Environmental Impact Assessment Item		Hot Mix Asphalt Plant on King Road
Proposed Project Description and Need		January 11, 2024
1.	Describe the overall project in detail, including all proposed phases.	Yes - Chatham County Asphalt Plant project (the "Project") is a commercial asphalt plant proposed to be built on the "New Tract 1", +/-18.685 acres of the overall 70+ acre parcel
2.	Provide a project location map showing surrounding areas.	yes
3.	Provide a project site plan showing existing and proposed facilities.	yes;
4.	Describe how this project fits into larger plans or connects with adjacent projects.	yes
5.	List and describe public facilities or benefits provided by the project.	yes
6.	Discuss the land acreage to be disturbed during each phase.	yes
7.	List square footage and height (in stores) of new buildings.	Yes - for phase 1; no buildings until phase 2 if ever
8.	Describe proposed uses of all buildings and proposed facilities.	yes
9.	Show number of parking spaces in parking lots and decks.	Yes
10.	Show areas to be cleared, graded, filled, paved and landscaped.	Yes
11.	Show connections to existing utility and sewer lines or new utilities.	Discussed in text but not shown on map.
12.	Show wastewater management systems on a map.	no
13.	Show proposed areas of impervious and semi-pervious surfaces.	no
14.	w and describe any proposed stormwater control devices.	Yes - 2 drainage basins are shown on pages 106 and 107 in grading and erosion control maps; more detail and locations needed of SCMs as applicable for the SPCC and NCG01 and NCG016 permit

Alternatives Analysis	
1. Discuss and compare all reasonable development alternatives (site selection, facility layout, utilities, stormwater management, construction methods, open space preservation, any other pertinent alternative considerations.	Incomplete - We disagree with the following as a statement of fact:  Section 4.0 Alternative Analysis (Pg 6), As noted above, this Property has been used for timber harvesting for many years, and this property was most recently clear cut in 2021 with minimal environmental controls and requirements. As such and by its very nature, timbering of an entire tract of land has more of an adverse impact on the environment, wildlife habitat, water quality, and soil stability than asphalt plants. Asphalt plants only use a small portion of a tract, are highly regulated by both the State and EPA, and must have safeguards in place on an ongoing basis to remain in operationChanging the use of a widely impacted timber tract to a restricted asphalt plant use (whose total disturbed area will be less than 12% of the overall tract acreage), along with the various environmental controls and approvals required for asphalt plants, should be seen as an improvement and a preferred alternative use of this tract of land
<ol> <li>Discuss how the preferred alternative was selected and its benefits relative to other alternatives (including a no-build alternative, if applicable).</li> </ol>	yes
Existing Environment and Project Impacts For each resource topic below, describe:	
A. Existing resources and conditions.	yes
B. Anticipated impacts (short-term construction impacts, long-term operation impacts, and indirect or secondary impacts.)	Incomplete 1.No discussion of indirect or secondary impacts. Asphalt plants have permits for air pollution because of the potential for toxic emissions. (see air permit p.113) What will be the off-site impact of the emissions? Maps on pages 195-6 appear to model off-site emissions.  2. Needs to address indirect land disturbance associated with required natural gas and electrical lines along King Road.
	3. How will wastes associated with baghouse be managed?

	4. Also there needs to be consideration of cumulative air pollution impacts in the Moncure
	area. There are industries in place that create air pollution, plus the addition of the STAR coal ash burning and any possible air pollutants from Vinfast. How does this contribute to the local public health impacts of the combined pollutants?
	Use of Trichloroethylene (TCE) solvent, a carcinogen, in asphalt production releases a toxic air pollutant that is listed on the air quality permit. TCE also contaminates groundwater. D-Limonene, a non-toxic solvent used in asphalt production in other states, obviates the need for use of this carcinogen in Chatham.
C. Discuss how potential impacts to the resource will be avoided and minimized through alternative selection, design strategies, construction methods, and long-term maintenance procedures.	yes
<ul> <li>D. For unavoidable impacts, describe whether any compensatory mitigation is planned or required.</li> </ul>	No
1. Geography	
<ul> <li>Discuss the geographic setting, geology, and topography of the project area and adjacent areas.</li> </ul>	yes
<ul> <li>Provide a topographic map of the property and surrounding area, use the county GIS website topography (2' contours interval) data at a scale appropriate for the project size, i.e., 1" = 100', etc.).</li> </ul>	yes
<ul> <li>Identify any 100-year floodplains (FEMA Special Flood Hazard Areas) on or adjacent to the property. If present, provide an appropriate-scale map of the flood-prone areas defined by the NC Flood Mapping Program.</li> </ul>	yes
<ul> <li>Show areas that will be graded or filled, and provide estimated cut/fill volumes.</li> </ul>	Yes

•	If the project includes pond or dam work, show areas that will be flooded.	Yes
2.	Soils and Prime Farmlands	
•	Identify dominant soils in the project area (county GIS or NRCS website) and show on a map.	yes
•	Discuss any soil constraints (fill, wetland soils, septic suitability, slopes, etc.) and indicate those areas on a map.	yes
•	Describe any soil disturbance or contamination expected as a result of this project.	yes
•	If contamination is expected, discuss containment plans and procedures.	Inadequate containment of/response to unexpected spills [of liquid asphaltic concrete cement?] on gravel areas.  Section 5.3 notes Per SPCC tanks will be double walled and have secondary containment; recommendation to conditionally approve this section under those control measures.
•	If soil will be relocated, specify the number of square yards/feet to be moved, and its relocation site.	N/A at the time of the EIA the operation will be a "zero balance site"
•	Describe runoff management plans for the project.	yes they will "meet the requirements" NCG01 and NCG016 will be applied for
•		No off site impacts because of buffer zones. Recommendation to include land disturbance associated with added electrical and NG lines along King Road to EIA
•	Provide a map of any prime or unique farmland soils in the project or service areas, and include reference used to make this determination.	Yes
•	Describe impacts to prime or unique farmland soils, including acreage estimates of lost farmland soils and retained farmland soils.	yes pg. 12 - disagree with the statement that because the land is not in farming now that there will be no impacts to prime farmland.
3.	Land Use	

•	Provide a map showing current use of land on the site and surrounding properties.	yes
•	Discuss how the current land use fits into the surrounding area (conservation, development, ecological function, etc.)	yes
•	Provide the current zoning of the project site and the surrounding area.	yes
•	Discuss how the proposed uses fit into the intended land use of the area (conservation, development, ecological function, quality of life).	yes
•	Indicate whether zoning or local land use plans will need to be changed after project completion.	yes
4.	Wetlands	
•	Indicate whether wetlands are present, describe the basis for this determination and identity of the person who made the determination.	yes
•	Show identified wetlands on a map, and describe all relevant details, such as acreage, types, delineation, function, etc.)	yes
•	If wetlands are to be filled, specify the number of acres that will be affected.	NA
•	List all required permits and permitting agencies.	yes
•	If any diversions/additions/withdrawals of surface water will affect wetlands, describe those activities.	yes
5.	Public lands and Scenic, Recreational, and State Natural Areas	
•	Provide a map of County or municipal parks, scenic, recreational or state natural areas (SNHAs, State or Federal Forests, etc.) on or adjacent to the site/project area.	yes
6.	Areas of Archaeological or Historical Value	

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<ul> <li>Discuss any archaeological or historical studies of the project location; provide relevant references.</li> </ul>	yes
<ul> <li>Describe and identify on a map any structures (i.e., walls, buildings, etc.) on the site and provide estimated ages of those structures.</li> </ul>	yes
<ul> <li>Describe all impacts to any archaeological or historical resources in the proposed project area.</li> </ul>	yes
<ul> <li>Describe plans for demolishing or rebuilding any structures.</li> </ul>	NA
<ul> <li>Provide photographs of any significant resources, including all structures older than 50-years.</li> </ul>	yes
<ul> <li>Provide relevant correspondence with the Chatham County Historical Association and NC SHPO.</li> </ul>	yes
7. Air Quality	
Describe the project's impacts on ambient air quality.	But on Page 29 they state "over a decade ago, EPA reviewed emissions from asphalt plants and determined that such facilities are not major sources and were subsequently delisted by the agency. This is misleading. The EPA delisted the source category for purposes of Hazardous air pollutants (section 112 of the CAA) but not for New Source Performance Standards or the National Ambient air quality standards. This paragraph may need to be modified to make accurate or deleted. Particularly since the permit shows that emissions for TAP under the state program. Permittee must quantify all 97 TAPS emitted [requirement for all new & modified asphalt plant applications under 1999 policy] Hot mix asphalt plants are by nature polluting industries. Look at the list on page 120 of the pollutants that will be allowed under their state air permit- (for 1, 314, 000 tons per year?) Plus additional chemicals on page 122. The air permit does not include expected "fugitive emissions"

		that can occur when hot asphalt is loaded into trucks. How about wind patterns and downstream residents? EJ issues? How will excessive emissions and malfunctions be regulated?  EJ component of NC DAQ permitting process: they should factor in socioeconomic or racial status of surrounding community.  "The EPA typically doesn't regulate asphalt plants. They're defined as "minor emitters," although health experts say that the impact on people who live nearby can be anything but minorThe Tar Heel State requires asphalt plant operators to conduct emissions testing once every 10 years. Federal and state regulations may require a plant to submit emissions tests initially — and then never again. Due to variability in a plant's performance over time, our state has found that 10- year retesting helps ensure continued compliance with state and federal standards," North Carolina Division of Air Quality representative Shawn Taylor told KERAWhile federal regulations limit opacity and filterable particulate matter emittedNC regulations also limit total particulate matter, Taylor said." per KERA News
•	Describe plans for any open burning during or after construction.	Yes
•	Indicate the number of proposed parking spaces, if applicable.	Yes
•	Describe whether the project will increase odor levels, or the likelihood of odor complaints.	"Sometimes odors from heated materials may emanate from an asphalt plant. Even Though these may be noticeable, these odors pose no danger to plant personnel or the community in which the plant operates. A noticeable odor does not indicate a health hazard: there are many instances of natural and man made odors that are noticeable but not harmful - skunks, dairy farms, garlic and marshlands to name a few. Asphalt odors are not harmful" - This statement is taken from the National Asphalt Pavement

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		Association's "The Environmental Impact of Asphalt Plants"
		Although the concentration of the pollutants emitted that create the odors like H2S, polycyclic hydrocarbons, volatile Organic Carbons may not be in high concentrations and they may want to rephrase that odors are not harmful.
		Recommendation for the client to engage all key stakeholders prior to the formal approval
•	Provide a copy of any required traffic studies.	No - Claims King Road is a dead end road with low traffic volume. Does King Road connect to Old Hwy 1?
8.	Noise Levels	
•	Discuss current noise levels; use a benchmark if possible.	yes
•	Describe any increases in noise levels expected from this project.	yes; equipment used is described as well as their respective operational controls; however, no calculations or estimation of the system running in unison is made.
		Recommendation to conduct noise survey to verify the operation meets Chatham County code once in routine operation. Operator should plan for contingencies if noise survey during operation exceeds threshold.
•	Specify the distance at which the increased noise will be heard.	yes
•	Discuss whether surrounding properties will be affected by noise levels.	yes
•	If commercial uses are proposed, specify the hours of operation.	yes - Only occasional night operation to supply asphalt for paving operation. See light levels below.
9.	Light Levels	
•	Describe lighting plans for the project, including how lighting will impact adjacent residents and wildlife.	yes; recommendation to install lighting with no uplighting meeting LEED standards

10. Surface and Groundwater Resources (discuss separately)	
<ul> <li>Identify and provide a map of surface waters in the project area. Describe groundwater (aquifers) in the project area.</li> </ul>	Yes - But the EIA states no potential waters of the US or county protected features would be impacted; however, design plans show a buffered ephemeral stream within the parcel along the NW boundary.
<ul> <li>Include names, locations, classifications, and use support ratings for surface waters.</li> </ul>	Yes
<ul> <li>Specify and show on a map the river basin in which the project is located.</li> </ul>	yes
<ul> <li>Discuss any known groundwater quality issues.</li> </ul>	yes
Discuss drinking water sources.	Yes
11. Fish and Aquatic Habitats	
<ul> <li>Describe fish and aquatic habitats in and adjacent to the site/project area.</li> </ul>	yes
<ul> <li>Discuss impacts to fish and aquatic life and their habitats, including a map showing those habitats.</li> </ul>	yes
12. Wildlife and Natural Vegetation	
<ul> <li>Describe and provide a map of natural community types on and adjacent to the site/project area.</li> </ul>	NA
<ul> <li>List the species of dominant plants and animals observed on the site that typify those communities.</li> </ul>	yes
<ul> <li>Evaluate and discuss whether suitable habitat exists for rare, threatened, and /or endangered species, as described in the NC Natural Heritage Program.</li> </ul>	NA No suitable habitats–timbered in 2021.
<ul> <li>If wildlife will be displaced, discuss any limitation of adjacent areas to support them.</li> </ul>	No - Adjacent habitats are already occupied by wildlife and not available for additional populations.

<ul> <li>Identify, list, and describe the distribution of the invasive species present on the site.</li> <li>Consult the NC Botanical Garden's Web page, "Plants to Avoid in the Southeast US" for a list of invasive species common to the region.</li> </ul>	Yes
<ul> <li>If forest will be cleared, discuss the extent of planned deforestation and specify the forestry methods to be used, including BMPs.</li> </ul>	NA
13. Hazardous Materials	
List all hazardous materials to be stored or introduced during construction or operation.	No - Waste slags from asphalt production not addressed. The owner and operator should plan to properly characterize waste streams prior to generation and incorporate the needed waste storage designs, disposal, and contracts with necessary waste disposal facilities to ensure compliant management 3rd party testing by certified parties should be done to appropriately characterize waste streams as not subjected to RCRA (40 CFR) otherwise.
<ul> <li>For each hazardous material, other than de minimis quantities or for routine housekeeping purposes, describe the procedures to be used to ensure their proper management, storage, and disposal.</li> </ul>	SPCC, SWPP, NCG01, and NCG016 permits; recommendation to ensure SPCC also includes truck loading and staging areas.  Operator should assess RCRA applicability status (VSQG,SQG, LQG) resulting from waste generation and devise the appropriate plans, facilities, and vendor relations prior to start up.  Would the operator be required to monitor groundwater and drinking water given the proposed site plan and use?
References	Yes
Exhibits (Maps, Figures, Tables, Photos, etc.)	yes
State and Federal Permits Required	yes

### **Chatham County**

Environmental Review Advisory Committee Comments on Environmental Impact Assessment

ERAC Opinion Summary - We do not find this EIA adequate and complete. The total impacts and risks of this project to the environment and the community are not adequately discussed. The site plan and use may lead to release of petroleum and other hazardous chemicals to the environment. Use of industry best practices such as non-hazardous alternative chemicals like D-limonene were not considered. Details and specifications of the SPCC and the Stormwater Pollution Prevention Plans were not provided for review or critique. Off-sets for environmental impacts such as wildlife habitat restoration were not discussed. Please see our EIA review for additional specific comments.