

HYDRAULICS UNIT NEWSLETTER

December 14, 2023

IN THIS ISSUE

- New Unit Head
- ATLAS Workbench Update
- Engineer III Posting

CONTACT US

Please share any Questions, Comments or Ideas for the Hydraulics Unit [here](#).

NEW STATE HYDRAULICS ENGINEER



We are pleased to announce that **Matthew (Matt) Lauffer** is the new State Hydraulics Engineer for NCDOT. Mr. Lauffer graduated with a Bachelor of Science in Civil Engineering from The Ohio State University. For the past 25 years Matt has served NCDOT Hydraulics Unit in a variety of capacities, including managing the Highway Stormwater Program,

serving as an Assistant State Hydraulics Engineer and a member of the Department's Resiliency Program Management Team. He has led various design flood resiliency initiatives and partnered with NCEM on Transportation Flood Warning Systems which assist various NCDOT departments pre-, during, and post- storm. He is a member of the Transportation Research Board Committee on Hydrology, Hydraulics and Stormwater and is a member of the AASHTO Committee of Design and Technical Committee on Hydrology and Hydraulics and is a licensed Professional Engineer in North Carolina.

Please congratulate Matt Lauffer on his new position. We are very fortunate to have Matt in this new role and excited for the Hydraulics Unit to continue to shine under his leadership!

HYDRAULICS SECTION OF THE ATLAS WORKBENCH HAS BEEN UPDATED

The Hydraulics section of the ATLAS Workbench has been updated to align with the stages within the Project Delivery Network (PDN) and expanded to capture additional deliverables. Users can now upload all key deliverables for Project Delivery Network (PDN) activities that span from PDN Stage 1 to 5.

Hydraulic Workbench updates include:

- Deliverables organized by PDN Stage
- Deliverable questions and uploads grouped together.
- Deliverable uploads for PSMP, BSR/CSR, SFC/CLOMR, Construction Support, and Construction Drainage Investigations have been added.
 - Deliverable type for PSMP is a **PDF**.
 - Deliverable type for BSR/CSR, SFC/CLOMR, Construction Support, and Construction Drainage Investigations is the **Document Set**.
- Combined and eliminated deliverable questions.

HYDRAULICS UNIT NEWSLETTER

December 14, 2023

The following screenshots show preview of the new workbench along with notes on the updates.

1. PDN Stage 2HY1

* Is the Hydraulic Planning Report required?

Yes No

2HY1. Upload the Hydraulic Planning Report (PDF).

* Is the Preliminary Stormwater Management Plan required?

Yes No

2HY1. Upload the Preliminary Stormwater Management Plan (PDF).

* Does the project require work encroaching and adversely effecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A? (i.e. Is any part of the project touching a floodplain?)^{CE}

Yes No

New Question

Deliverable now in Workbench

2. PDN Stage 2HY2

* Is the Final Hydroplaning Assessment required?

Yes No

2HY2. Upload the Final Hydroplaning Assessment (Document Set).

* Are Hydraulic Design Reports for Major Structures (BSRs and CSRs) required?

Yes No

2HY2. Upload the Hydraulic Design Reports for Major Structures; BSRs and CSRs (Document Set).

NOTE: Submit final PDF of each approved BSR/CSR(s). Individual BSR/CSRs should be named as follows: [6 digit structure number]_[Year sealed]_[Project or TIP No]_[Stream]_[Route Name]_[BSR or CSR].pdf

* Are Drainage Plans for Field Inspection required?

Yes No

2HY2. Upload Drainage Plans for Field Inspection (PDF).

NOTE: Upload the Final redline Drainage Plans and Computations under PDN Stage 3HY1.

Deliverable now a Document Set

Deliverable now in Workbench

Naming Convention for BSR/CSRs provided.

HYDRAULICS UNIT NEWSLETTER

December 14, 2023

3. PDN Stage 3HY1

* Are Drainage Design files required?

Yes No

Upload the Final Drainage Design files.

3HY1. Final Redline Drainage Plans as a single file (PDF).

3HY1. Final Drainage Plan Computations as a single file that contains Storm Drain Comps, Inlet Comp, Outfall Analysis, Pipe Data Sheets, etc. (PDF).

* Are SFC/CLOMR approvals required?

Yes No

3HY1. Upload the approved SFC/CLOMR Packages (Document Set).

**Deliverable
now a
Document Set**

NOTE: Submit final Zip of file of each approved SFC/CLOMR package. Individual SFC/CLOMR package(s) should be named as follows: [ProjectID]_[StructureID].zip

* Is the Stormwater Management Plan required?

Yes No

3HY1. Upload the completed Stormwater Management Plan (PDF).

* Are Environmental Permits required?

Yes No

Upload the completed Environmental Permit files.

3HY1. Completed Environmental Permit Drawings packaged in a zip file (ZIP).

3HY1. Completed Environmental Permit Drawings (DGN).

* Are Final 4B/4C Merger Meeting Minutes required? If so, please upload those in the Merger tab of ATLAS Workbench.

Yes No

4. PDN Stage 5HY1

5HY1. Upload Construction Drainage Investigation Documentation (Document Set).

5HY1. Upload Construction Support Documentation (Document Set).

**Deliverables
now in
Workbench**

HYDRAULICS UNIT NEWSLETTER

December 14, 2023

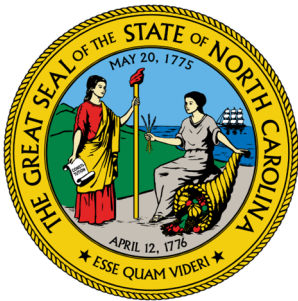
ATLAS Resources

ATLAS goal is to improve business processes and provide a data access and storage framework to support informed project development through use of GIS-based data on a regional level.

ATLAS Resources <https://connect.ncdot.gov/resources/Environmental/EAU/Project-Atlas/Pages/default.aspx>

ATLAS Training <https://connect.ncdot.gov/resources/Environmental/EAU/Project-Atlas/Project-Atlas-Training/Pages/default.aspx>

HIRING FOR AN ENGINEER III IN THE HIGHWAY FLOODPLAIN PROGRAM



The Hydraulics Unit is happy to announce a new posting for an Engineer III. This position will serve as a project engineer within the Hydraulics Unit's statewide Highway Floodplain Program responsible for providing necessary guidance to in-house staff and private engineering firms on compliance issues of FEMA National Flood Insurance Program (NFIP) regulations, and the Department's Memorandum of Agreement (MOA) with N.C. Emergency Management (NCEM).

Additional details can be found here:

<https://www.governmentjobs.com/careers/northcarolina/jobs/4311249/engineer-iii>

Make a positive impact.
Join NCDOT.



Stay in the Flow

Keep up to date on the Hydraulics Unit policies, procedures, innovations, updates, advertisements, etc.... by signing up to receive the **Hydraulics Unit Newsletter**. To sign up, just complete the simple form [Hydraulics Unit Notifications](#)

