## NOTICE OF PROPOSED CLASSIFICATION ACTIONS BY THE HUMAN RESOURCES DIRECTOR

The following actions are being posted in accordance with Civil Service Rule 109. In the absence of a protest\_addressed to the Human Resources Director, the proposed changes will become final seven (7) calendar days from the posting date.

Posting No: 28 Fiscal Year: 2013/2014 Posted Date: 3/6/14 Reposted Date: N/A

# AMEND THE FOLLOWING JOB SPECIFICATION(S): (Job specification(s) attached.)

Item #	Job Code	Title
1	5362	Engineering Assistant
2	5364	Engineering Associate I

For additional information regarding this proposed classification action, please contact Cathy Abela, Senior Personnel Analyst, at (415) 557-4926 or by email at <u>Cathy.Abela@sfgov.org</u>.

Protests on an item should be addressed to the Human Resources Director and can be submitted by mail to the City and County of San Francisco, Department of Human Resources, 1 South Van Ness Ave, 4th Floor, San Francisco, CA 94103 or by email to <u>DHR.ClassificationActionPostings@sfgov.org</u>. All protests must be received in writing no later than close of business seven (7) calendar days from the posting date, and must include the posting and item number(s), the basis on which the protest is submitted and identify the effected parties.

Copies of this notice may be obtained from the Department of Human Resources or from the website at: <u>http://sfdhr.org/index.aspx?page=109</u>. Copies of Civil Service Rule 109 may be obtained from the Department of Human Resources, the office of the Civil Service Commission at 25 Van Ness Ave, Suite 720, San Francisco, CA 94102 or from the website at: <u>http://www.sfgov3.org/index.aspx?page=328</u>.

cc: All Employee Organizations

All Departmental Personnel Officers DHR - Class and Comp Unit DHR - Client Services Unit DHR - Employee Relations Unit DHR - Recruitment and Assessment Unit DHR - Client Services Support Services Micki Callahan, DHR Jennifer Johnston, CSC Sandra Eng, CSC Linda Cosico, DHR Maria Newport, SFERS Risa Sandler, Controller/Budget Division Devin Macaulay, Controller/ Budget Division Theresa Kao, Controller/ Budget Division Chris Trenschel, Controller/ Budget Division E-File

#### Title: ENGINEERING ASSISTANT Job Code: 5362

#### INTRODUCTION

Under supervision, the Engineering Assistant applies technical engineering/drafting techniques in the preparation of civil (including structural and/or transportation), electrical, or mechanical engineering drawings and other graphic material using computer-aided drafting\_software products such as (specifically AutoCAD). Map 3D, Civil 3D and/or Revit, manual drafting methods and working accurately and in compliance with drafting standards

#### **DISTINGUISHING FEATURES**

The Engineering Assistant is the entry level in the classification series and is distinguished from the 5364 Engineering Associate I by the latter's higher level of responsibility. There are three distinct specialty areas in this classification: Civil, Electrical and Mechanical. None.

#### SUPERVISION EXERCISED

None.

## MAJOR, IMPORTANT, AND ESSENTIAL DUTIES

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

- Depending on the specialty area/–discipline, prepares civil (including structural and/or transportation), electrical or mechanical drawings using <u>computer-aided software products</u> <u>such as AutoCAD, Map 3D, Civil 3D and/or Revit, and manual drafting</u> in compliance with engineering drafting standards.
- 2. Collects and calculates field and departmental data needed for the preparation of designs and drawings.
- 3. Assists in the preparation of cost and quantity estimates for engineering projects and site investigations.
- 4. Processes <u>contractor construction shop project</u> submittals. <u>through logging, transcribing and</u> <u>filing of materials</u>
- 5. Indexes, reproduces, and maintains engineering documents stored in databases or spreadsheets in hard copy form.
- 6. Applies mathematical and other engineering computations as required in the course of performing work.
- 7. Operates and replaces media on equipment used in the course of performing work.
- 8. Responds orally to inquiries and requests for information from the general public,

#### Title: ENGINEERING ASSISTANT Job Code: 5362

contractors, and other agencies.

9. Prepares memos, letters, and field reports in the course of performing work.

10. May drive a vehicle to and from work sites.

11. Performs related duties as required.

# IMPORTANT AND ESSENTIAL KNOWLEDGES, SKILLS, AND ABILITIES

Knowledge of: drafting including the techniques, standards, nomenclature, and symbols relevant to each engineering discipline/ specialty areas used in the preparation of engineering drawings and other graphic material.

Ability to: perform manual drafting/quick sketches and computer-aided drafting (using AutoCAD) <u>Map 3D, Civil 3D and/or Revit</u>, in the preparation of drawings; use mathematical functions to solve drafting, design, construction, maintenance and other problems; write reports, memos, correspondence and complete forms; communicate orally with the general public, other city personnel, and contractors in a clear and understandable manner; transcribe/interpret basic survey/field notes.

#### MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

1. Two years of verified civil (including structural and/or transportation), or electrical, or mechanical technical engineering drafting experience using computer-aided drafting software products such as (specifically AutoCAD), Map 3D, Civil 3D and/or Revit, -manual drafting to prepare engineering drawings and other engineering graphic material. This experience must have been obtained within the last five (5) years.

2. Possession of a valid California driver license.

Substitution: Possession of a Certificate of Completion in drafting or Computer-Aided Drafting from an accredited college or technical/vocational school may be substituted for six (6) months of the two years of required experience.

# LICENSE AND CERTIFICATION

Title: ENGINEERING ASSISTANT Job Code: 5362

**PROMOTIVE LINES** 

ORIGINATION DATE:	12/18/72
AMENDED AND RETITLED:	12/18/72; 11/10/00; 1/31/08, 3/19/2008
AMENDED:	10/22/2004,
	To consolidate classes 5344 Mechanical Engineering Assistant, 5352 Electrical Engineering Assistant, and 5362 Civil Engineering Assistant.
REASON FOR AMENDMENT	To accurately reflect the current tasks, knowledge, skills and abilities defined in the most recent job analysis conducted for this job code.

BUSINESS UNIT(S):

COMMN SFCCD SFMTA SFUSD

# Title: 5364 Job Code: ENGINEERING ASSOCIATE I

## INTRODUCTION

Under general supervision, the Engineering Associate I performs difficult technical engineering work in the preparation of civil (including structural and/or transportation), or electrical, or mechanical engineering drawings and other graphic material using computer-aided drafting (specifically software products such as AutoCAD), Map 3D, Civil 3D and/or Revit, and manual drafting methods and working accurately and in compliance with drafting standards.

## **DISTINGUISHING FEATURES**

The Engineering Associate I is distinguished from 5362 Engineering Assistant by its higher level of responsibility for overseeing/supervising work of others and design functions. It is distinguished from the 5366 Engineering Associate II by the latter's responsibility for full supervision. Additionally some 5366 positions may include responsibility for computer-aided drafting management. There are three distinct specialty areas/ disciplines in this classification: Civil, Electrical and Mechanical.

#### SUPERVISION EXERCISED

May supervise the work of others

# MAJOR, IMPORTANT, AND ESSENTIAL DUTIES

According to Civil Service Commission Rule 109, the duties specified below are representative of the range of duties assigned to this job code/class and are not intended to be an inclusive list.

- 1. Depending on the specialty area/–discipline, prepares civil (including structural and/or transportation), or electrical, or mechanical engineering drawings and other graphic material using AutoCAD, Map 3D, Civil 3D and/or Revit, and manual drafting methods in compliance with civil engineering drafting standards.
- 2. Checks and may evaluate the technical engineering work of other staff.

3. Conducts engineering investigations and collects and calculates field/departmental data the preparation of designs and drawings.

4. Makes preliminary checks and reviews engineering documents and drawings for accuracy, engineering sufficiency, and conformance to specifications and standards.

- 5. Assist in the preparation of cost and quantity estimates for engineering projects, project specifications and written reports, and site investigations.
- 6. Processes and/or reviews submittals from contractors, utilities and others.

7. Indexes, reproduces and maintains engineering documents stored in databases or spreadsheets in hard copy form.

8. Applies mathematical and other engineering computations as required in the course of

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performing work.

9. Operates and replaces media (i.e. printer cartriges, plotter paper rolls and printer paper) on equipment used in the course of performing work.

10. Responds orally and in written form to inquiries, complaints, and requests for information from the general public, contractors, and other agencies.

11. Plans, assigns, schedules, oversees, checks and evaluates the work of subordinate employees.

12. Prepares written reports, minutes, correspondence, field reports and specifications in the course of performing work.

13. Assists in performing field and equipment inspections.

14. Performs design work using engineering knowledge and appropriate software programs.

15. Explains and enforces drafting procedures and standards. Contributes to the development of computer-aided drafting and design (CADD) standards.

16. May drive a vehicle to and from work sites.

17. Performs related duties as required.

# IMPORTANT AND ESSENTIAL KNOWLEDGES, SKILLS, AND ABILITIES

Knowledge of: drafting including techniques, standards, nomenclature and symbols relevant to each specialty area/ discipline and used in the preparation of engineering drawings and other graphic material.

Ability to: perform manual drafting/quick sketches and computer-aided drafting (using AutoCAD), <u>Map 3D, Civil 3D and/or Revit</u>, in the preparation of drawings; use mathematical functions to solve drafting, design, construction, maintenance and other problems; write reports, memos, correspondence, and complete forms; communicate orally with the general public, other city personnel, and contractors in a clear and understandable manner; process and/or review submittals from contractors, utilities, and others; supervise, schedule, assign and check the work of subordinate personnel; and use computer design tools (such as third party software).

#### MINIMUM QUALIFICATIONS

These minimum qualifications establish the education, training, experience, special skills and/or license(s) which are required for employment in the classification. Please note, additional qualifications (i.e., special conditions) may apply to a particular position and will be stated on the exam/job announcement.

1. Four years of verified civil (including structural and/or transportation), or electrical, or mechanical technical engineering drafting experience using computer-aided <u>software products</u>

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drafting (specifically such as AutoCAD), Map 3D, Civil 3D and Revit, and manual drafting to prepare engineering drawings and other engineering graphic material, at least two years of which must have been in a position with duties comparable to those of Class 5362 Engineering Assistant. This experience must have been obtained within the last seven years.

2. Possession of a valid California driver license.

Substitution: Candidates may substitute possession of a Certificate of Completion in drafting or computer-aided drafting from an accredited college or technical/vocational school for six months of the required four years of experience.

## LICENSE AND CERTIFICATION

## **PROMOTIVE LINES**

AMENDED:	11/10/00; 1/13/05,
AMENDED AND RETITLED:	12/18/72; 03/18/2008
	To consolidate classes 5346 Mechanical Engineering Associate I, 5354 Electrical Engineering Associate I, and 5364 Civil Engineering Associate I.
REASON FOR AMENDMENT	To accurately reflect the current tasks, knowledge, skills and abilities defined in the most recent job analysis conducted for this job code.
BUSINESS UNIT(S):	COMMN SFCCD SFMTA SFUSD