



# Maryland

Department of  
the Environment

Larry Hogan  
Governor

Boyd Rutherford  
Lieutenant Governor

Ben Grumbles  
Secretary

MAY 24 2016

Ms. Celia Craze  
City of Greenbelt, Dept. of Planning & Community Development  
15 Crescent Road, Suite 200  
Greenbelt, MD 20770

Permit No.: 14-MR-0062M  
Tracking No.: 201460956  
Agency Interest (AI): 21315  
Project: Greenbelt Lake Dam Repairs Modification 1  
County: Prince George's

Dear Ms. Craze:

The Maryland Department of the Environment (the Department) has modified Waterway Construction Permit No. 14-MR-0062 for repairs to Greenbelt Lake Dam (MD Dam No. 8). The modified permit, No. 14-MR-0062M, supersedes the previous permit No. 14-MR-0062, issued on May 8, 2015. Per your request, the Engineer-In-Charge has been changed to Brian Davila, P.E. of Charles P. Johnson & Association, Inc, and the schedule of repairs has been updated. All other conditions of the permit remain the same. This permit does not preclude the need to obtain required authorizations or approvals from other State, Federal, or Local agencies as required by law.

Please note the conditions of the permit including the requirement to notify the Dam Safety Division five (5) days prior to starting construction. Failure to comply with the permit conditions will constitute grounds for enforcement action.

If you take exception to any of the conditions attached to the Permit you may file a petition for judicial review in the Prince Georges County Circuit Court. The petition for judicial review must be filed within thirty (30) days of the publication of the permit decision.

Ms. Celia Craze  
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If you have any questions or require any additional information, please contact me by phone at (410) 537-3538 or by email [hal.vanaller@maryland.gov](mailto:hal.vanaller@maryland.gov) or Ms. Anna Sobilo-Ryzner of the Dam Safety Division at (410) 537-3524 or by email [anna.sobilo-ryzner@maryland.gov](mailto:anna.sobilo-ryzner@maryland.gov).

Sincerely,

  
Lynn Buhl, Director  
Water Management Administration

Enclosures

cc: Brian Davila, P. E., Charles P. Johnson & Associates, Inc. w/enclosures  
MDE Inspection & Compliance Program, w/enclosures  
MDE Wetlands and Waterways Program, w/enclosures

Maryland Department of the Environment  
Water Management Administration  
Dam Safety Division



# PERMIT

**WATERWAY CONSTRUCTION PERMIT NO.**

**EFFECTIVE DATE OF PERMIT**

14-MR-0062M

5/24/16

In accordance with §§5-501 through 5-514, et seq. of the Environment Article, Annotated Code of Maryland, permission is hereby granted to the City of Greenbelt, Department of Planning & Community Development, 15 Crescent Road, Suite 200, Greenbelt, MD 20770, hereinafter referred to collectively as "the Owner" or "the Permittee", by the Maryland Department of the Environment, Dam Safety Division (the Department) to repair Greenbelt Lake Dam as shown on sheets 1 through 16 of plans prepared by Charles P. Johnson & Associates, Inc. and approved by the Department on March 19, 2015.

The site is located south of 500 Crescent Road, Greenbelt, Maryland on a tributary to Indian Creek in Prince George's County, at latitude 39.0027 degrees north, longitude -76.8907 degrees west, ADC Map No. 5288, Grid H10.

Sincerely,

Lynn Buhl, Director  
Water Management Administration

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This **PERMIT** is granted subject to the following:

### GENERAL CONDITIONS

1. This Permit is valid only for use by the Permittee. Permission to transfer the Permit must be obtained from the Department in writing.

2. This Permit is issued based on this structure being classified as a high hazard dam. Changes in downstream development within the dam break flood zone may require updates of the Emergency Action Plan incorporating the changes.
3. This Permit shall become null and void if the construction authorized herein has not begun within two (2) years from the date of this Permit. If the construction authorized herein has not been completed within five (5) years from the date of this Permit, approvals contained herein shall become null and void except that these limits may be extended at the discretion of the Department. After construction has been completed, the Operation and Maintenance Conditions shall remain in effect unless modified by the Department.
4. This Permit is subject to all laws and regulations now in effect and may be revoked if it becomes at variance with the laws of the State, or if the Permittee fails to comply with the conditions of this Permit. It is understood that the obligations attendant to this Permit shall run with the land and shall attach to all Successors in Title. In accepting this Permit, the Permittee shall record or allow a "Memorandum of Land Restrictions for Dam or Reservoir" to be recorded in the land records of Prince George's County, Maryland in accordance with §5-508(b) of the Environment Article, Annotated Code of Maryland. The Permittee shall allow the Department to record the Memorandum if the Department so chooses.
5. If future repairs, additions, or modifications other than routine maintenance must be made to the structure following completion of construction, a separate permit must be obtained from the Department.
6. The permittee shall submit annual updates of the Emergency Action Plan by July 1 of each year.
7. The Permittee shall notify the Dam Safety Division at least five (5) days prior to commencement of construction and no later than five (5) days following completion of construction at (410) 537-3538.
8. This permit does not preclude the need to obtain required authorizations or approvals from other State, Federal or local agencies as required by law.

#### **CONSTRUCTION CONDITIONS**

9. The Permittee is responsible for implementing all required erosion and sediment controls as approved by the Prince George's Soil Conservation District. The approved erosion and sediment control plan shall be maintained at the construction site for reference during the construction period. The Permittee is responsible for implementing the erosion and sediment control plan.
10. The bed and banks of the waterway shall be disturbed as little as possible. Following initial soil disturbance or redisturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading. Should construction be interrupted or delayed for more than seven (7) days, the Permittee, as directed by the Department, shall implement temporary measures to prevent soil erosion during that period. All erosion and sediment control practices during construction shall be in accordance with the 2011 Maryland Standards and Specifications for Erosion and Sediment Control or an approved equivalent. The discharge of untreated sediment laden waters is strictly prohibited.
11. Instream construction in Use I waters is prohibited between the dates of March 1st and June 15th, inclusive, of each calendar year.

12. Motor driven construction equipment is allowed to be used within the stream channel only for that work that is authorized by this Permit and located within the project right-of-way. Spoil material/debris shall be disposed of outside the floodplain. Any temporary excavation or filling within the stream channel or floodplain shall be restored to the elevation existing prior to construction unless the Department requires otherwise.

13. Construction activities, operation, and maintenance shall be carried out in strict accordance with Code of Maryland Regulations (COMAR) 26.17.04.05 and this Permit. The location, dimensions and type of all structures, excavation, or filling is to be in strict accordance with the approved plans and specifications unless written approval for any changes is granted by the Department. If any changes to the Plans are found to be necessary, they shall be submitted to the Department for approval prior to ordering the execution of such change.

14. A person (including Permittee, its employees, agents or contractors) who violates or fails to comply with the terms and conditions of this Permit, approved plans or an administrative order may be subject to penalties in accordance with §5-514 and §5-911, Environment Article, Annotated Code of Maryland (2007 Replacement Volume).

15. A copy of the approved plans and this Permit are to be kept at all times at the construction site for reference during the construction period.

16. If the Permittee, its employees, agents or contractors fail to comply with this Permit or approved plans, the Department may, in its discretion, issue an administrative order requiring Permittee, its employees, agents and contractors to cease and desist any activities that violate this Permit, or the Department may take any other enforcement action available to it by law, including filing civil or criminal charges.

17. This Permit may be suspended or revoked by the Department for cause, including violation of permit conditions, obtaining a permit by misrepresentation, failing to disclose a relevant or material fact, or change in conditions. The Department shall notify the violator in writing and provide an opportunity for a hearing, if the Permittee: (a) submits false or inaccurate information in the Permit application or subsequently required submittals; (b) deviates from the approved plans, specifications, terms and conditions; (c) violates, or is about to violate terms and conditions of this Permit; (d) violates, or is about to violate, any regulation promulgated pursuant to Title 5, Department of the Environment Article, Annotated Code of Maryland as amended; (e) fails to allow authorized representatives of the Department to enter the site of authorized activities at any reasonable time to conduct inspections and evaluations; (f) fails to comply with the requirements of an administrative action or order issued by the Department; or (g) does not have vested rights under this Permit and new information, changes in site conditions, or amended regulatory requirements necessitate revocation or suspension.

18. Overall design of the project has been under the supervision of Jeff Blass, P. E., (Maryland Registration No. 32457), Charles P. Johnson & Associates, Inc. Construction shall be under the supervision of Brian K. Davila, P.E., (Maryland Registration No. 19908), Charles P. Johnson & Associates, Inc., hereinafter referred to as Engineer-In-Charge (EIC). The EIC may not be changed without written approval from the Department. The EIC shall notify the Dam Safety Division upon the commencement of construction activities and thereafter submit a progress report (Form 1) to the Department each month. The progress reports shall be submitted electronically by email to: [hal.vanaller@maryland.gov](mailto:hal.vanaller@maryland.gov). Included along with the progress report shall be the results of all field and laboratory material testing, delivery tickets for concrete and/or flowable fill, shop drawings, and several representative digital photographs of the work.

19. A history of the construction shall be maintained by the EIC and shall include: 1) the date, location and results of field and laboratory material testing, 2) a narrative of problems encountered during construction and changes in design, and 3) "As-Built" plans. The EIC or his representative shall be present during all phases of construction and shall document his findings upon completion of the following construction phases: a) site preparation, b) lake drain pipe replacement, manhole repairs, and drain valve operation, c) chimney filter and toe drain construction, d) embankment fill placement, e) spillway repairs, and f) upon completion of construction.

20. Within sixty (60) days following construction of each phase of the project (referred to as "Target Dates" in the Construction Progress Report (Form 1)), the EIC shall submit a completed "Project Completion Report" (Form 2), the project history, and "As-Built" drawings to the Dam Safety Division. The "As-Built" drawings shall include the contract drawings annotated with all changes in elevation, location, quantity, material specification, and any supplemental drawings issued during the construction period. The "As-Built" drawings as well as the project history and test results shall be submitted in electronic form (.pdf or .tif format) and in printed copy. Special attention shall be directed toward documenting the foundation conditions encountered during construction. Where "... or equal" substitutions are made, the As-Built plans shall reflect these installed items.

#### **OPERATION AND MAINTENANCE CONDITIONS**

21. The Permittee and any heirs, successors, or assigns are responsible for the safety of the dam and the continued operation, surveillance, inspections, and maintenance in accordance with the conditions described herein. The Permittee shall promptly notify the Department of significant changes in conditions.

22. In accepting the Permit, permission is hereby granted to representatives of the Department to enter in or upon the subject premises at any reasonable time for the purpose of conducting inspections pursuant to the provisions of Title 5 of the Environment Article, Annotated Code of Maryland, as amended.

23. If the dam is not operated or maintained in full compliance with this Permit, the Permittee shall repair all or any part of the structure at his sole cost and expense, as directed by the Department.

24. Annual inspections of the facility shall be made by the owner and/or qualified engineer. Records of each inspection shall be maintained by the Owner. Annual inspection reports are to be submitted to the Department within sixty (60) days of each inspection. Extensions may be granted under extenuating circumstances. At a minimum, annual inspection reports shall include a dam inspection checklist (Form 3), photographs of the dam, overall assessment of the condition of the dam and appurtenant works, a review of the downstream danger reach to determine if any new structures exist, etc.

25. Inspections of the facility will also be made during and after storms with significant runoff, by the Owner, to uncover any structural or operational problems. These inspections will include checking of the reservoir pool, spillway and conduit, to assure that they are free of any restricting debris. Records of these inspections shall be maintained by the Owner and submitted to the Department with the annual inspection report.

26. The Permittee is responsible for maintaining a low flow release as determined by the Department as required by any other permits. At no time shall the flow to the stream channel below the dam be stopped completely.

27. Maintenance work such as the removal of all new tree growth and mowing of the dam will be scheduled as determined necessary during the Owner's inspections. Mowing of the dam shall be accomplished at least twice each year by the Owner. Any emergency maintenance will also be accomplished by the Owner.

28. The Owner agrees not to plant or allow the growth of any trees or woody vegetation on or around the dam. The growth of this vegetation shall be removed by the Owner.

29. The costs of the inspection, regular maintenance and emergency repairs will be accomplished by the Owner as warranted or at the direction of the Department.

Form 1: Monthly Construction Progress Report  
 To be submitted electronically to: hal.vanaller@maryland.gov

Date \_\_\_\_\_

TO: MDE Dam Safety Division  
 Water Management Administration  
 1800 Washington Blvd, Suite 440  
 Baltimore, Maryland 21230-1708

Re: Monthly Construction Progress Report No. \_\_\_\_  
 WMA Permit No. 14-MR-0062M

The work on **Greenbelt Lake Dam** in Prince George's County is progressing as follows:

Description of Work Phase	Target Date	Percent Complete
<b>Phase I</b>		
Removal of CMP lake drain pipe and replacement	November 1, 2016	
Lake drain manhole repairs	November 1, 2016	
Lake drain valve stem extension	November 1, 2016	
Lake drain functional test	November 1, 2016	
<b>Phase II</b>		
Seepage chimney filter on downstream slope	September 1, 2017	
Seepage trench drain along downstream toe	September 1, 2017	
Fill placement on crest to uniform Elev. 114.6	September 1, 2017	
<b>Phase III</b>		
Overflow spillway structure replacement and repair	July 1, 2018	
Other:		

REMARKS (Enter any remarks or details pertinent to the status and conditions of construction)

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Submitted By:

**Brian Davila, P.E.**  
 Engineer-In-Charge

Please attach several representative digital photographs of the work (.jpg format) and the results of field and laboratory testing (.pdf or .tif format).

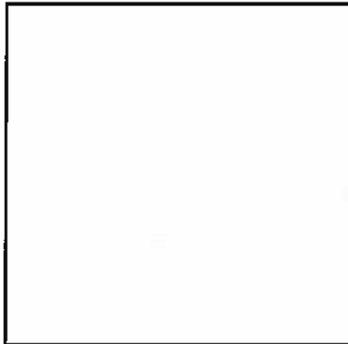
STATE OF MARYLAND  
WATER MANAGEMENT ADMINISTRATION  
DAM SAFETY DIVISION

MDE Dam Safety Division  
Water Management Administration  
1800 Washington Blvd, Suite 440  
Baltimore, Maryland 21230-1708

PROJECT COMPLETION REPORT NO. \_\_  
WMA Permit No. **14-MR-0062M**  
Date \_\_\_\_\_

Gentlemen:

I (We) hereby certify that the \_\_\_\_\_ insert description of work phase \_\_\_\_\_ of the repairs to **Greenbelt Lake Dam** in **Prince George's County** was completed on \_\_\_\_\_, 20\_\_\_\_, in accordance with the plans and specifications approved by the Department. Any minor differences between the As-Built plans and the approved construction plans will not affect the safety of the dam including hydraulic performance or the minimum freeboard criteria.



Very truly yours,

**Brian Davila, P.E.**  
Engineer-In-Charge

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. \_\_\_\_\_, Expiration Date: \_\_\_\_\_.

Signature of Permittee

\_\_\_\_\_  
**Celia Craze**  
City of Greenbelt  
Dept. of Planning & Community Development

\_\_\_\_\_  
Title  
Enclosed: As-Built plans (both paper and electronic), project history



Dam: \_\_\_\_\_ Weather: \_\_\_\_\_ Date: \_\_\_\_\_

Inspectors: \_\_\_\_\_ Pool Level: \_\_\_\_\_

MARYLAND DAM INSPECTION CHECKLIST	Y	N	Monitor Repair
<b>1. CREST</b>			
Ground cover in good condition			
Settlements Depressions Cracks			
<b>2. UPSTREAM SLOPE</b>			
Ground cover in good condition			
Riprap in good condition			
Erosion Animal Burrows Trees Shrubs			
Settlements Depressions Bulges Cracks			
<b>3. DOWNSTREAM SLOPE</b>			
Ground cover in good condition			
Erosion Animal Burrows Trees Shrubs			
Settlements Depressions Bulges Cracks			
Seepage _____ gpm			
<b>4. INTERNAL DRAINAGE SYSTEM</b>			
Seepage/drain flow: Left _____ gpm Right _____ gpm Other _____ gpm			
Does seepage contain fines?			
<b>5. ABUTMENT CONTACTS</b>			
Trees Shrubs Erosion			
Seepage _____ gpm			
<b>6. SPILLWAY/RISER STRUCTURE</b> Concrete or Metal Pipe			
Spalling Cracking Corrosion Erosion Scaling Exposed Reinforcement			
Joints: Displacement Leakage Loss of joint material			
Trash racks: Operational Broken Bent Rusted Debris Obstructed			
Sluice/Drain gates: Operational Broken Bent Corroded Leaking			
<b>7. SPILLWAY CONDUIT</b> Concrete or Metal Pipe			
Debris Cracking Leakage Spalling Exposed reinforcement			
Joints: Displacement Leakage Loss of joint material			
<b>8. STILLING BASIN/PLUNGE POOL</b> Riprap or Concrete			
Spalling Cracking Erosion Scaling Exposed Reinforcement Joint Deterioration			
Undercutting Eroding			
Outlet channel condition:			
Tailwater elevation and flow condition:			
<b>9. EMERGENCY SPILLWAY</b>			
Ground cover in good condition			
Erosion Trees Shrubs Obstructions			
<b>OVERALL CONDITION:</b> Excellent Good Fair Poor Unsafe			

Notes: