



# Alachua County Environmental Protection Department

Stephen Hofstetter, Director

June 29, 2023

## MEMORANDUM

**TO:** Alachua County BoCC

**VIA:** Stephen Hofstetter, Director

**FROM:** Mark Brown, CPSS, Sr. PWS, Natural Resource Program Manager

**SUBJECT:** City of Gainesville – Gainesville Community Redevelopment Agency  
Cornerstone Eastside Development  
Summary - Countywide Wetland Protection Code  
Avoidance, Minimization and Mitigation Plan

### Project Purpose

As referenced from the submitted information, “The Cornerstone Eastside Development is a partnership project between Alachua County, City of Gainesville; RTS & CRA, and UF Health to create an East Gainesville campus including a UF Health medical clinic, a transit hub, and public safety facility in the form of Ambulance and Fire Rescue services. In addition, the project will include open space, future medical offices, retail/grocery, and workforce housing, all initiated by the City or UF Health. The project will interlink with the Gainesville Technology Entrepreneurship Center (GTEC) campus to provide a truly mixed-use campus with opportunities to live, work, and play.”

The 2021 master concept plan (right figure) was presented at a joint City-County Commission meeting on September 21, 2021. There have been minor subsequent revisions to the concept plan (page 3) presented at a joint City-County Commission on January 26, 2023. The project has received positive feedback and support from the City and County Commissions.

### Site proposal – Hawthorne Road

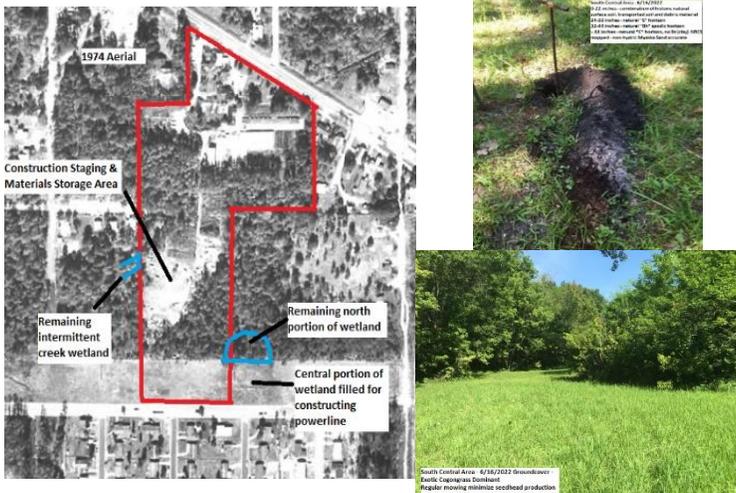
- Population density, ED use and traffic drive by data suggest that optimal location is North or East of the Waldo/ Hawthorne Roads interchange
- Additional advantages to site location on 13 acres on Hawthorne Road East of Waldo Road just West of GTECH incubator
- Includes Hawthorne Road frontage with room for future expansion
- Available for immediate development



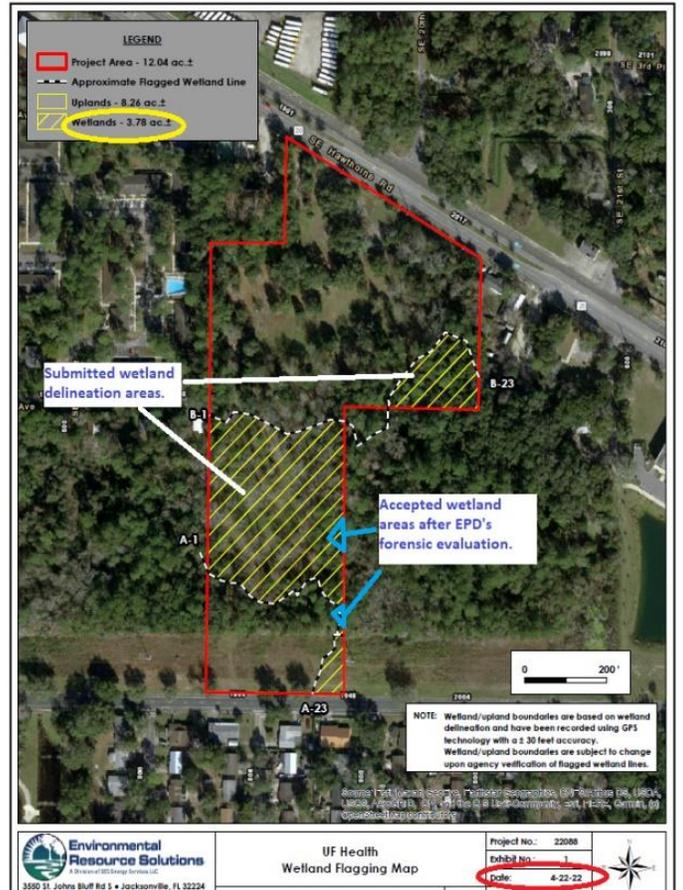
UF HEALTH - HAWTHORNE ROAD | CONCEPT PLAN | 6-23-2021

### Wetland Delineation

In May, 2022, CHW requested EPD staff conduct verification of the wetland delineation conducted by ERS (Env. Consultant) within the western 12-acre parcel owned and proposed by UF to construct the Health Clinic (right aerial). Prior to site review, staff reviewed available GIS-layers with historical aerials. When cross-referencing the documentation while conducting the site review, it was evident there were inaccurate interpretations with the wetland delineation. To assist, EPD staff voluntarily conducted a forensic evaluation utilizing various resources of historical information, GIS-data and conducted ground-truth verification of conditions.



In general, most of the area delineated as wetland was historically upland flatwood habitat. As depicted on the 1974 aerial above, the area was probably used for staging and storage of construction equipment and material. Soil borings confirmed historic placement of approximately two feet of fill material over native upland soils and the ground cover vegetation is dominated by Cogongrass (an upland exotic species, above photos). The forensic evaluation received concurrence by staff from CHW, ERS, UF and COG; and provided the necessary documentation to demonstrate the wetland coverage on the UF parcel was limited to only 0.2-acre instead of the delineated 3.8-acres depicted on the above right aerial.

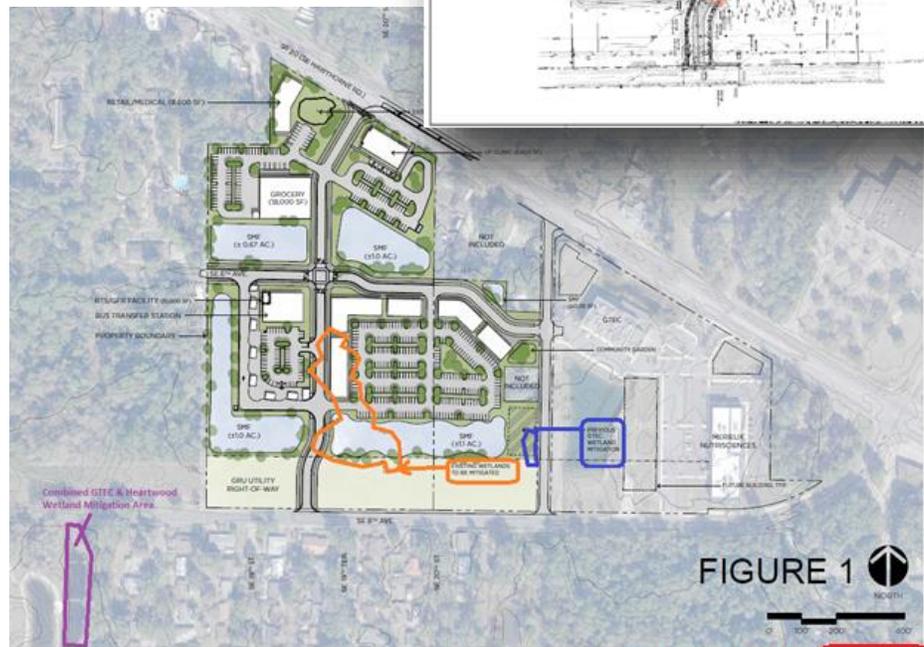


During the latter part of 2022, the COG negotiated the acquisition of the adjacent 5-acre parcel owned by White Electric Co. (lower aerial on previous page). The delineation of the entire wetland extending onto both parcels was reviewed and approved by the SJRWMD, FDEP, EPD and COG (green highlight area on previous aerial). EPD’s assistance by conducting the forensic assessment resulted in decreasing the total anticipated wetland delineation from approximately eight acres to the approved 1.2-acres. As a result, this also substantially reduced the acreage within the 75 ft. wetland buffer.

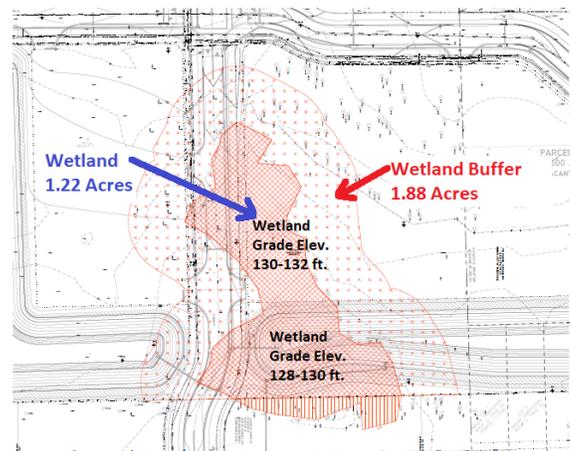
### Project Design

In December of last year, staff reviewed the two design plan sets submitted to the SJRWMD that included the proposed UF Health Clinic and separate plans for the “Eastside / GTEC Infrastructure” (two above figures). Those plans depicted proposed roadway fill of the 0.2-acre portion of the wetland delineated on the UF Health parcel. Staff provided questions to CHW requesting documentation on the avoidance & minimization evaluation conducted for this proposed roadway crossing and adjacent 75 ft. wetland buffer encroachment.

In January, CHW provided the current concept plan (Figure 1 above and right figure) that reference the proposed removal of 1.22-acres of wetland and 1.88-acres of adjacent buffer due to excavation for a stormwater basin, and fill material to construct couple buildings, access roads, and predominantly parking areas.



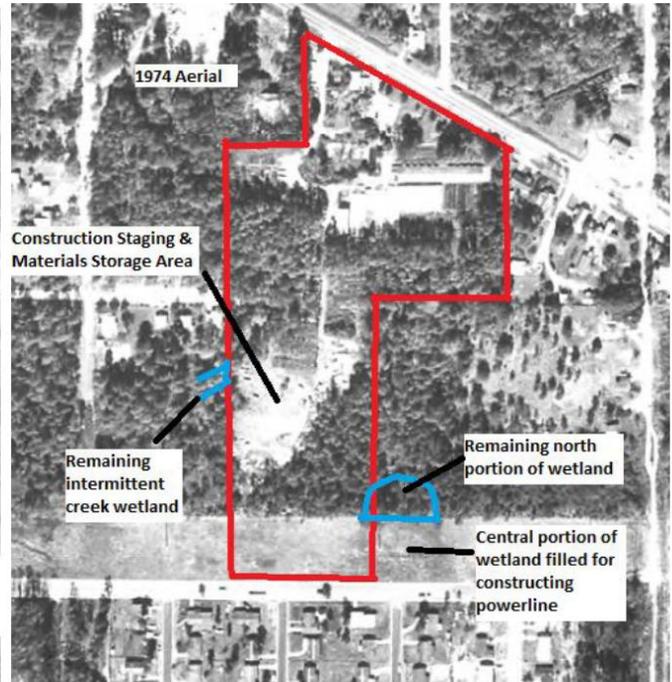
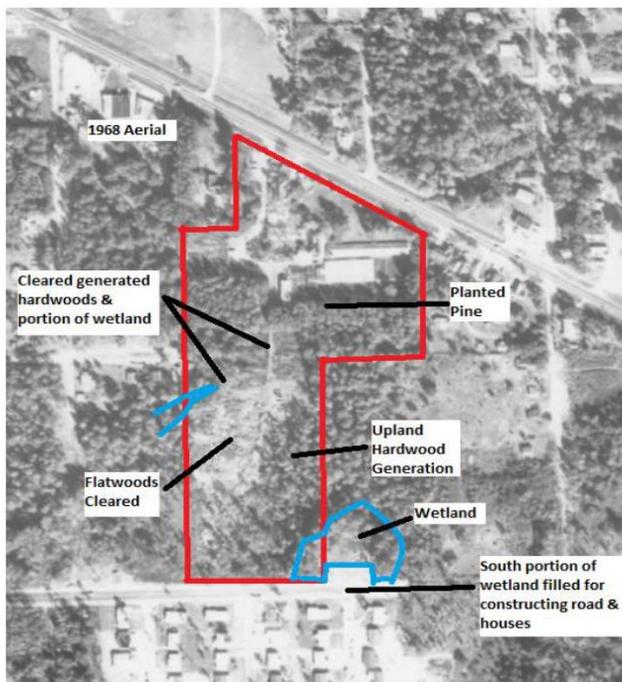
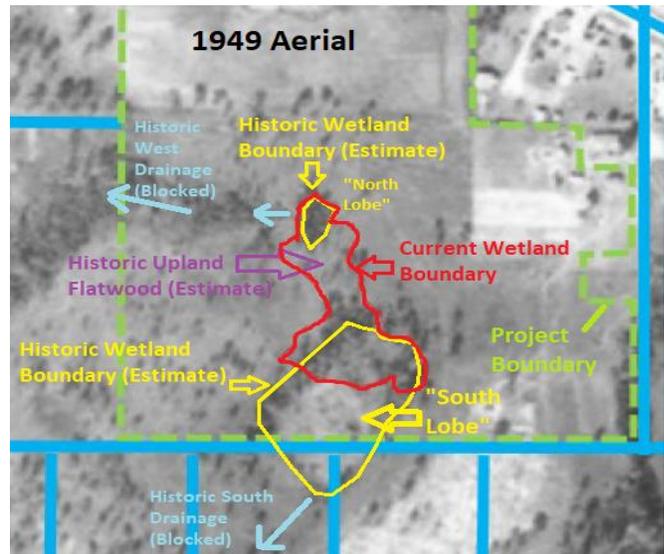
GCRA CORNERSTONE EASTSIDE DEVELOPMENT | CONCEPT PLAN 1-11-2023



Subsequent correspondence and meetings between EPD, COG & CHW staff included additional evaluation of possible options and alternatives that could potentially result in reducing the proposed wetland and buffer encroachment. The first step toward the evaluation included an assessment of historic, current, and anticipated future ecosystem functions and benefits this wetland could be expected to provide due to both short and long-term conditions associated with site development.

### Wetland – Historic & Current Habitat

Assessment of the 1.2-acre wetland indicated there is high probability the system was historically comprised of two wetlands separated by an upland flatwood area (above 1949 aerial). The “South Lobe” portion was primarily non-forested marsh habitat that by the 1970’s, was reduced by over 50% to only an approximate 0.5-acre remnant portion associated with the current wetland. The reduction was associated with fill material installed during construction of SW 8<sup>th</sup> Avenue, few adjacent Lincoln Estates residences, and within the GRU utility right-of-way. With the referenced fill material on the adjacent UF Health parcel, historic westward drainage was blocked from discharging flow from the minimal 0.1-acre “North Lobe” wetland. It is probable the combination of blocked drainage south and west contributed to containing and elevating surficial and groundwater elevations that resulted in the transition of the center upland flatwood area to wetland habitat. As depicted in the previous aerial sequence, discontinuation of typical vegetative management practices resulted in the natural recruitment and generation of hardwood species within the historic marsh area.

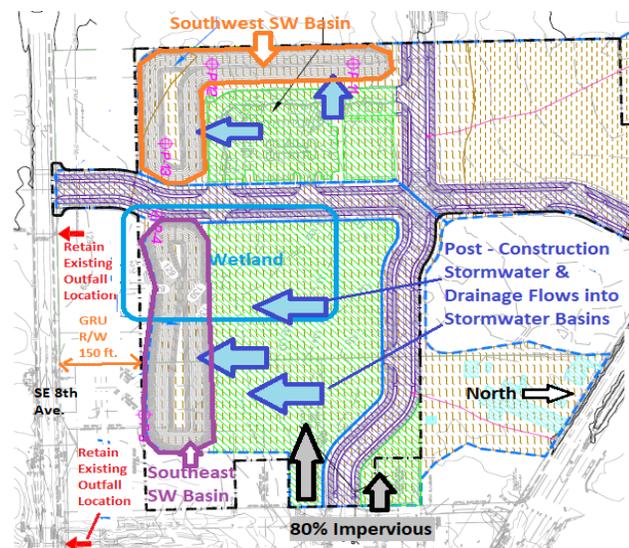
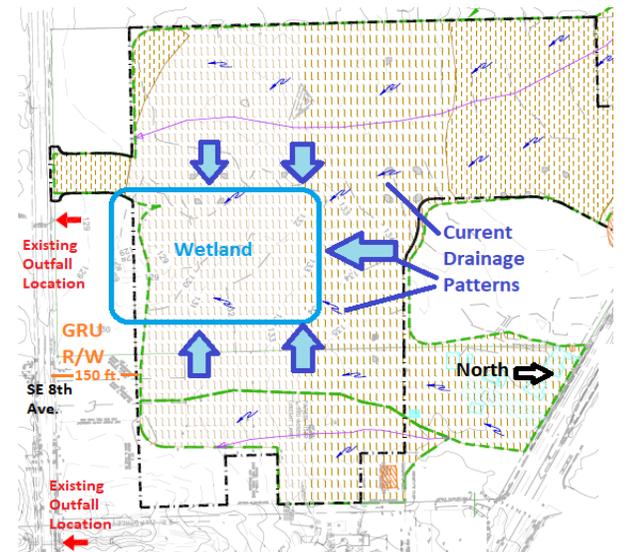


The vegetation, hydrology and habitat conditions of the current wetland and buffer vary, with the higher quality habitat and species diversity within the remnant South Lobe area bordering the north boundary of the GRU R/W (right photo).

## Wetland Hydrology

The most critical factor for the formation and maintaining appropriate wetland ecosystem functions and ecological benefits are associated with contributing hydrology factors such as surface water drainage, shallow groundwater water levels and associated rainfall. As depicted on the right figure, the existing grade elevations direct a high percentage of the contributing watershed drainage toward the 1.2-acre wetland. Evaluation of the various collected data, contours, vegetative species, hydric soil characteristics and hydrologic indicators associated with the wetland indicate the system primarily functions as a seepage system with the surficial groundwater level primarily within 2-3 feet below surface grade, with intermittent and short duration of less than six inches of surface water (hydroperiod) occurring within the lower elevations of the South Lobe (128-129 ft.). CHW provided verification that even though only 33% of South Lobe portion of the wetland is located within the GRU R/W, that area retains 75% of the available storage capacity of the South Lobe due to lower grade elevations within 30 ft. south of the R/W boundary.

With the high quantity of facilities proposed for the 22-acre project area, the alternatives assessment primarily focused on evaluating potential technical design alternatives for surface and stormwater drainage features. Primarily if and where associated stormwater treatment methods and facilities could possibly be modified to at least reduce encroachment by incorporating appropriate portions of the wetland into the design; particularly associated with the higher quality South Lobe. With a proposed post-construction design plan that includes 80% impervious within the southern half of the project site (green highlight on right figure), there will be substantial volumes of stormwater that will be directed toward the two southern stormwater basins. As a result, essentially all the current surface water drainage and large percentage of shallow groundwater that currently contributes to the wetland will be initially diverted to stormwater basins (above figure).

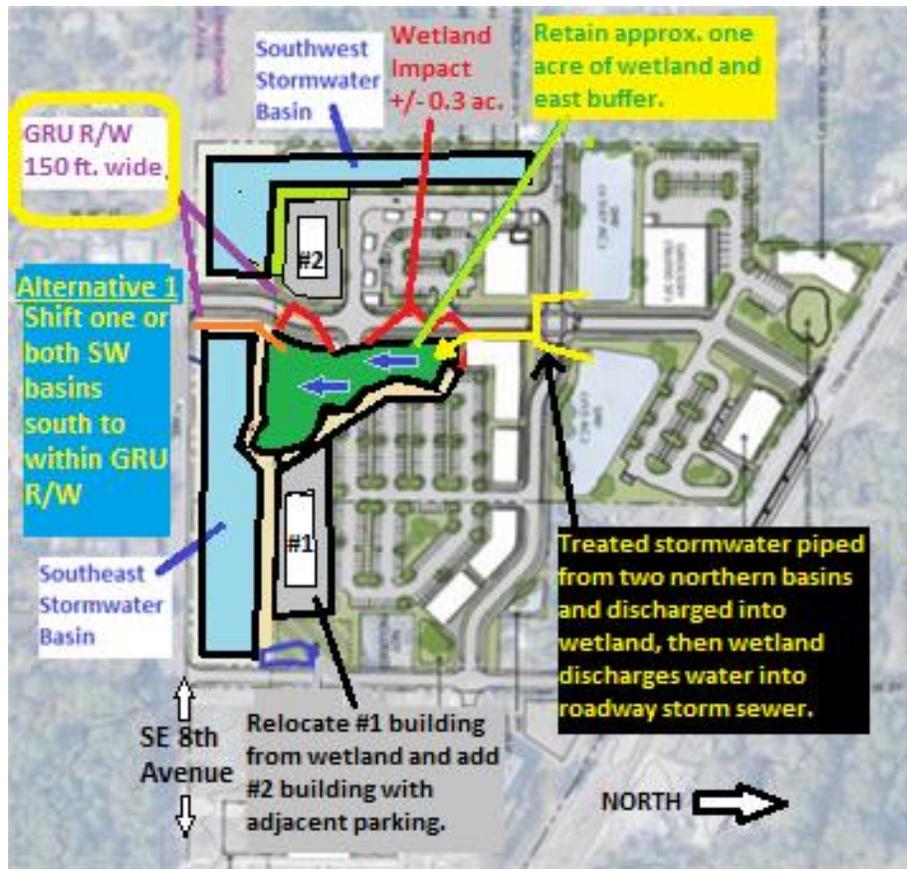


## Technical Alternatives Assessment

This baseline of wetland information provided the critical element in evaluating design options to potentially achieve and retain sufficient hydrologic functions for the wetland habitat. The following summarizes three prospective alternatives that were considered to have the highest potential for successful protection of wetland habitat while achieving the desired objectives for the development.

### Alternative 1 – Shifting Southeastern Stormwater Basin to within GRU R/W

The shifting of the southeastern basin south to the adjacent cleared GRU utility R/W would make it unnecessary to excavate the southern half of the wetland. In addition, the relocation of the proposed building and some parking within the northern half of the wetland could be designated within the area currently proposed for the southeastern basin (represented by #1 building on figure). Even though shifting the southern portion of southwest basin into the R/W would not affect the wetland, it could provide an additional area for another building, parking and/or other uses (represented by #2 building on the aerial). Treated stormwater discharged from the two proposed northern stormwater basins could be routed to discharge into the northern area of the wetland where the gradual hydraulic gradient south would retain the seepage hydrology (yellow line on the figure). An overflow structure near the southwestern corner of the wetland would also ensure positive outfall and discharge of water into the roadway storm sewer system (orange line on figure). The minor roadway encroachment within the western perimeter of the wetland was not shifted west, however most of the wetland and some buffer along the eastern boundary of the wetland would be preserved and with enhanced habitat, could provide an ecological benefit and recreational walking opportunity for the Cornerstone community.



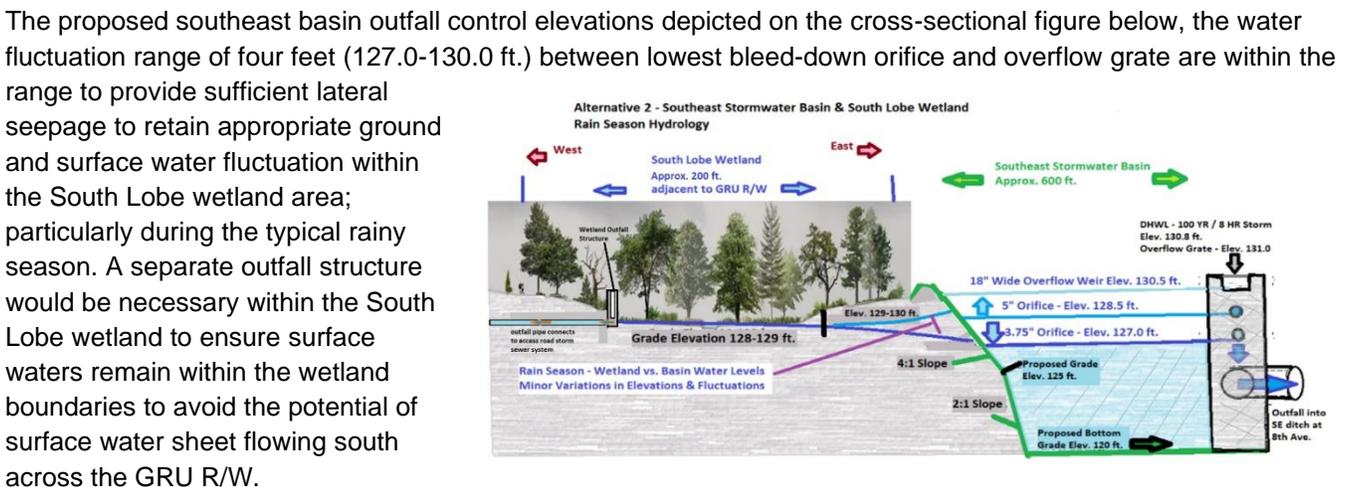
Discussions between the COG and GRU resulted in GRU agreeing to allow the proposed access road crossing over the GRU's utility R/W and connection with SE 8<sup>th</sup> Avenue. However, other potential activities that would require land clearing, earthwork and/or structures and facilities within the R/W were not supported by GRU. This requirement is also inclusive of potential modifications of existing drainage patterns. As a result, these restrictions are also factors and limitations for the other prospective alternatives. These limitations and possible options are referenced within Alternatives 2 & 3.

**Alternative 2 – Southeastern Stormwater Basin Configuration Around South Lobe Wetland**

The northern half of the isolated wetland has grade elevations primarily in the range of 130-132 feet, higher than the control elevations proposed for the southeast and southwest basins. As referenced under Alternative 1, discharging treated stormwater from the two proposed northern basins and directed to flow into and through the northern portion of the wetland will be a benefit to retain seepage hydrology. The two southern and northwestern stormwater basins are designed to function as wet detention basins. Even though the northwestern basin has not been designed, it is also anticipated to be wet detention. Unlike dry basins that are typically shallow excavation and rely on soil infiltration to provide water quality treatment, wet detention systems are generally deep excavation and rely on retaining a consistent pool of surface water to treat stormwater. As a result, the two northern stormwater basins will detain storm and surface waters for longer duration than currently drains south to the wetland. There are many variables as to whether the wet detention of the southeaster basin could provide sufficient hydrology to retain the habitat conditions within the northern portion of the wetland. It is possible a reduction in lateral groundwater seepage would eventually result in transitioning that area back to the predominantly non-wetland functions and characteristics. In turn, resulting in increasing the natural recruitment and generation of nuisance and exotic species such as the *Coral ardisia* and cogon grass currently present within the adjacent upland areas. As a result, Alternative 2 focused on potential design features that could be implemented to preserve and incorporate the lower grade elevations of the South Lobe wetland area into the surface and stormwater design.



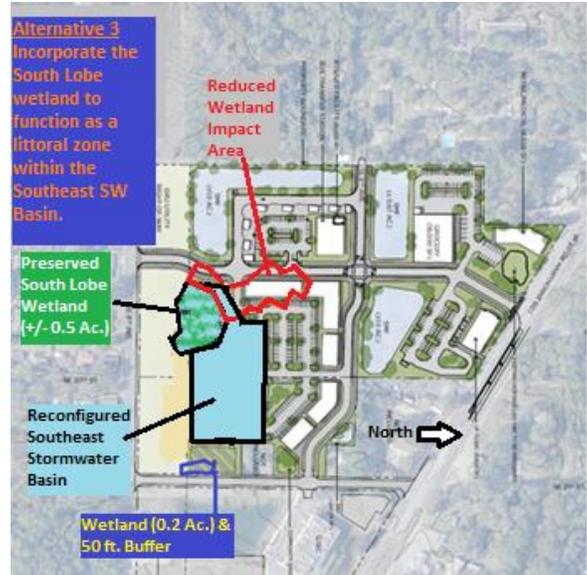
The proposed southeast basin outfall control elevations depicted on the cross-sectional figure below, the water fluctuation range of four feet (127.0-130.0 ft.) between lowest bleed-down orifice and overflow grate are within the range to provide sufficient lateral seepage to retain appropriate ground and surface water fluctuation within the South Lobe wetland area; particularly during the typical rainy season. A separate outfall structure would be necessary within the South Lobe wetland to ensure surface waters remain within the wetland boundaries to avoid the potential of surface water sheet flowing south across the GRU R/W.





**Alternative 3 – Shift Southeast Stormwater Basin and incorporate South Lobe Wetland as Littoral Zone.**

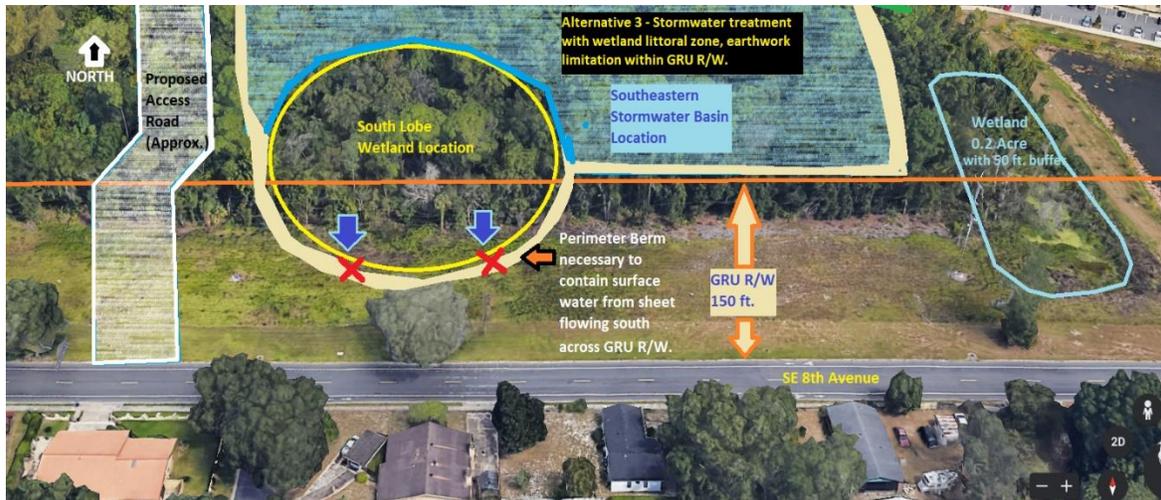
In terms of WMD/DEP and local wetland regulatory agencies, isolated wetlands are allowed to be incorporated within the wet detention stormwater treatment facilities. This treatment method is not often applied since, in comparison to Alternative 2, the range of water level fluctuations are typically not as wide to match the hydrology and hydroperiods of the incorporated wetland. Since the subject wetland has four feet of slope gradient and seepage hydrology, there would be limitations to include the entire wetland in the stormwater basin. However, this condition could be minimized by selecting this treatment option to include the South Lobe. Stormwater treatment systems that incorporate wetlands typically have more consistent water levels compared to wet detention alone, so there is less need to excavate the basin portion as deep as currently designed for the southeast basin. A shallower basin reduces the conditions that increase hydraulic gradient drawdown. However, unless a larger wetland is incorporated into the stormwater basin and appropriate ratio of contributing watershed to wetland size, the more consistent water levels within wetland treatment systems can result in problems with containing surficial waters during periods of heavy rainfall. Even though a containment berm is incorporated into the current design for the southeast basin, extending the berm to include the South Lobe would be necessary to incorporate the wetland into the design. There are a few potential containment options that could be considered:



**GRU R/W – Fill Low Elevation Pocket** – As depicted on the aerial view below, except for +/- 30 feet wide band of trees parallel along the south side of the R/W limits, the remaining portion the South Lobe within the GRU R/W includes periodically mowed herbaceous vegetation such as bahiagrass, maidencane, and blackberry. Filling the low-quality herbaceous area (elev. 128-130 ft.) to elevations of 1-2 feet above the 100-year flood zone elevation (130.8 ft.) would contain the surface water in the wetland & basin from sheet flowing across the R/W. The volume of current surface water holding capacity lost by filling this area would have to be compensated with additional volume in the stormwater basin.



**GRU R/W – Containment Berm** – If the currently proposed containment/maintenance access berm around the perimeter of the southeast basin was extended south and around the perimeter of the herbaceous component of the South Lobe, this would provide similar surficial water containment benefits as the previous option, while reducing the fill volume and enhancing the marsh habitat (aerial below).



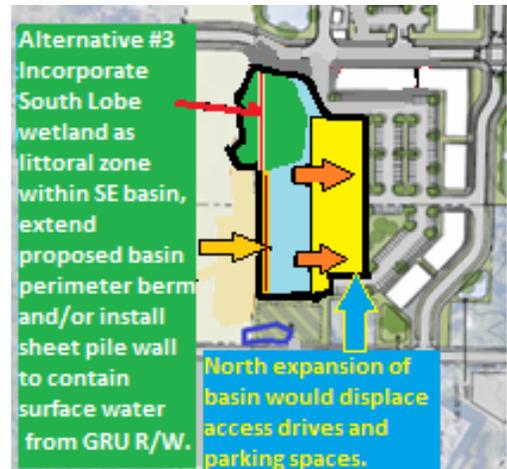
**South Lobe – Containment Berm and/or Sheet Pile Wall** – However, as previously referenced under Alternative 1, the previous two berm options would require GRU approval since each would involve minor activities within the utility R/W. Since approval of these two options appear doubtful, a third option would include extending the containment berm and/or installing sheet pile wall approximately 200 ft. across the South Lobe wetland adjacent to the northern R/W (aerial below). This option would result in ensuring surface water sheet flow would not occur over the GRU R/W. However, this option would result in a linear wetland impact from berm and/or wall construction across the South Lobe.



Since a containment berm and/or wall north of the GRU R/W appeared to be the only viable option, this feature was included in the Alternative 3 design (right). Since the stormwater design fluctuation would require a decrease in storage capacity and the basin would have to incorporate storage volume of the South Lobe portion within the GRU R/W, the basin would require expansion further north than depicted for the Alternative 2 option. For the concept plan, this would potentially displace an additional parking access drive and adjacent parking spaces. However, there wouldn't be a need to relocate the footprint of buildings to another location.

### Countywide Wetland Protection Code (CWPC) Evaluation Requirements

The Countywide Wetland Protection Code (CWPC) requires an applicant to provide appropriate and sufficient details of proposed wetland and buffer encroachment, and sufficient documentation demonstrating evaluation of various alternatives considered to avoid and minimize the proposed encroachment. The compiled information is summarized and provided in response to criteria required within Section 77.20 of the Code. For this project, the CWPC criteria are referenced below (bold font) with direct responses provided by CHW & COG as quoted (*blue font*) from their "Avoidance, Minimization and Mitigation Plan." Below each applicant response, information is provided by EPD staff (*green font*).



#### **CWPC, Sec. 77.20. - Authorized impacts.**

**(a) Alteration activities shall not be authorized in wetlands or wetland buffers except when the following criteria are met:**

**(1) The applicant has taken every reasonable step to avoid adverse impact to the wetland and buffer;**

*CHW & COG - The City of Gainesville as the applicant has evaluated numerous options for this property, looked for alternate sites in east Gainesville, reviewed options of re-use of other sites and no other location met the unique programmatic needs of the Cornerstone Development which includes a transit hub, medical offices, workforce housing and a Fire Rescue Station with adjacency to the existing GTEC campus, and as such the site is not developable without an impact to the wetland.*

*EPD – Staff acknowledge for the stated project goals and considering the desired location is also adjacent to the City's GTEC facilities, compared to potential alternate sites and on-site options for this property, the 22-acre site offers unique opportunities. The stated goals and design include numerous facilities that will require converting most of the vegetation and native habitats to impervious facilities and the necessary stormwater treatment facilities to fulfill water quality treatment requirements. As a result, without incorporating substantial modifications to the quantity, design and location of proposed facilities, staff concur with the statement that the site is not developable without an impact to the wetland, as well as the adjacent wetland buffer.*

**(2) The applicant has taken every reasonable step to minimize adverse impact to the wetland and buffer;**

*CHW & COG - Based on the selected site and the programmatic elements of the Master Plan that are required by the City of Gainesville to make the project feasible from a space allocation, meet the public's needs and financially feasible it's impossible to minimize the impacts to the wetland and still have a viable project that meets the diverse needs of the East Gainesville residents.*

**EPD** – From a technical perspective, the alternative assessment resulted in demonstrating that even with minimizing adjustments to proposed building structures and infrastructure and reducing the proposed wetland and buffer encroachment, there would still be many issues and high risk in being able to preserve and maintain appropriate habitat and hydrologic functions for the 1.2-acre wetland. To achieve this objective would require a successful design, construction and implementation of an integrative wetland and stormwater system. There would also be the additional expense associated with design, construction and perpetual commitment toward habitat maintenance and management of a retained wetland habitat, but additional commitments to also ensuring the appropriate maintenance, operation, and management of the adjacent southeastern stormwater basin. Unfortunately, even when reducing the proposed impacts to preserve and incorporate the higher quality +/- 0.5-acre South Lobe wetland area, there are still issues and limitations to sustain this small wetland in a post-construction condition surrounded by high impervious conditions associated with many buildings, infrastructure, roadways, access drives and parking areas. These risks and limitations increase if GRU retained their position that even minor earthwork additions are not authorized in their utility R/W.

**(3) The applicant has provided appropriate mitigation for adverse impacts to the wetland and buffer; and**

**CHW & COG** - The City is proposing mitigation from Mill Creek Mitigation Bank for the wetland impacts and a fee in lieu for the buffer removal. Please note buffer mitigation for the buffers in the GRU power Line ROW is NOT included in the fee in lieu calculations. Note that Mill Creek Mitigation Bank is not located in Alachua County but is in the watershed of the project and was previously approved for use on the SW 62<sup>nd</sup> project and thus a precedent established for the use of the mitigation bank provided it is within the watershed despite it being in Marion County, not Alachua County.

Based on UMAM scores the required credits at Mill Creek Mitigation Bank are approximately 0.53 UMAM credits which will be purchased as a condition of the approval. Additionally, the County code requires a fee in lieu for buffer impacts which is based on 1.88 acres of buffer at 38,600 dollars per acre based on the appraised value of the land for a total of \$72,568.00. The fee in lieu of for buffer impacts shall be paid prior to the CO of the first phase to the City Parks department to make improvements to environmentally sensitive areas managed by the City.

**EPD** – As noted, EPD and the BoCC agreed to the COG-PWD’s Avoidance, Minimization & Mitigation Plan that included selection of the Mill Creek Mitigation Bank to provide compensation for the wetland impacts associated with the SW 62<sup>nd</sup> Blvd. project. In addition, collaboration between the COG-PWD and EPD staff resulted in the selection and BoCC approval of the proposal to mitigate the associated wetland buffer impacts with the COG-PWD allocating \$100,000 to COG-Parks Dept. for the proposed hydrologic and habitat enhancement and restoration within the 5-acre “Boardwalk Wetland” located at the Bivens Arm Nature Park. The BoCC’s approval of both mitigation allocations were memorialized and tracked through the associated Interlocal Agreement.

**INTERLOCAL AGREEMENT NO. 13163 BETWEEN ALACHUA COUNTY AND CITY OF GAINESVILLE’S PUBLIC WORKS DEPARTMENT FOR SW 62<sup>nd</sup> BLVD. CONNECTOR – WETLAND & BUFFER MITIGATION**

The proposed mitigation for the 1.22 acres of proposed wetland impact associated with the Cornerstone Eastside project includes the City purchasing an estimated 0.53 credit from the Mill Creek Mitigation Bank. EPD and SJRWMD staff concur with the proposed wetland impact and selection of the mitigation bank. The CWPC offers a few options to fulfill wetland buffer mitigation requirements including (1) onsite restoration or enhancement of habitat, (2) offsite preservation of land, and (3) fee-in-lieu of land. As noted above, the City has proposed the fee-in-lieu of land option by allocating funds to the Gainesville Parks department to make improvements to environmentally sensitive areas managed by the City. EPD staff agree with the proposed 1.88 acres of wetland buffer impact and the allocation of funds to the Parks Dept. The interlocal agreement will include collaboration and coordination between COG Parks and EPD/ACF staff on the selected improvement activities and associated City-owned property.

However, there is a minor revision on the amount of the allocated funds for buffer mitigation. The following CWPC criteria clarifies why the required multiplier (150%) will increase the designated buffer allocation of \$72,568 to \$108,852.

$\$38,600$  (avg. per acre-appraised market value)  $\times$  1.5 (150%) =  $\$57,900 \times 1.88$  acres of wetland buffer impacts =  **$\$108,852$**

**(3) Fee-in-lieu of land.** As an alternative to the protection of land, the county may allow contribution of a fee-in-lieu-of-land to the environmentally sensitive lands fund, under which the county shall purchase or manage land to protect natural resources in accordance with standards of this chapter. Where fee-in-lieu of land is allowed, the cash payment shall be equivalent to 150 percent of the average per acre-appraised market value, at the time of permit application, multiplied by the number of acres of regulated buffer area for which mitigation is required, plus estimated total cost of management required to establish the viability of that type of resource.

**(4) Mitigation may be permitted for new wetland loss only where the applicant demonstrates that the activity cannot practically be located on the upland portion of the parcel or contiguous parcels under common ownership or control. The applicant must demonstrate that one of the following applies:**

- i. Minimal impact activity;**
- ii. Overriding public interest; or**
- iii. All economically viable use of the property is otherwise precluded.**

**CHW & COG** - Through the above analysis and attached master plan, the City has demonstrated that all the required elements of the City's Cornerstone Development cannot be provided within the upland portions of the property alone that the City owns or even could purchase and thus the impact is necessary in the public interest. The overriding public interest is met by the need for the medical and dental clinic, transit hub, fire rescue facility as well as the work force housing facility all planned for the site and only possible with the impact and mitigation of the 1.22 acres of wetland on the site.

As such the project meets the County Wide Protection Code threshold for an authorized impact as an overriding public interest and the City should find that the project is in compliance with such and approve the impact and mitigation.

**EPD** – As noted in the comments above, the Cornerstone Eastside Development Project will include the construction of various facilities that emphasize offering and providing critically important public services for the citizens of Gainesville and Alachua County. The project has received important endorsement and financial commitments by the Gainesville City Commission, Alachua County Board of County Commissioners, UF Health, various Legislators, agencies, committees, and the public. As a result, EPD staff agree with the stated opinion the project demonstrates qualification as an “overriding public interest” project.

### **Countywide Wetland Protection Code - Analysis Summary**

The following summarizes EPD staff's evaluation of the proposed Cornerstone Eastside project:

- Staff has found the Cornerstone Eastside project demonstrates the “overriding public interest” requirement of the CWPC [Section 77.20(a)(4)ii.]
- Staff has found the proposed wetland and buffer impacts are necessary for construction of the proposed design for the Cornerstone Eastside and demonstrates achieving the avoidance and minimization criteria requirements of the CWPC [Section 77.20(a)(1) & (2)].
- Staff has found proposed purchase of credits from the Mill Creek Mitigation Bank will provide appropriate mitigation for the proposed wetland impacts; achieving the permitting requirements of the SJRWMD as well as CWPC [Section 77.20(a)(3)].
- Staff has found the proposed allocation of \$108,852 to City of Gainesville Parks Dept. to conduct habitat improvements to environmentally sensitive lands owned by the City to provide appropriate mitigation for the proposed wetland buffer impacts.

- Prior to conducting removal and clearing of vegetation within the wetland and adjacent buffer, the Gainesville City Commission and County BoCC will finalize an Interlocal Agreement to document purchasing of the Mill Creek Mitigation Bank credits and joint City/County approval of habitat improvement activities within City-owned properties. This agreement will include contingency allocation of the Bivens Arm funds (\$108,852) to Alachua County’s Environmental Sensitive Lands Funds.

**Staff Recommendation**

As a result of the referenced reasons and justifications provided by the COG and CHW, EPD staff believe the proposed wetland and buffer encroachments and mitigation activities are consistent with Section 77.20 requirements of the Countywide Wetland Protection Code. As a result, staff recommends the BoCC approve the presented *Avoidance, Minimization and Mitigation Plan* as referenced in the CWPC [Section 77.22 (b)(3)].