

# SOUTHERN CALIFORNIA SURVEYORS JOINT APPRENTICESHIP COMMITTEE

A JOINT LABOR-MANAGEMENT TRAINING PROGRAM



## CHAINMAN APPRENTICESHIP PROGRAM ON THE JOB TRAINING WORK PROCESSES

### **Apprentice A -**

**0 to 500 Hours**

Introduction to:

#### TOOL CARE AND SAFETY

1. Use and care of hand tools
2. Care of survey vehicle and equipment
3. Care and handling of survey instruments
  - a. Removing from and replacing in the box
  - b. Carrying equipment mounted on a staking staff or tripod
  - c. Setting up instruments
- \*4. Safety practices
  - a. First Aid and First Aid Kits
  - b. Use of sharp tools
  - c. Precautions for jobsite hazards
5. Understanding survey terminology and use of hand signals
6. Procedures for stake driving and marking and placing of guard stakes of witness lath

### **Apprentice B -**

**500 to 1,000 Hours**

Review of skills 1-6, introduction to:

#### FIELD STAKING PROCEDURE

7. Use of stationing systems
- \*8. Methods of note keeping and sketching
9. Setting of bench marks and turning points
10. Setting of survey monuments
11. Rules of good public relations and relations between colleagues

### **Apprentice C -**

**1,000 to 2,000 Hours**

Skilled in 1-6, review of 7-11, introduction to:

#### SURVEY INSTRUMENT OPERATION

12. Operation of a level and level note keeping
- \*13. Use of GPS/RTK
14. Use of scanners

**Apprentice D -**

**2,000 to 3,000 Hours**

Skilled in 1-11, review of 12-14, introduction to:

**ADVANCED FIELD METHODS**

15. Methods for peg adjustment of a level
16. Methods of plan reading
17. Methods of preparing grades and cut sheets
18. Methods of referencing survey control/ties
19. Topographic survey procedures

**Apprentice E -**

**3,000 to 4,000 Hours**

Skilled in 1-19, introduction to:

**FIELD CALCULATION**

20. Methods of basic field calculation
21. Methods and application of staking curves horizontal and vertical
22. Project control calculation and traverse adjustment

**Apprentice F -**

**4,000 to 5,000 Hours**

Skilled in 1-22, introduction to:

**QUALITY ASSURANCE**

- \*23. Staking procedures for various projects
- \*24. Preparation of stakes and materials for jobsite layout
25. Identification of safety hazards
26. Review of staking information for accuracy
- \*27. Electronic transfer and filing of job information

**Apprentice G -**

**5,000 to 6,000 Hours**

Skilled in 1-27, introduction to:

**PROJECT PLANNING**

28. Identification of required jobsite accuracy
29. Techniques of analyzing jobs for efficient procedures
30. Basic criteria and procedures for property surveys

**Chainman -**

**6,000 Hours**

\*Skilled in 1-30. Complete Program as a journeyman chainman

\* These topics include "green curriculum".

Wage rates effective 10-01-20 through 09-30-21