



City of San Antonio

Agenda Memorandum

File Number:18-5462

Agenda Item Number: 15.

Agenda Date: 2/14/2019

In Control: City Council A Session

DEPARTMENT: Neighborhood and Housing Services

DEPARTMENT HEAD: Verónica R. Soto, AICP

COUNCIL DISTRICTS IMPACTED: Citywide

SUBJECT:

Acceptance of up to \$29,000, as a sub grantee, through Michigan Technological University's (MTU) 2017 Lead Technical Studies Grant from the U.S. Department of Housing and Urban Development to implement phase III of MTU's research project "A Novel Phytoremediation Method to Cleanup Lead-Based Paint Contaminated Soils: Phase III-Demonstration Study".

SUMMARY:

Consideration of a professional services contract between the City of San Antonio and MTU to implement phase III of MTU's research project "A Novel Phytoremediation Method to Cleanup Lead-Based Paint Contaminated Soils: Phase III-Demonstration Study". This is a two year study which commences upon council approval.

BACKGROUND INFORMATION:

The City of San Antonio is a current Lead Hazard Reduction Demonstration (LHRD) grantee from the US Department of Housing and Urban Development's (HUD) Office of Healthy Homes and Lead Hazard Control. These funds address lead hazards in residential properties in low income communities, with children ages five and under.

The Michigan Technological University (MTU) has been awarded a Lead Technical Studies grant to complete Phase III of their research project to test a removal method for lead-based paint contaminated soils. Phase I was a "proof-of-concept" greenhouse study conducted to see if vetiver grass would be able to tolerate and take up lead from contaminated soils. Soils were collected from various homes in San Antonio and Baltimore to

investigate how soil properties from the two cities would impact remediation.

Phase II of the study was conducted in large wooden platforms, which were placed outside, open to the elements. Soil from San Antonio and Baltimore was used again in this study. The study was considered simulated because although the plants were outside, the water that was leaching out was controlled.

The Neighborhood & Housing Services Department (NHSD) was selected by MTU as a sub grantee of the 2017 HUD Lead Technical Studies grant and has been awarded \$29,000 to conduct phase III of this research project. Services will be offered in three homes previously assisted by the San Antonio's Green and Healthy Homes (SAGHH) Program.

As a recipient of HUD funds, MTU is required to enter into a written cost-reimbursement research subaward agreement with the City concerning the City's participation in the study.

ISSUE:

NHSD seeks approval from City Council to accept the 2017 HUD Lead Technical Studies sub grantee funds in the amount of \$29,000 and to implement phase III of MTU's research project "A Novel Phytoremediation Method to Cleanup Lead-Based Paint Contaminated Soils: Phase III-Demonstration Study". The project consists of MTU students planting vetiver grass along the dripline of three SAGHH assisted homes which have high levels of lead in the soil. The grass will lower the lead levels in the soil by removing the lead. SAGHH staff will monitor the project over the course of two years. Result of this study, if successful, can be replicated in other homes with high lead levels in the soils. The current method of addressing high lead in the soils is by removing up to six inches of soil and replacing with new. If successful, the method covered by the study will be more cost effective and less destructive.

ALTERNATIVES:

The City can vote to not approve the professional services contract. However, this would adversely impact the ability of the City to implement phase III of MTU's research project "A Novel Phytoremediation Method to Cleanup Lead-Based Paint Contaminated Soils: Phase III-Demonstration Study".

FISCAL IMPACT:

If approved, this action will authorize the agreement in an amount not to exceed \$29,000 to reimburse SAGHH personnel expenses for monitoring the health of MTU's vetiver grass weekly over the course of two years. The source of funding for the payment is the MTU's 2017 Lead Technical Studies Grant from the U.S. Department of Housing and Urban Development (HUD) reimbursing the City monthly. There is no cash match requirement and there will be no impact to the City's General Fund.

RECOMMENDATION:

Staff recommends the approval of a professional services contract between the City of San Antonio and

Michigan Technological University (MTU) in the amount of \$29,000 to implement phase III of MTU's research project "A Novel Phytoremediation Method to Cleanup Lead-Based Paint Contaminated Soils: Phase III-Demonstration Study".