

February 25, 2025

Ms. Darcie McGee
Brevard County Natural Resources Management Department
2725 Judge Fran Jamieson Way, Building A
Viera, Florida 32940

Re: Wetland Toolbox Submittal
Aurora Road Manufacturing and Warehouses
Aurora Road, Melbourne, Florida
Atlantic Environmental File No. 21805

Dear Ms. McGee:

Atlantic Environmental of Florida, LLC (Atlantic Environmental) has completed a Brevard County Wetland Assessment Method on the above-referenced project which is seeking to impact the on-site wetland. Below you will find information regarding the wetland proposed for impact, assessment matrix calculations, and a discussion on the project's benefits to the public.

Public Interest

This project includes the construction of a commercial 20,000 square foot building and 6 individual bays for manufacturing and warehouse use located on the north side of Aurora Road. This commercial project will have a positive impact on the community and local economy as listed below.

- A portion of the development will be dedicated for storage of large automobiles (campers) and boats by local residents which is both lacking in the area and also needed due to local restrictions.
- Developing the site will eliminate ongoing community concerns (i.e., homeless using the site).
- Sales and property tax will increase from the expected increase in property value and services that will be provided by the commercial businesses.

Proposed Wetland Impacts

The site is currently vacant and surrounded by commercial and residential development. There is one wetland located on the property (Figure 1) that encompasses approximately 0.38 acres and is connected to a roadside ditch. An old free flowing well is located in the northern end of the wetland and has been unnaturally hydrating the wetland for years. The applicant is in the process of having this well capped by St. Johns River Water Management District (SJRWMD) under the abandoned artesian well plugging program.

The wetland is considered low in quality due to its impacted hydrology caused by the well, adjacent development, and high level of exotic vegetation. Vegetation within this wetland includes Brazilian pepper, red maple, American elm, arrowhead vine, wild taro, and swamp fern. This wetland provides minimal storage capacity due to the direct connection to the roadside ditch. Lastly, no listed wildlife species were located within the on-site wetlands.

Due to the small size of the lot and stormwater requirements for development by SJRWMD, the entire wetland will be required to be impacted. An Environmental Resource Permit was issued in January 2025 by SJRWMD which authorized the filling of the entire on-site wetland. Mitigation was provided

by purchasing wetland mitigation credits at Basin 22 Mitigation Bank. An application was also submitted to the US Army Corps of Engineers (USACE) utilizing the same mitigation strategy as SJRWMD permitted. This agency should be issuing the permit for wetland impacts within the next 4 weeks.

Wetland Mitigation

As stated above, compensatory mitigation was required by SJRWMD and USACE, and was acquired by the applicant at Basin 22 Mitigation Bank. The service area for this bank extends over several counties and includes the area where the subject property is located. However, since the actual mitigation bank boundary is located in Indian River County, the applicant is proposing to purchase additional wetland mitigation within Brevard County to meet Brevard County's comp plan requirements. The applicant proposed to purchase 0.06 wetland mitigation credits at the Lake Washington Mitigation Bank located in Brevard County. This amount of credit equates to 0.38 acres of wetlands that will be enhanced and preserved in perpetuity. This credit and acreage amount was determined by taking the total Lake Washington Mitigation Bank acreage (i.e., 1657.5 acres) and dividing this acreage by the total amount of credits available (i.e., 242.6 credits), thereby determining that each credit equates to approximately 6.832 acres. As such, these 0.38 acres of proposed wetland impacts is equivalent to just under 0.06 credits.

By completing this purchase of 0.06 credits, there will be no net loss of wetlands within the county as a result of this project. Also, the quality of wetlands preserved at the Lake Washington Mitigation Bank are significantly higher in quality than those proposed for impact. In summary, the mitigation acquired at Basin 22 Mitigation Bank as well as at Lake Washington Mitigation Bank will more than compensate for the proposed impacts to the low-quality on-site wetland.

Brevard County Wetland Assessment Method Results

The subject site is abutted by Aurora Road which is listed as a Brevard County Mitigation Qualified Roadways (MQR). The wetland also falls within a Brevard County Landscape Level Wetland (Figure 1). The Brevard County Wetland Assessment Method calculated the assessment score of this wetland at a value of **0.369**. Thus, the wetland is not considered a high functioning wetland as defined by Brevard County.

In summary, the on-site wetland proposed for impact is within a Landscape Level Polygon and located along an MQR. However, the wetland is not defined as high functioning. The public benefit resulting from this project is sound justification for allowing the impact of the on-site wetland which will be authorized through permitting and the provision of adequate mitigation.

Should you require additional information or have any questions, please do not hesitate to contact our office.

Sincerely,



David G. Purkerson, MS, PWS
Vice President/Biologist



Jon H. Shepherd, MS, PWS
President/Ecologist

Aurora Road Manufacturing and Warehouses

Brevard County Wetland Assessment Matrix

Landscape Location Score

<i>Enter FLUCFCS_ legend</i>	<i>Enter Sum of Acres</i>	<i>LSI_Value</i>	<i>Landcover Percent</i>	<i>Landscape Location Score (=LSI_Value* Landcover Percent)</i>
1100-Low Density Urban		2.22	0.000	0.000
1100-Residential, Low Density		3.57	0.000	0.000
1200-Residential, Medium Density	4.94	2.81	0.297	0.835
1300-High Density Urban		0.91	0.000	0.000
1300-Residential, High Density		2.72	0.000	0.000
1400-Commercial and Services	6.48	0.91	0.390	0.355
1500-Industrial		1.87	0.000	0.000
1660-Holding Ponds		9.08	0.000	0.000
1700-Institutional		2.14	0.000	0.000
1820-Golf courses		3.42	0.000	0.000
1850-Parks and Zoos		3.42	0.000	0.000
1900-Open Land	1.12	3.42	0.067	0.230
2110-Improved Pasture		6.96	0.000	0.000
2120-Unimproved/Woodland Pasture		8.03	0.000	0.000
2130-Woodland Pastures		8.87	0.000	0.000
2210-Citrus		7.02	0.000	0.000
2240-Abandoned Groves & Orchards		8.87	0.000	0.000
2500-Specialty Farms		3.33	0.000	0.000
3290-Other Shrubs and Brush		10	0.000	0.000
4110-Pine Flatwoods		10	0.000	0.000
4120-Longleaf Pine - Xeric Oak		10	0.000	0.000
4200-Upland Hardwood Forest	1.51	10	0.091	0.908
4280-Cabbage Palm		10	0.000	0.000
4320-Sand Live Oak		10	0.000	0.000
4340-Hardwood - Coniferous Mixed		10	0.000	0.000
4360-Upland Scrub, Pine and Hardwoods		10	0.000	0.000
4370-Australian Pine		8.87	0.000	0.000
4410-Coniferous Plantations		9.36	0.000	0.000
5100-Streams and Waterways	0.33	10	0.020	0.198
5200-Natural Lakes & Ponds		10	0.000	0.000
5300-Reservoirs		10	0.000	0.000
5420-Estuarine		10	0.000	0.000
5700-Major Bodies of Water		10	0.000	0.000
6110-Bay Swamps		10	0.000	0.000
6120-Mangrove Swamp		10	0.000	0.000
6150-Streams and Lake Swamps (Bottomland)		10	0.000	0.000
6170-Mixed Wetland Hardwoods		10	0.000	0.000
6210-Cypress		10	0.000	0.000
6240-Cypress - Pine - Cabbage Palm		10	0.000	0.000
6250-Hydric Pine Flatwoods		10	0.000	0.000
6270-Slash Pine Swamp Forest		10	0.000	0.000
6280-Wet Coniferous Plantations		10	0.000	0.000
6300-Wetland Forested Mixed		10	0.000	0.000
6310-Wetland Shrub		10	0.000	0.000
6410-Freshwater Marshes		10	0.000	0.000
6420-Saltwater Marsh		10	0.000	0.000
6430-Wet Prairie		10	0.000	0.000
6440-Freshwater Marshes		10	0.000	0.000
6500-Non-Vegetated		10	0.000	0.000
6510-Tidal Flats		10	0.000	0.000

6520-Shorelines		10	0.000	0.000
7400-Disturbed Land		9.08	0.000	0.000
7430-Spoil Area		9.08	0.000	0.000
8120-Rails		2.43	0.000	0.000
8140-Roads	2.25	1.91	0.135	0.258
8300-Utilities		2.43	0.000	0.000
TOTAL	16.63	0.91	1.000	2.784

Water Quality Treatment

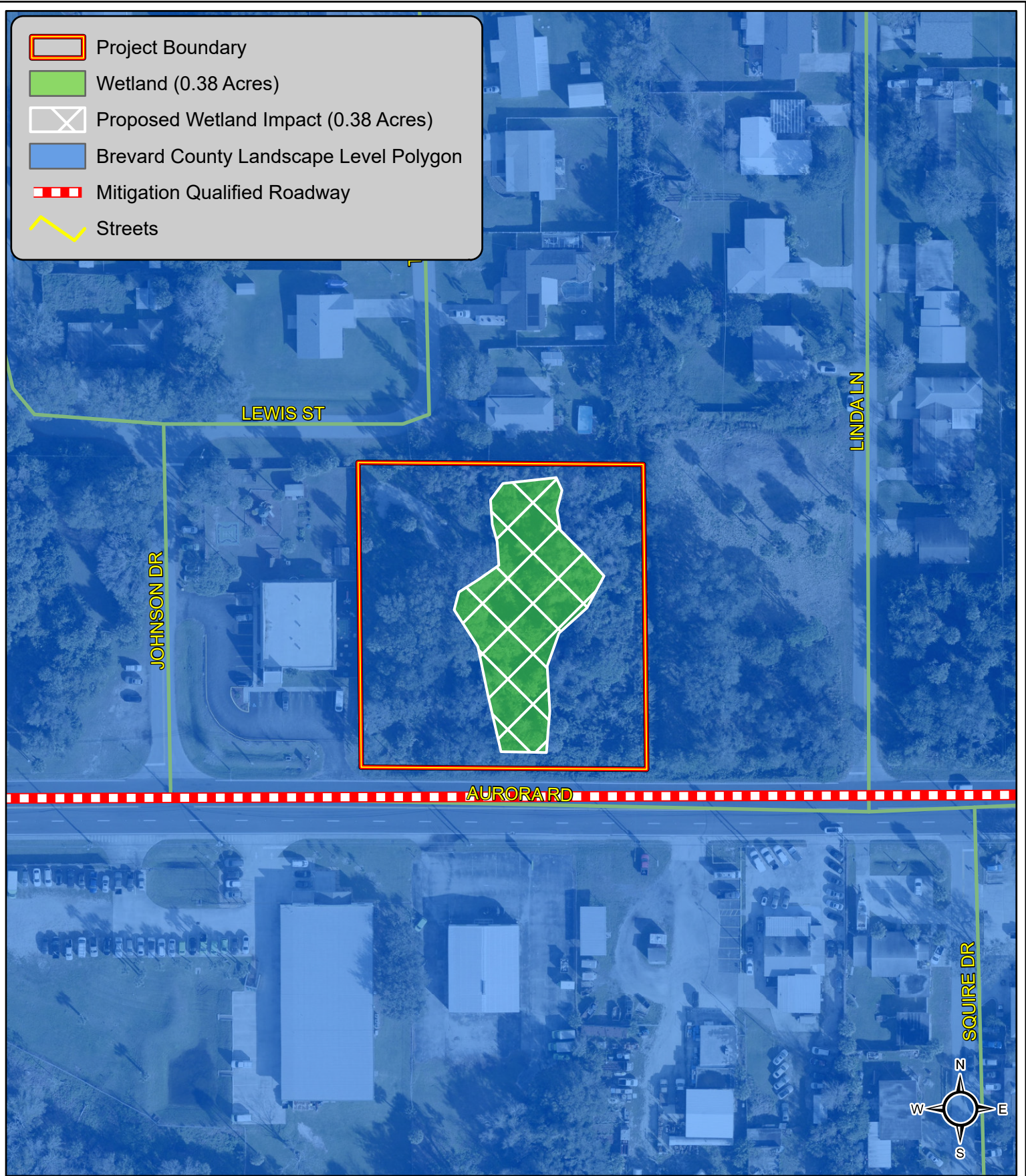
Enter Percentage of surrounding landcover that contributes to the Water Quality Treatment	Category	Coefficient	Water Quality Treatment Score
100	Natural	5	5
	Only rainfall - no contributing basin	4.6	0
	Wet detention with swales	4.2	0
	Wet detention with dry detention	4.2	0
	Combination grass swales with dry detention	3.3	0
	Grass swales only / vegetative buffer strip	1.7	0
	Dry Detention only	1.7	0
	No treatment	0	0
100	Correct		5

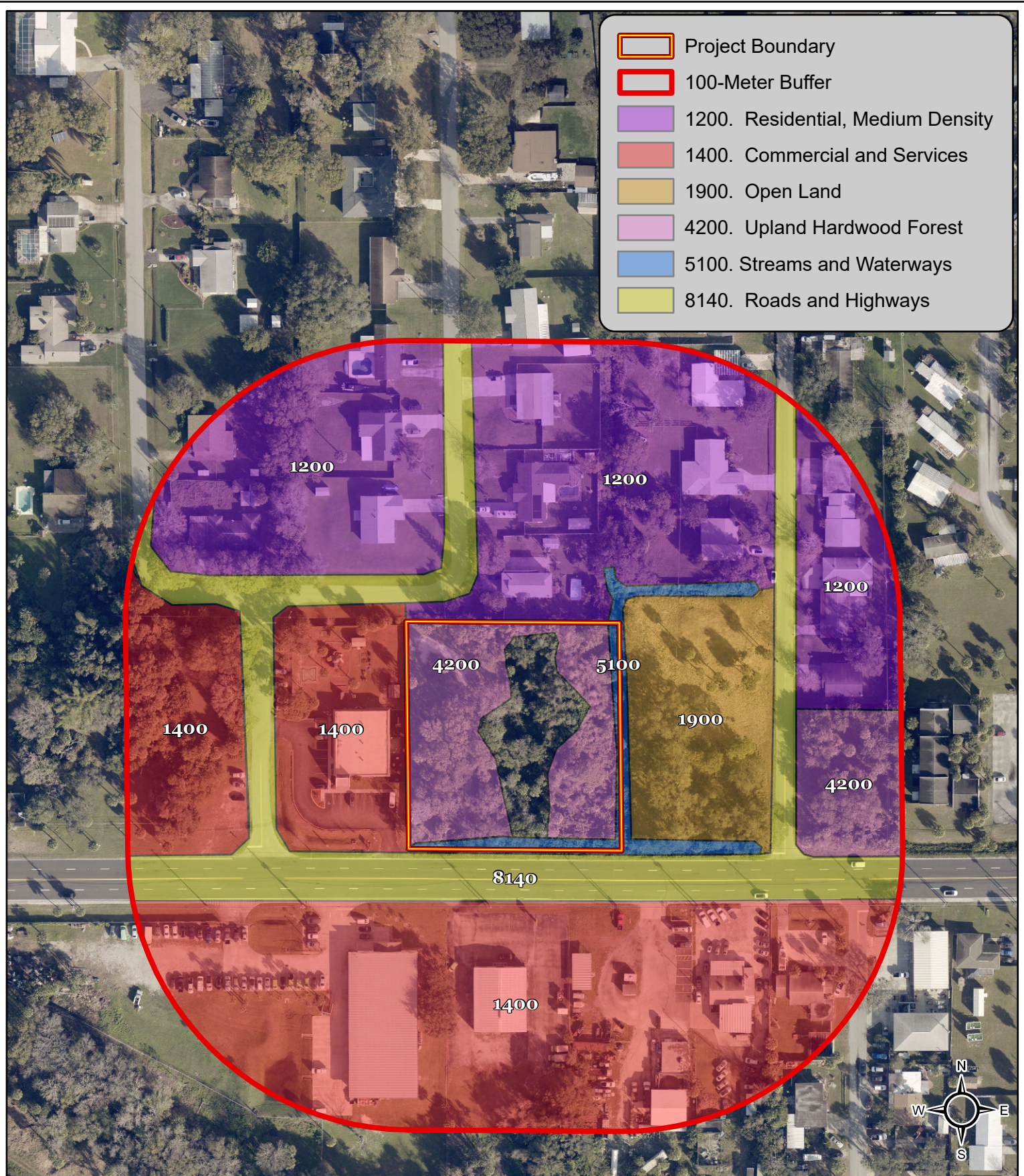
Enter Hydrologic Indicator Score
3.3

Vegetative Score	Percentages (from other tabs)	Score		Thresholds
Wetland Vegetation	30	2		a perfect wetland would have a maximum score of 10
Exotic Vegetation	35	4		
Total Percentage	65	0.0	Vegetative Community Score	The Vegetative Community Score is calculated as the average of the wetland vegetation score and the exotic vegetation score unless; 1) the wetland vegetation is < 30% or 2) if the percent of exotic vegetation is > the percent of wetland vegetation. If either of these two conditions exist the Community Vegetative Score will = 0.

3.0 Average

<i>Wetland Criteria</i>	<i>Score</i>		<i>Thresholds</i>
Landscape	2.78		a perfect landscape would have a maximum score of 10
Water Environment	8.3		a perfect water environment would have a maximum score of 10
Vegetative Community	0		a perfect vegetative community would have a maximum score of 10
Assessment Score	0.369		a perfect wetland would have a score of 1.0





Project: Aurora Road Manufacturing and Warehouses

Figure 2: Wetland Assessment Map

0 100 200 400 Feet

2024 Aerial, Brevard County, Florida