Laborers Training School

Blueprint Reading Syllabus

Time: 40 hours

Maximum Class Size: 12

Prerequisites: None

Course Description: This course will give the participant the basic knowledge needed to navigate through a set of blue prints. The class will cover all aspects of a complete set of drawings and reading a scale (Architects’ and Engineers’). Participants will develop a thorough understanding of blue prints and develop the ability to cross reference through architectural, structural and other working drawings. Ample time will be devoted to hands-on exercises using actual Blue Prints.

Goals/Objectives/Student Learning Outcomes:

- Read and interpret two sets of blue prints
- Correctly use the sheet index
- Explain the purpose of project directory
- Locate project description, site plan and vicinity map
- Locate revisions in a set of blue prints
- Interpret abbreviations and symbols on a set of blue prints
- Demonstrate how to use a scale ruler (engineers, architects and digital scaler)
- Interpret different plan views
- Identify contour lines
- Interpret the following categories: architectural, civil, structural, mechanical, electrical and landscaping
- Demonstrate how to use match line for extending blue print pages
- Define door and window schedules
- Demonstrate how to move through drawings using detail information
- Perform materials take-off on a specific drawing
- Read an engineer’s rod and architect’s rod

Classroom Rules and Procedures

- All classes begin at 6:30 am and end at 3:00 pm
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- Upon entering classroom, all participants must sign in and be seated by 6:30 am
- Class will consist of a combination of lecture, video, demonstration, coached group exercises, individual exercises and assessment.
- Students are required to report to class ready to work and maintain the provided PPE

Textbooks/Readings/Materials

- Blueprints: Set #1 The Laborers Training School Building D
- Blueprints: Set #2 City of El Monte Sewer Improvement Plans
- Blueprint Reading Student Handout Packet
- Blueprint Reading Student Handout Packet IV
- Projector and screen
- Flipchart and chart paper
- Dry erase markers
- Blue Print Reading Exit Exams A & B, Answer Sheet and Keys
- 13 Engineer scale rulers
- 13 Architect scale rulers
- 13 packs of multicolored highlighters
- 1 Engineer’s rod
- 1 Architect’s rod
- 13 magnifying glasses

Personal Protective Equipment

- 12 pairs of gloves
- 12 pairs of safety glasses
- 12 hard hats

Course Requirements

To receive credit for the course, participants must:

- Be present for full forty hours
- Participate in all classroom exercises
- Pass a written exam
- Pass a hands-on evaluation

Course Policies
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- Participants must be on-time and ready to work.
- Participants must return from breaks on-time.
- Participants must participate in each exercise and assignment

Assessment and Grading

Participants will be assessed on the following:

- All written exams must be passed with a score of 80% or above.
- All hands-on exercises are graded on performance and participation. They are pass/fail and must be passed with a score of 80% or above.

Safety

Failure to maintain and use PPE may result in dismissal from the course.