Jackie Eury Lighting || Electrical Shawn Good Denver Police Department Crime Lab Denver, CO September 18, 2014 Building Statistics, Part I

General Building Data

Building Name: Denver Police Department Crime Lab Location and Site: 1371 Cherokee Street, Denver, CO 80204 Building Occupant Name: Denver Police Department Occupancy or Function Types: Laboratory Classification: B, A-3 Size: 60,000 GSF Stories: 3 Dates of Construction: March 2011 – July 2012 Actual Cost Information: \$28,000,000.00 Project Delivery Method: CM at Risk

Primary Project Team

Owner: Denver Police Department General Contractor and Construction Management: JE Dunn http://www.jedunn.com/ Architect: Durrant No longer in business Design Architect and Engineer, Lab Planner: SmithGroupJJR http://smithgroupjjr.com/ Electrical Engineer: Scanlon Szynskie Group http://www.ssgroupinc.com/ Mechanical Engineer: Gehring and Associates http://thearchitectsengineer.com/ Structural Engineer: MNA http://www.mnaengineering.com/ Civil Engineer: S.A. Miro, Inc. http://www.samiro.com/

Architecture

The Crime Lab utilizes a contemporary approach to architecture, with pieces of the building boldly extruding from the façade and an elevation that undulates. The materials that make up the exterior are a combination of metal and glass curtain walls, as well as concrete panels.



Figure 1. (above) Extruding Cubes on Southeast Corner



Figure 2. (above) Double-helix Inspired Design on Northeast Corner

Zoning: District D-GT (Downtown Golden Triangle) Neighborhoods within this district are housing, office, commercial, retail and mixed use.

Maximum Height: 175 feet above the elevation of Broadway St.

Major National Model Codes: IBC 2006 | IMC 2006 | IPC 2006 | NEC 2005 | IFC 2006 | IECC 2006

Historical Requirements: N/A

Building Enclosure

Façade: A mixture of cladding systems makes up the building envelope of the crime lab. There are aluminum curtain walls, and precast concrete and composite metal panels. The structure itself is steel frame with composite and concrete decking.

Glazing: The glazing on the structure consists of four different glasses: spandrel, vision, frosted, and gradieted frit.

Roofing: Single Ply Membrane Roofing System from Everguard TPO. This light grey colored membrane is smooth type, polyester scrim reinforced thermoplastic polyolefin. This thermoplastic roofing does not allow water penetration and has a UL Class A fire rating.

Sustainability Features

Falling under LEED Gold for New Construction, the Denver Police Department Crime Lab has multiple sustainable facets. Water usage in the building was reduced by using low-flow fixtures. In addition to this, 20% of the materials in the building are recycled. Listed below are some other features that were placed into the building to achieve the LEED Gold rating:

- Heat Island Effect
- Light Pollution Reduction
- Water Efficient Landscaping
- Construction Waste Management
- Daylight and Views