Water License Application To Nunavut Water Board

Iqaluit Airport Utilidor Removal and Asbestos Abatement

Proponent: Transport Canada

Prairie and Northern Region

Environmental Affairs

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Nunavut Water Board

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Public Registry

Project Description

Prior to July 1, 1995 Iqaluit Airport was owned by the Government of Canada and operated by the Quebec Region of the Department of Transport. From July 1, 1995 until April 1, 1999 the airport was owned by the Government of Northwest Territories and operated by the Arctic Airports Division of the Department of Transportation. Since April 1, 1999 the airport has been owned by the Government of Nunavut and operated by the Nunavut Airports Division of the Nunavut Department of Community Government, Housing and Transportation.

The Government of Nunavut submitted a proposal to Transport Canada (TC) under the Airport Capital Assistance Program (ACAP) requesting funds for upgrading the runway and apron. As part of the proposal, a request for funding was made to reconfigure the drainage channels due to water ponding on the runway and Aprons from snow melt and rain. The proposed location to reconfigure the drainage channels intersects an abandoned utilidor on the airport property. The proposal identifies the removal of a 110m section of the utilidor. The utilidor is located approximately 10m north of Apron I (see Diagram 1).

Regular utilidor construction practices consisted of insulation containing asbestos. TC undertook an investigation in August 2005 to confirm this. A consultant with asbestos abatement expertise Pinchen Environmental was contracted to investigate and sample the utilidor. The report indicated it contained aircell insulation composed of 50-75% chrysotile asbestos and sweatwrap insulation composed of 50-75% chrysotile asbestos. The condition of the pipe insulation is poor and exposed to the environment. The utilidor will need to be demolished and removed prior to the Government of Nunavut proceeding with reconfiguring the drainage channels. The utilidor consists of concrete culvert beneath the road and taxiway, tin sheeting, foam and fibrous insulation, steel and metal piping. The tin sheeting is used to enclose and protect the piping inside of the utilidor. A section of the utilidor runs beneath the road and taxiway that is contained in a concrete culvert. The culvert is being used as both drainage for the ditch and passage of the utilidor beneath the road. The culvert and utilidor running beneath the road and taxiway will be demolished and removed. Prior to the removal, the Government of Nunavut will redirect the drainage channel and install a new culvert located beside the current location (see drawing attached).

The utilidor will need to be properly removed, the asbestos contained and disposed of in an acceptable manner that meets all regulation as determined by the consultant. The concrete and metal structure of the utilidor will need to be cleaned of debris and removal of all asbestos material prior to the demolition of the structure. The process details are outlined in the specifications appendix.

The construction will not be initiated until the water levels decrease substantially. The water levels and flow must be at a level where the contractor has access to the site to undertake the project. The contractor will make this determination. No in water works will take place. No machinery will work in the ditch or in any water remaining in the ditch. The section of utilidor located beneath the road and the taxiway will need to be removed. A new culvert will be installed prior to construction to redirect any water in the

ditch away from the utilidor while construction is taking place. The Government of Nunavut is responsible for installing the culvert and redirecting any water remaining in the ditch prior to TC initiating the utilidor removal. Mitigation measures will be in place to prevent any erosion and sedimentation to enter the ditch. This may include erosion control blankets, silt fencing and additional precautions the contractor identifies. The contractor will decide on the best type and appropriate measure. Any waste in the ditch will be removed and disposed of in the local landfill. This may include any garbage encountered and non-asbestos containing insulation. The local landfill accepts construction and household waste that may be encountered during the project.

The demolition waste from the utilidor (tin sheeting, steel, metal piping) will be sorted and stored on site to be removed and recycled. Before the waste may be removed all hazardous material and asbestos will be removed as prescribe by the contractor who must be certified in asbestos removal (see specification appendix). All hazardous material and asbestos will be removed out of Nunavut and disposed at a site the contractor selects. All hazardous material will be stored in This location must be a licensed facility for disposing asbestos. The non-hazardous, non-asbestos containing insulation (fiberglass and cellulose) will be disposed of in the local landfill. Approximately 20 cubic meters of this material will need to be disposed of since there are no facilities to recycle it.

There are no water bodies or waterways in the general vicinity of the utilidor. The drainage channels direct the melt water and rain away from the Apron and airstrip eventually making its way to drainage channels off the property. There is no water being used for this project.

A separate consultant will be contracted to conduct an air sampling/monitoring program for this project. They will be required to take background samples prior to the start of the project, during and after completion.

Execution of Work

Prior to commencing any works, establish location and extent of existing services and utilities such as water, sewer, electrical and communications. All existing services and utilities at locations entering any building will be disconnected and tested to ensure they are not in use.

Prior to the start of any demolition work, remove and dispose of contaminated or hazardous materials (i.e. asbestos). All asbestos material will be fully encapsulated and removed as per the recommendations by the consultant. The asbestos will be removed and transported out of Nunavut. The disposal location is unknown at this time until a construction contract is awarded. The successful bidder will outline the disposal methods and location.

The metal piping, tin sheeting, and steel will be removed, separated and stored on site for removal to a recycling facility determined by the consultant. The non-asbestos insulation (cellulose and fiberglass) will be disposed at the local landfill. At locations where

utilidors terminate at buildings, the services will be cut and capped. Where utilidors enter the building, they will be demolished to the underside of the floor of the building and restore the floor to match existing conditions. The demolition of the utilidors will include the spurs leading to the Federal Residence Building, the maintenance garage and First Air's Nose Dock. This will include the removal of all piping, asbestos insulation and any other non-hazardous materials (see diagram for location). Lay down areas will be designated on the site for the collection and storage of reused, salvaged or recycled material.

Mitigation for Construction

- Take precautions to guard against movement, settlement or collapse of adjacent services, sidewalks, roadways or driveways.
- Maintain and protect active site services
- Prevent erosion of existing site soils to areas outside of contract limits. The use of
 erosion control mats and silt fencing will be used on disturbed soil areas. This
 will prevent the potential of sediments from entering on-site or adjacent
 catchbasins, drainage systems sumps, pits.
- As a safety and health precaution dust suppression will be implemented by wetting material from a municipal water source
- All materials will be contained in the defined work area adjacent to the construction site.
- No materials permitted to migrate off site to other areas on the airport and surrounding areas.
- Contain all fibrous material (i.e. cellulose or fiberglass insulation) to minimize release while being handled or transported
- Remove any remaining debris, rubble or crushed material from the site after completion of the work to be disposed of in local landfill
- Keep public roadways and sidewalks clean of mud, soil, debris and garbage.
 Wash tires of all vehicles leaving the site as necessary. Water for this will be via municipal water
- Ensure demolition work does not adversely affect adjacent watercourses, groundwater and wildlife. A sampling program will be in effect to monitor air to ensure safety guidelines are met
- No machinery will be allowed in the ditch
- Only a licensed asbestos abatement contractor will be hired for this project.
- A separate consultant will be contracted to conduct an air sampling/monitoring program for this project. They will be required to take background samples prior to the start of the project, during and after completion.
- All machinery will be inspected for leaks. A spill plan will be required for refueling of machinery. No machinery may be filled within 100 m of the drainage ditch and any watercourse or body of water.

• The construction does not require airside access. However, if the need requires airside access the airport manager will be contacted and the proper procedures will be followed.

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- Due to normal aircraft operations, noise is not expected to a concern with construction practices.
- The airport is a developed and secure site, no wildlife has access to this location and no species at risk are present.

09/06/05 172 MANCH STREET, WASHING, MASTORA R2H 0T4 PHONE:(204) 462-0063 FAX:(204) 453-0788 IQALUIT AIRPORT UTILIDORS ASBESTOS ABATEMENT & DEMOLITION PINCHIN CLENT: TRANSPORT CANADA DRAWING NO.: SITE PLAN INDICATING LOCATION OF UTILIDORS PHACHEN PROJECT NO. 30636 DRAWN BY: DATE: SE SE BA REVIEWED BY: VD LEGEND SCALE CONCRETE CULVERT --FIRST AIR HOSE DOCK NUNAVCT STEEL CULVERT 943484 NWT LTD. CANADIAN HELICOPTERS ACCESS ROAD MAINTENANCE GARAGE KEDIN BOREX AR - STEEL CULVERT -STEEL CULVERY-RESIDENCE