

December 3, 2020

Jim Harrington  
Colorado Legacy Land, LLC  
4601 DTC Blvd. - Suite 130  
Denver, CO 80237

**RE: Schwartzwalder Mine, Permit No. M-1977-300, 112d-2 Amendment Application (AM-5), Adequacy Review No. 2**

Mr. Harrington:

The Division of Reclamation, Mining and Safety (Division) has completed its 2<sup>nd</sup> adequacy review of the materials submitted for the above referenced application. All comment and review periods for the application began on September 10, 2020, when the application was called complete for filing purposes. The decision date for the application is set for December 9, 2020.

After reviewing the operator's response submitted via email on November 23, 2020 (and via mail on November 30, 2020), the Division has identified adequacy items requiring additional clarification or information. These items are listed below under their respective exhibit heading and numbered sequentially:

**Exhibit B – Index Map (Rule 6.4.2):**

- 1) The format of the revised index map is acceptable. However, the location of the affected lands is not indicated on the map, as required. Please provide a revised index map which indicates the location of the affected lands. This is typically done by adding the mine name to the map with an arrow and/or circle indicating the location of the mine site.

**Exhibit C – Pre-Mining and Mining Plan Map(s) of Affected Lands (Rule 6.4.3):**

- 2) The revised Exhibit C-1 map does not legibly portray the affected land boundary (and proposed expansion areas) due to the many text boxes overlapping the boundary and the depiction of the underground workings (not a required feature), which obscure portions of the boundary. Additionally, the revised map does not show less of the property boundary (not a required feature) and more of the affected land boundary, as recommended by the Division in its preliminary adequacy review letter. Please provide a revised Exhibit C-1 map which shows a closer view of the affected land boundary with minimal to no features overlapping the boundary, and with the underground workings feature removed.

**Exhibit E – Reclamation Plan (Rule 6.4.5):**



- 3) The Division understands the proposed expansion areas include undisturbed hillside (besides the two mine openings) which are not anticipated to be disturbed by the operation. However, the proposed backfill plan for the Black Forest mine openings is not part of the current approved reclamation plan, and therefore, additional details on this plan are required. The revised reclamation plan proposes two potential backfill plans for the mine openings, including a Rockfill plan and a Soil Cement Backfill plan. In order for the Division to calculate the required financial warranty for the proposed reclamation plan, the operator must commit to implementing one of these backfill plans and provide the additional required information on the plan in this exhibit and in Exhibit L. If the operator decides to implement a different backfill plan after AM-5 approval, this plan must be proposed through submittal of a subsequent permit revision to update the reclamation plan and bond estimate accordingly.

Because the bond estimate provided in Exhibit L appears to correlate with the Rockfill plan, the Division will refer only to this plan at this time. However, if the operator chooses (in AM-5) to implement the Soil Cement Backfill plan, please know the additional information requested in this exhibit and in Exhibit L for the Rockfill plan must instead be provided for the Soil Cement Backfill plan.

Please provide in this exhibit the following additional details on the Rockfill plan:

- a) Please provide an estimated volume of material (for each type of material proposed) required to backfill the Black Forest mine openings.
- b) Please identify the anticipated location on site from which the large diameter rock (< 1 foot) will be derived. The Division requires this information in order to estimate the haul/push distance for the bond calculation.
- c) Please identify the anticipated location on site from which the Common Fill will be derived. The Division requires this information in order to estimate the haul/push distance for the bond calculation.
- d) Please provide a general description of the anticipated Common Fill material to be used for this project.
- e) Please provide an estimated volume and placement depth of Plant Growth Medium to be placed on the backfill area.
- f) Please identify the anticipated location on site from which the Plant Growth Medium will be derived. The Division requires this information in order to estimate the haul/push distance for the bond calculation. If the operator anticipates importing growth medium to the site for reclamation, please state as such in this exhibit and be sure to include costs for importing this material in the Exhibit L bond estimate.
- g) Please provide an estimated acreage to be seeded in the backfill area.

- 4) The operator estimates the Black Forest Mine to have a capacity of approximately 15,000 CY. It is the Division's understanding the majority of this capacity may need to be utilized in order to complete the alluvial excavation project as planned. Therefore, the Division requires additional information on the placement of this material into the mine, particularly how far the operator expects to place the backfill material up to the mine opening gates. Please describe the anticipated interface between the edge of the backfilled contaminated alluvial materials inside the mine and the gated mine openings. Does the operator propose backfilling the mine up to the gates, or will there be some space left between the toe of the backfill and the gates? If so, please provide the estimated buffer distance proposed. The Division is particularly interested in the anticipated interface between the contaminated alluvial materials placed inside the mine and the proposed backfill materials to be placed against the gates of the mine openings. The Division believes these interfaces as well as the proposed backfill plan would be best depicted in a conceptual diagram. Please provide a conceptual cross-section showing the anticipated outer edge of backfilled materials inside the mine, the gated mine openings, and the proposed backfill plan for the mine openings (from mine opening gate to toe of backfill). Please ensure the backfill plan shown on this cross-section portrays the proposed types of material (e.g., Rock, Common Fill, Plant Growth Medium) and approximate placement depths of this material.
- 5) Please make the following revisions to the Water Quality Monitoring Plan provided in Section E.6:
  - a) On page 13, the operator states "Water quality samples are collected quarterly from thirteen surface water sample locations and sixteen groundwater sample locations". However, according to the approved permit, there are fifteen groundwater sample locations, including wells MW-00, MW-0, MW-6, MW-7, MW-12, MW-13, MW-14, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, Raw Feed/Mine Refill, and collected sump water from Sump #1 (Master Sump). Please correct this statement accordingly.
  - b) In Table E-3 – Groundwater Sample Locations, all sumps (including Sumps 1, 4, 5, 8, 9, and 10) are said to be "Discontinued". Additionally, under the Sumps sampling location (in the last row), it states "Combined pumpback water from sumps". However, according to the approved permit, Sump 1 has not been discontinued and is designated as the "Master Sump", from which, water is collected (inside the water treatment plant) for water quality analysis. Please correct this table accordingly.
  - c) The Figure E-3 – Groundwater Monitoring Locations map is not the most recent version of this map from the approved permit (see enclosed Groundwater Monitoring Locations map provided with the 2<sup>nd</sup> Quarter 2020 Sampling Results on October 16, 2020). It should be noted, there is one error on the enclosed map which should be corrected for future submittals – the surface water monitoring location "SW-BPL" is erroneously included and should be removed. Please revise Figure E-3 accordingly.

**Exhibit F – Reclamation Plan Map (Rule 6.4.6):**

- 6) The revised F-1 – Reclamation Plan Map does not show less of the property boundary (not a required feature) and more of the affected land boundary, as recommended by the Division in its preliminary adequacy review letter. This makes it difficult to assess the expected physical appearance of the

affected lands after reclamation. Please provide a revised Figure F-1 map which shows a closer view of the affected lands.

- 7) Please include the following information on Figure F-1:
- a) The approximate final slope gradients for disturbed areas (e.g., waste rock piles, valley disturbances, mesa disturbances, Black Forest backfill area). The slope gradients should be provided in this format “3H:1V” or “2H:1V – 3H:1V” or “2H:1V or flatter”.
  - b) The location of all mine openings located within the affected land boundary and a brief description of how they will be reclaimed. For example, you might add “Steve Adit – locked gate” or “Black Forest Entrance – backfilled”.
  - c) Show all structures expected to remain for reclamation. On the revised Figure F-1, the only structure shown to remain is Glencoe Valley Road. However, it is the Division’s understanding that, at a minimum, the NWRP diversion structure is expected to remain for reclamation. Therefore, please ensure all structures (from the revised Figure C-1 map) which are expected to remain for reclamation are shown on this map.
  - d) Indicate all areas within the affected land to be retopsoiled and revegetated for reclamation. This should include all areas that have already been revegetated as well as current or new disturbed areas that will require revegetation for reclamation.
- 8) Please provide a separate Exhibit F map (or an inset on Figure F-1) showing a closer view of the Black Forest Mine area which portrays the expected physical appearance of the backfilled mine openings. This map should depict the approximate dimensions of the backfill area, show the approximate final slope gradients, and indicate areas to be retopsoiled and revegetated for reclamation.

**Exhibit L – Reclamation Costs (Rule 6.4.12):**

- 9) The Division appreciates the operator providing a copy of the site-wide bond estimate associated with the Succession of Operators (SO-1) approved in 2018 (Table L-1), as well as a separate bond estimate for the reclamation proposed in AM-5 associated with backfilling the Black Forest mine openings (Table L-2). It is the Division’s understanding the operator plans to submit a Surety Reduction request in the near future, at which time, reclamation costs for the entire affected lands will be re-evaluated. In its review of AM-5, the Division will focus solely on the reclamation costs associated with the proposed expansion areas, including the plan to backfill the Black Forest mine openings.

Accordingly, the following additional details are required in order for the Division to calculate the reclamation costs for the proposed backfill plan:

- a) Please provide the expected on-site location or approximate haul/push distance for the Fill Soil.
- b) Please specify the type of equipment to be used to extract/load the Fill Soil, to haul this material to the Black Forest Mine (if necessary), and to place this material for reclamation.

- c) Please provide the expected on-site location or approximate haul/push distance for the Topsoil.
- d) Please specify the type of equipment to be used to extract/load the Topsoil, to haul this material to the Black Forest Mine (if necessary), and to place this material for reclamation.
- e) Please specify the expected rate of application for the hydromulch in tons per acre. (Please ensure the costs provided for Mulching include the addition of a tackifier, as proposed.)
- f) Please provide the expected on-site location or approximate haul/push distance for the Rock.
- g) Please specify the type of equipment to be used to extract/load the Rock, to haul this material to the Black Forest Mine (if necessary), and to place this material for reclamation.
- h) Please include a grading task if required to achieve the final slope configuration of the backfill area.

**Exhibit R – Proof of Filing with County Clerk and Recorder (Rule 6.4.18)**

- 10) Per Rule 1.6.2(1)(c), any changes or additions to the application on file in our office must also be reflected in the public review copy which was placed with the County Clerk and Recorder. Rule 6.4.18 requires the operator to provide an affidavit or receipt to our office indicating the date this was done. This means a copy of the revised application submitted as an adequacy response must be placed with the County Clerk and Recorder, and a new affidavit or receipt indicating the date this was done must be provided to the Division with the adequacy response submittal. While the adequacy response submitted to our office did include a copy of the affidavit signed on August 19, 2020 for the original application submittal, the Division was not able to find a new affidavit for the adequacy response submittal. Please submit an affidavit or receipt indicating the date the revised application (adequacy response no. 1) was placed with the County Clerk and Recorder.

**Exhibit S – Permanent Man-Made Structures (Rule 6.4.19):**

- 11) The list of all permanent, man-made structures located on or within 200 feet of the affected lands includes only two structures that are not owned by the operator – two overhead power lines owned by United Power Inc.

Per Rule 6.4.19, where the affected lands are within 200 feet of any significant, valuable and permanent man-made structure, the applicant shall:

- a) Provide a notarized agreement between the applicant and the person(s) having an interest in the structure, that the applicant is to provide compensation for any damage to the structure; or
- b) Where such an agreement cannot be reached, the applicant shall provide an appropriate engineering evaluation that demonstrates that such structure shall not be damaged by activities occurring at the mining operation; or

- c) Where such structure is a utility, the applicant may supply a notarized letter, on utility letterhead, from the owner(s) of the utility that the mining and reclamation activities, as proposed, will have "no negative effect" on their utility.

If a structure agreement between Colorado Legacy Land, LLC and United Power Inc. has already been provided to the Division, please specify where in the permit file this document can be found. Otherwise, please provide a structure agreement (see enclosed form) for the overhead power lines owned by United Power Inc. Because this structure is considered a utility, the operator may provide a notarized letter on utility letterhead from the owner of the utility which meets the requirements of Rule 6.4.19(c) above.

This concludes the Division's 2<sup>nd</sup> adequacy review of your amendment application. Please ensure the Division sufficient time to complete its review process by responding to these adequacy items prior to the decision date, currently scheduled for **December 9, 2020**. If more time is needed to address these items, it will be your responsibility to submit an extension request prior to the decision date.

Please remember that, pursuant to Rule 1.6.2(1)(c), any changes or additions to the application on file in our office must also be reflected in the public review copy which was placed with the County Clerk and Recorder. Pursuant to Rule 6.4.18, you must provide our office with an affidavit or receipt indicating the date this was done.

If you have any questions, you may contact me by telephone at 303-866-3567, ext. 8129, or by email at [amy.eschberger@state.co.us](mailto:amy.eschberger@state.co.us).

Sincerely,

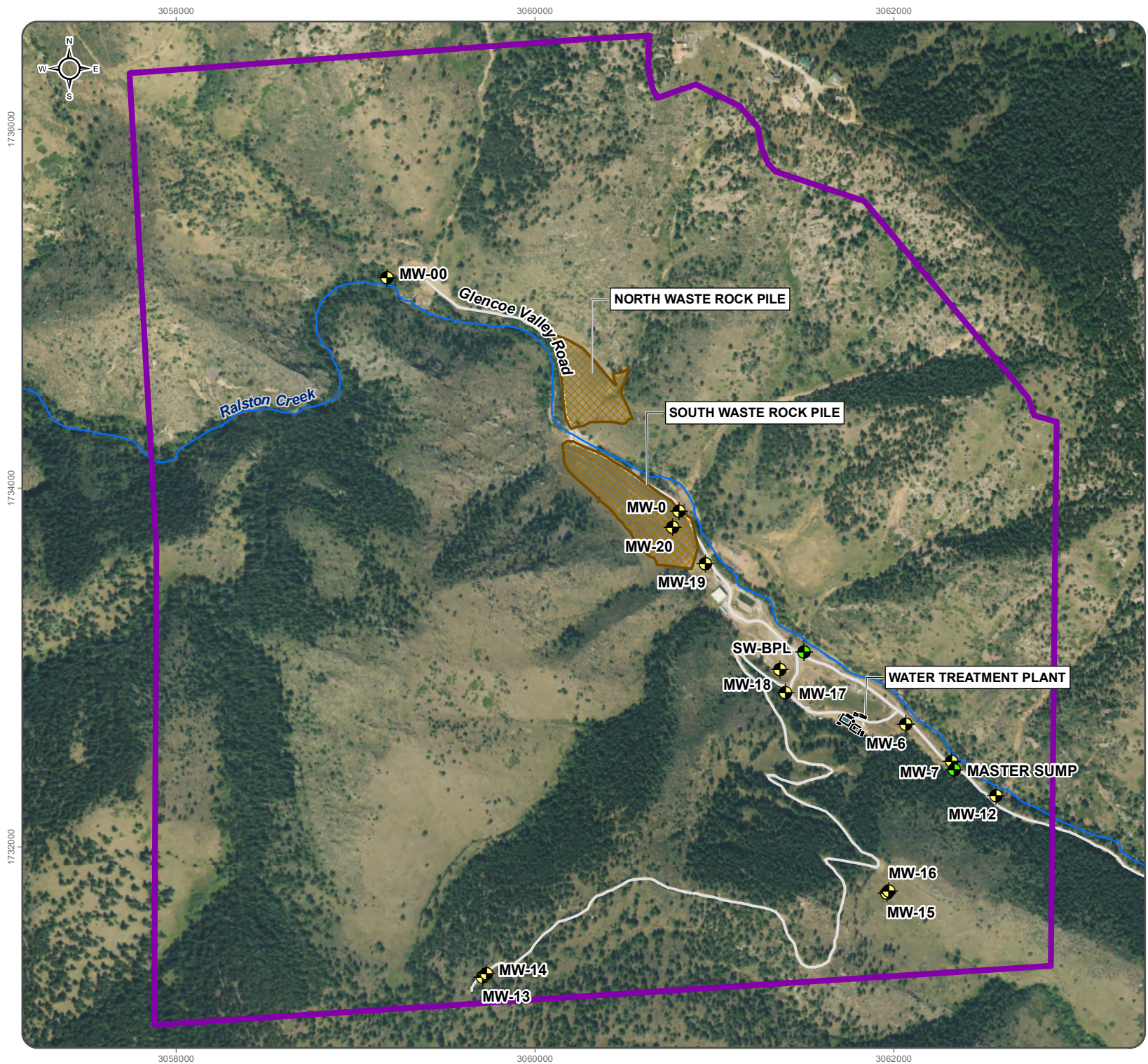


Amy Eschberger  
Environmental Protection Specialist

Encls: Groundwater Monitoring Locations map provided with the 2<sup>nd</sup> Quarter 2020 Sampling Results  
on October 16, 2020  
Structure agreement form

Cc: Elizabeth Busby, Ensero Solutions US, Inc.  
Bill Ray, Ensero Solutions US, Inc.  
Paul Newman, Colorado Legacy Land, LLC  
Eric Williams, Colorado Legacy Land, LLC  
Michael Cunningham, DRMS





# COLORADO LEGACY LAND SCHWARTZWALDER MINE

**FIGURE 2**  
**GROUNDWATER MONITORING  
LOCATIONS**

OCTOBER 2020



- GW Monitoring Well
- Pumpback Sump
- CLL Property Boundary
- Waste Rock Dump
- Existing Mine Feature Footprint
- Glencoe Valley Road
- Ralston Creek

1:9,000 when printed on 8x11 inch paper



Satellite imagery obtained from ArcGIS on  
services.arcgis.com on October 2020

Datum: NAD 1983 (CORS96) StatePlane Colorado Central FIPS  
0502 (US Feet)

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An example Structure Agreement which meets the requirements of the Statutes is shown below.

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## **Structure Agreement**

This letter has been provided to you as the owner of a structure on or within two hundred (200) feet of a proposed mine site. The State of Colorado, Division of Reclamation, Mining and Safety (“Division”) requires that where a mining operation will adversely affect the stability of any significant, valuable and permanent man-made structure located within two hundred (200) feet of the affected land, the Applicant shall either:

- a) Provide a notarized agreement between the Applicant and the Person(s) having an interest in the structure, that the Applicant is to provide compensation for any damage to the structure; or
- b) Where such an agreement cannot be reached, the Applicant shall provide an appropriate engineering evaluation that demonstrates that such structure shall not be damaged by activities occurring at the mining operation; or
- c) Where such structure is a utility, the Applicant may supply a notarized letter, on utility letterhead, from the owner(s) of the utility that the mining and reclamation activities, as proposed, will have “no negative effect” on their utility. ( *Construction Materials Rule 6.3.12 and Rule 6.4.19 & Hard Rock/Metal Mining Rule 6.3.12 and Rule 6.4.20*)

*The Colorado Mined Land Reclamation Board (“Board”) has determined that this form, if properly executed, represents an agreement that complies with Construction Materials Rule 6.3.12(a), Rule 6.4.19(a), and C.R.S. § 34-32.5-115(4)(e) and with Hard Rock/Metal Mining Rule 6.3.12(a), Rule 6.4.20(a), and C.R.S. § 34-32-115(4)(d). This form is for the sole purpose of ensuring compliance with the Rules and Regulations and shall not make the Board or Division a necessary party to any private civil lawsuit to enforce the terms of the agreement or create any enforcement obligations in the Board or the Division.*

**The following structures are located on or within 200 feet of the proposed affected area:**

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- 4. \_\_\_\_\_
- 5. \_\_\_\_\_

*(Please list additional structures on a separate page)*



## **CERTIFICATION**

The Applicant, \_\_\_\_\_ (print applicant/company name),  
by \_\_\_\_\_ (print representative's name), as \_\_\_\_\_ (print  
representative's title), does hereby certify that \_\_\_\_\_ (structure owner) shall  
be compensated for any damage from the proposed mining operation to the above listed structure(s)  
located on or within 200 feet of the proposed affected area described within Exhibit A, of the Reclamation  
Permit Application for \_\_\_\_\_ (operation name),  
File Number M-\_\_\_\_-\_\_\_\_\_.

***This form has been approved by the Colorado Mined Land Reclamation Board pursuant to its  
authority under the Colorado Land Reclamation Act for the Extraction of Construction Materials and  
the Colorado Mined Land Reclamation Act for Hard Rock, Metal, and Designated Mining Operations.  
Any alteration or modification to this form shall result in voiding this form.***

## **NOTARY FOR PERMIT APPLICANT**

ACKNOWLEDGED BY:

Applicant \_\_\_\_\_ Representative Name \_\_\_\_\_

Date \_\_\_\_\_ Title \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

The foregoing was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by  
\_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_.

\_\_\_\_\_  
Notary Public My Commission Expires: \_\_\_\_\_

**NOTARY FOR STRUCTURE OWNER**

ACKNOWLEDGED BY:

Structure Owner \_\_\_\_\_ Name \_\_\_\_\_

Date \_\_\_\_\_ Title \_\_\_\_\_

STATE OF \_\_\_\_\_ )

) ss.

COUNTY OF \_\_\_\_\_ )

The foregoing was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by  
\_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_.

\_\_\_\_\_ My Commission Expires: \_\_\_\_\_

Notary Public