



April 05, 2024

CERTIFIED LETTER  
RETURN RECEIPT REQUESTED

Luck Stone Corporation  
Attn: Chuck Stilson, P.E.  
PO Box 29682  
Richmond, VA 23242

RE: Approval of Application and Reclamation Plan for a Mine Operating Permit  
Issuance of Mine Operating Permit I-002404  
Luck Stone Corporation | Luck Saluda Quarry, Saluda County

Dear Mr. Chuck Stilson,

The S.C. Department of Health and Environmental Control (DHEC) has approved the application and reclamation plan for the Luck Saluda Quarry as of April 05, 2024. DHEC has approved the reclamation bond submitted in the amount of \$810,831.00.

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 Luck Saluda Quarry is being issued as of the date of this letter. Enclosed are the permit document, reclamation plan, and mine and reclamation maps.

A guide to board review outlining the procedure for requesting a final review is enclosed. Should there be any questions or if we may be of further assistance, please do not hesitate to contact the project manager, Sarah Harris, at (803) 898-3887 or by e-mail at [harris1@dhec.sc.gov](mailto:harris1@dhec.sc.gov). Sarah is also the mine inspector for granite quarries.

Sincerely,

Jeremy E. Eddy, P.G.  
Manager - Mining and Reclamation Section  
Division of Mining and Solid Waste Management

cc: Sarah Harris – DMSWM  
Brett Caswell – BoW  
AirPermitting – BAQ ([airpermitting@dhec.sc.gov](mailto:airpermitting@dhec.sc.gov))  
Sandra Padget - Saluda County ([s.padget@saludacounty.sc.gov](mailto:s.padget@saludacounty.sc.gov))





# MINE OPERATING PERMIT

**PART I:**

## **Saluda Quarry Luck Stone Corporation**

**Luck Stone Corporation**, a corporation, has been granted a Mine Operating Permit, Mine Permit Number I-002404, to operate the Saluda 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.

A handwritten signature in blue ink that reads "Jeremy E. Eddy".

---

JEREMY E. EDDY, P.G.

MANAGER - MINING AND RECLAMATION SECTION  
DIVISION OF MINING AND SOLID WASTE MANAGEMENT

**PERMIT NUMBER:** I-002404  
**ORIGINALLY ISSUED:** April 05, 2024

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-002404

# Luck Stone Corporation

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

**Address for Official Mail:** Luck Stone Corporation  
Chuck Stilson  
PO Box 29682  
Richmond, VA 23242

**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  
Director of Quarry Design and Development

Telephone: (804) 784-6300  
Email: [chuck.stilson@luckstone.com](mailto:chuck.stilson@luckstone.com)

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

Latitude: 33.969622 Longitude: -81.590079

**DESCRIBE LOCATION:** The operation is located in Saluda County, approximately 5 mile(s) northwest of Batesburg-Leesville, S.C. Specifically, the site is located approximately 1.0 mile south of the intersection of Double Bridges Road and Spann Road.

## **Part II: MINE OPERATIONS**

Luck Stone Corporation, also referred to as the operator, is permitted to mine granite at the Saluda Quarry. The maximum depth to the pit floor shall not exceed 590 feet below ground surface (to an approx. elevation of -120 feet mean sea level) measured from the lowest ground surface elevation. Mining will take place on a tract of land owned by the referenced operator. This tract of land is identified in the submitted *Land Entry Agreement* (LEA).

### MINE/PIT CHARACTERIZATION:

The granite will be excavated, processed, and stockpiled on site. Ground clearing will be accomplished by bull dozers, wheel loaders, and hydraulic excavators. Removed overburden will be placed in permanent storage areas at locations designated on the mine map. 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 the processing plant by conveyor for further processing.

The mine pit will be excavated in two (2) phases, as depicted on the mine map (SM-2404-1V1). Phase 1 will be in the southern area of the site. Phase 2 will expand the pit northward and shall require permitting and mitigation-approval by the US Army Corps of Engineers (USACE) for impacts to Waters of the US/State prior to affecting land in the Phase 2 area.

Prior to overburden being placed in the Northwest & Southwest Berm/Overburden Storage Areas, and/or initiation of mining activity in Pit Phase 2, an updated reclamation cost estimate and additional financial assurance is required to be approved by DHEC.

### PROCESSING PLANT LOCATED ON MINE SITE:

The processing plant will consist of primary, secondary, and tertiary crushers, screens, conveyors, and 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. Runoff from the plant area will be stored in nearby processing ponds and re-used in a closed-loop system for product washing.

### MINE DEWATERING:

Due to groundwater seepage from natural fractures/joints in the host rock, quarry dewatering will be necessary when the pit floor extends below the water table. Additionally, where feasible, stormwater runoff shall be diverted into the pit, collected into the sump, and discharged in the same manner as groundwater. Any accumulation of groundwater and stormwater shall be pumped into a sediment basin prior to discharge. Water discharged from the mine to a receiving stream must be discharged through an outfall regulated by an NPDES permit.

If an operator receives a complaint concerning adverse impacts to neighboring wells, the operator is to notify DHEC's Manager of the Mining and Reclamation Section, Columbia, SC, within 24 hours. After investigation, if DHEC determines dewatering activities at the mine are affecting a drinking water well or water supply well, the operator shall be responsible for repairing, deepening, or re-drilling such wells. Until that permanent water supply is re-established, the operator shall supply the owner with a temporary water supply (e.g., bottled water for drinking, provisions for laundry).

Active pumping and discharge of water shall cease if the dewatering discharge causes flooding conditions to property downstream of the mine site. See Part X: *Additional Terms and Conditions #7*.

### BLASTING:

Blasting is permitted at this site. Blasting activities shall be conducted in accordance with R.89-150.

Pursuant to R.89-150A., the operator shall conduct a pre-blast survey on inhabited structures within one-half mile of any blasting, prior to the commencement of any blasting activities. The survey shall be completed by a third-party consultant and a copy of the report sent to DHEC, the operator, and the landowner. Upon review and approval, DHEC will then grant permission to begin blasting activities.

Pursuant to R.89-150J., the operator shall report any suspected incident of flyrock outside of the permitted area resulting from blasting operations. Pursuant to R.89-150E., the operator shall report if the peak particle velocity exceeds one (1.0) inch per second at the immediate location of any dwelling not owned by the operator (or where a waiver of damage has been submitted to DHEC). These incidents shall be reported to DHEC within 24 hours of the blast, and a written report shall be submitted to DHEC within five (5) business days.

Pursuant to R.89-150H., the operator shall maintain a minimum distance of 250 feet from contiguous property boundaries when conducting blasting. Additionally, pursuant to R.89-150I., the operator shall maintain a minimum distance as shown on the approved mine map between the nearest point of blasting and any structures not owned by the operator (at the time of the completed application) or where a waiver of damage has been submitted to DHEC.

**SIGNIFICANT CULTURAL OR HISTORICAL SITES:**

A report, Phase I Cultural Resources Survey of the Luck Saluda Site, has been reviewed by the State Historic Preservation Office. No archaeological sites or isolated finds are eligible for listing in the National Register of Historic Places (NHRP). No significant cultural or historical sites have been identified within the permit boundary. Note Part X: *Additional Terms and Conditions* of this Mine Operating Permit.

**VISUAL SCREEN:**

To appropriately screen the operation from view, the operator shall maintain a minimum 50ft. undisturbed buffer between mining activity and all property lines. Vegetated earthen berms (Berms 1, 2, and 3) shall be constructed and maintained on the mine side of the north and east boundaries as depicted in the mine map.

**NOISE MONITORING AND CONTROL:** The operator shall use Best Management Practices (BMPs) to minimize noise from the mine site. These noise 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.

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

<b>TMS #</b>	<b>Land Owner(s)</b>
174-00-00-006	Luck Stone Corporation

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

OWNED 331.0      LEASED 0.0      TOTAL 331.0

**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:** 284.1 acres of land are to be affected by Luck Stone Corporation under the current mine plan; 140.1 of the affected acres are currently bonded. The bonded areas include Pit – Phase 1, the Plant and Facilities Area, the Southeast Berm/Overburden Storage area, and the Berm/Overburden Development area, as labelled on the approved mine map. 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:** 46.9 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:** 331.0 acres as submitted on the *Land Entry Agreement(s)*.

#### **Part IV: MAPS**

The mine site map was prepared by Kennedy Consulting Services, LLC. This map is further identified with the following SCDHEC map number and is part of the operating permit:

SM-2404-1V1 Mine Map Dated: August 1, 2023

The reclamation map was prepared by Kennedy Consulting Services, LLC. This map is further identified with the following SCDHEC map number and is part of the operating permit:

RM-2404-1V1 Reclamation Map Dated: August 1, 2023

#### **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 \$810,831.00. 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.**

Prior to mining activities, this site's land use type was undeveloped; the immediate area around this site is mostly rural residential. The topography of this area is moderately variable (i.e., several hills and dales), with surface elevation ranging from 400-510 ft. MSL. Perennial streams and associated wetlands are located along the southeast boundary and western portion of the site. See Part X: *Additional Terms & Conditions #4*. Common wildlife typical to this area can be found in and around this site; no threatened or endangered species are known to inhabit the area. There are residential areas south and east of the mine site. Wesley Chapel Christian Methodist Episcopal Church is located across from the site's entrance on Double Bridges Road, and a solar farm is located approximately 0.3 miles southeast of the entrance.

**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.

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 trackout on public roads, the operator shall construct a paved road that extends the width of the haul road and stretches a minimum of one hundred (100) feet in length.

The operator shall establish a protected area or 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.**

There are no publicly owned parks, forests, or recreation areas near this mine site.

**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 Non-metallic Mineral Mining and Stormwater Pollution Prevention Plan developed for the mine.

**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 no steeper than 2H:1V during active mining. Per the Mine Safety Health Administration (MSHA) requirements, the hard rock pit walls shall be benched 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 mine operator will use appropriate measures (e.g. water truck, dust suppressants) to control fugitive dust created by moving equipment along haul roads. The operator, where feasible, shall establish vegetation in non-active mine areas barren of vegetation to stabilize the soil and reduce potential for wind erosion and dust emissions.

**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 apply for modification of the permit and/or *Reclamation Plan*, which may be modified 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 and may modify the permit and/or Reclamation Plan consistent with 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 made available to the operator electronically. The operator should receive access to 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 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 50ft. undisturbed buffer between all land disturbance activity and any USACE jurisdictional wetlands. This buffer shall be permanently flagged *prior* to the initiation of any mine activity. The flags shall be maintained throughout the active mine operation of the site. The operator is allowed to discharge accumulated stormwater—that meets NPDES permit limits—into wetlands through a regulated NPDES outfall.

5. Prior to entering into the Phase 2 Pit, impacts to USACE jurisdictional wetlands and/or Waters of the US/State shall be permitted by the US Army Corps of Engineers and DHEC.

6. The operator shall submit a reclamation cost estimate and financial assurance prior to expanding mine activity into the Phase 2 Pit area, the Northwest Berm/Overburden area, and/or the Southwest Berm/Overburden area.

7. Prior to any mining activity, the operator shall construct 4 groundwater monitoring wells, as depicted in the Luck Saluda Groundwater Monitoring Plan (Appendix B).

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 monitoring wells shall be measured monthly. Groundwater elevations shall be normalized to mean sea level, and hydrographs plotted for each monitoring well. This data shall be submitted quarterly to the Division of Mining and Solid Waste Management by the 28<sup>th</sup> day of the month following the end of the quarter. The report should include a record of daily precipitation measurements, with monthly rainfall totals graphed to facilitate comparison to well hydrographs.

# APPENDIX A

## MODIFICATIONS TO MINE PERMIT I-002404

<b>NUMBER</b>	<b>DATE</b>	<b>DESCRIPTION OF MODIFICATION</b> (PA= Permitted Acreage; AA= Affected, Bonded Acreage; FR= Reserves Acreage, B= Buffer Acreage)
Issue	04/05/24	PA = 331.0ac., AA = 284.1ac., (140.1ac. Bonded) FR = 0.0ac., B = 46.9ac. Permit issued.



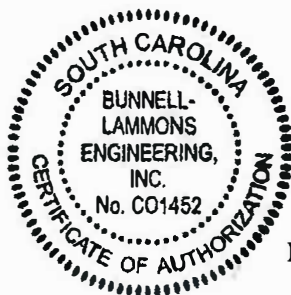
# GROUNDWATER MONITORING PLAN: LUCK SALUDA

NEAR INTERSECTION OF DOUBLE BRIDGES ROAD  
AND HEATHER LANE  
SALUDA COUNTY, SOUTH CAROLINA



**Prepared For:**

Luck Stone Corporation  
P.O. Box 29682  
Richmond, Virginia 23242



BLE Project Number J23-18886-01

August 17, 2023 (Revised: February 1, 2024)



**BUNNELL  
LAMMONS  
ENGINEERING**



August 17, 2023 (Revised: February 1, 2024)

Luck Stone Corporation  
P.O. Box 29682  
Richmond, Virginia 23242

Attention: Mr. Bruce Smith  
Greenfield Development Manager

Subject: **Groundwater Monitoring Plan: Luck Saluda  
Parcel Identification Number #174-00-00-006  
Saluda County, South Carolina  
BLE Project Number J23-18886-01**

Dear Mr. Smith:

As authorized, Bunnell Lammons Engineering, Inc. (BLE) has prepared this Groundwater Monitoring Plan (GWMP) in association with the proposed Luck Stone Corporation aggregate quarry west of the intersection of Double Bridges Road and Heather Lane in Saluda, Saluda County, South Carolina. The GWMP herein provides details regarding the monitoring of groundwater elevation prior to and during operation of the proposed aggregate quarry in accordance with South Carolina Department of Health and Environmental Control (SCDHEC) Form MR-400. A hydrogeologic assessment report including estimated drawdown of the water table surrounding the facility was submitted by BLE under a separate cover on September 7, 2023.

During a site visit by the South Carolina Department of Natural Resources (SCDNR), the addition of a groundwater monitoring well completed in shallow residuum was verbally requested to assess potential dewatering impacts on the perennial Flat Rock Branch Creek. This GWMP has been revised from the original submittal dated August 17, 2023 to include the potential installation of a groundwater monitoring well completed in shallow residuum.

If you have any questions concerning this report, please contact Timothy J. Daniel at (864) 288-1265.

Sincerely,  
BUNNELL LAMMONS ENGINEERING

Timothy J. Daniel, P.G.  
Project Geologist  
Registered, South Carolina #2385



David R. Loftis, P.E.  
Senior Engineer  
Registered, South Carolina #27867



- cc: Sarah Harris - South Carolina DHEC, Mining Reclamation
- Mark Williams – Luck Stone Corporation
- Clint Courson, CHMM – Hodges, Harbin, Newberry & Tribble
- Brant Lane, P.E. – Hodges, Harbin, Newberry & Tribble



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**FIGURES**

- Figure 1 Site Vicinity Map
- Figure 2 Monitoring Well Network



## **1.0 INTRODUCTION**

### **1.1 Background Information and Objective**

BLE has prepared this GWMP on behalf of Luck Companies in association with the proposed aggregate quarry located off of Double Bridges Road approximately 5 miles northwest of Batesburg-Leesville in Saluda County, South Carolina (see **Figure 1**). The proposed aggregate quarry is herein referred to as “Luck Saluda.” This GWMP was prepared for submittal to the Mining Reclamation Section of the South Carolina Department of Health and Environmental Control (SCDHEC) as required by SCDHEC Form MR-400 (Application For A Mine Operating Permit). The GWMP provides detail regarding the collection of background groundwater elevations prior to site development and to document changes in water table elevations during mining activities.

## **2.0 GROUNDWATER MONITORING**

### **2.1 Groundwater Monitoring Well Locations**

The GWMP for Luck Saluda includes the installation of four (4) groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4) at the facility (see **Figure 2**). Groundwater monitoring wells MW-1, MW-2, MW-3, and MW-4 will be installed to intersect water bearing fractures within the bedrock aquifer.

During a site visit by the South Carolina Department of Natural Resources (SCDNR), the addition of a groundwater monitoring well completed in shallow residuum was verbally requested to assess potential dewatering impacts on the perennial Flat Rock Branch Creek. If groundwater is encountered in the shallow residuum at the approximate location of MW-2, a shallow groundwater monitoring well (MW-2S) will be installed to monitor potential dewatering effects on the adjacent Flat Rock Branch Creek.

If it is determined that one (1) or more of the private drinking water wells located within a 0.5 mile radius of the proposed mining extraction area is completed in the soil residuum above competent bedrock, an amendment to the GWMP may be deemed necessary by SCDHEC to monitor groundwater in the shallow residuum in the general vicinity of the well(s). Additionally, no groundwater monitoring wells are planned to be installed along the northern property boundary due to the absence of nearby private drinking water wells and the presence of perennial Clouds Creek to the north of the facility.

### **2.2 SCDHEC Well Permit Application**

Prior to monitoring well installation, a monitoring well installation permit application will be submitted to SCDHEC for approval. The application package will include the following:

- SCDHEC Form D-3736;
- Drilling procedures;
- Monitoring well construction procedures;
- A typical monitoring well construction diagram;
- A site location map; and
- A site plan showing the proposed well locations.

Once a SCDHEC Permit has been issued, the monitoring wells will be scheduled for installation.



### 2.3 Groundwater Monitoring Well Construction

A South Carolina licensed well driller will perform the well installation, and a geologist registered in the state of South Carolina will observe the drilling activities. The monitoring wells will be constructed in accordance with South Carolina Well Construction Standards – *SCDHEC Regulation No. 61-71.H*.

The groundwater monitoring wells set to intersect water bearing fractures within the bedrock aquifer will be constructed out of 6-inch nominal diameter Schedule 40 PVC pipe (or similar) from the ground surface to the top of competent bedrock. The remainder of the well construction from the top of competent bedrock to the total depth will be completed “open hole” with no screen unless site specific conditions require it. If a groundwater monitoring well is installed in shallow residuum above the bedrock, it will be constructed of 2-inch nominal diameter Schedule 40 PVC pipe inserted into a 6-inch (or larger) diameter borehole. The bottom 10-foot section of each well will be a manufactured well screen with 0.010-inch-wide slots.

A lockable PVC cap and a protective stickup-mounted steel cover will be placed over each well. Each well will be constructed with a vent hole at the top of the PVC casing and a weep hole near the base of the outer protective cover. A 4-foot (ft) by 4-ft concrete pad will be constructed at the ground surface for each well. Permanent well identification labels will be affixed to the protective steel cover.

The location, top of casing elevation, and groundwater surface elevation at each well will be measured and recorded by a South Carolina licensed surveyor.

### 2.4 Monitoring Intervals, Data Collection, and Reporting

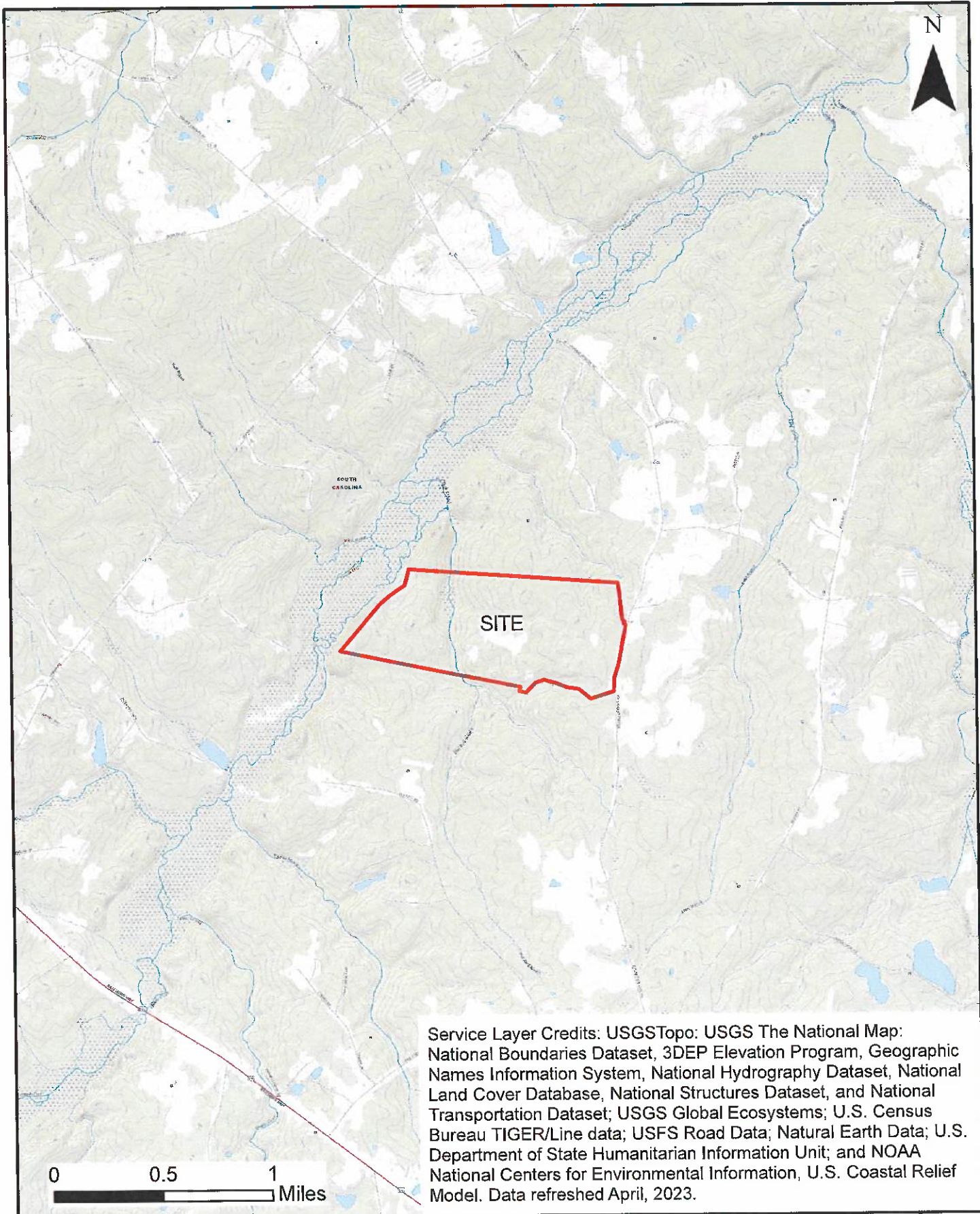
The locations of monitoring wells MW-1, MW-2, MW-3, and MW-4 were selected to monitor changes in water table elevation in the vicinity of private drinking water wells located to the northeast, southeast, and southwest of the facility and along Flat Rock Branch Creek that flows south to north bisecting the site (**Figure 2**).

Depth to groundwater relative to the top of casing in monitoring wells at the facility is to be measured monthly and submitted to SCDHEC in a memo or report on a quarterly basis. Each quarterly report will be submitted to SCDHEC within 30 days after the end of each quarter and will summarize the current and historical groundwater elevation dataset. If upon review of the quarterly report SCDHEC notices any trends in groundwater elevation that may result in potentially significant adverse impacts to neighboring wells then a South Carolina licensed professional geologist or engineer will be contracted, within 5 days of notification, to provide further investigation of the potential impacts.

No groundwater sampling activities for laboratory analysis are planned.

## FIGURES





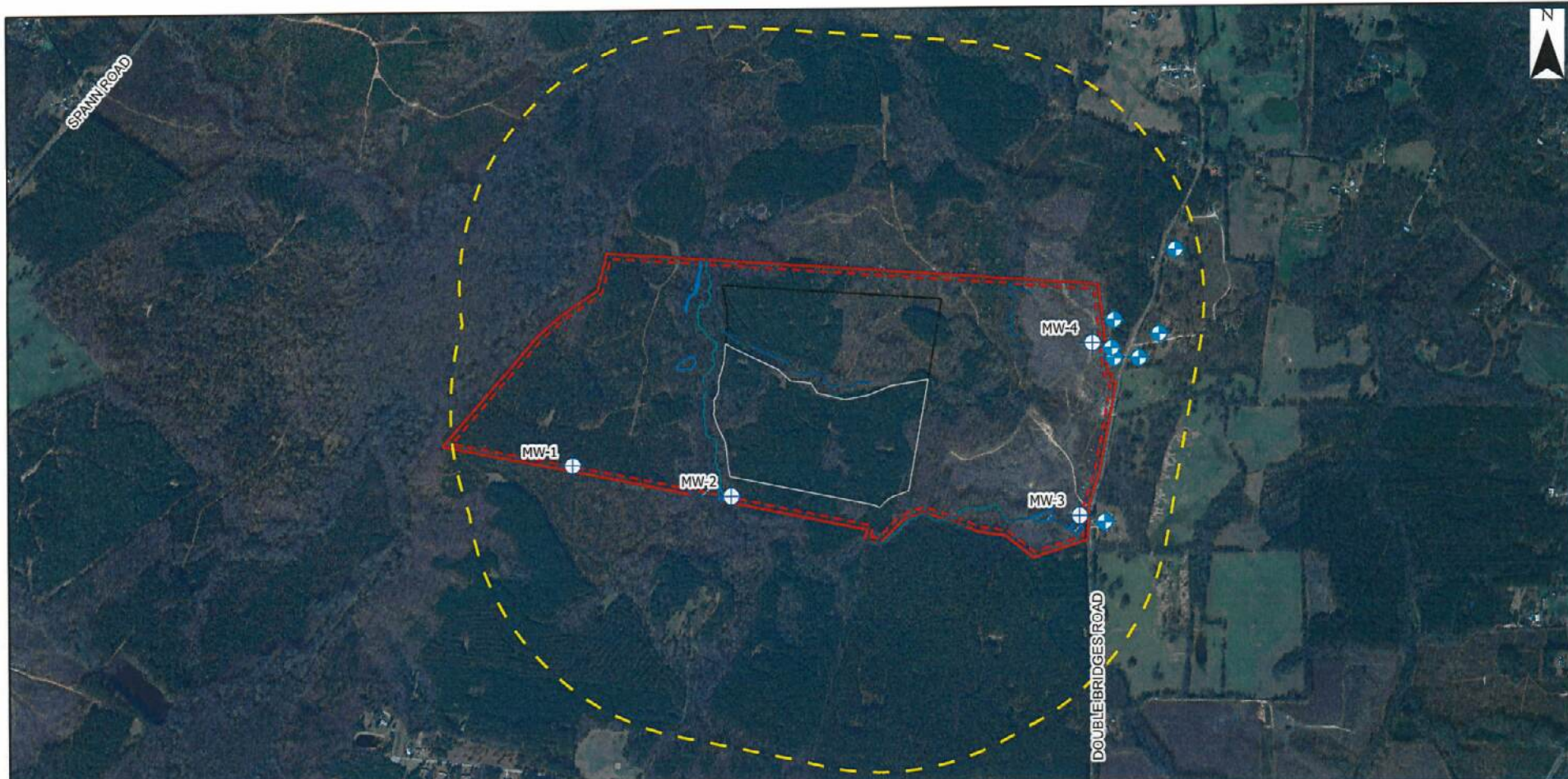
DRAWN BY:	TJD	DATE:	09-06-2023
CHECKED BY:	TAO	FILE NAME:	SAL_LOC
APPROVED BY:	TWM	JOB NO.:	J23-18886-01



SITE VICINITY MAP  
LUCK SALUDA  
SALUDA, SOUTH CAROLINA

FIGURE
1





- SUSPECTED PRIVATE DRINKING WATER WELL
- PROPOSED GROUNDWATER MONITORING WELL
- JURISDICTIONAL PERENNIAL STREAMS
- NON-JURISDICTIONAL INTERMITTENT STREAMS
- JURISDICTIONAL WETLANDS

- 50 FOOT UNDISTURBED PROPERTY BUFFER
- PROPERTY BOUNDARY
- 0.5-MILE RADIUS AROUND PROPOSED MINING EXTRACTION AREA
- PHASE 1
- PHASE 2



NOTE: PROPOSED GROUNDWATER MONITORING WELL LOCATIONS ARE APPROXIMATE AND MAY BE MODIFIED DUE TO SITE SPECIFIC CONDITIONS ENCOUNTERED DURING DRILLING.

REFERENCES: AERIAL IMAGERY FROM SALUDA COUNTY MAP SERVICE LAYER "SALUDA 2020".  
 WETLANDS AND STREAMS PROVIDED BY HODGES, HARBIN, NEWBERRY & TRIBBLE IN ASSOCIATION WITH THE MAY 23, 2023 "DELINEATION CONCURRENCE REQUEST" SUBMITTED TO THE US ARMY CORPS OF ENGINEERS.

DRAWN BY: TJD	DATE: 01-29-2024	REVISIONS	
CHECKED BY: TAO	FILE NAME: SAL_MW_LOC	No.	DESCRIPTION
APPROVED BY: DRL	JOB NO: J23-18886-01		BY



MONITORING WELL NETWORK  
 LUCK SALUDA  
 SALUDA, SOUTH CAROLINA



# MR-500 Reclamation Plan for an Individual Mine Operating Permit

## Environmental Protection

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### **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 rural 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. Within the 331.0 acres of permitted land, undisturbed buffers are used to provide additional protections to adjacent properties, creeks and other sensitive areas.

### **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.

### **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, cleanup of any spillage of petroleum products, removal of scrap material. Setbacks, established buffers and soil stabilization of mine disturbed areas will protect any nearby streams and fisherys. Establishing 3:1 slopes around the pit and overburden storage areas will remove hazardous conditions for the public and indigenous animal populations.

### **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.

## Reclamation of Affected Area

---

### **State useful purpose(s) the affected land is being proposed for reclamation.**

Grassland  
Lake or Pond

### **Feasibility Documentation Attachment**

NONE PROVIDED

### **Comment**

NONE PROVIDED

### **Will the final maximum surface gradient (slope) in soil, sand, or other unconsolidated materials be steeper than 3 Horizontal : 1 Vertical (18 degrees or 33 percent)?**

No

### **How will the final slopes in unconsolidated material be accomplished?**

All slopes will be accomplished by grading to achieve final slopes.

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 bringing 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 (i.e., adequate distance between the property line and edge of highwall).

## Final slopes calculations or other supporting information attachment(s)

NONE PROVIDED

### Comment

Not applicable - Backfilling will not be necessary to achieve final slopes.

**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.**

#### (a) Planned Soil Test

Soil analysis will be performed to determine the need for pH adjustment and nutrients. Different soils will be sampled separately. Soil samples will be taken in advance of planting. Soil samples will be submitted to the cooperative NRCS or Clemson extension services or commercial lab for analysis.

#### (b) Site Preparation & fertilization

Grading, shaping, and other earth moving will be completed to the extent necessary to permit seeding or planting. Tillage shall be the minimum needed to break compaction; incorporate fertilizers when incorporation of them is required; and provide enough loose soil to cover the seed when seed are to be drilled or covered by harrowing or cultipacking.

Soil amendments will be added as necessary to promote conditions suitable for plant growth (i.e., organic matter). Agricultural limestone will be uniformly spread and incorporated as soon as possible to allow for the pH adjustment. Incorporation also benefits relatively immobile nutrients such as phosphorus when needed. Type and rate of fertilization will be determined bases upon soil analysis.

#### (c) & (d) Seed or Plant Selection and Seeding Rates

Plants shall be selected based on species characteristics, site and soil conditions, the planned land use and maintenance of the area, the time of year the planting is made, and the needs and desires of the land user. Availability of seed will be one of the criteria for plant selection.

Piedmont

Spring Seeding Mix

Grass or legume Optimum

Planting Date Seeding Rate

(# per acre) Comments

Browntop millet April- August 10 Serve as short term cover

Bermudagrass (common)

or

Coastal Panicgrass March-June

February - June 4

20 broadcast, 12 drilled Hulled (chaff removed)

Pure Live Seed (PLS)

Annual lespedeza (Kobe) March - July 10 Use scarified seed and inoculate

Piedmont

Fall Seeding Mix

Grass or legume Optimum

Planting Date Seeding Rate

(# per acre) Comments

Rye (Abruzzi) or Oats Sept-Dec. 10 Serve as short term cover

Bermudagrass (common)

or

Switchgrass Aug-Nov

Oct-May 8

10 Unhulled (in chaff)

Crimson clover (optional) Aug - Dec 10 Serve as short term cover, inoculate



(e) Maintenance

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

**Does the possibility exist for (a) acid rock drainage; (b) where the National Pollutant Discharge Elimination Systems (NPDES) Permit has discharge limitation parameters other than pH and Total Suspended Solids (TSS); (c) chemically treated tailings or stockpiles (excludes fertilizer or lime for revegetation purposes)?**

No

**Describe the methods to control contaminants and permanently dispose any mine waste. This includes any soil, rock (overburden), mineral, scrap, tailings, fines, slimes, or other material directly connected with the mining, cleaning, and preparation of mineral substances mined. It also includes all waste material deposited on or in the permit area from any source.**

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

Overburden will be stored in permanent storage areas, sloped to an overall 3:1 grade and revegetated. These berms will provide visual screening and barriers to unauthorized entry to the site.

**Describe the 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.

**Describe the method of restoring or establishing stream channels, stream banks, and site drainage to a condition to minimize erosion, siltation, and other pollution.**

Impact to streams will be permitted and mitigate under the Corps of Engineers permit before being disturbed by mining. Stream crossing for the haul road to the western overburden berm/storage areas will be a temporary crossing. Once access to the western overburden areas are no longer necessary, the stream crossing will be reclaimed by returning to original grade and revegetating.

**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.

**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.**

Prior to commencing final reclamation activities, the operator intends to conduct both market, community, and zoning investigations to determine the best and proper utilization for post mine development. By example, this may include uses such as parks & community space, agricultural/timber, commercial ventures, or residential uses. Upon determination, any plans shall incorporate all necessary activities associated with necessary and responsible bonded reclamation requirements. This shall include continued focus to provide safety to persons and adjoining areas. The outer perimeter of the reclaimed pit will be secured by fencing or other approved and appropriate security practice.

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 rock highwalls will be limited.

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

**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.

**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 future tenants on the property can use the facilities. 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.

**Attach a copy 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 through P - see below):**

[4-RLuck Saluda RECLAMATION MAP-\(3\)- 300 24X36.pdf - 08/15/2023 11:19 AM](#)

**Comment**

NONE PROVIDED

- 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 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.



## Schedule for Implementation of Conservation and Reclamation Practices

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.

Earthen berms (berms 1-3, 22.4 acres) will be constructed along the northern, southern, and eastern sides of permit area early in mine life to provide visual screening. The berms will be reclaimed immediately after construction. Berms/overburden storage area will be reclaimed as soon as feasible.

The pit of a rock quarry cannot be mined and reclaimed in segments. Once the pit expands to a terminal wall (a pit wall where mining cannot expand any further in that direction), the overburden can be sloped and revegetated.

Berms/overburden storage areas will be reclaimed as soon as feasible.

### Schedule for Implementing Conservation and Reclamation Practices

Conservation & Reclamation Practices	Segment # or Area	Planned Amount	Planned Year	*Applied Amount	*Applied Year	Notes
Mark wetland & property line buffers along access road & berms	WB-2, PLB-1, PLB-2, PLB-3, PLB-4 & PLB-5	16.8 AC	2025			NONE PROVIDED
Mark wetland buffers for Pit Phase 1	WB-3, WB-4 & WB-5	15.4 AC	2025			NONE PROVIDED
Mark wetland buffer along process plant	WB-1	2.2 AC	2025			NONE PROVIDED
Construct Sediment Basins and associated diversion channels for plant	SB-3, SB-4	4.3 AC	2025/26			NONE PROVIDED
Construct Sediment Basins and associated diversion channels Pit Phase 1	SB-1, SB-2	2.8 AD	2025/26			NONE PROVIDED
Construct berms, slope and revegetate	BERMS 1 - 3	22.4 AC	2025/26			NONE PROVIDED
Construct Berm/Overburden Storage	SE OVB/BERM	11.2 AC	2026			NONE PROVIDED
Deploy silt fencing and/or other sediment control BMPs	WHERE NECESSARY	NONE PROVIDED	NONE PROVIDED			NONE PROVIDED
Slope overburden to 3:1 slope along terminal pit wall and revegetate	PIT-PHASE 1	5.8 AC	TBD			NONE PROVIDED
Prior to mining, jurisdictional stream will be permitted by the Corps of Engineers	PIT-PHASE 2	NONE PROVIDED	TBD			Stream SFD (Wetland Delineation Map)
Route stormwater into pit	PIT-PHASES 1 & 2	NONE PROVIDED	AT ALL TIMES			WHERE FEASIBLE
Slope overburden to 3:1 slope along terminal pit wall and revegetate	PIT-PHASE 2	5.0 AC	TBD			NONE PROVIDED
Construct Sediment Basins and diversions as necessary	SB-5, SB-6, SB-7, SB-8	10.0 AC	TBD			NONE PROVIDED

<b>Conservation &amp; Reclamation Practices</b>	<b>Segment # or Area</b>	<b>Planned Amount</b>	<b>Planned Year</b>	<b>*Applied Amount</b>	<b>*Applied Year</b>	<b>Notes</b>
Development of overburden storage ◆ grading to 3:1 slopes and revegetating	NW Ovbn & SW Ovbn	TBD	TBD			NONE PROVIDED
Timbering exempted stream crossing grade restored and reclaimed	PREVIOUS LANDOWNER	0.1 AC	2024			NONE PROVIDED
Mining exempted stream crossing grade restored and reclaimed	STREAM STA	0.2 AC	END OF MINING			North haul road to Northwest Overburden
Construction perimeter fence or other suitable barrier around final pit	PIT	8,000 FT	END OF MINING			NONE PROVIDED
Remove mine equipment, process plant equipment, and stone stockpiles	PLANT	43.3 AC	END OF MINING			NONE PROVIDED



APPROVED BY  
SOUTH CAROLINA DEPARTMENT OF  
HEALTH AND ENVIRONMENTAL CONTROL  
DIVISION OF MINING AND SOLID WASTE MGT

BY Jeremy E. Eddy  
TITLE SM-2404-1V1  
DATE APPROVED April 05, 2024  
PERMIT NO L-002404

By	Date	Description

--

Kennedy Consulting Services, LLC  
Craig Kennedy, P.G.  
**KCS**  
Office: 403 Seaside Court, Lexington, SC 29072  
Mail: P.O. Box 364, Irmo, SC 29063  
Call: 803.960.2562  
craigkennedykcs@gmail.com

Luck Saluda Mine Map  
Prepared for Luck Stone Corporation  
Saluda County, South Carolina

Project No.: KCS 23-180  
Date: 08-01-23  
Approved by: RCK  
Drawn by: B.C.  
Scale: 1"=300'

Sheet No. 1 of 4



PRIOR TO IMPACTING STREAM AND STREAM BUFFER WB-5, IMPACTS TO STREAM WILL BE PERMITTED BY CORPS AND LOSS TO WOTUS MITIGATED

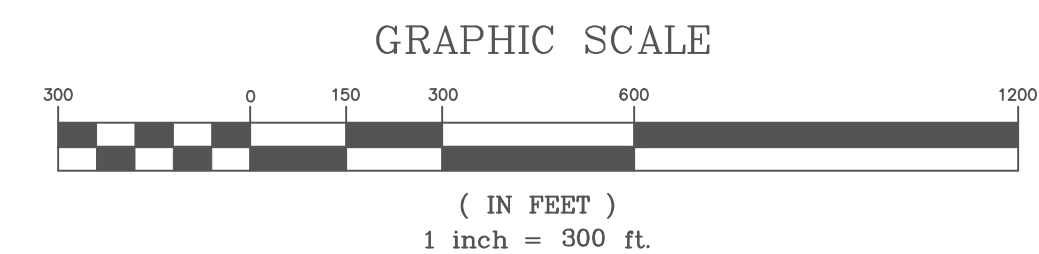
LEGEND

[Symbol]	PIT
[Symbol]	BERM/OVERBURDEN STORAGE
[Symbol]	PROCESS PLANT
[Symbol]	ACCESS/HAUL ROAD
[Symbol]	SEDIMENT BASIN
[Symbol]	VEGETATIVE FILTER (VF)
[Symbol]	WETLANDS
[Symbol]	50 FEET PROPERTY LINE AND WETLAND BUFFER
[Symbol]	PROPERTY LINE
[Symbol]	PERMIT BOUNDARY
[Symbol]	250 FEET PROPERTY LINE BLASTING SETBACK
[Symbol]	STREAMS
[Symbol]	STORMWATER FLOW
[Symbol]	250' EXISTING GRADE CONTOUR (5 FEET)
[Symbol]	EXISTING GRADE CONTOUR (2 FEET)
[Symbol]	SEDIMENT BASIN DISCHARGE OUTFALL

NOTES:

1. MINE PERMIT BOUNDARY IS BASED ON SURVEY BY WELLSTON AND ASSOCIATES LAND SURVEYORS, LLC. THE MINE PERMIT AREA IS PART OF AN OVERALL TRACT (TMS# 174-00-00-006). THE MINE PERMIT AREA IS EXPECTED TO BE SUBDIVIDED.
2. TOPOGRAPHIC CONTOURS WERE SURVEYED BY WELLSTON AND ASSOCIATES, LLC.
3. AQUATIC RESOURCES SHOWN ARE FROM HHNT'S DELINEATION IN PREPARATION FOR DELINEATION CONCURRENCE REQUEST TO THE US ARMY CORPS OF ENGINEERS.
4. STORMWATER SEDIMENT BASINS AND STORMWATER DIVERSIONS ARE AS PROVIDED BY HHNT IN CONJUNCTION WITH THE EROSION AND AND EROSION SEDIMENT CONTROL PLAN.
5. SURROUNDING PARCEL DATA ARE FROM SALUDA COUNTY'S GEOGRAPHIC INFORMATION SYSTEM (GIS) DEPARTMENTS.
6. MINE DESIGN PROVIDED BY LUCK STONE CORPORATION.

SUMMARY OF ACREAGE DETAILS  
AFFECTED AREA 284.1 ACRES  
BUFFER AREA 46.9 ACRES  
FUTURE IMPACT AREA 0.0 ACRES  
TOTAL PERMIT AREA 331.0 ACRES





APPROVED BY  
 SOUTH CAROLINA DEPARTMENT OF  
 HEALTH AND ENVIRONMENTAL CONTROL  
 DIVISION OF MINING AND SOLID WASTE MGT

BY: Jeremy E. Eddy  
 TITLE: RM 404-1V1  
 DATE APPROVED: April 05, 2024  
 PERMIT NO: I-002404



IT IS NOT ANTICIPATED ALL OF THE NORTHWEST OVERBURDEN AND SOUTHWEST OVERBURDEN AREAS WILL BE USED FOR OVERBURDEN STORAGE. AREAS NOT USED WILL BE LEFT UNDISTURBED. OVERBURDEN PLACED IN THESE AREAS WILL BE SLOPED TO AN OVERALL 3:1 GRADE AND REVEGETATED IN ACCORDANCE WITH RECLAMATION PLAN

N/F  
 SHEALY JOSEPH L & JOAN L  
 TMS 156-00-00-043

N/F  
 BARR-CAR TIMBERLANDS, LLC  
 TMS 173-00-00-035

N/F  
 BARR-CAR TIMBERLANDS, LLC  
 TMS 173-00-00-035

N/F  
 IMPERIAL WOODLANDS, LLC  
 TMS 173-00-00-006

N/F  
 BAIRD JEWELL S  
 TMS 174-00-00-001

N/F  
 MATTHEWS JARED & LOGAN M  
 TMS 174-00-00-018

N/F  
 MATTHEWS ADAM  
 TMS 174-00-00-019

N/F  
 ENGLAND KEVIN D & JENNY C  
 TMS 174-00-00-005

N/F  
 FEASTER PRICE & LINDA  
 TMS 174-00-00-014

N/F  
 CHURCH-WESLEY CHAPEL CME  
 TMS 174-00-00-013

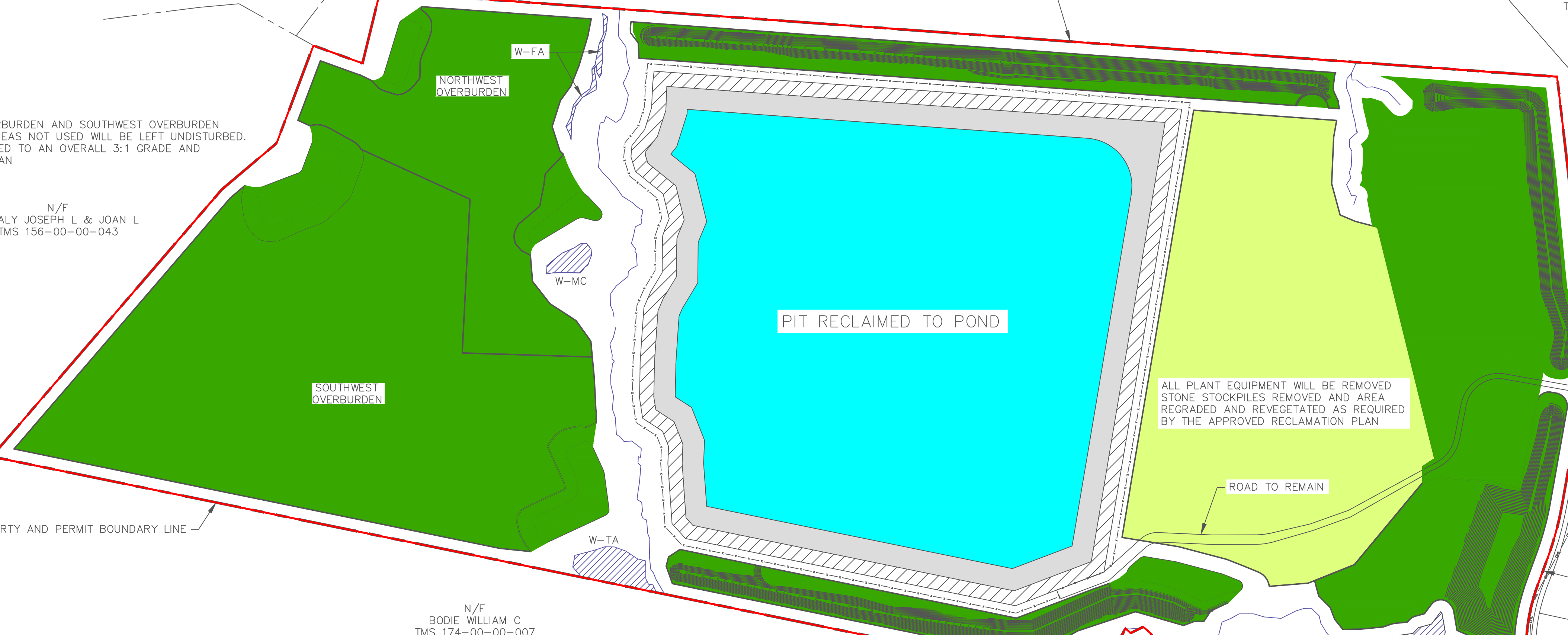
N/F  
 FEASTER PRICE & LINDA  
 TMS 174-00-00-014

N/F  
 BARR-CAR TIMBERLANDS  
 TMS 174-00-00-008

PROPERTY AND PERMIT BOUNDARY LINE

PROPERTY AND PERMIT BOUNDARY LINE

PROPERTY AND PERMIT BOUNDARY LINE

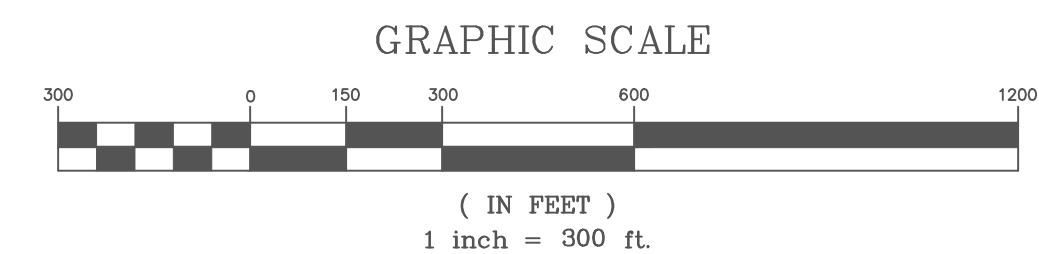


LEGEND

	PIT RECLAIMED TO POND
	PIT OVERBURDEN GRADED TO 3:1 SLOPE & REVEGETATED
	PIT WITH EXPOSED ROCK HIGHWALLS
	OVERBURDEN/BERMS GRADED TO OVERALL 3:1 SLOPE AND REVEGETATED, ASSOCIATED SEDIMENT BASINS, GRADED AND REVEGETATED
	WETLANDS - UNDISTURBED
	PROCESS PLANT EQUIPMENT AND STOCKPILES REMOVED AREA GRADED AND REVEGETATED, PROCESS AND SEDIMENT POND GRADED AND REVEGETATED
	PREVIOUS BUFFER AREAS, FUTURE IMPACT AREA - UNDISTURBED
	STREAMS - UNDISTURBED
	FENCE OR OTHER SUITABLE AND APPROVED BARRIER

NOTES:

- MINE PERMIT BOUNDARY IS BASED ON SURVEY BY WELLSTON AND ASSOCIATES LAND SURVEYORS, LLC. THE MINE PERMIT AREA IS PART OF AN OVERALL TRACT (TMS# 174-00-00-006). THE MINE PERMIT AREA IS EXPECTED TO BE SUBDIVIDED.
- SURROUNDING PARCEL DATA ARE FROM SALUDA COUNTY'S GEOGRAPHIC INFORMATION SYSTEM (GIS) DEPARTMENTS.
- MINE DESIGN PROVIDED BY LUCK STONE CORPORATION.



REVISIONS

Date	By	Description

Kennedy Consulting Services, LLC  
 Craig Kennedy, P.G.  
  
 Office: 403 Seaside court, Lexington, SC 29072  
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 Call: 803.960.2562  
 Email: craigkennedy.KCS@gmail.com

Luck Saluda  
 Reclamation Map  
 Prepared for  
 Luck Stone Corporation  
 Saluda County, South Carolina

Project No.: KCS 23-180  
 Date: 08-01-23  
 Approved by: RCK  
 Drawn by: B.C.  
 Scale: 1"=300'

Sheet No.  
**4**  
 of  
**4**