
THE MUSEUM OF THE BIBLE

Washington, DC



BUILDING STATISTICS : PART ONE

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L/E Option

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GENERAL BUILDING DATA

Building Name | Museum of the Bible (MOTB)

Location and Site | Washington, D.C.; property name known as Washington Design Center (WDC)

Building Occupant Name | Museum of the Bible

Occupancy or function types (type of building) | Museum

Size (total square feet) | 430,000 SF

Number of stories | 6 stories above grade; 9 total levels

Primary project team | Museum of the Bible, SmithGroupJJR, Tadjer Cohen Edelson Associates Inc., RK&K, Michael Vergason, Fluidity Fountain, Theatre Consultants Collaborative, Inc.

Dates of Construction (start-finish) | Feb 2015 – Fall 2017

Actual cost information | Contract Value: \$237 million

Project Delivery Method | Design – Bid – Build

Note: All renderings, drawings and other imagery are courtesy of SmithGroupJJR



ARCHITECTURE



The Museum of the Bible (MOTB) is a non-sectarian museum focusing on the history and impact of the Bible with a core collection is a compilation of more than 40,000 biblical antiquities and rare biblical texts and artifacts. The Museum has several uses which include exhibit space, library resources, meeting spaces and guest rooms for visiting scholars, space for certain affiliated museums and their exhibits, and sound ground floor accessory retail uses, such as a gift shop and café or food service establishment. The MOTB will also be a center of study for the Green Scholars Initiative, where established scholars and students will conduct research to pioneer new biblical and classical discoveries on items from the collection.

The Washington Design Center (WDC) originally was an eight-story 241, 073 SF brick and concrete building, designed in the Renaissance Revival style, and built for the Terminal Refrigerating and Warehousing Company in 1922. In 1982, the original building was renovated to house the WDC, which included the construction of an addition to the east. The Washington Design Office Center Phase II (WOC) was later added in 1989 to complete the block.

The new construction of MOTB includes a demolition of the 1982 addition, adding six stories above the original footprint. This addition includes over 430,000,000 square feet of construction including three stories below grade to accommodate rotating exhibit gallery collections, storage, and a lower level central plant. The exterior aesthetics honor the historic characteristics of the building, and a curved glass roof will be added to allow daylight exposure as well as beautiful views of central D.C. as well as the capital building.



Major National Model Codes | 2009 International Building Code (IBC)

American Concrete Institute (ACI)

American Welding Society Code (AWS)

American Institute of Steel Construction (AISC)

National Fire Protection Association (NFPA)

National Electrical Code (NEC)

2012 International Energy Conservation Code

American National Standards Institute (ANSI)

Americans with Disabilities Act (ADA)

Zoning Requirements | D.C. Municipal Regulations and D.C. Register, Title 11

Historical District Requirements | Design to accommodate the U.S. Commission of Fine Arts (CFA)

BUILDING ENCLOSURE

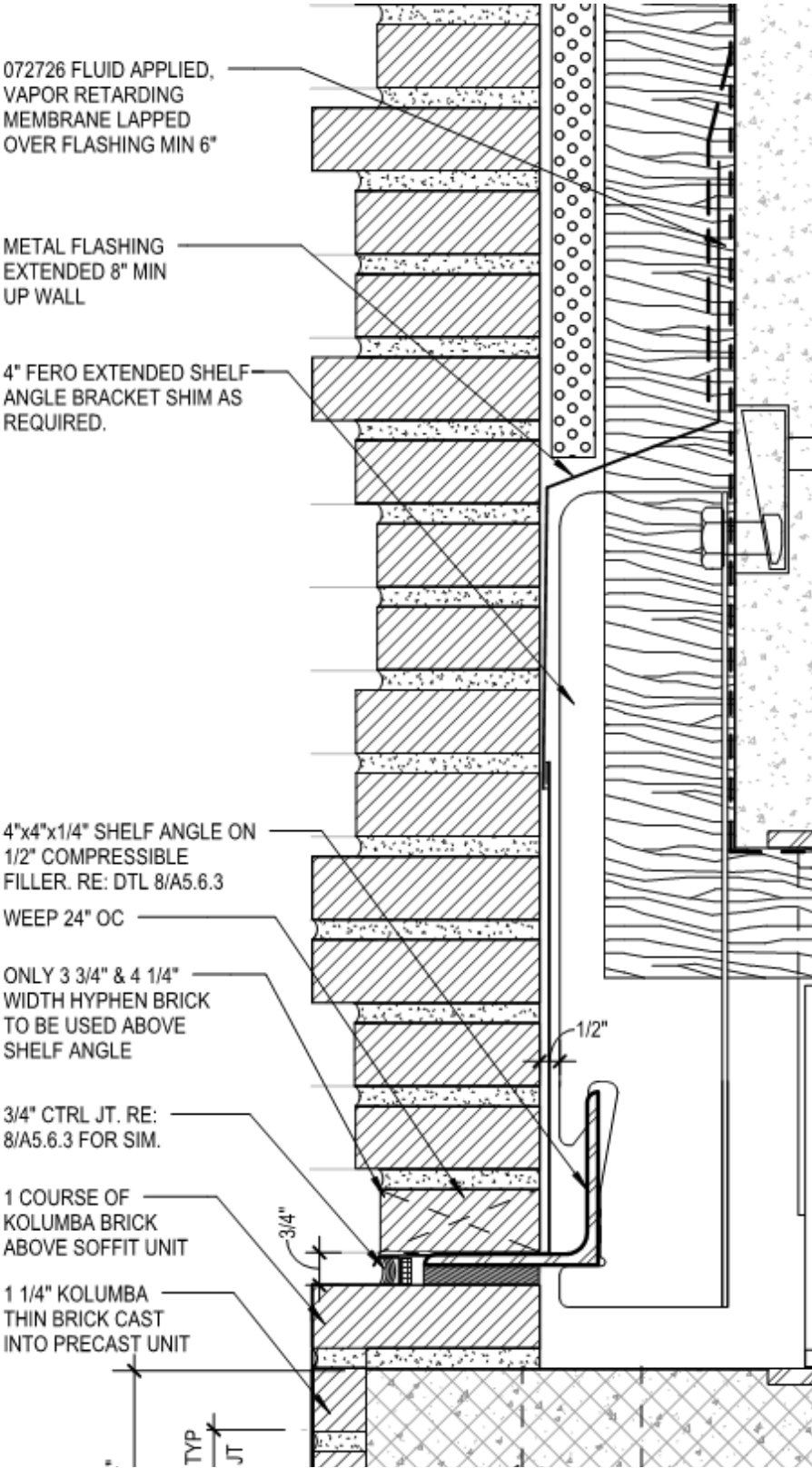
Exterior Walls | The 1922 Refrigerated warehouse concrete structure and masonry exterior will be retained. Although interior demolition will take place in 40% of the floors, the exterior skin will be retained from the second floor to that parapet. This enclosure features a staggered brick façade, with metal flashing and a fluid applied, vapor retarding membrane. SEE DETAIL ON FOLLOWING PAGE FOR FURTHER CLARIFICATION.

Exterior Window Systems and Doors | Punched windows will be constructed of extruded aluminum frames with 1" insulated low-e glazing units. The window mullion pattern and door elevations shall closely match the original design of the 1922 Terminal Refrigerating and Warehousing Company.

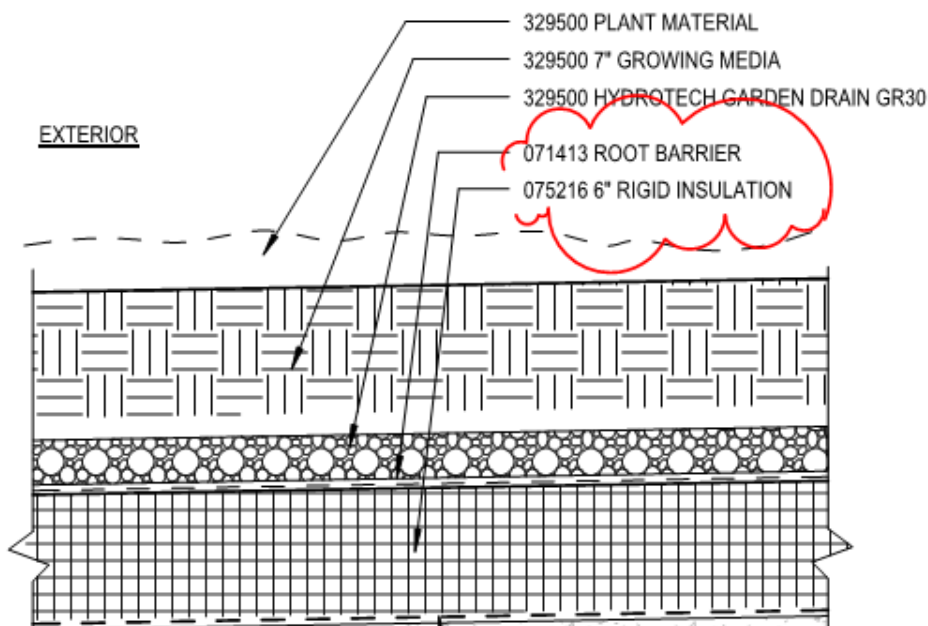
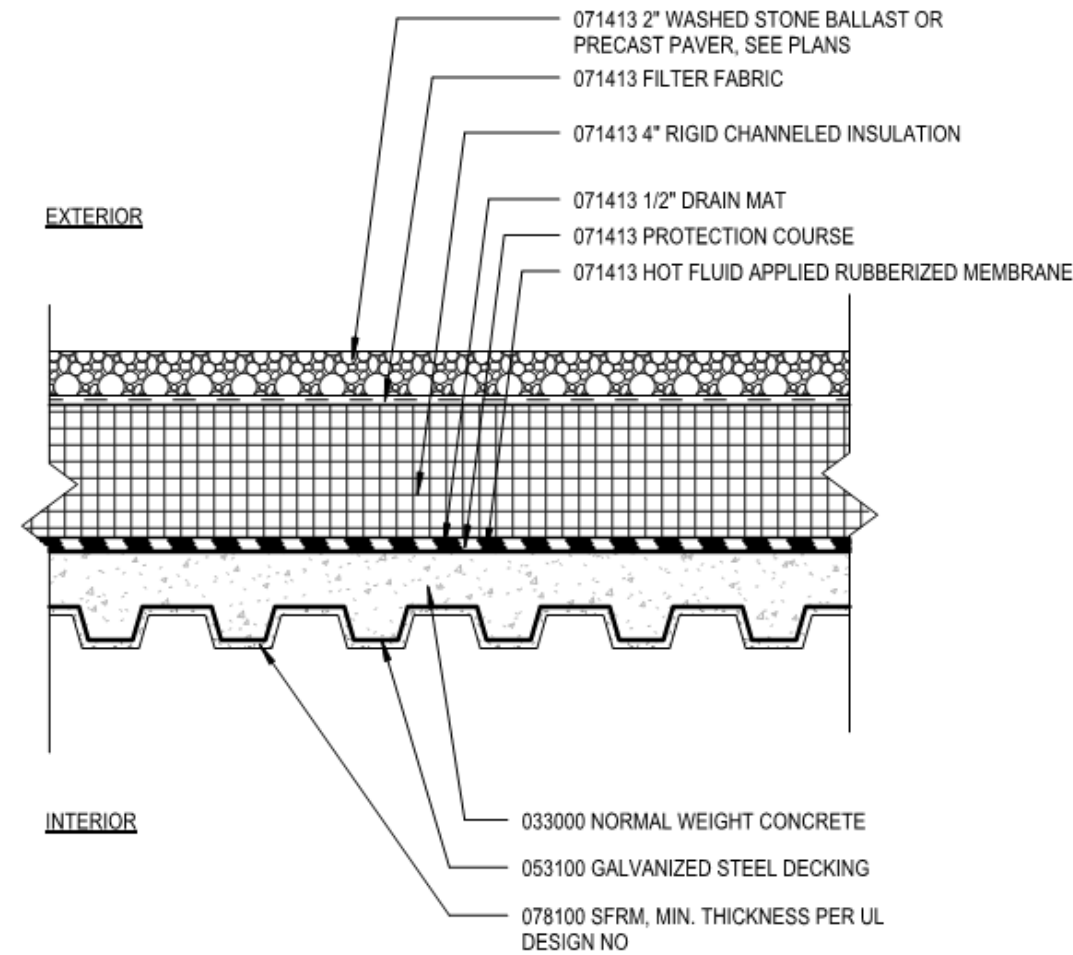
Roof Construction & Roofing | Typical roofing technique shows a washed stone ballast or precast paver with filter fabric, rigid channeled insulation, a drain mat and a hot fluid rubberized membrane. The most used roof construction technique used normal weight concrete and galvanized steel decking. SEE DETAIL ON FOLLOWING PAGE FOR FURTHER CLARIFICATION.



TYPICAL WALL SECTION DETAIL



TYPICAL ROOF SECTION DETAILS



SUSTAINABILITY FEATURES

The Museum of the Bible is constructed under the requirements of LEED 2009 for New Construction and Renovations. Some of the more notable initiatives being taken include:

- * Limitations to exterior building lighting to minimize visual impact to the National Mall
- * Use of captured rainwater for irrigation and fountain water to minimize the impact of storm water runoff on-site and as a means of reducing domestic water consumption
- * Increasing the overall amount of planted tree square footage by 22% and converting all paving to a porous alternative for soil and growth conditions
- * MEP systems which include: High efficiency electric centrifugal chillers and gas-fired condensing hot water boilers, VAV air handling systems for capacity control and energy savings, daylighting control, etc.
- * Reused materials and sustainable resources for the building envelope, including maintaining the existing concrete structure and masonry exterior of the warehouse
- * Two exterior rooftop spaces, with landscape for natural ventilation
- * Curtain wall glazing on the exterior perimeter and interior glazing around the existing atrium in the office building addition, as well as skylights for natural lighting
- * A computerized energy management system provided for the facility to control all HVAC systems and staff to monitor and optimize their operations

