

**SECTION 00 0102
PROJECT INFORMATION**

PART 1 GENERAL

1.01 PROJECT IDENTIFICATION

- A. Project Name: Duluth Steam Cooperative Association Chimney Stack Rehabilitation, located at One Lake Place Drive, Duluth, MN 55802.
- B. Owner: Duluth Steam Cooperative Association.
- C. Owner's Representative: Gerald Pelofske, Manager.
 - 1. Address: One Lake Place Drive.
 - 2. City, State, Zip: Duluth, MN 55802.

1.02 PROJECT DESCRIPTION

- A. Summary Project Description:
 - 1. Task 1: Perform any necessary lightning protection grounding system repairs. Replace the existing exterior access ladder with a current code compliant ladder with a fall arrest system.
 - 2. Task 2: Remove existing exterior stack coating, repair exterior stack concrete surface spalling and cracks, and replace exterior coating.
 - 3. Task 3: Perform an interior inspection and perform breaching repairs.
- B. Schedule:
 - 1. Coordinate the project Work Schedule with Owner. The following is a preliminary schedule to be confirmed by Owner:
 - a. Work to be performed as follows:
 - 1) Task 1: 2012
 - 2) Task 2: 2013
 - 3) Task 3: 2014

1.03 PROCUREMENT TIMETABLE

- A. The Owner reserves the right to change the schedule or terminate the entire procurement process at any time.

1.04 PROCUREMENT DOCUMENTS

- A. Availability of Documents: Complete sets of procurement documents may be obtained:
 - 1. From the office of LHB, Inc., 21 W. Superior Street, Suite 500, Duluth, MN 55802. Phone (218) 727-8446, Fax (218) 727-8456.

1.05 EXISTING CONDITIONS

- A. The original slip formed reinforced concrete chimney was 250-foot high 20-foot base diameter and 13-foot top diameter constructed in 1932. The chimney is lined with 4-inch hard burned common brick from the 40-foot elevation to the 120 foot elevation. The upper ten feet of the chimney was removed in the early 1950's to the current 240-foot high configuration. An additional ten to 12 feet of the top was removed in 1995 and replaced with brick and shotcrete. The chimney serves four coal fired boilers. The average internal operating temperature of the chimney is between 450 to 525 degrees Fahrenheit with a maximum possible temperature of 800 degrees Fahrenheit. The ambient outside air temperature in Duluth can fall to -45 degrees Fahrenheit in the winter with severe wind speeds.

Repairs in 1994 included crack sealing and spall repairs to the exterior of the chimney column. An estimated 2000 lineal feet of crack repair was performed. Repairs consisted of sawing the cracks and filling with a sealant. The exterior was also sounded and spalled areas were repaired. Approximately 30-feet at the top of the interior portion of the chimney was lined with

shotcrete during the repair work in the mid 90's. The chimney was coated in 1995 with Tuffide Stack-Kote with a wet thickness of 25 mils.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION