it is a nationwide issue and they are open to any suggestions. Council Member Muhammad then asked about maintaining the city's housing page and the St. Petersburg Downtown Partnership's affordable housing website and Ms. Foster said she did not foresee any issues with that. Council Member Muhammad then asked about how needs are considered when it comes to goal setting. Ms. Foster replied that though the goals could be set higher, they would be unreachable tangibly speaking without increases in federal and state funding sources, as well.

Council Member Gerdes pointed out that he hopes the NTM-1 change will help with increasing the number of three- and four-unit multifamily units.

Chair Floyd expressed concern with the goals and said he would like to them to better reflect the housing need that exists. He also expressed concern with some statements in the St. Petersburg Downtown Partnership's affordable housing dashboard.

***The meeting adjourned at 9:16PM.***

Housing, Land Use, & Transportation Committee Pending & Continuing Referral List						May 11, 2023	
	Topic	Return Date	Date of Referral	Prior Meeting	Referred by	Staff	Notes
1	Percentage of required permeable green space for yards abutting streets.	5/11/2023	12/15/2022		Gerdes		
2	Draft Consolidated Plan and Proposed Budget. Approval of Draft for Publication and Comment	6/8/2023	Annual				
3	Annual update on the City of St Petersburg Employee Assisted Housing Program	6/8/2023	7/7/2022	6/9/2022	Gabbard		
4	St. Petersburg Affordable Housing Advisory Committee – Quarterly Report	7/8/23	2/6/2020	12/8/22	Gabbard		
5	Creation of community eviction standards for City-owned housing and City-subsidized housing	7/8/2023	6/16/2022	2/9/2023	Floyd		
6	An update on the implementation of the Complete Streets Plan.	8/10/2023	3/2/23		Gabbard		
7	A discussion considering the funding and implementation of a city-wide Rebates for Residential Rehabilitation Program.	TBD	3/2/23		Gabbard		
8	Review of the Annual Action Plan	TBD	3/2/23		Gerdes		Moved from BFT on 3/2/2023.
9	Implementation of a City maintained Landlord Registry	TBD	10/6/2022	3/9/23	Figgs-Sanders		
10	Requirement that a percentage of rental units be reserved for voucher holders in City-subsidized housing	TBD	6/16/2022		Floyd		
11	Parking requirements for multi-family dwellings in Downtown St. Petersburg.	TBD	2/10/2022	7/28/2022	Montanari		1/29/2023–Referred from PSI on 1/19/23. 7/28/2022 – CM Montanari asked that the item remain on the referral list.

# HLUT

May 11, 2023

Permeable green space for yards  
abutting streets



**Use of artificial turf is permitted, but installation is limited.**

**Two code provisions limit the location of where it can be placed and limit the amount that may be used:**

Impervious Service Ratio (ISR): because artificial turf does not allow rainwater to freely flow into the ground and will clog over time, it is considered to be an impervious surface, similar to pavement, shell, pavers and buildings.

## Vegetative green space:

Required front and street side yards shall be maintained as permeable landscaped vegetative green space with the exception of driveways, walks, patios and similar paved areas and non-organic mulch areas, which areas combined shall not exceed 25 percent of the required yard area for corner lots and 45 percent of the required yard area for inside lots.

Required yards not abutting streets shall also be maintained as permeable landscaped vegetative green space with the exception of driveways, walks, patios and similar paved areas and non-organic mulch areas.

### Prohibited locations:

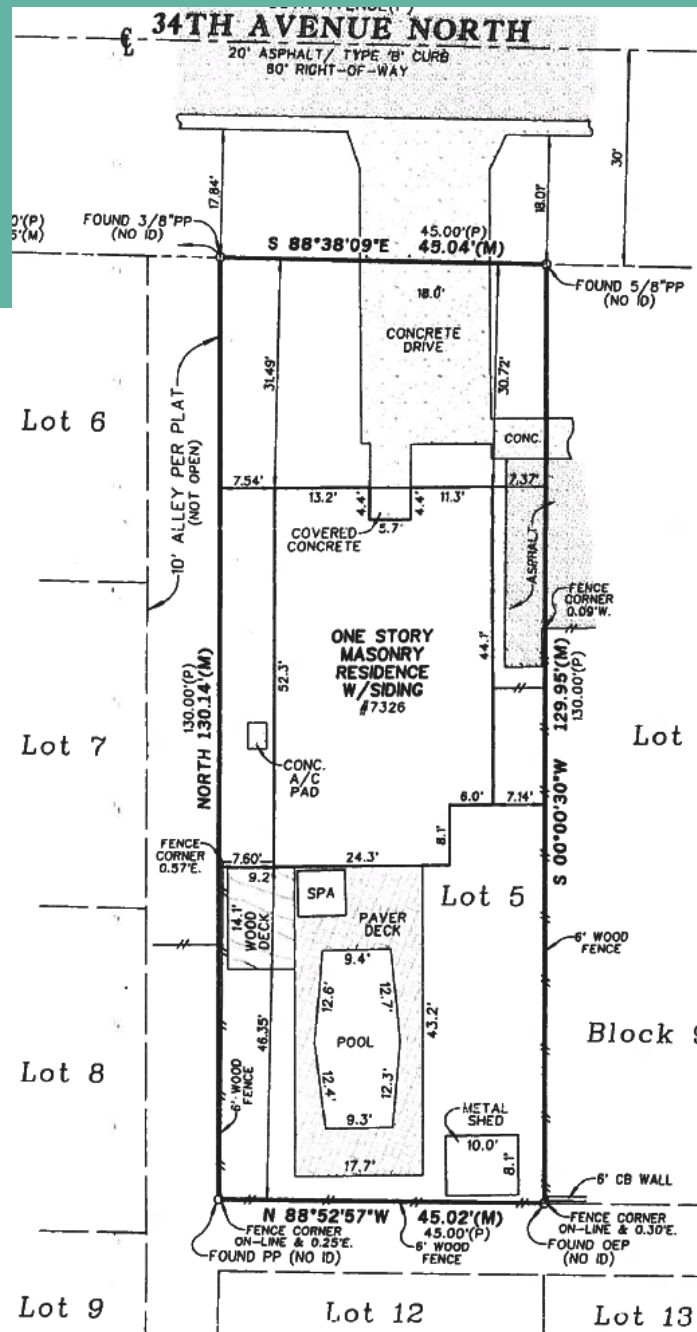
In the parkway (between the property line and the edge of the pavement of the street(s)). This area must be maintained with sod or ground cover plant material.

## Codes Citations –

- Past two years: 12 citations for the installation of artificial turf,
- 8 of which included installation on both the property and the abutting right-of-way

## Variance Requests:

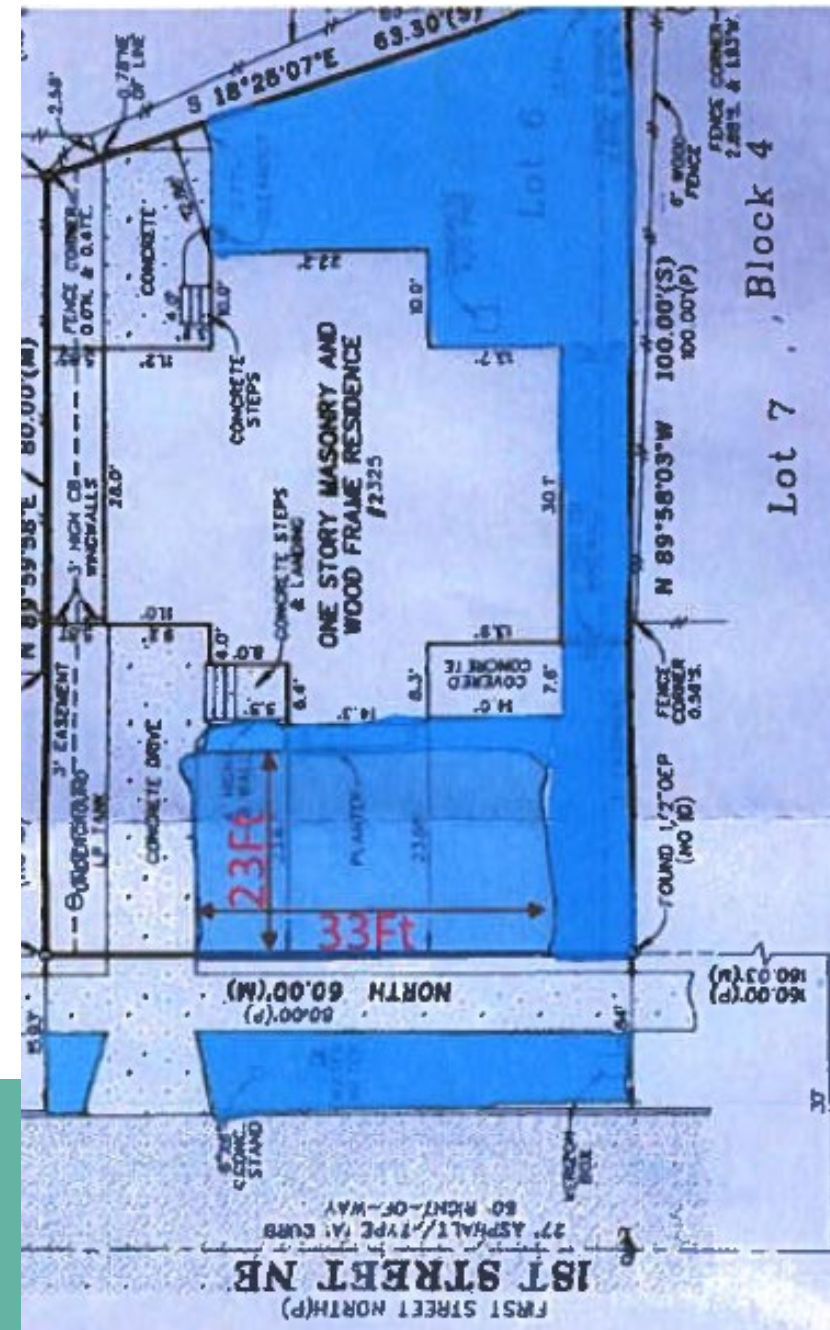
- Past two years , 2 cases
- After the fact variance to allow artificial turf in the front yard to remain



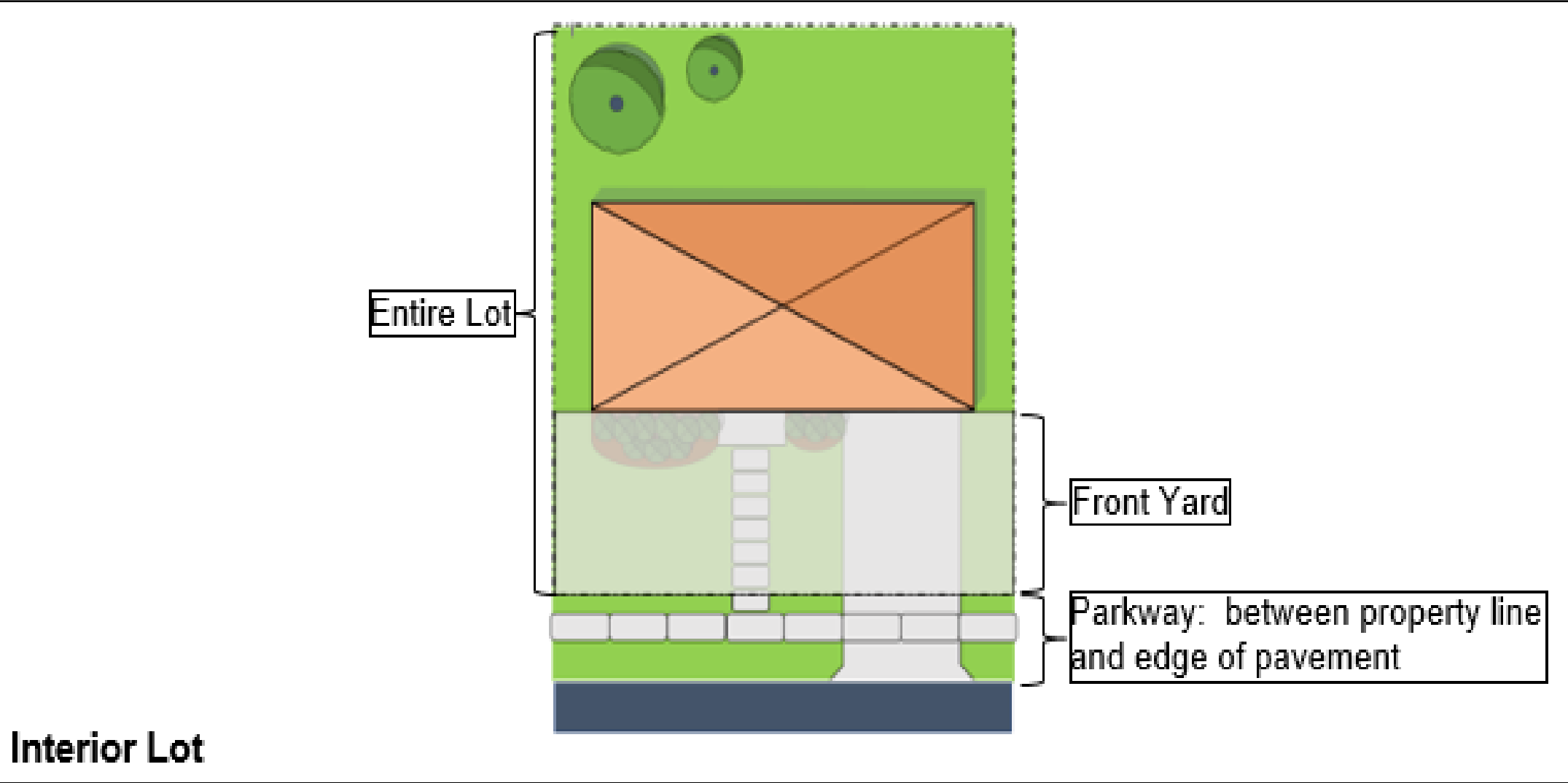
NOTE: This survey is made for the exclusive use of the current owners of the property and also those who

7326 34<sup>th</sup> Ave N – After the fact variance request to ISR to allow artificial turf in front yard to remain. Artificial turf was installed in both the street and alley rights-of-way; request was denied

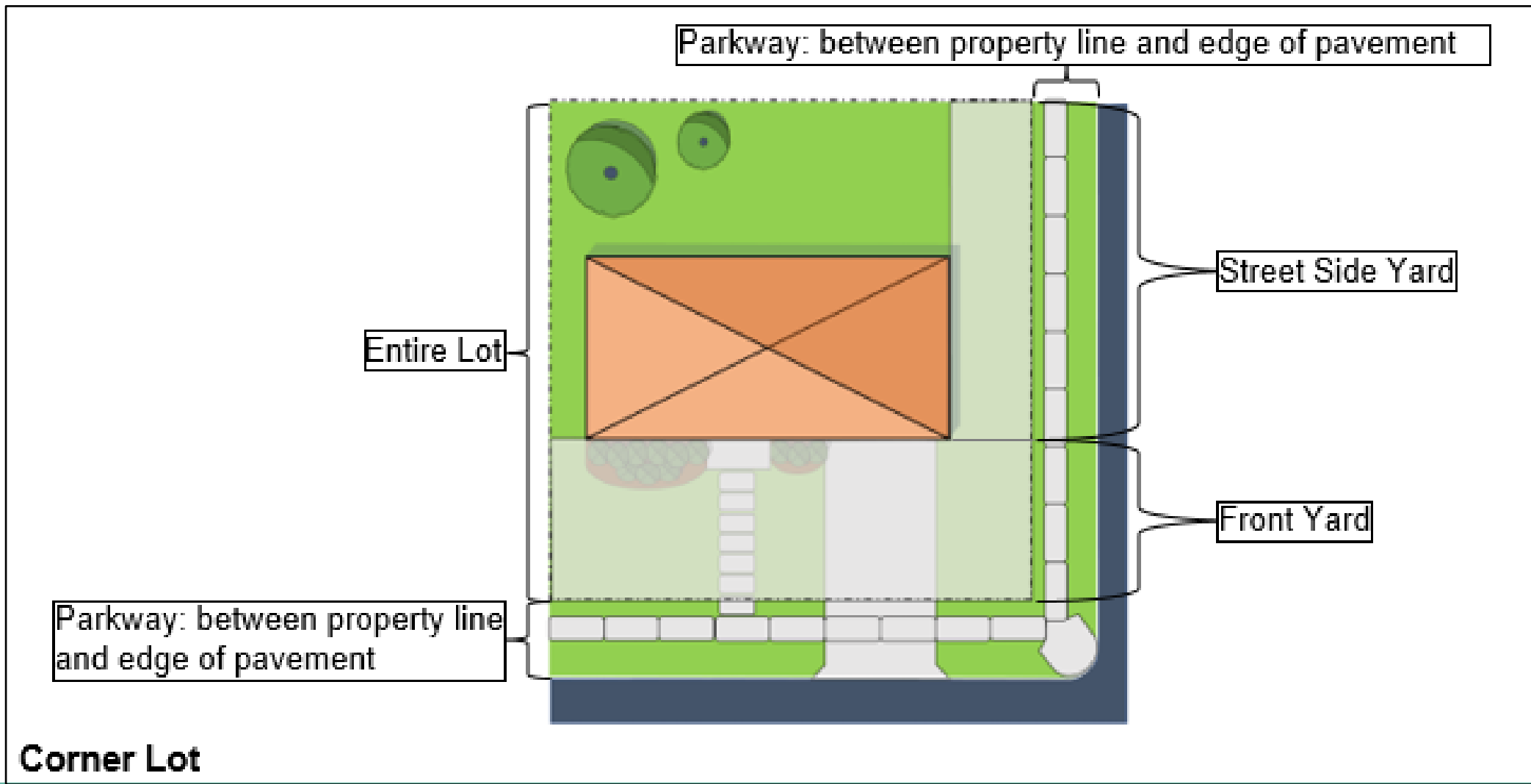




2325 1<sup>st</sup> St NE –  
After the fact variance request to allow artificial turf in front yard to remain; request was denied



Diagrams to determine extent of installation



Diagrams to determine extent of installation

## Research and Stakeholder Feedback:

### Stetson Law

- Memo from Stetson Law to Agency on Bay Management, Tampa Bay Regional Planning Council dated April 18, 2023; and
- Artificial Turf Model Ordinance Assessment presentation

### Bayway Isles

- Email from Travis Jarman dated January 23, 2023
- University of Florida IFAS Extension Memo – Synthetic Turfgrass and the Nine Principles of Florida Friendly Landscaping

### Tampa Bay Builders Association(TBBA )

- Email from Edward Briggs dated March 30, 2023
- Synthetic Grass Overview Presentation

# THANK YOU

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**Planning and Development Services**

1 4<sup>th</sup> Street North

727-892-5453

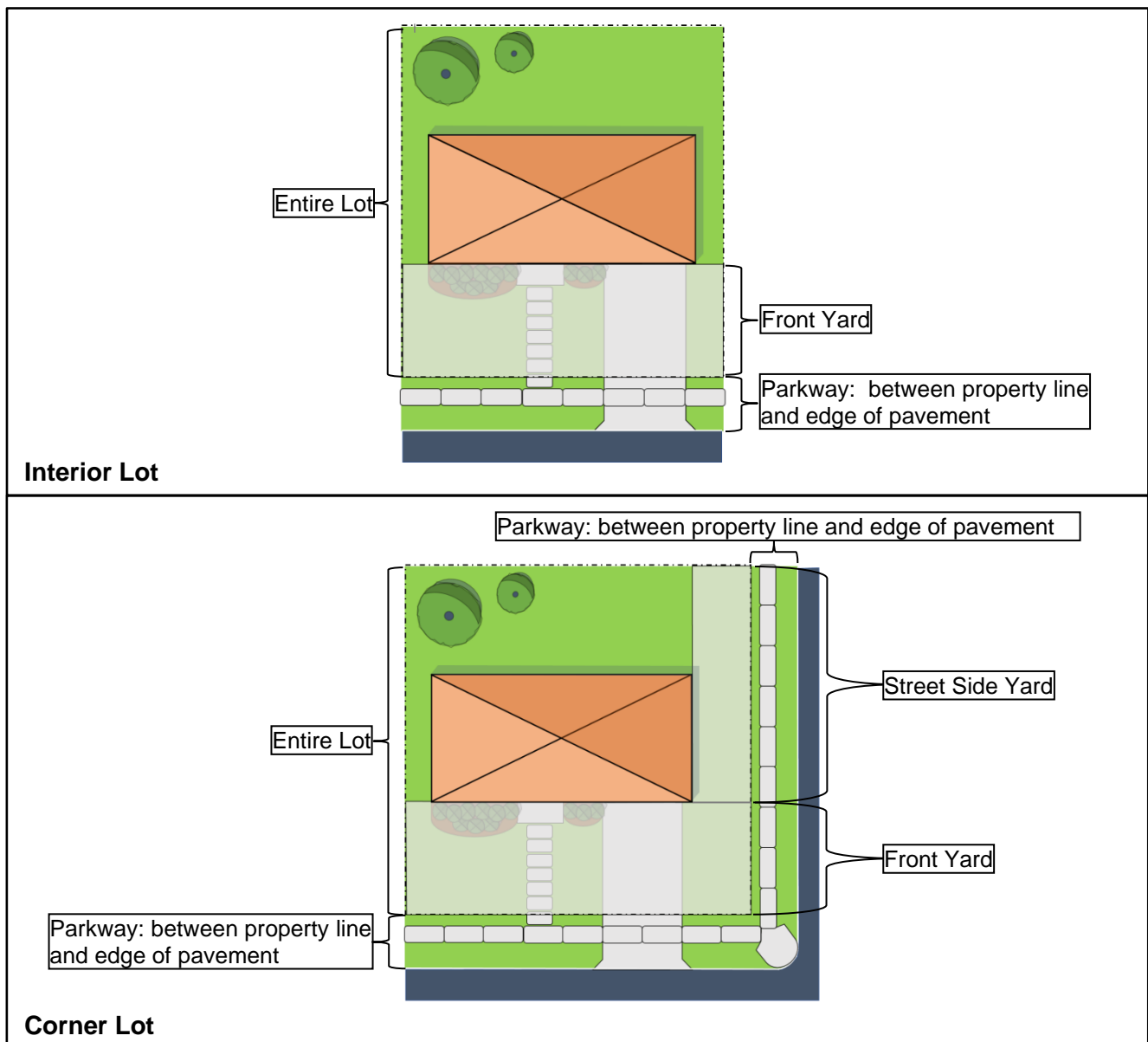
[www.stpete.org/business/planning\\_\\_\\_zoning/zoning.php](http://www.stpete.org/business/planning___zoning/zoning.php)



**CITY OF ST. PETERSBURG**  
**PLANNING & DEVELOPMENT SERVICES DEPT.**  
 DEVELOPMENT REVIEW SERVICES DIVISION

**ARTIFICIAL TURF ON SINGLE-FAMILY RESIDENTIAL PROPERTIES**

The use of artificial turf on single-family properties is allowed, but installation is limited. There are two city code provisions that limit the location of where it can be placed and limit the amount that may be used: Impervious Surface Ratio (ISR) limits and Landscape code requirements for vegetative green space. The purpose of this handout is to provide guidance on how to calculate what amount would be allowed and provide contact information to verify compliance with the regulations prior to installation. You can first verify the zoning of the property by going to [www.stpete.org/LDR](http://www.stpete.org/LDR) and use the GIS Zoning Map Lookup. Email [devrev@stpete.org](mailto:devrev@stpete.org) with questions.



## City Code Provisions

1. Impervious Service Ratio (ISR): because artificial turf does not allow rainwater to freely flow into the ground and will clog over time, it is considered to be an impervious surface, similar to pavement, shell, pavers and buildings.
2. Vegetative green space:  
Required front and street side yards shall be maintained as permeable landscaped vegetative green space with the exception of driveways, walks, patios and similar paved areas and non-organic mulch areas, which areas combined shall not exceed 25 percent of the required yard area for corner lots and 45 percent of the required yard area for inside lots. ([Section 16.40.060.2.1.2.A](#))  
  
Required yards not abutting streets shall also be maintained as permeable landscaped vegetative green space with the exception of driveways, walks, patios and similar paved areas and non-organic mulch areas. ([Section 16.40.060.2.1.1.5](#))
3. Prohibited locations: in the parkway (between the property line and the edge of the pavement of the street(s)). This area must be maintained with sod or ground cover plant material.

How to calculate the maximum impervious surface ratio: first add up the square footage of all buildings, driveways, walks, patios and similar paved areas, then divide by the lot area and the result is the impervious surface ratio of the property. *If the existing impervious areas are below the allowable maximum for the property, artificial turf may be used, up to the maximum allowed for the lot.*

Maximum impervious surface allowed for the entire lot:

[Neighborhood Suburban \(NS\): 60%](#)

[Neighborhood Traditional \(NT\): 65%](#)

Maximum impervious surface allowed in the Front Yard: 45%

Front Yard is determined by using the required front yard setback for the corresponding zoning district.

Maximum impervious surface allowed on a Corner Lot: 25%

Corner Lot includes both the Front Yard and Street Side Yard. Front Yard is determined by using the required front yard setback for the corresponding zoning district. Street Side yard is determined by using the required street side yard setback for the corresponding zoning district.

### Example:

Existing lot is 50-feet wide by 120-feet in depth, for a total of 6,000 square feet, and located in a NT district allowing 65% maximum, or 3,900 square feet.

Existing house, pool, and driveway are 2,500 square feet in area. 3,900 square feet max – 2,500 square feet existing = 1,400 square feet remaining that could be utilized for artificial turf.

Front Yard Calculation: Front yard is 50 by 25 or 1,250 square feet in area, therefore maximum 562.5 square feet impervious allowed.

Existing driveway and walkway in the front yard are 325 square feet, therefore a maximum of 237 square feet of artificial turf allowed.



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**MEMORANDUM**

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**TO:** Agency on Bay Management, Tampa Bay Regional Planning Council  
**FROM:** Maxwell Pyles & Angela Xu from the Jacobs Public Interest Law Clinic for Democracy and the Environment  
**DATE:** April 18, 2023  
**SUBJECT:** Artificial Turf Model Ordinance Research Memorandum

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**I. Introduction**

This memorandum provides an outline of factors to consider in contemplating an artificial turf model ordinance, including the environmental impacts of artificial turf, how municipalities have implemented artificial turf ordinances, the work of the Florida-Friendly Landscaping program, and the concerns of artificial turf industry representatives.

Dr. Kruse’s presentation to the Agency on Bay Management on September 8, 2022 informed the memo, along with scholarly research, analysis of existing ordinances addressing artificial turf, and conversations with industry representatives.

**II. Environmental Impacts of Artificial Turf**

Residential use of artificial turf is increasingly popular but concerns about potential environmental impacts remain.<sup>1</sup> Artificial turf is designed to prevent water from pooling and running off the property, but these systems are imperfect and do not achieve water infiltration into soil as compared to natural turf.<sup>2</sup> Compacted soil base, poor drainage, and hydrophobicity of artificial materials can reduce water infiltration and movement.<sup>3</sup> Furthermore, artificial turf retains more heat than other landscaping materials and can have detrimental ecological effects.<sup>4</sup> Therefore, a potential ordinance should address three primary concerns: water infiltration, urban heat island effect, ecological impacts. Additionally, pollution and the harmful chemicals found in synthetic turf should be considered.

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<sup>1</sup> Jason Kruse, Professor, University of Florida, Presentation to the Agency on Bay Management: The Impacts of Artificial Turf (Sept. 8, 2022).

<sup>2</sup> *Id.*

<sup>3</sup> *Id.*

<sup>4</sup> *Id.*

## A. Water Infiltration

Water infiltration, or permeability, is the process of water on the turf's surface entering the soil. Permeability is important because precipitation that permeates soil recharges groundwater, improving water quantity and quality. Impermeable surfaces decrease recharge and increase runoff, which worsens local water quality. Numerous layers of artificial turf can impact the permeability, but the foundation layers, or the base, decreases permeability due to the materials used and amount or degree of compaction.<sup>5</sup> Currently, the City of Tampa prohibits compacted crushed concrete and compacted limerock as a base stabilization material, and considers the materials to be impervious.<sup>6</sup> Under City of Tampa Ord. No. 2012-48 Section 21-141, and Pinellas County Ord. No. 10-06 Section 58-473, an *impervious surface* is defined as a surface “that has been compacted or covered with a layer of material . . . that [is] highly resistant or prevents infiltration by stormwater,” including roofs, compacted sand, clay, limerock, sidewalks, streets, and parking lots.<sup>7</sup> In contrast, the synthetic turf industry supports these practices and claims that the material is pervious.<sup>8</sup>

A study by King's College London compared natural grass to two types of artificial grass,<sup>9</sup> predicting harmful environmental impacts.<sup>10</sup> The study hypothesized a decrease in water infiltration and increase in runoff in urban areas because of high flood risk, a substantial number of private and public lawns, and “an abundance of impervious surface cover and climate change impacts.”<sup>11</sup> The study showed synthetic grasses displayed significantly greater volumes and proportion of runoff and “perform[s] worse hydrologically than living grass.”<sup>12</sup> Therefore, artificial turf likely reduces overall water infiltration into the soil and promotes runoff into stormwater drains or other water bodies.

When assessing permeability, it is important to consider the integral elements of synthetic turf's base, grass fibers, backing, and infill. Infill is the particulates of material that sit between the turf's blades of grass. The Tampa Bay Builders Association's (TBBA) study conducted in

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<sup>5</sup> *Id.*

<sup>6</sup> Email from Alexander Awad, Chief Planning Engineer, City of Tampa, to Maxwell Pyles et al., Student, Stetson U. Coll. of L. (Feb. 24, 2023, 8:24 EST) (on file with author).

<sup>7</sup> See Email from Alexander Awad (2023).

<sup>8</sup> See <https://turffactorydirect.com/2021/09/23/is-artificial-grass-permeable/> (stating that “properly installed artificial turf” is permeable and drains even better than natural grass).

<sup>9</sup> Thomas J. Simpson et al., *Artificial lawns exhibit increased runoff and decreased water retention compared to living lawns following controlled rainfall experiments*, 63 *Urban Forestry & Urban Greening* Volume (2021).

<sup>10</sup> Robert A. Francis, *Artificial lawns: environmental and societal considerations of an ecological simulacrum*, 30 *Urban Forestry & Urban Greening* 152, 152-156 (2018).

<sup>11</sup> Simpson, *supra* note 9.

<sup>12</sup> *Id.*

Hillsborough County by Anticus Engineering compared natural turf soil with 4 different synthetic turf geotextile bases (the layer on the soil), including concrete and limerock aggregates.<sup>13</sup> Anticus used saturated hydraulic conductivity tests, a common technique to study permeability.<sup>14</sup> The study found that natural grass had less permeability than all synthetic turf bases,<sup>15</sup> an opinion that was echoed by turf industry representatives at a March 6, 2023 TBBA meeting.<sup>16</sup> However, the study only examines aggregate base and does not test the permeability of grass blades, infill, and carpet backing layers of artificial turf that sit on top of the aggregate base,<sup>17</sup> nor did it address the fact that a field or collector drain in or below the base intercept and divert the water before it enters the base layer.

## B. Heat and Increased Ambient Temperature

Artificial turf has been found to have an increased ambient temperature as compared to other common surfaces, both natural and artificial.<sup>18</sup> Natural grass has the ability to dissipate “high levels of radiant heat in urban areas” and has “lower surface and ambient temperatures” compared to artificial turf, particularly synthetic fields with crumb rubber infill.<sup>19</sup> Artificial turf shows great capacity to absorb and retain heat and sunlight,<sup>20</sup> and will significantly increase the temperature of ground surfaces and the surrounding air.<sup>21</sup>

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<sup>13</sup> Report of Permeability Testing Synthetic Turf Section Testing Hillsborough County, Florida Anticus Project No: 01.5348.22. May 12, 2022 at 12. Anticus provides geotechnical engineering services in Florida, <https://anticuseng.com/services/>, (last visited Mar. 15, 2023).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.*

<sup>16</sup> Meeting with Tampa Bay Builders Association, March 6, 2023.

<sup>17</sup> *Id.*

<sup>18</sup> Frank Williams and Gilbert Pulley, *Synthetic Surface Heat Studies*, Brigham Young University (2002).

<sup>19</sup> Julian E. Lozano et al., *Ecosystem services for compensation of artificial turf systems*, (2021).

<sup>20</sup> Tayoaki Aoki, *Solar illuminance and albedo on surface temperature of outdoor sport surfaces*, 11 *Nature and its Environment* 40, 40-48 (2009); Neda Yaghoobian et al., *Modeling the Thermal Effects of Artificial Turf on the Urban Environment*, 49 *J. Applied Meteorology and Climatology* 332, 332-345 (2010).

<sup>21</sup> Lauren Petrass et al., *Understanding how the Components of a Synthetic Turf System Contribute to Increased Surface Temperature*, The 2014 Conference of the International Sports Engineering Association (2014); See also Adam W. Thoms et al., *Models for predicting surface temperatures on synthetic turf playing surfaces*, The 2014 Conference of the International Sports Engineering Association (2014); See also: C.Y. Jim, *Intense summer heat fluxes in artificial turf harm people and environment*, 157 *Landscape and Urban Planning* 561, 561-576 (2017).

Artificial turf surface temperature can rise 54 degrees Fahrenheit higher than natural surfaces, and even sustain high temperatures throughout the evening.<sup>22</sup> Artificial turf was found on average 39 degrees hotter than a sand-based grass field, and 8 degrees hotter than asphalt, with the hottest reading 86 degrees higher than grass.<sup>23</sup> Transpiration from natural grass has a cooling effect, so grass seldom reaches temperatures warmer than 100 degrees Fahrenheit.<sup>24</sup> In comparison, turf field temperatures regularly go above 100 degrees Fahrenheit.<sup>25</sup> The Center for Sports Surface Research at Pennsylvania State University conducted studies finding that surface temperatures of synthetic turf reached an average of 140 to 170 degrees Fahrenheit on hot and sunny days.<sup>26</sup>

Widespread use in residential landscaping could exacerbate the heat island effect and require more energy to cool homes.<sup>27</sup> While head sprinklers and irrigation may help to cool artificial turf, this is a temporary remedy that reduces surface temperatures for only up to half an hour.<sup>28</sup> Instead of crumb rubber, utilizing organic infills or installing fields without such granules can reduce the effect of heat.<sup>29</sup> Plastic-based granules dominate the performance infill market.<sup>30</sup>

This increased temperature could potentially cause issues like the urban heat island effect (UHIE).<sup>31</sup> UHIE is heat accumulation within urban areas due to urban construction and human activities.<sup>32</sup> UHIE can have numerous negative ecological and environmental effects on the surrounding area.<sup>33</sup> Artificial turf has the potential to impact urban heat islands, though “the magnitude of such heat effect is unclear and will depend on . . . color and other specifications of the infill material and of the artificial turf carpet.”<sup>34</sup> A health risk assessment conducted for a

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<sup>22</sup> Jane Loveday, et al., *Seasonal and Diurnal Surface Temperatures of Urban Landscape Elements*, 11 Sustainability (2019).

<sup>23</sup> *Supra* note 17.

<sup>24</sup> Sonia Myrick, *Synthetic Sports Fields and the Heat Island Effect*, National Recreation and Park Association (May 8, 2019); <https://www.nrpa.org/parks-recreation-magazine/2019/may/synthetic-sports-fields-and-the-heat-island-effect/>.

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> *Supra* note 18.

<sup>28</sup> Thomas Serensits, et al., Human health issues on synthetic turf in the USA, 225 J. Sports Engineering and Technology 139, 139-146 (2011).

<sup>29</sup> Eunomia Research & Consulting Ltd, *Environmental impact study on artificial football turf*, (2017), (a study conducted for FIFA).

<sup>30</sup> *Id.*

<sup>31</sup> Li Yang, et al., *Research on Urban Heat-island Effect* (2016).

<sup>32</sup> *Id.*

<sup>33</sup> *Id.*

<sup>34</sup> Joe Lavorgna et al., *A Review of Benefits and Issues Associated with Natural and Artificial Turf Rectangular Stadium Fields - Final Report*, (2011).

municipality in Canada showed that “synthetic turf surfaces may pose a risk of heat-related illness, including burns, heat stress and dehydration.”<sup>35</sup>

### C. Loss of Biodiversity and Ecosystem

Replacing natural surfaces with artificial turf can have negative ecological effects. Natural grass ecosystem services are lost when they are replaced by synthetic grass,<sup>36</sup> and “[l]arge populations . . . are supported by the soil-turfgrass ecosystem,”<sup>37</sup> whereas artificial turf does not provide habitat for wildlife or beneficial insects.<sup>38</sup> For example, “[n]atural turf ecosystems can support abundant populations of earthworms,” which leads to better water infiltration and retention.<sup>39</sup>

Furthermore, artificial turf does not support microorganisms which break down and recycle organic and inorganic products falling on the surface and soil microbes which decompose pesticides and bacteria.<sup>40</sup> Removing the ability of decomposition from the ecosystem could create issues with waste on the turf surface.<sup>41</sup> Over time, runoff containing the waste may enter water bodies, contributing to pollution and nutrient loading.<sup>42</sup> An increase of nutrients in water bodies may impact water quality and cause harmful ecological impacts, such as algal growth.<sup>43</sup> Runoff from artificial turf may also increase microplastics entering water bodies.<sup>44</sup> While it is hard to quantify the sources of many microplastics, Nordic countries found that hundreds or even thousands of metric tons of microplastics were lost from artificial turfs each year.<sup>45</sup> Much of this plastic could potentially be found in marine ecosystems through stormwater.<sup>46</sup>

### D. Pollution, Harmful Chemicals, and Recycling

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<sup>35</sup> Geoff McKee, *The Health Implications of Synthetic Turf Fields with Crumb Rubber Infill - A Human Health Risk Assessment for the Municipality of North Cowichan*, (2015).

<sup>36</sup> Lozano, *supra* note 19.

<sup>37</sup> *Id.*

<sup>38</sup> Florida-Friendly Landscaping Program™, <https://ffl.ifas.ufl.edu/about-ffl/> (last visited Feb. 27, 2023).

<sup>39</sup> *Id.*

<sup>40</sup> Lozano, *supra* note 19.

<sup>41</sup> *See supra* note 1.

<sup>42</sup> Yun-Ya Yang & Mary G. Lusk, *Nutrients in Urban Stormwater Runoff: Current State of the Science and Potential Mitigation Options*, (9 April 2018).

<sup>43</sup> *Id.*

<sup>44</sup> Lozano, *supra* note 19.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.*

Tampa Bay is already struggling with a microplastics issue. Runoff from artificial turf may increase microplastics entering water bodies. One study found that hundreds to thousands of metric tons of microplastics were annually lost from artificial turf, and much of this plastic could potentially be found in marine ecosystems through stormwater.<sup>47</sup>

The Norwegian Institute of Water Research also conducted an environmental risk assessment of the leachate materials from artificial turf, finding that the rubber granulates and concentrated amounts of zinc are the most problematic pollution component.<sup>48</sup> The study found that these pollutants were a risk because of direct run-off into a watercourse instead of infiltration into the ground.<sup>49</sup>

Crumb rubber infill is comprised of chemical substances that can be harmful to human health.<sup>50</sup> 14 European countries conducted a health risk assessment with rubber granule samples made from tires, finding carcinogenic contaminants.<sup>51</sup> The contaminants were below critical levels and the leaching of hazardous substances did not exceed critical limits.<sup>52</sup> However, other research found the presence of microplastics and zinc to be concerning.<sup>53</sup> Research shows that infill with rubber granules can be cancerous<sup>54</sup> and contain other harmful chemicals.<sup>55</sup>

Per- or poly-fluoroalkyl substances (PFAS) are thousands of compounds that break down very slowly in the environment.<sup>56</sup> Some PFAS have been linked to health problems, such as

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<sup>47</sup> Lozano, *supra* note 19.

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

<sup>51</sup> *Id.*

<sup>52</sup> *Id.*

<sup>53</sup> *Id.*

<sup>54</sup> Barbara Laker et al., *A Tangled Timeline*, The Philadelphia Inquirer, Mar. 7, 2023, <https://www.inquirer.com/news/inq2/astroturf-vet-stadium-artificial-turf-monsanto-history-phillies-stadium-forever-chemicals-pfas-20230307.html>; See also: Washington State Department of Health, <https://doh.wa.gov/community-and-environment/schools/environmental-health/synthetic-turf> (last visited Mar. 15, 2023); See also: CBS Austin, <https://cbsaustin.com/news/nation-world/toxic-turf-debate-weighs-safety-of-artificial-crumb-rubber-fields-used-for-kids-sports-parks-fields-stadiums-united-states-synthetic-grass-soccer-football-non-hodgkins-lymphoma-carcinogens> (last visited Mar. 15, 2023).

<sup>55</sup> Rachel Masset et al., *Artificial Turf Infill: A Comparative Assessment of Chemical Contents*, 30 NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy 10, 10-26 (2020); See also: Philip Zuccaro et al., *Assessing extraction-analysis methodology to detect fluoretelomer alcohols (FTOH), a class of perfluoroalkyl and polyfluoroalkyl substances (PFAS), in artificial turf fibers and crumb rubber infill*, Case Studies in Chemical and Environmental Engineering 7 (2023).

<sup>56</sup> EPA, PFAS Explained, <https://www.epa.gov/pfas/pfas-explained> (last visited Mar. 28, 2023).

cancers and kidney or liver issues.<sup>57</sup> Because of its widespread use and presence in the environment, many PFAS are found all over the world: in water, air, soil, blood samples of humans and animals, and food and agriculture products.<sup>58</sup> The Children’s Environmental Health Center of the Icahn School of Medicine at Mount Sinai discourages the use of artificial turf, stating that “environmental contamination from turf field run off” is a concern because of PFAS contaminating water.<sup>59</sup> Furthermore, PFAS are found in artificial turf backing, grass blades, and fibers,<sup>60</sup> and are used in extruding the plastics during manufacturing.<sup>61</sup>

The Environmental Protection Agency, the Center for Disease Control, and the Agency for Toxic Substances and Disease Registry issued a report on recycled crumb rubber, finding numerous metals and volatile and semi-volatile organic compounds (VOCs).<sup>62</sup> Many of these compounds are carcinogens, such as cadmium, benzene, nickel, chromium, and arsenic.<sup>63</sup>

Municipalities across the country – including several in Massachusetts and Connecticut, and two in California’s Bay Area – have limited their usage of artificial turf by way of bans, moratoriums, or making installation illegal.<sup>64</sup> Boston banned artificial turf, citing its makeup of dangerous chemicals, toxic PFAS compounds, VOCs, heavy metals, benzene, and other carcinogens.<sup>65</sup> The artificial turf material also emits high levels of methane, which is a severe

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<sup>57</sup> *Id.*

<sup>58</sup> *Id.*

<sup>59</sup> Sarah Evans, *The Children’s Environmental Health Center of the Icahn School of Medicine at Mount Sinai Strongly Discourages the Installation of Artificial Turf*, <https://www.tapinto.net/towns/scotch-plains-slash-fanwood/articles/the-children-s-environmental-health-center-of-the-icahn-school-of-medicine-at-mount-sinai-strongly-discourages-the-installation-of-artificial-turf> (last visited Apr. 16, 2023).

<sup>60</sup> Toxics Use Reduction Institute, U. Mass. Lowell, *Per- and Poly-fluoroalkyl Substances (PFAS) in Artificial Turf Carpet* (2020).

<sup>61</sup> Sharon Lerner, *Toxic PFAS Chemicals Found in Artificial Turf*, *The Intercept* (Oct. 8, 2019).

<sup>62</sup> EPA, *Synthetic Turf Field Recycled Tire Crumb Rubber Research Under the Federal Research Action Plan, Final Report Part 1 – Tire Crum Rubber Characterization Volume 1*, [https://www.epa.gov/sites/production/files/2019-08/documents/synthetic\\_turf\\_field\\_recycled\\_tire\\_crumb\\_rubber\\_research\\_under\\_the\\_federal\\_research\\_action\\_plan\\_final\\_report\\_part\\_1\\_volume\\_1.pdf](https://www.epa.gov/sites/production/files/2019-08/documents/synthetic_turf_field_recycled_tire_crumb_rubber_research_under_the_federal_research_action_plan_final_report_part_1_volume_1.pdf), (2019).; See also: Lerner, *supra* note 59.

<sup>63</sup> *Id.*

<sup>64</sup> Tom Perkins, *Boston bans artificial turf in parks due to toxic ‘forever chemicals,’* *The Guardian* (Sept. 30, 2022).; See also: Liz Neisloss, *More games or more grass fields? Turf wars play out across Massachusetts*, *WGBH* (May 10, 2022).; *See also* *The Daily Journal*, *Millbrae enacting temporary ban on new artificial turf Council halting installation of synthetic yard treatment pending permanent ordinance limiting its use in the city* (Nov. 1, 2021).; See also: Michelle Pitcher, *Sierra Club opposes artificial turf at Los Gatos schools*, *The Mercury News* (Nov. 14, 2021).

<sup>65</sup> *Id.*

greenhouse gas that also sheds chemicals and microplastics into waterways.<sup>66</sup> Furthermore, the European Commission recently proposed a broad ban on microplastics, including that found in rubber crumb infill.<sup>67</sup>

Presently, while there are initiatives to recycle artificial turf, it appears that these practices are not widespread nor currently implemented.<sup>68</sup>

### III. Implementation of Artificial Turf Ordinances

Most cities in Florida do not seem to address artificial turf or only address it in passing,<sup>69</sup> and the Florida state legislature has not addressed the issue. Thus far, Orlando is the largest municipality in Florida that has clearly identified artificial turf in legislation.<sup>70</sup> Member governments of the Tampa Bay Regional Planning Council are mostly quiet on the issue, with St. Pete Beach addressing artificial turf directly and Tampa having issued guidelines.<sup>71</sup> Otherwise, few municipalities have addressed artificial turf, often in a similar fashion.<sup>72</sup> This section addresses allowable square footage of artificial turf, as requested by the City of Tampa;<sup>73</sup> then details how Tampa Bay Regional Planning Council member governments, Orlando, and other municipalities have addressed artificial turf in their ordinances; and finally, it discusses Florida-Friendly Landscaping as a potential driver of policy in local municipalities.

#### A. Allowable Square Footage

One strategy to address potential negative environmental effects is to set an allowable square footage. Allowable square footage is the total amount of artificial turf allowed on residential property. There are currently two most common methods of setting an allowable limit: impervious surface ratio (ISR) and minimum distance of artificial turf from other landscape aspects. Municipalities may also set hard limits on allowable square footage, but this option has been avoided, most likely due to difficulty in determining a reasonable limit.<sup>74</sup>

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<sup>66</sup> *Id.*

<sup>67</sup> European Commission Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards synthetic polymer microparticles (Proposed 22 Sept. 2022).

<sup>68</sup> Lundstrom, Marjie, et al., *The Dangerous Pileup of Artificial Turf*, <https://www.theatlantic.com/science/archive/2019/12/artificial-turf-fields-are-piling-no-recycling-fix/603874/>; *Can Artificial Grass be Recycled?*, <https://artificialgreens.org/can-artificial-grass-be-recycled/>

<sup>69</sup> City of Weston, Fla., Codified Ordinances § 124.37.3 (2022).

<sup>70</sup> City of Orlando, Fla., Codified Ordinances § 60.224 (2021).

<sup>71</sup> *Infra* note 82.

<sup>72</sup> *Id.*

<sup>73</sup> *See supra* note 6.

<sup>74</sup> *Infra* note 82.

Impervious surface ratio is the total amount of hard-surfaced development over the total area of the property.<sup>75</sup> ISR is often limited by local governments to maintain water permeability and prevent runoff.<sup>76</sup> Municipalities frequently require artificial turf be included as impervious in ISR calculations.<sup>77</sup> Through this ISR method, the municipality will have already set a standard for property owners and the ordinance is merely including turf within that standard. Using ISR is an attractive answer to determining allowable square footage because it sets a maximum amount of artificial turf allowed on residential property under successful existing regulations.

In tandem with ISR, municipalities regulate how far artificial turf may be from other landscaping aspects.<sup>78</sup> Some examples include distance from trees and shrubs, structures, unfenced side property lot lines, and water bodies.<sup>79</sup> On busy properties with numerous improvements or a close proximity to other properties or water bodies, these requirements could limit how much artificial turf is able to exist on the property.

The simplest and most direct way to address allowable square footage is to set a hard limit. For example, Miami Shores allows artificial turf on up to 30% of total area and not in excess of 600 square feet.<sup>80</sup> This appears to be the only Florida local ordinance that clearly defines an allowable square footage.<sup>81</sup> Other ordinances prefer ISR as a method of determining allowable square footage if they address this issue at all. This is likely due to the difficulty of determining a number like Miami Shores that is not arbitrary, whereas ISR is specifically addressing impervious surfaces as an issue.

#### B. Tampa Bay Regional Planning Council Member Governments

Currently, the member governments of the Tampa Bay Regional Planning Council are mostly quiet about artificial turf. Only two counties and two cities have directly addressed artificial turf in some capacity. Hernando County does not accept “synthetic lawns” as living plant installations in landscape designs.<sup>82</sup> Pinellas County, New Port Richey, and St. Pete Beach allow

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<sup>75</sup> *Impervious Surface Ratio (ISR Definition)*, Law Insider. (2023), <https://www.lawinsider.com/dictionary/impervious-surface-ratio-isr>.

<sup>76</sup> *Impervious Surface*, City of Durham, <https://www.durhamnc.gov/864/Impervious-Surface>.

<sup>77</sup> *See infra* note 82.

<sup>78</sup> *Id.*

<sup>79</sup> *Id.*

<sup>80</sup> Village of Miami Shores, Fla., Codified Ordinances § 536 (7)(a)(1)(iii).

<sup>81</sup> *See infra* note 82.

<sup>82</sup> County of Hernando, Fla., Codified Ordinances § 10-25.

artificial turf to meet general landscape maintenance standards for private property.<sup>83</sup> St. Pete Beach goes further by labeling artificial turf as a pervious material, but limits use of artificial turf to 20% of minimum required pervious area.<sup>84</sup> At the Natural Resources Committee meeting, City of Tampa representatives stated that the city has guidelines for installing artificial turf, but these guidelines are not codified.<sup>85</sup> It is possible that similar guidelines exist in other municipalities.

### C. Orlando

Orlando promulgated an ordinance addressing artificial turf in 2021.<sup>86</sup> The Orlando ordinance directly addresses three main issues: water infiltration, urban heat island effect, and aesthetics.<sup>87</sup>

First, Orlando requires a permit from the city to install any artificial turf and the installation is subject to the manufacturer's specifications and any applicable stormwater requirements.<sup>88</sup> Section 60.224(a) allows artificial turf to be installed on residential and other private lands, but the section also prohibits artificial turf within 50 feet of water bodies, within drainage features, and inside the drip line of any tree.<sup>89</sup> This section intends to prevent the adverse effects of runoff from artificial turf without prohibiting its use in residential areas.

Furthermore, § 60.224(b) requires areas of artificial turf to be considered an impervious surface.<sup>90</sup> This section clearly states that the intent of the code is to encourage "living, sub-tropical materials on *pervious* areas" (emphasis added).<sup>91</sup> This notion was reinforced in the city council's summary of the ordinance, noting preference for "materials that store carbon, absorb rainwater, and reduce heat island effects" when discussing artificial turf as an impervious surface.<sup>92</sup> Summarized, Orlando is using the impervious surface ratio to set an allowable square footage. Once again, the ordinance seeks to allow the use of artificial turf, but sets requirements designed to discourage the ill effects, particularly permeability and the urban heat island effect.

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<sup>83</sup> County of Pinellas, Fla., Codified Ordinances § 138-3658 (a)(3); City of New Port Richey, Fla., Codified Ordinances § 26-6 (b); City of St. Pete Beach, Fla., Codified Ordinances § 26-6 (b).

<sup>84</sup> St. Pete Beach, Fla., § 2.1, 22.4 (f).

<sup>85</sup> Agency on Bay Management Natural Resources Committee Meeting, March 29, 2023.

<sup>86</sup> City of Orlando, Fla., § 60.224 (2021).

<sup>87</sup> *Id.*

<sup>88</sup> *Id.*

<sup>89</sup> *Id.* § 60.224(a).

<sup>90</sup> *Id.* § 60.224(b).

<sup>91</sup> *Id.*

<sup>92</sup> City of Orlando Council Agenda Item Ordinance No. 2021-49 (Aug. 23, 2021).

Finally, the ordinance contains numerous provisions to address the aesthetics of artificial turf. The ordinance requires a natural appearance, prohibits plastic/nylon carpeting, prohibits visible use in historical sites, and requires consistent cleaning and maintenance.<sup>93</sup>

Notably, the same ordinance also enacted Florida-Friendly Landscaping into the code.<sup>94</sup> Orlando's city council enacted the ordinance with findings of no fiscal impact<sup>95</sup> and without public comment or discussion by councilmembers.<sup>96</sup>

#### D. Other Municipalities

Some smaller municipalities have also addressed artificial turf, usually more robustly than Orlando's ordinance. Particularly, small municipalities in South Florida have ordinances addressing artificial turf in a consistent fashion. Lantana, Lighthouse Point, Marco Island, Miami Shores, Surfside, and Weston use strikingly similar language in their ordinances.<sup>97</sup> While some differences occur, the language clearly shows the cities based their ordinance off the same source. A broader search found that even the city of Beverly Hills, California uses much of the same base language.<sup>98</sup> These cities' ordinances included permitting, design, installation, and additional requirements.

##### 1. Permitting

Each city requires a permitting process in order to install artificial turf on residential property.<sup>99</sup> The cities note what is required in the application for the permit, with the exception of Lantana, which merely requires a permit.<sup>100</sup> The other permits require landscaping plans for the property, including the dimensions and details of turf and other natural/artificial spaces.<sup>101</sup> For example, Miami Shores requires the plans to maintain a maximum allowable area for artificial turf at 30% of rear yard area but no more than 600 square feet.<sup>102</sup> The other cities do not directly address

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<sup>93</sup> City of Orlando, Fla., § 60.224 (c) - (d).

<sup>94</sup> *Supra* note 91.

<sup>95</sup> *Id.*

<sup>96</sup> City of Orlando City Council Meeting, (August 23, 2021). [https://www.youtube.com/live/IHZXerO\\_KhI?feature=share](https://www.youtube.com/live/IHZXerO_KhI?feature=share) at 1:06:30.

<sup>97</sup> City of Lantana, Fla., Codified Ordinances § 10.5-23 (e); City of Lighthouse Point, Fla., Codified Ordinances § 42-392; City of Marco Island, Fla., Codified Ordinances § 30-435 (i); Village of Miami Shores, Fla., Codified Ordinances § 536; City of Surfside, Fla., Codified Ordinances § 90-87 (15); City of Weston, Fla., Codified Ordinances § 124.37.3.

<sup>98</sup> City of Beverly Hills, Cali., Codified Ordinances § 10-3-2519.5.

<sup>99</sup> *Supra* note 82.

<sup>100</sup> *Id.*

<sup>101</sup> *Id.*

<sup>102</sup> Miami Shores, Fla., § 536 (7)(a)(1)(iii).

the maximum allowable area.<sup>103</sup> Permit applications must also contain irrigation details, turf manufacturer and specifications, drawings of installed turf cross sections and/or a sample of the turf, and a survey of the property.<sup>104</sup> Weston and Miami Shores also require the application to include a calculation of pervious and impervious area, with Weston requiring at least 40% pervious area.<sup>105</sup>

## 2. Design Standards

Design standards set in these ordinances mostly involve the type of materials used and how the turf will interact with other landscaping properties.<sup>106</sup> The ordinances require the turf blades to be made of polypropylene and/or polyethylene, but the ordinances are inconsistent about which material, and Lantana contains no such requirement.<sup>107</sup> Each ordinance requires the use of cut-pile infill (blades similar to natural blades of grass) and requires infill material such as silica sand.<sup>108</sup> The ordinances require permeable backing to the turf itself, with Miami Shores specifically requiring a drain rate of 15 inches per hour and Marco Island allowing turf with a permeability exceeding that of real turf.<sup>109</sup> The ordinances require lead free and flame retardant materials, minimum face weight and blade height, prohibition of indoor/outdoor carpeting, and exceptions for sports turf (ex. putting green height may be lower).<sup>110</sup>

## 3. Installation Standards

Installation standards include materials used and actions taken during installment.<sup>111</sup> The ordinances require the installment to be completed by a Florida licensed general contractor or professional.<sup>112</sup> Florida Department of Business and Professional Regulation requires a landscape architecture license for “design landscape that provides for drainage and run-off that limits erosion.”<sup>113</sup> It is unclear if the ordinances intend to invoke this licensure requirement. The cities also require installation up to the manufacturer’s specifications, use of compacted aggregate material at a minimum of three inches, and a subgrade designed for positive drainage.<sup>114</sup> The turf

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<sup>103</sup> *Supra* note 82.

<sup>104</sup> *Id.*

<sup>105</sup> Miami Shores, Fla., § 536 (7)(a)(1)(i); Weston, Fla., § 124.37.3 (G)(6).

<sup>106</sup> *Supra* note 82.

<sup>107</sup> *Id.*

<sup>108</sup> *Id.*

<sup>109</sup> *Id.*

<sup>110</sup> *Id.*

<sup>111</sup> *Supra* note 82.

<sup>112</sup> *Id.*

<sup>113</sup> Department of Business and Professional Regulation, <http://www.myfloridalicense.com/dbpr/services-requiring-a-dbpr-license/>.

<sup>114</sup> *Supra* note 82.

layer must have invisible seams with proper anchoring and use of infill.<sup>115</sup> Furthermore, the installation process needs to protect the roots of trees and shrubs and artificial turf may not be installed within a certain distance from trees, shrubs, structures, or unfenced side property lot lines.<sup>116</sup>

#### 4. Additional Standards

Additional standards include maintenance requirements of keeping turf clean from weeds and debris, fadeless, and require fixing tears and holes.<sup>117</sup> Municipalities prohibit use of turf in public rights-of-way or swales.<sup>118</sup> Miami Shores standards only apply to the rear yard and driveway, whereas Weston only allows use in the rear yard, and the others are quiet on the matter.<sup>119</sup> Lantana allows the town to remove artificial turf at any time, for utility work or otherwise, and requires the property owner to cover costs to repair or reinstall.<sup>120</sup> Lighthouse Point requires easement holders on the property to agree to installation in writing and requires the owner to repair damage done by the easement holder.<sup>121</sup> Lantana also requires the turf to be pinned or staked to an adjacent seawall and may not be directly placed on a seawall.<sup>122</sup> Marco Island treats the turf as impervious, with a maximum of 67% total impervious surface area for the property, but it may be used in pervious calculations if the applicant can prove permeability.<sup>123</sup> Lantana requires that the turf structure as a whole has a minimum permeability of 30 inches per hour per square yard.<sup>124</sup>

In total, the municipalities address many of the same issues as Orlando, including permeability and aesthetics, but these municipalities go further to include more finely tuned issues. In general, this fine tuning creates a higher barrier to entry for residential property owners, but there remains a question of enforcement of the requirements after installation is permitted. Many of these ordinances fail to accurately convey the allowable square footage under the law, favoring requiring conformance with existing landscape and Impervious Surface Area standards. While this may be advantageous from a municipalities' perspective, this may be confusing or unhelpful for some property owners. A potential artificial turf customer may not realize the importance of these standards or know how to ensure compliance with the law without the ordinance having clear standards, like Miami Shores. Alongside the material requirements in these cities' ordinances, a

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<sup>115</sup> *Id.*

<sup>116</sup> *Id.*

<sup>117</sup> *Id.*

<sup>118</sup> *Id.*

<sup>119</sup> *Id.*

<sup>120</sup> Lantana, Fla., § 10.5-23 (e)(2)(l).

<sup>121</sup> Lighthouse Point, Fla., § 42-392.

<sup>122</sup> Lantana, Fla., § 10.5-23 (e)(2)(d).

<sup>123</sup> Marco Island, Fla., § 30-435 (e)(3).

<sup>124</sup> Lantana, Fla., § 10.5-23 (e)(1)(b).

model ordinance should clearly set standards for allowable square footage, permeability, landscaping, and allowable uses.

#### E. Florida-Friendly Landscaping

An additional factor is how different communities incorporate the Florida-Friendly Landscaping program (FFL) as an influence for landscaping.<sup>125</sup> FFL is “a partnership between the University of Florida, Institute of Food and Agricultural Sciences Extension (UF/IFAS Extension) and the Florida Department of Environmental Protection (DEP).”<sup>126</sup> FFL applies goals and aesthetics that fit each community’s unique landscape conditions, while promoting sustainability.<sup>127</sup> The ultimate goal is reducing nonpoint source pollution by utilizing less pesticides, water, and fertilizer.<sup>128</sup> FFL considers its guidance as “low-impact, environmentally friendly, science-based landscape practices.”<sup>129</sup>

Approximately 50 Florida counties have an active FFL program,<sup>130</sup> including Hillsborough,<sup>131</sup> Manatee,<sup>132</sup> Pasco,<sup>133</sup> and Pinellas.<sup>134</sup> To encourage using FFL, Pinellas County

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<sup>125</sup> Orlando incorporates this. *See* City of Orlando, Fla., § 60.229, 66.200.

<sup>126</sup> Florida-Friendly Landscaping Program™, *supra* note 38.

<sup>127</sup> *Id.*

<sup>128</sup> *Id.*

<sup>129</sup> *Id.*

<sup>130</sup> UF IFAS Extension Manatee County, *Florida-Friendly Landscaping™ in Manatee County*, YouTube (Mar. 21, 2022), <https://www.youtube.com/watch?v=hqLLjnqg5aw>.

<sup>131</sup> Florida-Friendly Landscaping™, UF IFAS Extension Hillsborough County, <https://sfyl.ifas.ufl.edu/hillsborough/lawngarden/florida-friendly-landscaping/>, (last visited Apr. 16, 2023); *See also*: Board Approves Funding for Florida Friendly Landscaping, Tampa Bay Water, <https://www.tampabaywater.org/blog/board-approves-funding-for-florida-friendly-landscaping/>, (last visited Apr. 16, 2023).

<sup>132</sup> Florida-Friendly Landscaping™, UF IFAS Extension Manatee County, <https://blogs.ifas.ufl.edu/manateeco/category/home-landscapes/florida-friendly-landscaping/>, (last visited Apr. 16, 2023).

<sup>133</sup> Florida-Friendly Landscaping™, UF IFAS Extension Pasco County, <https://sfyl.ifas.ufl.edu/pasco/our-program-areas/florida-friendly-landscaping/>, (last visited Apr. 16, 2023).

<sup>134</sup> Florida-Friendly Landscaping™, UF IFAS Extension Pinellas County, <https://sfyl.ifas.ufl.edu/pinellas/florida-friendly-landscaping/>, (last visited Apr. 16, 2023); *See also*: Florida-Friendly Landscaping Incentive Program, Pinellas County, <https://pinellas.gov/programs/florida-friendly-landscaping-incentive-program/>, (last visited Apr. 16, 2023).

provides an incentive program available to businesses and residents living in the watershed communities of McKay Creek, Allen’s Creek, and Lake Seminole Basin.<sup>135</sup>

FFL connects to community members in the following ways:

- (1) Florida Yards and Neighborhoods (FYN) collaborates with homeowners.
- (2) Florida-Friendly Communities (FFC) targets homeowners’ associations, builders, developers, property managers, community managers, and local governments.
- (3) Green Industries Best Management Practices works with landscape professionals to provide training in how to reduce water consumption while applying irrigation methods, pesticides, and fertilizer. Under Florida Statutes,<sup>136</sup> this training is mandatory for “all commercial fertilizer applicators” – and, as required by certain local ordinances, for some non-commercial fertilizer applicators – in their process of earning the required “Limited Certification from the Florida Department of Agriculture and Consumer Services (FDACS).”<sup>137</sup> UF/IFAS and the Florida Department of Environmental Protection provide certificates for completing the training.<sup>138</sup>

Notably, the Florida-Friendly Landscaping Program does not consider artificial turf to be a “Florida Friendly Product.”<sup>139</sup> The Florida-Friendly Landscaping Program’s primary concerns with artificial turf are that it is a petroleum-based product, can reduce groundwater recharge and wildlife habitat, and can increase local heat, glare, noise.<sup>140</sup>

#### **IV. Turf Industry Perspectives**

TBBA members expressed a desire to set industry standards and guidance for municipalities and homeowners on appropriate turf grass manufacturing and installation. For example, TBBA explained the importance of using appropriate *infill*, how it adds weight and acts as a ballast, expands life of turf and backing, and helps filter and move water. The most common infill in residential areas includes sand, silica sand (uncoated and coated), and rubber. Each has different performance capabilities. For example, cooling infill absorbs and releases water over time. TBBA asserted that this can keep soil saturated for growing plants and has a cooling effect on turf. While the types of infill vary in cost, TBBA members prioritize the highest quality of infill over affordability, functionality over cost, believing their products to be of a premium service.

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<sup>135</sup> *Id.*

<sup>136</sup> Fla. Stat. § 482.1562 (2022).

<sup>137</sup> Florida-Friendly Landscaping Program™, *supra* note 38.

<sup>138</sup> *Id.*

<sup>139</sup> *Id.*; See also: Kathy Malone et al., Questions and Answers: 2009 Florida-Friendly Landscaping Legislation (Feb. 21, 2021), <https://edis.ifas.ufl.edu/publication/EP440>.

<sup>140</sup> Kruse, *supra* note 1.

Except for rubber infill, TBBA noted that most infill in residential turf are made from mostly natural materials or sand granules.

TBBA asserted that synthetic turf has several benefits, including its ability to prevent erosion. “According to Beard et al. (1994), the erosion control effectiveness of turfgrass is the combined result of a high shoot density and root mass for surface soil stabilization, plus a high biomass matrix that provides resistance to lateral surface water flow. . .”<sup>141</sup> Artificial turf reduces the use and consumption of water as well, bypassing the need for irrigation. The Synthetic Turf Council estimated that synthetic turf fields conserved more than three billion gallons of water.<sup>142</sup>

## V. Conclusion

Artificial turf has numerous possible issues, including permeability, water filtration, urban heat island effect, and ecological impacts. Florida municipalities have begun to slowly address these issues through ordinances affecting how artificial turf may be used on residential property by addressing allowable square footage, installation and design standards, and even promotion of sustainable practices like Florida Friendly Landscaping. A model ordinance should set clear standards for artificial turf installation and use to promote environmentally and consumer friendly landscaping practices.

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<sup>141</sup> Lozano, *supra* note 20.

<sup>142</sup> Synthetic Turf Counsel, <https://www.syntheticurfCouncil.org/news/123873/Synthetic-Turf-Conserves-More-Than-Three-Billion-Gallons-of-Water-and-Helps-the-Environment.ht> (last visited Mar. 11, 2023).

## BIBLIOGRAPHY

Aoki, Tayoaki, *Solar illuminance and albedo on surface temperature of outdoor sport surfaces*, 11 Nature and its Environment 40, 40-48 (2009).

CBS Austin, <https://cbsaustin.com/news/nation-world/toxic-turf-debate-weighs-safety-of-artificial-crumb-rubber-fields-used-for-kids-sports-parks-fields-stadiums-united-states-synthetic-grass-soccer-football-non-hodgkins-lymphoma-carcinogens> (last visited Mar. 15, 2023).

Effects of Artificial Turf on the Urban Environment, 49 J. Applied Meteorology and Climatology 332, 332-345 (2010).

EPA, Synthetic Turf Field Recycled Tire Crumb Rubber Research Under the Federal Research Action Plan, Final Report Part 1 – Tire Crum Rubber Characterization Volume 1, [https://www.epa.gov/sites/production/files/2019-08/documents/synthetic\\_turf\\_field\\_recycled\\_tire\\_crumb\\_rubber\\_research\\_under\\_the\\_federal\\_research\\_action\\_plan\\_final\\_report\\_part\\_1\\_volume\\_1.pdf](https://www.epa.gov/sites/production/files/2019-08/documents/synthetic_turf_field_recycled_tire_crumb_rubber_research_under_the_federal_research_action_plan_final_report_part_1_volume_1.pdf), (2019).

Eunomia Research & Consulting Ltd, *Environmental impact study on artificial football turf*, (2017), (a study conducted for FIFA).

European Commission Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards synthetic polymer microparticles (Proposed 22 Sept. 2022).

Evans, Sarah, The Children’s Environmental Health Center of the Icahn School of Medicine at Mount Sinai Strongly Discourages the Installation of Artificial Turf, <https://www.tapinto.net/towns/scotch-plains-slash-fanwood/articles/the-children-s-environmental-health-center-of-the-icahn-school-of-medicine-at-mount-sinai-strongly-discourages-the-installation-of-artificial-turf> (last visited Apr. 16, 2023).

Florida-Friendly Landscaping Program™, <https://ffl.ifas.ufl.edu/about-ffl/> (last visited Feb. 27, 2023).

Francis, Robert A., *Artificial lawns: environmental and societal considerations of an ecological simulacrum*, 30 Urban Forestry & Urban Greening 152, 152-156 (2018).

Impervious Surface Ratio (ISR Definition), Law Insider. (2023), <https://www.lawinsider.com/dictionary/impervious-surface-ratio-isr>.

Jim, C.Y., *Intense summer heat fluxes in artificial turf harm people and environment*, 157

Landscape and Urban Planning 561, 561-576 (2017).

Kruse, Jason, University of Florida, Presentation to the Agency on Bay Management: The Impacts of Artificial Turf (Sept. 8, 2022).

Laker, Barbara, et al., *A Tangled Timeline*, The Philadelphia Inquirer, Mar. 7, 2023, <https://www.inquirer.com/news/inq2/astroturf-vet-stadium-artificial-turf-monsanto-history-phillies-stadium-forever-chemicals-pfas-20230307.html>.

Lavorgna, Joe, et al., *A Review of Benefits and Issues Associated with Natural and Artificial Turf Rectangular Stadium Fields - Final Report*, (2011).

Loveday, Jane, et al., *Seasonal and Diurnal Surface Temperatures of Urban Landscape Elements*, 11 Sustainability (2019).

Lozano, Julian E. et al., *Ecosystem services for compensation of artificial turf systems*, (2021).

Malone, Kathy et al., Questions and Answers: 2009 Florida-Friendly Landscaping Legislation (Feb. 21, 2021), <https://edis.ifas.ufl.edu/publication/EP440>.

Massey, Rachel, et al., *Artificial Turf Infill: A Comparative Assessment of Chemical Contents*, 30 NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy 10, 10-26 (2020).

McKee, Geoff, *The Health Implications of Synthetic Turf Fields with Crumb Rubber Infill - A Human Health Risk Assessment for the Municipality of North Cowichan*, (2015).

Meeting with Tampa Bay Builders Association, March 6, 2023.

Myrick, Sonia, [Synthetic Sports Fields and the Heat Island Effect](https://www.nrpa.org/parks-recreation-magazine/2019/may/synthetic-sports-fields-and-the-heat-island-effect/), National Recreation and Park Association (May 8, 2019). <https://www.nrpa.org/parks-recreation-magazine/2019/may/synthetic-sports-fields-and-the-heat-island-effect/>.

Lerner, Sharon, *Toxic PFAS Chemicals Found in Artificial Turf*, The Intercept (Oct. 8, 2019).

Petrass, Lauren, et al., *Understanding how the Components of a Synthetic Turf System Contribute to Increased Surface Temperature*, The 2014 Conference of the International Sports Engineering Association (2014).

Pulley, Gilbert and Williams, Frank, *Synthetic Surface Heat Studies*, Brigham Young University (2002).

Simpson, Thomas J., et al., *Artificial lawns exhibit increased runoff and decreased water retention compared to living lawns following controlled rainfall experiments*, 63 *Urban Forestry & Urban Greening* Volume (2021).

Serensits, Thomas, et al., Human health issues on synthetic turf in the USA, 225 *J. Sports Engineering and Technology* 139, 139-146 (2011).

Synthetic Turf Council, <https://www.syntheticurfCouncil.org/news/123873/Synthetic-Turf-Conserves-More-Than-Three-Billion-Gallons-of-Water-and-Helps-the-Environment.ht> (last visited Mar. 11, 2023).

Thoms, Adam W., et al., *Models for predicting surface temperatures on synthetic turf playing surfaces*, The 2014 Conference of the International Sports Engineering Association (2014).

Toxics Use Reduction Institute, U. Mass. Lowell, *Per- and Poly-fluoroalkyl Substances (PFAS) in Artificial Turf Carpet* (2020).

Washington State Department of Health, <https://doh.wa.gov/community-and-environment/schools/environmental-health/synthetic-turf> (last visited Mar. 15, 2023).

Yaghoobian, Neda, et al., *Modeling the Thermal Effects of Artificial Turf on the Urban Environment*, 49 *J. Applied Meteorology and Climatology* 332, 332-345 (2010).

Yang, Li, et al., *Research on Urban Heat-island Effect* (2016).

Yang, Yun-Ya & Lusk, Mary G., *Nutrients in Urban Stormwater Runoff: Current State of the Science and Potential Mitigation Options*, (9 April 2018).

Zuccaro, Philip, et al., *Assessing extraction-analysis methodology to detect fluoretelomer alcohols (FTOH), a class of perfluoroalkyl and polyfluoroalkyl substances (PFAS), in artificial turf fibers and crumb rubber infill*, *Case Studies in Chemical and Environmental Engineering* 7 (2023).

# Artificial Turf Model Ordinance Assessment

Maxwell Pyles and Angela Xu  
Students from Stetson University College of Law  
Jacobs Public Interest Law Clinic  
for Democracy and the Environment



STETSON LAW



# Roadmap

- Methods
- Environmental Impacts
  - Water
  - Heat
  - Ecology
  - Pollution
- Allowable Square Footage
- Existing Ordinances
  - TBRPC Members
  - Orlando
  - Other Florida Municipalities
- Other Paths

## Methods

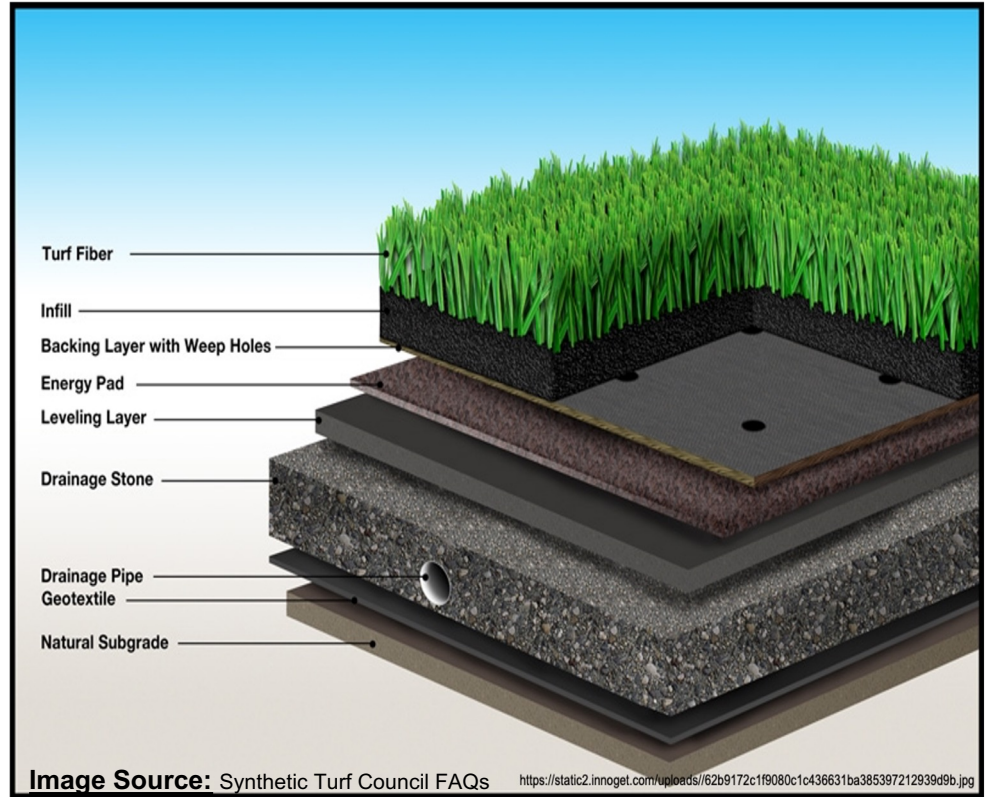
- Base Knowledge: September 8, 2022 ABM Meeting
- Scholarly Research
- Legal
  - Municode
  - Local Government Websites
- Meetings

A landscape photograph of a marsh at sunset. The foreground is filled with vibrant green grass. In the middle ground, there is a small body of water and some trees. The sky is filled with large, colorful clouds in shades of blue, orange, and pink, indicating a sunset or sunrise. A white rectangular box with a thin black border is overlaid on the right side of the image, containing the text "Environmental Impacts".

# Environmental Impacts

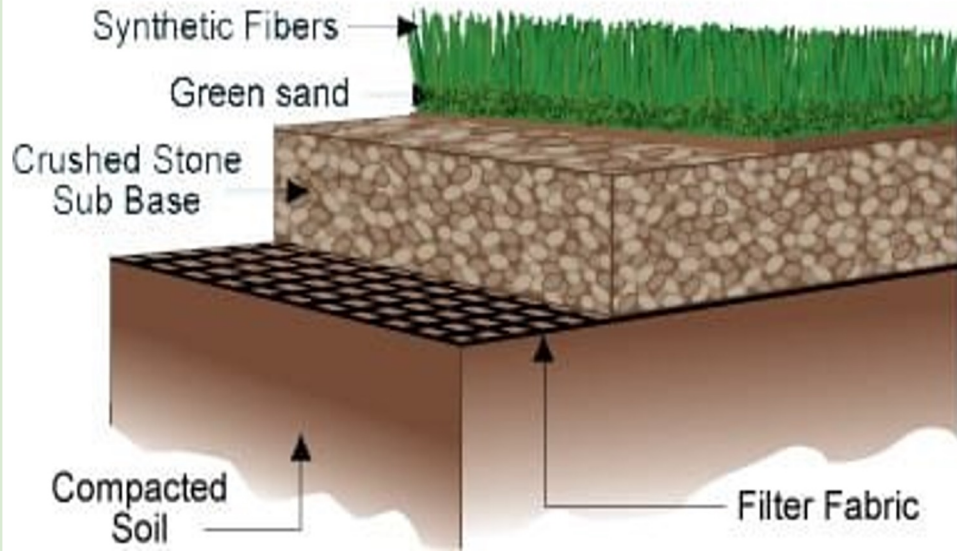
# Water

- Water Infiltration
  - Permeability
  - Runoff
- Reduce Water Use



[https://staging-stc.site-ym.com/resource/resmgr/images/turf\\_crosssection.JPG](https://staging-stc.site-ym.com/resource/resmgr/images/turf_crosssection.JPG)

# Compaction



**Image Source:** Cascade Greens <https://images.squarespace-cdn.com/content/v1/62c466004573201d728200c2/eb841795-69f7-4daa-85ed-6a3f0e512ff5/Silica+sand.jpeg>



**Image Source:** Global Syn-Turf <https://www.globalsynturf.com/images/art/25x21/compacting-base-turf.jpg>

# Heat

- Urban Heat Island Effect
  - Heat accumulation due to urban construction and human activities
- Higher Ambient Temperature
- Heat Retention

## Ecology

- Loss of natural grass ecosystems
- Macroorganisms
  - Fewer insect populations
  - Weed growth
- Microorganisms
  - Reduced decomposition of waste

## Pollution

- Microplastics, Chemicals, and PFAS
  - Potential leaching into stormwater runoff
  - PFAS: per- or poly-fluoroalkyl substances
  - VOCs: Volatile Organic Chemicals
- Recyclability
  - Theoretically recyclable
  - Not widely adopted

A landscape photograph of a marsh at sunset. The foreground is filled with tall, green grasses. In the middle ground, there is a small body of water and some trees. The sky is filled with large, colorful clouds in shades of blue, orange, and pink. A white rectangular box with a thin black border is overlaid on the right side of the image, containing the text "Allowable Square Footage".

# Allowable Square Footage

## Allowable Square Footage

- Impervious Surface Ratio (ISR)
- Maintain Distance
  - Trees and Shrubs
  - Lot lines
  - Water Bodies
  - Structures
- Hard Limit
  - Miami Shores: 30% of area or 600 ft<sup>2</sup>

A landscape photograph of a marsh at sunset. The foreground is filled with tall, green grasses. In the middle ground, there is a small body of water and some trees. The sky is filled with large, colorful clouds in shades of blue, orange, and pink. A white rectangular box with a thin black border is overlaid on the right side of the image, containing the text "Existing Ordinances".

# Existing Ordinances

# Florida Municipalities

- TBRPC Member Governments
- Orlando
- Other Municipalities
  - Lantana
  - Lighthouse Point
  - Marco Island
  - Miami Shores
  - Surfside
  - Weston

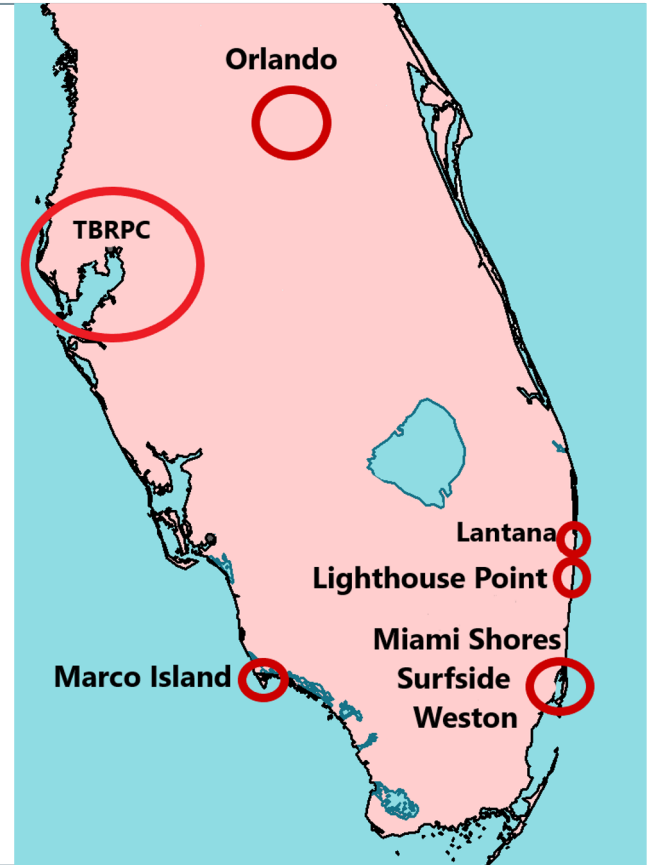


Image Source: <http://www.yourchildlearns.com/states/images/florida-map.png>  
edited by Maxwell Pyles

## TBRPC Member Governments



- Mostly Quiet
- Not Accepted As Live Plant Installations
  - Hernando County
- Artificial Turf meets General Maintenance Requirements
  - Pinellas County, New Port Richey, St. Pete Beach
- St. Pete Beach
  - Nonvegetative Pervious Material
  - Limited to 20% of Minimum Required Pervious Area

# Orlando

- Permit Requirement
- Impervious Surface Ratio
- Installation
- Distance Requirements
- Aesthetics

## ORDINANCE NO. 2021-49

1 AN ORDINANCE OF THE CITY COUNCIL OF THE CITY  
2 OF ORLANDO, FLORIDA, RELATING TO ARTIFICIAL  
3 TURF; AMENDING CHAPTER 60, PART 2, AND  
4 CHAPTER 66 OF THE LAND DEVELOPMENT CODE, TO  
5 PROVIDE SPECIFIC REGULATIONS FOR ARTIFICIAL  
6 TURF AND PROVIDING STANDARDS FOR THE  
7 INSTALLATION AND MAINTENANCE OF ARTIFICIAL  
8 TURF; PROVIDING LEGISLATIVE FINDINGS, AND FOR  
9 CODIFICATION, CORRECTION OF SCRIVENER'S  
10 ERRORS, SEVERABILITY, AND AN EFFECTIVE DATE.  
11

12 **WHEREAS**, section 163.3202(1), Florida Statutes, requires that the city of  
13 Orlando, Florida (the "city"), adopt or amend and enforce land development regulations  
14 that are consistent with and implement the city's adopted comprehensive plan; and  
15

16 **WHEREAS**, section 163.3202(3), Florida Statutes, encourages the use of  
17 innovative land development regulations and requires that all land development  
18 regulations be combined into a single land development code for the city; and  
19

20 **WHEREAS**, from time to time, amendments and revisions to the city's adopted  
21 comprehensive plan (the "Growth Management Plan"), progress in the field of planning  
22 and zoning, or changes to state law make it necessary or desirable to amend the land  
23 development regulations of the city; and  
24

25 **WHEREAS**, at its regularly scheduled meeting of May 18, 2021, the Municipal  
26 Planning Board recommended to the City Council of the City of Orlando, Florida (the  
27 "Orlando City Council"), that the provisions of this ordinance are consistent with the  
28 applicable provisions of the city's adopted Growth Management Plan, are in the best  
29 interest of the public health, safety, and welfare, are in harmony with the purpose and  
30 intent of the Land Development Code of the City of Orlando, Florida (the "Land  
31 Development Code"), will not result in disorderly and illogical development patterns, and  
32 will not result in incompatible land uses; and  
33

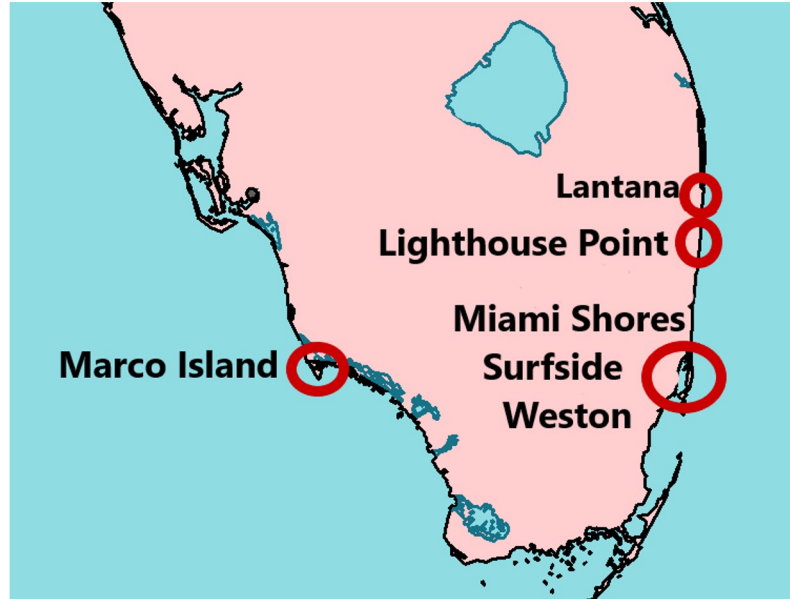
34 **WHEREAS**, the Orlando City Council hereby finds and determines that this  
35 ordinance is consistent with the applicable provisions of the city's adopted Growth  
36 Management Plan, is in the best interest of the public health, safety, and welfare, is in  
37 harmony with the purpose and intent of the city's Land Development Code, will not result  
38 in disorderly and illogical development patterns, and will not result in incompatible land  
39 uses; and  
40

41 **WHEREAS**, the Orlando City Council hereby finds and declares that this ordinance  
42 is in the best interest of the public health, safety, and welfare.  
43

44 **NOW THEREFORE, BE IT ENACTED BY THE CITY COUNCIL OF THE CITY OF**  
45 **ORLANDO, FLORIDA, AS FOLLOWS:**

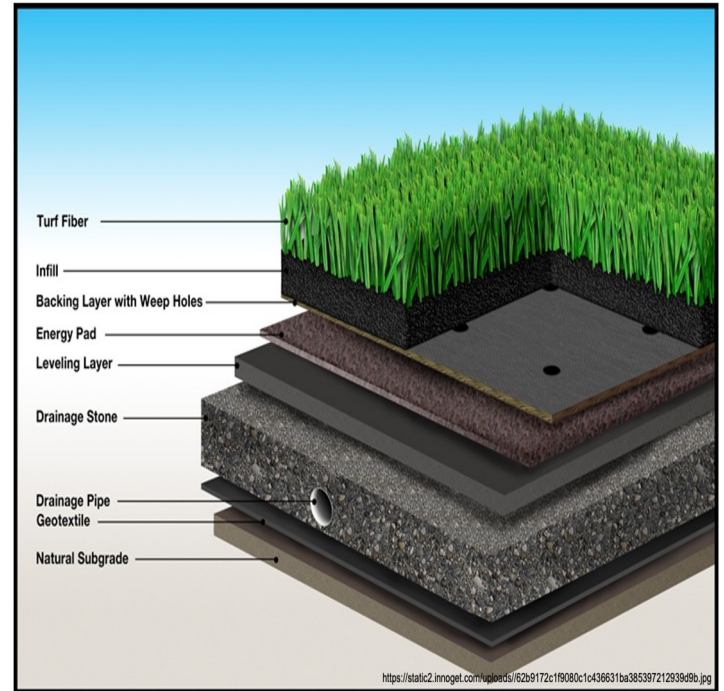
## Other Municipalities

- Permitting
- Design
- Installation
- Additional Standards



# Permitting

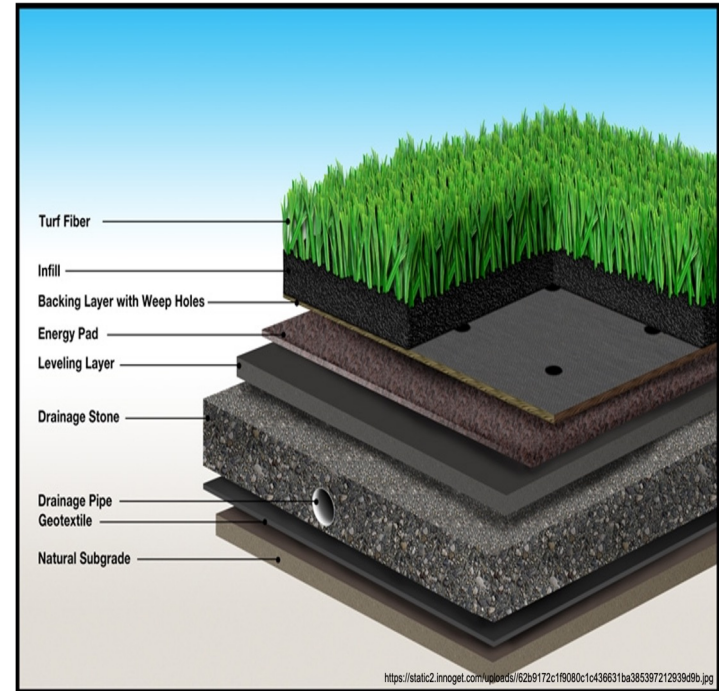
- Landscaping Plans
  - Dimensions and Details
  - Impervious Area Calculation
- Irrigation
- Manufacturer Specifications
- Turf Cross Sections / Sample
- Property Survey



**Image Source:** Synthetic Turf Council FAQs  
[https://staging-stc.site-ym.com/resource/resmgr/images/turf\\_crosssection.JPG](https://staging-stc.site-ym.com/resource/resmgr/images/turf_crosssection.JPG)

# Design

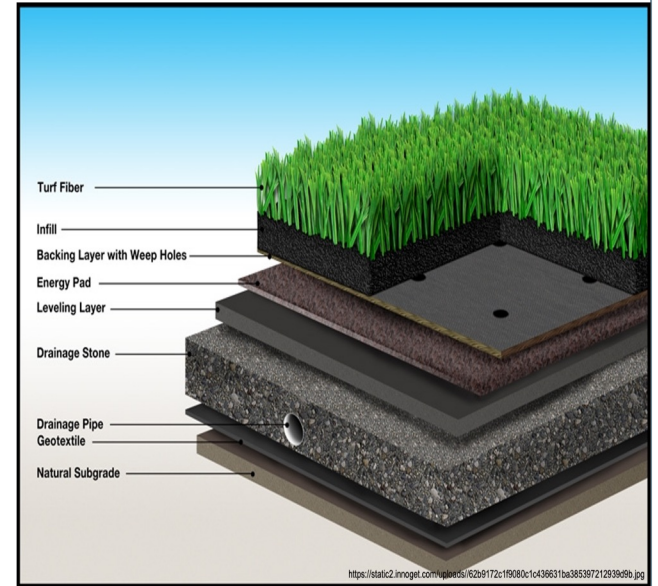
- Pile Type (Grass Blades)
  - Min/Max Blade Height
  - Material
- Infill Use
  - Silica Sand
- Permeable Backing
- Face Weight
- Lead Free and Flame Retardant
- Prohibits Indoor/Outdoor Carpeting



**Image Source:** Synthetic Turf Council FAQs  
[https://staging-stc.site-ym.com/resource/resmgr/images/turf\\_crosssection.JPG](https://staging-stc.site-ym.com/resource/resmgr/images/turf_crosssection.JPG)

# Installation

- Florida Licensed Contractor or Professional
  - DBPR License?
- Manufacturer Specifications
- Compacted Aggregate
- Subgrade designed for Positive Drainage
- Seams and Infill
- Distance from Plants, Structures, Lot Lines
- Protect Roots



**Image Source:** Synthetic Turf Council FAQs  
[https://staging-stc.site-ym.com/resource/resmgr/images/turf\\_crosssection.JPG](https://staging-stc.site-ym.com/resource/resmgr/images/turf_crosssection.JPG)  
G

## Additional Standards

- Maintenance
  - Clean, Fadeless, Whole
- Prohibited in Rights-of-way
- Rear Yard Only
- Removal/Damage Covered by Property Owner
- Prohibited on Seawall
- Impervious Surface

## Existing Municipalities

- Mostly Address Design and Installation
- Environmental Issues
  - Difficult to Directly Address
  - Still Partially Accomplished

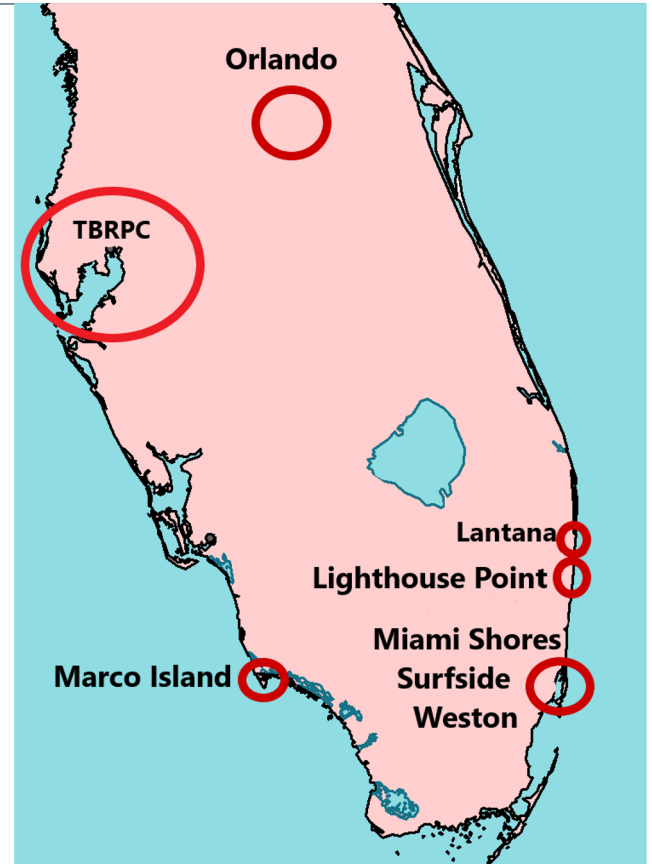


Image Source: <http://www.yourchildlearns.com/states/images/florida-map.png>  
edited by Maxwell Pyles

## Potential Model Ordinance Options


- Hard Limits
- Permitting
- Limit Potentially Harmful Aspects
  - Allowable Square Footage
  - Protect Natural Landscape
  - Materials
    - Reduce/Ban Crumb Rubber Infill
- General Installation Requirements
  - Manufacturer Specifications, Quality Standards, Materials, etc.
- Note Enforcement Issues

# Florida-Friendly Landscape



[ffl.ifas.ufl.edu](http://ffl.ifas.ufl.edu)

**UF** IFAS Extension  
UNIVERSITY OF FLORIDA

Florida-Friendly  
Landscaping  PROGRAM



## Conclusion

- Methods
- Environmental Impacts
  - Water
  - Heat
  - Ecology
  - Pollution
- Allowable Square Footage
- Existing Ordinances
  - TBRPC Members
  - Orlando
  - Other Florida Municipalities
- Other Paths



## Elizabeth Abernethy

---

**From:** Travis Jarman <travis.jarman@bayway.org>  
**Sent:** Monday, January 23, 2023 7:13 AM  
**To:** Corey D. Malyszka  
**Cc:** Elizabeth Abernethy  
**Subject:** Artificial Turf and Florida Friendly Landscaping  
**Attachments:** UFAS ENH1348 .pdf

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Corey – I’m writing as a local resident and Board member of the Bayway Isles Homeowners Club, as an Executive Board member of Scenic Florida ([www.scenicflorida.org](http://www.scenicflorida.org)), and as the founder of Scenic St. Petersburg.

Liz asked that I follow up with you about the upcoming PS&I Committee discussion on artificial turf. I understand that staff is not recommending any changes in the current landscaping ordinance, specifically regarding Section 16.40.060.2.1.2. The organizations that I represent endorse and fully support the staff’s position.

I don’t know if you are aware of the University of Florida’s IFAS Extension’s paper regarding the use of artificial turf in Florida landscapes, attached. City staff’s comments notwithstanding, the University’s position on this matter may be helpful in informing the PS&I Committee members regarding the negative impact of artificial turf. If you have not already done so, I encourage you to provide each Committee member with a copy of the attached document as background material ahead of their first meeting on the subject.

If it would be helpful members of our Association’s Board would be happy to meet individually with the Committee members so that they are fully informed as to the negative effects of allowing the increased use of artificial turf on our city’s residential lots.

If there is anything I can do to assist in this matter, please reach out by email or call me at 727 865-1920.

Please use my comments as feedback from the public on this matter.

Thank you for everything you do for our city.

Best regards,

Travis Jarman  
Vice President  
Bayway Isles Homeowners Club, Inc

# Synthetic Turfgrass and the Nine Principles of Florida-Friendly Landscaping™<sup>1</sup>

Jason Kruse, Bryan Unruh, Jennifer Marvin, Tom Wichman, Lynn Barber, Norma Samuel, John Bossart, Claire Lewis, and Esen Momol<sup>2</sup>

## Introduction

Homeowners in Florida are offered many different species and cultivars of natural turfgrass to consider for their lawns, each offering varying levels of shade, maintenance, water, disease, and pest resistance, as well as differences in color, texture, and overall aesthetics. Recent additions to the list of available turfgrasses have benefited from extensive breeding programs to develop cultivars that need fewer inputs (e.g., water and fertilizer), have fewer pest problems, and require less mowing, all traits that contribute to their appropriate use in Florida-Friendly Landscaping™ (FFL) (Momol et al. 2021).

However, in addition to these living turf options, some homeowners replace natural turfgrass with synthetic turf, also referred to as artificial turf. Originally developed as a durable, low-maintenance playground surface, synthetic turf is a manufactured product that utilizes synthetic fibers that mimic the aesthetic look of natural grass. Essentially outdoor carpet, artificial turf is typically composed of nylon, polypropylene, or polyethylene fibers connected to a reinforced backing material. While designed to imitate the look of natural turf, synthetic turf does not provide the

ecosystem benefits of a natural turf system. This publication examines the properties of synthetic turf in relation to each of FFL's nine principles.

## Florida-Friendly Landscaping™: The Nine Program Principles

FFL protects Florida's natural resources by conserving water, reducing waste and pollution, creating wildlife habitat, and preventing runoff and erosion (Momol et al. 2021). Landscapes in Florida can be Florida-Friendly if designed and maintained according to the nine Florida-Friendly Landscaping™ principles (FYN Handbook 2015). Each of the nine Florida-Friendly Landscaping™ principles are evaluated below as they relate to living turfgrass and its potential replacement by synthetic turf.

**1. Right Plant, Right Place:** FFL's mission is to provide science-based information for creating resilient, sustainable landscapes of living plants that have been specifically selected and appropriately installed so that they require little or no irrigation, fertilizer, or pesticide. Because synthetic turf is not alive, it does not meet the criteria

1. This document is ENH1348, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date December 2021. Visit the EDIS website at <https://edis.ifas.ufl.edu> for the currently supported version of this publication.
2. Jason Kruse, associate professor, Environmental Horticulture Department; Bryan Unruh, professor and associate center director, Environmental Horticulture Department, UF/IFAS West Florida Research and Education Center, Jay, FL; Jennifer Marvin, statewide FYN coordinator, UF/IFAS Florida-Friendly Landscaping™ Program; Tom Wichman, assistant director and statewide GI-BMP coordinator, UF/IFAS Florida-Friendly Landscaping™ Program, UF/IFAS Center for Land Use Efficiency; Lynn Barber, program county Extension agent II, Florida Friendly Landscaping™, UF/IFAS Extension Hillsborough County; Norma Samuel, Extension agent IV, PhD, Florida Friendly Landscaping™ and urban horticulture, UF/IFAS Extension Sumter County; John Bossart, Extension program manager, UF/IFAS Florida-Friendly Landscaping™ Program; Claire Lewis, statewide FFC coordinator, UF/IFAS Florida-Friendly Landscaping™ Program; and Esen Momol, director, UF/IFAS Florida-Friendly Landscaping™ Program; UF/IFAS Extension, Gainesville, FL 32611.

of a plant choice for an FFL landscape. As a living plant, natural turfgrass plays an important role in cooling the environment that synthetic turf cannot. Average surface temperatures of a natural turfgrass lawn have been reported to be as much as 70°F cooler than a dormant brown lawn and as much as 100°F cooler than synthetic turf surfaces. Higher surface temperatures increase the surrounding air temperatures and result in an increase in the energy required for mechanical cooling of adjacent homes and buildings. Caludio (2008) describes heat island effects generated by larger installations of synthetic turf. Living turfgrass also provides a root zone, which helps to filter and slow runoff and stop erosion. Synthetic turf cannot do this, because part of its installation requires compacting the earth below, increasing runoff beneath the synthetic turf.

**2. Water Efficiently:** Synthetic turf systems do not require supplemental irrigation; however, installations may require water use for different reasons. As mentioned above, synthetic turf can become excessively hot, with one author (Kruse) measuring surface temperatures on synthetic turf as high as 160°F. Because of these high temperatures, it is common for users to spray the surface with water to cool it for use, which may negate some of the perceived benefit from the system not requiring “irrigation.” In addition, many manufacturers recommend weekly wash downs of the artificial turf surface to remove contaminants such as dust and pet waste and its odor. These washings, especially those to remove pet urine, often use quite a bit of water because the waste must pass through the artificial turf, the underlying substrate, and the weed barrier before being carried away. This wash water will generally not infiltrate into the ground below because of soil compaction conducted before installation of the synthetic turf. As noted in *The Ultimate Artificial Grass Maintenance Guide* ([neograss.co.uk](http://neograss.co.uk)):

If your lawn has not been installed on a free-draining sub-base, then you may need to purchase one of the many artificial grass cleaning products available on the market that will remove the smell of urine and sanitize your lawn.

Living turf, on the other hand, helps cool the environment, absorbs pet urine, and does not require washing to remove odors or dust. Once established, living turf needs minimal water during times of drought.

**3. Fertilize Appropriately:** Synthetic turf systems do not require fertilization. However, the lack of a root system and its associated microbial community in synthetic

turf systems eliminates the water filtration benefit that is gained through the installation of a living turfgrass system.

**4. Mulch:** In an FFL landscape, mulch is often incorporated within ornamental beds and around shrubs to maintain soil moisture and control weed growth. However, mulch application is not applicable to synthetic turf systems.

**5. Attract Wildlife:** An FFL landscape will often incorporate elements that attract wildlife, including the installation of host and pollinator plants to attract butterflies and native bees, as well as mixes of shrubs and trees that provide food, cover, and nesting opportunities for birds and other wildlife. This effect is amplified when natural wildlife preserves, and other green areas are adjacent or nearby. Research has shown that turfgrass lawns support an abundance of beneficial arthropods, such as beetles, bees and wasps, as well as worms, which in turn support larger wildlife such as birds and other ground-feeding wildlife (Shimat et al. 2020). Synthetic turf does not offer any benefits that attract or support wildlife.

**6. Manage Yard Pests Responsibly:** A fundamental component of FFL is using the appropriate combinations of plants (see FFL Principle No. 1: Right Plant, Right Place) maintained through proper irrigation and fertilizer protocols, so that yard pests are controlled with little or even no need for pesticide application. This holistic pest management approach forms the basis of integrated pest management, or IPM. As discussed above, while synthetic turf plays no role in attracting or supporting wildlife, it also does not contribute to the mix and balance of landscaping plants that promote IPM.

**7. Recycle Yard Waste:** FFL promotes the recycling of yard and landscape clippings into mulch and compost. This not only reduces the amount of yard waste that must be picked up curbside and transported for disposal, but yard waste converted to compost and used as fertilizer decreases the need for a homeowner to buy other fertilizers, especially synthetic fertilizers. Because synthetic turf is primarily plastic, it does not directly generate yard waste such as leaf litter and clippings, although falling leaves that accumulate on the synthetic turf must still be removed to prevent wear and tear. More importantly, however, synthetic turf has a finite life span, perhaps 10 to 20 years depending on the quality of ongoing care including rinsing, removing leaves, and sanitizing. At the end of its life, the synthetic turf will need to be removed and replaced, with the ultimate disposal of the old synthetic turf most likely in a landfill.

**8. Reduce Stormwater Runoff:** The primary base construction for synthetic turf systems in residential landscapes involves removal of a portion (2"–3") of the topsoil followed by heavy compaction of the remaining soil to establish a firm, uniform base on which to install the synthetic turf product. This compaction reduces soil infiltration rates and increases the risk of runoff from the landscape. While it may be possible to use rain gardens, berms, and swales to retain runoff on the property, there remains a significant risk of increased runoff when compared to natural turfgrass, which has been shown to increase soil infiltration rates. A recent study by Simpson and Francis (2021) demonstrated that synthetic turf lawns had more runoff and decreased water retention compared to living turf lawns. A similar study (Chang et al. 2021) found that living turf provided greater runoff control than synthetic turf.

- a. In addition to runoff volume, synthetic turf runoff has been shown to contain zinc in concentrations that pose a potential risk to surface waters and aquatic organisms (Connecticut Department of Environmental Protection 2010). Another synthetic turf study in New York found that runoff water from rain or from spraying or misting contained some 25 different chemical species and four metals (zinc, selenium, lead, and cadmium) that were released into water from the rubber infill incorporated into the synthetic turf (Claudio 2008).
- b. In contrast to synthetic turf, a healthy, established natural turf system consists not only of the dense cover of the aboveground grass blades, but also an underlying deep, intricately intertwined root zone that can filter and absorb contaminants. Natural turf installations improve soil structure over time and as a result enhance water filtration and infiltration into the soil. A robust root zone with healthy soil will also absorb dissolved nutrients, decrease nutrient leaching into the underlying ground water, and sequester carbon. Because, by definition, synthetic turf systems do not consist of plant material, they have no capacity to provide these same ecosystem services as a living turf.

**9. Protect the Waterfront:** Synthetic turf systems lack the soil-stabilizing benefits offered by the rootzones of flood-tolerant plants that are typically found along the edges of water bodies. The presence of these plants protects the shoreline from erosion and has been documented as having a significant impact in reducing the concentration and amount of contaminants that enter bodies of water

through stormwater runoff. Installation of a synthetic turf system along the edge of a water body increases the risk of soil erosion due to the lack of an established soil-stabilizing rootzone. In addition, the increased risk of runoff due to compaction of the soils during installation will increase the risk of pollutants reaching the water body that may have otherwise been caught/filtered out by the natural turfgrass system.

## Conclusions

Protecting and preserving Florida's water resources through sustainable landscaping practices on living landscapes is the primary focus of the Florida-Friendly Landscaping™ Program. It strives to achieve this goal through implementation of nine principles designed to reduce the environmental impact of urban landscapes while creating wildlife habitat, preventing erosion, and reducing landscape-based contributions to landfills. When considering the use of a synthetic turf system in the urban landscape, it is important to understand all the potential environmental impacts. Synthetic turf systems have not been shown to improve or create wildlife habitat, do not improve groundwater recharge, can heat excessively in the sun and, in more extensive installations, can cause a substantial heat island effect. In addition, synthetic turf generates higher stormwater runoff than natural turf and has been shown to leach a variety of contaminants, including both organic compounds and heavy metals. Finally, since synthetic turf is primarily plastic it has a finite lifespan and must eventually be disposed of in a landfill, a practice that is counter to the sustainability goals of the Florida-Friendly Landscaping™ Program.

## References

- Chang, B., B. Wherley, J. A. Aitkenhead-Peterson, and K. J. McInnes. 2021. "Effects of Urban Residential Landscape Composition on Surface Runoff Generation." *Science of the Total Environment* 783:146977. <https://doi.org/10.1016/j.scitotenv.2021.146977>
- Claudio, L. 2008. "Synthetic Turf Health Debate Takes Root." *Environmental Health Perspectives* 116 (3): 117–122. <https://doi.org/10.1289/ehp.116-a116>
- Connecticut Department of Environmental Protection. 2010. *Artificial Turf Study, Leachate and Stormwater Characteristics, Final Report*.
- The Florida Yards and Neighborhoods Handbook*. 2015. [https://fll.ifas.ufl.edu/media/fllifasufledu/docs/FYN\\_Handbook\\_2015\\_web.pdf](https://fll.ifas.ufl.edu/media/fllifasufledu/docs/FYN_Handbook_2015_web.pdf)

Joseph, S. V., K. Harris-Shultz, D. Jespersen, B. Vermeer, and C. Julian. 2020. "Incidence and Abundance of Bees and Wasps (Hymenoptera) in Centipedegrass Lawns in Georgia." *Journal of Entomological Science* 55 (4): 547–559. <https://doi.org/10.18474/0749-8004-55.4.547>

Momol, E., M. Scheinkman, M. Thomas, T. Wichman, G. Hansen, C. Lewis, J. Marvin, L. Barber, T. Silvasy, T. Freeman, T. McIntyre, E. Brown, A. Peck, and J. Bossart. 2021. "What Is Florida-Friendly Landscaping™?" *EDIS* 2021 (4). <https://doi.org/10.32473/edis-ep607-2021>

Simpson, T. J., and R. A. Francis. 2021. "Artificial Lawns Exhibit Increased Runoff and Decreased Water Retention Compared to Living Lawns Following Controlled Rainfall Experiments." *Urban Forestry & Urban Greening* 63:127232. <https://doi.org/10.1016/j.ufug.2021.127232>

**From:** [Edward Briggs](#)  
**To:** [Elizabeth Abernethy](#)  
**Subject:** Artificial turf  
**Date:** Thursday, March 30, 2023 3:28:18 PM  
**Attachments:** [image001.png](#)  
[Edward Briggs3.vcf](#)

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**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Liz,

As a follow up to your meeting with the TBBA St. Pete GA.

Follow up from our meeting with St. Pete. The link below includes information concerning artificial turf that has been presented to City of Tampa and TBRPC.

Please review info in folder and let me know if you have any questions:

[https://www.dropbox.com/sh/mqkxzsw0hjmp0gr/AABPpjZTu\\_bF2i5FjA6Trt9va?dl=0](https://www.dropbox.com/sh/mqkxzsw0hjmp0gr/AABPpjZTu_bF2i5FjA6Trt9va?dl=0)

They key to this current exercise is education and benefit of artificial at this point. The system is pervious, it helps limit run off, excessive water usage and reduces emissions.

[https://www.dropbox.com/sh/mqkxzsw0hjmp0gr/AABPpjZTu\\_bF2i5FjA6Trt9va?dl=0](https://www.dropbox.com/sh/mqkxzsw0hjmp0gr/AABPpjZTu_bF2i5FjA6Trt9va?dl=0)

We are happy to set up a separate meeting on this.

Sincerely,



**Edward Briggs**  
Vice President of Government Relations & Community  
Affairs

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# **SYNTHETIC GRASS OVERVIEW**



# BRIEF INTRODUCTION

The first type of artificial turf, a carpet of green nylon, was introduced in the 1960s when it was installed on a sports field in a domed stadium. Since then, synthetic turf has gained widespread popularity as new generations of turf systems have been installed in residential, commercial, municipal, government and military landscape lawn applications, including specialized systems for golf and putting greens, dog parks, rooftops, and playgrounds.



# A FEW ADVANTAGES OF SYNTHETIC TURF

- Reduces runoff and saves water
- Eliminates fertilizer, pesticides, and herbicides
- Reduces use of lawn equipment and harmful emissions
- Requires minimal maintenance
- Eliminates cost of lawn maintenance, irrigation systems, etc.
- Allows lush green landscapes in difficult areas to grow natural landscape
- Most products are 100% recyclable after their 15 to 20 year lifespan

# A FEW MORE ADVANTAGES TO SYNTHETIC GRASS

- Kid & pet safe
- Environmentally friendly
- No heavy metals
- Does not leach VOCs
- Fiber innovations: Increased turf life



**OUR ENVIRONMENT AND  
WATER: SYNTHETIC GRASS HAS  
ADVANTAGES TO HELP**

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# NATURAL LAWN & CHEMICALS



- Of the 30 most commonly used lawn pesticides, 10 are linked with Cancer or Carcinogenicity, 13 to Birth Defects, 21 to Reproductive Issues, 26 with Liver/Kidney Damage, 15 with Neurotoxicity and 11 to Disruption of the Endocrine System.
- Pesticides and fertilizers negatively affect streams and waterways through storm water runoff and has been identified by the EPA as a principal cause of water pollution
- In Florida alone, the EPA estimates that 1,000 miles of rivers & streams, 350,000 acres of lakes and 900 sq. miles of estuaries are impaired by runoff of these chemicals
- Americans use 10 times more chemical pesticides and fertilizers on their lawns, per acre, than is used on US farmlands



# HERBICIDES & PESTICIDES IN FL

- As of March 2019, 32 countries have to date banned the use of Glyphosate, the key ingredient in Monsanto's Roundup weed killer. The IARC report concluded that glyphosate is a "probable human carcinogen."
- In March 2019 the city of Miami passed a resolution banning the use of glyphosate on city property over concerns that harmful pesticides were killing the local plant life.
- The ban went to effect immediately after its passage by city commissioners. The city typically uses almost 5,000 galls of glyphosate products every year. This ban will significantly reduce resident exposure.
- 11 other FL cities have matching restrictions

# WATER USAGE

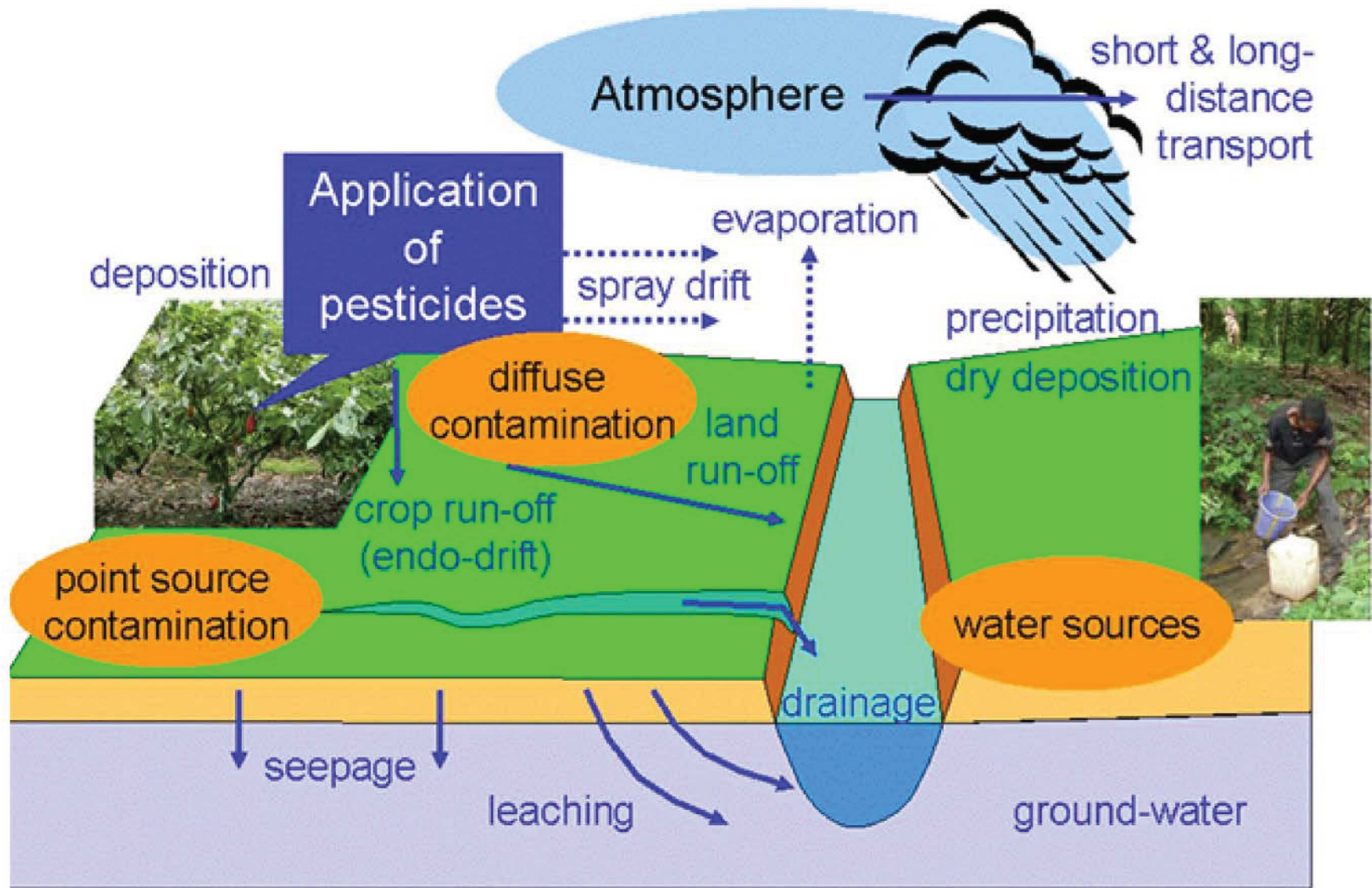
- Americans spend approximately \$28.9 billion annually on lawns. That's \$1,200 per household
- According to the EPA, 50-70% of household water is used for outdoor irrigation. Total is over 7 billion gallons of water per day
- The amount of synthetic grass currently installed nationally saves 3-4 BILLION gallons of water every year
- EPA estimates 50% of the water used for irrigation of lawns is wasted due to inefficient watering methods and systems
- Natural grass sports fields up to 1 million gallons of water each year
- Municipalities are finding the need to implement water saving tactics, even where rain is plentiful



\*\* facts and research provided by the EPA and the synthetic turf

council 2014\*\*

# WATER USAGE



# DID YOU KNOW?

- Gas-powered lawnmower with 3.5 horsepower releases the same amount of air pollution in 1 hour as a new car driven 340 miles?
- Over 17 million gallons of gas and oil are spilled each year refueling lawn equipment
- 2.2 billion gallons of fuel are used each year for lawn care & maintenance
- A product that is recyclable at the end of its service life
- Artificial grass does however stay much cooler than any other hardscape surface and does not absorb & radiate heat like hard pavement, rock or brick surfaces. Synthetic grass attains the same temperature as a concrete surface. Artificial grass surface can be quickly cooled with a spritz of water on the hottest of summer days

\*\*\*facts from south coast air quality management district, American yard from a sustainability standpoint, EPRO water\*\*\*

# RECYCLABILITY

After removal, old synthetic turf can be turned into new turf infill and backing, as well as other products, such as crude oil, custom bi-products, and artificial lumber.

Some manufacturers have a “take back” program for both sports fields and landscape applications, whereby they will provide customers with the option that the turf will be recycled at their end of its useful life when replaced with another synthetic turf system.



# WATER USE RESTRICTIONS: HOW TURF CAN HELP

In some areas of the US, outdoor landscaping may account for more than 50% of daily water use. For areas of the US in a continued state of emergency due to severe drought, outdoor water use must be reduced.

To address severe drought conditions, states such as California have issued a series of Executive Orders and directed their State Water Resources Control Board to implement mandatory water reductions in cities and towns to reduce potable urban water usage by 25 percent statewide. Executive Order B-29-15 will:

- lead an initiative to replace 50 Million Square Feet of lawns and ornamental turf with drought tolerant landscapes.
- require that commercial, industrial and institutional properties (including campuses, golf course and cemeteries) immediately implement water efficiency measures to reduce potable water usage by 25%.
- prohibit irrigation of lawns and ornamental turf on public street medians, and
- prohibit new homes and developments from irrigating with potable water unless water-efficient drip irrigation systems are installed.

# WATER USE RESTRICTIONS: HOW TURF CAN HELP

To help reach water use reduction goals, some jurisdictions offer tax rebates and water rebates to assist homeowners and commercial building owners with the upfront costs of turf removal and synthetic grass installation. Consult local jurisdictions regarding their synthetic turf design standards and applicable rebate programs.



# **THE PROPERTIES OF SYNTHETIC GRASS**

# EVOLUTION OF SYNTHETIC TURF

Synthetic turf is essentially a flooring fabric made from a variety of materials and layers. Since its creation the artificial turf industry has studied the behavior of natural grass and the safety and sustainability of synthetic grass.

Synthetic turf systems are developed by system integrators who select the synthetic grass, infill, and seaming and base materials. New technologies and research have enabled manufacturers to design, produce, and install synthetic turf that replicates the look and feel of natural grass with the safety and performance of an engineered surface.

## First Generation Turf

A tightly curled, nylon fiber, woven into a foam backed material. The first installations were engineered to be glued down on top of hard surfaces, such as concrete and asphalt. The First Generation of turf was inspired by the Ford Foundation's request to improve inner city play areas.

## Second Generation Turf

Polypropylene yarns were introduced along with a new "shag turf" like metaphor in the early 1990s. The new yarns were less abrasive than the first generation turf products.

## Third Generation Turf

Polyethylene yarn fibers were introduced into the synthetic turf industry in the mid-1990s along with an improvement in the turf system's form, function and stability by introducing the use of infill.



# MAIN COMPONENTS

The 3 main components of a synthetic turf system

- Fibers or Blades
- Backing
- Infill

The type of material used to make each component will affect the functionality and durability of the entire turf system as a whole.

# FIBERS OR BLADES



The fibers are made of yarn and makeup the blades of grass that are seen on top. From manufacturer to manufacturer and blade type to blade type the fibers will vary in composition, structure, color, thickness, and height.

The fibers can be “tufted” into the backing using similar techniques to those used to manufacture carpets or “knitted” into the backing.

- In the tufting process, loops of yarn are created on the top surface of the turf as the needles of the tufting machine insert the yarn into the backing material. The loops of yarn are then cut to create individual blades of grass.
- In the knitting process, a separate piece of yarn is threaded and knotted into the backing to create each individual blade of grass.

The yarn may be curled, fibrillated, multiplied or twisted, before it is tufted or knitted into the backing material and then cut to the specified height. New technologies enable manufacturers to produce synthetic grass that replicate different natural grass types, as found naturally and grown across the US.

# FIBERS OR BLADES



## **Density**

Density refers to the amount of pile yarn per area of turf or the closeness of the tufts. Closer tufts require more yarn per square foot of turf and create a more dense landscaping surface. A softer synthetic grass is created with a longer pile height and a higher density

## **Denier**

Denier is a yarn size unit—a yarn's weight measured in grams per 9000 meters of yarn end. The lower the denier, the finer the fiber; the higher the denier, the larger or heavier the yarn. The term denier is sometimes used interchangeably with the term density or to express the density of synthetic grass

## **Fibre thickness**

Fibre thickness is measured in microns and is measurement of the edge of a fibre. The number of blades per stitch needs to be taken into account when reviewing the value of a fiber's thickness for lawn and landscape use unless the project is under extreme traffic or weight loads.

# FIBERS OR BLADES

## Blade structure

### Two common blade forms are slit-film and monofilament.

- Slit-film fibers are made from sheets of polymer that have been cut to a specified width. The resulting wide tapes are then slit at random intervals which causes them to split during the infilling steps of the manufacturing process creating a natural grass look.
- Monofilament fibers are single-stranded extrusions that are individually tufted into the turf's backing. Monofilament fibers have a strong spine and the single-strand extrusion process means a variety of cross sections and shapes can be produced.

The addition of ridges running from top to bottom alongside each face of the blades structure increases the strength and softness of synthetic grass fibers. Made possible by a proprietary technology, the ridges allow the fibers to flex, twist, and rebound like natural grass blades. Flat blades do not have the same rebound quality.



Ridged blades

# BACKING

The backing, the third main component of a synthetic turf system, comprises a primary backing and a secondary backing, both of which must work together to provide dimensional stability to the entire system.

The primary backing is the material that the yarn fibers are tufted or knitted into and the secondary backing is a coating applied to the reverse side of the primary backing.

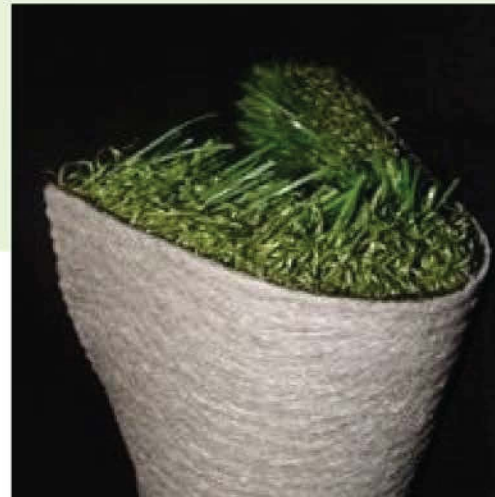
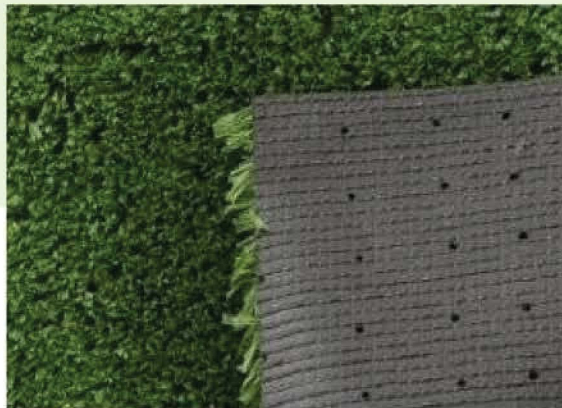
The primary and secondary backing also play a role in how well a turf system drains.



# BACKING

The primary backing supports the fibers and facilitates seaming between the turf panels. Primary backing materials for landscape synthetic grass systems may be layers of woven or non-woven fabrics such as felt, needled fleece, or woven polypropylene.

The purpose of the secondary backing is to permanently lock the fibers into place, thereby increasing tuft bind. Secondary coating options include polyurethane (PU), hot melt polyolefin (HMP), and latex. To ensure drainage requirements are met, secondary backings are either precision coated with a 100% permeable woven polypropylene backing with microscopic holes, solid-coated and perforated with holes punched or burned into the backing, or affixed with a semi-permeable felt-type material.



# INFILL



The last component of a synthetic turf system, the infill, is usually a loose, fragmented or granular material that is easily spread on top of the backing and distributed between the fibers.

Infill material options for landscape synthetic turf may include a layer of one or a combination of the following:

- acrylic coated sand
- washed silica sand
- crumb rubber (granules specified as new or recycled rubber)
- cryogenic rubber (highest grade recycled rubber granule)
- volcanic ash, and
- cork, corn husks or coconut shell products.

VOLCANIC ASH



ACRYLIC COATED SAND



SILICA SAND



CRYOGENIC RUBBER



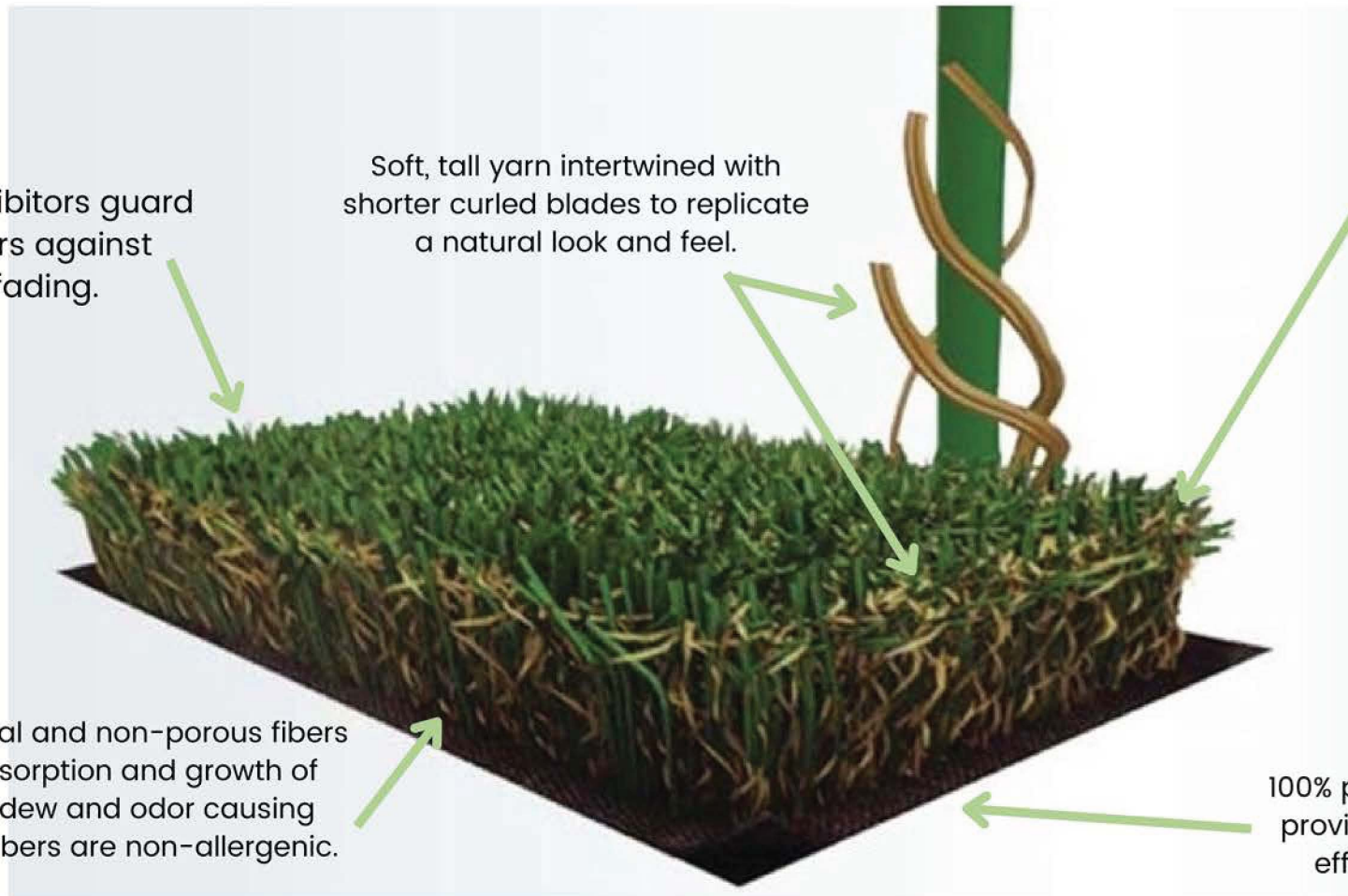
# INFILL



Since the infill replicates the thatch or top soil layer of natural sod, it is usually available in an earth tone or green color to blend well with the fibers. The type and amount of infill used depends on the application e.g. public use, dog grass, play area etc.

Proper infill installation is critical to maintaining blade structure, keeping the blades vertical, and protecting the grass system from the elements. The infill prevents the fibers from being “trodden flat.” A critical mistake made in many turf projects, regardless of the type of infill used, is the under filling or over filling of the turf system. An over filled system may experience severe infill displacement, while an under filled system may experience wrinkling and/or buckling of the turf surface and premature wear and abrasion of the fibers.

# SYNTHETIC GRASS COMPONENTS



UV inhibitors guard fibers against fading.

Soft, tall yarn intertwined with shorter curled blades to replicate a natural look and feel.

Supple texture of the fiber is made possible by an extrusion process that stretches fibers multiple times for maximum softness.

Antimicrobial and non-porous fibers inhibit absorption and growth of mold, mildew and odor causing bacteria. Fibers are non-allergenic.

100% permeable backing provides resiliency and effective drainage

# HEAT RESISTANCE

Artificial grass in general can not stay as cool as natural grass because natural grass is coursing with water which cools the organic grass blade surface.

Artificial grass does however stay much cooler than any other hardscape surface and does not absorb and radiate heat like hard pavement, rock or brick surfaces. In general, synthetic grass attains the same temperature as a concrete surface. However, because of its non-absorptive properties and because it does not radiate heat, the artificial grass surface can be quickly cooled with a spritz of water or cloud coverage on the hottest of summer days.



# FIRE RESISTANCE

Synthetic grass has fire retardant properties, so while the fibers will melt or singe when exposed to open fire and extremely hot objects for an extended period of time, fire will not spread. In addition, some infill types, e.g. sand, rubber, are fireproof and have an extinguishing effect on flame spread. Select turf products have achieved a Class 1 fire rating. Consult individual manufacturers for details.

In some instances, careful consideration must be paid to a landscape's orientation and its exposure to the sun's energy when magnified by glass or reflective surfaces. Intense light reflections from windows or doors with low emittance (low-E) glass, glass tables, or reflective siding may shrink, curl or even melt synthetic turf fibers. Therefore, it may be necessary to design a landscaped area that includes hard- and softscape features for shading and to tint any windows or doors that cause magnified or reflective light issues.



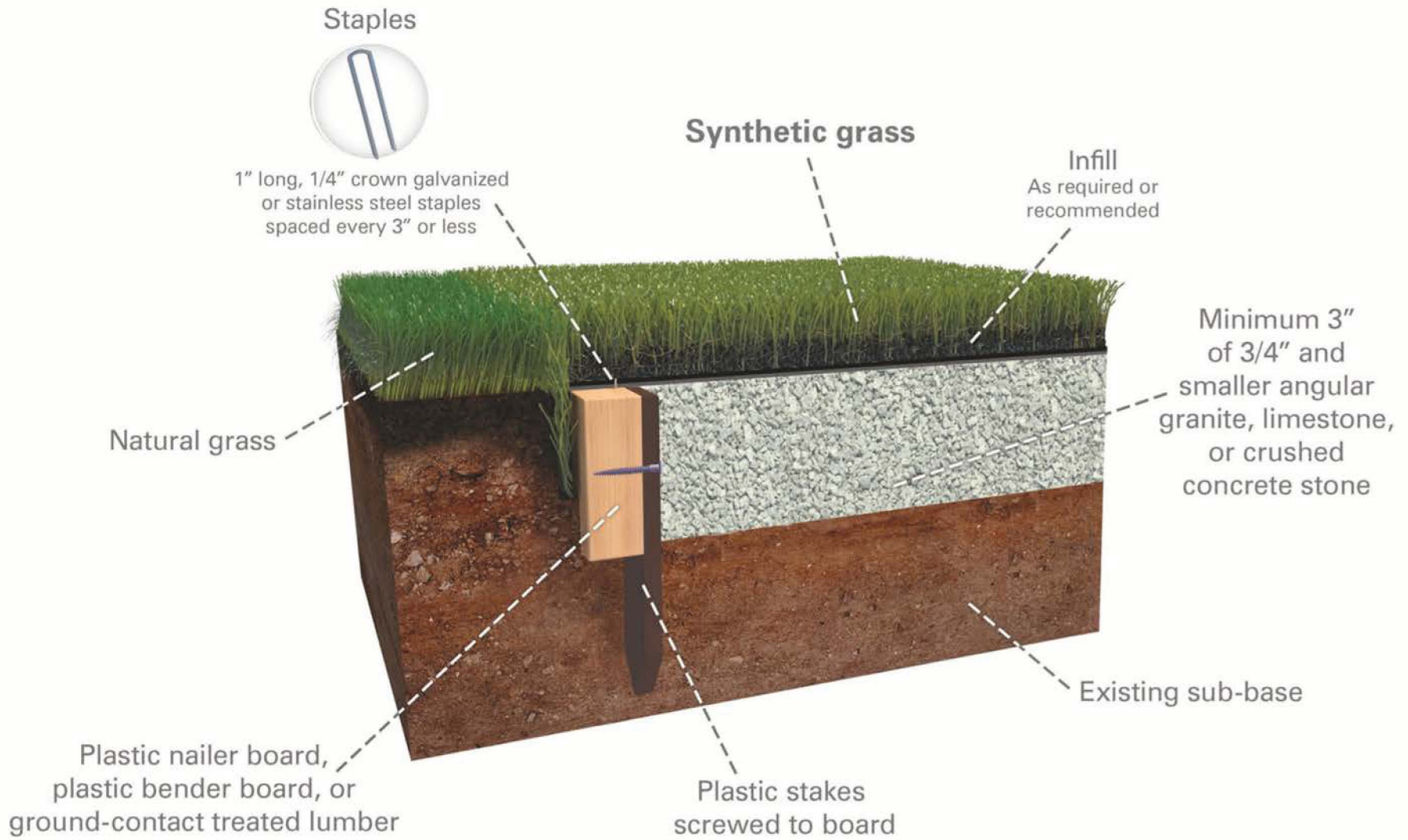
**RECOMMENDED  
INSTALLATION AND  
PERMEABILITY**

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# **DRAINAGE REQUIREMENTS**

The ability of synthetic grass for landscape to drain effectively to accommodate the local climatic conditions and demand of the installation depends on the materials used for the backing, infill, and base. The STC suggests that a permeable synthetic grass system drain at a minimum of 25 inches of water per hour. The composition and performance of the backing simply cannot be overlooked. While the backing is not seen, it plays a vital role in maintaining the aesthetics and performance of a synthetic grass system. Turf backings that absorb water and drain slowly lead to issues with water back-up and odor and bacteria buildup.

# Synthetic Grass - Residential Installation - City of Tampa



The field percolation test results are summarized below:

Section No.	Section Materials	Percolation Rate (minutes:seconds)	Comments
5	natural grass subgrade	4:55	subgrade compacted to approximately 92% of relative density
2	synthetic turf 4 inches of crushed concrete aggregate geotextile/subgrade	2:51	subgrade and aggregate compacted to approximately 92% of relative density
1	synthetic turf 2 inches of 3/8 inch granite 6 inches of No. 57 aggregate geotextile/subgrade	2:28	subgrade and aggregate compacted to approximately 92% of relative density
3	synthetic turf 4 inches of 3/8 inch limerock aggregate geotextile/subgrade	2:27	subgrade and aggregate compacted to approximately 92% of relative density
4	synthetic turf 2 inches of 3/8 inch granite 2 inches of 3/4 inch granite geotextile/subgrade	1:53	subgrade and aggregate compacted to approximately 92% of relative density

We utilized a 12-inch sample tube for each test and completed the laboratory testing in accordance with the above referenced method. The laboratory permeability test results are summarized below:

Section No.	Section Materials	Permeability Rate (in/hr)	Comments
5	natural grass subgrade	2.8	subgrade compacted to approximately 92% of relative density
3	synthetic turf 4 inches of 3/8 inch limerock aggregate geotextile/subgrade	8.5	subgrade and aggregate compacted to approximately 92% of relative density
2	synthetic turf 4 inches of crushed concrete aggregate geotextile/subgrade	9.6	subgrade and aggregate compacted to approximately 92% of relative density
4	synthetic turf 2 inches of 3/8 inch granite 2 inches of 3/4 inch granite geotextile/subgrade	11.3	subgrade and aggregate compacted to approximately 92% of relative density
1	synthetic turf 2 inches of 3/8 inch granite 6 inches of No. 57 aggregate geotextile/subgrade	12.9	subgrade compacted to approximately 92% of relative density; due to size of apparatus unable to compact No. 57 aggregate



# DRAINAGE REQUIREMENTS

The ability of synthetic grass for landscape to drain effectively to accommodate the local climatic conditions and demand of the installation depends on the materials used for the backing, infill, and base. The STC suggests that a permeable synthetic grass system drain at a minimum of 25 inches of water per hour. The composition and performance of the backing simply cannot be overlooked. While the backing is not seen, it plays a vital role in maintaining the aesthetics and performance of a synthetic grass system. Turf backings that absorb water and drain slowly lead to issues with water back-up and odor and bacteria buildup.

# SYNTHETIC TURF AND LEED

Synthetic turf has an impact on environmental conservation through a variety of means. It can reduce water usage by 70%, serve as a directional tool in gray water reclamation and is 100% recyclable. Consult individual manufacturers for specific information about LEED programs and relevant credits, but as listed here, synthetic turf systems may help a building project satisfy the requirements of earning LEED credits in the following categories. Turf only projects are not eligible for LEED consideration—synthetic turf installation must be part of a building project.

## Sustainable Sites

- Maximize open space
- Stormwater design

## Materials and resources

- Construction waste management
- materials re-use
- recycled content
- regional materials

## Site development

- Water efficient landscaping
- Water use reduction

## Indoor Environmental

- Low emitting material

## Innovation and Design

- Innovation in design

# **SYNTHETIC GRASS**

# **MAINTENANCE**



# MAINTENANCE

After installation, a synthetic grass landscape may feel softer than anticipated. Full penetration of the infill between the grass fibers and its subsequent settling into a uniform surface will occur naturally over time with normal weathering (rainfall) and initial use of the surface.

Depending on climatic conditions, this “settling in” period usually reaches its optimum after 2 to 3 months of use.

After this period of time the landscape surface will stabilize.



# MAINTENANCE

In order to maintain optimum performance and appearance of a synthetic grass surface, a couple of simple maintenance procedures must be performed on a regular basis (every four weeks) using a stiff bristle push broom or drag brush depending on the size of the area. Note, grooming will prematurely age the surface if done more than once a month. High traffic areas must be checked and groomed across their entire area by pushing or dragging the brush over the surface. The broom should be pushed/dragged in two directions since this will groom the exposed grass fibers and keep them from matting down excessively while providing an opportunity to maintain the infill level.

Intensive and repetitive use of certain areas may cause the infill material to be displaced, but uniformity of the infill can be easily maintained by replacing the displaced infill in these specific areas, as recommended by individual manufacturers

# MAINTENANCE

Although routine maintenance and natural weather patterns will clean and maintain a synthetic turf system, a few other maintenance precautions and procedures may be required.

## **Weeds**

- The presence of weeds and moss can occur if the surface is neglected or covered by items such as tarps for an extended period of time. Weeds may occur at the interface between the synthetic grass and a perimeter curb. Should this occur, weeds should be treated with a biodegradable weed killer which leaves no residue and more importantly, will not negatively affect the fibers or the coloring of the surface.

## **Stains**

- Many manufacturers provide cleaners and scrubs to help remove stubborn stains or debris, e.g. gum, that do not rinse away even after water has been spray applied. It is important to thoroughly flush the cleaning detergent from the affected area to avoid the surface from becoming slippery and posing a potential safety hazard. In all cases, manufacturer's instructions should be followed when applying any stain removal product.

# MAINTENANCE

## **Organic debris**

- A leaf blower may be used to remove organic materials from the grass surface. Rakes can be used to remove heavier objects; however, a leaf blower is the ideal tool for general upkeep.

## **Dry spills**

- A shop-vac may be used to clean up dry spills. Users must be sure to hold the suction end of the hose up off the surface to avoid removing the infill material along with the debris.

## **Pet clean-up**

- Solid waste is removed normally and any remaining waste can be washed off with a hose. Pet waste and urine will not discolor or stain the synthetic turf landscape.

# **SYNTHETIC GRASS COMMON USAGE**

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# RESIDENTIAL & COMMERCIAL

## BENEFITS

- You can use it all year long
- Increased leisure time
- Greatly reduces maintenance costs
- Pet & Kid friendly grass
- Fertilizer, herbicide & pesticide free

## IDEAL FOR

- Single family homes
- Senior living facilities
- Multi-family homes
- Pet owners
- Golfers
- Bocce ball fans

# PETS & DOG PARKS

## BENEFITS

- Drains clean, requires no harsh chemicals for urine
- Antimicrobial & hypoallergenic surface
- Safe, non-toxic infill
- Keeps pets clean
- Fertilizer and pesticide free

## IDEAL FOR

- Residential
- Animal shelters
- Dog parks & pet resorts
- Animal hospitals
- Neighborhood pet relief areas

# POOLS & COMMON AREAS

## BENEFITS

- Provides usable area all year long
- Can handle high traffic without the need for constant reseeding
- Greatly reduces maintenance costs
- Fertilizer, herbicide and pesticide free

## IDEAL FOR

- Residential Community Entranceways
- City & County Buildings
- Public Housing Areas
- Hospitals & Clinics

# ENTRANCES & COURTYARDS

## BENEFITS

- Community aesthetics
- Increased design opportunities
- Improves storm water management-will put more water in the turf than on the streets
- Reduces traffic control for maintenance
- Fertilizer, herbicide & pesticide free

## IDEAL FOR

- Residential community entranceways
- City & private buildings
- Public & private schools
- Hospitals & clinics
- Hotels

**AWARDS, EXPENDITURES AND ACCOMPLISHMENTS OVER A THREE YEAR PERIOD  
CDBG, CDBG-CV, ESG, ESG-CV, HOME, NSP, SHIP, SSCRA**

		FY 2023				FY 2022				FY 2021				GRAND TOTAL		
Title/Strategy	Description	Approved Budget	Expended as of April 30, 2023	Goals	Accomplishments as of April 30, 2023	Approved Budget	Expended as of September 30, 2022	Goals	Accomplishments as of September 30, 2022	Approved Budget	Expended as of September 30, 2021	Goals	Accomplishments as of September 30, 2021	Total Awarded	Total Expended	Total Goals / Accomplishments
NSP New Construction	Construction of new homes - Bright Community Trust, St. Jude Great Commission CDC and East Tampa Business & Civic Association	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Habitat for Humanity *	City assisted Habitat to purchase lots for housing	0	0	0	0	100,000	14,000	5	1	100,000	28,000	5	4	200,000	42,000	5
Housing Counseling - Multiple Agencies	Homebuyer education and foreclosure prevention city-wide	75,000	12,890	125	119	50,000	27,020	100	241	25,000	29,640	100	231	150,000	69,550	591
Purchase Assistance *	Down payment and closing cost assistance city-wide	1,575,000	2,006,900	54	35	980,841	1,311,314	62	34	546,791	511,286	39	29	3,102,632	3,829,500	98
Housing Accessibility *	Disabled Retrofit city-wide	150,000	0	10	0	150,000	19,427	20	0	75,000	123	17	1	375,000	19,550	1
Rehabilitation Assistance *	Repair Code citable items city-wide	916,851	897,818	51	23	1,002,922	1,108,623	31	39	925,000	618,016	19	30	2,844,773	2,624,457	92
Façade Improvements - SSCRA *	Façade improvements - ext painting, re-siding/cleaning, masonry/stucco repair/replacement, replace/repair awnings/shutters, repair doors/windows, repair/restructure front porch/stoops, ext code violations, repair/replace fencing, repair/replace accessibility ramps	400,000	88,323	50	7	200,000	227,408	21	25	200,000	87,259	21	9	800,000	402,990	41
Multi-Family	New Construction/Preservation	979,275	0	65	0	0	0	0	0	0	0	0	0	979,275	0	0
Single-Family New Construction to Assist Developers with matching funds - SSCRA	Construct new homes to be sold to a first-time, income eligible homebuyer within 12 months of construction completion	750,000	168,750	30	11	300,000	28,806	30	18	300,000	670,750	30	10	1,350,000	868,306	39
Community Housing Development Organization - PAL	Acquisition of property for construction of 20 units of affordable rental housing (Whispering Pines)	0	0	0	0	0	0	0	0	150,000	0	20	0	150,000	0	0
Community Housing Development Organization - Bright Community Trust	Develop 2 homes on NSP lots and other vacant land to be sold to first-time homebuyers at or below 80% mfi	237,711	0	1	0	0	0	0	0	380,000	0	2	0	617,711	0	0
Boley Centers *	Rental vouchers for homeless persons city-wide	287,400	50,251	25	14	287,400	233,981	25	19	230,480	282,598	25	23	805,280	566,830	56
Boley Centers	Rental assistance to households at-risk of becoming homeless	0	0	0	0	0	0	0	0	1,782,809	941,412	140	107	1,782,809	941,412	107
Catholic Charities *	Rental assistance to households at-risk of becoming homeless	40,000	28,230	20	10	40,000	20,600	20	12	1,678,924	598,668	140	95	1,758,924	647,497	117
Tetra Tech	Rental assistance to households at-risk of becoming homeless	0	0	0	0	0	6,492,092	0	1,148	12,196,406	5,358,018	-	689	12,196,406	11,850,110	1,837
<b>TOTAL HOUSING</b>		<b>5,411,237</b>	<b>3,253,161</b>	<b>431</b>	<b>219</b>	<b>3,111,163</b>	<b>2,991,178</b>	<b>314</b>	<b>1,537</b>	<b>6,394,004</b>	<b>3,767,752</b>	<b>558</b>	<b>1,228</b>	<b>14,916,404</b>	<b>10,012,091</b>	<b>2,984</b>

\* Approved budget reflects new funding only, prior year(s) funding is also being utilized

**CITY OF ST. PETERSBURG, HOUSING AND COMMUNITY DEVELOPMENT  
AWARDS, EXPENDITURES AND ACCOMPLISHMENTS OVER A THREE YEAR PERIOD  
ARPA, CDBG, CDBG-CV, ESG and ESG-CV**

		FY 2023				FY 2022				FY 2021				GRAND TOTAL		
Title/Strategy	Description	Approved Budget	Expended as of April 30, 2023	Goals	Accomplishments as of April 30, 2023	Approved Budget	Expended as of September 30, 2022	Goals	Accomplishments as of September 30, 2022	Approved Budget	Expended as of September 30, 2021	Goals	Accomplishments as of September 30, 2021	Total Awarded	Total Expended	Total Accomplishments
<b>PUBLIC SERVICE</b>																
AIDS Services Association of Pinellas	Operating support for HIV/AIDS program 3050 1st Avenue South	0	0	0	0	0	0	0	0	36,973	11,787	80	39	36,973	11,787	39
Bay Area Legal Services	Provide legal aide services to households facing eviction	0	49,028	0	61	135,000	20,441	200	28	0	0	0	0	135,000	69,469	89
Boley Centers - Case Management	Case management and wrap around services for permanent supportive housing	0	96,497	75	28	1,000,000	16,249	75	13	0	0	0	0	1,000,000	112,747	41
Boley Centers	Operating support for safe haven - 555 31st Street South	46,300	13,921	25	33	58,577	58,577	25	48	55,000	55,000	23	36	159,877	127,498	117
Catholic Charities	Operating support for Pinellas HOPE - 5726 126th Avenue North	30,149	0	760	1161	38,573	38,573	1000	1,303	40,000	40,000	1,000	247	108,722	78,573	2,711
Catholic Charities *	Rapid re-housing assistance to homeless persons city-wide over a 12 months	0	0	0	0	0	12,322	0	1	250,000	0	25	0	250,000	12,322	1
CASA	Operating support for emergency shelter confidential location	41,859	27,958	428	103	61,995	47,428	479	576	86,056	65,849	600	503	189,910	141,235	1,182
Community Law Program	Provide legal aide services to households facing eviction	0	41,422	0	33	0	144,630	0	192	137,500	55,687	100	25	137,500	241,739	250
Directions for Living	Rapid re-housing assistance to homeless persons city-wide over a 12 months	0	0	0	0	0	219,188	0	7	600,000	0	36	0	600,000	219,188	7
Directions for Living	Temporary hotel/motel vouchers where no appropriate emergency shelter beds are available	0	0	0	0	150,000	38,708	12	95	0	0	0	0	150,000	38,708	95
Gulfcoast Legal Services	Provide legal aide services to households facing eviction	0	2,992	0	4	0	18,382	0	19	98,267	1,099	30	1	98,267	22,473	24
Homeless Leadership Alliance	Operating support for PHMIS Information Network	59,503	34,855	0	201	60,220	60,220	0	0	61,692	56,662		548	181,415	151,737	749
Homeless Leadership Alliance	Provide services to prevent an divert households from becoming homeless.	0	54,819	0	16	0	58,383	0	20	258,612	0	50	0	258,612	113,203	36
Homeless Leadership Alliance	Provide assistance to prevent homelessness	0	63,040	0	82	160,302	9,930	55	1	0	0	0	0	160,302	72,971	83
Hope Villages of America	Deliver food to locations where the impact of COVID has imposed a food insecurity .	0	39,225	0	1841	0	46,304	0	4,409	88,302	0	3,000	0	88,302	85,530	6,250
Isaiah's Place	Provide funding to feed the homeless	15,000	0	500	0	0	0	0	0	0	0	0	0	15,000	0	0
New Frontiers	Operating support for 12 step program for recovering alcoholics and substance abuse - 440 Roser Park Drive South	5,148	2,587	35	55	5,000	5,000	50	56	5,000	5,000	150	35	15,148	12,587	146
Pinellas Opportunity Council	Assist the elderly with house cleaning and yard work city-wide	39,721	14,404	45	26	40,573	40,573	47	75	30,000	30,000	36	119	110,294	84,977	220
Salvation Army	Create a one-stop center for providing job and resource services to homeless residents, clients and overall low/mod persons at 1400 4th Street South	25,148	0	756	156	0	0	0	0	0	0	0	0	25,148	0	156

**CITY OF ST. PETERSBURG, HOUSING AND COMMUNITY DEVELOPMENT  
AWARDS, EXPENDITURES AND ACCOMPLISHMENTS OVER A THREE YEAR PERIOD  
ARPA, CDBG, CDBG-CV, ESG and ESG-CV**

		FY 2023				FY 2022				FY 2021				GRAND TOTAL		
Title/Strategy	Description	Approved Budget	Expended as of April 30, 2023	Goals	Accomplishments as of April 30, 2023	Approved Budget	Expended as of September 30, 2022	Goals	Accomplishments as of September 30, 2022	Approved Budget	Expended as of September 30, 2021	Goals	Accomplishments as of September 30, 2021	Total Awarded	Total Expended	Total Accomplishments
St. Petersburg Pregnancy Center	Provide medical, wellness and program services to pregnant and parenting women and their partners and families.	0	0	0	0	0	12,363	0	539	12,363	0	817	0	12,363	12,363	539
St. Vincent dePaul	Provide funding to pay night shelter staff salary and benefits - 401 15th Street North	59,344	41,418	272	302	68,914	68,914	467	see above	71,989	71,989	556	538	200,247	182,321	840
St. Vincent dePaul	Rapid re-housing assistance to homeless persons city-wide over a 12 months	0	343,818	0	63	0	273,935	0	53	478,883	0	30	0	478,883	617,754	116
St. Vincent dePaul	Temporary hotel/motel vouchers where no appropriate emergency shelter beds are available	0	72,112	0	34	0	155,604	0	70	257,416	155,218	60	32	257,416	382,935	136
Westcare	Operating support for transitional housing - 1735 Dr ML King Jr. Street South	29,858	29,858	100	75	32,427	32,427	250	109	58,630	58,630	319	105	120,915	120,915	289
Westcare	Operating support for inebriate receiving center (Turning Point) - 1801 5th Avenue North, including COVID funding	29,858	20,151	800	331	32,427	32,427	950	518	76,776	66,013	730	818	139,061	118,591	1,667
<b>TOTAL PUBLIC SERVICE</b>		<b>341,740</b>	<b>851,608</b>	<b>3,796</b>	<b>4,605</b>	<b>1,844,008</b>	<b>1,410,579</b>	<b>3,610</b>	<b>8,132</b>	<b>2,703,459</b>	<b>672,934</b>	<b>7,642</b>	<b>3,046</b>	<b>4,889,207</b>	<b>2,935,121</b>	<b>15,783</b>

**CAPITAL PROJECTS**

Abundant Life Ministries Fellowship	Complete the construction of the multi purpose outreach building	0	0	0	0	55,600.00	8,167.60	1500	0	0	0	0	0	55,600	8,168	0
Boley - Hays Facility	Replace flooring at 445 31st Street North	49,240	259	200	0	0.00	0.00	0		0	0	0	0	49,240	259	0
Brookwood Florida	Upgrade HVAC systems (FY 18); upgrade/remodel 7; restrooms (FY 19); and renovate laundry room and re-seal parking lots (FY 20) at 901 7th Avenue South	0	0	0	0	20,726.00	16,975.80	100	76	0	0	0	0	20,726	16,976	76
CASA *	Replace HVAC (FY 19) and replace flooring (FY 20), parking lot paving (FY 21), modernize elevator and roof replacement (FY 22), architectural design for roof replacement (FY 23), at 1011 1st Avenue North	25,000	4,907	2300	677	149,500.00	75,095.30	500	1,324	25,500	167	500	839	200,000	80,169	2,840
CASA	Alternations to expand the crisis hotline room in order to social distance as a result of COVID	0	0	0	0	0.00	0.00	0	0	9,347	8,666	500	see above	9,347	8,666	0

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		FY 2023				FY 2022				FY 2021				GRAND TOTAL		
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Catholic Charities	Install ultraviolet lights in A/C to filter the air and kill bacteria, viruses, and pathogens at 425 13th Avenue South and 5726 126th Avenue North	0	0	0	0	0.00	8,156.00	0	645	10,210	54	1,026	0	10,210	8,210	645
Catholic Charities	Construction of bathroom/showers at 5726 126th Avenue North as a result of COVID	425,000	0	760	0	0.00	0.00	0	0	0	0	0	0	425,000	0	0
Dome District Apartments	Replace sliding glass doors and entry doors at 1029 Burlington Avenue North	0	0	0	0	49,970.00	48,035.50	18	18	0	0	0	0	49,970	48,036	18
Jordan Park Elementary School (Plan Amendment)	Renovations to the property - 2392 9th Avenue South	0	110,105	0	76	0.00	576,414.16	0	114	1,244,565	523,035	177	86	1,244,565	1,209,554	276
Louise Graham	Installation of autoatoc hand dryers and the purchase of supplies to prevent the spread of COVID at 2301 3rd Avenue South and 2355 28th Street South	0	0	0	0	0.00	10,325.00	0	81	12,963	578	72	102	12,963	10,903	183
Lutheran Services/Jordan School	Rehabilitation (FY 2019); install ultraviolet lights in A/C to filter the air and kill bacteria, viruses, and pathogens at 2390 9th Avenue South, and purchase of items to prevent the spread of COVID (FY 2020)	0	0	0	0	0.00	97,244.55	0	see above	85,454	0	0	see above	85,454	97,245	see below
Sanderlin Center	Repairs and painting of th exterior (FY 18); and create additional parking from existing green space (FY 20)	0	0	0	0	94,857.00	66,400.00	200	434	0	0	0	0	94,857	66,400	434
PARC - Cottages *	Replace fencing and playground safe surface (FY 18); purchase/install a permanent generate (FY 19); renovate 2 bathrooms, re-texture ceilings, replace light fixtures (FY 20); renovate two bathrooms (FY 21); and renovated two bathroomns (FY 22) at 3025 76th Way North	87,750	385	16	16	70,000.00	953.00	16	48	0	55,687	0	16	157,750	57,026	80
PARC - Bert Muller Home *	Repave two parking lots, replacement of playground equipment, and security camera upgrades (FY 20); renovate 24 bathrooms (FY 21); and renovate 24 bathrooms (FY 22) at 3190 75th Street North	298,508	1,123	48	48	219,596.00	855.10	48	48	0	0	0	0	518,104	1,978	96
PARC - Life-Long Learning Center	Renovate 8 bathrooms and replace windows with hurricane rated (FY 20); Replacement of HVAC system at 3100 75th Street North (FY 21)	0	0	0	0	0.00	37,780.50	0	265	192,371	1,099	360	254	192,371	38,879	519

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		FY 2023				FY 2022				FY 2021				GRAND TOTAL		
Title/Strategy	Description	Approved Budget	Expended as of April 30, 2023	Goals	Accomplishments as of April 30, 2023	Approved Budget	Expended as of September 30, 2022	Goals	Accomplishments as of September 30, 2022	Approved Budget	Expended as of September 30, 2021	Goals	Accomplishments as of September 30, 2021	Total Awarded	Total Expended	Total Accomplishments
22nd Street South Corridor/Deuces Live Main Street Improvements	Improvements to include: construct a public park/plaza 22nd Street and 9th Avenue South, construct a public park/plaza 22nd Street and 5th Avenue South, convert 22nd Street between 9th & 11th Avenues, to a flush street-adding brick pavers, widening sidewalks, and adding enhanced streetscape.	0	256,901	0	Low/Mod Census	0.00	1,666,110.99	0	Low/Mod Census	2,378,082	0	0	NRSA	2,378,082	1,923,012	0
Westcare - Turning Point *	Purchase and installation of an emergency generator, replace windows, and bathroom/shower renovations (FY 21); and installation of new lighting ceiling tiles, insulation and flooring (FY 22) at 1801 5th Avenue North	58,658	0	see above	see above	207,234.00	35.50	0	see above	0	0	0	0	265,892	36	0
Westcare - Davis/Bradley *	Remove restrooms replace flooring in common areas and replace kitchen tile (FY 21); and replace flooring in hallways and residential rooms (FY 22) at 1735 Dr ML King Jr Street South	60,409	0	see above	see above	191,575.00	35.50	0	see above	0	0	0	0	251,984	36	0
<b>TOTAL CAPITAL PROJECTS</b>		<b>1,004,565</b>	<b>373,680</b>	<b>2,564</b>	<b>817</b>	<b>1,059,058</b>	<b>2,612,585</b>	<b>2,382</b>	<b>3,053</b>	<b>3,958,492</b>	<b>589,286</b>	<b>2,635</b>	<b>1,297</b>	<b>6,022,115</b>	<b>3,575,550</b>	<b>5,167</b>
<b>GRAND TOTAL OF PUBLIC SERVICE AND CAPITAL PROJECTS</b>		<b>1,346,305</b>	<b>1,225,288</b>	<b>6,360</b>	<b>5,422</b>	<b>2,903,066</b>	<b>4,023,164</b>	<b>5,992</b>	<b>11,185</b>	<b>6,661,952</b>	<b>1,262,220</b>	<b>10,277</b>	<b>4,343</b>	<b>10,911,323</b>	<b>6,510,672</b>	<b>20,950</b>

\* Approved budget reflects new funding only, prior year(s) funding is also being utilized

Funding Sources

Line No.	Approved Projects	Program Goals H-Household, P-Persons, L-Loans	Fiscal Year to date Accomplishments	Total Budget	CDBG	CDBG-CV#1	CDBG-CV#3	HOME	HOME-ARP	ARPA	ESG	ESG-CV#1	ESG-CV#2	NSP	ERAP	SHIP	SSCRA	CHTF	HCPJ	Penny for Pinellas	AHF	GEN FUND	Total Expended	Amount Remaining	Commitments/Under Contract	Total Funds Available to Commit	
<b>Housing Programs</b>																											
1	Rehabilitation Assistance Program (RAP): SF, O/O, <120% MFI	51 H	21	2,732,053.44				0.00								681,774.01	198,643.80							880,417.81	1,851,635.63	407,551.83	1,444,083.80
2	Housing Assistance Program: SF, O/O, <120% MFI	10 H		258,000.00												17,400.00	0.00							17,400.00	238,600.00	12,000.00	226,600.00
3	Purchase Assistance: SF, HBL, <140% MFI	54 H	31	3,634,082.28				0.00								1,203,300.00	803,600.00							2,008,900.00	1,627,182.29	11,505.55	1,615,656.71
4	Multi-Family Housing Development Program	65 H		5,676,433.73				0.00								0.00		0.00			0.00	0.00		0.00	5,676,433.73	290,000.00	5,386,433.73
5	Construction Warranty Program: SF, O/O <120% MFI	2		32,684.73																0.00				0.00	32,684.73	0.00	32,684.73
6	Lead-Based Paint Testing/Abatement	0		13,395.27																				0.00	13,395.27	0.00	13,395.27
7	Affordable Housing Property Acquisition and Site Preparation	235 H		9,190,248.40													0.00		901,379.70				901,379.70	8,288,868.70	8,277,118.79	11,750.00	
8	Affordable Residential Property Improvement Grant	10 H		378,274.00													125,148.00							125,148.00	253,126.00	23,960.00	229,166.00
9	Affordable Housing Redevelopment Loan Program	30 H	11	9,531,114.12																				1,695,339.99	7,835,774.17	6,777,749.35	1,058,024.82
10	Affordable Single-Family Façade Improvement Program	50 H	7	498,399.69																				98,322.72	400,076.94	23,718.00	376,358.94
11	Affordable/Workforce Housing	0		1,711,174.53																	155,650.00		155,650.00	1,555,524.53	468,200.49	1,087,324.04	
12	Homeownership Counseling / Foreclosure Prevention Counseling	125 P	107	97,980.00												12,890.00	0.00						12,890.00	85,090.00	85,090.00	0.00	
13	Jordan Park Apartments			2,000,000.00																				2,000,000.00	0.00	0.00	0.00
14	Community Development Housing Organization (CHDO) - Bright Community Trust	1 H		677,595.01				0.00															0.00	677,595.01	51,059.01	626,536.00	
15	Community Development Housing Organization (CHDO) - Pinellas Affordable Living Founders Point	15 H		320,817.00				0.00															0.00	320,817.00	0.00	320,817.00	
16	Community Development Housing Organization (CHDO) - Pinellas Affordable Living Whispering Pines	20 H		910,000.00				0.00															0.00	910,000.00	910,000.00	0.00	
17	Community Development Housing Organizations (CHDO) - NHS (proceeds account only)																						0.00	0.00	0.00	0.00	0.00
18	Habitat for Humanity (carry forward)			263,161.19				0.00															0.00	263,161.19	0.00	263,161.19	
19	NSP Housing Programs	0		752,381.12										16,657.98									16,657.98	735,723.14	733,319.56	2,403.58	
20	Aff Hsg GAP Financing-FY 21			3,500,000.00																			0.00	3,500,000.00	3,500,000.00	0.00	
21	Flats on 4th - Arcway Partners LLC	64 H		610,000.00																	0.00		0.00	610,000.00	610,000.00	0.00	0.00
22	Bear Creek Commons			500,000.00						0.00													0.00	500,000.00	0.00	500,000.00	
23	Burlington Post II			2,939,125.00						0.00													0.00	2,939,125.00	0.00	2,939,125.00	
24	Skylark Lofts II			6,500,000.00						0.00													0.00	6,500,000.00	0.00	6,500,000.00	
25	Innovare			3,426,166.00						468,691.47													468,691.47	2,957,474.53	2,957,474.53	0.00	
26	Ed White Senior Acts			5,938,214.00						0.00													0.00	5,938,214.00	0.00	5,938,214.00	
27	Vincentian Village			1,000,000.00						0.00													0.00	1,000,000.00	0.00	1,000,000.00	
28	Residential Rehab Rebates Program			250,000.00																		0.00	0.00	250,000.00	0.00	250,000.00	
29	<b>Total Housing Programs</b>			<b>63,339,276.58</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>468,691.47</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>16,657.98</b>	<b>0.00</b>	<b>1,918,364.91</b>	<b>4,921,654.56</b>	<b>0.00</b>	<b>1,667,025.70</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>8,378,797.68</b>	<b>84,866,478.92</b>	<b>25,138,747.11</b>	<b>29,821,731.81</b>	
<b>Subrecipient Projects *</b>																											
30	Abundant Life Ministries Fellowship	1,500 P		52,432.40	0.00																		0.00	52,432.40	52,432.40	0.00	0.00
31	Bay Area Legal Services (carry forward)		31	171,258.79			49,027.50	0.00															49,027.50	122,231.29	122,231.29	0.00	
32	Bible Centers - Safe Haven	20 P	32	46,300.00	13,920.68																		13,920.68	32,379.32	32,379.32	0.00	
33	Bible Centers - Hays Facility	200 P		49,240.00	259.09																		259.09	48,980.91	48,980.91	0.00	
34	Bible Centers - TIBRA	25 P	17	455,912.10				50,251.00															50,251.00	405,661.10	396,707.38	8,953.72	
35	Bible Centers - Case Management	75 P	29	983,750.71						162,408.91													162,408.91	821,341.80	821,341.80	0.00	
36	Brookwood Florida			0.00	0.00																		0.00	0.00	0.00	0.00	
37	Catholic Charities - Rental Assistance	20 H	10	74,769.19								31,128.77											31,128.77	43,640.42	43,640.42	0.00	
38	Catholic Charities - Pinellas HOPE	780 P	885	455,149.00	0.00	0.00	0.00																0.00	455,149.00	30,149.00	425,000.00	
39	Community Action Stops Abuse (CASA) - Operating	428 H	177	41,869.00	21,332.11							11,137.25											11,137.25	32,469.34	9,389.64	9,389.64	
40	Community Action Stops Abuse (CASA) - Rehab	2,300 P	601	94,900.00	74,806.50																		74,806.50	20,093.50	15,093.50	5,000.00	
41	Community Law Program (carry forward)		33	114,642.56			41,421.72																41,421.72	73,220.81	73,220.81	0.00	
42	Gulfcoast Legal Services (carry forward)		4	79,786.20			2,992.13																2,992.13	75,794.07	75,794.07	0.00	
43	Hope Villages of America (carry forward)		1,841	41,997.98			39,225.18																39,225.18	2,772.80	2,772.80	0.00	
44	Isaiah's Place			15,000.00	0.00																		0.00	15,000.00	15,000.00	0.00	
45	James B. Sanderlin Center *			(182.50)	(182.50)																		(182.50)	0.00	0.00	0.00	
46	New Frontiers	35 P	44	5,148.00	2,587.08																		2,587.08	2,560.92	2,560.92	0.00	
47	Operation PAR*			0.00	0.00																		0.00	0.00	0.00	0.00	
48	PARC - Bert Muller Home	48 P	48	517,248.90	219,884.00																		219,884.00	297,364.90	297,364.90	0.00	
49	PARC - Cottages	16 P	16	251,797.00	164,432.30																		164,432.30	87,364.70	87,364.70	0.00	
50	Pinellas County Homeless Leadership Alliance (HLA) (carry forward)		40	410,103.60		63,040.32	54,819.44				34,855.25												152,715.08	257,388.52	257,388.52	0.00	
51	Pinellas Opportunity Council	45 H	18	36,721.00	14,403.58																		14,403.58	25,317.42	25,317.42	0.00	
52	RC Club - Happy Worker's Day Care	98 P*		(389.15)	(389.15)																		(389.15)	0.00	0.00	0.00	
53	Salvation Army of St. Petersburg	796 P	156	25,148.00	0.00																		0.00	25,148.00	25,148.00	0.00	
54	St. Vincent dePaul (current & carry forward)	272 P	349	1,405,128.56	35,941.67	4,738.00					11,136.25		415,930.24										467,746.16	937,380.40	937,380.40	0.00	
55	Westcare-Transitional Housing	100 P	64	379,131.50	18,721.75																						

Link

Funding Sources

Line No.	Approved Projects	Program Goals H- Household, P- Persons, L- Loans	Fiscal Year to date Accomplishments	Total Budget	CDBG	CDBG-CV#1	CDBG-CV#3	HOME	HOME-ARP	ARPA	ESG	ESG-CV#1	ESG-CV#2	NSP	ERAP	SHIP	SSCRA	CHTF	HCFP	Penny for Pinellas	AHF	GEN FUND	Total Expended	Amount Remaining	Commitments/Under Contract	Total Funds Available to Commit	
	Support Services																										
63	CHDO Operations - PAL			60,000.00				0.00															0.00	60,000.00	30,000.00	30,000.00	
64	Administration			3,893,452.24	295,694.64	11,299.39	13,103.01	2,743.05	17,684.09	44,675.00	13,682.56		43,101.09	122.07	266.89	134,077.99						568,379.96	1,134,786.34	2,798,665.90	1,130,058.40	1,628,607.50	
65	TBRA Voucher Program Administration			25,600.00				1,600.00															1,600.00	24,000.00	14,000.00	10,000.00	
66	Legal Administration			59,436.67																		18,933.81	18,933.81	40,502.86	0.00	40,502.86	
67	Program Delivery Costs			380,000.00	262,407.74			0.00															262,407.74	117,592.26	117,592.26	0.00	
68	Total Support Services			4,418,488.91	658,102.38	11,299.39	13,103.01	4,343.05	17,684.09	44,675.00	13,682.56	0.00	43,101.09	122.07	266.89	134,077.99	0.00	0.00	0.00	0.00	0.00	568,379.96	1,417,727.89	3,000,761.02	1,291,680.66	1,708,110.36	
69	Total All Approved Projects			74,873,660.99	1,499,020.00	123,327.28	186,299.81	84,694.99	17,684.09	876,776.80	124,210.88	0.00	489,031.33	16,780.09	266.89	2,049,442.00	4,921,854.56	0.00	0.00	0.00	0.00	568,379.96	11,732,626.76	62,845,034.81	30,764,171.92	32,088,862.89	
	Funding to be Reprogrammed																										
70	Funding to be programmed			9,417,942.79	505,954.86	0.00	57,747.43	2,581,160.15	0.00	0.00	0.00	0.00	0.00	0.00	5,704,803.10	0.00		156,205.69	412,071.56					9,417,942.79	0.00	9,417,942.79	
71	Old HUD (Program Ended) Funding at City			26,906.08	26,906.08																				26,906.08	26,906.08	
72	HCFP Designated for Housing Units from Developers			209,068.33																				209,068.33	209,068.33	0.00	
73	Available CRA funding for BIF, Rehab, PA, Counseling not assigned			984,013.61													984,013.61								984,013.61	984,013.61	
74	Total Funding to be Reprogrammed			10,637,930.91	632,860.94	0.00	57,747.43	2,581,160.15	0.00	0.00	0.00	0.00	0.00	0.00	5,704,803.10	0.00	984,013.61	156,205.69	621,139.85	0.00	0.00	0.00	0.00	10,637,930.91	209,068.33	10,428,862.48	
	Sources																										
75	FY Grants / City Funds / CV Funds			20,403,274.07	1,857,263.00			875,225.00	0.00	0.00	154,953.00				5,969,209.53	2,497,889.00	5,620,705.00		675,000.00	1,500,000.00	250,000.00	1,013,029.54					
76	B-05/B-06 Reprogrammed Award 81573			14,437.70	14,437.70																						
77	Carry Forward Funds from Previous FY			63,909,519.51	1,993,746.13	802,904.40	945,363.60	3,202,416.35	3,034,753.97	21,773,075.84	44,062.81	1,374,966.96	757,469.52	0.00	3,007,163.28	8,965,826.22	439,954.48	14,652,671.14	1,915,142.78	1,000,000.00							
78	Fiscal Year Program Income-Housing			89,454.03	77,882.34			107,627.79								439,574.27											
79	Prior HUD-Must be used for Low Mod Housing			26,906.08	26,906.08																						
80	Total Sources			85,213,591.39	3,970,235.25	802,904.40	945,363.60	4,185,269.13	3,034,753.97	21,773,075.84	199,015.81	0.00	1,374,966.96	757,469.52	5,969,209.53	9,944,626.55	14,586,533.22	446,205.69	15,555,789.68	3,415,142.78	1,250,000.00	1,013,029.54	0.00	0.00	0.00	0.00	
81	Total Funding by Funding Source Remaining			(8,911,930.40)	(2,471,416.25)	(679,577.12)	(789,064.00)	(4,130,674.00)	(3,017,069.88)	(21,097,299.80)	(74,809.23)	0.00	(916,936.66)	(740,689.43)	(5,969,942.60)	(3,895,184.55)	(9,665,478.72)	(446,205.69)	(14,479,826.07)	(3,415,142.78)	(1,250,000.00)	(454,653.58)	(11,732,626.76)	(73,480,966.62)	(30,963,240.25)	(42,917,725.37)	

1.32

\* Subrecipient Notes:  
Line No(s):  
38 Funds were declined from agency and expense moved to the General Fund  
46 Funds were declined from agency

CDBG Timeliness Ratio

0.00

Funding Source	Commitments - Contracts	Commit	Total
CDBG	2,799,365.05	1,136,691.36	3,939,056.41
HOME	1,700,848.72	2,429,626.36	4,130,675.08
HOME-ARP	0.00	3,017,999.86	3,017,999.86
ARPA	3,778,816.33	17,316,483.53	21,097,299.86
ESG	949,032.45	41,708.43	990,740.88
SHIP	806,875.85	3,088,308.70	3,895,184.55
CRA	7,006,168.35	2,659,310.37	9,665,478.72
ERAP	0.00	5,958,942.64	5,958,942.64
NSP 1 and 3	738,285.89	2,403.58	740,689.47
CHTF	290,000.00	156,205.69	446,205.69
HCFP	12,993,847.61	1,585,978.46	14,479,826.07
Penny	0.00	3,415,142.78	3,415,142.78
AHF	0.00	1,250,000.00	1,250,000.00
GEN FUND	0.00	454,653.58	454,653.58
Total	30,963,240.25	42,917,725.37	73,480,965.62
	0.00	0.00	

Notes

Spent of budget 5.73%

Five Year Housing Delivery Tracking 2017-2022

Name of Development	Address	Total Number of Units	0-30% AMI (& 33% AMI) UNITS	<50% AMI Units	<60% AMI Units	<80% AMI Units	80-120% AMI Units	Funding Req. From City	HOME	SHIP	LHAF	Other City (CRA/HCI/P)	City Penny	Econ Stab or ARPA*	Other - Non City Funding Assistance	Current Status	Type of Units
Burlington Place	3155 Burlington Ave N	53		53				\$90,000		\$90,000					\$12,339,117	Complete -CO 2017	New
Burlington Post	Burl. Ave & 32nd St N	90		8	78		4	\$90,000		\$90,000					\$17,754,470	Complete 2018	New
The Preserves at Clam Bayou Phases I & II	4110 34th Ave S	16		16				\$970,590	\$970,590						\$1,818,000	Complete 2019	New
The Preserves at Clam Bayou 3	4146 34th Ave S	8		8				\$481,093	\$481,093						\$962,186	CO issued 6/24/20	New
Skyway Lofts (aka Avery Commons)	3319 39th Ave. South	65	10		42	13		\$90,000			\$90,000				\$15,434,149	Complete - CO 2/28/2022	New
Delmar Terrace	745 Delmar Terrace South	65	33		32			\$334,000				\$334,000			\$22,031,984	Complete-CO issued 1/28/22	New
Butterfly Grove	506 Grove St North	20		20				\$75,000				\$75,000			\$5,164,600	Complete - CO 3/23/2022	Demo & New Construction
The Shores Apt	26th Ave S and 31st St. S	51	5		46			\$567,500				\$567,500			\$11,057,703	Complete- CO issued 8/12/22	New
VOA's Innovare	846 5th Av S	51	4	8	39			\$75,000				\$75,000	\$3,426,166		\$15,239,643	Under Construction - *ARPA inflation funding approved 10/20/22& closed 2/7/23	New
Bayou Pass	3201 6th Street South	10		10					\$111,000							CC approved preservation 1/07/2021	preservation thru 1/01/2031
CHAF	1825 13th S/S, 1861 13th S/S, 936 23rd A/S	6					6					\$60,000				Complete 9/21/21	New
Whispering Pines	2655 54th Ave S	20		20				\$910,000	\$910,000						\$4,796,585	3/27/23 closing. Under construction	New
Founders Point	2901 31st Street South	15	3	12				\$75,000	\$320,817			\$75,000			\$3,964,500	FHFC awarded funding 4/29/2022.	New
Arya New NE	5475- 3rd Lane North	415				59	66	\$1,000,000						\$1,000,000	\$97,000,000	Council approved 7/15/21. Permits in Process	New
Jordan Park	1245 Jordan Park Strret South	266	40		226							\$2,000,000			\$91,600,725	Ground breaking 1/28/22	60 New/& 206 rehab
Bear Creek- elderly	635-64th Street South	85	13		56	16					\$290,000	\$320,000	\$1,950,000	\$4,000,000	\$22,880,568	City Penny Land Acquisition closed 7/21/22- *ARPA inflation funding approved 10/20/22, closing& construction set for May 2023	New
Sixteenth Square	1600 block of Dr. Martin Luther King Jr. S. South	11					11					\$286,000			\$2,314,000	Under Construction	New townhomes
Russell Street	1701, 1715, 1729 Russell St. S	12			12									\$750,000		Under Renovation	preservation through 2/4/2052
Shell Dash	12th Avenue & 16th St. South	10				10						\$1,075,000				CC approved 3/10/2022, permit in process	New
Orange Station	1300 1st Ave N	103					42									CDA Development Agreement for former police station site 8/27/20	New
Fairfield Apartments	3200 Fairfield Avenue South	264		53		67	144					\$2,281,689			\$5,600,000	approved BOCC 5/10/22 CRA 7/05/22 City Council Approval 8/18/22	New
Citrus Grove	731 15th St. S	84			84							\$1,420,708				CRA 7/05/22 - CC 8/18/22. Under renovation.	preservation
Skyway Lofts II	3800 34th St S	66	12	0	38	16							\$6,500,000	\$12,950,550	CC approved 10/20/22 - estimate Aug 2023 start	new	
Archway Flats on 4th	106th Ave & 4th St. N.	64	10		44	10						\$610,000		\$22,576,961	CC approved 10/20/22 - future request pending if win 9%	new	
SPHA- Ed White	2331 9th Ave N	70			70							\$3,000,000	\$5,938,214	\$14,551,214	CC approved 10/20/22	new	
Vincetian Village	401 15th St N	73	4	11	58								\$1,000,000	\$27,629,032	CC approved 10/20/22 - closing set for July 2023	new	
Burlington Post II	3100 Burlington Ave. N.	75	12	0	39	24						\$2,685,875	\$2,939,125	\$20,689,145	CC approved ARPA 10/20/22 - CRA approval 11/10 CC. Awarded SAIL 1/27/22- est Feb 2024 start	new	
Habitat Townhomes	1800 blk 18th Ave S	12			12							\$1,425,000				Negotiating Term Sheet with Habitat. 11/01 CAC & 11/10 CC	New
Habitat Townhomes	2100 blk 18th Ave S	44			44							\$725,000				Negotiating Term Sheet with Habitat 11/01 CAC & 11/10 CC	New
<b>Total approved &amp; pending (includes some market)</b>	<b>COMBINE APPROVED &amp; PENDING</b>	<b>2124</b>	<b>146</b>	<b>219</b>	<b>920</b>	<b>215</b>	<b>273</b>	<b>\$4,758,183</b>	<b>\$2,793,500</b>	<b>\$180,000</b>	<b>\$380,000</b>	<b>\$14,015,772</b>	<b>\$4,950,000</b>	<b>\$25,553,505</b>	<b>\$428,355,132</b>		
			<b>1,500</b>	<b>at or below 80% AMI</b>			<b>273</b>	<b>at or below 120%AMI</b>		<b>1,773</b>	<b>combined Aff &amp; WF</b>						

Revised 4/5/2023 \* ARPA projects approved October 20, 2022

Approved by City Council; loan or funding agreement not yet signed (ccordinating with construction funding timelines)

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
19 7546	19/03/25	Z15	2136 BONITA WAY S 01 32 16 49428 076 0020	113687	HUNDLEY, DAVID A 5141 14TH AVE N ST PETERSBURG 337106024	FL
16 20737	16/09/16	MN	807 CALLA TERR N 19 31 17 74664 000 0070	182603	AGANA ST PETE 7777777 LLC 4830 KENNEDY BLVD STE 600 TAMPA 336092584	FL
22 6105	22/03/15	Z15	5340 CAROLONA WAY S 01 32 16 49248 002 0080	112795	THORNHILL, PAULINE CUTLIFF TRE 5340 CAROLONA WAY S ST PETERSBURG 337124932	FL
4 1811	4/01/15	MN	2880 CENTRAL AVE 23 31 16 35118 024 0060	86685	GOLDEN SUN 8 LLC PO BOX 21084 ST PETERSBURG 337421084	FL
20 8193	20/04/06	ERH	7705 DR. ML KING JR ST N 30 30 17 75605 001 0010	142657	BURGER KING COMPANY LLC 5707 BLUE LAGOON DR MIAMI 331262015	FL
15 23204	15/10/05	JAR	927 DR. ML KING JR ST S 25 31 16 00648 000 0010	90649	R E M PROPERTIES IV INC 307 62ND AVE N ST PETERSBURG 337027537	FL
10 4014	10/03/17	JAR	1900 FAIRFIELD AVE S 24 31 16 59454 001 0011	90053	HOUSE OF GOD CHURCH WHICH IS T 1900 FAIRFIELD AVE S ST PETERSBURG 337121773	FL
22 24448	22/11/15	MW	3926 INDIANAPOLIS ST NE 04 31 17 81522 028 0040	154877	HAWTHORNE, ANDREW 3926 INDIANAPOLIS ST NE ST PETERSBURG 337036044	FL
15 29210	15/12/11	JAR	1417 JAMES AVE S 25 31 16 17694 000 0140	91399	DAVIS, JAMES A 1417 JAMES AVE S ST PETERSBURG 337052244	FL
2 15235	2/06/10	Z04	6010 MAGNOLIA ST N 31 30 17 61146 091 0440	147895	WHITAKER, DAVID 6031 DR MARTIN LUTHER KING JR ST PETERSBURG 337031139	FL
19 29045	19/10/30	JAR	1056 QUEEN ST S 25 31 16 50976 002 0160	93727	ALLEN, BOBBY L 1036 QUEEN ST S ST PETERSBURG	FL

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
					337122424	
23 1222	23/01/20	Z15	3695 SEAROBIN DR SE 32 31 17 18036 041 0140	189739	SMITH, JEAN EST 3695 SEAROBIN DR SE ST PETERSBURG 337054034	FL
23 6230	23/04/06	CBG	1908 UNION ST S 25 31 16 79722 000 0200	95171	THAI, TRINH 1908 UNION ST S ST PETERSBURG 33712	FL
21 11746	21/05/18	MN	2520 1ST AVE N 23 31 16 35082 019 0030	86029	STARKE, CHRISTOPHER 1326 60TH ST S ST PETERSBURG 337073209	FL
23 1224	23/01/20	RTH	651 10TH AVE S 30 31 17 77004 000 0040	185639	ALBANO INVESTMENTS GROUP INC PO BOX 1064 ST PETERSBURG 337311064	FL
19 20440	19/08/07	JAR	1151 10TH AVE S 25 31 16 80208 000 0060	95227	LEE, TIMOTHY 1151 10TH AVE S ST PETERSBURG 337052116	FL
19 3126	19/02/07	JAR	1246 10TH AVE S 25 31 16 17658 002 0060	91277	LOVETT, DELORES 8200 YARDLEY AVE N ST PETERSBURG 337103668	FL
18 32971	18/12/28	ERH	1201 102ND AVE N 13 30 16 78381 000 0010	5393	FL INT IMP FUND TRE ATTN: ST PETE REG COMM CNTR TALLAHASSEE 323996575	FL
22 19033	22/09/07	JAR	1002 13TH AVE S 25 31 16 15012 000 0150	91075	FEINMAN DANIEL TRE PO BOX 447 ODESSA 335560447	FL
20 22553	20/09/17	PM	2181 13TH AVE S 25 31 16 22320 000 0090	91727	WILLIAMS, RAY E EST PO BOX 35097 ST PETERSBURG 337050502	FL
23 1225	23/01/20	PM	2624 13TH AVE S 26 31 16 97560 000 0640	240285	RS RENTAL II LLC 31 HUDSON YARDS FL 11 NEW YORK 100012170	NY
21 11741	21/05/18	ZM	3445 13TH AVE S	102527	HARRIS, JERALEEN	

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
			27 31 16 59652 000 0070		3023 RUSSET PASS LAKELAND 338125117	FL
18 32970	18/12/28	ZM	4029 13TH AVE S 27 31 16 53532 000 0060	102227	RERFF1 LLC 9912 BOSQUE CREEK CIR UNIT 302 TAMPA 336195160	FL
18 11636	18/05/11	FDJ	4810 13TH AVE S 28 31 16 21492 001 0100	105047	FEINMAN, DANIEL TRE PO BOX 447 ODESSA 335560447	FL
22 24449	22/11/15	BG	7691 14TH ST N 25 30 16 56736 042 0160	9343	ELBERT, DIANE M 3112 SE BURTON ST TOPEKA 666052138	KS
20 7706	20/03/30	JAR	1363 14TH ST S 25 31 16 10656 000 0050	90813	BEACHUM, BEATRICE W 935 POST AVE ROCHESTER 146192313	NY
21 4675	21/03/04	JAR	1421 14TH ST S 25 31 16 51138 000 0030	93737	SMITH, CARRIE 1428 14TH ST S ST PETERSBURG 337052412	FL
18 21620	18/08/15	JAR	1661 14TH ST S 25 31 16 26442 000 0080	91923	COPELAND, GERALDINE C 118 MIDDLE RD N LEESBURG 317633700	GA
22 5212	22/03/04	PM	3017 15TH AVE S 26 31 16 89694 003 0170	99495	CLARK, BONNIE J 3017 15TH AVE S ST PETERSBURG 337121941	FL
14 23118	14/11/03	ZM	3465 15TH AVE S 27 31 16 13860 000 0050	100685	COLEMAN, KOBIE 59 MOUNT VERNON RIDGE DALLAS 301321251	GA
23 6229	23/04/06	ZM	3819 15TH AVE S 27 31 16 01746 000 0050	100069	***** PO BOX 35295 ST PETERSBURG 337050505	FL
23 3914	23/03/02	GF	3640 15TH ST N 12 31 16 41598 001 0210	43265	SRQ RESTORATIONS LLC 3640 15TH ST N ST PETERSBURG 337041014	FL

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
23 4573	23/03/13	GF	3643 15TH ST N 12 31 16 41598 002 0210	43315	DANESE HOMES LLC 907 JONES ST CLEARWATER 337554424	FL
18 27379	18/10/12	RTH	524 16TH AVE S 30 31 17 46404 005 0040	185291	HARDWICK REAL ESTATE INVESTMEN 1700 66TH ST N STE 104-131 ST PETERSBURG 337105544	FL
23 4872	23/03/17	GF	4100 16TH ST N 01 31 16 53442 000 0040	17139	4100 16TH ST MAIN LLC 4222 INTERLAKE DR TAMPA 336242349	FL
22 13568	22/06/27	ZM	4100 18TH AVE S 27 31 16 87156 001 0030	104035	FAHLMAN, JAMES CLARENCE 4100 18TH AVE S ST PETERSBURG 337112704	FL
18 1991	18/01/24	GF	4351 18TH ST N 01 31 16 59850 000 0710	18089	TOTH, CSABA PETER 14 MAPLE AVE S MISSISSAUGA ON L5H 2R6	
21 27018	21/11/12	RTH	809 19TH AVE S 30 31 17 31284 002 0120	184753	NASH INVESTMENTS LLC 4573 DAYBREAK PKWY SOUTH JORDAN 84009	UT
18 33059	18/12/28	CBG	3000 19TH AVE S 26 31 16 00432 002 0010	96313	P C R H FUND LLLP 6830 CENTRAL AVE STE C ST PETERSBURG 337071208	FL
20 19144	20/08/18	CBG	3022 19TH AVE S 26 31 16 00432 002 0020	96315	SWEAT, THELMA 5110 ARAGON WAY S ST PETERSBURG 33705	FL
20 12623	20/06/11	ZM	3451 19TH AVE S 27 31 16 15408 001 0150	100743	NEW MARKET REALTY LLC 8311 LUCERNE LOOP BRADENTON 342020300	FL
19 10299	19/04/23	JAR	1118 19TH ST S 25 31 16 20232 002 0190	91655	JORDAN, VANETTE BYNUM 2758 HILLVALE COVE WAY LITHONIA 300581827	GA
22 20329	22/09/23	JAR	1217 19TH ST S 25 31 16 28908 000 0190	92091	GT INVESTMENTS OF FLORIDA LLC 242 S WASHINGTON BLVD STE 340 SARASOTA	FL

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
					342366943	
20 11342	20/06/01	PM	2440 2ND AVE S 23 31 16 78390 028 0060	88303	2ND AVENUE 2440 LAND TRUST PO BOX 76152 ST PETERSBURG 337346152	FL
19 426	19/01/07	RLH	3418 2ND AVE S 22 31 16 96228 006 0030	84145	WELLS, KEVIN 4905 34TH ST S UNIT 115 ST PETERSBURG 337114511	FL
18 19693	18/07/30	RLH	3434 2ND AVE S 22 31 16 96228 006 0040	84147	WELLS, KEVIN 4905 34TH ST S UNIT 115 ST PETERSBURG 337114511	FL
14 8195	14/05/09	CBG	3021 21ST AVE S 26 31 16 00432 003 0220	96403	EDWARDS, BETTYE A 6699 22ND WAY S ST PETERSBURG 337125851	FL
22 19030	22/09/07	GF	3128 21ST ST N 12 31 16 91566 000 0670	45759	3105 WISMER LLC 1840 DERHAKE RD FLORISSANT 630336432	MO
20 23331	20/09/24	CBG	1934 21ST ST S 25 31 16 00000 330 0100	90585	RUSSELL, TAJ LAJUANE 1145 WILDWOOD ST CLEARWATER 337562252	FL
16 6854	16/04/15	CBG	2165 22ND AVE S 25 31 16 14220 000 0030	90921	NIBLACK, PATRICIA 3888 40TH WAY S ST PETERSBURG 337114218	FL
23 6225	23/04/06	RTH	625 25TH AVE S 31 31 17 36684 000 1080	187547	N & J DREAMS LLC 2655 6TH AVE S ST PETERSBURG 337121653	FL
18 16501	18/06/29	MN	439 26TH ST N 23 31 16 35082 001 0090	85539	PROXIMA CENTAURI LLC 3330 XENIA ST N ST PETERSBURG 337132726	FL
21 14631	21/06/17	KL	1666 27TH AVE N 12 31 16 69102 016 0090	44677	RAD DIVERSIFIED REIT INC 10808 FOOTHILL BLVD UNIT 160-3 RANCHO CUCAMONGA 917303889	CA
22 2970	22/02/04	PM	1411 28TH ST S	98019	DEO GRATIAS HOLDINGS LLC	

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
			26 31 16 72846 000 0100		2247 BONITA WAY S ST PETERSBURG 337124238	FL
22 13128	22/06/21	RTH	657 29TH AVE S 31 31 17 62460 000 0590	188421	ALTRUISTIC LOVING CARE INC 3822 N 52ND ST TAMPA 336191006	FL
23 6226	23/04/06	PM	1338 29TH ST S 26 31 16 72846 000 0180	98031	THOMAS, NATHANIEL JR PO BOX 13457 ST PETERSBURG 337333457	FL
20 25633	20/10/20	CBG	2239 29TH ST S 35 31 16 37854 001 0100	109153	DAVIS, ALPHONSO J 2239 29TH ST S ST PETERSBURG 337123329	FL
23 4546	23/03/10	GF	1818 31ST AVE N 12 31 16 27846 002 0030	42803	FL TAX DEEDS LLC 111 W WASHINGTON ST STE 1270 CHICAGO 606023475	IL
20 19268	20/08/19	CBG	2437 33RD ST S 35 31 16 39276 000 1040	109255	GREENE, REGINA SPENCER 3257 VERDANT DR SW UNIT 1406 ATLANTA 303313085	GA
20 25639	20/10/20	Z04	5720 4TH ST N 31 30 17 61146 058 0010	146761	OH MYUNG, KUN 2300 61ST LN N ST PETERSBURG 337104134	FL
22 24447	22/11/15	ERH	7230 4TH ST N 30 30 17 00000 330 0100	140605	HOLLYWOOD SP MHC LLC 8800 N BRONX AVE 2ND FLR SKOKIE 600771804	IL
23 6573	23/04/12	ERH	7491 4TH ST N 30 30 17 91243 001 0020	143715	JEM INVESTMENTS LTD 501 N MORGAN ST STE 202 TAMPA 336023906	FL
21 24246	21/10/06	ERH	8210 4TH ST N 30 30 17 75546 004 0120	142259	JANI, JAYANTILAL J EST 8210 4TH ST N ST PETERSBURG 337023606	FL
18 11634	18/05/14	FDJ	1001 46TH ST S 28 31 16 94248 010 0080	105739	BARKLEY, JAMES J 4284 49TH AVE S ST PETERSBURG 337114622	FL

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
10 14376	10/07/29	MN	136 5TH AVE N 19 31 17 74466 003 0050	181213	PLDD 5TH AVENUE LLC 3060 ALT 19 N PALM HARBOR 346831929	FL
11 1738	11/02/02	MN	116 5TH ST S 19 31 17 74466 038 0110	181789	FLORIDA FAIR HOUSING CORP PO BOX 330537 MIAMI 332330537	FL
21 26784	21/11/09	Z04	816 51ST AVE N 06 31 17 01386 005 0180	160661	SICILIAN, JOSEPH EST 1968 CROWBRIDGE DR FRISCO 750338387	TX
21 17570	21/07/26	RTH	2502 6TH ST S 31 31 17 36684 000 0760	187487	A & H REAL PROPERTIES LLC 4852 LOST COLONY CT STONE MOUNTAIN 300883524	GA
10 2294	10/02/10	RTH	2711 6TH ST S 31 31 17 62460 000 0290	188373	AL-DILEAMY, FOUZIAH H 122 17TH AVE SE ST PETERSBURG 337015908	FL
21 17573	21/07/26	RTH	2947 6TH ST S 31 31 17 62460 000 0730	188447	BURNEY, JIMMIE D CMR 489 BOX 943 APO AE 097510010	
17 16833	17/07/10	Z15	4015 7TH ST S 06 32 17 49752 001 0140	193281	MILLER, KIRSTEN PO BOX 971007 MIAMI 331971007	FL
23 522	23/01/10	MN	2311 8TH AVE N 14 31 16 12492 000 0220	51153	FLIPIT2U LLC 12011 FOX HILL CIR BOYNTON BEACH 334737833	FL
23 70	23/01/03	RLH	3517 8TH AVE N 15 31 16 45648 001 0140	56349	YEZZ INVESTMENTS INC 9817 CARR RD RIVERVIEW 335695666	FL
17 27416	17/10/30	JAR	1000 8TH AVE S 25 31 16 63612 000 0190	94427	WALKER, ROSIE L 11401 S BELL AVE CHICAGO 606434123	IL
23 6503	23/04/07	JAR	1224 8TH AVE S 25 31 16 33786 000 0330	92815	MOTEN, LORRIN 2822 54TH AVE S LOT 230 ST PETERSBURG	FL

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address/Pin</u>	<u>Location ID</u>	<u>Owner's Name/Address</u>	
					337124610	
22 6355	22/03/18	MN	3300 9TH AVE N 14 31 16 46350 015 0010	52587	D R P COMPANY OF ALABAMA INC 4308 W CAYUGA ST TAMPA 336146951	FL
22 7157	22/03/30	JAR	1757 9TH AVE S 25 31 16 78750 000 0220	95027	D&D CONSTRUCTION MGMT LLC PO BOX 1248 PINELLAS PARK 337801248	FL
22 21654	22/10/25	ZM	3735 9TH AVE S 27 31 16 76806 000 0150	103533	YOUNG, TYRONICA 3735 9TH AVE S ST PETERSBURG 337112106	FL
22 13126	22/06/21	ERH	419 92ND AVE N 19 30 17 03348 002 0230	135771	STARKE, CHRISTOPHER 1326 60TH ST S ST PETERSBURG 337073209	FL

79 Cases selected for report.

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
21 11741	21/05/18	ZM	3445 13TH AVE S	SERMONS, ERNESTINE 3445 13TH AVE S  SAINT PETERSBURG FL 337112214	102527
18 32970	18/12/28	ZM	4029 13TH AVE S	MERAI, NAZIEH 1894 MICHIGAN AVE NE  SAINT PETERSBURG FL 337033332	102227
18 11636	18/05/11	FDJ	4810 13TH AVE S	CHANDLER, LUELLE 4810 13TH AVE S  SAINT PETERSBURG FL 337112318	105047
14 23118	14/11/03	ZM	3465 15TH AVE S	JENNINGS, MICHAEL POA 23 ANONDALE DR  HUNTINGTON NY 11743	100685
23 6229	23/04/06	ZM	3819 15TH AVE S	WEDEL, RUTH 3819 15TH AVE S  SAINT PETERSBURG FL 33711	100069
22 13568	22/06/27	ZM	4100 18TH AVE S	COMMUNITY HOUSING FUND 800 W AIRPORT FWY STE-197, LB 6099 IRVING TX 750626207	104035
18 11634	18/05/14	FDJ	1001 46TH ST S	BARKLEY, JAMES J 4284 49TH AVE S  SAINT PETERSBURG FL 337114622	105739
22 21654	22/10/25	ZM	3735 9TH AVE S	YOUNG, ED W 3735 9TH AVE S  SAINT PETERSBURG FL 337112106	103533

5/01/23 6:00:00  
131 CPASEC1AR

City of St. Petersburg, FL  
Codes Compliance Assistance Department  
Vacant & Boarded Properties - Childs Park Area

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
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8 Cases selected for report.

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
4 1811	4/01/15	MN	2880 CENTRAL AVE	ANDERSON, MARGARET L TR 22 BAGDAD RD  DURHAM NH 03824	86685
15 23204	15/10/05	JAR	927 DR. ML KING JR ST S	MARTIN, RICHARD E 307 62ND AVE N  SAINT PETERSBURG FL 337027537	90649
10 4014	10/03/17	JAR	1900 FAIRFIELD AVE S	HOUSE OF GOD CH LIVING GOD * 1900 FAIRFIELD AVE S  SAINT PETERSBURG FL 337121773	90053
15 29210	15/12/11	JAR	1417 JAMES AVE S	DAVIS, JAMES A * 1417 JAMES AVE S  SAINT PETERSBURG FL 337052244	91399
19 29045	19/10/30	JAR	1056 QUEEN ST S	ALLEN, BOBBY L 1036 QUEEN ST S  SAINT PETERSBURG FL 337122424	93727
23 6230	23/04/06	CBG	1908 UNION ST S	GOMEZ, LENORE 2839 IVANHOE WAY S  SAINT PETERSBURG FL 337053602	95171
21 11746	21/05/18	MN	2520 1ST AVE N	VALENTIN, ISABELINO 10 S MAIN ST #B  NEW MILFORD CT 06776	86029
23 1224	23/01/20	RTH	651 10TH AVE S	MOSLEY, DONALD F PO BOX 2072  SAINT PETERSBURG FL 337312072	185639

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
19 20440	19/08/07	JAR	1151 10TH AVE S	LEE, ANNIE L EST 1151 10TH AVE S  SAINT PETERSBURG FL 337052116	95227
19 3126	19/02/07	JAR	1246 10TH AVE S	LOVETT, DELORES 1246 10TH AVE S  SAINT PETERSBURG FL 337052119	91277
22 19033	22/09/07	JAR	1002 13TH AVE S	BLOSSOM, SAMUEL L 2641 15TH AVE S  SAINT PETERSBURG FL 337122057	91075
20 22553	20/09/17	PM	2181 13TH AVE S	ROBINSON, FLORENCE W * 128 YOUNG ST  TALLAHASSEE FL 323015436	91727
23 1225	23/01/20	PM	2624 13TH AVE S	MEUNIER, DAVID PO BOX 3982  CLEARWATER BEACH FL 33767	240285
20 7706	20/03/30	JAR	1363 14TH ST S	BEACHUM, BEATRICE W 1363 14TH ST S  SAINT PETERSBURG FL 337052326	90813
21 4675	21/03/04	JAR	1421 14TH ST S	SMITH, CARRIE 1428 14TH ST S  SAINT PETERSBURG FL 337052412	93737
18 21620	18/08/15	JAR	1661 14TH ST S	COPELAND, GERALDINE C 1661 14TH ST S  SAINT PETERSBURG FL 337052523	91923

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
22 5212	22/03/04	PM	3017 15TH AVE S	CLARK, BONNIE J * 3017 15TH AVE S  SAINT PETERSBURG FL 337121941	99495
18 27379	18/10/12	RTH	524 16TH AVE S	BECKFORD, VIRGIL 524 16TH AVE S  SAINT PETERSBURG FL 337015440	185291
21 27018	21/11/12	RTH	809 19TH AVE S	DONOVAN, WILLIAM 2901 58TH AVE N  SAINT PETERSBURG FL 337141326	184753
18 33059	18/12/28	CBG	3000 19TH AVE S	FAIRBANKS CAPITAL CORP 338 S WARMINSTER RD  HATBORO PA 19040	96313
20 19144	20/08/18	CBG	3022 19TH AVE S	SWEAT, ALBERT L SR * 3022 19TH AVE S  SAINT PETERSBURG FL 337122919	96315
19 10299	19/04/23	JAR	1118 19TH ST S	BYNUM, INEZ 1118 19TH ST S  SAINT PETERSBURG FL 337122343	91655
22 20329	22/09/23	JAR	1217 19TH ST S	BROWN-KEYS, HELEN V TRE 4245 BEACH DR SE  SAINT PETERSBURG FL 337054129	92091
20 11342	20/06/01	PM	2440 2ND AVE S	PETIT, CHRISTOPHER M 2417 WORTHINGTON WOODS BLVD  POWELL OH 43065	88303

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
14 8195	14/05/09	CBG	3021 21ST AVE S	JONES, IDELL * 3021 21ST AVE S  SAINT PETERSBURG FL 337122922	96403
20 23331	20/09/24	CBG	1934 21ST ST S	CLARK, QUEEN E 1934 21ST ST S  SAINT PETERSBURG FL 337123110	90585
16 6854	16/04/15	CBG	2165 22ND AVE S	BRADLEY, MARY EST * 1435 PRESCOTT ST S  SAINT PETERSBURG FL 337122442	90921
23 6225	23/04/06	RTH	625 25TH AVE S	USA HOUSING & URBAN DEV * 3280 POINTE PKWY STE 1000  NORCROSS GA 30092	187547
22 2970	22/02/04	PM	1411 28TH ST S	REED, RUDOLPH * 2941 22ND AVE S  SAINT PETERSBURG FL 337122926	98019
22 13128	22/06/21	RTH	657 29TH AVE S	STRANDBERG, ERNEST * 4621 23RD AVE S  SAINT PETERSBURG FL 337113303	188421
23 6226	23/04/06	PM	1338 29TH ST S	THOMAS, NATHANIEL JR PO BOX 13457  SAINT PETERSBURG FL 337333457	98031
20 25633	20/10/20	CBG	2239 29TH ST S	DAVIS, JACQUELINE L * 2239 29TH ST S  SAINT PETERSBURG FL 337123329	109153

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
20 19268	20/08/19	CBG	2437 33RD ST S	SPENCER, ELLA M 2437 33RD ST S  SAINT PETERSBURG FL 337123314	109255
11 1738	11/02/02	MN	116 5TH ST S	5TH STREET HOLDING CO INC 3637 4TH ST N  SAINT PETERSBURG FL 33704	181789
21 17570	21/07/26	RTH	2502 6TH ST S	KINGZETT, JAMES M * 310 FOOTHILL RD  GARDNERVILLE NV 894106525	187487
10 2294	10/02/10	RTH	2711 6TH ST S	ROGAK, MICHAEL 11634 FOX CREEK DR  TAMPA FL 33635	188373
21 17573	21/07/26	RTH	2947 6TH ST S	BURNEY, JIMMIE D 970 10TH AVE S  SAINT PETERSBURG FL 337052113	188447
17 27416	17/10/30	JAR	1000 8TH AVE S	WALKER, ROSIE L 6914 S JUSTINE ST  CHICAGO IL 606363921	94427
23 6503	23/04/07	JAR	1224 8TH AVE S	DANIELS, AUSTELS 1224 8TH AVE S  SAINT PETERSBURG FL 337051919	92815
22 7157	22/03/30	JAR	1757 9TH AVE S	CLARK, ELLA M 2450 13TH AVE S  SAINT PETERSBURG FL 337122133	95027

5/01/23 5:00:05  
131 CCMSEC1AR

City of St. Petersburg, FL  
Codes Compliance Assistance Department  
Midtown Vacant & Boarded Properties

<u>Case No.</u>	<u>Case Reported</u>	<u>Invstg</u>	<u>Location Address</u>	<u>Owner's Name/Address</u>	<u>Location Id</u>
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40 Cases selected for report.

## 2019- 2023 Vacant & Boarded Report Comparison

	Citywide					Midtown					Childs Park				
Month	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
JAN	192	162	137	106	71	80	75	73	49	37	31	27	18	16	9
FEB	189	151	138	100	75	78	74	74	47	38	29	20	19	16	10
MAR	187	143	125	93	72	78	70	68	46	37	29	18	18	16	9
APR	178	142	123	98	74	72	72	64	47	36	30	18	18	17	8
MAY	181	133	118	87	79	74	72	58	40	40	32	18	18	15	8
JUNE	179	134	120	75		71	74	60	36		32	16	18	12	
JULY	181	132	123	77		74	73	60	38		31	17	19	11	
AUG	178	132	121	75		73	72	61	36		29	17	18	11	
SEPT	175	135	114	70		74	78	57	35		28	17	15	9	
OCT	169	136	107	72		73	79	54	37		28	18	15	9	
NOV	168	137	107	71		76	77	52	37		28	18	15	9	
DEC	164	134	109	69		74	75	52	36		27	18	16	9	



**The Forward Pinellas Board met in person on March 8, 2023.**

- **Action items included:**

- The approval of two complete streets planning projects in the Cities of Largo and Pinellas Park and one complete streets construction project in the City of St. Petersburg.
- And the approval of the Forward Pinellas Apportionment Plan recommended by staff, with a few modifications, to change the voting structure of the Board to account for the latest population data from the 2020 Census. After discussion, staff modified the proposed changes to retain the single Dunedin seat and the seat shared by Oldsmar, Safety Harbor, and Tarpon Springs. This increases the number of seats on the Board from 13 to 15 voting members and restructures the shared seats to allow rotating members to serve 3-year terms.
- **The Board also received a presentation by FDOT staff with information on a study evaluating capacity, bicycle, and pedestrian improvements on Gandy Boulevard from 4<sup>th</sup> St. N in Pinellas County to Westshore Boulevard in Hillsborough County.** The proposed project would reconstruct Gandy Boulevard to provide an elevated controlled access 4-lane to 6-lane roadway mainline separated from local traffic with frontage roads and multi-use trails on both sides of the corridor, widen the westbound Grandy Bridge, and construct a new eastbound bridge to provide a wider structure for 3 travel lanes and a multi-use trail.

The next Forward Pinellas Board meeting will be held on April 12, 2023.