

**Planning and Development Department**

156 CHURCH STREET, HENDERSON, NC 27536

(252) 738-2080 / FAX 738-2089

**Staff Report 10/09/2014**

**Owner:** James & Kimberly Champion (0375 01015) and John Bennett, Jr. & Ronald Bennett (0375 01001)

**Applicant:** FLS Energy, Inc. on behalf of Stagecoach Owner, LLC

**Parcel ID:** 0375 01015 and a portion of 0375 01001

**Location:** Stagecoach Road, approx. 0.6 miles west of Kelly Road

**Current Zoning:** (A-R) Agricultural Residential

**Public Hearing:**  
09/11/2014  
continued to 10/9/2014

**Prepared by:**  
David Robinson

**Description of Conditional Use Permit Request:**

The applicant is requesting a conditional use permit to allow construction of a 4.99 MW solar farm under the use category of "Solar Energy System, Large Scale".

**Exhibits as follows:**

**Exhibit 1.** Application

**Exhibit 2.** Applicant's supporting materials

**Exhibit 3.** Surrounding zoning and property owner map

**Exhibit 4.** Solar Farm regulations (as per zoning ordinance)

**Exhibit 5.** Items submitted since September 11th, 2014 meeting

- Letter, site address, recombination survey, landscape plan, findings from EMF study, release agreement, topographic map, road frontage photographs

**Exhibit 6.** Conditional Use Permit Check List

**DRAFT Findings of Fact**

1. The request is for a conditional use permit to allow a 4.99 MW solar farm on a parcel zoned (A-R) Agricultural Residential.
2. James & Kimberly Champion own a 25 acre parcel (0375 01015) and John Bennett, Jr. and Ronald Bennett own a 200 acre parcel (0375 01001). FLS Energy, LLC is to purchase 0375 01015 (25 acres) and a portion (16.875 acres) of 0375 01001.
3. The property is located on the south side of Stagecoach Road across from Crowder Farm subdivision, approximately 0.6 miles west of Kelly Road.
4. The property consists of 41.87 acres of which 26.4 acres will be the array footprint. The property currently is partly wooded with no structures.
5. The lot is currently zoned (A-R) Agricultural Residential.
6. The application requesting a conditional use permit was filed on August 20<sup>th</sup>, 2014.
7. The adjoining property owners were notified on August 26<sup>th</sup>, 2014.
8. The property was posted on August 29<sup>th</sup>, 2014.
9. The legal notice was run in the Henderson Daily Dispatch on August 27<sup>th</sup> and September 3<sup>rd</sup>, 2014.
10. The Board of Adjustment opened the hearing and heard testimony from staff, the public, and the Assistant General Counsel for FLS, Energy, Inc. at the September 11, 2014 meeting. Upon reviewing the submitted application, the board tabled the matter to allow additional information to be submitted in accordance with the concerns noted.

**Staff Comments**

The applicant is requesting a conditional use permit to construct a 4.99 MW solar farm. As proposed, the solar farm project would involve the purchase of a 25 acre parcel (0375 01015) and a portion of a 200 acre parcel (0375 01001) for a total property area of 41.87 acres. The proposed array footprint area will be 26.4 acres. The intent of FLS Energy, LLC is to record a recombination survey to reflect the new property boundaries and acreage of the project area. It is recommended that the board require completion and recordation of the recombination survey prior to staff releasing the conditional use permit.

The proposal states that FLS will leave natural wooded buffers in place to reduce visibility, with no tree removal to take place within 20 feet of neighboring properties. Side setbacks will range from 129 feet to 209 feet, rear setbacks will be greater than 150 feet, and the minimum front setback will be 70 feet. Following construction, FLS proposed to fence in the solar farm with a chain link fence with a height of at least eight feet. Access to the site will be controlled via keyed locks.

The solar panels will have no moving parts and will have a relatively low profile with a maximum height of 7.5 feet (ordinance requires less than 25 feet).

**Initial Review Items:**

1. NCDOT - The application includes correspondence with DOT regarding a driveway permit. DOT inspected the Stagecoach site and will require vegetation to be cut along road frontage to achieve the minimum site distance.
2. NCDENR – Division of Water Quality has no objections to project, but requires an erosion and sedimentation control plan. It is recommended that the NCDENR certificate of completion be submitted prior to issuance of the local certificate of occupancy.

**Review of Material Submitted Since September 11, 2014 meeting:**

1. An address has been issued for the Stagecoach solar site. The address will be 1835 Stagecoach Road, Henderson, NC 27537.
2. A preliminary recombination survey was submitted showing the recombination of a portion of parcel 0375 01001 (16.875 acres) and 0375 01015 (25 acres) for a total acreage of 41.87 acres. In addition to the recombination survey, legal descriptions of land to be purchased have been submitted.
3. The applicant developed a landscaping plan that shows a 20 foot wide buffer of existing vegetation around the site. The plan shows that new plant material will be added to the Stagecoach Road side of the property to create a 50 foot deep landscape buffer that will include canopy trees, under canopy trees, and shrubbery to reduce visibility of the project site.
4. Included in the newly submitted material is a paper authored by Good Company that outlines the scientific background behind solar panels, electromagnetic fields (EMF), and potential effects on humans.
5. The applicant has secured a release agreement with Gary Tillotson for the dirt drive as shown on the Boundary Survey prepared by Sacks Surveying & Mapping, P.C. and dated July 14, 2014.
6. There is also a topographic map included to show drainage on the project site.
7. Planning staff also took photographs of the site from Stagecoach Road to gauge the presence, density, and height of vegetation on the site.
8. The Duke Energy interconnection agreement has been drafted but not yet executed. Planning staff recommends that the execution of this agreement be finalized as a condition to the permit.
9. The applicant is still working with NCDENR but has not yet developed the erosion and sedimentation control plan. Planning staff recommends that the NCDENR certificate of completion be submitted prior to issuance of the local certificate of occupancy.
10. The driveway permit from NCDOT is ready to be issued; however technical software issues prevented the issuance of the permit before the submittal of the applicant's material to the Planning staff.



# Vance COUNTY

NORTH CAROLINA

## Conditional Use Permit Application

Vance County Planning & Development Department

156 Church Street, Suite 3  
Henderson, NC 27536  
Ph: (252) 738-2080  
Fax: (252) 738-2089

### For Administrative Use Only:

Case #	20140911-1
Fee Paid	\$250.00 ck
BOA Date	9-11-2014

### Property Owner Information

Property Owner: James T. Champion and Kimberly P. Champion  
Mailing Address: 200 Nutbush Drive  
City: Manson State: NC Zip Code: 27533  
Phone #: ( 252 ) 213 - 0099 Fax #: ( ) -  
E-mail Address: kksnws@vance.net

### Applicant Information

Applicant: FLS Energy, Inc. on behalf of Stagecoach Owner, LLC  
Mailing Address: 130 Roberts Street  
City: Asheville State: NC Zip Code: 28801  
Phone #: ( 828 ) 350 - 3993 Fax #: ( ) -  
E-mail Address: greg@flsenergy.com

### Property Information *For multiple properties please attach an additional sheet.*

Property Address: Stagecoach Road (unimproved land with no E911 address currently)  
Tax Map Number: 112 PIN (parcel identification #): 0375 01015  
Type of Petition: Conditional Use Permit  
Existing Zoning: A-R Proposed Zoning: A-R  
Acreage: +/- 25 acres Road Frontage: +/- 750 feet  
Existing Use: unimproved, mostly wooded land

### Deed Reference

- ☐ Metes and bounds description attached
- ☐ Site plan/sketch of proposal attached



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### For Administrative Use Only:

Case #	20140911-1
Fee Paid	\$250.00 CF
BOA Date	9-11-2014

### Property Owner Information

Property Owner: John T. Bennett, Jr. & Ronald E. Bennett  
Mailing Address: 3300 Stagecoach Road  
City: Henderson State: NC Zip Code: 27537  
Phone #: ( 252 ) 425 - 5928 Fax #: ( ) -  
E-mail Address: hillsidefarms13@yahoo.com

### Applicant Information

Applicant: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Phone #: ( ) - Fax #: ( ) -  
E-mail Address: \_\_\_\_\_

### Property Information *For multiple properties please attach an additional sheet.*

Property Address: Stagecoach Road  
Tax Map Number: \_\_\_\_\_ PIN (parcel identification #): 0375 01 001  
Type of Petition: Conditional Use Permit  
Existing Zoning: AR Proposed Zoning: AR  
Acreage: 15 acres Road Frontage: +/- 380 feet  
Existing Use: unimproved wooded land

### Deed Reference

- ☐ Metes and bounds description attached
- ☐ Site plan/sketch of proposal attached



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## Conditional Use Permit Application

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### Statement of Justification

1. Application is hereby made for the following use: *Please explain below:*

Solar Energy System, Large Scale. The project will provide renewable electricity to  
Duke Energy Carolinas local distribution point.

2. The intent is to : *Check all that apply:*

- ☒ Construct a new structure for a conditional use;
- ☐ Repair the existing structure for the conditional use;
- ☐ Alter and/or expand the existing structure for the conditional use;
- ☐ Other

3. The following requirements have been provided: *Check all that apply:*

- ☒ Site plan;
- ☒ Property description;
- \* ☐ NC DOT entrance permit (if applicable);  
*Please see attached e-mail from NC DOT.*

4. Additional information:

FLS Energy is one of the U.S. 's top developers, and a long term owner of  
best-in-class solar energy projects. We are also unique in that we own, not lease the  
land.

**In order to issue a Conditional Use Permit, the Board shall consider each of the following conditions, and based on the evidence presented at the hearing(s) make findings in regards to each and must find that the issuance of the Conditional Use Permit is in the best interest of the county.**

A. The use requested is among those listed as an eligible conditional use in the district in which the subject property is located.

Yes ☒ No ☐

FLS takes pride in being a low-impact neighbor, and as an owner of both the project  
and the land, of maintaining an attractive project.

B. The use or development is located, designed and proposed to be operated so as to maintain or promote the public health or safety;

Yes ☒ No ☐

All of our projects are developed to not exceed 7.5' in height, and use top tier  
equipment having low glare (with anti-reflective coating) and barely audible noise.



# Vance COUNTY

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## Conditional Use Permit Application

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- C. The use or development complies with all required regulations of the Zoning Ordinance and all applicable specific conditions and specifications;

Yes ☒ No ☐

The project will meet and exceed requirements for setbacks and will be another model for best practices for similar solar projects.

- D. The use or development is located, designed and proposed to be operated so as to maintain or enhance the value of adjoining or abutting property, or that use or development is a public necessity;

Yes ☒ No ☐

Using best practices, included preserving natural buffers, and using large setbacks, FLS intends minimize the impact on the adjacent rural and residential areas.

- E. The use or development will be in harmony with the area in which it is located and will be in general conformity with the plan of development of the County.

Yes ☒ No ☐

Solar farms are a safe, low-impact development that require very little maintenance during their life. The lack of traffic and impact works well in low density areas.

### Property Owners Signature

James T. Champion Kimberly P. Champion  
Please sign in blue or black ink

Date 8-11-14

### Applicants' Signature

Greg N...  
Please sign in blue or black ink

Date 8/11/14



# Vance COUNTY

NORTH CAROLINA

## Conditional Use Permit Application

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Yes ☐ No ☐

- D. The use or development is located, designed and proposed to be operated so as to maintain or enhance the value of adjoining or abutting property, or that use or development is a public necessity;

Yes ☐ No ☐

- E. The use or development will be in harmony with the area in which it is located and will be in general conformity with the plan of development of the County.

Yes ☐ No ☐

**Property Owners Signature**

*Ronald E. Bennett, John T. Bennett*

*Please sign in blue or black ink*

Date

8-13-14

**Applicants' Signature**

Date

*Please sign in blue or black ink*





# Vance COUNTY

NORTH CAROLINA

## Conditional Use Permit Application

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Yes ☒ No ☐

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Yes ☒ No ☐

Using best practices, included preserving natural buffers, and using large setbacks, FLS intends minimize the impact on the adjacent rural and residential areas.

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### Property Owners Signature

\_\_\_\_\_  
Please sign in blue or black ink

Date \_\_\_\_\_

### Applicants' Signature

Stagercoach Owner, LLC  
Please sign in blue or black ink

Date 8/13/14

By: FLS 2014 B Manager, LLC, its Manager

By: FLS Energy, Inc., its Manager

By: [Signature]  
Dale Frendenberger, CEO





In support of the Conditional Use Permit Application for the property located along **Stagecoach Road**, and enclosed herein, we offer the following:

1. A check in the amount of **\$250.00** representing the application fee;
2. Completed and executed Application;
3. E-mail from Roger Elliott (NCDOT) commenting on our proposed driveway;
4. General Warranty Deeds for the Bennett (15 acres of the larger parcel) and Champion properties;
5. National Wetland Inventory Map from U.S. Fish and Wildlife surface showing that the property is outside of wetland areas;
6. Letter from the NC State Clearinghouse commenting on the suitability of the site for the proposed solar project;
7. E-mail from Duke Energy Carolinas (Progress Energy) stating that the project is capable of being connected at the proposed site;
8. One page sheet discussing the proposed technology;
9. Business Plan (covering both projects);
11. Site Plan over survey with setbacks and proposed vegetative buffers (10 Copies);
12. Phase I Environmental Site Assessment;
13. Tax Cards.

The Vicksboro Road and the Stagecoach road solar farms are late stage projects in the FLS Energy 2014-2015 pipeline. As such, the FLS engineering team and operations associates are working diligently to ready this project for construction, pending government approvals. We currently have purchase agreements in place for the property and plan to own the land in fee simple following closing. In addition to FLS Energy owning the underlying land, FLS would also install, own, operate, maintain and remove the equipment.

During the construction process, the procedure followed is to follow NC DWQ Best Management Practices related to stormwater management and to design ground cover as pervious to the maximum extent possible. Solar photovoltaic projects such as the ones proposed require very little maintenance; however, the sites offer ample room for parking service vehicles in the event such maintenance is required. Following construction, the solar farm will be fenced in a chain link fence with a height of at least six feet (6'); with such fence being continuously maintained for the duration of the project. Access to the site shall be controlled via keyed locks; however, Emergency Services shall have access to the site at all times.

With respect to the **Stagecoach Road** site, FLS will leave in place the natural wooded buffers to reduce visibility from the adjoining property owners, and to provide for a transition between uses. In addition, the model solar ordinance prepared with a working group of local planners and government agencies recommends 20' – 30' front; 15' side and 25' rear setbacks. Our design method, which may serve as a benchmark in the industry, takes an aggressive



approach to setbacks, and thus allows for large buffers on all sides. For instance, on the current site, side setbacks range from 129' at the minimum up to 209' at maximum. Rear setbacks are over 150'.

With respect to the **Vicksboro Road** site, the proposed use promotes a legitimate public purpose in that it contributes to the revitalization of the property, it promotes economic stability of the region, and helps diversify the power mix of the neighborhood. During the development process, FLS had conversations with James Falk, the representative for the cemetery within the parcel, as well as with local officials regarding the septic tanks on the premises. Based on environmental considerations and respect for the families of the individuals buried on the property, FLS will only develop the back portion of the site. We've worked with the Falk family to create an access drive away from the current driveway to the cemetery. Similar to Stagecoach, the property will leave in place the natural wooded buffer adjacent to the Farmington subdivision to reduce visibility to neighbors.

The projects will consist of tier-one, third party tested, high warranty solar modules installed in arrays, which are then mounted on racks. The panel height shall be no greater than seven and a half (7.5) feet (where typically they can be over 20'). During construction approximately fifty deliveries of major equipment will reach the site, generally over the course of three to four weeks. Construction will take between two and three months to reach substantial completion. Following construction, no materials will be stored on-site. Within six (6) months after completion of construction of the solar project, FLS shall restore its property to a condition reasonably similar to its condition prior to construction; and in the event FLS sells the property for a use other than for solar energy, FLS shall remove the equipment from the property and restore the site to a condition that will offer us the highest re-sale value. The equipment has a useful life beyond 20 years and continues to produce eighty percent of its revenue, even at that time.

Solar energy projects like the ones proposed represent valuable assets in the community – creating local construction jobs, workforce training, economic development, increased property tax base, and ongoing educational opportunities. FLS has completed several projects throughout North Carolina, including one of the state's first solar farms on top of a closed landfill. Because of the nature of the technology (no air or noise pollution) and low amount of maintenance required of such projects, there will be no discernible effects on traffic in the area, and otherwise, the project will have no adverse impact on the health, safety or welfare of Vance County or the general public.

We believe that the proposed development of the property is in keeping with responsible land use, is most suitable for A-R zoned areas, and the project will provide a model for best practices for future projects by either FLS Energy, Inc. or other developers in the state. Our goal in working with Vance County will be to create two well-planned solar project that is built to the greatest extent possible in harmony with the area in which it is located and in general conformity with the Vance County Zoning Ordinance.



I look forward to once again collaborating with your office and the public in the process. Please feel free to contact me directly if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "G. Ness", is positioned below the word "Sincerely,".

Greg S. Ness  
Assistant General Counsel, FLS Energy, Inc.  
(828) 233-8130/[greg@flsenergy.com](mailto:greg@flsenergy.com)

**J. Patrick Price**  
**Environmental Consultant**

**PHASE 1**  
**ENVIRONMENTAL SITE ASSESSMENT**

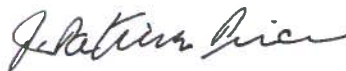
**Champion Property**  
**1911 Stagecoach Road**  
**Henderson, North Carolina 27357**

*Prepared for:*

**Stagecoach Owner, LLC**  
**FLS Energy, Inc.**  
**130 Roberts Street**  
**Asheville, NC 28801**

*Date:*

**July 8, 2014**



**J. Patrick Price**  
**Certified Environmental Assessor**

**26 Zephyr Drive, Asheville, NC 28806**  
**Phone/Fax: 828-252-1118**  
**E-mail: patrickprc@aol.com**



## I. EXECUTIVE SUMMARY/RECOMMENDATIONS

A Phase I Environmental Site Assessment, as specified by ASTM E1527-13, and the Standard Guide for Vapor Encroachment Screen on Property, ASTM 2600-10, has been completed with respect to the property located at 1911 Stagecoach Road, Henderson, NC 27357. There are no structures on the property. The acreage of the property is approximately 25 acres. The property was clear cut in May, 2012 and is now an open field with shrubs and small trees. The adjacent properties on both the east and west sides are heavily wooded. There is a residential development across Stagecoach Road.

No non-compliance issues were noted during data collection or during site visit.

- I have performed a Phase 1 Environmental Site Assessment in conformance with the scope and limitation of ASTM Practice 1527-13 of the property located along Stagecoach Road, Henderson, NC. This assessment has revealed no evidence of recognized environmental conditions in connection with the property.
- I have the specific qualification based on education, training and experience to assess a property of the nature, history and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

**Greg Ness**

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**From:** Tal Ingram  
**Sent:** Tuesday, August 05, 2014 3:50 PM  
**To:** Greg Ness  
**Subject:** FW: Vance County- Driveway permit

Any further questions while I have his attention?

Talbott Ingram  
Project Manager, FLS Energy Inc.  
130 Roberts Street | Asheville, NC | 28801  
O 828.350.3993 | C 828.279.1131

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**From:** Elliott, Roger M [<mailto:relliott@ncdot.gov>]  
**Sent:** Tuesday, August 05, 2014 3:37 PM  
**To:** Tal Ingram  
**Cc:** Winstead, Stephen D  
**Subject:** RE: Vance County- Driveway permit

Talbott,  
Went out and looked at sites you submitted. I offer these preliminary comments: the Vicksboro Road site meets our minimum required sight distance for an entrance onto NCDOT highway system, the one on Stagecoach road will require vegetation to be cut(on your property frontage) to achieve the minimum sight distance. Hope this is the information you needed. If not please let me know.  
Sincerely,

Roger Elliott

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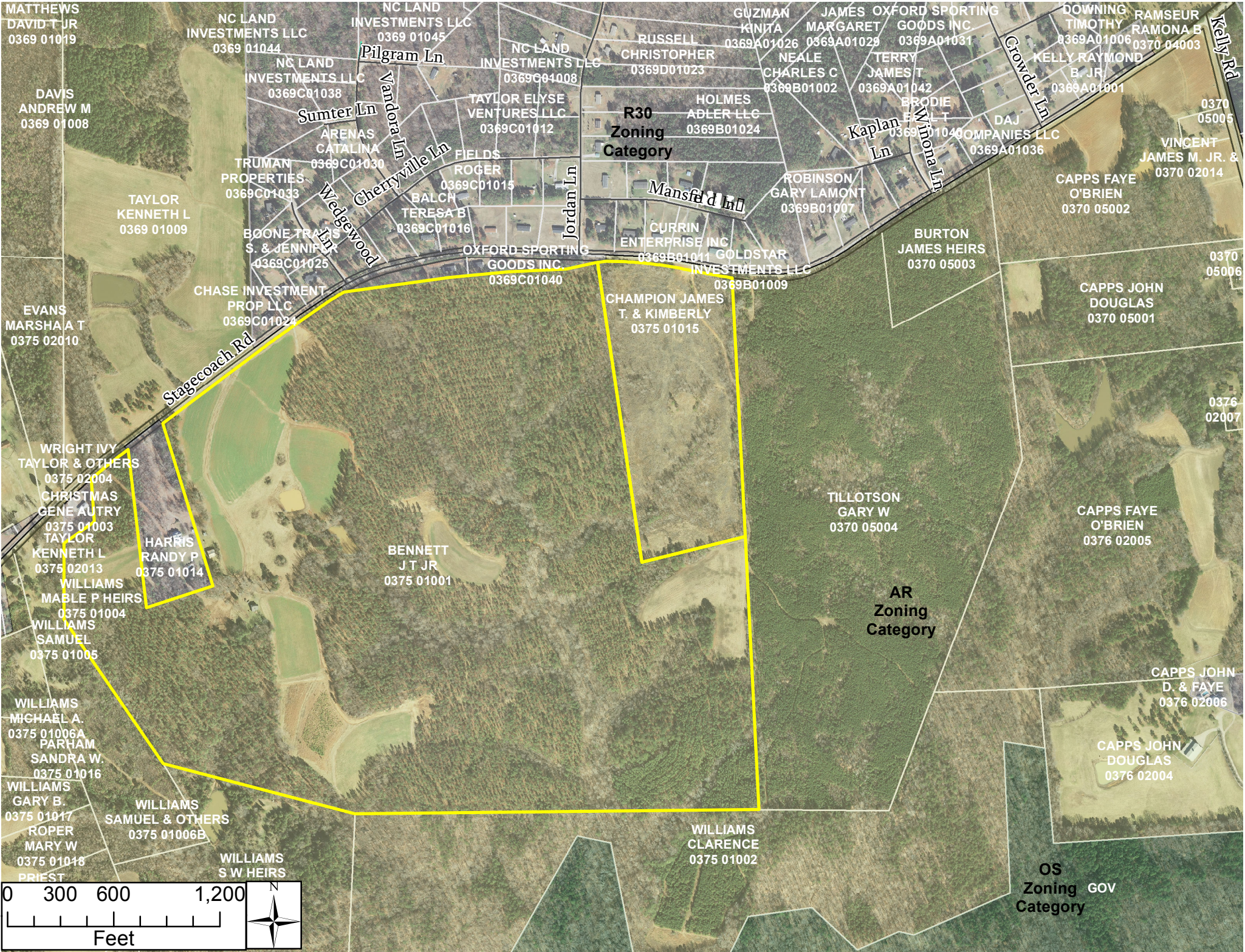
**From:** Tal Ingram [<mailto:tal@flsenergy.com>]  
**Sent:** Monday, August 04, 2014 10:27 AM  
**To:** Elliott, Roger M  
**Subject:** Vance County- Driveway permit

Roger,  
To follow up on my recent call. Josh Crumpler recommended I speak with you about how to proceed on acquiring a driveway permit in Vance County. Currently, they will not approve a permit without an approved DOT driveway permit. However, they will not release an E911 address until the conditional use permit is approved. I have attached out site plan layouts for reference. If these look acceptable, would you say these driveway locations are suitable and could be approved so the county will release an E911 to us?

Could you please give me a call this morning to discuss possible options on how to proceed? My cell below is the best place to reach me.  
Thank you,

Talbott Ingram  
Project Manager, FLS Energy Inc.  
130 Roberts Street | Asheville, NC | 28801  
O 828.350.3993 | C 828.279.1131





MATTHEWS  
DAVID T JR  
0369 01019

DAVIS  
ANDREW M  
0369 01008

TAYLOR  
KENNETH L  
0369 01009

EVANS  
MARSHALL T  
0375 02010

WRIGHT IVY  
TAYLOR & OTHERS  
0375 02004

CHRISTMAS  
GENE ATRY  
0375 01003

TAYLOR  
KENNETH L  
0375 02013

WILLIAMS  
MABLE P HEIRS  
0375 01004

WILLIAMS  
SAMUEL  
0375 01005

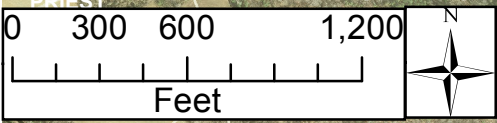
WILLIAMS  
MICHAEL A.  
0375 01006A

PARHAM  
SANDRA W.  
0375 01016

WILLIAMS  
GARY B.  
0375 01017

ROPER  
MARY W  
0375 01018

PRIEST



NC LAND  
INVESTMENTS LLC  
0369 01044

NC LAND  
INVESTMENTS LLC  
0369C01038

TRUMAN  
PROPERTIES  
0369C01033

CHASE INVESTMENT  
PROP LLC  
0369C01024

HARRIS  
RANDY P  
0375 01014

WILLIAMS  
SAMUEL & OTHERS  
0375 01006B

WILLIAMS  
S W HEIRS

NC LAND  
INVESTMENTS LLC  
0369 01045

NC LAND  
INVESTMENTS LLC  
0369C01038

TAYLOR ELYSE  
VENTURES LLC  
0369C01012

ROGER  
FIELDS  
0369C01015

BALCH  
TERESA B  
0369C01016

BENNETT  
J T JR  
0375 01001

OXFORD SPORTING  
GOODS INC  
0369C01040

CHAMPION JAMES  
T. & KIMBERLY  
0375 01015

WILLIAMS  
CLARENCE  
0375 01002

NC LAND  
INVESTMENTS LLC  
0369C01008

RUSSELL  
CHRISTOPHER  
0369D01023

HOLMES  
ADLER LLC  
0369B01024

CURRIN  
ENTERPRISE INC  
0369B01011

GOLDSTAR  
INVESTMENTS LLC  
0369B01009

GUZMAN  
KINITA  
0369A01026

NEALE  
CHARLES C  
0369B01002

ROBINSON  
GARY LAMONT  
0369B01007

JAMES OXFORD SPORTING  
GOODS INC  
0369A01031

TERRY  
JAMES T  
0369A01042

BRODIE  
E. L. T  
0369B01040

BURTON  
JAMES HEIRS  
0370 05003

TILLOTSON  
GARY W  
0370 05004

AR  
Zoning  
Category

DOWNING  
TIMOTHY  
0369A01006

KELLY RAYMOND  
B. JR  
0369A01001

CAPPS FAYE  
O'BRIEN  
0370 05002

CAPPS JOHN  
DOUGLAS  
0370 05001

CAPPS FAYE  
O'BRIEN  
0376 02005

CAPPS JOHN  
D. & FAYE  
0376 02006

CAPPS JOHN  
DOUGLAS  
0376 02004

OS  
Zoning GOV  
Category

RAMSEUR  
RAMONA B  
0370 04003

VINCENT  
JAMES M. JR. &  
0370 02014

0370  
05006

0376  
02007



Use Type	AR	R30	R20	R10	RMHC	HC	GC1	LI	IM	EIA	OI	OS	WOZ	Parking- Loading
Adult Establishments	X	X	X	X	X	CU	CU	CU	X	X	X	X	X	Parking: 4 per 1,000 SF Loading: N/A
Airports	CU	X	X	X	X	X	CU	CU	CU	CU	CU	X	X	Special Study Required***
Commercial Communications Towers (Cell Towers)	CU	X	X	X	X	CU	CU	CU	CU	CU	CU	CU	CU	Parking: 2 per tower Loading: 1
Cemetery (Church, Family)	P	P	P	CU	X	X	X	X	X	X	X	P	CU	N/A
Cemetery (Commercial)	P	CU	X	X	X	X	X	X	X	X	X	CU	CU	Parking: 6 per 1,000 SF of office-building Loading: 1
Shooting Ranges	CU	X	X	X	X	X	X	X	X	X	X	CU	CU	Parking: 1.5 per shooting station Loading: 1
Solar Collector (Accessory)	P	P	P	P	P	P	P	P	P	P	P	P	P	N/A
Solar Energy Systems, Large Scale (Solar Farms)	CU	X	X	X	X	X	X	CU	CU	CU	CU	X	X	Parking: 1/every 2 employees on shift of greatest employment
<b>TEMPORARY USES</b>														
Commercial (temporary-see Definitions) Outdoor Sales	P	P	X	X	X	P	P	P	P	P	P	P	P	Parking: staff review Loading: N/A
Concrete/Asphalt Operations	X	X	X	X	X	X	X	CU	P	X	X	X	X	Parking: staff review Loading: 1 per vehicle
Contractor's Office (located at project site for duration of project)	CU	CU	X	X	X	CU	CU	CU	P	CU	CU	X	CU	Parking: 1 per 200 SF Loading: N/A
Farmstand	P	P	X	X	X	P	P	P	X	X	X	P	P	Parking: 8 spaces Loading: N/A
Manufactured Housing Unit for Office and/or Exhibition	CU	CU	CU	CU	P	P	P	P	X	X	CU	CU	CU	Parking: 1 per vehicle Loading: N/A
Manufactured Home for Hardship	CU	CU	CU	CU	P	X	X	X	X	X	X	X	CU	Parking: 2 per dwelling unit Loading: N/A
Public Interest Event and/or Special Event	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	Parking: 1/patron Loading: 1 per vehicle
Temporary Miscellaneous Sales (see Definitions)	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	Parking: 1 per vehicle Loading: N/A
***See Section 6.10.L														

- c. *Warning signs.* Warning signs meeting National Rifle Association (NRA) guidelines for shooting ranges shall be posted at one hundred-foot intervals along the entire perimeter of the shooting range facility and along the entire perimeter of the property lines in the same intervals.
  - d. *Distance from occupied dwelling.* All shooting stations, targets, and firing lines shall be located at least one-half (1/2) mile from any existing, occupied dwelling.
  - e. *Access to facility.* Access to the facility and shooting range shall be secured and controlled, with ingress and egress permitted only during operating hours as established below. Prior to issuance of a permit, a valid driveway permit must be obtained from North Carolina Department of Transportation.
  - f. *Written variance.* The distance requirements of this section may be varied with written permission in the form of an affidavit from all adjoining property owners and all rightful leaseholders of dwellings located within the ½ mile surrounding area affected thereby, except that written approval is not needed for any adjoining land owned by the State of North Carolina.
5. **Operational Requirements:**
- a. *Maintenance.* Where not otherwise specified within this ordinance, shooting range facilities shall be operated and maintained in a manner that shall meet or exceed the guidelines as specified by the Range Technical Team Advisor upon inspection going by the guidelines in the NRA's Range Source Book: A Guide to Planning and Construction, current edition.
  - b. *Best Management Practices.* Outdoor Shooting Ranges shall provide a plan outlining its Best Management Practices (BMPs) relating to lead management. Said plan shall meet or exceed the guidelines as specified by the Environmental Protection Agency's (EPA) Best Management Practices for Lead at Outdoor Shooting Ranges, current edition.
  - c. *Hours of operation.* Shooting Ranges shall be allowed to operate between sunrise and sunset Monday through Saturday, except that the hours may be extended after sunset for purposes of subdued-lighting certification of law enforcement officers, or may be extended for other purposes only when a permit allowing such activity is issued in advance by the Sheriff's Office.
  - d. *Liability insurance.* The permittee shall be required to carry a minimum of three million dollars (\$3,000,000.00) per occurrence of liability insurance. Such insurance shall name Vance County as an additional insured party and shall save and hold Vance County, its elected and appointed officials, and employees acting within the scope of their duties harmless from and against all claims, demands, and causes of action of any kind or character, including the cost of defense thereof, arising in favor of a person or group's members or employees or third parties on account of any property damage arising out of the acts or omissions of the permittee, his/her group, club, or its agents or representatives. The County shall be notified of any policy changes or lapses in coverage.

#### **N. Solar Energy Systems, Large Scale (Solar Farms)**

- 1. Height: Systems, equipment and structures shall not exceed twenty-five (25) feet in height when ground mounted. Excluded from this height requirement, however, are

electric transmission lines and utility poles. Roof mounted systems shall not exceed the maximum height for the applicable zoning district.

2. Setback: Active solar system structures must meet the following setbacks:
  - a. Ground mounted– Ground mounted solar energy systems as part of a solar farm shall meet the minimum zoning setback for the zoning district in which it is located.
3. Screening and Fencing: Adequate fencing shall be provided along the perimeter of the area (with all entrances gated) to prevent trespassing on the property.
4. Lighting: All lighting shall be arranged and shaded so as to reflect the light away from adjoining properties and streets.
5. Noise: Noise levels measured at the property line shall not exceed fifty (50) decibels when located adjacent to an existing residence or residential district.
6. Power Transmission Lines: To the extent practical, all new power transmissions lines to any building, structure or utility connection shall be located underground. Existing above ground utility lines shall be allowed to remain in their current location.
7. Approved Solar Components: Electric solar system components must have a UL listing.
8. Compliance with Building and Electrical Codes: All solar farms shall be in conformance with the requirements of the State Building and Electrical Codes (current addition), the State of North Carolina and Vance County. All active solar systems shall be inspected by a Vance County building inspector.
9. Utility Notification: No grid tied photovoltaic system shall be installed until evidence has been given to the Planning and Development Department that the owner has been approved by the utility company to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
10. Abandonment: It is the responsibility of the owner to notify the County and to remove all obsolete or unused systems within twelve (12) months of cessation of operations. Reusable components are to be recycled whenever possible.

O. WIRELESS COMMUNICATIONS TOWERS (“CELL TOWERS”)

1. The purpose of the following requirements is to promote and to protect the public health, welfare, and safety by regulating existing and proposed communication towers. The requirements are intended to protect property values, create a more attractive economic and business climate, and enhance and protect the scenic and natural beauty of designated areas.
2. *General Requirements.* When allowed, such towers and associated equipment shall be subject to the following additional requirements:
  - a. Towers shall not interfere with normal radio and television reception in the vicinity. Commercial messages shall not be displayed on any tower. Violations shall be considered zoning violations and shall be corrected under the enforcement provisions.
  - b. Lighting shall not exceed the Federal Aviation Administration (FAA) minimum if lighting is required by the FAA. The lights shall be oriented so as not to project directly onto surrounding residential property, consistent with FAA requirements. Prior to issuance of a building permit, the applicant shall be required to submit documentation from the FAA that the lighting is the minimum lighting required by the FAA.
  - c. Towers shall be constructed and maintained in conformance with all applicable building code requirements.
  - d. In order to protect the public from unnecessary exposure to electromagnetic radiation, the tower owner shall provide appropriate



August 24, 2014

**VIA HAND DELIVERY TO:**

Mr. Jordan D. McMillen, Deputy County Manager  
Vance County  
156 Church Street, Suite 3  
Henderson, North Carolina 27536

<b>RE:</b>	<b>Application of FLS Energy, Inc. on behalf of Stagecoach Owner, LLC and related to the Conditional Use Permit Applications for property located at 1835 Stagecoach Road, Henderson, NC 27537.</b>
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Mr. McMillen:

In furtherance of the **Conditional Use Permit Application** for the property located **1835 Stagecoach Road, Henderson, NC 27537**, we offer the following additional information in response to the Board of Adjustment's initial concerns, as well as in response to some of the concerns raised by members of the public (specifically Mr. Russell Smith and Mr. Lindsay Rice):

1. **E-mail from Phyllis Carter, Planning Technician, Vance County Planning & Development providing the site with an E-911 address**  
-This is intended to address the concern that the location was not well determined.
2. **Recombination Survey covering both the Bennett and the Champion parcels**  
-This is intended to address the concern that the location was not well determined.
3. **Separate Legal Descriptions covering each of the Bennett and Champion parcel**  
-This is intended to address the concern that the location was not well determined.
4. **Landscaping Plan prepared by Landscape Engineering Firm "Kleinfelder"**  
-See the discussion below.
5. **A memorandum and accompany study regarding "EMF" to address concerns raised at the initial CUP hearing by Mr. Russell Smith (and neighbors not present at the hearing)**



-This information addresses the concern raised by citizen Russell Smith.

**6. An executed Release Agreement dated September 19, 2014 for the dirt road indicated on the survey**

-This is intended to address the concern from the Board that the property owner located behind the solar farm would have their site access blocked.

**7. Interconnection Agreement from Duke Energy Progress, Inc.**

-Per the request of the Board.

**8. NCDOT Permit**

-Per the request of the Board.

**9. A topographic map of the parcel prepared by ECS Carolinas, LLP**

-Per the request of the Board. Also note that the topographic features are evaluated during the initial layout of the panels as this is a primary factor in determining the suitability of the site.

The solar farm development complies with all required regulations of the Vance County Zoning Ordinance. However, during the public meeting on **September 11, 2014**, there were concerns related to whether the proposed solar farm 1) is located/designed to maintain the public health or safety and 2) the use is designed/operated to maintain or enhance the value of the property within the subdivision located across the street from our proposed development.

There are no current occupied residential areas adjoining or abutting the parcels, and the two respective owners, Mr. Tillotson and Mr. Bennett have not voiced concerns regarding the development.

Specific initial concerns included:

**I. Devaluation of Property Located Across Stagecoach Road**

Regarding concerns about residential property values being decreased, no research is currently available regarding whether solar has any effect upon such values. I did however reach out to several North Carolina real estate appraisers; none had any knowledge or input into this new area. One appraiser from Robeson County, where solar farms are prevalent, offered some





insight. He said while they do not consider solar during their appraisals, there was one recent home sold next to a solar farm developed by a competitor that was sold without any apparent devaluation caused by an adjacent solar farm. This should not weigh heavily on the current evaluation as the solar farm is not adjacent to or abutting any of the homes in the area. Additionally, there are far too many considerations to consider regarding home values, including the economy in general to where I do not consider this information to be of much value, but more of an opinion at best.

The general solution taken by most municipalities is to at least *maintain* the value of nearby properties by requiring screening and setbacks to minimize visual impacts. This also allows for the solar farm to be in general harmony with the surrounding mix of residential and agricultural areas along Stagecoach Road. Vance County has already drafted provisions requiring such protective measures. FLS has revised its initial submittal to affirm that we are aware of the concerns and have made substantial efforts to address them. This is indicated by the attached landscaping plan prepared by landscaping engineer Kleinfelder.

Regarding the landscaping plan, also note that FLS has contemplated a dense, fifty foot (50') buffer with a mix of canopy, under canopy and shrubbery, which will make the solar farm practically invisible from the neighborhood across the street from the solar farm. As such, it is reasonable to assume that there will be no substantial aesthetic impact from our facility on this neighborhood. This is in addition to the natural buffer located in front of the created landscape buffer. Per the request of the Board, we have also found two landscaping companies that are able to handle the landscaping at the site. They will also provide a statement related to the amount of water needed to maintain the species; however, the species will be selected for their drought resistant properties and compatibility within the region. The side buffers have more robust natural vegetation with no breaks and a 20' buffer is still contemplated. There are no adjoining or abutting properties in relation to our solar farm, but this measure will protect the interests of citizens in the event those areas are developed with a residential use.

It should finally be emphasized that most of the nuisance features of a traditional fossil fuel utility plant, such as noise (the "*corona effect*" a buzzing sound associated with transmission lines), smoke and stench (from combusting coal/wood), and traffic (for daily power plant operations) are not present with solar facilities. Also, practically speaking, having a solar farm next door prevents the property from being developed with a more intense use in the future.

Additionally, Mr. Russell Smith (a resident of the neighborhood across the street from the solar farm) posed a question to the Board whether I would live adjacent to a solar farm such as the one proposed. The answer is "yes", so long as the proper vegetative buffers and setbacks were in place like the ones proposed in our landscaping plan.

Bias aside, it is not inconceivable that at some point such solar farms could serve surrounding communities directly; however, this will take further regulatory development in the State of North Carolina. Similar to my statement in response to the neighbors opinion on property values, this is my opinion based on my experience in the solar energy and is not guaranteed to occur.



## II. Crime and Safety

Per our best practices, and as required by the Zoning Ordinance, our solar farm will be enclosed by eight foot (8') fencing with one foot (1') of additional barbed wire. Other than wire, there is not much that can be readily stolen from the site (due to weight, bolting, etc.). The predominant component of a solar panel is glass, followed by the metal associated with the wiring.

To protect intruders and other Operation and Maintenance personnel, the *2014 National Electric Code* (primarily **Article 690**) and the *Uniform Solar Energy Code* are followed. Applicable equipment is UL certified. Third party engineers perform quality control inspections on each of our facilities to ensure safety compliance. The facility will also be inspected by a Vance County building inspector. Additionally, compared to a utility facility (i.e. a power plant), there are no live wires readily exposed.

As far as the solar farm potentially attracting criminals to the area, I have no familiarity with law enforcement in Vance County; however, this is a risk that we will assume as a private business. However, as mentioned, we will have a security fence beyond the setbacks/buffers, along with numerous warning signs surrounding the perimeter.

I look forward to answering any additional questions that the Board may have at the continuance hearing on *October 9, 2014*. Please feel free to contact me directly if you have any questions or need additional information.

Sincerely,

A handwritten signature in blue ink, appearing to read "Greg S. Ness", is written over a horizontal line.

Greg S. Ness

Assistant General Counsel, FLS Energy, Inc.  
(828) 233-8130/[greg@flsenergy.com](mailto:greg@flsenergy.com)

**Greg Ness**

---

**Subject:** RE: FLS Energy - Stagecoach and Vicksburg E911 Drawings - need the E911 addresses

**From:** Phyllis Carter [<mailto:pcarter@vancecounty.org>]

**Sent:** Wednesday, September 17, 2014 8:52 AM

**To:** Holly Crabill

**Subject:** RE: FLS Energy - Stagecoach and Vicksburg E911 Drawings - need the E911 addresses

Holly,

The address for the Stagecoach and Vicksboro sites are listed below:

Stagecoach Road – 1835 Stagecoach Road, Henderson, NC 27537

Vicksboro Road – 2131 Vicksboro Road, Henderson, NC 27537

If you have any questions, please give me a call.

Phyllis Carter

Planning Technician

Vance County Planning & Development

156 Church Street, Ste 003

Henderson, NC 27536

Phone (252) 738-2093

Main (252) 738-2080

Fax (252) 738-2089

[pcarter@vancecounty.org](mailto:pcarter@vancecounty.org)

*E-mail correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to other parties as part of public information requests or other requests.*



LEGAL DESCRIPTION:

PLAT BOOK V, PAGE 613, 25.00 ACRE TRACT

That certain tract or parcel of land in Williamsboro Township, Vance County, North Carolina, and being more particularly described as follows:

BEGINNING at a vertical section of railroad rail found in the southerly right-of-way line of Stagecoach Road [SR 1329] (60' public right-of-way), said rail lying in the westerly line of property owned, now or formerly, by Gary W. Tillotson (Deed Book 691, Page 658 of the Vance County Register of Deeds Office); running thence with the westerly line of Tillotson South 03 deg 53' 20" East a distance of 1476.80 feet to an iron pipe found, a corner with the property owned, now or formerly, by John T. Bennett, Jr. and Ronald E. Bennett (Deed Book 595, Page 441 of the Vance County Register of Deeds Office); thence with the line of Bennett the following two courses and distances: 1) South 73 deg 37' 02" West a distance of 615.03 feet to an iron pipe found; and 2) North 07 deg 46' 19" West a distance of 1739.81 feet to an iron pipe found at the center of an old road bed, said iron lying in the southerly line of property owned, now or formerly, by Oxford Sporting Goods, Inc. (Deed Book 1036, Page 88, Tract 7 of the Vance County Register of Deeds Office); thence with the center of said old road bed North 81 deg 32' 22" East a distance of 220.69 feet (passing an iron pipe set in the southerly right-of-way line of Stagecoach Road at a distance of 76.01 feet) to a magnetic nail set in the centerline of Stagecoach Road; thence with the centerline of Stagecoach Road the following five (5) courses and distances: 1) South 84 deg 35' 52" East a distance of 116.71 feet to a point; 2) South 80 deg 53' 47" East a distance of 100.42 feet to a point; 3) South 79 deg 09' 47" East a distance of 98.91 feet to a point; 4) South 79 deg 48' 40" East a distance of 101.70 feet to a point; and 5) South 80 deg 37' 48" East a distance of 93.45 feet to a magnetic nail set in the centerline of Stagecoach Road, the northwestern corner of said Gary W. Tillotson property; thence with the westerly line of Tillotson South 03 deg 53' 20" East a distance of 30.82 feet to the POINT AND PLACE OF BEGINNING, containing 25.001 acres, more or less, and BEING all that certain tract or parcel of land containing 25.00 acres according to survey and plat thereof as appears in Plat Book "V," Page 613, Vance County Registry.

LEGAL DESCRIPTION:

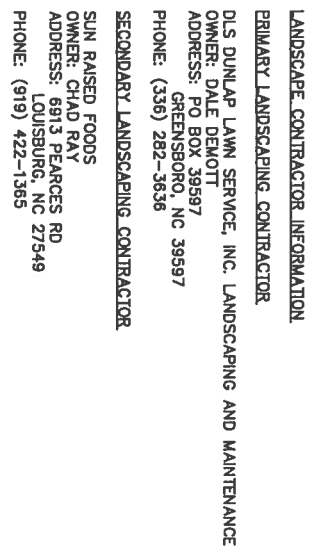
16.875 ACRE PORTION OF DB 595 PG 441

That certain tract or parcel of land in Williamsboro Township, Vance County, North Carolina, and being more particularly described as follows:

BEGINNING at an iron pipe found in the westerly line of that 25.00 acre tract shown in Plat Book "V," Page 613, Vance County Registry; said iron lying North 07 deg 46' 19" West a distance of 191.00 feet from the southwesterly corner of said 25.00 acre tract; thence a new line South 87 deg 43' 17" West a distance of 535.93 feet to a new iron pipe set; thence a new line North 04 deg 15' 33" West a distance of 1455.85 feet to a new iron pipe set; thence a new line North 75 deg 32' 48" East a distance of 259.10 feet to a pinched-top iron pipe found at the center of an old road bed, said iron lying in the southerly line of property owned, now or formerly, by Oxford Sporting Goods, Inc. (Deed Book 1036, Page 88, Tract 7 of the Vance County Register of Deeds Office); thence with the center of said old road bed the following two (2) courses and distances: 1) North 77 deg 19' 59" East a distance of 163.64 feet to a new iron pipe set; and 2) North 81 deg 32' 22" East a distance of 23.89 feet to a bent iron pipe found, the northwesterly corner of said 25.00 acre tract; thence with the westerly line of said 25.00 acre tract South 07 deg 46' 19" East a distance of 1548.81 feet to the POINT AND

PLACE OF BEGINNING, containing 16.875 acres, more or less, BEING a portion of that property described in Deed Book 595, Page 441, Vance County Registry.












1. CANOPY SIZE TREES: CANOPY SIZE TREES MUST BE A MIN. OF EIGHT FEET HIGH AND TWO INCHES IN CALIPER, MEASURED SIX INCHES ABOVE GRADE, WHEN PLANTED. WHEN MATURE, A CANOPY TREE SHOULD BE AT LEAST FORTY FEET HIGH AND HAVE A MINIMUM CROWN WIDTH OF THIRTY FEET.
2. UNDERSTORY TREE SIZE: UNDERSTORY TREES MUST BE MIN. OF FOUR FEET HIGH AND ONE INCH IN CALIPER, MEASURED SIX INCHES ABOVE GRADE, WHEN PLANTED.
3. SHRUB SPECIES: ALL APPROVED SHRUBS SHALL BE INSTALLED AT A MIN. SIZE OF EIGHTEEN INCHES, SPREAD OR HEIGHT, AND REACH A MIN. HEIGHT OF EIGHT FEET, AND A MIN. SPREAD OF FORTY-EIGHT INCHES WITHIN THREE YEARS OF PLANTING.



1. BOUNDARY PROVIDED BY FLS ENERGY, DATED 09/16/2014.
2. LANDSCAPING PROFESSIONAL SHALL PROVIDE A STATEMENT REGARDING THE AMOUNT OF WATER THAT WILL NEED TO BE PROVIDED TO ANY PLANTED SPECIES FOR A PERIOD OF ONE YEAR TO MAINTAIN THE PLANT WARRANTY.

 PROPOSED PERMANENT FENCE  
 EXISTING ROW  
 EXISTING PROPERTY BOUNDARY  
 EXISTING TREELINE  
 PROPOSED LANDSCAPE BUFFER  
 10' X 70' LINE-OF-SIGHT TRIANGLE  
 PROPOSED 50' LANDSCAPE BUFFER B ZONE

[illegible]

**KLEINFELDER**  
Bright People. Right Solutions.

3500 Gateway Centre Blvd., Suite 200  
Merrittville, PA 15469  
Phone: 818-755-5011  
www.kleinfelder.com



9/22/14

**SCALE VERIFICATION**

THIS BAR IS 1 INCH IN LENGTH  
ON ORIGINAL DRAWING

0 1"

IF IT'S NOT 1 INCH ON THIS  
SHEET ADJUST YOUR  
SCALES ACCORDINGLY

NORTH ARROW

IF IT'S NOT 1 INCH ON THE

0 80 160 240

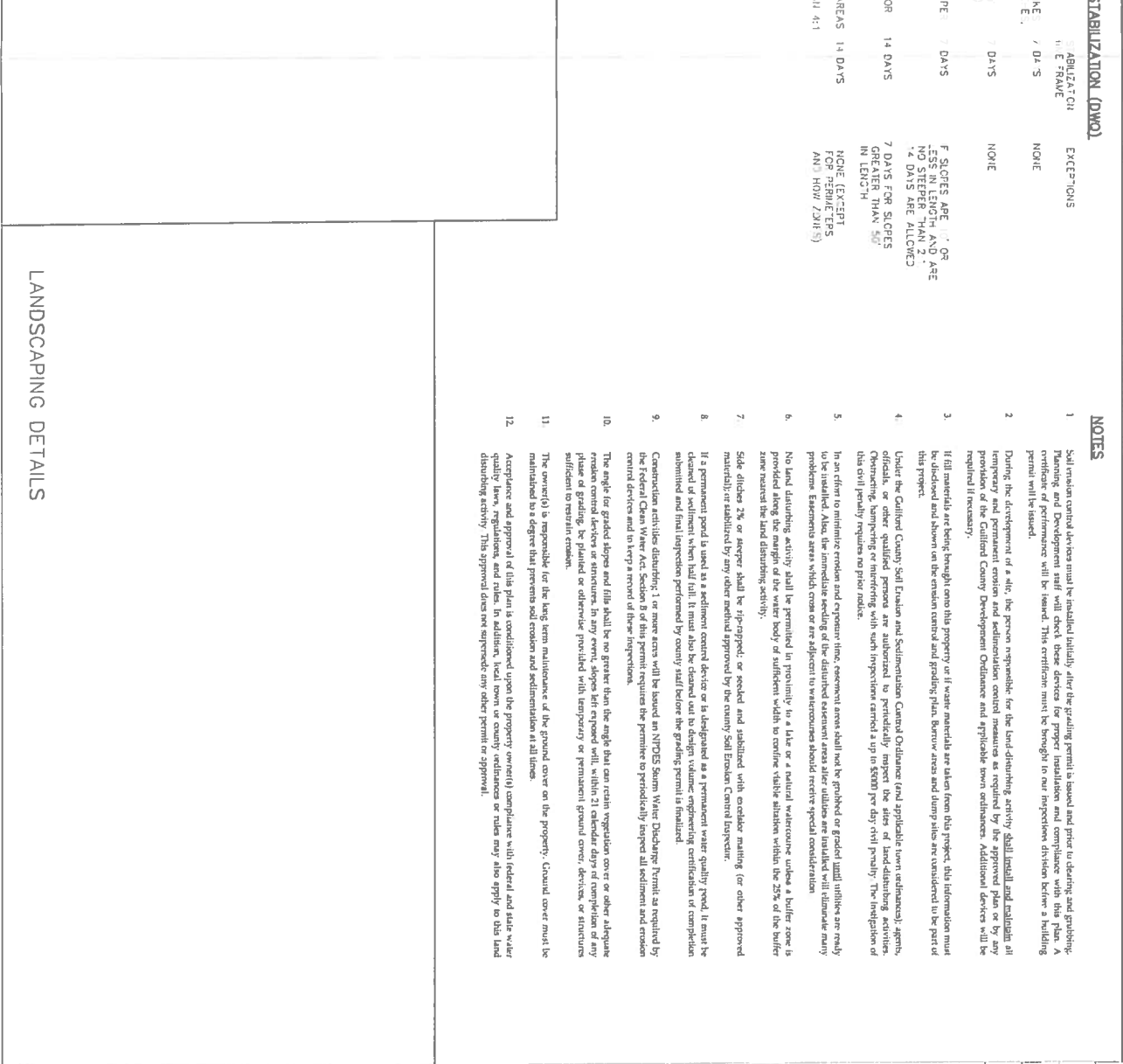
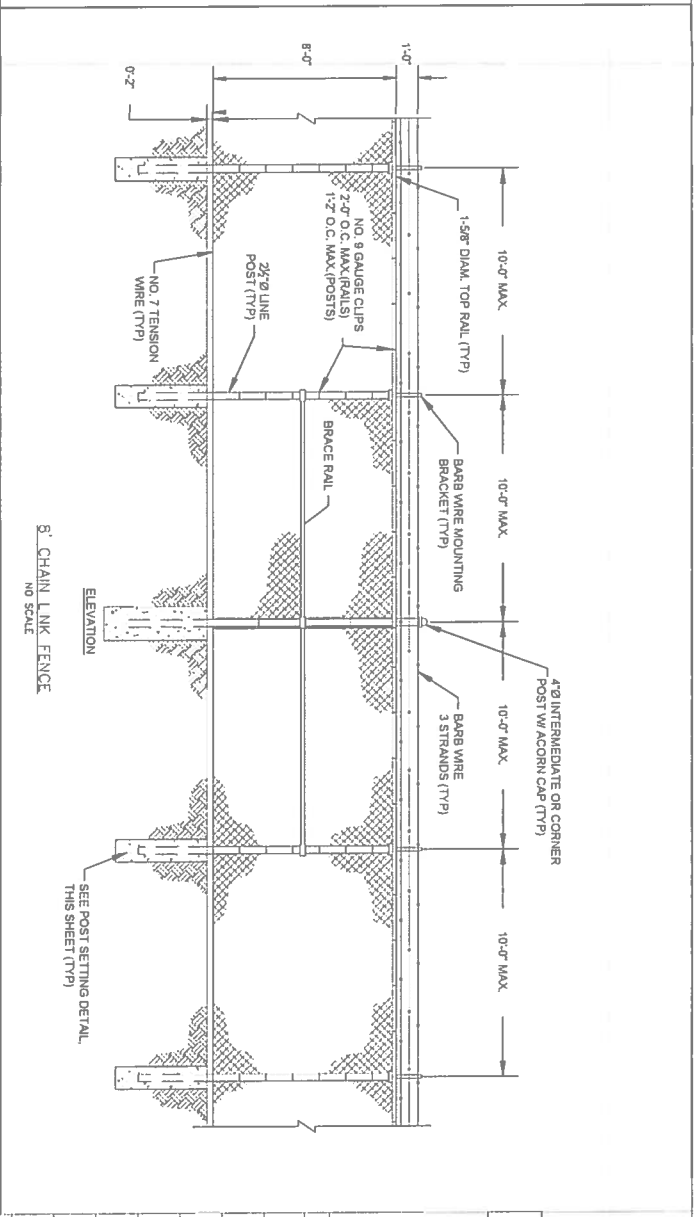
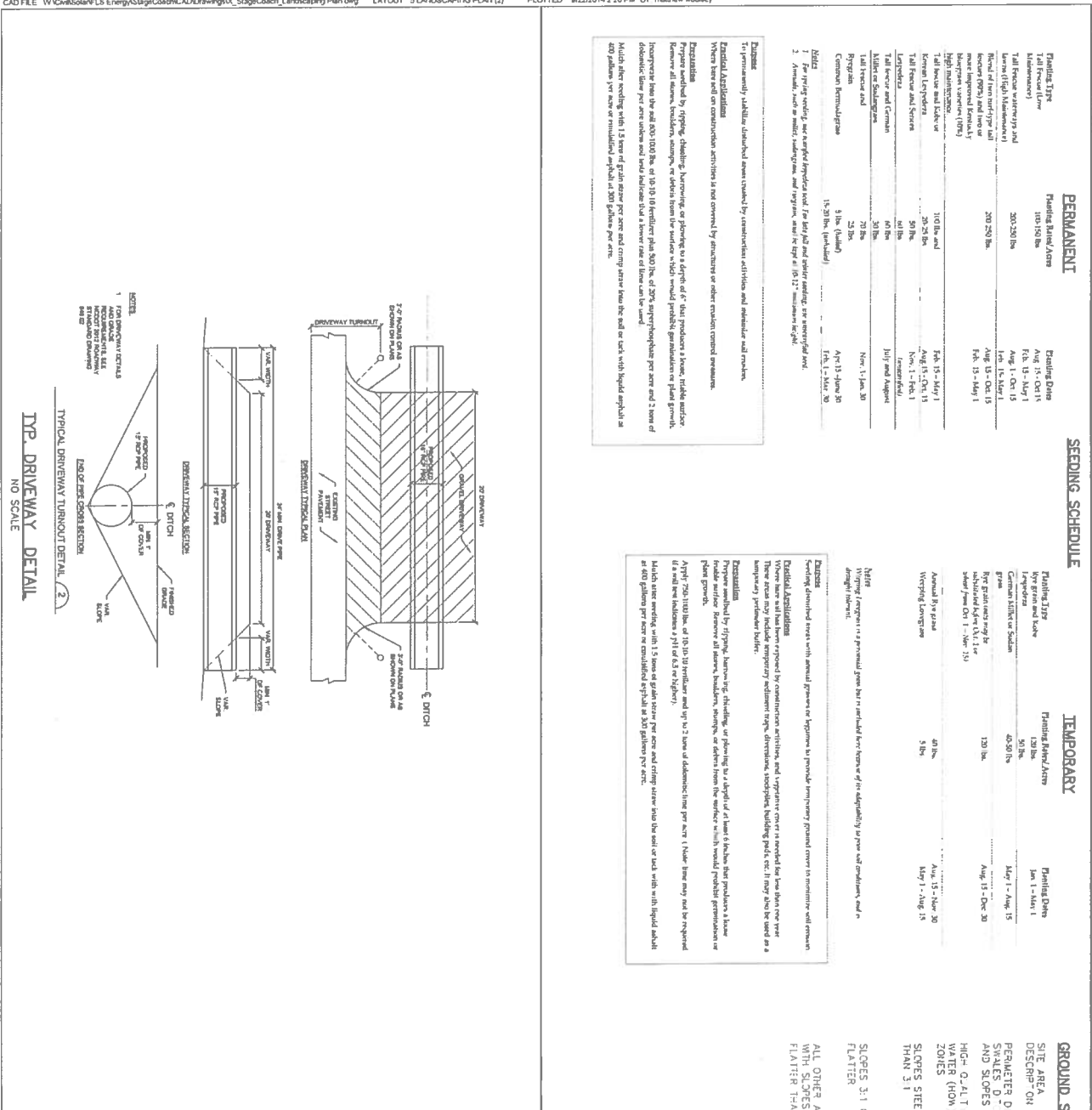
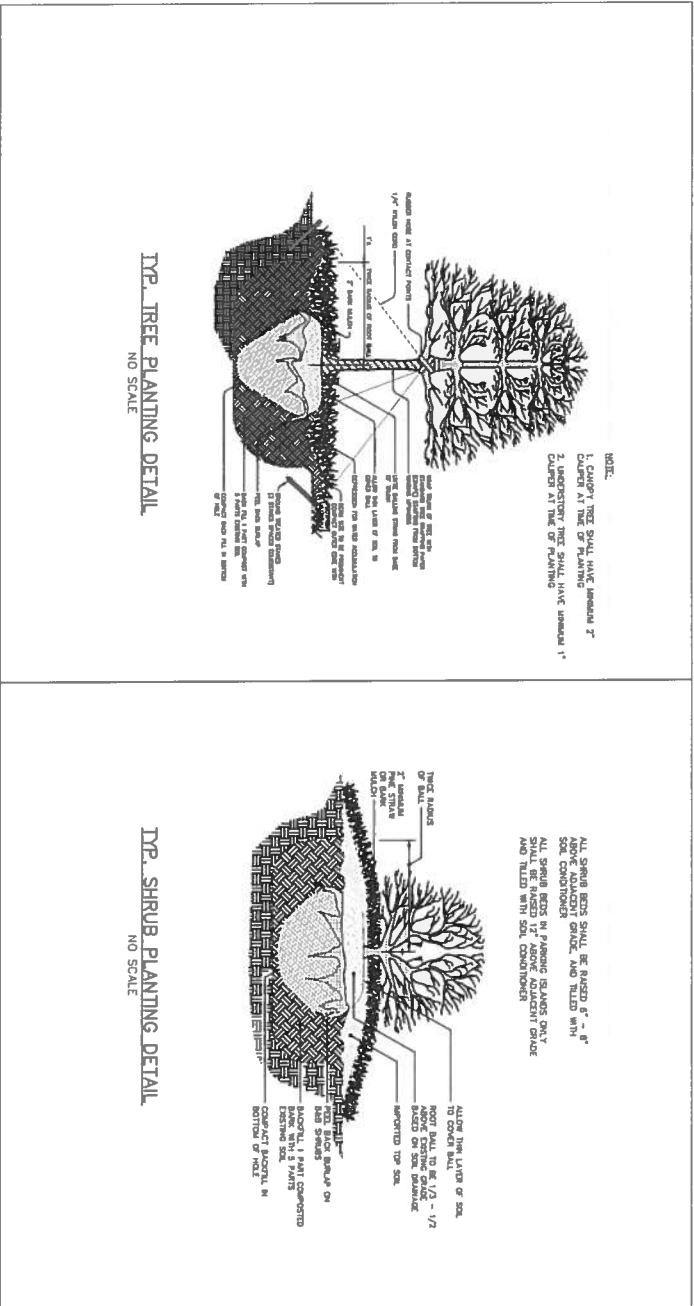
SCALE 1" = 80'

SCALE IN FEET

ORIGINAL DRAWING SIZE IS 24 x 36

STAGECOACH SOLAR SIT  
1911 STAGECOACH RD  
HENDERSON, NC

**FLS ENERGY**  
130 ROBERTS ST  
ASHEVILLE, NC 28801  
(828) 350-3993



**KLEINFELDER**  
Bright People. Right Solutions.

3500 Guilford County Blvd., Suite 200  
P.O. Box 9125-2011  
Winston-Salem, NC 27155-2011  
www.kleinfelder.com

Signed By: \_\_\_\_\_

REVISIONS

REV	DESCRIPTION	DATE

PROJECT NO: \_\_\_\_\_

ISSUE DATE: 09/17/2014

CURRENT REVISION: N/A

DESIGNED BY: MEW

DRAWN BY: MEW

CHECKED BY: JAC

APPROVED BY: JAC

SHEET: 2 of 2

STAGECOACH SOLAR SITE  
1911 STAGECOACH RD  
HENDERSON, NC

**FLS ENERGY**  
FLS ENERGY  
130 ROBERTS ST  
ASHVILLE, NC 28801  
(828) 350-3953

SCALE VERIFICATION

THE BAR IS 1" EQUAL TO 10' ON THIS SHEET. ADJUST YOUR SCALES ACCORDINGLY.

0 1'

9/14/14

# Scaling Public Concerns of Electromagnetic Fields Produced by Solar Photovoltaic Arrays



## Introduction

In our modern society electricity is vital to our health, safety, comfort and well-being. While our daily use of electricity is often taken for granted, public concern has arisen about potential adverse health effects from electric and magnetic – electromagnetic – fields (EMFs) produced by our use of electricity. The purpose of this paper is to give an overview of the sources and scale of electric and magnetic fields and provide an understanding of the current science about potential associated health risks. In addition, included is an evaluation of the sources and scale of EMFs to be produced by the proposed West Linn Solar highway photovoltaic solar array.

### **KEY FINDINGS**

- People are constantly exposed to electric and magnetic fields (EMFs) from a variety of natural and human-made sources.
- The current scientific consensus is that no causal relationship exists between exposure to low-level power frequency EMFs and any adverse health effects including childhood cancer.
- Protective guidelines exist limiting public and occupational exposure to harmful short-term exposures to very high levels of EMFs that can be harmful to human health.
- Health protection guidelines established by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) suggests that the general public not be exposed to static magnetic fields in excess of 4 million milligauss or power frequency magnetic fields in excess of 830 milligauss.
- Under controlled testing conditions, the largest string of solar panels at the proposed West Linn Solar Highway Project could theoretically produce a static magnetic field of 1,697 milligauss at a distance of three feet from the string conduits. This is less than one twentieth of one percent (<.05%) of the ICNIRP's threshold for exposure to static magnetic fields for the general public.
- The type of power inverter proposed for use in the West Linn project could theoretically produce a maximum power-frequency magnetic field of approximately 344 milligauss at a distance of three feet away. This is less than half of the ICNIRP's threshold for exposure to power-frequency magnetic fields for the general public.
- At a distance of ten feet the field strength from the power inverter would fall to approximately 3 milligauss — a level comparable to common household appliances. The proposed locations for power inverters at the West Linn site are more than 250 feet away from the closest residences.
- The potential theoretical EMFs produced by the proposed West Linn Solar Highway photovoltaic array would likely be indistinguishable from background levels produced by other human and natural sources at the perimeter of the site's security fence and therefore are not a concern to public health for neighboring residences.

STATE OF NORTH CAROLINA


COUNTY OF VANCE

)  
)  
)

RELEASE AGREEMENT

This Release Agreement is made this 19th day of September, 2014 by Gary Wayne Tillotson, for and in consideration of \$10.00 and other valuable consideration, the receipt and sufficiency of which is hereby acknowledged, \_\_\_\_\_ does hereby forever remise, release and quitclaim unto James T. Champion and wife, Kimberly P. Champion Frances and their heirs, successors and assigns, any and all interest he may have in that road labeled "Dirt Drive" as shown on that map entitled "Boundary Survey prepared for FLS Energy, Inc. of the Stagecoach Solar Farm Site", dated July 14, 2014 and prepared by Sacks Surveying & Mapping, P.C.

IN WITNESS WHEREOF, the undersigned has hereunto set his/her hand and seal as of the date first above written.

 (SEAL)  
Print Name: GARY TILLOTSON

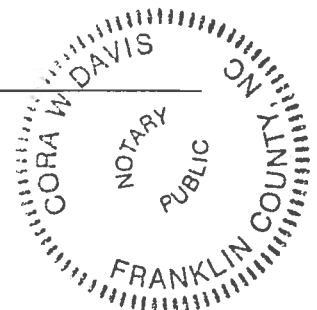
Vance County, State of North Carolina

I, CORA W DAVIS, Notary Public, certify that Gary Wayne Tillotson, personally appeared before me this day, acknowledging to me that he/she voluntarily signed the foregoing document for the purposes stated therein.

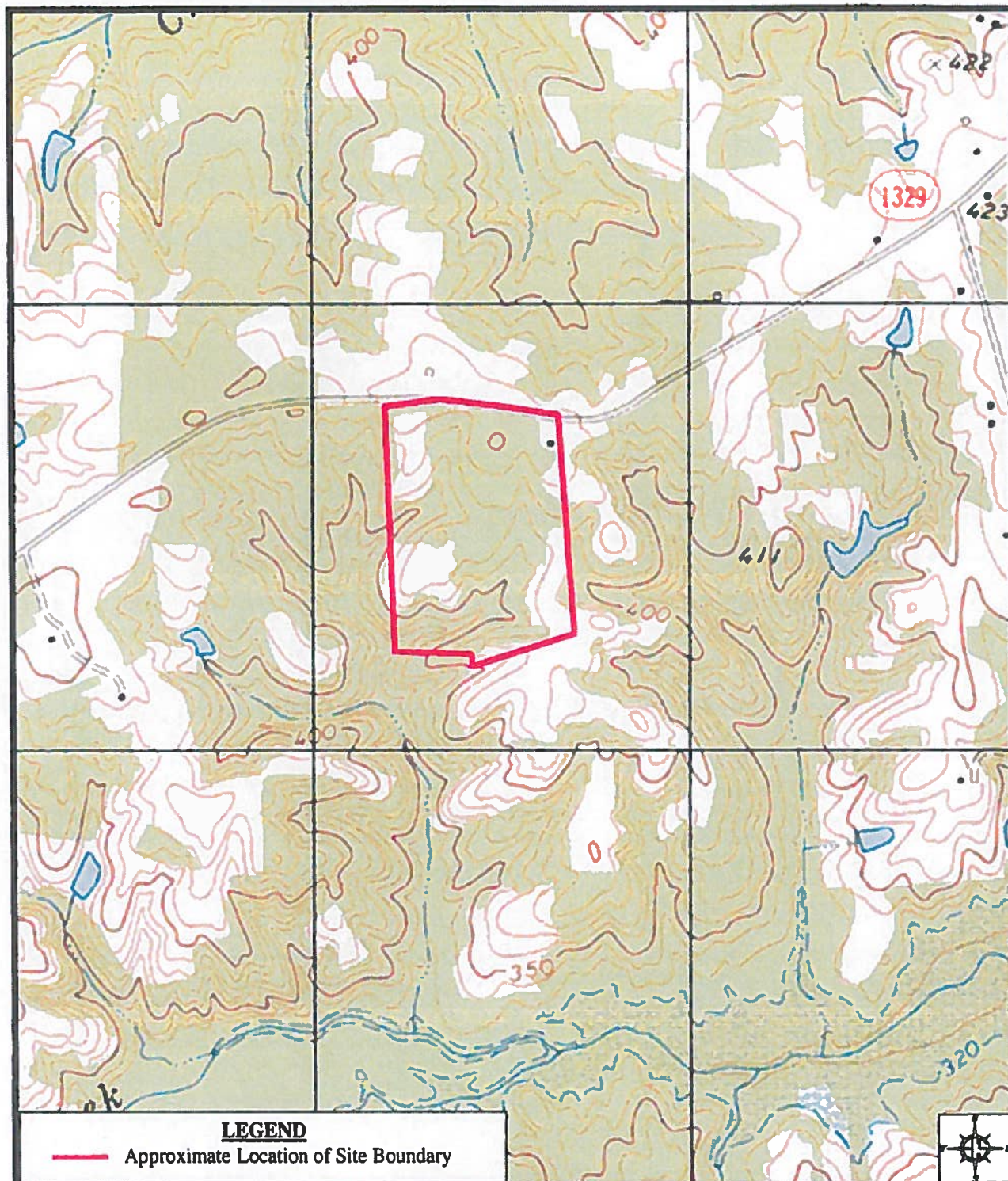
Date: 9-19-14

Cora W Davis  
Notary Public

My Commission expires: 8-30-15







**LEGEND**

— Approximate Location of Site Boundary

**SOURCE:**

United States Geological Survey  
7.5 - Minute Series Topographic Map:  
Townsville Quadrangle  
Dated: 1970  
Contour Interval = 10 feet



**FIGURE 1  
SITE LOCATION MAP**

Stagecoach Road Farm  
Stagecoach Road  
Henderson, Vance County, NC

ECS Project #: 06:21758





Vantage: across from project site on Stagecoach Road



Vantage: looking southeast



Vantage: looking west from Stagecoach Road



Vantage: looking south from Stagecoach Road



### Conditional Use Permit Check Sheet

1. The use requested is among those listed as an eligible conditional use in the district in which the subject property is located.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

2. The use or development is located, designed and proposed to be operated so as to maintain or promote the public health or safety.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

3. The use or development complies with all required regulations of the Zoning Ordinance and all applicable specific conditions and specifications.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

4. The use or development is located, designed and proposed to be operated so as to maintain or enhance the value of adjoining or abutting property, or that the use is a public necessity;

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	

5. The use or development will be in harmony with the area in which it is to be located and will be in general conformity with the plan of development of the County.

	True	False		True	False		True	False	TOTAL
Alston:	<input type="checkbox"/>	<input type="checkbox"/>	Harvin:	<input type="checkbox"/>	<input type="checkbox"/>	Stainback:	<input type="checkbox"/>	<input type="checkbox"/>	
Brummitt:	<input type="checkbox"/>	<input type="checkbox"/>	Johnson:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 1:	<input type="checkbox"/>	<input type="checkbox"/>	
Haley:	<input type="checkbox"/>	<input type="checkbox"/>	Shaw:	<input type="checkbox"/>	<input type="checkbox"/>	Alternate 2:	<input type="checkbox"/>	<input type="checkbox"/>	