

# Special Specification 7188

## Snow and Ice Control



### 1. DESCRIPTION

This Item will govern for treatment of bridges and designated locations with de-icing material as directed.

The Winter Weather Season (WWS) will be defined as the time period stated in the General Notes as the time the Contractor must have all equipment, as stated in the General Notes, equipped and available to respond to a Winter Weather Event (WWE).

A Winter Weather Event (WWE) will be defined as winter precipitation, including snow, sleet, freezing rain, etc.

A Call-out will be defined as the Engineer's notification to the Contractor to respond to a WWE.

### 2. MATERIALS

Deicing materials will be provided by the Department. Department stockpile locations will be specified on the plans. Deicing material will consist of granular Meltdown 20, salt, salt water brine, Liquid Magnesium Chloride, and Aggregate or similar.

### 3. EQUIPMENT AND PERSONNEL

Provide equipment, numbers, and types, as shown in the General Notes during the WWS and maintain in good working condition. Provide reflection on anti-icing equipment, supervision trucks, and heavy equipment (loaders, motor graders, backhoes, blowers, etc.). De-icing trucks must be equipped with amber and blue warning lights with 360 degree visibility. Provide all labor, tools, fuel, tire chains, equipment transportation, safety equipment, and any other items necessary to complete the Work.

Shadow vehicles are required for all scheduled anti-icing/pretreatment operations. Shadow vehicles for deicing operations will be compensated in accordance with Section 9.7, "Payment for Extra Work and Force account Method," when approved. Shadow vehicles must be equipped with warning lights, truck mounted attenuator, arrow board, and sign CW21-10, "Work Convoy". Assure used attenuators are in good working condition and are approved for use. A list of approved TMA/TA units can be found in the Department's Compliant Work Zone Traffic Control Devices List. The host vehicle for the TMA and TA must weigh a minimum of 19,000 lbs. Host vehicles may be ballasted to achieve the required weight. Any weight added to the host vehicle must be properly attached or contained within it so that it does not present a hazard and that proper energy dissipation occurs if the attenuator is impacted from behind by a large truck. The weight of a TA will not be considered in the weight of the host vehicle but the weight of a TMA may be included in the weight of the host vehicle. Upon request, provide either a manufacturer's curb weight or a certified scales weight ticket to the Engineer. Work vehicles must be equipped with warning lights. Trail vehicle and ramp control vehicle are not required.

Provide Automatic Vehicle Location (AVL) with Global Positioning Satellite (GPS) devices for all equipment to be used on the roadway. The AVL system must be internet based and the Department will have access to view the AVL system. The accuracy of the AVL devices must be within 15 ft. of the actual location of the equipment with data updated and transmitted at a minimum of every minute. Each vehicle/piece of equipment with an AVL device must have an identifier as to the type of equipment, operator and contact number. If the AVL units are not functioning properly, personnel and equipment will not be considered as being on the jobsite until the AVL units are functioning properly. All time disincentives will apply until the

internet site logs the AVL data points, unless the Contractor notifies the Engineer of a temporary AVL functionality issue before an event.

If a temporary AVL issue exists, the Contractor will provide the Engineer, or designee, a mutually agreed upon form of verification to document that the equipment and personnel met the time requirements defined in the Contract. All data records of the AVL system must be maintained for at least 1 yr. The Contractor must provide the Engineer with backup copies of the data files upon request.

Provide operators with appropriate driver's licenses.

Provide a supervisor on duty for all snow and ice events as the Department's point of contact. Supervisor must maintain the ability to communicate with the Department and contractor personnel. The supervisor must maintain contact and communication with the Engineer throughout the event, adjusting his equipment and personnel as requested by the Engineer. The supervisor is responsible for notifying the Engineer of all breakdowns and repaired or replaced vehicles. If an event requires the District to activate the Emergency Operation Center (EOC), provide a supervisor to contact the EOC for each work shift until the EOC has been deactivated.

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#### 4. WORK METHODS

A Snow and Ice Control Preparatory Meeting will be held in the summer of each year (to include, but not be limited to, the Contractor's Project Manager and Department personnel) or at least one month before the WWS, when authorization to begin Work is after the summer, to discuss Work plan for the coming WWS. The Contractor may provide input, but must fully comply with the final Work plan as directed.

Supply all equipment, as stated in the General Notes, during the WWS equipped and adjusted to perform the Work.

The Engineer will conduct a dry run at the beginning of the first month of the WWS. At the dry run, equipment will be inspected for compliance with the numbers and types shown in the General Notes, proper calibration, and proper operation. The Engineer will provide a minimum of 2 weeks' notice of the dry run.

The Engineer will determine the size and type of resources and equipment required, etc., and Call-out the Contractor to respond to a WWE. The number of hours and equipment use will vary with the number and severity of each WWE.

Respond; arrive at designated stockpile locations, to each Call-out a maximum of 2 hr. with equipment and personnel.

Perform traffic control for snow and ice planned anti-icing/pretreatment activities in accordance with TCP (3-1)-13, "Mobile Operations Undivided Highways" or TCP (3-2)-13, "Mobile Operations Divided Highways."

Provide one initial treatment of all freeway mainlane bridges. Continue treatment of bridges, steep grades, sharp curves, intersections and other trouble spots at the application rate for de-icing material, as directed throughout the duration of the event. The Department will monitor weather conditions and request additional treatments as necessary.

Be prepared to Work continuously 24 hr. a day. Limit personnel to a maximum of 12 hr. of operation during any 24 hr. time period, unless otherwise approved by the Engineer. Furnish backup personnel as needed.

After a WWE, within 24 hr., report the following information to the Engineer:

- Total man-hours worked,
- Amount of de-icing material applied (cu. yd.) and/or (gal.), and
- Other information as requested by the Engineer.

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**5. MEASUREMENT**

Work during a Call-out will be measured by the hour for each truck, shadow vehicle, loader, and spray rig. Partial hours will be rounded to the nearest 1/2 hr. of Work performed. Time charges begin when the equipment and personnel have responded, arrived at designated stockpile locations, and ends when Work is complete and the Engineer has determined that WWE is no longer a hazard to the traveling public and authorizes full or partial discontinued use for the Call-out.

Supply of all equipment, as stated in the General Notes, during the WWS will be measured by the month. The Engineer will confirm the adequacy of equipment during the dry run.

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**6. PAYMENT**

The Work performed during the WWE in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Snow and Ice Control (Truck)", "Snow and Ice Control (Shadow Vehicle)", "Snow and Ice Control (Loader)", "Snow and Ice Control (Spray Rig)", "Snow and Ice Control (Blade)", and "Snow and Ice Control (Snow Plow)". These prices must be full compensation for personnel, equipment, labor, fuel, tools and incidentals.

Failure to respond, arrive at designated stockpile locations, within 2 hr. of notification and continually perform directed Work will result in the assessment of disincentives as noted in the General Notes. The time to respond will begin at the first attempt of notification.

The Work performed, supply of all equipment, as stated in the General Notes, and measured as provided under "Measurement" during the WWS must be paid at the unit price bid for "Snow and Ice Control Season".