

## Main Terminal AeroTrain Station

Construction of the new automated AeroTrain System at Washington Dulles International Airport began with the Main Terminal Station. The Terminal Station construction site was excavated to approximately 60 feet below ground, directly adjacent to the Main Terminal on the airfield side of the Terminal, and spans its entire length (approximately 1,600 feet) from west to east.

When completed, the Terminal Station will have four distinct levels: Departures (49,600 square feet), Arrivals (49,600 square feet), Security Mezzanine (121,700 square feet), and the Train Platform (54,500 square feet).

The Security Mezzanine will provide critical floor space for a new, expanded passenger security screening function that will provide for more efficient passenger screening and alleviate congestion on the Main Terminal Ticketing Level. Passengers who do not need to check luggage will be able to go directly to the Security Mezzanine from the parking facilities.



The Train Platform will be built in a side-center-side arrangement. This arrangement will allow departing passengers to enter the train from the center platform after arriving passengers, bound for baggage claim, exit the train onto the side platforms and proceed up to the ground floor (Bag Claim Level) of the Terminal.



Skylights at roof level will maximize the natural light filtering down to the station platforms. Along with natural and artificial light, the extensive use of glass forms and stainless steel throughout the Terminal Station will brighten the space.

Notice to Proceed:                    October 2002  
Forecast Completion:                July 2009

Contractors  
    Design:                                Skidmore, Owings and Merrill  
    Construction:                        Turner Construction Company

***See following page for additional FACTS about the Main Terminal AeroTrain Station.***

## Main Terminal AeroTrain Station

### FACTS:

<b>Schedule:</b>	7 years/5 milestones
<b>Four Levels:</b>	
Departures (Ticketing) Level:	49,600 sf
Arrivals (Baggage Claim) Level:	49,600 sf
Security Mezzanine Level:	121,700 sf
AeroTrain Platform:	54,500 sf
<b>Total Building Square Footage:</b>	275,400 sf
<b>Total TSA Security Checkpoints:</b>	32-38 (depending on final TSA configuration)
<b>Elevators:</b>	20
<b>Escalators:</b>	36
<b>Stairwells:</b>	23 public
<b>MUFIDS:</b>	16
<b>Mobile Lounge Docks:</b>	20
<b>What It Takes:</b>	
Excavation:	220,000 cy
Backfill:	24,000 cy
Rebar:	5,300 tons
Concrete:	47,000 cy
Terrazzo Floor	186,000 sf
Pre-Cast Wall Panels	600 each/36,000 sf
Skylights	140
Train Tube Glass pieces:	765 each/25,200 sf
Curtainwall/Clerestory:	11,000 sf
Plinths:	4,800 lf
Power Rails	2,400 lf
Guiderails:	5,000 lf
Switches:	4
Air Conditioning Load:	1,425 tons
Heating Load:	7,760 MBTU's
Substation Size:	2 substations @ 3,300 kw each
Kingpost Truss Span:	105 ft
Cable Size:	2 ½ in diameter (minimum breaking strength of 432 tons each)
Cable Load:	250 kps
Micropiles:	164 permanent (plus 30 temporary)
Support of Excavation	123,000 sf
Labor:	Up to 300 people per day (two shifts) estimated 3.8 million manhours at completion
<b>Number of Subcontractors:</b>	75