

Frattalone Companies, Inc.

MetroDome & Island Station Demolition Recycling
RAM/SWANA Conference
October 9, 2014



Frattalone Companies Services

- Frattalone Companies, Inc. is a full service civil site contractor self-performing earthwork, demolition, underground utilities and environmental remediation services for customers throughout the Upper Midwest and across the Nation.
- Established in 1970 as F. M. Frattalone Excavating & Grading, Inc.
- We support our client's projects, no matter the location, and have performed work as far as Seattle, Oklahoma, Alabama, Virginia, Niagara Falls, NY and many locations in between.

Frattalone Family of Companies

- Frattalone Companies, Inc. – St. Paul, MN
 - Parent Company and provider of earthwork, environmental, demolition and utilities construction services
- Fra-Dor, Inc. – Little Canada, MN
 - Recycled Concrete Aggregate and Landscape Materials Sales
 - Supports Parent Company and other clients
- Frattalone's Dawnway, LLLP – South St. Paul, MN
 - Demolition Landfill, concrete recycling & aggregate sales
 - Supports Parent Company and other clients

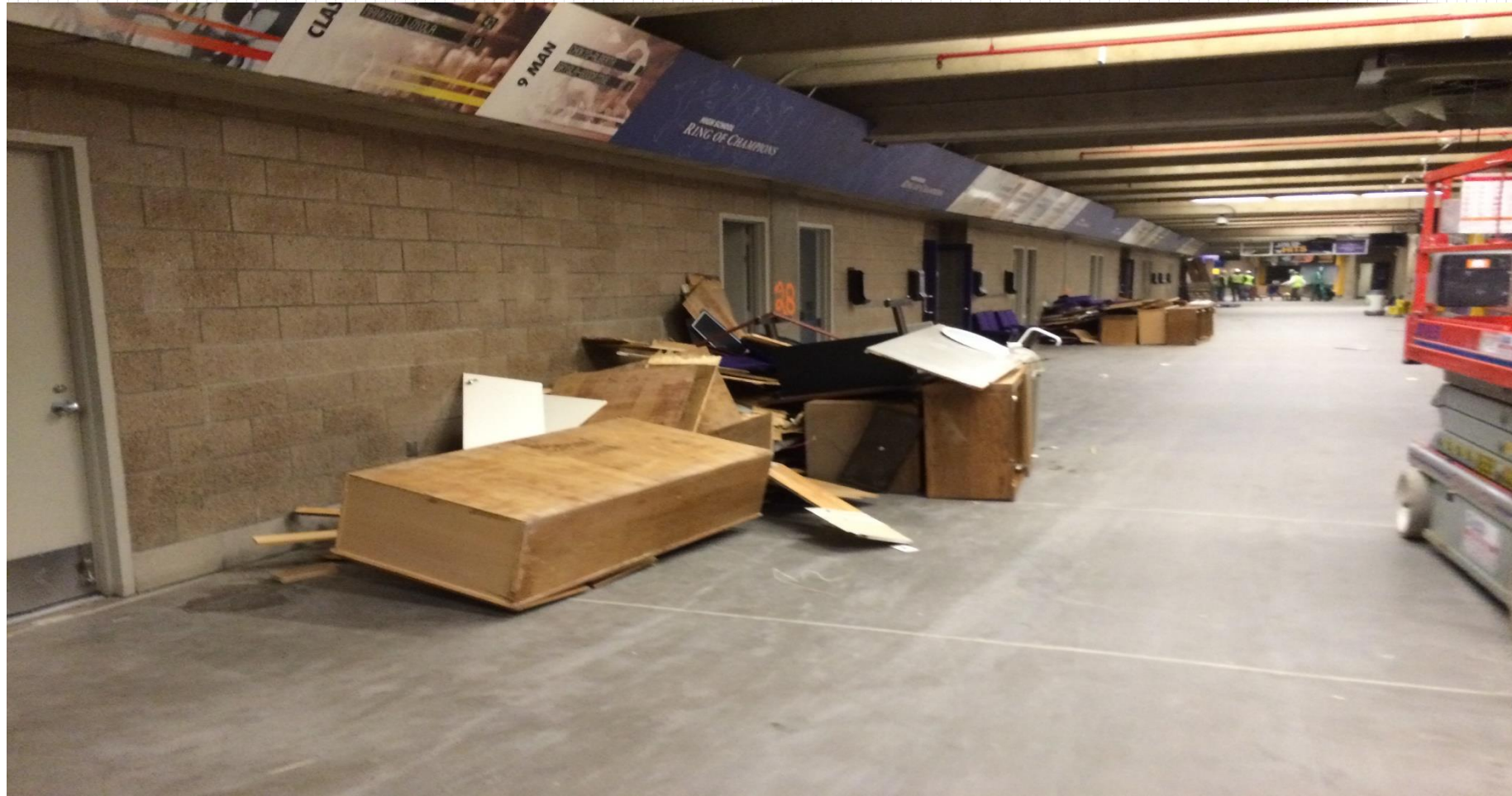
Services - Demolition

- Frattalone has performed a wide variety of demolition projects from the recent MetroDome and Island Station power plant, to all types of commercial/industrial structures including numerous grain silos and elevators.
- We specialize in partial or “surgical” removal of structures including recent projects such as The Ordway Music Theatre, St. Paul and Koda Energy, Shakopee, MN.
- Virtually all of our projects involve salvage and recycling depending on the type of construction and owner’s requirements.

H.H.H. MetroDome Demolition – Mpls, MN

- Demolished between January and April 2014
 - Year Built: 1982
 - Total Square Feet: 900,000
 - Number of Seats: 64,000
 - % of Structure Recycled: > 80%
 - Tons of Concrete Salvaged: 80,000
 - Tons of Ferrous Metals Salvaged: 5,000
 - Tons of Plastic Seats Salvaged: 320
 - Tons of 3.5” Roof Cables Salvaged: 300
 - Tons of Non-ferrous Metals Salvaged: 150

MetroDome Interior Salvage/Demolition



MetroDome Interior Salvage/Demolition



MetroDome Demolition



MetroDome Demolition



MetroDome Demolition



MetroDome Demolition



MetroDome Demolition with new Volvo EC480D High Reach Demolition Excavator

MetroDome Demolition



MetroDome – Offsite Concrete Recycling



MetroDome Waste Stream

- The following materials were salvaged, recycled or removed from the Dome:
 - Interior fixtures, furnishings, equipment
 - Field Turf – Reused on a high school field in Rochester, MN and other applications
 - Seating – HDPE seats and backs on cast steel frames
 - Interior “soft” demolition – Sheet rock, insulation, steel stud partitions, masonry
 - Teflon Coated Roof fabric and support cables
 - Ferrous metals – typically structural and reinforcing steel
 - Non-ferrous metals – copper, aluminum, brass, etc.
 - Concrete – for re-use as MnDOT spec roadway aggregate base

MetroDome - Regulated Materials

- All demolition projects are required to separately remove bulbs, ballasts, mercury switches/thermostats, etc. These are all recycled.
- Some examples of items removed from the MetroDome include:
 - 4' Lamps 5,105 each
 - 8' Lamps 644 each
 - HID Lamps 582 each
 - Non-PCB Ballasts 12,377 pounds
 - Computer Board Equipment 35,957 pounds

Island Station Power Plant – St. Paul, MN

- Demolished in March 2014
- Constructed in 1920's
- Closed in 1970's
- Total SF: 75,000
- The main plant was over 100 feet high with a 180 foot high, 30 foot diameter riveted steel stack above it
- Brick clad, structural riveted steel frame on 5 foot thick slab founded on 1000 wood piles
- Tons of Ferrous Metals salvaged: 1,500
- Tons of Non-ferrous Metals salvaged: 100

Island Station Implosion Video

Island Station Demolition



Pre-Demolition Interior Views

Island Station Demolition

Pre-Implosion Preparation



Island Station Demolition



Foundation Removal

Demolition Salvage/Recycling

- Demolition Contractors were recycling before recycling was fashionable!
- Any economically feasible value in the waste stream is extracted.
- Twin Cities Area Firms involved in recycling demolition materials:
 - Dem-Con
 - Lloyds Construction Services
 - Atomic Recycling
 - J & J Contracting
 - Bauer Brothers
 - Emsco
 - H & H
 - Re-Store

Commonly Salvaged/Recycled Demolition Materials

- Concrete
- Metals – scrap vs. resell
- Wood – shred, timbers, etc.
- Industrial Equipment – scrap or resell
- Drywall
- Ceiling Tiles
- Misc. Materials

Obstacles to Salvage/Recycling

- Legislation – Is it necessary?
 - 9-27-14 StarTribune article discusses increasing recycling rates on demolition projects – especially residential.
<http://www.startribune.com/local/minneapolis/277294221.html>
 - Story notes that there are currently 5 recycling operations operating in the Metro area without mandates.
- Bid Format
 - Negotiated contracts often allow/require more opportunity for recycling than “low price”, competitive bid projects.
- Contract Time
 - Frequently not enough time allowed to fully recycle all materials.

Obstacles to Salvage/Recycling

- Hazardous/Contaminated Materials
 - Items that may otherwise be recyclable may be coated or contaminated with hazardous materials (asbestos, lead paint, etc.)
- Budget
 - Value is only what someone is willing to pay. Cost to salvage can exceed salvage value.
- Geographic Location
 - Some projects are too far from recycling facilities.
 - Local regulations may dictate recycling or disposal or favor local vs. out of state contractors, WI for example

Thank you!

Please contact us if you have any additional questions about demolition or landfill services.

Chris Niemand

651-765-1125

chrisn@frattalonecompanies.com

Scott Spisak

651-765-1115

scotts@frattalonecompanies.com

