

PPD Work Plan / Hazard Analysis

JOB NAME: Deep Rod Monument installation.

LOCATION: Site.

ESTIMATED START DATE: 1 April, 2003.

ESTIMATED JOB DURATION OR END DATE: 30 May, 2003

DESCRIPTION OF WORK: Install Deep Rod Monuments at selected locations across the Fermilab site.

SETTING PROCEDURES:

1. Using a power auger or post hole digger, drill or dig a hole in the ground 12 - 14 inches in diameter and 3-1/2 feet deep.
2. Drive the sectionalized rod until a driving rate of 60 seconds per foot is achieved. The top of the rod should terminate about 3 inches below ground surface.
3. Insert the grease filled 3-foot section of 1-inch PVC pipe sleeve over the rod. The rod and datum point should protrude through the sleeve about 3 inches.
4. Backfill and pack with fine-grained washed or play sand around the sleeve to about 20 inches below surface. Place the 6-inch PVC and logo cap over and around the 1-inch sleeve and rod. The datum point should be about 3 inches below the cover of the logo cap.
5. Place concrete around the outside of the 6-inch PVC and logo cap, up to the top of logo cover. Trowel the concrete until a smooth neat finish is produced.
6. Continue to backfill and pack with sand inside the 6-inch PVC and around the outside of the 1-inch sleeve and rod to about 1 inch below the top of the sleeve.
7. Remove all debris and excess dirt to leave area in original condition. Make sure all excess grease is removed and the datum point is clean.

ASSOCIATED HAZARDS

1. Hazards in "first time use" of new equipment.
2. Moving mechanical hazards, noise levels above the TWA, potential chemical contact while mixing cement, flying debris, head bump hazard while working around equipment, potential for heavy equipment or materials to be dropped on feet.
3. Potential for striking an underground utility while digging.
4. Potential that the installation of the deep rod monuments may adversely impact the environment.

PLANNED MITIGATION OF HAZARDS:

(match mitigation # to hazard # above)

1. All employees involved in the operation of the equipment must read the operator's manuals for the Ingersoll-Rand Compressor and the ScatTrak operator's manual thoroughly. All employees using the mechanical equipment will be properly trained by experienced operators in FESSAll training will be documented.
2. All employees involved in the operation will wear safety glasses with side shields, rubber gloves when mixing concrete, hard hats, steel toe boots and hearing protection (muffs or plugs according to Roads and Grounds) when operating the mechanical equipment.
3. An Excavation Permit must be in hand before digging or pounding in any area. Contact person is Carl Holmgren, FESS, at extension 3174. Rope off exposed hole. Does this address the temporary pins you need to use?
4. Reviewed the installation procedure and location with the head of the Environmental Group in the ES&H Section. It was determined that NEPA approval was not necessary. Was this actually done? I know Paul Kesich was going to see you and review the map. We just want to be sure that we document the fact that the potential for environmental impact was reviewed.

TASK SUPERVISOR: John Greenwood

PHONE: 6296

WORK PARTY (NAMES, TITLES IN THIS TASK):

1. Craig Bradford – Crew Chief
2. Randy Wyatt

PREPARED BY: Terry Sager

DATE: 4 April, 2003

APPROVED BY:

DATE:

DETAILS ON NOTIFICATION / APPROVAL BY OTHER DIVISIONS

