

STATE OF OHIO (DAS)
CLASSIFICATION
SPECIFICATION

CLASSIFICATION SERIES:

Soils & Foundation

SERIES NO.:

5326

MAJOR AGENCIES:

Ohio Department of Transportation only

EFFECTIVE DATE

SERIES PURPOSE

The purpose of the soils & foundation occupation is to operate earth drilling equipment.

At the full performance level, incumbents operate earth drilling equipment.

At the supervisory level, incumbents supervise soils & foundation technicians.

At the managerial level, incumbents supervise soils & foundation supervisors.

This classification series is for use in the Ohio Department of Transportation only.

CLASS TITLE

Soils & Foundation Technician

CLASS NUMBER:

53261

EFFECTIVE DATE

01/23/1994

CLASS CONCEPT:

The full performance level class works under general supervision & requires working knowledge of earth drilling methods in order to operate earth drilling equipment (e.g., truck mounted auger, hollow stem auger, drill rod equipment, high speed wire-line core drill, front end loader, drag line crane, backhoe &/or earthmover).

CLASS TITLE

Soils & Foundation Supervisor

CLASS NUMBER:

53265

EFFECTIVE DATE

01/23/1994

CLASS CONCEPT:

The supervisory level class works under general direction & requires considerable knowledge of earth drilling methods in order to supervise soils & foundation technicians & operate earth drilling equipment & bulldozers.

CLASS TITLE

Soils & Foundation Manager

CLASS NUMBER:

53266

EFFECTIVE DATE

01/23/1994

CLASS CONCEPT:

The managerial level class works under general direction & requires considerable knowledge of earth drilling methods in order to supervise soils foundation supervisors.

| | | |
|---|-------------------------------|-------------------------------|
| CLASS TITLE Soils & Foundation Technician | CLASS NUMBER: 53261 | BARGAINING UNIT: 06 |
|---|-------------------------------|-------------------------------|

EFFECTIVE DATE

01/23/1994

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Operates earth drilling equipment (e.g., truck mounted auger, hollow stem auger, drive rod equipment, high speed wire-line core drill, front end loader, drag-line crane, backhoe &/or earth mover) in order to gather statewide soil & water samples.

Collects & evaluates samples noting specific characteristics to include color consistency &/or contents; classifies core samples based upon evaluations; calculates N-value; performs blow-count test; determines ground water level by taking measurements, calculating level & testing hypothesis by drilling to calculated level.

Performs slope inclinometer installation & tests to measure slope of ground; prepares peat & soil samples; conducts PH tests & soil analysis.

Maintains soils & foundation equipment (e.g., auger truck, core truck); cleans equipment & containers; recommends repairs & troubleshoots problems; performs safety checks on equipment to ensure proper functioning of drills.

MAJOR WORKER CHARACTERISTICS:

Knowledge of earth drilling safety practices. Skill in maintenance of drilling equipment*; operation of earth drilling equipment (e.g., truck mounted auger, hollow stem auger, drag-line crane). Ability to understand system of mechanical procedures; demonstrate strength to lift 75-100 lb. augers, 75-100 lb. rods & 25 lb. wrenches; carry out detailed but basic written or oral instructions.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

6 mos. trg. or 6 mos. exp. in operation of heavy earth drilling equipment (e.g., truck mounted earth auger, hollow stem auger, drive rod equipment, high speed wire-line core drill, front end loader, drag line crane, backhoe or earth mover) & related safety practices; valid Class "A" commercial driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Works with heavy equipment on a continual basis; loss of fingers & severe back sprains not uncommon; exposed to dust, fumes, mud & all extremes of weather.

| | | |
|---|-------------------------------|-------------------------------|
| CLASS TITLE Soils & Foundation Supervisor | CLASS NUMBER: 53265 | BARGAINING UNIT: EX |
|---|-------------------------------|-------------------------------|

EFFECTIVE DATE

01/23/1994

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Supervises soils & foundation technicians assigned to foundation field crews in gathering soil & water samples, ensures that field crew uses proper safety procedures, reviews sample evaluation documents to check results & identify areas where more samples are needed & checks storage of samples to ensure proper transporting methods are used.

Operates & maintains earth drilling equipment (e.g., truck mounted auger, hollow stem auger, drive rod equipment, high speed wire-line core drill, front end loader, drag-line crane, backhoe &/or earth mover); request repairs of equipment & orders supplies; reviews safety procedures with field crew.

MAJOR WORKER CHARACTERISTICS:

Knowledge of earth drilling safety practices; employee training & development; supervisory principles & techniques*; construction technology*; geology*; geometry*. Skill in maintenance of earth drilling equipment*; operation of earth drilling equipment (e.g., truck mounted auger, hollow stem auger, drag-line crane); reading survey & construction plan blueprints*. Ability to understand system of mechanical procedures; demonstrate strength to lift 75-100 lb. augers, 75-100 lb. rods & 25 lb. wrenches; establish friendly atmosphere as supervisor of work unit.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

18 mos. trg. or 18 mos. exp. in operation of heavy earth drilling equipment (e.g., truck mounted earth auger, hollow stem core auger, drive rod equipment, high-speed wire-line core drill, front end loader, drag line crane, backhoe or earth mover) & related safety practices; 12 mos. trg. or 12 mos. exp. in employee training & development; 6 mos. trg. or 6 mos. exp. in reading survey & construction plans & in cataloging core samples; valid class "A" commercial driver's license.

-Or 12 mos. exp. as Soils & Foundation Technician, 53261.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Works with heavy equipment on a continual basis; loss of fingers &/or severe back sprains not uncommon; exposed to dust, fumes, mud & all extremes of weather.

| | | |
|--|-------------------------------|-------------------------------|
| CLASS TITLE Soils & Foundation Manager | CLASS NUMBER: 53266 | BARGAINING UNIT: EX |
|--|-------------------------------|-------------------------------|

EFFECTIVE DATE:

01/23/1994

JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)

Supervises soils & foundation supervisors over field crews, prioritizes drilling/sampling projects for overall efficiency & to meet statutory deadlines & conducts field reviews of project sites.

Coordinates with utilities & property owners to gain access to project sites & ensures that safety is maintained; reviews plans concerning projects to determine the most efficient means in which to drill soil borings & gather samples; acts as test lab liaison with bridge & planning/design bureaus on matters involving drilling of soil borings & gathering of soil samples; makes recommendations to bureau chief on budgetary needs for soils & foundation section; ensures that all staff have proper training, certification & licensure to operate earth drilling equipment.

Operates & maintains earth drilling equipment (e.g., truck mounted auger, hollow stem auger, drive rod equipment, front end loader, drag-line crane, backhoe, earth mover & bulldozer).

MAJOR WORKER CHARACTERISTICS:

Knowledge of management*; supervisory principles & techniques; employee training & development; earth drilling safety practices; construction technology; geology; geometry. Skill in operation of earth drilling equipment (e.g., truck mounted auger, hollow stem auger, hollow stem auger, drive rod equipment, high speed wire-line core drill, front end loader, drag-line crane, backhoe or earthmover); maintenance of earth drilling equipment; reading survey & construction plan blueprints. Ability to define problems, gather data, establish facts & draw valid conclusions; understand system of mechanical procedures; establish friendly atmosphere as manager of work units; use geometry; proofread blueprints & construction plans.

(*)Developed after employment.

MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

24 mos. trg. or 24 mos. exp. in operation of earth drilling equipment (e.g., truck mounted earth auger, hollow stem core auger, drive rod equipment, high-speed wire-line core drill, front end loader, drag line crane, backhoe, earth mover); 12 mos. trg. or 12 mos. exp. in supervisory principles & techniques; 12 mos. trg. or 12 mos. exp. in employee training & development; 6 mos. trg. or 6 mos. exp. in reading survey & construction plans & blueprints; 1 course or 3 mos. exp. in geometry; valid class "A" commercial driver's license.

-Or 12 mos. exp. as Soils & Foundation Supervisor, 53265.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:

Not applicable.

UNUSUAL WORKING CONDITIONS:

Works with heavy equipment; loss of fingers &/or severe back sprains not uncommon; exposed to dust, fumes, mud & all extremes of weather.