

#### **DEPARTMENT OF THE ARMY**

U.S. ARMY CORPS OF ENGINEERS
HUNTINGTON DISTRICT
502 EIGHTH STREET
HUNTINGTON, WV 25701-2070

2 July 2021

Huntington District 408-LRH-2019-0005- ODOT-1-70/I-71/SR 315 Interchange Project

Mr. Steven Fellenger, P.E. Project Manager Ohio Department of Transportation District 6 400 East William Street Delaware, OH 43015

Mr. Fellenger:

The U.S. Army Corps of Engineers (USACE) Huntington District (District) and the Great Lakes and Ohio River Division (Division) has completed the review of your request under Section 14 of the Rivers and Harbors Act of 1899, 33 U.S.C 408 (Section 408) to alter the West Columbus Local Protection Project (WCLPP). The proposed WCLPP alteration will be in association with the construction of the Interstate (I)-70/I-71/State Route (ST) 315 Interchange project, a highway improvement project. The highway improvement project includes the construction of Project 4A. Project 4R. Project 6A, and Project 6R, which effectively consists of the reconstruction of the I-70/I-71/SR-315 interchange. The ODOT refers to these projects via project identifiers (PIDs). Project 4A is given PID FRA-70-13.11 (77372/3084-E), Project 4R is given PID FRA-70/71-12.68/14.86 (105523/3486-E), Project 6A is given PID FRA-70-13.10 (89464), and Project 6R is given PID FRA-71-14.36 (105588). Portions of the project will be constructed within the right-of-way of the WCLPP, which is operated and maintained by the City of Columbus (non-federal sponsor). The Section 408 evaluation was performed consistent with Engineer Circular (EC) 1165-2-220 titled Policy and Procedural Guidance for Processing Requests to Alter US Army Corps of Engineers Civil Works Projects Pursuant to 33 USC 408. The Section 408 request was assigned Section 408 identification number 408-LRH-2019-0005. Please continue to reference this number on all correspondence related to this alteration.

Features of the WCLPP that will be directly impacted by the highway improvement project are described below and identified in the attached figure (Enclosure 1). Alterations that directly affect features of the WCLPP are identified to include:

a. **ODOT Area A:** *LPP feature impacted: I-wall.* In order to accommodate the required widening and reconstruction for I-71 Northbound (NB) and Ramp A5, approximately 415 feet of the existing I-wall floodwall will be relocated and reconstructed from ODOT Sta. 256+73 (I-71 NB) to Sta. 5007+35 (Ramp A5)

(approximate USACE Sta. 231+17 to Sta. 235+65). The existing I-wall falls within the proposed pavement of the new ramp. A new I-wall will be constructed approximately 10 feet to the east of the existing alignment and will function in the same manner as the existing. The exposed height of the new I-wall within Area A ranges from approximately 2.9 feet to 5.7 feet.

b. **ODOT Area B:** *LPP feature impacted: Levee.* In order to accommodate required widening and reconstruction for I-71 NB and Ramp A5, approximately 387 feet of the existing levee located south of the existing I-wall within ODOT Area A will also be impacted from approximately ODOT Sta. 252+86 to Sta. 256+73 (I-71 NB) (approximate USACE Sta. 235+65 to Sta. 239+52). Earthwork and proposed permanent slopes associated with the pavement widening which extend toward the Scioto River will impact the top width of the existing levee; the top elevation of the levee will not be changed. A new permanent ODOT Type D Concrete Barrier will be constructed along the edge of roadway shoulder to provide the necessary earth retention. This barrier will be continuous (i.e. tie in) with the I-wall to be built within ODOT Area A. The height of the new barrier within Area B ranges from approximately 3.5 feet to 5.1 feet.

During the ODOT lane widening project occurring in this area in 2019-2020, this section of levee (approximate USACE Sta. 235+00 to Sta. 240+38) was disturbed without a prior Section 408 review and/or authorization. As a result, the levee composition, geometry, and alignment were adversely impacted. The condition of the levee embankment compromised the line of protection and impaired the usefulness of the WCLPP, and the USACE required the ODOT to repair the levee segment as well as the impacted downstream segments of high ground and levee embankment (approximate USACE Sta. 240+38 to Sta. 250+22). Remediation plans were submitted by the ODOT and approved by the USACE on 20 November 2020. Construction of the remediation began in April 2021 and is ongoing. The approved remediation will restore the line of protection and will not require additional modification to the design documents for this impact area. Following the acceptance of the remediation, updated design plans and Emergency Action Plans for this section of the project were again reviewed as an addendum to the Agency Technical Review (ATR, Appendix C). Lessons learned from the unauthorized impacts to this area of the WCLPP and construction of a similar Type D Barrier adjacent to a levee embankment by the ODOT as part of a separate Section 408 Permission at the WCLPP (408-LRH-2019-0014) generated additional comments from the ATR team on the proposed design.

c. **ODOT Area C:** *LPP features impacted: Dodge Park Combined Pumping Station and Storm Water Pumping Station.* Due to the construction of the FRA-71-1503L Bridge Pier 9L location at ODOT Sta. 250+20 (I-71 Southbound (SB)), the relocation of 10-inch and 36-inch diameter sanitary force mains and an 18-inch diameter sanitary stormwater overflow force main will be required. The relocation of the existing force mains (approximate USACE Sta. 213+12 to Sta. 215+96) require: excavation and reconnection of the 10-inch and 36-inch diameter mains to the existing mains near (within approximately 11 feet) the existing WCLPP sheetpile cutoff, removal of an air

release valve manhole and backfilling, and removal of or filled in place with control density fill (CDF) the portions of the force mains that will no longer be in service. The relocation of the force mains near the sheetpile cutoff were evaluated for possible temporary flood protection measures to be implemented during construction. A new storm sewer will be required for the bridge scupper outlets.

d. **ODOT Area D:** *LPP feature impacted: Gatewell #5.* Construction of Ramp A5 will involve fill placement around Gatewell #5 (ODOT Sta. 5009+96; approximate USACE Sta. 228+65) that extends above the current top elevation of the gatewell; therefore, it will be required to reconstruct/raise the gatewell by approximately 7.5 feet to reach the new proposed grade and allow continued operation of the gatewell.

Other aspects associated with the ODOT's proposed construction of Project 4 and Project 6 that were identified as having the potential to impact the WCLPP due to the close proximity to the levee system include:

# Reconstruction of FRA-70-1321R (I-70 Eastbound (EB) over the Scioto River)

The FRA-70-1321R bridge structure carries I-70 EB over the Scioto River. The existing structure will be completely removed and replaced, and the proposed structure will consist of a five-span bridge with a total length of approximately 1,075 feet. The existing bridge will be widened to the south approximately 15 feet. The proposed west abutment (approximate ODOT Sta. 148+00 (I-70 EB)) will be constructed behind the existing abutment and within the existing floodwall right-of-way (approximate USACE Sta. 219+17) and, therefore, were included in the review. Construction of the new abutment and removal methods for the existing abutment (partially) were evaluated for possible temporary flood protection measures to be implemented during construction.

## Construction of FRA-70-1321A (Ramp A5/B5/C5 over the Scioto River)

The FRA-70-1321A bridge structure carries relocated Ramps A5, B5 & C5 over the Scioto River. The new structure will consist of a five-span bridge with a total length of approximately 1,030 feet. The bridge starts where the FRA-71-1518A bridge ends, near ODOT Sta. 5017+07, where they share a common pier. It will be approximately 65 feet south of the proposed FRA-70-1321R bridge. This westernmost pier (the shared pier) is partially located within the existing floodwall right-of-way (approximate USACE Sta. 221+80) and, therefore, were included in the review. Construction of the new west bridge abutment and the piers are supported on drilled shafts. As such, possible temporary flood risk reduction measures during construction were evaluated.

# Construction of FRA-71-1301A (Ramp C5 over SR 315)

The FRA-70-1301A bridge structure carries Ramp C5 traffic over SR 315, then via the bridge over the Scioto River, to downtown Columbus to the east. The new structure will consist of an eight-span bridge with a total length of approximately 966 feet. The rear abutment and all the piers are located outside the existing floodwall right-of-way. Pier 4 (approximate ODOT Sta. 5050+00 (Ramp C5)) is the closest

substructure to Pump Stations ST-1/ST-1A (approximate USACE Sta. 223+29 and Sta. 223+65), but will not negatively impact the structural integrity of the stations. Pier No. 5, Pier No. 6 and Pier No. 7 are placed in a way that will not negatively impact the existing maintenance access. When the bridge is completely constructed, this structure will accommodate one 16-foot lane of traffic. Construction of the Pier No. 7 was evaluated for possible temporary flood risk reduction measures to be implemented during construction.

### Construction of FRA-71-1518A (Ramp A5 over the Scioto River)

The FRA-71-1518A bridge structure carries the relocated Ramp A5 over the Scioto River. The new structure will consist of a two-span bridge with a total length of approximately 171 feet. The bridge is approximately 802 feet north of where the new floodwall will tie into the existing floodwall. At the south end of the bridge, the rear abutment (approximate ODOT Sta. 5015+40 (Ramp A5)) is supported in new mechanically stabilized earth wall embankment and is within the existing floodwall right-of-way (approximate USACE Sta. 223+33). The embankment (comprising part of the WCLPP line of protection) for the new rear abutment fill will be raised in elevation due to the relocation of Ramp A5. The new piers will be supported on drilled shafts and will have little effect on the Scioto River, but are also partially within the floodwall right-of-way. As such this structure was part of the review. Possible temporary flood risk reduction measures during construction were evaluated.

## Construction of FRA-70-1322L (I-70 Westbound (WB) over the Scioto River)

The FRA-70-1322L bridge structure carries relocated I-70 WB over the Scioto River. The new structure will consist of a five-span steel bridge with a total length of 1,018 feet. The bridge begins at the top of the west bank of the Scioto River at ODOT Station 149+13.68, approximately 15 feet behind the existing I-70 bridge abutment. The structure ends at the east bank of the Scioto River at ODOT Station 159+22.02, approximately 60 feet behind the existing abutment. All piers will be supported directly on drilled shafts. The west abutment (approximate ODOT Sta. 149+14 (I-70 WB)) is within the existing floodwall right-of-way (approximate USACE Sta. 217+18) and was part of the review. Construction of the new abutment and removal methods for the existing abutment were evaluated for possible temporary flood risk reduction measures to be implemented during construction.

### Construction of FRA-70-1323L (Ramp D3 over the Scioto River)

The FRA-70-1323L bridge structure carries Ramp D3 over the Scioto River. The new structure will consist of a five-span steel bridge with a total length of 1,020 feet. The bridge begins at the top of the west bank of the Scioto River at ODOT Station 3042+28.79, approximately 15 feet behind the existing I-70 bridge abutment. The structure ends at the east bank of the Scioto River at ODOT Station 3052+44.77. All piers will be supported directly on drilled shafts. The west abutment is within the existing floodwall right-of-way (approximate USACE Sta. 216+49) and was part of the

review. Construction of the new abutment was evaluated for possible temporary flood risk reduction measures to be implemented during construction.

# Construction of FRA-71-1503L (I-71 SB over the Scioto River)

The FRA-71-1503L bridge structure carries relocated I-71 SB over the Scioto River, as well as numerous features including two railroads and the SR 315 Interchange. The new structure will consist of a 23-span bridge with a total length of approximately 4,683 feet. Impacts to the Scioto River are limited to Spans 10 through 14, located from approximately ODOT Station 251+00 to 262+00. The piers located within this area are supported directly on drilled shafts. Portions of the substructure units for this bridge are within the floodwall right-of-way (approximate USACE Sta.214+55 to Sta. 214+95) and were included in the review. The location of Bridge Pier 9L requires vehicle access modification to the Dodge Park Storm Water Pumping Station as necessary for continued Operations & Maintenance activities. The ODOT has developed a plan to maintain the non-federal sponsor's requisite access. The construction of the substructure for Pier 9L will also require construction of a causeway partially within the floodwall right-of-way and within the Scioto River just downstream of the Dodge Park Storm Water Pumping Station outlet. The temporary impacts resulting from the causeway were addressed in the Temporary Construction Emergency Action Plan. A communication tower that is necessary for communication with the Dodge Park Pump Stations and emergency services is currently located at the Dodge Park Storm Water Pumping Station is anticipated to be blinded by the construction of the bridge. The ODOT has coordinated with the City of Columbus to install an alternative communication system in its place.

### Relocation of 10-inch and 36-inch diameter sanitary force mains east of the Scioto River

The construction of FRA-070-1373B rear abutment (approximate ODOT Sta. 7007+60 (Ramp D7)) requires the relocation of the existing 10-inch and 36-inch diameter force mains that run along the south side of Mound Street along with reconnecting them to the City of Columbus' Olentangy Scioto Interceptor Sewer. These force mains are components of the WCLPP.

### Gatewells and existing I-70/I-71/SR-315 pump stations

The existing gatewells #4, #6 and #7, the existing pump stations (ST-1 and ST-1A) located within the loop ramp infield of the I-70/I-71/SR-315 interchange and the 42-inch and 48-inch diameter storm force mains near these pump stations are to remain with no impacts from the proposed construction. For gatewell #6, the design depth of the sheet piling required for the new I-wall may necessitate making provisions to allow passage of the existing 18-inch diameter reinforced concrete storm sewer pipe through the sheet piling in order to reconnect it with the gatewell (approximate ODOT Sta. 5004+58 (Ramp A5); approximate USACE Sta. 233+91), including possible excavation and backfill.

Based on the District's and Division's review of the proposed alteration and per paragraph 8.c.(1) of the EC 1165-2-220, the Great Lakes and Ohio River Division is granting permission to the ODOT under Section 408 to alter the WCLPP in association with the construction of the I-70/I-71/SR-315 Interchange project (PIDs 77372/3084-E, 105523/3486-E, 89464, and 105588). The highway widening project is located partially within the WCLPP right-of-way, as specified in the ODOT's request, summarized above, and illustrated in the figure attached (Enclosure 1). The Section 408 permission is subject to compliance with the terms and conditions attached (Enclosures 2 and 3).

For any questions regarding your Section 408 permission decision, please contact Mr. Brett Latta, Section 408 Coordinator, at (614) 692-4672 or Brett.C.Latta@usace.army.mil.

Sincerely,

Digitally signed by Jason Evers Date: 2021.07.02 14:31:08

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JASON A. EVERS, P.E., PMP Colonel, Corps of Engineers Commanding

Enclosures

# **Project Impact Areas**



408-LRH-2019-0005 Enclosure 1

#### STANDARD TERMS AND CONDITIONS

#### LIMITS OF THE AUTHORIZATION

- 1. This permission only authorizes you, the requester, to undertake the activity described herein under the authority provided in Section 14 of the Rivers and Harbors Act of 1899, as amended (33 USC 408). This permission does not obviate the need to obtain other federal, state, or local authorizations required by law. This permission does not grant any property rights or exclusive privileges, and you must have appropriate real estate instruments in place prior to construction and/or installation.
- The time limit for completing the work authorized ends on <u>01 November 2026</u>. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 3. Without prior written approval of the USACE, you must neither transfer nor assign this permission nor sublet the premises or any part thereof, nor grant any interest, privilege or license whatsoever in connection with this permission. Failure to comply with this condition will constitute noncompliance for which the permission may be revoked immediately by USACE.
- 4. The requester understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration of the work herein authorized, or if, in the opinion of the Secretary of the Army or an authorized representative, said work will cause unreasonable conditions and/or obstruction of USACE project authorized design, the requester will be required upon due notice from the USACE, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim can be made against the United States on account of any such removal or alteration.

#### INDEMNIFICATION AND HOLD HARMLESS

- 5. The United States will in no case be liable for:
  - a. any damage or injury to the structures or work authorized by this permission that may be caused or result from future operations undertaken by the United States, and no claim or right to compensation will accrue from any damage; or
  - b. damage claims associated with any future modification, suspension, or revocation of this permission.
- 6. The United States will not be responsible for damages or injuries which may arise from or be incident to the construction, maintenance, and use of the project requested by you, nor for damages to the property or injuries to your officers, agents, servants, or employees, or others who may be on your premises or project work areas or the federal project(s) rights-of-way. By accepting this permission, you hereby agree to fully defend, indemnify, and hold harmless the United States and USACE from any and all such claims, subject to any limitations in law.
- Any damage to the water resources development project or other portions of any federal project(s) resulting from your activities must be repaired at your expense.

#### REEVALUATION OF PERMISSION

- 8. The determination that the activity authorized by this permission would not impair the usefulness of the federal project and would not be injurious to the public interest was made in reliance on the information you provided.
- 9. This office, at its sole discretion, may reevaluate its decision to issue this permission at any time circumstances warrant, which may result in a determination that it is appropriate or necessary to modify or revoke this permission. Circumstances that could require a reevaluation include, but are not limited to, the following:
  - a. you fail to comply with the terms and conditions of this permission;
  - b. the information provided in support of your application for permission proves to have been inaccurate or incomplete; or
  - c. significant new information surfaces which this office did not consider in reaching the original decision that the activity would not impair the usefulness of the water resources development project and would not be injurious to the public interest.

#### CONDUCT OF WORK UNDER THIS PERMISSION

- 10. You are responsible for implementing any requirements for mitigation, reasonable and prudent alternatives, or other conditions or requirements imposed as a result of environmental compliance.
- 11. Work/usage allowed under this permission must proceed in a manner that avoids interference with the inspection, operation, and maintenance of the federal project.
- 12. In the event of any deficiency in the design or construction of the requested activity, you are solely responsible for taking remedial action to correct the deficiency.
- 13. The right is reserved to the USACE to enter upon the premises at any time and for any purpose necessary or convenient in connection with government purposes, to make inspections, to operate and/or to make any other use of the lands as may be necessary in connection with government purposes, and you will have no claim for damages on account thereof against the United States or any officer, agent or employee thereof.
- 14. You must provide copies of pertinent design, construction, and/or usage submittals/documents. USACE may request that survey and photographic documentation of the alteration work and the impacted project area be provided before, during, and after construction and/or installation.
- 15. You may be required to perform an inspection of the federal project with the USACE, prior to your use of the structure, to document existing conditions.
- 16. USACE shall not be responsible for the technical sufficiency of the alteration design nor for the construction and/or installation work.

### Project Specific Terms and Conditions

- 1. The Ohio Department of Transportation (ODOT) shall review impacts described in the attached Section 408 Permission Letter and concur with all direct and potential impacts to the West Columbus Local Protection Project (WCLPP). Any direct or potential impact to the WCLPP not captured in this summary shall be brought to the attention of the City of Columbus and the United States Army Corps of Engineers (USACE), Huntington District immediately. Any impact not captured in this document shall not be permitted by the issuance of this Section 408 permission.
- 2. Any unauthorized impact to the WCLPP observed in the field during construction may result in a stop work order until the related design and impact can be fully identified and reviewed by the USACE and the City of Columbus. Any appropriate mitigation required by the USACE and/or the City of Columbus shall be identified to the ODOT prior to resuming construction in the identified area. The ODOT shall complete the required mitigation within 180 days of notification from the USACE or according to an approved extension.
- 3. The ODOT shall obtain all Department of the Army authorizations required by Section 404 of the Clean Water Act from the Huntington District Regulatory Division prior to construction. In addition, the ODOT shall obtain any other federal, state, and/or local authorizations required by law for the proposed activities.
- 4. The ODOT shall comply with all assumptions associated with the National Environmental Policy Act (NEPA) Categorical Exclusion Determination Memorandum and the Memorandum for Record (Appendix G, dated 8 July 2019 and 9 April 2021, respectively).
- 5. To avoid impacts to the federally listed endangered Indiana bat (*Myotis sodalis*) and the federally listed threatened northern long-eared bat (*Myotis septentrionalis*), the ODOT shall complete all tree clearing between October 1 through March 31.
- 6. The ODOT shall provide the USACE and the City of Columbus with the 100% Plans and Specifications Final Bid Package, including special provisions, as soon as it becomes available and before any construction begins. Any new information that may impact the WCLPP shall be specifically identified to the USACE and the City of Columbus for review prior to construction.
- 7. The ODOT shall provide the USACE and the City of Columbus with the opportunity to attend pre-construction partnership meetings.
- 8. The ODOT shall provide sufficient funds for the City of Columbus to fund one fulltime inspector representing the interests of the City of Columbus to provide construction oversight and to monitor and document construction conditions and activities associated with the floodwall/levee alterations. The City of Columbus'

- inspector, in coordination with the ODOT representatives, will ensure compliance with the approved plans and specifications of the proposed work associated with floodwall/levee features being constructed/altered/modified by the ODOT.
- The ODOT shall install cameras that cover all construction occurring within 50 feet of the WCLPP right of way. These cameras should be live feed and viewable remotely by the USACE and the City of Columbus via the internet.
- 10. The ODOT shall acquire all necessary easements and rights of entry from the City of Columbus prior to initiation of construction in the associated parcels. The State of Ohio shall subordinate its interests to the rights of the United States of America and the City of Columbus to construct, operate, and maintain the WCLPP as well as relocated utilities owned by the City of Columbus (Appendix F, dated 7 February 2020).
- 11. The ODOT shall provide the City of Columbus and the USACE with an initial schedule prior to the start of construction, and subsequent schedule updates, to inform the City of Columbus inspection resources and USACE construction oversight visits, pursuant to the executed Memorandum of Agreement between the Department of the Army and the Ohio Department of Transportation For West Columbus, Ohio FRA-70-12.68 PID 77372 (MOA) dated June 16, 2016 and the executed Amendment 01 to the MOA dated July 30, 2020 (Appendix I).
- 12. The ODOT shall provide some temporary, highly-visible visual marking of the WCLPP centerline of protection and other features (e.g. gatewells, conduit outfalls, etc.) in construction areas and in areas immediately adjacent to construction areas (i.e. within 50 feet). This shall serve to increase awareness of the WCLPP to the ODOT construction/field personnel. The proposed marking method shall be submitted to the City of Columbus and the USACE for concurrence.
- 13. The ODOT shall notify the USACE a minimum of two days prior to initiating construction in each of the four identified impact areas (Area A, Area B, Area C, and Area D per the *Review Plan* dated 14 November 2019).
- 14. The ODOT shall notify the USACE immediately if site conditions vary during construction that would require revisions to the proposed construction plan(s) and authorized alterations.
- 15. The ODOT Contractor must submit all Work Plans to the ODOT, the USACE, and the City of Columbus in accordance with the Safety Assurance Review (i.e. the IEPR Type II) recommendations (Appendix D, dated 20 January 2020) and the Temporary Construction Emergency Action Plans (dated 12 October 2020 for ODOT Projects 4A and 4R and 21 October 2020 for ODOT Projects 6A/6R). The

- Work Plans will serve to clarify the means, methods, and sequence of the authorized construction activities which have the potential to impact the WCLPP, as evaluated under the Section 408 permission.
- 16. The ODOT shall submit to the USACE all testing results as required by the USACE's Standard Operating Procedure for Excavation Benching and/or Backfill Compaction for Levee and Floodwall Modifications (dated 11 April 2019) within 24 hours of performing such work. The ODOT is wholly responsible for quality assurance and quality control of all testing results.
- 17. The ODOT shall not store any materials or equipment within the WCLPP right of way, nor permit their contractors to do so, without prior written consent from the City of Columbus.
- 18. The ODOT shall be solely responsible for any remedial action needed to correct any deficiency in the design or construction of the requested alteration as defined by the USACE and/or the City of Columbus.
- 19. The ODOT shall provide the City of Columbus and the USACE with any Requests for Information (RFI's), proposed construction change orders, and associated submittals for floodwall/levee related alterations.
- 20. The ODOT shall perform site restoration and reseeding of all disturbed areas to the satisfaction of the USACE and the City of Columbus.
- 21. The ODOT shall notify the USACE at least 30 days in advance of anticipated project completion for a joint City of Columbus and the USACE on-site inspection of the completed alteration. Following this post-construction inspection, the USACE will provide notification regarding final acceptance or any corrective actions that are required.
- 22. The ODOT shall recover the USACE primary existing control stations near the project limits and report the condition of all monuments with close-up and horizontal pictures. The ODOT shall locate these stations with real-time kinematic positioning for five minute observations. The ODOT shall update the nearest control points (215/16, 215/17, 215/18, 215/19, 215/20, 86/12-2, 86/13, 86/14, 86/14-1, or the next nearest if one or more of these points is found to be destroyed, for a minimum of three horizontal and two vertical control points) to NAD83/NAVD88 GEOID 18 or the current survey datum and submit to Online Positioning User Service SharePoint (OPUS Share) and provide the updated coordinates to the USACE. The USACE control must be utilized for all as-built construction drawings submitted to the City of Columbus and the USACE.

- 23. The ODOT shall survey the impacted levee/floodwall features to ensure the required top of protection elevation has been satisfactorily met. Surveys of levee embankment sections shall also include cross-sections at 50 foot intervals (minimum). The survey(s) shall occur prior to submittal of "as-built" construction drawings to the City of Columbus and the USACE. Data from the survey should be included therein.
- 24. The ODOT shall provide the USACE and the City of Columbus with plans and specifications with amendments during construction showing alterations as finally constructed (i.e. as-builts) within 180 days of construction completion. These record drawings will be subject to review and approval by the City of Columbus and the USACE to determine whether a sufficient amount of information has been provided for the City of Columbus' continued operation and maintenance of the WCLPP.
- 25. Following project completion, the ODOT shall provide the USACE with sufficient information to update the WCLPP Operations and Maintenance (O&M) Manual. Information may include, but not be limited to, a detailed description of all new project features, survey data from completed sections, reference to the Section 408 approval(s), record drawings showing as-constructed conditions, and instructions regarding O&M of any new features not included in the existing manual.
- 26. Following project completion, the ODOT shall not modify or remove the barrier/retention wall utilized in Impact Area B (reference the *Review Plan* dated 14 November 2019). Upon completion of construction, the barrier/retention wall becomes a feature of the WCLPP and shall be treated as such. Any future modifications or removal will require written approval from the City of Columbus and the USACE.
- 27. The City of Columbus shall be solely responsible for all long term operation, maintenance, and monitoring of features of the WCLPP altered by the authorized Section 408 permission.
- 28. The ODOT shall provide mitigation for the adverse impacts to the City of Columbus communication tower at Dodge Park that will occur as a result of the construction of the ODOT Project 6R. A written and legally binding agreement between the ODOT and the City of Columbus on the matter shall be presented to the USACE prior to any construction activities occurring in Impact Area C.