

# Temporary Dewatering Design

Durham Meadows Waterline Remedial Design  
Durham, Middlefield, and Middletown, Connecticut

May 22, 2019

Project No. J2195015

## GOVERNMENT COMMENTS:

Could not locate the following comments on the drawing. Suggest you add under comments under General Notes.

1. The CT DEEP General permit will apply to all dewatering activities. Registration is not necessary for the work on this project. All dewatering activities will be done in compliance with the laws, regulations, and codes of the CT DEEP General Permit.
2. All Crossings will be have a separate submittal addressing dewatering activities.

## Prepared for:

Ludlow Construction Co., Inc.  
Ludlow, Massachusetts

## Prepared by:

Terracon Consultants, Inc.  
Rocky Hill, Connecticut

[terracon.com](http://terracon.com)

**Terracon**

Environmental



Facilities



Geotechnical



Materials



May 22, 2019

Ludlow Construction Co., Inc.  
19 Carmelina's Circle  
Ludlow, MA 01056

Attn: Mr. Michael Pio  
P: (413) 583 2522  
E: mpio@ludlowconstruction.com

Re: Geotechnical Engineering Design Services – Revision 1  
Durham Meadows Waterline Remedial Design  
Durham, Middlefield, and Middletown, Connecticut  
Terracon Project No. J2195015

Dear Mr. Pio:

Terracon Consultants, Inc. (Terracon) is submitting, herewith, the temporary dewatering design for the above-referenced project. This revision incorporates review comments dated April 5, 2019. The work was performed in general accordance with our proposal dated February 22, 2019.

This submittal includes typical details for temporary dewatering, including an installation procedure and materials specifications for the system.

We appreciate the opportunity to be of service to you on this project. If you have questions concerning this design, or if we may be of further service, please contact us.

Sincerely,  
**Terracon Consultants, Inc.**

Christian B. Rice, P.E.  
Senior Staff Geotechnical Engineer

Stephen C. Lanne, P.E.  
Geotechnical Department Manager

/cbr/J2195015

Attachment: Exhibit A-1 Dewatering Details

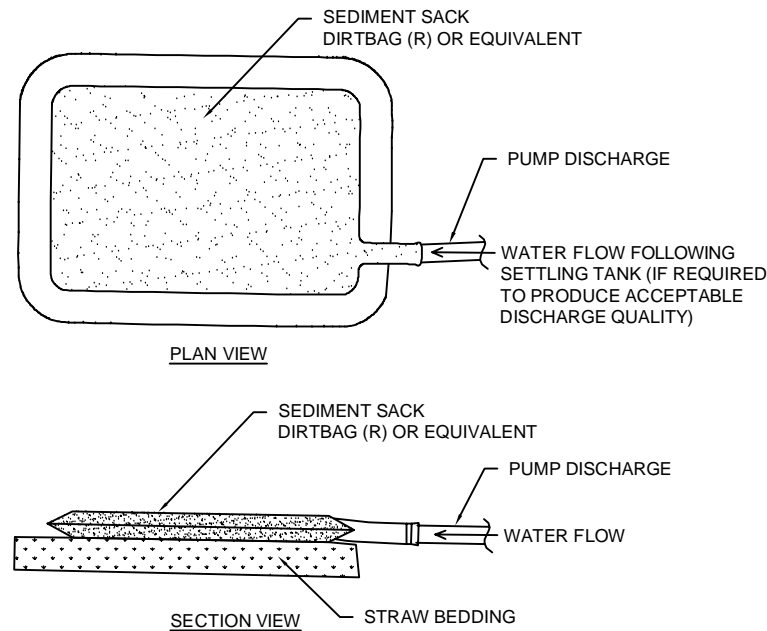
Terracon Consultants, Inc. 201 Hammer Mill Road Rocky Hill, Connecticut 06067  
P (860) 721 1900 F (860) 721 1939 terracon.com

**GENERAL NOTES:**

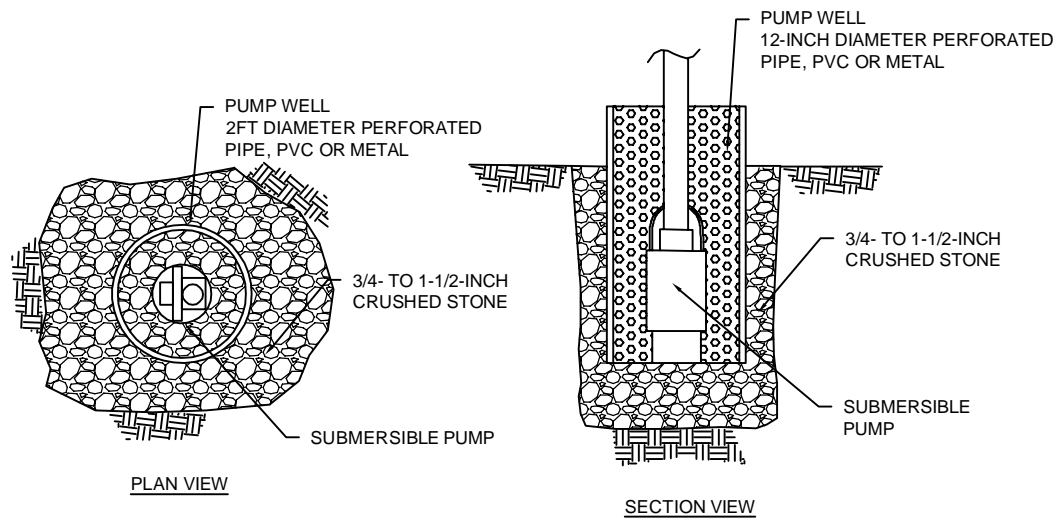
1. INSTALL TEMPORARY DEWATERING SUMP PITS IN PUMP WELL WITH CRUSHED STONE TO DEPTH NECESSARY TO LOWER GROUNDWATER AT LEAST 2 FEET BELOW BOTTOM OF EXCAVATION.
2. USE FILTERED SUBMERSIBLE PUMPS TO CONTROL AND REMOVE WATER AS REQUIRED. DISCHARGE FROM DEWATERING PUMPS SHALL BE SCREENED THROUGH A BAFFLED SETTLING TANK AND SEDIMENT SACK FILTERS AS REQUIRED TO PRODUCE ACCEPTABLE DISCHARGE QUALITY. WATER SHALL BE DISCHARGED INTO APPROVED LOCATIONS. ACCEPTABLE DISCHARGE QUALITY IS DEFINED AS DISCHARGED WATER WHICH WILL NOT CAUSE OR CONTRIBUTE TO AN EXCEEDANCE OF THE APPLICABLE WATER QUALITY STANDARDS IN THE RECEIVING WATER.
3. DISCHARGING OF WATER SHALL BE PERFORMED IN ACCORDANCE WITH NPDES, 40 CFR, 122.26; AND CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION (DEEP) "GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES" DATED AUGUST 21, 2013.
4. DISCHARGING DIRECTLY INTO DRAINAGE SYSTEMS, WETLANDS, WATERCOURSES, OR WATER BODIES IS PROHIBITED.
5. CHECK SEDIMENT SACK FILTERS AND STRAW BEDDING DAILY TO ENSURE FILTERS ARE IN GOOD WORKING CONDITION. CLEAN OR REPLACE FILTERS AS REQUIRED TO MAINTAIN ACCEPTABLE DISCHARGE QUALITY.
6. INSTALL ONE SUMP PIT FOR EVERY 300 SQUARE FEET OF EXCAVATION FOOTPRINT WITH MINIMUM PUMP DISCHARGE CAPACITY OF 90 GALLONS PER MINUTE (GPM). ASSUMES COHESIONLESS SOILS AND GROUNDWATER LEVEL TO BE LOWERED NO MORE THAN 4 FEET, WITH PUMPS RUNNING DURING WORK HOURS ONLY. CONTACT TERRACON IF FIELD CONDITIONS DIFFER.
7. BACKUP DISCHARGE FILTERING MATERIALS SHOULD BE READILY ACCESSIBLE ON-SITE AT ALL TIMES IN CASE OF NECESSARY REPLACEMENT.
8. DO NOT REMOVE DISCHARGE FILTERING MATERIALS (SEDIMENT SACKS, HAY BALES, AND THE LIKE) UNTIL EXCAVATIONS HAVE BEEN BACKFILLED.

**MATERIALS:**

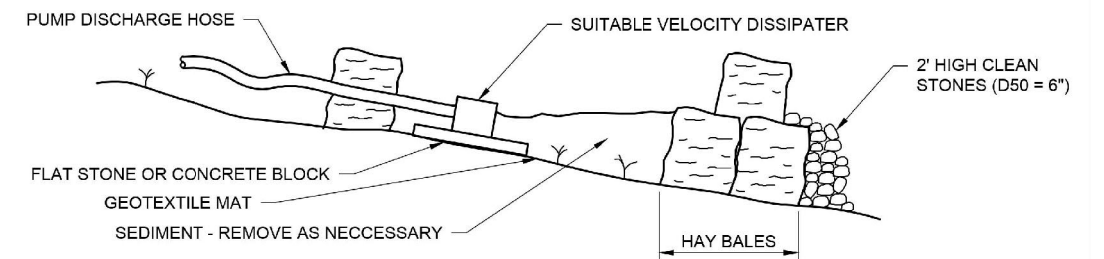
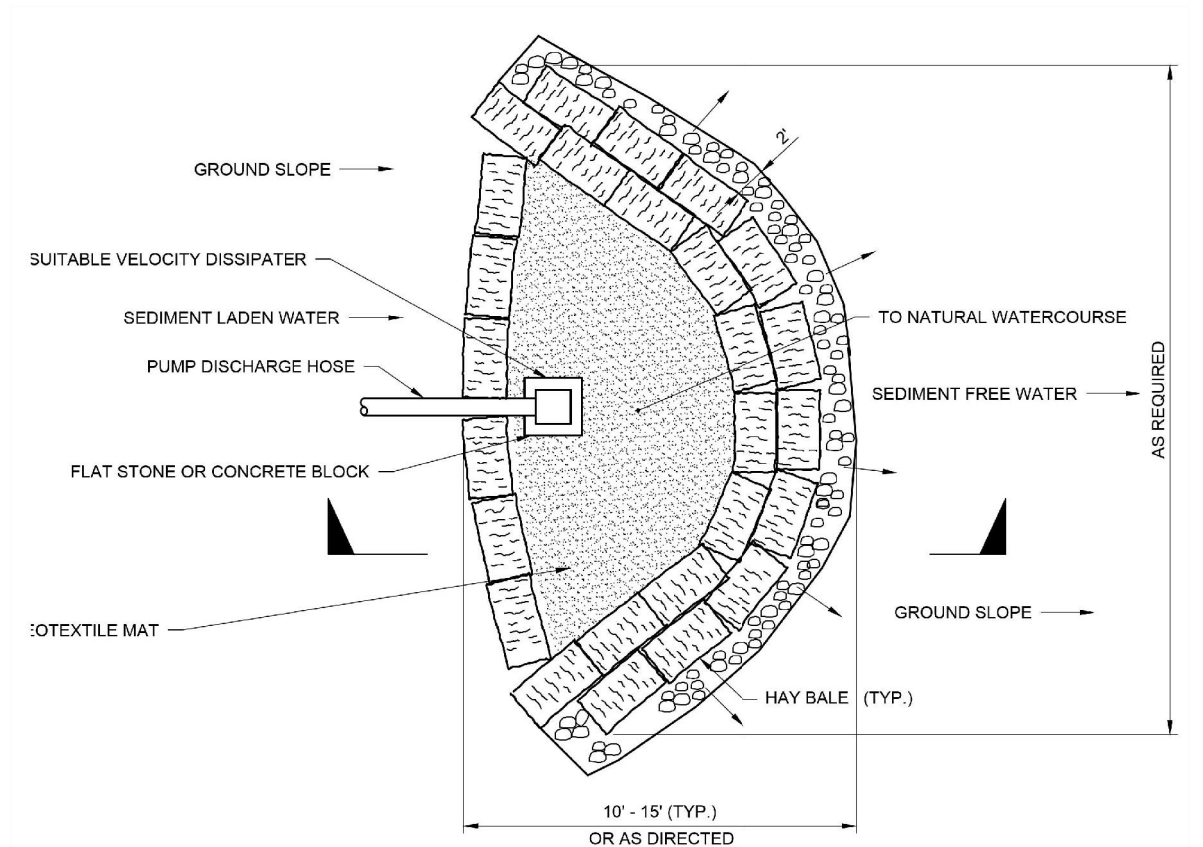
1. CRUSHED STONE: 3/4- TO 1 1/2-INCH CLEAN, CRUSHED STONE.
2. PUMP WELL: 2-FOOT DIAMETER PERFORATED PIPE, PVC OR METAL.



**SEDIMENT SACK DETAIL**  
SCALE: NTS



**SUBMERSIBLE PUMP DETAIL**  
SCALE: NTS



**SEDIMENT TRAP DETAIL**  
SCALE: NTS

DETAIL FROM "EROSION AND SEDIMENTATION CONTROL DETAILS", SHEET No. C-501, DATED APRIL 2018, PREPARED BY AECOM.

Prepared For: LUDLOW CONSTRUCTION CO. INC. 19 CARMELINA'S CIRCLE LUDLOW, MA 01056	Project Mngr: CBR	Project No. J2195015
Drawn By: CBR	Scale: AS SHOWN	
Checked By: SCL	File No. J2195015	
Approved By: SCL	Date: MAY 2019	

**Terracon**

201 Hammer Mill Road Rocky Hill, Connecticut 06067  
PH. (860)721-1900 FAX. (860)721-1939

**DEWATERING DETAILS**

DURHAM MEADOWS WATERLINE REMEDIAL DESIGN  
DURHAM, MIDDLEFIELD, AND MIDDLETOWN, CONNECTICUT

**EXHIBIT**

**A-1**