

PMC-ND

(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY**  
**OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY**  
**NEPA DETERMINATION**



RECIPIENT:NREL

STATE: CO

**PROJECT****TITLE :**

STM Exterior Improvements Project 2015; NREL Tracking No. 15-012

**Funding Opportunity Announcement Number****Procurement Instrument Number****NEPA Control Number****CID Number**

DE-AC36-08GO28308

NREL-15-012

GO28308

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

## Description:

**DOE/EA-1968**  
**(NREL STM)**

SITEWIDE ENVIRONMENTAL ASSESSMENT, U.S. DOE NATIONAL RENEWABLE ENERGY  
 LABORATORY, SOUTH TABLE MOUNTAIN CAMPUS, GOLDEN, COLORADO

## Rationale for determination:

The U.S. Department of Energy (DOE) proposes a project to address several site improvements at the National Renewable Energy Laboratory (NREL) South Table Mountain (STM) campus located in Golden, Colorado. The proposed project would address the following four issues on the NREL STM campus:

- Pedestrian safety improvements at the south entrance to the STM campus
- Hillside stabilization and erosion control improvements behind the Integrated Biorefinery Research Facility (IBRF)
- Hillside stabilization and erosion control improvements behind the Field Test Laboratory Building (FTLB)
- Drainage improvements on the north side of the FTLB

Pedestrian safety improvements would include enhancing pedestrian lighting for safety near the South Site Entrance Building, installing a sidewalk from Denver West Parkway down to South Site Entrance Building, and installing ADA-compliant pedestrian crossings on Research Road. All work would occur on NREL property.

The steep hillside behind the IBRF access roadway on the north side of the building exceeds maximum slope standards and has experienced significant amounts of erosion that washes onto the access roadway which occasionally impedes traffic and fire lane access. This steep slope area would be modified to increase slope stability and a clear zone behind the curb and gutter would be provided to trap any debris that may come off the steep slope area in the future without impacting accessibility to the roadway. Systems like terraces, vegetated walls, block walls, and concrete walls would be evaluated. Additionally, a method to intercept a majority of the surface water drainage that currently flows down the steep slope area would be designed and implemented to redirect the flow away from the steep slope area to a more stable location. The proposed project would also improve the drainage around the adjacent Thermal Test Facility (TTF) and the area between the IBRF and TTF.

The steep hillside at the northwest corner of the FTLB exceeds maximum slope standards and has experienced significant amounts of erosion that washes onto the FTLB west parking area and has exposed portions of the foundation wall along the FTLB structure adjoining the steep slope. The proposed project would improve the steep slope area at the northwest corner of the building to increase slope stability and would correct the erosion that has occurred near the building. A clear zone behind the curb and gutter at the parking lot would be provided that would trap any debris that may come off the steep slope area in the future without going into the parking lot. The surface runoff would be redirected westerly along the parking lot to the established drainage channel rather than running over curb into parking lot.

The proposed project would also address water intrusion issues occurring along the northern edge of the FTLB.



Surface runoff would be redirected away from the foundation wall behind the FTLB and the existing drainage channel would be armored and reinforced to reduce the infiltration of water along the foundation wall. This would also include waterproofing accessible portions of the foundation wall where accessible.

Additional details of the proposed project can be found in the Project Management Plan, State of Work and exhibits uploaded to the PMC.

The proposed project would have short-term impacts of up to two acres of land disturbed during the construction phase. The project would result in positive long-term impacts on erosion, slope stability, and stormwater conveyance by stabilizing steep slopes and improving existing drainage systems. All ground disturbing activities would be conducted in accordance with NREL Lab Level Procedure 6-1.28

Stormwater Pollution Prevention for Construction Activities: South Table Mountain Site. Permit coverage under the USEPA Stormwater Construction General Permit would likely be required and a Stormwater Pollution Prevention Plan would be implemented to minimize stormwater and erosion impacts during construction. All disturbed areas that are not replaced with impervious features, such as the Research Road sidewalk, retaining walls, or drainage channels, would be revegetated and restored in accordance with NREL policy and procedures.

Any mobile air emission sources from construction equipment, such as excavators, back hoes, concrete trucks, support trucks, etc., would be negligible and short-term. Construction-related noise would consist of a short-term, intermittent increase in ambient noise levels and would abide by applicable noise ordinances. Additional lighting to improve pedestrian safety by the south STM gate would be LED "full cutoff fixtures" light poles similar to existing campus lighting where the light is only emitted downwards and would shield potential horizontal light pollution. The lights would be on sensors to minimize the time that they are active. This should minimize potential light pollution to nearby neighbors.

Per agency consultations conducted during the Site-Wide Environmental Assessment for the NREL South Table Mountain campus (DOE/EA-1968), no cultural resources, threatened or endangered species, wetlands, floodplains, or prime farmlands would be impacted by this proposed project. A migratory bird nesting survey would be conducted prior to project activity. If nests or eggs are found, the particular area would be cordoned off with a proper buffer until nestlings fledge. This would ensure that no migratory birds, nests or eggs are destroyed during the proposed project.

Hazardous materials and waste generated during the construction phase of this project would be managed in accordance with applicable regulations and NREL policy and procedures. Construction waste would be segregated and recycled to the extent practicable. Construction contractors would abide by applicable environmental, health, and safety regulations and NREL procedures.

Based on review of the project information and the above analysis, DOE has determined that the activities associated with the proposed project would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined that the proposed site operation improvements are bounded by the analysis of the December 2014 NREL STM Site-Wide Environmental Assessment (DOE/EA-1968) and its Findings of No Significant Impact, and no further NEPA review is required.

#### NEPA PROVISION

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

NEPA review conducted by Rob Smith on 07/16/2015.  
National Renewable Energy Laboratory

#### SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature: \_\_\_\_\_

NEPA Compliance Officer

Date: \_\_\_\_\_

7/20/2015

**FIELD OFFICE MANAGER DETERMINATION**

☐ Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- ☐ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- ☐ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_  
Field Office Manager

Date: \_\_\_\_\_