

**Wake Stone Corporation Triangle Quarry**  
**Mining Permit No. 92-10**  
**Application for Modification of Mining Permit**  
**April 8, 2020**

**Background**

Through a Mineral Lease agreement with the Raleigh-Durham Airport Authority (RDUAA), Wake Stone Corporation has the opportunity expand its Triangle Quarry operation. This quarry expansion will allow the continued production of quality crushed stone products for the local market from our existing stone processing and delivery infrastructure at the Harrison Avenue location in Cary, NC. Additionally, through royalty payments to be made to RDUAA under the terms of the mineral lease, RDUAA will receive an estimated \$24M over the projected 30-year mine life at a time when RDUAA requires funding for needed capital improvements. Since January 2016 Wake Stone has meticulously investigated the viability of establishing a quarry pit on the 106+/- acre RDUAA's Odd Fellows tract. Through exploration drilling and other due diligence activities we have formulated a plan for expanding the existing Triangle Quarry. This Mining Permit Modification Application package provides the details of our proposed expansion activities.

**Connectivity**

RDUAA's Odd Fellows tract is located directly across Crabtree Creek from the current Triangle Quarry pit. In order to safely and efficiently move equipment and transfer mined stone between the proposed new pit and the existing processing equipment, a bridge will be constructed across Crabtree Creek. Wake Stone has engaged the services of Michael Baker International (Baker), a recognized leader in transportation infrastructure engineering, to assist in the engineering design and construction permitting for a bridge structure suitable for use in mine truck haulage of stone to the existing processing facilities. Baker's services include the examination of any potential FEMA/100-Year Floodway and Neuse River Riparian Buffer Rule (NRB) impacts. Baker has, through Sungate Design Group, PA, submitted a No Impact Certification to Wake County Environmental Services (copy included in Appendices). Wake County Environmental Services concurrence on the No Impact Certification will be forwarded to NCDEMLR upon receipt. Minor NRB impacts, which are deemed allowable for bridge construction, are being addressed under a separate application being filed with NCDWR.

Site development planning has also incorporated engineering designs for improvement to be made to the pit perimeter roadway around the north side of the existing Triangle Quarry pit. These improvement include lowering the roadway and the installation of engineered retaining walls and other sound/visual barrier structures installed for the purpose of minimizing any potential impacts to the users of Umstead State Park.

Throughout our due diligence period we have acknowledged stakeholders' concerns about truck haulage on Old Reedy Creek Road and have maintained that no quarry products (including overburden) will be hauled from the site via Old Reedy Creek Road. Installation of the planned bridge over Crabtree Creek will facilitate overburden removal through the existing quarry site and Harrison Avenue entrance, negating the need for customer truck traffic on Old

Reedy Creek Road. If the off-site demand for overburden falls short of the pace of stripping, the old Triangle Quarry pit will be used for storage of overburden.

Once overburden removal activities are well underway and the initial pit has been established, we will have a better understanding of the construction industry's interest in utilization of our overburden for area construction projects. We will also determine the most efficient methods of handling the overburden based upon its unique characteristics, and the need to explore other potential material transportation methods. If alternative material transportation methods are found to be viable within the mining permit boundary, a permit modification request will be submitted for DEMLR review and approval.

### **Aquatic Resources – streams and wetlands**

An integral part of Wake Stone's due diligence activities has been the identification of and determination of jurisdictional status of any on-site streams, wetlands, or other aquatic resources. Soil and Environmental Consultants, PA was retained to perform a detailed delineation of any such features using standard US Army Corps of Engineers (USACE) and North Carolina Division of Water Resources (NCDWR) jurisdictional determination procedures. The limits of all identified aquatic resources were confirmed through on-site consultations with representatives of the USACE and NCDWR, and a survey plat prepared by a licensed land surveyor. Following those site visits, the USACE issued an Approved Jurisdictional Determination (AJD) and NCDWR issued a Buffer Determination Letter. (These documents are included in this Mining Permit Application package.) Wake Stone has planned and designed its site development activities in such a manner as to avoid impacts to any jurisdictional aquatic resources.

### **Mitigation of Perceived Impacts to the Public**

Through our due diligence process, we have been subjected to numerous public complaints via social media and other outlets. We acknowledge that some members of the public may not think the Odd Fellows tract is a suitable location for a quarry pit, and that establishment of such will have an adverse effect on their usage of the Old Reedy Creek Road greenway and Umstead State Park. We take those concerns seriously and have devised our site development plans in such a manner as to mitigate those concerns. As detailed in the application booklet and accompanying site plan maps, we intend to retain ample buffers along the Old Reedy Creek Road and Umstead Park boundaries. These buffers, including the planned construction of expansive vegetated earthen berms, will provide sufficient set-back distances and visual and sound barriers from users of Old Reedy Creek Road and Umstead State Park. The perimeter earthen berms will be installed as early in the site development period as possible. As illustrated on the site development plans, pit development activities have been planned to initially occur only on the eastern side of the Odd Fellows tract, keeping mine development activities as far removed from the public as possible.

### **Planned Site Development**

Incorporated in the application material are detailed plans for development of the new quarry pit and ancillary features on the Odd Fellows tract, including a detailed sequence of development activities. Once the Mining Permit Modification is approved by NCDEQ/DEMLR, we will begin expansion activities according to these detailed plans. Improvements to the existing

pit perimeter road and construction of the bridge will coincide with initial site work on the Odd Fellows tract, including construction of the perimeter earthen berms. Our intention is to complete berm construction as early as possible in order to screen the site from public view. Erosion and sediment control structures have been designed in accordance with NCDEQ standard specifications. Details for all erosion and sediment control structures are provided in the application materials and Erosion and Sediment Control Plan designed by Piedmont Land Design, LLP.

### **Post-Mining Site Reclamation**

As detailed in the mineral lease agreement between Wake Stone and RDUAA and further discussed in this Mining Permit Modification Application, Wake Stone is committed to reclaim the 106-acre site post-mining with features such as overlooks, greenway trails, parking areas, pit security fencing, with connectivity to Umstead State Park. The details of such reclamation activities will be determined by RDUAA and Wake Stone upon completion of mining activities. As stated in the April 3, 1981 Final Decision of the Mining Commission (pursuant to issuance of the initial mining permit for Triangle Quarry), Wake Stone will continue to be obligated to offer to the State the original Triangle Quarry “quarry site” as defined in the Mining Commission decision document.

### **Permit Denial Criteria**

The Triangle Quarry has been successfully operated since 1981 without invoking any of the seven permit denial criteria dictated by the North Carolina Mining Act, and in compliance with applicable mining, water discharge, and air quality regulations. State and Federal permitting and required monitoring under the NPDES/Stormwater and Air Quality programs ensure that continued operation of the quarry will not have adverse effects on wildlife or fisheries, or violate any air or water quality standard. Existing natural vegetation buffers and proposed vegetated earthen berms will screen the expanded operation from public view. These buffers and vegetated berms will provide adequate buffering for neighboring residences, vehicular and foot traffic along Old Reedy Creek Road, and visitors to Umstead Park. Designated buffers, stabilized overburden cut slopes, safe blasting practices, and proposed high wall barriers will ensure the prevention of physical hazard to any neighboring structures or properties.

Wake Stone Corporation has operated the Triangle Quarry since 1981 without violation of any of the State or Federal regulations governing mining. Through implementation of well-designed mining plans and sediment and erosion control plans, sediment deposition in adjoining waterways has been prevented. Undisturbed vegetated buffers along Crabtree Creek and the Umstead State Park boundary provide adequate buffering to prevent sediment deposition in the creek, while providing visual and sound buffering of the operation.

Umstead State Park has thrived during the past 39 years, becoming one of the most popular state parks in North Carolina. Based upon the information provided in the attached permit modification application, Wake Stone firmly believes Umstead State Park will continue to prosper as we operate on the RDUAA Odd Fellows property. Our intention is to continue to operate as we have for the past 39 years, with a dedicated commitment to permit compliance and environmental stewardship.