



APPLIED RESEARCH BUILDING

DATE: **02/28/22-03/13/22**

PHASE: **Project Overview**



Facing North View



Facing South View



McCarthy + SmithGroup
ARB Design Build Team

APPLIED RESEARCH BUILDING

DATE: **02/28/22-03/13/22**

PHASE: **Structural Steel**



Large Scale Testing Lab Crane Steel Beams



Mechanical Room Steel Structure Anchor Bolt

Fun Fact:

The anchor bolt is held in place with a steel template to ensure it doesn't move during the concrete pour. The steel members will have holes that fit perfectly on the bolts to anchor them down.

APPLIED RESEARCH BUILDING

DATE: 02/28/22-03/13/22

PHASE: Interior Finish



Level-2 Topping-Out Drywall



West Mechanical Shaft

Fun Fact:

The mechanical shaft has a 2-hour rating fire assembly. These assemblies are engineered to ensure they meet the requirements. The illustrated Assembly in the bottom photo consist of a drywall sheet on top and special framing of 4" and 2 layers of rated drywall in the bottom. All joints and penetrations must be fire stopped (the red caulking).

APPLIED RESEARCH BUILDING

DATE: 02/28/22-03/13/22

PHASE: Form-Work



Level-4 Deck Shoring Towers



Level-4 Beam Form-Work

APPLIED RESEARCH BUILDING

DATE: **02/28/22-03/13/22**

PHASE: **Concrete**



Re-shoring Post for Level-4 Deck On Level-2



Level 4 Deck (Roof) Reinforcing

Fun Fact:

The re-shoring posts go under the deck below the level getting poured to ensure the weight of the concrete is supported properly until the concrete cures to the designed strength.

APPLIED RESEARCH BUILDING

DATE: **02/28/22-03/13/22**

PHASE: **Concrete**



Level-4 Area 10 Concrete Pour



Level-4 Area 10 Concrete Pour

Fun Fact:

Area 10 marks the last major concrete pour for ARB, which totals in 5,934 cubic yards of ready mix concrete.



McCarthy + SmithGroup
ARB Design Build Team

APPLIED RESEARCH BUILDING

DATE: **02/28/22-03/13/22**

PHASE: **Mock-Up**



Building Mock-up

Fun Fact:

The blue coat on the walls is called waterproofing. It is an adhesive coat that covers the drywall to prevent moisture from penetrating through the surface.

APPLIED RESEARCH BUILDING

DATE: **02/28/22-03/13/22**

PHASE: **Mechanical, Electrical & Plumbing**



Level 2 Overhead Electrical and Sprinkler Lines



Level-4 MEP Blockout

Fun Fact:

All of the yellow sleeves shown are the stub-ups for the equipment that will be on the roof. Each sleeve is labeled by the circuit it is feeding from, as mentioned previously identifying the source of power is crucial in electric work.



APPLIED RESEARCH BUILDING

DATE: **02/28/22-03/13/22**

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



- **Structural Steel.**
- **Exterior Waterproofing.**
- **Architectural Building Mock up Completion.**
- **Level 3 Re-shoring.**
- **Level 1 In wall electrical and plumbing.**
- **Level 1 production walls.**
- **Level 4 Mechanical Room Steel**
- **High Bay Stripping.**
- **Main Equipment Pads.**



McCarthy + SmithGroup
ARB Design Build Team