Albany Park Stormwater Diversion Tunnel

Frequently Asked Questions

The Basics – Who, What, When, Where, Why, How.....

Why is the project being performed?

The project is being constructed to reduce flooding in the Albany Park Neighborhood. Major storm events in 2008 and 2013 highlighted the significant flood risk posed by the Chicago River in this area. Following the April 2013 flood, Mayor Emanuel along with state, Federal and local agencies developed a plan to divert excess flood water from the Chicago River to the North Shore Channel.

What is the project about?

During flood events, excess river water will be diverted into an 18-foot diameter tunnel via an inlet structure located near Springfield Avenue along the south bank of the river within a small section of undeveloped Chicago Park District land. The tunnel will run 150 feet below Foster Avenue eastward approximately 5,800 feet to an outlet structure in River Park along the east bank of the North Shore Channel. Two large shafts will be excavated through soil and rock to the base of the tunnel. The tunnel will be excavated using a Tunnel Boring Machine. The rock excavated during the tunneling will be removed from the outlet shaft at River Park and removed from the site. Once the tunnel construction is completed, the two park areas will be restored. The park on Foster Avenue at Springfield will become a new park amenity which was previously used only for Park District stockpiles and maintenance. The park area at River Park will include a new well drained baseball field and regulation soccer field.

Who is doing the work?

The project is being undertaken by the City of Chicago. The Chicago Department of Transportation (CDOT) is the lead City agency in charge of the project. The project is funded using a combination of funds from the City of Chicago, the Metropolitan Water Reclamation District of Greater Chicago (MWRDGC), Illinois Department of Natural Resources and U.S. Department of Housing and Urban Development. The two construction work areas are on property owned by the Chicago Park District. Kenny Construction is the construction contractor and WSP – Parsons Brinkerhoff is CDOT's construction management consultant.

When will the construction be happening?

Work will begin in May 2016 and continue for two years. During the spring and summer of 2016, work will include setting up the construction work areas and excavating the inlet and outlet shafts. The tunneling work will start in late fall 2016 and continue through late 2017. The inlet and outlet structures will be constructed in 2017 with final construction and site restoration finishing in spring 2018.

Where will the work be done?

There will be two construction sites located on Chicago Park District property. The main construction site is located at the north end of River Park, immediately south of Foster Avenue on the east bank of the channel. This site includes the outlet shaft and structure and will be the location of most of the tunnel excavation activities. The inlet structure site is located north of Foster Avenue near the Springfield Avenue intersection.

The tunnel will be located under Foster Avenue. There will be no construction or lane closures on Foster Avenue itself. Trucks will use Foster Avenue to remove tunnel rock and bring in materials for the construction. Worker parking will be within the contractor's work area and not on residential streets. The existing bike path in River Park will be temporarily closed during construction and a new path and pedestrian crossing signal will be added temporarily across Foster Avenue.

How will the shafts and tunnel be built?

The shafts will be excavated vertically through approximately 70 feet of soil and 75 to 100 feet of rock. Sheet piling or other earth retention systems will be used to support the surrounding soils throughout construction. The rock will be excavated using controlled blasting overseen by an Illinois licensed blaster and an independent blasting consultant. The contract includes stringent specifications regarding safety, vibration and noise limits, vibration and settlement monitoring as well as a public awareness program to inform the community of blasting activities.

Most of the tunnel will be excavated using a tunnel boring machine, or TBM. The TBM is a very large mechanical device which bores through the rock and removes the chipped rock through a conveyance system back through the tunnel and up the shaft at River Park. The excavated material is then loaded on trucks and removed. Over 100 truck trips will be required daily

during full tunnel mining operations.



Once the tunnel is excavated, the exposed rock will be stabilized using steel rock bolts, grouted as needed to reduce groundwater seepage into the tunnel and lined with concrete for long term stability.

More Detailed Questions......

Has this type of work been done before in Chicago?

The City of Chicago and MWRDGC have constructed numerous tunnels over many decades for stormwater and potable water conveyance. MWRDGC has constructed over 109 miles of rock tunnels as part of the Deep Tunnel project. The Albany Park tunnel contractor has constructed many tunnels nationally and in Chicago including most recently the three mile long MWRDGC 39th Street tunnel.

What about blasting noise and vibration? Will the work damage my house?

Public safety is paramount. Although the blasting operations will cause vibrations, it is highly unlikely that it will cause damage to adjacent property. However, as a precaution, the contractor will conduct a pre-construction settlement survey of private properties within 500 feet of the blasting locations. Throughout the project, the settlement, vibration, and noise levels will be continuously monitored. If the levels exceed specified stringent thresholds, the construction team will take steps to mitigate the noise and vibrations.

How will residents be notified about blasting and other construction activities?

A public information meeting will be scheduled through the Alderman's office for your ward. Additionally, project information and schedule will be posted on the ward website in advance of major construction operations. During blasting, a horn alert warning system will be implemented in conjunction with warning signage to alert the nearby public of an impending blast. Blasting will be scheduled once per day, only during weekday, daytime hours, approximately every other day.

How will dust be controlled?

Housekeeping of the project site and impacted roadway will be monitored and addressed to minimize the dust from trucking and construction operations.

How much additional truck traffic will there be?

There will be a higher than normal volume of truck traffic on Foster during daytime hours due to the removal and delivery of materials, but there are no plans to restrict or close lanes on Foster Avenue or any of the cross streets. The project team is currently coordinating with Office of Emergency Management and Communication (OEMC) to address the possibility of the higher volumes increasing travel times.

Which wards are involved?

The project involves three aldermanic wards – the 33rd (Deborah Mell), the 39th (Margaret Laurino) and the 40th ward (Patrick O'Connor).

How will the community be protected from flooding until the tunnel is finished?

Stating in May 2016, City forces will be constructing a temporary flood barrier wall along Foster Avenue and the south side of the Chicago River to reduce flooding risk while the tunnel is being constructed. This wall will consist of concrete jersey barriers and sand bags. This work will be completed in June 2016. City agencies will continually monitor the river levels and take

necessary steps to minimize flooding risk during construction. The general alignment is shown below.

How will I cross Foster Avenue at the park during construction?

Foster Avenue and all intersection crosswalks are scheduled to be open throughout construction, with the exception of Foster and Avers. At the intersection of Foster and Avers, CDOT will be installing a traffic signal, ADA ramps, and roadway resurfacing, crosswalk detours will be provided while this intersection is being improved.

Additionally a crosswalk and signal will be installed at the intersection of Virginia across Foster for bicyclist and pedestrians to cross Foster.

What will the sites look like once construction is complete?

Once the tunnel construction is completed, the two park areas will be completely restored. Eugene Park on Foster Avenue at Springfield will become a new park amenity which was previously used only for Park District stockpiles and maintenance, new entrances and pathways will offer a renewed functionality of the park space for the public. The park area at River Park will include a new well drained baseball field with new fencing and backstop, a regulation soccer field, and new bicycle and pedestrian pathways.

What is the cost of this project?

\$70 Million

How can I get more information?

A public information meeting will be scheduled for this summer before any blasting occurs through the Alderman's office for your ward. Regular project information and schedule updates will also be provided through your ward office.