



## **Grand Central Station 42<sup>nd</sup> Street Sheet Waterproofing**

Country

USA, New York City

Type

Transit, Railway, Metro

Client

MTA

**Main Contractor** 

Skanska USA

**Execution of the work** 

Renesco Inc.

Designer
Construction Period

Gall Zeidler Consulting

2024

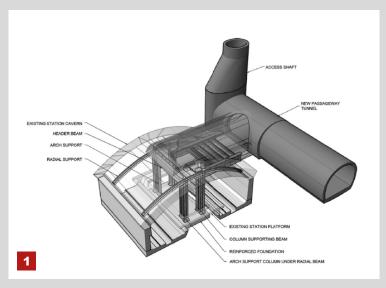
## **Project Description**

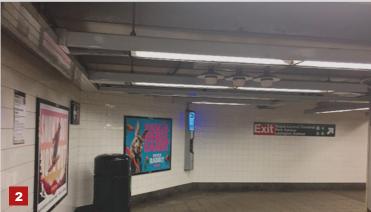
New Passageway Tunnel for Circulation Improvements at Grand Central - 42nd Street Station, New York City, that connect the heart of Midtown. The project includes redesigning platforms, adding elevators and stairs, installing in-station artwork, replacing escalators and stairways, and transforming the 42 St Shuttle into a fully accessible service. The passageway includes the breakin of an over 100-year-old station cavern with an innovative design implementing a protective structure above the existing track to allow for safe train operations and passenger circulation during construction. Construction of the new passageway follows the Sequential Excavation Method (SEM).

## **Scope of Service**

Scope of work includes supply and installation of loose laid full-round (360°) waterproofing system between the primary and final shotcrete lining. The system includes:

- 100 mil (2.5mm) PVC-P sheet waterproofing
- Geotextile, Polypropylene (22oz./sq. yd)
- PVC-P Water barriers (1'-5" width, 17" height, 6 ribs)
- Remedial Grouting System & Concept (including remedial grout ports and re-injectable hoses along waterbar and at the termination locations)
- BA anchors
- Termination at existing structures with adhesive strip/tape







- 1. Isometric view of the new passageway tunnel, station connection and access shaft
- 2. Existing passageway
- 3. Shaft access from the street