

[the County Council, and the County's administrator \(or their equivalents at the time of such notice\).](#)

Conditions for a Special Exception to Allow Mining Operations and Associated Uses on the ID3 Property ("Mining Operations")

Development and use of the ID3 Property for Mining Operations pursuant to the requested Special Exception shall be subject to the following conditions, which shall be and remain in effect for the duration of the SC DHEC Surface Mining Permit applicable to the ID3 Property:

1. Hours of Operation. Hours of operation shall be limited as follows:
 - (a) Extraction Area, Primary Plant and Equipment: 6:00 a.m. to 9:00 p.m. Monday through ~~Saturday ("Standard Operating Hours")~~ Friday only except as provided below.
 - (b) Shipping, Loading and Limited Processing: 6:00 a.m. to 9:00 p.m. Monday through Friday and 7:00 a.m. to 2:00 p.m. Saturday ("Standard Operating Hours") except as otherwise required in the event a federal, state or local agency or authority requests or requires that such activities be conducted during other hours.
 - (c) Processing Plant (secondary, tertiary and/or finishing phases of plant operations): Hours of operation for the processing plant shall be unrestricted when operated without the use of trucks and loaders utilizing audible back-up alarms (when operated with trucks and loaders utilizing audible back-up alarms, Standard Operating Hours shall apply). Any vehicular operations during hours other than Standard Operating Hours shall be for processing activities only and shall not be for extraction activities.
 - (d) Blasting. Blasting shall not occur before 9:30 a.m. or after 5:00 p.m. Monday through Friday, except when a blasting charge has been set before 5:00 p.m. and is delayed due to reasons beyond the reasonable control of Operator or due to safety considerations. In such a case, Operator may then complete the blast after 5:00 p.m. but no later than thirty (30) minutes after sunset. There shall be no blasting on Saturdays or Sundays except to complete a blast where the charge was set and blasting delayed as described above.
2. Buffers. Buffers shall be provided in the locations and of the widths shown on the on the plan included in this application dated November 11, 2022 and entitled "Updated and Compiled General Development Plan" (the "GDP"). Buffers shall consist of undisturbed natural vegetation supplemented by berms, additional vegetation or otherwise as necessary to comply with the requirements of the mining permit (the "State Mining Permit") issued to Operator for Mining Operations by the South Carolina Department of Health and Environmental Control ("DHEC"). Encroachments into buffers shall be allowed for utility lines, roads, access points and such other encroachments or breaks as necessary to conduct Mining Operations in accordance with the State Mining Permit.
3. No Trespassing Signs. "No Trespassing" signs shall be posted and perpetually maintained around the perimeter of the processing and extraction areas. Signs shall not be more than 300 feet apart.
4. Wetlands. All necessary permits to allow disturbance of jurisdictional wetlands on the ID3 Property shall be obtained from the applicable governmental authority (e.g., U.S. Army Corps. of Engineers, Chester County Government, or DHEC).
5. DHEC Mining, Water Discharge and Air Permits.
 - (a) Prior to commencement of any land disturbance associated with Mining Operations, Operator shall obtain the State Mining Permit from DHEC. The State Mining

Permit shall address all relevant issues including soil erosion, stormwater management, air quality and reclamation. Completion of the reclamation plan shall be secured by a bond posted with DHEC in accordance with its regulations.

(b) Prior to commencement of Mining Operations, Operator shall obtain an NPDES General Permit for Discharges Associated with Nonmetal Mineral Mining Facilities from the DHEC Bureau of Water pursuant to the Pollution Control Act of South Carolina and the Federal Clean Water Act which is administered by DHEC in South Carolina.

(c) Prior to commencement of Mining Operations, Operator shall obtain an Air Quality Permit from the DHEC Bureau of Air Quality to ensure compliance with the Federal Clean Air Act which is administered by DHEC in South Carolina. In connection with the issuance of the Air Quality Permit, Operator shall develop and implement a facility-wide plan for controlling fugitive dust and emissions from Mining Operations including process operations, truck traffic, storage piles, and any other areas within the ID3 Property where fugitive dust emissions can be generated. Fugitive dust generated from direct Mining Operations shall be controlled by wet suppression and/or dry dust collection systems. Fugitive dust generated by vehicular traffic within Mining Operations shall be controlled by the application of water or equivalent wetting agent to roadways and other traveled surfaces on the ID3 Property.

(d) Operator shall maintain copies of all federal and state records pertaining to permits and approvals on-site and, upon reasonable prior notice from County zoning officials, Operator shall make copies of permits and approvals to County zoning officials for review.

(e) Ores and minerals extracted and processed from the ID3 Property will be limited to those which are granitic in nature, except that topsoil and fill dirt (which may include sand and clay) may also be extracted and processed from the ID3 Property, all in accordance with the State Mining Permit and applicable law. There shall be no lithium sold, extracted or processed from the ID3 Property.

6. Entrance Road.

~~(a)~~

(a) No later than the commencement of the sale of crushed stone from the ID3 Property, wheel wash and load wet-down rack infrastructure will be installed for traffic leaving the ID3 Property.

(b) Operator shall pave and maintain in good condition the entrance road providing access to Mining Operations from Highway 9 for a distance of approximately 1000 feet as generally shown on the on the GDP.

~~(b)~~ Permanent access to Mining Operations shall be limited to a single point on Highway 9 as generally shown on the GDP and approved by SC Department of Transportation. The portion of such access located between Highway 9 and the area used for active mining may be shared by other uses as authorized by Operator.

~~(c)~~ Operator shall inspect the intersection of the Mining Operations entrance road and Highway 9 daily for loose stone. Operator shall remove any loose stone material at or around the entrance road outside of the right of way of Highway 9 if removal can be completed safely and without interruption of traffic on Highway 9. Operator shall solicit the assistance of the appropriate agency (SCDOT, County Sheriff, etc.) with respect to removal of stone within the right of way of Highway 9 or as otherwise required for safe removal without interruption of traffic on Highway 9.

7. Monitoring Wells. Operator shall construct five (5) monitoring wells at locations determined by an independent qualified professional (i.e., certified hydrologist or geologist) and approved by DHEC. A plan describing the procedures and timing of observance for the monitoring wells shall be developed by an independent qualified professional and approved by DHEC and to be followed by Operator.
8. Water Well Impacts. Upon submission of a formal complaint by an adjacent property-owner or, as requested acknowledged by the County DHEC, pursuant to the State Mine Permit, DHEC shall determine if any activity associated with Mining Operations has caused a well or wells on the adjacent property owner's land to become dry. From the submission of the complaint until DHEC's determination, Operator shall supply water (e.g., via a water tank, etc.) to the affected property owner as needed for such owner to receive the volume of water historically drawn from the property owner's well. If DHEC determines that Mining Operations ~~has~~have caused the drying of the property owner's well, Operator shall be responsible for providing an alternative water source (e.g., drill well deeper, new well, or connect to public water source at the discretion of Operator) for the aggrieved party at Operator's expense.
9. Blasting.
 - (a) Blasting Data shall be monitored and recorded for all blasts, shall be maintained on-site at the scale house for a period of three (3) years and shall be made available to County zoning officials for review at the scale house. Blasting Data shall include the time and date of blast, pounds of blasting material per delay, total pounds of blasting materials per blast, seismograph readings of ground vibration levels and air over-pressure levels in decibels.
 - (b) Operator shall provide notice prior to the first blast associated with Mining Operations (not site development/construction) either by (i) written notice via direct mail to all property owners and/or occupants of existing dwellings within one-half (1/2) mile of the areas where blasting will occur or (ii) advertisement two (2) times in a local newspaper of general circulation at least ninety (90) days prior to the first blast associated with Mining Operations blast. Upon receipt, pursuant to the above described notice, by DHEC and Operator of a written request from the owner of any existing structures within one-half (1/2) mile of the areas where blasting will occur, a third party consultant selected and engaged by Operator shall conduct an inspection of the applicable structures to determine the structural condition of the structures prior to the first blast associated with Mining Operations. The property owner shall have the right to supervise the inspection by the third-party consultant and shall be provided with a copy of the consultant's report.
 - (c) Ground vibration caused by blasting activity shall not exceed the maximum peak particle velocity allowed pursuant to South Carolina Code of Regulations Section 89-150(E) as measured at the immediate location of any dwelling, public building, school, church, or commercial or institutional building existing as of the date of approval of the Special Exception to allow Mining Operations. The maximum peak particle velocity requirement does not apply to structures within the permitted area, or any area that is owned or leased by Operator or any structures on which Operator has acquired waiver to damage rights.
 - (d) If a formal claim is made by any private or public landowner that the landowner or the property (real or personal) of the landowner has been damaged by blasting activities associated with Mining Operations, whether by ground vibration, air over-pressure or otherwise, an independent, qualified professional with experience in the effects of blasting shall be engaged to determine if any damage was caused by blasting activities associated with Mining Operations. If it is determined that damage was caused

by blasting activities associated with Mining Operations, Operator shall correct the damage or reimburse the landowner for such damage. The amount of any reimbursement shall be determined by an independent, competent professional with expertise in estimating the damage (for example, a licensed builder or building contractor where the damage is to a residence). The independent professionals performing assessments pursuant to this paragraph shall be agreed upon by both Operator and the property owner and retained at the expense of Operator.

(e) Prior to each blast, Operator shall notify by email, text and/or phone call those citizens and County staff who have provided their names and contact information to Operator. Operator will maintain the notification list and individuals may add their names to the list at any time by contacting the scale house at the quarry facility.

10. Lighting. Exterior light fixtures associated with Mining Operations shall be of a type and installed in a manner to reasonably minimize light spillage from Mining Operations onto adjoining parcels.

11. Noise.

(a) Airborne noise produced from Mining Operations other than blasting shall not exceed ~~80dba of continuous noise~~, for greater than five (5) minutes at any one time as measured along the northern and western boundaries of the ID3 Property, (i) 80dba of continuous noise from 6:00 a.m. to 6:30 p.m. or (ii) 70 dba of continuous noise from 6:30 p.m. to 6:00 a.m. (the "Noise Limit"). The Noise Limit shall not apply to individual events lasting less than five (5) minutes. Operator shall install monitoring devices on the northern and western property lines of the ID3 Property to monitor decibel levels to assure that noise from Mining Operations does not exceed the Noise Limit. Operator shall maintain readings from such monitoring devices for a period of three (3) years and make such readings available to the County upon request.

(b) In connection with the initial development of the ID3 property and in adherence to condition 11(a) above, Operator shall make best efforts above current permitted design to enhance any berms, buffers or vegetation in a manner to reduce noise to adjacent properties which may be produced from temporary facilities located outside of the pit.

12. Reclamation Plan.

(a) As a condition of the Special Exception, the reclamation plan approved by DHEC as part of the State Mining Permit shall be complied with by Operator, including, but not limited to, the following tasks which shall be completed upon completion of Mining Operations: (i) all debris, scrap metal, concrete foundations, sidewalks and structures will be removed and (ii) the stockpile, office and plant areas will be graded, sloped back to as natural a contour as reasonably possible (but no steeper than a 3h:1v slope) and seeded. Perimeter berms and buffers may be left in place and the pit area may be allowed to fill up with water.

(b) As required by Sections 48-20-110 and 48-20-120 of the South Carolina Code of Laws and as otherwise required pursuant to the South Carolina Mining Act, Operator shall, in connection with the State Mining Permit and associated reclamation plan and construction requirements for the ID3 Property, (i) submit to the State of South Carolina and thereafter maintain (until completion of reclamation activities) a reclamation bond in the amounts required by SC DHEC, (ii) provide all filings and reports required by DHEC with respect to the reclamation bond and DHEC's annual review thereof, and (iii) enter into an agreement with DHEC to allow DHEC or its assignee to enter the ID3 Property for the performance of work

related to the reclamation bond as required by DHEC. A copy of the Operator's SC DHEC reclamation plan and associated bond will be made available by the Operator to the County for the County's files.

13. Community Interest Engagement Group. Operator shall work with interested parties in the community to establish a Community Interest Engagement Group (the "CIEG") comprised of representatives of homeowner associations or similar residential groups and interested individual property owners located within a two (2) mile radius of Mining Operations. Operator shall facilitate meetings with the CIEG on a quarterly basis or as otherwise mutually determined by Operator and the CIEG to allow for information exchanges with respect to historical Mining Operations, future plans for Mining Operations and other community issues or opportunities of concern or interest of the CIEG and Operator. This condition is intended to provide a forum for communications among the CIEG and Operator and does not grant any approval rights to the CIEG with respect to Mining Operations.
14. Community Fund. Annually, Operator shall contribute the lesser of (i) one percent (1%) of the adjusted net sales of construction aggregate materials excavated from the ID3 Property and sold to third parties during the year or (ii) Thirty Five Thousand Dollars (\$35,000.00) to one or more organizations within Chester County in support of local Chester County non-profit initiatives, workforce development programming or general community improvement opportunities. This funding will be managed by Operator and distributed to organizations selected by Operator after consultation with the CIEG. For purposes of this condition, "adjusted net sales" shall mean total sales dollars of construction aggregate materials mined or extracted from the ID3 Property excluding any transportation (whether by truck, rail or other method), hauling, loading or unloading charges and less deductions for cash discounts, price adjustments, additive materials, allowances, volume discounts and sales, use and other similar taxes or governmental charges. Annually, a report of contributions made by Operator pursuant to this condition shall be provided to the CIEG and to the County.

15 Plant Modifications.

(a) At such time as the pit reaches an average depth of 150 feet from the top of the rock and Operator installs a permanent Primary Plant within the pit, (i) Operator shall cease use of any temporary Primary Plant located outside the pit, and (ii) any dump-hopper within the pit shall have an elevation no higher than the top of the cut of the pit (i.e., the initial ground elevation before excavation of the pit).

(b) Upon installation of the permanent processing plant (for secondary, tertiary and/or finishing phases of plant operations), all screens and crushers above the top of the cut of the pit on the ID3 Property shall be enclosed for noise abatement.

(c) From the commencement of Mining Operations until such time as the Phase 2 portion of the ID3 Property (as identified on the GDP) is being mined or the preparation for construction of a permanent plant, if earlier, the portable plant associated with the Mining Operations shall be located within the pit for Phase 2, which location ensures closer proximity of the portable plant to SC Highway 9.

16 Reversion and Transfer Clause.

(a) Transfer of Special Exception. This Special Exception to allow Mining Purposes on the ID3 Property shall automatically terminate if operation of the stone quarry on the ID3 Property is transferred to a new quarry operator (hereinafter, the “transferee”) that has not been deemed acceptable by the County Council. A transferee may continue to operate hereunder if, prior to the transfer, a transferee is determined by the County Council to be an acceptable operator of the stone quarry located on the ID3 Property. A determination of a transferee’s acceptability shall be initiated by a written request from the Applicant to the County Council. Upon receipt by the County Council—verified by the clerk of the County Council—of a written request by the Applicant and required supporting documentation, the Council shall have sixty (60) days to review the request and issue a determination as to the acceptability of a transferee. Supporting documentation to be considered by the Council shall include: (i) a financial report that demonstrates a transferee’s financial ability to comply with all applicable rules and regulations, (ii) a letter from the state agency responsible for the regulation of stone quarries of each state in which a transferee owns or operates a stone quarry facility, if any, indicating whether a transferee is in compliance with all applicable state rules and regulations, and (iii) a list of each locality in which a transferee owns or operates a stone quarry, if any. This 60-day review by the County Council is not intended to constitute a new Special Exception application, and approval of a transferee shall not be unreasonably withheld, conditioned or delayed. Any approved transferee shall accept the special exception conditions as approved by the County Council and the County’s Zoning Board of Appeals, as applicable.

(b) Reversion of Permitted Uses. In the event this Special Exception is terminated following a transfer of the operation of the stone quarry on the ID3 Property to a transferee that has not been accepted by County Council in accordance with subsection (a) above, then the permitted uses applicable to the ID3 Property (i.e., Tax Parcel 089-00-00-025-000 and the applicable portions of Tax Parcels 089-00-00-002-000 and 089-00-00-001-000) shall revert to those uses permitted within the zoning district applicable to such properties prior to the rezoning and Special Exception of which these conditions are a part.

17. Correction Plans. In the event of an alleged violation of the conditions of this Special Exception that the County’s Planning Director reasonably believes could give rise to the termination of the Special Exception, or in the event that the County’s Planning Director has determined that such a violation has occurred, prior to the County taking any action to terminate the Special Exception or modify its conditions, the County’s Planning Director shall notify the Applicant and Operator in writing of the alleged violation or the determined violation (together with any evidence in support thereof) and the Applicant and/or Operator shall meet with the County’s Planning Director within a reasonable time after receipt of such written notice. If a violation is determined to have occurred, then Operator shall (i) immediately take action to remedy such violation in accordance with applicable industry standards, and (ii) within thirty (30) calendar days or such other reasonable time agreed to by the Operator and the County’s Planning Director, prepare a correction plan detailing the nature and timing of such correction, all as commercially reasonable and consistent with applicable industry standards, to be reviewed and approved by the County’s Planning Director, such approval not to be unreasonably withheld, conditioned or delayed. Each such correction plan, if applicable, shall be implemented promptly following approval from the County’s Planning Director and in accordance with its terms. If the same violation giving rise

to such correction plan occurs two or more times after approval of the correction plan by the County's Planning Director (and after allowing for such corrective time as is set forth in the plan), then the County may impose a daily monetary penalty on Operator until such violation is corrected, not to exceed \$500 per day. If any such violation shall remain uncorrected for a period of sixty (60) days after the correction date identified in the applicable correction plan, the County may thereafter take action to terminate the Special Exception.

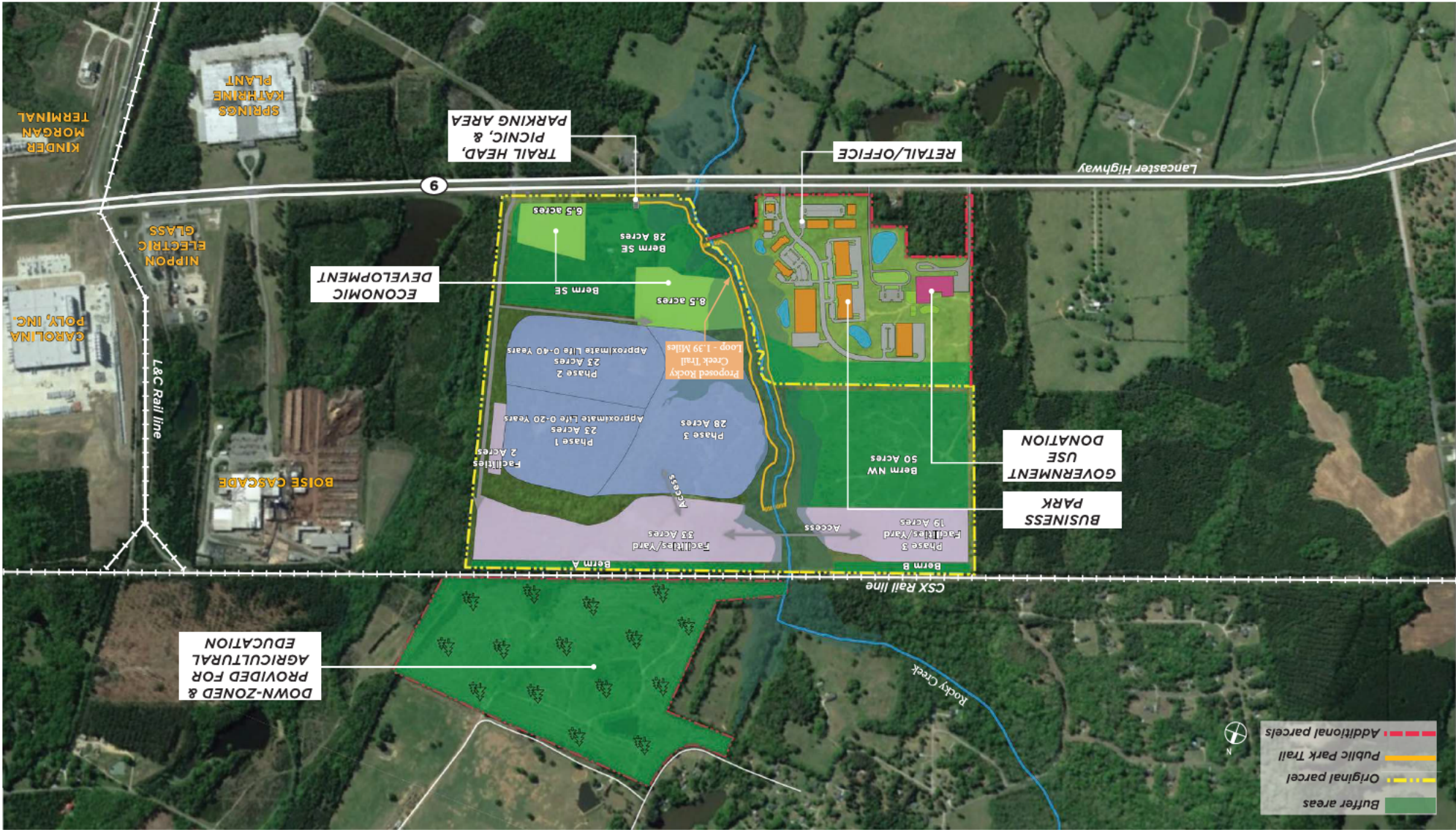
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Total changes	68

UPDATED & COMPILED GENERAL DEVELOPMENT PLAN





March 31, 2020

CERTIFIED LETTER
RETURN RECEIPT REQUESTED

Mr. Chuck Stilson
Luck Stone Corporation
515 Stone Mill Dr.; P.O. Box 29682
Richmond VA, 23242

RE: Approval of Application and Reclamation Plan for a Mine Operating Permit
Issuance of Mine Operating Permit I-002270
Chester Quarry, Chester County

Dear Mr. Stilson

The S.C. Department of Health and Environmental Control (DHEC) has approved the application and reclamation plan for the Chester Quarry as of March 31, 2020. DHEC has approved the reclamation bond submitted in the amount of \$794,880.00.

With the receipt of the reclamation bond and the approval of the application and reclamation plan, this letter serves as official notification that the Mine Operating Permit for the Chester Quarry is being issued as of the date of this letter. Enclosed are the permit document, reclamation plan, and approved maps. Upon issuance of the permit and final acquisition of the land by Luck Stone Corporation, per the attorney letter on file, a new attorney letter must be provided to DHEC. No mining activity may commence until this attorney letter is received and approved by DHEC.

A guide to board review outlining the procedure for requesting a final review is also enclosed. Should there be any questions or if we may be of further assistance, please do not hesitate to contact the project manager, Mason Brandes, at 803-898-1369 or by e-mail at brandemd@dhec.sc.gov.

Sincerely,

Juli E. Blalock, Director
Division of Mining and Solid Waste Management

cc Joe Koon – BLWM
Mason Brandes – BLWM
Brett Caswell – BOW
Lance Davis – BAQ
Veronica Barringer – EQC
Greg Harrington - EQC
Jeffrey Phillips – MSHA
Shane Stuart, Chester County - sstuart@chestercounty.org
Craig Kennedy - craigkennedy.kcs@gmail.com
Bruce Smith - BruceSmith@luckcompanies.com
Chuck Stilson - chuck.stilson@luckcompanies
DHEC File# 11219



S.C. Department of Health and
Environmental Control

MINE OPERATING PERMIT

PART I:

Chester Quarry Luck Stone Corporation

Luck Stone Corporation has been granted a Mine Operating Permit, Mine Permit Number I-002270, to operate the Chester Quarry in accordance with the S.C. Mining Act (S.C. Code Sections 48-20-10 *et seq.*, 1976) and Regulations 89-10 *et seq.* The operator shall conduct this operation as represented in documents submitted to support the issuance of this permit.

JOSEPH M. KOON, MANAGER
MINING AND RECLAMATION SECTION
DIVISION OF MINING AND SOLID WASTE MANAGEMENT

PERMIT NUMBER: I-002270
ORIGINALLY ISSUED: March 31, 2020

In accordance with Section 48-20-60 of the South Carolina Mining Act, this Mine Operating Permit will remain valid unless it terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The anticipated mining completion date is shown on the *Schedule for Conservation and Reclamation Practices* in the *Reclamation Plan*.

The approved *Permit Application*, *Reclamation Plan*, and all supplemental information referenced herein, are an integral part of this permit. *Land Entry Agreements and Mine Maps* as identified in Part II and Part IV, respectively, are also a part of this permit.

I-002270

Luck Stone Corporation

Home Office Address: Luck Stone Corporation
515 Stone Mill Dr.; P.O. Box 29682
Richmond VA, 23242

Local Office Address: None

Address for Official Mail: Same as Home Office Address

Company personnel and title to be the contact for official business and correspondence [South Carolina Department of Health and Environmental Control (DHEC) should be notified in writing immediately of any change in contact, address, telephone or fax numbers]:

Chuck Stilson, PE
Mine Engineer

Telephone: 804-721-9825
Email: chuck.stilson@luckcompanies.com

LOCATION: The mine is located on the Chester, SC U.S.G.S. 7.5' Topographic Map. The approximate geographic coordinates for the site are:

Latitude: 34.4342

Longitude: -81.0900

DESCRIBE LOCATION: This site is located on Highway 9, adjacent to and west of Chester Wood Products. This site is bounded to the north by Seaboard Coastline railroad and to the south by Hwy 9. Specifically, the site is located directly north of the intersection of Old Richburg Road and SC Highway 9.

Part II: MINE OPERATIONS

Luck Stone Corporation, also referred to as the operator, is permitted to mine granite at the Chester Quarry. The maximum depth to the pit floor will be 500 feet below ground surface to an elevation of 50 feet above mean sea level (MSL) measured from the lowest ground surface elevation. Mining will take place on tracts of land owned by the referenced operator. These tracts of land are identified in the submitted *Land Entry Agreements* (LEAs).

MINE/PIT CHARACTERIZATION:

The mining process will start with timbering and clearing of existing vegetation and stripping overburden. Removed overburden will be placed in permanent storage areas at designed locations. The exposed granite will be drilled, explosives loaded and blasted to fragment stone into manageable sizes to facilitate loading in haul trucks and crushing by the primary crusher. Stone passing through the primary crusher will be transported to a surge pile in the processing plant by conveyor for further processing.

PROCESSING PLANT LOCATED ON MINE SITE:

The processing plant consists of primary and secondary crushers, screens, conveyors, loading and hauling machines. Waste screenings and other fines from crushing, washing and screening the crushed stone will be stockpiled around the plant site or placed in overburden storage areas.

MINE DEWATERING:

Quarry dewatering will be necessary when the pit floor extends below the water table, with groundwater seepage from natural fractures/ joints and storm water accumulation. The water will be pumped into a series of sediment basins. Water discharged from the quarry to a receiving stream must be discharged through an outfall regulated by NPDES permit. See Part X: ADDITIONAL TERMS AND CONDITIONS numbers 7-9.

BLASTING:

Blasting operations are permitted at this mine site. Blasting activities shall be conducted in accordance with R. 89-150.H, under the direction of a SC Licensed Blaster and in compliance with regulations of the S.C. Fire Marshall. A minimum distance of 250 ft shall be maintained between the blast area and adjacent property boundaries. Prior to the initiation of mining, the operator shall conduct a pre-blast survey pursuant to R. 89-150. The survey shall be offered to owners of structures within 0.5-mile radius of any blasting.

Pursuant to R.89-150.I, the operator must maintain a minimum distance of 1,000 ft between the nearest point of blasting and any structure not owned by the operator as of the completed application date, unless the structure owner has granted a waiver. The operator shall be required to monitor each blasting event by seismograph and maintain blasting records documenting each blast. Blasting records will be made available upon request to DHEC. DHEC shall be notified following any incident of flyrock outside the permitted area. This notice shall be made within 24 hours of the blast followed with a written report within five business days.

SIGNIFICANT CULTURAL OR HISTORICAL SITES:

A *Cultural Resource Survey of the Chester Greenfield Site* dated February 2019 was conducted by S&ME. The survey identified two archaeological sites, one isolated find, and five above ground resources. The two archaeological sites (38CS418 and 38CS419), the isolated find (IF-1) and the five above ground resources (0023, 0299, 0300, 0301, 0302) were recommended not eligible for inclusion in the National Register of Historic Places (NRHP).

THREATENED AND ENDANGERED SPECIES:

A *Protected Species Assessment of the Chester Greenfield Site* Dated April 9, 2019, was conducted by S&ME. The assessment concluded that the site does not provide suitable habitat for federally listed endangered species in Chester County. A mussel survey was performed by Alderman Environmental Services, Inc. (Alderman) in March of 2019. The survey determined the on-site tributaries (Rocky Creek & the one significant unnamed tributary to Rocky Creek on-site) to be poor habitat for the Carolina Heelsplitter and none were observed on the site during the survey. The U.S Fish and Wildlife Service (Service) reviewed the mussel survey. A follow-up reconnaissance of Rocky Creek south of Highway 9 to the confluence with Grassy Creek

found poor Carolina Heelsplitter habitat and determined it extremely unlikely the Carolina Heelsplitter species would populate this reach of Rocky Creek.

VISUAL SCREEN:

To appropriately screen the operation from view, the operator shall maintain the buffers and visual screen features as shown on the permitted mine map SM-2270-V1. Property line buffers will be utilized leaving existing and enhanced vegetation. A vegetated earthen berm approximately 15 feet in height shall be located along the northern property line as shown on the mine map. Overburden storage areas once constructed and vegetated will also visually screen active mining operations.

NOISE MONITORING AND CONTROL: The operator shall use Best Management Practices (BMPs) to minimize noise from the mine site. Vegetated earthen berms and buffers are also used on-site to minimize noise beyond the mine permit area. Other BMPs shall include, at a minimum, proper maintenance of mufflers on equipment (trucks, trackhoes, pumps, etc.) and consideration of special buffering measures if planning to operate equipment during nighttime hours.

OTHER STATE OR FEDERAL PERMITS: The operator must obtain, maintain, and update, as appropriate, all necessary State and Federal permits in order to construct and operate the mine.

~~**LAND ENTRY AGREEMENTS:** The operator is required to furnish and maintain up-to-date *Land Entry Agreements* on all lands covered under this permit. Any change in ownership on any portion of land covered by this permit, the operator is responsible for furnishing the appropriate and completed *Land Entry Agreements* (Forms MR-600 or MR-700) to DHEC within 30 days of the change of ownership.~~

Landowner(s) as Listed on *Land Entry Agreement(s)*:

- TMS #: 089-00-00-025-000, Luck Stone Corporation
- 089-00-00-002-000, Luck Stone Corporation
- 089-00-00-001-000, Luck Stone Corporation

Total acres of the contiguous tract(s) of land for which the permit is granted:

OWNED 276.6 LEASED 0.0 TOTAL 276.6

Part III: PERMITTED LAND

This permit allows the operator to conduct mining operations within the permitted land as defined through the *Land Entry Agreement* submitted as part of the application. Permitted land as defined by Section 48-20-40(18) is "the affected land in addition to (a) lands identified for future mining to become affected land; (b) and undisturbed or buffer area that is or may become adjacent to the affected land." Therefore, this permit grants the operator the right to conduct active mining operations within the specified affected land, delineate land for future mine areas as future reserves, and to establish undisturbed buffer zones to mitigate any adverse effects to the surrounding environment.

AFFECTED LAND: 249.0 acres of land are to be affected by Luck Stone Corporation under the current mine plan; 145.5 of the affected acres are currently bonded. The affected acres are derived from the operator's response in the *Application for a Mine Operating Permit* and are shown on the approved mine map(s).

FUTURE RESERVES: 0.0 acres are identified as future reserves and are specified on the mine site map. Prior to the initiation of activity in future reserves, the operator shall submit detailed mine and reclamation plans to DHEC for approval.

BUFFER AREAS: 27.6 acres are identified as buffer area, setbacks, or areas that will not be disturbed beyond the pre-mine natural state. These buffer areas are identified on the mine site map. Acres designated as buffer areas are not bonded under the reclamation bond. Any activity within the buffer areas (e.g. removal of timber) shall require **prior** notification and approval by DHEC.

TOTAL PERMITTED AREA: 276.6 acres as submitted on the *Land Entry Agreement(s)*.

Part IV: MAPS

The mine site maps were prepared by Kennedy Consulting Services, LLC and S&ME. These maps are further identified with the following SCDHEC map numbers and are part of the operating permit:

SM-2270-1V1	Mine Map – Phase I	Dated: February 27, 2019	Revised: December 11, 2019
SM-2270-2V1	Mine Map – Phase II	Dated: February 27, 2019	Revised: December 11, 2019
SM-2270-3V1	Overall Facility Plan	Revised: February 7, 2020	
GWM-2270-1V1	Groundwater Monitoring Well Locations	Dated: December 18, 2019	

The reclamation map was prepared by Kennedy Consulting Services, LLC. These maps are further identified with the following SCDHEC map numbers and are part of the operating permit.

RM-2270-1V1	Reclamation Map	Dated: February 27, 2019	Revised: December 11, 2019
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Part V: RECLAMATION BOND

The Reclamation Bond is based upon the total affected acres. Pursuant to Section 48-20-70 and R.89-200, the reclamation bond for this mining permit is set at \$794,880.00. The reclamation bond shall remain in force and continuous throughout the life of the mining operation and shall only be released, partially or in full, back to the operator after the operator has completed reclamation in accordance with the approved *Reclamation Plan* and the minimum standards in R.89-330.

Part VI: PROTECTION OF NATURAL RESOURCES

1. Describe the area of and around the mine site. Specify topography, surface water systems, wildlife habitats, residential houses, commercial properties, recreational areas, and/or public roads.

The quarry permit area lies in the Piedmont Physiographic Province. Prior to mining activities, the permit area was used as a cattle farm and residence; the immediate area around this site is a mix of residential and

commercial. The topography of this area has surface elevations ranging from 560-480 feet MSL, with high knolls falling toward Rocky Creek and its tributary. Rocky Creek and its unnamed tributary run north to south through the site. Common wildlife typical to this area can be found in and around this site; Orr Baptist Church is located to the south of the property across Highway 9. Craigbrow, Mallard Creek, and Quail Hollow communities are located to the northwest of the proposed mine site north of the seaboard railroad. Chester Middle School is located approximately 1 mile to the west and the City of Chester is located approximately 4 miles to the west.

2. Methods used to prevent physical hazards to persons and to any neighboring dwelling, house, school, church, hospital, commercial or industrial building, or public road.

A gate shall be installed at the entrance to the mine site and kept locked during inactive periods. *Warning* and/or *Danger* signs shall be posted around the perimeter of the property. A fence shall be constructed along the south and east side of the entrance road and office area as shown on Mine Map SM-2270-V1. At any time DHEC may require additional fencing or other safety measures to be installed where necessary.

Operator shall use BMPs to prevent accumulation of sediment/ soil on public roads carried by trucks and other vehicles exiting the mine site; any accumulations shall be removed by the operator on a daily basis or more frequently if needed. To reduce the potential of tracking debris on the highway, the operator shall provide and maintain an asphalt surfaced entrance roadway from SC Highway 9 to 100 feet beyond the scale house and office area toward the plant area. ~~Roads interior to the plant and product stockpile area shall be maintained with crushed stone.~~

The operator shall establish a protected area and establish procedures to minimize fuel spillage or incidental spillage of other petroleum products during storage, refueling of equipment or in the performance of routine maintenance on equipment. Contaminated materials resulting from contact with petroleum products shall be removed from the site and disposed of properly to prevent contamination to ground and surface water resources.

3. Methods used to prevent an adverse effect on the purposes of a publicly owned park, forest, or recreation area.

Any parks, forest, or recreation areas are located at a safe distance and buffered appropriately to avoid any adverse effects from mining operations.

4. Measures taken to insure against substantial deposits of sediment in stream beds or lakes.

The operator shall comply with the NPDES General Permit for Discharges Associated with Nonmetal Mineral Mining Facilities and Stormwater Pollution Prevention Plan developed for the mine. Active pumping and discharge of water from the active pit and any subsequent settling basins shall cease if the dewatering discharge causes flooding conditions to property downstream of the mine site. Rocky Creek and its tributaries shall be protected by a minimum 50-foot undisturbed buffer. Additionally, the operator shall install appropriate BMPs to ensure no sediment encroaches the creeks; BMPs shall be installed to the mine side of the undisturbed buffer.

5. Measures taken to insure against landslides or unstable mine walls.

To maintain stable mine walls, the unconsolidated saprolite shall be sloped to a stable configuration during mining (no steeper than 3:1 slope). The hard rock pit walls shall be benched per the Mine Safety Health Administration (MSHA) requirements to maintain stability and provide safety.

6. Measures taken to insure against acid water generation at the mine site that may result in pollution on adjacent property.

Acid water is not anticipated to be generated from the oxidation of existing minerals currently found on this site.

7. Measures taken to minimize or eliminate fugitive dust emissions from the permitted area.

The operator shall comply with DHEC Air Quality Construction Permit. Prior to mine development; the operator shall implement a Fugitive Dust Control Plan (FDCP) in accordance with their Air Quality Construction Permit.

Part VII: STANDARD CONDITIONS OF MINE OPERATING PERMIT

1) SURVEY MONUMENTS: In accordance to R.89-130, the operator shall install and maintain the two required permanent survey monuments, or control points, within the permitted area as shown on the mine site map. At the discretion of DHEC, the operator may be required to mark the area to be affected with flagging or other appropriate measures.

2) RIGHT OF ENTRY: Pursuant to Section 48-20-130 and R.89-240, the operator shall grant DHEC and/or duly appointed representatives access to the permitted area for inspection to determine whether the operator has complied with the reclamation plan, the requirements of this chapter, rules and regulations promulgated hereunder, and any terms and conditions of this permit.

3) RECORDS RETENTION: All records are to be maintained through additional terms and conditions of this permit or by regulations. Records shall be kept on site or at the office identified for receipt of official mail and open for inspection during normal business hours. The records shall be maintained for a minimum of three (3) years or as specified by DHEC. The operator shall furnish copies of the records upon request to DHEC.

4) PERMIT MODIFICATIONS: Pursuant to Section 48-20-80, the operator may modify the permit and/or *Reclamation Plan* upon approval by DHEC. Requests for permit and/or *Reclamation Plan* modifications may be made to DHEC on Form MR-1300. The operator shall submit any requested supporting data for consideration during DHEC's evaluation of the modification request. If a modification request is determined to be substantial by DHEC, the modification request will be public noticed pursuant to R.89-100 and a modification fee will be required as specified in R.89-340. If DHEC determines activities proposed under the *Reclamation Plan* and other terms and conditions of the permit are failing to achieve the purpose and requirements of the S.C. Mining Act and Regulations, DHEC shall notify the operator of its intentions to modify the permit and/or *Reclamation Plan* pursuant to Section 48-20-150.

5) TRANSFER OF PERMIT: Pursuant to Section 48-20-70, this permit may be transferred to another responsible party. The transfer of the permit must be conducted in accordance with R.89-230. The transferor of the permit will remain liable for all reclamation obligations until all required documents, plans, and the replacement reclamation bond have been submitted and approved by DHEC. The transfer will be considered complete when all parties have received notification by certified letters of the approval of the transfer by DHEC.

6) DURATION OF MINE OPERATING PERMIT: In accordance with Section 48-20-60, this Mine Operating Permit will remain valid unless this permit terminates as set forth in R.89-270 or is revoked in accordance with Section 48-20-160 and R.89-280. The proposed anticipated mining completion date is shown on the *Schedule for Conservation and Reclamation Practices* in the *Reclamation Plan*.

Pursuant to R.89-80(B), the operator shall conduct reclamation simultaneously with mining whenever feasible. Reclamation shall be initiated at the earliest practicable time, but no later than 180 days following termination of mining of any segment of the mine and shall be completed within two years after completion or termination of mining on any segment of the mine.

Part VIII: ENFORCEMENT ACTIONS

Pursuant to Section 48-20-30 of the S.C. Mining Act, "DHEC has ultimate authority, subject to the appeal provisions of this chapter, over all mining, as defined in this chapter, and the provisions of the chapter regulating and controlling such activity." This allows DHEC to assist, cooperate with, or supersede other State agencies in taking enforcement action on violations of the State Regulations or violations of the S.C. Mining Act to ensure the purposes of this Act are enforced.

COMPLIANCE: The operator shall comply at all times with all conditions of this mine operating permit. Non-compliance with this mining permit, statute, or regulations could lead to permit revocation and bond forfeiture pursuant to Sections 48-20-160 and 48-20-170 or other enforcement action allowed by law.

Compliance with the Mine Operating Permit requires the operator to conduct the mining operation as described in the approved *Application for a Mine Operating Permit*. Variance from the *Application for a Mine Operating Permit*, this permit, statute or regulation, without first receiving DHEC approval, shall be deemed non-compliance with the permit.

An operator or official representative of the mine operator who willfully violates the provisions of the S.C. Mining Act, rules and regulations, or willfully misrepresents any fact in any action taken pursuant to this chapter or willfully gives false information in any application or report required by this chapter shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined not less than one hundred dollars nor more than one thousand dollars for each offense. Each day of continued violation after written notification shall be considered a separate offense.

The operator is responsible for all mining activity on the permitted mine site.

Part IX: REPORTS

1) ANNUAL RECLAMATION REPORTS: The operator shall comply with Section 48-20-120 and Regulation 89-210 and submit an *Annual Reclamation Report* on Form MR-1100 as supplied by DHEC. The form for the report will be sent by regular mail to the operator to the mailing address shown on the previous year's *Annual Reclamation Report*. The operator should receive the report form from DHEC by July 1 of each year; however, the operator is ultimately responsible for obtaining the *Annual Reclamation Report* form and is not excused from penalty fees for failure to submit the report on time.

The Annual Operating Fee is a part of the *Annual Reclamation Report*. Failure to submit a complete *Annual Reclamation Report* and fee, in accordance with Section 48-20-120 and R.89-340, will result in a late penalty payment. The *Annual Reclamation Report* and Annual Operating Fee are required if there is any permitted land not fully reclaimed and released by DHEC by June 30 of each year.

2) SPECIAL REPORTS: DHEC may at any time request information, data, or explanations from the operator as to conditions relating to the permitted mine site. Such requests from DHEC shall be made in writing to the operator with an appropriate time frame stated for the submittal of the requested information to DHEC. The operator must produce the information requested within the timeframe specified by DHEC.

Part X: ADDITIONAL TERMS AND CONDITIONS

1. If archaeological materials are encountered within the permitted area prior to or during the construction of mine facilities or during mining, the S.C. Department of Archives and History and DHEC should be notified immediately. Archaeological materials consist of any items, fifty years or older, which were made or used by humans. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, oyster shell, worked wood, bone and stone, metal and glass objects, human skeletal remains, and concentrations of charcoal and stones below the ground surface. These materials may be present on the ground surface and/or under the surface of the ground.
2. Temporary or permanent placement of refuse and debris (e.g., concrete, brick, asphalt) from off-site locations is prohibited without approval by DHEC. Topsoil fill approved by DHEC may be brought in from off-site sources only for the purposes of mine land reclamation.
3. In the future, if determined to be necessary by DHEC, an appropriate fence will be installed around the affected area.
4. The operator shall maintain a minimum 50-foot undisturbed buffer between any land disturbance activity and wetland areas. This buffer shall be permanently flagged prior to the initiation of any mine activity or preparation. The flags shall be maintained throughout the active mine operation of the site. Access road(s) through the buffer are allowed for gaining access to maintain and utilize NPDES outfall and water withdrawal locations.
5. At the time of permit issuance, a Jurisdictional Determination (JD) from the Army Corps of Engineers (Corps) of wetlands within the permitted area has not been received by DHEC. Wetlands have been delineated and a JD request has been submitted to the Corps. The JD shall be submitted to DHEC along with an updated accounting of wetlands to be protected and impacted in the mine permit area. DHEC will review this information and once approved, land disturbance activities may commence. No land disturbance activities under the jurisdiction of this Mine Operating Permit may commence until an approval letter is given by DHEC.
6. The application approved by DHEC states that Jurisdictional Wetland impacts will be necessary and that these impacts will be mitigated pursuant to the permitting requirements of the Corps. The operator shall provide appropriate Corps permits and 401 Water Quality Certifications to the Mining and Reclamation Section prior to any impacts to Jurisdictional Wetlands.
7. Prior to the construction of the Rocky Creek crossing indicated on the Phase II map (SM-2270-2V1) the operator shall provide DHEC design and construction details. In preparing these details, the operator shall consider recommendations of the SC Department of Natural Resources (SCDNR) made by letter dated February 28, 2020. DHEC will provide these design and construction details to SCDNR for comment. DHEC must provide an approval letter prior to construction commencing on the Rocky Creek crossing.
8. An inventory of all water wells for domestic or agricultural purposes within the pre-blast survey area shall be conducted prior to the initiation of mining. Additional inventories at a greater distance from the pit may be required during mining if deemed necessary by DHEC. The information collected at each well shall be used to establish the existence, condition and productive use(s) of the well. The inventory shall include the following information where available, as able to be determined, and as access is allowed by the property owner:
 - A. Location of well.
 - B. Name and address of property owner, use of the well water, use of property.
 - C. Well completion details as documented from drillers logs or DHEC well form 1903.
 - D. Pump details such as type and depth as documented.
9. Six groundwater monitoring wells shall be constructed in the general areas delineated on the approved map GWM-2270-V1. The monitoring wells shall be installed by a certified well driller in accordance with R.61-71, Well Standards and Regulations. The surveyed elevation of the measuring point, relative to an established benchmark, must be submitted with the driller/ geologist's log for each well. Groundwater elevation

measurements (to the nearest inch) shall begin after well development is complete and continue monthly thereafter. The elevation data shall be submitted to DHEC in a spreadsheet accompanied by time/water level graphs on a quarterly basis unless otherwise approved. A log of local precipitation amounts from the nearest NOAA weather station shall be maintained and submitted quarterly with the groundwater elevation data. One year of monitoring results shall be completed and submitted to DHEC prior to the development of a granite pit sump and subsequent dewatering.

10. Upon receipt of a water well supply compliant, DHEC is responsible for determining if dewatering activities at the Chester Quarry caused the problem. During the determination process, the operator shall immediately supply the owner with a temporary water supply (e.g. bottled water for drinking, provisions for laundry services, etc.) until DHEC completes the investigation of the water supply well problem and makes a determination. If DHEC determines the Chester Quarry caused the problem, the operator shall be responsible for repairing, deepening or re-drilling such wells.

APPENDIX A

MODIFICATIONS TO MINE PERMIT I-002270

NUMBER	DATE	DESCRIPTION OF MODIFICATION (PA= Permitted Acreage; AA= Affected, Bonded Acreage; FR= Reserves Acreage, B= Buffer Acreage)
Issuance	3/31/20	Permit issued; PA = 276.6ac., AA = 249.0ac., FR = 0.0ac., B = 27.6ac.



Mining Form MR-500

S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
BUREAU OF LAND AND WASTE MANAGEMENT
DIVISION OF MINING AND SOLID WASTE MANAGEMENT
2600 Bull Street, Columbia, SC 29201
Telephone Number(803) 869-4261 Fax Number: (803) 896-4001

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
BUREAU OF LAND AND WASTE MANAGEMENT
DIVISION OF MINING AND SOLID WASTE MANAGEMENT
2600 Bull Street; Columbia, SC 29201
Telephone Number (803) 896-4261 Fax Number (803) 896-4001

RECLAMATION PLAN
FORM MR-500 DATE VERSION ADOPTED: 7/1/94

As required in Section 48-20-90 of the South Carolina Mining Act, "An operator shall submit with his application for an operating permit a proposed reclamation plan. The reclamation plan for an operating permit only must be furnished to the local soil and water conservation district in which the mining operation is to be conducted. The plan must include as a minimum each of the elements specified in the definition of 'reclamation plan' in Section 48-20-40 and information required by the department. The reclamation plan must provide that reclamation activities, particularly those relating to control of erosion, to the extent feasible, must be conducted simultaneously with mining operations and be initiated at the earliest practicable time after completion or termination of mining on a segment of the permitted land. The plan must provide that reclamation activities must be completed within two years after completion or termination of mining on each segment of the area for which an operation permit is requested unless a longer period specifically is permitted by the department."

I. APPLICANT INFORMATION

1. Name of Company: Luck Stone Corporation

2. Name of Proposed Mine: Chester Quarry County: Chester

3. Home Office Address: 515 Stone Mill Dr.; P.O. Box 29682 (Street and P.O. Box) 804-784-6300 (Telephone No.)

Richmond VA 23242 (City) (State) (Zip Code) 804-784-6390 (Fax. No.)

4. Local Office Address: Not Established (Street and P.O. Box) (Telephone No.)

(City) (State) (Zip Code) (Fax. No.)

5. Designate to which office Official Mail is to be sent:

Home Office: x Local Office:

6. Name of company personnel and their title to be the contact for official business and

correspondence: Mark Williams, Environmental Director

II. ENVIRONMENTAL PROTECTION

1. Describe practices to protect adjacent resources such as roads, wildlife areas, woodland, cropland and others during mining and reclamation.

The mine permit area is located in a semi-rural and industrial area with land cover consisting of hardwood and managed pine forests for timber. On land neighboring the mine permit area, the land uses include agricultural, managed timberlands, rural residential and industrial. Of the 276 acres of permitted land, undisturbed buffers are used to provide additional protections to adjacent properties, creeks and other sensitive areas. The nearest public road, SC Primary Highway 9 (Lancaster Highway), fronts the southern permit boundary area of the mine permit area.

2. Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources.

Proper reclamation of the mine site will include stabilizing all overburden storage piles with vegetation, removal of mine equipment both mobile and stationary, clean up of any spillage of petroleum products, removal of scrap material. Once mining is terminated, groundwater levels will rebound to approximate original levels. The mining process will not use chemicals in the mining or processing of crushed stone; consequently, there is no potential for chemical contamination to groundwater resources. Additionally, vegetative filters of existing vegetation will provide redundancy to active sediment control measures to further protect adjacent surface water resources.

3. Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.

S&ME conducted a Cultural Resource Survey. The report *Cultural Resource Survey Chester Greenfield Site Chester County, South Carolina* indicates that one archaeological site (38CS419) and one isolated find (IF-1) were identified. However, neither of these two sites are recommended for eligibility in the National Register of Historic Places (NRHP).

4. Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permitted area.

Proper reclamation of the mine site will include stabilizing all overburden storage piles with vegetation, removal of mine equipment both mobile and stationary, clean up of any spillage of petroleum products, removal of scrap material. Setbacks, established buffers and soil stabilization along stream banks will provide protection to fisheries in nearby streams. Establishing 3:1 slopes around the pit and overburden storage areas will remove hazardous conditions for the public and indigenous animal populations. On final reclamation, a fence around the pit will be constructed.

Vegetative filters will be established consisting of existing woodlands to provide redundant sediment control to protect wetlands and adjacent properties from mining activities.

5. Describe how applicant will comply with State air quality and water quality standards as established by the S.C. Department of Health and Environmental Control.

To operate the mine and processing plant, the mine operator will obtain the Air Quality Construction Permit and the Air Quality Operating Permit. These permits set the quantity of air particulates that can be emitted to be protective of air quality standards.

With the termination of mining all mobile mine equipment and processing plant equipment will be removed from site. Once the process plant equipment is removed from site, the Air Quality Operating Permit can be terminated. Stone stockpiles, fines and barren soils, potential sources of dust after mining, will be either removed (stone stockpiles) or stabilized with vegetation to eliminate windblown dust.

Discharges from the Chester Quarry will qualify for the *NPDES General Permit for Discharges Associated with Nonmetal Mineral Mining Facilities*. These standards are set to be protective of aquatic life and human health and safety. Prior to discharge in to waters of the State, stormwater and groundwater will be treated by appropriated sized and designed sediment basins. Upon final reclamation, vegetation will be established to control erosion and protect water quality.

III. RECLAMATION OF AFFECTED AREA

6. State useful purpose(s) the affected land is being proposed to be reclaimed to. More than one purpose may be checked, but information should be submitted to support the feasibility for each proposed purpose.

- | | |
|---|--|
| a. Lake or pond <input checked="" type="checkbox"/> | f. Grassland <input checked="" type="checkbox"/> |
| b. Agriculture _____ | g. Recreation _____ |
| c. Woodlands _____ | h. Wetlands _____ |
| d. Residential _____ | i. Park _____ |
| e. Commercial <input checked="" type="checkbox"/> | j. Other _____ |

The operator may elect to modify reclamation of the site to provide economic development opportunities for the area with Industrial or Commercial uses as an end goal. Any future industrial or commercial uses will comply with County's development and DHEC's stormwater requirements for safety and environmental protection respectively.

7. State the final maximum surface gradient(s) (slope) in soil, sand, or other unconsolidated materials on reclaimed land. Surface gradients steeper than 3H:1V (18 degrees or 33 percent) may be required to submit geotechnical data and studies to demonstrate that the steeper slopes will remain stable following final reclamation.

The final maximum surface gradient for slopes in overburden storage areas and slopes in overburden in the pit will be 3:1. The earthen berms located along the northern permit boundary will be 2:1 slopes to better serve as a barrier.

8. How will the final slopes in unconsolidated material be accomplished? If the slope will be by backfilling, demonstrate that there is adequate material to accomplish the stated final gradient. If gradient is to be achieved by bring in material from outside the permitted area, state the nature of the material and approximate quantities. If the gradient is to be achieved by grading, show that there is adequate area for grading to achieve gradient (ie. adequate distance between the property line and edge of highwall). Operator should show calculations or other appropriate information to demonstrate that there is adequate materials in backfilling and grading to meet the requirements for final slope.

The overburden stripped to expose metadiorite will be placed in overburden storage areas or earthen berms. The final overburden slope around the pit perimeter will be cut slopes at a 3:1 grade for stability and safety. Backfilling is not necessary to achieve final 3:1 slopes.

9. Describe the plan for revegetation or other surface treatment of affected area(s). The revegetation plan shall include but not be limited to the following: (a) planned soil test; (b) site preparation and fertilization; (c) seed or plant selection; (d) rate of seeding or amount of planting per acre; (e) maintenance.

Soil test, seed bed preparation, seed mix selection, soil amendments (fertilizer, lime, growth stimulants, etc.), cover and seeding rates will be based upon SC DOT's *Supplemental Technical Specification (SC-M-810-2(04/11)) for Seeding*.

Revegetated sites will be maintained with periodic inspections to detect areas with significant erosion, seed germination failure or significant plant die off. Site will be inspected after significant storm events to detect wash outs or gullies in planted areas. Damaged area will be repaired where necessary by fixing erosion damage and reseeding as necessary.

10. Provide, as a separate document, a closure plan of the mine and permitted facilities to prevent a release of contaminants from being harmful to the environment. A closure plan is not necessary for all mines, but is required where the possibility exist for (a) acid rock drainage; (b) where the National Pollutant Discharge Elimination Systems (NPDES) Permit have discharge limitation parameters other than pH and Total Suspended Solids (TSS); (c) chemically treated tailings or stockpiles (excludes fertilizer or lime for revegetation purposes).

Reclamation for the pit will not require a closure plan. A) The metadiorite does not oxidize to form acid and thus, create acid mine drainage. B) This mine qualifies for coverage under the *NPDES General Permit for Discharges Associated with Nonmetal Mineral Mining Facilities (SG-730000)* with no additional parameters other than pH and TSS. C) No chemicals will be used in the mining process.

- 11. Method of control of contaminants and disposal of mine waste soil, rock, mineral, scrap, tailings, slimes, and other material directly connected with the mining, cleaning, and preparation of mineral substances mined and includes all waste materials deposited on or in the permit area from any source.**

Fines created from processing metadiorite are not "clay slime"; thus, they will not create an unstable sediment mass in settling ponds. These fines will accumulate in the clarification ponds of the wash circuit and periodically removed and either sold as a by-product or placed in overburden storage.

- 12. Method of reclaiming settling and/or sediment ponds.**

Any process ponds associated with the process plant will be backfilled to original grade, topsoiled and revegetated.

- 13. Describe method of restoration or establishment of stream channels, stream banks and site drainage to a condition minimizing erosion, siltation and other pollution.**

Appropriate setbacks and buffers will be established to protect the streams and wetlands that will be avoided by mining. Wetlands to be impacted by mining will be permitted through the US Army Corps of Engineer's 404 permit or appropriate Nationwide permit with appropriate mitigation measures utilized.

The East Tributary, as shown on the mine and reclamation maps, will be diverted in Phase II of the pit development. The mine and reclamation maps show an approximate location for the East Tributary diversion, but final design and route of the diversion will be determined and permitted through the US Army Corps of Engineers at the beginning of Phase II pit development.

- 14. What are the maintenance plans to insure that the reclamation practices established on the affected land will not deteriorate before released by the Department?**

Areas that have undergone final reclamation practices will be maintained through periodic inspections and conducting any necessary repairs in a timely manner.

- 15. For final reclamation, submit information about practices to provide for safety to persons and to adjoining property in all excavations. Identify areas of potential danger (vertical walls, unstable slopes, unstable surface on clay slimes, etc.) and provide appropriate safety provisions. These provisions can include but are not limited to setbacks, fencing, signs, benching, guardrails and boulders.**

The following mine segments will be reclaimed to provide safety to persons and adjoining areas.

Highwalls -- The relative shallow overburden will be sloped to a 3:1 gradient around the pit perimeter. Due to the sloped overburden and water filled pit, exposure of metadiorite highwalls will be limited.

Unstable Slopes -- All overburden storage areas will be sloped to 3h:1v gradient and vegetated. Soils place to 3:1 gradients are stable and are not prone to landslides.

The outer perimeter of the reclaimed pit will be fenced.

- 16. What provisions will be taken to prevent noxious, odious, or foul pools of water from collecting and remaining on the mined area? For mines to be reclaimed as lakes or ponds, provide supporting information that a minimum water depth of four (4) feet on at least fifty percent (50%) of the pond surface area can be maintained.**

The final pit will be reclaimed as a lake and will meet the above referenced regulatory requirement for sufficient depth. Areas of the affected land not reclaimed to ponds will be properly graded to prevent unwanted pools of water from collecting and prevent foul water from forming.

- 17. Identify any structures (e.g. buildings, roads) that are proposed to remain as part of final reclamation. Provide justification for leaving any structures.**

The office building and other support buildings may be left upon final reclamation. Also, some of the haul roads may be left to provide access to the property. All areas will be sloped and stabilized to prevent erosion and control sediment.

18. Attach two (2) copies of a map of the area (referred to as the RECLAMATION MAP) that shows the reclamation practices and conservation practices to be implemented. The following should be shown:

- A. The outline of the proposed final limits of the excavation, during the number of years for which the permit is requested.
- B. The approximate final surface gradient(s) and contour(s) of the area to be reclaimed. This would include the sides and bottoms of mines reclaimed of ponds and lakes.
- C. The outline of the tailings disposal area.
- D. The outline of disposal areas for spoil and refuse (exclusive of tailings ponds).
- E. The approximate location of the mean shore line of any impoundment or water body and inlet and/or outlet structures which will remain upon final reclamation.
- F. The approximate locations of access roads, haul roads, ramps or buildings which will remain upon final reclamation.
- G. The approximate locations of various vegetative treatments.
- H. The proposed locations of re-established streams, ditches or drainage channels to provide for site drainage.
- I. The proposed locations of diversions, terraces, silt fences, brush barriers or other Best Management Practices to be used for preventing or controlling erosion and off-site siltation.
- J. Proposed locations of the measures to provide safety to persons and adjoining property.
- K. Segments of the mine that can be mined and reclaimed as an ongoing basis.
- L. The boundaries of the permitted area.
- M. The boundaries of the affected area for the anticipated life of the mine.
- N. The boundaries of the 100-year floodplain, where appropriate.
- O. Identify sections of mine where the final surface gradient will be achieved by grading and/or backfilling.
- P. A legend showing the name of the applicant, the name of the proposed mine, the north arrow, the county, the scale, the date of preparation and the name and title of the person who prepared the map.

THE REQUIRED RECLAMATION MAP SHALL HAVE A NEAT, LEGIBLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALLY PREPARED LINE DRAWING, AERIAL PHOTOGRAPH, ENLARGED USGS TOPOGRAPHIC MAP OR A RECENTLY PREPARED PLAT. RECLAMATION MAP SHOULD BE THE SAME SCALE USED FOR THE SITE MAP.

IV. SCHEDULE FOR IMPLEMENTATION OF CONSERVATION AND RECLAMATION PRACTICES

19. As stated in Section 48-20-90 of the S.C. Mining Act, reclamation activities, to the extent feasible, must be conducted simultaneously with mining operations. Identify which areas or segments of the mine are not feasible to reclaim simultaneously with mining. Provide reasons why reclamation can not proceed simultaneously with mining in these areas.

Not applicable

20. Section 48-20-40(16)(l) of the S.C. Mining Act requires a, "time schedule, including the anticipated years for completion of reclamation by segments". This time schedule should meet the requirements of Section 48-20-90 of the Mining Act.


SCHEDULE FOR IMPLEMENTING CONSERVATION AND RECLAMATION PRACTICES

Conservation & Reclamation Practices	Segment or Area	Planned		*Applied		Notes
		Amount	Year	Amount	Month/Year	
Permit impacts to wetlands for initial mine construction - Compliant with Corps' permitting requirements	JW-P, JT-4, JW-M, JW-D & JT-2	TBD				Only small portions of JW-P & JT-2 will be impacted
Mark 50' wide upland buffers for wetlands to be avoided along Rocky Creek west of Process Plant	B2	6.2 ac				West of Process Plant and along length of the east bank of Rocky Creek
Mark wetland buffers on east tributary to Rocky Creek	B3, B4, B5, B6 & B7	9.2 ac				Adjacent to Phase I Pit and Process Plant to confluence with Rocky Creek
Mark 50' undisturbed buffer along east property line.	PLB2	4.0 ac				Prior to construction of access road, office and process plant
Mark 50' undisturbed buffer along south property line.	PLB3	1.8 ac				Prior to placement of overburden in SE Overburden Storage area
Construct earthen berm I along northeast property line.	Berm I	5.0 ac				Adjacent to CSX railroad
Construct Sediment Basins and associated diversion channels	Process Plant, Pit & Ovbn SE					5 Sediment Basins – Construct before land disturbance within drainage area
Deploy silt fencing and/or other sediment control BMPs	Where necessary	Varies				
Route stormwater into pit	Phase I Pit		All times			Where feasible
Development of overburden storage – grading to 3:1 slopes and revegetating	SE Ovbn Storage	46.9 ac				During Phase I Pit development
Slope overburden to 3:1 slope along terminal pit wall and revegetate	Phase I Pit	TBD	TBD			When and where feasible
Permit impact to Rocky Creek crossing – Compliant with Corps' permitting requirements	Phase I/Phase II Pit	TBD	TBD			
Development of overburden storage – grading to 3:1 slopes and revegetating	NW Ovbn Storage	39.3 ac	TBD			End of Phase I Pit and Phase II pit development
Permit impacts to wetlands Phase II Pit development - Compliant with Corps' permitting requirements	JT-2, JT-3, JT-4, JW-E, JW-F, JW-J, JW-K, JW-L	TBD	TBD			
Construct Sediment Basin	Ovbn NW	TBD				
Divert east tributary to Rock Creek – Compliant with Corps' permitting requirements	JT-2	TBD	TBD			Phase II Pit development
Seed & fertilize as necessary in areas above the planned ultimate pool level lake surface water	Phase II Pit	As needed	End of mining			Final Reclamation
Construction perimeter fence around final pit	Phase II Pit		End of mining			Final Reclamation
Remove mine equipment, process plant equipment, and stone stockpiles	All areas	TBD	TBD			At end of mining and final reclamation
AA – Affected Area; BMPs – Best Management Practices; Fert. – Fertilize; PL – Property Line; SB – Sediment Basin; ST – Sediment Traps SW – Stormwater; TS – Topsoil; WL – Wetlands;						
NOTE: The year and amount for deployment of conservation & reclamation practices are estimates and subject to change depending on market conditions and rate of mining.						

* Completed by the Department

YOU ARE NOTIFIED THAT:

- 1) you, the operator, must file an application to modify the reclamation plan in the event actual reclamation varies from the set forth hereinabove, and
- 2) if at any time it appears to the Department that the activities under the reclamation plan are failing to achieve the purposes and requirements of the S.C. Mining Act, the Department may modify the RECLAMATION PLAN in accordance to Section 48-20-150.


 Signature of Applicant/Operator or his Authorized Representative

BENJAMIN A. THOMPSON
 Printed Name of Applicant/Operator or his Authorized Representative

DIRECTOR
 Title


June 10, 2019
 Date

Department Use Only

Permit No. 2270 Date Application Approved 3-31-2020 Date Bond Rec'd 3-18-2020
 Bond Amount \$794,880 Blanket or Single Bond Permit Issuance Date 3-31-2020

ACTION TAKEN ON THIS RECLAMATION PLAN

Approved Denied Approved with Additional Terms and Conditions

By: 
 DIVISION DIRECTOR
 Section Manager

Date: 3-31-2020

South Carolina Board of Health and Environmental Control

Guide to Board Review

Pursuant to S.C. Code Ann. § 44-1-60

The decision of the South Carolina Department of Health and Environmental Control (Department) becomes the final agency decision fifteen (15) calendar days after notice of the decision has been mailed to the applicant, permittee, licensee and affected persons who have requested in writing to be notified, unless a written request for final review accompanied by a filing fee in the amount of \$100 is filed with Department by the applicant, permittee, licensee or affected person.

Applicants, permittees, licensees, and affected parties are encouraged to engage in mediation or settlement discussions during the final review process.

If the Board declines in writing to schedule a final review conference, the Department's decision becomes the final agency decision and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court within thirty (30) calendar days after notice is mailed that the Board declined to hold a final review conference. In matters pertaining to decisions under the South Carolina Mining Act, appeals should be made to the South Carolina Mining Council.

I. Filing of Request for Final Review

1. A written Request for Final Review (RFR) and the required filing fee of one hundred dollars (\$100) must be received by Clerk of the Board within fifteen (15) calendar days after notice of the staff decision has been mailed to the applicant, permittee, licensee, or affected persons. If the 15th day occurs on a weekend or State holiday, the RFR must be received by the Clerk on the next working day. RFRs will not be accepted after 5:00 p.m.
2. RFRs shall be in writing and should include, at a minimum, the following information:
 - The grounds for amending, modifying, or rescinding the staff decision;
 - a statement of any significant issues or factors the Board should consider in deciding how to handle the matter;
 - the relief requested;
 - a copy of the decision for which review is requested; and
 - mailing address, email address, if applicable, and phone number(s) at which the requestor can be contacted.
3. RFRs should be filed in person or by mail at the following address:
South Carolina Board of Health and Environmental Control
Attention: Clerk of the Board
2600 Bull Street
Columbia, South Carolina 29201
Alternatively, RFR's may be filed with the Clerk by facsimile (803-898-3393) or by electronic mail (boardclerk@dhec.sc.gov).
4. The filing fee may be paid by cash, check or credit card and must be received by the 15th day.
5. If there is any perceived discrepancy in compliance with this RFR filing procedure, the Clerk should consult with the Chairman or, if the Chairman is unavailable, the Vice-Chairman. The Chairman or the Vice-Chairman will determine whether the RFR is timely and properly filed and direct the Clerk to (1) process the RFR for consideration by the Board or (2) return the RFR and filing fee to the requestor with a cover letter explaining why the RFR was not timely or properly filed. Processing an RFR for consideration by the Board shall not be interpreted as a waiver of any claim or defense by the agency in subsequent proceedings concerning the RFR.
6. If the RFR will be processed for Board consideration, the Clerk will send an Acknowledgement of RFR to the Requestor and the applicant, permittee, or licensee, if other than the Requestor. All personal and financial identifying information will be redacted from the RFR and accompanying documentation before the RFR is released to the Board, Department staff or the public.
7. If an RFR pertains to an emergency order, the Clerk will, upon receipt, immediately provide a copy of the RFR to all Board members. The Chairman, or in his or her absence, the Vice-Chairman shall based on the circumstances, decide whether to refer the RFR to the RFR Committee for expedited review or to decline in writing to schedule a Final Review Conference. If the Chairman or Vice-Chairman determines review by the RFR Committee is appropriate, the Clerk will forward a copy of the RFR to Department staff and Office of General Counsel. A Department response and RFR Committee review will be provided on an expedited schedule defined by the Chairman or Vice-Chairman.
8. The Clerk will email the RFR to staff and Office of General Counsel and request a Department Response within eight (8) working days. Upon receipt of the Department Response, the Clerk will forward the RFR and Department Response to all Board members for review, and all Board members will confirm receipt of the RFR to the Clerk by email. If a Board member does not confirm receipt of the RFR within a twenty-four (24) hour period, the Clerk will contact the Board member and confirm receipt. If a Board member believes the RFR should be considered by the RFR Committee, he or she will