(NAME OF COMPANY)

Health and Safety Plan
for

Job Title _____

Building Number _____

Contract Number _____

Job Number _____

TABLE OF CONTENTS

Section 1: COMPLIANCE LETTER

COMPANY LETTERHEAD

Date: _____
Brookhaven National Laboratory
Bldg. 134C
Upton, N.Y. 11973
Attn: Mr. Peter Boyle
Construction Supervisor

Re: Contract No_____
Job Title: _____
Job No: _____
Bldg. No: _____

Dear Mr. Boyle:
In conformance with the requirements of the construction documents for the above project, the following information is submitted on our company's construction safety program:

- Copy of the company's record of injuries and accidents (OSHA 300 logs)
- Insurance experience modification rate for the past two years
- Environmental compliance records (if applicable) for past five years, including fines, Administrative Consent Orders, and Notices of Violations.

We understand that Brookhaven National Laboratory is an ISO 14001 Registered Organization. All construction and environmental work shall conform to the applicable requirements of this program. ***(Insert Company Name)*** its employees and subcontractors shall follow the BNL requirements listed in its Standards Based Management System (SBMS) https://sbms.bnl.gov/ pertaining to: Work Planning and Control for Operations, Emergency Response/Spill Response, Waste Management (radiological, hazardous, mixed, medical, industrial), Chemical Handling and Use (RCRA, OSHA), Land Use Restrictions (Wetlands, Pine Barrens, Endangered Species), Liquid Effluents.

(Insert Company Name) its employees and subcontractors shall comply with the applicable requirements established in the SBMS https://sbms.bnl.gov/. Environment, Safety and Health Standards of the SBMS are located at: https://sbms.bnl.gov/SBMSearch/LD/ld08/ld08t011.htm for review and use. Where the requirements specified in the BNL Standards Manual and the SBMS exceed the requirements of the OSHA standards, the BNL requirements shall take precedence.

BNL shall provide all appropriate permits required by these standards. ***(Insert Company Name)*** shall verify that these permits are current for the scope of work and updated, with appropriate approvals, to reflect any changes to the scope of work, and shall abide by the requirements of the permit.

This letter also certifies that ***(Insert Company Name)*** is aware of, understands and shall comply with the safety regulations of the OSHA Standard 29 CFR 1926 and 29 CFR 1910.

In addition, ***(Insert Company Name)*** understands that the BNL ES&H Standards Manual and the Standards Based Management System (SBMS) is available, on line, for our review and use and we shall comply with applicable safety requirements for this project.
Yours truly,

_____
Title_____

Section 2: STATEMENT OF ACCIDENT PREVENTION PROGRAM

(COMPANY LETTERHEAD)

Re: Contract No_____
Job Title: _____
Job No: _____
Bldg. No: _____

Project Superintendent: _____
Phone Numbers: On Site _____ Off Site: _____

Policy Statement A safe and healthful place of employment is a basic right of every working person. Exposure to unsafe conditions, no matter who created them, is unacceptable. Therefore, accident prevention measures shall be integrated with all operating functions.

A safe and healthful place of employment can exist and be maintained only if both supervisory and non-supervisory personnel participate in and support the safety and health program by working with whomever is designated as being responsible for overseeing safe and health conditions on the job site. Employees should report all unsafe conditions to the Safety Representative.

For each jobsite there shall be a Safety Representative.
Name: _____
Phone Nos. Jobsite _____ Office: _____
Pager _____ Alternate _____

The Safety Designee shall implement the Accident Prevention Program and shall:

1. Prior to the start of work each day on a jobsite, evaluate the site for any unsafe conditions at the jobsite and take appropriate steps to eliminate employee exposure.
2. Prior to the initiation of any work by employees, evaluate the hazards of that work, and instruct the employees as to site and job-specific hazards. As jobs change, site and job-specific instructions shall also change.
3. Hold weekly safety meetings with all employees. These meetings may be in the form of one-on-one contacts or group meetings.
4. Inspect the jobsite regularly. This may be performed as a separate inspection or while the Safety Representative is engaged in other supervisory duties. Such inspections shall be documented, noting discrepancies and corrective actions taken. Include a descriptive outline of the program for frequent and regular inspections and reporting of jobsite conditions. The program shall include the person responsible for conducting inspections, the frequency of inspections, reporting unsafe acts or conditions, and taking corrective action to prevent or control the unsafe act or condition. Daily inspections should be performed and documented by the safety representative or designee during active construction, periodically during shutdowns to maintain site barriers, etc., and when mandated by adverse weather conditions.
5. Insure that first aid and emergency services are available when required. Brookhaven National Laboratory (BNL) shall provide emergency services, fire, medical, and spill

response, for any emergencies arising while on the Laboratory property. BNL shall provide emergency medical transportation. All construction personnel shall use the BNL emergency phone number 2222 or 911 (from any BNL phone) or 344-2222 (from a pay phone or cellular phone) and immediately notify the BNL Project Person in the event of any emergency. Minor injuries shall be those that are treatable by first aid only, all other injuries shall be reported to and treated by BNL's Medical Clinic or BNL emergency services personnel.

6. Investigate all accidents or near accidents and take appropriate steps to eliminate the cause of the accident before work is resumed. All such incidents shall be reported immediately to the BNL Project Manager.
7. Utilize a safety and health checklist during the evaluation of the jobsite with the understanding that any unsafe conditions, not covered by the checklist, shall be corrected.
8. Periodically review and update the checklist with items that were originally not included, but identified during the worksite inspections.
9. Inform all employees of the location and availability of the company's WRITTEN HAZARD COMMUNICATION PROGRAM, which is required to be on the jobsite, and which must include copies of all MATERIAL SAFETY DATA SHEETS (MSDS) for hazardous materials used on the jobsite by the Company.
10. Make readily available for all employee copies of 29 CFR 1910.20, Employee Access to Exposure and Medical Records (which includes Material Safety Data Sheets and other exposure records).
11. Conduct annual training for employees concerning who is the person responsible for keeping these records and that the employees or their authorized representatives have the right to have access to them.
12. Ensure that all personnel (workers or visitors) wear as a minimum the following personal protective equipment
    a. Hard hat (required for all construction sites)
    b. Construction work shoes
    c. Safety glasses.
    d. Long pants
    e. Shirts with sleeves that cover the shoulders
13. Ensure that all workers on the job site wear personal protective equipment appropriate for their task.

<u>Safety Representative Training and Qualifications</u>

I certify that the Safety Representative has completed, as a minimum, the 10-hour OSHA Construction Safety course. (For multi-discipline projects, the 30-hour OSHA Construction Safety Course shall be completed.) Attached is a copy of that individual's training completion certificate.

A summary of the Safety Representative's training and qualifications, as appropriate for this job, is also included. The individual is trained and knowledgeable in the Environment, Safety & Health requirements of the project for which he or she shall be responsible.

Acceptable training and qualifications include certificates of completion for formal classroom and hands-on training, as applicable, in:

- OSHA-authorized 10 hour Construction Safety & Health Regulations, 30 hours for high hazard or complex activities.

Additional training may be required for specific hazards, as dictated by the scope of work, such as:

- Lockout/Tagout (LOTO)
- Working on live electrical circuits
- Excavations
- Confined spaces
- Material handling/forklift operation/rigging
- Fall protection
- Respirators
- Hazardous chemicals
- Lead, asbestos
- Radiation

_____

Company Owner/President/CEO

Date: _____

Section 3: CONTRACTOR/SUBCONTRACTOR RESPONSIBILITIES

(COMPANY LETTERHEAD)

The following summarizes the responsibilities of the ***(Insert Company Name)*** as prime contractor and any subcontractors hired by the contractor in the course of this project:

CONTRACTOR RESPONSIBILITIES:

- Immediately rectify any and all conditions that are found to be unsafe and/or unsanitary.
- Issue a "Stop Work" order for those events, which pose an imminent danger to personnel, environment, or equipment. All Stop Work orders will be reported to the BNL Project Manager.
- Report any unsafe conditions to project personnel and send all copies of safety inspections to Brookhaven National Laboratory Plant Engineering Division
- A follow-up report shall be issued detailing the action taken to rectify any and all inadequacies.
- Coordination of activities with Subcontractors shall take place to ensure work proceeds in accordance with applicable safety requirements.
- Project Personnel and Subcontractors shall be notified of any recognized hazards, potential problem areas and safety requirements.

  Coordination of all pertinent certifications, training and record keeping shall take place and their accessibility for review made available.

SUBCONTRACTOR RESPONSIBILITIES:

- Subcontractors shall retain full responsibility for the safety of his/her personnel.
- Review possible safety hazards, construction activities, etc., with his/her personnel.
- Issue a "Stop Work" order for those events, which pose an imminent danger to personnel, environment, or equipment. All Stop Work orders will be reported to the contractor and the BNL Project Manager.
- Ensure that his/her foreman and personnel understand all necessary precautions to be taken and sees that these precautions are carried out.
- Makes regular inspections of hand tools and equipment used in all phases of the construction activity.
- Immediately corrects any safety deficiencies when identified and/or notified.
- Immediately informs the Contractor and Contractor Safety Representative of any and all unsafe conditions or activities.

There shall be an open and continuous line of communication
between the Contractor and Subcontractor
to discuss any unsafe acts or conditions
that arises or may arise in the course of this project.

Section 4: SAFETY TRAINING AND COMMUNICATION

(COMPANY LETTERHEAD)

TRAINING AND EDUCATION:

- Safety oriented signs and posters shall be properly posted and clearly visible at various locations around the job site.
- The Safety Representative shall ensure that all personnel and Subcontractors have been properly trained for the hazards anticipated on this project as specified in Section 15, "Phase Hazard Analysis".
- All new personnel shall be instructed in construction safety policies, regulations and procedures for the project prior to the start of work, for one's own safety and the safety of all those working at the job site.
- Avoiding potential hazardous situations during the activities planned for the workweek shall be addressed at weekly toolbox talks or more frequently if necessary. Any new safety procedures and safety updates shall be discussed at these talks; and a safety-conscious attitude shall be emphasized and reinforced.
- As each new phase of construction begins, as specified in Section 15, "Phase Hazard Analysis", a safety awareness meeting shall be held for all personnel and Subcontractors involved in that aspect of the work.
- Proper steps shall be taken to correct any and all offenders not practicing adequate safety procedures.
- Incorrect safety procedure shall be immediately indicated to the offender.
- The Safety Representative shall ensure that the offender has a clear understanding of the corrective action to take and the possible consequences if those measures are not followed.
- Severe or repetitive safety violations shall be cause for permanent removal from the job site.
- The Safety Representative shall possess on file any special training records and education documentation.

DRUG-FREE WORKPLACE POLICY STATEMENT

(COMPANY LETTERHEAD)

Drug-Free Workplace

Policy Statement
The unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace. A single violation of such prohibition shall result in the offending individual being removed from the job-site and recommendation of participation in an approved drug abuse assistance or rehabilitation program, and/or reporting to the civil authorities for criminal prosecution.

All employees shall abide by the rules of this program, and shall notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.
Program Elements
Ongoing drug-free awareness training program includes:

1. Mandatory participation by all employees.
2. Classroom and/or toolbox discussions shall include:
    - The dangers of drug abuse in the workplace.
    - Distribution and discussion of the Contractor's policy of maintaining a drug-free workplace.
    - Any available drug counseling, rehabilitation, and employee assistance programs.
    - The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace.
3. Intervention Procedures - employee and supervisor.
    - Identification - Signs and Symptoms
    - Corrective action
4. Personnel actions - program enforcement, disciplinary options, and employee assistance.
    - Legal or criminal actions.
    - Disciplinary actions up to and including termination.
    - Drug abuse or rehabilitation program.
5. Brookhaven National Laboratory's Contracting Officer shall be notified in writing within 10 days after receiving notice of an employee's conviction under a criminal drug statute for a violation occurring in the workplace. Notification shall include the position title of the employee and the appropriate personnel action to be taken within 30 days under the requirements of this program.

Company Owner/President/CEO

_____
Date: _____

DRUG-FREE WORKPLACE REQUIREMENTS – TOOL BOX TALK

Project Title: _____

Location: _____
Date: _____

Instructor:

(Insert Company Name) strictly prohibits the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance including alcohol. A single violation of such prohibition shall result in the offending individual being removed from the job-site and recommendation of participation in an approved drug abuse assistance or rehabilitation program, and/or reporting to the civil authorities for criminal prosecution.
Counseling, rehabilitation, and assistance are available through this company, for further information contact ***(Insert Company Employee Assistance Representative's Name)*** or talk to your supervisor.

All employees shall abide by the rules of this program and shall notify ***(Insert Company Name)*** in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

Personnel should be alert to abnormal behavior, and are required to report their observations to the appropriate supervisory personnel. Should the behavior create or have the potential to create a hazard to personnel, property or the environment, personnel have the right to stop work on that activity.

Substance and alcohol abuse shall not be tolerated in the workplace. It contributes to unsafe, unproductive work, and may result in adverse action against you personally by company and legal authorities.

List of attendees:

Section 5: HAZARD COMMUNICATION

(INSERT COMPANY NAME)

SAMPLE HAZARD COMMUNICATION PROGRAM

1. **Purpose**
   The purpose of this hazard communication program is to inform ***(Insert Company Name)*** employees and all sub-contractor employees of known chemical hazards that may exist in the workplace.

2. **Application**
   This program applies to chemicals known to be present in the workplace in such a manner that employees may be exposed under normal conditions, non-routine tasks, or foreseeable emergencies.

   This hazard communication program relies on Material Safety Data Sheets (MSDS) from suppliers for purposes of hazard determination.

3. **Program Summary**
   The major elements of this program are as follows:
   a) Labels and other forms of warning
   b) Material Safety Data Sheets (MSDS) from suppliers
   c) Employee information and training
   d) List of hazardous chemicals known to be present in the workplace
   e) Methods for informing employees of hazards of non-routine tasks
   f) Methods for informing contractor employers of hazards their employees may be exposed to while working for ***(Insert Company Name).***

4. **Labels and Other Forms of Warning**
   Each container of hazardous chemicals shall be labeled, tagged, or otherwise marked with:
   a) The identity of the hazardous chemicals (or chemicals), and,
   b) Appropriate hazard warnings

   Labels and other forms of warning shall be legible and in English, and shall be prominently displayed or readily available in the work area during each shift.

5. **Material Safety Data Sheet**
   A material safety data sheet (MSDS) shall be kept for each hazardous chemical known to be present in the workplace.

   Material safety data sheets are kept ***(in, at, location)*** and are readily accessible by employees during each work shift.

   The ***(insert job title)*** is responsible for maintaining the MSDS in a complete and up-to-date manner.

When work is shipped to customers, copies of MSDS for any known hazardous chemicals included as part of the products shipped shall be passed along to the customer.

6. **Training & Information**

1. All employees shall be trained according to a written hazard-communication training plan that is part of the company's overall hazard communication program.
2. Training shall extend to non-routine tasks, as necessary, and to foreseeable emergencies.
3. All employees shall be trained on any revisions to this program.

7. **Revisions**

This program shall be amended as changes in work operations, new materials or processes, or new information dictate.

(INSERT COMPANY NAME)

HAZARD COMMUNICATION TRAINING PROGRAM

1. Initial Assignment Information and Training

a) The ***(insert job title)*** shall train new employees in hazard communication and protection procedures as part of their general orientation before the new employees begin work.
b) The ***(insert job title)*** is responsible for training affected employees whenever new hazardous chemicals are introduced into the workplace. This responsibility extends to provide additional training, as required, for existing employees reassigned into new positions.
c) All current employees shall be trained in the elements of ***(Insert Company Name)*** hazard communication program by ***(insert contract start date)*.**

2. Curriculum

a) All employees shall be provided with the following information:
    1) Employees shall be informed that ***(insert company name)*** is required by law to have a chemical hazard communication program.
    2) Employees shall be informed of the details of ***(Insert Company Name)*** chemical hazard communication program including:
        - The location and ready availability of a list of all hazardous chemicals used by the company
        - A list of all hazardous chemicals known to be present in the work area is kept at ***(insert location)*** and is available for review by employees during each work shift
        - The location and ready availability of Material Safety Data Sheets (MSDS) for hazardous chemicals used within the company
        - Specific operations or tasks in the employees' work area that use hazardous chemicals
b) All employees shall receive training as follows:
    1) Employees shall be trained in methods and observations to detect the presence of hazardous chemicals.
    2) Employees shall be trained regarding the specific physical and health hazards of known hazardous chemicals in the employees' work area.
    3) Employees shall be trained in protective measures including the use of personal protective equipment and protective measures implemented by ***(Insert Company Name)***, including work procedures.
    4) Employees shall be trained in understanding, interpreting and using hazard information provided on labels and in MSDS.

3. Training Program Completion

All ***(insert company name)*** employees are required to successfully complete the ***(Insert Company Name)*** hazard-communications training program. Employees are required to follow safe and healthy work practices as a condition of employment.

4. Non-Routine Tasks:

Training for hazard protection during non-routine tasks is the responsibility of the ***(insert supervisor or other job title)*** and shall be provided as needed.

5. Foreseeable Emergencies:

Training for hazard protection during foreseeable emergencies (such as fires, floods, spills, etc.) shall be provided to all affected employees as part of their general safety training.

6. Sub-Contractor Employees

The employer of sub-contractors required to work on this project shall be informed of the hazard communication program. While the sub-contractor is responsible for their own employees' training, ***(Insert Company Name)*** shall attempt to answer sub-contractor employees' questions about workplace hazards.

The MSDS and list of hazardous materials shall be available to sub-contractor employees as well.

REFERENCES:

29 CFR 1910.1200 – Hazard Communications

HAZARD COMMUNICATION TRAINING SESSION
ACKNOWLEDGEMENT SHEET

LOCATION: _____
GIVEN BY: _____
JOBSITE: _____
DATE OF TRAINING SESSION: _____

- I know where Material Safety Data Sheets for my work are kept.
- I understand the safe work procedures and precautions to be taken when working with these products including use of protective equipment.
- I know where emergency supplies are kept.
- I know where the emergency phone number and Hazard Communication Information are posted.
- I am aware that I may review copies of the hazardous chemical list, the company's written program, and Material Safety Data Sheets.
- I will inform my supervisor upon discovery of any identified chemical hazards.

NAME	DATE

(SAMPLE FORM)

LIST OF HAZARDOUS CHEMICALS KNOWN TO BE PRESENT

NOTE: Material Safety Data Sheet (MSDS) is on file for each substance on this list. Details of specific physical and health hazards as well as protective measures can be found on the MSDS for individual chemicals.

Substance	Supplier/Source	Comments

Section 6: EMERGENCIES: FIRE, MEDICAL AND ENVIRONMENTAL

(COMPANY LETTERHEAD)

Hazard Control and Implementation Guidelines/Checklists:

The Safety Representative shall assume responsibility and ensure that the following guidelines/checklists are adhered to for the safeguard of all personnel and the environment**:**

A. FIRST AID AND MEDICAL ATTENTION:

- The Safety Representative shall maintain a First Aid Kit on site.

- For all injuries and illnesses, the Safety Representative shall immediately report them to Brookhaven National Laboratory's Medical Clinic or BNL Emergency Services personnel for treatment at extension 2222 or 911. If calling from a phone not part of the BNL system, e.g., cellular phone, (631)344-2222 must be dialed.

(Notification of the injury shall also be made to the Brookhaven Laboratory Plant Engineering Construction Inspector or Project Engineer.)

- The Safety Representative shall ensure that all project personnel is properly trained on site and facility-specific information.

- Only qualified BNL Emergency Services Division personnel shall provide emergency services and medical transportation.

B. FIRE PROTECTION AND PREVENTION:

- Fire extinguishers shall be provided at strategic locations around the job and free access to all fire hydrants of the job site shall be maintained.

- Fire protection equipment shall be provided during any construction activities that may pose a fire hazard, i.e. welding, flame cutting, etc., and there shall be one fire extinguisher for each operation.

- ***(Insert Company Name)*** shall provide Fire protection equipment (one fire extinguisher for each 1,500 sq. ft. of floor space).

- All necessary permits, i.e. welding, cutting, etc., shall be obtained and a fire watch program shall be in effect as needed.

- There shall be one fire watch with no other duties assigned per open flame operation.

- In the case of any fire Plant Engineering Construction Inspector or Project Engineer shall be notified.
- Within 72 hours of an emergency incident, the Safety Representative shall submit a written report to Brookhaven National Laboratory Plant Engineering Division and the report shall include the following information:
  - Type of fire
  - Cause of fire
  - Planned remedial action to prevent any future occurrences
  - Nature and outcome of any and all injuries not only personnel, but also to equipment and the project itself

C. ENVIRONMENTAL PROTECTION:

- The use of containment for spill intervention shall be implemented when applicable.

- There shall be proper storage and handling of hazardous materials (all MSDS sheets inclusive).

- There shall be proper documentation of operations, maintenance and repair of equipment.

- Leaking or loose fluid retention systems shall be intercepted via documented daily equipment inspection.

- Concrete or blacktop shall be used as surface for overnight storage of vehicles.

- ***(Insert Company Name)*** shall remove all unused chemicals.

In the case of a fire, medical emergency, spill response or any other arising emergency, the BNL Emergency Services Division shall be immediately contacted by dialing the following number(s):

- Dial 2222 or 911 from any BNL phone
- Dial (631)344-2222 from a phone not part of the BNL system (i.e. cellular phone or other outside lines)

Immediate notification shall be made to the BNL Plant Engineering Division in the event of a fire or any other emergency after notifying BNL Emergency Services Division at
Ext.2222 or if calling from a phone not part of the BNL system, (631) 344-2222.

Section 7: EXCAVATIONS

(COMPANY LETTERHEAD)

SAMPLE COMPETENT PERSON QUALIFICATION SUBMISSION FOR EXCAVATIONS

_____ is the designated competent person responsible for excavation safety on Job Title: _____ Bldg #: _____ Job #: _____

_____ is trained and knowledgeable in excavation hazards, hazards, OSHA excavation safety standards, and safe working requirements.

_____ is capable of identifying excavation hazards and has authority to take all precautions necessary to protect personnel, property and the environment from harm.

The competent person shall be responsible for:

- Implementing the project-specific excavation plan
- Making frequent daily inspections to verify proper implementation
- Taking all precautions necessary, up to and including work stoppage
- Advising BNL and workers on any approved changes to the excavation plan
- Briefing workers on project-specific excavation hazards
- Securing and clearly making the area during working and non-working hours
- Disciplining violators up to and including termination

_____ _____

Company Owner/President/CEO Date

EXCAVATION PLAN

- The proposed method to prevent undermining existing structures and to protect personnel from potential cave-ins is described below

- The soil for this project is type ***(specify type A, B, or C),*** and all cave-in protection shall conform to the applicable OSHA requirements.

- Methods intended for supporting existing utilities and maintaining surface appurtenances such as roadways, sidewalks, and other anticipated encumbrances is briefly described below.

- A contingency plan for notifying Plant Engineering upon suspicion or discovery of any contaminated soils, live munitions or other materials shall be implemented.

- For excavations 5 ft. or deeper or where there is a risk of cave-in, where sloping is to be used as cave-in protection, the slopes shall be no greater than one to one and one-half, rise to run, or approximately 34 degrees from the horizontal.

- Satisfactory lumber/timber shall be used, i.e. badly cracked/broken timber shall not be used for bracing or support of excavations.

- An adequate number of ladders shall be present in the excavation for access. OSHA requires no more than 25 feet of lateral travel between ladders.

- Excavated materials shall be placed away from excavation cut in order to decrease additional loading on the support system as well as decreasing potential for excavated material to slough off into the cut.

- Daily inspections shall be done by the superintendent/foreman to monitor the condition of the support system.

- A plan for proper de-watering and an excavation plan that fully describes the method used to protect workers from cave-in is included below

- Proper permits shall be filled out and approved before beginning work (i.e. digging, confined space entry permits, etc.)

- There shall be barricading against people and vehicles to eliminate the possibility of introducing any hazards

- A rigging plan for materials in and around the excavation is included below.

CAVE-IN PROTECTION EQUIPMENT

- Cave-in protection equipment shall be provided if 5ft or deeper. For excavations greater than 20 feet in depth, the protective systems shall be designed and approved by a registered professional engineer with a specialty in soil mechanics.

- Where shoring, shielding or systems other than sloping are proposed, there shall be a submittal of manufacturer's or engineer's data on the system to be used, the depths of the excavations where it shall be applied, and the system configurations to be utilized.

- Sub-type of soil as defined by the manufacturer's or engineer's specifications shall be determined; and there shall be a submittal of soil type determinations and the system configuration selections to Plant Engineering Division for approval prior to work being performed in the excavation/trench.

REFERENCES:

29 CFR 1926 Subpart P - Excavations

Section 8: CONCRETE AND MASONRY PENETRATIONS

(COMPANY LETTERHEAD)

PERMITS:

- All concrete and masonry penetrations shall be performed in accordance with Plant Engineering Procedure EP-ES&H-803 " Concrete and Masonry Penetrations", which requires that a completed permit be in place at the jobsite prior to penetrations being made.

- A Lockout/Tagout Program shall be submitted and approved if utilities must be shutdown to safely perform the work.

REFERENCES:

29 CFR 1926 Subpart Q – Concrete and Masonry

Section 9: ELECTRICAL SAFETY

(COMPANY LETTERHEAD)

ELECTRICAL SAFETY PROGRAM & SAFEGUARD CHECKLIST:

- Electrical dangers shall be observed and improper electrical conditions shall be notified to all project personnel.

- Use of the following equipment is prohibited for the safety of all involved personnel:

    - Metal ladders
    - Frayed extension cords

- All personnel shall be protected from such electrical hazards:
    - Exposed live electrical parts
    - Ungrounded electrical equipment (double insulated tools is acceptable)
    - Unprotected electrical cords
    - Non-GFCI protected equipment

- Daily tests and inspections on the following equipment shall be made to ensure it is safe, free from defects, and functioning properly:
    - Lighting and illumination equipment
    - Power and Electrical Equipment
    - GFCI's
    - Portable electric tools and cords
    - Extension cords

- Safety Representatives shall ensure that all project personnel is instructed to inspect power tools prior to each use to ensure tools are in proper operating condition.

- Immediately remove all equipment found to be defective for repair or replacement.

- A Control Zone shall be utilized to protect personnel who may accidentally encounter exposed energized components in a facility because of a lack of knowledge or awareness of the hazards.

- Personnel who may accidentally come in contact with energized circuits while working within a Control Zone shall be protected by the following:
    - Training in accordance with Departmental procedure,
    - Lockout and Tagout,
    - A barricade, and
    - Personal Protective Equipment appropriate for the task

- Equipment failure shall be prevented by proper maintenance and inspection of all electrical equipment and other equipment/tools coming into contact with electric equipment/sources.

RERFERENCES:

29 CFR 1926 Subpart K – Electrical Safety
29 CFR 1910 Subpart S – Electrical Safety
NFPA 70E – Standard for Electrical Safety in the Workplace

SAMPLE LOCK-OUT/TAG-OUT PROGRAM

LOCK-OUT/TAG-OUT PROGRAM

POLICY:
The use of the Lock-Out/Tag-Out Program is to prevent an unexpected operation or release of energy of electrical or electronic equipment. The unexpected starting of motors may injure persons working on them, or unexpected energizing of equipment can produce an electrical shock and/or damage to the equipment. The Lock-Out/Tag-Out Program combines the use of tags and locks, or other electrical or physical systems to lock out power to the equipment while it's broken, or being worked on.

Locking and tagging key points are proven methods of controlling the release of energy or hazardous materials, and an important way of safeguarding workers who operate or repair machines or processes in the plant. This document defines lock-out/tag-out, list specific procedures to follow to properly lock-out/tag-out, define responsibility for lock-out/tag-out, and show the importance of both education and discipline in these procedures.

INTRODUCTION:
The majority of accidents happen around machinery of some type. Often, the accident involves electrical shock, burns or exposure to hazardous materials or moving machinery. These accidents share one thing in common: the uncontrolled release of energy.

To protect yourself and your co-workers from danger in the workplace, you must understand that energy, left uncontrolled, can be very dangerous. Energy, simply defined, is the capacity for doing work. Kinetic (moving) energy is the force caused by the motion of an object, such as spinning flywheel. Potential (stored) energy is the unseen force inside an object when not moving, such as a spring under tension. There are many sources of energy, which can provide power to machinery. Section 15, Phase Hazard Analysis identifies specific hazardous energy sources.. These may include:

- Gravity
- Electrical
- Mechanical
- Chemical
- Hydraulic
- Pneumatic
- Thermal
- Nuclear

A LOCK-OUT is simply a locking device, such as a padlock, placed on a power source to prevent the release of hazardous energy that could set a machine in motion or otherwise endanger an employee working on the machine. Locks may be used with a lock-out device that holds an energy control point, such as a switch, lever or valve, in the off position, making it impossible to operate.

A TAG-OUT is a written warning telling all others not to operate a switch or valve that could release hazardous energy or set a machine in motion. The tag-out is placed prominently on the switch or lever so as not to be missed.

RESPONSIBILITY:
Locking and tagging key points are proven methods of controlling the release of energy or hazardous materials, and an important way of safeguarding workers who operate or repair equipment, or machines, and processes in the plant. This document lists specific procedures to follow to properly lock-out/tag-out, and show the importance of both education and discipline to these procedures.

It is be the responsibility of the ***(insert name of responsible individual)*** to enforce the lock-out/tag-out procedure as well as provide the necessary equipment to comply in all respects with the procedure. Transferred employees shall be instructed by their supervisor in the purpose and use of lock-out/tag-out procedure. Supervisors shall be responsible for enforcing the specific lock-out/tag-out procedures listed below.

1. Production and support departments shall be responsible for being knowledgeable of and adhering to this procedure. No locks shall be removed from equipment without first consulting the Maintenance Department.

2. A lock-out/tag-out continued from one shift to the next shall be the responsibility of the craftsmen involved to remove the appropriate lock and replace it with a new one.

3. If more than one individual is required to lock-out or tag-out equipment, each shall place their own lock or tag on the affected equipment in such a way as to be certain the equipment is locked out. If the affected equipment cannot accept multiple locks or tags, a multiple lock-out or tag-out hasp shall be used.

EQUIPMENT:
Equipment shall consist of the following:

1. Padlocks. Sufficient quantities of padlocks, each lock to have an individual key, and one master key controlled by maintenance supervision.

2. Multiple lock tongues. To be used in case more than one department is involved in a job.

3. Danger/Warning tags. To be used wherever it is necessary to warn maintenance employees, and operators of a repair.

4. Equipment shall be distributed and controlled by ***(insert name of responsible individual)***.

WHEN TO LOCK-OUT-TAG-OUT:
Most equipment is designed with safe switches, disabling the equipment for minor repair or calibration during normal operation. In general, these switches provide adequate protection for minor repair which is routine, repetitive, and necessary to the normal use of the equipment. Lock-out/tag-out procedures shall be used for the following situations:

1. Major repairs or overhaul.

2. When working alone, out of visual contact of the controlling switch.

3. Anytime there is danger of injury from an unexpected release of energy.

4. Any situation that threatens an employee's safety.

LOCK-OUT/TAG-OUT PROCEDURES:
The following are specific procedures to be followed for lock-out/tag-out:

1. Notify all affected areas and employees of the impending lockout situation, the reason for it and estimated start and duration times.

2. Equipment shutdown and isolation. Place all switches in the "off" or "safe" position. Disconnect sources of power, ensuring all sources of both primary and secondary power to the equipment are interrupted.

3. Dissipate residual energy. Shutting down equipment does not mean there is no energy left in it. Check for trapped pressure or residual electricity in the system.

4. Lock-out or tag-out all in-line points of control. In most cases, this may be more than one place, or more than one lock, if several people are working on the equipment.

5. Lock-out verification. Take nothing for granted. Verify that the locked-out switch or control cannot be overridden. Test the equipment to be certain that the locked-out switch is de-energized & not simply malfunctioning. Press all start buttons or valves to see if the equipment starts. Ensure the system you are working on is the same one that has been locked out.

6. Perform the work scheduled. Try to foresee all possible hazards. Ensure the new/repair work does not bypass the lockout and reactivate the system.

7. Lock and/or tag removal. All locks and tags are to be left in place until work is completely finished. This is especially true when more than one employee is working on the equipment. A lock is never to be removed except by the person who placed it there.

NOTE: Only immediate supervisors are to authorize emergency removal of a lock or tag. The individual who applied the tag must be notified that the tag is being removed.

8. Equipment start up. Make a final safety check before restarting equipment, to be certain it is safe to operate. Make sure of the following:

    a. All tools and other items have been removed.
    b. All machine guards are returned to their proper position.
    c. All electric, hydraulic, pneumatic or other systems are properly reconnected.
    d. All employees are clear of equipment.

Many of the lock-out/tag-out procedures appear to be common sense, and they are. Following them will ensure safe operation calibration, maintenance and repair of equipment and/ or processes, without dangerous surprises or injury.

WORKING ON OR NEAR ENERGIZED CIRCUITS

- It is the policy of ***(insert company name)*** that, except under extreme circumstances, work shall not be done on energized circuits.
- Justification must be made to the BNL Project Engineer, the BNL Construction Inspector and the BNL Construction Safety Engineer of the need to work on energized circuits.
- Work with voltages less than 50 volts (in BNL Range "A") is not considered working on or near energized conductors. Energized parts that operate at less than 50 V to ground are not required to be de-energized if there must be no increased exposure to electrical burns or to explosion due to electric arcs. BNL will issue energized work permits.
- Energized work permits shall address, as a minimum, the following elements:
  1) A description of the circuit and equipment to be worked on and their location;
  2) Justification for why the work must be performed in an energized condition;
  3) A description of the safe work practices to be employed;
  4) Results of the shock hazard analysis;
  5) Determination of shock protection boundaries;
  6) Results of the flash hazard analysis;
  7) The Flash Protection Boundary;
  8) The necessary personal protective equipment to safely perform the assigned task;
  9) Means employed to restrict access of unqualified persons from the work area;
  10) Evidence of completion of a job briefing, including a discussion of any job-specific hazards (Include in Phase Hazard Analysis – Section 15);
  11) Energized work approval signature as indicated above
- For all energized work, regardless of the voltages, the appropriate personal protective equipment must be worn.
- Work performed on or near energized circuits performed by qualified persons related to testing, troubleshooting, voltage measuring, etc., is permitted without an energized work permit, provided appropriate safe work practices and personal protective equipment in accordance with NFPA 70-E is used.

EDUCATION AND DISCIPLINE:

The key to worker safety is education. The purpose of this document is to ensure that everyone understands the importance of lock-out/tag-out and how to recognize when it is in use. These elements shall be covered during initial contractor/vendor orientation and during the pre-job and periodic “tool-box” talks. By educating all employees to the importance of following proper safety procedures, a safer working environment can be ensured.

As with all safety procedures, a fair uniform enforcement of discipline must be in place. Employees are responsible for their own safety, the safety of their fellow employees and the safety of the facility. Violating lock-out/tag-out procedures is a major safety violation and will subject the employee to immediate discipline.

REFERENCES:

29 CFR 1910.147	The Control of Hazardous Energy (Lockout/Tagout)
29 CFR 1926.417	Lock-out and Tagging of Circuits
NFPA 70E	Standard for Electrical Safety in the Workplace

PERIODIC INSPECTION CHECKLIST

DATE OF INSPECTION ___/___/___ TIME OF INSPECTION _____

NAME OF INSPECTOR _____

NAME OF EMPLOYEE BEING INSPECTED _____

DATE OF ORIGINAL TRAINING ___/___/___

DEPARTMENT WHERE WORKING _____

MACHINE OR EQUIPMENT _____

DEVIATIONS OR INADEQUACIES OBSERVED DURING THE INSPECTION:

_____
_____
_____

REVIEW CONDUCTED OF EMPLOYEE'S RESPONSIBILITIES? Yes___ No___

INITIAL TRAINING TO BE REPEATED? Yes___ No___

THE SIGNATURES BELOW CERTIFY THAT A PERIODIC INSPECTION HAS BEEN PERFORMED, AND COMPLETED.

INSPECTOR_____ EMPLOYEE_____

SAFETY MASTERCARD

Name of Equipment: _____Operator: _____
Job Requested by: _____Department: _____
Ready for Service Check-Off:_____

Job Description: _____
_____
_____

Reason for Job:_____
_____

Operations: _____
_____

Operations Lock No	Location of Lock/Tag w/Hasp	Lock-out or Tag-out	Test Isolation	Job Complete Signoff

Serviceperson: _____

Section 10: MOBILE EQUIPMENT PROGRAM

(COMPANY LETTERHEAD)

SAFE OPERATION AND MAINTENACE:

Prior to the use of motor vehicles or mobile equipment, this plan shall be discussed with all employees, including subcontractor employees, concerning the scope of work to be accomplished, and the methods to accomplish that work safely.

The supervisor, foreman, or safety representative shall verify that all vehicles and mobile equipment have been inspected and maintained at the beginning of each shift to assure all parts, equipment and accessories affecting safe operation are in proper operating condition and free from defects. Inspection and maintenance shall include:

- Operator License, Certification, or other Qualifications
- Backup alarms
- Rollover Protective Structures (ROPS)
- Lighting
- Cab Glass
- Fluid Levels
- Leak/Spill Containment and Cleanup Equipment, Procedures and Training
- Traffic Safety Requirements
  - Spotters
  - Cones
  - Flag Personnel
  - Traffic Warning and Information Signs
  - Emergency Signals
  - Work Plan
  - Traffic Diversion Plan
  - Approvals from Local Authorities and Agencies

All defects shall be corrected before placing vehicle in service.

Employees shall not operate vehicles or mobile equipment with an obstructed view to the rear without a reverse signal alarm distinguishable from the surrounding noise level unless an observer signals that it is safe to do so.

THE OPERATOR SHALL IMMEDIATLEY STOP THE VEHICLE OR MOBILE EQUIPMENT IF HE/SHE LOSES SIGHT OF THE OBSERVER

All vehicles and equipment shall be maintained in a leak free condition. Fittings and hoses shall be frequently inspected for tightness, proper seal, deterioration, or loss of leak-tight integrity.

All personnel shall know the emergency stop signal and shall use it in the event of, or potential for, imminent danger or violation of a radiological requirement. Where feasible, ground personnel, spotters, supervisors, and safety representatives shall carry air horns as an established emergency stop signal for all equipment.

Every attempt shall be made to establish and maintain equipment operations a safe distance away from ground personnel or other equipment that may be adversely impacted by the operation of mobile equipment. Safe work zones shall be established to prohibit personnel from being within the range of motion of equipment, material being manipulated or carried by equipment, or material or structures that could potentially become entangled or disturbed by equipment. In any area, personnel shall not approach equipment from within the range of motion defined above without the operator's knowledge and consent.

If required to work within the range of motion of equipment or materials, personnel shall attend daily toolbox discussions with operators to define the day's plan for accomplishing the work, and individual responsibilities and work locations. Methods for maintaining communication via visual contact, hand signals, and the use of air horns shall be established for and understood by all affected personnel. Personnel working within the range of motion of equipment or materials shall maintain communication with equipment operators at all times as discussed at the daily toolbox meeting. All personnel working near mobile equipment shall wear high visibility clothing.

Machinery, equipment, or parts thereof, which are suspended or held aloft, shall be substantially blocked to prevent falling or shifting while personnel are working on, around, or between them. Vehicles and equipment shall be maintained and repaired at our company shop, never on the customer's property.

REFERENCES:

29 CFR 1926 Subpart O – Motor Vehicles, Mechanized Equipment, and Marine Operations

RIGGING PLAN WORKSHEET

(INSERT NAME OF CONTRACTOR)

Building #: _____ Job #: _____ Project Title: _____
Location: _____

Note: All lifting operations shall be conducted in accordance with applicable ANSI standards and OSHA requirements.

Equipment List						
Equipment List	**Type**	**Qty.**	**Dimensions**	**Capacity**	**Configuration**	**Load**
Slings						
Shackles						
Roller/Skates						
Jacks						
Cribbing/Shoring						
Hoist						
Lifting Vehicles						
PPE/HAZMAT						
Transport Vehicles						

C. RIGGING PLAN

The following must be considered when developing a rigging plan:

Weight of Lift
Center of Gravity
Tag lines and locations of attendants
Prelift Meeting- Documented, attendees, content
Designated Signal Person
Designated Person In Charge (PIC)
Communication and Signals- Hand signals, emergency signals, voice communications.

Remarks:

Descriptive Drawing/sketch of Pre & Post lift locations and encumbrances/clearances, impact on utilities **(contact Plant Engineering Division)** and capacities and protective measures where required are attached

Describe Method of Accomplishment -a written description of the operations is attached. All lifting operations shall be conducted in accordance with ANSI and OSHA requirements.

REFERENCES:

2 CFR 1926 Subpart H – Material Handling, Storage, Use and Disposal

SITE-CLEARING PLAN WORKSHEET

(INSERT NAME OF CONTRACTOR)

Building #: _____ Job #: _____ Project Title: _____
Location: _____

Note: All tree felling, cutting, handling, and chipping operations shall be conducted in accordance with applicable ANSI standards and OSHA requirements.

Equipment List						
Equipment List	**Type**	**Qty.**	**Operator(s)**	**Capacity**	**Configuration**	**Load**
Saws						
Loaders						
Skidders						
Chippers						
Trucks						
Transport Vehicles						
Slings/Cables						
Other						

The following must be considered when developing a site-clearing plan:

Person In Charge (PIC)
- Name
- phone/pager #'s
- qualifications/experience, include any safety training received.

Daily Pre-clearing site evaluation
- Existing encumbrances, appurtenances, or other obstacles.
- Changes in site conditions or other trade activities.

Coordination with other trades
- Site access control, area marked, fenced, or otherwise identified.

Communication and Signals
- Hand signals
- emergency signal
- voice communication.

Training- Initial, ongoing, weekly toolbox talks, daily operations plan.

Equipment inspection and maintenance
Inspect equipment daily or before each use for:
- safety guards and features in good condition and working order; i.e. kickback protection ROPS/FOPS, PPE, alarms, cab glass, etc..

Daily Pre-clearing site evaluation- Existing encumbrances, appurtenances, or other obstacles. Changes in site conditions or other trade activities.

Coordination with other trades- Site access control, area marked, fenced, or otherwise identified.

Communication and Signals- Hand signals (see chart), emergency signal, voice communication.

Training- Initial, ongoing, weekly toolbox talks, daily operations plan.

Equipment inspection and maintenance- Inspect equipment daily or before each use for safety guards and features in good condition and working order; i.e. kickback protection, ROPS/FOPS, PPE, alarms, cab glass, etc..

Remarks:

Descriptive Drawing- Sketch of site to be cleared showing beginning and ending locations or areas of concentration, direction of work to progress, locations of clearing operations (generic if no unusual circumstances expected, or specific for areas requiring operational changes to accommodate existing or future obstacles or site conditions), safe working distances or radii, material handling/trucking routes(generic and specific), material staging and processing areas, telephone, sanitation supplies, lunch/break areas.

Describe Method of Accomplishment- A written description of the operations, the personnel performing them and their sequence, i.e. Felling, limbing, bucking, skidding, chipping, loading,

cabling, etc. is attached. All clearing operations must be conducted in accordance with ANSI and OSHA requirements.

Section 11: FALL PROTECTION

(COMPANY LETTERHEAD)

General:

- Each employee (regardless of their craft) on a working/walking surface 6 feet or more above a lower level shall be protected from falling by a guardrail system, a safety net system, or personal fall arrest system. Where a guardrail system is employed, and a controlled access zone has been established for leading edge work, the control line may be used in lieu of a guardrail system along the edge that parallels the edge.

- Guardrails shall be constructed at all floors or roof openings if these openings cannot be covered well and rails shall be constructed at all elevator shafts or stairwells.

Observe any possibilities of elevated falls.

Ladders:

- There shall be careful observation of and advising to all personnel on proper use of ladders, slope of ladders, height above elevation levels, conditions of ladders.

- Ladders shall be properly inspected to make sure that the following conditions are not encountered:
  - Broken rungs or missing steps
  - Improperly secured and erection of ladder
  - Improper ladders used (i.e. using metal ladders for electrical work)
  - Poorly constructed man-made ladders

- Use of ladders with broken/missing rungs or steps, broken/split siderails, or other faulty or defective construction are prohibited. If ladders are defective in any way they shall be discarded and removed from the site.

- Ladders shall be tied off to prevent displacement.

- Ladders shall extend 36” above the landing area.

- For man-made (not commercially purchased) ladders, the following criteria shall be included in their construction, as specified by OSHA:
  - Width of single cleat ladders shall be between 15 and 20 inches.
  - Cleats shall be uniformly spaced, 12 inches, top to top. Filler blocks must be used between the cleats.
  - Two inch by four-inch lumber, minimum, shall be used for siderails up to 16 feet long.

Scaffolds:

- Personnel shall be properly advised on the use of scaffolds, guardrails, and toe-boards guarding tubular welded frame scaffolds.
- Scaffolds shall be properly erected and guarded; and they shall be fully planked, equipped with guardrails, and set on sound rigid footing.
- All scaffolds used on this job shall be designed by **(Insert Name of Qualified Person)** and constructed and loaded in accordance with that design.
- Each employee who works on the scaffold shall be trained by **(Insert Name of Qualified Person)** in the subject matter to recognize the hazards associated with the type of scaffold in use and to understand the procedures to control or minimize those hazards.
- ***(Insert Name of Company)*** shall have each employee who is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold trained by ***(Insert Name of Competent Person)*** to recognize any hazards associated with that work.
- For this project, the type of scaffold to be use is ***(Insert type of scaffold)*** and conforms to the requirements of ***(Insert appropriate 29 CFR 1926 Subpart L Section)***

References:

29 CFR 1926 Subpart L	Scaffolds
29 CFR 1926 Subpart M	Fall Protection
29 CFR 1926 Subpart X	Stairways and Ladders

SCAFFOLD TRAINING SESSION ACKNOWLEDGEMENT SHEET

LOCATION: _____
GIVEN BY: _____
JOBSITE: _____
DATE OF TRAINING SESSION: _____

- I understand the nature of electrical hazards, fall hazards, and falling object hazards in the work area.
- I understand the correct procedures for dealing electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used.
- I understand the proper use the scaffold and the proper handling of material on the scaffold.
- I am aware of the maximum intended load and the load carrying capabilities of the scaffold.

NAME	DATE

Section 12: WELDING/CUTTING - OPEN FLAME OPERATIONS

(COMPANY LETTERHEAD)

CUTTING/WELDING PERMIT:

- Proper cutting/welding permits shall be obtained from the Fire/Rescue Group (Building 599)
-
- Requirements of the BNL ES&H Cutting and Welding Standard 4.3.0 shall be observed

- Notification shall be made to the Fire/Rescue Group and a permit obtained 48 hours prior to work commencing.

- A dedicated fire watch and fire extinguisher for the cutting/welding operation shall be available

REFERENCES:

29 CFR 1926 Subpart J – Welding and Cutting

Section 13: CONFINED SPACES

(COMPANY LETTERHEAD)

Confined Space Entry:

- Entry into confined spaces shall be in accordance with Brookhaven National Laboratory Subject Area – Confined Spaces
- BNL Plant Engineering Division, if required, shall provide all permits.
- BNL Fire/Rescue Group, or an alternate rescue company, shall provide emergency response and shall be available whenever there is an entry into a permitted confined space.

Section 14: RESPIRATORY PROTECTION

(COMPANY LETTERHEAD)

- Respirators, applicable and suitable for the purpose intended, shall be provided by (Insert Name of Company) when such equipment is necessary to protect the health of the employee.
- (Insert Name of Company) is responsible for establishing and maintaining a respiratory protection program in accordance with OSHA regulations.

REFERENCES:

29 CFR 1910.134 – Respiratory Protection

Section 15 PHASE HAZARD ANALYSIS

The Phase Hazard Analysis (PHA) is intended to identify each phase of the project, the specific hazards associated with each of those phases, and to **detail** the mitigation and prevention measures to be taken to prevent injuries, property damage, and environmental insults. For example, if the project requires working from elevations, a detailed description of the fall protection measures (including the type of equipment used) which will be taken. If respiratory protection is required, the type of respirator must be listed. It is not sufficient to say, "Comply with OSHA regulations".

Where special or heavy equipment will be used, the contractor must specify the type of equipment to be used, e.g., front-end loader, man lift, concrete finishing equipment, etc. The contractor must research available information for each specialized piece of equipment, including operating manuals, manufacturer's web sites, etc., and address those hazards identified by the manufacturer of the equipment. If available prior to the start of the project the contractor must supply to the BNL Construction Safety Engineer that portion of the equipment-operating manual or other reference material, which discusses the safety precautions of that piece of equipment.

Attached is an example of typical list of project phases. It is intended that the contractor develop his own list for the specific project.

Section 15: PHASE-HAZARD ANALYSIS

(COMPANY LETTERHEAD)

For each phase of the work (as appropriate) indicate the hazards that shall be encountered and the prevention and mitigation controls which shall be in place.

Work Phase	Hazard	Prevention/Control
Mobilization/Staging		
Site Clearing		
Site Grubbing		
Dust Control		
Excavation		
Backfilling		
Compacting		
Grading		
Road Bed Stone Placement		

Asphalt Placement		
Foundation Demolition		
Excavation		
Concrete/Masonry		
Electrical		
Utilities		
Flooring		
HVAC		
Masonry/Exterior Work		
Interior Finish Work		
Road Work		
Roofing		
Structural Steel		