

July 8, 2016

Ms. Gail Mount
North Carolina Department of Commerce
Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

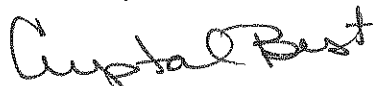
Re: SCH File # 16-E-4600-0365; Amended Application of Bladen Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Bladen Co. Docket #SP-5220, Sub 0.

Dear Ms. Mount:

The above referenced environmental impact information has been reviewed through the State Clearinghouse under the provisions of the North Carolina Environmental Policy Act.

Attached to this letter are comments made in the review of this document. Because of the nature of the comments, it has been determined that no further State Clearinghouse review action on your part is needed for compliance with the North Carolina Environmental Policy Act. The attached comments should be taken into consideration in project development.

Sincerely,



Crystal Best

State Environmental Review Clearinghouse

Attachments
cc: Region N




PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

MEMORANDUM

To: Crystal Best
State Clearinghouse Coordinator
Department of Administration

From: Lyn Hardison 
Division of Environmental Assistance and Customer Service
Environmental Assistance and Project Review Coordinator

RE: 16-0365
Environmental Review – AMENDED - Application of Bladen Solar, LLC for the
Certificate to construct a 50-MW Solar Photovoltaic Electric Generating Facility
Bladen County

Date: July 6, 2016

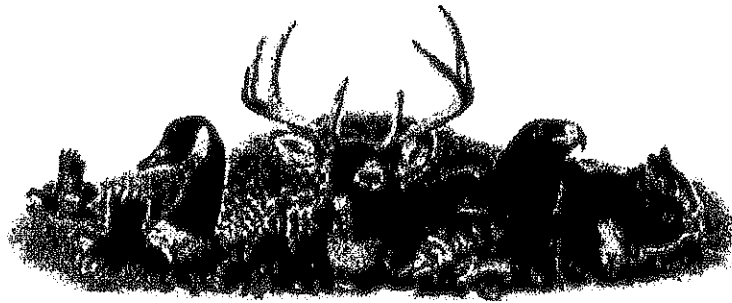
The Department of Environmental Quality has reviewed the proposal for the referenced project. Based on the information provided, several of our agencies have identified permits that may be required and offered some valuable guidance to minimize impacts to the natural resources, aquatic and terrestrial wildlife resources within and around the project area. The comments are attached for the applicant's review.

If the applicant has any questions pertaining to NCDEQ permitting processes, please suggest to the applicant to contact David Lee, Permit Assistance Coordinator, in the Department's Raleigh Regional Office, (919)791-4200 for more permitting assistance. The proposed project is located within his geographic working territory.

Thank you for the opportunity to respond.

Attachment





☐ North Carolina Wildlife Resources Commission ☐

Gordon Myers, Executive Director

MEMORANDUM

TO: Lyn Hardison, Environmental Assistance and SEPA Coordinator
NCDEQ Division of Environmental Assistance and Customer Services

FROM: Gabriela Garrison
Eastern Piedmont Coordinator
Habitat Conservation *Gabriela Garrison*

DATE: July 5, 2016

SUBJECT: Comments on the Amended Bladen Solar, LLC Solar Facility in Bladen County; Project Number 16-0365.

Biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the proposed project description. Comments are provided in accordance with certain provisions of the North Carolina Environmental Policy Act (G.S. 113A-1 through 113A-10; 1 NCAC 25) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

Bladen Solar, LLC, previously circulated under DEQ Project Number 15-0472, proposes to construct a 50 MW solar photovoltaic electric generating facility in Bladen County. The facility would be located on the west side of Braxton Edge Road, west of its intersection with Old Fayetteville Road and east of Walter West Road, southeast of Fayetteville.

An aerial view of the proposed location suggests the project is sited on both forested and cleared land. The western portion of the property is within the Horseshoe Lake and Marshy Bay Natural Heritage Natural Area. Clearing trees from this site and installing solar panels will significantly diminish this sensitive habitat and displace a diverse array of wildlife species. Installing solar panels on previously cleared and disturbed land will have less impact and is therefore the preferred option. Solar projects should be sited to avoid impacts to wetlands, streams, riparian buffers and priority wildlife habitat.

Aerial images and maps indicate Turnbull Creek flows in between the eastern and western portions of the project site. Little Turnbull Creek bisects the eastern portion of the project area. Briary Stream borders the western portion of the project area. There are records for the federal species of concern and state-special concern (SSC), pinewoods darter (*Etheostoma mariae*) downstream of the project in Turnbull Creek. In addition, there are records for the SSC, dwarf salamander (*Eurycea quadridigitata*) on the project site. The NCWRC-owned Suggs Mill Pond Game Lands (SMGL) are located both east and west of the project site. In the western section of the SMGL, there are records for the following species: the state-significantly rare (SSR), chicken turtle (*Deirochelys reticularia*), ornate chorus frog (*Pseudacris*

Mailing Address: Habitat Conservation • 1721 Mail Service Center • Raleigh, NC 27699-1721
Telephone: (919) 707-0220 • Fax: (919) 707-0028

July 5, 2016
 Bladen Solar, LLC
 DEQ Project No. 16-0365

ornata), pine barrens treefrog (*Hyla andersonii*) and coachwhip (*Masticophis flagellum*); the federally and state-threatened (due to similarity of appearance) American alligator (*Alligator mississippiensis*); and the SSC dwarf salamander. In the eastern section of the SMGL, there are records for the SSR coachwhip, the SSC dwarf salamander and a great blue heron (*Ardea herodias*) rookery. The amended application states that the footprint has expanded. Due to the presence of these rare and sensitive species, it is important to minimize disturbance, protect water quality and enhance habitat. The NCWRC continues to encourage placing solar panels on previously disturbed areas. The following recommendations will minimize impacts to aquatic and terrestrial wildlife resources:

1. The project footprint should be surveyed for wetlands and streams to ensure there are no impacts to surface waters. In addition to providing wildlife habitat, wetland areas and streams aid in flood control and water quality protection. United States Army Corps of Engineers Section 404 Permits and NC Division of Water Resources Section 401 Certifications are required for any impacts to jurisdictional streams or wetlands.
2. Maintain or establish a minimum 100-foot undisturbed, native forested buffer along each side of perennial streams and 50-foot undisturbed, native forested buffer along each side of intermittent streams and wetlands. Forested riparian buffers provide habitat areas and travel corridors for wildlife species. In addition, forested riparian buffers protect water quality by stabilizing stream banks and filtering stormwater runoff.
3. The solar facility will connect to existing utility lines; impacts to wildlife habitat will be minimized by connecting along pathways that do not contain quality wildlife habitat, such as cleared or agricultural land. If additional overhead transmission lines will be installed, measures to minimize impacts to birds should be implemented. These can include increasing line visibility, insulating wires to cover exposed connections and increasing the distance between wires so no contact with ground or other energized wire can be made. For more information see <http://www.fws.gov/birds/documents/powerlines.pdf>.
4. Consider planting native, wildflower seed mixes that will create pollinator habitat within the project boundary. Shade-tolerant plants that are within 12 to 18 inches can be selected for plantings both underneath and around the solar panels. Pollinator habitat can also be created in buffer areas outside of the panel region. In addition, consider adding other habitat-enhancing features, such as permeable fencing, bat boxes and brush piles that will minimize impacts from habitat loss. Further information and free technical guidance from the NCWRC is available upon request.
5. If pesticides or chemicals will be used for site maintenance, stormwater runoff from the site should be funneled to bio-retention areas prior to discharge to streams or wetlands. Pesticides, fertilizers and other chemicals should not be used in wetland areas or near streams.
6. Sediment and erosion control measures should be installed prior to any land clearing or construction. The use of biodegradable and wildlife-friendly sediment and erosion control devices is strongly recommended. Silt fencing, fiber rolls and/or other products should have loose-weave netting that is made of natural fiber materials with movable joints between the vertical and horizontal twines. Silt fencing that has been reinforced with plastic or metal mesh should be avoided as it impedes the movement of terrestrial wildlife species. Excessive silt and sediment loads can have detrimental effects on aquatic resources including destruction of spawning habitat, suffocation of eggs and clogging of gills.
7. Develop a plan that identifies the party responsible for decommissioning the facility as well as the conditions under which decommissioning will occur. In addition, the plan should emphasize

Page 3

July 5, 2016
Bladen Solar, LLC
DEQ Project No. 16-0365

that all equipment must be removed from the site, and the land should be restored to pre-construction conditions.

Thank you for the opportunity to review and comment on this project. If I can be of further assistance, please contact me at (910) 409-7350 or gabriela.garrison@newwildlife.org.

OFFICIAL COPY

Jul 11 2016

State of North Carolina
Department of Environment and Natural Resources
INTERGOVERNMENTAL REVIEW - PROJECT COMMENTS

Reviewing Office: FRO

Project Number 16-0365 Due Date: 7/4/2016
County BLADEN

After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law. Questions regarding these permits should be addressed to the Regional Office indicated on the reverse of the form. All applications, information and guidelines relative to these plans and permits are available from the same Regional Office.

	PERMITS	SPECIAL APPLICATION PROCEDURES or REQUIREMENTS	Normal Process Time (statutory time limit)
<input type="checkbox"/>	Permit to construct & operate wastewater treatment facilities, sewer system extensions & sewer systems not discharging into state surface waters.	Application 90 days before begin construction or award of construction contracts. On-site inspection. Post-application technical conference usual.	30 days (90 days)
<input type="checkbox"/>	NPDES - permit to discharge into surface water and/or permit to operate and construct wastewater facilities discharging into state surface waters.	Application 180 days before begin activity. On-site inspection. Pre-application conference usual. Additionally, obtain permit to construct wastewater treatment facility-granted after NPDES. Reply time, 30 days after receipt of plans or issue of NPDES permit-whichever is later.	90-120 days (N/A)
<input type="checkbox"/>	Water Use Permit	Pre-application technical conference usually necessary	30 days (N/A)
<input type="checkbox"/>	Well Construction Permit	Complete application must be received and permit issued prior to the installation of a well.	7 days (15 days)
<input type="checkbox"/>	Dredge and Fill Permit	Application copy must be served on each adjacent riparian property owner. On-site inspection. Pre-application conference usual. Filling may require Easement to Fill from N.C. Department of Administration and Federal Dredge and Fill Permit.	55 days (90 days)
<input type="checkbox"/>	Permit to construct & operate Air Pollution Abatement facilities and/or Emission Sources as per 15 A NCAC (2Q.0100 thru 2Q.0300)	Application must be submitted and permit received prior to construction and operation of the source. If a permit is required in an area without local zoning, then there are additional requirements and timelines (2Q.0113).	90 days
<input type="checkbox"/>	Permit to construct & operate Transportation Facility as per 15A NCAC (2D.0800, 2Q.0601)	Application must be submitted at least 90 days prior to construction or modification of the source.	90 days
<input type="checkbox"/>	Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900	N/A	60 days (90 days)
<input type="checkbox"/>	Demolition or renovations of structures containing asbestos material must be in compliance with 15 A NCAC 20.1110 (a) (1) which requires notification and removal prior to demolition. Contact Asbestos Control Group 919-707-5950.		
<input type="checkbox"/>	Complex Source Permit required under 15 A NCAC 2D.0800		
<input checked="" type="checkbox"/>	The Sedimentation Pollution Control Act of 1973 must be properly addressed for any land disturbing activity. An erosion & sedimentation control plan will be required if one or more acres to be disturbed. Plan filed with proper Regional Office (Land Quality Section) At least 30 days before beginning activity. A fee of \$65 for the first acre or any part of an acre. An express review option is available with additional fees.		20 days (30 days)
<input type="checkbox"/>	Sedimentation and erosion control must be addressed in accordance with NCDOT's approved program. Particular attention should be given to design and installation of appropriate perimeter sediment trapping devices as well as stable stormwater conveyances and outlets.		(30 days)
<input type="checkbox"/>	Mining Permit	On-site inspection usual. Surety bond filed with ENR Bond amount varies with type mine and number of acres of affected land. Any acre mined greater than one acre must be permitted. The appropriate bond must be received before the permit can be issued.	30 days (60 days)
<input type="checkbox"/>	North Carolina Burning permit	On-site inspection by N.C. Division Forest Resources if permit exceeds 4 days	1 day (N/A)
<input type="checkbox"/>	Special Ground Clearance Burning Permit - 22 counties in coastal N.C. with organic soils	On-site inspection by N.C. Division Forest Resources required "if more than five acres of ground clearing activities are involved. Inspections should be requested at least ten days before actual burn is planned."	1 day (N/A)
<input type="checkbox"/>	Oil Refining Facilities	N/A	90-120 days (N/A)
<input type="checkbox"/>	Dam Safety Permit	If permit required, application 60 days before begin construction. Applicant must hire N.C. qualified engineer to: prepare plans, inspect construction, certify construction is according to ENR approved plans. May also require permit under mosquito control program. And a 404 permit from Corps of Engineers. An inspection of site is necessary to verify Hazard Classification. A minimum fee of \$200.00 must accompany the application. An additional processing fee based on a percentage of the total project cost will be required upon completion.	30 days (60 days)

February 11, 2015

OFFICIAL COPY

Jul 11 2016

County <u>BLADEN</u>		Project Number: <u>16-0365</u>	Due Date: <u>7/4/2016</u>	Normal Process Time (statutory time limit)
PERMITS		SPECIAL APPLICATION PROCEDURES or REQUIREMENTS		
<input type="checkbox"/>	Permit to drill exploratory oil or gas well	File surety bond of \$5,000 with ENR running to State of NC conditional that any well opened by drill operator shall, upon abandonment, be plugged according to ENR rules and regulations.		10 days N/A
<input type="checkbox"/>	Geophysical Exploration Permit	Application filed with ENR at least 10 days prior to issue of permit. Application by letter. No standard application form.		10 days N/A
<input type="checkbox"/>	State Lakes Construction Permit	Application fee based on structure size is charged. Must include descriptions & drawings of structure & proof of ownership of riparian property.		15-20 days N/A
<input checked="" type="checkbox"/>	401 Water Quality Certification	N/A		60 days (130 days)
<input type="checkbox"/>	CAMA Permit for MAJOR development	\$250.00 fee must accompany application		55 days (150 days)
<input type="checkbox"/>	CAMA Permit for MINOR development	\$50.00 fee must accompany application		22 days (25 days)
<input type="checkbox"/>	Several geodetic monuments are located in or near the project area. If any monument needs to be moved or destroyed, please notify: N.C. Geodetic Survey, Box 27687 Raleigh, NC 27611			
<input checked="" type="checkbox"/>	Abandonment of any wells, if required must be in accordance with Title 15A. Subchapter 2C.0100.			
<input checked="" type="checkbox"/>	Notification of the proper regional office is requested if "orphan" underground storage tanks (USTS) are discovered during any excavation operation.			
<input type="checkbox"/>	Compliance with 15A NCAC 2H 1000 (Coastal Stormwater Rules) is required.			45 days (N/A)
<input type="checkbox"/>	Catawba, Jordan Lake, Randalman, Tar Pamlico or Neuse Riparian Buffer Rules required.			
<input type="checkbox"/>	Plans and specifications for the construction, expansion, or alteration of a public water system must be approved by the Division of Water Resources/Public Water Supply Section prior to the award of a contract or the initiation of construction as per 15A NCAC 18C .0300 et. seq. Plans and specifications should be submitted to 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. All public water supply systems must comply with state and federal drinking water monitoring requirements. For more information, contact the Public Water Supply Section, (919) 707-9100.			30 days
<input type="checkbox"/>	If existing water lines will be relocated during the construction, plans for the water line relocation must be submitted to the Division of Water Resources/Public Water Supply Section at 1634 Mail Service Center, Raleigh, North Carolina 27699-1634. For more information, contact the Public Water Supply Section, (919) 707-9100.			30 days

Other comments (attach additional pages as necessary, being certain to cite comment authority)

Division	Initials	No comment	Comments	Date Review
DAQ	GWR	<input checked="" type="checkbox"/>		6/9/16
DWR-WQROS (Aquifer & Surface)	BSH	<input checked="" type="checkbox"/>		/ / 6/14/16
DWR-PWS		<input type="checkbox"/>		/ /
DEMLR (LQ & SW)	LHB	<input checked="" type="checkbox"/>		6/10/16
DWM - UST	KEC	<input checked="" type="checkbox"/>		6/10/16

REGIONAL OFFICES

Questions regarding these permits should be addressed to the Regional Office marked below.

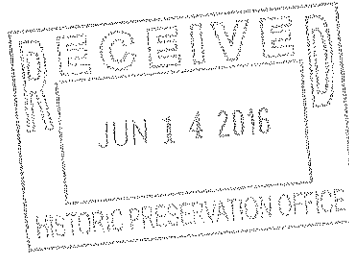
☐ Asheville Regional Office2090 US Highway 70
Swannanoa, NC 28778
(828) 296-4500☐ Mooresville Regional Office610 East Center Avenue, Suite 301
Mooresville, NC 28115
(704) 663-1699☐ Wilmington Regional Office127 Cardinal Drive Extension
Wilmington, NC 28405
(910) 796-7215☐ Fayetteville Regional Office225 North Green Street, Suite 714
Fayetteville, NC 28301-5043
(910) 433-3300☐ Raleigh Regional Office3800 Barrett Drive, Suite 101
Raleigh, NC 27609
(919) 791-4200☐ Winston-Salem Regional Office450 West Hanes Mill Road, Suite 300
Winston-Salem, NC 27105
(336) 771-9800☐ Washington Regional Office943 Washington Square Mall
Washington, NC 27889
(252) 946-6481

**NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW**

COUNTY: BLADEN

H11: ENERGY RELATED
FACILITIES/ACTIVITIES

STATE NUMBER: 16-E-4600-0365
DATE RECEIVED: 06/07/2016
AGENCY RESPONSE: 07/04/2016
REVIEW CLOSED: 07/07/2016



MS RENEE GLEDHILL-EARLEY
CLEARINGHOUSE COORDINATOR
DEPT OF NATURAL & CULTURAL RESOURCE
STATE HISTORIC PRESERVATION OFFICE
MSC 4617 - ARCHIVES BUILDING
RALEIGH NC

CA 15-0608

REVIEW DISTRIBUTION

DEPT OF AGRICULTURE
DEPT OF ENVIRONMENTAL QUALITY
DEPT OF NATURAL & CULTURAL RESOURCE
DEPT OF TRANSPORTATION
DNCR - DIV OF PARKS AND RECREATION
DPS - DIV OF EMERGENCY MANAGEMENT
LUMBER RIVER COG

Previously Reviewed
(NC)

PROJECT INFORMATION

APPLICANT: North Carolina Department of Commerce
TYPE: State Environmental Policy Act
Environmental Review

DESC: Amended Application of Bladen Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Bladen Co. Docket #SP-5220, Sub 0. - View document at <http://starwl.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type SP-5220 Sub 0 in the Docket Number search line.

Located on the west side of Braxton Edge Road, east and west of the intersection with Old Fayetteville Road, and east of Walter West Road near Fayetteville, NC

Amended due to the additional land added.

CROSS-REFERENCE NUMBER: 15-E-4600-0472

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

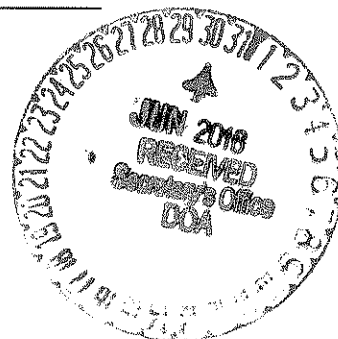
AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: ☒ NO COMMENT ☐ COMMENTS ATTACHED

SIGNED BY:

Renee Gledhill-Earley

DATE:

6.27.16



OFFICIAL COPY

Jul 11 2016

JUN 08 2016

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

COUNTY: BLADEN

H11: ENERGY RELATED
FACILITIES/ACTIVITIES

STATE NUMBER: 16-E-4600-0365
DATE RECEIVED: 06/07/2016
AGENCY RESPONSE: 07/04/2016
REVIEW CLOSED: 07/07/2016

MS PAULA CUTTS
CLEARINGHOUSE COORDINATOR
DPS - DIV OF EMERGENCY MANAGEMENT
FLOODPLAIN MANAGEMENT PROGRAM
MSC # 4218
RALEIGH NC

REVIEW DISTRIBUTION

DEPT OF AGRICULTURE
DEPT OF ENVIRONMENTAL QUALITY
DEPT OF NATURAL & CULTURAL RESOURCE
DEPT OF TRANSPORTATION
DNCR - DIV OF PARKS AND RECREATION
DPS - DIV OF EMERGENCY MANAGEMENT
LUMBER RIVER COG

PROJECT INFORMATION

APPLICANT: North Carolina Department of Commerce
TYPE: State Environmental Policy Act
Environmental Review

DESC: Amended Application of Bladen Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Bladen Co. Docket #SP-5220, Sub 0. - View document at <http://starw1.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type SP-5220 Sub 0 in the Docket Number search line.

Located on the west side of Braxton Edge Road, east and west of the intersection with Old Fayetteville Road, and east of Walter West Road near Fayetteville, NC

Amended due to the additional land added.

CROSS-REFERENCE NUMBER: 15-E-4600-0472

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: ☒ NO COMMENT ☐ COMMENTS ATTACHED

SIGNED BY:

David Herby

DATE:

6/10/16

not on SPHA.



OFFICIAL COPY

Jul 11 2016

NORTH CAROLINA STATE CLEARINGHOUSE
DEPARTMENT OF ADMINISTRATION
INTERGOVERNMENTAL REVIEW

Hemal Shah

COUNTY: BLADEN

H11: ENERGY RELATED
FACILITIES/ACTIVITIES

STATE NUMBER: 16-E-4600-0365
DATE RECEIVED: 06/07/2016
AGENCY RESPONSE: 07/04/2016
REVIEW CLOSED: 07/07/2016

MS CARRIE ATKINSON
CLEARINGHOUSE COORDINATOR
DEPT OF TRANSPORTATION
STATEWIDE PLANNING - MSC #1554
RALEIGH NC



REVIEW DISTRIBUTION

DEPT OF AGRICULTURE
DEPT OF ENVIRONMENTAL QUALITY
DEPT OF NATURAL & CULTURAL RESOURCE
DEPT OF TRANSPORTATION
DNCR - DIV OF PARKS AND RECREATION
DPS - DIV OF EMERGENCY MANAGEMENT
LUMBER RIVER COG

PROJECT INFORMATION

APPLICANT: North Carolina Department of Commerce
TYPE: State Environmental Policy Act
Environmental Review

DESC: Amended Application of Bladen Solar, LLC for Certificate to construct a 50 MW Solar Photovoltaic Electric Generating Facility in Bladen Co. Docket #SP-5220, Sub 0. - View document at <http://starw1.ncuc.net/NCUC/portal/ncuc/page/Dockets/portal.aspx>, Type SP-5220 Sub 0 in the Docket Number search line.

Located on the west side of Braxton Edge Road, east and west of the intersection with Old Fayetteville Road, and east of Walter West Road near Fayetteville, NC

Amended due to the additional land added.

CROSS-REFERENCE NUMBER: 15-E-4600-0472

The attached project has been submitted to the N. C. State Clearinghouse for intergovernmental review. Please review and submit your response by the above indicated date to 1301 Mail Service Center, Raleigh NC 27699-1301.

If additional review time is needed, please contact this office at (919)807-2425.

AS A RESULT OF THIS REVIEW THE FOLLOWING IS SUBMITTED: ☒ NO COMMENT ☐ COMMENTS ATTACHED

SIGNED BY:

Hemal Shah

DATE:

6/10/2016



OFFICIAL COPY

Jul 11 2016