

RW-004  
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**ENGINEERING AND OPERATIONS  
NORTHERN AIRPORTS**

**SPECIFICATION FOR  
UNDERGROUND ELECTRICAL PULL-PITS  
FOR USE IN MEDIUM INTENSITY  
AIRFIELD LIGHTING SYSTEMS**

**Manitoba  
Transportation and  
Government Services**



**TRANSPORTATION AND GOVERNMENT SERVICES  
NORTHERN AIRPORTS**

**SPECIFICATIONS FOR UNDERGROUND ELECTRICAL  
PULL-PITS**

**1. SCOPE**

This specification defines the general requirements applicable to underground electrical pull-pits. The intent of this specification is to establish minimum acceptable electrical, mechanical, design and performance requirements, which all underground electrical pull-pits must meet to ensure satisfactory and reliable operation. It is not intended to impose restrictions upon design or materials, which must conform to the FAA or Transport Canada TP 312 Technical standard. All FAA and Transport Canada TP 312 standards, current FAA and Transport Canada TP 312 specifications at time of contract, not specifically mentioned in this specification will apply. Where there is a conflict between this specification and the latest FAA and Transport Canada TP 312 standard, this specification will apply.

**2. REQUIREMENTS**

- 2.01 The pull-pits must be fabricated from high-density polyethylene and constructed to withstand the pressures of frost heave when installed underground.
- 2.02 The pull-pits must be fabricated in accordance with Drawing #NAP-004 attached.
- 2.03 The pull-pits must be complete with a 6mm steel, hot dipped galvanized lid. The lid must have two 25 mm turning holes for removal purposes. The lid shall have a 6mm tapped (20 mm) hole to attach a grounding lug. (See Drawing #NAP-005) attached.
- 2.04 All galvanizing must be hot dipped with a minimum zinc coating of 600g/sq.m. (2 oz. per sq. ft.) CSA specification G164-M92. Shop coat primer to GCSB 1-GP-40M. Galvanizing primer must be zinc rich, ready-mix to 1 GP- 181M.

**3. WARRANTY**

- 3.01 All units must be guaranteed against failure for one year from date of acceptance by the Traffic Engineering Branch of the Department of Transportation and Government Services.

#### **4. INSPECTION AND ACCEPTANCE**

- 4.01 The vendor must supply one evaluation sample unit of each type being supplied along with all testing and technical documentation.

Electrical pull-pits that conform to this specification and are not currently in use by this Department must be submitted to the Traffic Signal Workshop for a one-year evaluation period by the Department. At the end of the evaluation period the supplier must be advised by the Traffic Operations Engineer if the equipment submitted for evaluation is acceptable.

The total cost of supplying this equipment for evaluation must be borne by the supplier. The bidder must complete the attached "Specification Compliance Summary" (attached). Failure to complete the summary will result in disqualification from the bidding.

- 4.02 All shipments of electrical pull-pits must be delivered to the Mechanical Equipment Warehouse facility at 1550 Dublin Avenue, Winnipeg, Manitoba. At that time they will be inspected by the Traffic Engineering Branch of the Department of Transportation and Government Services.

Acceptance will be based on the supplied equipment meeting the requirements of this specification.

- 4.03 For additional technical information please contact Mark Seniuk at (204) 945-7335 office, or (204) 799-8682 cellular.