GREENFIELD
BUILDING YOUR FUTURE

CASE STUDY



Ethanol Plant Grain Storage

Four Million Bushels of Integrated Storage Built for Harvest

INDUSTRY
Ethanol and Grain Storage

CLIENT
KAAPA Ethanol

LOCATION
Minden, Nebraska

THE CHALLENGE

An operating ethanol plant needed to expand its grain storage capacity while improving the efficiency of its receiving and material-handling process. The original concept called for two separate 2-million-bushel buildings.

Greenfield evaluated the facility's requirements and recommended consolidating the capacity into one 4-million-bushel building. The larger structure would simplify the storage configuration, support more efficient grain movement and allow the surrounding receiving and reclaim systems to operate as one integrated solution.

Construction took place within an active ethanol facility, with strict safety requirements, multiple trades and persistent rain adding complexity.

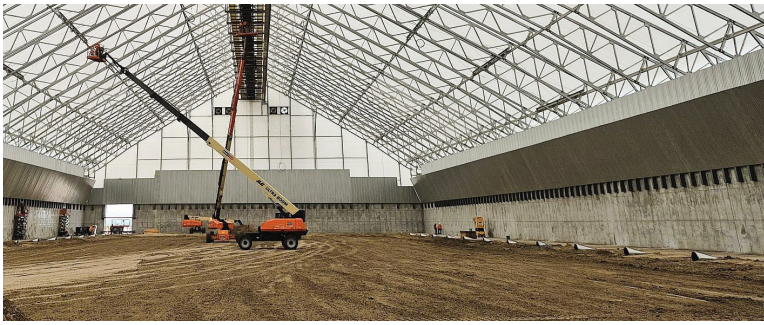
THE SOLUTION

Greenfield's scope included installation of the 200-by-504-foot fabric structure and a custom-engineered grain-retention wall. The independently supported wall transfers grain pressure directly to the foundation rather than the building frame, helping protect the structure from unnecessary stress.

Working within an active ethanol manufacturing facility required strict adherence to site-specific safety protocols. Our Greenfield team participated in weekly on-site meetings to coordinate with other contractors, address field conditions, maintain safety requirements and keep construction moving toward the harvest deadline.

PROJECT SNAPSHOT

CLIENT	KAAPA Ethanol
INDUSTRY	Ethanol and Grain Storage
PRODUCT TYPE	Flat Grain Storage
STRUCTURE TYPE	Fabric Structure with Hot-Dip Galvanized Steel Frame
PROJECT SIZE	200 feet by 504 feet
SITE COVERAGE	Approximately 2.3 acres
CAPACITY	4 million bushels
LOCATION	Minden, Nebraska
GREENFIELD SCOPE	Building, installation and engineered grain-retention wall



PERFORMANCE & OPERATIONAL ADVANTAGES

INCREASED CAPACITY

The new building adds 4 million bushels of enclosed grain-storage capacity to support the ethanol plant's ongoing production needs.

FASTER RECEIVING

Two indoor dump pits and fixed conveyor systems are designed to move trucks through the facility faster and streamline receiving during harvest.

REDUCED MATERIAL HANDLING

Unlike temporary ground piles, the integrated building allows grain to be weighed, received, conveyed, stored and reclaimed with less hauling and fewer manual handling steps.

BUILT FOR FUTURE GROWTH

The site and system were configured to accommodate additional storage capacity as the operation's needs evolve.

CONSTRUCTION COMPLEXITY / EXECUTION

Building within an operating ethanol facility required careful planning, strict site-safety compliance, and close coordination among multiple trades. The project included the removal of existing scales and a scale house, soil corrections performed by another project partner, and the integration of receiving pits, conveyors, aeration, and temperature-monitoring systems.

Summer rain compressed portions of the schedule, requiring the teams to respond quickly as field conditions changed. Greenfield maintained an active presence through weekly coordination meetings and worked closely with the project team to address engineering, installation and safety concerns as they arose.



KEY RESULTS

4 MILLION BUSHELS
New Enclosed Storage Capacity

200 × 504 FEET
Integrated Flat-Storage Building

2 INDOOR DUMP PITS
Designed to Improve Truck Flow

2.3 ACRES
Building Footprint

HARVEST-READY DESIGN
Receiving, Filling and Reclaim Systems Integrated

A Complete Storage System, Not Just a Building

"Managing the KAAPA project meant keeping a close eye on the schedule, especially when weather disrupted construction. The Greenfield team worked through those challenges, stayed responsive when issues arose, and kept the project moving. Despite the weather, we met the deadline."

— Lynn Strahm, Project Manager



PLANNING YOUR NEXT EXPANSION?

Greenfield Contractors partners with cooperatives, ag retailers, and industrial operations to deliver high-performance facilities built for scalability, efficiency, and long-term durability.

Info@Greenfield-Contractors.com

(833) 385-1859

1012 N Santa Fe Ave, Princeville, IL
806 Mill St, Clermont, IA
1108 S Old US Highway 75, Sabetha, KS

CONNECT WITH US

facebook.com/greenfieldcontractorsllc
linkedin.com/company/greenfield-contractors-llc/
youtube.com/@GreenfieldContractorsLLC

QR CODE