STATE OF ARIZONA JOB CODE SPECIFICATION

FLSA:	**NEXP**	**Job Code:**	**ACV95383**
Job Class Code:	**140**	**Salary Schedule:**	**ASRRENGPL**
EEO Category:	**03**	**Grade:**	**18**
Workers Comp Code:	**8601**		
Job Code Established:	**04/23/84**	**Effective Date:**	
Job Code Revised:	**01/01/01**	**Effective Date:**	

JOB CODE SERIES: Engineering Series

JOB CODE TITLE: ENGINEERING PLANS TECHNICIAN III

HRIS TITLE: ENGRG PLANS TECH III

WORK DESCRIPTION: Designs and supervises and/or performs the drafting of a variety of detailed map or highway plan sheets for the more complex specialized projects; computes all geometrics for special details of projects; conducts in-depth analysis and evaluation of a wide variety of technical engineering data; may act as assistant squad leader or lead worker for lower level staff; reviews, analyzes and validates a variety of engineering data to ensure completeness and accuracy; coordinates the maintenance of engineering records and files.

WORK ACTIVITIES: calculates land areas, earth forms, circular curves, material quantities and other quantitative measurements, using geometric and trigonometric computations.
Examines and verifies numeric data and specifications on source documents by recalculating computations, using geometry and trigonometry.
Reviews construction plans and verifies that these are in accordance with designated specifications and other requirements.
Reviews and refines horizontal alignment of roadway in engineering drawing.
Reviews and refines vertical alignment (grade line) of roadway in engineering drawing.
Develops quantity summaries for bid items for roadway construction (computes quantities of materials or service needed for a construction project).
Designs highway drainage systems, including culvert and channel sizes and locations.
Writes final design plan for a highway construction project, incorporating summaries of quantity computations (materials and services) contract documents and design details.
Directs various preliminary engineering assignments requiring computer applications including cogo and ashes.
Coordinates and monitors branch computer processing to insure accuracy and efficiency.
Estimates costs of future construction projects in the planning phase, based on calculations from available data.
Reviews, verifies or inspects work of subordinate-level workers, for quality control.
Attends staff meetings of work unit or section, under direction of work supervisor; gives and receives information helpful in work unit or work system operation.
Searches blueprints, maps, charts, records, and diagrams for specific information regarding current construction or past work done in a future work site.
Codes data in preparation for data processing input.
Corrects errors in computer output data, and resubmits to operations supervisor for a rerun.
Performs related work as required.

WORK CONDITIONS: No unusual work conditions.

SUPERVISION: Works under the direction of a first-line supervisor and exercises considerable independent judgment within established program parameters, policies and procedures.

WORK RESULTS/PRODUCTS: Completed preliminary and final design of highway projects; completed preliminary and final map or plans sheets; completed, updated engineering data bases.

RESPONSIBILITY: Assigned projects are completed within established time frames; supervises the completion of maps or plans drafting within the parameters of assigned projects; accuracy and completeness of all design features for assigned projects; may supervise squad staff in the absence of the squad leader.

AUTHORITY: Determines whether design features are standard or require special detailing; verify that all calculations are correct; verify that all sheets meet applicable standards.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of: principles of traffic safety, drainage and highway construction as applied to the design of roadways; methods, procedures and techniques used in analyzing and interpreting a variety of engineering data such as field survey books, aerial photographs and maps; computer programs available for use in the work unit; agency drafting and design standards, policies and procedures and other regulations applicable to the area of assignments.

Skill in: using a variety of drafting and office equipment and machinery.

Ability to: research and interpret a wide variety of engineering data; verbally and graphically communicate project requirements to other members of the work unit; verify the accuracy of a variety of engineering data, including computer printouts, preliminary sketches and final map or plan sheets.