TOWN OF FRANKLIN INSPECTION DEPARTMENT

Building Inspection - Division of Wires - Division of Gas Division of Plumbing

MUNICIPAL BUILDING – 355 East Central Street Franklin, Massachusetts 02038

Lloyd (Gus) Brown **Building Commissioner** Telephone: 508-520-4926 FAX: 508-520-4906

ZONING REVIEW

APPLICANT:

Hallie Wetzell and Nicholas Paone

LOCATION:

394 Washington Street

ZONING DISTRICT: Single Family 111

TYPE OF PROJECT: Construct a Detached 24' X 36' Garage with an Accessory

Dwelling

DATE: 09/07/2023

DENY

SPECIAL PERMIT and VARIANCE

ZONING BY LAW SECTIONS: 185 Attachment 8 Part VII, 185 Section 14, 185

Section 19 (B)(1), and 185 Section 40 (D)(1)(L)(i)

REASON FOR DENIAL: Applicant is seeking to construct a detached 24' x 36' garage with an Accessory Dwelling Unit that is 25.3' from the frontage and to render impervious coverage 21.0% where 15.0% is allowed. The building permit is denied without a Special Permit and a Variance from the ZBA.

APPEAL OF DENIAL OPTIONS:

ZONING	BOARD	OF A	PPE	ALS
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APPLICANT SIGNATURE

ZONING OFFICIAL SIGNATURE LAB 09/07/2023 DATE

TOWN OF FRANKLIN ZONING BOARD OF APPEALS

TOWN OF FRANKLIN TOWN CLERK 2023 SEP 13 A 9:31

RECEIVED

Municipal Building 355 East Central Street Franklin, MA 02038 508-520-4926

RECEIVED TOWN OF FRANKLIN

SEP 13 2023

ZONING BOARD OF APPEALS

ZBA APPLICATION FORM

GENERAL INFORMATION

The undersigned hereby petitions the Zoning Board of Appeals for the following:
Special Permit: X Variance: X Appeal:
PETITIONER: Hallie Wetzell & Nicholas Paone
PETITIONER'S ADDRESS: 394 Washington Street PHONE: 617-905-3682
IOCATION OF PROPERTY: 394 Washington Street
TYPE OF OCCUPANCY: Residential ZONING DISTRICT: Single Family III
ASSESSORS MAP & PARCEL: AM 312 Parcel 6
REASON FOR PETITION:
Additions X New Structure
Change in Use/Occupancy Parking
Conversion to Addi'l Dwelling Unit's Sign
Dormer
X Other: Accessory Dwelling Unit
to be utilized as an in-law apartment for their mother-in-law The allowed impervious coverage in the water resource district is 15%. The existing impervious coverage is 19.2%. The construction of the ADU will increase impervious coverage to 21.0% SECTIONS OF ZONING ORDINANCE CITED:
Article Section See attached
Article Section
Article Section
Applicants for a Variance must complete Pages 1-5 Applicants for a Special Permit must complete Pages 1-4 and 6 Applicants for an Appeal to the ZBA pursuant to Zoning Bylaw section 185-45 (D) must attach a statement concerning the reasons for the appeal Original Signature(s): Hallie Wetzell/Nicholas Paone
Address: (Print Name) 394 Washington Street Franklin, MA 02038
Tel. No.: 617-905-3682
E-Mail Address: hwetzell@aol.com
Date:

TOWN OF FRANKLIN ZONING BOARD OF APPEALS

Municipal Building 355 East Central Street Franklin, MA 02038 508-520-4926

ZBA APPLICATION FORM - OWNERSHIP INFORMATION

To be completed by OWNER, signed and returned to the Secretary of the Zoning Board of Appeals.

I/We Hallie Wetzell & Nicholas Paone (OWNER)					
Address: 394 Washington Street					
State that I/We own the property located at 394 Washington Street ,					
which is the subject of this zoning application.					
The record title of this property is in the name of					
Hallie Wetzell & Nicholas Paone					
*Pursuant to a deed of duly recorded in the date $8-8-2013$, Norfolk					
County Registry of Deeds at Book 31636 , Page 270 ; or					
Dedham Registry District of Land Court, Certificate No					
BookPage					

SIGNATURE BY/LAND OWNER OR AUTHORIZED TRUSTEE, OFFICER OR AGENT*

TOWN OF FRANKLIN ZONING BOARD OF APPEALS

Municipal Building 355 East Central Street Franklin, MA 02038 508-520-4926

ZBA APPLICATION FORM

DIMENSIONAL INFORMATION

LOCATION: 394 Wash			ZONE: SFR II	
PHONE: 617-905-36	82	REQUESTED USE/OC		ry Structure/In Law Apt
		EXISTING CONDITIONS	REQUESTED CONDITIONS	ORDINANCE REQUIREMENTS ¹
Lot Area:		<u>54,521+/- s</u> f	54,521+/- sf	20,000+/sf(min.)
Continuous Frontage	<u>):</u>	578.14 lf	NC	125 lf (min.)
Size of Lot:	Width	·	NC	112.5 lf_ (min.)
	Depth	136 lf	NC	160 lf (min)
Setbacks in	Front 31.	.4 ft (NC House)	25.3 ft (ADU)	40 ft (min.)
<u>Feet</u> :	Rear 25	ft (NC House)	11.5 ft (ADU)	30 ft (min.)
	Left Side	305 ft	NC	25 lf (min.)
	Right Side	N/A	NA NC House	25 lf (min.)
Building Height:	Stories	2	ADU 1 Story	3 lf (max.)
	Feet	NC		35 lf (max.)
NO. of Dwelling Units:		3	4	(max.)
NO. of Parking Spaces:		2		(min./max)
Describe where ann		occupancies on sa	ume lot, the size o	of adjacent buildings me, concrete, brick,
	family 3-hed	room wood framed	l house on a pre- own water and sev	-existing

Sections of Zoning Ordinance Cited For 394 Washington Street, Franklin, Massachusetts Revised: September 6, 2023

Special Permits:

Article 185 Section Attachment 8 Use Regulation Schedule Part VII to allow an ADU in SFR III

Article 185 Section 14: To allow more than one building on a lot

Article 185 Section 19 (B)(1) To allow an accessory structure within the required front yard setback

Article 185 Section 40 (D)(1)(L)(i): To render impervious coverage more than 15% of the upland area

Variance Requests:

Article 185 Section 19 (B)(1) To allow an accessory structure within the required front yard setback:

• The Applicant requests relief of 14.7' from the 40-foot setback requirement to 25.3'

TOWN OF FRANKLIN ZONING BOARD OF APPEALS

Municipal Building 355 East Central Street Franklin, MA 02038 508-520-4926

ZBA APPLICATION FORM

SUPPORTING STATEMENT FOR A VARIANCE

EACH OF THE FOLLOWING REQUIREMENTS FOR A VARIANCE MUST BE ESTABLISHED AND SET FORTH IN COMPLETE DETAIL BY THE APPLICANT IN ACCORDANCE WITH ZONING BYLAW SECTION 185-45 (D) (2) (6) AND MGL 40A, SECTION 10:

A) A Literal enforcement of the provisions of this Zoning bylaw would involve a substantial hardship, financial or otherwise, to the petitioner or appellant for the following reasons:

The Applicant currently resides in Franklin and a literal enforcement of the provisions of this bylaw would prohibit the construction of an ADU and further restrict financially feasible options to have their mother be closer to family for assistance as she continues to age.

B) The hardship is owing to the following circumstances relating to the soil conditions, shape or topography of such land or structures and especially affecting such land or structures but not affecting generally the zoning district in which it is located for the following reasons:

The property boundary is irregular in shape and has a significant amount of wetlands on the northern side of the property. Therefore, the most irregular shaped portion of the property is the only possible location to construct an accessory dwelling unit (ADU) and minimize impacts to the abutting resource areas.

- C) Desirable relief may be granted without either:
 - 1) Substantial detriment to the public good for the following reasons:
- The ADU is proposed for the Owner's aging mother to live in close proximity to her son, while still maintaining her independence.
- The ADU is strictly for a family member
- 2) Nullifying or substantially derogating from the intent or purpose of
 this Zoning Bylaw for the following reasons:
 - Based on recent Town Council meetings, proposed amendments to the Zoning Bylaws to
 allow ADUs by special permit are currently under review.
- The proposed ADU has been positioned on the property in accordance with the proposed amendments and would not substantially derogate or nullify the intent or purpose of this bylaw.

purpose of this bylaw. purpose of this bylaw. questions as to whether you can establish all of the applicable legal requirements, you should consult with your own attorney.



ZEA APPLICATION FORM SUPPORTING STATEMENT FOR A SPECIAL PERMIT

Please describe in complete detail how you meet each of the following criteria in accordance with Zoning Bylaw Section 185-45(D)(2)(a) referring to the property and proposed changes or uses which are requested in your application. Attach sheets with additional information for special permits for which additional criteria must be met under the Zoning Bylaw.

185-45(D)(2)(A) BOARD OF APPEALS: TO HEAR AND DECIDE APPLICATIONS FOR SPECIAL PERMITS UPON WHICH THE BOARD IS EMPOWERED TO ACT UNDER THIS CHAPTER. SPECIAL PERMITS SHALL BE GRANTED BY THE BOARD OF APPEALS ONLY UPON ITS WRITTEN DETERMINATION THAT THE PROPOSED USE WILL NOT HAVE ADVERSE EFFECTS WHICH OVERBALANCE ITS BENEFICIAL EFFECTS ON EITHER THE NEIGHBORHOOD OR THE TOWN, IN VIEW OF THE PARTICULAR CHARACTERISTICS OF THE SITE AND OF THE PROPOSAL IN RELATION TO THAT SITE. THIS DETERMINATION SHALL BE IN ADDITION TO THE FOLLOWING SPECIFIC FINDINGS:

(1) Proposed project addresses or is consistent with neighborhood or Town need.

The proposed ADU would fit into the existing neighborhood and will be the same style as the existing home.

(2) Vehicular traffic flow, access and parking and pedestrian safety are properly addressed.

The ADU will not effect the existing traffic flow or pedestrian safety.

(3) Public roadways, drainage, utilities and other infrastructure are adequate or will be upgraded to accommodate development.

The proposed ADU would have separate utility connections in accordance with the Town requirements

- (4) Neighborhood character and social structure will not be negatively impacted.
- The ADU will be of the same character as the existing structure and will not negatively impact the neighborhood.
 - (5) Project will not destroy or cause substantial damage to any environmentally significant natural resource, habitat, or feature or, if it will, proposed mitigation, remediation, replication, or compensatory measures are adequate.

The ADU has been proposed in an area pre-disturbed and outside of the resource areas

(6) Number, height, bulk, location and siting of building(s) and structure(s) will not result in abutting properties being deprived of light or fresh air circulation or being exposed to flooding or subjected to excessive noise, odor, light, vibrations, or airborne particulates. The ADU will be in the same character of the existing structure and will not result in any

deprivation to the neighborhood.

(7) Water consumption and sewer use, taking into consideration current and projected future local water supply and demand and wastewater

treatment capacity, will not be excessive.

Water consumption and sewer use will be minimal based on the proposed use.

NOT AN

N O T A N OFFICIAL

COPY

OFFICIAL Property Address: 394 Washington Street, Frankling P Y

Massachusetts 02038

Quitclaim Deed

I, Frederick Alfred Wetzell, III, Trustee of Frederick A Wetzell III 2003 Revocable Trust under trust dated 06/24/2003, of 394 Washington Street, Franklin, Massachusetts 02038 in consideration of Three Hundred Fifty Thousand and 00/100 Dollars (\$350,000.00) grant to Hallie Wetzell and Nicholas Paone, tenants in common of 394 Washington Street, Franklin, Massachusetts 02038

with QUITCLAIM COVENANTS

The land on the easterly side of Washington Street in Franklin, Norfolk County, Massachusetts, bounded and described as follows:

Beginning at the southwesterly comer of land now or formerly of the heirs of the late George W. Nason, by said street; thence

in a Southwesterly direction on the easterly side of said Washington Street on the line of the Rhode Island and Massachusetts Railroad; thence

Northeasterly on the line of said Railroad to land now or formerly owned by said Nason heirs, at or near an old cartroad; thence in a

Northwesterly direction on said Nason's land to said Washington Street at the place of beginning.

For Grantors title see Deed from Barbara W Pizzelli, Trustee, Dated August 23, 2006 and Recorded with the Norfolk Registry of Deeds on August 23, 2006 at 02:07 PM at Book 24004 Page 502,

MASSACHUSETTS STATE EXCISE TAX Norfolk Registry of Deeds

Date: 08-08-2013 @ 10:32am Ct1#: 391

Doc#: 95962

WILLIAM P. O'DONNEIL, REGISTER NORFOLK COUNTY REGISTRY OF DEEDS RECEIVED & RECORDED ELECTRONICALLY

0	FFICIAL	OFFICIAL COPY	
Executed as a sealed instru Friderick Alfred Wetzell, Frederick A Wetzell III 20	M Instee	HZDB Trusta	
		of Massachusetts	, 851
On this Frederick Alfred Wetze	II. III. Trustee of Frederick A	e, the undersigned notary public, personally Wetzell III 2003 Revocable Trust under to officentification, which were D Driver's Lice	rust gateg

, Notary Public

06/24/2003, proved to me through satisfactory evidence of identification, which were \Box Driver's License; \Box State ID; I Passport; I Other Government Issued ID; I Other, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he/she/they signed it voluntarily for its stated

N O T

A N

N O T

AN

purpose.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

NOT	N O T
STATE OF CALIFORNIA	A N
COUNTY OF 100 MINUS	- OF TOTAL
on august by 2018 o before me	NUM Tracaco
Notary Public personally appeared	Wetzell, TIT
TOET OF	who proved to me on the basis of satisfactory
evidence to be the person(s) whose name(s) (slare sub-	scribed to the within instrument and acknowledged to
me that 60/she/they executed the same in his/her/their	authorized capacity(ies), and that by his/hei/their
me that hat have executed the same in his harman signature(s) on the instrument the person(s), or the enti-	ty upon behalf of which the personis) acteu, executed
the instrument.	~
	the out of California that the foregoing paragraph
I certify under PENALTY OF PERJURY under the laws	of the State of California that the foregoing party of
is true and correct.	4
	SHAWN ARAGON
WITNESS my hand and official seal.	Cammission # 1959024
	Notary Public - California
	Las Angeles County
	My Comm. Expires Nov 29, 2015
	Activities and Most
	Affix Notary Seal Here

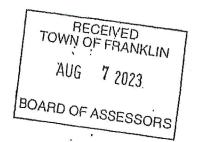
Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

DESCRIPTION OF ATTACHED DOCUMENT
Title or type of document
Number of Pages
Date of Document
Signer(s) other then named above

acavaliere @ gandthengineering.ca

Town of Franklin – Board of Assessors

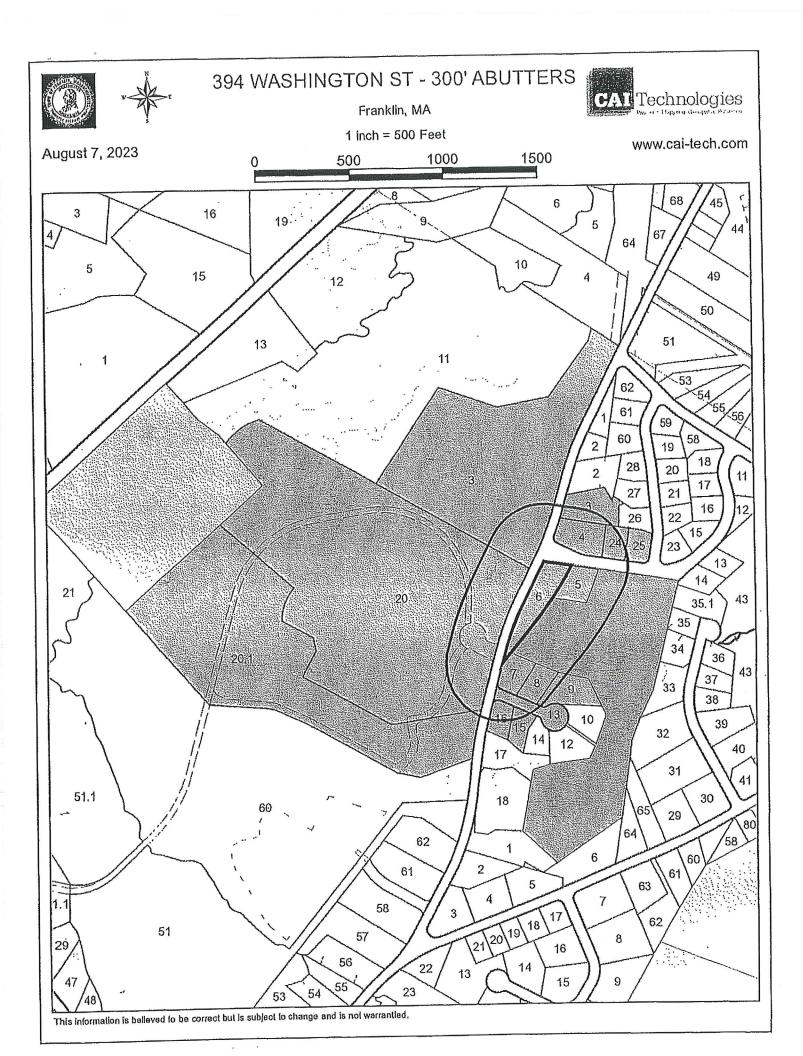
355 East Central Street Franklin, MA 02038 Tel # 508-520-4920 Fax # 508-520-4923

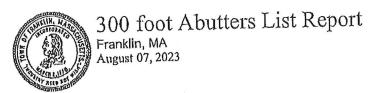


Abutters List Request Form

Please Note: A \$25.00 fee per list is required to process your request. Payment is due at the time of submission of this form. Please allow 10

Payment is due at the time of submission of this zero. Assessors office to complete processing your request. (Revised 1-1-22)
Date of Request 8 17 / 2023
Assessors Parcel ID # (12 digits) 312 - 006 - 000 - 000
Property Street Address 394 Washington St.
Distance Required From Parcel # listed above (Circle One): 500 (300) 100 (Note: if a distance is not circled, we cannot process your request)
Property Owner Hallie Wetzell
Property Owner's Mailing Address. 394 Washington Street
Town/City Franklin State MA. Zip Code 02038
Property Owner's Telephone # 617 - 905 - 3682
Requestor's Name (if different from Owner) Guerriere & Halnon, Inc.
Requestor's Address _ 55 West Central Street Franklin, MA.
Requestor's Telephone #5085283221
Office Use Only: Date Fee Paid/ Paid in Cash \$
Paid by Check \$ Check # Town Receipt #
Please Circle One:
Administration Conservation Planning Zoning Board of Appeals





Subject Property:

Parcel Number:

312-006-000

CAMA Number: 312-006-000-000

Property Address: 394 WASHINGTON ST

Mailing Address: WETZELL HALLIE PAONE NICHOLAS

394 WASHINGTON ST

FRANKLIN, MA 02038

Abutters:

Parcel Number:

305-003-000

CAMA Number:

305-003-000-000

Property Address: 291 WASHINGTON ST

Parcel Number: CAMA Number:

312-003-000

312-003-000-000

Property Address: 400 WASHINGTON ST

Parcel Number:

312-004-000

312-004-000-000 CAMA Number:

Property Address: 372 WASHINGTON ST

Parcel Number:

312-005-000 312-005-000-000

CAMA Number:

Properly Address: 1 WILSON RD

Parcel Number:

312-006-000

CAMA Number:

312-006-000-000

Property Address: 394 WASHINGTON ST

Parcel Number: CAMA Number: 312-007-000 312-007-000-000

Property Address: 2 IVY LN

Parcel Number: CAMA Number: 312-008-000 312-008-000-000

Property Address: 4 IVY LN

Parcel Number: CAMA Number: 312-009-000 312-009-000-000

Property Address: 6 IVY LN

Parcel Number:

312-011-000 312-011-000-000 CAMA Number:

Property Address: WASHINGTON ST

312-013-000

Parcel Number: 312-013-000-000 CAMA Number:

Property Address: IVY LN

Mailing Address: CHENT REALTY INC

291 WASHINGTON ST FRANKLIN, MA 02038

Mailing Address: EASTMAN CHARLES F III EASTMAN

MIREILLE T

400 WASHINGTON ST FRANKLIN, MA 02038

Mailing Address: DANIELLO ALBERT AJR DANIELLO

THERESA M

372 WASHINGTON ST FRANKLIN, MA 02038

Mailing Address: VERNEY LAWRENCE J VERNEY RITA E

1 WILSON RD

FRANKLIN, MA 02038

Mailing Address: WETZELL HALLIE PAONE NICHOLAS

394 WASHINGTON ST FRANKLIN, MA 02038

Malling Address: CARUSO MICHAEL CARUSO VANESSA

2 IVY LN

FRANKLIN, MA 02038

Mailing Address: RIPLEY JAMES F RIPLEY LAUREL E

4 IVY LN

FRANKLIN, MA 02038

Mailing Address: TRAN DUC THUY DANG

6 IVY LN

FRANKLIN, MA 02038

Mailing Address: FRANKLIN TOWN OF

355 EAST CENTRAL STREET

FRANKLIN, MA 02038

Mailing Address: KANE JOHN

1 IVY LN

FRANKLIN, MA 02038





300 foot Abutters List Report

Franklin, MA August 07, 2023

Parcel Number:

312-015-000

CAMA Number:

312-015-000-000

Property Address: 3 IVY LN

Mailing Address: MOORE ROBERT E KIRK KRISTEN

1 SANSONE STREET - SUITE 1500

1 SANSONE STREET - SUITE 1500

SAN FRANCISCO, CA 94104-4448

SAN FRANCISCO, CA 94104-4448

3 IVY LN

FRANKLIN, MA 02038

Parcel Number: CAMA Number: 312-016-000

312-016-000-000

Property Address: 1 IVY LN

Mailing Address: BOYCE KEVIN BOYCE KATIE

1 IVY LN

Malling Address: ICBP IV HOLDINGS 34 LLC C/O

Mailing Address: ICBP IV HOLDINGS 34 LLC C/O

FRANKLIN, MA 02038

BERKELEY PARTNERS

BERKELEY PARTNERS

Parcel Number:

312-020-000 312-020-000-000

CAMA Number: Property Address: 100 FINANCIAL PARK

Parcel Number:

312-020-001 312-020-001-000

CAMA Number: Property Address: 200 FINANCIAL PARK

Parcel Number: CAMA Number:

313-024-000 313-024-000-000 Property Address: 4 WILSON RD

Mailing Address: PAUL VIJU PAUL JINCY

4 WILSON RD FRANKLIN, MA 02038

Parcel Number: CAMA Number:

313-025-000 313-025-000-000 Property Address: 6 WILSON RD

Mailing Address: ROSS MELISSA M

6 WILSON RD FRANKLIN, MA 02038

Evni 11. Doyle, 8-7-2023

BOYCE KEVIN BOYCE KATIE 1 IVY LN FRANKLIN, MA 02038 RIPLEY JAMES F RIPLEY LAUREL E 4 IVY LN FRANKLIN, MA 02038

CARUSO MICHAEL CARUSO VANESSA 2 IVY LN FRANKLIN, MA 02038

ROSS MELISSA M 6 WILSON RD FRANKLIN, MA 02038

CHENT REALTY INC 291 WASHINGTON ST FRANKLIN, MA 02038 TRAN DUC THUY DANG 6 IVY LN FRANKLIN, MA 02038

DANIELLO ALBERT AJR DANIELLO THERESA M 372 WASHINGTON ST FRANKLIN, MA 02038 VERNEY LAWRENCE J VERNEY RITA E 1 WILSON RD FRANKLIN, MA 02038

EASTMAN CHARLES F III EASTMAN MIREILLE T 400 WASHINGTON ST FRANKLIN, MA 02038 WETZELL HALLIE PAONE NICHOLAS 394 WASHINGTON ST FRANKLIN, MA 02038

FRANKLIN TOWN OF 355 EAST CENTRAL STREET FRANKLIN, MA 02038

ICBP IV HOLDINGS 34 LLC C/O BERKELEY PARTNERS 1 SANSONE STREET - SUITE 1500 SAN FRANCISCO, CA 94104-4448

KANE JOHN 1 IVY LN FRANKLIN, MA 02038

MOORE ROBERT E KIRK KRISTEN 3 IVY LN FRANKLIN, MA 02038

PAUL VIJU PAUL JINCY 4 WILSON RD FRANKLIN, MA 02038

F-4611 Chambers

Prepared by {enter your company name here}

HydroCAD® 10.00-21 s/n 10299 © 2018 HydroCAD Software Solutions LLC

Pond 13P: Cultec C-100HD Chamber - Chamber Wizard Field A

Chamber Model = Cultec C-100HD (Cultec Contactor® 100HD)

Effective Size= 32.1"W x 12.0"H => 1.86 sf x 7.50'L = 14.0 cf Overall Size= 36.0"W x 12.5"H x 8.00'L with 0.50' Overlap Row Length Adjustment= +0.50' x 1.86 sf x 1 rows

2 Chambers/Row x 7.50' Long +0.50' Row Adjustment = 15.50' Row Length +12.0" End Stone x 2 = 17.50' Base Length

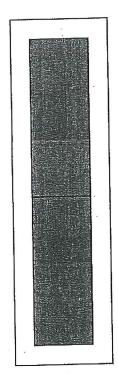
1 Rows x 36.0" Wide + 12.0" Side Stone x 2 = 5.00' Base Width 6.0" Base + 12.5" Chamber Height + 6.0" Cover = 2.04' Field Height

2 Chambers x 14.0 cf +0.50' Row Adjustment x 1.86 sf x 1 Rows = 28.9 cf Chamber Storage

178.6 cf Field - 28.9 cf Chambers = 149.8 cf Stone x 40.0% Voids = 59.9 cf Stone Storage

Chamber Storage + Stone Storage = 88.8 cf = 0.002 af Overall Storage Efficiency = 49.7% Overall System Size = 17.50' x 5.00' x 2.04'

2 Chambers 6.6 cy Field 5.5 cy Stone







CULTEC Contactor® 100HD Stormwater Chamber

The Contactor® 100HD is a 12.5" (318 mm) tall, low profile chamber and is typically used for installations with depth restrictions or when a larger infiltrative area is required. The Contactor 100HD has the side portal internal manifold feature. The HVLV® SFCx2 Feed Connector is inserted into the side portal of the Contactor 100HD to create the internal manifold.

man	noiu.	
Size	(L x W x H)	8' x 36" x 12.5"
-	,——————————————————————————————————————	2.44 m x 914 mm x 318 mm
Inst	alled Length	7.5'
	**************************************	2.29 m
Len	gth Adjustment per Run	0.5'
		0.15 m
Cha	mber Storage	1,87 ft³/ft
		0.17 m ³ /m
		14.00 ft ³ /unit
		0.40 m³/unit
Min	, Installed Storage	3.84 ft³/ft
		0.36 m³/m
		28.81 ft ³ /unit
		0.82 m³/unit
Min	ı. Area Required	25 ft²
		2.32 m²
Cha	amber Weight	38.0 lbs
		17.24 kg
Shi	lpping	55 chambers/skid
		2,195 lbs/skid
		16 skids/48' flatbed
Mir	n. Center to Center Spacing	3.33'
1		1.02 m
Ma	x. Allowable Cover	12'
		3.66 m
Ma	ax. Inlet Opening in End Wall	10" HDPE, PVC
		250 mm HDPE, PVC
Ma	ax. Allowable O.D.	6" HDPE, PVC
	Side Portal	150 mm HDPE, PVC
Co	ompatible Feed Connector	HVLV SFCx2 Feed Connector
		I-aath

Calculations are based on installed chamber length.

All above values are nominal.

All above values are nominal.

Min. installed storage includes 6" (152 mm) stone base, 6" (152 mm) stone above crown of chamber and typical stone surround at 40"(1016 mm) center-to-center spacing.

	Stone Foundation Depth			
	6" 12"		18"	
	152 mm	305 mm	457 mm	
Chamber and Stone Storage Per	28.81 ft ³	33.81 ft ³	38.81 ft ³	
Chamber	0.82 m³	0.96 m³	1.10 m³	
Mln. Effective Depth	2.04'	2.541	3.04	
Mill Elicative - F-	0.62 m	0.77 m	0.93 m	
Stone Required Per Chamber	1.37 yd³	1.84 yd³	2.30 yd³	
Otolio (reden en en en	1.05 m ³	1.40 m³	1.76 m³	

Calculations are based on installed chamber length. Includes 6" (152 mm) stone above crown of chamber and typical stone surround. Stone void calculated at 40%.



Contactor® 100HD Bare Chamber Storage Volumes

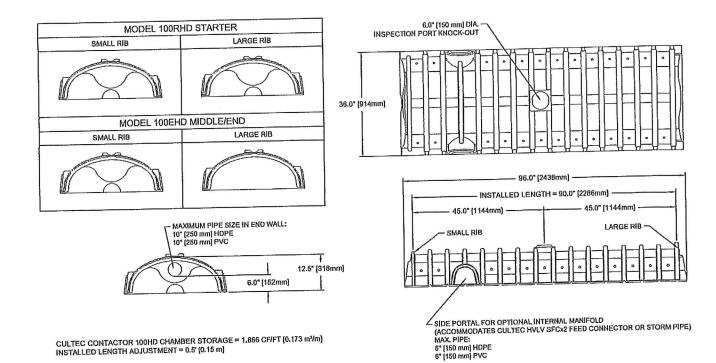
Elevation		Incremental Storage Volume			Cumulative Storage		
in.	mm	ft³/ft	m³/m	ft³	m ⁹	ft³	m³
12	305	0.009	0.001	0,068	0.002	13,995	0.396
11	279	0.067	0.006	0.503	0.014	13.928	0.394
10	254	0.110	0.010	0,825	0.023	13.425	0.380
9	229	0.139	0.013	1.043	0.030	12,600	0.357
8	203	0.159	0.015	1.193	0.034	11,558	0.327
7	178	0.174	0.016	1.305	0.037	10.365	0,294
6	152	0.184	0.017	1.380	0.039	9.060	0.257
5	127	0.192	0.018	1,440	0.041	7.680	0.217
4	102	0.203	0.019	1.523	0,043	6.240	0.177
3	76	0.203	0.019	1.523	0.043	4.718	0.134
2	51	0,203	0.019	1.523	0.043	3.195	0.090
ı	25	0.223	0.021	1.673	0.047	1.673	0.047
	otal	1.866	0.173	13,995	0.396	13.995	0,396

Calculations are based on installed chamber length.

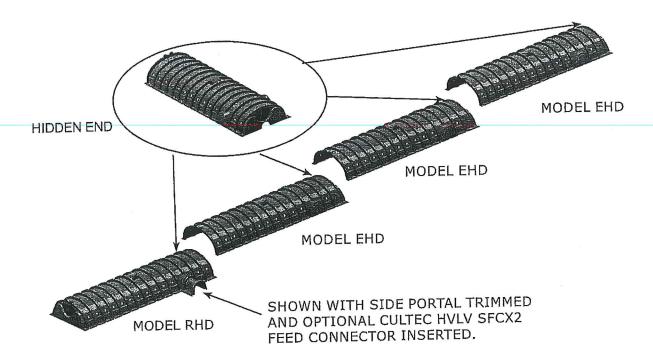
Visit www.cultec.com/downloads.html for Product Downloads and CAD details.



Three View Drawing



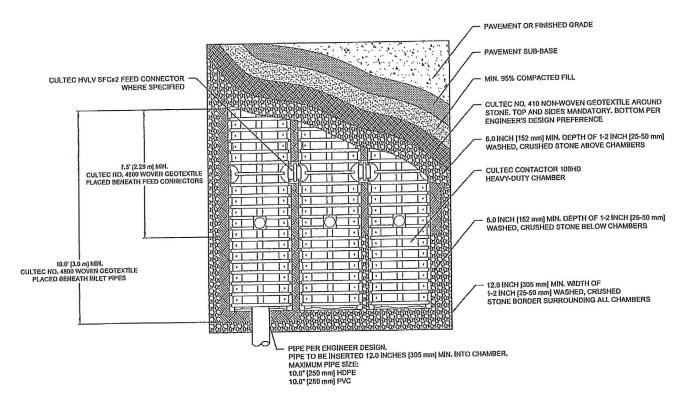
Typical Interlock Installation



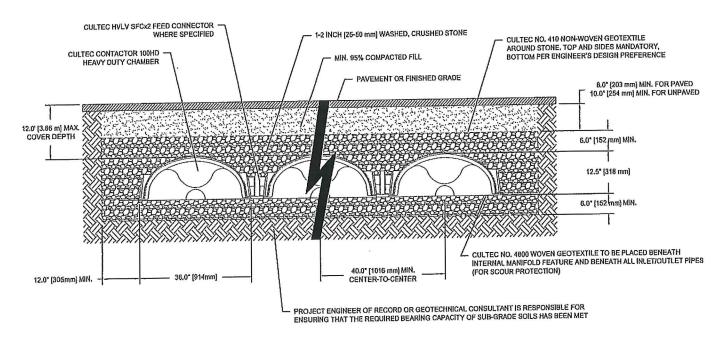
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CULTEC Contactor® 100HD Stormwater Chamber

Plan View Drawing



Typical Cross Section for Traffic Application



CULTEC Contactor® 100HD Stormwater Chamber

CULTEC Contactor® 100HD Specifications

GENERAL

CULTEC Contactor® 100HD chambers are designed for underground stormwater management. The chambers may be used for retention, recharging, detention or controlling the flow of on-site stormwater runoff.

CHAMBER PARAMETERS

- The chambers shall be manufactured in the U.S.A. by CULTEC, Inc. of Brookfield, CT (cultec.com, 203-775-4416).
- The chamber shall be vacuum thermoformed of polyethylene with a black interior and blue exterior. 2.
- The chamber shall be arched in shape. 3.
- The chamber shall be open-bottomed. 4.
- The chamber shall be joined using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings or separate end walls.
- The nominal chamber dimensions of the CULTEC Contactor® 100HD shall be 12.5 inches (318 mm) tall, 36 inches (914 mm) wide and 8 feet (2.44 m) long. The installed length of a joined Contactor® 100HD shall be 7.5 feet (2.29 m).
- Maximum inlet opening on the chamber end wall is 10 inches (250 mm) HDPE, PVC. 7.
- The chamber shall have two side portals to accept CULTEC HVLV® SFCx2 Feed Connectors to create an internal manifold. The nominal I.D. dimensions of each side portal shall be 5.75 inches (146 mm) high by 7.5 inches (191 mm) wide. Maximum allowable O.D. in the side portal is 6 inches (150 mm) HDPE, PVC.
- The nominal chamber dimensions of the CULTEC HVLV® SFCx2 Feed Connector shall be 7.6 inches (194 mm) tall, 12 inches (305 mm) wide and 19.7 inches (500 mm) long.
- 10. The nominal storage volume of the Contactor $^{\circ}$ 100HD chamber shall be 1.866 ft³ / ft (0.173 m³ / m) without stone. The nominal storage volume of a single Contactor® 100RHD Stand Alone unit shall be 14.93 ft³ (0.42 m³) - without stone. The nominal storage volume of a joined Contactor® 100EHD as an Intermediate unit shall be 13.995 ft³ (0.396 m³) - without stone. The nominal storage volume of the length adjustment amount per run shall be 0.93 ft³ (0.09 m³) - without stone.
- 11. The nominal storage volume of the HVLV® SFCx2 Feed Connector shall be 0.294 ft³ / ft (0.027 m³ / m) without stone.
- 12. The Contactor® 100HD chamber shall have forty-four discharge holes bored into the sidewalls of the unit's core to promote lateral conveyance of water.
- 13. The Contactor® 100HD chamber shall have 16 corrugations.
- 14. The end wall of the chamber, when present, shall be an integral part of the continuously formed unit. Separate end plates cannot be used with this unit.
- 15. The Contactor® 100RHD Starter/Stand Alone unit must be formed as a whole chamber having two fully formed integral end walls and having no separate end plates or separate end walls.
- 16. The Contactor® 100EHD Middle/End unit must be formed as a whole chamber having one fully formed integral end wall and one fully open end wall and having no separate end plates or end walls.
- 17. The HVLV® SFCx2 Feed Connector must be formed as a whole chamber having two open end walls and having no separate end plates or separate end walls. The unit shall fit into the side portals of the Contactor® 100HD and act as cross feed
- 18. Chambers must have horizontal stiffening flex reduction steps between the ribs.
- 19. The chamber shall have a raised integral cap at the top of the arch in the center of each unit to be used as an optional inspection port or clean-out.
- 20. The units may be trimmed to custom lengths by cutting back to any corrugation on the large rib end.
- The chamber shall be manufactured in an ISO 9001:2015 certified facility.
- 22. The chamber shall be designed and manufactured to meet the material and structural requirements of IAPMO PS 63-2019, including resistance to AASHTO H-10 and H-20 highway live loads, when installed in accordance with CULTEC's installation instructions.
- 23. Maximum allowable cover over the top of the chamber shall be 12' (3.66 m) for the Heavy Duty version.
- 24. The chamber shall be designed to withstand traffic loads when installed according to CULTEC's recommended installation instructions.