



# REGIONAL REVIEW FINDING

Atlanta Regional Commission • 40 Courtland Street NE, Atlanta, Georgia 30303 • ph: 404.463.3100 • fax: 404.463.3105 • www.atlantaregional.com

DATE: Feb 8 2007

ARC REVIEW CODE: R701101

TO: Chairman Jason Harper  
ATTN TO: Jessica Guinn, Planning and Zoning  
FROM: Charles Krautler, Director

NOTE: This is digital  
signature. Original on file.

The Atlanta Regional Commission (ARC) has completed regional review of the following Development of Regional Impact (DRI). Below is the ARC finding. The Atlanta Regional Commission reviewed the DRI with regard to conflicts to regional plans, goals, and policies and impacts it might have on the activities, plans, goals, and policies of other local jurisdictions and state, federal, and other agencies. The finding does not address whether the DRI is or is not in the best interest of the local government.

**Submitting Local Government:** Henry County  
**Name of Proposal:** Crystal Lake Golf and Country Club

<b>Review Type:</b> Development of Regional Impact	<b>Date Opened:</b> Jan 10 2007	<b>Date Closed:</b> Feb 8 2007
--	---------------------------------	--------------------------------

**FINDING:** After reviewing the information submitted for the review, and the comments received from affected agencies, the Atlanta Regional Commission finding is that the DRI is in the best interest of the Region, and therefore, of the State.

**Additional Comments:** The proposed development in conjunction with the West Erma development adjacent to the Crystal Lake Development will include over 1300 residential units within the immediate area. Henry County is experiencing rapid growth and is expected to continue to grow at this rapid pace over the next twenty five years. It is important and strongly recommended that the County consider providing for basic daily commercial service and employment needs of the residents. The closest commercial, service oriented uses are located at the intersection of Jonesboro and Chambers Roads, approximately 1.5 miles away where a large scale commercial and office development is under construction. As the surrounding area continues to develop, it is important to provide convenient access to basic services for individuals to shop.

## THE FOLLOWING LOCAL GOVERNMENTS AND AGENCIES RECEIVED NOTICE OF THIS REVIEW:

ARC LAND USE PLANNING  
ARC DATA RESEARCH  
GEORGIA DEPARTMENT OF NATURAL RESOURCES  
CITY OF STOCKBRIDGE

ARC TRANSPORTATION PLANNING  
ARC AGING DIVISION  
GEORGIA DEPARTMENT OF TRANSPORTATION  
CLAYTON COUNTY

ARC ENVIRONMENTAL PLANNING  
GEORGIA DEPARTMENT OF COMMUNITY AFFAIRS  
GEORGIA REGIONAL TRANSPORTATION AUTHORITY  
HENRY COUNTY SCHOOLS

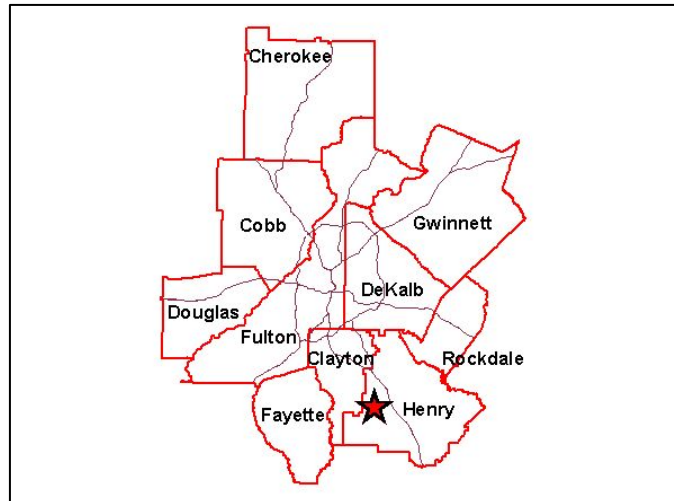
If you have any questions regarding this review, Please call Haley Fleming, Review Coordinator, at (404) 463-3311. This finding will be published to the ARC website.

The ARC review website is located at: <http://www.atlantaregional.com/landuse>.

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

### **PROPOSED ADDITION**

The proposed development is the addition of 16 residential units on 16.86 acres, as part of the Crystal Lake Golf and Country Club development that was reviewed in 2003 as the Links at Walnut Creek. Based on the DCA Rules and Procedures for DRI's, the proposed additional residential units trigger the development for a re-review. The overall development will consist of 701 single family detached dwelling units, an 18 hole golf course with an associated clubhouse with a 3,500 square foot restaurant. The proposed addition is located in the center of the overall development and will only have access from an existing internal subdivision street.



### **PROPOSED DEVELOPMENT:**

The Links at Walnut Creek is a residential development that will include 630 residential lots, an 18-hole golf course, and a clubhouse that will hold a 3,500 square foot restaurant. The project is located along Jonesboro Road, North Mount Carmel Road, and Dutch Town Road in the southwest portion of Henry County, just west of McDonough.

### **PROJECT PHASING:**

The project is scheduled to be completed as a single phase with a completion year of 2010.

### **GENERAL**

According to information on the review form or comments received from potentially affected governments:

**Is the proposed project consistent with the host-local government's comprehensive plan? If not, identify inconsistencies.**

The current zoning of the site is RA. The proposed zoning for the site is R-2. Information submitted for the review indicates that the proposed development is inconsistent with Henry County's Future Land Use Plan which indicated the site as future residential agricultural uses at up to 1.0 units per acre.

**Is the proposed project consistent with any potentially affected local government's comprehensive plan? If not, identify inconsistencies.**

None were determined during the review.

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT <u>REVIEW REPORT</u></b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

**Will the proposed project impact the implementation of any local government's short-term work program? If so, how?**

None were determined during the review.

**Is the proposed development consistent with regional plans and policies?**

### **Proposed Addition**

The Unified Growth Policy Map identifies the area as suburban neighborhoods which are defined as areas that are located outside the Central City or Activity Centers, developed at a more suburban scale with appropriate commercial development and low intensity mixed use servicing the local area.

The proposed development in conjunction with the West Erma development adjacent to the Crystal Lake Development will include over 1300 residential units within the immediate area. Henry County is experiencing rapid growth and is expected to continue to grow at this rapid pace over the next twenty five years. It is important and strongly recommended that the County consider providing for basic daily commercial service and employment needs of the residents. The closest commercial, service oriented uses are located at the intersection of Jonesboro and Chambers Roads, approximately 1.5 miles away where a large scale commercial and office development is under construction. As the surrounding area continues to develop, it is important to provide convenient access to basic services for individuals to shop.

### **Original Review**

This project meets or exceeds many of the policies and best development practices of the Regional Development Plan (RDP). However, the site design could be further refined to improve the consistency with RDP Policies and Practices. It is strongly recommended that the following policies and practices be used to evaluate the current site design:

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

## **FINAL REPORT**

### **Regional Development Plan Policies**

1. Promote sustainable economic growth in all areas of the region.
2. Encourage development within principal transportation corridors, the Central Business District, activity centers, and town centers.
3. Increase opportunities for mixed use development, transit-oriented development, infill and redevelopment.
4. At strategic regional locations, plan and retain industrial, and freight land uses.
5. Design transportation infrastructure to protect the context of adjoining development and provide a sense of place appropriate for our communities.
6. Promote the reclamation of Brownfield development sites.
7. Protect the character and integrity of existing neighborhoods, while also meeting the needs of communities.
8. Encourage a variety of home styles, densities, and price ranges in locations that are accessible to jobs and services to ensure housing for individuals and families of all incomes and age groups.
9. Promote new communities that feature greenspace and neighborhood parks, pedestrian scale, support transportation options and provide an appropriate mix of uses and housing types.
10. Promote sustainable and energy-efficient development.
11. Protect environmentally-sensitive areas including wetlands, floodplains, small water supply watersheds, rivers and stream corridors.
12. Increase the amount, quality, connectivity and accessibility of greenspace.
13. Provide strategies to preserve and enhance historic resources.
14. Through regional infrastructure planning, discourage growth in undeveloped areas.
15. Assist local governments to adopt growth management strategies that make more efficient use of existing infrastructure.
16. Inform and involve the public in planning at regional, local, and neighborhood levels.
17. Coordinate local policies and regulations to support Regional Policies.
18. Encourage the development of state and regional growth management policy.

### **BEST LAND USE PRACTICES**

Practice 1: Keep vehicle miles of travel (VMT) below the area average. Infill developments are the best at accomplishing this. The more remote a development the more self contained it must be to stay below the area average VMT.

Practice 2: Contribute to the area's jobs-housing balance. Strive for a job-housing balance with a three to five mile area around a development site.

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

Practice 3: Mix land uses at the finest grain the market will bear and include civic uses in the mix.

Practice 4: Develop in clusters and keep the clusters small. This will result in more open space preservation.

Practice 5: Place higher-density housing near commercial centers, transit lines and parks. This will enable more walking, biking and transit use.

Practice 6: Phase convenience shopping and recreational opportunities to keep pace with housing. These are valued amenities and translate into less external travel by residents if located conveniently to housing.

Practice 7: Make subdivisions into neighborhoods with well-defined centers and edges. This is traditional development.

Practice 8: Reserve school sites and donate them if necessary to attract new schools. This will result in neighborhood schools which provide a more supportive learning environment than larger ones.

Practice 9: Concentrate commercial development in compact centers or districts, rather than letting it spread out in strips.

Practice 10: Make shopping centers and business parks into all-purpose activity centers. Suburban shopping centers and their environs could be improved by mixing uses and designing them with the pedestrian amenities of downtowns.

Practice 11: Tame auto-oriented land uses, or at least separate them from pedestrian-oriented uses. Relegate "big box" stores to areas where they will do the least harm to the community fabric.

## BEST TRANSPORTATION PRACTICES

Practice 1: Design the street network with multiple connections and relatively direct routes.

Practice 2: Space through-streets no more than a half mile apart, or the equivalent route density in a curvilinear network.

Practice 3: Use traffic-calming measures liberally. Use short streets, sharp curves, center islands, traffic circles, textured pavements, speed bumps and raised crosswalks.

Practice 4: Keep speeds on local streets down to 20 mph.

Practice 5: Keep speeds on arterials and collectors down to 35 mph (at least inside communities).

Practice 6: Keep all streets as narrow as possible and never more than four traffic lanes wide. Florida suggests access streets 18 feet, subcollectors 26 feet, and collectors from 28 feet to 36 feet depending on lanes and parking.

Practice 7: Align streets to give buildings energy-efficient orientations. Allow building sites to benefit from sun angles, natural shading and prevailing breezes.

Practice 8: Avoid using traffic signals wherever possible and always space them for good traffic progression.

Practice 9: Provide networks for pedestrians and bicyclists as good as the network for motorists.

Practice 10: Provide pedestrians and bicyclists with shortcuts and alternatives to travel along high-volume streets.

Practice 11: Incorporate transit-oriented design features.

Practice 12: Establish TDM programs for local employees. Ridesharing, modified work hours, telecommuting and others.

## BEST ENVIRONMENTAL PRACTICES

Practice 1: Use a systems approach to environmental planning. Shift from development orientation to basins or ecosystems planning.

Practice 2: Channel development into areas that are already disturbed.

Practice 3: Preserve patches of high-quality habitat, as large and circular as possible, feathered at the edges and connected by wildlife corridors. Stream corridors offer great potential.

Practice 4: Design around significant wetlands.

Practice 5: Establish upland buffers around all retained wetlands and natural water bodies.

Practice 6: Preserve significant uplands, too.

Practice 7: Restore and enhance ecological functions damaged by prior site activities.

Practice 8: Detain runoff with open, natural drainage systems. The more natural the system the more valuable it will be for wildlife and water quality.

Practice 9: Design man-made lakes and stormwater ponds for maximum environmental value. Recreation, stormwater management, wildlife habitat and others.

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

Practice 10: Use reclaimed water and integrated pest management on large landscaped areas. Integrated pest management involves controlling pests by introducing their natural enemies and cultivating disease and insect resistant grasses.

Practice 11: Use and require the use of Xeriscape™ landscaping. Xeriscaping™ is water conserving landscape methods and materials.

## BEST HOUSING PRACTICES

Practice 1: Offer “life cycle” housing. Providing integrated housing for every part of the “life cycle”.

Practice 2: Achieve an average net residential density of six to seven units per acre without the appearance of crowding. Cluster housing to achieve open space.

Practice 3: Use cost-effective site development and construction practices. Small frontages and setbacks; rolled curbs or no curbs; shared driveways.

Practice 4: Design of energy-saving features. Natural shading and solar access.

Practice 5: Supply affordable single-family homes for moderate-income households.

Practice 6: Supply affordable multi-family and accessory housing for low-income households.

Practice 7: Tap government housing programs to broaden and deepen the housing/income mix.

Practice 8: Mix housing to the extent the market will bear.

**Will the proposed project generate population and/or employment increases in the Region? If yes, what would be the major infrastructure and facilities improvements needed to support the increase?**

Yes. Based on regional averages, the development will have a population of 1,575 residents, of which 457 would be school-aged children. It should be noted 153 lots will be marketed towards an older population whose households are less likely to contain school-aged children. Additionally, regional averages indicate 15 jobs would be created for commercial/retail uses, however, a restaurant use could generate several times that number of employment opportunities.

**What other major development projects are planned near the proposed project?**

The ARC has reviewed other major development projects, known as Area Plan (1984 to 1991) or as a DRI (1991 to present), within a three mile radius of the proposed project.

YEAR	NAME
2005	West Erma
2003	The Links at Walnut Creek

**Will the proposed project displace housing units or community facilities? If yes, identify and give number of units, facilities, etc.**

The site is undeveloped. The additional 16 lots are internal to an existing subdivision and abuts residential-agricultural zoned properties.

**Will the development cause a loss in jobs? If yes, how many.**

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

No.

## **LOCATION**

**Where is the proposed project located within the host-local government's boundaries?**

The proposed addition is located within Pod B of the overall subdivision development which is located in the center of the site. The adjacent roadways associated with the additional component are Jonesboro Road to the north, North Mount Carmel Road to the east, Dutchtown Road to the west and Mount Carmel Road to the south.

**Will the proposed project be located close to the host-local government's boundary with another local government? If yes, identify the other local government.**

The site proposed for development is less than 2 miles from the City of Lovejoy and Clayton County.

**Will the proposed project be located close to land uses in other jurisdictions that would benefit, or be negatively impacted, by the project? Identify those land uses which would benefit and those which would be negatively affected and describe impacts.**

The surrounding land use is primarily residential in character. The development will provide additional housing and recreational opportunities to the surrounding community.

## **ECONOMY OF THE REGION**

According to information on the review form or comments received from potentially affected governments:

**What new taxes will be generated by the proposed project?**

Information submitted with the review estimates a value of \$7,500,000 for the proposed addition at build-out. The estimated annual local tax revenue from the proposed addition is estimated at \$100,000.

Information submitted with the review estimates a value of \$288,000,000 at build-out. The estimated annual local tax revenue is estimated at \$5,000,000.

**How many short-term jobs will the development generate in the Region?**

Short-term jobs will depend upon construction schedule.

**Is the regional work force sufficient to fill the demand created by the proposed project?**

Yes.

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

**In what ways could the proposed development have a positive or negative impact on existing industry or business in the Region?**

The proposed development will provide additional housing in the area.

## **NATURAL RESOURCES**

**Will the proposed project be located in or near wetlands, groundwater recharge area, water supply watershed, protected river corridor, or other environmentally sensitive area of the Region? If yes, identify those areas.**

### **Proposed Addition**

#### **Water Supply Watersheds and Stream Buffers**

The project property is located in the Walnut Creek Water Supply Watershed, which is a small (less than 100-square mile) water supply watershed serving the City of McDonough. The County has developed a watershed protection district for Walnut Creek under Article VIII, Section 3-7-161 of the Henry County Code. The project will need to conform to all County Watershed District requirements.

Based on the USGS coverage for the project area, a blue-line tributary to Walnut Creek appears to cut across Lots 497 and 498, but neither the stream nor any buffers are shown. If this or any other stream is on the property, the project must conform to the relevant buffer requirements of the County's Walnut Creek Protection District and must meet the requirements of the County's Stream Buffer Ordinance, which has been adopted as one of the stormwater ordinances required under the Metropolitan North Georgia Water Planning District's District-wide Watershed Management Plan. Any work in the County buffers must meet ordinance requirements or a variance must be approved by the County.

For all state waters on the property, the State 25-foot erosion and sedimentation buffer is required. Any work in those buffers must conform to the state E & S requirements and must be approved by the appropriate agency.

#### **Storm Water/Water Quality**

The project should adequately address the impacts of the proposed development on stormwater runoff and downstream water quality. During construction, the project should conform to the relevant state and federal erosion and sedimentation control requirements. After construction, water quality will be impacted due to polluted stormwater runoff. ARC has estimated the amount of pollutants that will be produced after construction of the proposed development, using impervious areas based on estimated averages for land uses in the Atlanta Region. Actual loadings will vary with the actual project design and the actual amount of impervious coverage. The following table summarizes the results of the analysis:

Pollutant loads (lb./yr.)



<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

Land Use	Land Area (acres)	TP	TN	BOD	TSS	Zinc	Lead
Low-Med SF Res. (0.5-1 ac)	15.67	16.92	73.96	532.78	10013.13	4.23	0.94
Roads	1.19	2.14	21.79	135.66	1230.46	1.54	0.27
<b>TOTAL</b>	<b>16.86</b>	<b>19.07</b>	<b>95.75</b>	<b>668.44</b>	<b>11243.59</b>	<b>5.77</b>	<b>1.21</b>

Total Estimated Impervious: 24% in this analysis

The current site plan does not clearly indicate how stormwater runoff will be managed. In order to address post-construction stormwater runoff quality and quantity, the project should implement stormwater management controls (structural and/or nonstructural) as found in the Georgia Stormwater Management Manual ([www.georgiastormwater.com](http://www.georgiastormwater.com)) and meet the stormwater management quantity and quality criteria outlined in the Manual.

Where possible, the project should utilize the stormwater better site design concepts included in the Manual. Stormwater runoff from the site must be treated to remove at least 80% of the average annual total suspended solids (TSS) loading. An Excel design tool (GSMM Site Development Review Tool) is available at [www.northgeorgiawater.org](http://www.northgeorgiawater.org) that can be used to evaluate the site for meeting this requirement.

Yes, the property contains an area designated as within the 100-year floodplain and wetland to the north of Lake Erma. This area appears to be preserved from development according to the site plan. Lake Erma is also listed as part of the wetland area. The site is located within the Walnut Creek small water supply area. The southern half and the northern tip of the site contains areas of probably groundwater recharge.

## **Original Review**

### Watershed Protection

The project is in the South River sub-basin of the Ocmulgee River Basin. The proposed golf course/residential development is located in the Walnut Creek Water Supply Watershed, which is a water source for Henry County. The project should be designed to conform to the undisturbed vegetative buffers, impervious surface setbacks and impervious surface limits required under the Georgia Part V Criteria and any approved Henry County Water Supply protection plans.

### Georgia Erosion and Sedimentation Act/Stream Buffer Requirements

The Georgia Erosion and Sedimentation Control Act requires a 25-foot buffer on "State waters." It does not appear that any streams are located on the property.

### Wetlands and Floodplains

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

Areas within the floodplain are present north of Lake Erma. These areas and the lake are also within a wetland area. The site plan does not appear to show any type of encroachment into these areas. Also, information submitted with the review indicates the floodplain area would be preserved.

#### Storm Water/Water Quality

Steps should be taken to limit the amount of pollutants that will be produced during and after construction. During construction, the project should conform to the County's erosion and sediment control requirements. After construction, water quality can be impacted without storm water pollution controls.

Because the project area and the average lot sizes were not provided, estimated storm water loads could not be developed.

#### Structural Storm Water Controls

According to information submitted with the review, the proposed development would include storm water management. Before any permits are issued, the County should require that the developer submit a storm water management plan as a key component of the Plan of Development. The storm water plan should include location, construction and design details, and all engineering calculations for all storm water quality control measures. The Plan also should include a monitoring program to ensure storm water pollution control facilities function properly. ARC staff recommends that structural controls be designed to accommodate the installation, operation, and maintenance of automatic equipment at inlet and outlet locations for the monitoring of flow rates and water quality. It is recommended that the monitoring program consider the following minimum elements:

- Monitoring of four storms per year (1 per quarter);
- Collection of flow weighted composite of the inflow to the structure during the entire storm event;
- Collection of a flow weighted composite of the outflow from the structure—the sampling period should include the peak outflow resulting from the storm event;
- Analysis of inflow and outflow flow weighted composite samples for biochemical oxygen demand (BOD), total suspended solids (TSS), zinc, lead, total phosphorous (TP) and total nitrogen (TKN & NO<sub>3</sub>); and
- Collection of grab samples at the inlet and outlet locations during the periods of peak inflow and outflow for pH, dissolved oxygen (DO) and fecal coliform bacteria.

The County should determine the actual number and size of storms to be monitored as well as who should be responsible for conducting the monitoring. Monitoring should be conducted at the developer's or owner's expense. Analysis should conform to EPA standards. Specific monitoring procedures and parameters analyzed may change in the future based on continuing storm water runoff and water quality studies.

The storm water plan should require the developer to submit a detailed, long-term schedule for inspection and maintenance of the storm facilities. This schedule should describe all maintenance and inspection requirements and persons responsible for performing maintenance and inspection activities. These provisions and the monitoring program should be included in a formal, legally binding maintenance agreement between the County and the responsible party.

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

In addition to inspections required in the storm water management plan, the formal maintenance agreement between the developer and the County should allow for periodic inspections for the storm water facilities to be conducted by the County. If inadequate maintenance is observed, the responsible party should be notified and given a period of time to correct any deficiencies. If the party fails to respond, the County should be given the right to make necessary repairs and bill the responsible party.

The County should not release the site plans for development or issue any grading or construction permits until a storm water management plan has been approved and a fully executed maintenance/monitoring agreement is in place.

### **HISTORIC RESOURCES**

**Will the proposed project be located near a national register site? If yes, identify site.**

No.

**In what ways could the proposed project create impacts that would damage the resource?**

Not applicable.

**In what ways could the proposed project have a positive influence on efforts to preserve or promote the historic resource?**

Not applicable.

### **INFRASTRUCTURE**

#### **Transportation**

Proposed Addition

**How many site access points will be associated with the proposed development? What are their locations?**

The proposed additional 16 lots will only have access from an existing internal subdivision street.

The overall development will have a total of three access points.

- Two access points will be located along Dutchtown Road.
- One access point will be located along North Mount Carmel Road.

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

**How much traffic (both average daily and peak am/pm) will be generated by the proposed project?**

PBS&J performed the transportation analysis. GRTA and ARC review staff agreed with the methodology and assumptions used in the analysis. The net trip generation is based on the rates published in the 7<sup>th</sup> edition of the Institute of Transportation Engineers (ITE) Trip Generation report; they are listed in the following table:

Land Use	A.M. Peak Hour			P.M. Peak Hour			24-Hour
	Enter	Exit	2-Way	Enter	Exit	2-Way	2-Way
701 Single-Family Homes	132	396	528	436	257	693	6834
3,500 sq ft Restaurant Space	2	1	3	17	9	26	315
18-Hole Golf Course	32	8	40	22	27	49	643
<b>TOTAL NEW TRIPS</b>	<b>166</b>	<b>405</b>	<b>571</b>	<b>475</b>	<b>293</b>	<b>768</b>	<b>7792</b>

\*The trip generation table above represents gross trip generation data. No reductions were taken as part of this review.

**What are the existing traffic patterns and volumes on the local, county, state and interstate roads that serve the site?**

Incorporating the trip generation results, the transportation consultant distributed the traffic on the current roadway network. An assessment of the existing Level of Service (LOS) and projected LOS based on the trip distribution findings helps to determine the study network. The results of this exercise determined the study network, which has been approved by ARC and GRTA. If analysis of an intersection or roadway results in a substandard LOS "D", then the consultant recommends improvements.

Projected traffic volumes from the Regional Travel Demand Model are compared to the assigned capacity of facilities within the study network. This data is used to calculate a volume to capacity (V/C) ratio. The V/C ratio values that define the LOS thresholds vary depending on factors such as the type of terrain traversed and the percent of the road where passing is prohibited. LOS A is free-flow traffic from 0 to 0.3, LOS B is decreased free-flow from 0.31 to 0.5, LOS C is limited mobility from 0.51 to 0.75, LOS D is restricted mobility from 0.76 to 0.9, LOS E is at or near capacity from 0.91 to 1.00, and LOS F is breakdown flow with a V/C ratio of 1.01 or above. As a V/C ratio reaches 0.8, congestion increases. The V/C ratios for traffic in various network years are presented in the following table. Any facilities that have a V/C ratio of 1.0 or above are considered congested.



<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

**List the transportation improvements that would affect or be affected by the proposed project.**

**2006-2011 TIP\***

ARC Number	Route	Type of Improvement	Scheduled Completion Year
N/A	N/A	N/A	N/A

**2030 RTP\***

ARC Number	Route	Type of Improvement	Scheduled Completion Year
N/A	N/A	N/A	N/A

*\*The ARC Board adopted the 2030 RTP and FY 2006-2011 TIP on February 22, 2006. USDOT approved on March 30<sup>th</sup>, 2006.*

**Summarize the transportation improvements as recommended by consultant in the traffic study for Crystal Lake Plantation.**

According to the findings, there will be some capacity deficiencies as a result of future year **background** traffic. The transportation consultant has made recommendations for improvements to be carried out in order to upgrade the existing level of service.

**North Mount Carmel Road at Jonesboro Road**

- Provide an eastbound right-turn lane.
- Provide a westbound left-turn bay.
- Signalize intersection.

**North Mount Carmel Road at Mount Carmel Road**

- Provide an eastbound left-turn bay.

According to the findings, there will be some capacity deficiencies as a result of future year **total** traffic. The transportation consultant has made recommendations for improvements to be carried out in order to upgrade the existing level of service. The recommendations stated in the no-build condition are also applicable to the build condition.

**North Mount Carmel Road at Mount Carmel Road**

- Provide a westbound right-turn bay.
- Signalize intersection.

**Is the site served by transit? If so, describe type and level of service and how it will enhance or be enhanced by the presence of transit? Are there plans to provide or expand transit service in the vicinity of the proposed project?**

The proposed site is located approximately five miles from the McDonough park and ride lot which is serviced by GRTA Xpress bus route 430. GRTA Xpress bus route 430 provides service, with a connection to Downtown Atlanta, Monday through Friday. Morning service is provided from 5:45

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

a.m. till 7:45 a.m. with headways between fifteen and thirty minutes. Evening service is provided from 3:30 p.m. till 7:20 p.m. with headways between fifteen and thirty five minutes.

**What transportation demand management strategies does the developer propose (carpool, flex-time, transit subsidy, etc.)?**

None proposed.

**What are the conclusions of this review? Is the transportation system (existing and planned) capable of accommodating these trips?**

According to the impact analysis in the traffic study, two intersections will operate below the acceptable level of service in the future year background traffic condition prior to implementing the recommended improvements while one intersection will operate below the acceptable level of service in the future year total condition prior to implementing the recommended improvements. Implementing the recommended improvements allows the three identified intersections to return to an acceptable level of service. It is suggested that all recommended improvements be implemented prior to construction completion.

## **INFRASTRUCTURE**

### **Wastewater and Sewage**

Wastewater for the proposed 16 additional lots is 0.0075 MGD based on information submitted for the review. Wastewater for the overall development is estimated at 0.3 MGD based on information submitted for the review. A 5-mile sewer line extension would be necessary to serve this project.

**Which facility will treat wastewater from the project?**

Information submitted with the review state that the Camp Creek plant (Henry County) is the wastewater treatment plant that would serve this area.

**What is the current permitted capacity and average annual flow to this facility?**

The capacity of the Camp Creek plant is listed below:

<b>PERMITTED CAPACITY MMF, MGD<sub>1</sub></b>	<b>DESIGN CAPACITY MMF, MGD</b>	<b>2001MMF, MGD</b>	<b>2008 MMF, MGD</b>	<b>2008 CAPACITY AVAILABLE +/-, MGD</b>	<b>PLANNED EXPANSION</b>	<b>REMARKS</b>
1.5	1.5	1.2	1.5	0	When flow exceeds capacity, excess flow will be diverted to Indian Creek WRF – Upon completion of new Walnut Creek plant, all flow diverted to Walnut Creek and Camp Creek decommissioned.	

*MMF: Maximum Monthly Flow. MGD: million of gallons per day.*

<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

<sup>1</sup> Source: Metropolitan North Georgia Water Planning District *SHORT-TERM WASTEWATER CAPACITY PLAN Final Report*

**What other major developments will be served by the plant serving this project?**

ARC has reviewed a number of major developments that will be served by this plant.

**INFRASTRUCTURE**

**Water Supply and Treatment**

**How much water will the proposed project demand?**

Water demand for the proposed 16 additional lots is 0.01 MGD. Water demand for the overall development also is estimated at 0.3 MGD based on information submitted for the review.

**How will the proposed project's demand for water impact the water supply or treatment facilities of the jurisdiction providing the service?**

There appears to be sufficient capacity for this project to be constructed, however this project as proposed would use all remaining capacity of the treatment facility.

**INFRASTRUCTURE**

**Solid Waste**

**How much solid waste will be generated by the project? Where will this waste be disposed?**

Information submitted with the review estimates 580 tons of solid waste per year for the overall development and 42 tons for the proposed 16 additional units, however based on regional averages the estimate rises to 1,046 tons of solid waste per year.

**Will the project create any unusual waste handling or disposal problems?**

No.

**Are there any provisions for recycling this project's solid waste?**

None stated.

**INFRASTRUCTURE**

**Other facilities**

**According to information gained in the review process, will there be any unusual intergovernmental impacts on:**

- Levels of governmental services?
- Administrative facilities?



<b>Preliminary Report:</b>	January 10, 2007	<b>DEVELOPMENT OF REGIONAL IMPACT REVIEW REPORT</b>	<b>Project:</b>	Crystal Lake Golf and Country Club
<b>Final Report</b>	February 9, 2007		<b>Comments</b>	January 24, 2007

- **Schools?**
- **Libraries or cultural facilities?**
- **Fire, police, or EMS?**
- **Other government facilities?**
- **Other community services/resources (day care, health care, low income, non-English speaking, elderly, etc.)?**

None were determined during the review of the proposed 16 additional lots. However, at the time of the original review of the Links at Walnut Creek, the Georgia Department of Transportation provided a comment concerning the condition of Mount Carmel Road in the vicinity of Mount Carmel Elementary School and Dutch Town Road. They note congestion along Mount Carmel Road during drop-off and pick-up times of children from the elementary school.

## **HOUSING**

### **Will the proposed project create a demand for additional housing?**

Few jobs would be created as a part of the proposed development.

### **Will the proposed project provide housing opportunities close to existing employment centers?**

No.

### **Is there housing accessible to the project in all price ranges demanded?**

The site proposed for the development is located in Census Tract 703.05. This tract had a 29.8 percent increase in number of housing units from 2000 to 2005 according to ARC's Population and Housing report. The census tract data in which the project is located shows that 100 percent of the housing units are single-family, compared to 67 percent for the region; thus indicating a need for additional housing options in the immediate area.

### **Is it likely or unlikely that potential employees of the proposed project will be able to find affordable\* housing?**

The project would create few employment opportunities, however it would be anticipated that affordable housing would be available in the area.

\* Defined as 30 percent of the income of a family making 80 percent of the median income of the Region – FY 2000 median income of \$51,649 for family of 4 in Georgia.

January 20, 2007

M. Haley Fleming, AICP  
Senior Planner  
Atlanta Regional Commission  
40 Courtland Street, NE  
Atlanta, Georgia 30303

**RE:     ARC Review Code R701101                             Submitted via email on 01-22-07**  
**Proposal Name: Crystal Lake Golf and Country Club, Henry County**

Dear Ms. Fleming:

The purpose of this letter is to respond to the above referenced zoning proposal. Your memorandum of January 10, 2007 solicits comments relating to the above referenced prior to January 24, 2007.

Upon review of the above referenced proposal, it appears that this is a proposal for sixteen single family residences. As such, this request appears to have a negligible impact on future public school enrollment in Henry County.

Please do not hesitate to contact me if you have questions or comments regarding your solicitation of comments regarding this proposal or if I have incorrectly interpreted the purpose of this proposal.

Sincerely,

Ethan Hildreth, Ph.D.  
Assistant Superintendent,  
Administrative Services

Copy: Dr. Jack Parish, Superintendent  
Allen Guimarin, Director of Facilities

Your DRI ID NUMBER for this submission is: **1254**  
 Use this number when filling out a DRI REVIEW REQUEST.  
 Submitted on: 10/19/2006 1:17:52 PM

## DEVELOPMENT OF REGIONAL IMPACT

### Henry County Initial DRI Information (Form1b)

This form is intended for use by local governments within the Metropolitan Region Tier that are also within the jurisdiction of the Georgia Regional Transportation Authority (GRTA). The form is to be completed by the city or county government for submission to your Regional Development Center (RDC), GRTA and DCA. This form provides basic project information that will allow the RDC to determine if the project appears to meet or exceed applicable DRI thresholds. Local governments should refer to both the Rules for the DRI Process 110-12-3 and the DRI Tiers and Thresholds established by DCA.

### Local Government Information

Submitting Local Government:	Henry County
*Individual completing form and Mailing Address:	Jessica Guinn Henry County Planning and Zoning 140 Henry Parkway McDonough, GA 30253
Telephone:	(770) 954-2457
Fax:	(770) 954-2958
E-mail ( <b>only one</b> ):	<a href="mailto:jguinn@co.henry.ga.us">jguinn@co.henry.ga.us</a>

\*Note: The local government representative completing this form is responsible for the accuracy of the information contained herein. If a project is to be located in more than one jurisdiction and, in total, the project meets or exceeds a DRI threshold, the local government in which the largest portion of the project is to be located is responsible for initiating the DRI review process.

### Proposed Project Information

Name of Proposed Project:	Crystal Lake Golf and Country Club (DRI #371)	
Development Type	Description of Project	Thresholds
Housing	Development consisted of 630 lots at the time of initial review (DRI # 371). At this time 685 lots have been platted within the Crystal Lake Golf and Country Club development. A rezoning request has been submitted to Henry Planning and Zoning to add 14 lots to the development exceeding the 693 lots permissible under the 10% Rule by 6 lots.	<a href="#">View Thresholds</a>
Developer / Applicant and Mailing Address:	JAMDAT Development, LLC 827 Fairways Court, Suite 305 Stockbridge, GA 30281	
Telephone:		
Fax:		
Email:		
Name of property owner(s) if different from developer/applicant:		
Provide Land-Lot-District Number:	Land Lots 106 & 107, District 6	
What are the principal streets or roads providing vehicular access to the site?	North Mount Carmel Road	
Provide name of nearest street(s) or intersection:	North Mount Carmel Road and Erma Road	
Provide geographic coordinates (latitude/longitude) of the center of the proposed project (optional):	/	
If available, provide a link to a website providing a general location map of the proposed project (optional). ( <a href="http://www.mapquest.com">http://www.mapquest.com</a> or <a href="http://www.mapblast.com">http://www.mapblast.com</a> are helpful sites to use.):	<a href="http://www.mapquest.com">HTTP://www.mapquest.com</a>	

Is the proposed project entirely located within your local government's jurisdiction?	Y
If yes, how close is the boundary of the nearest other local government?	Appx. 4 miles
If no, provide the following information:	
In what additional jurisdictions is the project located?	
In which jurisdiction is the majority of the project located? (give percent of project)	Name: (NOTE: This local government is responsible for initiating the DRI review process.)
	Percent of Project:
Is the current proposal a continuation or expansion of a previous DRI?	Y
If yes, provide the following information (where applicable):	Name: The Links at Walnut Creek
	Project ID:
	App #: DRI # 371
The initial action being requested of the local government by the applicant is:	Rezoning
What is the name of the water supplier for this site?	Henry County Water and Sewerage Authority
What is the name of the wastewater treatment supplier for this site?	Henry County Water and Sewerage Authority
Is this project a phase or part of a larger overall project?	Y
If yes, what percent of the overall project does this project/phase represent?	appx. 2%
Estimated Completion Dates:	This project/phase: Unknown Overall project: Unknown

### Local Government Comprehensive Plan

Is the development consistent with the local government's comprehensive plan, including the Future Land Use Map?	N
If no, does the local government intend to amend the plan/map to account for this development?	N
If amendments are needed, when will the plan/map be amended?	

### Service Delivery Strategy

Is all local service provision consistent with the countywide Service Delivery Strategy?	Y
If no, when will required amendments to the countywide Service Delivery Strategy be complete?	

### Land Transportation Improvements

Are land transportation or access improvements planned or needed to support the proposed project?	N
If yes, how have these improvements been identified:	
Included in local government Comprehensive Plan or Short Term Work Program?	
Included in other local government plans (e.g. SPLOST/LOST Projects, etc.)?	
Included in an official Transportation Improvement Plan (TIP)?	
Developer/Applicant has identified needed improvements?	
Other (Please Describe):	

Submitted on: 1/3/2007 4:41:11 PM

## DEVELOPMENT OF REGIONAL IMPACT DRI Review Initiation Request (Form2a)

### Local Government Information

Submitting Local Government:	Henry County
Individual completing form:	Jessica Guinn
Telephone:	(770) 288-7526
Fax:	(770) 954-2958
Email ( <b>only one</b> ):	<a href="mailto:jguinn@co.henry.ga.us">jguinn@co.henry.ga.us</a>

### Proposed Project Information

Name of Proposed Project:	Crystal Lake Golf and Country Club
DRI ID Number:	1254
Developer/Applicant:	JAMDAT Development, LLC- Attn.: J.P. Evans
Telephone:	(770) 474-1347
Fax:	(770) 474-0022
Email(s):	jpeconst@aol.com

### DRI Review Process

Has the RDC identified any additional information required in order to proceed with the official regional review process? (If no, proceed to Economic Impacts.)	Y
If yes, has that additional information been provided to your RDC and, if applicable, GRTA?	Y
If no, the official review process can not start until this additional information is provided.	

### Economic Impacts

Estimated Value at Build-Out:	\$7,500,000
Estimated annual local tax revenues (i.e., property tax, sales tax) likely to be generated by the proposed development:	\$100,000
Is the regional work force sufficient to fill the demand created by the proposed project?	Y
If the development will displace any existing uses, please describe (using number of units, square feet., etc): None	

### Community Facilities Impacts

#### Water Supply

Name of water supply provider for this site:	Henry County Water and Sewerage Authority
What is the estimated water supply demand to be generated by the project, measured in Millions of Gallons Per Day (MGD)?	0.01 MGD
Is sufficient water supply capacity available to serve the proposed project?	Y
If no, are there any current plans to expand existing water supply capacity?	
If there are plans to expand the existing water supply capacity, briefly describe below: N/A	
If water line extension is required to serve this project, how much additional line (in miles) will be required?	0.4 mi.

### Wastewater Disposal

Name of wastewater treatment provider for this site:	Henry County Water and Sewerage Authority
What is the estimated sewage flow to be generated by the project, measured in Millions of Gallons Per Day (MGD)?	0.0075 MGD
Is sufficient wastewater treatment capacity available to serve this proposed project?	Y
If no, are there any current plans to expand existing wastewater treatment capacity?	Y
If there are plans to expand existing wastewater treatment capacity, briefly describe below: N/A	
If sewer line extension is required to serve this project, how much additional line (in miles) will be required?	0.5 mi.

### Land Transportation

How much traffic volume is expected to be generated by the proposed development, in peak hour vehicle trips per day? (If only an alternative measure of volume is available, please provide.)	58 AM Peak Hour; 79 PM Peak Hour
Has a traffic study been performed to determine whether or not transportation or access improvements will be needed to serve this project?	Y
If yes, has a copy of the study been provided to the local government?	Y
If transportation improvements are needed to serve this project, please describe below: See traffic study	

### Solid Waste Disposal

How much solid waste is the project expected to generate annually (in tons)?	42 tons
Is sufficient landfill capacity available to serve this proposed project?	Y
If no, are there any current plans to expand existing landfill capacity?	
If there are plans to expand existing landfill capacity, briefly describe below: N/A	
Will any hazardous waste be generated by the development? If yes, please explain below:	N

### Stormwater Management

What percentage of the site is projected to be impervious surface once the proposed development has been constructed?	18%
Is the site located in a water supply watershed?	Y
If yes, list the watershed(s) name(s) below: Walnut Creek Watershed District	
Describe any measures proposed (such as buffers, detention or retention ponds, pervious parking areas) to mitigate the project's impacts on stormwater management: County required buffers; state and county mandated water quality and quantity BMP's	

### Environmental Quality

Is the development located within, or likely to affect any of the following:	
1. Water supply watersheds?	Y
2. Significant groundwater recharge areas?	N
3. Wetlands?	N
4. Protected mountains?	N
5. Protected river corridors?	N

If you answered yes to any question 1-5 above, describe how the identified resource(s) may be affected below:

Has the local government implemented environmental regulations consistent with the Department of Natural Resources' Rules for Environmental Planning Criteria?

Y

Is the development located within, or likely to affect any of the following:

1. Floodplains?

N

2. Historic resources?

N

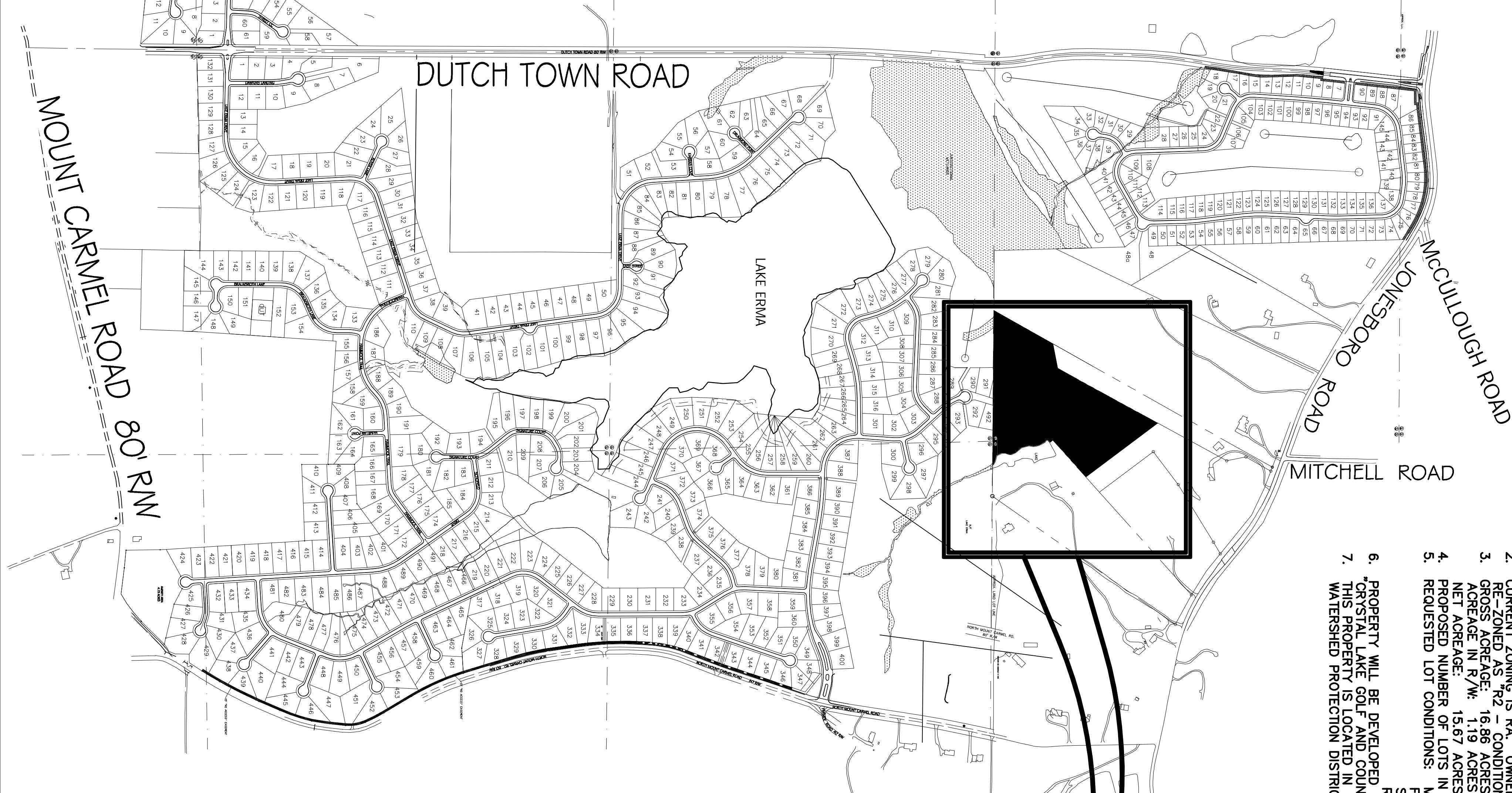
3. Other environmentally sensitive resources?

N

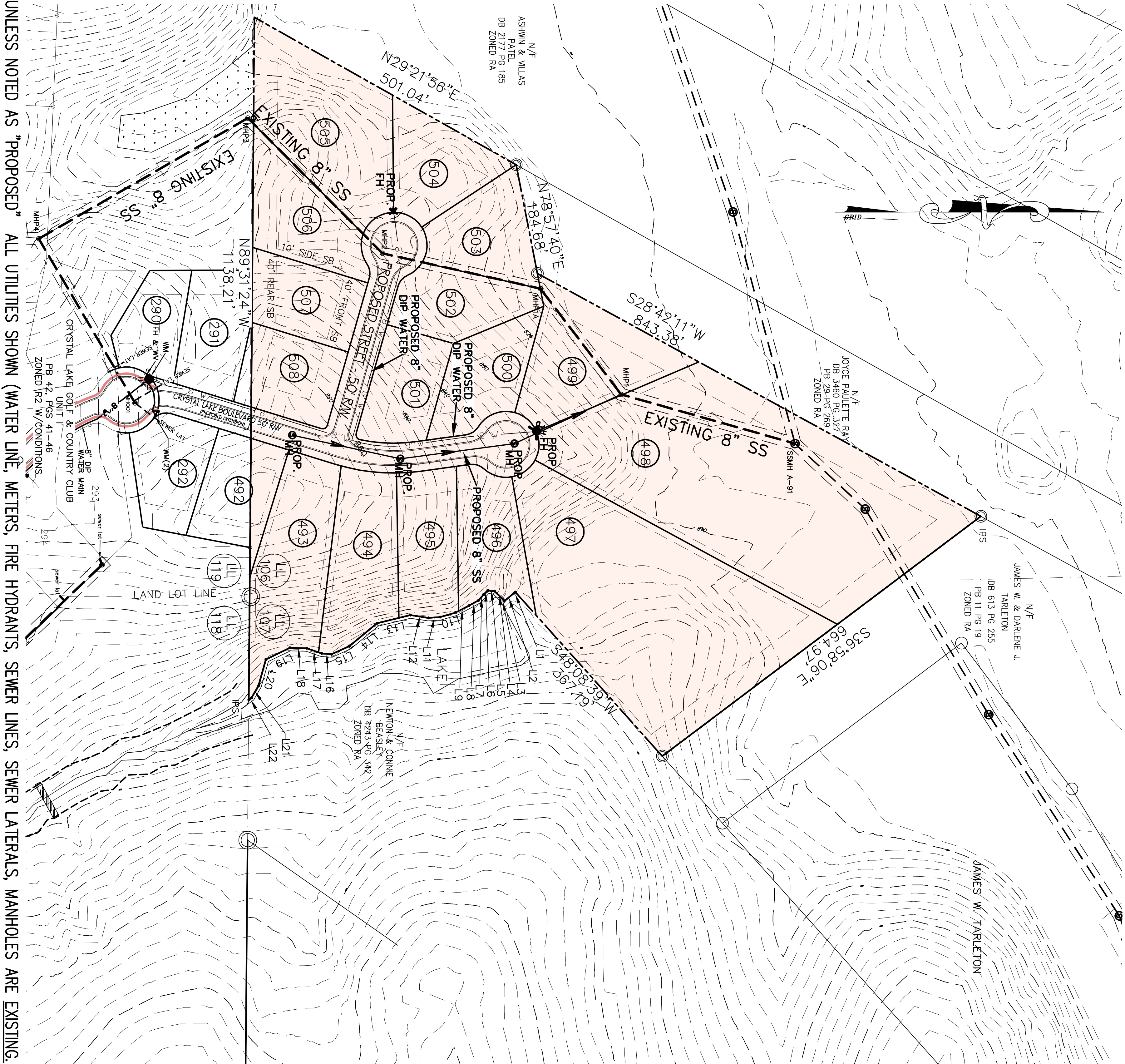
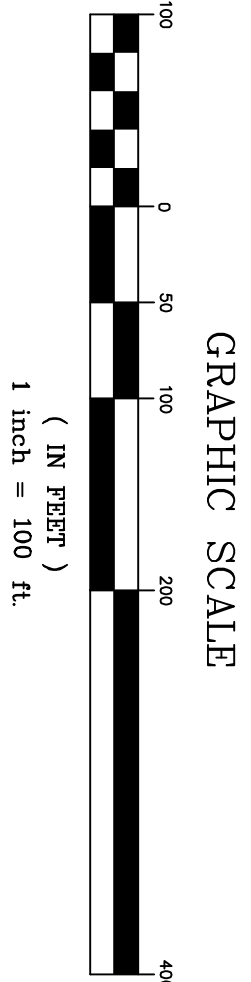
If you answered yes to any question 1-3 above, describe how the identified resource(s) may be affected below:



- NOTES:
1. OWNER/DEVELOPER: JAMDAT DEVELOPMENT, LLC  
827 FAIRWAYS COURT, SUITE 306  
STOCKBRIDGE, GEORGIA 30281  
PHONE: 678-859-6857
  2. CURRENT ZONING IS RA. OWNER REQUESTS PARCEL TO BE RE-ZONED AS "R2 - CONDITIONAL."
  3. GROSS ACREAGE: 16.86 ACRES  
ACREAGE IN R/W: 1.19 ACRES  
NET ACREAGE: 15.67 ACRES
  4. PROPOSED NUMBER OF LOTS IN THIS PARCEL: 16  
MINIMUM LOT SIZE - 22,000 S.F.  
FRONT SETBACKS - 40 FT.  
SIDE SETBACKS - 10 FT.  
REAR SETBACKS - 10 FT.
  6. PROPERTY WILL BE DEVELOPED AS A CLUB.  
"CRYSTAL LAKE GOLF AND COUNTRY CLUB".
  7. THIS PROPERTY IS LOCATED IN THE WALNUT CREEK WATERSHED PROTECTION DISTRICT.



LINE TABLE		
LINE	LENGTH	BEARING
L1	32.3	S34°34'24"E
L2	32.3	S34°34'24"E
L3	32.3	S34°34'24"E
L4	19.66	S43°29'17"W
L5	11.56	S06°43'43"W
L6	9.90	S45°06'12"E
L7	12.54	S49°07'24"E
L8	18.57	S28°50'42"E
L9	6.26	S27°23'31"E
L10	19.42	S04°11'54"E
L11	30.51	S08°45'19"W
L12	57.29	S13°56'17"E
L13	60.19	S39°42'29"E
L14	32.32	S24°07'26"E
L15	16.50	S02°23'59"W
L16	28.37	S01°51'44"W
L17	44.33	S25°50'52"E
L18	43.61	S74°46'47"E
L19	23.44	S59°51'00"E
L20	5.63	S55°46'11"E



UNLESS NOTED AS "PROPOSED" ALL UTILITIES SHOWN (WATER LINE, METERS, FIRE HYDRANTS, SEWER LINES, SEWER LATERALS, MANHOLES ARE EXISTING.

SUBDIVISION			SHEET TITLE:	
COUNTY	HENRY	CITY	REZONING PLAN	
LAND LOT	106 & 107	DISTRICT	6TH	PREPARED FOR:
SHEET	1	JOB NO.	206938	JAMDAT DEVELOPMENT, LLC
DATE	6/14/06	SCALE	1" = 100'	