

**Contract No. R-042-052**  
**“Living Stone Lodge – Phase III”**  
 Submitted by MHA Nation-South Segment  
 Principal Investigator: Jessica White Plume

**PARTICIPANTS**

<b>Sponsor</b>	<b>Cost Share</b>	
MHA Nation-South Segment	\$518,962	
Subtotal Cash Cost Share		\$518,962
North Dakota Industrial Commission	<u>\$398,850</u>	
Total Project Cost		\$917,812

Project Schedule – 13 months  
 Contract Date – 2/10/2020  
 Start Date – 2/1/2020  
 Completion Date – 3/31/2021

Project Deliverables:  
 Progress Report for 2/20 – 4/20: 5/31/2020 ✓  
 Progress Report for 5/20 – 7/20: 8/31/2020  
 Progress Report for 8/20 – 10/20: 11/30/2020  
 Progress Report for 11/20 – 3/21: 4/30/2021  
 Final Report: 4/30/2021

**OBJECTIVE/STATEMENT OF WORK:**

The purpose of the project is to develop and commercialize affordable, energy efficient homes that surpasses ENERGY STAR rating and can be easily built on rural Native American Reservations. The goal is to reach net-zero energy use and construct the home for under \$100 per square foot.

**STATUS:**

The contract has been fully executed.

**June 2020**

Renewable energy strategy for electrification

- Electrification is approximately 70% complete and expected to be finalized in the next four weeks. The research and modeling for ground performance for geothermal has been completed.

Model homes constructed with renewable energy (geothermal ground source heat pumps and passive solar energy)

- The homes are on schedule to be completed within the time frame stated within the proposal.

Renewable energy corridor capable of adding solar or wind energy easily

- The energy corridor will be started once the architectural and structural drawings are completed.

Custom mold for 22.5 degree ICF Corner Blocks

- The COVID-19 pandemic has halted business with the Canadian business contractor responsible for designing the mold. It is anticipated the design work will begin in June.

Architectural, Engineering and Electrical design drawings of high-performance home

- Architectural drawings are 80% complete and structural drawings are 50% complete. Expected completion within six weeks.

Detailed shop drawings with all specifications for manufacturing

- Architectural and structural drawings have been completed for steel parts and sent to the production shop where they are tooling up to manufacture the parts. Drawings still to be completed include: SIPS roof panels and ICF Block Wall Design.
- Detailed mechanical and electrical shop drawings will begin once the electrification conversion plan is complete.

Updated 6/23/20