



Town of Swanzeey

620 Old Homestead Highway
P.O. Box 10009
Swanzeey, New Hampshire 03446

-addendum-

Project Number	Project Description
825353	Fire Pond Dredging and Dam Improvements

NUMBER: 2

ISSUED: April 6, 2020

The following listed items are clarifications, modifications, additions, substitutions or deletions to or from the above – captioned project.

1. Clarification:

Separate sealed BIDS will be received by the Town of Swanzeey at the following locations until 10:00 am, on April 10, 2020:

PO Box 10009
620 Old Homestead Highway
Swanzeey, NH 03446

OR

mbranley@swanzeeynh.gov

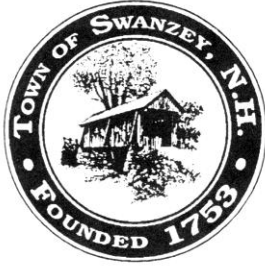
2. Question: Requirements of the temporary bypass system? What are the base flows in the stream?

Answer: The temporary cofferdam/control of water system shown on sheet 4 and 7 are to depict the limits of in-stream disturbance. The Contractor shall be responsible for preparing and submitting a control of water plan to the for approval by the Owner, Engineer, and NH DES Wetland Bureau, prior to the beginning of any work.

A USGS StreamStats report is attached to this addendum which includes information regarding the Fire Pond watershed. Flow statistics are shown within the report.

3. Question: Can the roadway through the jobsite be shut down? Can stockpiling occur on the roadway?

Answer: The roadway along Fire Pond is for access to recreational trails. For the duration of the project the roadway may shut down. Materials can be stockpiled on the roadway outside the Ordinary High Water boundaries as shown on the Plans.



Town of Swanzey

620 Old Homestead Highway
P.O. Box 10009
Swanzey, New Hampshire 03446

4. ***Question: Is the stabilized construction access required?***

Answer: No, the Contractor shall provide adequate erosion prevention and sediment controls to prevent debris and dust from the job site propagating onto Old Richmond Road. The Contractor shall inspect the Old Richmond Road periodically and clean the paved surface if necessary and if directed by the Owner or Engineer.

5. ***Question: What is the Town providing for hauling? What is the roundtrip from the site to disposal?***

Answer: The Town will be providing hauling and disposal of excavated on-site materials. The Town has requested that the project not occur until a July/August timeframe to accommodate the Town's internal work schedules. The Town has indicated they will be providing four trucks.

The estimated roundtrip time from the jobsite to the Town Highway garage and back according to Google Maps is 30 minutes.

6. ***Question: What is the stone fill for? Can a conversion be provided from tons to cubic yards?***

Answer: Stone fill is not shown on the project plans. The purpose for the stone fill is for stream stabilization if needed and will be installed as directed by the Engineer. The bid quantity shown is indeterminate and conversion will be 2.0 tons/cubic yards

7. ***Question: What is the expected depth of the excavation? Were borings completed?***

Answer: The excavation must be completed to the depth shown on the plans. A 3H:1V slope was assumed for the excavation. The depth and volume shown are required to allow for access to the low level outlet plug on the Dam and to provide sufficient fire protection volume. Borings were not completed. The anticipated volume to be removed is 800 C.Y.

Reportedly, the pond began to fill after Tropical Storm Irene in 2011. The stream washout from that storm blocked the low level plug. Sediment deposits within the pond are expected to be from upstream sediment and from washout of the adjacent roadway. The Contractor is responsible to means and methods for excavating the sediment.

8. ***Question: What is the anticipated seepage from the wetlands adjacent to the pond?***

Answer: The wetland on the southern side of the project area was surveyed to be higher than the ordinary high water level. The anticipated control of water/cofferdam is expected to extend to this wetland area. The drainage to this specific area is limited by the surrounding topography.



Town of Swanzey

620 Old Homestead Highway
P.O. Box 10009
Swanzey, New Hampshire 03446

9. Question: COVID-19 concerns/Essential Business

Answer: The Town has indicated that at current this project would be considered exempt to the NH restrictions regarding COVID-19. Contractors should consult NH State Health monitoring and movement restrictions and emergency orders.

10. Question: Erosion Matting extents? Matting within pond?

Answer: Erosion matting is only required on slopes of 3H:1V or greater as shown on the plans. Matting shall be removed from below the Ordinary High Water level prior to refilling the pond.

11. Question: To be a qualified bidder do you have to buy plans and technical specifications?

Answer: A qualified bidder must submit their bid on the bid form within the Bid Documents. The most current documents can be found at the issuing office. Future addendum if needed will be issued to plan holders of record.

12. Question: What is the Engineer's estimate for the construction cost?

Answer: The engineer's estimate for construction is approximately \$60,000.

END OF ADDENDUM

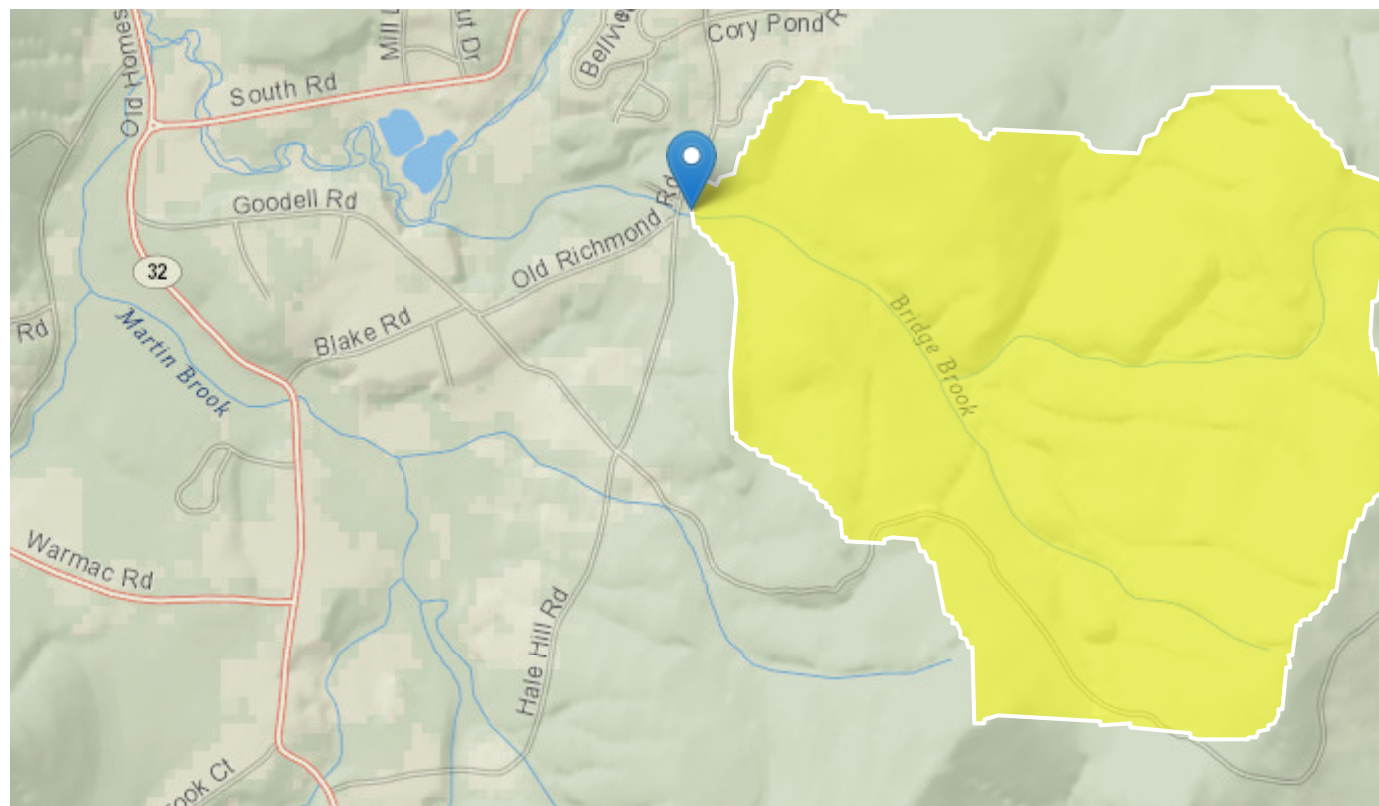
Fire Pond Dredging and Dam Improvements

Region ID: NH

Workspace ID: NH20200406161604806000

Clicked Point (Latitude, Longitude): 42.84173, -72.25573

Time: 2020-04-06 12:16:32 -0400



Bridge Brook StreamStats Data

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
APRAVPRE	Mean April Precipitation	3.655	inches
BSLDEM30M	Mean basin slope computed from 30 m DEM	13.297	percent
CENTROIDX	Basin centroid horizontal (x) location in state plane coordinates	830716.4	meters
CENTROIDY	Basin centroid vertical (y) location in state plane units	123049.6	meters
CONIF	Percentage of land surface covered by coniferous forest	20.4651	percent

Parameter Code	Parameter Description	Value	Unit
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	380	feet per mi
DRNAREA	Area that drains to a point on a stream	1.6	square miles
ELEVMAX	Maximum basin elevation	1460.86	feet
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	0.00404	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	0.000363	percent
MINTEMP_W	Mean winter minimum air temperature over basin surface area	13.386	degrees F
MIXFOR	Percentage of land area covered by mixed deciduous and coniferous forest	32.3873	percent
OUTLETX	Basin outlet horizontal (x) location in state plane coordinates	826275	feet
OUTLETY	Basin outlet vertical (y) location in state plane coordinates	125055	feet
PREBC0103	Mean annual precipitation of basin centroid for January 1 to March 15 winter period	7.64	inches
PREBC_1112	Mean annual precipitation of basin centroid for November 1 to December 31 period	7.36	inches
PRECIPCENT	Mean Annual Precip at Basin Centroid	42	inches
PRECIPOUT	Mean annual precip at the stream outlet (based on annual PRISM precip data in inches from 1971-2000)	40.2	inches
PREG_03_05	Mean precipitation at gaging station location for March 16 to May 31 spring period	8.7	inches
PREG_06_10	Mean precipitation at gaging station location for June to October summer period	17.4	inches
SNOFALL	Mean Annual Snowfall	67.809	inches
TEMP	Mean Annual Temperature	44.816	degrees F
TEMP_06_10	Basinwide average temperature for June to October summer period	60.846	degrees F
WETLAND	Percentage of Wetlands	0.3977	percent

Peak-Flow Statistics Parameters^[Peak Flow Statewide SIR2008 5206]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.6	square miles	0.7	1290
APRAVPRE	Mean April Precipitation	3.655	inches	2.79	6.23
WETLAND	Percent Wetlands	0.3977	percent	0	21.8
CSL10_85	Stream Slope 10 and 85 Method	380	feet per mi	5.43	543

Peak-Flow Statistics Flow Report^[Peak Flow Statewide SIR2008 5206]

PII: Prediction Interval-Lower, Plu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	PII	Plu	SEp	Equiv. Yrs.
2 Year Peak Flood	94.2	ft ³ /s	57.6	154	30.1	3.2
5 Year Peak Flood	161	ft ³ /s	97.1	267	31.1	4.7
10 Year Peak Flood	219	ft ³ /s	129	370	32.3	6.2
25 Year Peak Flood	298	ft ³ /s	170	522	34.3	8
50 Year Peak Flood	363	ft ³ /s	201	657	36.4	9
100 Year Peak Flood	442	ft ³ /s	236	826	38.6	9.8
500 Year Peak Flood	633	ft ³ /s	311	1290	44.1	11

Peak-Flow Statistics Citations

Olson, S.A.,2009, Estimation of flood discharges at selected recurrence intervals for streams in New Hampshire: U.S.Geological Survey Scientific Investigations Report 2008-5206, 57 p. (<http://pubs.usgs.gov/sir/2008/5206/>)

Low-Flow Statistics Parameters^[Low Flow Statewide]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.6	square miles	3.26	689
TEMP	Mean Annual Temperature	44.816	degrees F	36	48.7

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
PREG_06_10	Jun to Oct Gage Precipitation	17.4	inches	16.5	23.1

Low-Flow Statistics Disclaimers_[Low Flow Statewide]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors
 One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Low-Flow Statistics Flow Report_[Low Flow Statewide]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0583	ft ³ /s
7 Day 10 Year Low Flow	0.0167	ft ³ /s

Low-Flow Statistics Citations

Flynn, R.H. and Tasker, G.D.,2002, Development of Regression Equations to Estimate Flow Durations and Low-Flow-Frequency Statistics in New Hampshire Streams: U.S.Geological Survey Scientific Investigations Report 02-4298, 66 p. (<http://pubs.water.usgs.gov/wrir02-4298>)

Flow-Duration Statistics Parameters_[Low Flow Statewide]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.6	square miles	3.26	689
PREG_06_10	Jun to Oct Gage Precipitation	17.4	inches	16.5	23.1
TEMP	Mean Annual Temperature	44.816	degrees F	36	48.7

Flow-Duration Statistics Disclaimers_[Low Flow Statewide]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors
 One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Flow-Duration Statistics Flow Report_[Low Flow Statewide]

Statistic	Value	Unit
60 Percent Duration	0.71	ft ³ /s
70 Percent Duration	0.455	ft ³ /s
80 Percent Duration	0.242	ft ³ /s
90 Percent Duration	0.11	ft ³ /s
95 Percent Duration	0.0632	ft ³ /s
98 Percent Duration	0.0361	ft ³ /s

Flow-Duration Statistics Citations

Flynn, R.H. and Tasker, G.D.,2002, Development of Regression Equations to Estimate Flow Durations and Low-Flow-Frequency Statistics in New Hampshire Streams: U.S.Geological Survey Scientific Investigations Report 02-4298, 66 p. (<http://pubs.water.usgs.gov/wrir02-4298>)

Seasonal Flow Statistics Parameters_[Low Flow Statewide]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.6	square miles	3.26	689
CONIF	Percent Coniferous Forest	20.4651	percent	3.07	56.2
PREBC0103	Jan to Mar Basin Centroid Precip	7.64	inches	5.79	15.1
BSLDEM30M	Mean Basin Slope from 30m DEM	13.297	percent	3.19	38.1
MIXFOR	Percent Mixed Forest	32.3873	percent	6.21	46.1
PREG_03_05	Mar to May Gage Precipitation	8.7	inches	6.83	11.5
TEMP	Mean Annual Temperature	44.816	degrees F	36	48.7
TEMP_06_10	Jun to Oct Mean Basinwide Temp	60.846	degrees F	52.9	64.4
PREG_06_10	Jun to Oct Gage Precipitation	17.4	inches	16.5	23.1
ELEVMAX	Maximum Basin Elevation	1460.86	feet	260	6290

Seasonal Flow Statistics Disclaimers_[Low Flow Statewide]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors
 One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors

Seasonal Flow Statistics Flow Report [Low Flow Statewide]

Statistic	Value	Unit
Jan to Mar15 60 Percent Flow	0.968	ft ³ /s
Jan to Mar15 70 Percent Flow	0.809	ft ³ /s
Jan to Mar15 80 Percent Flow	0.701	ft ³ /s
Jan to Mar15 90 Percent Flow	0.523	ft ³ /s
Jan to Mar15 95 Percent Flow	0.414	ft ³ /s
Jan to Mar15 98 Percent Flow	0.342	ft ³ /s
Jan to Mar15 7 Day 2 Year Low Flow	0.7	ft ³ /s
Jan to Mar15 7 Day 10 Year Low Flow	0.375	ft ³ /s
Mar16 to May 60 Percent Flow	3.63	ft ³ /s
Mar16 to May 70 Percent Flow	2.83	ft ³ /s
Mar16 to May 80 Percent Flow	2.1	ft ³ /s
Mar16 to May 90 Percent Flow	1.46	ft ³ /s
Mar16 to May 95 Percent Flow	1.06	ft ³ /s
Mar16 to May 98 Percent Flow	0.747	ft ³ /s
Mar16 to May 7 Day 2 Year Low Flow	0.989	ft ³ /s
Mar16 to May 7 Day 10 Year Low Flow	0.528	ft ³ /s
Jun to Oct 60 Percent Flow	0.17	ft ³ /s
Jun to Oct 70 Percent Flow	0.121	ft ³ /s
Jun to Oct 80 Percent Flow	0.0896	ft ³ /s
Jun to Oct 90 Percent Flow	0.0538	ft ³ /s
Jun to Oct 95 Percent Flow	0.0347	ft ³ /s
Jun to Oct 98 Percent Flow	0.0296	ft ³ /s
Jun to Oct 7 Day 2 Year Low Flow	0.062	ft ³ /s
Jun to Oct 7 Day 10 Year Low Flow	0.0182	ft ³ /s
Nov to Dec 60 Percent Flow	1.53	ft ³ /s
Nov to Dec 70 Percent Flow	1.16	ft ³ /s

Statistic	Value	Unit
Nov to Dec 80 Percent Flow	0.875	ft^3/s
Nov to Dec 90 Percent Flow	0.56	ft^3/s
Nov to Dec 95 Percent Flow	0.358	ft^3/s
Nov to Dec 98 Percent Flow	0.217	ft^3/s
Oct to Nov 7 Day 2 Year Low Flow	0.849	ft^3/s
Oct to Nov 7 Day 10 Year Low Flow	0.342	ft^3/s

Seasonal Flow Statistics Citations

Flynn, R.H. and Tasker, G.D.,2002, Development of Regression Equations to Estimate Flow Durations and Low-Flow-Frequency Statistics in New Hampshire Streams: U.S.Geological Survey Scientific Investigations Report 02-4298, 66 p. (<http://pubs.water.usgs.gov/wrir02-4298>)

Recharge Statistics Parameters[Groundwater Recharge Statewide 2004 5019]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
PRECIPOUT	Mean Annual Precip at Gage	40.2	inches	35.83	53.11
TEMP	Mean Annual Temperature	44.816	degrees F	36.05	48.69
MINTEMP_W	Mean Winter Min Temperature	13.386	degrees F	0.8	19.88
CONIF	Percent Coniferous Forest	20.4651	percent	3.07	56.18
PREG_03_05	Mar to May Gage Precipitation	8.7	inches	6.83	11.54
SNOFALL	Mean Annual Snowfall	67.809	inches	54.46	219.07
PREG_06_10	Jun to Oct Gage Precipitation	17.4	inches	16.46	23.11
MIXFOR	Percent Mixed Forest	32.3873	percent	6.21	46.13
PREBC_1112	Nov to Dec Basin Centroid Precip	7.36	inches	6.57	15.2
PRECIPCENT	Mean Annual Precip at Basin Centroid	42	inches	37.44	75.91

Recharge Statistics Flow Report[Groundwater Recharge Statewide 2004 5019]

PIl: Prediction Interval-Lower, Plu: Prediction Interval-Upper, SEp: Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SEp
GW_Recharge_Jan_to_Mar15	4.36	in	15.5
GW_Recharge_Mar16_to_May	7.13	in	12.4
GW_Recharge_Jun_to_Oct	2.44	in	26.5
GW_Recharge_Nov_to_Dec	3.06	in	15.8
GW_Recharge_Ann	19.2	in	12.4

Recharge Statistics Citations

Flynn, R.H. and Tasker, G.D.,2004, Generalized Estimates from Streamflow Data of Annual and Seasonal Ground-Water-Recharge Rates for Drainage Basins in New Hampshire, U.S. Geological Survey Scientific Investigations Report 2004-5019, 67 p. (<http://pubs.usgs.gov/sir/2004/5019/http://pubs.usgs.gov/sir/2004/5019/>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.3.11