The Maumee River Crossing project utilizes a construction method called precast segmental concrete construction. That means the bridge is divided into separate pieces, approximately 3,057 individual concrete segments. The segments are fabricated at the casting yard on Front Street using high-strength concrete for maximum durability.

The casting yard houses 15 casting machines, many capable of producing one segment per day. The machines utilize a process called “match casting” to create each segment. Match casting uses a finished segment to form one face of the mold for the next segment, producing an exact fit. The segments are then assembled side by side to create the finished bridge. Through specialized surveying techniques the relative positions of the two segments are controlled within a few 1000ths of a foot.

Since each segment is cast to fit in a specific position in the final bridge assembly, they are numbered and stored at the casting yard until needed.

The casting yard offers some 40 acres of space to store finished segments awaiting assembly in the bridge.
A reinforcing steel cage for each segment is fabricated and inserted in the mold.

A special crane known as a “Straddle Carrier” moves finished segments from the casting area to the storage yard.

The 40-acre storage yard can hold up to 1,800 segments awaiting assembly.

For additional background materials on the Maumee River Crossing, call the project Hot line at 419-244-7696 or visit our Web site at www.lookuptoledo.org for the latest project updates.

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