

**ADDITIONAL INFORMATION  
ADDRESSING OCTOBER 2012 CYCLE  
EVALUATION AND APPRAISAL REPORT (EAR)-BASED APPLICATIONS**

- PowerPoint presentation by Jeffrey Bercow, presented on October 2, 2013, at the Miami-Dade Board of County Commissioners (Board) public hearing addressing the EAR-based applications;
- Letter in support of the Department's recommendation on Application No. 1, submitted by 1000 Friends of Florida, Audubon of Florida, Clean Water Action, EMERGE Miami, Everglades Law Center, the Sierra Club, Tropical Audubon Society and the Urban Environment League, dated October 1, 2013;
- Letter submitted in reference to the Miami-Dade County Population Project submitted by Mr. John F. Long, Ph.D. and President, USA Demography, LLC, dated September 30, 2013;
- Letter of Opposition to EAR-Based Application No. 1 submitted by Armada Quirke from the Law Firm of Levine, Kellogg, Lehman, Schneider and Grossman, dated September 30, 2013. Letter depicts several maps and charts.
- Letter from the Florida Atlantic Building Association in support of Planning Advisory Board's recommendations to EAR-based amendments, received by the Department of Regulatory and Economic Resources, September 23, 2013;
- Letter (with attachments) from the Department of the Air Force addressing the removal of parcel Nos. 292 and 293 from the 2015 Urban Expansion Area, dated September 18, 2013; and
- Compliance Evaluation Report, dated July 8, 2013, prepared by Kenneth Metcalf for Limonar Development, Inc. (excerpt). Addresses 2015 Urban Expansion Area modification proposed through Parcel 294 of EAR-Based Application No. 1.



# **EAR-BASED CDMP AMENDMENTS**

**Miami-Dade Board of County Commissioners**  
**October 2, 2013**

# Adopted 2011 EAR

Table 1.1-7  
Residential Land Supply/Demand Analysis  
Miami-Dade County by Tier and Subtier, 2010 to 2030

Analysis Done Separately for Each Type, i.e. No Shifting of Demand between Single & Multifamily Type	Structure Type		
	Single Family	Multi- Family	Both Types
Capacity in 2010	43,543	92,186	135,729
Annual Demand in 2010-2015	6,293	5,125	11,418
Capacity in 2015	12,078	66,561	78,639
Annual Demand 2015-2020	6,602	5,448	12,050
Capacity in 2020	0	39,321	18,389
Annual Demand 2020-2025	6,492	5,726	12,218
Capacity in 2025	0	10,691	0
Annual Demand 2025-2030	6,809	5,275	12,084
Capacity in 2030	0	0	0
Depletion Year	2016	2026	2021

Source: Miami-Dade County Department of Planning and Zoning, Research Section, 2011.



# County EAR Amendments

Table 3  
Residential Land Supply/Demand Analysis,  
Countywide, 2012 to 2030

Analysis Done Separately For Each Type,  
i.e. No Shifting of Demand Between Single  
& Multi-Family Type

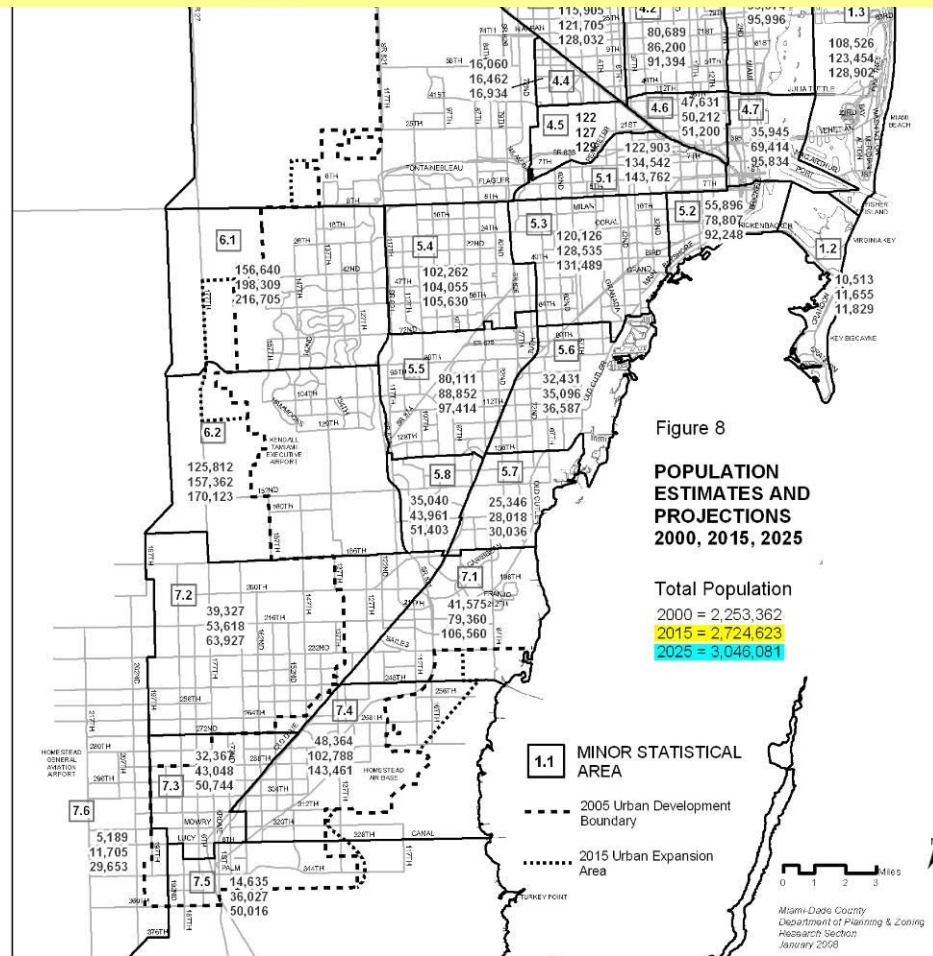
	Structure Type		
	Single-Family	Multifamily	Both Types
Capacity in 2012	41,001	102,049	143,050
Demand 2010-2015	4,013	3,927	7,940
Capacity in 2015	28,962	90,268	119,230
Demand 2015-2020	4,957	4,590	9,547
Capacity in 2020	4,177	57,318	71,495
Demand 2020-2025	5,353	4,920	10,273
Capacity in 2025	0	42,718	20,130
Demand 2025-2030	6,041	5,635	11,676
Capacity in 2030	0	14,543	0
Depletion Year	2020	2033	2026

Note: Residential capacity is expressed in terms of housing units.

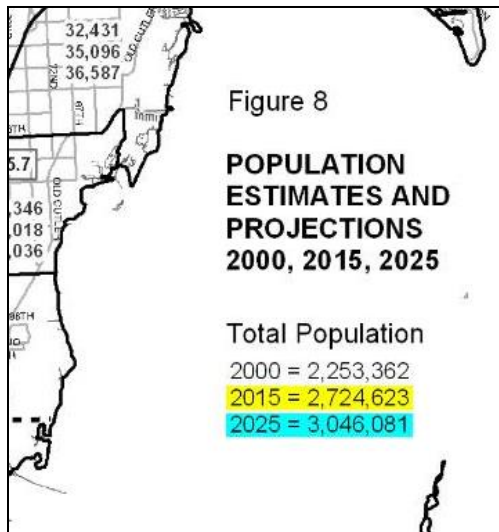
Housing demand is an annual average figure based on population projections.

Source: Department of Regulatory and Economic Resources, Research Section, March 2013.

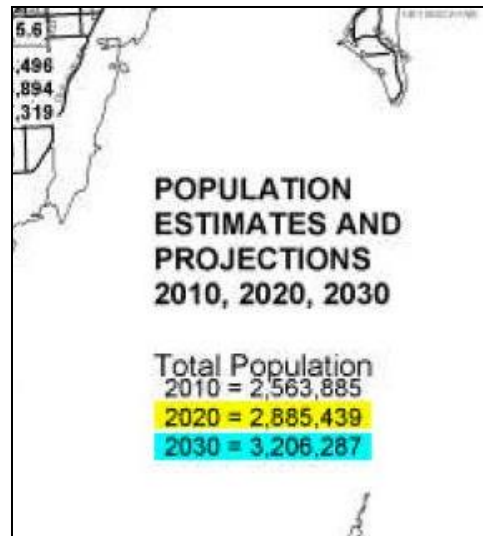
# Figure 8, Land Use Element



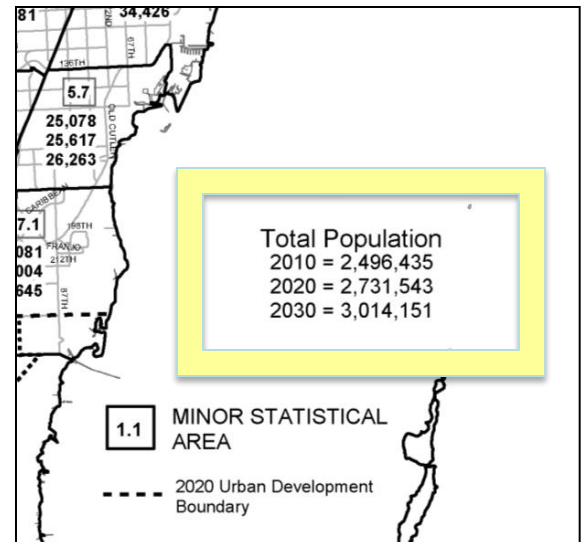
# Figure 8, Land Use Element



Adopted



2011 EAR



2012  
Amendment

# Real World Experience

*Miami Herald, April 15, 2013:*

*"After disputed presidential elections in Venezuela, Doral can expect a new wave of immigrants from the South American country who could increase the population by 40 percent in the next two years" - Mayor Luigi Boria*

**World Property Channel, by Michael Gerrity:**

According to the Miami Association of Realtors, Miami experienced a **54%** increase year-over-year in condo sales in the month of June 2011 alone. Most of those sales were to **international buyers**, who mostly purchased in cash.

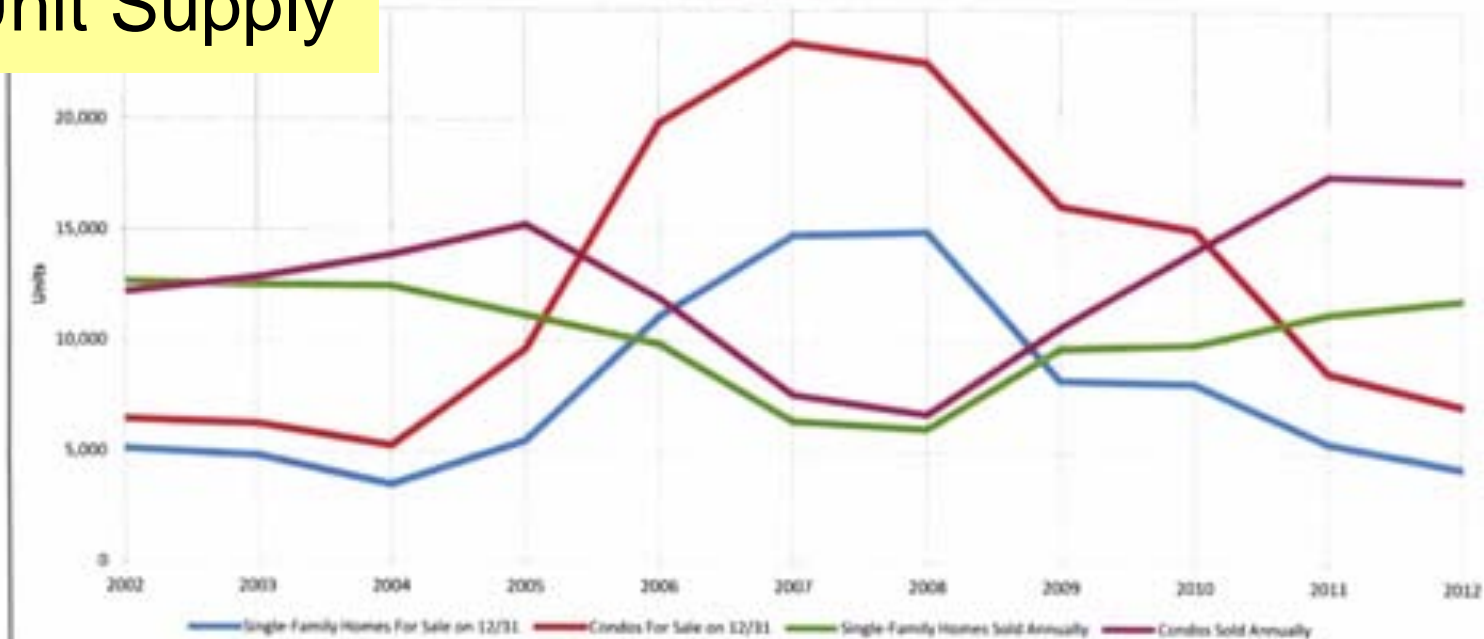
*Moody's is among those predicting Florida's population will swell by 360,000 this year. New York, by comparison, is expected to add between 50,000 and 100,000 new net residents.*

"A[n] . . . area around Collins Avenue and 71st Street has become known as "Little Buenos Aires," where thousands of working-class Argentines have settled after fleeing economic chaos in their country. Wealthier Argentines have gravitated toward Aventura, between Miami and Fort Lauderdale, and Key Biscayne, an island southeast of downtown Miami."

-- MelG Group

# Impact on Unit Supply

## Inventory and Sales Miami-Dade County 2002-2012

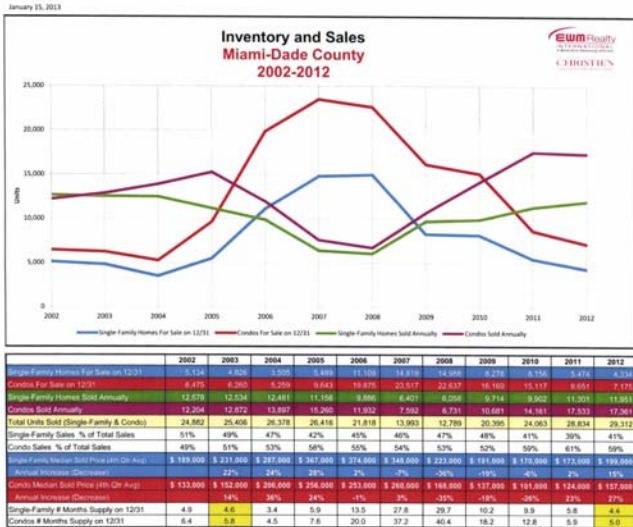


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Single-Family Homes For Sale on 12/31	5,134	4,826	3,505	5,489	11,109	14,819	14,966	8,278	6,156	5,474	4,334
Condos For Sale on 12/31	6,475	6,260	5,259	9,643	19,875	23,517	22,637	16,169	15,117	8,651	7,175
Single-Family Homes Sold Annually	12,679	12,534	12,481	11,156	9,886	6,401	6,056	9,714	9,902	11,301	11,951
Condos Sold Annually	12,204	12,872	13,897	15,260	11,932	7,592	6,731	10,681	14,981	17,533	17,361
Total Units Sold (Single-Family & Condo)	24,882	25,406	26,378	26,416	21,818	13,993	12,789	20,395	24,063	28,834	29,312
Single-Family Sales % of Total Sales	51%	49%	47%	42%	45%	46%	47%	48%	41%	39%	41%
Condo Sales % of Total Sales	49%	51%	53%	58%	55%	54%	53%	52%	59%	61%	59%
Single-Family Median Sold Price (4th Qtr Avg)	\$ 189,000	\$ 231,000	\$ 287,000	\$ 367,000	\$ 374,000	\$ 348,000	\$ 223,000	\$ 181,000	\$ 179,000	\$ 173,000	\$ 199,000
Annual Increase (Decrease)		22%	24%	28%	2%	-7%	-36%	-19%	-6%	2%	15%
Condo Median Sold Price (4th Qtr Avg)	\$ 133,000	\$ 152,000	\$ 206,000	\$ 256,000	\$ 293,000	\$ 260,000	\$ 188,000	\$ 137,000	\$ 101,000	\$ 124,000	\$ 157,000
Annual Increase (Decrease)		14%	36%	24%	-1%	3%	-35%	-18%	-26%	23%	27%
Single-Family # Months Supply on 12/31	4.9	4.6	3.4	5.9	13.5	27.8	29.7	10.2	9.9	5.8	4.4
Condos # Months Supply on 12/31	6.4	5.8	4.5	7.6	20.0	37.2	40.4	18.2	12.8	5.9	5.0

Source: Southeast Florida Regional MLS



# Impact on Unit Supply



As of the end of 2012, condominium and single family unit supply was equivalent to that seen in 2003 and **lower than** any time since 2005.

“In August [2013], Miami-Dade saw a 3.1 percent increase in inventory from a year earlier, but with buyers out in full force, that represented only a 4.9-month supply, down **12.7 percent from August 2012. . . .**”

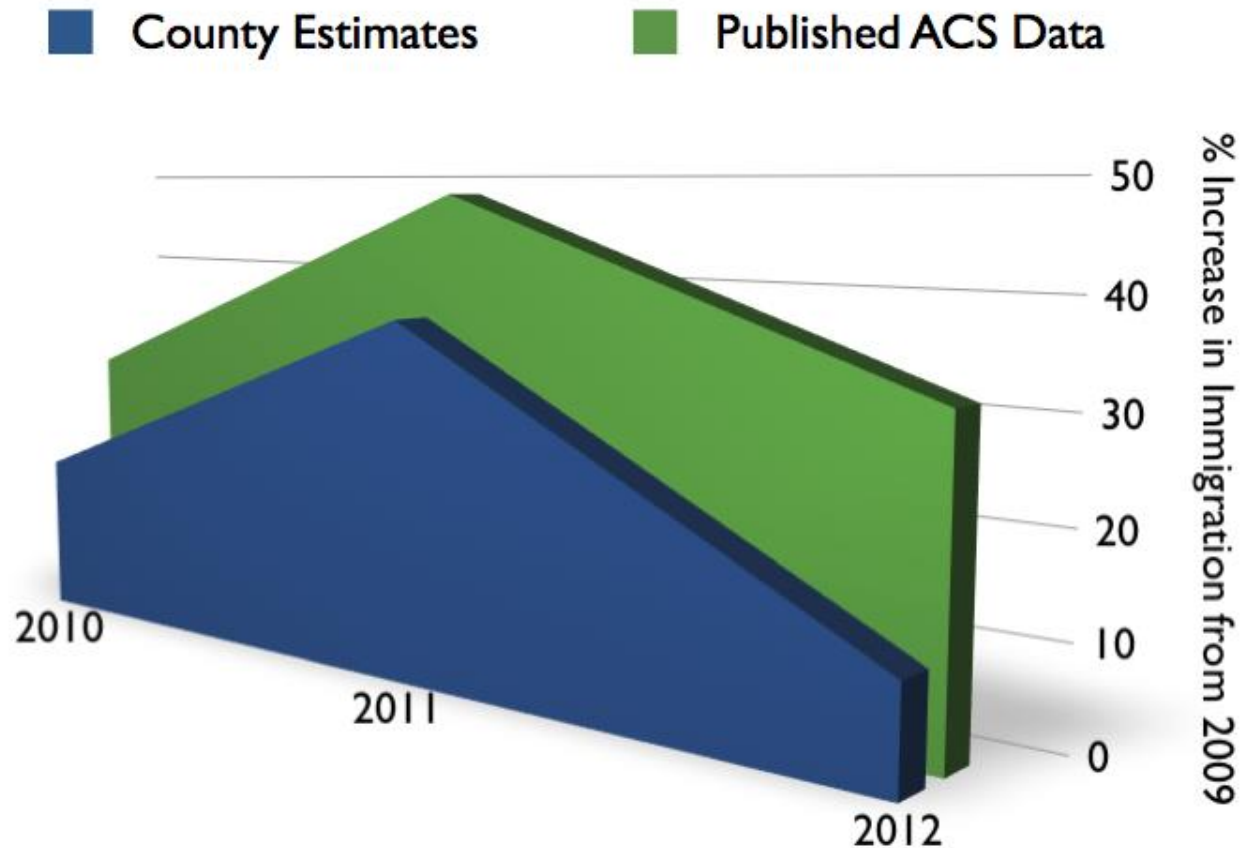
“South Florida existing home prices up sharply in August” Miami Herald September 19, 2013



# Immigration Data

Period	Census Data	Transmitted Data	Final Data
2006	--	31,764	28,373
2007	32,729	32,579	30,024
2008	33,135	32,557	29,956
2009	28,653	28,377	26,036
2010	32,799	26,313	30,364
2011	38,054	28,876	35,447
2012	--	29,438	28,667

# Immigration Data





## Comparison of Immigration Projections

Year	Transmitted Data	Final Data
2012	29,438	28,667
2013	30,000	29,063
2014	30,562	29,292
2015	31,124	29,355
	<b>Difference</b>	<b>-4,747</b>

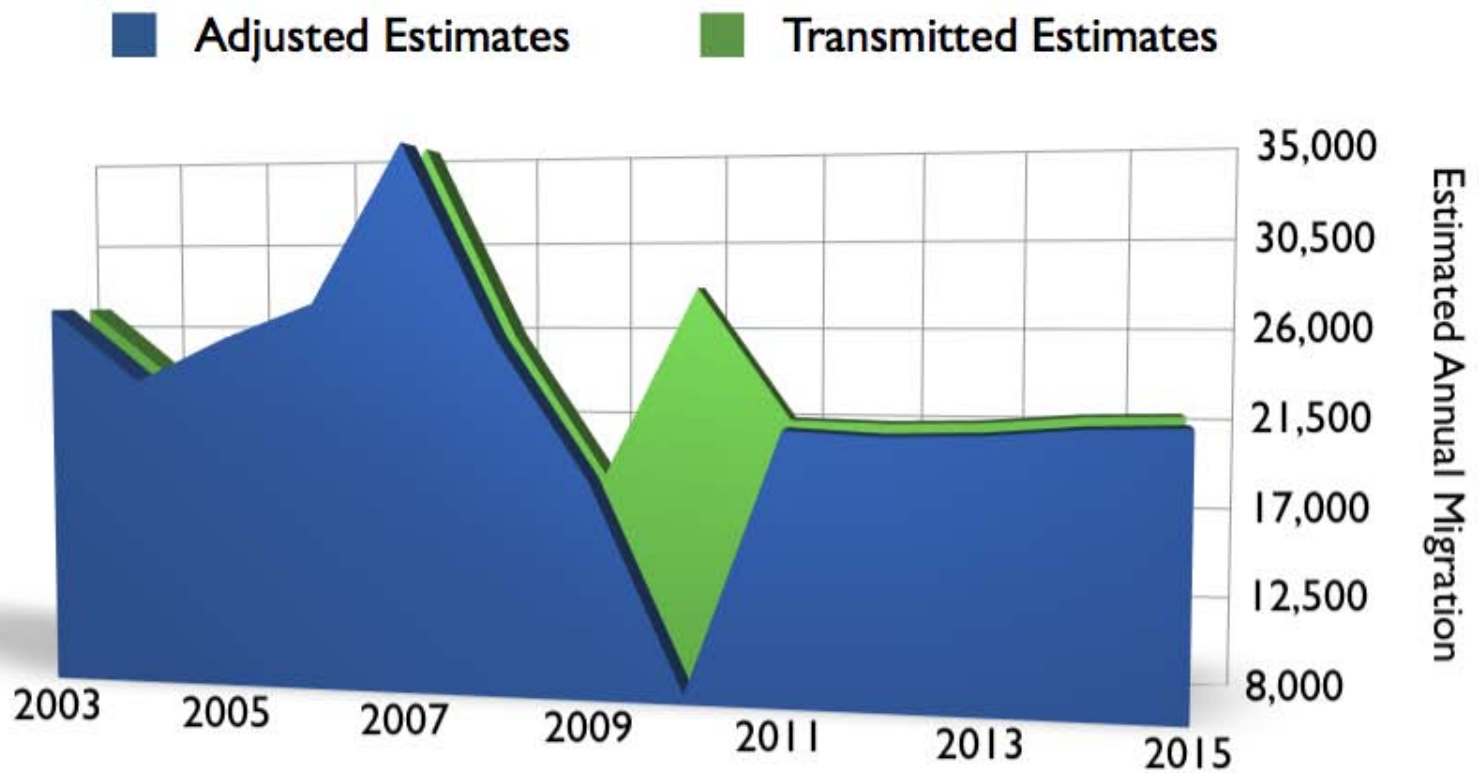
# Migration Data

Period	IRS Data	Transmitted Data
2005-06	27,190	27,190
2006-07	35,038	35,038
2007-08	25,572	25,572
2008-09	18,666	18,666
2009-10	8,502	27,974
2010-11	N/A	21,481
2011-12	N/A	21,358

## Migration Data

Period	Transmitted Data	Final Data
2005-06	27,190	27,190
2006-07	35,038	35,038
2007-08	25,572	25,572
2008-09	18,666	18,666
2009-10	27,974	8,502
2010-11	21,481	21,244
2011-12	21,358	21,003

# Migration Data



# DEO Recommendation

Rick Scott



Jesse Panuccio

**Recommendation:** Update the population projection methodology to include the most recent estimates of migration and immigration published by the IRS and the ACS. The methodology should explain how the historical data is used (particularly with respect to the time period used) and whether recent changes in the data indicate long term trends.

findings concerning the amendment. We have identified five objections and have included recommendations regarding measures that can be taken to address the objections. We are also providing seven technical assistance comments consistent with Section 163.3168(3), F.S. The Department of Economic Opportunity's technical assistance comments will not form the basis of a challenge. They are offered as suggestions which can strengthen the County's comprehensive plan, or are technical in nature and designed to ensure compliance with the provisions of Chapter 163, F.S.

The County should act by choosing to adopt, adopt with changes, or not adopt the proposed amendment. Also, please note that Section 163.3184(4)(e)1, F.S., provides that if the second public hearing is not held and the amendment adopted within 180 days of your receipt of the Department of Economic Opportunity report, the amendment shall be deemed withdrawn unless extended by agreement with notice to the Department of Economic Opportunity and any affected party that provided comment on the amendment. For your assistance, we have enclosed the procedures for final adoption and transmittal of the comprehensive plan amendment.

Florida Department of Economic Opportunity | Gateway Building | 107 E. Madison Street | Tallahassee, FL 90509  
404.921.1451 | 850.943.1081 | 850.921.4211 Fax  
www.fldeop.com | 800.943.2200 (Toll Free) | 850.921.4211

# Concerns About Methodology

## USA DEMOGRAPHY

Sept. 30, 2013

Members of the Board of County Commissioners  
111 NW 1st St.  
Miami, FL 33128

Dear Commissioners:

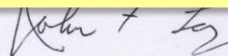
This letter is in reference to the Miami-Dade County Population Projections that you currently have under consideration.

I was asked by Miami Economic Associates, Inc. to review the population projections for Miami-Dade County because of my expertise in population projections methods (see attached vita). In the process of that review and discussions with the Miami-Dade County departments involved, I determined that the projections had been based on outdated and faulty data. The data failed to account for recent increases in international migration into the county and for declines in domestic migration out of the county. Both factors have led to increased population growth in the county in recent years and could reasonably be assumed to continue for the near future.

Professionally accepted methodology would be to base the assumptions about future changes in the demographic components on the updated historical data emphasizing recent trends. However, the assumptions in these projections do not reflect these recent trends and data corrections. In fact, the assumptions appear to have ignored these recent trends and kept a previously chosen set of assumptions that would lead to slow growth in the county. As a result these projections substantially underrepresent the likely population growth of the county – particularly in the short and medium term.

This failure to incorporate recent trends into the near-term assumptions of the projections is already evident in the first year of the projection period. Despite the fact that the county had substantially increased levels of immigration in 2010 and 2011, the Dept. of Planning chose to include assumptions of immigration for 2012 and subsequent years that were substantially lower than the 2010 and 2011 levels. The most recent data on immigration released from the U.S. Census Bureau's American Community Survey this month show that immigration for 2012 continues to run above the 2010 levels while the County projected a decline of 6 percent below the 2010 values. As a consequence, the County's population projections for 2012 are already below the current estimates made by the State of Florida and those made by the U. S. Census Bureau. These low levels of immigration are built into the County's assumptions for the next 5 to 10 years -- leading to what will probably be a substantial underestimate of immigration and population growth by 2020.

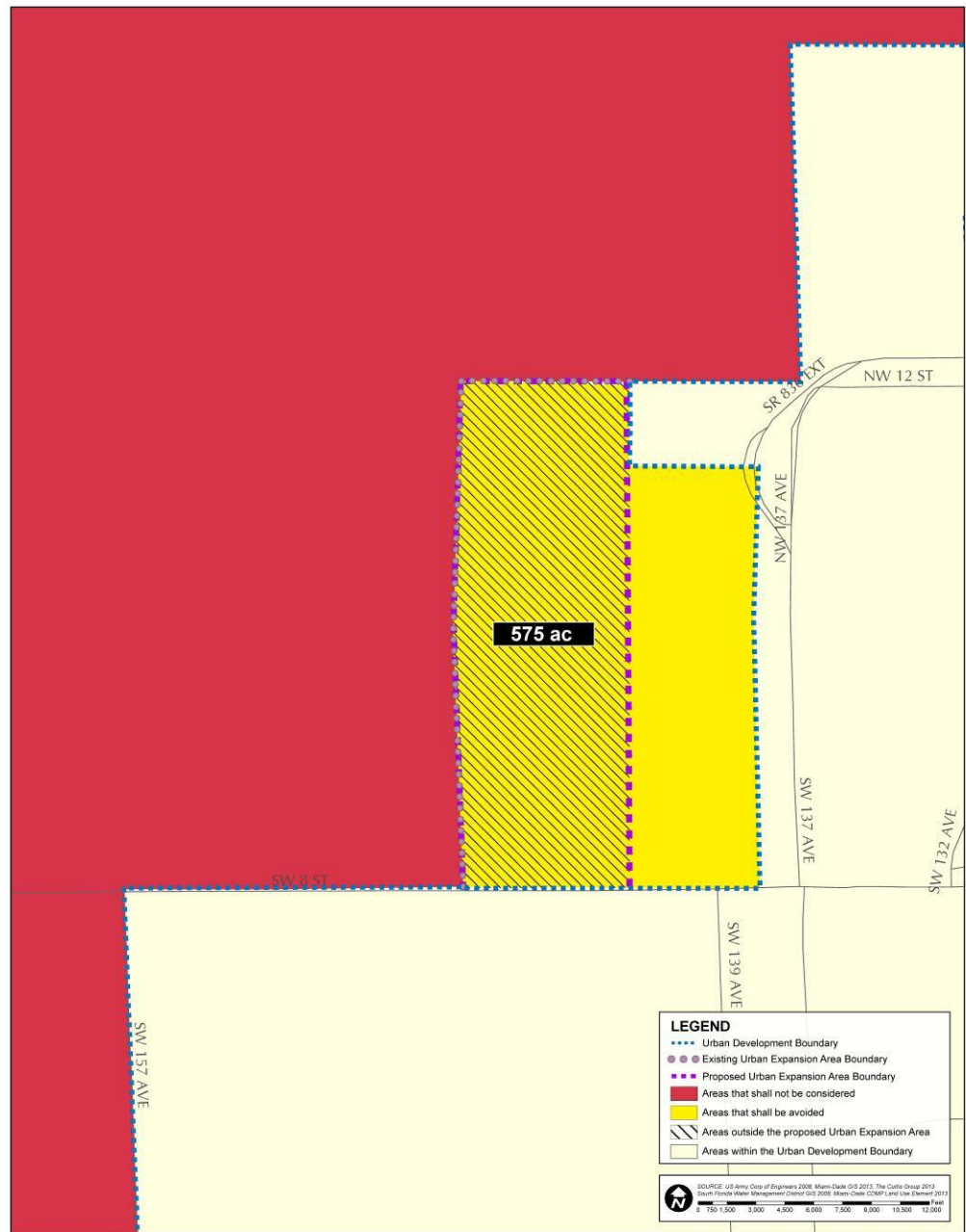
Sincerely,



John F. Long, Ph.D.  
President, USA Demography, LLC  
johnlong@usademography.com



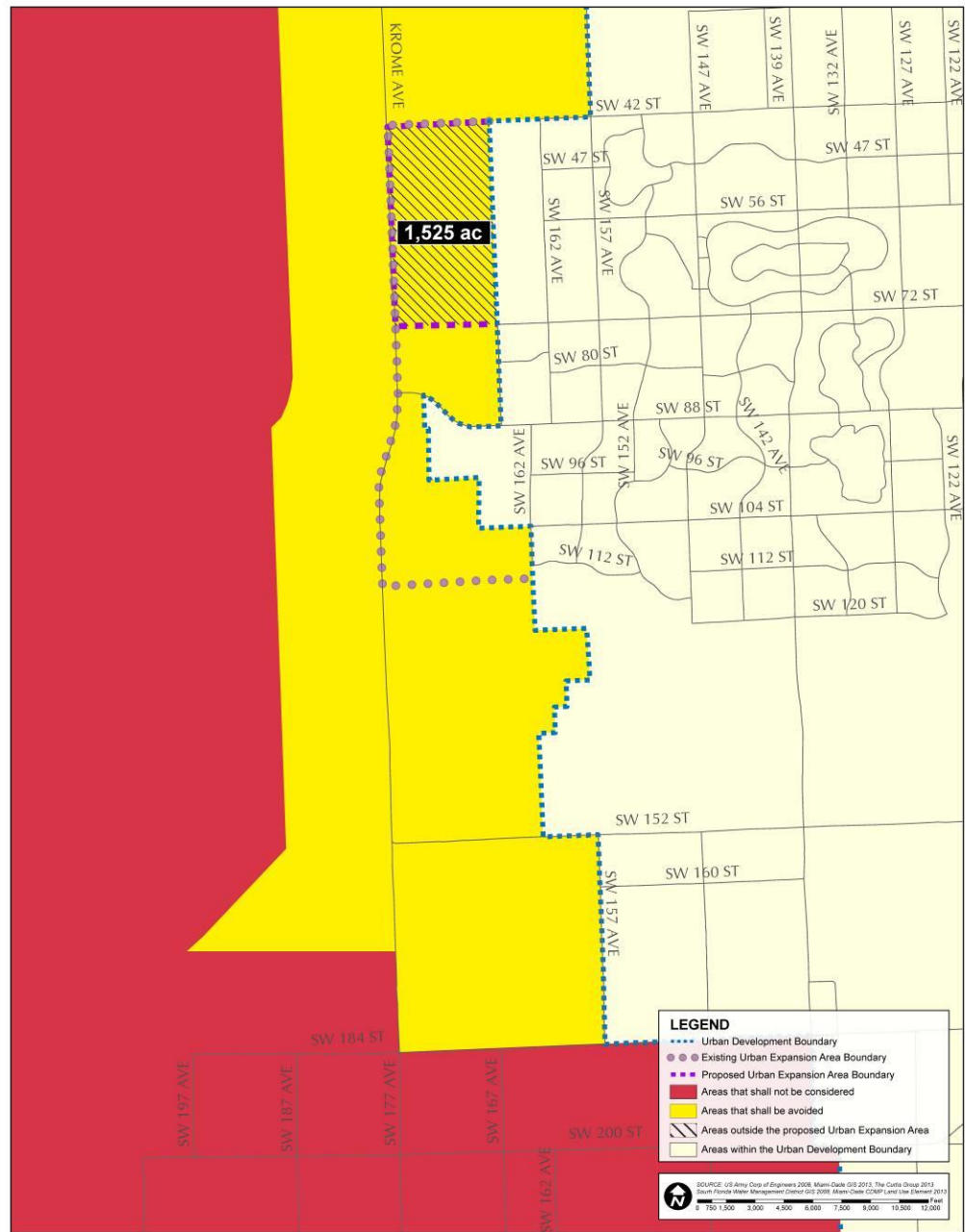




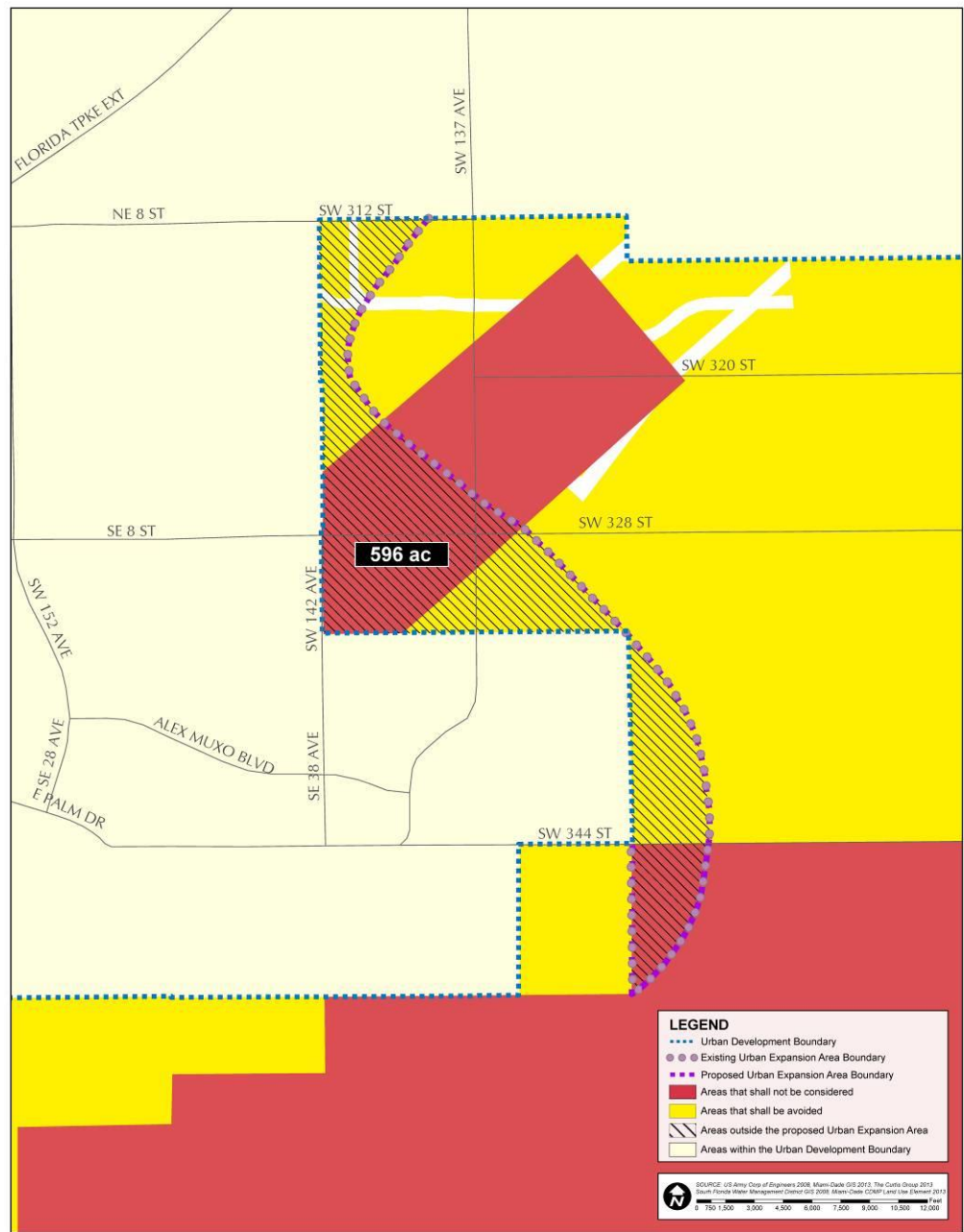
APRIL 2013

PROPOSED 2012 EAR BASED AMENDMENTS: PARCEL 295 (STAFF PROPOSED)









APRIL 2013

PROPOSED 2012 EAR BASED AMENDMENTS: PARCEL 293 (STAFF PROPOSED)

## SUMMARY OF STAFF-PROPOSED UEA REVISIONS

	EXISTING ACREAGE	STAFF-PROPOSED ACREAGE
Parcel 295	784 acres	209 acres
Parcel 294	2,817 acres	1,612 acres
Parcel 293	596 acres	0 acres
<b>TOTAL</b>	<b>7,298 acres</b>	<b>3,292 acres</b>

**55% Reduction**



# Proposed Policy LU-8H

- 79 LU-8H. Applications requesting expansion of the UDB shall be in accordance with the foregoing Policies LU-8F and LU-8G, and must meet the following criteria to be considered for approval:

- a) Residential development proposals shall provide for the non-residential needs, of the future residents of such proposed developments including but not limited to places of employment, shopping, schools, recreational and other public facilities, and shall demonstrate that such needs are adequately addressed;
- b) Residential development shall be at an average minimum density of ten (10) dwelling units per gross acre;
- c) Residential development must participate in the Purchase of Development Rights, Transfer of Development Rights (TDR) or other County established program(s) geared to protecting agricultural lands and/or environmentally sensitive lands;
- d) The non-residential component(s) of the proposed development, excluding public facilities, shall be developed at a minimum intensity of 0.25 FAR; and
- e) The proposed development shall be planned to provide adequate buffering to adjacent agricultural lands and shall incorporate and promote bicycle and pedestrian accessibility throughout the development.
- f) The proposed development must be demonstrated not to discourage or inhibit infill and redevelopment efforts within the UDB;
- g) The proposed development will not leave intervening parcels of property between the proposed development and the UDB; and
- h) It must be demonstrated that the proposed development will have a neutral or positive net fiscal to Miami-Dade County.

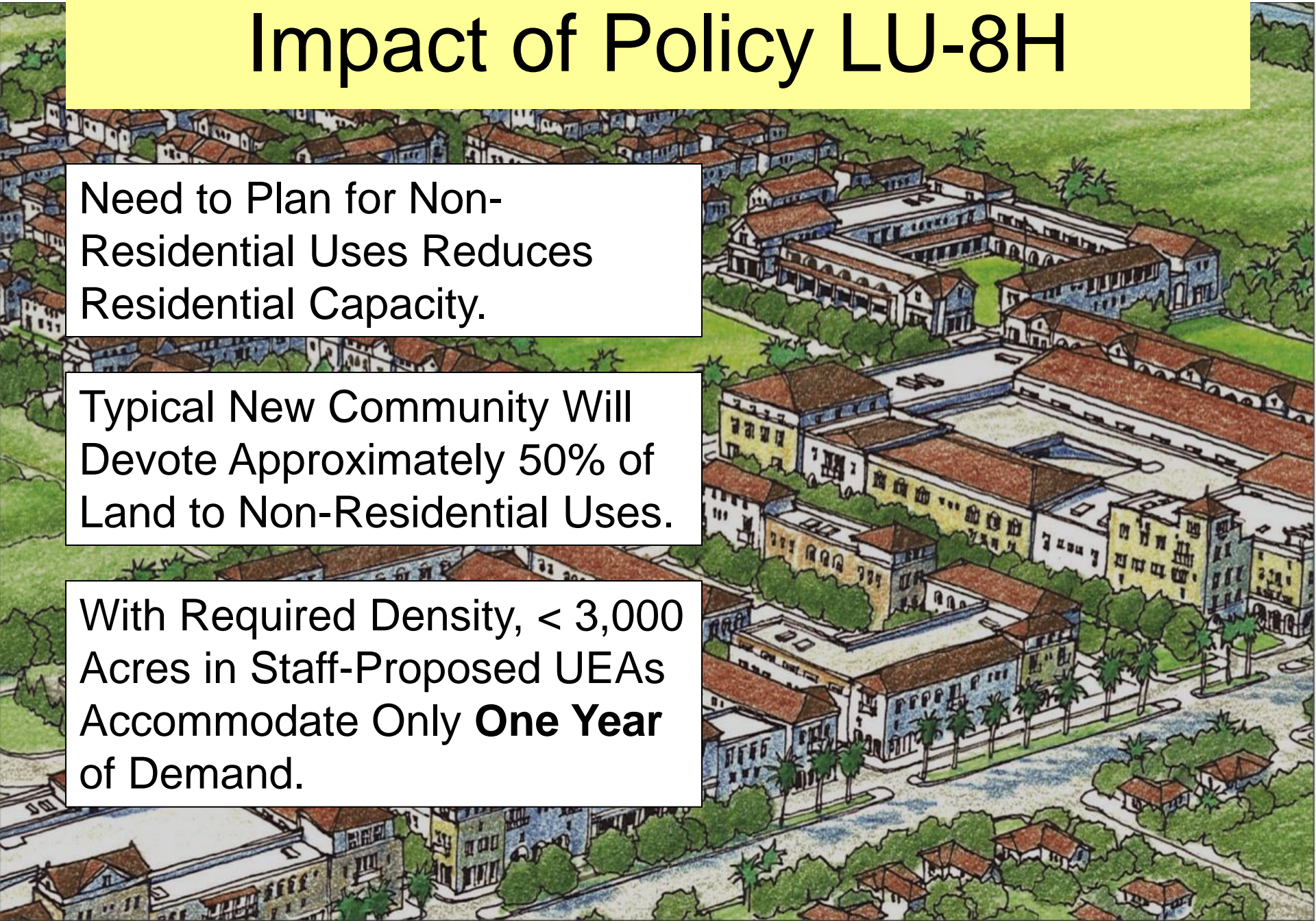


# Impact of Policy LU-8H

Need to Plan for Non-Residential Uses Reduces Residential Capacity.

Typical New Community Will Devote Approximately 50% of Land to Non-Residential Uses.

With Required Density, < 3,000 Acres in Staff-Proposed UEAs Accommodate Only **One Year** of Demand.



# Residential Development of UEAs

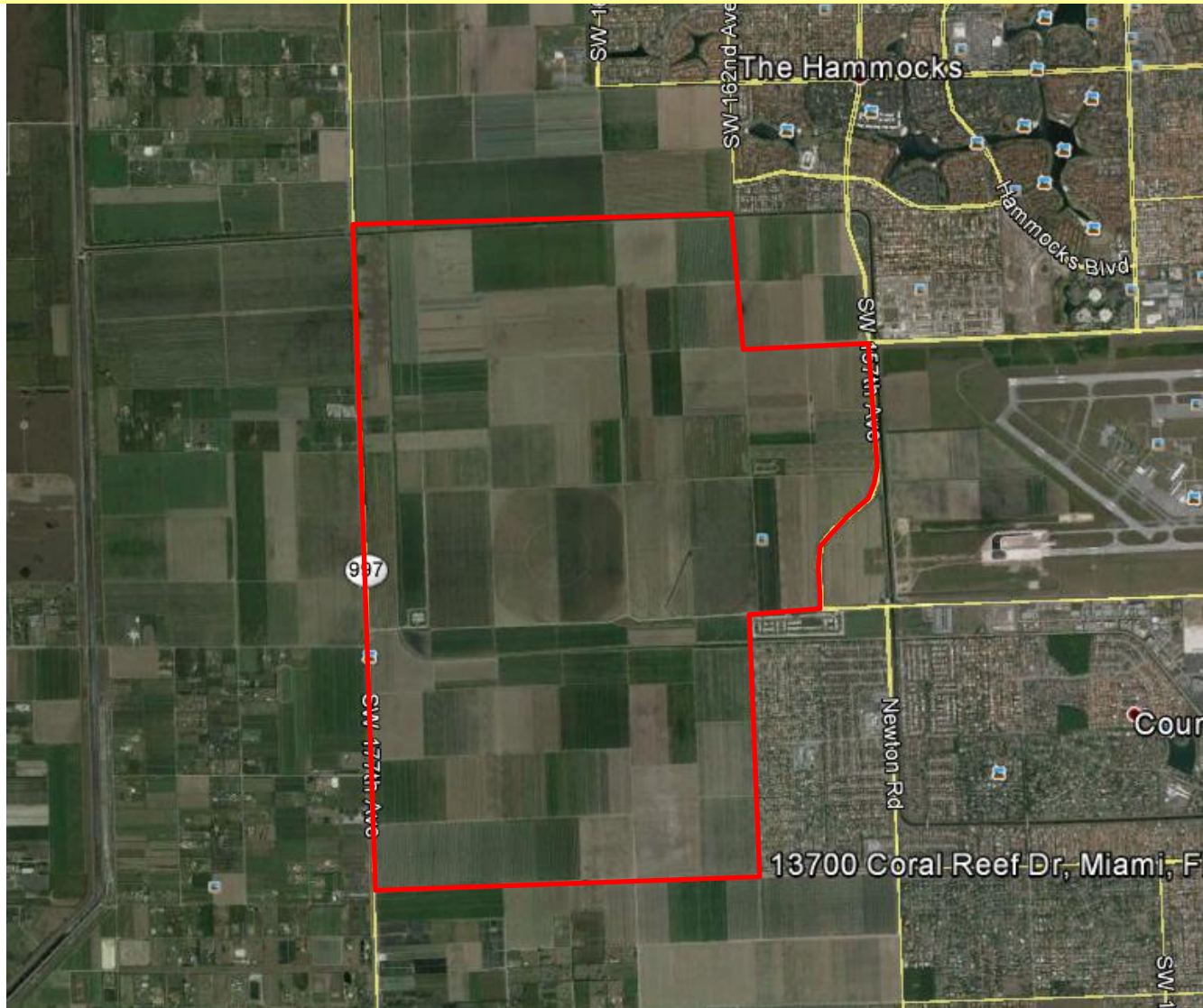
1,600 Acres Available for Residential  
UEAs

Policy LU-8H Contemplates 10 Units Per Acre of  
Residential Land

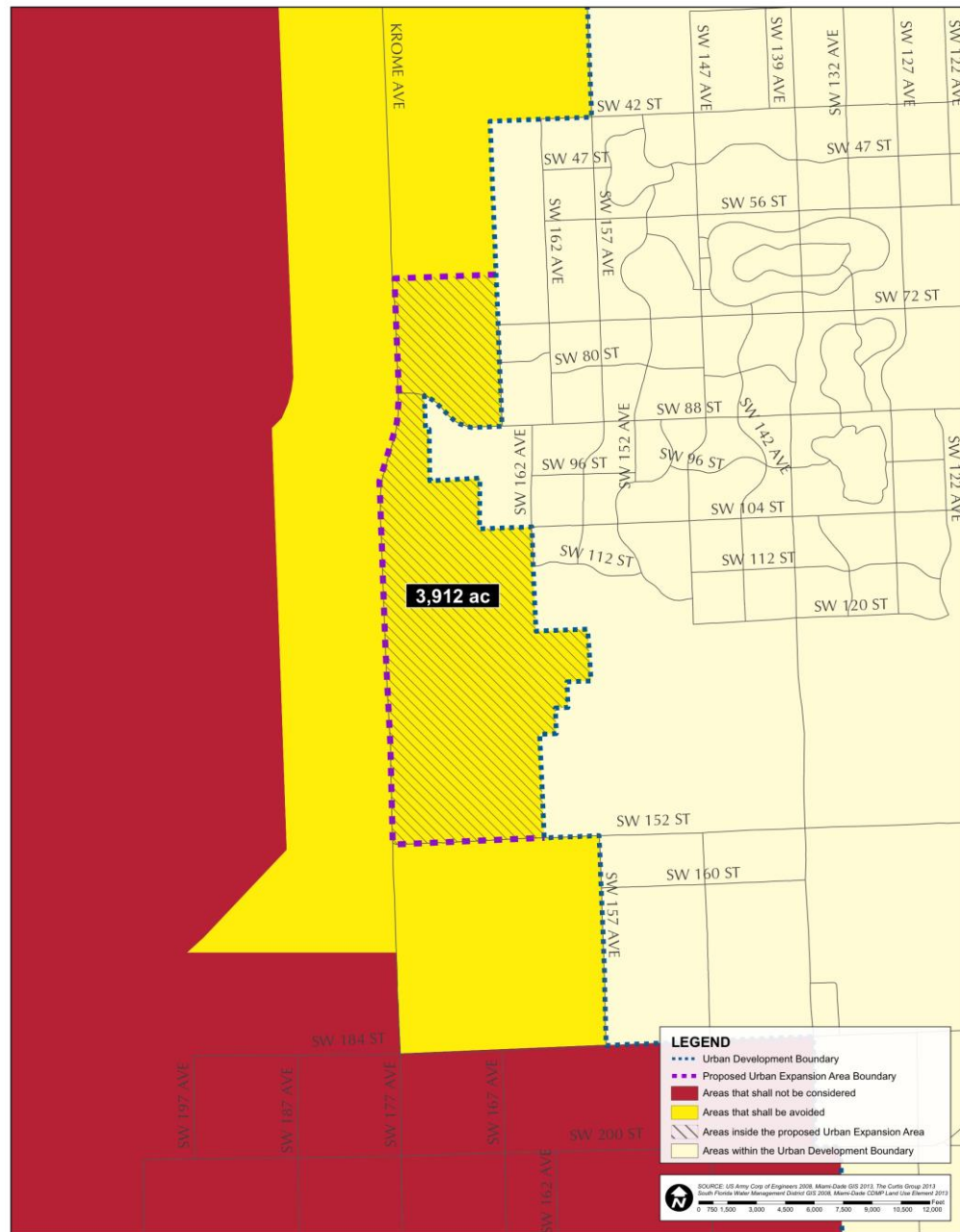
**1,600 acres X 10 du/ac =  
16,000 Potential Units**



# Western UEA Proposed Expansion Area







SEPTEMBER 2013

## PROPOSED 2012 EAR BASED AMENDMENTS: PARCEL 294

# Depletion of South-Central Tier

Table 1.1-10  
Residential Land Supply/Demand Analysis  
South Central Tier, 2010 to 2030

Analysis Done Separately for Each Type, i.e. No Shifting of Demand between Single & Multifamily Type	Subtier								
	East of Turnpike			West of Turnpike			South Central Total		
	Single Family	Multi- Family	Both Types	Single Family	Multi- Family	Both Types	Single Family	Multi- Family	Both Types
Capacity in 2010	2,173	12,419	14,592	4,607	1,711	6,318	6,780	14,130	20,910
Annual Demand 2010-2015	616	679	1,295	1,494	71	1,565	2,110	750	2,860
Capacity in 2015	0	9,024	8,117	0	1,356	0	0	10,380	6,610
Annual Demand 2015-2020	684	740	1,424	1,436	68	1,504	2,120	808	2,928
Capacity in 2020	0	5,324	997	0	1,016	0	0	6,340	0
Annual Demand 2020-2025	800	869	1,669	753	35	788	1,553	904	2,457
Capacity in 2025	0	979	0	0	841	0	0	1,820	0
Annual Demand 2025-2030	614	674	1,288	1,748	83	1,831	2,362	757	3,119
Capacity in 2030	0	0	0	0	426			0	
Depletion Year	2013	2026	2020	2013	2049	2014	2013	2027	2017

Source: Miami-Dade County Department of Planning and Zoning, Research Section, 2011.

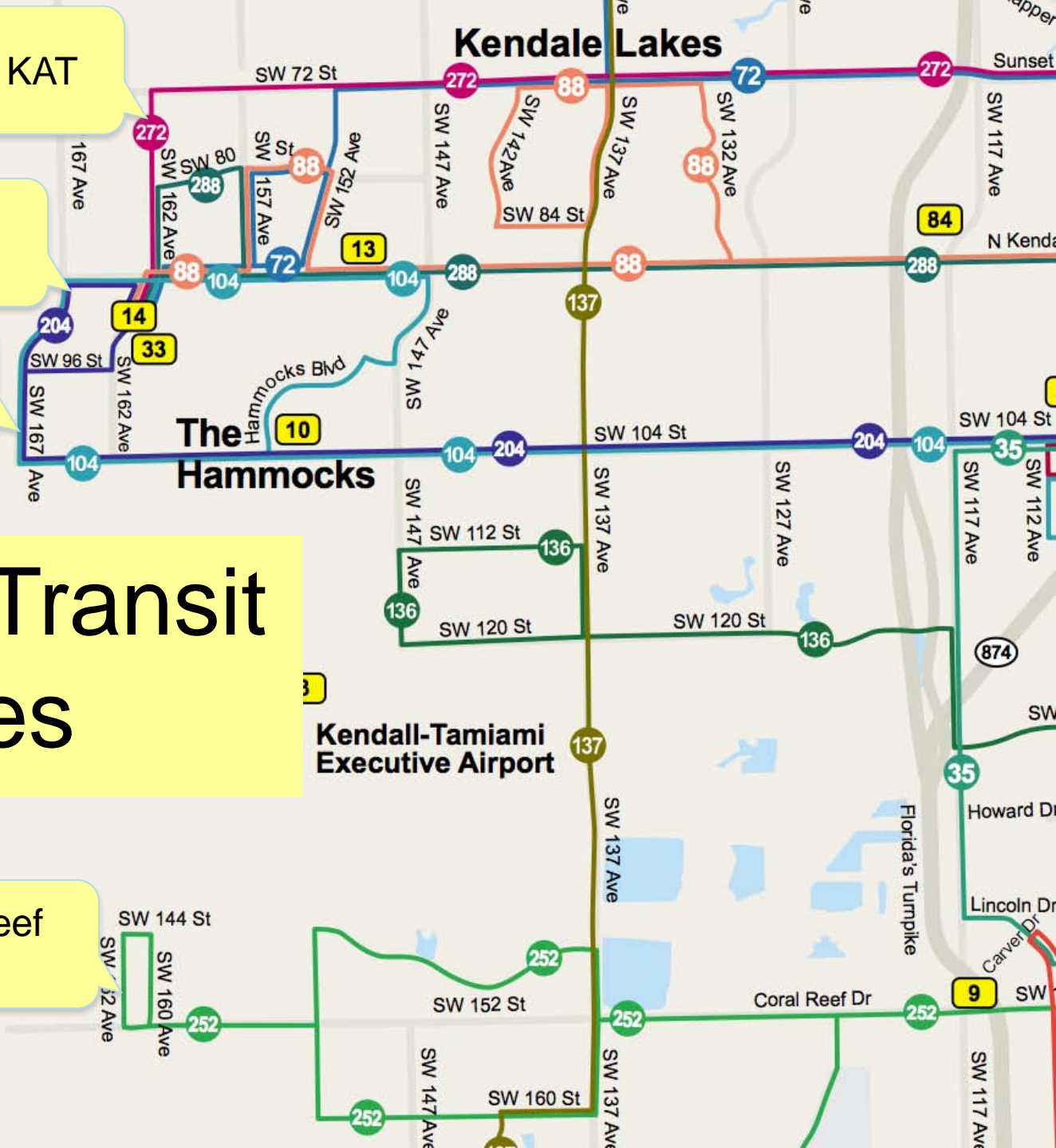
Sunset KAT

Kendall  
Cruiser

Killian KAT

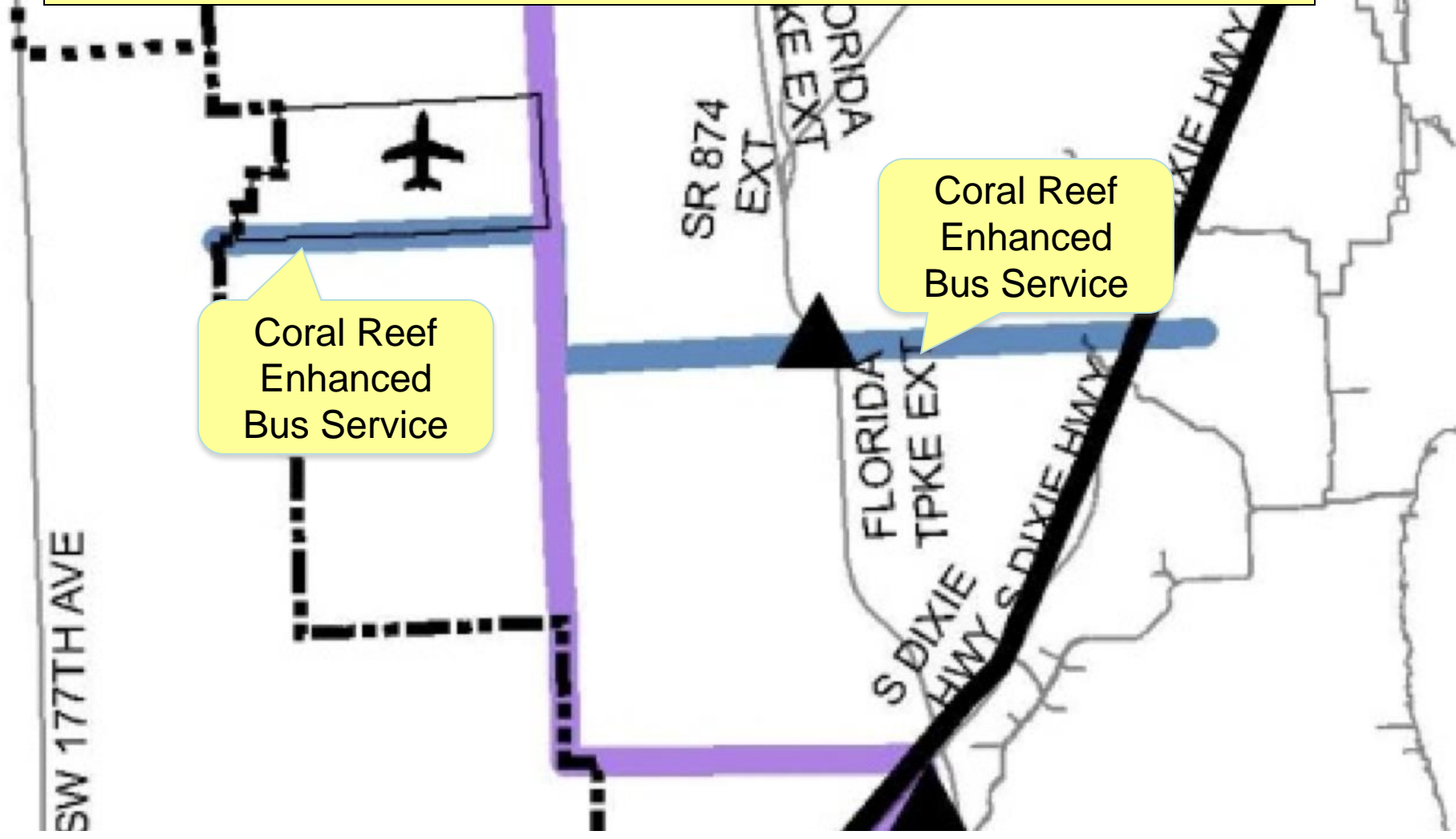
# Premium Transit Routes

Coral Reef  
MAX



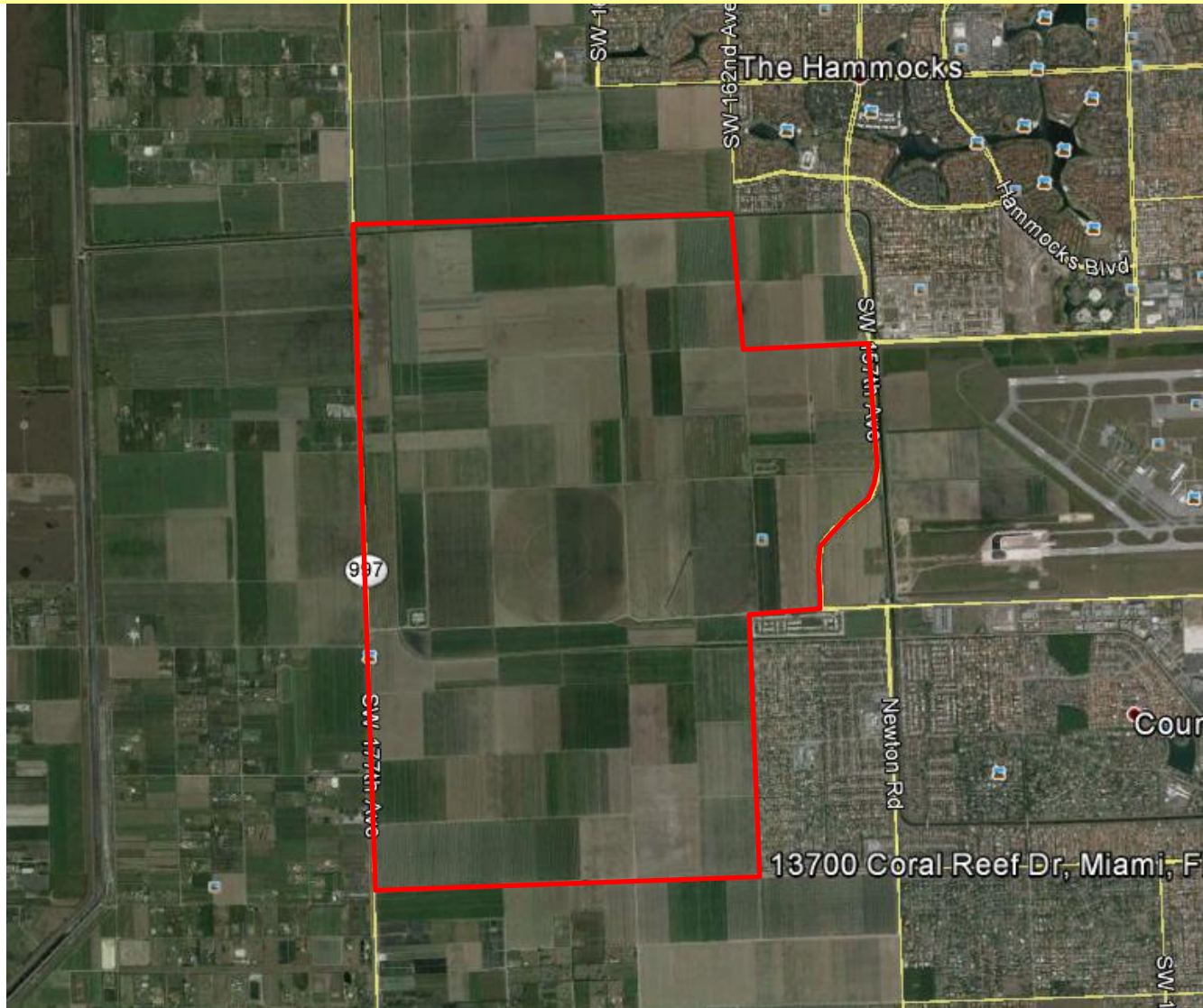
# New Premium Transit Corridor Map

(Figure 3 of Mass Transit Subelement)



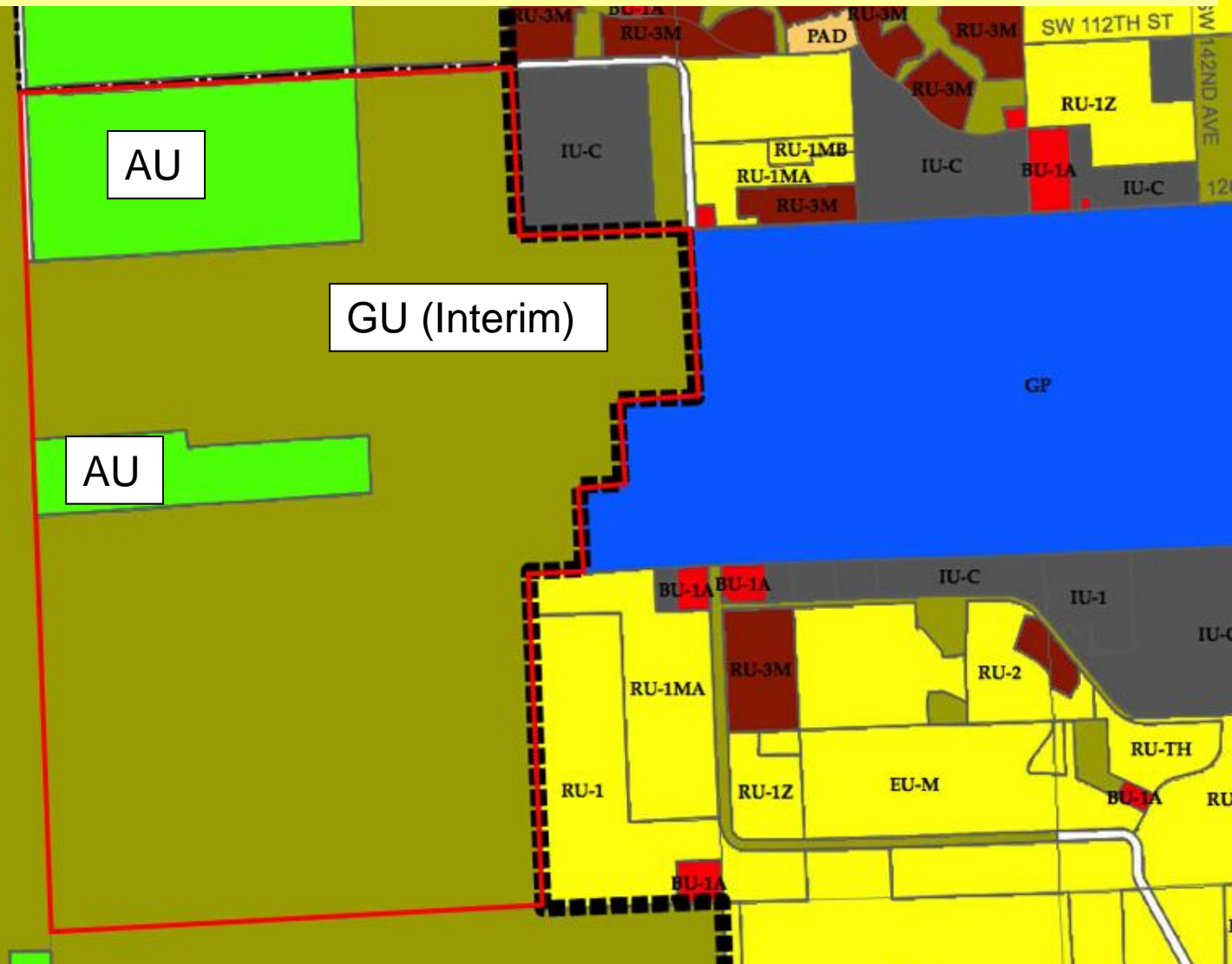


# Western UEA Proposed Expansion Area

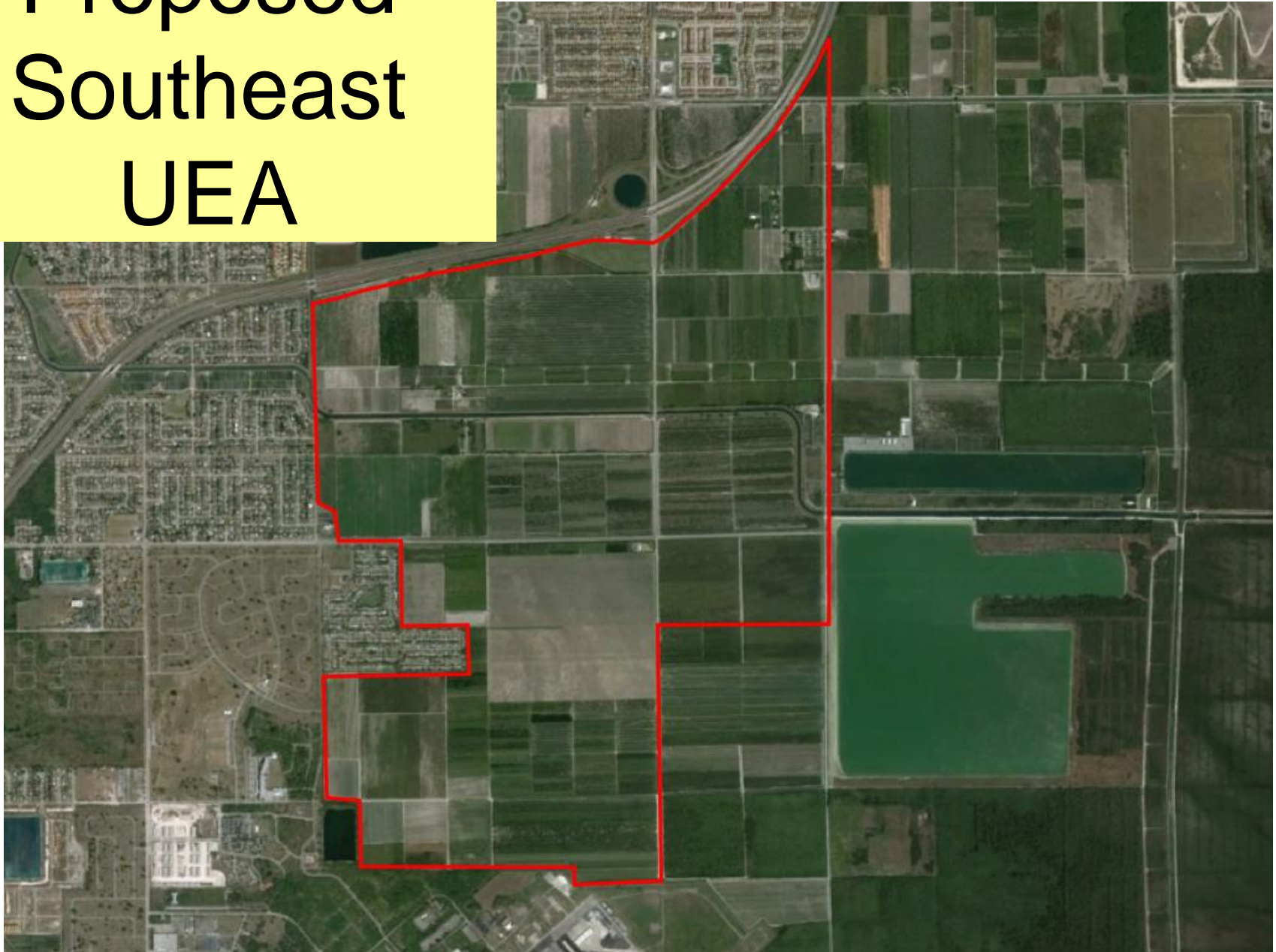


# Western UEA

## Zoning of Proposed Expansion Area



# Proposed Southeast UEA



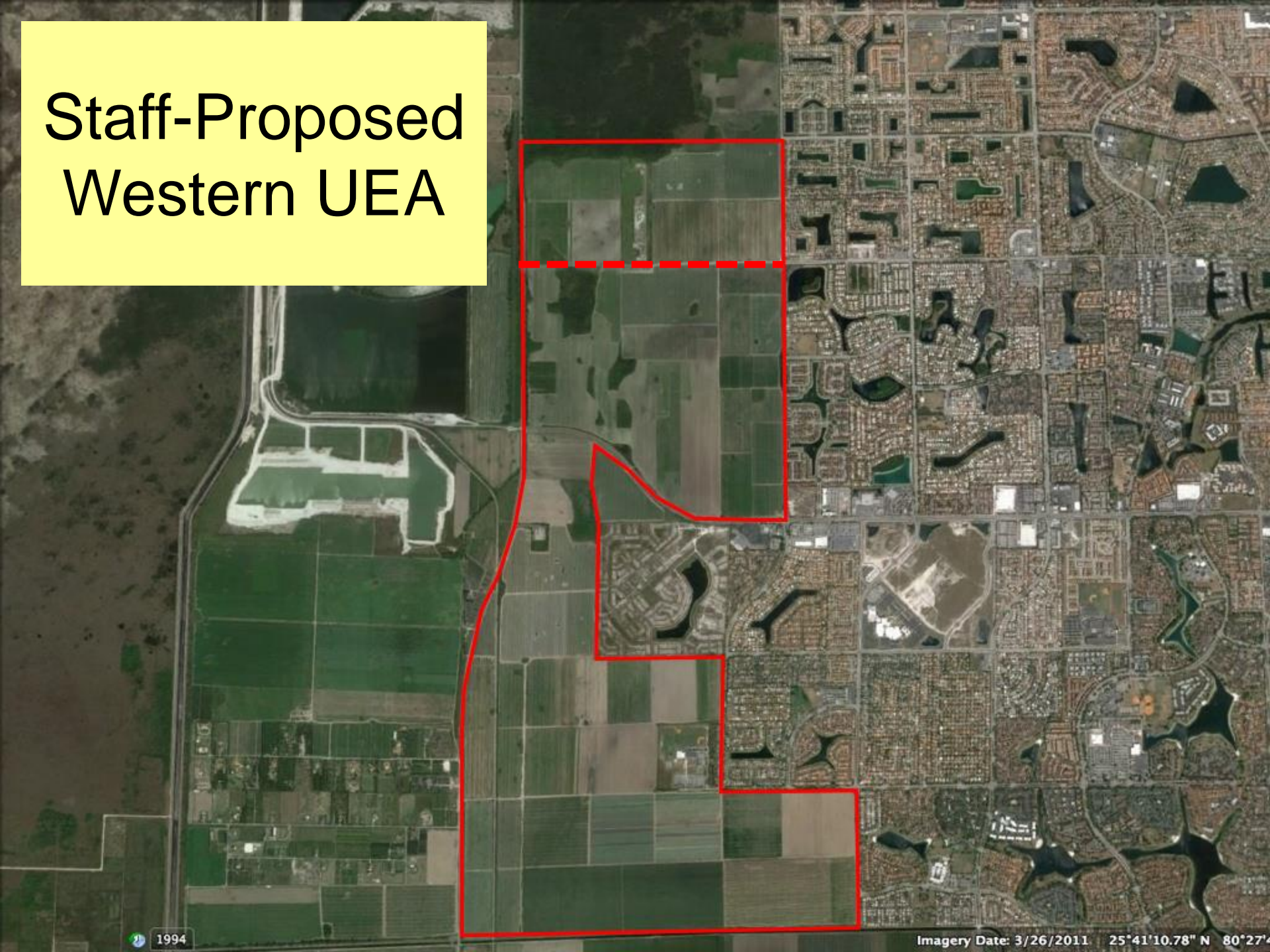


# Proposed Southeast UEA

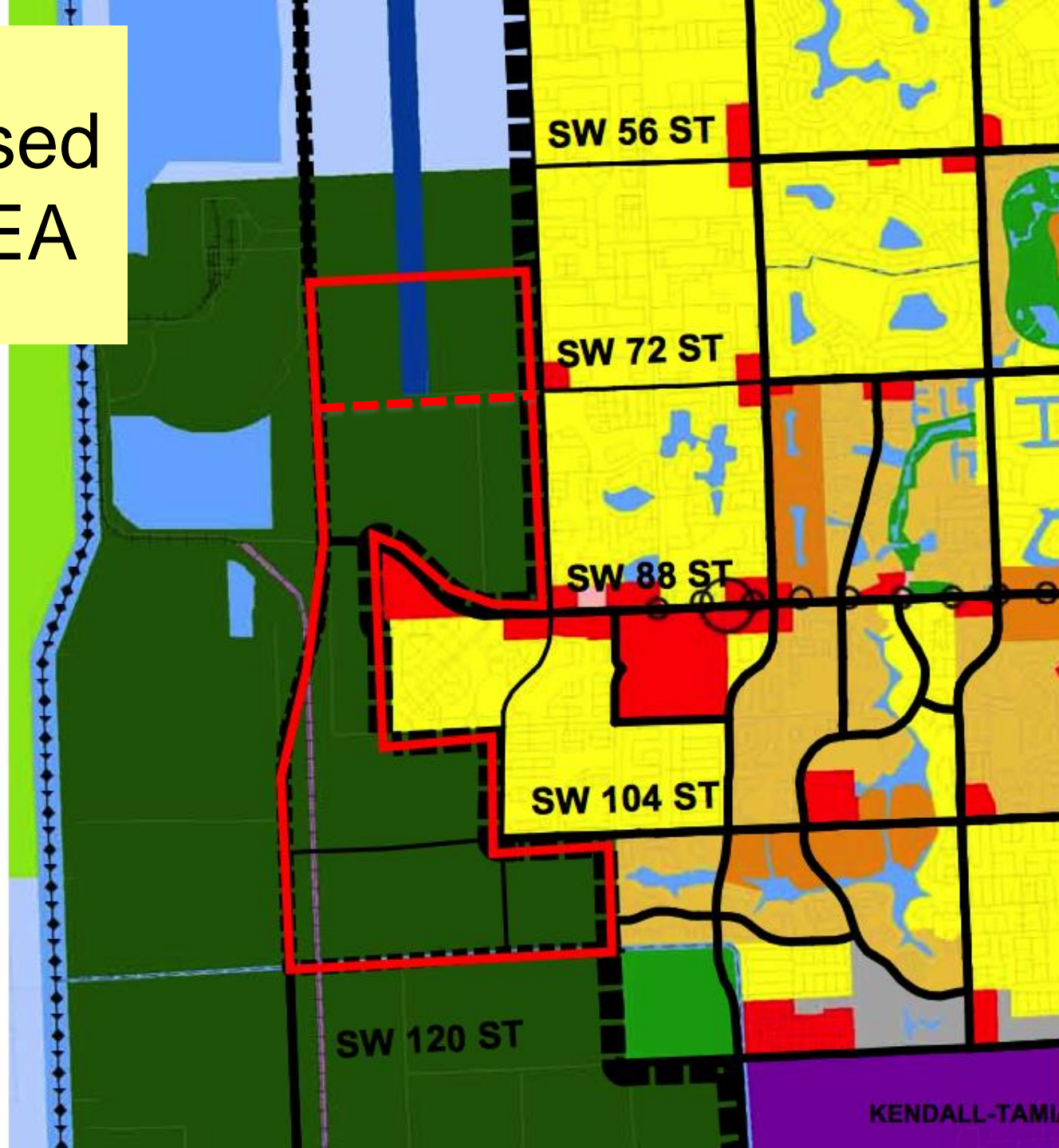




# Staff-Proposed Western UEA

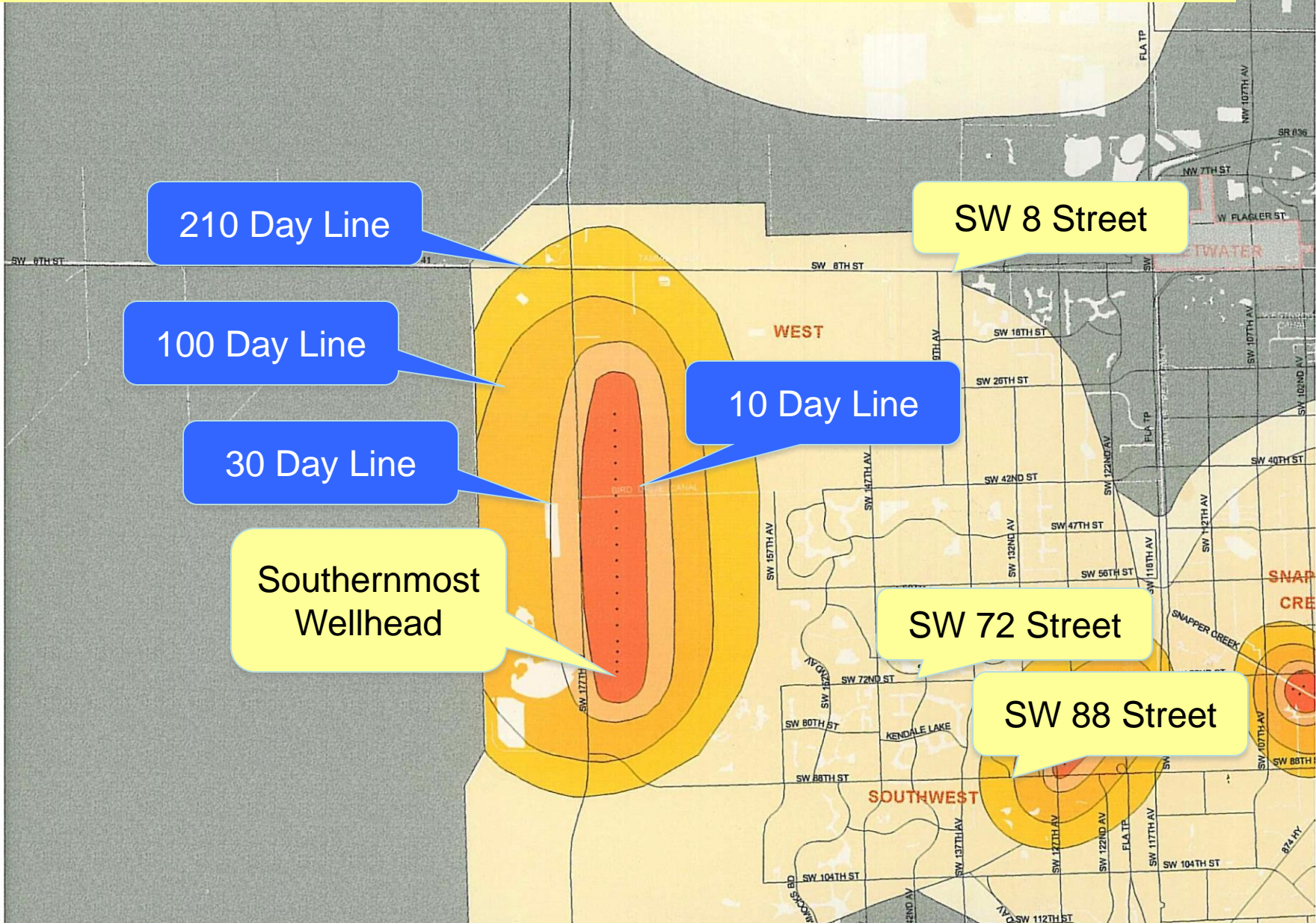


# Staff-Proposed Western UEA





# West Wellfield



## SUMMARY OF PROPOSED UEA CHANGES

	EXISTING ACREAGE	PROPOSED ACREAGE
Parcel 295	784 acres	209 acres
Parcel 294	2,817 acres	<b>+/- 4,253 acres</b>
Parcel 292	3,100 acres	1,471 acres
Parcel 293	595 acres	0 acres
<b>TOTAL</b>	<b>7,297 acres</b>	<b>5,933 acres</b>

# **EAR-BASED CDMP AMENDMENTS**

**Miami-Dade Board of County Commissioners**  
**October 2, 2013**





1000 Friends of Florida • Audubon of Florida  
Clean Water Action • EMERGE Miami  
Everglades Law Center • Sierra Club • Tropical Audubon Society  
Urban Environmental League P 3: 33

October 1, 2013

Honorable Rebeca Sosa  
Miami Dade County Commission  
Stephen P. Clarke Center  
111 NW First Street  
Miami, FL 33128

Dear Chairwoman Sosa,

On behalf of the undersigned organizations, we write to generally support your staff's recommended amendments to the Comprehensive Development Master Plan (CDMP) in order to implement recommendations of the 2010 Evaluation and Appraisal Report (EAR).

We support Miami-Dade Planning and Zoning's recommendations for the following reasons:

**Staff's UEA maps are amended to follow policy LU-8G**

The current EAR draft proposes to shrink some of the boundaries of the Urban Expansion Area (UEA) so the land use map is consistent with Policy LU-8G. Policy LU-8G states, in part, that the County must avoid four types of land when considering locations for inclusion within the UDB. They are: (1) future wetlands; (2) lands designated for agriculture, (3) hurricane evacuation areas, and (4) lands that are part of the Comprehensive Everglades Restoration Plan (CERP).

It is crucial for the Board of County Commissioners to understand that revising our UEAs is an important step to ensure we grow in a sustainable fashion, thus protecting our finite resources and the taxpayers' pockets. Staff's recommendations to contract all current UEAs and amending Policy LU-8G sets a clear path forward: to grow in areas fit to support population, save environmentally sensitive areas, and protect our water supply by standing clear off our wellfields.

The four existing UEAs are constrained in part by existing wetlands, wellfield protection areas, CERP footprints, and other types of land use that should be avoided for development. By modifying these UEAs, you can ensure that land identified for future urban expansion in each UEA is free from these constraints.

While the development industry *thinks* that even more land should be included in the UEAs, we *know* that the population projection numbers that your staff calculated are correct based on recent

PLANNING & ZONING  
METROPOLITAN PLANNING SECT

**RECEIVED**  
By the Clerk for the record.

OCT 2 2013

Item \_\_\_\_\_  
Exhibit D  
Meeting BCC CDMP



statements from the state Department of Economic Opportunity.<sup>1</sup> These numbers do not justify expanding these areas at this time. The Commission should reject their claims and follow staff's expertise.

We fully support staff's modifications and agree that no other area outside the UDB fulfills the criteria for inclusion within a UEA. Contracting the following UEAs is of utmost importance, and we ask you hear to your Staff's recommendations that are based on solid facts:

***Parcel 292:***

Staff has recommended removing 1,489 acres from the UEA because this area falls into 4 out of the 4 criteria for exclusion per policy LU- 8G: Accident Potential Zone (APZ) of the Homestead Air Reserve Base, High Coastal High Hazard Area (LU-8G(ii)(c), Future Wetlands and CERP Water Management Areas (LU-8G(ii)(a), and CERP project footprints for the Biscayne Bay Coastal Wetlands (LU-8G(ii)(d).

While exclusion from the UEAs does not stop developers from applying for a CDMP amendment, it does make it clear to everyone that this area has been identified by the county as *not suitable for urban development*. This is the most efficient way of protecting taxpayers from a flood issue, and of ensuring economic prosperity for fisheries dependent on a clean Biscayne Bay since land in this area has been purchased by the South Florida Water Management District for the Biscayne Bay Coastal Wetlands Restoration Project that is part of CERP.

***Parcel 294:***

Staff has recommended removing 1,525 acres from this UEA to bring the map into compliance with the CDMP's policies. These 1,525 acres lie within the West Wellfield Protection Area, which serves as a critical drinking water source for many Miami-Dade residents. The Biscayne aquifer is extremely porous and the water table is very close to the surface, making it vulnerable to pollution. Pollutants that are discharged onto the ground or that occur in surface waters can contaminate the groundwater and be drawn into our drinking water wells.

While LU-8G identifies the area to be protected as between SW 8<sup>th</sup> street and SW 42<sup>nd</sup> st, recent data from the county clearly indicates that this protection area should be expanded. In December 2012, the county published a map that shows the West Wellfield Protection Area reaching as far south as 72<sup>nd</sup> street.<sup>2</sup> The Florida Department of Economic Opportunity also found that the wellfield reaches to SW 72<sup>nd</sup> street.<sup>3</sup>

Miami-Dade maps of the wellfield also show that the travel time of aquifer water to well pumps is in the 10-day travel time period period. Based on the time travel contour lines depicted in the map pertaining to this UEA, any pollutants from nearby developments could filter through the aquifer and reach our potable water within 10 days.

---

<sup>1</sup> Florida Department of Economic Opportunity Objections, Recommendations, and Comments Report to Miami-Dade County, Proposed Comprehensive Plan Amendment 13-4ER, August 23, 2013 at 4.

<sup>2</sup> Initial Recommendations, October 2012 Cycle, EAR-Based Applications to Amend the Comprehensive Development Master Plan, April 2013, Miami-Dade County.

<sup>3</sup> Florida Department of Economic Opportunity Objections, Recommendations, and Comments Report to Miami-Dade County, Proposed Comprehensive Plan Amendment 13-4ER, August 23, 2013 at 5.

Jeopardizing our drinking water supply in this area is simply not an option. It is because of these contour lines that your staff has made recommendations to amend this UEA to protect our water supply from the threat of pollution from development occurring so near such sensitive area.

Therefore, in order to protect this vital resource for the county, we also recommend amending the language in LU-8G to identify the area to be protected as between SW 8<sup>th</sup> street and SW 72<sup>nd</sup> street at a minimum. We strongly urge you to side with your staff on this UEA and protect our wellfield.

In addition, this area falls within an identified portion of the Everglades Buffer Areas as identified by the South Florida Water Management District to provide a buffer between the Everglades and east coast urban centers, managed in a manner that allows water to be captured, stored, and released at opportune times to benefit both the urban communities and the ecological system to the west.

#### ***Parcel 295***

Staff has recommended removing approximately 575 acres as these lands contain areas identified by the SFWMD as future wetlands, which would be inconsistent for development pursuant to the CDMP's policy LU-8G. Indeed, these lands are now classified as wetlands, which provide a critical environmental service to Miami-Dade. Wetlands provide crucial storage for our aquifer, naturally clean pollutants out of our water, help mitigate storm and flooding impacts on nearby development, while also providing important habitat for numerous species including as a nursery for fish.

Many have recognized that growth patterns in previous decades have not been based on solid science or policy, and have had negative impacts on our economy and quality of life. This is an opportunity to be forward-thinking and support infill development projects that continue to improve our County, supply jobs and contribute to our economy. We strongly urge the BCC to embrace the fact that our economic success is intimately tied to the conservation and preservation of our environment.

#### **Density and Transit**

We must start to make the necessary infrastructure investments toward areas where growth is desirable and planned. It is foolish to continue the battle between land preservation and economic growth when the two can easily work hand-in-hand.

By prioritizing density at targeted areas, we can create vibrant communities that support successful transit systems. This will allow our sensitive westward lands to be conserved for agricultural uses, wildlife habitat, and natural water storage. We ask that you consider the plethora of positive impacts that will emerge from establishing enforceable minimum density requirements at targeted urban infill locations, and adopt strong text in the EAR to encourage this type of development.

There is an urgent need to increase our county's mobility. The most efficient way to do this is to ensure that all residents have access to an affordable, energy-efficient, reliable and convenient

public transit system. Alternative means of transit funding – like using a portion of Miami-Dade Expressway's resources – will become essential for us to develop the type of modern transit system our residents need to be economically viable. Successful transit can reduce traffic congestion and alleviate the burden on our overstressed roadways; it can also reduce the amount of greenhouse gases emitted each year, decreasing potential impacts of climate change.

### **Climate Change Mitigation and Adaptation**

As a valuable member of the 4 county climate compact, and an active partner in the Seven50 regional planning process, Miami-Dade has the unique opportunity to emerge as a national leader in the mitigation and adaptation of climate change impacts. As the CDMP envisions future growth and plans for the locations of growth, it is critical to start assessing each new application with a climate filter in place that can be evaluated through multiple agency perspectives.

It is essential that commitment to Everglades restoration continue to be a top priority for our county. Water management structures will need to be modified, road-beds raised, drainage improved but if this issue is not addressed and envisioned in our comprehensive planning document now, we will be missing an opportunity to coordinate and ultimately create a safer, more economically-viable community for future growth.

For all these reasons, we are supportive of adopting the proposed new policies on climate change. However, many of the critical tools will not be implemented or even analyzed until 2017. Given the tremendous availability of data relevant to Miami-Dade and local climate experts, and the reality that we are already experiencing climate impacts, we urge you to accelerate these initiatives.

We would urge MDC to be an example of a community seeking to reduce its carbon footprint and advocate for carbon reduction nationally and worldwide.

### **Urban Development Boundary**

The EAR concludes that, based on current demographics and supply and demand analysis by the County, "an expansion of the UDB is not warranted to meet the needs for commercial and industrial lands" for the 2025 planning horizon. However, County staff has identified a 554-acre parcel (parcel 296) to include within the UDB. The area in question is a proverbial "hole-in-the-donut" that was created as a result of previous Shoppyland and Beacon Lakes development initiatives, and is surrounded by lands already included within the UDB.

We are concerned that the proposed expansion will set a dangerous precedent of facilitating development without demonstrated need, and request that guidelines be mandated to ensure that this "hole-in-donut" land use scenario not be replicated in the future.

### **Conclusion**

You are in the unique position to positively influence the growth of our county and leave a legacy for future generations. Thank you for your time and consideration of these important issues.

Sincerely,

Charles Pattison  
President  
1000 Friends of Florida  
[cpattison@1000fof.org](mailto:cpattison@1000fof.org)

Julie Hill-Gabriel  
Audubon of Florida  
[jhill-gabriel@audubon.org](mailto:jhill-gabriel@audubon.org)

Kathleen E. Aterno  
Florida Director  
Clean Water Action  
[katerno@cleanwater.org](mailto:katerno@cleanwater.org)

Bruce Stanley  
Organizer  
EMERGE Miami

Sara Fain  
Executive Director  
Everglades Law Center  
[sara@evergladeslaw.org](mailto:sara@evergladeslaw.org)

Stephen Mahoney  
Conservation Chair, Miami Group  
Sierra Club  
[rsmahoney@bellsouth.net](mailto:rsmahoney@bellsouth.net)

Laura Reynolds  
Executive Director  
Tropical Audubon Society  
[tropicalaudubon@gmail.com](mailto:tropicalaudubon@gmail.com)

Barbara Falsey  
President  
Urban Environment League  
[barbine237@gmail.com](mailto:barbine237@gmail.com)

Cc: Members of the Board of County Commissioners  
Mayor Carlos Gimenez  
Mark Woerner





## USA DEMOGRAPHY

RECEIVED  
By the Clerk for the record.

Sept. 30, 2013

Members of the Board of County Commissioners  
111 NW 1st St.  
Miami, FL 33128

OCT 2 2013

Item \_\_\_\_\_  
Exhibit A  
Meeting BCC CDMP

Dear Commissioners:

This letter is in reference to the Miami-Dade County Population Projections that you currently have under consideration.

I was asked by Miami Economic Associates, Inc. to review the population projections for Miami-Dade County because of my expertise in population projections methods (see attached vita). In the process of that review and discussions with the Miami-Dade County departments involved, I determined that the projections had been based on outdated and faulty data. The data failed to account for recent increases in international migration into the county and for declines in domestic migration out of the county. Both factors have led to increased population growth in the county in recent years and could reasonably be assumed to continue for the near future.

Professionally accepted methodology would be to base the assumptions about future changes in the demographic components on the updated historical data emphasizing recent trends. However, the assumptions in these projections do not reflect these recent trends and data corrections. In fact, the assumptions appear to have ignored these recent trends and kept a previously chosen set of assumptions that would lead to slow growth in the county. As a result these projections substantially underrepresent the likely population growth of the county - particularly in the short and medium term.

This failure to incorporate recent trends into the near-term assumptions of the projections is already evident in the first year of the projection period. Despite the fact that the county had substantially increased levels of immigration in 2010 and 2011, the Dept. of Planning chose to include assumptions of immigration for 2012 and subsequent years that were substantially lower than the 2010 and 2011 levels. The most recent data on immigration released from the U.S. Census Bureau's American Community Survey this month show that immigration for 2012 continues to run above the 2010 levels while the County projected a decline of 6 percent below the 2010 values. As a consequence, the County's population projections for 2012 are already below the current estimates made by the State of Florida and those made by the U. S. Census Bureau. These low levels of immigration are built into the County's assumptions for the next 5 to 10 years -- leading to what will probably be a substantial underestimate of immigration and population growth by 2020.

Sincerely,



John F. Long, Ph.D.  
President, USA Demography, LLC  
johnlong@usademography.com





2013 SEP 30 P 5:34

PLANNING & ZONING  
METROPOLITAN PLANNING SECT

**RECEIVED**  
By the Clerk for the record.

September 30, 2013

Mark Woerner  
Planning Director  
111 NW 1st Street, 12th Floor  
Miami, Florida 33128

OCT 2 2013

Item \_\_\_\_\_  
Exhibit E  
Meeting BCC CDMP

Re: EAR Based CDMP Amendments, Application 1

Dear Mr. Woerner,

Please consider this letter in opposition to EAR Based CDMP Amendment, Application 1 (the "Proposed Amendment.") This firm represents Alger Farms, John Alger, and Richard Alger (the "Algers.") The Algers own hundreds of acres<sup>1</sup> (the "Alger Property") that comprise the majority of the acreage in (a) Parcel 293, which is the 596 acre tract proposed to be removed from the Urban Expansion Area; and (b) the APZ I and APZ II area that is subject to the proposed amendment that the area "shall not be considered" for UDB expansion.<sup>2</sup>

**Population Projections Require Addition – Not Removal – of UEAs**

The UEAs are areas "where current projections indicate that further urban development beyond the 2020 UDB is likely to be warranted some time between the year 2020 and 2030."<sup>3</sup> "The over 58% reduction in size of the existing UEAs, the proposed increase in significance of the UEAs to the County's planning efforts, and the expected need to devote land within the UEAs for non-residential purposes all suggest that additional UEA acreage should be recognized in order to provide the needed planning flexibility."<sup>4</sup> Thus, according to the EAR, the addition – not removal – of UEAs is necessary to satisfy the increasing population in Miami Dade County.

The population projections cited in the EAR, and in the Proposed Amendment, show that the residential land supply may be exhausted between 2021-2026. In fact, population in the vicinity of the Alger Property is projected to double by 2030.<sup>5</sup> In addition, any residential

<sup>1</sup> Miami Dade folio numbers 10-7923-001-0020; 10-7923-001-0021; 10-7915-001-0260; 10-7915-001-0300; 10-7922-001-0010; 10-7922-001-0040; 10-7922-001-0050; 10-7922-001-0060; 10-7922-001-0070; 10-7922-001-0072; 10-7922-001-0080; 10-7922-001-0090; 10-7914-001-0060; 10-7914-001-0070; and 30-7914-001-0090. See Highlighted Area, Ex. A.

<sup>2</sup> Proposed Amendment to Policy LU-8G(ii).

<sup>3</sup> October 2012 Cycle EAR-Based CDMP Amendments, Ex. H stamped May 22, 2013 at p. 1.

<sup>4</sup> October 2012 Cycle EAR-Based CDMP Amendments, Ex. H stamped May 22, 2013 at p. 9.

<sup>5</sup> 2010 EAR, Figure 1.1-7. (Ex. B)

expansion also requires the provision of places of employment, shopping, and other public facilities (Proposed Policy LU-GH). Therefore, based on the population projections in the EAR, Parcel 293 should not be removed from the UEA.

**Designation of Parcel 293 as a UEA is Consistent with the AICUZ**

The basis for the Proposed Amendment with respect to the Alger Property is that the "AICUZ overlay and the limited size of this UEA means it will have little utility for providing additional capacity."<sup>6</sup> The majority of Parcel 293 is located in APZ II and *outside* the APZ zones<sup>7</sup>. According to the AICUZ Recommended Land Use Compatibility Guidelines, a number of land uses are compatible with the HARB in the APZ II. For example, residential units at 1-2 units per acre or more pursuant to a Planned Unit Development, manufacturing, utilities, retail, professional services, etc.<sup>8</sup> In other words, the AICUZ states that many land uses that would require expansion of the UDB are actually compatible with the HARB operations. Therefore, the designation of Parcel 293 as a UEA is consistent with the AICUZ and the land uses that the Air Force itself has determined are compatible with the HARB.

The Alger Property is designated Agriculture. Thus, it is particularly affected by the Proposed Amendment, which clarifies that Agricultural land within a UEA would not be disfavored for inclusion within the UDB. Parcel 293 was designated a UEA when the HARB was in full operation, and the County specifically determined that Parcel 293 was an appropriate UEA. Nothing has changed. Therefore, there are no new circumstances that require the removal of Parcel 293 from the UEA.

For these reasons, Parcel 293 should not be removed from the UEA. Furthermore, the amendment to Policy LU-8G(ii) to prohibit consideration of the APZ I and APZ II for inclusion in the UDB should be rejected. If the Proposed Amendment is adopted in its current form, the Alger will not even have the opportunity to develop the Alger Property in a manner consistent with the AICUZ in the future. In that event, the Alger Property should have top priority for the Purchase of Development Rights Program. Please contact me at 305-722-8893 if you would like to discuss these issues in further detail.

Sincerely,



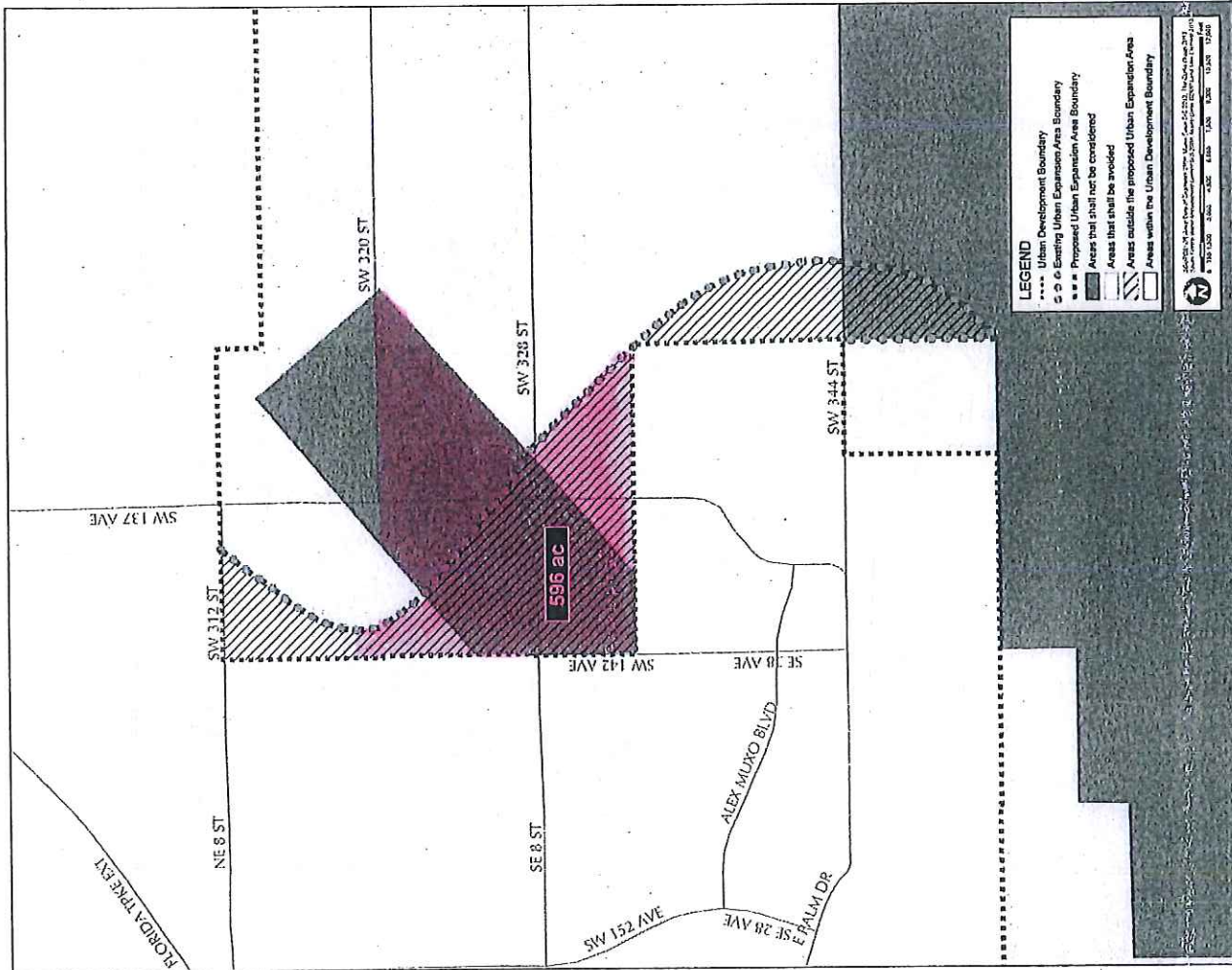
Amanda Quirke

<sup>6</sup> October 2012 Cycle EAR-Based CDMP Amendments, Ex. H stamped May 22, 2013 at p. 7.

<sup>7</sup> October 2012 Cycle EAR-Based CDMP Amendments, Ex. 7 stamped May 22, 2013 at p. 1-10. (Ex. C)

<sup>8</sup> See AICUZ, Table 3-1 USAF Recommended Land Use Compatibility Guidelines in Relation to APZs and Noise Zones. (Ex. D).





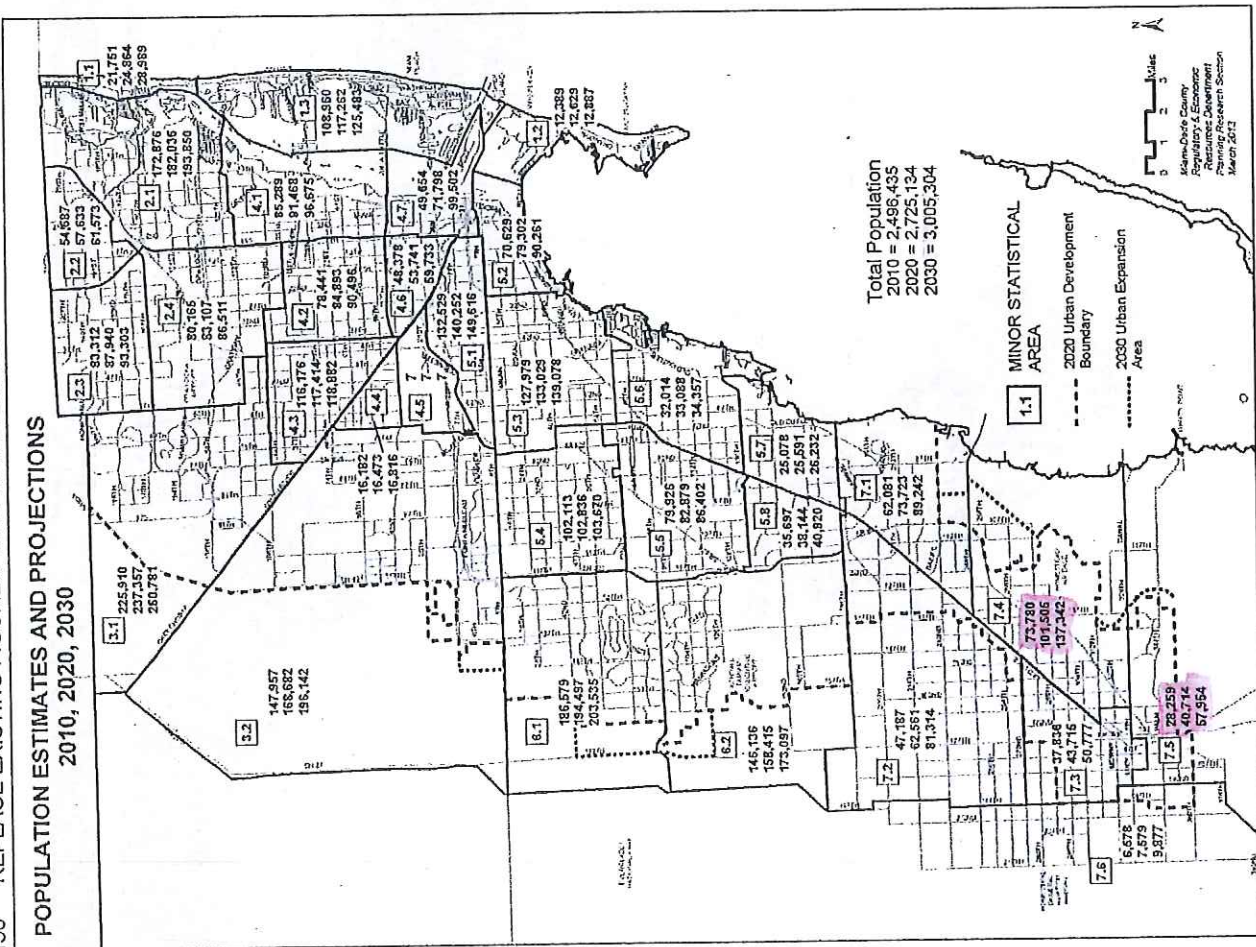
APRIL 2013

PROPOSED 2012 EAR BASED AMENDMENTS: PARCEL 293 (STAFF PROPOSED)

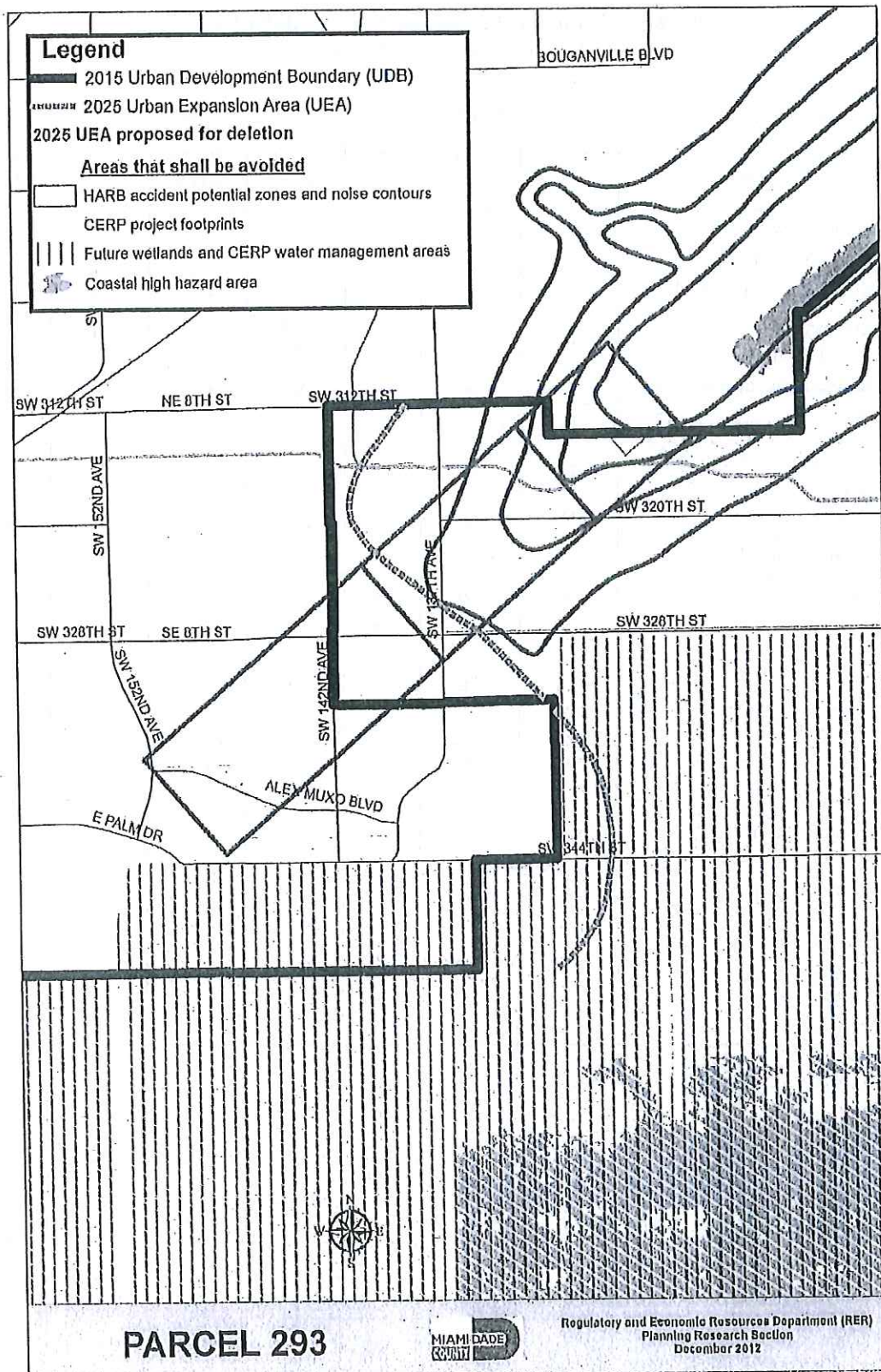


POPULATION ESTIMATES AND PROJECTIONS

2010, 2020, 2030



# EXHIBIT "A"







**Table 3-1. USAF Recommended Land Use Compatibility Guidelines  
in Relation to APZs and Noise Zones**

Land Use		APZs			Noise Zones			
SLUCM No.	Name	CZ	APZ I	APZ II	65-69 dBA	70-74 dBA	75-79 dBA	80+ dBA
10	<i>Residential</i>							
11	Household units							
11.11	Single units; detached	N	N	Y <sup>1</sup>	A <sup>11</sup>	B <sup>11</sup>	N	N
11.12	Single units; semidetached	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.13	Single units; attached row	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.21	Two units; side-by-side	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.22	Two units; one above the other	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.31	Apartments; walk-up	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
11.32	Apartments; elevator	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
12	Group quarters	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
13	Residential hotels	N	N	N	A <sup>11</sup>	B <sup>11</sup>	N	N
14	Mobile home parks or courts	N	N	N	N	N	N	N
15	Transient lodgings	N	N	N	A <sup>11</sup>	B <sup>11</sup>	C <sup>11</sup>	N
16	Other residential	N	N	N <sup>1</sup>	A <sup>11</sup>	B <sup>11</sup>	N	N
20	<i>Manufacturing</i>							
21	Food and kindred products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
22	Textile mill products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
23	Apparel and other finished products made from fabrics, leather, and similar materials; manufacturing	N	N	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
24	Lumber and wood products (except furniture); manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
25	Furniture and fixtures; manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
26	Paper and allied products; manufacturing	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
27	Printing, publishing, and allied industries	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
28	Chemicals and allied products; manufacturing	N	N	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>





**Table 3-1. USAF Recommended Land Use Compatibility Guidelines  
in Relation to APZs and Noise Zones (continued)**

Land Use		APZs			Noise Zones			
SLUCM No.	Name	CZ	APZ I	APZ II	65-69 dBA	70-74 dBA	75-79 dBA	80+ dBA
29	Petroleum refining and related industries	N	N	N	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
30	<i>Manufacturing</i>							
31	Rubber and misc. plastic products; manufacturing	N	N <sup>2</sup>	N <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
32	Stone, clay, and glass products manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
33	Primary metal industries	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
34	Fabricated metal products; manufacturing	N	N <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
35	Professional, scientific, and controlling instruments; photographic and optical goods; watches and clocks; manufacturing	N	N	N <sup>2</sup>	Y	A	B	N
39	Miscellaneous manufacturing	N	Y <sup>2</sup>	Y <sup>2</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
40	<i>Transportation, communications and utilities</i>							
41	Railroad, rapid rail transit, and street railroad transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
42	Motor vehicle transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
43	Aircraft transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
44	Marine craft transportation	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
45	Highway and street right-of-way	N <sup>3</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
46	Automobile parking	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
47	Communications	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	A <sup>15</sup>	B <sup>15</sup>	N
48	Utilities	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>
49	Other transportation communications and utilities	N <sup>3</sup>	Y <sup>4</sup>	Y	Y	A <sup>15</sup>	B <sup>15</sup>	N
50	<i>Trade</i>							
51	Wholesale trade	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>



**Table 3-1. USAF Recommended Land Use Compatibility Guidelines  
in Relation to APZs and Noise Zones (continued)**

Land Use		APZs			Noise Zones			
SLUCM No.	Name	CZ	APZ I	APZ II	65-69 dBA	70-74 dBA	75-79 dBA	80+ dBA
52	Retail trade: building materials, hardware, and farm equipment	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
53	Retail trade: general merchandise	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
54	Retail trade: food	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
55	Retail trade: automotive, marine craft, aircraft, and accessories	N	Y <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
56	Retail trade: apparel and accessories	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
57	Retail trade: furniture, home furnishings, and equipment	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
58	Retail trade: eating and drinking establishments	N	N	N <sup>2</sup>	Y	A	B	N
59	Other retail trade	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
60	<i>Services</i>							
61	Finance, insurance, and real estate services	N	N	Y <sup>6</sup>	Y	A	B	N
62	Personal services	N	N	Y <sup>6</sup>	Y	A	B	N
62.4	Cemeteries	N	Y <sup>7</sup>	Y <sup>7</sup>	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14,21</sup>
63	Business services	N	Y <sup>8</sup>	Y <sup>8</sup>	Y	A	B	N
64	Repair services	N	Y <sup>2</sup>	Y	Y	Y <sup>12</sup>	Y <sup>13</sup>	Y <sup>14</sup>
65	Professional services	N	N	Y <sup>6</sup>	Y	A	B	N
65.1	Hospitals, nursing homes	N	N	N	A*	B*	N	N
65.1	Other medical facilities	N	N	N	Y	A	B	N
66	Contract construction services	N	Y <sup>6</sup>	Y	Y	A	B	N
67	Governmental services	N	N	Y <sup>6</sup>	Y*	A*	B*	N
68	Educational services	N	N	N	A*	B*	N	N
69	Miscellaneous services	N	N <sup>2</sup>	Y <sup>2</sup>	Y	A	B	N
70	<i>Cultural, entertainment, and recreational</i>							
71	Cultural activities (including churches)	N	N	N <sup>2</sup>	A*	B*	N	N
71.2	Nature exhibits	N	Y <sup>2</sup>	Y	Y*	N	N	N
72	Public assembly	N	N	N	Y	N	N	N
72.1	Auditoriums, concert halls	N	N	N	A	B	N	N





**Table 3-1. USAF Recommended Land Use Compatibility Guidelines  
in Relation to APZs and Noise Zones (continued)**

Land Use		APZs			Noise Zones			
SLUCM No.	Name	CZ	APZ I	APZ II	65-69 dBA	70-74 dBA	75-79 dBA	80+ dBA
72.11	Outdoor music shell, amphitheaters	N	N	N	N	N	N	N
72.2	Outdoor sports arenas, spectator sports	N	N	N	Y <sup>17</sup>	Y <sup>17</sup>	N	N
73	Amusements	N	N	Y <sup>8</sup>	Y	Y	N	N
74	Recreational activities (including golf courses, riding stables, water recreation)	N	Y <sup>8,9,10</sup>	Y	Y*	A*	B*	N
75	Resorts and group camps	N	N	N	Y*	Y*	N	N
76	Parks	N	Y <sup>8</sup>	Y <sup>8</sup>	Y*	Y*	N	N
79	Other cultural, entertainment, and recreation	N	Y <sup>9</sup>	Y <sup>9</sup>	Y*	Y*	N	N
80	<i>Resources production and extraction</i>							
81	Agriculture (except livestock)	Y <sup>16</sup>	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20,21</sup>
81.5 to 81.7	Livestock farming and animal breeding	N	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20,21</sup>
82	Agricultural-related activities	N	Y <sup>5</sup>	Y	Y <sup>18</sup>	Y <sup>19</sup>	N	N
83	Forestry activities and related services	N <sup>5</sup>	Y	Y	Y <sup>18</sup>	Y <sup>19</sup>	Y <sup>20</sup>	Y <sup>20,21</sup>
84	Fishing activities and related services	N <sup>5</sup>	Y <sup>5</sup>	Y	Y	Y	Y	Y
85	Mining activities and related services	N	Y <sup>5</sup>	Y	Y	Y	Y	Y
89	Other resources production and extraction	N	Y <sup>5</sup>	Y	Y	Y	Y	Y

Source: USURA 1965

**Key:**

SLUCM = Standard Land Use Coding Manual, USURA.

Y = Yes – Land uses and related structures are compatible without restriction.

N = No – Land use and related structures are not compatible and should be prohibited.

Y\* = Yes with restrictions – Land use and related structures generally compatible; see notes indicated by the superscript.

N\* = No with exceptions – See notes indicated by the superscript.

NLR = Noise Level Reduction (NLR) (outdoor to indoor) to be achieved through incorporation of noise attenuation measures into the design and construction of the structures.

A, B, or C = Land use and related structures generally compatible; measures to achieve NLR for A (DNL of 65-69 dBA), B (DNL of 70-74 dBA), C (DNL of 75-79 dBA) need to be incorporated into the design and construction of structures.



A\*, B\*, and C\* = Land use generally compatible with NLR; however, measures to achieve an overall noise level reduction do not necessarily solve noise difficulties and additional evaluation is warranted. See appropriate notes below.

\* = The designation of these uses as "compatible" in this zone reflects individual Federal agencies and program considerations of general cost and feasibility factors, as well as past community experiences and program objectives. Localities, when evaluating the application of these guidelines to specific situations, might have different concerns or goals to consider.

**Notes:**

1. Suggested maximum density of 1 to 2 dwelling units per acre, possibly increased under a Planned Unit Development where maximum lot coverage is less than 20 percent.
2. Within each land use category, uses exist where further deliberating by local authorities might be needed due to the variation of densities in people and structures. Shopping malls and shopping centers are considered incompatible use in any accident potential zone (CZ, APZ I, or APZ II).
3. The placement of structures, buildings, or aboveground utility lines in the CZ is subject to severe restrictions. In a majority of the CZs, these items are prohibited. See AFI 32-7060, *Interagency and Intergovernmental Coordination for Environmental Planning* (USAF 1994), and Unified Facilities Criteria 3-260-01, *Airfield and Heliport Planning and Design* (USACE 2006) for specific guidance.
4. No passenger terminals and no major aboveground transmission lines in APZ I.
5. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
6. Low-intensity office uses only. Meeting places, auditoriums, and similar structures are not recommended.
7. Excludes chapels.
8. Facilities must be low-intensity.
9. Clubhouse not recommended.
10. Areas for gatherings of people are not recommended.
11. (a) Although local conditions might require residential use, it is discouraged in DNL of 65–69 dBA noise zone and strongly discouraged in DNL of 70–74 dBA noise zone. The absence of viable alternative development options should be determined and an evaluation should be conducted prior to approvals indicating a demonstrated community need for residential use would not be met if development were prohibited in these zones.  
(b) Where the community determines the residential uses must be allowed, measures to achieve outdoor to indoor NLR for the DNL of 65–69 dBA noise zone and the DNL of 70–74 dBA noise zone should be incorporated into building codes and considered in individual approvals.  
(c) NLR criteria will not eliminate outdoor noise problems. However, building location and site planning, and design and use of berms and barriers can help mitigate outdoor exposure, particularly from near ground level sources. Measures that reduce outdoor noise should be used whenever practical in preference to measures that only protect interior spaces.
12. Measures to achieve the same NLR as required for facilities in the DNL of 65–69 dBA noise zone must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
13. Measures to achieve the same NLR as required for facilities in the DNL of 70–74 dBA noise zone must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
14. Measures to achieve the same NLR as required for facilities in the DNL of 75–79 dBA noise zone must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise-sensitive areas, or where the normal noise level is low.
15. If noise-sensitive, use indicated NLR; if not, the use is compatible.
16. No buildings.
17. Land use is compatible provided special sound reinforcement systems are installed.
18. Residential buildings require the same NLR as required for facilities in the DNL of 65–69 dBA noise zone.
19. Residential buildings require the same NLR as required for facilities in the DNL of 70–74 dBA noise zone.
20. Residential buildings are not permitted.
21. Land use is not recommended. If the community decides the use is necessary, personnel should wear hearing protection devices.



## FLORIDA ATLANTIC BUILDING ASSOCIATION

Serving the Building Community throughout South Florida

4601 Sheridan Street, Suite 401, Hollywood, FL 33021 • Miami-Dade: 305-556-6300 Broward: 954-399-9233 Fax: 954-639-7107  
www.myfaba.com



2013 SEP 24 PM 12:10

PLANNING & ZONING  
METROPOLITAN PLANNING SECT

Honorable Rebeca Sosa, Chairwoman and  
County Commissioners  
Miami-Dade County Commission  
111 NW First Street, 2<sup>nd</sup> Floor  
Miami, FL 33128

Via-mail only

### Re: Support of PAB Recommendations to EAR-based Amendments to Master Plan

Dear Chairwoman Sosa and County Commissioners:

I am writing to you today, to express some concerns and the position of the Miami-Dade Legislative Committee of the Florida Atlantic Building Association (FABA) regarding the EAR-based amendments to the Comprehensive Development Master Plan (CDMP).

**FABA supports the Planning Advisory Board (PAB)'s recommended revisions to the staff recommendations for the following reasons:**

1. **The PAB's recommendations provide the County Commission with more flexibility to expand Urban Expansion Area (UEA).**
2. **The PAB's recommendations are the middle of the road option: they would add more land than staff would recommend, but less than the construction industry's numbers indicate should be included.** While the industry thinks that even more land should be added to the UEAs, given the now-rising land costs, and their population projection evaluations, **the PAB'S recommendations are the minimum which the membership thinks is necessary to retain the land price vs. home prices balance.**
3. **Our concern is driven by the fact that the CMDP requires the County to accommodate the projected population as well as have residential land supply for 15 years.** The reason is to retain the proper balance between the cost each family has to pay to rent or buy a home or apartment and actual number of homes or apartments are available or can be built. The number of acres made available by the County on which to build - and the cost of a new or existing place - directly affects a family's budget: how much will that home or apartment cost to live in each month.
4. **There could be two approaches to this:**
  - a. The County Commission could simply increase the density throughout the county to encourage even more infill development and more mid-rise communities;
  - b. Or, judiciously expand the UEA with additional safeguards for the residents and the County. The PAB's proposal includes such additional criteria, and they would apply to any application which seeks to expand the UEA. Each application must meet the same criteria which include requirements for employment centers, schools, and infrastructure construction, among other things.



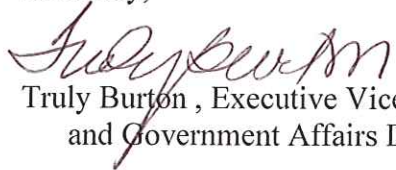
County Commission PAB Workshop  
Page Two  
September 23, 2013

**Other issues which FABA wants to stay involved in, include:**

5. **Climate change** - we want to be part of climate change discussion and analysis tool staff says they will develop for this purpose.
6. **Infill development** – FABA urges the County Commission to meet with municipalities by the end of 2013, to start work on a study discussed in the EAR report to streamline requirements for residential density for transit-oriented development.

**Based on the above, FABA reiterates its support for the PAB recommendations to the EAR report.** We thank the Commission and staff for their consideration of industry's views. We stand ready to work with the staff and Commission members to implement these land use requirements in the most cost efficient and meaningful way possible.

Sincerely,



Truly Burton, Executive Vice President  
and Government Affairs Director





DEPARTMENT OF THE AIR FORCE  
AIR FORCE RESERVE COMMAND

18 Sep 13

Colonel Christian G. Funk  
Commander, 482d Fighter Wing  
29050 Coral Sea Blvd, Bldg 360  
Homestead ARB FL 33039-1299

The Honorable Carlos Gimenez, Mayor, Miami-Dade County  
The Miami-Dade County Board of County Commissioners  
Stephen P. Clark Center, Suite 220  
111 N.W. 1st Street  
Miami, FL 33128

Dear Mayor Gimenez and Members of the Board

This letter is in reference to Application No.1 (*CDMP Preface and Land Use Element*) of the EAR-Based applications to amend Miami-Dade County's Comprehensive Development Master Plan (CDMP), specifically the removal of Parcels 292 and 293 from the Urban Expansion Area.

On 15 April 2013 and 6 May 2013, the Planning Advisory Board (PAB), accepted the recommendations of the Miami-Dade County Planning staff, to adjust the boundaries of the Urban Expansion Area (UEA) in the vicinity of Homestead Air Reserve Base (ARB), as outlined in Application No.1 (Land Use Element) of the Evaluation and Appraisals Report (EAR)-Based Amendment Application. Attachment 1 contains an excerpt from Application No.1 (Figure P, "Proposed Land Use Plan Map Changes", pg. 150), showing the recommended changes to the UEA. In addition to the important conservation impacts of the proposed boundary changes to the UEA, these actions will reduce the potential for incompatible land use around Homestead ARB, will improve safety for military personnel as well as the surrounding communities, and help prevent impediments to military mission sustainment and growth. It is important to note that the existing noise contours, which are based on current flying operations, may expand in the future as mission requirements change. As such, ensuring compatible land use near Homestead ARB could prove beneficial to both the Air Force and Miami-Dade County. County staff and the PAB's recommendations support the long term viability of the base.

On 21 May 2013 (the day before the Board of County Commissioners (BCC) meeting on the subject), Homestead ARB received two letters from the Larsarte Law Firm (Attachments 2 and 3), requesting that the staff-recommended UEA boundary changes be adjusted, both in Parcel 292 and 293. The proposals contained within the Lasarte letters could serve to eventually permit development closer to Homestead ARB in the future, which could impact the ability of the Air Force (and/or the other Armed Forces tenants) to sustain or modify the mission and operations at Homestead ARB, and may increase the potential for land use incompatibility at a later date.



After examining the staff and PAB recommendations, the Board of County Commissioners, at its 22 May 2013 meeting, recommended the transmission of the staff and PAB recommended UEA boundary changes to the Florida Department of Economic Opportunity, which was officially transmitted on 19 June 2013. Homestead ARB strongly believes that the staff, PAB and BCC recommendations, as transmitted to the State on 19 June, best support the long term viability of the base as well as serving to protect military and civilian personnel.

Homestead ARB would like to thank the Planning Division of the Miami-Dade Department of Regulatory and Economic Resources and the Board of County Commissioners for all the work that was performed on these applications. Please contact Mr. Lawrence Ventura at (786) 415-7163 or by e-mail at [lawrence.ventura@us.af.mil](mailto:lawrence.ventura@us.af.mil) with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Funk', with a stylized flourish at the end.

CHRISTIAN G. FUNK, Colonel, USAFR  
Commander

3 Attachments:

1. Figure P, page 150, Application No. 1, EAR-Based Amendments
2. Letter from Lasarte Law Firm, 17 May 2013, Re: "October 2012 EAR-Based Amendments..."
3. Letter from Lasarte Law Firm, 17 May 2013, Re: "Amended Request..."

cc:

1. Jack Osterholt, Deputy Mayor/Director, Department of Regulatory and Economic Resources, Miami-Dade County
2. Mark Woerner, Assistant Director for Planning, Department of Regulatory and Economic Resources, Miami-Dade County
3. Bill Pable, Division of Community Development, Department of Economic Opportunity, State of Florida



P. 305.594.2877  
F. 305.594.2878

The Lasarte Law Firm  
3250 N.E. First Avenue  
Suite 334  
Miami, FL 33137  
www.lasartelaw.com

2013 MAY 17 P 3:34

Felix M. Lasarte, Esq.  
felix@lasartelaw.com

PLANNING & ZONING  
METROPOLITAN PLANNING SECT

VIA HAND DELIVERY

May 17, 2013

Mr. Mark Woerner  
Metropolitan Planning Section  
Permitting, Environment and Regulatory Affairs  
Miami-Dade County  
111 NW 1st Street, 12th Floor  
Miami, Florida 33128

**Re: Amended Request / October 2012 EAR-Based Amendments (Application No. 1)  
/ Properties located E/O Fl. Turnpike, W/O SW 97 Ave and S/O SW 248 St in  
Miami-Dade County, Florida**

Dear Mr. Woerner:

We have revised our proposed re-alignment of the boundaries for the Urban Expansion Area (UEA) in this section of the County to address the comments we discussed in our last meeting. I have attached an aerial showing our proposed revised boundaries as Exhibit "A." We would like you for you to please reconsider repositioning the boundaries according to the lines highlighted in blue in the attached Exhibit. Please note that we are not adding areas to the UEA which were previously excluded under the current UEA boundary which is highlighted in red in the attached Exhibit.

We appreciate your considerate time and attention to this matter. As always, should you have any questions or concerns, please do not hesitate to contact my office.

Sincerely,

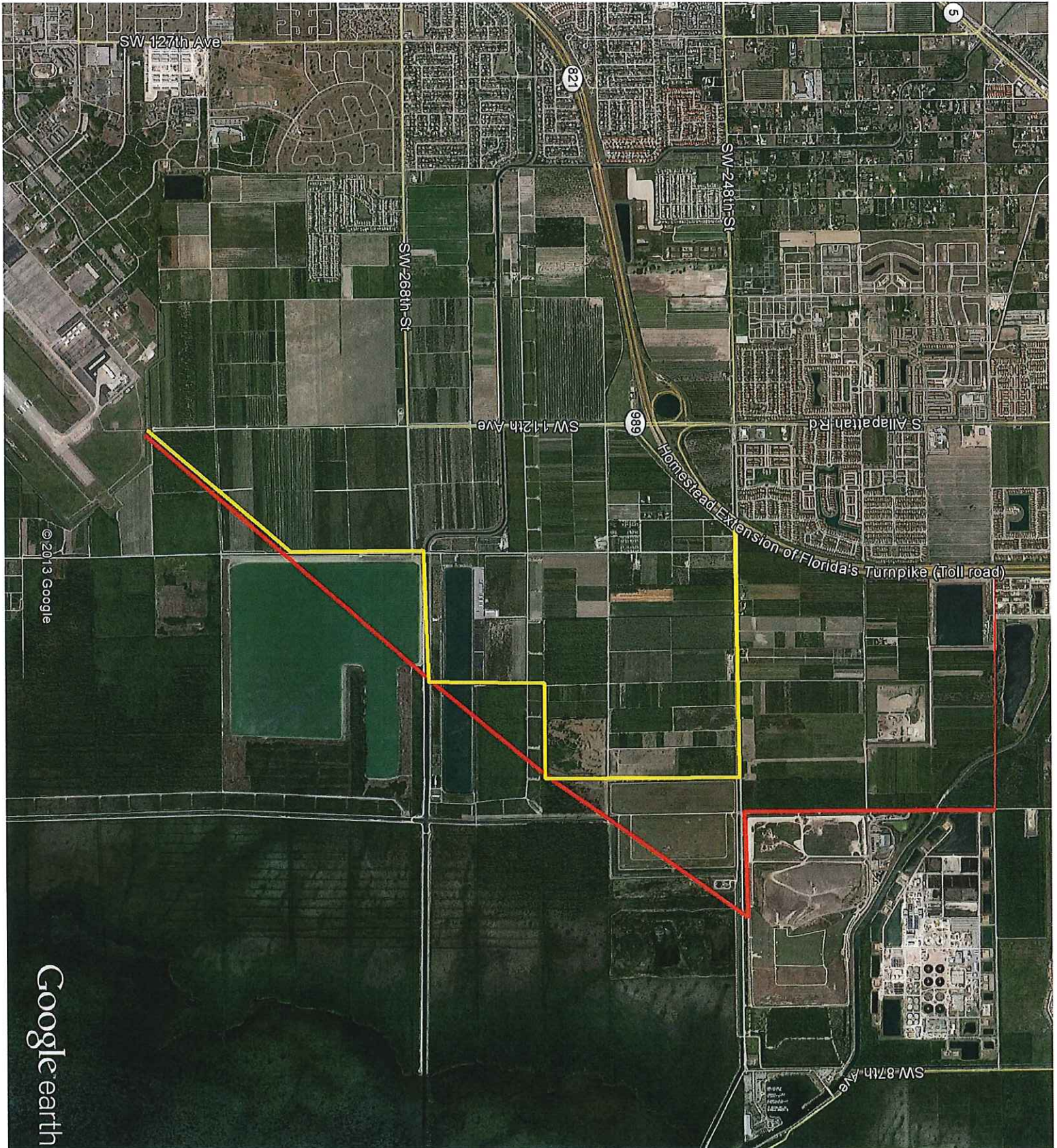
THE LASARTE LAW FIRM



Felix M. Lasarte



# EXHIBIT "A"







P. 305.594.2877  
F. 305.594.2878

The Lasarte Law Firm  
3250 N.E. First Avenue  
Suite 334  
Miami, FL 33137  
www.lasartelaw.com

2013 MAY 17 P 3:34

Felix M. Lasarte, Esq.  
felix@lasartelaw.com

VIA HAND DELIVERY

PLANNING & ZONING  
METROPOLITAN PLANNING SECT

May 17, 2013

Mr. Mark Woerner  
Metropolitan Planning Section  
Permitting, Environment and Regulatory Affairs  
Miami-Dade County  
111 NW 1st Street, 12th Floor  
Miami, Florida 33128

**Re: October 2012 EAR-Based Amendments / Application No. 1 / Parcels located  
S/O SW 312<sup>th</sup> Street and E/O SW 142<sup>nd</sup> Avenue in Miami-Dade County, Florida**

Dear Mr. Woerner:

We have reviewed your proposed realignment of the boundaries for the Urban Expansion Area (UEA) in this section of the County under Application No. 1 to the October 2012 EAR-Based Amendment Cycle. I am attaching a copy of the new proposed boundaries as Exhibit "A." The purpose of this letter is to request that you please reconsider repositioning the boundaries according to the lines highlighted in yellow in the attached Exhibit "B."

This particular expansion area, which is highlighted in yellow, is located at the intersection of two major section lines (SW 312<sup>th</sup> Street and SW 137<sup>th</sup> Avenue). These parcels of land are surrounded by existing residential and commercial development to the North, East and West and are bordered by a large canal to the South. Additionally, they are located away from the Accident Potential Zones (APZ) of the Homestead Air Reserve Base and away from any future wetlands and CERP Water Management Areas.

We appreciate your considerate time and attention to this matter. As always, should you have any questions or concerns, please do not hesitate to contact my office.

Sincerely,

THE LASARTE LAW FIRM



Felix M. Lasarte



# EXHIBIT "A"

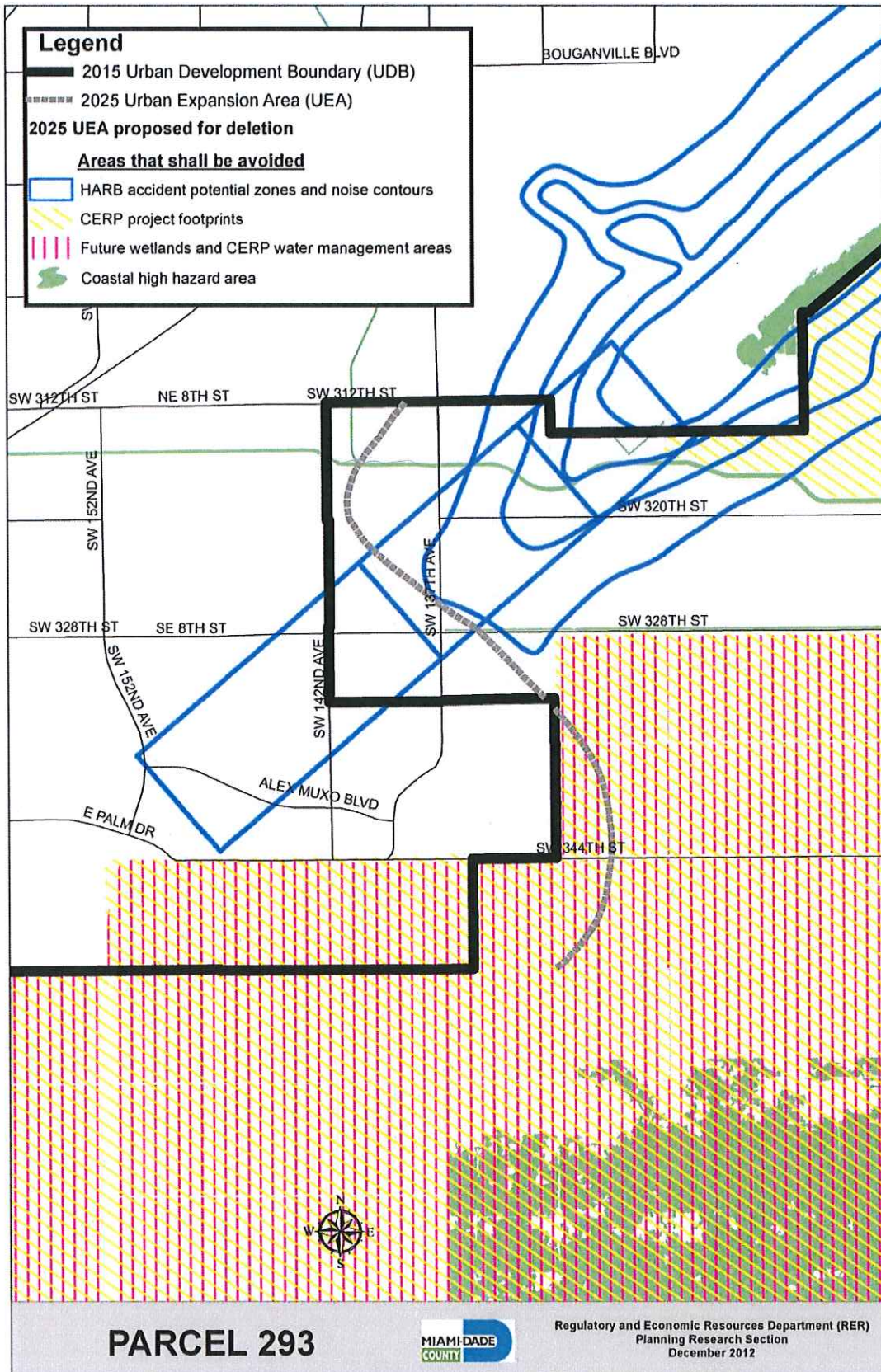
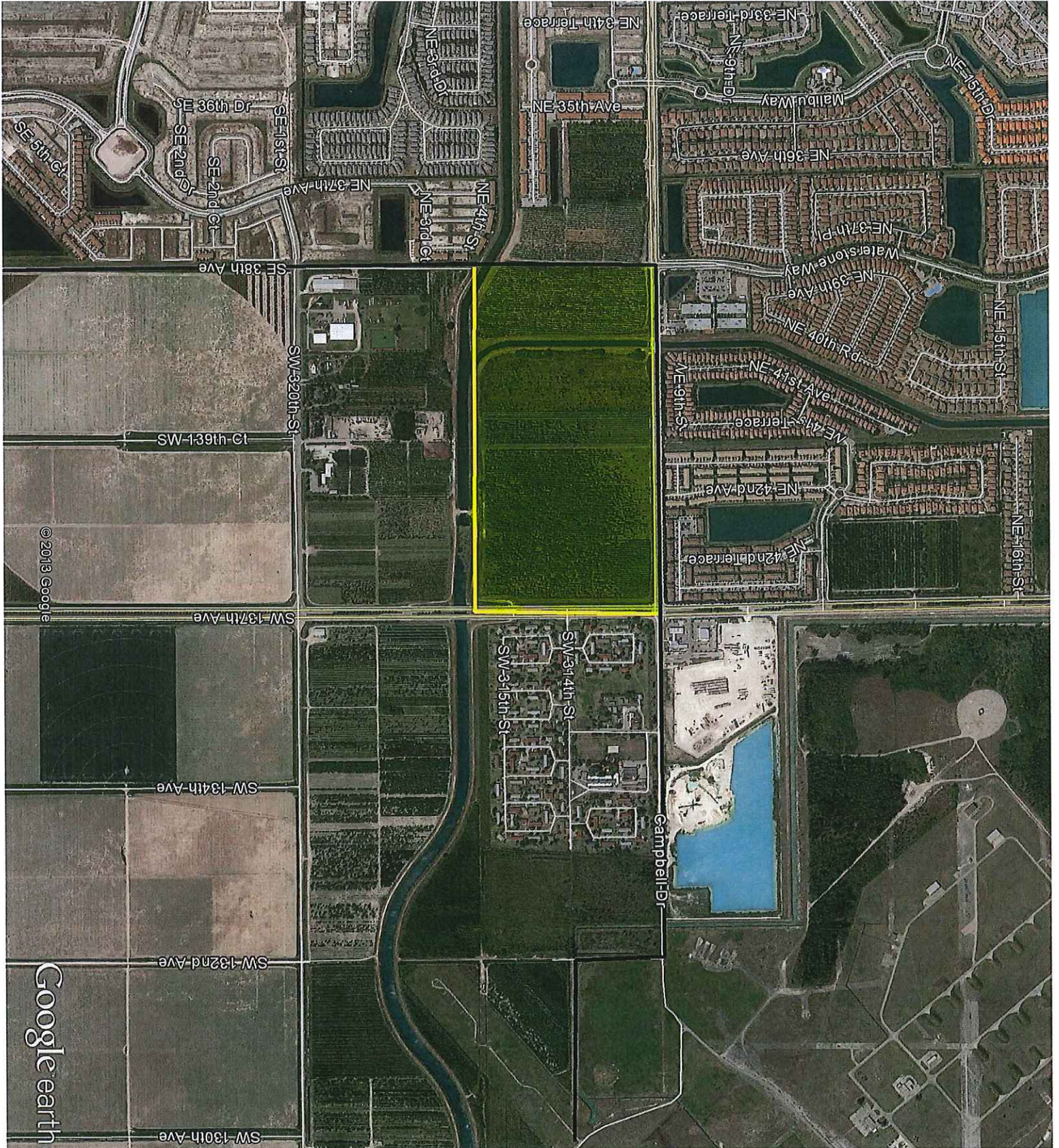








EXHIBIT "B"





254299

2013 JUL 18 P 4: 14

PLANNING & ZONING  
METROPOLITAN PLANNING SECT

## **COMPLIANCE EVALUATION REPORT**

**An Evaluation of Compliance Issues Related to Proposed Amendment  
No. 1, Part C, (pertaining to Parcel 294) transmitted by Miami-Dade  
County to the Florida Department of Economic Opportunity**

**Prepared by Kenneth Metcalf, AICP  
Planning Director, Greenberg Traurig, PA**

**Submitted on Behalf of  
Limonar Development, Inc. & Wonderly Holdings, Inc  
July 8, 2013**

  
Kenneth Metcalf, AICP



## 1.0 Introduction

Miami-Dade County transmitted by letter, dated June 19, 2013, certain proposed comprehensive plan amendments to the Department of Economic Opportunity (“Department”). The subject line of the County’s transmittal letter states:

State Coordinated Review of the Proposed October 2012 Cycle Evaluation and Appraisal-Based Applications (EAR-Based Application Nos. 1 through 11) to Amend the Comprehensive Development Master Plan for Miami-Dade County, Florida

As noted in the County transmittal letter, EAR-Based Application No. 1, Part C, proposes to remove Parcels 292, 293, 294 and 295 from the Urban Expansion Area (“UEA”) depicted on the Future Land Use Map (“FLUM”) of the Comprehensive Development Master Plan (“CDMP”).

Limonar Development, Inc., and Wonderly Holdings, Inc., (collectively “Limonar”) is the owner of certain property in Miami-Dade County generally situated between S.W. 64<sup>th</sup> Street (north boundary) and Kendall Drive (south boundary) and S.W. 167<sup>th</sup> Avenue (east boundary) and Krome Avenue (west boundary) as depicted on Exhibit 1 (“Limonar Property”). EAR-Based Application No. 1, Part C, proposes to amend the FLUM to remove Parcel 294<sup>1</sup> in its entirety from the UEA. Limonar owns that portion of Parcel 294 which lies between S.W. 64<sup>th</sup> Street and S.W. 72<sup>nd</sup> Street, except for a strip of land measuring 660’ in width where the West Wellfield is located (“Subject Property”), as shown in orange on attached Exhibit 2. For the reasons outlined in this Compliance Evaluation Report, Limonar objects to EAR-Based Application No. 1, Part C, as related to that component which proposes to remove the Subject Property from the UEA (“Subject Amendment”).

The Limonar Property, which includes the Subject Property, presents a unique opportunity for Miami-Dade County to work with Limonar and adjacent property owners to achieve the vision and policy directives of the CDMP, particularly in achieving self-sustaining, transit oriented development projects along Premium Transit Corridors. Limonar has actively acquired lands within the UEA and has undertaken significant planning efforts directed toward the development of a transit oriented, New Town project (Green City) at the west end of the Kendall Premium Transit Corridor. However, the Subject Amendment would exclude a significant portion (280 of 485 acres) of the Limonar Property from the UEA, thereby preventing Limonar from implementing its development plans that were envisioned based on the tenets

---

<sup>1</sup> Parcels 292-295 are parcel reference numbers utilized by Miami-Dade County to define the geographic area of each proposed amendment to the UEA. This parcel identification does not indicate parcel ownership. Proposed amendment 294 would divide the ownership of Limonar, retaining the area south of S.W. 72<sup>nd</sup> Street in the UEA and excluding the area between S.W. 64<sup>th</sup> Street and S.W. 72<sup>nd</sup> street.

and specific policy directives of the CDMP. The compliance analysis herein demonstrates that the Subject Amendment is not consistent with these important policy directives and is not In Compliance. Moreover, the Planning Advisory Board voted to recommend, in its capacity as the Local Planning Agency, modification to Parcel 294 to retain the Subject Property within the UEA. Limonar respectfully requests that Miami-Dade County reconsider and withdraw the Subject Amendment in light of the Planning Advisory Board recommendation and in recognition of the compliance concerns raised in this Compliance Evaluation Report, but equally importantly, so that the County may take advantage of a unique opportunity to further protect the West Wellfield, support the County's multimodal strategy for the Kendall Premium Transit Corridor and improve livability in the western Kendall area.

### ***1.1 State Coordinated Review Process***

Section 163.3184(2)(c), Florida Statutes, requires that EAR-based amendments undergo the state coordinated review process as set forth in s. 163.3184(4), Florida Statutes. Section 163.3184(c), Florida Statutes, states that written comments submitted by the public shall be sent directly to the local government, but does not preclude the public from submitting written comments directly to the Department; nor does s. 163.3184(4)(d), Florida Statutes, preclude the Department from considering written comments submitted by the public. This Compliance Evaluation Report has been submitted concurrently to Miami-Dade County and the Department for consideration.

Pursuant to s. 163.3184(4)(d)1, Florida Statutes, the state land planning agency (i.e., the Department) must issue a report giving its "objections, recommendations and comments" within 60 days after receipt of the proposed plan amendment. Unlike for amendments subject to the expedited review process, the Department may object to proposed EAR-based amendments based on whether the amendment is "in compliance" as related to supporting data, internal inconsistency and other compliance issues as identified in this evaluation. In addition, the Department must determine whether important state resources or facilities will be adversely impacted by the plan amendment. Based on modeling of wellfield impacts, the West Wellfield could potentially be adversely impacted by the Subject Amendment as further discussed in this evaluation.

### ***1.2 Purpose of Compliance Evaluation Report***

This Compliance Evaluation Report has been prepared on behalf of Limonar to serve several purposes:

1. Assist the Department in formulating its Objections, Recommendations and Comments (ORC) Report by identifying objections which would form the basis for a Not In Compliance determination with respect to the Subject Amendment;

2. Assist the Department in making recommendations that would resolve the compliance issues with respect to the Subject Amendment;
3. Assist Miami-Dade staff in formulating its final recommendations to the Board of County Commissioners based on consideration of the Department's ORC Report and this Compliance Evaluation Report;
4. Recommend to the Board of County Commissioners that the Subject Amendment be modified to retain the Subject Property within the UEA; and
5. Describe Limonar's acquisition and development plans for the Limonar Property and demonstrate that the Subject Amendment would effectively undermine Limonar's effort to implement plans that were envisioned pursuant to the CDMP.

Section 163.3184(4)(e), Florida Statutes, provides that the local government shall consider the report submitted to it by the State Land Planning Agency and "written comments submitted by any other person." Limonar requests that the County carefully consider the objections set forth in this report as well as the significant investments and planning efforts that Limonar has made in pursuit of a progressive development strategy that is fully consistent with the requirements of the CDMP.

## **2.0 Objections to Subject Amendment**

The Subject Amendment is not "In Compliance" with statutory requirements. §163.3184(1)(b), Florida Statutes, defines In Compliance as follows:

(b) "In compliance" means consistent with the requirements of ss. 163.3177, 163.3178, 163.3180, 163.3191, 163.3245, and 163.3248, with the appropriate strategic regional policy plan, and with the principles for guiding development in designated areas of critical state concern and with part III of chapter 369, where applicable.

The following objections identify compliance issues in accordance with the above definition and relevant statutory requirements.

### **Objection 1. Data and Analysis.**

The Subject Amendment is not based on relevant and appropriate data as required by §163.3177(1)(f), Florida Statutes. This paragraph further requires that:

To be based on data means to react to it in an appropriate way and to the extent necessary indicated by the data available on that particular subject at the time of adoption of the plan or plan amendment at issue.



The supporting analysis set forth in the amendment package does not react appropriately to the data. The Subject Property is located within the West Wellfield Protection Area. Miami Dade County Department of Regulatory and Economic Resources – Planning Division staff (“planning staff”) cite protection of the West Wellfield as the primary rationale for excluding the Subject Property from the UEA. However, no supporting data or related analysis has been presented to support the exclusion of all urban development from the portion of the West Wellfield Protection Area that occurs on the Subject Property.

The Miami Dade Evaluation and Appraisal Report (EAR) describes the County’s process for determining development capacity within the UDB. It states on p. 1.1-6, that:

Development capacity is the ability of land without an existing use to accommodate greater development. It is simply developable vacant land, without severe physical constraints (size, shape, accessibility), legal restrictions (dedicated platted areas like landscape parcels, entrances, lakes, or right of way and easements, etc.) or environmental constraints (conservation areas, environmentally sensitive parcels, preserves, etc.) and finally ownership limitations (government owned properties, private institutionally owned properties, community associations), which might have a future use different to residential, industrial or commercial.

None of these constraints exist or apply to the Subject Property, except that the property has not yet been included within the UDB to allow for an urban FLUM land use category designation. Once the need for additional lands in the UDB is triggered pursuant to Policy LU-8F, the Subject Property would qualify for inclusion within the UDB based on Policy LU-8G and would be counted toward development capacity based on the assigned FLUM designation. Development constraints as identified in the UDB development capacity methodology would not apply, except as to industrial uses.

The EAR also discusses the methodology for considering inclusion of properties within the UEA. Page 1.1-45 describes the County’s process for evaluating vacant land during each cycle and for reevaluating the UEA boundaries. It states:

The County also reassesses the feasibility of utilizing the Urban Expansion Areas (UEAs) for development, given new considerations.

The narrative further states that:

Areas that should be excluded from the UEA could include Environmentally Endangered Lands (EEL) acquisition project areas, footprints of Comprehensive Everglades Restoration Plan properties and related areas, wetlands, wellfield

protection areas, saltwater intrusion areas, 100-year floodplains, natural forest areas, accidental zones around Homestead Air Reserve Base, and prime agricultural lands.

The narrative also specifically discusses the West Wellfield. It states:

Roughly the northern half of the UEA that borders the north side of theoretical 112<sup>th</sup> Street is within the West Wellfield Protection Area. The County Code establishes some protections for this area, through the restriction of certain land uses and hazardous materials management, to protect the County's drinking water supply. Some of this acreage, therefore, may not be suitable for development, or may be suitable for development specifically designed for this sensitive area.

As described by planning staff, the EAR process is designed to consider changed circumstances or conditions that warrant a change in policy direction in the comprehensive plan. Section 163.3191(3) states:

Local governments are encouraged to comprehensively evaluate and, as necessary, update comprehensive plans to reflect changes in local conditions. (emphasis added)

However, the EAR analysis does not identify any changed conditions or new considerations that warrant the exclusion of the Subject Property from the UEA. Limonar does not object to the proposed amendment to Policy LU-8G, nor does it object to the exclusion of that portion of Parcel 294 which occurs north of S.W. 64<sup>th</sup> Street; however, it does object to the arbitrary exclusion of the Subject Property from the UEA.

The above EAR finding is correct that the County Code restricts certain land uses and limits hazardous materials. However, the restricted land uses are industrial in nature or involve certain special commercial uses, such as dry cleaners or junkyards, which pose a threat to underlying groundwater resources. All residential uses and most commercial uses are allowed, subject only to restrictions regarding the amount of sewage flow which may occur within specified groundwater travel contours. Pursuant to Chapter 24 of the County land development regulations, the level of protection for the West Wellfield increases with proximity to the wellfield head; sewage flow limitations are increasingly restrictive with proximity to the wellfield. For example, the maximum allowable sewer flow within the 30-day groundwater travel contour is 1,600 GPD/acre, which decreases to 850 GPD/acre within the 10-day contour. Thus, we concur with the conclusion that the West Wellfield Protection Area is not suitable for specifically prohibited industrial uses, but contest that the West Wellfield Protection Area south of S.W. 64<sup>th</sup> Street is not suitable in general for urban development.

No data has been cited and analyzed to indicate or confirm that urban development with appropriate limitations required by the CDMP and County Code has caused adverse water quality impacts to groundwater resources within wellfield protection areas. To the contrary, a 1996 study<sup>2</sup> modeled alternatives to reduce potential contamination and determining that urban development reduces potential risk as compared to agricultural activities. Monitoring and Data programs for the Conservation Element define monitoring requirements for groundwater and wellfields. The amendment package does not cite to any exceedances based on the monitoring data to indicate a changed condition that supports the Subject Amendment or that confirms that the existing wellfield protection program, as defined by the CDMP, has not been effective. The general conclusion that the West Wellfield Protection Area is not suitable for urban development is not based on relevant and appropriate data as required by §163.3177(1)(f), Florida Statutes.

The Biscayne Aquifer serves as the primary potable water drinking source for some 3 million people. As such, it constitutes an important state resource which should be protected from adverse impacts. Data and supporting analysis has not been presented to demonstrate that the Subject Amendment, which would continue agricultural uses in the West Wellfield on an indefinite basis, does not pose a long term threat to the Biscayne Aquifer from adverse impacts associated with fertilizers, pesticides and animal waste.

***Objection 1.1 Inaccurate Data Generalizations Regarding the UEAs and Specifically the Subject Property***

The specific findings documented in Amendment Application No. 1, Part C, and the related exhibits also indicate that some confusion may have inadvertently occurred in regard to the designations which precisely apply to the Subject Property. Miami Dade County Department of Regulatory and Economic Resources – Planning Division staff (“planning staff”) provided a powerpoint presentation (stamped as Exhibit J in the amendment package) at the same hearing indicating that Parcel 294 “removes portions of the UEA” from the West Wellfield Protection Area, East Coast Buffer Area and South Florida Water Management District property ownership within the area. This general summation did not adequately describe the boundaries of these areas within Parcel 294.

As noted in the minutes from the April 19, 2013 Planning Advisory Board hearing on Application No. 1, planning staff stated generically that the amendments:

---

<sup>2</sup> Tsihrintzis, V. A., Fuentes, H. R. and Gadipudi, R. K. (1996), MODELING PREVENTION ALTERNATWES FOR NONPOINT SOURCE POLLUTION AT A WELLFIELD IN FLORIDA. JAWRA Journal of the American Water Resources Association, 32: 317–331. doi: 10.1111/j.1752-1688.1996.tb03454.x.



“...adjust the 2015 Urban Expansion Area boundaries by excluding lands with development constraints from the UEA” and further described that constraints included “CERP project footprints, the Coastal High Hazard Areas, future wetlands and CERP water management areas, Homestead Air Reserve Base (HARB) noise contours, Everglades buffer areas, and the Northwest Wellfield Area.” When questioned by a Board member regarding why the Subject Property would be excluded from the UEA, planning staff explained that “staff considered protecting areas within the West Wellfield Protection Area and the Everglades Buffer Areas from development.”

However, the Subject Property is not located within the Everglades Buffer Areas which are depicted on Exhibit 3, which is a map showing the Everglades Buffer Area, Future Wetlands and CERP water management areas and CERP project footprints, none of which occur on the Subject Property. Importantly, this County map incorrectly labels the West Wellfield Protection Area as the Northwest Wellfield Protection Area, again perhaps causing confusion during the public hearing process, considering that the Northwest Wellfield Protection Area is prohibited from inclusion within the UDB and by extension the UEA.

Application No 1, p. 173, Under Reasons for Change, cites to the Major Issue discussion in the EAR, as reviewed above, and states in regard to Parcel Nos. 292 through 295 that:

“...each UEA is constrained by the existence of wetlands, wellfield protection areas, EEL properties within the UEAs, among other factors, such as the Comprehensive Everglades Restoration Project (CERP), which are areas that shall either not be considered for urban expansion or should be avoided, pursuant to Land Use Element Policy LU-8G. Recommendation No. 4 provides that each UEA should be modified to appropriately address the provisions of Policy LU-8G and other factors that constrain development within the UEAs, and to modify the UEAs as necessary to ensure that UEA land identified for future urban expansion is free of these constraints.”

The analysis again overgeneralizes perhaps simply due to the phraseology. In any case, the finding gives the impression that all of the various constraints apply to all of the UEAs and that the constraints apply throughout the identified parcel. This does not accurately summarize the data sets and applicable conditions. The Subject Property does not include any of the constraints, except for the purported West Wellfield Protection Area constraint, which as previously stated does not constrain residential and commercial land uses. Given the phraseology, the finding could also be misconstrued to mean that Policy LU-8G requires wellfields to be prohibited from consideration or avoided in determining lands for inclusion within the UDB, hence supporting a finding that such lands should be excluded from the UEA.

However, Policy LU-8G prohibits only the Northwest Wellfield Protection Area and does not prohibit the West Wellfield Protection Area within the UDB or even require that the County avoid its inclusion.

The generalized analysis does not react appropriately to the data and is not consistent with §163.3177(1)(f), Florida Statutes.

### **Objection 2. Internal Consistency**

The Subject Amendment is not internally consistent with the CDMP policies addressing UDB expansion, designation of the UEA and wellfield protection. §163.3177(2), Florida Statutes, requires internal consistency among the elements of the CDMP and that maps depicting future conditions must reflect the principles, guidelines, and standards within all elements. §163.3177(2) states:

(2) Coordination of the several elements of the local comprehensive plan shall be a major objective of the planning process. The several elements of the comprehensive plan shall be consistent. Where data is relevant to several elements, consistent data shall be used, including population estimates and projections unless alternative data can be justified for a plan amendment through new supporting data and analysis. Each map depicting future conditions must reflect the principles, guidelines, and standards within all elements, and each such map must be contained within the comprehensive plan.

The CDMP includes a section starting at Paragraph No. 100, entitled, *Interpretation of the Land Use Plan Map: Policy of the Land Use Element*. Although not formatted as a policy, the paragraphs in this section are adopted provisions of the CDMP, are deemed an integral component of the land use element as described by Objective LU-5 and are subject to the same statutory requirements as policies. §163.3177(1), Florida Statutes, requires that the CDMP include principles, guidelines, standards, and strategies for the orderly development of the community, and §163.3177(1)(c) further provides that guidelines and principles are typically expressed as goals, objectives and policies, but are not required to be presented in that format. For the purpose of this report, the paragraphs in this section of the CDMP and all other adopted provisions that are not defined as goals, objectives and policies shall be considered as guidelines and/or principals as appropriate, and are evaluated for compliance in the same manner as required for policies.

Guideline/Principal No. 137, under this section of the CDMP, states that:

The Land Use Plan Map also contains a year 2030 Urban Expansion Area (UEA) Boundary. The UEA is comprised of that area located between the 2020 UDB

and the 2030 UEA Boundary. The Urban Expansion Area is the area where current projections indicate that future development beyond the 2020 UDB is likely to be warranted sometime between the year 2020 and 2030. Until these areas are brought within the year 2020 UDB through the plan review and amendment process, they are allowed to be used in a manner consistent with provisions set forth for lands designated as "Agriculture" or the applicable "Open Land Area." (emphasis added)

This guideline or principle does not provide criteria for the location of the UEA, but instead indicates that the UEA identifies areas where current projections indicate development is likely to be warranted. As discussed in Objection 3, the CDMP does not provide predictable guidelines and standards for determining how the UEA should be designated. In the absence of specific direction, the only reasonable interpretation that achieves internal consistency in implementing the CDMP would be to follow the criteria set forth in Policy LU-8G given that these criteria determine lands which are eligible for inclusion within the UDB. Since the purpose of the UEA is to identify areas for eventual inclusion within the UDB, the UEA lands must necessarily be consistent with the UDB criteria. Planning staff recognized this point in proposing the amendment to Policy LU-8G to prioritize agricultural lands within the UEA for inclusion within the UDB. The amendment was necessary considering that Agricultural lands comprise the vast majority of acreage within the UEA, but were previously listed as a geographic area to be avoided for inclusion in the UDB. This was an inherent conflict which requires reconciliation by interpreting the UEA lands as an exception to Policy LU-8G. The amendment to Policy LU-8G corrects this inconsistency.

Importantly, as part of the internal consistency requirement, §163.3177(1), Florida Statutes, requires that the comprehensive plan include principles and standards to guide future decisions in a consistent manner and describe how program, activities and land development regulations will be implemented in a consistent manner. The Subject Amendment is not internally consistent with the guideline above and related Policy LU-8G. As previously noted, this policy does not *prohibit* consideration of lands within the West Wellfield Protection Area from inclusion within the UDB or even require that the County *avoid* the protection area in extending the UDB. Based on the adopted criteria, only those locations north of S.W. 64<sup>th</sup> Street would be excluded from the UEA. Moreover, Policy LU-8G, defines criteria for prioritizing lands to be included within the UDB. Lands within the West Wellfield Protection Area south of S.W. 64<sup>th</sup> Street are consistent with the criteria for prioritizing their inclusion within the UDB, and therefore, by logical and consistent extension, are suitable for designation within the UEA. Conversely, it is not internally consistent with Policy LU-8G and the above guideline, to arbitrarily exclude that portion of the West Wellfield Protection Area which is otherwise



prioritized for inclusion by Policy LU-8G and not affected by the criteria for avoiding or prohibiting inclusion.

Lands within the West Wellfield Protection Area south of S.W. 64th Street, including the Subject Property, do not trigger the criteria for prohibiting or avoiding inclusion within the UDB (Policy LU-8G.i and ii) as follows (policy requirement in **bold**/findings in *italics*):

i) **The following areas shall not be considered:**

- a. **Lands within the Northwest Wellfield.** *The Subject Property is located within the West Wellfield Protection Area (#19) and not located within the Northwest Wellfield (#13) as documented by Figure 4, attached as Exhibit 4.*
- b. **Water Conservation Areas, Biscayne Aquifer Recharge Areas, and Everglades Buffer Areas.** *The Subject Property is not located within these areas as documented by attached Exhibit 3 and Exhibit 3.A.*
- c. **The Redland Area south of Eureka Drive.** *The Subject Property is not located within this area.*
- d. **Areas within the Accident Potential Zones of HARB.** *The Subject Property is not located within this area.*

ii) **The following areas shall be avoided:**

- a. **Future Wetlands designated in the Conservation and Land Use Element and land designated as Agriculture on the Land Use Plan map, except where located in designated Urban Expansion Areas (UEAs).** *The Subject Property is not located within Future Wetlands as documented by Figure 14, attached as Exhibit 3.B. The Subject Property is designated as Agriculture on the Land Use Plan map, but is also currently located within the UEA. The proposed amendment to LU-8G corrects this inconsistency as previously discussed.*
- b. **Coastal High Hazard Areas.** *The Subject Property is not located in these areas.*
- c. **Comprehensive Everglades Restoration Plan project footprints delineated in Tentatively Selected Plans and/or Project Implementation Reports.** *The Subject Property is not located within CERP project footprints as documented by Exhibit 3. However, Exhibit 3 identifies a small area in yellow extending south beyond S.W. 64<sup>th</sup> Street which is labeled as "CERP project footprint". This portion of the CERP project footprint does not occur within the Subject Property, but rather is located within the 660' wide strip just north of the West Wellfield. Attached Exhibit 3.C. is a map downloaded from the interactive GIS portal on [www.Everglades.org](http://www.Everglades.org), the official CERP website jointly maintained by the U.S. Army Corps of Engineers and SFWMD, which depicts the CERP footprint and shows the West Miami Dade Reuse site just north of the West Wellfield, which is the small area shown in yellow on Exhibit 3.*

Lands within the West Wellfield Protection Area south of S.W. 64<sup>th</sup> Street, including the Subject Property, reflect the prioritization criteria for inclusion within the UDB (Policy LU-8G.iii) as follows (policy requirement in **bold**/findings in *italics*):

- a) **Planning Analysis Tiers with earliest depletion years:** *Located within the western sub-tier of the South Central Tier as shown on Figure 2, attached as Exhibit 5. Table 6, shown in attached Exhibit 6, indicates that this tier has the earliest depletion year (2024) and that the western portion of the tier will deplete at an earlier year than the eastern portion.*
- b) **Lands within the UEA and contiguous to the UDB:** *The Subject Property is within the UEA and contiguous to the UDB as shown on Exhibit 2.*
- c) **Locations within one mile of a planned urban center or extraordinary transit service:** *Figure 3 (from Application No. 2), attached as Exhibit 8, confirms that Kendall Drive is a designated Premium Transit Corridor, which is defined by Policy TC-1B as extraordinary transit service. Exhibit 7 confirms that the transit stop at the west end of the Kendall Corridor is located within one mile of the Subject Property. Figure 5, attached as Exhibit 7.A., documents the location of Planned Urban Centers. As shown, a Community Urban Center<sup>3</sup> is located about one mile east of S.W. 167<sup>th</sup> Avenue, placing it approximately two miles (driving distance) from the Subject Property. However, this spacing is appropriate considering that Green City should be designated as a Metropolitan Urban Center upon inclusion into the UDB and would provide a much needed western, TOD anchor for the Kendall Premium Transit Corridor as further discussed in Section 3 of this report.*
- d) **Locations having projected surplus service capacity or where necessary facilities and services can be readily extended:** *Urban infrastructure extends to the western edge of the UDB in this general area and could be readily extended to serve the Subject Property as indicated by Figure 3-2, attached as Exhibit 9. In addition, it is important to recognize that Green City will provide significant opportunities for the inclusion of clustered public facilities and civic uses that will be accessible by transit for Green City residents and western Kendall residents.*

The analysis confirms that the West Wellfield Protection Area south of S.W. 64<sup>th</sup> Street, including the Subject Property, fulfills the requirements for inclusion within the UDB. The Subject Amendment is internally inconsistent with Policy LU-8G and by extension with the CDMP guideline as previously cited. It should also be recognized that the Subject Amendment is more proximate to planned urban centers, extraordinary transit service, and urban

---

<sup>3</sup> Guideline No. 122 indicates that Planned Community Centers shall have a radius of 700-1,800'. The Subject Property is just over a mile from this center measured in a straight line. It would potentially be within one mile if the center were expanded beyond the minimum required radius.

infrastructure as compared to other existing UEA lands that are not proposed for removal and as compared to lands that are proposed for inclusion in the amendment package. As the Subject Amendment involves a change to an adopted CDMP map, it is required to reflect the principles, guidelines and standards of the CDMP. The Subject Amendment does not comply with this requirement.

## **2.1 CDMP Protection of Wellfield Protection Areas**

It is also important to recognize that the CDMP defines the policies, principles and standards for protecting the West Wellfield from incompatible land uses in accordance with §163.3177(d) 2, Florida Statutes, which states:

2. The element must contain principles, guidelines, and standards for conservation that provide long-term goals and which:

\*\*\*

- b. Conserves, appropriately uses, and protects the quality and quantity of current and projected water sources and waters that flow into estuarine waters or oceanic waters and protect from activities and land uses known to affect adversely the quality and quantity of identified water sources, including natural groundwater recharge areas, wellhead protection areas, and surface waters used as a source of public water supply. (emphasis added)

The CDMP protects the West Wellfield through numerous objectives, policies, guidelines and standards, including, but not limited to:

- Policies LU-3B and LU-9B which provide for the protection of wellfields from incompatible land uses and by adoption of appropriate implementing regulations, which are further defined in the references below;
- Land Use Guideline Nos. 118, 119, 157 and 168 which recognize land use restrictions requires to ensure compatibility with protection of wellfields;
- Objectives CON-2 and CON-3 and their implementing policies as related to protection from hazardous wastes;
- Monitoring requirements which recognize the need to collect and analyze data to determine whether regulatory adjustments are required; and
- Policy CON-3d which requires implementation of BMPs for agriculture.

Most importantly, Policy WS-1D clearly provides that the protection of groundwater within wellfield protection areas shall be achieved through land use restrictions and regulatory standards. It states:



The County shall protect the integrity of groundwater within wellfield protection areas by strict adherence to the Wellfield Protection Ordinances, by rigorous enforcement of sanitary sewer requirements, hazardous waste prohibitions, land use restrictions, and all other applicable regulations, and by supporting system improvements which are designed to protect or enhance the raw water supply. Existing and future wellfields of exceptional quality, such as the Northwest Wellfield, shall be particularly addressed in the regulations to prevent degradation of water quality.

The analysis presented on p. B-8 identifies the incompatible land uses and cites to the land use restrictions applicable to the West Wellfield Protection Area as set forth Chapter 24 of the County regulations and listed in Table 2 on p. B-11. The analysis confirms that all wellfields include a protection zone based on the 210-day groundwater travel distance from the wellhead and that land use restrictions are increasingly more stringent the closer a proposed development is to a wellfield. This is the land use compatibility approach required by the CDMP.

Appendix C to Amendment No. 1, Part C, provides a consistency analysis for the amendments. This consistency analysis (p. C-3) again overgeneralizes in citing Policies LU-3 and LU-3B in regard to Parcel 294 by not specifically recognizing that the CERP footprint, Future Wetland designation and other resource protection areas, as cited in those policies and Policy LU-8G, do not apply to the Subject Parcel. The consistency analysis in Appendix C is incomplete, not relevant to the Subject Property and does not support the Subject Amendment. The Subject Amendment is internally inconsistent with the CDMP requirements which define the land use restrictions and implementing regulations required for the West Wellfield and do not require or support the exclusion of the West Wellfield Protection Area from the UEA.

It must also be recognized that the County has supported the adoption of the amendment for Parcel 296, which proposes to include vacant property within the UDB within the Northwest Wellfield and change the future land use designation for the property from Open Lands to Restricted Office and Industrial. The rationale for the amendment is to maintain a consistent land use pattern and resolve the “hole in the donut.” This would seem to recognize development expectations based on the surrounding land use patterns and related precedent decisions. While Limonar does not object to the amendment, it seeks comparable and equitable review in recognizing its reasonable development expectations, particularly given that the entirety of the Limonar Property, including the Subject Property, has been in the UEA for decades and is fully consistent with the relevant CDMP requirements pertaining to the West Wellfield.

## **2.2 Consistency with Staged Urbanization of UEA/Agricultural Protection**

The West Wellfield Protection Area is not intended or required by the CDMP to remain in agricultural use. Rather, the UEA guidelines and policies anticipate, and are intended to provide for, the staged urbanization of the UEA. This fundamental relationship is recognized by the following policies and guidelines:

- Policy LU-2B and Guideline Nos. 155 and 162 which provide for the staged extension of urban infrastructure to serve the UEA upon inclusion into the UDB;
- Policies WS-1H and CIE-5A which provide for the staged extension of urban infrastructure to serve the UEA upon inclusion into the UDB; and
- Policy TC-4C and Guideline No. 63 which provide for the stage extension of roadways and mass transit to serve the UEA upon inclusion into the UDB.

The Agricultural future land use designation on lands within the West Wellfield Protection Area is not intended to preclude eventual urbanization. Those lands are not comprised of Prime Agricultural lands or even relatively high ranking agricultural lands. The Agricultural Land Study determined the relative suitability of agricultural lands as depicted on the Agriculture Suitability map, attached as Exhibit 10, which indicates that the Subject Property is less suitable for Agricultural lands as compared to lands south of S.W. 112<sup>th</sup> Street. As the map indicates, the suitability of lands for agricultural use generally increases from a north to south direction in the County with the Redlands reflecting the highest suitability. This finding is also reflected in Guideline No. 161 which discusses the potential Ultimate Development Area and recognizes that agricultural lands in south Dade warrant careful planning to progressively extend the UDB westward and avoid premature conversion of the Redlands. Conversely, Guideline 161 identifies the partially drained wetlands within the Bird-Trail Canal basins as the most suitable which would include the lands within the West Wellfield Protection Area. The Subject Amendment is internally inconsistent with the referenced policies and guidelines and is not based on relevant and appropriate data.

### **Objection 3. Predictable Standards and Meaningful Guidelines for Implementation**

§163.3177(1), Florida Statutes, requires that the CDMP include predictable standards and meaningful guidelines for implementation strategies, including appropriate policy direction for the adoption and implementation of land development regulations. As previously stated, the CDMP does not include specific direction to define the criteria for inclusion of properties within the UEA, unless Policy LU-8G is deemed to also apply for the purpose of determining the eligibility of properties for inclusion within the UDB and the UEA. Such an interpretation is reasonable for the reasons previously discussed and supports the retention of the Subject Property within the UEA. However, if the policy were interpreted to not apply to the UEA, then

this objection applies due to the need for additional policy direction regarding the UEA. Guideline No. 137 does not provide predictable and meaningful guidelines for determining areas “likely to be warranted” for inclusion in the UEA. This guideline does not include any criteria for making that determination. Similarly, CON Objectives 2 and 3 and the implementing policies clearly define an implementation framework for protecting the West Wellfield through regulatory standards, BMPs, and other strategies. However, if these provisions are not interpreted and applied in a manner to define acceptable land uses for inclusion within the UEA, in conjunction with the specific policy direction provided by Policy LU-8G, then this objection applies due to the need for additional clarity to achieve predictable and meaningful implementation guidelines and standards. This objection is presented in this conditional manner because it is our position that the CDMP provides sufficient clarity to warrant and require the retention of the Subject Property in the UEA.

Based on the three objections set forth above, the Subject Amendment should be withdrawn or modified so that the Subject Property remains within the UEA. It is important to recognize that the Local Planning Agency (Planning Advisory Board) recommended that the Subject Property remain with the UEA. The approved motion stated the following in regard to Parcel 294:

Move the northern boundary line of the Urban Expansion Area (addressed by Parcel 294) south from Bird Road/S.W. 42<sup>nd</sup> Street to S.W. 64<sup>th</sup> Street rather than S.W. 72<sup>nd</sup> Street as proposed by staff;

Limonar respectfully requests that the Planning Division recommend adoption of this PAB recommendation to the Board of County Commissioners.

### **3.0 Green City**

Limonar has focused on acquiring properties located within the UEA for future urban development in reliance on Miami-Dade County’s CDMP which sets forth specific policy direction for prioritizing land to be included within the Urban Development Boundary (“UDB”) and for staging the expansion of the UDB to incorporate the UEA into the UDB. Limonar began acquiring property located within the UEA in 1997 and substantially increased its holdings in 2009 for the future development of Green City. As part of its diligence, Limonar examined the CDMP policies to determine the most suitable location for the long term planning and development of a mixed use, new town type development, which is strongly favored by the CDMP, particularly along transit routes. Guided by Policy LU-8G and the various policies and guidelines as cited throughout this Compliance Evaluation Report, Limonar acquired properties that are:

- contiguous to the UDB;
- proximate to planned centers and transit service;
- comprised primarily of uplands/drained wetlands; and
- located in high demand tier/minor statistical area.

Conversely, Limonar *avoided* properties that are:

- located within the Northwest Wellfield Protection Area;
- environmentally significant;
- located within Everglades Buffer Areas; or
- located within Comprehensive Everglades Restoration Plan ("CERP") delineated project footprints.

Limonar has made significant investments in reliance on the CDMP and pursued its vision of Green City based on these development backed expectations. The CDMP emphasizes its role in guiding and influencing the private land market. Indeed, this is one of its most important functions as summarized in Guideline No. 13, which states:

The Land Use Element is at the same time both proactive and reactive. It not only reflects previously adopted plans and established land use and zoning patterns, it also establishes the County's policy regarding future zoning and land use patterns. Similarly, while it reflects existing urban service capacities and constraints, it also establishes locations where future service improvements will have to follow. It both reflects, and seeks to promote, activity in the private land market. Recent development trends are carefully considered, however, the Land Use Element endeavors to assert County influences on locations and intensify of future development.

Similarly, Guideline No. 155 emphasizes the importance of the UDB and UEA in defining development expectations in the private market based on County policy direction regarding the location of infrastructure. Of course, this does not mean that the County is forever more precluded from amending its policies, but it should mean that the County will recognize investment-backed development expectations and maintain cornerstone policies, unless significant changes in circumstances or conditions occur that clearly warrant a shift in policy. This has not occurred with regard to the West Wellfield Protection Area and the adoption of the Subject Amendment would impart an unnecessary hardship on Limonar.

Limonar intentionally targeted lands within the Urban Expansion Area to allow sufficient time to assemble and consolidate acreage, conduct preliminary planning studies, and to ultimately work with the County on the eventual land use amendments and implementation regulations required to achieve the vision of Green City - a progressive, sustainable mixed use community



incorporating a transit oriented core downtown and many other planning and design principles espoused by the CDMP. Green City will be the first of its kind in Miami-Dade County with its own overlay zoning designation and new building standards that exceed those set forth in the Miami-Dade County zoning code. Limonar seeks the cooperation and partnership of Miami-Dade County to achieve its vision as a landowner and developer which is fully consistent with the vision and specific policy direction of the CDMP.

Limonar has undertaken preliminary planning studies and conducted intensive charrettes to develop strategies for TOD development, mixed use land use patterns, wellfield protection buffers, wellfield land use allocations based on sewage flow limitations and other key aspects as discussed in the following review. Also, please refer to Exhibit 5 to the amendment package, which includes a powerpoint presentation by Valle Valle & Partners ("Valle Presentation"). The following analysis identifies example CDMP policies which Limonar seeks to implement through Green City.

### ***3.1 Transit Oriented Development***

Kendall Drive is proposed as the only east-west, Premium Transit Corridor, south of S.W. 8th Street, which provides a direct connection to the Metrorail. The Kendall Transit Corridor is anchored on the east end by the Dadeland Metrorail Station, Downtown Kendall and significant future redevelopment opportunities. A Metropolitan Urban Center has been designated roughly midway between the east and west ends of the corridor as shown in Exhibit 7.A. However, the west end of the corridor currently lacks a comparable TOD anchor, which is critically necessary to the success of the corridor as a premium multimodal facility. Although major trip generators occurs along the corridor, the land use pattern, densities, intensities and development form throughout most of the corridor remains suburban in character and not conducive to transit use. Green City provides a significant opportunity to achieve transit oriented development that will enhance the Kendall Premium Transit Corridor and expand on the west anchor initiated with Kendall Commons. The withdraw of the Subject Amendment is a critical step to support Green City and would be consistent with Objective LU-7 and its implementing policies. See Valle Presentation and Composite Exhibit 11 for related designs and additional details.

### ***3.2 Enhanced Wellfield Protection***

CDMP Policy CON-2J requires a 500' protection zone for non-community water supplies that serve uses, such as schools. Green City has proposed minimum buffers for sewage-generating uses of 500' and designed buffers ranging between 500' and nearly 1,000', substantially exceeding minimum code requirements. In addition, Green City has designed the land uses and densities within the West Wellfield Protection Area to ensure compliance with sewage

limitation flows in accordance with Chapter 24. Green City provides a significant opportunity to enhance protection of the West Wellfield and implement Objective CON-3 and its implementing policies. See Valle Presentation and Composite Exhibit 11 for related designs and additional details. The design appropriately locates the TOD and most intensive core areas of the project closest to Kendall Drive, which also affords the greatest distance to the wellfield.

### ***3.3 Planning for Population Growth, Discouraging Urban Sprawl and Supporting Economic Development***

Table 3 shows a year 2025 projected countywide capacity of 20,130 units and a projected annual demand of 11,670 units, indicating countywide capacity will be exhausted during 2027. By 2030, a minimum allocation of over 35,000 dwelling units will be required to satisfy demand. At the minimum average density of 10 units per acre as required by proposed Policy LU-8H(b), and conservatively accounting for 25% set aside for infrastructure and 10% in transitional/vacant use as evaluating by planning staff, a minimum allocation of about 5,400 acres would be required to satisfy the projected demand. While a segment of this demand may be satisfied through intensified redevelopment, the analysis supports retention of the Subject Property within the UEA, particularly when considering the priority given to the South Central tier based on its depletion year.

The CDMP utilizes the UDB and related UEA designation to provide for the staged provision of urban infrastructure as a primary means to discourage urban form. Implementing the existing policies by retaining the Subject Property within the UEA and thereby prioritizing its eventual inclusion within the UDB is consistent with Objectives WS-1 and TC-4. The CDMP also relies on various objectives, policies and guidelines, including Objectives LU-8 and LU-9 and their implementing policies to achieve efficient use of lands, timely conversion of agricultural lands, minimum targeted densities and required urban development form to discourage urban sprawl. These objectives can be most effectively achieved through larger-scale acreage opportunities which provide for economies of scale, agglomeration of supporting economic sectors and greater flexibility to achieve quality design. Green City provides these opportunities which supports retention of the Subject Property based on the requirements of the CDMP.

The Economic Element of the CDMP, Goal II, emphasizes the need to achieve socio-economic objectives including employment opportunities for disadvantaged groups to achieve improved economic mobility. Mixed use development patterns, diverse housing products across income strata, proximate employment and regional accessibility to job centers are all key elements to achieve socioeconomic objectives. Green City incorporates all of these factors in its carefully planned land use allocations, densities and intensities, and design strategies. Moreover, Policy LU-8H achieves long term protection of the agricultural base through attendant TDR requirements. Although the Subject Property does not consist of the higher quality agricultural

lands within Miami Dade County, Green City supports the use of TDRs to achieve balance and will actively work with Miami Dade County to achieve economic objectives as the project ultimate proceeds through land use amendments, zoning overlay review and site plan approval. Green City is consistent with the County's economic goals.

For the sake of brevity, it is not possible to explore all beneficial aspects of Green City in narrative format. Readers are encouraged to review Composite Exhibit 11 for additional details, particularly as related to sustainability strategies related to LEED design, water recycling, and other progressive strategies.

#### **4.0 Conclusion**

The Subject Amendment is not In Compliance as defined by §163.3184(1)(b), Florida Statutes, would impart a hardship on Limonar considering its investment-backed expectations reasonably made in reliance on the CDMP and would preclude the ability to develop Green City and achieve numerous important objectives and policies of the CDMP. Limonar respectfully requests that Miami-Dade County withdraw the Subject Amendment and work proactively in partnership with Limonar to jointly plan and ultimately approve development plans for Green City.

# EXHIBIT "1"



**designGroup**

established architecture services  
Ph: (305) 968-8767 / (786) 877-7176  
bmdesigngroup@gmail.com

FOLIO No.: 30-4930-001-.... (SECTION 30-54-39)  
FOLIO No.: 30-4931-001-.... (SECTION 31-54-39)

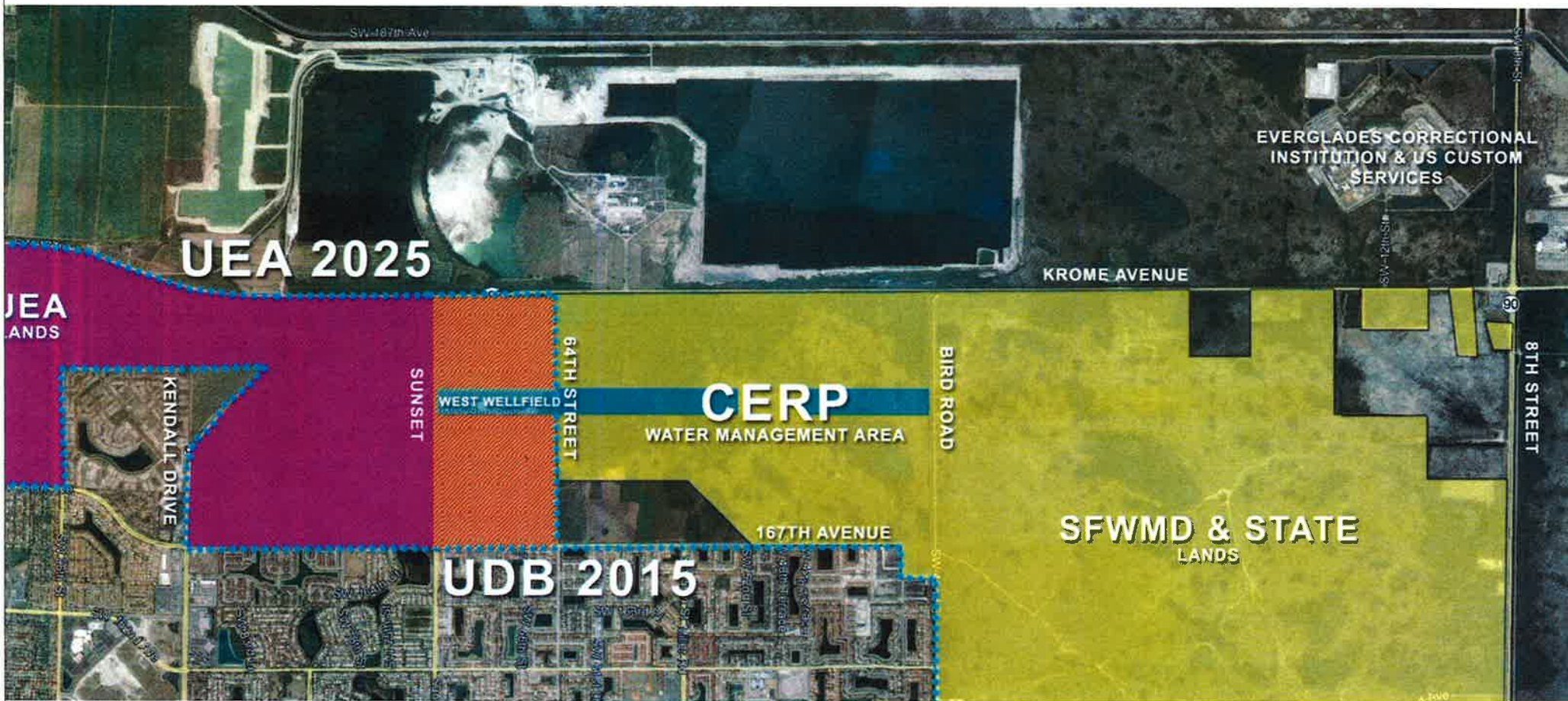
WH - WONDERLY HOLDINGS  
LD - LIMONAR DEVELOPMENT  
LP - LUIS POSADA

UNDEVELOPED  
SW 172nd AVENUE (Not - Open)  
SW 72nd STREET (SUNSET DRIVE) (Not - Open)



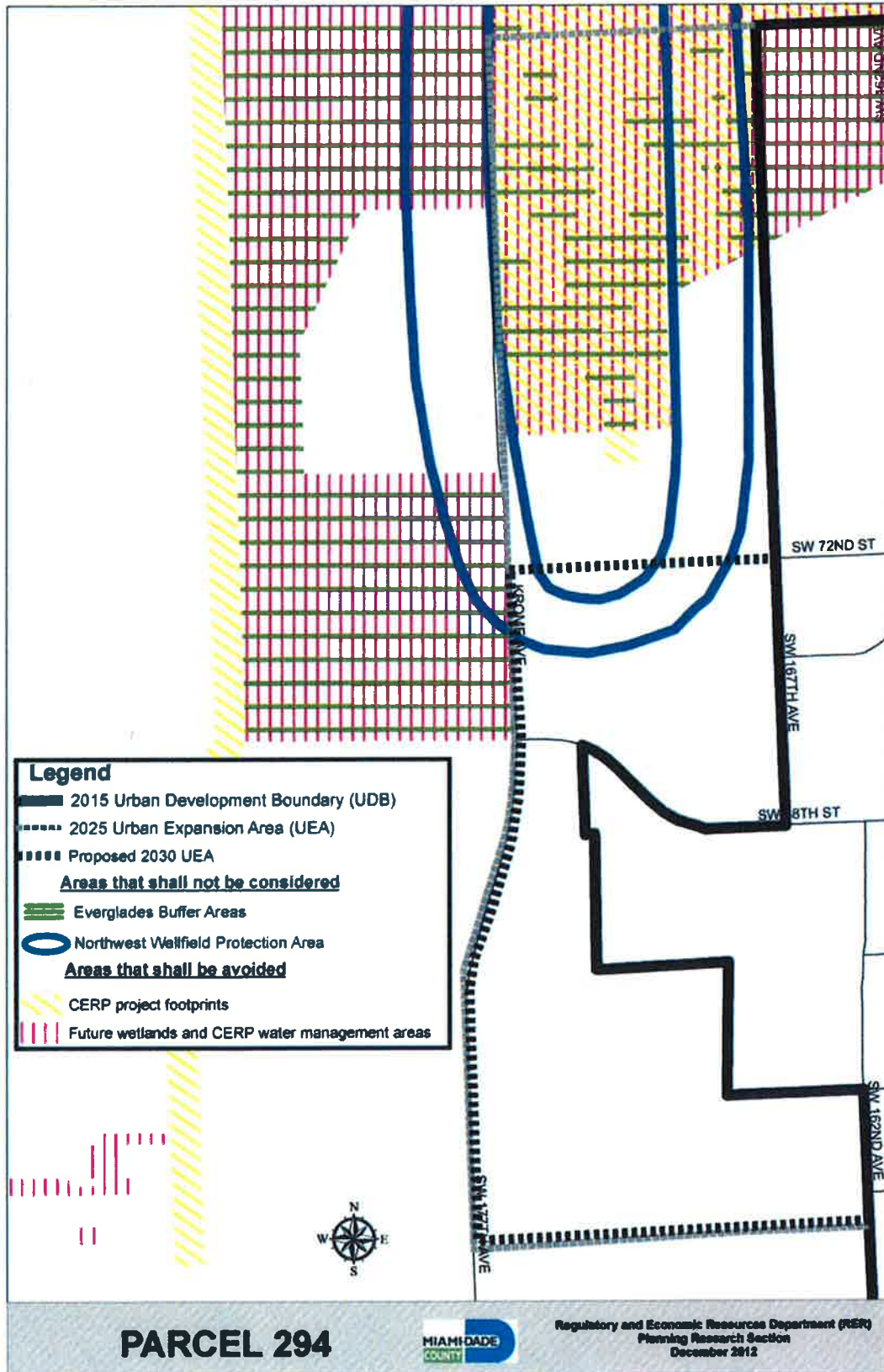
EXHIBIT "2"

## Parcel No. 294



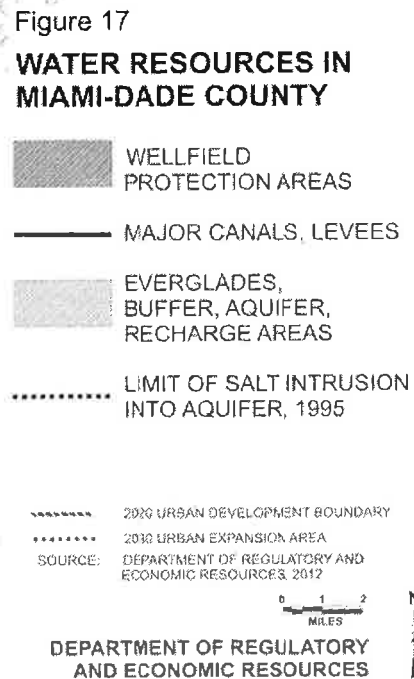
**Request to move the UEA to 64th Street**

# EXHIBIT "3"



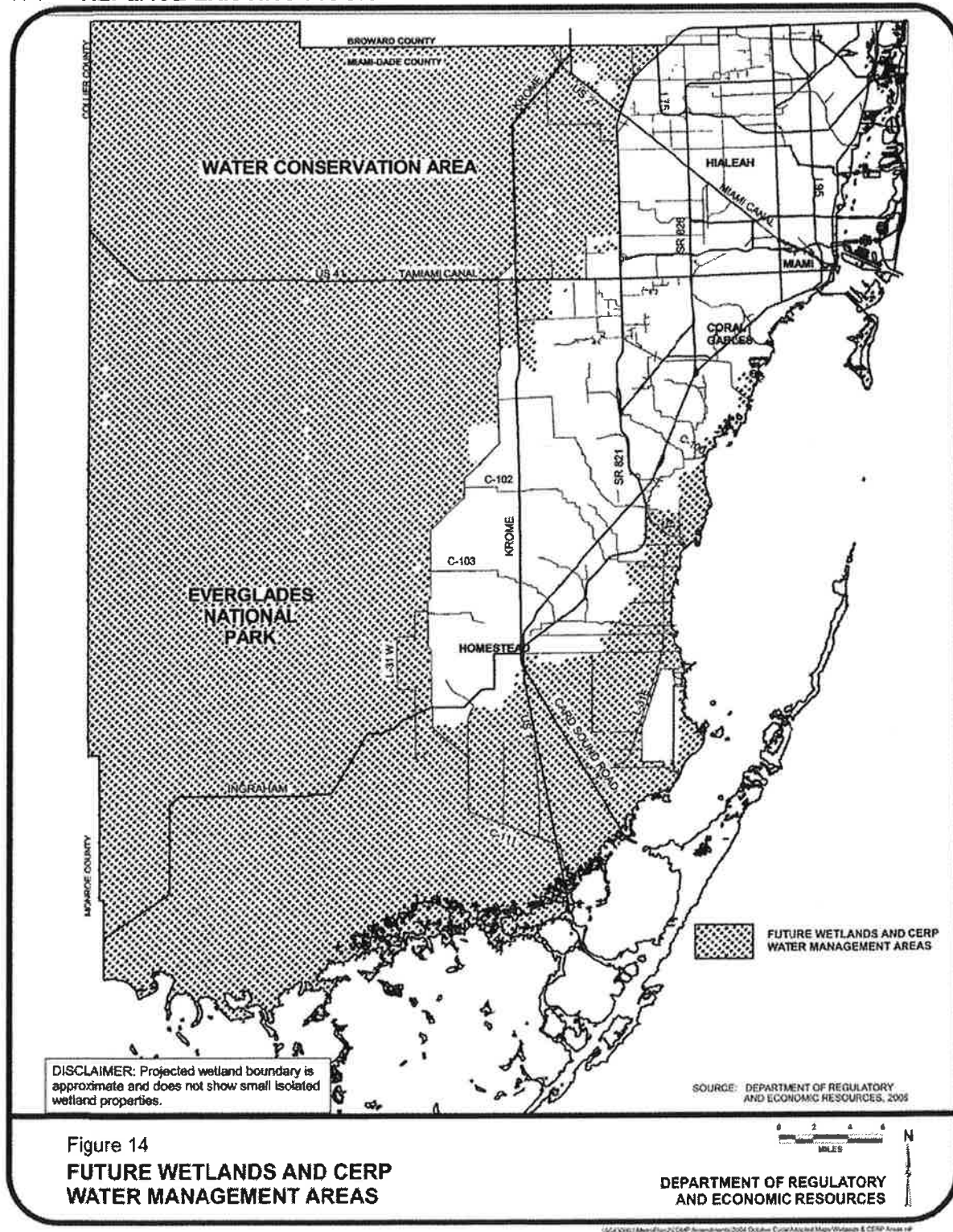


**179 REPLACE EXISTING FIGURE 17 WITH NEW FIGURE 17**



# EXHIBIT "3.B"

174 REPLACE EXISTING FIGURE 14 WITH NEW FIGURE 14





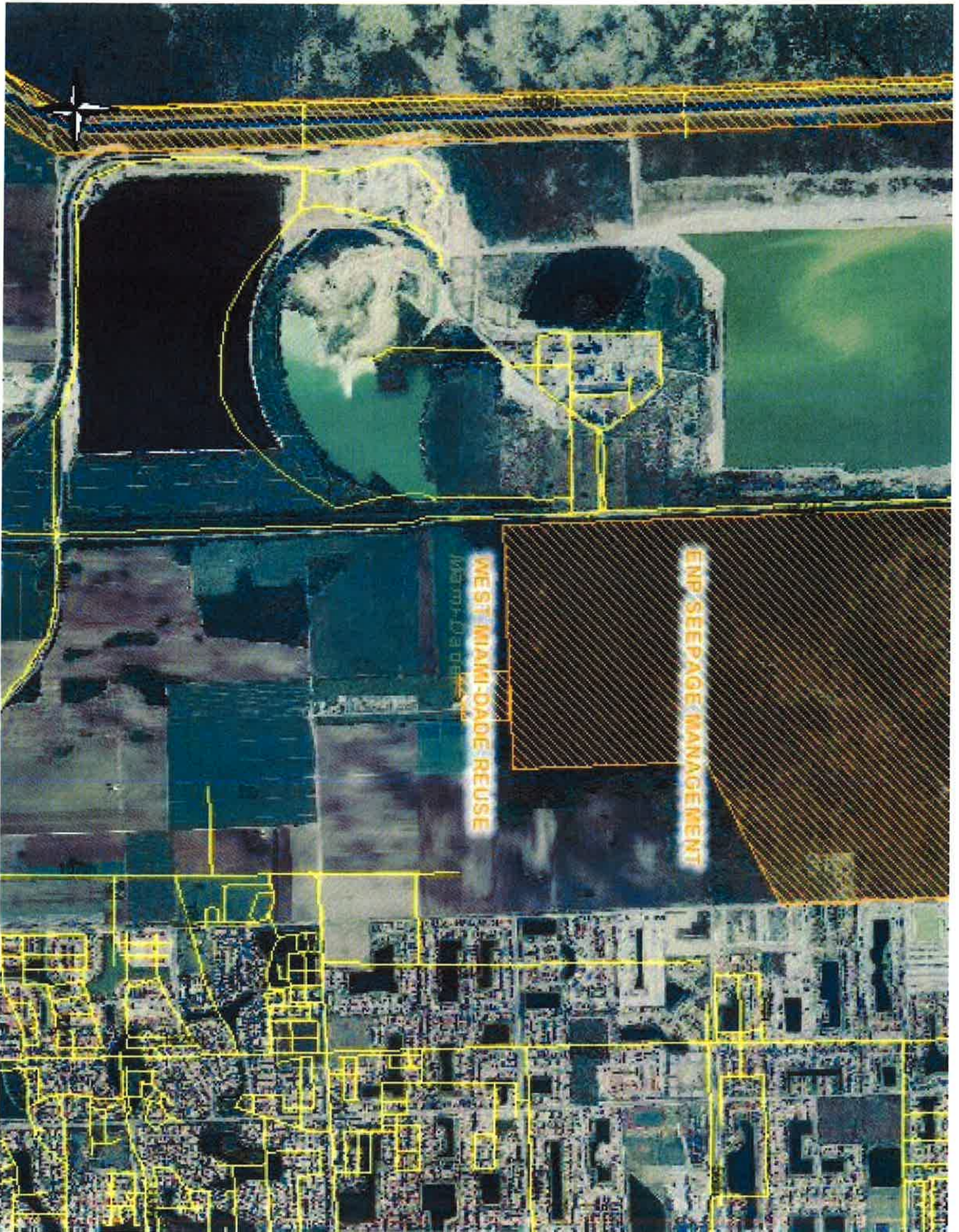
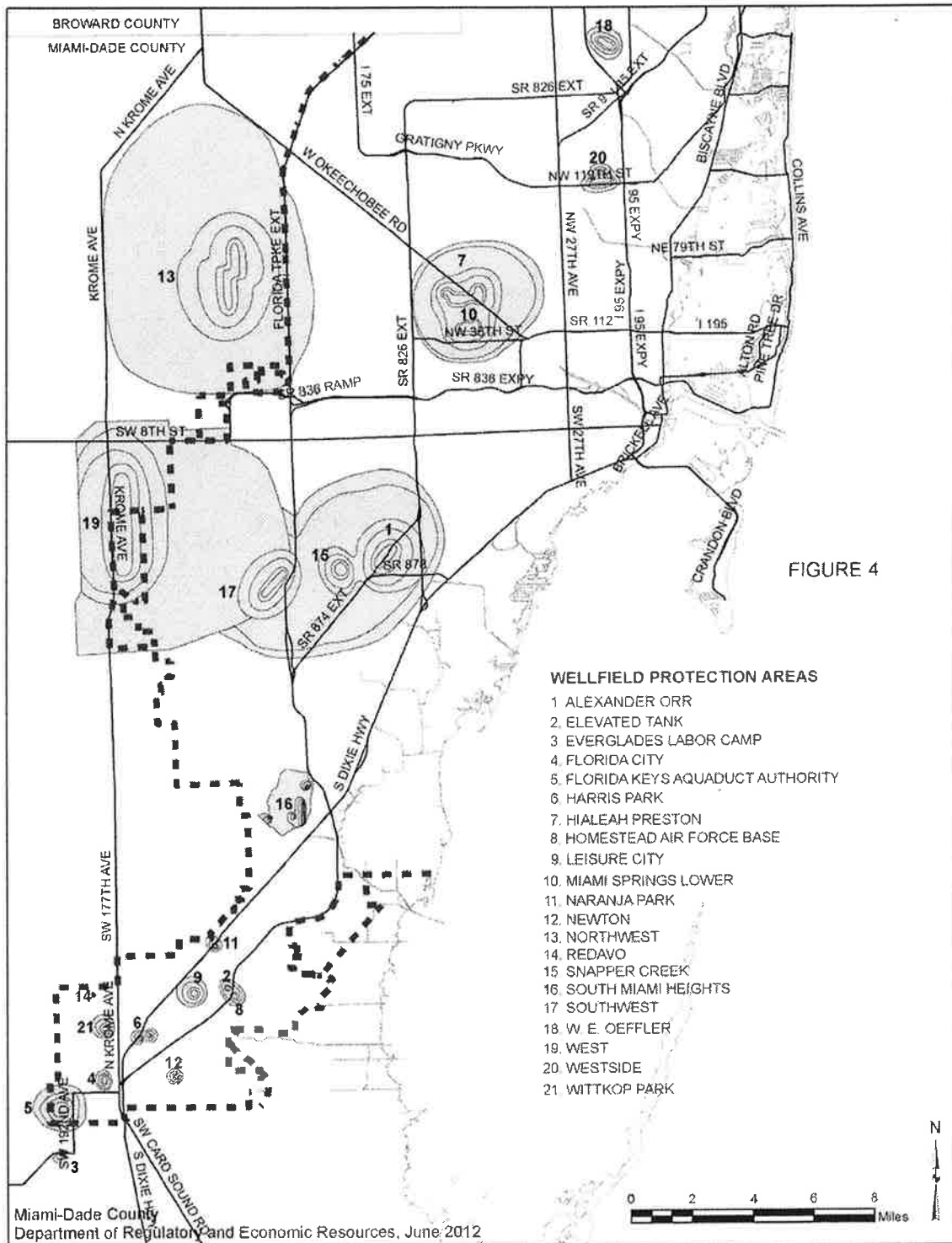


EXHIBIT "3.C"



# EXHIBIT "4"



# EXHIBIT "5"

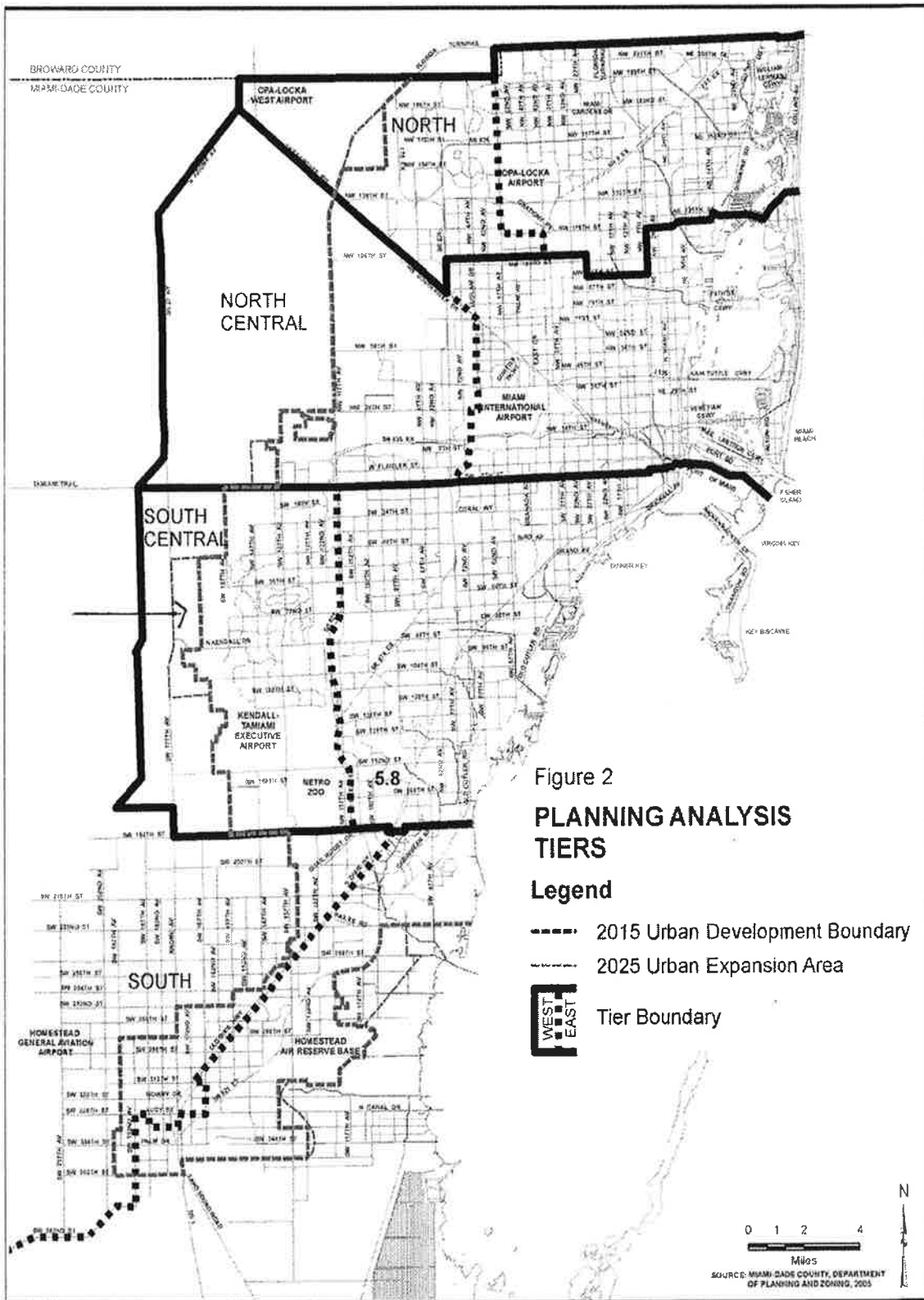


Figure 2  
**PLANNING ANALYSIS  
TIERS**

## Legend

- 2015 Urban Development Boundary
- ..... 2025 Urban Expansion Area

**Tier Boundary**

## EXHIBIT "6"

Table 5  
Residential Land Supply/Demand Analysis  
North Central Tier, 2012 to 2030

Analysis Done Separately for Each Type, i.e. No Shifting of Demand between Single & Multifamily Type	Subs								
	Eastern Part			Western -- MSA 3.2			North Central Total		
	Single Family	Multi- Family	Both Types	Single Family	Multi- Family	Both Types	Single Family	Multi- Family	Both Types
Capacity in 2012	2,651	44,862	47,513	2,554	9,765	12,319	5,205	54,627	59,832
Demand 2010-2015	734	1,960	2,694	314	299	613	1,048	2,259	3,307
Capacity in 2015	449	38,982	39,431	1,612	8,868	10,480	2,061	47,850	49,911
Demand 2015-2020	684	1,954	2,638	443	422	865	1,127	2,376	3,503
Capacity in 2020	0	29,212	26,241	0	6,758	6,155	0	35,970	32,396
Demand 2020-2025	730	2,146	2,876	488	465	953	1,218	2,611	3,829
Capacity in 2025	0	18,482	11,861	0	4,433	1,390	0	22,915	13,251
Demand 2025-2030	842	2,486	3,328	540	514	1,054	1,382	3,000	4,382
Capacity in 2030	0	6,052	0	0	1,863	0	0	7,915	0
Depletion Year	2015	2033	2029	2018	2034	2026	2016	2033	2028

Note: Housing demand is an annual average figure based on population projections.

Source: Department of Regulatory and Economic Resources, Research Section, March 2013.

Table 6  
Residential Land Supply/Demand Analysis  
South Central Tier, 2012 to 2030

Analysis Done Separately for Each Type, i.e. No Shifting of Demand between Single & Multifamily Type	Subs								
	East of Turnpike			West of Turnpike			South Central Total		
	Single Family	Multi- Family	Both Types	Single Family	Multi- Family	Both Types	Single Family	Multi- Family	Both Types
Capacity in 2012	1,684	13,736	15,420	4,045	2,106	6,151	5,729	15,842	21,571
Demand 2010-2015	459	417	876	426	115	541	885	532	1,417
Capacity in 2015	307	12,485	12,792	2,767	1,761	4,528	3,074	14,246	17,320
Demand 2015-2020	540	499	1,039	643	174	817	1,183	673	1,856
Capacity in 2020	0	9,990	7,597	0	891	443	0	10,881	8,040
Demand 2020-2025	600	553	1,153	649	175	824	1,249	728	1,977
Capacity in 2025	0	7,225	1,832	0	16	0	0	7,241	0
Demand 2025-2030	689	634	1,323	674	181	855	1,363	815	2,178
Capacity in 2030	0	4,055	0	0	0	0	0	3,166	0
Depletion Year	2015	2038	2026	2019	2025	2020	2017	2034	2024

Note: Housing demand is an annual average figure based on population projections.

Source: Department of Regulatory and Economic Resources, Research Section, March 2013.

Table 7 below shows that the South Tier has sufficient capacity to accommodate projected housing demand to the year 2028. The capacity for single-family units is projected to be depleted in 2024, and multi-family capacity extends to 2042. Both housing demand and capacity is higher in the eastern half than in the western half.



# Exhibit 7

Subject Property

< One Mile

Extraordinary Transit

997

SW 177th Ave

94

SW 167th Ave

SW 162nd Ave

SW 157th Ave

SW 152nd Ave

SW 80th St

SW 56th St

Kendall W

Westwind Rd

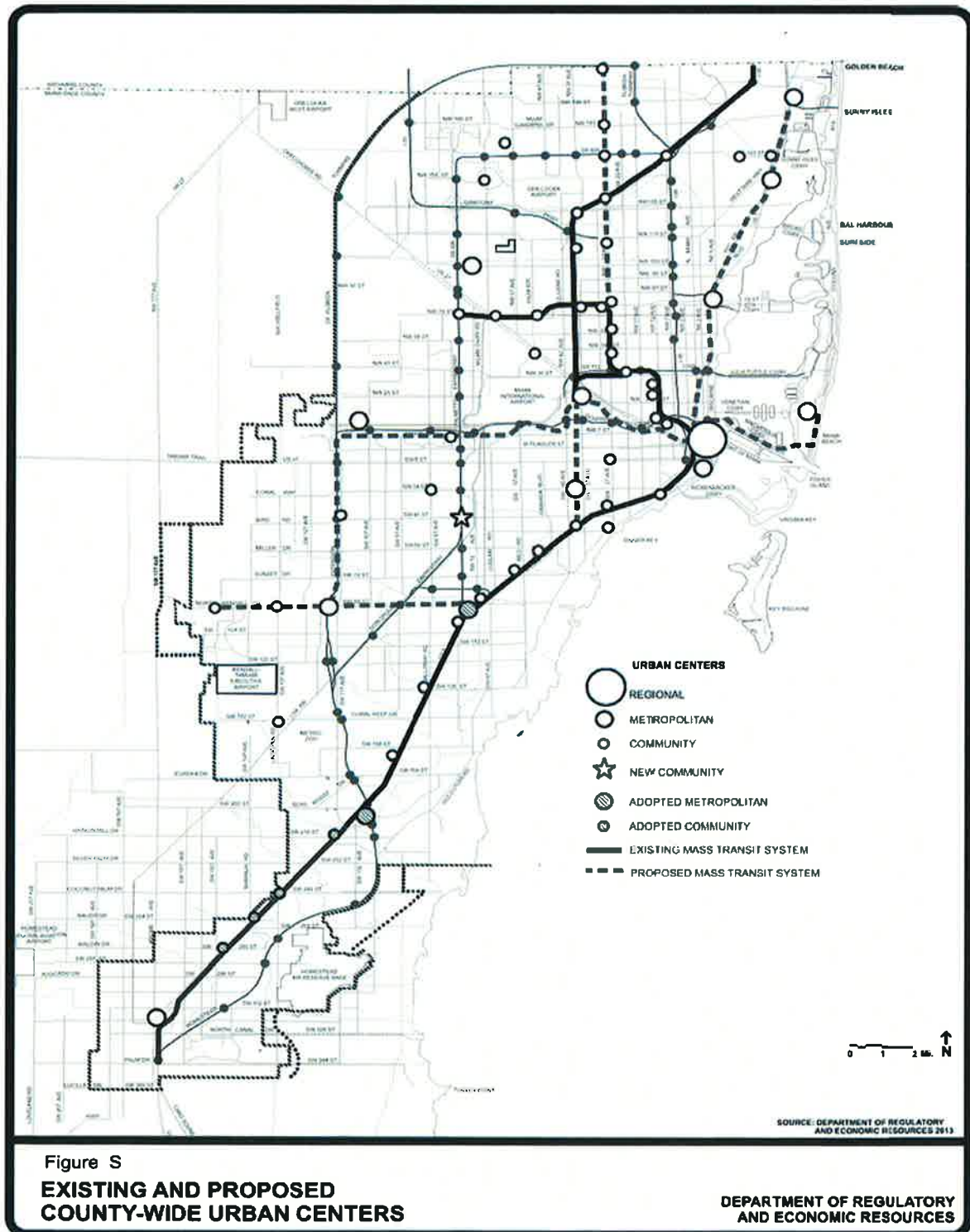
© 2013 Google

Google earth



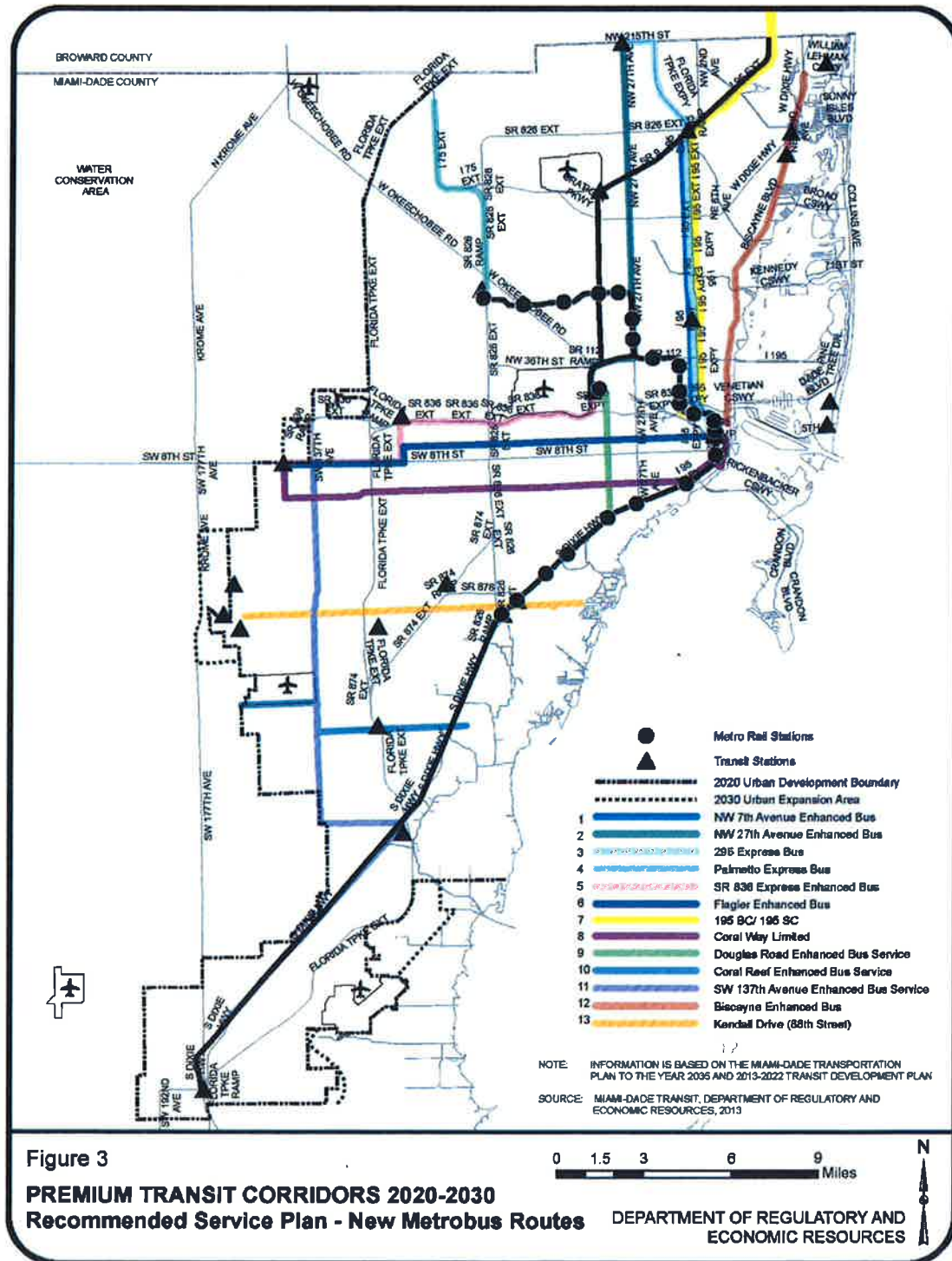
# EXHIBIT "7.A."

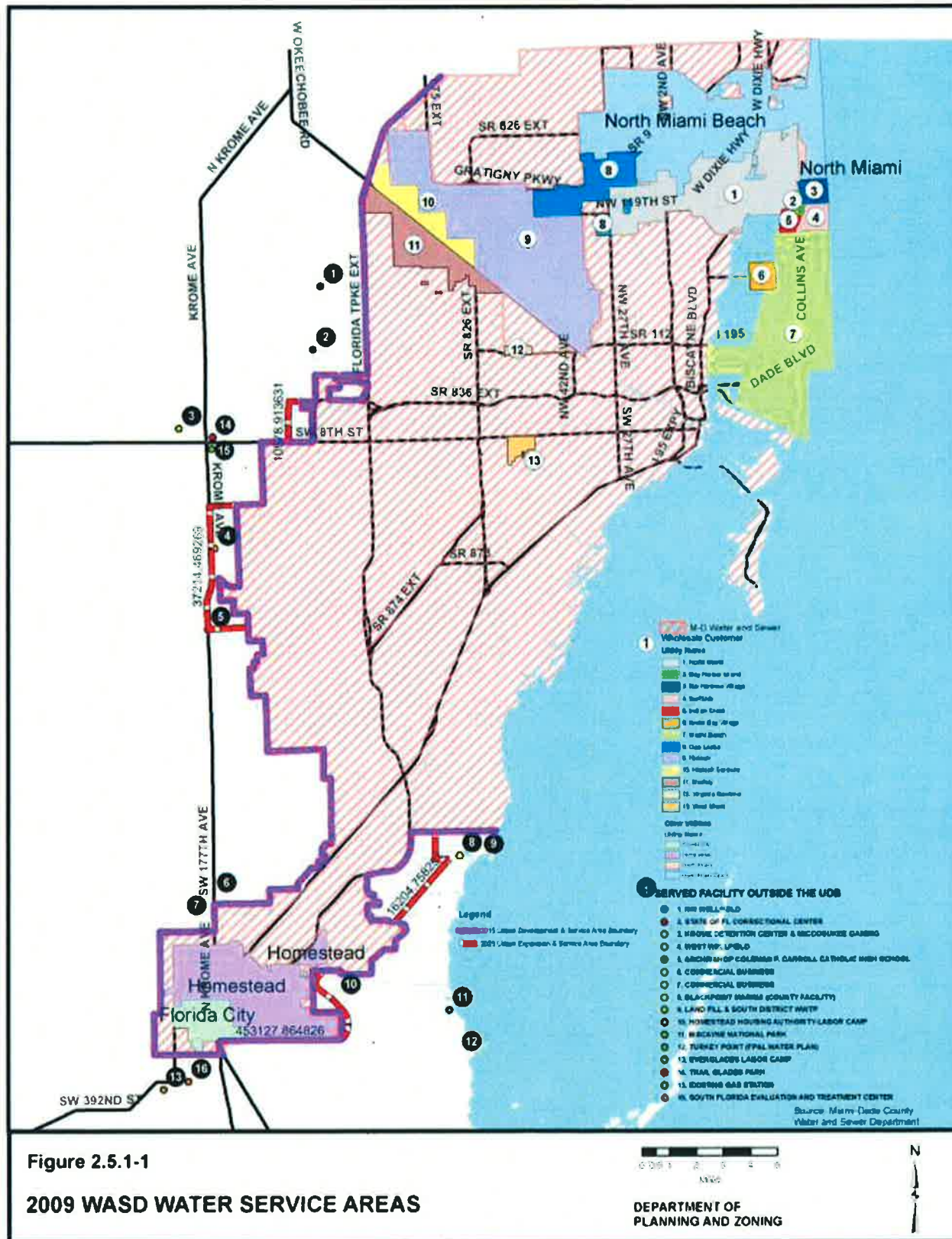
**Replace existing Figure S with new Figure S – Existing and Proposed County-Wide Urban Centers**



# EXHIBIT "8"

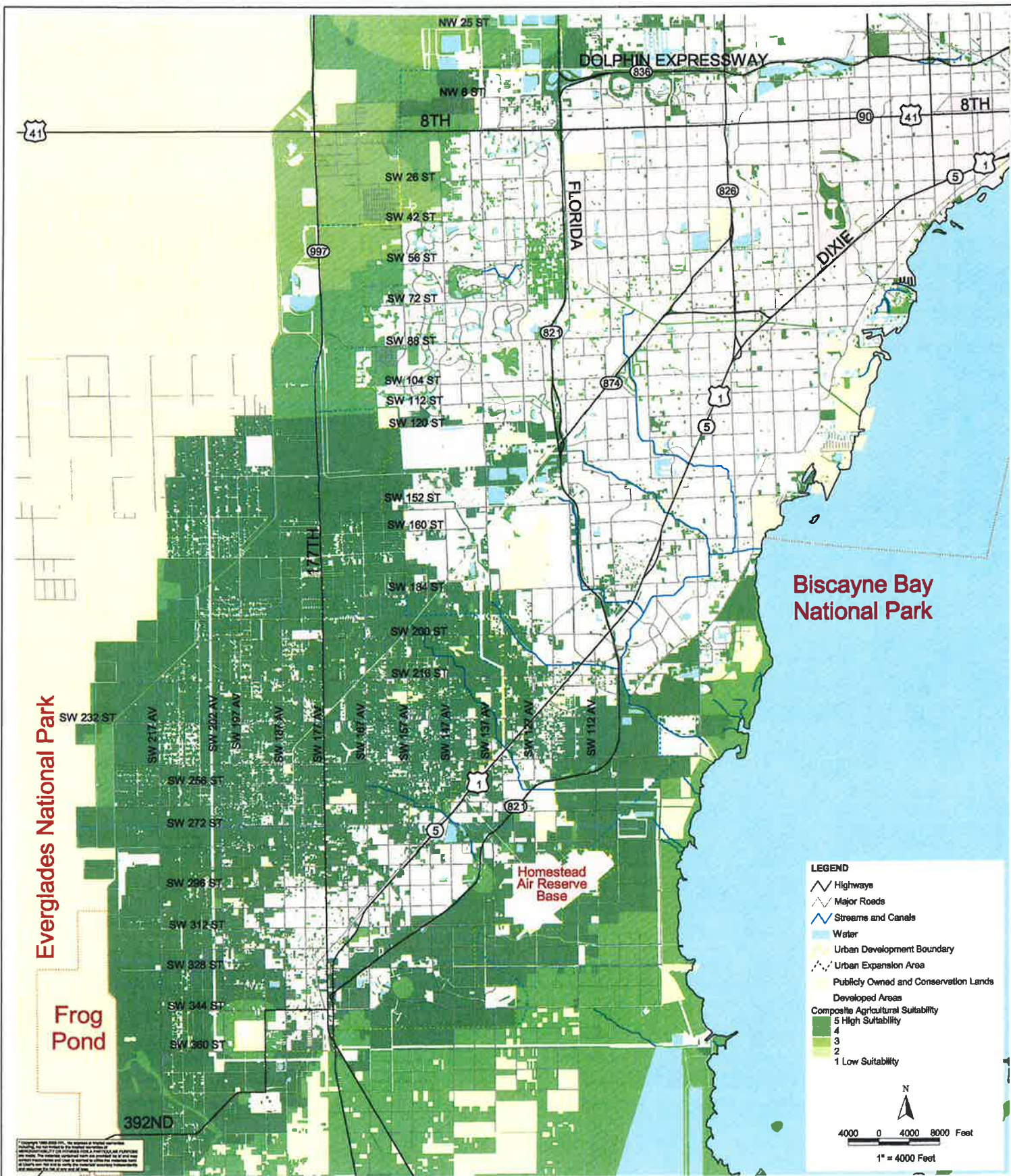
46. Insert new Figure 3 Premium Transit Corridors







**EXHIBIT "10"**



**Agricultural Suitability**  
**Composite Agricultural Suitability Criteria**  
**Miami-Dade County**  
**Agriculture & Rural Area Study**

This map represents a synthesis of agricultural suitability. The areas are Wetlands, Wetland Protection Areas, and Environmentally Sensitive Areas. The map information are the Substudy Areas and Map Description documentation. Data Sources:

- Atlantic Wetlands County, 1986
- Stream and Coastal USGS, 1984
- IFNR (IFNR), 1985
- Urban Development Boundary: Miami-Dade County, Urban Expansion Area: Miami-Dade County
- Wildlife Corridor and Corridor Areas, 2005. Compiled from 3 sources: Environmentally Endangered Lands, Miami-Dade County, Feb 2001; Conservation and Recreational Lands, IFNR, 1986; County Parks, Miami-Dade County, 2000.
- Wetlands and Lower Wetlands County, Miami-Dade County, 1986

Substudy Source:

- Wetlands: DFWMD, 1986, Florida Land Use Cover and Form Classification System (FLUCCS)
- Wetland Protection Areas: Miami-Dade County
- Environmentally Sensitive Areas: Miami-Dade County, IFNR, Environmentally Endangered Lands

November, 2002



### Key Map



# Green City Miami

EXHIBIT "11"

MIAMI-DADE COUNTY, FLORIDA

VALLE  
VALLE  
&  
PARTNERS

CITY

ECO-URBANISM  
TO CREATE PLACE

GREEN

BUILDINGS  
TO CONSERVE

ENERGY

RENEWABLE  
TO POWER

WATER

HARVESTING  
TO RECYCLE

FOOD

PRODUCTION  
TO SUPPLY



# Green City Miami Charrette

MIAMI-DADE COUNTY, FLORIDA

## TABLE OF CONTENTS

THE PROJECT AND VISIONING PROCESS.....	Page 3
THE STUDY AREA.....	Page 4
THE URBAN DEVELOPMENT BOUNDARY .....	Page 5
WELLFIELDS PROTECTION AREA (SITE) .....	Page 6
WELLFIELDS PROTECTION AREA (TABLE) .....	Page 7
CASE STUDIES I .....	Page 8
CASE STUDIES II.....	Page 9
MASTER PLAN I - CHARRETTE .....	Page 10
MASTER PLAN I - DIAGRAMS.....	Page 11
MASTER PLAN II - CHARRETTE .....	Page 12
MASTER PLAN I - DIAGRAMS.....	Page 13
MASTER PLAN I - PROGRAM .....	Page 14
MASTER PLAN II - PROGRAM .....	Page 15
10 ACRE OWNERSHIP PATTERN .....	Page 16
10 ACRE TRACT - LOW DENSITY .....	Page 17
10 ACRE TRACT - MEDIUM DENSITY.....	Page 18



10 ACRE TRACT - HIGH DENSITY .....	Page 19
10 ACRE TRACT - PARKING STUDY (DENSITY 18-24 D.U./ACRE).....	Page 20
10 ACRE TRACT - PARKING STUDY (DENSITY 30-40 D.U./ACRE).....	Page 21
DOWNTOWN DISTRICT (MAIN ENTRANCE) .....	Page 22
DOWNTOWN DISTRICT (BALCONY) .....	Page 23
CENTRAL DISTRICT (CIVIC PARK) .....	Page 24
PARK DISTRICT .....	Page 25
ECO-INDUSTRIAL PARK - FARMERS MARKET .....	Page 26
HYDROPONICS FARMING.....	Page 27
ECO-INDUSTRIAL PARK DISTRICT.....	Page 28
COMMERCIAL BUILDING SECTION .....	Page 29
COMMERCIAL ZERO ENERGY+WATER+WIND.....	Page 30
RESIDENTIAL ZERO ENERGY+WATER+WIND .....	Page 31
STREET SECTIONS .....	Pages 32-33
MASTER PLAN - OWNER .....	Page 34
MASTER PLAN - OWNER+OTHERS .....	Page 35



## The Project and Visioning Process

The **Green City Miami** charrette took place on February 15<sup>th</sup>, 2011. It grew out of a major land owner's foresight to produce a "Vision" for a 650 acre tract of agricultural land that is situated within the county's 2025 Urban Development Boundary (UDB) line. Their vision for this study area was focused on building an ideal Green City in Miami. Located within a mile from the edges of the Florida Everglades National Park this new master planned community would become a model for how to protect, enhance, and celebrate the natural resources available in this region of South Florida. This new self-sustainable community would demonstrate how to integrate a variety of housing, working, and entertainment options, utilized renewable energies, recycle rain-water, and produce food.

The study area stretches from 167<sup>th</sup> street on the East to Krome Avenue on the West and Sunset Drive on the North to Kendall Drive on the South. The charrette's team professionals included Valle Valle & Partners (Estela Valle, Erick Valle, Yukai Hsiung, Maria Martin-Hidalgo and John Zanetta), and the civil engineer Nicolas Martin-Hidalgo. During the charrette boards were mounted on the walls demonstrating the boundaries of the study area with aerial photographics of the surrounding neighborhoods. Tables were set up with aerial maps, sketch paper, pens, color markers, and note pads for the participants to write and/or draw anything they felt compelled to share during this visioning process.

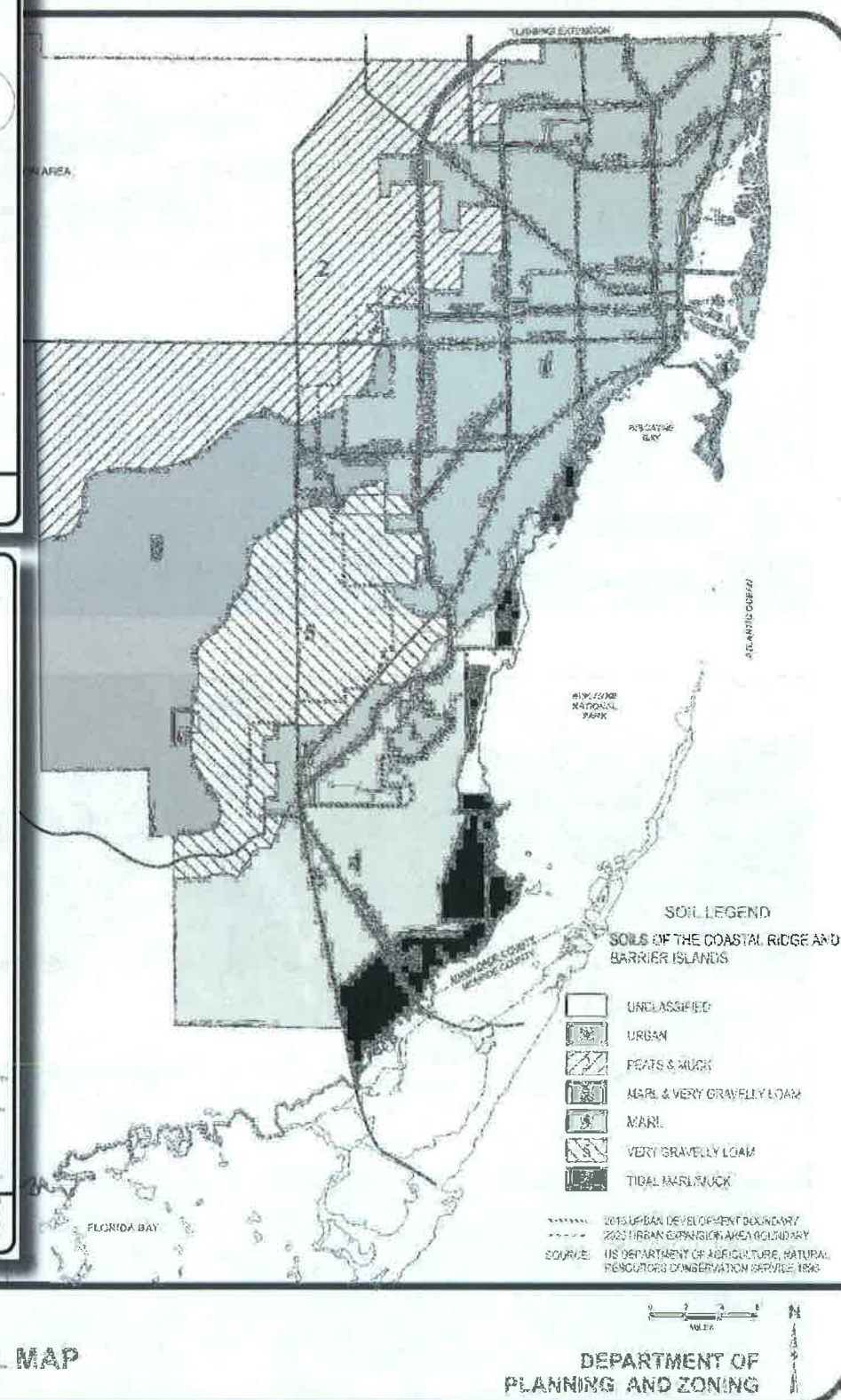
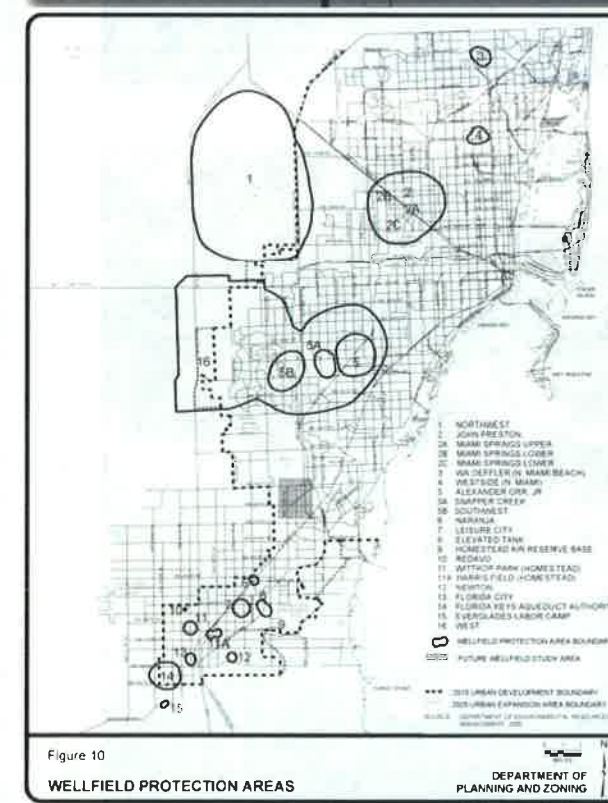




The map displays the geographical distribution of environmentally protected parks within Miami-Dade County. Everglades National Park is shown as a large, dark-shaded area in the western and central parts of the county. Biscayne National Park is a smaller, dark-shaded area located in the eastern part of the county, adjacent to Biscayne Bay. The map also shows major roads, including I-95, SR 112, and SR 112A, and the Atlantic Ocean to the east. The map is titled 'Figure 4 ENVIRONMENTALLY PROTECTED PARKS' and includes a scale bar and north arrow.

**Figure 4**  
**ENVIRONMENTALLY PROTECTED PARKS**

DEPARTMENT OF PLANNING AND ZONING

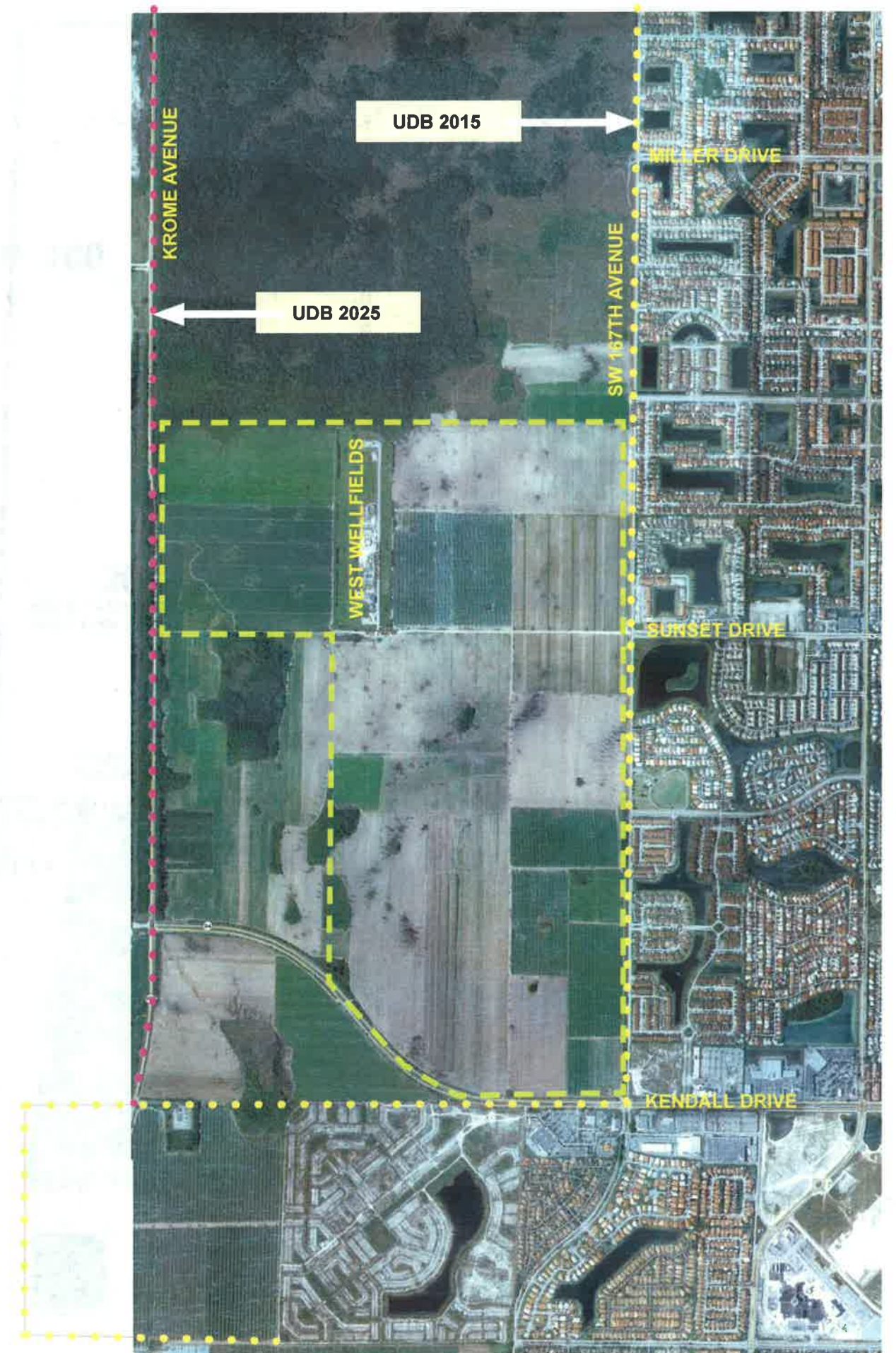
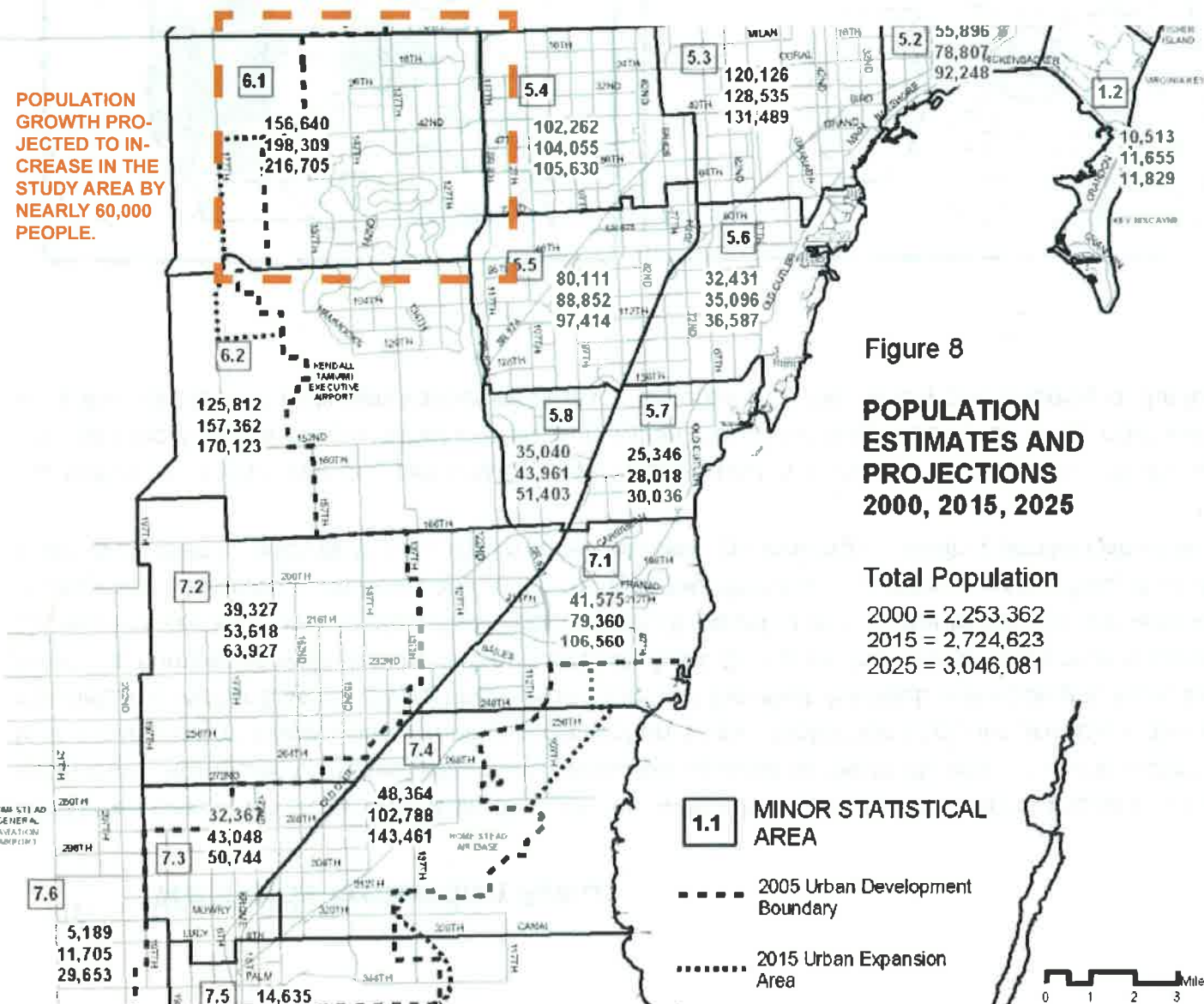




## The Urban Development Boundary (UDB)

The **Green City Miami** study area consisting of 650 acres currently used for agricultural farming and considered to be within the 2025 UDB. The Urban Development Boundary (UDB) Line was first created in 1975; increasing in 36 years by only 15%. This has been Miami-Dade County's key tool for growth management. Now with less than 6% of undeveloped remaining inside the UDB, it is considered by Miami-Dade county insufficient to accommodate another 15 years of development.

Looking forward, it is projected that Miami-Dade will gain 700,000 residents by 2030. Where will these people live, work, play, pray, and have a choice of schools. Furthermore, the impact on our roadways will mean a profound impact on how the county deals with transportation and with providing the necessary civil services. In the illustration below it is projected that between 2000-2025 our study area will be impact by nearly 60,000 new residents. The **Green City Miami** development is projected to absorb 25,000 people and proposes a self-sustainable solution addressing enviromental, economical, and social issues within a new master planned community. This proposal celebrate's the natural, cultural, and regional resources offering a high quality of life experience.

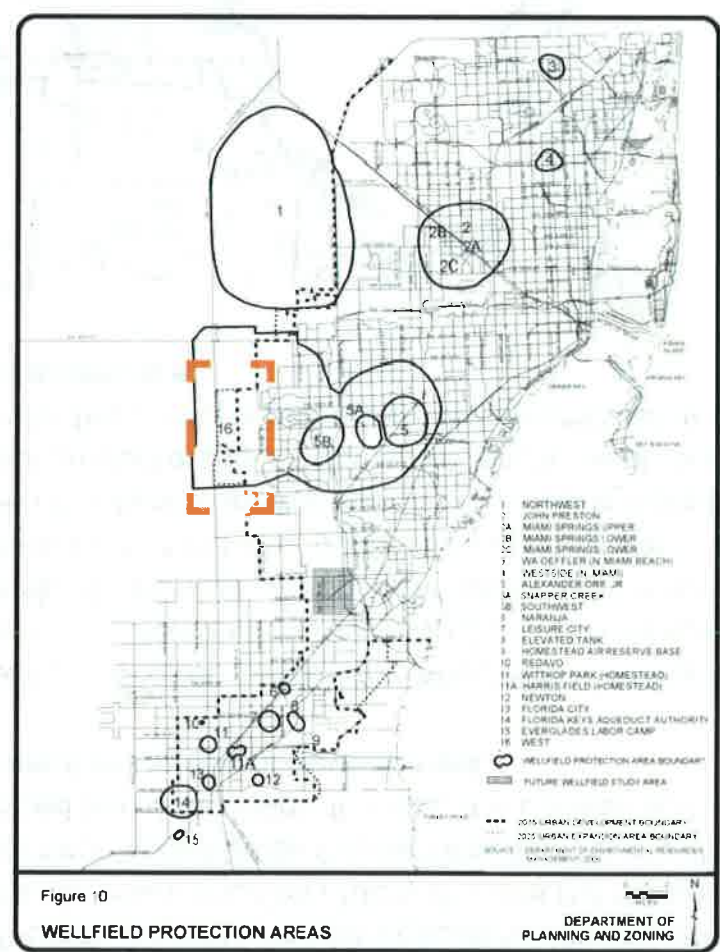
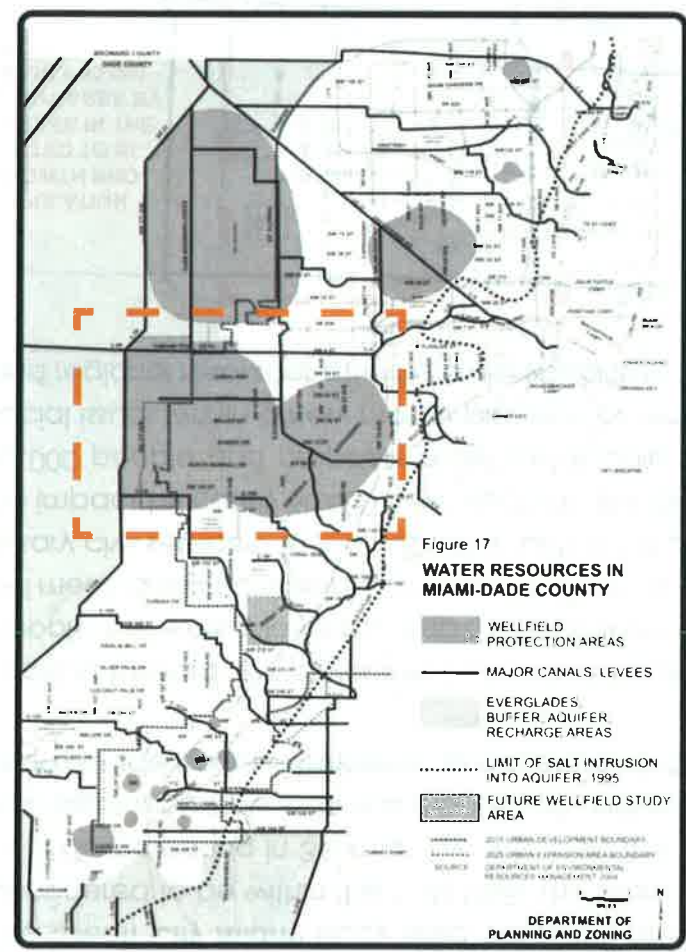




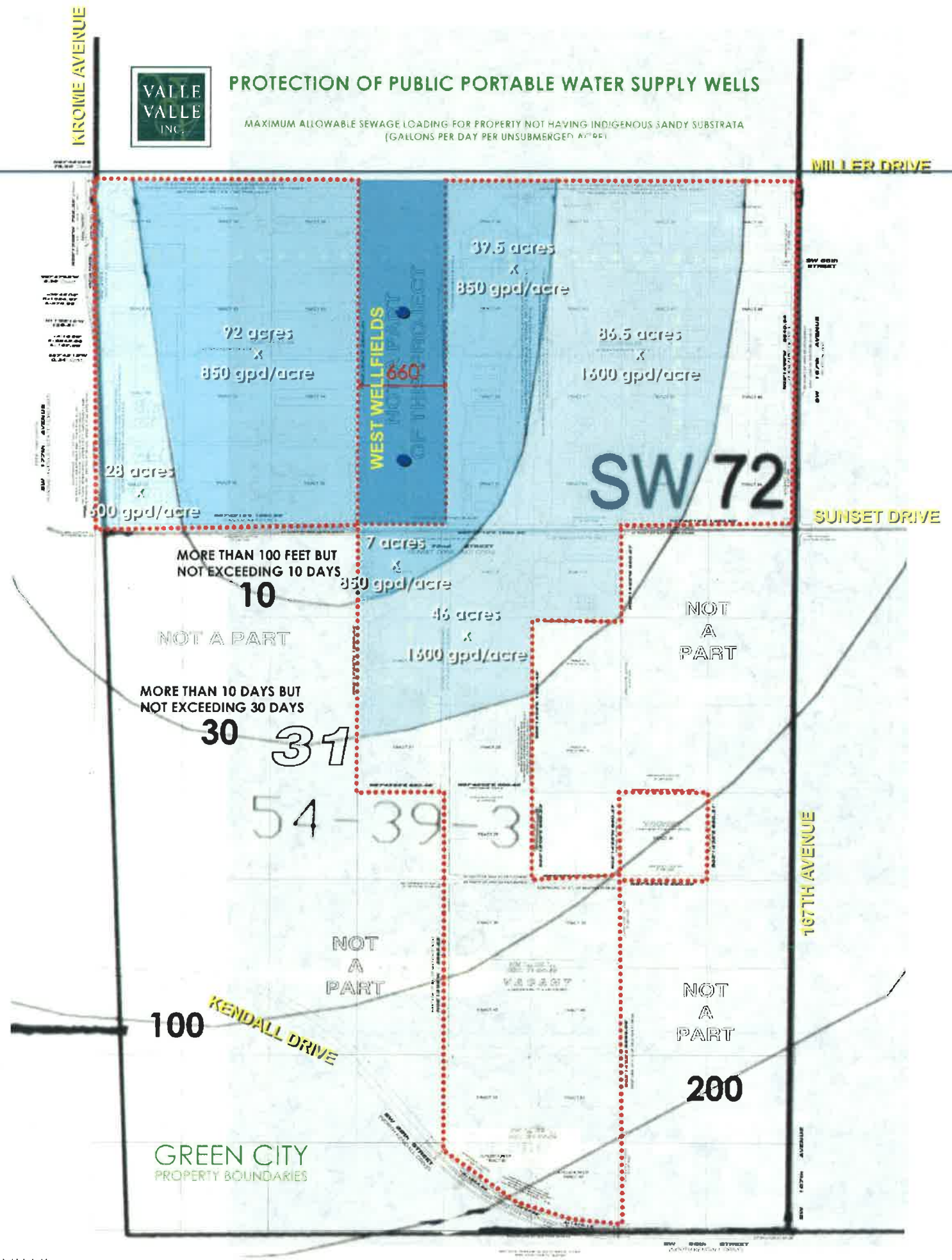
## Wellfields Protection Area

The **Green City Miami** study area is situated entirely within the West Wellfield Interim protection area. This meant that more restrictive regulations would be applied to the study area. The restrictions are found in the Miami-Dade County zoning code section 24-43. - Protection of public potable water supply wells. The Water & Sewer Department projected that the West Wellfields were going to have three times the number of wells that have been actually built. Based on that earlier projection a series of circles were drawn that indicated the number of days it would take for water to travel to the west wellfields protection area. In the illustration to the far right, the circles were overlay over the study area and colored shaded to analyze the maximum allowable sewage loading capacity permitted within each.

The maximum gallons per day per unsubmerged acre found in Table B-1, under section 24-43, were used to calculate the program that can be built within these travelling water circles. The calculations were then distributed between various landuses to determine the density and intensity of the land.



THE STUDY AREA FALLS WITHIN THE BOUNDARIES OF WEST WELLFIELDS PROTECTION AREA







Wellfields Protection Area

The table below was created to calculate the maximum density and intensity that can be built within the land areas that fall within each of the travelling water circles. The distribution of program became a back-and-forth exercise between the master plan and the table until the appropriate balanced was achieved. The totals shown in dark red column on the table below indicates the program used.

SEC. 24-43. PROTECTION OF PUBLIC PORTABLE WATER SUPPLY WELLS: The provisions of this section which impose upon land uses within the West Wellfield Interim protection area regulations which are more restrictive than those regulations applicable to the other public utility potable water supply wellfields in Miami-Dade County shall be deemed interim in nature. Said more restrictive regulations shall be reviewed by such technical review task force(s) or committee(s) as provided by the Board of County Commissioners or its designee upon recommendation of the Director. The Director shall submit to the Board of County Commissioners progress reports, as necessary, pertaining to said review, and recommendations necessary to protect the public health, safety and welfare arising out of said review shall be presented to the Board of County Commissioners. The Miami-Dade County Conflict of Interest and Code of Ethics Ordinance (Section 2-11.1 of this Code) shall not be applicable to task forces or committees provided for in this section.

LOCATION	MORE THAN 100 FEET BUT NOT EXCEEDING 10 DAYS	MORE THAN 10 DAYS BUT NOT EXCEEDING 30 DAYS	ALLOWABLE GALLONS/DAY PER UNSUBMERGED ACRE	TOTAL GPD	CLASSIFICATION	Single Family - Detached gpd/unit	Single Family - Attached gpd/unit	Multifamily gpd/unit	Retail gpd/sf	Office gpd/sf	Industrial gpd/sf	Parks gpd/person	School gpd/stud	School gpd/staff	Community gpd/sf		
STANDARD LEED						350 280	250 200	200 160	5/100 4/100	10/100 8/100	20/1000 16/1000	5 4	20	15	10/100 8/100		
west side	92	28	850 1,600	78,200 44,800 123,000	PROPOSED	NA	NA	498	-	325,000	700,000	-	300	10	-		
					LEED	-	-	79,650	-	26,000	11,200	-	6,000	150	-		
east side	39.5	86.5	850 1,600	33,575 138,400 171,975	PROPOSED	NA	NA	1,024	125,000	55,000	-	120	-	-	5,000		
					LEED	-	-	163,895	5,000	2,200	-	480	-	-	400		
south side	7	46	850 1,600	5,950 73,600 79,550	PROPOSED	NA	NA	279	-	-	-	15	1,700	57	-		
					LEED	-	-	44,696	-	-	-	4	34,000	850	-		
BUT NOT EXCEEDING 10 DAYS						SF - Detached		SF - Attached	Multifamily Units	Retail sf	Office sf	Industrial sf	Parks Acres	Students	Staff	Community sf	
138.5						TOTALS		-	-	1,802	125,000	380,000	700,000	135	2,000	67	5,000

TABLE B-1 Residential Property Served by Sanitary Sewers; Nonresidential Property Served by Sanitary Sewers and Not Using, Generating, Handling, Disposing, Discharging or Storing Hazardous Materials

Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well	Maximum Allowable Sewage Loading for Property Not Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)	Maximum Allowable Sewage Loading for Property Having Indigenous Sandy Substrata (Gallons Per Day Per Unsubmerged Acre)
More than 30 days	No additional restrictions	No additional restrictions
More than 10 days but not exceeding 30 days	1600	No additional restrictions
More than 100 feet but not exceeding 10 days	850	1600
100 feet or less	0	0

TABLE C-1 Allowable Storm Water Disposal Methods for Residential and Nonresidential Property

Travel Time in Days or Distance in Feet from Property to Nearest Public Utility Potable Water Supply Well	Allowable Methods for Storm Water Disposal
More than 30 days but not exceeding 210 days	Infiltration or seepage or overflow outfalls only
More than 10 days but not exceeding 30 days	Infiltration or seepage only
More than 100 feet but not exceeding 10 days	Infiltration only
100 feet or less	None

TABLE E-1: Allowable Land Uses Within the Northwest Wellfield Protection Area and Within the West Wellfield Interim Protection Area

**SAMPLE OF PERMITTED LAND USES**  
Hotels, motels, Libraries (public), Office building, Plant sales (no propagation), Police station, Post office, Produce or fruit market, Professional and semiprofessional offices (no medical laboratory or clinic), Residential uses, Restaurants, including outdoor patios and service, Schools (no hazardous materials), Seafood stores, Storage warehouse (no hazardous materials), Vegetable stands, Warehouses (storage of food, fodder, apparel, and other nonhazardous materials), and Water tanks or towers



These case studies show potential densities outside the 30 day travelling water circle.

**Bay Meadow Park:** The lessons we learn from this development demonstrate how a mixed-use program can function both vertically and horizontally. The intense mixed-use program is located along a well-defined public open space with ample access roads in the form of boulevards. The buildings frame the street edges with wide sidewalks and parallel parking. The majority of the parking is hidden behind the buildings in parking structures. The aerial view demonstrates how to scale down from the vertical mix to a compatible residential program using apartments and townhouses to buffer from the adjacent single family residential neighborhood.

**Market Commons:** The lessons are similar, however it is a more intensive vertical mix program. In this case study the townhouses are attached to mixed-use buildings to help buffer from the single family residential neighbor. The parking is sandwiched between buildings on three sides in an attempt to wrap program along all the street edges to celebrate the pedestrian experience.

**Addison Circle:** The lessons that we learn in this case study are how to preserve a human scale to the development while building a highly dense program, how to prioritize the road network so that access to the parking garages is kept to the secondary roads, the opportunities created when carving out public space, and various ways to hide parking garages.

### ADDISON CIRCLE



SITE DATA	
Location:	Addison, Texas
Municipality:	N.A.
Acres:	80 acres
Zoning:	Mixed-Use
Setting:	Infill
Structured Parking:	7,500 Spaces
Transportation:	Local Bus
Access to Bicycle/Pedestrian Paths:	1/4 Mile

PROGRAM	
F.A.R.:	2.5
Density Type (D.U./Acre):	50
Housing [Rental+Sale]:	2,700 Units
Retail:	250,000 Sq Ft
Hotel:	None
Office:	1,000,000 Sq Ft
Park/Landscaping:	20% Required

REGULATIONS	
Landuse:	Mixed-Use
Build-To-Line (BTL):	At Pedestal and Tower
Bldg. Height:	8 Stories Max.
Pedestal Height:	N.A.
Tower Bldg. Height:	N.A.
Penthouse Bldg. Height:	N.A.
Bldg. Frontage:	Minimum 75 %
Bldg. Placement:	Front 0 + Sides/Rear 0
Colonnade/Balcony:	Encroachment over Sidewalk
Habitable Space:	N.A.
Expression Line:	N.A.
Vehicular Entries:	N.A.
Open Space:	12 % Min. in the Form of Courtyard Gardens, Colonnades, Squares, & Plazas



### BAY MEADOW PARK



SITE DATA	
Location:	San Francisco, California
Municipality:	SanMateo County
Acres:	75acres
Zoning:	Mixed-Use
Setting:	Infill
Structured Parking:	5,000 Spaces
Transportation:	Local Bus & Metro-Rail
Access to Bicycle/Pedestrian Paths:	1/4 Mile

PROGRAM	
F.A.R.:	2.0
Density Type (D.U./Acre):	30
Housing [Rental+Sale]:	740 Units
Retail:	300,000 Sq Ft
Hotel:	None
Office:	500,000 Sq Ft
Park/Landscaping:	20% Required

REGULATIONS	
Landuse:	Mixed-Use
Build-To-Line (BTL):	At Setback
Bldg. Height:	6 Stories Max.
Pedestal Height:	6 Stories Max.
Tower Bldg. Height:	N.A.
Penthouse Bldg. Height:	N.A.
Bldg. Frontage:	Mini. 75 %
Bldg. Placement:	Front 0 + Sides/Rear 0
Colonnade/Balcony:	Encroachment over Sidewalk
Habitable Space:	N.A.
Expression Line:	Top of 1st Story Required
Vehicular Entries:	N.A.
Open Space:	20 % Min. in the Form of Courtyard Gardens, Colonnades, Squares, & Plazas

### MARKET COMMONS



SITE DATA	
Location:	Clarendon, Virginia
Municipality:	Wahington D. C.
Acres:	15 acres
Zoning:	Core Sub-District
Setting:	Infill
Structured Parking:	1,000 Spaces
Transportation:	Local Bus & Metro-Rail
Access to Bicycle/Pedestrian Paths:	1/4 Mile

PROGRAM	
F.A.R.:	3.0
Density Type (D.U./Acre):	40
Housing [Rental+Sale]:	300+87 Units
Retail:	240,000 Sq Ft
Hotel:	None
Office:	100,000 Sq Ft
Park/Landscaping:	20% Required

REGULATIONS	
Landuse:	Mixed-Use
Build-To-Line (BTL):	Pedestal
Bldg. Height:	8 Stories Max.
Pedestal Height:	2 Stories Max.
Tower Bldg. Height:	4 Stories Max.
Penthouse Bldg. Height:	2 Stories Max.
Bldg. Frontage:	Mini. 75 %
Bldg. Placement:	Front 0 + Sides/Rear 0
Colonnade/Balcony:	Encroachment over Sidewalk
Habitable Space:	20' Min. for 8 Stories
Expression Line:	Top of 2nd Story Required
Vehicular Entries:	N.A.
Open Space:	20 % Min. in the Form of Courtyard Gardens, Colonnades, Squares, & Plazas



MIZNER PARK



SITE DATA	
Location:	Boca Raton, Florida
Municipality:	Palm Beach County
Acres:	10 acres
Zoning:	Mixed-Use "Urban Village"
Selling:	Infill
Structured Parking:	1,000 Spaces
Transportation:	Local Bus
Access to Bicycle/Pedestrian Paths:	1/4 Mile

PROGRAM	
F.A.R.:	2.5
Density Type (D.U./Acre):	50 and 100
Housing:	272 Units
Retail:	200,000 Sq Ft
Hotel:	None
Office:	170,000 Sq Ft
Park/Landscaping:	20% Required

REGULATIONS	
Landuse:	Mixed-Use "Urban Village"
Build-To-Line (BTL):	At Pedestal
Bldg. Height:	12 Stories Max.
Pedestal Height:	1 Stories Max.
Tower Bldg. Height:	11 Stories Max.
Penthouse Bldg. Height:	N.A.
Bldg. Frontage:	Minimum 75 %
Bldg. Placement:	Front 0 + Sides/Rear 0
Colonnade/Balcony:	Encroachment over Sidewalk
Habitable Space:	N.A.
Expression Line:	Top of 1st Story Required
Vehicular Entries:	N.A.
Open Space:	20 % Min. in the Form of Courtyard Gardens, Colonnades, Squares, & Plazas



CITY  
ECO-URBANISM  
100-3000 PLAZA

Case Studies II

These case studies show potential densities outside the 100 day travelling water circle.

**Mizner Park:** The lessons we learned from our research, as seen in these photographic views, are the importance of varying the building massing, the significance of carving out a linear park, the need to hide off-street parking, and the importance of attaching a single layer of program to a parking garage to hide it from a primary street.

**Downtown Kendall:** The lessons we learned from this project include the need to establish maximum building frontages, the need to restrict parking garage access to secondary streets, the importance of requiring 100% build-out of the retail along primary streets, and what happens when habitable space is required along the street frontage as a method to hide the parking.

**City Place:** The real lesson learned from this project is understood best in the site plan; it shows us how to spread density so that it can be kept to a human scale in the more public streets and more intense (higher floors) setback of the street edges.

DOWNTOWN KENDALL



SITE DATA	
Location:	Miami, Florida
Municipality:	Miami-Dade County
Acres:	12 acres
Zoning:	Mixed-Use
Selling:	Infill
Structured Parking:	200 Spaces
Transportation:	Local Bus & CalTrain Transit
Access to Bicycle/Pedestrian Paths:	1/4 Mile

PROGRAM	
F.A.R.:	3.0
Density Type (D.U./Acre):	75
Housing:	74 Units
Retail:	22,500 Sq Ft
Hotel:	None
Office:	None
Park/Landscaping:	20% Required

REGULATIONS	
Landuse:	Core Sub-District/Mixed-Use
Build-To-Line (BTL):	At Pedestal and Tower
Bldg. Height:	7 Stories Max.
Pedestal Height:	2 Stories Max.
Tower Bldg. Height:	6 Stories Max.
Penthouse Bldg. Height:	N.A.
Bldg. Frontage:	Minimum 75 %
Bldg. Placement:	Front 0 + Sides/Rear 0
Colonnade/Balcony:	Encroachment over Setback
Habitable Space:	20' Min. for First 7 Stories
Expression Line:	Top of 2nd Story Required
Vehicular Entries:	33' feet Width Max.
Open Space:	15 % Min. in the Form of Courtyard Gardens, Colonnades, Squares, & Plazas



CITY PLACE



SITE DATA	
Location:	West Palm Beach, Florida
Municipality:	Palm Beach County
Acres:	72 acres
Zoning:	Mixed-Use
Selling:	Infill
Structured Parking:	3,300 Spaces
Transportation:	Local Bus & Metro-Rail
Access to Bicycle/Pedestrian Paths:	1/4 Mile

PROGRAM	
F.A.R.:	2.5
Density Type (D.U./Acre):	25 and 120
Housing:	600 Units
Retail:	700,000 Sq Ft
Hotel:	400 Rooms
Office:	750,000 Sq Ft
Park/Landscaping:	20% Required

REGULATIONS	
Landuse:	Mixed-Use
Build-To-Line (BTL):	At Pedestal and Tower
Bldg. Height:	25 Stories Max.
Pedestal Height:	3 Stories Max.
Tower Bldg. Height:	20 Stories Max.
Penthouse Bldg. Height:	2 Stories Max.
Bldg. Frontage:	Minimum 75 %
Bldg. Placement:	Front 0 + Sides/Rear 0
Colonnade/Balcony:	Encroachment over Sidewalk
Habitable Space:	N.A.
Expression Line:	Top of 1st Story Required
Vehicular Entries:	N.A.
Open Space:	10 % Min. in the Form of Courtyard Gardens, Colonnades, Squares, & Plazas



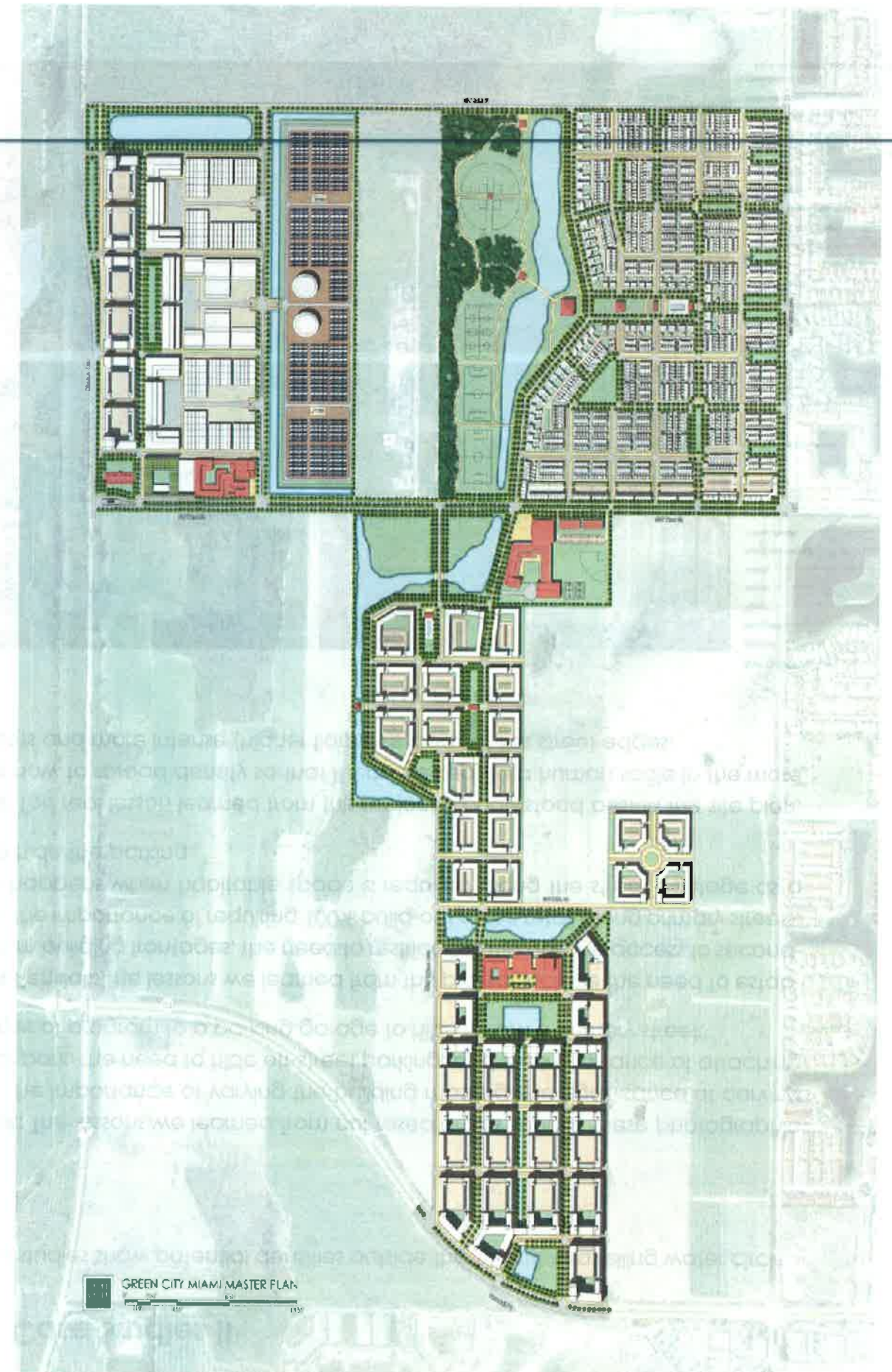




## Charrette Master Plan I

This master plan shows the 450 acres owned by the majority land owner. The master plan is divided into four distinct neighborhoods. The Downtown District located off Kendall Drive with high density mixed-use residential, the Central District located off Sunset Drive with Medium Density mixed-use residential, the Park District located off Miller Drive with low density mixed-use residential, and the Eco-Industrial Park of Krome Avenue with high density mixed-use residential.

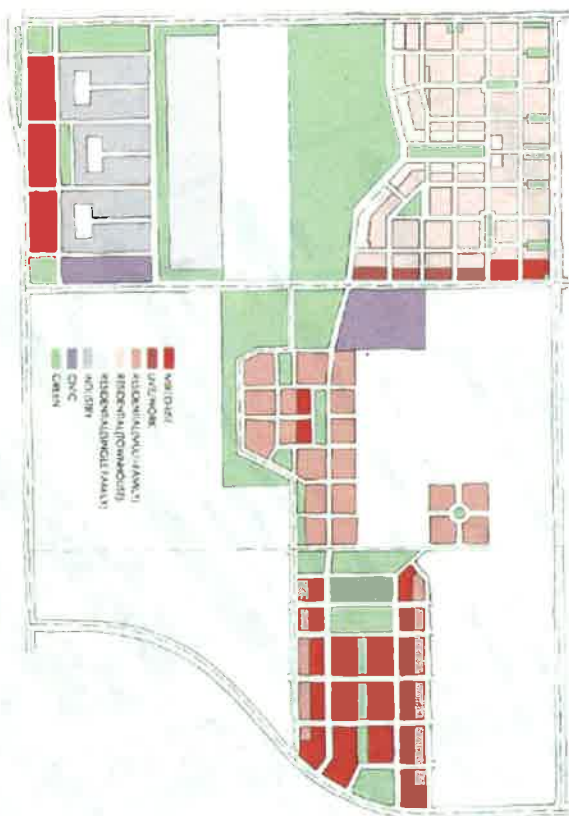
The diagrams in the next page show the landuses, the four distinct neighborhoods, the green network, the water network, the street network and the transportation network.





**LANDUSE:**

This diagram illustrates the location of landuses within each district. The dark red (mix-use) is located along the collector roads and at the downtown district, the light grey color indicates the EIP, the other colors are single uses.



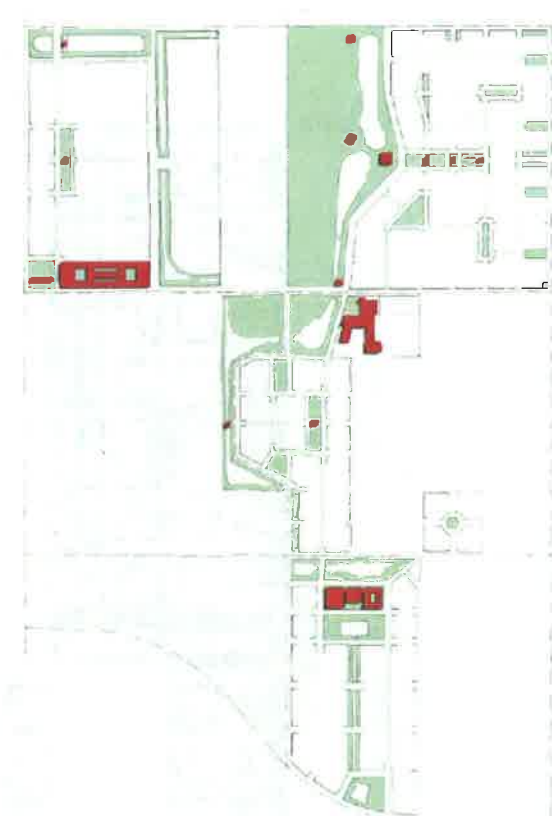
**NEIGHBORHOODS:**

This diagram illustrates four differently colored neighborhoods; 1) downtown; 2) central; 3) park; and, 4) EIP. The circles shows five minute walking distance between each neighborhood.



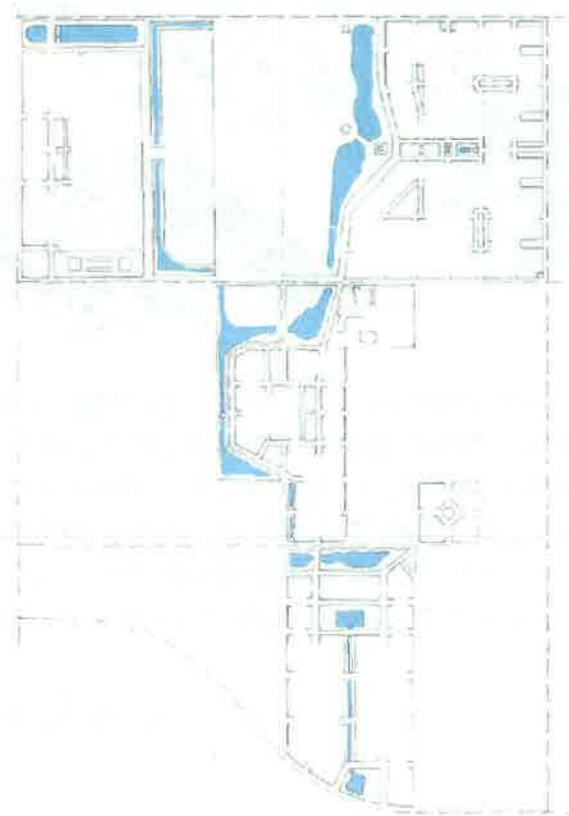
### GREEN NETWORK:

This diagram illustrates a network of public greens interconnecting the four neighborhoods. This design encourages pedestrians to walk from paseo's to the pocket parks.



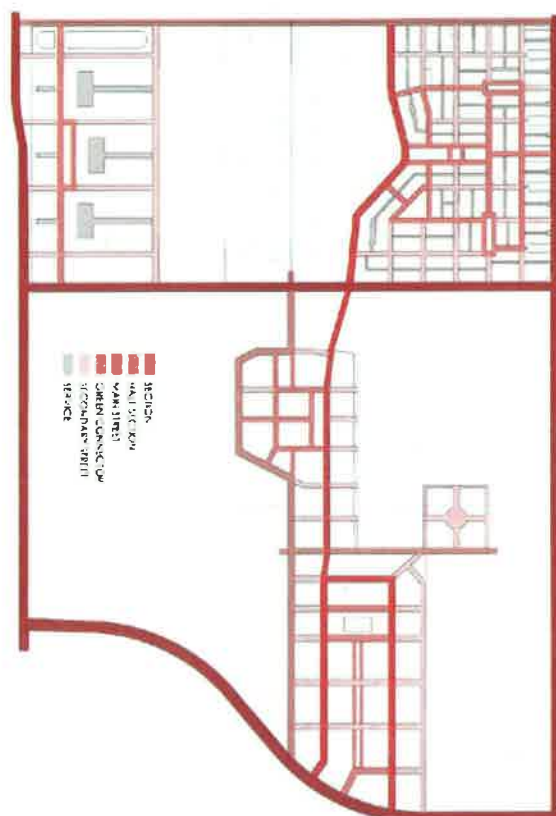
### WATER NETWORK:

This diagram illustrates how to allow a natural water flow to be used to interconnect each of the neighborhoods, while also creating natural features in the landscape.



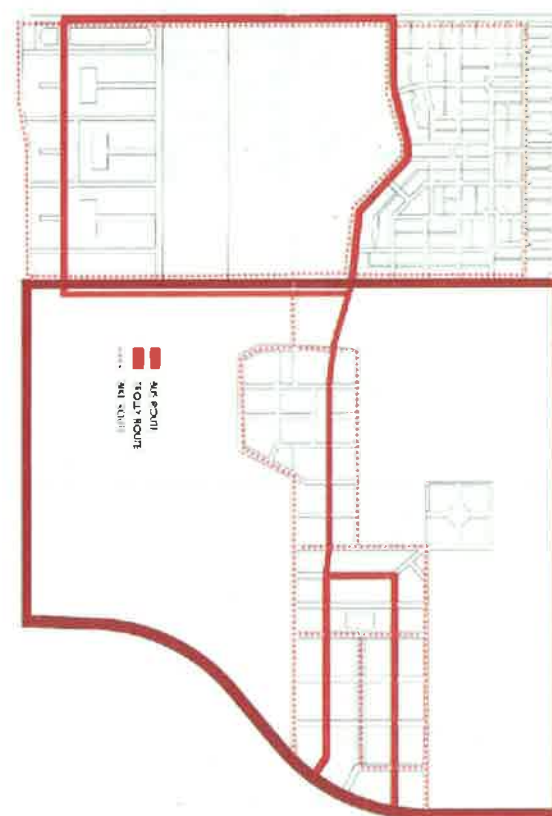
### STREET NETWORK:

This diagram illustrates a hierarchy of roads ranging from the major collectors (dark colored) to the local neighborhood streets (light colored). The roadways are layout to permit multiple access routes within each neighborhood.



**TRANSIT NETWORK:**

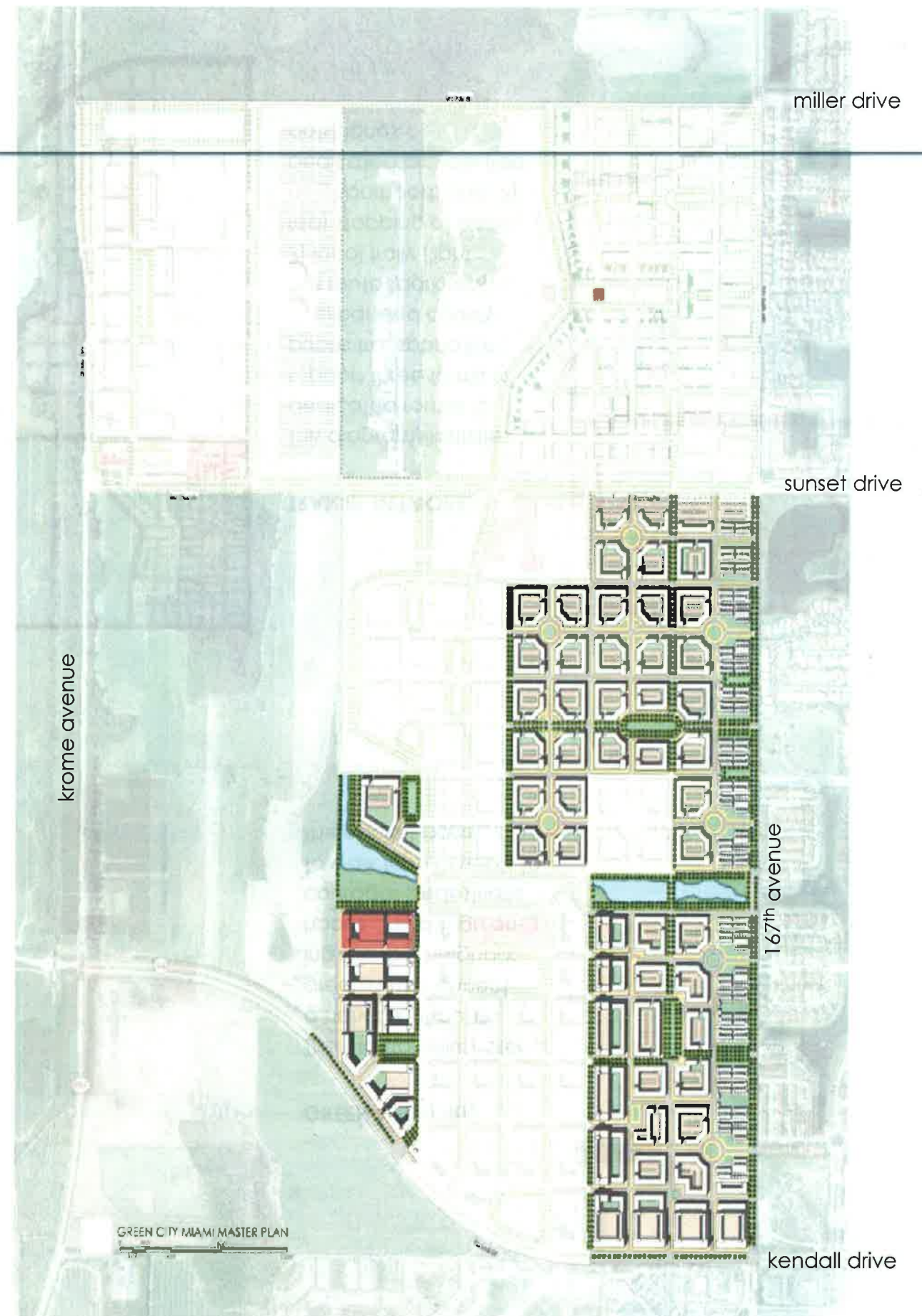
This diagram illustrates dedicated routes to support three forms of public transportation; 1) expanded county bus route (dark red); 2) local trolley (light red) stopping at each neighborhood; and, 3) dedicated bicycle (red dots) lanes.





## Charrette Master Plan II

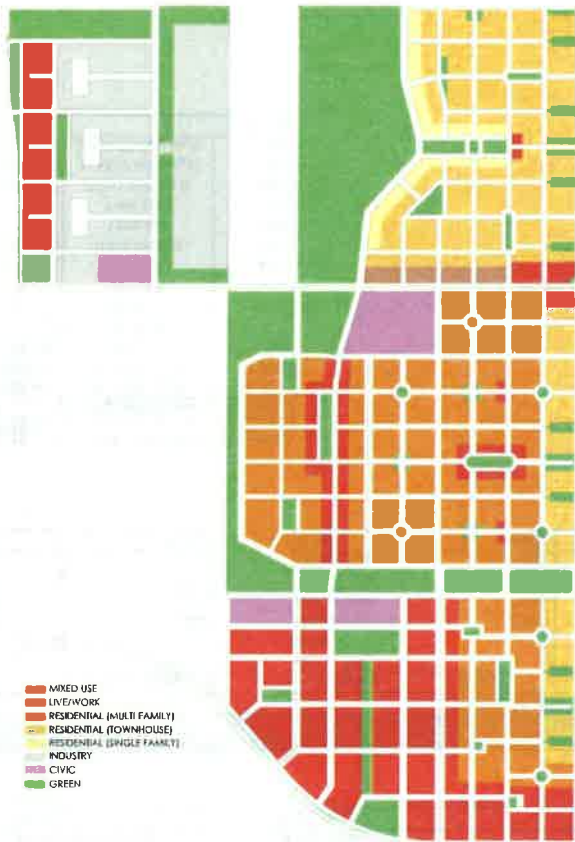
This master plan shows an additional 215 acres infilling the balance of the lands between 167th avenue and the majority land owner and a section of land along the west side adjacent to Kendall Drive. Master Plan II continues the networks of streets, waterways, and greens with the previous seamlessly. The combination of both master plan I + master plan II are projected to create a population growth of 22,854 residents, provide 10,138 residential units and 4,195,837 square feet of non-residential (government offices, residential and commercial space) and create 9,091 permanent jobs.





**LANDUSE:**

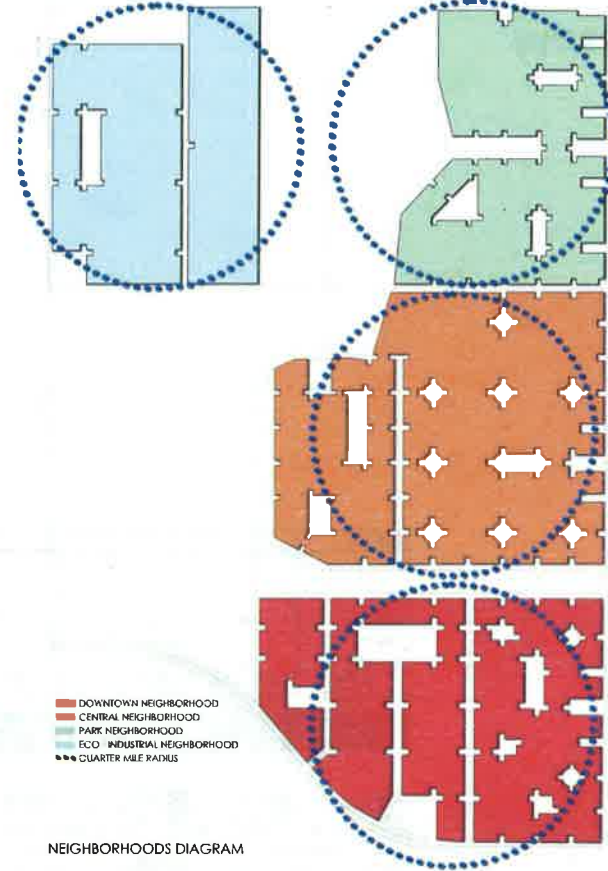
This diagram illustrates the location of landuses within each district. The dark red (mix-use) is located along the collector roads and at the downtown district, the light grey color indicates the EIP, the other colors represent single



LAND USE DIAGRAM

**NEIGHBORHOODS:**

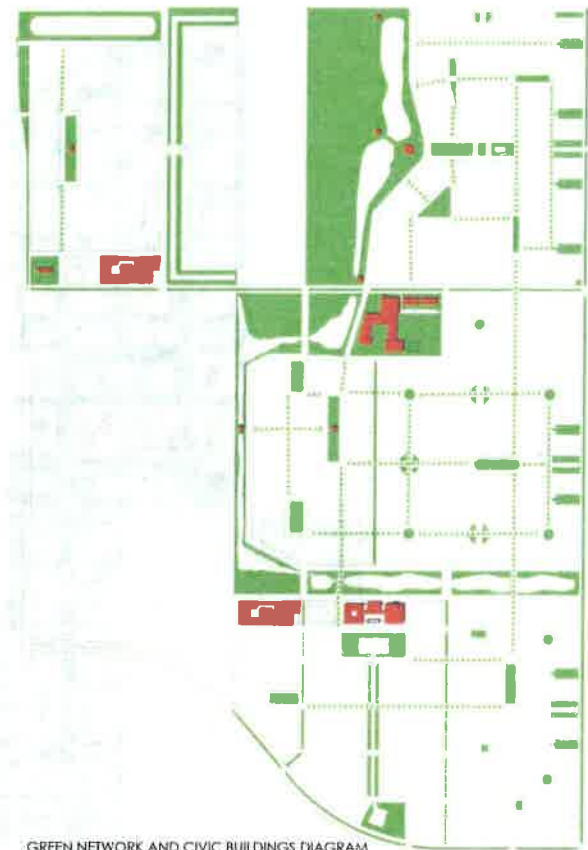
This diagram illustrates four differently colored neighborhoods; 1) downtown; 2) central; 3) park; and, 4) EIP. The circles shows five minute walking distance between each neighborhood.



NEIGHBORHOODS DIAGRAM

**GREEN NETWORK:**

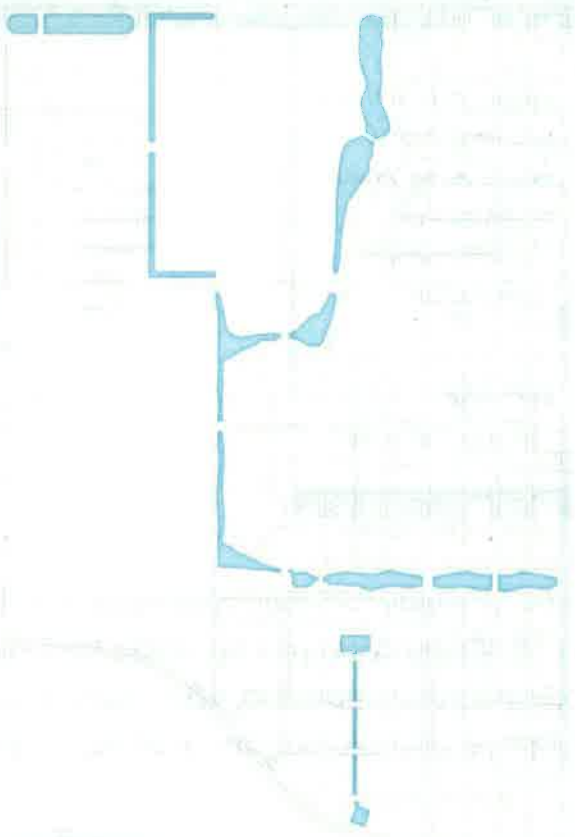
This diagram illustrates a network of public greens interconnecting the four neighborhoods. This design encourages pedestrians to walk from paseo's to the pocket parks.



GREEN NETWORK AND CIVIC BUILDINGS DIAGRAM

**WATER NETWORK:**

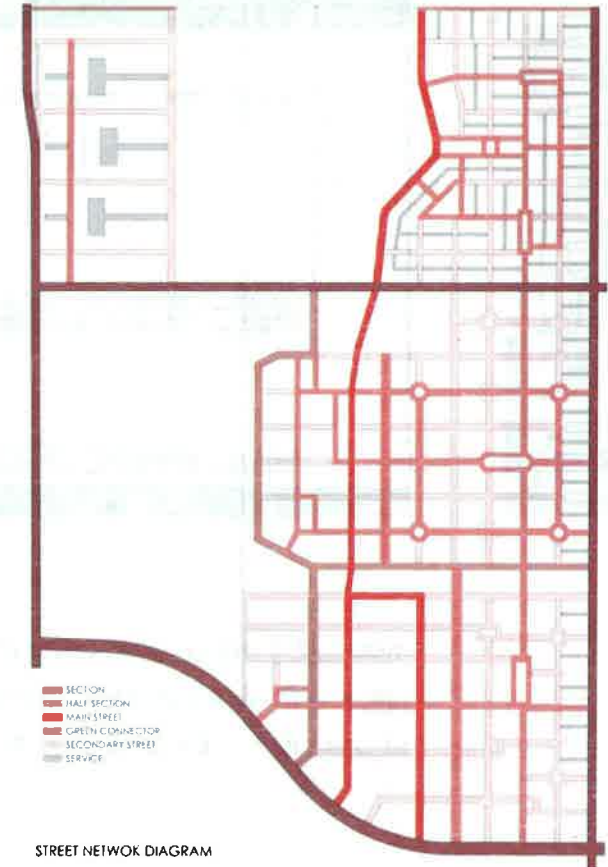
This diagram illustrates how to allow a natural water flow to be used to interconnect each of the neighborhoods, while also creating natural features in the landscape.



WATER FLOW DIAGRAM

**STREET NETWORK:**

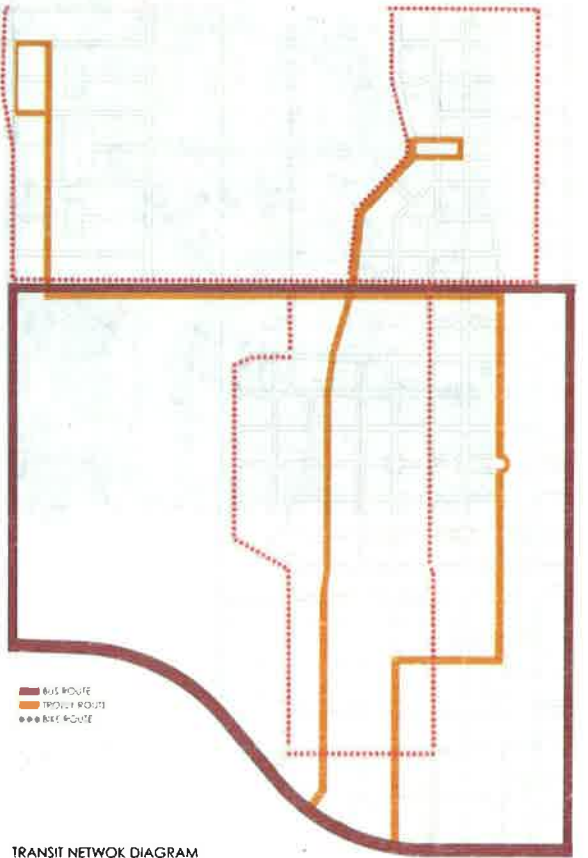
This diagram illustrates a hierarchy of roads ranging from the major collectors (dark colored) to the local neighborhood streets (light colored). The roadways are layout to permit multiple access routes within each neighborhood.



STREET NETWORK DIAGRAM

**TRANSIT NETWORK:**

This diagram illustrates dedicated routes to support three forms of public transportation; 1) expanded county bus route (dark red); 2) local trolley (light red) stopping at each neighborhood; and, 3) dedicated bicycle (red dots) lanes.



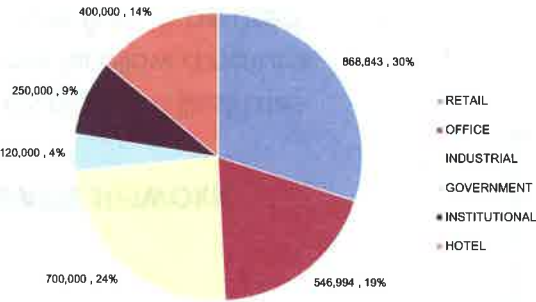
TRANSIT NETWORK DIAGRAM



# Master Plan I - Program

It was calculated, in the tables below, the proposed program of "Master Plan I" would produce a projected population growth of 9,803 residents of which 1,658 will be of school age for grades from Kindergarten to High School. These people would be living in 4,303 residential units ranging from single family homes to mid-rise buildings and they would have the opportunity to work in the 5,272 new jobs created from the 2,885,837 sq. ft. of non-residential (government, commercial and office).

## GREEN CITY PROGRAM ANALYSIS



GREEN CITY SUMMARY						
LAND ALLOCATION (ACRES)	CIVIC	SHOPFRONT	WORKSHOP	RESIDENTIAL	ROADWAYS	GREENS
	20	20	13	141	71	185
TOTAL ACRES	450					
PROGRAM SQ. FT.	RETAIL	OFFICE	INDUSTRIAL	GOVERNMENT	INSTITUTIONAL	HOTEL
	868,843	546,994	700,000	120,000	250,000	400,000
TOTAL NON-RESIDENTIAL	2,885,837 SQ. FT.					
TOTAL RESIDENTIAL	4,303 UNITS					
POPULATION PROJECTIONS	9,803 RESIDENTS					
STUDENT GENERATION	1,658 ELEMENTARY THROUGH HIGH SCHOOL (K-12)					
EMPLOYMENT ASSUMPTIONS	5,272 NUMBER OF JOBS THAT WILL BE CREATED WITH THE PROPOSED PROGRAM					

## GREEN CITY NEIGHBORHOODS PROGRAM ANALYSIS

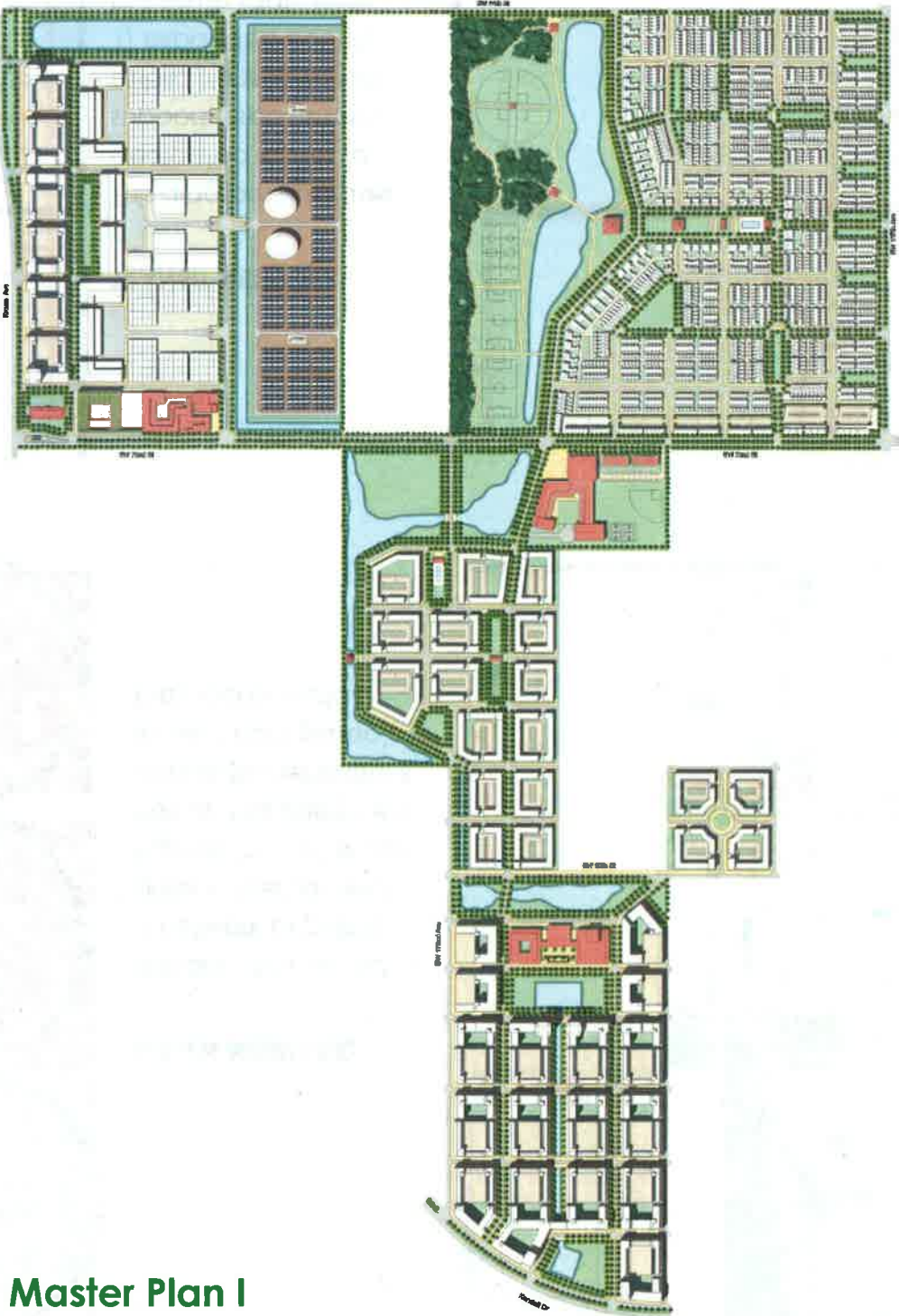
NEIGHBORHOOD	UNITS	ACRES	DENSITY	SQUARE FEET						ACRE(S) PARK/GREEN
				RETAIL	OFFICE	INDUSTRIAL	GOVERNMENT	INSTITUTIONAL	HOTEL	
DOWNTOWN	2,317	30.89	75 d.u./acre	443,551	139,902	-	120,000	-	200,000	10
CENTRAL	574	35.54	24 d.u./acre	158,820	27,866	-	-	100,000	-	15
PARK	646	62.77	8 d.u./acre	49,288	54,374	-	-	-	-	120
EIP	766	44.08	75 d.u./acre	217,185	324,853	700,000	-	150,000	200,000	40
TOTAL	4,303	173.29		868,843	546,994	700,000	120,000	250,000	400,000	185

## GREEN CITY PROJECTIONS

POPULATION PROJECTIONS				STUDENT GENERATION				NON-RESIDENTIAL NEEDS			
Program	Units	Ratio	Population	Program	Units	Ratio	Students	Program	Units	Sq. Ft./D.U.	Sq. Ft.
Ass't Living	0	0	-	Ass't Living	0	0	-	Retail	4,303	60	258,184
Hotel	0	0	-	Hotel	0	0	-	Office	4,303	15	64,546
Mixed-Use	2,971	2.14	6,358	Mixed-Use	2,971	0.37	1,099	Institutional	4,303	30	129,092
Multi-Family	686	2.23	1,530	Multi-Family	686	0.37	254				
Townhouse	541	2.9	1,569	Townhouse	541	0.46	249				
Single Family	105	3.3	347	Single Family	105	0.53	56				
Total	4,303		9,803	Total	4,303		1,658	Total			451,822

## EMPLOYMENT ASSUMPTIONS

Program	SF/Employee	AREA	Range/Employee	Jobs
Retail - Neighborhood	450	820,843	450-650 sq.ft.	1,931
Office Class A	350	546,994	225-450 sq.ft.	1,563
Grocery	700	48,000	per sq.ft.	69
Cinema	1500	-	per sq.ft.	-
Restaurant (Sit)	450	-	per sq.ft.	-
Restaurant (Fast)	100	-	per sq.ft.	-
Government	500	120,000	per sq.ft.	240
Hotel	1800	400,000	0.5-1.0/room	222
ACLF/Nursing	1	200	1 per bed	200
Parks & Recreation	1	185	1 per acre	185
Institutional	300	150,000	225-1,000 sq.ft.	500
Warehouse	4250	350,000	1,000-7,500 sq.ft.	82
Industrial	2500	350,000	2,500-10,000 sq.ft.	280
Total				5,272



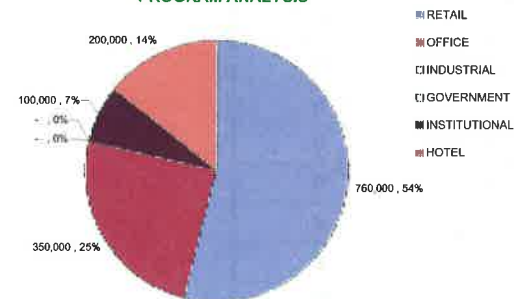
Master Plan I



## Master Plan II - Program

It was calculated, in the tables below, the proposed program of "Master Plan II" would produce an additional projected population growth of 13,051 residents of which 2,181 will be of school age for grades from Kindergarten to High School. These people would be living in 5,835 residential units ranging from multi-family apartments to mid-rise buildings and they would have the opportunity to work in the 3,819 new jobs created from the 1,310,000 sq. ft. of non-residential (commercial and office).

### GREEN CITY PROGRAM ANALYSIS



GREEN CITY SUMMARY						
LAND ALLOCATION (ACRES)	CIVIC	SHOPFRONT	WORKSHOP	RESIDENTIAL	ROADWAYS	GREENS
	15	30	30	100	35	20
TOTAL ACRES	215					
PROGRAM SQ. FT.	RETAIL	OFFICE	INDUSTRIAL	GOVERNMENT	INSTITUTIONAL	HOTEL
	760,000	350,000	-	-	100,000	200,000
TOTAL NON-RESIDENTIAL	1,310,000 SQ. FT.					
TOTAL RESIDENTIAL	5,835 UNITS					
POPULATION PROJECTIONS	13,051 RESIDENTS					
STUDENT GENERATION	2,181 ELEMENTARY THROUGH HIGH SCHOOL (K-12)					
EMPLOYMENT ASSUMPTIONS	3,819 NUMBER OF JOBS THAT WILL BE CREATED WITH THE PROPOSED PROGRAM					

### GREEN CITY NEIGHBORHOODS PROGRAM ANALYSIS

NEIGHBORHOOD	UNITS	ACRES	HIGH	MEDIUM	LOW	RETAIL	OFFICE	INDUSTRIAL	GOVERNMENT	INSTITUTIONAL	HOTEL	ACRE(S) PARK/GREEN
DOWNTOWN	3,585	105.00	75	24	-	660,000	300,000	-	-	100,000	200,000	10
CENTRAL	2,250	110.00	-	24	8	100,000	50,000	-	-	-	-	-
TOTAL	5,835	215.00	-	-	-	760,000	350,000	-	-	100,000	200,000	10

### GREEN CITY PROJECTIONS

POPULATION PROJECTIONS				STUDENT GENERATION				NON-RESIDENTIAL NEEDS			
Program	Units	Ratio	Population	Program	Units	Ratio	Students	Program	Units	Sq.Ft./D.U.	Sq.Ft.
Ass't Living	0	0	-	Ass't Living	0	0	-	Retail	5,835	60	350,100
Hotel	0	0	-	Hotel	0	0	-	Office	5,835	15	87,525
Mixed-Use	1,425	2.14	3,050	Mixed-Use	1,425	0.37	527	Institutional	5,835	30	175,050
Multi-Family	4,160	2.23	9,277	Multi-Family	4,160	0.37	1,539				
Townhouse	250	2.9	725	Townhouse	250	0.46	115				
Single Family	-	3.3	-	Single Family	-	0.53	-				
Total	5,835	-	13,051	Total	5,835	-	2,181	Total			612,675

EMPLOYMENT ASSUMPTIONS				
Program	SF/Employee	AREA	Range/Employee	Jobs
Retail - Neighborhood	450	712,000	450-650 sq.ft.	1,689
Office Class A	350	350,000	225-450 sq.ft.	1,000
Grocery	700	48,000	per sq.ft.	69
Cinema	1500	-	per sq.ft.	-
Restaurant (Sit)	450	-	per sq.ft.	-
Restaurant (Fast)	100	-	per sq.ft.	-
Government	500	120,000	per sq.ft.	240
Hotel	1800	200,000	0.5-1.0/room	111
ACLF/Nursing	1	200	1 per bed	200
Parks & Recreation	10	10	1 per acre	10
Institutional	300	150,000	225-1,000 sq.ft.	500
Warehouse	4250	-	1,000-7,500 sq.ft.	-
Industrial	2500	-	2,500-10,000 sq.ft.	-
Total				3,819

BY SCHOOL BOUNDARIES							
School	Name	Students	Teachers	Student/Teacher Ratio	Populated	Available	Address
Elementary	Christina M. Eve Elementary	783	52	15.1	84%	16%	16251 SW 99th Street
Middle	Lamar Louise Curry Middle	1,502	57	26.4	120%	-20%	16750 SW 47th Street
High	John A. Ferguson Senior	2,595	114	22.8	95%	5%	15900 SW 56th Street

Note: Miami-Dade County voters elected to limit the public school classroom size in each grade level as follows:

School	Student/Teacher Ratio
Elementary	18.0
Middle	22.0
High	24.0



## Master Plan II



# 10 ACRE OWNERSHIP PATTERN



GREEN CITY MIAMI IS SPREAD OVER 660 ACRES. THE MAJORITY OF THE LAND, 445 ACRES, IS OWNED BY CONSTRUCTORA LIMONAR. THE OWNERSHIP PATTERN OF THE BALANCE OF THE SITE IS ILLUSTRATED HERE. THE NEXT LARGEST LAND OWNER IS THE HL MILLS FAMILY WITH 120 ACRES, THEN THE OSCAR FINANCE CORP WITH 35 ACRES AND THE BALANCE OF 60 ACRES IS OWNED IN 5 & 10 ACRE TRACTS.

CENTRAL DISTRICT				
TRACT	ACRES	RETAIL	OFFICE	RESIDENTIAL
01	10	50,000	25,000	210
02	10	50,000	25,000	240
16	10	-	-	160
15	10	-	-	240
14	10	-	-	240
17	10	-	-	160
18	10	-	-	240
19	10	-	-	240
32	10	-	-	160
30	05	-	-	120
30	05	-	-	120
28	10	-	-	120
TOTAL	110	100,000	50,000	2,250
DOWNTOWN DISTRICT				
TRACT	ACRES	RETAIL	OFFICE	RESIDENTIAL
33	10	-	-	80
34	10	-	-	120
37	10	LANDS DESIGNATED FOR NEW URBAN K-20 SCHOOL		
48	10	-	-	160
47	10	-	-	495
44	10	60,000	-	750
49	10	-	-	160
50	10	-	-	495
53	05	120,000	60,000	375
64	10	240,000	120,000	455
63	10	240,000	120,000	495
TOTAL	105	660,000	300,000	3,585

PROGRAM DISTRIBUTION BY DISTRICT - THE ABOVE TABLES PROJECT THE ADDITIONAL PROGRAM GENERATED FROM INCLUSION OF LAND AREAS WITHIN THE CENTRAL AND DOWNTOWN DISTRICTS THAT ARE HELD IN OWNERSHIP BY OTHERS.





10 ACRE TRACTS - LOW DENSITY



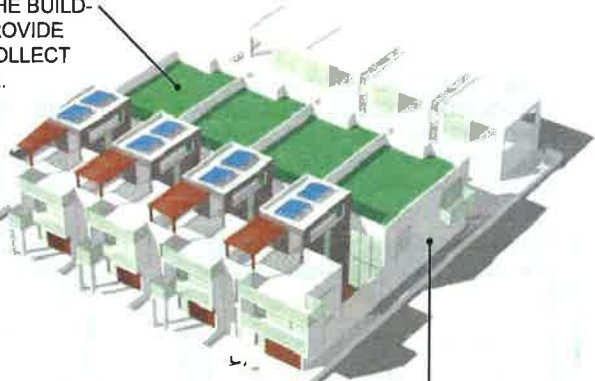
MIAMI GREEN CITY IS COMPOSED OF FOUR DISTINCT NEIGHBORHOODS; 1) DOWNTOWN DISTRICT; 2) CENTRAL DISTRICT; 3) PARK DISTRICT; AND, 4) EIP DISTRICT. THE LOW DENSITY IS LOCATED IN THE PARK DISTRICT. IT INCLUDES FROM SINGLE FAMILY HOMES TO TOWNHOMES. THE LOW DENSITY IS LOCATED ADJACENT TO THE PROPOSED 120 ACRE REGIONAL PARK.



10 ACRE TRACT WITH RESIDENTIAL DENSITY RANGING FROM 4 D.U./ACRE TO 16 D.U./ACRE.

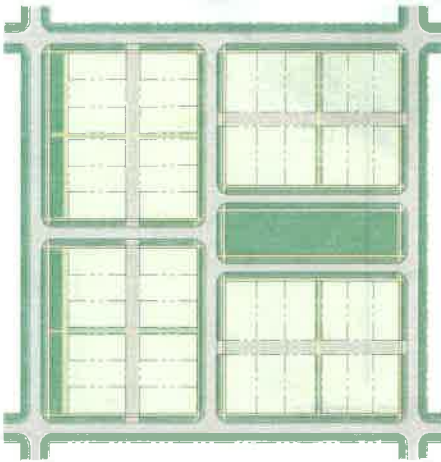
PUBLIC GREEN

WATER RECYCLING - ALL THE BUILDINGS ARE REQUIRED TO PROVIDE FOR ITS OWN MEANS TO COLLECT AND RECYCLE RAIN WATER.

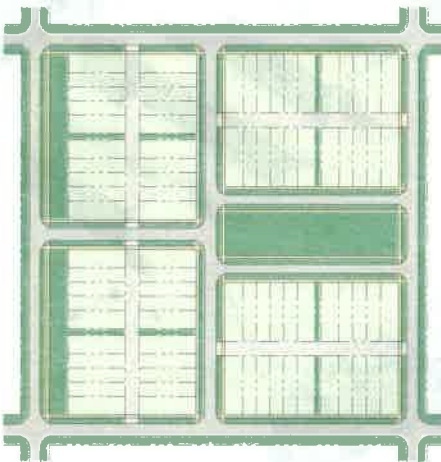


LEED CERTIFICATION - LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN CERTIFICATION IS REQUIRED TO IMPROVE THE PERFORMANCE OF ALL THE BUILDINGS.

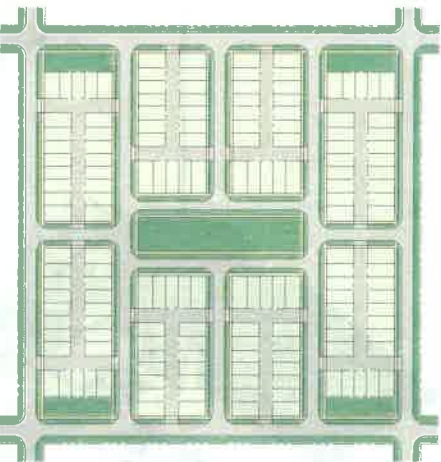
STORMWATER DRAINAGE AND STORAGE - GREENS AND BIOSWALES ARE STRATEGICALLY LOCATED THROUGHOUT EACH OF THE 10 ACRE TRACTS FOR STORMWATER RETENTION.



FOURTY & FIFTY (40'-50') FOOT WIDE LOTS - LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH LOTS THAT ARE 40' TO 50' FOOT WIDE X 100' FOOT DEEP; PRODUCING GROSS DENSITY OF 4 D.U./ACRE.



TWENTY-FOUR (24') FOOT WIDE LOTS - LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH 24' FOOT WIDE X 100' FOOT DEEP LOTS; PRODUCING A GROSS DENSITY OF 8 D.U./ACRE.



TWENTY-FOUR (24') FOOT WIDE LOTS - THIS LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH 24' FOOT WIDE X 46' FOOT DEEP LOTS; PRODUCING A GROSS DENSITY OF 16 D.U./ACRE.



# 10 ACRE TRACTS - MEDIUM DENSITY



MIAMI GREEN CITY IS COMPOSED OF FOUR DISTINCT NEIGHBORHOODS; 1) DOWNTOWN DISTRICT; 2) CENTRAL DISTRICT; 3) PARK DISTRICT; AND, 4) EIP DISTRICT. THE MEDIUM DENSITY IS SITUATED IN THE CENTRAL DISTRICT. THIS DISTRICT HAS A MIX-OF-LANDUSES WHICH INCLUDES APARTMENTS, RETAIL, K-12 SCHOOL, AND A NETWORK OF PARKS AND CANALS THAT EMBRACES ONE OF THE EDGES.

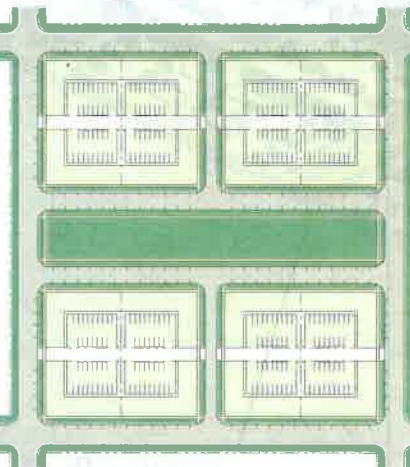


**WATER RECYCLING** - ALL THE BUILDINGS ARE REQUIRED TO PROVIDE FOR ITS OWN MEANS TO COLLECT AND RECYCLE RAIN WATER.

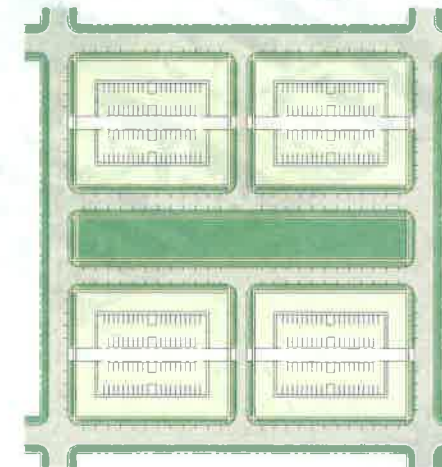
**PUBLIC GREEN**

**LEED CERTIFICATION** - LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN CERTIFICATION IS REQUIRED TO IMPROVE THE PERFORMANCE OF ALL THE BUILDINGS.

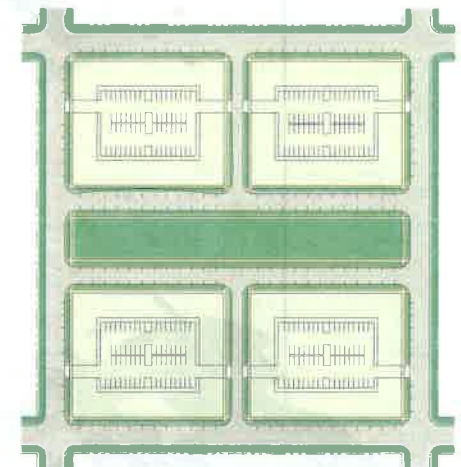
**STORMWATER DRAINAGE AND STORAGE** - GREENS AND BIO-SWALES ARE STRATEGICALLY LOCATED THROUGHOUT EACH OF THE 10 ACRE TRACTS FOR STORMWATER RETENTION..



**APARTMENT BLOCK TYPE I** - THIS LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH FOUR PARCELS PER BLOCK; PRODUCING A GROSS DENSITY OF 24 D.U./ACRE.



**APARTMENT BLOCK TYPE II** - THIS LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH TWO PARCELS PER BLOCK; PRODUCING A GROSS DENSITY OF 20 D.U./ACRE.



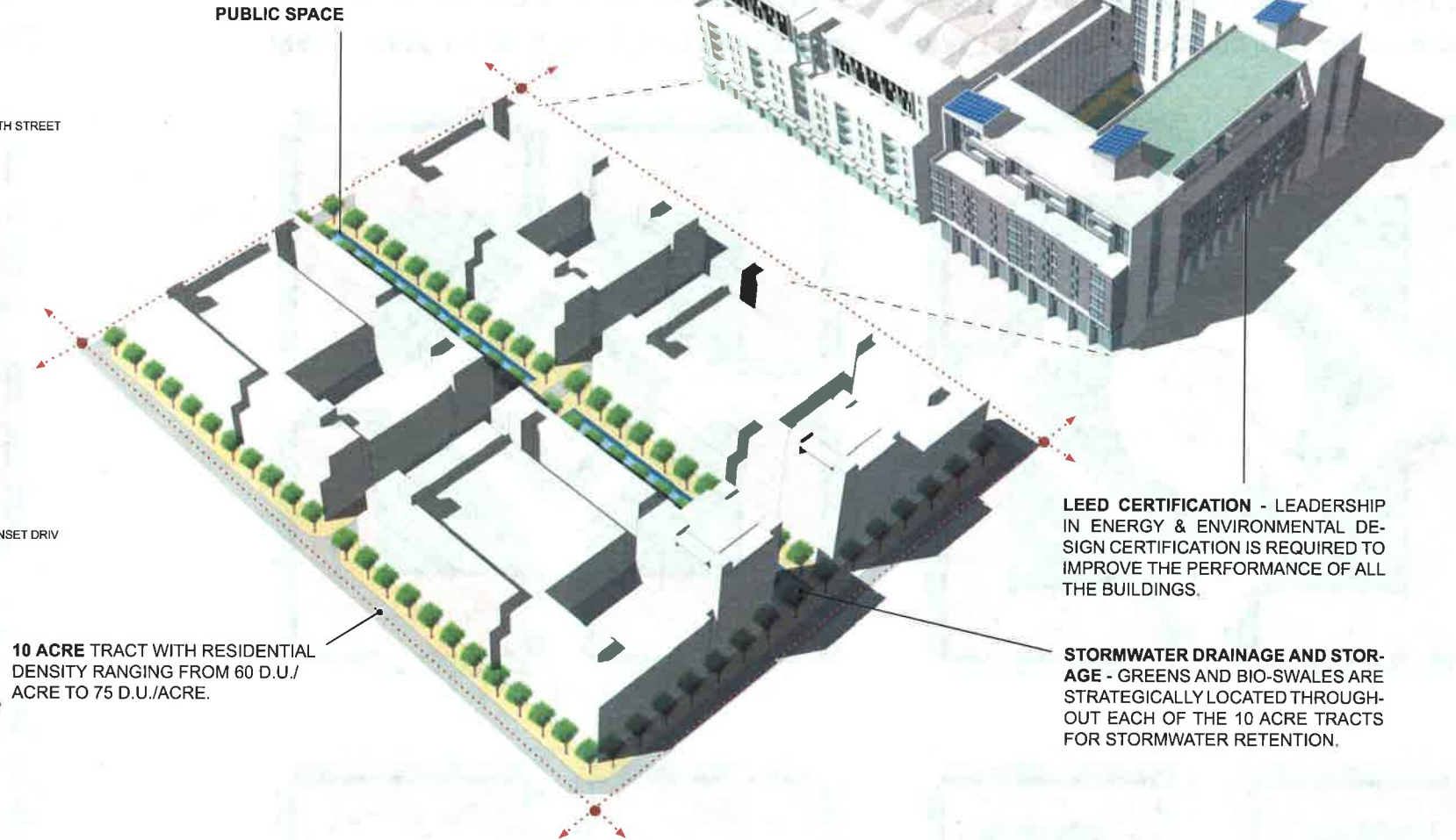
**APARTMENT BLOCK TYPE III** - THIS LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH ONE PARCEL OVER AN ENTIRE BLOCK; PRODUCING A GROSS DENSITY OF 16 D.U./ACRE.



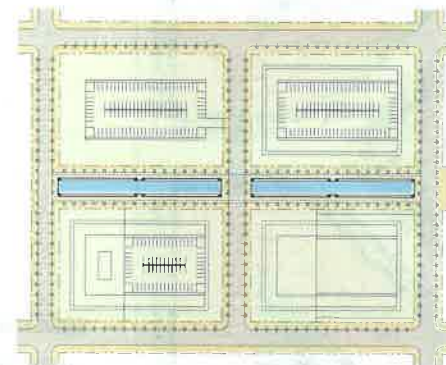
# 10 ACRE TRACTS - HIGH DENSITY



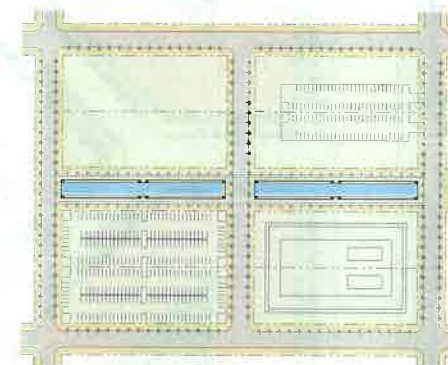
MIAMI GREEN CITY IS COMPOSED OF FOUR DISTINCT NEIGHBORHOODS; 1) DOWNTOWN DISTRICT; 2) CENTRAL DISTRICT; 3) PARK DISTRICT; AND, 4) EIP DISTRICT. THE HIGHEST DENSITY AND INTENSITY IS FOUND IN THE DOWNTOWN DISTRICT; WHICH INCLUDES RETAIL, OFFICE, RESIDENTIAL, AND CIVIC LANDUSES. THE BLOCK IS SIZED TO ACCOMMODATE LARGER TENANTS, THUS OFFERING MORE DIVERSITY.



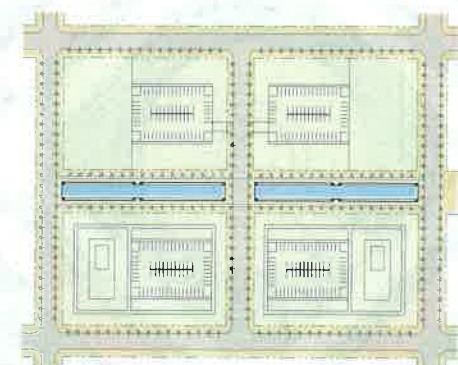
10 ACRE TRACT WITH RESIDENTIAL DENSITY RANGING FROM 60 D.U./ACRE TO 75 D.U./ACRE.



**MIXED-USE BLOCK TYPE I** - LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH SINGLE PARCEL BLOCK; PRODUCING A GROSS DENSITY FROM 60 D.U./ACRE TO 75 D.U./ACRE AND UP TO 500,000 SQ. FT. OF NON-RESIDENTIAL.



**MIXED-USE BLOCK TYPE II** - LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH MULTIPLE PARCELS DIVIDING THE BLOCK; PRODUCING A GROSS DENSITY FROM 60 D.U./ACRE TO 75 D.U./ACRE AND UP TO 500,000 SQ. FT. OF NON-RESIDENTIAL.

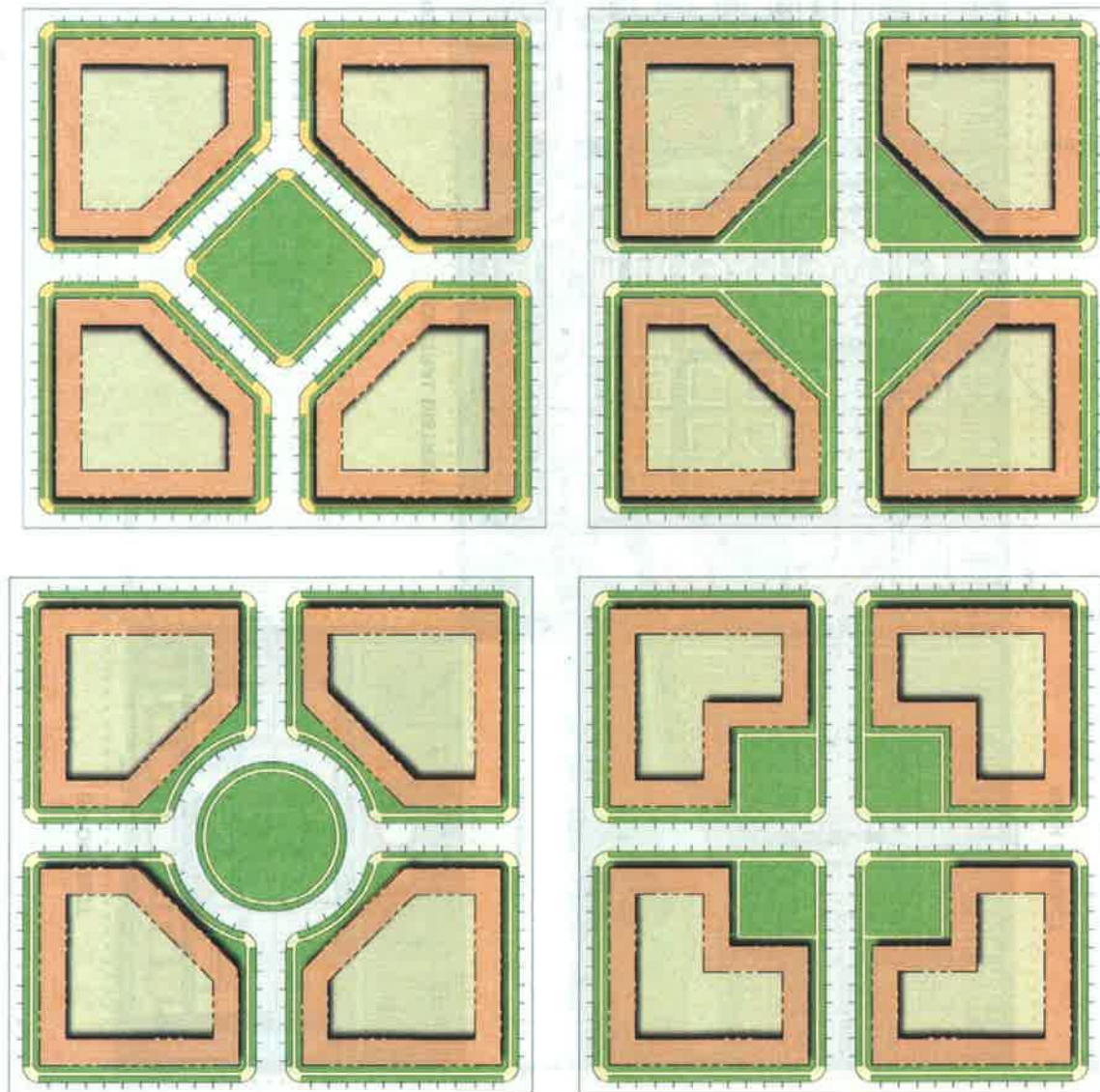


**MIXED-USE BLOCK TYPE III** - LAYOUT DEMONSTRATES A 10 ACRE TRACT WITH SINGLE PARCELS THAT CAN ACCOMMODATE LARGER COMMERCIAL BIG BOX TENANTS; PRODUCING THE SAME RESIDENTIAL DENSITIES AS TYPE I & TYPE II.



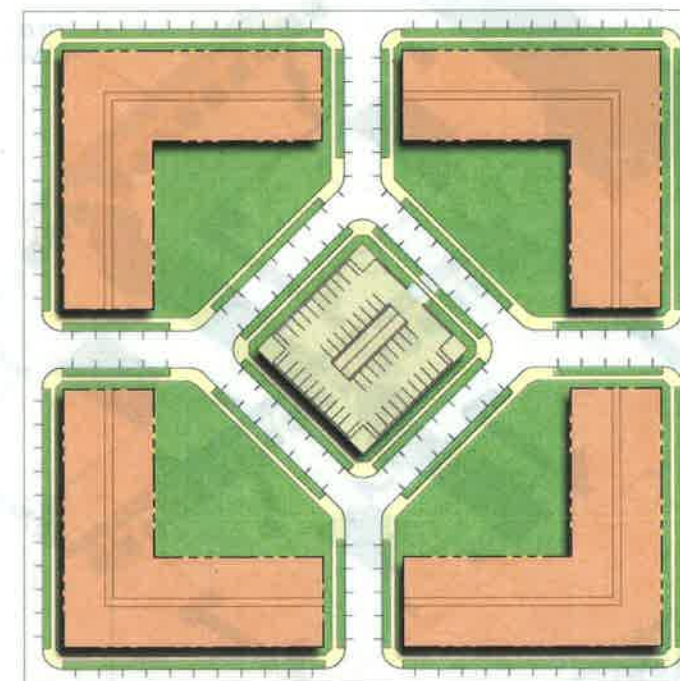
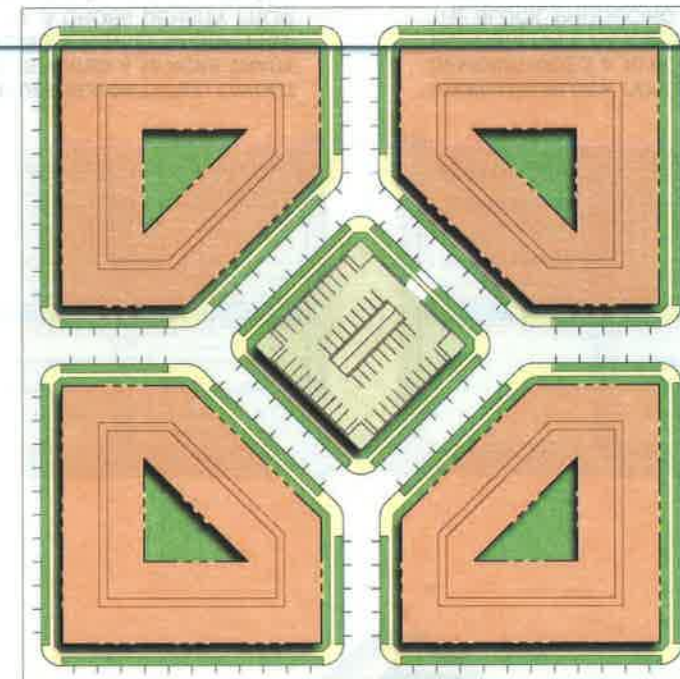
## 10 ACRE TRACT - PARKING STUDY

The entire study area within Green City Miami is subdivided into 10 acre parcels. This increment presents an opportunity to study alternative ways to handle off-site parking. Each of the diagrams, in these next two pages, represent a single 10 acre parcel that has been subdivided into four equal blocks with public greens and a single five-story parking garage surrounded by perimeter buildings that access the parking garage along pedestrian bridges.



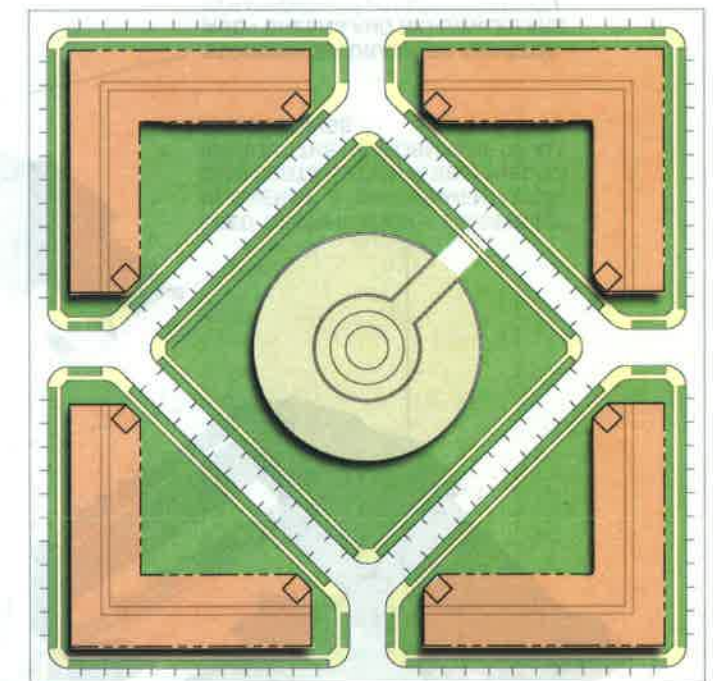
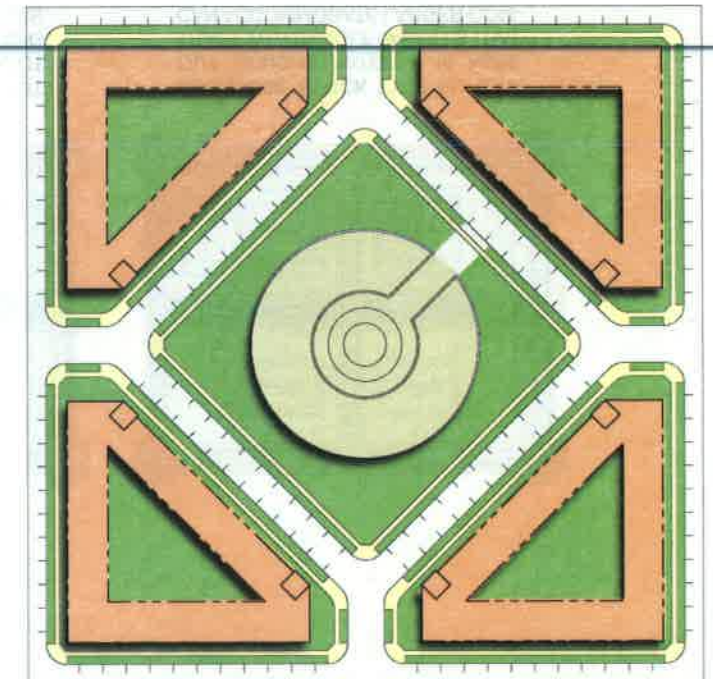
**STANDARD TRACT** - Each of these 10 acre tract studies have a common thread that makes them the same; they have a density of 18 d.u./acre and all the off-site parking (shown in light grey) is located in the rear of the buildings. What distinguishes each is how they carve the public and semi-public green space.

## 13 D.U./ACRE



**TRACT STUDY 1** - All parking is located in a 46 p.s./floor parking garage. This scheme frees up land area in each block, creating more public space and a greater diversity of architecture.

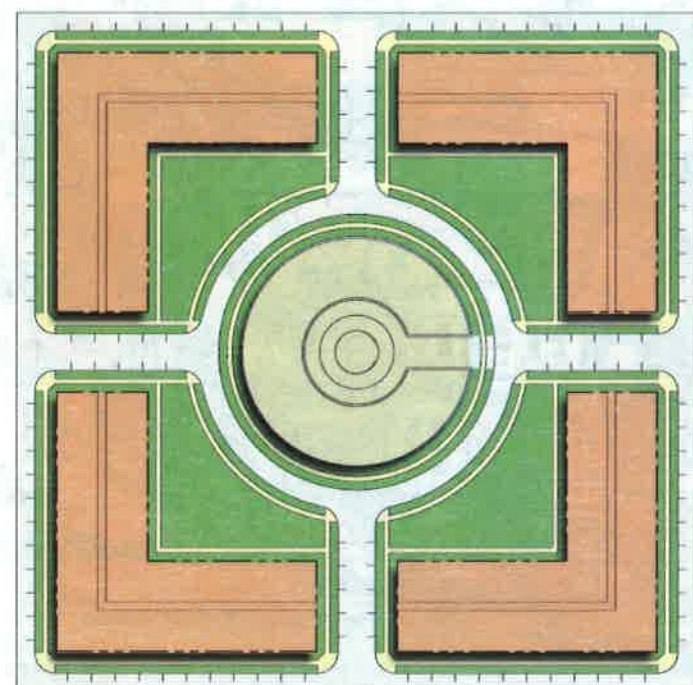
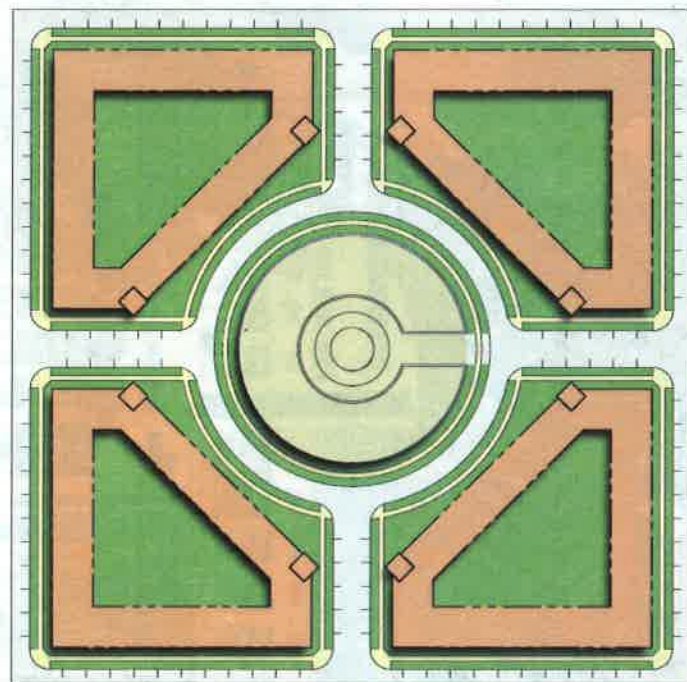
## 20 D.U./ACRE



**TRACT STUDY 2** - All parking is located in a circular 88 p.s./floor parking garage with program at ground level in a rectangular block. This scheme splits up the green areas of each block.

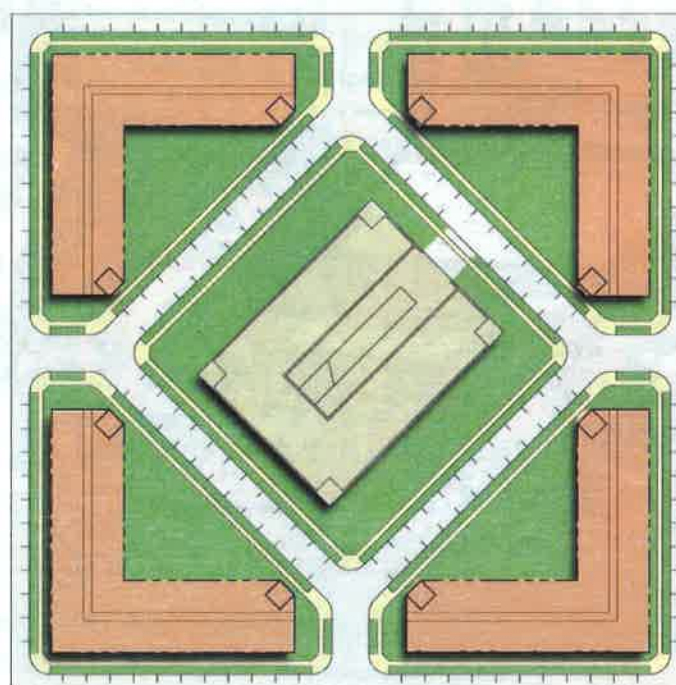
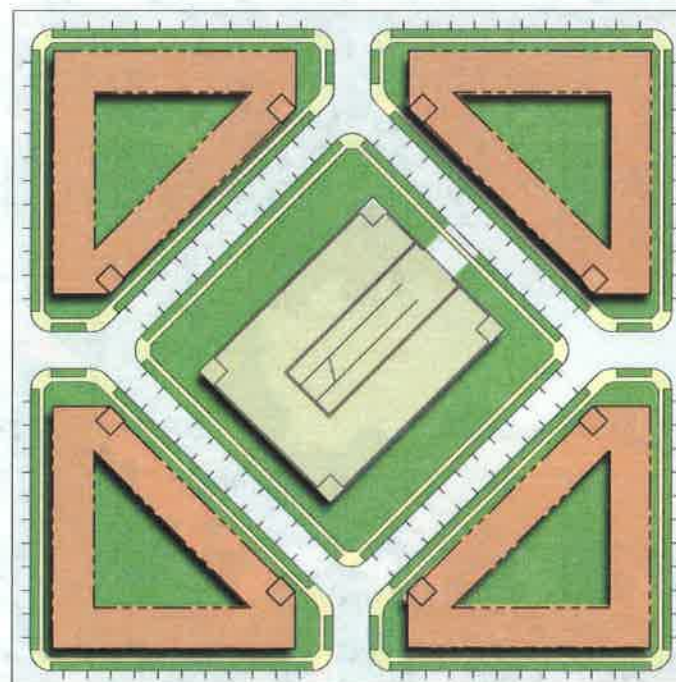


20 D.U./ACRE



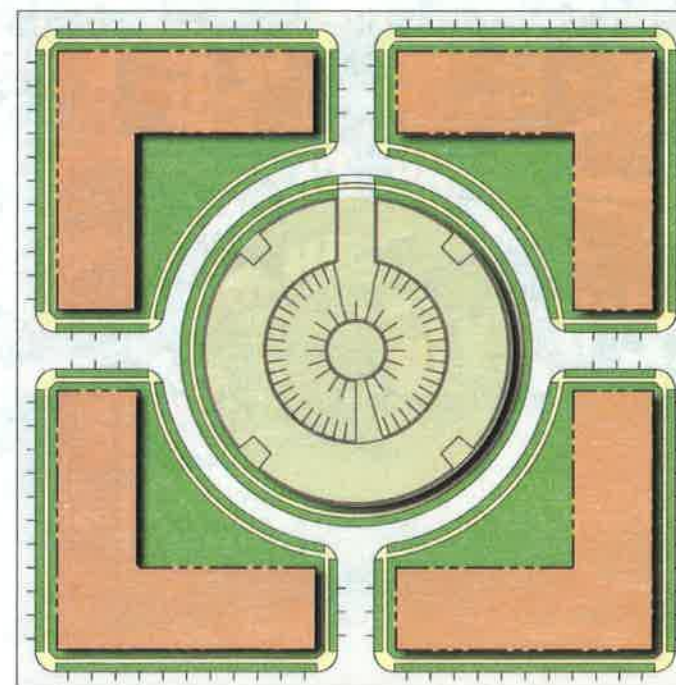
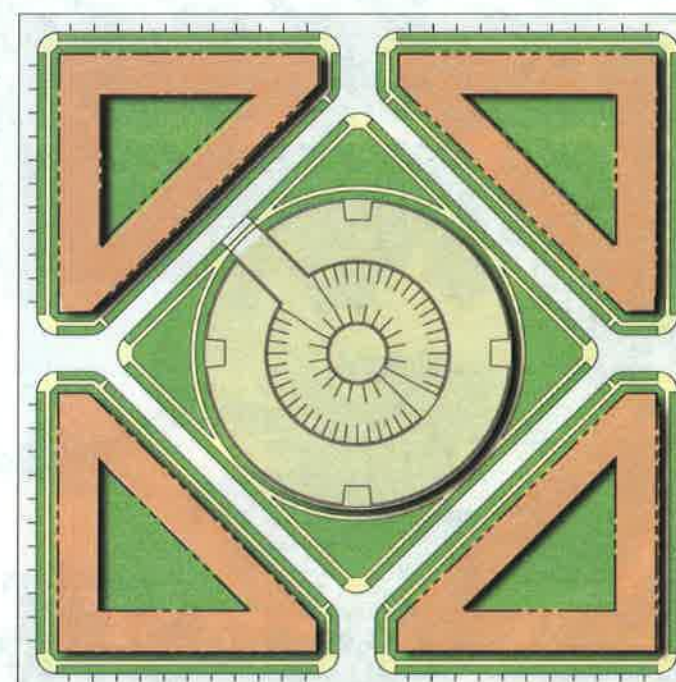
**TRACT STUDY 3** - All parking is located in the same parking garage as tract study 2 but it sits in a circular block maximizing the green areas in each block.

30 D.U./ACRE



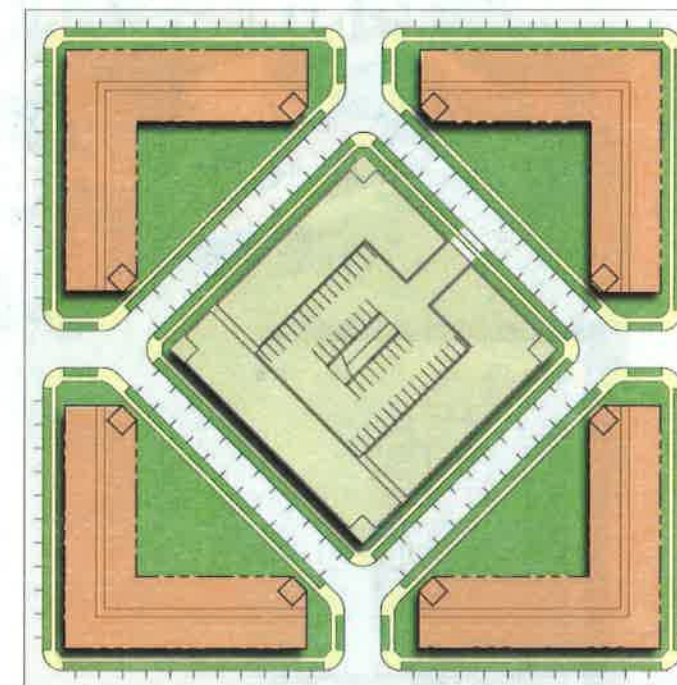
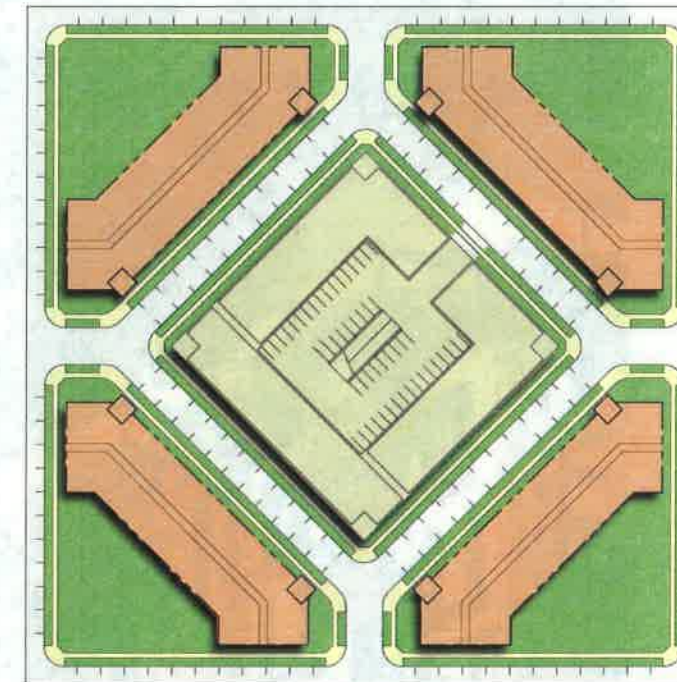
**TRACT STUDY 4** - All parking is located in a 128 p.s./floor parking garage with program at the ground level in a rectangular block. This scheme limits the layout within each block.

48 D.U./ACRE



**TRACT STUDY 5** - All parking is located in a circular 208 p.s./floor parking garage with program at the ground level in a circular block. This scheme flows traffic more smoothly.

48 D.U./ACRE



**TRACT STUDY 6** - All parking is located in a 208 p.s./floor parking garage with program at the ground level in a rectangular block. This scheme slows down traffic.

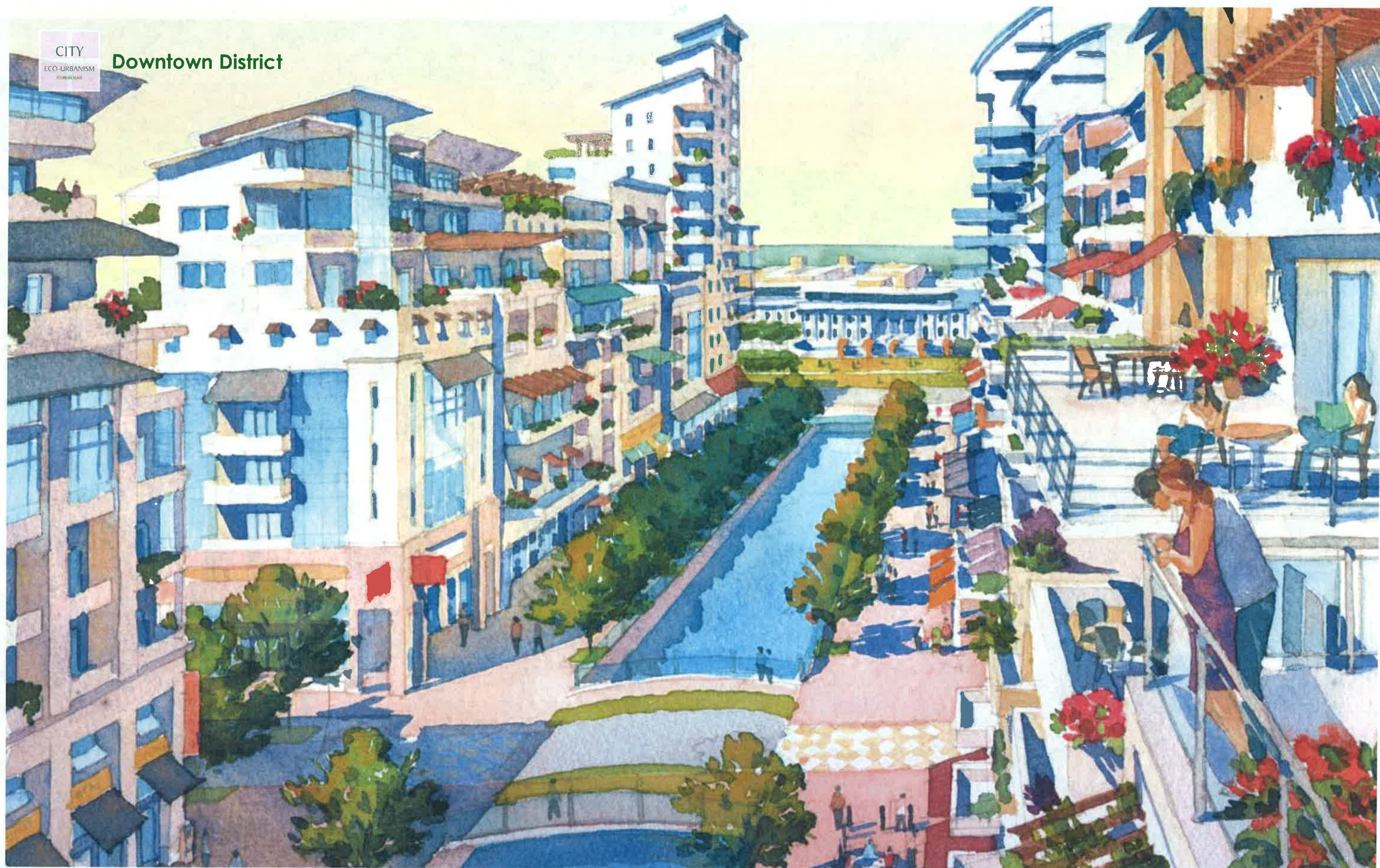


## Downtown District





## Downtown District





CITY  
ECO-URBANISM  
WORKING PLAN

## Central District





CITY  
ECO-URBANISM  
SUSTAINABLE PLANS

# Park District





## Eco-Industrial Park District





# HYDROPONICS FARMING



THE HYDROPONICS FACILITY GROWS PLANTS WITHOUT SOIL UTILIZING 1/3 THE WATER. THE VALUE OF HYDROPONICS GROWING IS TO PRODUCE HIGHER YIELDS, WITH LESS PESTICIDES AND LESS WATER WASTE. HYDROPONICS VEGETABLES TASTE BETTER THAN GARDEN ONES BECAUSE THEY GET ALL THE MICRONUTRIENTS MAKING THEN SUPERIOR IN TASTE, COLOR, SIZE, AND EVEN NUTRITIONAL VALUE.



HYDROPONICS FACADE

THE ROOFTOP **SOLAR PANELS** WILL PROVIDE KILOWATTS OF ELECTRICITY AND HOT WATER FOR USE BY THE BUILDING.

**LEED** - LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN IS REQUIRED TO IMPROVE PERFORMANCE OF ALL BUILDINGS.

INTERIOR **HIGH INTENSITY DISCHARGE LIGHTS** ARE USED TO REPRODUCE THE BLUE END OF THE SPECTRUM FOR YOUNG PLANTS.

SECURELY **VENTILATED** SUNSPACE TO PROVIDE FOR COOLING OF THE BUILDING.

EXTERIOR **SUN SHADE SCREENS** ARE USED TO PROVIDE FOR COOLING OF THE BUILDING.

SECURED LONG TERM, **BIKE PARKING** IS PROVIDED ON-SITE AND WITHIN THE RESIDENTIAL HOME.

THE **WIND** IS CAPTURED AND REDIRECTED ALLOWING NATURAL VENTILATION OF THE BUILDING THROUGH LARGE VERTICAL OPENINGS ALONG THE FACADE AND THROUGH ITS ROOF TOP VENTS.



OPEN AIR BIO-SWALE GARDENS

THE RAINWATER IS COLLECTED ON THE CATCHMENT AREA IN THE ROOF TOP. THE HARVESTED RAINWATER IS CONVEYED THROUGH THE ROOF DRAINS AND PIPING TO A SINGLE POINT OF DISCHARGE INTO STORAGE TANKS.



LARGE CANOPY STREET TREES PROVIDE FOR SHADING AND COOLING ALONG THE SIDEWALKS.

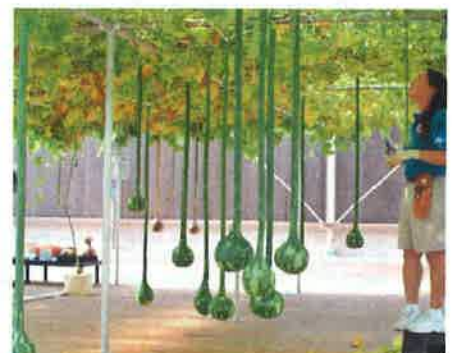
BUS STATION

DEDICATED BIKE LANE

METAL FRAME WALLS ARE DESIGNED TO ALLOW FOR OPTIMUM PLANT LIGHTING AND NATURAL VENTILATION.

**ZERO-ENERGY COMMERCIAL BUILDING (ZEB)** IS DESIGNED TO CAPTURE AND STORE RAINWATER THROUGH ITS ROOF TOP AND PROVIDE FOR ITS OWN ENERGY NEEDS USING SOME FORM OF ON-SITE RENEWABLE ENERGY.

ONE ADVANTAGE OF HYDROPONICS AGRICULTURE IS THAT IT CAN BE GROWN VERTICALLY SO IT CAN BE **FIVE TO TEN TIMES** MORE PRODUCTIVE IN THE SAME AMOUNT OF LAND.



SOILESS CONTROLLED AGRICULTURE



# ECO-INDUSTRIAL PARK DISTRICT



THIS CARBON-NEUTRAL ECO-INDUSTRIAL PARK IS SITUATED ON 120 ACRES (50 HECTARES). IT WILL PROVIDE FACILITIES FOR A RESEARCH INSTITUTE WITH EM-PHASIZE ON HYDROPONICS, AQUAPONICS, AND RENEWABLE ENERGY. INCLUDING OVER 200,000 SQ. FT. OF RETAIL, 325,000 SQ. FT. OF OFFICE, 766 RESIDENTIAL UNITS, A HOTEL AND 700,000 SQ. FT. OF WAREHOUSE SPACE.

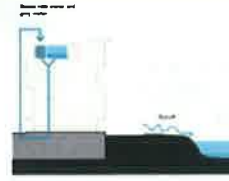
THESE MIXED-USE BUILDINGS PROVIDE OFFICE AND RESIDENTIAL USES. THE BUILDINGS ARE DE-SIGNED TO CAPTURE AND STORE RAIN WATER THROUGH ITS GREEN ROOF TOPS AND PROVIDE FOR ITS OWN ENERGY NEEDS THOUGH SOLAR CELLS AND PANELS.

WAREHOUSES ARE LAYED OUT IN SECURED CUSTERS SEPARATING TRUCK AND VEHICULAR TRAFFIC. THEY ARE DESIGNED TO CAPTURE AND STORE RAIN WATER AND PROVIDE FOR ITS OWN ENERGY NEEDS THROUGH SOLAR CELLS AND PANELS.



AQUAPONICS LABORATORY

THE **FARMERS MARKET** WILL PROVIDE THE GENERAL PUBLIC A DESTINATION PLACE WHERE THEY CAN ACCESS THE PRODUCT IT GROWS - VEGETABLES, ORNAMENTAL PLANTS, AND FISH.



WATER RECYCLING

DISTINCT MIXED-USE BUILDINGS PROVIDING RE-TAIL AT THE GROUND AND RESIDENTIAL ABOVE. THE BUILDINGS ARE DESIGNED TO CAPTURE AND STORE RAIN WATER AND TO HARDNESTTHE SUN RAYS THROUGH SOLAR CELLS AND PANELS.

**BIO-MASS** POWER PLANT THAT UTILIZES THE LOCAL FARMS TO PROVIDE RE-SOURCES SUCH AS EN-ERGY CROPS, MANURE, CLEAN WASTE AND RES-IDUES FROM CROPS, AND FOREST.

**STORMWATER DRAINAGE AND STORAGE.** THE SURROUNDING BUILDINGS WILL BE DRAINING TO AND DRAWING FROM THIS RESOURCE FOR ITS GREYWATER NEEDS. THESE BIO-SWALES STORE RAINWATER FOR RE-USE AFTER THE RAIN SUBSIDES.



LITTORAL ZONES

GREEN HOTEL

PUBLIC PLAZA

**LEED - LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN** IS REQUIRED TO IMPROVE PER-FORMANCE OF ALL BUILDINGS.

APPROX. 1/2 MILE OR 0.8 KILOMETERS

THE **DEDICATED BUS TRANSIT LANE** WILL PROVIDE ITS RESIDENTS WITH 10-MINUTE HEADWAYS THOUGH-OUT THE DEVELOPMENT.

THE **HYDROPONIC GREENHOUSE** MARKS A NEW AGE IN FARMING THAT HAS NOW TAKEN ROOT. THIS IS A SOILLESS CONTROLLED AGRICULTURAL ENVIRONMENT FOR GROWING THERAPEUTIC AND ORNAMENTAL PLANTS, AND FRUITS AND VEGETABLES. THIS METHOD OF VERTICAL FARM-ING HAS THE CAPACITY OF GROWING FIVE TIMES THAN BY ANY CONVENTIONAL METHOD.



HYDROPONICS GREENHOUSE



CANOPY TREES AND LARGE BUILDING OVERHANGS WILL PROVIDE FOR SHADING AND COOLING IN THE STREETS.

RESEARCH UNIVERSITY

10 MWATT SOLAR FARM

THE WATER STORAGE AREAS WILL BE PLANTED WITH **LITTORAL ZONES** TO NATURALLY FILTER THE WATER.

**RAINWATER STORAGE** COLLECTED FROM THE ROOF TOPS OF BUILD-INGS.

**10 MWATT SOLAR FARM** LOCATED WITHIN AN AREA OF 40 ACRES OR 16 HECTARES

BATTERY STORAGE FOR SOLAR FARM



SOLAR POWER ARRAY



COMMERICAL BUILDING SECTION

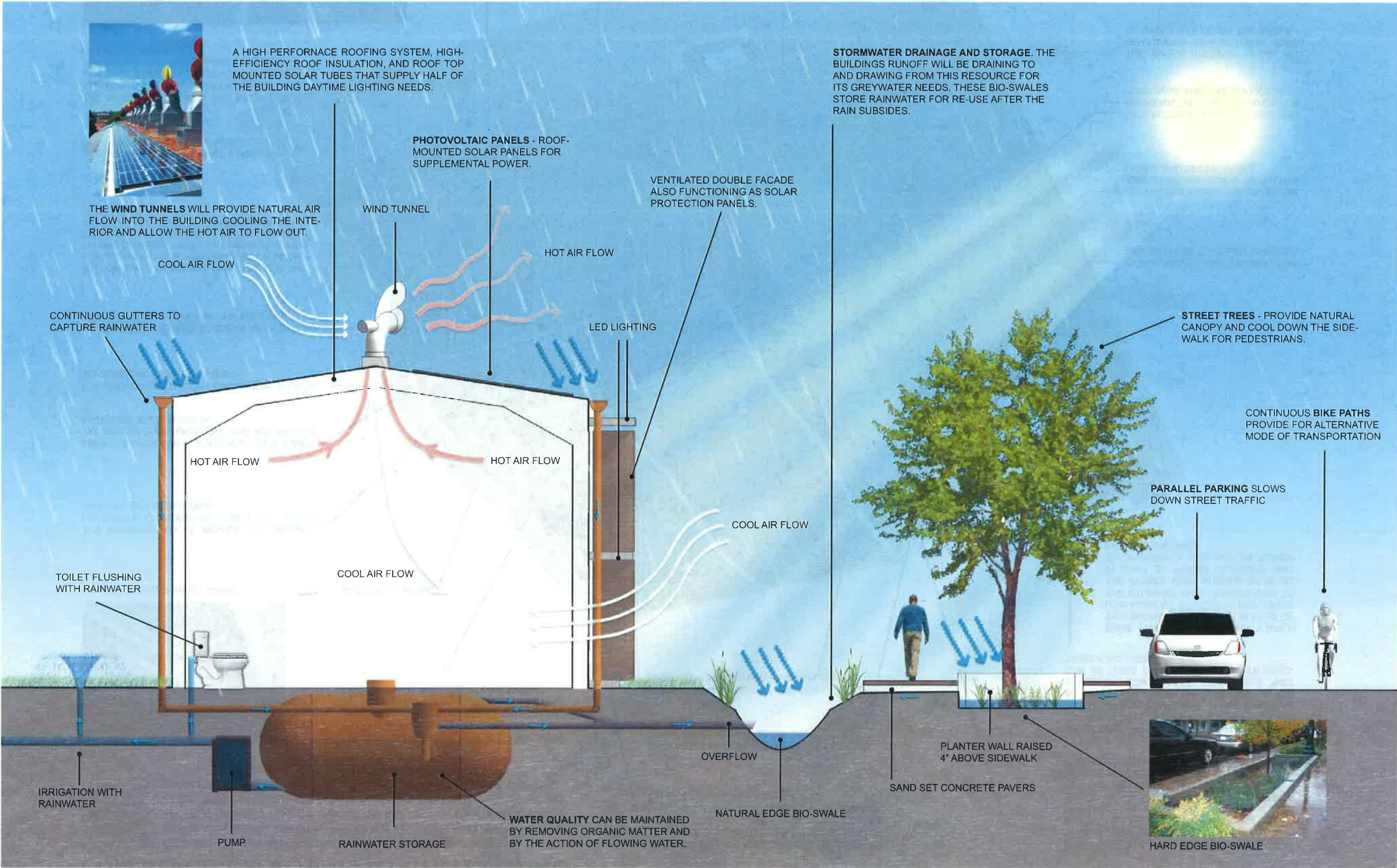


NET ZERO COMMERICAL APPLICATIONS HAVE A HIGH PAY BACK BECAUSE THEY HAVE LARGE ROOF AND FACADE SURFACES TO CAPTURE WATER AND TO HARD-NEST THE SUN. IN WAREHOUSES, THE LARGE FACADES CAN ALSO BE USED TO CAPTURE NATURAL AIR FLOW TO COOL DOWN THE INTERIOR OF BUILDINGS AND WHEN DOUBLED WITH SOLAR PANELS PROVIDE PROTECTION FROM THE SUN.

**ENERGY.** THE LARGE ROOF SURFACES ARE USED TO CAPTURE THE SUN RAYS AND HARVEST INTO ENERGY FOR USED BY THE BUILDING AND EXCESS ENERGY IS PLACED BACK ON THE UTILITY GRID.

**WATER.** THE COLLECTED RAINWATER CAN BE USED FOR NON-PORTABLE USES SUCH AS IRRIGATION, TOILETS AND URINALS, LAUNDRIES, MECHANICAL SYSTEMS, FOUNTAINS, CAR WASHING, AND RECHARGE.

**WIND.** NATURAL AIR FLOW CAN BE HARD-NEST TO COOL DOWN THE INTERIOR OF BUILDINGS OR ADJACENT PUBLIC SPACES. VENTILATED DOUBLE FACADE PANELS AND WIND TUNNELS PROVIDE OPTIONAL CHOICES.





# COMMERCIAL ZERO ENERGY+WATER+WIND



ZERO-ENERGY COMMERCIAL BUILDING UTILIZES RENEWABLE ENERGY SOURCES WITHIN THE BUILDING FOOTPRINT AND AT THE SITE AND IT ALSO HARVESTS RAINWATER. IT IS KNOWN THAT THE LARGER THE ROOF SURFACE AREA THE GREATER KILOWATTS ATTAINABLE THROUGH SOLAR ARRAYS AND THE HIGHER GATHERING CAPACITY OF WATER. THE WIND IS REDIRECTED TO COOL THE BLD'GS INTERIOR.

**ZERO-ENERGY COMMERCIAL BUILDING (ZEB)** IS DESIGNED TO CAPTURE AND STORE RAINWATER THROUGH ITS ROOF TOP AND PROVIDE FOR ITS OWN ENERGY NEEDS USING SOME FORM OF ON-SITE RENEWABLE ENERGY.

**BELOW GRADE CISTERN/STORAGE TANK.** HARVESTED WATER FOR USE IN THE BUILDING IS EXTRACTED FROM THE CLEANEST PART OF THE TANK, JUST BELOW THE SURFACE OF THE WATER. WATER QUALITY IS MAINTAINED BY REMOVING THE ORGANIC MATTER AND BY ACTION OF INCOMING WATER WHICH INTRODUCES OXYGEN AND AVOIDS MALODOROUSNESS.



ROOF TOP SOLAR PANEL ARRAY

THE RAINWATER IS COLLECTED ON THE CATCHMENT AREA IN THE ROOF TOP. THE HARVESTED REINWATER IS CONVEYED THROUGH THE ROOF DRAINS AND PIPING TO A SINGLE POINT OF DISCHARGE INTO THE STORAGE TANK.

EXTRACTED RAINWATER USED FOR **COOLING** OF AIR CONDITIONING UNITS.

EXTRACTED RAINWATER USED FOR **LOW FLOW TOILETS** PROVIDING WATER FOR FLUSHING.

ON-SITE **BIO-MASS** POWER PLANT THAT RUNS ON BIOLOGICAL MATERIAL SUCH AS WOOD, WASTE, GAS, AND ALCOHOL FUELS THAT CAN BE IMPORTED FROM OFF-SITE, OR WASTE STREAMS FROM ON-SITE PROCESSES THAT CAN BE USED ON-SITE TO GENERATE ELECTRICITY AND HEAT.

**NOTE:** LOCAL CITY OR COUNTY UTILITIES SHOULD BE SECURED IN CASE OF LOW RAINFALL SEASON TO REPLENISH THE STORAGE TANK. CONNECTION TO THE POWER GRID SHOULD BE MADE IN CASE OF POWER OUTRIDGE AND TO OPTIONALLY SELL EXCESS POWER BACK TO THE GRID.

THE ROOFTOP **SOLAR PANELS** WILL PROVIDE KILOWATTS OF ELECTRICITY AND HOT WATER FOR USE BY THE BUILDING.

**LEED** - LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN IS REQUIRED TO IMPROVE PERFORMANCE OF ALL BUILDINGS.

EXTERIOR AND INTERIOR **LED LIGHTING** IS USED TO CONSUME LOW ELECTRICITY.

EXTERIOR **SUN SHADE SCREENS** ARE USED TO PROVIDE FOR COOLING OF THE BUILDING.

**STORMWATER DRAINAGE AND STORAGE.** THE SURROUNDING BUILDINGS WILL BE DRAINING TO AND DRAWING FROM THIS RESOURCE FOR ITS GREYWATER NEEDS. THESE BIO-SWALES STORE RAINWATER FOR RE-USE AFTER THE RAIN SUBSIDES.

SECURED LONG TERM, **BIKE PARKING** IS PROVIDED ON-SITE FOR WORKERS.

THE **WIND** IS CAPTURED AND REDIRECTED ALLOWING NATURAL VENTILATION OF THE BUILDING THROUGH LARGE VERTICAL OPENINGS ALONG THE FACADE AND THROUGH ITS ROOF TOP VENTS.



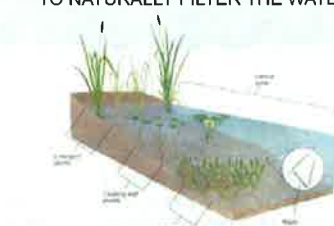
OPEN AIR GARDEN WELL



DEDICATED BIKE LANE

LARGE CANOPY STREET TREES PROVIDE FOR SHADING AND COOLING ALONG THE SIDEWALKS.

OPEN AIR GARDEN WELLS



LITTORAL ZONES

EXTRACTED RAINWATER USED FOR **CAR WASHING** TO CLEAN VEHICLES.

EXTRACTED RAINWATER USED FOR **IRRIGATION** PROVIDING WATER FOR LAWNS AND GREEN AREAS.

EXTRACTED RAINWATER USED FOR **FOUNTAINS** PROVIDING WATER FOR FOUNTAINS AND WATER FEATURES.

THE WATER STORAGE AREAS WILL BE PLANTED WITH **LITTORAL ZONES** TO NATURALLY FILTER THE WATER.



# RESIDENTIAL ZERO ENERGY+WATER+WIND



ZERO-ENERGY RESIDENTIAL BUILDING UTILIZES RENEWABLE ENERGY SOURCES WITHIN THE BUILDING FOOTPRINT AND AT THE SITE AND IT ALSO HARVESTS RAINWATER. IT IS KNOWN THAT THE LARGER THE ROOF SURFACE AREA THE GREATER KILOWATTS ATTAINABLE THROUGH SOLAR ARRAYS AND THE HIGHER GATHERING CAPACITY OF WATER. THE WIND IS REDIRECTED TO COOL THE BLD'GS INTERIOR.



ROOF TOP SOLAR PANEL ARRAY

THE ROOFTOP **SOLAR PANELS** WILL PROVIDE KILOWATTS OF ELECTRICITY AND HOT WATER FOR USE BY THE BUILDING.

**LEED** - LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN IS REQUIRED TO IMPROVE PERFORMANCE OF ALL BUILDINGS.

EXTERIOR AND INTERIOR **LED LIGHTING** IS USED TO CONSUME LOW ELECTRICITY.

SECURELY **VENTILATED** SUNSPACE TO PROVIDE FOR COOLING OF THE BUILDING.

EXTERIOR **SUN SHADE SCREENS** ARE USED TO PROVIDE FOR COOLING OF THE BUILDING.

SECURED LONG TERM, **BIKE PARKING** IS PROVIDED ON-SITE AND WITHIN THE RESIDENTIAL HOME.

THE **WIND** IS CAPTURED AND REDIRECTED ALLOWING NATURAL VENTILATION OF THE BUILDING THROUGH LARGE VERTICAL OPENINGS ALONG THE FACADE AND THROUGH ITS ROOF TOP VENTS.



OPEN AIR GARDEN WELL



DEDICATED BIKE LANE

LARGE CANOPY STREET TREES PROVIDE FOR SHADING AND COOLING ALONG THE SIDEWALKS.

OPEN AIR GARDEN WELLS

THE RAINWATER IS COLLECTED ON THE CATCHMENT AREA IN THE ROOF TOP. THE HARVESTED RAINWATER IS CONVEYED THROUGH THE ROOF DRAINS AND PIPING TO A SINGLE POINT OF DISCHARGE INTO THE STORAGE TANK.

NATURAL LIGHTING

EXTRACTED RAINWATER USED FOR LOW FLOW **TOILETS** PROVIDING WATER FOR FLUSHING.

**ZERO-ENERGY RESIDENTIAL BUILDING (ZEB)** IS DESIGNED TO CAPTURE AND STORE RAINWATER THROUGH ITS ROOF TOP AND PROVIDE FOR ITS OWN ENERGY NEEDS USING SOME FORM OF ON-SITE RENEWABLE ENERGY.

BELOW GRADE **CISTERN/STORAGE TANK**. HARVESTED WATER FOR USE IN THE BUILDING IS EXTRACTED FROM THE CLEANEST PART OF THE TANK, JUST BELOW THE SURFACE OF THE WATER. WATER QUALITY IS MAINTAINED BY REMOVING THE ORGANIC MATTER AND BY ACTION OF INCOMING WATER WHICH INTRODUCES OXYGEN AND AVOIDS MALODOROUSNESS.

**STORMWATER DRAINAGE AND STORAGE**. THE SURROUNDING BUILDINGS WILL BE DRAINING TO AND DRAWING FROM THIS RESOURCE FOR ITS GREYWATER NEEDS. THESE PONDS STORE RAINWATER FOR RE-USE AFTER THE RAIN SUBSIDES.

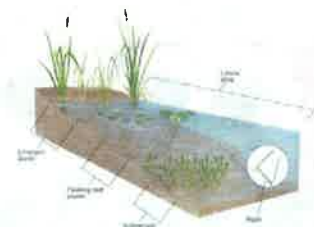
**NOTE:** LOCAL CITY OR COUNTY UTILITIES SHOULD BE SECURED IN CASE OF LOW RAINFALL SEASON TO REPLENISH THE STORAGE TANK. CONNECTION TO THE POWER GRID SHOULD BE MADE TO IMPORT AND EXPORT BACK TO THE UTILITY GRID.

EXTRACTED RAINWATER USED FOR **CAR WASHING** TO CLEAN VEHICLES.

THE WATER STORAGE AREAS WILL BE PLANTED WITH **LITTORAL ZONES** TO NATURALLY FILTER THE WATER.

EXTRACTED RAINWATER USED FOR **IRRIGATION** PROVIDING WATER FOR LAWNS AND GREEN AREAS.

EXTRACTED RAINWATER USED FOR **FOUNTAINS** PROVIDING WATER FOR FOUNTAINS AND WATER FEATURES.



LITTORAL ZONES



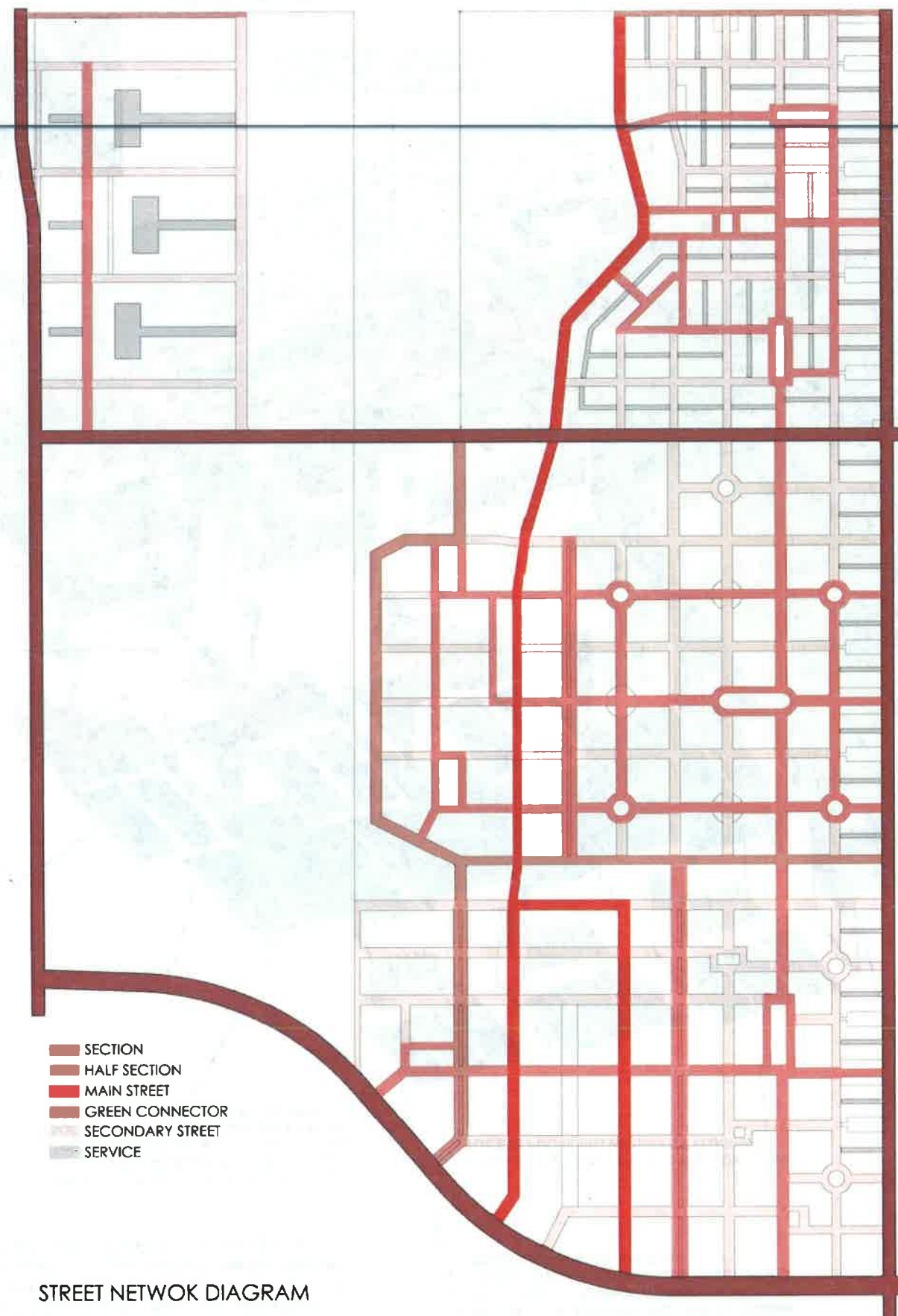
## PUBLIC STREETScape

The public streetscape is that public realm that exist in-between building edges and it starts where the building meets the street. It embraces all the spaces between building facades, not just across the street from each other. The crucial ingredients to make it memorable is to balance how vehicles, transit, pedestrians, and bicyclist will interact.

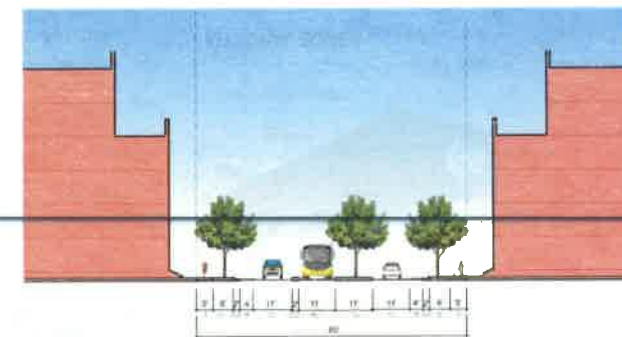
The public streetscale must provide vehicles with flexibility for parking and loading while also maintaining an easy flow of traffic. It must encourage public transit as an alternative mode of transportation. For the pedestrian it must feel safe, comfortable and provide protection from the sun and rain. To the bicyclist it needs to be safe with a dedicated lane and bicyclist street crossing at intersections.

To complete the public streetscape the architecture needs to be culturally unique. Through architecture it is possible to gauge many things about the lifestyle, artistic sensibilities, social structure of a region. When all these urban ingredients are properly understood and combined the end results can bring economic viability and continued success.

The street sections illustrated here were identified as the most important neighborhood throughfares. Diagram 1 - (top right) shows the street section that provides for a dedicated transit lane that connects to the rest of the county; Diagram 2 - (bottom right) shows one-way throughfare in the heart of the Downtown district; the rest of the diagrams in the next page show a variety of ways to move traffic based on a hierarchy of streets sections.



STREET NETWORK DIAGRAM

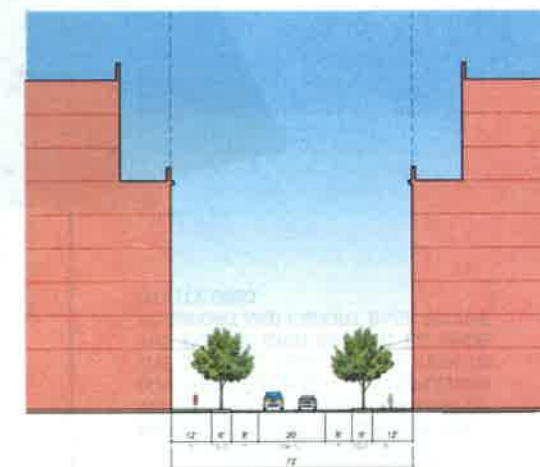


1 SUNSET DR

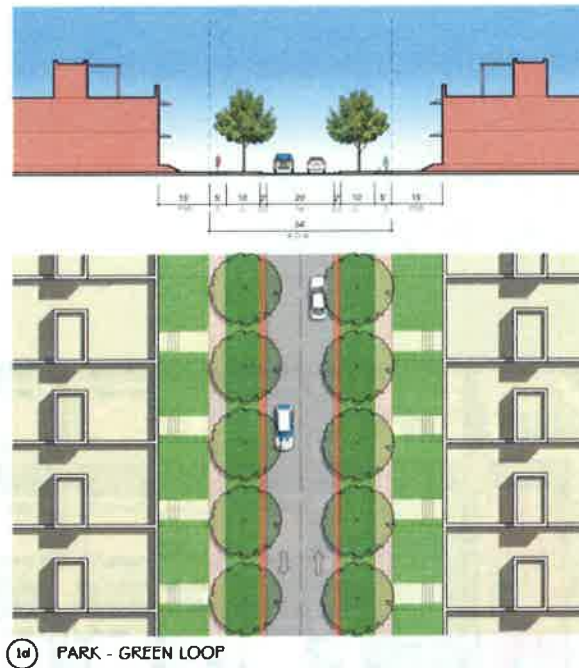


3c DOWNTOWN - MAIN WITH TREES

**COLLECTOR ROAD** - A road that moves traffic from local streets to arterial roads. A low to moderate-capacity road.

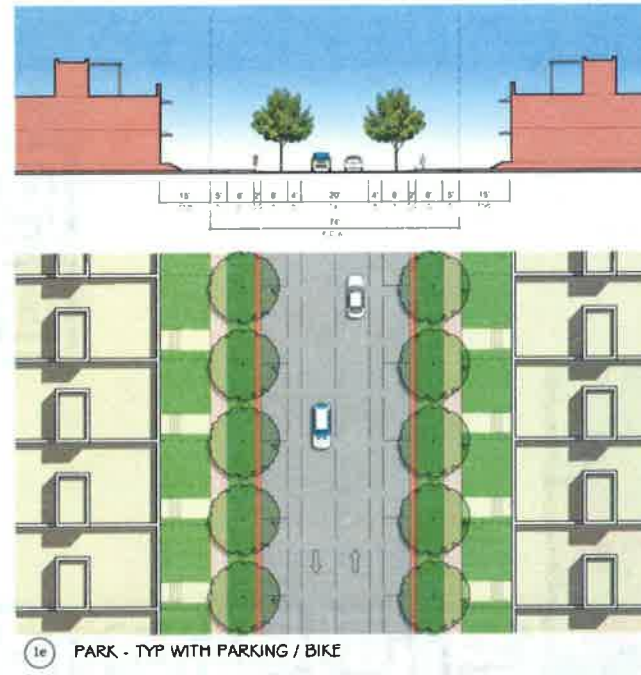






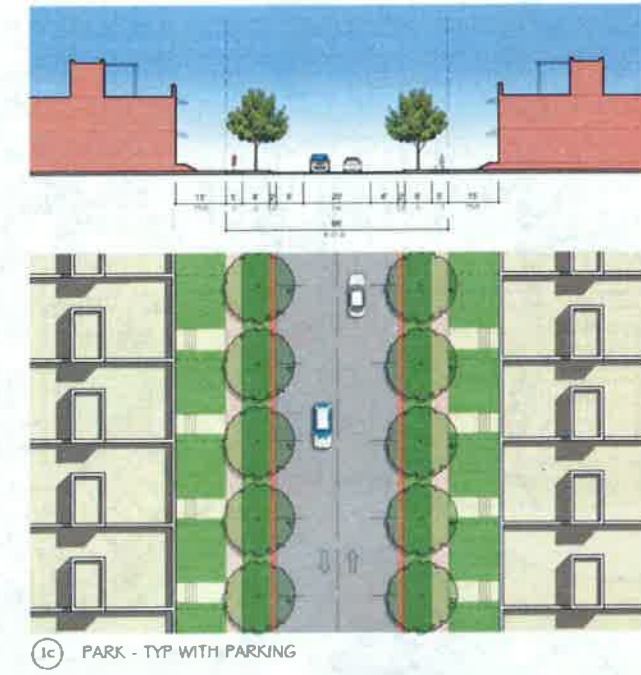
1a PARK - GREEN LOOP

**COMMERCIAL STREET** - A road that front's retail, therefore it is designed to accommodate the pedestrian and the car.



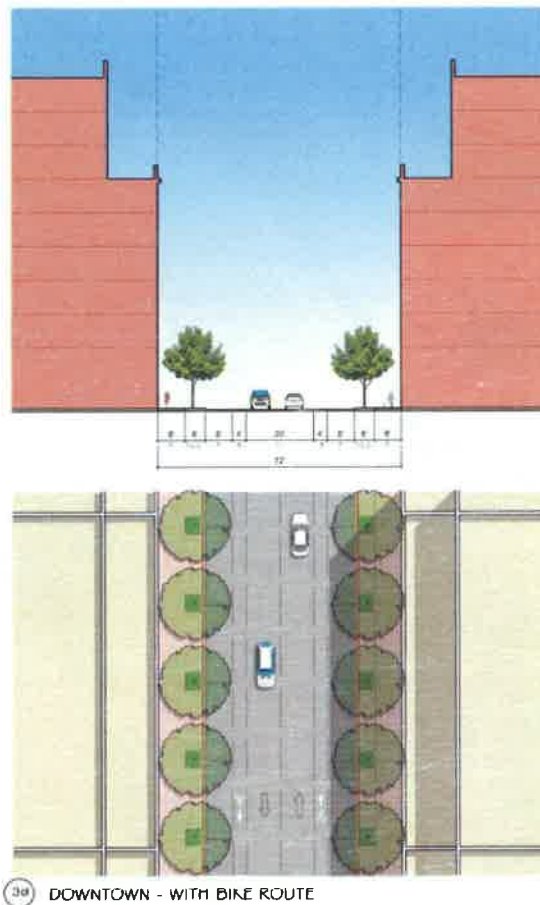
1e PARK - TYP WITH PARKING / BIKE

**AVENUE** - A road that moves traffic at faster speeds while providing for other modes of transportation such as dedicated bike lane.

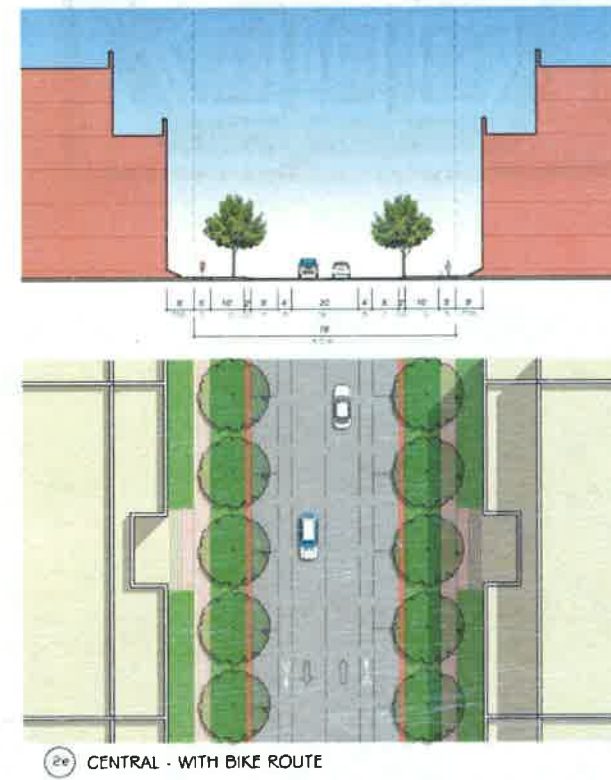


1c PARK - TYP WITH PARKING

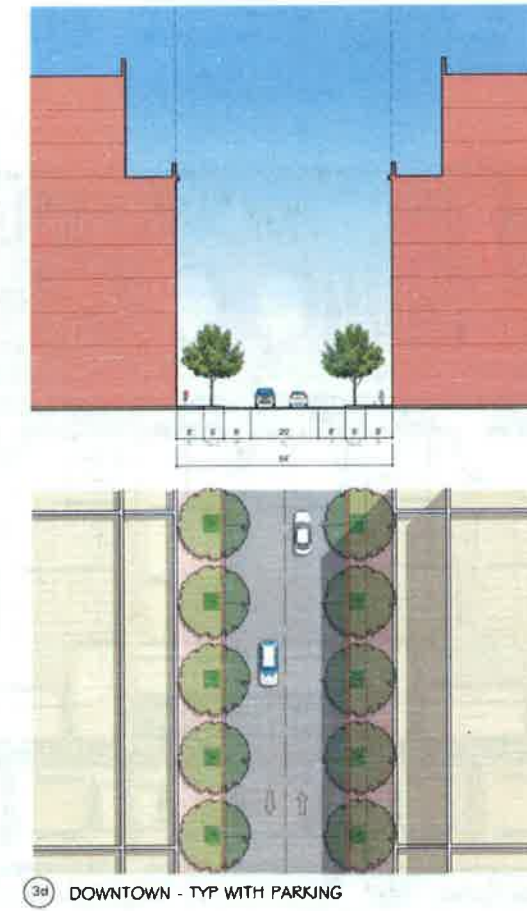
**RESIDENTIAL STREET** - A road utilizing parallel parking and narrow travel lanes to slow traffic and front's residential homes.



3a DOWNTOWN - WITH BIKE ROUTE



2e CENTRAL - WITH BIKE ROUTE



3c DOWNTOWN - TYP WITH PARKING



