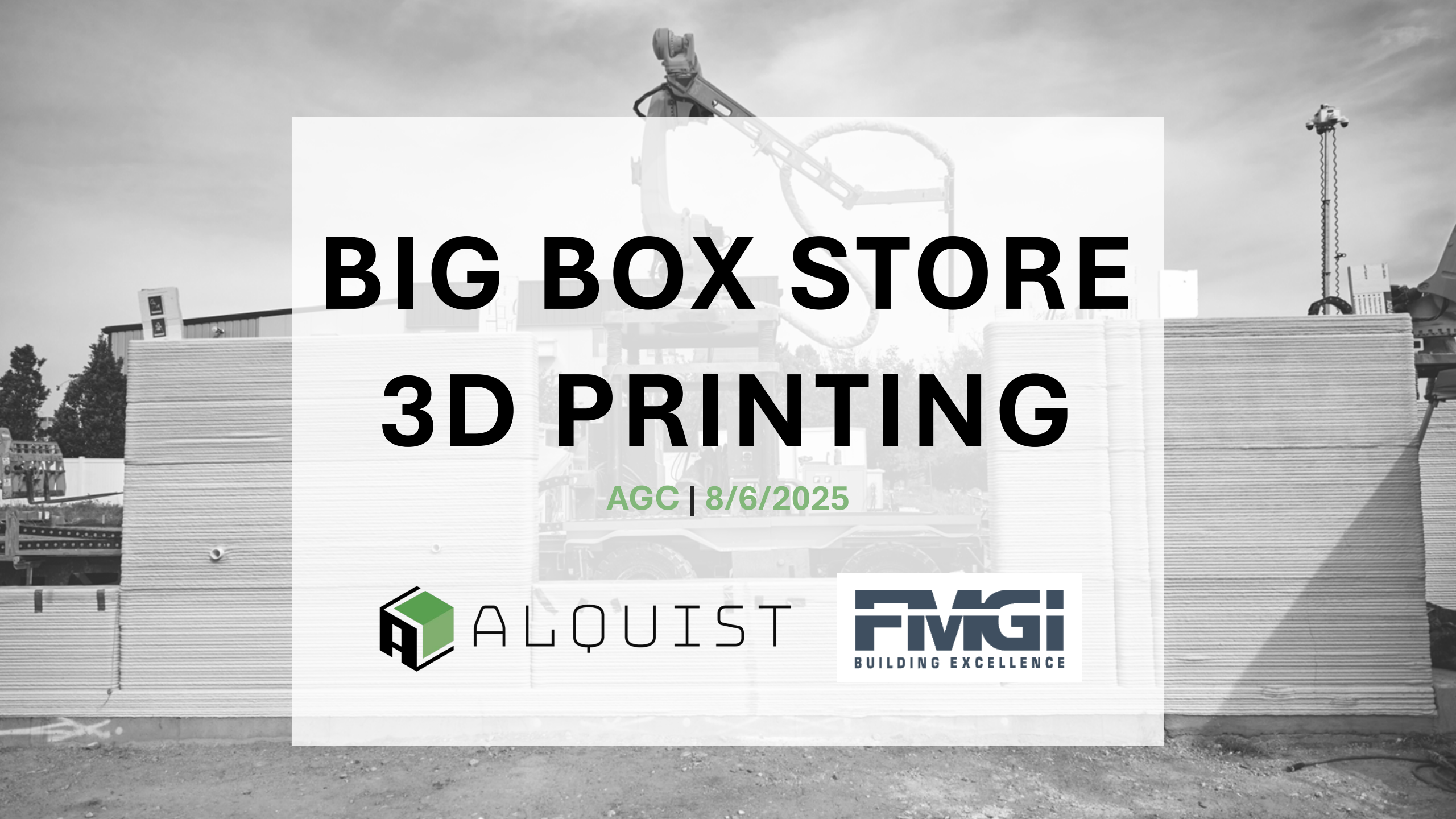
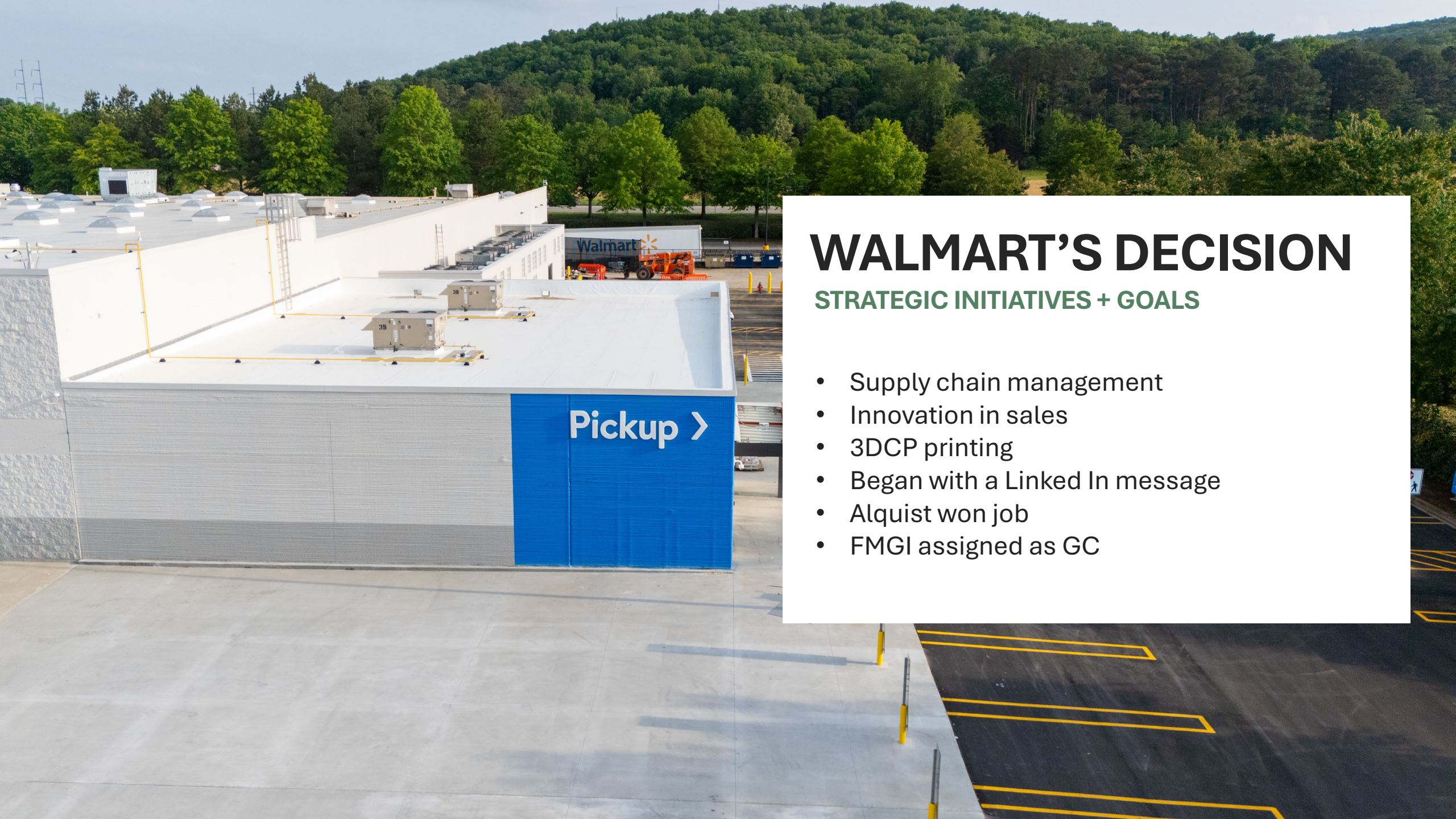


BIG BOX STORE 3D PRINTING

AGC | 8/6/2025

ALQUIST

FMGI
BUILDING EXCELLENCE



WALMART'S DECISION

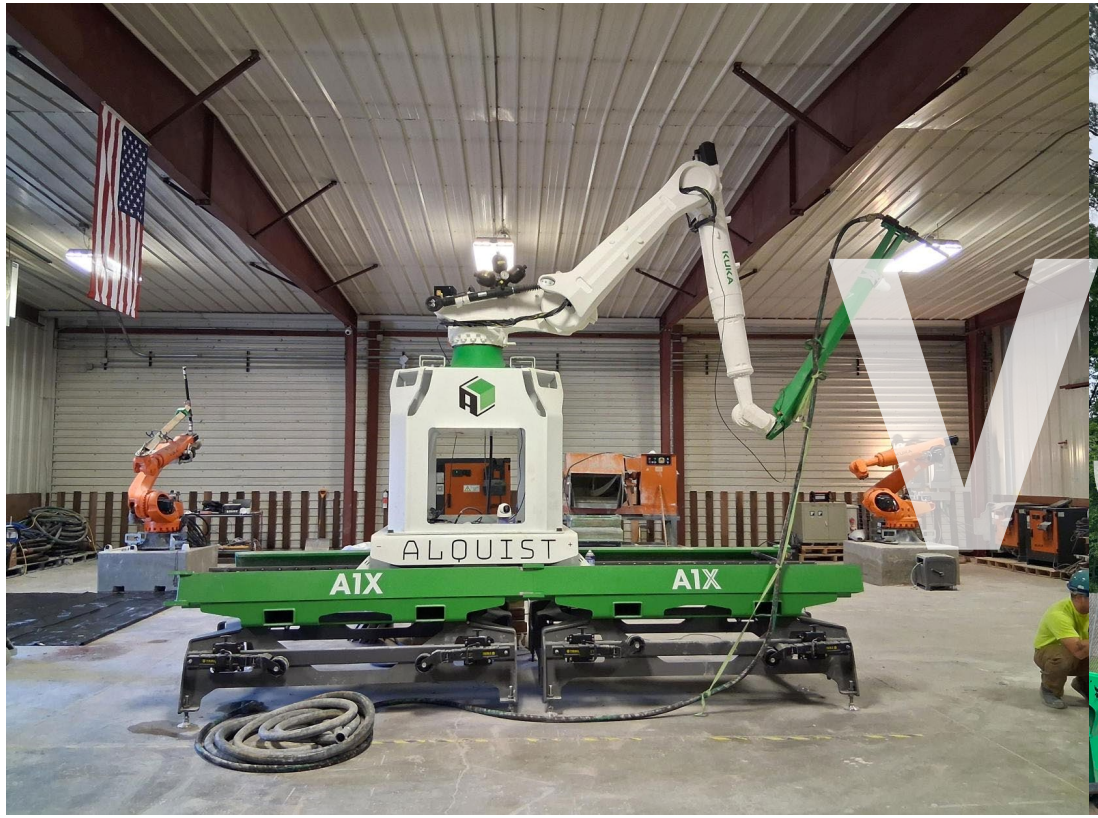
STRATEGIC INITIATIVES + GOALS

- Supply chain management
- Innovation in sales
- 3DCP printing
- Began with a Linked In message
- Alquist won job
- FMGI assigned as GC

3DCP TECHNOLOGY

- Software + Hardware
- Robots
- Artificial Intelligence
- CAD 3D

ROBOTICS



VS.

ROBOTIC ARM

GANTRY SYSTEM

THE JOB SITE ORGANIZATION

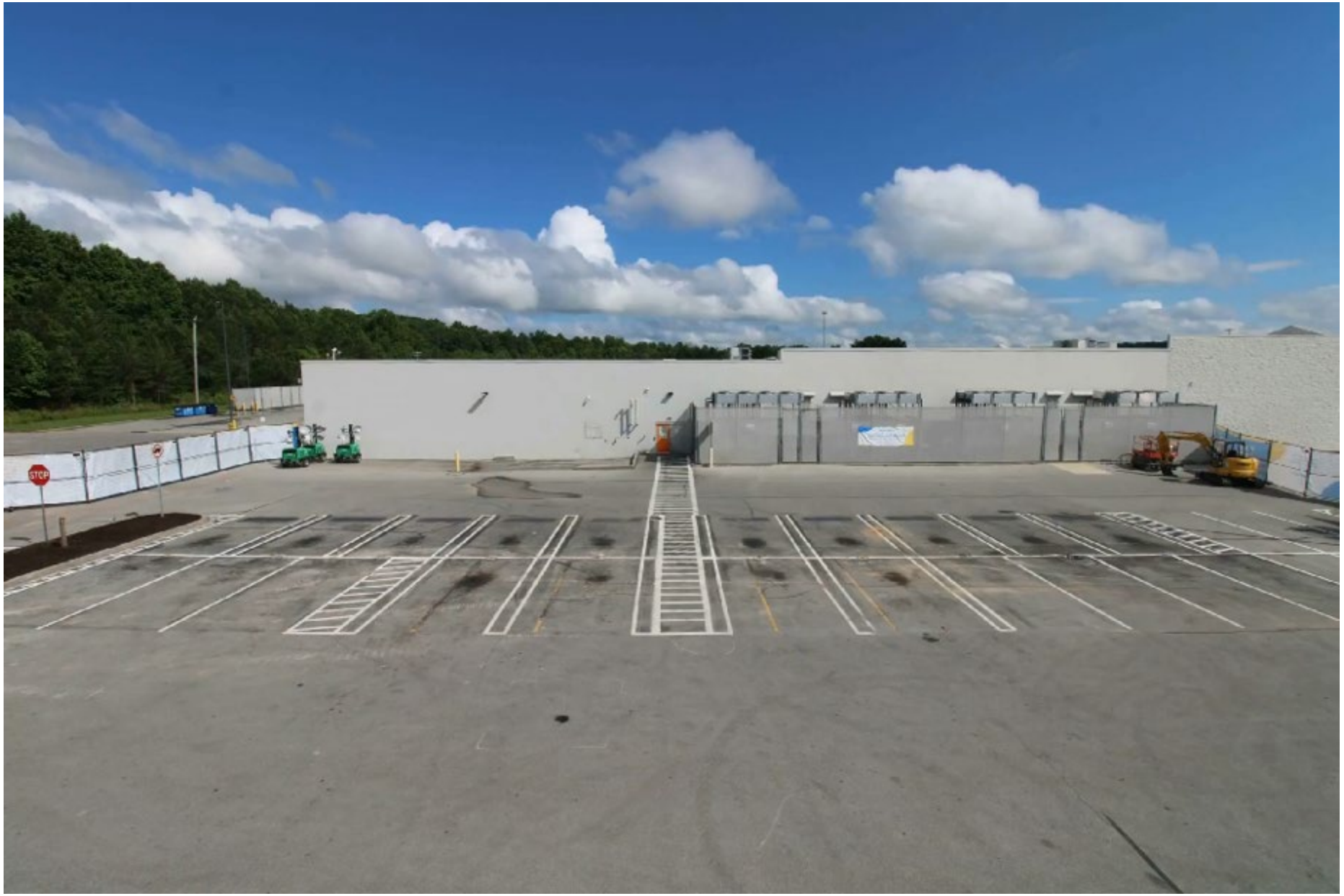
COMPLETED PROJECTS

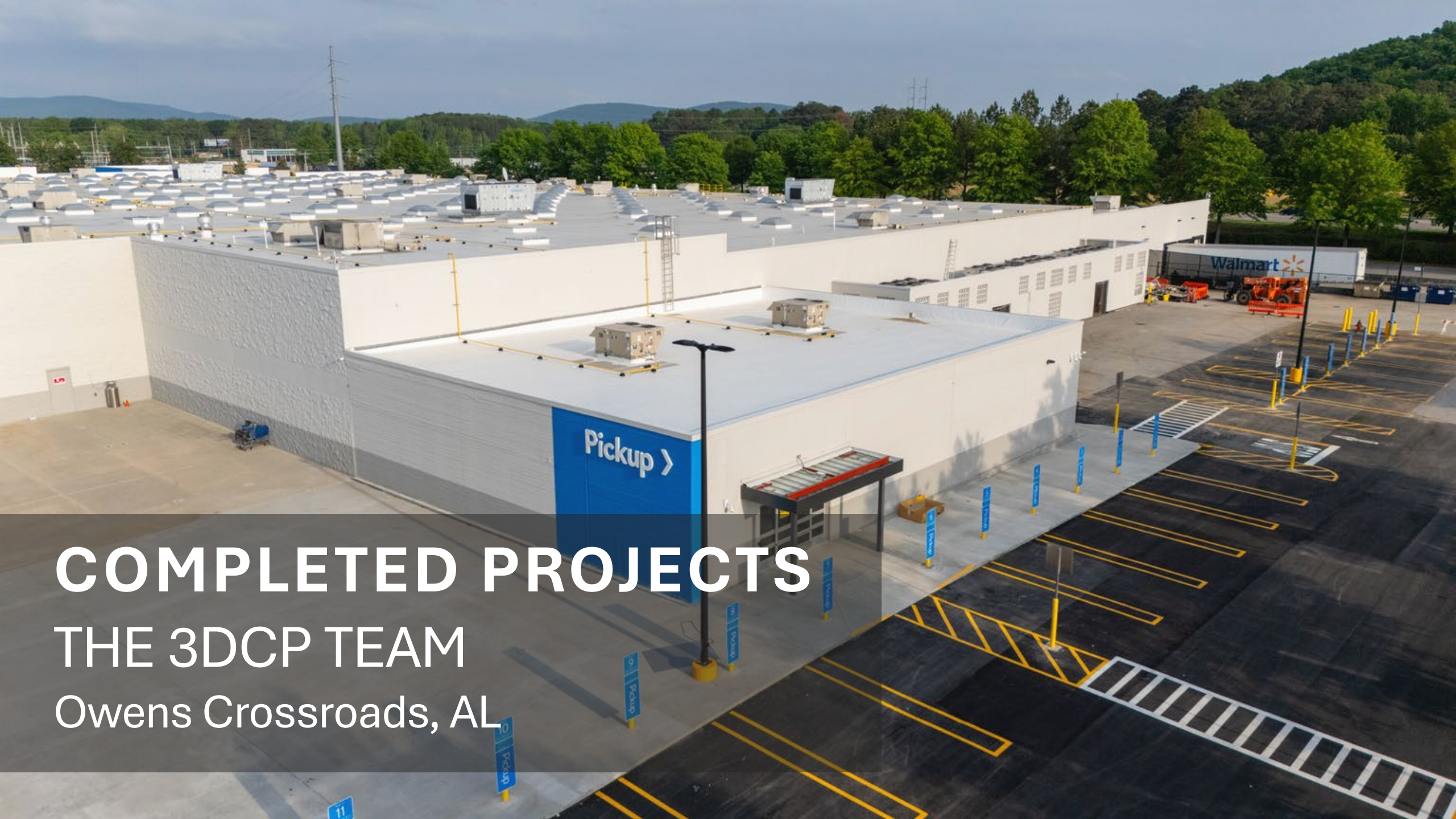
THE 3DCP TEAM

Owens Crossroads, AL

ONE OF THE LARGEST 3DCP COMMERCIAL PROJECTS IN THE HISTORY OF THE U.S.

2024

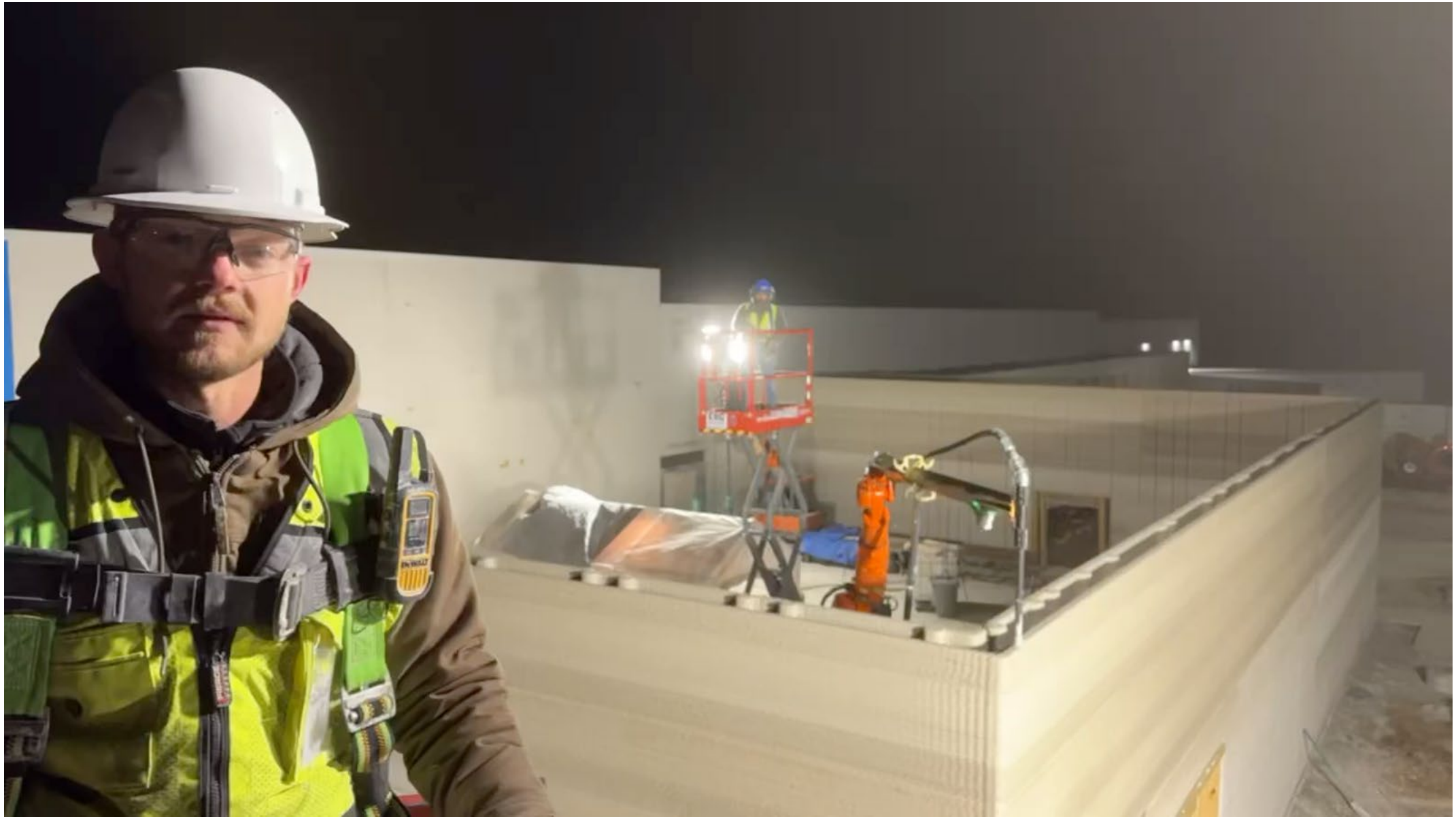

STOP



COMPLETED PROJECTS

THE 3DCP TEAM

Owens Crossroads, AL



GAINED EXPERIENCE

LESSONS LEARNED + DATA RESULTS FROM WALMART PROJECTS

- **Set a national benchmark** — First and largest 3D-printed commercial structure in U.S. history
- **Pioneered without a playbook** — Overbuilt to guarantee success In the absence of industry standards
- **Real-world tested** — Navigated extreme heat, lightning delays, and unplanned weather interruptions
- **Pushed equipment to the edge** — The scale and duration exposed key hardware gaps that informed our U.S.-made system
- **Catalyst for innovation** — Every challenge led to new learnings that now power our second-gen system and process improvements

GAINED EXPERIENCE

LESSONS LEARNED + DATA RESULTS FROM WALMART PROJECTS

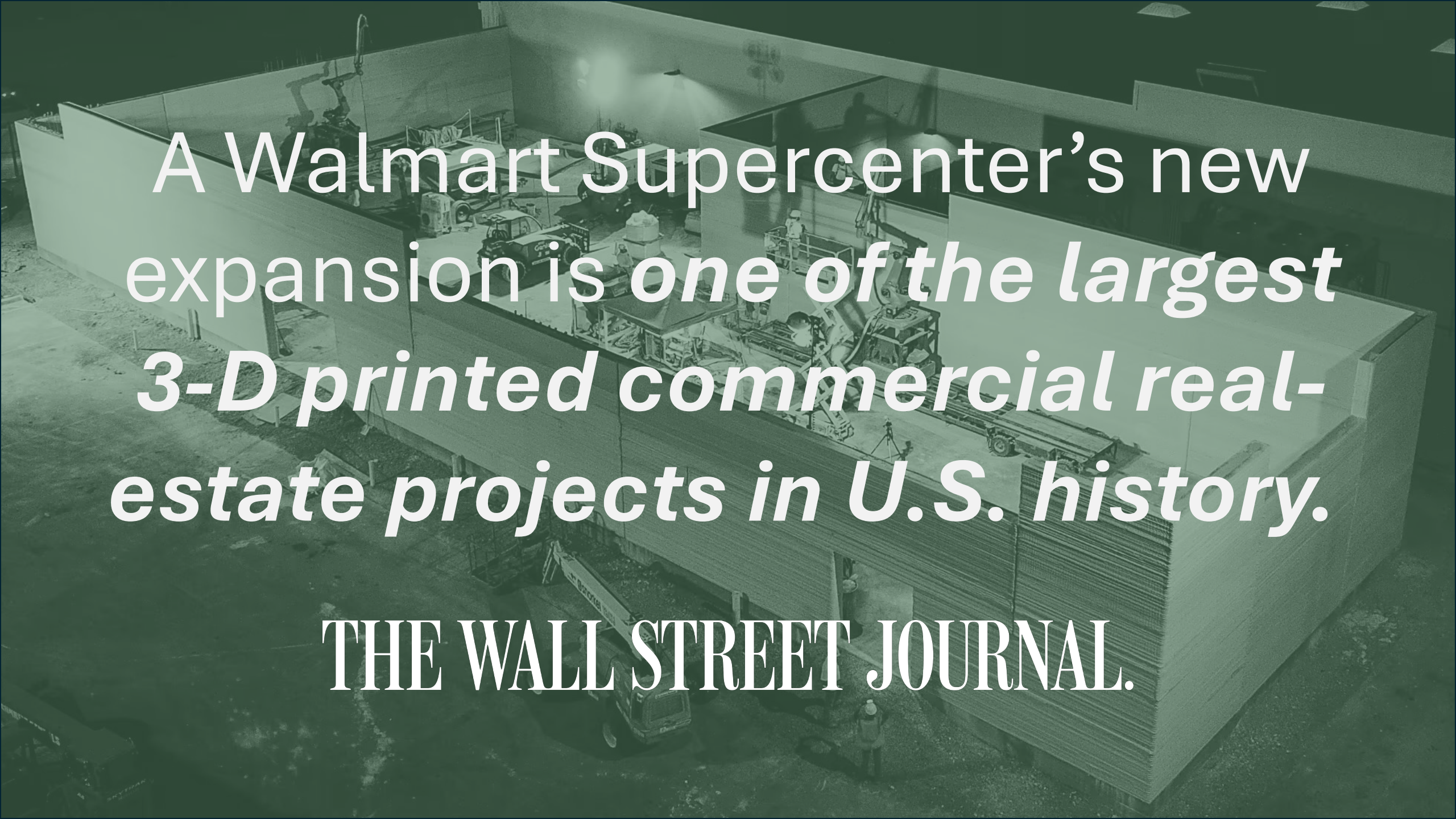
- **Simplified the build, kept the strength** — Smarter design + engineering reduced complexity without compromising safety
- **Aligned from day one** — Close coordination between Walmart, FMGI, and Alquist made phasing fast and fluid
- **Wall system 75% faster** — Compared to traditional block methods, we slashed the vertical build time
- **Saved serious time and money** — Wrapped the job ~3 **weeks early**, unlocking **~$100K in total project savings**

GAINED EXPERIENCE

LESSONS LEARNED + DATA RESULTS FROM WALMART PROJECTS

ATHENS, TENNESSEE	Average Traditional Construction	OWENS CROSS ROADS, ALABAMA
BUILDING SIZE		
8K Square Feet	**6.5K** Square Feet	**5K** Square Feet
DURATION		
91 Days	**35** Days	**10*** Days
MATERIAL WASTE		
50%	**10%**	**5%**
VERTICAL WALL COST		
$574K	**$312K**	**$260K**
ROBOTS USED		
2	--	**2**
CREW SIZE		
10 Laborers	**12** Laborers	**5** Laborers

*7 days total print time



A Walmart Supercenter's new expansion is ***one of the largest 3-D printed commercial real-estate projects in U.S. history.***

THE WALL STREET JOURNAL.

THE FUTURE

STARTING A COMPANY & AN INDUSTRY

Two Walmart Projects represent the beginning of the 3D commercial industry

MASS ADOPTION IS NEXT

Next 10 years will see 3DCP printers on every job site

FMGI = The Authority

QUESTIONS?

THANK YOU!

The 3DCP Commercial Team


ALQUIST