



February 13, 2025

Franklin Conservation Commission
355 E. Central Street
Franklin, MA 02038

Re: Peer Review Comment Response
444 East Central Street, Franklin, MA

Dear Franklin Conservation Commission,

Goddard Consulting, LLC, (Goddard) is pleased to submit this response letter on behalf of TAG Central LLC (the Applicant), to provide responses to the peer review comments issued by BETA Group, Inc. regarding the Abbreviated Notice of Resource Area Delineation (ANRAD) application filed for 444 East Central Street.

Two hard copies and a digital copy have been submitted for the Commission's review and approval. If you have any questions, please feel free to contact Chris Frattaroli at (617) 620-2740.

Sincerely,
Goddard Consulting, LLC

Chris Frattaroli
Lead Wetland Scientist

CC: A.J. Alevizos, TAG Central LLC, 275 Regatta Dr, Jupiter, FL 33477

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Attachment A: Peer Review Comments and Responses

Attachment B: *Response to MassDEP Comments, 444 East Central Street, Franklin MA (DEP File No. 159-1306)*, prepared by Goddard Consulting LLC, dated January 2, 2025.
(Reduced paper version of ARCH E1-sized IVW Exhibit plan sheet provided with this resubmittal)

Attachment C: *Bordering Land Subject to Flooding Analysis, 444 East Central Street, Franklin, MA (DEP File No. 159-1306)*, prepared by Goddard Consulting LLC, dated February 13, 2025.

Attachment D: *444 East Central Street Franklin, MA*, Allen & Major Associates, Inc., dated 11/26/24, revised 2/10/25.

1.0 PEER REVIEW COMMENTS AND RESPONSES

Goddard and the project’s engineer, Allen and Major Associates, Inc. (A&M), reviewed BETA’s comments and offer the following responses:

BETA Comment		Goddard Response
#1	BETA offers the following administrative/plan comments after conducting a review of the submitted application and plans based on generally accepted existing conditions plan standards and the applicable plan requirements per the Bylaw Regulations:	Acknowledged.
#1.A	<p>a) The filing has been assigned MassDEP File No. 159-1306 with the following technical comments from MassDEP: MassDEP recommends that the Commission field-verify the accuracy of wetland resource area boundaries delineated in the ANRAD filing, as well as degraded Riverfront Area boundaries depicted on site plans. Per 310 CMR 10.58(5), degraded Riverfront Area are those areas that are absent of topsoil, covered by existing impervious surfaces, junkyards, or abandoned dumping grounds. MassDEP also reminds the Commission of their ability to consider third party review per 310 CMR 10.05(4)(h). The Applicant should provide additional information in accordance with 310 CMR 10.57(2)(b)3. to verify whether the isolated vegetated wetlands meet parameters to be considered isolated land subject to flooding and jurisdictional under the WPA. Additionally, if the Applicant suspects that the isolated wetlands were once stormwater management features, additional information in accordance with 310 CMR 10.02(2)(c) should be provided to MassDEP and the Commission demonstrating when the asin was installed and that the stormwater basin has be maintained as such. The Commission may request that the Applicant submit maintenance logs. MassDEP recommends the Commission should verify that the GCC series does not connect to the wetland system. If a connection does exist, based on the information provided the GCC series may be considered jurisdictional even if it was a stormwater basin previously. Please provide additional information accordingly. Zone A 100-year floodplain exists on the lot and the Applicant indicates that the “Extent of BLSF to be determined with topographic survey data.” The boundary of BLSF should be determined using procedures outlined in 310 CMR 10.57(2)(a)3. Where NFIP Profile data is unavailable, such as in the case of Zone A 100-year floodplain, the BLSF boundary shall be the maximum lateral extent of flood water observed or recorded. In the event of a conflict of opinion, the Commission may require engineering calculations be provided following parameters listed in 310 CMR 10.57(2)(a)3.a.-c.</p>	<p>Responses to MassDEP’s technical comments have been previously provided to the Commission. Please see attached <i>Response to MassDEP Comments, 444 East Central Street Franklin MA (DEP File No. 159-1306)</i>, prepared by Goddard Consulting LLC, dated January 2, 2025.</p>

#1.B	b) The Applicant should provide a survey benchmark on the plans and include the referenced vertical datum.	The site plan has been revised to include the survey benchmark. The vertical datum was already identified in Note 3. Please see the revised site plan, <i>444 East Central Street Franklin, MA</i> , Allen & Major Associates, Inc., dated 11/26/24, revised 2/10/25.
#2	BETA concurs with the Applicant's onsite delineation of the GCB1 to GCB15 Series IVW based on the presence of hydrophytic vegetation, hydrology and hydric soils. See comment W9 regarding the isolated status of this wetland.	Acknowledged.
#3	BETA concurs with the Applicant's delineation of GCC1 to GCC22 Series IVW based on the presence of hydrophytic, hydrology, and hydric soils. This IVW is offsite, and flags should not be approved for this filing unless permission is granted from the property owner. See comment W9 regarding the isolated status of this wetland.	Acknowledged.
#4	BETA concurs with the Applicant's delineation of the GCD1 to GCD31 Series IVW based on the presence of hydrophytic vegetation, indicators of hydrology and hydric soils. Directly north of this Series a low-lying finger like extension vegetated by purple loosestrife (<i>Lythrum salicaria</i>) was observed; however, the area is predominantly vegetated by upland species. See comment W9 regarding the isolated status of this wetland.	Acknowledged.
#5	The Applicant should submit the required calculations to determine the presence of ILSF within the B-, C-, and D-Series IVWs if they seek confirmation of the absence/presence of ILSF. Should these calculations not be provided, the Commission should note in the ORAD that ILSF is not confirmed as part of this filing.	ILSF calculations were previously submitted to the Commission in a letter titled <i>Response to MassDEP Comments, 444 East Central Street Franklin MA (DEP File No. 159-1306)</i> , prepared by Goddard Consulting LLC, dated January 2, 2025. This letter is also included as an attachment herein. The Applicant does seek confirmation that no ILSF is present on the locus site as demonstrated in the calculations provided by A&M in that letter.
#6	BETA concurs with the Applicant's delineation of the GCA1 to GCA109 Series BVW, due to the presence of hydrophytic vegetation, and indicators of hydrology, soils were not able to be observed at the time of the review, although the wetland appears to generally follow the limit of phragmites (<i>Phragmites australis</i>). This BVW transitions from primarily being vegetated by phragmites to a red maple swamp.	Acknowledged.
#7	BETA concurs with the Applicant's delineation of the GCE1 to GCE9 Series BVW based on the presence of hydrophytic vegetation, indicators of hydrology and hydric soils.	Acknowledged.
#8	BETA concurs with the Applicant's onsite delineation of the perennial stream including, GCMAHW A1 to GCMAHW A30, GCMAHW B1 to GCMAHW B19, GCMAHW C1 to GCMAHW C107, and GCMAHW D1 to GCMAHW D4 due to an observable break in slope and bankful indicators. MAHW flags appear to correspond with the locations of undercut banks, limits of scour, and shifts to terrestrial vegetation.	Acknowledged.
#9	The Applicant has asserted that the GCB1 to GCB15, GCC1 to GCC22, and GCD1 to GCD31 Series wetlands are isolated due to a lack of surficial connection to another BVW or surface waterbody/waterway. BETA concurs that the B- and C-Series IVWs appear isolated; however, it is recommended that the Applicant conduct further due diligence with regard to the D-Series IVW.	It is believed that the compost pile in question was placed in its location in approximately 2005, and its placement did not result in wetland fill; however, it was not permitted under an Order of Conditions. It is the understanding of the Applicant and the opinion of Goddard that the D-series IVW has always been isolated and was not made isolated by the placement of fill/compost.

	The compost pile between the D Series IVW and A Series BVW appears to have been placed in this location in approximately 2005 ² . The Applicant should provide information regarding when this compost pile was created; whether it resulted in wetland fill; and whether it was permitted through a valid Order of Conditions. It is BETA's opinion that the presence of wetlands directly north and south of this compost pile warrants further investigation to determine if the D-Series IVW is isolated as a result of unpermitted fill.	
#10	The boundaries of degraded RA were not reviewed under this filing, as an ANRAD can only seek the confirmation of Resource Area boundaries. As noted in this letter, BETA concurs with the depiction of RA at the Site; however, a future Notice of Intent filing would be required to confirm extents of degraded RA.	Acknowledged.
#11	The extent of BLSF at the Site was not confirmed as a part of this peer review due to the Act/Bylaw stating that BLSF is based on the most up-to-date and credible engineering data. BLSF at the Site is presently a Zone A flood hazard (no base flood elevation) per FEMA; however, more detailed engineering information could be made available or submitted at the time of a future NOI filing.	Goddard has collaborated with A&M, the project engineer, to determine the extent of BLSF on the site more precisely than the available data from FEMA, which lacks a base flood elevation in this location. Additional analysis of BLSF on the site, and documentation of the methodology followed by A&M and Goddard is included as an attachment to this letter (<i>Bordering Land Subject to Flooding Analysis, 444 East Central Street, Franklin, Massachusetts (DEP File No. 159-1306)</i> , prepared by Goddard Consulting LLC, dated February 13, 2025). The Applicant does seek confirmation of BLSF as shown on attached site plans as part of this ANRAD filing.
#12	Luw exists at the Site between the MAHW/Bank boundaries of the perennial stream delineated as GCMAHW A1 to GCMAHW A30, GCMAHW B1 to GCMAHW B19, GCMAHW C1 to GCMAHW C107, and GCMAHW D1 to GCMAHW D4 Series. Should the Applicant seek confirmation of LUW, then they should provide the location of the mean low water line for review and approval.	The Applicant does not seek confirmation of LUW.
#13	BETA recommends that the Commission excludes the approval of flags located outside of the Site boundaries in the ANRAD. These flags include GCC1 to GCC122 and GCA1.	Acknowledged; however, the GCC-series wetland consists of flags GCC1 to GCC22, not GCC122 as indicated in the BETA letter.

January 2, 2025

Franklin Conservation Commission
355 East Central St
Franklin, MA 02038

Re: Response to MassDEP Comments
444 East Central Street, Franklin MA (DEP File #159-1306)

Dear Franklin Conservation Commission,

Goddard Consulting, LLC, (Goddard) is pleased to submit this response letter, along with site plan exhibit (IVW Exhibit, Allen & Major Associates, 1/2/2025) and HydroCAD Calculations, on behalf of TAG Central LLC (the Applicant), to provide responses to the initial project review comments issued by MassDEP in regard to the Abbreviated Notice of Resource Area Delineation (ANRAD) filed for 444 East Central Street, Franklin MA (DEP File #159-1306).

If you have any questions, please feel free to contact Chris Frattaroli at (617) 620-2740.

Sincerely,
Goddard Consulting, LLC



Chris Frattaroli
Wetland Scientist

CC: MassDEP Central Regional Office - Wetlands Division
TAG Central LLC

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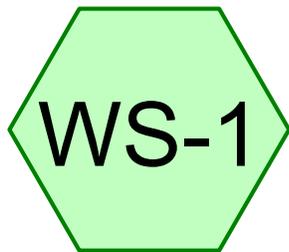
- Attachment A: **MassDEP Comments and Responses**
- Attachment B: **HydroCAD Calculations, Allen & Major Associates**
Signed and stamped by Carlton M. Quinn, PE, 1/2/2025
- Attachment C: **IVW Exhibit, Allen & Major Associates (one sheet)**
Signed and stamped by Carlton M. Quinn, PE, 1/2/2025

1.0 MASSDEP COMMENTS AND RESPONSES

Goddard and the project’s engineer, Allen and Major Associates (A&M), have reviewed MassDEP’s comments on behalf of the Applicant and offer the following responses:

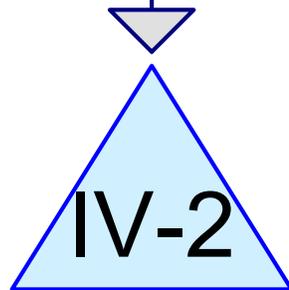
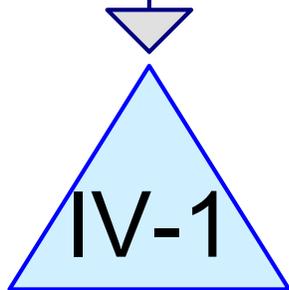
	MassDEP Comment	Goddard Response
#1	<p>MassDEP recommends that the Commission field-verify the accuracy of wetland resource area boundaries delineated in the ANRAD filing, as well as degraded Riverfront Area boundaries depicted on site plans. Per 310 CMR 10.58(5), degraded Riverfront Area are those areas that are absent of topsoil, covered by existing impervious surfaces, junkyards, or abandoned dumping grounds. MassDEP also reminds the Commission of their ability to consider third party review per 310 CMR 10.05(4)(h).</p>	<p>Goddard and the Applicant support the recommendation to field-verify the accuracy of delineated wetland resource areas and degraded Riverfront Area, and the use of a third-party peer reviewer.</p>
#2	<p>The Applicant should provide additional information in accordance with 310 CMR 10.57(2)(b)3. to verify whether the isolated vegetated wetlands meet parameters to be considered isolated land subject to flooding and jurisdictional under the WPA.</p> <p>Additionally, if the Applicant suspects that the isolated wetlands were once stormwater management features, additional information in accordance with 310 CMR 10.02(2)(c) should be provided to MassDEP and the Commission demonstrating when the basin was installed and that the stormwater basin has been maintained as such. The Commission may request that the Applicant submit maintenance logs. MassDEP recommends the Commission should verify that the GCC series does not connect to the wetland system. If a connection does exist, based on the information provided the GCC series may be considered jurisdictional even if it was a stormwater basin previously. Please provide additional information accordingly.</p>	<p>A&M has prepared engineering calculations to confirm that the isolated vegetated wetlands are not capable of containing ¼-acre foot of water and therefore cannot qualify as Isolated Land Subject to Flooding (see attached IVW Exhibit and HydroCAD calculations).</p> <p>It does not appear that either of the on-site IVWs (GCB- or GCD-series) were constructed as stormwater basins.</p> <p>Goddard and A&M do believe that the GCC-series wetland was constructed as a stormwater basin, but it does not appear to have been maintained due to the presence of large woody vegetation. As such, it has been identified as a vegetated wetland to accurately display the 100-foot buffer zone that casts onto the locus site. Goddard and the Applicant are investigating any potential connection and will provide revised plans to the Commission and MassDEP as appropriate.</p>
#3	<p>Zone A 100-year floodplain exists on the lot and the Applicant indicates that the “Extent of BLSF to be determined with topographic survey data.” The</p>	<p>NFIP Profile data is unavailable for this site. To evaluate the extent of the floodplain, A&M performed on-the-ground survey slightly offsite at</p>

<p>boundary of BLSF should be determined using procedures outlined in 310 CMR 10.57(2)(a)3. Where NFIP Profile data is unavailable, such as in the case of Zone A 100-year floodplain, the BLSF boundary shall be the maximum lateral extent of flood water observed or recorded. In the event of a conflict of opinion, the Commission may require engineering calculations be provided following parameters listed in 310 CMR 10.57(2)(a)3.a.-c.</p>	<p>Northern Spy Road. The location at which Uncas Brook flows under Northern Spy Road constitutes the highest elevation of impoundment possible for this broader wetland system. The road crest in this location was surveyed at elevation 271', and as such this elevation was used as the flood elevation.</p>
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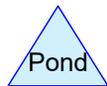
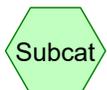
Subcat WS-1

Subcat WS-2



IV-1

IV-2



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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-year	Type III 24-hr		Default	24.00	1	2.75	2

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Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
29,865	39	>75% Grass cover, Good, HSG A (WS-1, WS-2)
20,348	61	>75% Grass cover, Good, HSG B (WS-1, WS-2)
1,300	80	>75% Grass cover, Good, HSG D (WS-2)
652	96	Gravel surface, HSG A (WS-2)
409	96	Gravel surface, HSG D (WS-2)
6,586	98	Paved parking, HSG A (WS-1, WS-2)
1,843	98	Paved parking, HSG B (WS-2)
4,482	98	Water Surface, HSG A (WS-1, WS-2)
2,602	98	Water Surface, HSG B (WS-1)
62	98	Water Surface, HSG D (WS-2)
104,584	30	Woods, Good, HSG A (WS-1, WS-2)
10,167	55	Woods, Good, HSG B (WS-1, WS-2)
3	77	Woods, Good, HSG D (WS-2)
182,903	43	TOTAL AREA

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Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
146,169	HSG A	WS-1, WS-2
34,960	HSG B	WS-1, WS-2
0	HSG C	
1,774	HSG D	WS-2
0	Other	
182,903		TOTAL AREA

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Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Sub Num
29,865	20,348	0	1,300	0	51,513	>75% Grass cover, Good	
652	0	0	409	0	1,061	Gravel surface	
6,586	1,843	0	0	0	8,429	Paved parking	
4,482	2,602	0	62	0	7,146	Water Surface	
104,584	10,167	0	3	0	114,754	Woods, Good	
146,169	34,960	0	1,774	0	182,903	TOTAL AREA	

3317-01 - IVW Calc HydroCAD

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Franklin
Type III 24-hr 1-year Rainfall=2.75"

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Time span=0.00-36.00 hrs, dt=0.05 hrs, 721 points
Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv.
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment WS-1: Subcat WS-1

Runoff Area=111,271 sf 5.60% Impervious Runoff Depth=0.14"
Flow Length=569' Tc=19.9 min CN=39/98 Runoff=0.26 cfs 1,308 cf

Subcatchment WS-2: Subcat WS-2

Runoff Area=71,632 sf 13.04% Impervious Runoff Depth=0.33"
Flow Length=352' Tc=8.1 min CN=36/98 Runoff=0.53 cfs 1,962 cf

Pond IV-1: IV-1

Peak Elev=271.57' Storage=1,308 cf Inflow=0.26 cfs 1,308 cf
Outflow=0.00 cfs 0 cf

Pond IV-2: IV-2

Peak Elev=271.75' Storage=1,962 cf Inflow=0.53 cfs 1,962 cf
Outflow=0.00 cfs 0 cf

Total Runoff Area = 182,903 sf Runoff Volume = 3,270 cf Average Runoff Depth = 0.21"
91.48% Pervious = 167,328 sf 8.52% Impervious = 15,575 sf

3317-01 - IVW Calc HydroCAD

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Franklin
Type III 24-hr 1-year Rainfall=2.75"

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Summary for Subcatchment WS-1: Subcat WS-1

Runoff = 0.26 cfs @ 12.26 hrs, Volume= 1,308 cf, Depth= 0.14"
Routed to Pond IV-1 : IV-1

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.75"

Area (sf)	CN	Description
19,331	39	>75% Grass cover, Good, HSG A
16,547	61	>75% Grass cover, Good, HSG B
3,414	98	Paved parking, HSG A
215	98	Water Surface, HSG A
2,602	98	Water Surface, HSG B
60,014	30	Woods, Good, HSG A
9,148	55	Woods, Good, HSG B
111,271	42	Weighted Average
105,040	39	94.40% Pervious Area
6,231	98	5.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	38	0.0200	1.15		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.28"
1.1	12	0.0600	0.17		Sheet Flow, B-C Grass: Short n= 0.150 P2= 3.28"
18.2	519	0.0090	0.47		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
19.9	569	Total			

3317-01 - IVW Calc HydroCAD

Prepared by Allen & Major Associates, Inc

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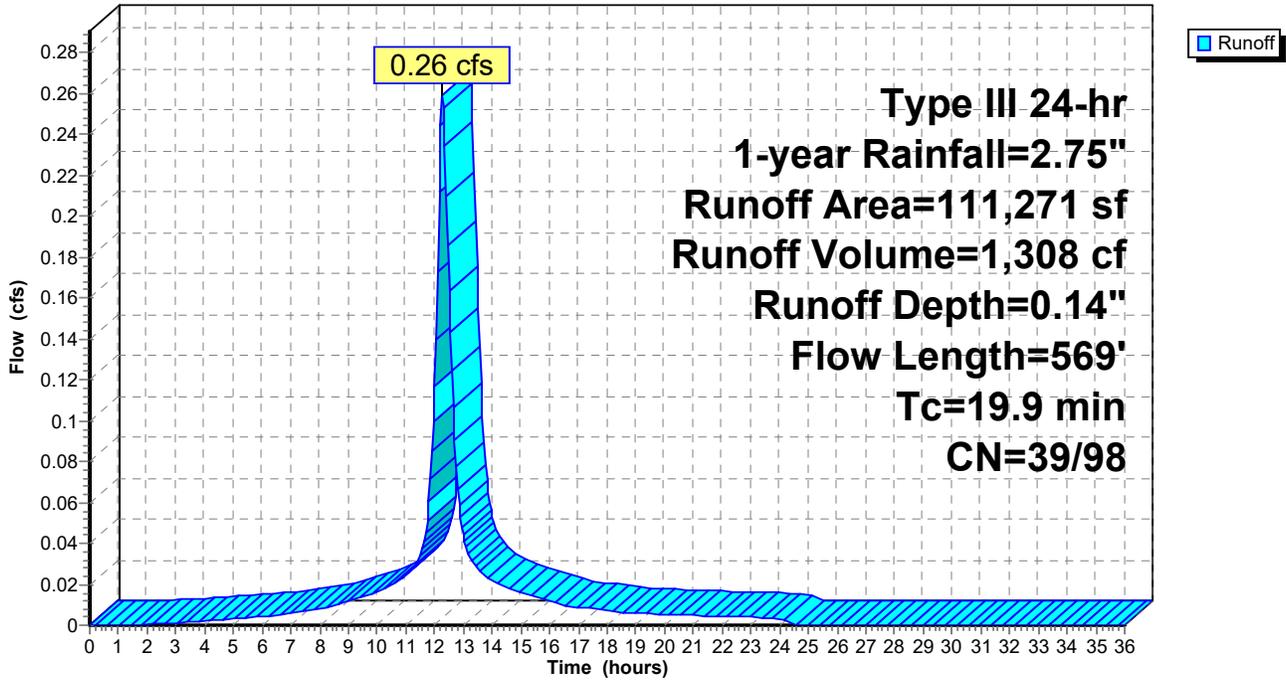
Franklin
Type III 24-hr 1-year Rainfall=2.75"

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Subcatchment WS-1: Subcat WS-1

Hydrograph



3317-01 - IVW Calc HydroCAD

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Franklin
Type III 24-hr 1-year Rainfall=2.75"

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Summary for Subcatchment WS-2: Subcat WS-2

Runoff = 0.53 cfs @ 12.11 hrs, Volume= 1,962 cf, Depth= 0.33"
Routed to Pond IV-2 : IV-2

Runoff by SCS TR-20 method, UH=SCS, Split Pervious/Imperv., Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 1-year Rainfall=2.75"

Area (sf)	CN	Description
10,534	39	>75% Grass cover, Good, HSG A
3,801	61	>75% Grass cover, Good, HSG B
1,300	80	>75% Grass cover, Good, HSG D
652	96	Gravel surface, HSG A
409	96	Gravel surface, HSG D
3,172	98	Paved parking, HSG A
1,843	98	Paved parking, HSG B
4,267	98	Water Surface, HSG A
62	98	Water Surface, HSG D
44,570	30	Woods, Good, HSG A
1,019	55	Woods, Good, HSG B
3	77	Woods, Good, HSG D
71,632	44	Weighted Average
62,288	36	86.96% Pervious Area
9,344	98	13.04% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	50	0.0300	0.18		Sheet Flow, A-B Grass: Short n= 0.150 P2= 3.28"
0.2	16	0.0300	1.21		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
3.2	286	0.0900	1.50		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
8.1	352	Total			

3317-01 - IVW Calc HydroCAD

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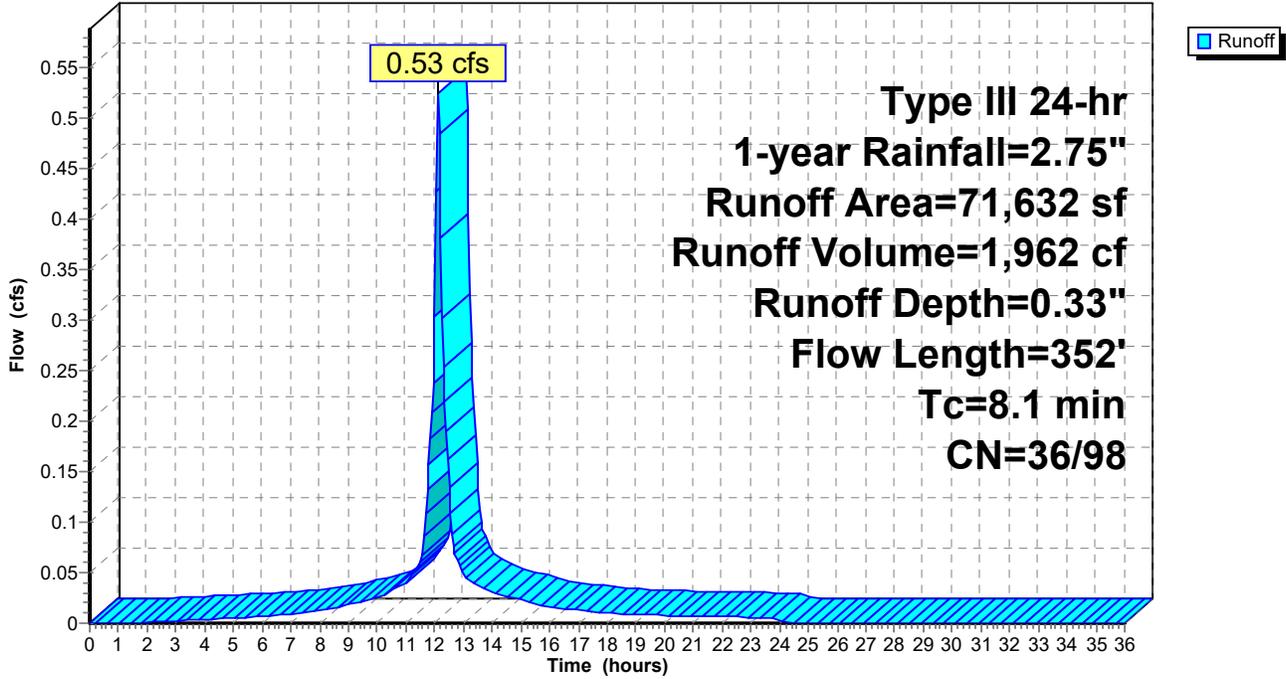
Franklin
Type III 24-hr 1-year Rainfall=2.75"

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Subcatchment WS-2: Subcat WS-2

Hydrograph



3317-01 - IVW Calc HydroCAD

Prepared by Allen & Major Associates, Inc

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Franklin
Type III 24-hr 1-year Rainfall=2.75"

Printed 1/2/2025

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Summary for Pond IV-1: IV-1

Inflow Area = 111,271 sf, 5.60% Impervious, Inflow Depth = 0.14" for 1-year event
 Inflow = 0.26 cfs @ 12.26 hrs, Volume= 1,308 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min

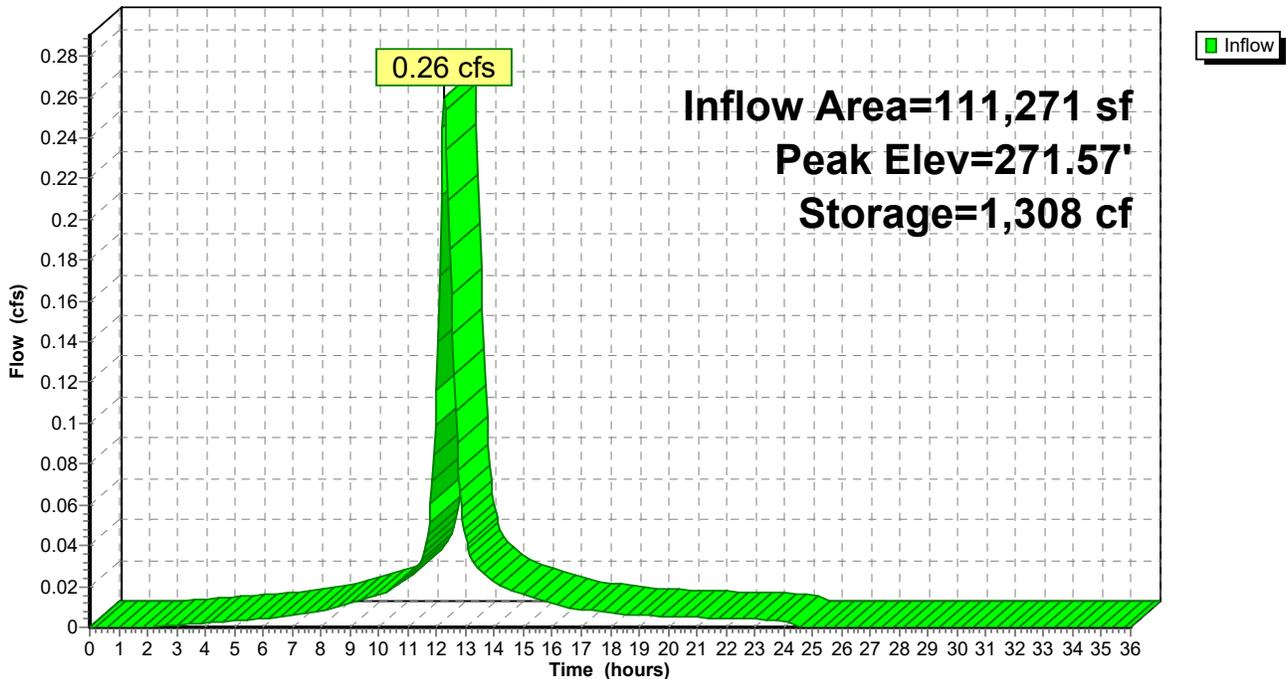
Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 271.57' @ 25.15 hrs Surf.Area= 2,499 sf Storage= 1,308 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description		
#1	271.00'	2,455 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
271.00	2,110	187.0	0	0	2,110
272.00	2,817	245.0	2,455	2,455	4,116

Pond IV-1: IV-1

Hydrograph



3317-01 - IVW Calc HydroCAD

Prepared by Allen & Major Associates, Inc

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Franklin
Type III 24-hr 1-year Rainfall=2.75"

Printed 1/2/2025

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Summary for Pond IV-2: IV-2

Inflow Area = 71,632 sf, 13.04% Impervious, Inflow Depth = 0.33" for 1-year event
 Inflow = 0.53 cfs @ 12.11 hrs, Volume= 1,962 cf
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min

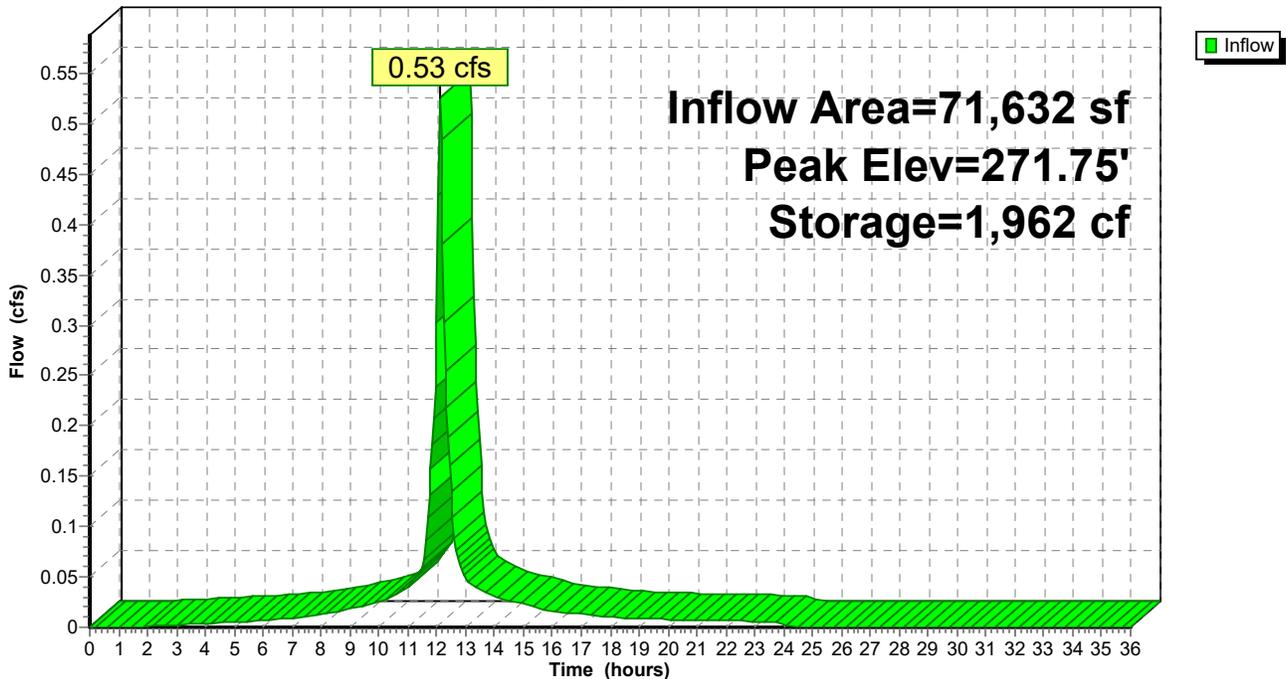
Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.05 hrs
 Peak Elev= 271.75' @ 24.50 hrs Surf.Area= 3,579 sf Storage= 1,962 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

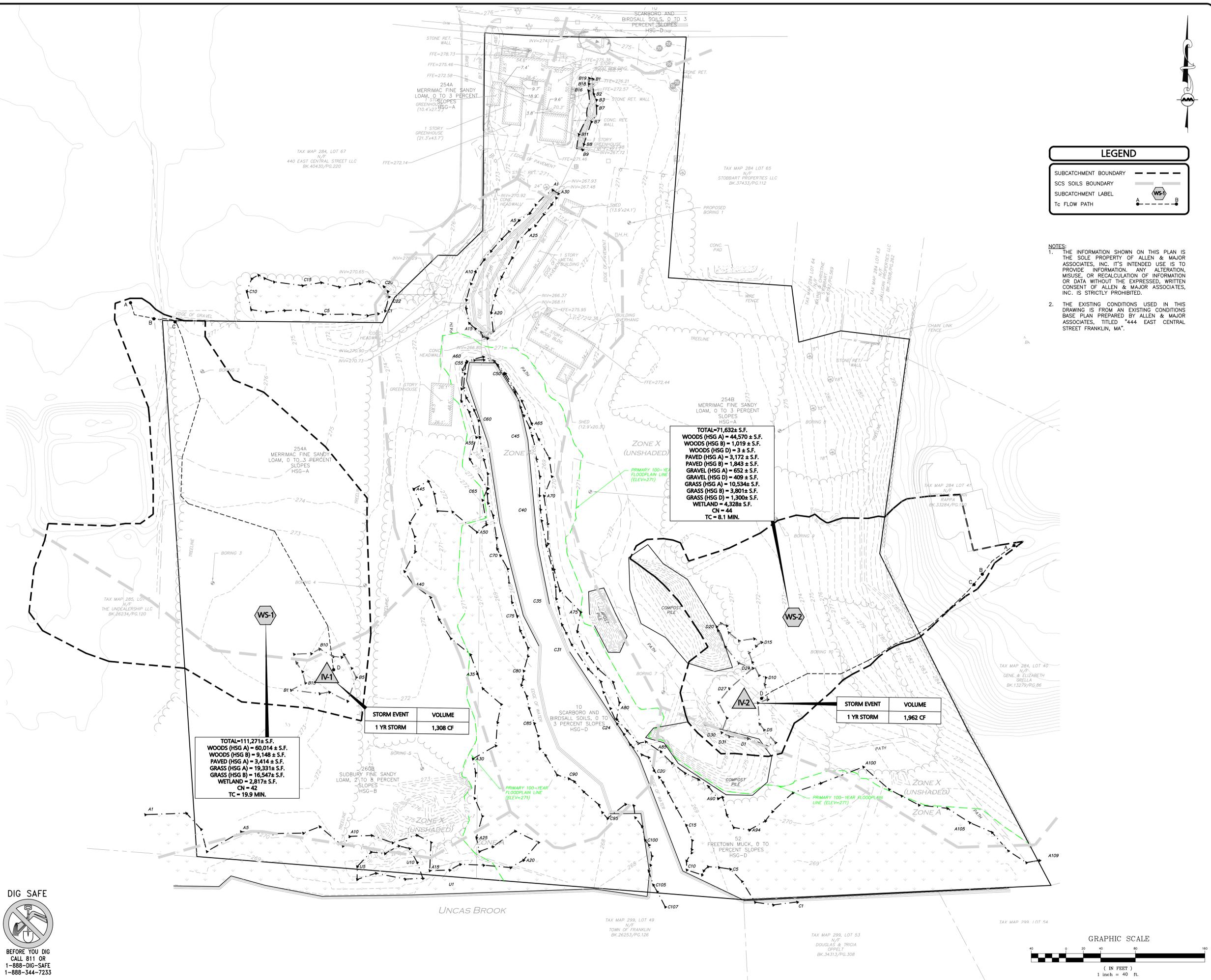
Volume	Invert	Avail.Storage	Storage Description		
#1	271.00'	2,950 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
271.00	1,761	271.0	0	0	1,761
272.00	4,328	439.0	2,950	2,950	11,260

Pond IV-2: IV-2

Hydrograph



N:\PROJECTS\3317-01\CIVIL DRAWINGS\CURRENT\C-3317-01_ILSF_CALC.DWG



LEGEND

SUBCATCHMENT BOUNDARY

SCS SOILS BOUNDARY

SUBCATCHMENT LABEL

Tc FLOW PATH

NOTES:

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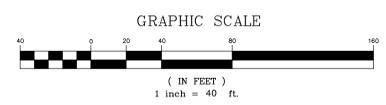
2. THE EXISTING CONDITIONS USED IN THIS DRAWING IS FROM AN EXISTING CONDITIONS BASE PLAN PREPARED BY ALLEN & MAJOR ASSOCIATES, INC. TITLED "444 EAST CENTRAL STREET FRANKLIN, MA".

TOTAL=71,632± S.F.
WOODS (HSG A) = 44,570 ± S.F.
WOODS (HSG B) = 1,019 ± S.F.
WOODS (HSG D) = 3 ± S.F.
PAVED (HSG A) = 3,172 ± S.F.
PAVED (HSG B) = 1,843 ± S.F.
GRAVEL (HSG A) = 652 ± S.F.
GRAVEL (HSG D) = 409 ± S.F.
GRASS (HSG A) = 10,534± S.F.
GRASS (HSG B) = 3,801± S.F.
GRASS (HSG D) = 1,300± S.F.
WETLAND = 4,328± S.F.
CN = 44
TC = 8.1 MIN.

TOTAL=111,271± S.F.
WOODS (HSG A) = 60,014 ± S.F.
WOODS (HSG B) = 9,148 ± S.F.
PAVED (HSG A) = 3,414 ± S.F.
PAVED (HSG B) = 19,331± S.F.
GRASS (HSG A) = 16,547± S.F.
GRASS (HSG B) = 2,817± S.F.
CN = 42
TC = 19.9 MIN.

STORM EVENT	VOLUME
1 YR STORM	1,308 CF

STORM EVENT	VOLUME
1 YR STORM	1,962 CF



Carlton M. Quinn
 PROFESSIONAL ENGINEER FOR
 ALLEN & MAJOR ASSOCIATES, INC.

APPLICANT/OWNER:
TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:
LIP APPLICATION PLANS
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO. 3317-01 DATE: 2025-1-2
 SCALE: 1" = 40' DWG. NAME: C-3317-01
 DESIGNED BY: MTB CHECKED BY: CMQ

ALLEN & MAJOR ASSOCIATES, INC.
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 environmental consulting • landscape architecture
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 TEL: (781) 935-6889
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WOBURN, MA • LAKESVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: **IWW EXHIBIT** SHEET No. **EX-1**

DIG SAFE

BEFORE YOU DIG
 CALL 811 OR
 1-888-DIG-SAFE
 1-888-344-7233



February 13, 2025

Franklin Conservation Commission
355 E. Central Street
Franklin, MA 02038

Re: Bordering Land Subject to Flooding Analysis
 444 East Central Street, Franklin, Massachusetts (DEP File No. 159-1306)

Dear Franklin Conservation Commission,

Goddard Consulting, LLC, (Goddard) is pleased to submit this memorandum on behalf of, TAG Central LLC (the Applicant) to document the extent of Bordering Land Subject to Flooding (BLSF) on the locus site as depicted on site plans submitted under the Abbreviated Notice of Resource Area Delineation (ANRAD) application filed for 444 East Central Street in Franklin, MA (DEP File No. 159-1306).

Two hard copies and a digital copy have been submitted for the Commission's review and approval. If you have any questions, please feel free to contact Chris Frattaroli at (617) 620-2740.

Sincerely,
Goddard Consulting, LLC

Chris Frattaroli
Lead Wetland Scientist

1.0 EXISTING CONDITIONS

The locus site, 444 East Central Street in Franklin, MA, has been in use as a nursery for many decades until the present. The site is bisected by a perennial stream. Other resource areas onsite include Riverfront Area (RFA), Bordering Vegetated Wetlands (BVW), Isolated Vegetated Wetlands (IVW) and Bordering Land Subject to Flooding (BLSF).

The wetland system on the locus site is contiguous with an expansive wetland system downgradient to the south. Surface water that flows through the perennial stream onsite merges with Uncas Brook, another perennial stream, just to the south of the site, and flows in an easterly direction. Uncas Brook, and its associated wetland system, channelize and flow under Northern Spy Road via a culvert.

A FEMA Flood Zone A (1% annual chance of flooding) is mapped on the locus site and extends to the east along Uncas Brook. This area of the FEMA Flood Zone does not have a provided Base Flood Elevation (BFE), which would typically be matched to a contour line to depict the extent of the Flood Zone A, and corresponding BLSF, on site plans.

2.0 PROPOSED BLSF

Because the FEMA Flood Zone polygon does not provide a BFE, overlaying this polygon on the site plans would result in an arbitrary BLSF boundary that does not follow any contour line and therefore would misrepresent the probable extent of floodwater during the 100-year storm. As such, Goddard and the project's engineer, Allen and Major Associates, Inc. (A&M) propose assigning a BFE to this Flood Zone for the purposes of this ANRAD.

Goddard and A&M have identified the location where Uncas Brook flows under Northern Spy Road as the highest elevation of impoundment for the broader wetland system in question. A&M has taken field survey measurements of the road crest at this location. The road crest here is situated at elevation 270.93'. This is corroborated by publicly available LIDAR contour data, which displays this elevation as 271'. Please reference attached graphic *BLSF Analysis*, prepared by Goddard Consulting LLC, dated 2/12/2025.

During a major flood event, such as the 100-year storm as depicted by FEMA Flood Zone A and regulated as BLSF, the highest elevation to which this wetland system can possibly flood is elevation 270.93', at the road crest of Northern Spy Road. Any floodwater that would otherwise exceed this elevation would simply flow over the road crest at this location, rendering it impossible for this wetland system, and consequently the wetland system on the locus site, to flood to any elevation greater than 270.93'.

Therefore, it is Goddard and A&M's professional opinion that establishing the 271' contour as a BFE for the FEMA Flood Zone on the site is appropriate and reflects on-the-ground conditions more accurately than the FEMA Flood Zone polygon. As such, the extent of BLSF as shown on the site plans is shown as extending up to contour 271'.

Legend

 Locus Site Property Boundary

 Survey Site

 271' Contour from LIDAR

 Direction of Flow

FEMA Flood Zones

 0.2% Annual Chance Flood Hazard

 1% Annual Chance Flood Hazard

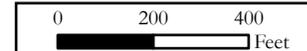


Location at which Uncas Brook flows under Northern Spy Road. Highest elevation of impoundment for wetland system. Road crest elevation surveyed at 270.93'

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BLSF Analysis



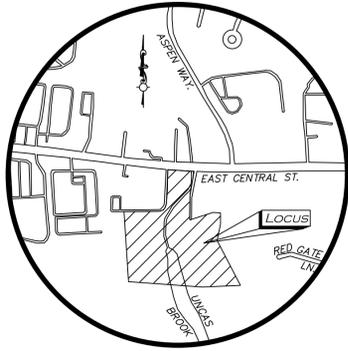
1" = 400'

Date: 02/12/2025

444 E. Central Street
Franklin, MA

71.3768718°W, 42.0779665°N

Parcel ID: 284-66



LOCUS MAP
(NOT TO SCALE)

TAX MAP 284, LOT 67
N/F
440 EAST CENTRAL STREET LLC
BK.40430/PG.220



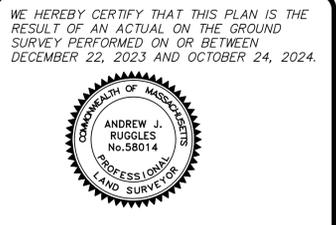
EAST CENTRAL STREET
(1927 SHLO #2436 - 60' WIDE - ROUTE 140)

BENCHMARK SUMMARY

TBM #	DESCRIPTION	ELEV.
1	SPIKE SET IN PAVEMENT	276.77
2	MAG NAIL SET IN PAVEMENT	275.92

LEGEND

DRILL HOLE (DH)	⊙
DRAIN MANHOLE (DMH)	⊕
SEWER MANHOLE (SMH)	⊗
CATCH BASIN (CB)	⊠
ROUND CATCH BASIN (RCB)	⊡
UTILITY POLE	⊕
UTILITY POLE W/LIGHT	⊕
GUY WIRE	—
WATER GATE	⊕
INVERT (INV)	—
LIGHT	⊕
FLOODLIGHT	⊕
TREE	⊕
BUSH / SHRUB	⊕
SIGN	⊕
MAILBOX	⊕
HAND HOLE	⊕
ELECTRIC BOX	⊕
FLAG POLE	⊕
ELECTRIC METER	⊕
CONCRETE	—
LANDSCAPED AREA (LSA)	—
FLAGSTONE	—
WETLAND AREA	—
BRICK	—
BUILDING	—
BUILDING OVERHANG	—
1' CONTOUR	—
5' CONTOUR	—
PROPERTY LINE	—
ABUTTERS LINE	—
STONE WALL	—
CONCRETE RETAINING WALL	—
STONE RETAINING WALL	—
TREE LINE	—
EDGE OF PAVEMENT	—
EDGE OF BRICK	—
EDGE OF WATER	—
CURB	—
CHAIN LINK FENCE	—
WIRE FENCE	—
GUARDRAIL	—
DRAIN LINE	—
OVERHEAD WIRES	—
FINISHED FLOOR ELEVATION	FFE
BUILDING HEIGHT	BH
BITUMINOUS	BIT.
CONCRETE	CONC.
GRANITE	GRAN.
REINFORCED CONCRETE PIPE	RCP
CORRUGATED METAL PIPE	CMP
CAST IRON PIPE	CI
DUCTILE IRON PIPE	DI
HIGH DENSITY POLYETHYLENE PIPE	HDPE
FOUND	FND
NOW OR FORMERLY	N/F
BOOK	BK.
PAGE	PG.



PROFESSIONAL LAND SURVEYOR FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION
1	2/10/25	ADD BENCHMARKS

APPLICANT/OWNER:
TAG CENTRAL LLC
275 REGATTA DRIVE
JUPITER, FL 33477

PROJECT:
444 EAST CENTRAL STREET
FRANKLIN, MA

PROJECT NO. 3317-01 DATE: 11/26/24

SCALE: 1" = 60' DWG. NAME: B317-01-EC

DRAFTED BY: JBT CHECKED BY: CMQ



ALLEN & MAJOR ASSOCIATES, INC.
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environmental consulting • landscape architecture
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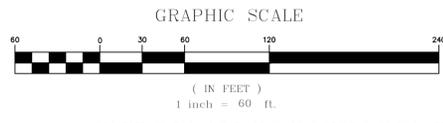
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DRAWING TITLE: **ANRAD PLAN** SHEET NO. **V-102**

LOCUS REFERENCES
-TOWN OF FRANKLIN ASSESSORS' PARCEL 284-66
-DEED BOOK 37502, PAGE 50
-RECORD OWNER: STOBART PROPERTIES LLC

PLAN REFERENCES
-PLAN 243 OF 1998
-PLAN 687 OF 1995
-PLAN 969 OF 1961
-PLAN 1091 OF 1988
-PLAN 971 OF 1985
-PLAN 148 OF 2002
-STATE HIGHWAY LAYOUT 1384
-STATE HIGHWAY LAYOUT 2436

NOTES
1. NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM NORFOLK REGISTRY OF DEEDS IN DEDHAM, MA.
3. VERTICAL DATUM IS NAVD 88, ESTABLISHED USING RTK GPS OBSERVATION.
4. CONTOUR INTERVAL IS ONE FOOT (1').



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