STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

DIVISION: Southcoast Region, Design &	PCN: 25-2385				
Engineering Services	(Position Description Attached)				
JOB CLASS/TITLE: Survey, Journey	WHEN POSITION IS NEEDED: 10/15/2018				
FLEXIBLY STAFFED: ☐ YES / ⊠ NO	DATE(S) / TIME FOR INTERVIEW/TESTING (IF KNOWN): LTC Schedule Interview? : ☐ YES / ☒ NO				
WAGE GRADE: 54 / \$22.16	DUTY STATION: Juneau				
Permanent Full-Time	Permanent Full-Time Seasonal				
Permanent Part-Time	Permanent Part-Time Seasonal				
Non-Perm Full-Time	Non-Perm Part-Time				
	14011 1 cmi i art i mic				
WORK SCHEDULE: M-F; 40 per week TRAVEL REQUIRED: ☑ YES / ☐ NO					
TRETTEE REQUIRED. MITEUT					
COMMENTS/SPECIAL REQUIREMENTS: Must have a valid Alaska Driver's License.					
Criminal Convictions: Must provide a copy of the	mercial Motor Vehicle Operator 10-year history form judgement from the Court for <u>any</u> Felony Conviction tion within the last 5 years. For positions requiring				
Note: Candidates who do not bring the required inform	nation to the interview may be rejected.				
	PHONE NUMBER: 907-586-6993				
CONTACT: Linda Murphy	FAX NUMBER:907-586-5757				
	FMAIL ADDRESS: linda@local71.com				



STATE OF ALASKA

Position Description

Position Control Number (PCN):

252385

Class Title:

Survey, Journey

Recruitment Type: Normal

1. Position Control Information	
Class Title: Survey, Journey	Title PK0743 Grade: 54
	Salary Schedule:
Bargaining Unit: Labor, Trade, and Crafts Unit	Bargaining Unit Code:
Department: Transportation & Public Facilities	Department Number: 25
Division: Southcoast Region Design and Engineering Services	5
Region/Section/Unit: S.E. Region/Preconstruction/Right of \	Way
Location: Juneau	Location Code: AWA
Time Seasonal OMB Authorized Code:	Time Class SACL
FLSA Exempt: No	Strike Class: 3
Position requires possession of a Commercial Drivers Lic	cense (CDL):
Position requires possession of, or access to, firearms or	r ammunition: No

2. Duties

2.1. In one or two sentences, state the main purpose of the position.

The main duty of the person in this position is to assist with the collection of land surveying field data as requested by the department, and required for pre-design, design, environmental, right-of-way, and/or geo-tech.

2.2. Starting from the most to the least important, list the functional areas assigned to the position. Within each functional area, describe the duty statement associated; estimate the percentage of time spent performing the duties; and define each area as essential (E) or marginal (M).

Fur	ctiona	Il Area Title:
E/M	% of Time	Duty Statement
Е	75 %	The primary duty of the Survey Journey (Instrument person) under the direction of the Survey Lead (Party Chief) is to assist with the collecting information about natural and man-made features used in the design of Capital projects, and for locating monuments and accessories used to determine the location of property lines and highway rights of way. Field surveying comprises the majority of the work-day for this position.
		In fulfilling the duties within the field, the person must be able to set up, prepare, and operate the survey equipment, and make accurate measurements during the operation of this equipment. Keep clear, concise and accurate field notes. In addition, download, check and edit the electronic files generated by the field equipment.
		This position requires an advanced knowledge of survey principles and practices, with the ability to compute coordinate closure using a hand held or portable computer or calculator. Must be able to fill in for the Survey Lead (Party Chief) during his absence.
E	10 %	A secondary, but no less critical duty within this position is care, maintenance, calibration, and adjustment of surveying tools and equipment.
		Field work is often conducted in inclement weather, and for the safe longevity and dependability it is imperative all tools and equipment be dried, cleaned, and maintained expediently, thoroughly and properly.
		To insure precise and accurate data it is important that survey instruments (theodolites, tribrachs, prism poles, etc.) be correctly adjusted and/or calibrated.
E	10 %	All field data must be transferred ("downloaded"), checked for blunders and errors, edited, and saved in an appropriate file for later retrieval by the survey technician.
		Completion of this duty is critical in order to insure accurate and error free data is processed by the technician.
E	5 %	Occasionally, in preparation for initiation of a field assignment, the Survey Journey must research records (local, state, and federal) that may be pertinent to that assignment.
		Often this data must be printed and/or copied, and perhaps entered in to a CAD drawing in order to generate coordinates that may be used for control or staking.

3. Other Work Details

3.1. List the computer software and hardware used to perform the duties described. Estimate how often each is used (e.g. daily, 2-3 times a week, 1-2 times a month, etc.).

Computer Software:

Tripod Data Systems (TDS) Survey Pro -- used daily; Microsurvey CAD 2010 -- used 2-3 times/week; Leica Geo-Office -- used 1-2 times/week; Leica GPS Geosystems -- used 1 time/week; Microsoft® Word© -- used daily; Microsoft® Excel© -- used daily; Garmin GPS -- used 1 time/month.

Computer Hardware:

Leica TS-15 Viva Total Station -- used daily; Dell Dimension lap computer -- used daily; HP 48 calculator -- used 1 time/week; Garmin handheld GPS -- used 1 time/month; Leica Series Viva GPS units -- used 1-2 times/week.

3.2. List the equipment and materials used to perform the duties described, including machinery, tools, instruments, vehicles, etc. Estimate how often each is used (e.g. daily, 2-3 times a week, 1-2 times a month, etc.).

This position requires the knowledge and ability to operate a wide variety of equipment ranging from very simple hand tools to vary complex and costly electronics survey equipment. The list includes:

- 1. Leica DI5S, DI2000 electronic Distomats for measuring and recording survey distances -- used 1 time/month.
- 2. Leica NA2 optical level, and DNA03 electronic level that measure and record differences in elevations -- used 1 time/month.
- 3. Conventional optical theodolites -- used daily.
- 4. Conventional optical levels -- used 1 time/month.
- 5. Leica System Viva Global Positioning System (GPS) equipment, and Garmin handheld GPS units -- used 1-2 days/week.
- 6. Innerspace recording fathometers -- used 5 times/year.
- 7. Hand-held VHF radios -- used 1 time/month.
- 8. Survey vehicles consisting of full size vans and trucks -- used daily.
- 9. Gas powered hammer drill -- used 1-2 times/month.
- 10. Chain saw -- used 2-3 times/month.
- 11. Boat and outboard motor -- used 3-4 times/month.

3.3. List the guides and references regularly used to perform the duties described. Examples include federal and state laws and regulations, professional standards, building codes, trade practices, contracts, and policy and procedure manuals. Explain how and why these guides and references are used. Estimate how often each is used (e.g. daily, 2-3 times a week, 1-2 times a month, etc.).

DOT/PF Manual of Survey Procedures -- referenced 1 time/month;

Department of Natural Resource's Survey Instructions -- referenced 1 time/month.

Standards of Practice Manual for surveyors, -- referenced 1 time/year.

Local Trades and Crafts (LTC) Local 71 Master Agreement -- referenced 4 time/month.

State Procurement Rules and DOT&PF Policies and Procedures regarding travel, per diem and the acquisitions of goods and services while working away from the main office -- referenced 1 time/year.

Manual of Standards for Work Zone Traffic Control -- referenced 1 time/month.

Alaska Statues regarding right of entry for surveying and the preservation and replacement of monuments, Bureau of Land Management (BLM) manual for surveying the public lands -- referenced 1 time/year.

3.4. Describe the level of authority and independence the incumbent of the position exercises. List the actions the incumbent takes or the decisions the incumbent makes on a regular basis without obtaining prior approval from a higher level employee. For example, explain how the position has the authority to commit the organization, or any parts thereof, to a course of action.

The person has the authority to determine which topographic features and property corners are to be mapped, and where those exact measurements will be taken. This discretion dictates how the topographic and/or "as-built" map will look, and where property/boundary lines will be computed/determined. It is the data from which plans, plats, and diagrams will be designed drafted.

3.5. Describe the nature of the contacts the incumbent has with other people in order to perform the duties described. Include who is contacted, the reason for the contact, and how often the contact is made.

The incumbent primarily interacts with his fellow crew members in determining field strategy, appropriate field techniques per assignment, tasks he/she will perform, and to coordinate crew work days/hours. In addition, the person must be in contact with the office staff (Senior Location Engineer, and Survey Coordinator) in order to be aware of travel logistics, work schedule, proper use of equipment, instruction and training needs, and purchasing of tools, supplies and survey equipment. Occasionally the incumbent is queried by members of the public, and during these instances he/she politely and forthrightly explains for whom he/she is working, the nature of the assignment, and why the information is needed by the Department. If questions are of a more technical, legal or detailed nature, the incumbent directs the person to the Party Chief or Senior Locations Engineer.

3.6. Describe the consequence of an error made by a prudent employee in the performance of the essential functions assigned to the position. What is the consequence of that error to individuals, operations, and programs?

Missed or poorly mapped feature(s) can result in improper quantity computations, thus claim(s) filed by contractor(s) or consultants, also right-of-way encroachment disparity and/or property boundary disputes that could lead to litigation. Errors in instrument set-up, calibration, and equipment can also cause result in the aforementioned.

3.7. List critical requirements of the position not previously described (e.g., skills in keyboarding, writing, negotiating, communications, etc.).

Position requires ability to keep neat and accurate field notes. Requires the ability to interact with the public in a positive way. Often the survey crew is the first person-to-person contact many home/property owners have with the Department when a new project has initiated, and occasionally these private citizens are not happy about the proposed project and vent their concerns and frustration upon the survey crew. Therefore,

the ability to be patient, calm and diplomatic are very important attributes to be practiced by the field crew members.
Requires first aid certification and CPR.
3.8. List licenses, certifications, registrations, physical or other standards required by state or federal law or regulation to perform the duties described. Cite the specific authority (e.g. law or regulation, such as the OSHA Bloodborne Pathogens Act).
Valid Alaska Drivers License.

4. Work Demands

The following identifies some of the physical and mental demands and potential hazards typically encountered by this position. These are job demands which can be **reasonably anticipated and are an expectation of the job**.

Keeping in mind the essential functional areas and duty statements described in section 2, select the rating that best matches the requirement of this position according to the following descriptions:

<u>Rating</u>	<u>Description</u>
Not Required (N):	Not required of this position.
Present (P):	Requirement is present, but is not essential to the position.(For example, a receptionist may encounter aggressive or angry people, but this is not an essential assignment.)
Occasional (O):	Required 33 percent of the time or less and essential to the position.(For example, a lifeguard swims only occasionally, but it is essential that a lifeguard be able to swim; a correctional officer must control aggressive/angry people who are life threatening.)

Frequent (F): Required over 33 percent of the time **and** essential to the position.

Items checked below must be consistent with the duty statements listed in section 2.

4.1 Physical Requirements

Title		Rat	ting	
	N	Р	0	F
Sitting			0	
Walking				F
Standing				F
Running		Р		
Jumping	N			
Bending or twisting			0	
Squatting or kneeling		Р		
Crawling		Р		
Reaching above shoulder level			0	
Reaching below shoulder level			0	
Ascending or descending using a ladder or other conveyance		P		
Climbing stairs		Р		
Driving cars, light duty trucks			0	
Driving heavy duty vehicles	N			
Using floor mounted foot controls to operate equipment (e.g., not driving a car)	N			
Repetitive motion of hands/fingers (e.g., keyboarding, turning pages)				F
Fine manipulation with fingers		Р		
Pinching with fingers		Р		
Grasping with hand, gripping		Р		
Load, unload, aim, and fire handguns, shotguns or other firearms	N			

Lifting/carrying up to 25 pounds		0	
Lifting/carrying 26-50 pounds		0	
Lifting/carrying more than 50 pounds		0	
Pushing/pulling up to 25 pounds		0	
Pushing/pulling 26-50 pounds		0	
Pushing/pulling more than 50 pounds		0	
Balancing on moving surfaces	N		
Balancing on narrow surfaces	N		
Balancing on slippery surfaces	N		
Balancing on uneven surfaces	N		
Restraining/grappling with people in a public protection environment	N		
Seeing objects at a distance		0	
Seeing objects peripherally		0	
Using depth perception			F
Seeing close work (e.g., typed print)			F
Distinguishing colors		0	
Hearing conversations or sounds			F
Hearing via radio or telephone		0	
Communicating through speech			F
Communicating by writing/reading			F
Distinguishing odors by smell	N		
Distinguishing tastes	N		

4.2 Work Environment

Title		Rat	ting	
	N P C			
Work in/exposure to inclement weather				F
Work in/exposure to cold water			0	
Work/live in remote field sites		Р		
Work in confined areas (under desks, in heating vents, etc.)		P		
Exposure to dust, chemicals, or fumes			0	
Exposure to hazardous equipment (e.g., guns, chainsaws, explosives)			0	
Exposure to electrical current (not outlets)		P		
Swimming/scuba diving	N			
Work at heights up to 25 feet (e.g., towers, poles)			0	
Work at heights over 25 feet (e.g., towers, poles)			0	
Work in urban or highway traffic (other than driving)			0	
Work around moving machinery or mobile equipment		Р		
Work around moving mechanical parts		P		
Work on and off moving equipment		Р		
Work on slippery or uneven surfaces		Р		
Work/travel in boat/small aircraft/helicopters			0	

Exposure to high noise levels		Р		
Exposure to infection, germs, or contagious diseases (e.g., hospital, lab, clinic, etc.)	N			
Exposure to blood, body fluid, or materials potentially contaminated by blood or body fluids (e.g., hospital, lab, clinic, public protection environment)	N			
Exposure to needles or sharp implements (e.g., hospital, kitchens)	N			
Use of hot equipment (e.g., kitchen ovens, lab equipment)	N			
Exposure to wild/dangerous animals			0	
Exposure to insect bites or stings				F
Exposure to aggressive/angry people in a public protection environment	N			

4.3 Other Work Demands

Title	Rating			
	N	Р	0	F
There are no other work demands.				

4.4. Explain any special physical, mental, or behavioral requirements of the position that have not already been addressed.

None

5. Supervisory Authority

This page must be completed if PCN **252385** is assigned supervisory or lead level authority (this includes Labor, Trades and Crafts foreman positions). In the chart below, list each position PCN **252385** supervises or leads. Record **252385** 's level of authority for each area of responsibility according to the definitions below. Subordinate positions listed must be consistent with those reflected on the staffing chart, and levels of authority must be substantiated in all other applicable portions of the PD (i.e. duties, guides, actions, decisions).

Note: These ratings are not dependent upon whether the position has actually exercised the authority, but rather what level is assigned.

Level Definition of Level of Authority Assigned

- 1 = Has authority to take action; notification to supervisor may or may not be necessary afterward.
- 2 = Effectively recommends and discusses decision with supervisor; then takes action.
- Presents recommendations to supervisor; supervisor makes decision and directs position to take action.
- 4 = No authority to take or recommend action.

Is PCN **252385** assigned supervisory or lead level authority for one or more of the responsibilities listed in the chart below? **No** If no, skip this section.

	PCN 252385 's Responsibilities and Assigned Level of Authority											
Positions	Employ	Discipline	Discharge	Adjudicate	Assign	Set	Check	Evaluate	Instruct			
Directly	(includes	(includes		Grievances	Work	Task	Quality	Performance	& Train			
Supervised	authority	authority		(includes		Priorities	of Work		Staff			
or Led by	to hire,	to		authority to								
PCN	transfer,	suspend,		respond to a								
252385	layoff,	demote,		first level								
	OR recall)	OR issue		grievance								
		written		under a								
		warnings)		collective								
				bargaining								
				agreement)								

None