

column sections were connected with bolted splices at the odd floors. The connections were 1.07 m (3 ft 6 in.) above the floor. Failures could occur at splice connections, so the locations of the ends on Floor 9 for the three severed columns visible in the image are consistent with their expected locations.

The spandrel at the base of the 9th floor, visible in Figure 5–69, appears to turn 90° near the corner (right arrow) and to continue to the east for a short distance before abruptly terminating. This suggests that the spandrel beam on the 9th floor on the south face was cut by the falling WTC 1 steel near the southwest corner. Strong visual evidence supporting this conclusion is available in Figure 5–47 (enlarged in Figure 5–49), Figure 5–50, and Figure 5–66. In each of these images, a short section of spandrel is visible at the southwest corner of the 9th floor that appears to extend as far as the expected location for Column 16, before abruptly disappearing. The combined observations on the south and west faces confirm that structural damage was present in a band from Column 14 on the west face to Column 19 on the south face.

There is considerable damage to the façade on the 8th floor. The misalignment of Column 14A certainly extends to this level. There seems to have been some damage to the corner of the building as low down as the 6th and 7th floors. For some reason, the window at the far end of the 6th floor, which contained vents, stands out in Figure 5–69. It is likely that the vents were broken out.

Damage to the East Side of the Promenade, Pedestrian Bridge, and East Sides of Floors 1 through 4 on the South Face

Images of the lower floors on the south face of WTC 7 shot from the east side of the building are very limited. However, some photographers and videographers did manage to reach as far as the corner of Vesey and West Broadway. Figure 5–70 reproduces a black and white photograph that was shot from the intersection of Vesey Street and West Broadway looking west down Vesey Street. The entire length of the Pedestrian Bridge is visible, and it is clear that it was not collapsed by debris from the towers. Another view of the bridge following the collapse of WTC 1 was shown in Figure 5–19. While the bridge was covered with debris, the only substantial damage to its cover was on the southern side near the WTC passageway between WTC 5 and WTC 6.

The Promenade is visible behind the Pedestrian Bridge. There is a large pile of steel formed by several panel sections from WTC 1 located between the Pedestrian Bridge and the Promenade near the base of WTC 6 on the south side of the street. There appears to be either a part of or a single panel section located near the center of the street. There is also a single piece of large debris visible near the base of the Pedestrian Bridge that seems to be leaning against the south face. It is not clear if this is structural steel from the towers. These are the only indications of large steel pieces between the Promenade and the corner of West Broadway and Vesey Street. The large pieces of steel observed on Vesey Street from the west are beyond the view of this photograph.

An enlarged and enhanced section of Figure 5–70 showing the south face of WTC 7 is included in Figure 5–71. The debris deposited near the south face of WTC 7 is nearly one story high. Many columns can be discerned on the south face looking under the Pedestrian Bridge. The spacing and size of these columns indicate that these were part of the nonstructural system used to support glass and doors in the four story atrium area. (See Figure 5–15, Figure 5–16, Figure 5–36, and Figure 5–37.) The glass was apparently broken out between the columns based on the depth visible. It is also possible to discern some of the horizontal supports for the glass façade. Even though it is not possible to identify individual columns