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## AGENDA COVER MEMORANDUM

**AGENDA DATE:** June 18, 2003

**TO:** Board of County Commissioners

**DEPARTMENT:** Management Services

PRESENTED BY: Jan Wilbur, Personnel Analyst 2

TITLE: IN THE MATTER OF CREATING THE CLASSIFICATIONS AND

SALARY RANGES FOR ENGINEER-IN-TRAINING (EIT),

ASSOCIATE SURVEYOR, SENIOR SURVEYOR

#### I. PROPOSED MOTION

MOVE TO APPROVE ORDER NO. \_\_\_\_\_ IN THE MATTER OF CREATING THE CLASSIFICATIONS AND SALARY RANGES FOR ENGINEER-IN-TRAINING (EIT), ASSOCIATE SURVEYOR, SENIOR SURVEYOR

#### II. ISSUE

The County agreed in an October 2001 Memorandum Of Understanding (MOU) between the COUNTY and the Administrative-Professional Association of Lane County Public Works, Inc., to pursue the feasibility of establishing a professional engineering series of classifications to recognize the need for and values of professional registration.

## III. DISCUSSION

## **Background:**

Currently, any Senior Engineering Associate, Engineering Associate, Waste Management Engineer or Environmental Engineering Specialist who is a registered Professional Engineer receives a five percent (5%) salary incentive. Any Sr. Engineering Associate or Engineering Associate who is registered as either a Professional Land Surveyor or an Engineer-In-Training (EIT) receives a three (3%) salary incentive.

A review was conducted by Human Resources and Public Works management with the intent to evaluate and possibly restructure our engineering classifications in order to improve our ability to recruit and retain both professional engineers and surveyors.

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## **Analysis:**

Human Resources undertook a review of what was occurring in various other jurisdictions in terms of their use of professional engineering and surveying classifications. We considered our current classification structure, as well as considered possible new classifications. The decision was made to update our existing Engineering Associate and Senior Engineering Associate classifications with de minimis changes, mainly with respect to including references related to new technology. Additionally, we proposed three (3) new classifications:

- 1. The Engineer-In-Training (EIT) classification is an entry-level engineering classification which is currently being utilized in several jurisdictions. It offers the County the ability to hire a new graduate engineer with his/her Engineer-In-Training (EIT) or Engineering Intern (EI) certification, but with less experience than required for our current Engineering Associate classification. This classification is the "building block" for ultimately enhancing the professional level of some of the County's engineering positions.
- 2. The Associate Surveyor is the first level in a professional surveying series. It requires licensure as a professional surveyor. The position leads field crews, performs advanced level technical engineering support, and exercises technical and functional supervision on a daily basis. The duties of this classification are currently being performed by individuals in the Engineering Associate classification which does not require a professional license.
- 3. The Senior Surveyor is the advanced journey level in the professional surveying series requiring licensure as a professional surveyor. It demonstrates a high level of surveying project management responsibility, exercises direct supervision over staff, and may be assigned to perform the legal responsibilities of the County Surveyor in his/her absence. The duties of this classification are currently being performed by individuals in the Senior Engineering Associate classification which does not require a professional license.

The positions were point-factored, and it is important to note that compensation for the required professional certificate or license is factored into the salary range for all three (3) of the proposed new classifications, and for that reason would not be eligible for registration differential.

- The Engineer-In-Training factored out at Grade 30, \$37,690-\$52,208. Examples of classifications at the same grade are Lead Electrician and Compliance Officer.
- The Associate Surveyor factored out at Grade 33, \$40,581-\$56,202. Examples of classifications at the same grade are Sr. Plans Examiner and Associate Planner.

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• The Senior Surveyor factored out at a Grade 38, \$45,906-\$63,544. Examples of classifications at the same grade are Management Analyst 2, and Internal Auditor.

A sideways glance at market as compared to our Engineer-In-Training classification shows that Marion County has a Civil Engineering Associate classification requiring some experience and an engineer-in-training (EIT) certification within six months of hire (\$40,310-\$54,080). Marion provides employees "comp credits" which adjusts the amount to \$42,640-\$57,200. Washington County does not have an Associate Surveyor classification, however, they do have a non-represented classification of Survey Supervisor position which organizes and supervises the surveying activities of the County Surveyor's office (\$54,120-\$65,784).

The classifications and proposed compensation were presented to Admin-Pro as required by the contract. (See attached classification specifications). Representatives of the County and the Union met to discuss the proposed classifications as required by the labor agreement. The County and Union have signed a Memorandum of Understanding (MOU) indicating that these new classifications and salary ranges are acceptable to the Union. The changes may now be implemented in accordance with the labor contract provisions.

### **Budget:**

If the proposed classifications are approved, only two (2) individuals would move from Senior Engineering Assistant classification to the new Senior Surveyor classification. Six (6) individuals would initially move from the Engineering Associate classification to the new Associate Surveyor classification and a seventh (7<sup>th</sup>) position would move at some future point when an incumbent meets the professional licensure requirements of the new classification. Only one (1) current employee (currently, and Engineering Tech 2) would meet the requirements of the new EIT classification, but there could eventually be a few (i.e., possibly as many as 4 or 5) positions in the classification as employee turnover occurs.

The <u>annual cost</u> (both current and projected) of the proposed new classifications is:

Classification	# of <u>Pos.</u>	First Full Year Cost		# of Pos.	Projected Cost	
Senior Surveyor Assoc. Surveyor	2 6	\$	2,412 6,744	2 7	\$	2,412 7,868
EIT	1		6,094	5		(6,345)*
Total	9	\$	15,250	14	\$	3,835

\* Because of our current classification structure, the EIT classification would be a cost increase from the current ET-2 classification. However, in the future, most choices would likely be between filling vacancies as an EIT or as an EA with the new EIT classification being at a lower compensation level than the current EA classification.

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All of the positions that would be slated to move to the new classifications, both currently and in the future, are budgeted in the Road Fund. Some of the positions in the County Surveyor's office do work on government corners for which the Road Fund is compensated by the Corners Fund. The Road Fund and Corners Fund both have the capability to fund the minimal increased cost of the new classifications.

### **Alternatives:**

- 1. Approve the classification specifications and new titles.
- 2. Reject the motion.

## Recommendation:

It is recommended that the proposed new classification specifications, as well as the salary ranges for the proposed Public Works positions be approved.

## IV. IMPLEMENTATION/FOLLOW-UP

If approved by Board action, the Public Works Department will implement the utilization of the new classifications effective immediately, and move employees as appropriate into their new position titles and accompanying salary ranges.

#### V. ATTACHMENTS

Board Order Classification Specifications

Attachment (A) Engineer-In-Training (EIT)

Attachment (B) Associate Surveyor

Attachment (C) Senior Surveyor

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LANE COUNTY
Job Code
Established XXXX

#### **ENGINEER-IN-TRAINING**

### **DEFINITION**

To plan, organize and perform engineering assignments in the areas of roads, streets, structures, traffic and related public works engineering and specialty functions, including civil, structural, geotechnical and other engineering disciplines; and to perform related duties as assigned.

## **CLASS CHARACTERISTICS**

This is an entry-level engineer position in the Public Works Department, and is required to have an Engineering Intern (EI) or Engineer-In-Training (EIT) certification. Positions at this level are responsible for completion of moderately difficult professional engineering assignments on time and within budget for a wide variety of projects and may also serve as an interagency liaison. This classification is distinguished from the Engineering Associate class by the requirement for an EI/EIT certification, and by the requirement for less prior engineering work experience than is required of incumbents in the Engineering Associate classification. This is the first step in a career progression that continues to the Engineering Associate classification.

## SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from assigned management and supervisory staff, including a registered professional engineer. As skills increase, engineering work assignments increase in responsibility, complexity, and difficulty.

May exercise functional and technical supervision over assigned technical and support staff and temporary help.

# **EXAMPLES OF DUTIES** - Duties may include, but are not limited to the following:

Perform and/or coordinate engineering, planning and design functions; formulate and evaluate design alternatives; write project special provisions and specifications; guide design review functions, and assist other staff on design projects.

Perform and/or coordinate project management on projects; write contract specifications and prepare cost information; schedule work; inspect construction and perform specialized tests; field check progress; assist with negotiating change orders and approving payment requests; and keep project records and verify project completion and final reports.

Use and maintain computer programs in design and construction of public works projects, including Geographic Information Systems (GIS).

Perform and/or coordinate project database and information technology related functions such as analysis and defining software and supplemental system needs, prepare spreadsheet computations, and internet research and development.

Facilitate communication between parties involved in engineering functions including ongoing liaison with management and technicians as well as consultants, contractors, vendors and other agencies. Investigate concerns and respond to inquiries; make recommendations and appropriate reports.

Perform project leadership and communication functions such as scheduling day-to-day activities, coordinating County and contractor functions, leading public involvement processes and assisting in supervision of technical and support staff.

### MINIMUM QUALIFICATIONS

## Knowledge of:

Principles, practices and procedures of civil engineering.

Principles and procedures of project management including scheduling, estimating, financial record keeping and reporting.

Engineering presentation, communications and report preparation including matters such as basic business letter writing, English usage, spelling, grammar and punctuation.

Information systems, Internet technology and software applications.

Principles and practices of policy development and implementation.

Principles and practices of supervision, training and personnel management.

Pertinent local, state and federal laws and ordinances.

Modern office procedures, methods and computer equipment.

#### Ability to:

Plan, organize and coordinate engineering specialty projects.

Operate GPS data collection equipment; maintain GIS databases.

Develop and present a wide variety of reports and collaborate with individuals representing

a variety of disciplines, interests and organizations and with people of diverse ethnic and socio/economic backgrounds.

Interpret and apply applicable County guidelines, federal, state and local laws, rules, regulations and policies.

Administer a variety of general and specialty activities, and help provide technical and functional supervision.

Analyze situations, develop alternative solutions, present sound recommendations.

Establish and maintain effective working relationships with those contacted in the course of work.

Communicate clearly and concisely, both orally and in writing.

# **Experience and Training**

## Training:

Bachelor's degree from an accredited college or university in civil engineering or a related field.

## Experience:

Some directly related engineering experience is desirable.

An equivalent combination of experience and training that will demonstrate the required knowledge and abilities is qualifying.

## **Special Requirements:**

Possession of an Oregon driver's license at time of appointment.

Possession of Engineer Intern or Engineer-in-Training (E.I./E.I.T.) certification at time of appointment.

Lane County
Job Code
Established XXX

#### ASSOCIATE SURVEYOR

### **DEFINITION**

To serve as survey crew leader on complex projects, perform professional survey activities on public works improvement and survey projects, serve as a resource and provide professional expertise, guidance and assistance to lower level staff working on multiple activities in the area of field engineering/surveying and to perform related duties as assigned.

## **CLASS CHARACTERISTICS**

This is the entry-level in the Surveyor series. Incumbents in this classification are required to perform professional surveying activities and lead complex survey projects. Employees within this classification are required to perform technical and functional supervision of assigned technical staff of a lower grade in field surveying applications, and are required to be registered as a professional land surveyor. Employees in this classification are fully trained in all procedures related to assigned areas of responsibility. This class is distinquished from the Senior Surveyor in that the later performs the most difficult and complex surveying management duties, and provides a broader range of supervision over personnel in lower classifications.

## SUPERVISION RECEIVED AND EXERCISED

Receives general direction from assigned supervisory, management or professional staff.

Exercises function and technical supervision over assigned technical personnel in field surveying applications.

EXAMPLES OF DUTIES – Duties may include, but are not limited to the following:

Supervise, plan, coordinate and participate in the varied work activities of survey crews performing boundary or cadastral surveying.

Perform reviews of subdivision, condominium and partition plats; review research documentation and review and prepare right-of-way information.

Prepare and review descriptions of real property; prepare documentation and process vacation of public property; and provide assistance to the public and agencies in need of right-of-way vacations.

Prepare preliminary and final maps and reports of Public Land Survey Corner remonumentations for public record; recover and analyze evidence of previous Public Land Survey Corners; and monument and reference Public Land Survey Corners under the direction of the Sr. Surveyor.

Research property records and prepare right-of-way documents; research public records relative to the re-establishment of public land corners, county roads and property boundaries; propose road alignments and resolutions of property boundaries; assist others in researching records of surveys, county road records, and vacation records.

Record survey notes; make distance and angle measurements; perform complex mathematical computations; and prepare survey data for computer input.

Operate survey instruments; electronic measuring devices, theodolites, data collectors, global positioning system (GPS) equipment, and manual survey and other tools, excavate and move equipment.

Create maps and plats utilizing survey data reduction software and/or computer aided drafting methods and operate and train others in the use of personal computers.

Provide professional level assistance to the public, public agencies, and consultants on issues related to County projects.

Trains and maintains the work standards of survey crews to meet established project requirements and applicable Oregon survey laws.

Participate in recommending the appointment of staff; provide or coordinate staff training and work with employees to correct deficiencies.

#### MINIMUM QUALIFICATIONS

#### Knowledge of:

Professional surveying concepts, theories, principles, practices and methods of land, geodetic and construction surveying.

Public Land Survey System and statutes related to surveying, right-of-way and platting.

Oregon laws and regulations as applied to boundary surveying and property development.

Mathematics including trigonometry, algebra, and geometry used in engineering and surveying technology.

Principles and practices of basic engineering land surveying or public works

construction.

Practices of technical research and report writing relating to area of assignment; title research and deed records.

Tools, equipment and methods of drafting and mapping.

Computer software relating to surveying and engineering.

Methods and equipment used in electronic and conventional surveying and GPS data collection; computer-assisted drafting.

Principles and practices of work site safety.

### Ability to:

Use current manual and electronic survey instruments; use field and office engineering instruments; operate personal computers and a scientific calculator..

Operate GPS data collection equipment and related software.

Perform physical labor in varying weather and terrain as required.

Perform engineering and surveying mathematical calculations, through trigonometry, with speed and accuracy.

Prepare drawings and surveying maps neatly and accurately, using both computer-assisted drafting software and conventional or manual means.

Read and interpret construction plans and specifications, technical manuals, and other related materials; research and prepare technical reports.

Prepare drafts, sketches or tracings of maps and plans; maintain neat, legible and accurate notes.

Establish and maintain effective working relationships; lead and train technical staff as necessary.

Communicate clearly and concisely, both orally and in writing.

#### EXPERIENCE AND TRAINING

#### Training:

Equivalent to a Bachelor's degree from an accredited college or university

with major coursework in surveying.

# Experience:

Three years of construction, boundary and/or cadastral surveying experience. Experience in leading and training personnel preferred.

An equivalent combination of experience and training that will demonstrate the required knowledge is qualifying.

# **Necessary Special Qualifications**

Registration as a Professional Land Surveyor (PLS) at time of appointment.

Possession of a valid Oregon driver's license at time of appointment.

# ATTACHMENT (C) Continued

Lane County
Job Code
Established xxx

#### SENIOR SURVEYOR

#### **DEFINITION**

To plan, organize, supervise surveying activities of the County, including Public Land Survey System (PLSS) in the restoration and referencing of corner monuments; to perform advanced level boundary, cadastral, construction and geodetic surveying work; to perform research, calculations, evaluation and documentation necessary to the PLSS corner restoration process; to plan, organize and supervise surveys for legalization of County roads, and to perform related duties as assigned.

### **CLASS CHARACTERISTICS**

This is the advanced journey level in the professional surveying series, and requires registration as a Professional Land Surveyor. Positions at this level are distinguished from the Associate Surveyor by the high level of surveying program management responsibility assumed and high complexity of duties and independent decision-making. Employees perform the most difficult and responsible types of duties assigned in surveying which include leading, directing and facilitating team solutions to project assignments. Employees at this level are required to be fully knowledgeable in all procedures related to assigned area of responsibility and in department and County policies and procedures. Employees at this level may be assigned to perform the legal responsibilities of the County Surveyor in the County Surveyor's absence.

## SUPERVISION RECEIVED AND EXERCISED

Receives direction from the County Surveyor or Field Engineering Superintendent.

Exercises direct supervision over assigned technical personnel.

## EXAMPLES OF DUTIES – Duties may include but are not limited to the following:

Recommend and assist in the implementation of goals and objectives; establish schedules and methods for completion of surveys; implement policies and procedures.

Evaluate operations and activities of assigned responsibilities; recommend improvements and modifications; prepare various reports on operations and activities.

Assist the County Surveyor or Field Engineering Superintendent in planning survey work

schedules and determining project assignments; resolve work problems and interpret administrative policies to subordinates, other departments, consultants, contractors, developers and the public.

Oversee the remonumentation of PLSS corners as mandated by state law; assist in the interpretation of state laws for survey projects; review records and surveys for accuracy; review assigned projects for compliance with state laws and local regulations.

Oversee monumentation of County road rights-of-way and supervise preparation of related survey plats for filing.

Oversee preliminary, location and construction surveying for County road projects.

Advise other departments and the public on technical aspects of land surveying; supervise surveys performed for other Lane County departments.

Participate in budget preparation and administration; prepare cost estimates for budget recommendations; submit justifications for requests; monitor and control expenditures.

Work with private and government entities as a liaison for funding, technical surveying matters, and other program activities; complete required reports; answer questions and provide information to the public; investigate complaints and recommend corrective action as necessary to resolve complaints.

Participate in the selection of staff; work with employees to correct deficiencies.

Plan, establish overall priorities, and assign, supervise and review the work of staff involved in surveying and GPS data collection.

#### MINIMUM QUALIFICATIONS

# Knowledge of:

Principles, practices and procedures of boundary, cadastral, construction and geodetic surveying.

Pertinent local, state and federal rules, regulations and laws pertaining to land survey methods and standards.

Drafting and computer-aided drafting methods.

Methods and techniques of land surveying.

Recent developments, current literature and sources of information regarding land

surveying.

Modern office procedures, methods and computer equipment.

Principles and procedures of financial record keeping and reporting

Principles and practices of training, supervision and performance evaluation.

## Ability to:

Use manual and electronic survey equipment and GPS data collection equipment.

Supervise and implement surveying programs.

Supervise the activities of large, varied, and complex surveying projects, including supervising staff and consultants.

Understand and interpret engineering construction plans, specifications and other contract documents.

Perform technical research and solve surveying problems.

Prepare contracts, conduct studies, prepare reports and make recommendations.

Interpret and apply pertinent laws, rules and regulations.

Perform mathematical computations through trigonometry.

Supervise, train, and evaluate survey personnel.

Assist in preparing and administering a budget, and maintain accurate records.

Communicate effectively both orally and in writing.

Establish and maintain cooperative working relationships.

## Experience and Training:

## **Training:**

Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering or surveying.

# Experience:

Four years of increasingly responsible experience in surveying, including one year of lead responsibility.

An equivalent combination of experience and training that will demonstrate the required knowledge and abilities is qualifying.

# Necessary Special Qualifications:

Registration as a Professional Land Surveyor by the State of Oregon at time of appointment.

Possession of a valid Oregon's driver's license if required to drive.

## IN THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

ORDER NO.	) IN THE MATTER OF CREATING
	) THE CLASSIFICATIONS AND SALARY
	) RANGES FOR ENGINEER-IN-TRAINING (EIT),
	) ASSOCIATE SURVEYOR, SENIOR
	) SURVEYOR
	•

WHEREAS, new classifications have been developed which appropriately describes the proposed duties and responsibilities to be performed; and

WHEREAS, it is the intent of Lane County to properly classify and compensate positions with regard to duties and responsibilities; and

WHEREAS, Lane Manual requires Board approval for amending the classification and compensation plans; and

WHEREAS, Human Resources has developed the classifications and salary ranges in compliance with current classification/compensation policy, therefore it is hereby

**ORDERED**, that the classifications and salary ranges be as follows:

Engineer-In-Training (EIT)	Range 30	\$37,690-\$52,208
Associate Surveyor	Range 33	\$40,581-\$56,202
Senior Surveyor	Range 38	\$45,906-\$63,544

DATED this 18th day of June, 2003

Peter Sorenson, Chair Lane County Board of Commissioners

IN THE MATTER OF CREATING THE CLASSIFICATIONS AND SALARY RANGES FOR ENGINEER-IN-TRAINING (EIT), ASSOCIATE SURVEYOR, SENIOR SURVEYOR

APPROVED AS TO FORM

OFFICE OF LEGAL COUNSEL