

BALTIMORE CITY DEPARTMENT OF TRANSPORTATION
COMBINED WORKFORCE TRAINING PROGRAM INCENTIVES

1. This project is funded by multiple funding sources each of which have similar, but slightly different requirements for workforce training. In order to meet the objectives of the Baltimore Apprenticeship Training Program, Baltimore City Residents First Executive Order, and in the spirit of the On the Job Training program typically used on federal-aid highway contracts, the City has established the following protocols for this project. The City will reimburse the contractor and any subcontractors for hiring individuals into specific construction trades as outlined in the schedule below. Individuals hired must be referred from Baltimore City workforce development program that has been approved by the Mayor's Office of Employment Development.
2. Incentives will be made available for hiring a maximum of **14** individuals.
3. The reimbursement rate for individuals who referred from a Baltimore City workforce program is \$1.60 per hour for each hour of documented approved training.
4. If a trainee is hired into any of the following construction trades on the project, an additional \$0.80 per hour will be reimbursed to the contractor.
 - a. Backhoe Operator
 - b. Concrete finisher (highway or bridge form builder)
 - c. Curb and gutter builder
 - d. Curb and gutter machine operator
 - e. Front-end loader
 - f. Ironworker structural
 - g. Mason structural
 - h. Office engineer
 - i. Pipe layer

(For example, if the contractor hires employee A, who has been referred from a Baltimore City workforce program, the contractor will be reimbursed \$1.60 per hour for each hour of documented approved training. If Employee A is referred from an approved Baltimore City workforce program **and** is hired into one of the nine construction positions listed above, the contractor will be reimbursed \$2.40 per hour for each hour of documented approved training.)

5. Reimbursement will only be made upon successful completion of the training program, unless otherwise approved by BCDOT.

BCDOT encourages contractors to take advantage of these incentives which help to recruit entry-

level individuals, when feasible, and provide them with meaningful training intended to lead to journey-level employment, to enhance skills in individuals for a particular craft, to maintain an adequate number of journeypersons in the industry, and to address the historical under-representation of members of these groups in construction skilled crafts. This program may be used to satisfy, in part, the requirements of Section 3 of the Housing and Urban Development Act of 1968, as such requirements apply to this contract.

BACKHOE OPERATOR

Approximate Training Time: 10 weeks or 400 hours

Operates power excavator which digs by pulling bucket toward machine to excavate or move materials. Pushes levers and depresses pedals to move machine, to lower and pull bucket into material and to lift, swing, and dump contents of bucket into truck, car or conveyor, hopper or stockpile.

I. Orientation and Observation

- A. Safety Procedures 10 hours
- B. Observe Machine in Operation (as a passenger) 10 hours
- C. Starting & Manipulating Levers & Electronic Controls for Moving Equipment & Attachments 25 hours

II. Care and Maintenance

- A. Safety Procedures 5 hours
- B. Routine Fueling, Lubrication & Servicing 130 hours

III. Actual Operation of Equipment

- A. Safety Procedures 5 hours
- B. Trenching Operations (for pipelaying, etc.) 100 hours
- C. Excavation (for structures, footing, etc) 100 hours
- D. Special Applications 15 hours

Total **BACK-HOE OPERATOR** **400 HOURS**

CONCRETE FINISHER/SURFACER

Approximate Training Time: 10 Weeks or 400 Hours

Finishes freshly-poured concrete surfaces to grade with hand tools, floats, trowels, screed, templates and straightedge on all types of concrete work requiring a fine finish. Spreads of freshly-poured concrete. Molds expansion joints and edges using edging tools, jointers and straightedge. May perform other related duties.

I. Orientation and Observation

- A. Safety Procedures 5 hours
- B. Observe use of Straightedge, Float, and Steel Trowels 10 hours
- C. Observation of Forming and Finishing of Edges and Joints 15 hours
- D. Observe Use of Concrete Finishing Machine 5 hours

II. Care and Maintenance

- A. Safety Procedures 5 hours
- B. Routine Cleaning of Work Area, Materials and Related Tools and
Equipment and Handling of Canvas Belting or Burlap Strips 130 hours
- C. Routine Fueling, Lubrication and Servicing of Related Mechanical Equipment . . . 25 hours

III. Actual Operation of Equipment

- A. Safety Procedures 5 hours
- B. Basic Use & Operation of Tools 10 hours
- C. Forming and Finishing Edges, Joints, Curbs, Gutters, Paving and Structures . . . 90 hours
- D. Operation of Trowels, Straightedges, Floats and or Finish Machine 100 hours

Total CONCRETE FINISHER/SURFACER 400 hours

CURB AND GUTTER BUILDER

Approximate Training Time: 10 Weeks or 400 Hours

Constructs concrete curb and gutter sidewalks, which do not require a fine finish. Grades earth with hand tools for setting steel forms. Sets and aligns steel forms. Places concrete in forms from ready-mix trucks with hand tools and shovels. Uses float trowel and templates. Edges concrete and completes with brush or broom. Not required to lay out work or to establish lines and grades. May perform other related work.

I. Orientation and Observation

- A. Safety procedures 5 hours
- B. Observation of operation 10 hours
- C. Observation of power and hand tools 10 hours

II. Care and maintenance

- A. Safety procedures 5 hours
- B. Observation of operation 10 hours
- C. Steel Forms 10 hours

III. Applied techniques of building curb and gutter

- A. Curb and gutter construction 150 hours
- B. Grading Earth 50 hours
- C. Set and align steel forms 60 hours
- D. Place and finish concrete 50 hours
- E. Edge and finish concrete with brush or broom 40 hours

Total CURB AND GUTTER BUILDER 400 HOURS

CURB MACHINE OPERATOR

Approximate training time 6 weeks or 240 hours

Operates curb machine, setting of elevation and stringline, and preparing subgrade. Set up for grade trimming/slipforms, pre-operational instruction, and slipform curb operation. May perform other related duties.

- I. Orientation and observation
 - A. Safety procedures 5 hours
 - B. Observation of machine in operation 5 hours
 - C. Starting and manipulating control panel 10 hours
- II. Care and maintenance
 - A. Safety procedures 5 hours
 - B. Routine fueling, lubricating and servicing; ordering parts 15 hours
- III. Actual operation of equipment
 - A. Safety operating procedures 10 hours
 - B. Setting stringlings 50 hours
 - C. Operating to string and detecting malfunctions 100 hours
 - D. Adjustments on grade and slope 10 hours
 - E. Familiarization of radius and curve 30 hours

Total CURB MACHINE OPERATOR 240 Hours

FRONT-END LOADER

Approximate Training Time: 8 Weeks or 320 Hours

Operates a rubber-tired or other crawler-type tractor with an attached scoop-type bucket on the front end. Starts engines, shifts gears, presses pedals and steers loader. Moves levers to raise and lower bucket and dump contents. 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.

I. Orientation and Observation

- A. Safety Procedures 5 hours
- B. Observe Machine in Operation 10 hours
- C. Starting & Manipulating Levers for moving Equipment & Attachments 10 hours

II. Care and Maintenance

- A. Safety Procedures 5 hours
- B. Routine Fueling, Lubrication & Servicing 20 hours

III. Actual Operation of Equipment

- A. Safety Procedures 10 hours
- B. Loading and Unloading Materials 105 hours
- C. Excavation 105 hours
- D. Grading 25 hours

E. Miscellaneous Applications 25 hours

Total FRONT-END LOADER 320 Hours

IRONWORKER, STRUCTURAL

Approximate Training Time: 10 Weeks or 400 Hours

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 member requiring riveting or welding. May perform other related duties.

I. Orientation and Observation

- A. Safety Procedures 20 hours
- B. Observe Operation 20 hours
- C. Plan Reading 20 hours

II. Care and Maintenance

- A. Safety Procedures 15 hours
- B. Care and Maintenance of Tools & Equipment 50 hours

III. Actual Operation

- A. Safety Procedures 15 hours
- B. Rigging Structural Members Requiring Riveting or Welding 60 hours
- C. Assembling Structural Members Requiring Riveting or Welding 100 hours
- D. Erection of Structural Members Requiring Riveting or Welding 100 hours

Total IRONWORKER, STRUCTURAL 400 HOURS

MASON, STRUCTURAL

Approximate Training Time: 10 Weeks or 400 Hours

Lays out work from plans and 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, et al. Molds expansion joints and edges using edging tools, jointers and straight edges. May performs other related duties.

I. Orientation and Observation

- A. Safety Procedures 20 hours
- B. Setting up templates & guidelines 10 hours
- C. Use of hand trowels, straight edges, & hand levels 30 hours

II. Actual Operation

- A. Safety procedures 10 hours
- B. Excavation 25 hours

- C. Manholes, catch basins, drop inlets 60 hours
- D Sidewalks, retaining walls, etc 90 hours
- E. Miscellaneous structures 90 hours

III Checking and Inspection

- A. Safety Procedures 5 hours
- B. Blueprint or construction plans reading 10 hours
- C. Conformity with plans and specifications 50 hours

Total MASON, STRUCTURAL 400 HOURS

OFFICE ENGINEER

Approximate Training Time: 6 Weeks or 240 Hours

Perform duties too varied and diverse to be classified in any specific office clerical occupation, requiring limited knowledge of office management systems and procedures. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of answering telephones, bookkeeping, typing or word processing, stenography, office machine operation, and filing.

- I. Orientation and Observation 2 hours
- II. Orientation to Office Computer Technician 100 hours
 - A. Assist Project Manager in managing project data/information
 - B. Gather and review Construction data for entry and management in Microsoft Project
 - C. Receive instruction from Project Manager or Senior Computer Technician
 - 1. Knowledge and usage of the project computer and its software

- 2. Data and information to be input
- 3. Reports generation including graphs charts etc.
- 4. Knowledge of billing and verification of data
- 5. Payroll generation including overtime and benefits
- 6. Cost effectiveness and job analysis reports

III. Office Computer Technician Experience 100 hours

- A. Demonstrate proficiency in the use of the computer and its software packages.
- B. Demonstrate knowledge of construction field office procedures: Billing, Payroll and Employee Benefits programs
- C. Receive additional instructions from Project Manager on processes, procedures and application of construction projects.

IV. Minimal Supervision Work Experience 38 hours

Total OFFICE ENGINEER 240 HOURS

PIPELAYER

Approximate Training Time: 8 Weeks or 320 Hours

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; receives 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.

I. Orientation and Observation

- A. Safety Procedures, Regulations 20 hours

- B. Observe Spade Operation & Laying of Pipe 10 hours
- C. Study of Various Forms of Pipe and Related Materials 5 hours
- D. Familiarity with Local Codes & Testing Procedures 50 hours

II. Care and Maintenance

- A. Safety Procedures 5 hours
- B. Ditch Preparation, Handles Materials & Tools 10 hours

III. Actual Handling of Pipe and Spade

- A. Ditch Grading with Compressed- Air-Driven or Hand Spade 35 hours
- B. Handle Materials, Assist in Lowering Pipe 35 hours
- 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 120 hours
- D. Performing Testing Procedures 30 hours

Total PIPELAYER 320 HOURS