



APPLIED RESEARCH BUILDING

DATE: 01/10/22-01/16/22

PHASE: **Project Overview**



Facing North View



Facing South View

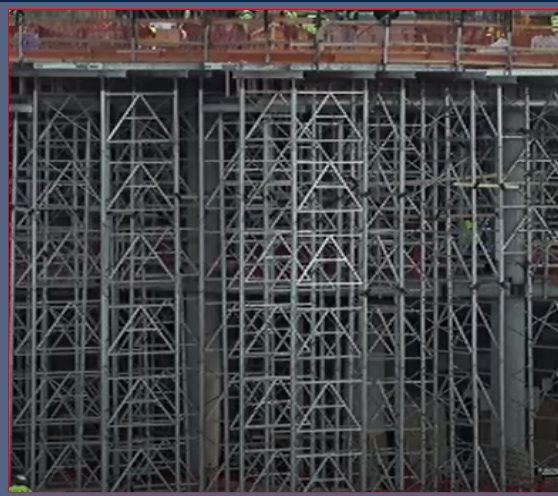


McCarthy + SmithGroup
ARB Design Build Team

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PHASE: Shoring and Decking



Southwest 40' Towers



Level-1 Reshoring

Fun Fact:

The purpose of the reshoring poles is to support the deck on the level below. Therefore, in order to pour Level 3, McCarthy added the poles on Level 1 to support the Level 2 deck. These poles are tied to each other to avoid falling as the concrete slab may shift/change due to the stress of the material weight above it.

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PHASE: Cold Metal Framing



Rated Walls Framing



Rated Walls Sheeting

Fun Fact:

Rated walls are identified in the beginning of the project and they are built first.

These walls are usually for corridors, rated partitions and electrical/data rooms. The priority wall sequence creates the opportunity to begin overhead utility installation.

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PHASE: Concrete



Level 3 North Slab Curing



Level 3 North Slab Finishing

Fun Fact:

Levels 1, 3 and 4 are larger square footage than Level 2 because Level 2 has more openings, including a very large opening to the floor below.

The cantilevered sections on Levels 3 and 4 will create soffits that extend past the floors below and require a unique form work condition. The Level 3 north deck pour was our largest to date totaling 860 cubic yards of concrete, took 17 hours to finish and covered approximately 19,000 square feet.

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PHASE: Form Work



Level 3 Columns Layout



Setting Level 3 Wall Formwork

Fun Fact:

Concrete structures require extreme focus on production. When one operation is coming to a close, another is starting. During long pours, the crews take advantage of the down time to prep for vertical construction (columns and walls). Once the concrete has cured enough, the next phase of work begins.

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PHASE: Mechanical, Electrical & Plumbing



Level 1 Overhead Plumbing

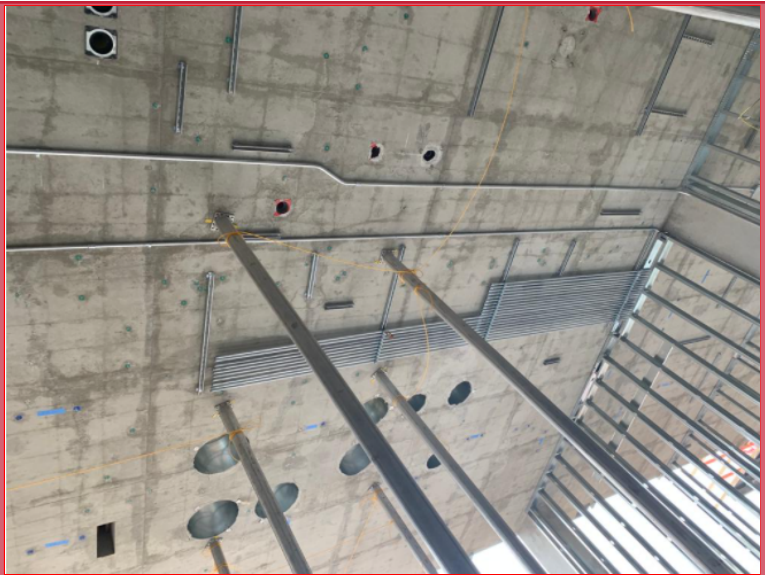


Level 1 Overhead Plumbing

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PHASE: Mechanical, Electrical & Plumbing



Level 1 Overhead Electrical



Level-1 Restroom Plumbing

Fun Fact:

Most of the ceilings are exposed concrete so all of the Mechanical/Electrical/Plumbing (MEP) work will be visible. The MEP team must focus on installing the conduits, ducts and pipes in a uniform, straight manner to deliver an architecturally acceptable, final look.

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PHASE: Mechanical, Electrical & Plumbing



Level 3 South In Slab Rough-in



Building Temporary Lighting

Fun Fact:

Temporary Lighting is crucial during construction to ensure adequate lighting is available when the walls start going up and block the natural light.



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PHASE: **What's next?!?**



- Structural Steel.
- Interior and Exterior Priority Wall Framing.
- Level 3 Concrete Pour.
- Architectural Building Mock up.
- Level 2 Re-shoring.
- Level 1 In wall electrical and plumbing.
- Level 1 ductwork.
- Equipment Pads.
- Level 3 Vertical pours.
- Level 4 Shoring.



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