

***The On-The-Job Training  
Program Guidelines***



***The Delaware Department of Transportation***

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## **Introduction and Background**

The Federal Aid Highway Act of 1968 was passed by the 91<sup>st</sup> Congress. It included a special section devoted to promoting and insuring Equal Employment Opportunity (hereinafter referred to as EEO) in the field of Federal-Aid highway construction. The Act outlined how the incorporation of equal opportunity legislation and regulations would be accomplished and reiterated that inclusion of these provisions reflected the congressional commitment to the development of an effective equal employment opportunity program.

Under the Federal Aid Highway Act of 1968, the inclusion of an approved affirmative action plan became an important element in the pre-qualification of contractors for federal aid projects. The On-The-Job (OJT) Program was identified as one specific area of Equal Employment Opportunity.

This On-The-Job Training Guidelines Manual will provide contractors who are involved in the Delaware Department of Transportation (hereinafter referred to as DelDOT) federally-assisted highway construction projects and charged with the implementing and monitoring of the On-The-Job Training Program with a user friendly guidebook. The On-the Job Training Program is a tool to ensure non-discrimination in hiring, employment and training and training practices and to meet the goals of training and retaining women, minorities, and disadvantaged persons in the highway construction industry.

The training programs and procedures contained herein have been developed for use by firms doing business with DelDOT. Firms wishing to adopt the program may do so at no cost or firms may develop their own programs and submit them to DelDOT for approval. All On-the-Job Training Programs approved for use will embody the objectives of fairness and equity as required by the Code of Federal Regulations 23 CFR Chapter 1, Subpart C, Section 230.307 which states:

***"Every employee and representative of State Highway Agencies shall perform all official equal employment actions in an affirmative manner, and in accord with the applicable statutes, executive orders regulations, and policies enunciated there under, to assure the equality of employment opportunity, without regard to race, color, religion, sex, or national origin both in its own workforce and in the workforces of contractors, subcontractors and material suppliers engaged in the performance of federal-aid highway construction contracts."***

## The On-the-Job Training Program

The primary objective of DelDOT's On-the-Job Training Program is to provide training opportunities for women, minorities, and disadvantaged persons which will increase their participation in every job classification in the highway construction industry. Established by the U. S. Congress as a special section of the Federal Aid Highway Act of 1968 after congressional hearing documented the absence of women, minorities, and disadvantaged persons in the highway industry, the training goals were set by the Federal Highway Administration for states and are translated as specific training positions on construction projects. DelDOT makes the assignment of training positions on federal-aid projects. *This training requirement is a binding contract specification and contractors are obligated to meet trainee assignment(s). It is expected that the contractor will graduate the number of trainees specified in the bid proposal and subsequent contract with the Delaware Department of Transportation.* These assignments are based upon the following considerations:

1. Location of the project.
2. Duration of the project.
3. Total workforce expected to be used.
4. Area's availability of targeted workers.
5. Dollar anticipation.
6. Types of available work during life of project.

Three types of on-the-job training are generally recognized apprenticeship, the DelDOT On-the-Job Training Program, or a self-administered, alternative on-the-job training program. The Delaware Department of Labor administers apprenticeship programs in compliance with federal regulations that have been issued by the U. S. Department of Labor. Apprenticeship programs usually require at least some classroom instruction time and are one, four or five years in duration. Training and supervision is provided by the contractor for an employee who is duly enrolled in an approved training program for a given job classification and position.

The Delaware Department of Transportation On-the-job Training Program assignments will be reviewed and approved on a project by project basis. All On-the-Job Training programs must include a list of job classifications covered, a training hours format for each job classification, a sample enrollment form, and sample exit documents (graduation certificate and/or termination report).

Whether it is an On-the-Job Training Program or an apprenticeship, DelDOT obtains concurrence from the local division office for the Federal Highway Administration (hereinafter referred to as FHWA). Employee compensation during training is governed by the Davis/Bacon Act and the project special provisions of the contract.

## **Contractor's Responsibilities**

- A. Before beginning any federal aid project, the Contractor must have his or her EEO Policy and Affirmative Action Plan in place. This plan should also include who monitors project On-the-Job Training Programs and who has responsibilities within the business for maintaining the company's Equal Employment Opportunity status, orienting employees on EEO concerns and organizing and /or administering the company's On-the-Job Training Program.
- B. Prior to, or no later than the pre-construction meeting the Contractor will complete the DelDOT Trainee Training Schedule and submit it to the District Engineer and the On-the Job Training Program Manager for review and approval.
- C. On-the-Job trainees are listed on an approved enrollment forms which are submitted to the District Engineer and the On-the-Job Training Manager for approval. Enrollment forms should not be submitted to the On-the-Job Training Manager and the District Engineer until the trainee [s] is ready to begin training. No training hours will be credited until the enrollment has been approved by the On-the-Job Training Manager and the District Engineer.
- D. The Contractor orients the training foreman, superintendent and the On-the-Job Training trainee [s] to their individual responsibilities in the program and provides copies of the training guidelines for the training job classification being used.
- E. The Contractor annotates the certified payroll and is required to show training hours distinct from regular hours for each On-Job-Training trainee and submits weekly to the District Engineer and the On-the-Job Training Program Manager.
- F. The Contractor monitors all trainees for progress in the program, problems, and Training issues.
- G. The Contractor should verbally notify the District Engineer and the On-the-Job Training Manager five (5) working days before a trainee termination and submit company's termination form within ten (10) working days after the termination. The District Engineer and the On-the-Job Training Manager will make a determination as to whether this training position needs to be replaced.
- H. Contractors who assign training position[s] to subcontractors must be sure the subcontractor has an approved On-the-Job Training Program. The Prime Contractor shall retain the responsibility for full compliance with the On-the-Job Training trainee requirements of the project.

## **Recruitment**

The recruitment of workers who are members of the targeted population groups for On-the-Job Training trainees is a vital element in the Contractor's successful completion of his contract requirement. Because hiring workers in the "usual" or standard ways did not bring

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a sufficient number of women, minorities, and disadvantaged persons into the highway construction industry, the Contractor has the responsibility to expand the scope of his recruitment activities to increase participation by women, minorities, and disadvantaged persons.

Contractors often find this requirement to be baffling. It need not be. Expanding the recruitment activities to attract qualified candidates for On-the-Job Training positions often enhances the company's recruitment efforts for their entire workforce. Contractors who have not met their employment goals for women, minorities, and disadvantaged persons must demonstrate they have made a good faith effort to do so. Such affirmative action must be designed to overcome past practices, which have, historically, perpetuated a pattern of non-employment of women, minorities, and disadvantaged persons in the highway construction industry. Only until a Contractor meets his employment goals or demonstrates good faith in applying an affirmative action program, will DelDOT consider that Contractor an "Equal Opportunity Employer." Skillful use of the On-the-Job Training program can be an integral and necessary part of a contractor's affirmative action plan.

The recruitment effort should address the following barriers for hiring minorities, women, and disadvantaged in the construction industry:

- Outreach: Women, minorities, and disadvantaged persons lack awareness of employment opportunities in the construction industry
- Education: Women, minorities, and disadvantaged persons lack familiarity with construction site hiring practices
- Outreach / Education / Information: Women, minorities, and disadvantaged persons may view employment in the construction industry as a "temporary" job
- Education / Information: Apprehension about the construction site environment (fear of being unwanted on the job site)
- Outreach: Seek women, minority, and disadvantaged person candidates that have knowledge, skills, ability and experiences that may not be directly comparable qualifying experiences for training in construction job classifications (transferable knowledge, skills and abilities).
- Structural Title VII discrimination practices by hiring personnel

### **Pro-active Recruitment Approaches**

- A. The first element in a successful recruitment effort is to make a job description specific, concise, and complete. A clear job description helps to address and overcome several of the barriers noted above. The job description serves to tell people about the highway construction industry, it "demystifies" the skills and aptitude needed, encourages the applicant, and instructs them on how to apply. Since these are training positions, companies should stress transferable skills or aptitudes in comparable qualifying experiences or craft

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areas that are needed or "desirable" in applicants rather than merely indicating the kinds of work to be done or equipment to be used.

- B. The second element to a successful recruitment effort is the widespread distribution of any vacancy announcement and a general / targeted outreach effort into the women, minority, and disadvantaged person community. Following are recommended recruiting approaches:
- Place job advertisement announcements in newspapers, newsletter and in other publications that serve the women, minority, and disadvantaged person community.
  - Mail job announcements to organizations that serve the women, minority, and disadvantaged person community, such as the State Chapter NAACP, The Wilmington Chapter of the NAACP, Dover Chapter of the NAACP and the Milford Chapter of the NAACP; the Metropolitan Wilmington Urban League; the YWCA of New Castle County; the League of Women Voters; Women in Business; the Latin American Community Center; La Esperanza and La Casa, and to publications that serve the Hispanic community, such as Unidad Latina and Hoy En Delaware.
  - Establish a working rapport with community based agencies that serve the women, minority, and disadvantaged person community. Conduct educational and informational workshops on the construction industry at the site of the community based agency.
  - Advertise job announcements on radio and television with high women, minority, and disadvantaged person ratings, and utilize government access television channels and leased access cable television programs that reach the women, minority, and disadvantaged person communities.
  - Visit high schools, community colleges, colleges, university, and other institution and attend career fairs where there is a significant women, minority, and disadvantaged person population.

Through the implementation of a recruitment approach that is pro-active the DelDOT and Contractors will increase their chances of successfully achieving their women, minority, and disadvantaged person recruitment goal for federal aid projects.

### **Trainee Training Schedule**

In completing DelDOT's Trainee Training Schedule DelDOT has taken the view that granting the contractor the flexibility in selecting trainees for skilled job categories gives contractors a greater degree of ownership in the administration of the On-the-Job Training Program. The Federal Highway Administration; Equal Employment Opportunity Commission; and the Office of Federal Contract Compliance Programs does require that this "self-selection" process result in demonstrable improvements in the number of women, minorities, and disadvantaged persons in all approved skilled job classifications.

If sufficient progress is not made, DelDOT may require different methods for accomplishing the



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state's Equal Employment Opportunity / On-the-Job Training goals such as targeting skilled job categories for training or specific projects rather than just the number of trainee positions for a given project. With this in mind, Contractors should evaluate every training position as to how it will impact on the company's EEO requirements the goal of increasing participation of women, minorities, and disadvantaged persons in the skilled occupations of the highway construction industry.

The selection of skilled job classifications to be used on a project is also an important part of the On-the-Job Training program. Each job classification selected should be one, which adds to the overall strength and value of the company's workforce. Although certain "entry level" positions are typically chosen for On-the Job Training positions, Contractors should not overlook the full range of potential job classifications. While DelDOT continues to allow contractor's to designate their choice of training categories, EEO reviews in other states have resulted in the mandating of job classifications by the U. S. Department of Transportation to the contractor in order to overcome continued low participation rates of Women, minorities, and disadvantaged persons in all skill areas in the highway industry. It therefore becomes increasingly important that companies provide training in a number of skill categories in order to retain this ability to designate a trainee classification. It has also been shown that training employees in the more advanced skill classifications with the least number of training hours are preferable because they insure quicker compliance. A pro-active training program looks to the future of the company and examines every project to determine where a meaningful training opportunity exists. Training job classifications which require substantial hours may mean that an On-the-Job Training trainee would not complete the entire training program on that particular project, shall be given the opportunity to complete the program on other federal aid projects and work locations. In approving training schedules, the On-the Job Training Program Manager and District Engineers are guided by DelDOT's emphasis of training workers in skilled job classifications above entry level.

### **Selecting the Trainer**

The selection of the correct trainee and job classification should be matched by the equally thoughtful selection of the trainer, for this position. The supervisor or journeyman selected to train the On-the Job Training trainee is critical to the success of the On-the Job Training effort. The best "on-the-job" trainer may not be the person with the most formal education or the highest supervisory position. It may not even be the person who is the "best" at the selected skill. The best trainer will be someone who can communicate his or her knowledge of the skill area in an effective manner and does not feel threatened by the trainee. It is imperative that trainers understand the importance of the On-the-Job Training positions and be able and willing to help the trainee complete the training program. For these reasons, an orientation given to the trainer is as important as any orientation given to the trainee. It is recommend as an approach to establish a good training program the contractor should elicit the input of the trainer when developing a training program.

### **On-the-Job Training Programs**

DelDOT approves on-the-Job Training Programs on a project by project basis. Contractors who seek approval to manage their own training programs are classified as "self-administered" programs. Other organizations have programs, which they offer for purchase to contractors for use in the On-the-Job Training Program. Self-administered On-the-Job Training Programs and purchased On-the-

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Job Training Programs must be approved by DelDOT and must include these essential items:

- A. *Company Equal Employment Opportunity policy;***
- B. *Training programs for each job skill category, broken down in hourly training formats, for which the company wants approval; and***
- C. *A copy of the enrollment/graduation/termination forms to be used.***

Contractors are required to have approved training programs in place by the time of pre-construction conferences for those contracts require training. Subcontractors who are assigned trainee positions can not utilize the prime contractor's program and may request the services of the Delaware Department of Transportation's On-the-Job Training Program Manager to assist in developing their own program. As an alternative, any Contractor / Subcontractor may purchase a training program or adopt the Delaware Department of Transportation's On-the Job Training Program or develop an alternative OJT Program that satisfies federal requirements.

### **Termination**

Termination results if a trainee fails to finish the training program. Termination is defined as: the trainee quitting voluntarily, is fired "for cause," or is retained by the contractor but taken out of the training program. In the event of a termination, DelDOT will determine if the training provided before the termination is sufficient to meet the requirement of the contract or whether the contractor will be required to enroll a replacement trainee.

### **Additional Trainees**

Contractors may make a written request to the On-the Job Training Program Manager for additional trainees on federally assisted projects. DelDOT *may require a contractor to enroll additional trainees if a determination is made that the contractor has failed to meet its Equal Employment Opportunity obligation on the same project or in company-wide operations.*

### **Interviews**

A good job vacancy announcement can produce a pool of qualified applications. Those in charge of making hiring decisions need to be aware of the concepts and issues involved in non-discriminatory hiring. To insure a non-discriminatory hiring process, employment interviews must be conducted in accordance with legal and common sense procedures.

Appropriate questions asked on job application forms during interviews, or even during "pre-employment inquires" can furnish companies much of the information needed to make good hiring decisions. Interview questions must relate to job performance and must not be designed to "screen out" women, minorities, and disadvantaged persons. Should you be charged with discrimination in employment some of the questions used during the interview process may be cited as evidence that the application and/or minority or women candidate was rejected on a basis other than suitability for the position.

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The Equal Employment Opportunity Commission recommends that in designing application forms or in conducting interviews employers examine their questions for potential bias and require them to pass a two prong test:

1. *Will the answer to this question, if used in making a choice among applicants, tend to disqualify women, minority, and disadvantaged person applicants at a much higher rate than applicants in other groups?*
2. *Is this information really needed to judge an applicant's qualifications or competence to do the job?*

The answers to these two questions will help you decide whether you are looking for relevant information to help you select good applicants or whether you are using a standard which will adversely impact upon one group of people.

To justify a hiring policy or selection procedure that does exclude a disproportionate number of members of any group protected by Equal Employment Opportunity laws, a "business necessity" must exist. The business necessity must be greater than the avoidance of inconvenience or expenses. You can not, for example, turn down women because they might not "fit in" with men, turn down a disabled person because you would have to make a few simple changes in a work area or turn down older applicants because of higher insurance costs. Rather, a business necessity must directly relate to job performance or be essential for the safe and efficient operation of the business. A business necessity would allow rejecting applicants with back problems for jobs requiring heavy lifting or an applicant with poor eyesight for a pilot's job.

In some jobs there may exist, on the basis of gender, religion or national origin, a "bona fide occupational qualification" (BFOQ) that is necessary to the normal operation of the business. There are jobs when gender can be considered a BFOQ for example a job like clothing models or acting. Religion is a BFOQ only for a job with a religious organization where membership in a certain religion is reasonably necessary to job performance.

To clarify Equal Employment Opportunity laws and help employers eliminate biased hiring criteria, the EEOC has published lists and charts of the types of pre-employment inquiries that have a high potential for bias. While there may be no absolute "do's" and "don'ts" the following examples of questions to avoid and suggested alternatives should illuminate the standard of "objectivity" expected.

**AGE:** Avoid asking, "How old are you? What is your date of birth? How old are your children, if any?" On the other hand, you may request that the applicant attach a copy of his or her birth certificate.

It is illegal to discriminate in hiring based on age; questions about age are viewed as having the potential to discriminate against older applicants. You can ask about age only if it is a bona fide job qualification, such as an actor for a youthful role. An alternative is simply, "Are you at least 18 years old?" Employers are entitled to know if an applicant is a minor.

**ARREST RECORD:** Avoid asking, "Have you ever been arrested?" This is considered

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discriminatory because members of some minority groups are arrested much more often than whites in proportion to their numbers in the population. The mere request for such information tends to discourage minority applicants.

***BANKRUPTCY:*** Avoid asking, "Have you ever filed for bankruptcy or been declared as bankrupt?" Federal bankruptcy laws make it illegal to discriminate in hiring based on bankruptcy.

***CHILDREN AND CHILDCARE:*** Avoid asking, "Do you have any children? How old are your children? Have you made provisions for childcare? Do you plan to have children?"

Like questions about marital status, questions about children and childcare arrangements are often directed only to women and may be used to discriminate against them. Do not imply that women will have more tardiness or absentee problems.

***CITIZENSHIP:*** Avoid asking, "Of what country are you a citizen? Are you a naturalized or native-born citizen?" Alternatively, request that the applicant "Attach a copy of his or her naturalization papers." These questions might be used to discriminate based on national origin. All employers need to know is whether an applicant is legally entitled to work so questions must be limited to "Are you a U. S. citizen, and if not, do you have the legal right to remain permanently in the U.S. and to work in the U. S.?"

***CONVICTION RECORD:*** Applicants may be asked, "Have you ever been convicted of a felony or a misdemeanor?" If asked, it should be made clear that a "yes" answer isn't automatic grounds for rejection, and that applicants will be considered on the basis of the types, number and recentness of convictions and the applicant's suitability for the particular job. For instance, it is clear conviction for drunk driving is relevant to the job of truck driving, but may not be to jobs such as a carpenter.

***EDUCATION:*** Avoid asking, "Do you have a high school diploma?" This question is permissible if it's directly related to successful job performance or is a business necessity. If not, this question tends to disqualify minority applicants at higher rate than white applicants.

***FINANCIAL STATUS:*** Avoid asking, "What is your financial status? Do you own a home, car, etc.? Have you ever had a wage garnished? Do you have good credit?" These questions tend to have a disproportionate impact on minority applicants and should you be asked only when there's a business need for the information.

As a rule, when conducting recruitment or screening interviews, only job related questions should be asked. Employers and supervisors should avoid a line of questioning and discussion that involves personal issues. These same guidelines should be considered in subsequent employment decisions after applicants are hired so that any decisions on recommendations for advancement, inclusive of training programs or other decisions are made on objective and work related criteria, and not the subjective criteria cited above.

While many companies do an excellent job of complying with Equal Employment Opportunity guidelines in the initial phases of job recruitment, it is expected that every company employee with the authority to make a personnel decision knows and understands and practices these standards as well.

**Retention**

The ultimate goal of DelDOT's On-the-Job Training Program is to increase the number of Women, minorities, and disadvantaged persons in every skill category in the highway construction industry. For this reason, the retention of trainees upon their completion of the training program and graduation is a primary goal for DelDOT's On-the-Job Training Program. Termination of Women, minorities, and disadvantaged persons by a contractor immediately after completion of training is an issue of concern for DelDOT. Although the highway construction industry requires a very fluid or mobile workforce, the goal of the On-the-Job Training Program is to place Women, minorities, and disadvantaged persons with companies on a permanent basis. Every effort should be made by contractors to encourage the graduation of On-the-Job Training trainees and to place and retain them permanently in the highway construction industry.

# **JOB CLASSIFICATIONS**

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**AIR COMPRESSOR OPERATOR:** Tends air compressor units to generate and supply compressed air for operation of pneumatic tools, hoists, and air lances. Starts power unit to build up specified pressure in compressor. Adjusts controls to maintain continuous air supply to pneumatic tools or equipment. May oil, grease, service and make normal operating adjustment to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 13 WEEKS or 520 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	10 Hrs.
B.	Observe machine in operation	15 Hrs.
C.	Starting, stopping and regulating valves	15 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	10 Hrs.
B.	Routine fueling, lubrication and servicing	30 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safety procedures	10 Hrs.
B.	Connecting pipes from compressor to equipment	45 Hrs.
C.	On-the-job operation	360 Hrs.
D.	Special applications	25 Hrs.
	<b>Total</b>	<b>520 Hrs.</b>



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**ASPHALT PAVING MACHINE/SCREED OPERATOR:** Manipulates hand or foot levers to control movement of paving machine which spreads and levels asphaltic concrete; regulates height and width of screed. Observes distribution of paving material along screed and controls direction of screed to eliminate voids at curbs and joints. Regulates temperature of asphalt; sets and maintains electronic controls for longitudinal and transverse grades. Regulates system to allow fully automatic paving; familiar with various manufactures' paving equipment. Performs routine fueling, lubrication and adjustment as needed. Performs other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	10 Hrs.
B.	Observe machine in operation and become familiar with various manufacturers' equipment	30 Hrs.
C.	Starting and manipulating levers and electronic Controls for moving equipment and attachments	30 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	10 Hrs.
B.	Routine fueling, lubrication and servicing	145 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safety procedures	10 Hrs.
B.	Screed regulation indoctrination and operation	120 Hrs.
C.	On-the-job operation	685 Hrs.
	Total	1040 Hrs.

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**BACKHOE OPERATOR:** Operates backhoe, such as is on the rear of a utility tractor and on other equipment, for the purpose of digging and excavating. May oil, grease, and make normal operating adjustment to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 18 WEEK or 720 HOURS.

I.	ORIENTATION AND OBSERVATION	
	A. Safety procedures	5 Hrs.
	B. Observation of machine and operations	20 Hrs.
	C. Starting, manipulating levers for moving equipment and attachments	20 Hrs.
II.	CARE AND MAINTENANCE	
	A. Safety Procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	70 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
	A. Safe operating procedures	5 Hrs.
	B. Trenching operations	275 Hrs.
	C. Excavation for footing, structures, etc.	280 Hrs.
	D. Special Applications and functions	40 Hrs.
	Total	720 Hrs.

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**BULLDOZER (utility):** Operates rubber tired or crawler type bulldozer performing work not requiring skill of regular bulldozer operator. Performs work including, but not limited to, moving material in stockpile, rough work grade, pusher for loading scrapers and earthmovers, etc. Operates tractor with other attachments including, but not limited to, clearing rake, ripper, stumper, push block, etc. May oil grease, service and make normal operating adjustments to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 18 WEEK or 720 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	5 Hrs.
B.	Observation (as a passenger) of machine in operations	35 Hrs.
C.	Starting, manipulating levers for moving equipment and attachments	30 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety Procedures	5 Hrs.
B.	Routine fueling, lubricating, and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safe operating procedures	5 Hrs.
B.	Movement and stockpiling of material	150 Hrs.
C.	Pushing and rough grading	125 Hrs.
D.	Clearing and grubbing	125 Hrs.
E.	Finish grading	175 Hrs.
F.	Special Applications and function	30 Hrs.
	Total	720 Hrs.

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**BULLDOZER:** Operates tractor equipped with bulldozer blade, operated either hydraulically or by cable. Capable of carrying grade and line. May oil, Grease, Service and make normal operating adjustments to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 18 WEEKS OR 720 HOURS

I.	ORIENTATION AND OBSERVATION	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of machine in operation	35 Hrs.
	C. Starting and manipulating levers for moving equipment and attachments	30 Hrs.
II.	CARE AND MAINTENANCE	
	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
	A. Safe operating procedures	5 Hrs.
	B. Movement and stockpiling of material	150 Hrs.
	C. Pushing and rough grading	125 Hrs.
	D. Clearing and grubbing	125 Hrs.
	E. Finish grading	175 Hrs.
	F. Special application	30 Hrs.
	Total	720 Hrs.

*DelDOT OJT Program Guidelines*

**CARPENTER:** Lays out work plans or sketch. Builds wooden structures; such as concrete form, falsework, pouring, chute, scaffold, etc. Builds in place to line and grade or prefabricates in units to be erected later, forms for bridge, drainage structure, wall, etc. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 26 WEEKS or 1040 HOURS

I.	ORIENTATION AND SAFE USE OF TOOLS OF THE TRADE	
A.	Power and hand tools	20 Hrs.
B.	Materials selection	20 Hrs.
II.	APPLIED TECHNIQUES OR HIGHWAY CONSTRUCTION CARPENTRY	
A.	Safety procedures	5 Hrs.
B.	Pier, pile and cap formwork	145 Hrs.
C.	Decking formwork	150 Hrs.
D.	Parapet and hand railing formwork	150 Hrs.
E.	Endwall formwork	150 Hrs.
F.	Box culverts, inlets and headwall formwork	150 Hrs.
III.	BULEPRINT OR CONSTRUCTION PLANS READING AND APPLICATIONS	50 Hrs.
IV.	BASIC FORMS DESIGN FAMILIARITY	95 Hrs.
A.	Safety procedures	5 Hrs.
V.	STRIPPING AND SALVAGE OF FORMS FOR RE-USE	95 Hrs.
A.	Safety procedures	5 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**CONCRETE FINISHER:** Finishes wet concrete surfaces to grade with hand tools, float, trowel, screed, template and straight edge on all types of concrete work requiring a fine finish. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 26 WEEK or 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedure	5 Hrs.
B.	Observation of use of straight edges, floats and steel trowels	25 Hrs.
C.	Observation of forming a finishing of edges and joints	25 Hrs.
D.	Observation of use of concrete finishing machine	15 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety Procedures	5 Hrs.
B.	Routine cleaning work area and materials holding materials, tools and handling canvas belting or burlap strips	195 Hrs.
C.	Routine fueling, lubricating, and servicing	50 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safe operating procedures	10 Hrs.
B.	Basic operation of tools	200 Hrs.
C.	Forming and finishing edges, joints, curbs, gutters, paving, and structures	310 Hrs.
D.	Operation of trowels, straight edges, floats or finishing machine	200 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**CONCRETE PAVING MACHINE OPERATOR:** Operates a self-propelled machine which levels fresh concrete to exact grade contour. Starts and operates machine, engages clutch and shifts gears to control machine's movement. Moves levers and adjusts paver to raise or lower attachment that spreads concrete. Observes surface of concrete to point out low spots for workers to add concrete. Operates machine with attachment to successively vibrate, screed, strike-off (remove excess), float surface of concrete, to spray curing compound and cut expansion joints. When cutting expansion joints, places strips of expansion-joint material on machine that automatically inserts material into joints. May oil, grease, or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties. When operating machine to screed and float surface, is designated CONCRETE FINISHING MACHINE OPERATOR. May be designated according to specific function of machine attachment as CURING MACHINE OPERATOR, PAVING SAW OPERATOR, LONGITUDINAL FLOAT OPERATOR, SCREED OPERATOR, SPREADER OPERATOR STRIKE-OFF MACHINE OPERATOR, and other applicable attachments.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	20 Hrs.
B.	Observe machine in operation	35 Hrs.
C.	Starting and manipulating levers for moving equipment and attachments	35 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	20 Hrs.
B.	Routine fueling, lubrication and servicing	170 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safety procedures	20 Hrs.
B.	On-the-job operation	700 Hrs.
C.	Daily cleaning and preventive maintenance	40 Hrs.
	<b>Total</b>	<b>1040 Hrs.</b>

*DelDOT OJT Program Guidelines*

**CRANE DRAGLINE AND SHOVEL (1 yard and under):** Operates crane, dragline and shovel. Grades to line and grades from reference points. Operates crane to hoist and move materials, raise and lower heavy weights, charge cold feed bins, etc. Uses dragline, clamshell, gradall, orange peel, and other related attachments. May oil grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEK or 1040 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	5 Hrs.
B.	Observation (as a passenger) of machine in operations	50 Hrs.
C.	Starting, manipulating levers for moving equipment and attachments	45 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety Procedures	5 Hrs.
B.	Routine fueling, lubricating, and servicing	295 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safe operating procedures	5 Hrs.
B.	Trenching operations (for pipelaying, etc.)	300 Hrs.
C.	Excavation	300 Hrs.
D.	Special Applications and function	35 Hrs.
	Total	1040 Hrs.



*DelDOT OJT Program Guidelines*

**CRANE DRAGLINE AND SHOVEL (Over 1 yard):** Operates crane, dragline and shovel. Grades to line and grades from reference points. Operates crane to hoist and move materials, raise and lower heavy weights, charge cold feed binds, etc. Uses dragline, clamshell, gradall, orange peel, and other related attachments. May oil grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 52 WEEK or 2080 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	10 Hrs.
B.	Observation (as a passenger) of machine in operations	50 Hrs.
C.	Starting, manipulating levers for moving equipment and attachments	50 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety Procedures	10 Hrs.
B.	Routine fueling, lubricating, and servicing	300 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safe operating procedures	10 Hrs.
B.	Excavation of footings and removal of unsuitable material	300 Hrs.
C.	Loading and unloading materials	350 Hrs.
D.	Trenching operations (for pipelaying, etc.)	250 Hrs.
E.	Hoisting Materials	400 Hrs.
F.	Placement of beams, pipe, girders, piles, etc.	300 Hrs.
G.	Charge hoppers with materials on asphalt and concrete plants	50 Hrs.
	Total	2080 Hrs.

*DelDOT OJT Program Guidelines*

**DRILL OPERATOR/AIR-TRACK DRILL OPERATOR:** Operates drilling machine, such as wagon drill, air track, well driller, etc., for the purpose of drilling rock, shale, or other material according to specifications. Starts, stops and services portable air compressor. Places block of stone on machine bed and secures it in position for drilling, using electric hoist, wedges and wooden blocks. Measures and installs specified bit in drill. Pulls levers and turns wheels to regulate speed of machine, flow of water (coolant) and drilling speed. May drill bits using grindstone. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
	A. Safety procedures	10 Hrs.
	B. Observe machine in operation	45 Hrs.
	C. Starting and manipulating levers for moving equipment and attachments	45 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
	A. Safety procedures	10 Hrs.
	B. Routine fueling, lubrication and servicing	290 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
	A. Safety procedures	10 Hrs.
	B. Purpose of various types of drills	5 Hrs.
	C. Fasten drill, adjust drill angle and lock into Position, adjust speed of drill	490 Hrs.
	D. Adjustments to equipment	100 Hrs.
	E. Special applications	35 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**ELECTRICAL WORKER:** Assists in a combination of duties, including: wiring, grounding, cutting wires to scale from blueprints or oral directions, installation of fixtures, switches and devices, installation of controls, conductors, heating, and air conditioning. Performs related tasks such as testing circuits. Performs other related duties.

Completion of this program does not qualify the trainee as an electrician.

TRAINING OUTLINE

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	10 Hrs.
B.	Tools of the trade	10 Hrs.
C.	Materials used and material selection	30 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	10 Hrs.
B.	Routine care and servicing of tools	15 Hrs.
III.	ACTUAL ELECTRICAL OPERATIONS	
A.	Safety procedures	10 Hrs.
B.	Basic Wiring	100 Hrs.
C.	Basic grounding	100 Hrs.
D.	Installation of controls, fixtures, and switches	455 Hrs.
E.	Installation of heat and air conditioners	150 Hrs.
F.	Control wiring	75 Hrs.
G.	Cable splicing	75 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**FOREMAN, HIGHWAY CONSTRUCTION:** Supervises and coordinates the activities of workers under him/her engaged in one or more occupations. Studies production schedules and estimates man hour requirements for the completion of the job.

TRAINING OUTLINE

Approximate Training Time: 50 WEEK or 2000 HOURS.

I.	<b>ADMINISTRATION</b> Interpreting company policy to workers, enforcing safety regulations, maintaining time and production records, coordinating work schedules with other foreman recruiting, and inspection of materials.	200 Hrs.
II.	<b>PRODUCTION</b> Receives instruction and specifications from superintendents and transmits them to other members of the crew. Interprets blueprints, specifications and job orders. Assists workers in solving jobsite problems. Operates power equipment and other machinery as needed. Regularly performs all tasks of workers in the crew.	1500 Hrs.
III.	<b>PERSONNEL</b> Supervises crew in absence of superintendent, recommends personnel actions, such as promotions, transfers, discharges, and disciplinary action. Trains/orients new employees and/or trainees.	300 Hrs.
	<b>Total</b>	<b>2000 Hrs.</b>

**SUGGESTED RELATED TRAINING:** Red Cross First Aid Certification, Industry Safety Publications, Blueprint Reading, Industrial Relations, Personnel Management, Contracting Laws, EEO, etc.

The trainee shall be given instruction and training in all branches of the occupation listed in the Training Outline and necessary to become skilled in the occupation. The work experience need not be in the precise order as listed, nor do the scheduled hours of any operation production schedule.

*DelDOT OJT Program Guidelines*

**FRONT-END LOADER OPERATOR:** Operates a rubber-tired or other crawler type tractor with an attached scoop-type bucket on the front end. Starts engines, shifts gears, presser pedals and steers loader. Machine is used to load and unload materials, perform excavation, charge batch plants, and load trucks. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. Performs other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 13 WEEKS or 520 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
	A. Safety procedures	10 Hrs.
	B. Observe machine in operation	25 Hrs.
	C. Starting and manipulating levers for moving equipment and attachments	20 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
	A. Safety procedures	10 Hrs.
	B. Routine fueling, lubrication and servicing	40 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
	A. Safety procedures	10 Hrs.
	B. Loading and unloading materials	195 Hrs.
	C. Excavation	150 Hrs.
	D. Grading	30 Hrs.
	E. Miscellaneous application	30 Hrs.
	Total	520 Hrs.

*DelDOT OJT Program Guidelines*

**GREASER/OILER:** Operates fuel, grease and oil truck. Lubricates moving parts and wearing surfaces of equipment assigned. Operates pressure greasing equipment. Cleans equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 26 WEEK or 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	5 Hrs.
B.	Observation (as a passenger) of truck in operations	10 Hrs.
C.	Starting and manipulating vehicle	15 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety Procedures	10 Hrs.
B.	Lubrication of moving parts and wearing surfaces of equipment	100 Hrs.
C.	Cleans equipment	100 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safe operating procedures	100 Hrs.
B.	Operates pressure greasing equipment	400 Hrs.
C.	Operations of vehicle	300 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**GUARD RAIL ERECTOR:** Digs hole for post, drives post, attaches guard rail, pours incidental concrete, paints guard rail. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 18 WEEKS or 720 HOURS

I.	<b>ORIENTATION AND OBSERVATION</b>	
	A. Safety procedures	5 Hrs.
	B. Observation of procedures and equipment in operation	35 Hrs.
	C. Starting machinery and manipulating equipment and controls	40 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
	A. Safety Procedures	10 Hrs.
	B. Routine fueling, lubricating and servicing	100 Hrs.
III.	<b>ACTUAL FUNCTIONS OF GUARD RAIL ERECTION</b>	
	A. Safety procedures	10 Hrs.
	B. Incidental concrete pouring and post setting	100 Hrs.
	C. Post hole digging and post driving equipment driving equipment operation	350 Hrs.
	D. Guard rail attachment, painting and finishing	120 Hrs.
	Total	720 Hrs.

*DelDOT OJT Program Guidelines*

**IRONWORKER, REINFORCING:** Positions and secures steel bars to placement of reinforced concrete. Determines number, sizes, shapes and locations of reinforcing rods from plans, specifications, sketches and/or oral instructions. Places and ties reinforcing steel using wire and pliers. Sets rods in place, spaces and secures reinforcing rods. May bead steel rods with hand tools or rodbending machine. May reinforce concrete with wire mesh. May weld reinforcing bars together. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 18 WEEKS or 720 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	20 Hrs.
B.	Observation of operation	15 Hrs.
C.	Care and repair of specially-coated bars	10 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	20 Hrs.
B.	Care and maintenance of tools and equipment	30 Hrs.
III.	ACTUAL OPERATION OF REINFORCING	
A.	Construction plan reading and application	30 Hrs.
B.	Identification and selection of materials	30 Hrs.
C.	Places reinforcing steel and support devices	465 Hrs.
D.	Spaces and secures reinforcing materials	100 Hrs.
	Total	720 Hrs.



*DelDOT OJT Program Guidelines*

**IRONWORKER STRUCTURAL:** Performs any combination of the following duties to raise, place and unite girders, columns and other structural steel members to form completed structures or structure frameworks, working as a member of a crew. Sets up hoisting equipment for raising and placing structural steel members. Fastens steel members to cable of hoist using chain, cable or rope. Signals worker operating hoisting equipment to lift and place steel members. Guides member using tab line (rope) or rides on member to guide it into position. Reads plans; rigs, assembles and erects structural members requiring riveting or welding. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	20 Hrs.
B.	Observe operation	35 Hrs.
C.	Plan reading	35 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	20 Hrs.
B.	Care and maintenance of tools and equipment	70 Hrs.
III.	<b>ACTUAL OPERATION</b>	
A.	Safety procedures	20 Hrs.
B.	Rigging structural members requiring riveting or welding	140 Hrs.
C.	Assembling structural members requiring riveting or welding	300 Hrs.
D.	Erection of structural members requiring riveting or welding	400 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**LOADER OPERATOR:** Operates rubber tired or crawler type tractor with attached scoop type bucket on front end. Excavates and loads excavated material, load material from stockpiles, charges batch plants, and load trucks. May oil grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 13 WEEKS or 520 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	5 Hrs.
B.	Observation (as a passenger) of machine in operations	20 Hrs.
C.	Starting, manipulating levers for moving equipment and attachments	15 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety Procedures	5 Hrs.
B.	Routine fueling, lubricating, and servicing	35 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safe operating procedures	5 Hrs.
B.	Loading materials	250 Hrs.
C.	Excavation	150 Hrs.
D.	Special Applications and function	35 Hrs.
	Total	520 Hrs.

*DelDOT OJT Program Guidelines*

**MASON STRUCTURAL:** Lays out work from plans. Sets up templates and guidelines . Shapes stone or brick preparatory to setting, using chisels, hammers, and other shaping tools. Spreads mortar over stone and foundation with trowel and sets stone in place by hand or with the aid of a crane. Sets stone, brick, concrete, tile or other materials in the construction of manholes, catch basins, drop inlets, sidewalks, retaining walls, and hand finishes same. Hand finishes Portland Cement Concrete structures such as slabs. Decks, piers, abutments, etc. Molds expansion joints and edges using tools, jointers and straight edges. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

<b>I.</b>	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	15 Hrs.
B.	Setting up templates ;and guidelines	10 Hrs.
C.	Use of hand trowels, straight edges, and hand levels	60 Hrs.
D.	Use of materials (including Portland Cement Concrete, brick, tile and concrete block)	40 Hrs.
<b>II.</b>	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	10 Hrs.
B.	Excavation	40 Hrs.
C.	Manholes, catch basins, drop inlets	360 Hrs.
D.	Sidewalks, retaining walls, etc.	180 Hrs.
E.	Miscellaneous structures	180 Hrs.
<b>III.</b>	<b>CHECKING AND INSPECTION</b>	
A.	Safety procedures	5 Hrs.
B.	Blueprint or construction plans reading	40 Hrs.
C.	Conformity with plans and specifications	100 Hrs.
	<b>Total</b>	<b>1040 Hrs.</b>

*DelDOT OJT Program Guidelines*

**MECHANIC:** Assembles, sets up, adjust, maintains, repairs, welds equipment. Operates any equipment unit on a temporary basis for operating adjustments. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 52 WEEKS or 2080 HOURS.

I.	<b>LUBRICATION</b> Oil, air, and fuel filtration, grease points, and capacities, inspection techniques to detect abnormal conditions	40 Hrs.
II.	<b>PAINT AND BODY</b> Body work and painting procedures	40 Hrs.
III.	<b>MACHINE SHOP FAMILIARIZATION</b> Welding and burning equipment and operations of lathes, saws, shapers, girder, and presses	160 Hrs.
IV.	<b>INJECTOR-GOVERNOR</b> The operation and service of fuel injector pumps and nozzles, and engine governors	200 Hrs.
V.	<b>WATER COOLED ENGINE REBUILD</b> Assist in the complete overhaul and testing of gas and diesel engines	120 Hrs.
VI.	<b>TRANSMISSION AND REAR ENDS</b> Assist in the complete overhaul of the various mechanisms used to transfer engine horsepower to tractive effort.	240 Hrs.
VII.	<b>AIR COOLED ENGINES</b> Assist in the complete overhaul of the various air cooled engines and their applications	200 Hrs.
VIII.	<b>HEAVY EQUIPMENT PARTS AND FAMILIARIZATION</b> The Parts Catalogs, procurement, handling, storage, and cost of heavy equipment parts	80 Hrs.
IX.	<b>STARTERS, GENERATORS, AND VOLTAGE REGULATORS</b> Assist in the complete overhaul of the	160 Hrs.

*DelDOT OJT Program Guidelines*

various starters, generators, and voltage regulators

X.	<b>HEAVY EQUIPMENT SHOP</b> Assist in the repair and overhaul of the various heavy equipment which includes, but is not limited to, crawler and wheel tractors, crawler and portable cranes, booms, front end loaders, rollers, subgrade mixers, motor graders, compactors, pumps, and air compressors - their power plants, transmissions, controls and accessories	600 Hrs.
XI.	<b>HEAVY EQUIPMENT FIELD</b> the role of the field mechanic is to make the repairs necessary in the field and perform preventive maintenance practices necessary to increase service life of the equipment.	240 Hrs.
	<b>Total</b>	<b>2080 Hrs.</b>

*DelDOT OJT Program Guidelines*

**MOTOR GRADER OPERATOR (Fine Grade):** Operates self-propelled motor grader and, from stakes and lines, cuts subgrade and performs other fine grade operations, requiring considerable experience and a high degree of skill. May oil, grease, service and make normal operating adjustment to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 39 WEEKS OR 1560 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	5 Hrs.
B.	Observation (as a passenger) of machine in operation	100 Hrs.
C.	Starting and manipulating levers for moving equipment and attachments	95 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	5 Hrs.
B.	Routine fueling, lubricating, and servicing	35 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safe operating procedures	5 Hrs.
B.	Scraping and leveling dirt on roadway	180 Hrs.
C.	Spreading and mixing materials on roadway	170 Hrs.
D.	Shaping and blading subgrades	150 Hrs.
E.	Balancing and rough shaping base course materials	375 Hrs.
F.	Fine grading and dressing of shoulders and slopes	440 Hrs.
	Total	1560 Hrs.

*DelDOT OJT Program Guidelines*

**MOTOR GRADER OPERATOR (Rough Grade):** Operates self-propelled motor grader on rough grade work, such as, finishing rough grade on highway, including highway shoulders, slopes and ditches. May oil, grease, service and make normal operating adjustment to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 26 WEEKS OR 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of machine in operation	100 Hrs.
	C. Starting and manipulating levers for moving equipment and attachments	95 Hrs.
	CARE AND MAINTENANCE	
II.	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
	A. Safe operating procedures	5 Hrs.
	B. Scraping and leveling dirt on roadway	180 Hrs.
	C. Spreading and mixing materials on roadway	170 Hrs.
	D. Shaping and blading subgrades	150 Hrs.
	E. Balancing and rough shaping base course materials	150 Hrs.
	F. Grading and dressing of shoulders and slopes	145 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**OILER/GREASER/FIRER:** A service worker who lubricates the moving parts of wearing surfaces of mechanical equipment, changes oil, greases and filters and refuels equipment. Uses grease gun to force grease into bearings. Packs grease cups by hand. Makes minor adjustments on miscellaneous drive chains and clutches. Keeps machines and equipment clean. Often drives a truck which carries the various fuels, oils and greases.

Hand stokes or fires by gas or oil, a portable or semi-portable steam boiler such as is used on steam shovels, pile drivers, cranes, dredges, hoisting equipment and asphalt plants. May be responsible for safe operation of an oil-fired steam boiler aboard a floating whirley; may be called upon to operate stationary and skid-mounted boilers on land. ;Must be familiar with operating pressures and adjustments of pipe, valves and fittings. Responsible for minor adjustments, routine maintenance and proper lubrication of equipment. Performs other related duties.

TRAINING OUTLINE

Approximate Training Time: 18 WEEKS or 720 HOURS.

I.	ORIENTATION AND SAFE USE OF TOOLS OF THE TRADE	
A.	Lubrication requirements of mechanical equipment	20 Hrs.
B.	Materials selection	20 Hrs.
II.	APPLIED TECHNIQUES OF THE OILER/GREASER/ FIRER	
A.	Safety procedures	10 Hrs.
B.	Equipment characteristics/lubrication points	140 Hrs.
C.	Oil changes, filter changes, greases guns, hard Packing of grease, greasing bearings	230 Hrs.
D.	Minor adjustments to drive chains and clutches	150 Hrs.
E.	Shop and field practices	50 Hrs.
III.	ACTUAL OPERATION	
A.	Equipment operation and operation of oil, grease And fuel truck	85 Hrs.
B.	Safety procedures	15 Hrs.
	Total	720 Hrs.



*DelDOT OJT Program Guidelines*

**PILE HAMMER OPERATOR:** Operates Pile-driving machine or Pile Hammer, with crane or skid-mounted, with leads or jets for driving pile as foundations for piers, bridges etc. Moves levers to control hoisting equipment used to position leads. Assists other workers in setting up pile hammer leads. May oil, grease or otherwise service and make necessary adjustments to equipment as needed. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	40 Hrs.
B.	Observe machine in operation	145 Hrs.
C.	Starting and manipulating levers for moving equipment and attachments	145 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	20 Hrs.
B.	Routine fueling, lubrication and servicing	40 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safety procedures	20 Hrs.
B.	Basic operation of crane or pile-driving rig in hoisting and moving	225 Hrs.
C.	Preparation of pile for driving	100 Hrs.
D.	Seating of pile hammer on pile in preparation for driving	140 Hrs.
E.	Driving of pile	165 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**PILEDRIVER LEADSPERSON:** Set pile in leads. Sets pile in correct position. Guides sheet steel pile into grooves of adjacent pile. Places cap; signals piledriver operator to start or stop hammer and adjusts direction and angle of leads. May perform other related duties

TRAINING OUTLINE

Approximate Training Time: 26 WEEKS OR 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	5 Hrs.
B.	Observation (as a passenger) of machine in operation	50 Hrs.
C.	Starting and manipulating levers for moving equipment and attachments	45 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	5 Hrs.
B.	Routine fueling, lubricating, and servicing	345 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safe operating procedures	10 Hrs.
B.	Basic operation of crane or pile driving rig in hoisting and moving	200 Hrs.
C.	Placement of pile in preparation for driving	140 Hrs.
D.	Seating of pile hammer on pile in preparation for driving	140 Hrs.
E.	Driving of pile	100 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**PIPELAYER:** (Sanitary/Storm/Water) Lays glazed or unglazed clay, concrete, steel or cast-iron pipe to form water lines, gas lines, sanitary or storm sewers and drains; lays underground telephone and electrical duct. May smooth bottom of trench to proper elevation by scooping with a shovel; received pipe lowered from top of trench; inserts spigot end of pipe into bell end of last laid pipe. Adjusts pipe to line and grade, caulks joints with oakum or yarn and seals joints with cement or other sealing compound; may connect threaded or flanged joint pipe, may assemble and place corrugated metal pipe. Must be able to physically set elevations with laser or other engineering equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 18 WEEKS or 720 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures MOSHA & OSHA regulations	40 Hrs.
B.	Observe spade operation and laying of pipe	15 Hrs.
C.	Study of various forms of pipe and related materials	5 Hrs.
D.	Familiarity with local codes & testing procedures	70 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	10 Hrs.
B.	Ditch preparation, handles materials and tools	15 Hrs.
III.	<b>ACTUAL HANDLING OF PIPE AND SPADE</b>	
A.	Ditch grading with compressed air driven or hand spade	50 Hrs.
B.	Handle materials, assist in lowering pipe	50 Hrs.
C.	Work with pipelayer in laying all types of pipe And duct, adjust pipe to elevation, insert spigot End of pipe into bell end of last laid pipe	365 Hrs.
D.	Performing testing procedures	100 Hrs.
	<b>Total</b>	<b>720 Hrs.</b>

*DelDOT OJT Program Guidelines*

**POWER TOOL OPERATOR:** Operates jack hammer, vibrator, tamper, paving breaker, chain saw, etc., employing air, fuel or current for power. Starts, stops, and services portable air compressor or portable fuel machine. May oil, grease, services and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 18 WEEKS OR 720 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	5 Hrs.
B.	Observation of jack hammer, vibrator, tamper, Paving breaker, torque, wrench, chain saw	35 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	5 Hrs.
B.	Routine fueling, lubricating, and servicing	50 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Jack hammer	100 Hrs.
B.	Vibrator	100 Hrs.
C.	Tamper	100 Hrs.
D.	Paving breaker	100 Hrs.
E.	Torque wrench	100 Hrs.
F.	Chain saw	50 Hrs.
G.	Other	75 Hrs.
	Total	720 Hrs.

*DelDOT OJT Program Guidelines*

**ROLLER OPERATOR:** Operates self-propelled steel wheeled, rubber tired, sheepfoot, vibratory, segmented or other type roller to compact earth, subgrade, subbase, shoulder materials, or stone cover on surface treatment. May also operate rubber tired roller on asphalt concrete. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties

TRAINING OUTLINE

Approximate Training Time: 26 WEEKS OR 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of machine in Operation	35 Hrs.
II.	CARE AND MAINTENANCE	
	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
	A. Safe operating procedures	5 Hrs.
	B. Rolls base course to desired compaction	455 Hrs.
	C. Rolls asphalt surfaces to desired compaction and Smoothness and assures proper sealing of joints	500 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**ROLLER OPERATOR (Finish):** Operates tandem or three-wheel steel roller for finishing of bases and asphalt surfaces. May also operate rubber tired roller on bases and asphalt surfaces, including final rolling in asphalt concrete. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 26 WEEKS OR 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of machine in operation	35 Hrs.
II.	CARE AND MAINTENANCE	
	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
	A. Safe operating procedures	5 Hrs.
	B. Rolls base course to desired compaction	455 Hrs.
	C. Rolls asphalt surfaces to desired compaction and smoothness and assures proper sealing of joints	500 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**ROLLER OPERATOR A:** (Asphalt, Bituminous Materials) Operates self-propelled steel-wheeled, rubber-tired, sheepsfoot, vibrator, segmented, or other type roller to compact binder course, base course, surface course, should materials, or stone cover on surface treatment. May also operate rubber tired roller on base and asphalt surfaces, including final rolling on asphalt concrete. Drives machine in successive overlapping passes over surfaces to ge compacted. Determines speed and direction of machine based on knowledge of compressibility of material under changing temperatures, so that ridges are not formed by excessive pressure. May oil, grease or otherwise service and make necessary adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
	A. Safety procedures	10 Hrs.
	B. Observe machine in operation	30 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
	A. Safety procedures	10 Hrs.
	B. Routine fueling, lubrication and servicing	30 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
	A. Safety procedures	10 Hrs.
	B. Starting and manipulating levers for moving equipment	30 Hrs.
	C. Rolls asphalt base course to desired compaction	450 Hrs.
	D. Rolls asphalt surfaces to desired compaction and smoothness and assures proper sealing of joints	470 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**ROLLER OPERATOR B:** (Earthwork, Up to Subgrade) Operates self-propelled steel-wheeled, rubber-tired, sheepsfoot, vibrator, segmented, or other type roller to compact earth, subgrade, sub-base, shoulder materials, or stone cover on surface treatment. May also operate rubber-tired roller on base and asphalt surfaces including final rolling on asphalt concrete. Drives machine in successive overlapping passes over surfaces to be compacted. Determines speed and direction of machine based on knowledge of compressibility of material under changing temperatures, so that ridges are not formed by excessive pressure. May oil, grease or otherwise service and make necessary adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
	A. Safety procedures	10 Hrs.
	B. Observe machine in operation	30 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
	A. Safety procedures	30 Hrs.
	B. Routine fueling, lubrication and servicing	10 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
	A. Safety procedures	10 Hrs.
	B. Starting and manipulating levers for moving equipment and attachments, including blades	30 Hrs.
	C. Rolls embankments to desired compaction	450 Hrs.
	D. Rolls subgrade to desired compaction and smoothness	470 Hrs.
	Total	1040 Hrs.



*DelDOT OJT Program Guidelines*

**SCRAPER:** Operates self-propelled rubber tired or tractor drawn unit know as scraper, pan, etc., to excavate, transport and deposit materials moved in normal grading operations. May oil, Grease, Service and make normal operating adjustments to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 13 WEEKS OR 520 HOURS.

I.	ORIENTATION AND OBSERVATION	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of machine in operation	20 Hrs.
	C. Starting and manipulating levers for moving equipment and attachments	15 Hrs.
II.	CARE AND MAINTENANCE	
	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
	A. Safe operating procedures	5 Hrs.
	B. Loading	150 Hrs.
	C. Spreading material	150 Hrs.
	D. Rough roadway grading	70 Hrs.
	E. Compaction of embankment	65 Hrs.
	Total	520 Hrs.

*DelDOT OJT Program Guidelines*

**SIGNERECTOR:** Erects reassembled signs according to plans, sketches and blueprints. Measures location for sign and marks points where holes for expansion shields are to be drilled. Drills holes, using star drill. Makes layout for erection of signs, cuts ties and sets reinforcing steel. Sets forms for concrete, pours concrete, sets anchor bolts, erects wooden or metal structures, places clamps, brackets or other required hardware on structures. May use welding equipment for installation. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	ORIENTATION AND SAFE USE OF TOOLS OF THE TRADE	
A.	Power and hand tools	20 Hrs.
B.	Special fittings and hardware	10 Hrs.
C.	Specifications or design for concrete mixer	20 Hrs.
II.	APPLIED TECHNIQUES OF SIGN ERECTION	
A.	Preparation of layout for signs	30 Hrs.
B.	Cuts, ties, and sets reinforcing steel for footings	25 Hrs.
C.	Sets forms, places concrete, set anchor bolts	300 Hrs.
D.	Erects wooden or metal structures	250 Hrs.
E.	Places clamps, brackets or other required Hardware on structures	240 Hrs.
F.	Safety procedures	10 Hrs.
III.	BLUEPRINT OR CONSTRUCTION PLAN READING AND FAMILIARITY WITH MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES	50 Hrs.
IV.	BASIC DESIGN FAMILIARITY	
A.	Safety procedures	10 Hrs.
V.	STRIPPING & SALVAGING OF FORMS FOR RE-USE	65 Hrs.
A.	Safety procedures	10 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**STEEL PAINTER:** Performs any of the following duties to assist setting up scaffolding, setting up containment, cleaning and maintaining painting equipment, stripping of old paint from steel, prepare steel surface for painting, and painting bridge steel. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 18 WEEKS or 720 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	20 Hrs.
B.	Observation of operation	15 Hrs.
C.	Use of ladders, scaffolding and rigging	25 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	20 Hrs.
B.	Care and maintenance of tools and equipment	30 Hrs.
III.	ACTUAL OPERATION	
A.	Construction plan reading and application	30 Hrs.
B.	Identification and selection of materials	30 Hrs.
C.	Places scaffolding and support devices, places containment where required; stripping old paint; cleaning steel for painting; painting	550 Hrs.
	Total	720 Hrs.

*DelDOT OJT Program Guidelines*

**STONE SPREADER:** Operates any self-propelled equipment on wheels or tracks which spreads stone or other granular materials. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 13 WEEKS OR 520 HOURS.

I.	ORIENTATION AND OBSERVATION	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of machine in operation	25 Hrs.
	C. Starting, stopping and manipulating levers for moving equipment and attachments	20 Hrs.
II.	CARE AND MAINTENANCE	
	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	30 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
	A. Selection and loading of material	40 Hrs.
	B. Spreading of stone or other granular materials on spreadway sub-base or base	395 Hrs.
	Total	520 Hrs.

*DelDOT OJT Program Guidelines*

**TRACTOR OPERATOR (Crawler):** Operates crawler type tractor to furnish motive power to other equipment units, such as, but not limited to, earth rollers, harrows, rippers, planers, plows, mixers, pans, etc. Operates attached winch. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 13 WEEKS OR 520 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
A.	Safety procedures	5 Hrs.
B.	Observation (as a passenger) of machine in operation	30 Hrs.
C.	Starting and manipulating levers for moving equipment and attachments	25 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
A.	Safety procedures	5 Hrs.
B.	Routine fueling, lubricating, and servicing	35 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
A.	Safe operating procedures	5 Hrs.
B.	Pushing other equipment to aid in loading and unloading operations	150 Hrs.
C.	Pulling compaction and mixing implements	150 Hrs.
D.	Ground clearing assistance	115 Hrs.
	Total	520 Hrs.

*DelDOT OJT Program Guidelines*

**TRACTOR OPERATOR (Utility):** Operates rubber tired tractor or other special types with attachments for digging post holes, driving posts or pins. Excavating, backfilling, hoist or crane for erection of signs, sweeping, etc. Pulls harrows, planers, plows, mixers, rollers, rooms, etc. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 13 WEEKS OR 520 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of machine in operation	30 Hrs.
	C. Starting and manipulating levers for moving equipment and attachments	25 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubricating, and servicing	35 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
	A. Safe operating procedures	5 Hrs.
	B. Pushing other equipment to aid in loading or unloading operations	150 Hrs.
	C. Pulling compaction and mixing implements	150 Hrs.
	D. Ground clearing assistance	115 Hrs.
	Total	520 Hrs.

*DelDOT OJT Program Guidelines*

**TRENCH TRIMMER, FINE:** Operates wheel-type trenching machine, roughly equivalent in size and horsepower to an industrial farm tractor, for installation of water pipes, electrical conduit and appurtenances. Sets wheel and digs trench to grade. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

TRAINING OUTLINE

Approximate Training Time: 18 WEEKS or 720 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	15 Hrs.
B.	Observe machine in operation	35 Hrs.
C.	Starting and manipulating levers and electronic Controls for moving equipment and attachments	40 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	15 Hrs.
B.	Routine fueling, lubrication and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safety procedures	15 Hrs.
B.	Excavation for footings and removal of unsuitable materials	190 Hrs.
C.	Loading and unloading materials	125 Hrs.
D.	Trenching for pipe, etc.	100 Hrs.
E.	Hoisting materials	50 Hrs.
F.	Placement of pipe, conduit, etc.	100 Hrs.
	Total	720 Hrs.

*DelDOT OJT Program Guidelines*

**TRUCK DRIVER (HEAVY OVER 7 CY):** Drivers multi-rear-axle truck transporting construction materials. May have various kinds of beds attached such as dump, flatbed, water tank, etc. May pull semi-trailer or trailer. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 19 WEEKS or 760 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	15 Hrs.
B.	Observe vehicle in operation and become familiar with various equipment	45 Hrs.
C.	Starting and operating vehicle	160 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	15 Hrs.
B.	Routine fueling, lubrication and servicing	35 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safety procedures	15 Hrs.
B.	Loading and unloading materials and operation of vehicle	435 Hrs.
IV.	COMMERCIAL DRIVER'S LICENSE (CDL) MANUAL REVIEW	
A.	Section 1	5 Hrs.
B.	Section 2	5 Hrs.
C.	Section 3	5 Hrs.
D.	Section 5	5 Hrs.
E.	Section 6	5 Hrs.
V.	PRACTICE TESTING CDL CERTIFICATION	
A.	General knowledge	5 Hrs.
B.	Airbrakes	5 Hrs.
C.	Vehicle operation	5 Hrs.
	Total	760 Hrs.

\*CDL training hours must be acquired during the final 50 hours of the training program.

\*\*The trainee will be recognized as a journey person after obtaining a CDL.



*DelDOT OJT Program Guidelines*

**TRUCK DRIVER (LIGHT 7 CY OR LESS):** Drives multi-rear-axle truck for transporting construction materials. May have various kinds of beds attached such as dump, flatbed, water tank, etc., may include pickup, water wagon, service truck, or hoist truck. May pull semi-trailer or trailer. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 14 WEEKS or 560 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	10 Hrs.
B.	Observe vehicle in operation and become familiar with various equipment	15 Hrs.
C.	Starting and operating vehicle	15 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	10 Hrs.
B.	Routine fueling, lubrication and servicing	30 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safety procedures	10 Hrs.
B.	Loading and unloading materials and operation of vehicle	430 Hrs.
IV.	COMMERCIAL DRIVER'S LICENSE (CDL) MANUAL REVIEW	
A.	Section 1	5 Hrs.
B.	Section 2	5 Hrs.
C.	Section 3	5 Hrs.
D.	Section 5	5 Hrs.
E.	Section 6	5 Hrs.
V.	PRACTICE TESTING CDL CERTIFICATION	
A.	General knowledge	5 Hrs.
B.	Airbrakes	5 Hrs.
C.	Vehicle operation	5 Hrs.
	Total	560 Hrs.

\*CDL training hours must be acquired during the final 50 hours of the training program.

\*\*The trainee will be recognized as a journey person after obtaining a CDL.

*DelDOT OJT Program Guidelines*

**TRUCK DRIVER (Single-Rear Axle):** Drives single-rear-axle truck for transporting construction materials. May have various kinds of beds attached such as dump, flatbed, water tank, etc., includes pickup, water wagon, service truck, hoist truck, etc. May pull semi-trailer or trailer. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 13 WEEKS or 520 HOURS.

I.	<b>ORIENTATION AND OBSERVATION</b>	
	A. Safety procedures	5 Hrs.
	B. Observation (as a passenger) of vehicle in operation	20 Hrs.
	C. Starting and manipulating vehicle	15 Hrs.
II.	<b>CARE AND MAINTENANCE</b>	
	A. Safety procedures	5 Hrs.
	B. Routine fueling, lubrication and servicing	35 Hrs.
III.	<b>ACTUAL OPERATION OF EQUIPMENT</b>	
	A. Safety procedures	5 Hrs.
	B. Loading and unloading materials and operation of vehicle	435 Hrs.
	Total	520 Hrs.

*DelDOT OJT Program Guidelines*

**TRUCK DRIVER (Multi-Rear Axle):** Drivers multi-rear-axle truck for transporting construction materials. May have various kinds of beds attached, such as: dump, flatbed, water tank, etc., includes water wagon, service truck, hoist trucks, etc. May pull semi-trailer or trailer. May oil, grease, service and make normal operating adjustments to equipment. May perform other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HOURS.

I.	ORIENTATION AND OBSERVATION	
A.	Safety procedures	10 Hrs.
B.	Observe vehicle (as a passenger) vehicle in operation	50 Hrs.
C.	Starting and manipulating vehicle	40 Hrs.
II.	CARE AND MAINTENANCE	
A.	Safety procedures	10 Hrs.
B.	Routine fueling, lubrication and servicing	340 Hrs.
III.	ACTUAL OPERATION OF EQUIPMENT	
A.	Safe operating procedures	10 Hrs.
B.	Loading and unloading materials and operation of vehicle	580 Hrs.
	Total	1040 Hrs.

*DelDOT OJT Program Guidelines*

**WELDER:** Is capable of operating one or both electric welding apparatus and acetylene welding apparatus. Fuses metal parts together, using either arc welding process or oxyacetylene method. Cuts, lays out, fits, and welds, sheet metal, cast iron, and other metal or alloyed metal parts to fabricate or repair equipment. Welds together the joints between lengths of pipe for oil, gas, or other types of pipelines. Performs other related duties.

**TRAINING OUTLINE**

Approximate Training Time: 26 WEEKS or 1040 HRS.

I.	<b>ORIENTATION AND SAFE USE OF TOOLS OF THE TRADE</b>	
A.	Safety procedures	5 Hrs.
B.	Welding equipment	20 Hrs.
C.	Materials selection	20 Hrs.
D.	Observation of welder	20 Hrs.
II.	<b>APPLIED TECHNIQUES OF WELDING</b>	
A.	Safety procedures	5 Hrs.
B.	Acetylene-cutting, brazing and welding	300 Hrs.
C.	Electric-cutting and welding	300 Hrs.
III.	<b>ACTUAL WELDING OPERATIONS</b>	
A.	Safety procedures	5 Hrs.
B.	Cut, lay out, fit, and weld sheet metal cast iron and other metal parts	185 Hrs.
C.	Fabricate and repair equipment	180 Hrs.
	<b>Total</b>	<b>1040 Hrs.</b>

*DelDOT OJT Program Guidelines*

# **FORMS**



## ALTERNATE ON-THE-JOB TRAINING PROGRAM AGREEMENT

WHEREAS the Delaware Department of Transportation (DelDOT) has the responsibility to oversee and administer an On-The-Job Training Program for projects let to contract by DelDOT and funded in whole or part with Federal Funds; and

WHEREAS DelDOT and the undersigned Contractor (Contractor) desire to administer training in an efficient manner for all parties involved, including the individual trainee; and

WHEREAS the Contractor acknowledges his obligation to establish an equal opportunity affirmative action program, as provided by 23 USC 140(a); and

WHEREAS DelDOT and the Contractor agree to waive individual project training requirements for projects let to contract during calendar year 20\_\_\_\_.

BE IT THEREFORE AGREED the Contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or classification involved. Preference shall be given to providing training in the following skilled work classifications:

Equipment Operators	Office Engineers
Truck Drivers	Estimators
Carpenters	Iron / Reinforcing Steel Workers
Concrete Finishers	Mechanics
Pipe Layers	Welders

Within 60 days of the date of this agreement, the Contractor shall submit to the DelDOT OJT Program Manager his Trainee Utilization Plan for the calendar year covered by this agreement. Should revision in the plan be required, the DelDOT OJT Program Manager shall be notified. The initial and revised utilization plans shall be submitted on forms provided by DelDOT and shall be approved by DelDOT prior to implementation.

The number of trainees specified in this agreement shall be distributed among the skilled work classifications on the basis of the Contractor's needs and the availability of journey workers in the various classifications within a reasonable area of recruitment. The Contractor shall submit to DelDOT the training status of each trainee. The submission shall be made monthly on forms provided by DelDOT. The Contractor will be credited for each trainee employed by him who is currently enrolled or becomes enrolled in an approved program and who receives training for not less than 100% of the specific program requirement.

Training and upgrading of women, minorities, and disadvantaged persons toward journey worker status is a primary objective of this program and agreement. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private resources likely to yield women, minority, and disadvantaged person trainees) to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps he has taken in the pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this agreement. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.





Contractor: \_\_\_\_\_  
 Contact Person: \_\_\_\_\_  
 Contract Number: \_\_\_\_\_ - \_\_\_\_\_  
 Description: \_\_\_\_\_  
 Training Program: \_\_\_\_\_



STATE OF DELAWARE  
**DEPARTMENT OF TRANSPORTATION**  
 800 BAY ROAD  
 P.O. Box 778  
 DOVER, DELAWARE 19903

**OJT MONTHLY  
 PROGRESS  
 REPORT**

Trainee Name: \_\_\_\_\_  
 Enrollment Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
 Starting Wage Rate: \$ \_\_\_\_\_  
 Percent Complete: \_\_\_\_\_ %  
 Current Wage Rate: \$ \_\_\_\_\_

Training Phase	Safety	Productivity	Quality	Understanding	Attitude	Attendance	Total Hours this Period	Total Hours to Date
<b>N = Needs Improvement   A = Acceptable   E = Excellent</b>								

Current Status:  Progressing    Disciplined (provide documents)    Dismissed    Quit    Laid Off    Completed Program

Observations and/or comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Supervisor Signature: \_\_\_\_\_   Trainee Signature: \_\_\_\_\_   Date: \_\_\_\_\_

*RETAIN ORIGINAL AND MAIL COPY TO:* Delaware Department of Transportation, Office of Civil Rights  
 800 Bay Road, P. O. Box 778  
 Dover, DE 19903



DELAWARE DEPARTMENT OF TRANSPORTATION  
ON-THE-JOB TRAINING PROGRAM  
TRAINEE ENROLLMENT FORM

PLEASE PRINT OR TYPE

Contractor: \_\_\_\_\_

EEO Contact: \_\_\_\_\_ Telephone No: ( ) \_\_\_\_\_

Trainee Name: \_\_\_\_\_  
*Last First Middle*

Address: \_\_\_\_\_  
*Street/PO*

City State Zip Code  
Telephone No: ( ) \_\_\_\_\_ Emergency Telephone No: ( ) \_\_\_\_\_

Date of Birth: \_\_\_\_\_ Social Security No: \_\_\_\_\_

Driver's License No: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ State: \_\_\_\_\_

Race:  Black  American Indian  Hispanic  White  Asian

Sex:  Male  Female Status:  New Hire  Upgrade

Classification: \_\_\_\_\_ No. Hours: \_\_\_\_\_ Start Date: \_\_\_\_\_

Check One:  OJT Project No. \_\_\_\_\_  Alternate OJT Program

\*\*\*\*\*  
*I hereby certify that I have presented this employee with a copy of his/her training program and have explained the program to his/her full understanding. To the best of my knowledge this employee has not successfully completed a training program leading to journey status in this classification or ever been employed as a journey person in this classification.*

Contractor Representative Signature: \_\_\_\_\_

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

**RETAIN ORIGINAL AND MAIL COPY TO:**  
Delaware Department of Transportation  
On-The-Job Training Program  
800 Bay Road, P. O. Box 778  
Dover, DE 19903



DELAWARE DEPARTMENT OF TRANSPORTATION  
ON-THE-JOB TRAINING PROGRAM  
TRAINEE SCHEDULE FORM

PLEASE PRINT OR TYPE

Project No. \_\_\_\_\_ Federal Aid No. \_\_\_\_\_

County \_\_\_\_\_ No. Of Trainee(s) Assigned \_\_\_\_\_

Contractor \_\_\_\_\_ Telephone ( ) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**APPROVED TRAINING PROGRAM TO BE USED:**

Company Program  DelDOT  Other (Please Explain)

Contract Calendar Days \_\_\_\_\_

NUMBER OF TRAINEES	CLASSIFICATIONS	ESTIMATED STARTING DATE (M/Y)	REQUIRED HOURS

Contractor Representative Signature: \_\_\_\_\_

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

Approved By District Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

**RETAIN ORIGINAL AND MAIL COPY TO:**  
Delaware Department of Transportation  
On-The-Job Training Program  
800 Bay Road, P. O. Box 778  
Dover, DE 19903



DELAWARE DEPARTMENT OF TRANSPORTATION  
ON-THE-JOB TRAINING PROGRAM  
TRAINEE TERMINATION FORM

PLEASE PRINT OR TYPE

Contractor: \_\_\_\_\_

EEO Contact: \_\_\_\_\_ Telephone No: ( ) \_\_\_\_\_

Trainee Name: \_\_\_\_\_  
Last First Middle

Address: \_\_\_\_\_  
Street/PO  
City State Zip Code

Telephone No: ( ) \_\_\_\_\_ Social Security No : \_\_\_\_\_

Race:  Black  American Indian  Hispanic  White  Asian

Sex:  Male  Female Classification \_\_\_\_\_

Check One:  OJT Project No. \_\_\_\_\_  Alternate OJT Program

REASON FOR TERMINATION

- Construction phase completed
- Death
- Fired (Please explain below)
- Illness/health problems
- Lack of transportation and/or travel distance
- Military duty
- Other (Pleas explain below)
- Personal
- Quit to work for another company
- Relocated

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contractor Representative Signature: \_\_\_\_\_

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

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