

# Guidelines for Proposal Preparation

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# Outline

- Opportunities for Utilization of NHERI Lehigh
- Site Support Operations
- Guidelines for Proposal Preparation at NHERI Lehigh
  - Project Process
    - Pre-proposal Stage
    - Proposal Writing Stage
    - Post-Award Stage



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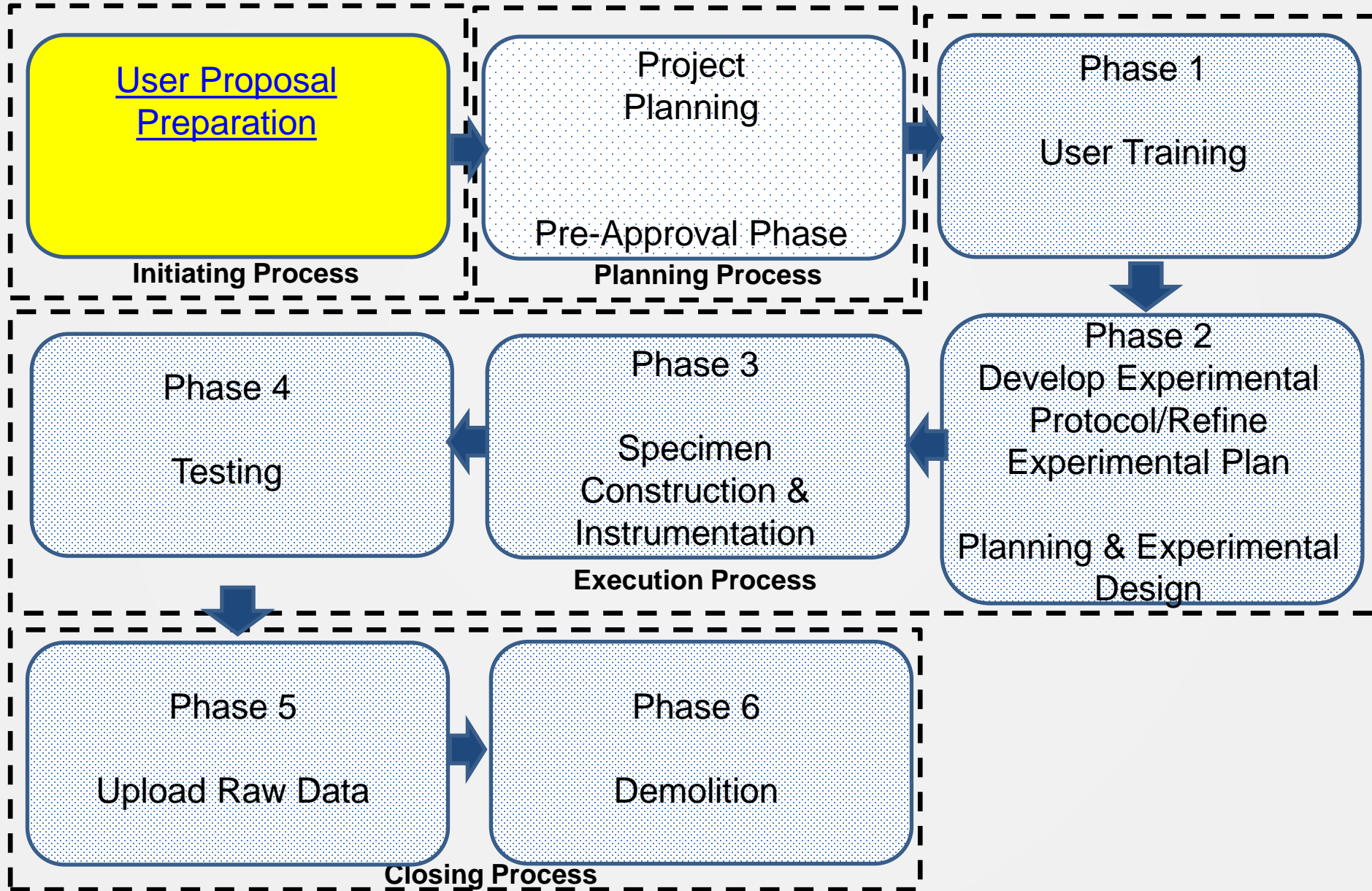
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# Opportunities for Utilization of NHERI Lehigh

- NHERI Lehigh EF is available for utilization for projects funded through both public and private sources
- NSF-funded projects that utilize NHERI Lehigh EF have specific costs that qualify for funding through one of the following sources:
  - NHERI Lehigh Operations and Maintenance budget
  - NSF-funded research project
- Projects funded by all non-NSF sources are responsible for all costs associated with project budget



# Site Support Operations for NHERI Lehigh



# Guidelines for Proposal Preparation

## Pre-Proposal Stage

- (1.1) Interactions with NHERI Lehigh EF
- (1.2) Review NHERI Lehigh EF website

## Proposal Writing Stage

- (2.1) Research Plan
- (2.2) Facilities, Equipment, and Other Resources
- (2.3) Schedule
- (2.4) Budget
- (2.5) Data Management Plan



# Pre-proposal Stage

- (1.1) Interactions with NHERI Lehigh EF to establish how facility can accommodate researcher needs
  - Contacts:
    - Joe Saunders– Facility Operations Manager
      - Email: [jms815@lehigh.edu](mailto:jms815@lehigh.edu)
    - Liang Cao – Research Scientist
      - Email: [lic418@lehigh.edu](mailto:lic418@lehigh.edu)
  - Important questions to consider at this stage:
    - *What is the proposed testing idea and does the proposed idea fit within the technical capabilities of the NHERI Lehigh EF?*
    - *Does NHERI Lehigh EF have the necessary equipment/ instrumentation for the proposed idea?*
    - *To what solicitation (and for which deadline) will the proposal be developed?*
    - *What additional information is available for EF or is required from EF by researcher for proposal?*



# Pre-proposal Stage

- (1.2) Review NHERI Lehigh EF website
  - [Questions for Pre-Proposal Stage](#)
  - [Checklist for Proposal Preparation](#)





The following serves as a guide for questions/topics to consider and address during the proposal stage for utilization of the NHERI Lehigh RTMD Experimental Facility:

General questions to address:

- What is the proposed testing idea and does the proposed idea fit within the technical capabilities of the NHERI Lehigh EF?
- Does NHERI Lehigh EF have the necessary equipment/ instrumentation for the proposed idea?
- To what solicitation (and for which deadline) will the proposal be developed?
- Can a schematic of the proposed test setup be provided to NHERI Lehigh EF for review and feedback?
- What additional information is available for EF or is required from EF by researcher for proposal?

Specific areas to address:

- Research Plan
  - Identify the items to be provided by researcher (with respect to utilization of facility)
  - What is the general plan of work envisioned, including broad design of activities to be undertaken at NHERI Lehigh EF?
  - Describe the experimental methods and procedures required by NHERI Lehigh EF
  - Is there a specific risk mitigation or safety strategy that should be considered?
  - Can a schematic of the proposed test setup be provided?
- Facilities, Equipment, and Other Resources
  - Items to be discussed with NHERI Lehigh EF (with respect to utilization of facility)
    - What resources are required of NHERI Lehigh EF?
    - Equipment?
    - Instrumentation?
    - Personnel?
    - Does NHERI Lehigh EF have these resources?
    - Are the capabilities required of the NHERI Lehigh EF established or do they need to be developed?
    - Are there additional ATLSS resources required for this proposal?
- Schedule
  - What is the proposed time-frame envision for utilization of NHERI Lehigh EF resources?
  - Equipment
  - Instrumentation
  - Physical space requirements (footprint in laboratory)
  - Technical staff
- Budget
  - What are the projected costs to:
    - Project Budget, including equipment use fees
    - NHERI O&M Budget
- Data Management Plan
  - What are the proposer's plans for data management and sharing of the research products?
  - Types of data, samples, software, etc. to be used at NHERI Lehigh EF
  - The standards used for data and metadata format and content
  - Plans for archiving data, samples, and other research products



The following serves as a checklist to follow during the proposal stage for utilization of the NHERI Lehigh RTMD Experimental Facility:

- Review the NSF Proposal and Award Policies and Procedures Guide
- Attend a researcher training workshop at NHERI Lehigh EF to become familiar with resources and capabilities of NHERI Lehigh EF
- Review NHERI Lehigh DesignSafe website (<https://lehigh.designsafe-ci.org/resources/>) to become familiar with resources, capabilities, policies, etc. associated with NHERI Lehigh EF, including review of the following files:
  - ATLSS Usage Rates for NSF NHERI Projects
  - ATLSS Usage Rates for non-NHERI Projects
  - Responsibility of Costs
  - Data Management Plan
  - ATLSS Laboratory Safety Plan
  - NHERI Lehigh RTMD EF User's Guide
- On the NHERI Lehigh DesignSafe website, review the file entitled "Questions to Address at Pre-Proposal Stage" and develop answers for the identified questions/topics
- Communicate with NHERI Lehigh EF operational personnel to assess if facility accommodates researcher needs
  - Primary Contact: Dr. Liang Cao, NHERI Lehigh Research Scientist, [lic418@lehigh.edu](mailto:lic418@lehigh.edu) or 610-758-5822



# User Proposal Preparation

## Pre-Proposal Stage

- (1.1) Interactions with NHERI Lehigh EF
- (1.2) Review NHERI Lehigh EF website

## Proposal Writing Stage

- (2.1) Research Plan
- (2.2) Facilities, Equipment, and Other Resources
- (2.3) Schedule
- (2.4) Budget
- (2.5) Data Management Plan



# Proposal Writing Stage

- Recommended steps for the researcher developing proposal:
  - Review NSF Proposal and Award Policies and Procedures Guide (PAPPG NSF 23001)
    - Part I Chapter II: Proposal Preparation Instructions
  - Review NHERI Lehigh EF Facility User's Guide
  - Communicate with NHERI Lehigh EF
    - Joe Saunders – Facility Operations Manager
      - Email: [jms815@lehigh.edu](mailto:jms815@lehigh.edu)
- Important Information to be discussed with NHERI Lehigh EF:
  - (2.1) Research Plan
  - (2.2) Facilities, Equipment, and Other Resources
  - (2.3) Schedule
  - (2.4) Budget
  - (2.5) Data Management Plan



# Proposal Writing Stage

- (2.1) Research Plan
  - Items to be provided by researcher (with respect to utilization of facility)
    - General plan of work envisioned, including broad design of activities to be undertaken at NHERI Lehigh EF
    - Description of experimental methods and procedures required by NHERI Lehigh EF
- (2.2) Facilities, Equipment, and Other Resources
  - Items to be discussed with NHERI Lehigh EF (with respect to utilization of facility)
    - *What resources are required of NHERI Lehigh EF?*
      - Equipment?
      - Instrumentation?
      - Personnel?
    - *Does NHERI Lehigh EF have these resources?*
    - *Are the capabilities required of the NHERI Lehigh EF established or do they need to be developed?*
    - *Are there additional ATLSS resources required for this proposal?*
  - NHERI Lehigh EF can provide information on EF as requested



# Proposal Writing Stage

- (2.3) Schedule
  - *What is the proposed time-frame envisioned for utilization of NHERI Lehigh EF resources?*
    - Equipment
    - Instrumentation
    - Physical space requirements (footprint in laboratory)
    - Technical staff
- (2.4) Budget
  - NHERI Lehigh EF Operations and Maintenance budget could be used to support qualified costs
    - NSF-funded projects that utilize NHERI Lehigh EF have specific costs that qualify for funding through one of the following sources:
      - NHERI Lehigh Operations and Maintenance budget
      - NSF-funded research project
    - Projects funded by all non-NSF sources are responsible for all costs associated with project budget



# Proposal Writing Stage

- (2.4) Budget
  - Where can you find information on budgeting at NHERI Lehigh EF?
    - NHERI Lehigh EF Rate Schedules (for [NSF-funded](#) and [non-NSF funded projects](#))
      - Provides use fee rates to utilize NHERI Lehigh EF equipment and instrumentation and other ATLSS (non-NHERI) equipment and instrumentation
      - Provides NHERI Lehigh EF personnel rates
    - NHERI Lehigh EF [Responsibility of Costs](#)
      - Assigns costs for NSF funded projects to either the NHERI Lehigh EF or the NSF-funded research project
    - Contact NHERI Lehigh Operations Manager with questions or for additional information
      - Joe Saunders, [jms815@lehigh.edu](mailto:jms815@lehigh.edu)
- (2.5) [Data Management Plan](#)
  - What are the proposer's plans for data management and sharing of the research products?
    - Types of data, samples, software, etc. to be used at NHERI Lehigh EF
    - The standards used for data and metadata format and content
    - Plans for archiving data, samples, and other research products



# Proposal Process

## Pre-Proposal Stage

(1.1) Interactions with NHERI Lehigh EF

## Proposal Writing Stage

(2.1) Research Plan  
(2.2) Facilities, Equipment, and Other Resources  
(2.3) Schedule  
(2.4) Budget  
(2.5) Data Management Plan

## Post-Award Stage

(3.1) Researcher Training  
(3.2) Scheduling of Testing  
(3.3) Execution of Testing  
(3.4) Post-Test Data Archiving

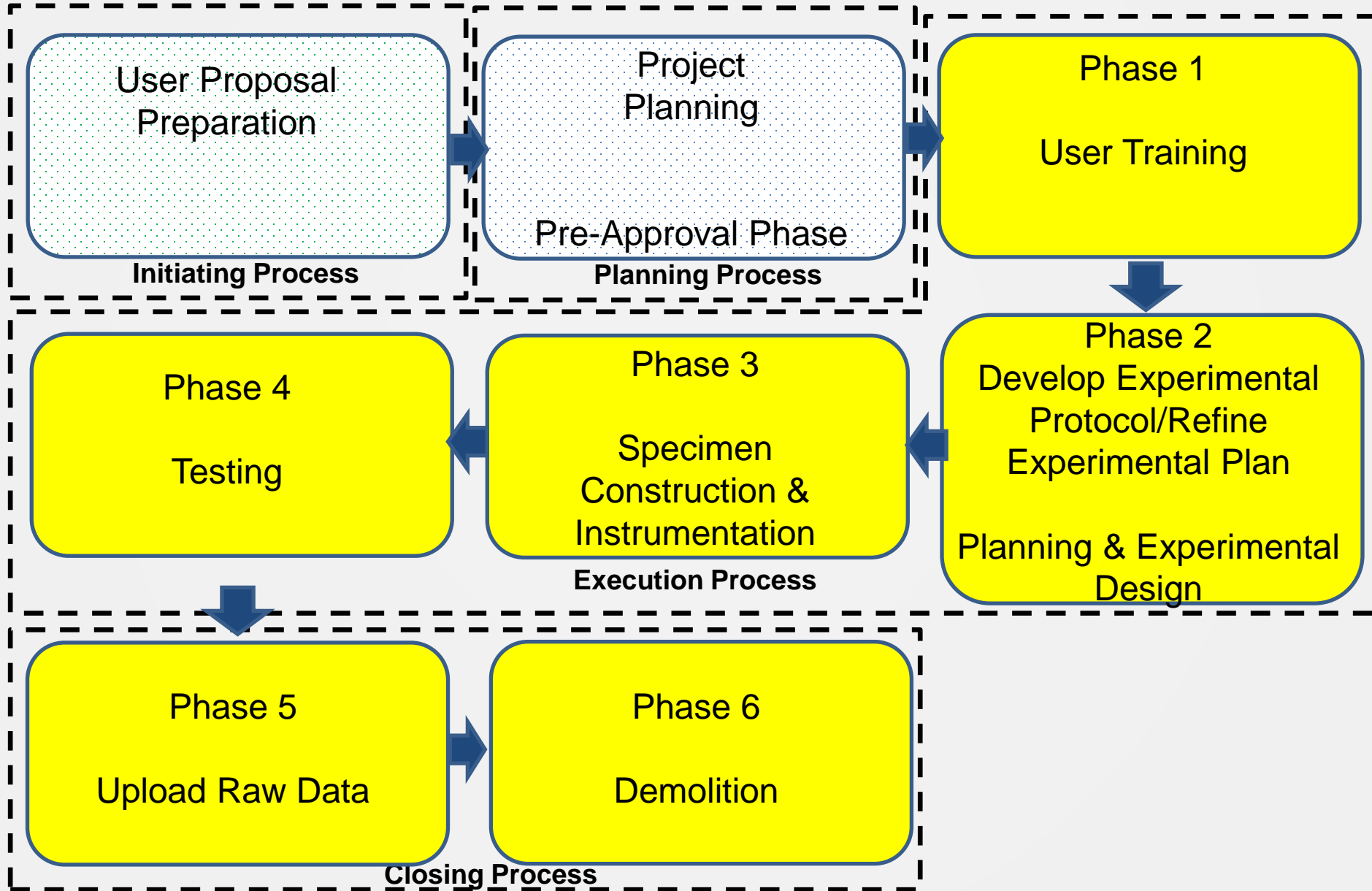


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# Site Support Operations for NHERI Lehigh



# Post-Award Stage

- (3.1) Researcher Training
  - Equipment
  - Safety
  - Controls and data acquisition
- (3.2) Experimental Test Plan/Scheduling of Testing
  - Experimental Test Plan (ETP)
    - Detailed document that outlines specific testing to be done at EF
      - Project scope (details of specimens, fabrication location, erection, instrumentation, data acquisition, testing plans, and demolition)
      - Detailed list of equipment, # of days of equipment site use, for entire duration of experimental activities
      - Project-specific safety requirements
      - Anticipated project schedule (for specimen construction, installation, testing, raw data upload, and demolition)
  - NHERI Lehigh EF will work with ATLSS Center staff for coordinating the schedule of research project
    - Resources assigned based on critical milestones of respective projects in order to maximize efficiency of laboratory operations
    - NHERI Lehigh Operations Manager will report schedule to the NCO Facility Scheduling Group for integration into overall NHERI facilities schedule
- (3.3) Execution of Testing
  - NHERI Lehigh EF will provide support for experimental preparation within the laboratory and operate equipment in order to complete testing in collaboration with research team
- (3.4) Post-Test Data Archiving
  - All data generated during testing is required to be uploaded to NHERI repository - DesignSafe
  - NHERI Lehigh IT Manager will provide assistance to researchers with data management, including data backup on local repository and data upload to NHERI repository
  - For more information on the NHERI repository - [DesignSafe](#)



# Summary

## Proposal

- Contact Jim, Claudia, Liang, or myself for a proposal
- Meet and discuss details
  - How NHERI Lehigh can facilitate research
  - What do you need, what is your schedule, what equipment do you need, what is your budget, etc.
- Review what you have proposed and provide feedback

## Post-Award

- Training
- Test plan
- Schedule
- Execute
- Data archiving





# Thank You!

## Questions?



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