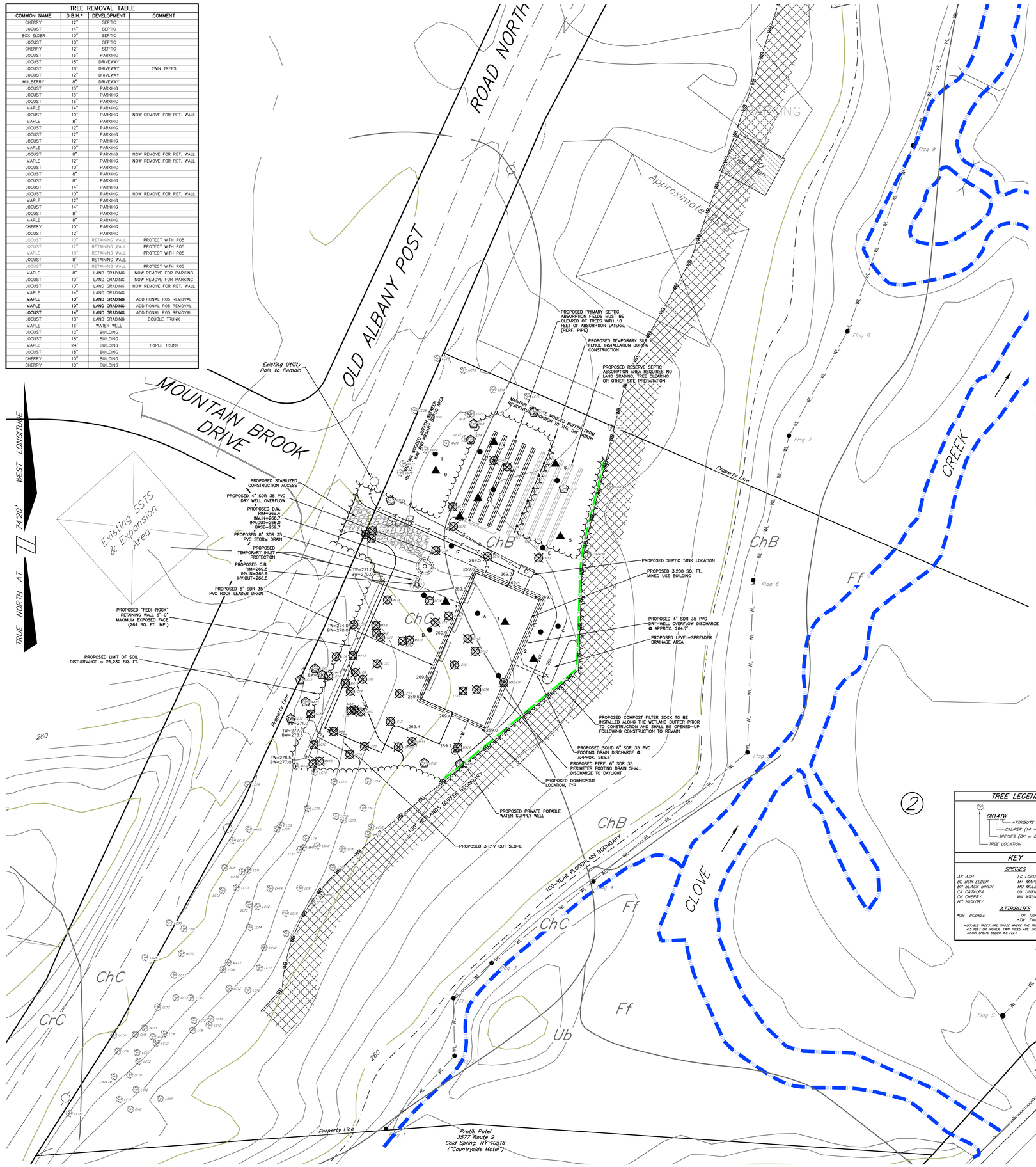
GEOGRAPHIC INDEX 41–29–11.3 –73–54–31.2

TREE REMOVAL TABLE

COMMON NAME	D.B.H.*	DEVELOPMENT	COMMENT
CHERRY	12"	SEPTIC	
LOCUST	14"	SEPTIC	
BOX ELDER	10"	SEPTIC	
LOCUST	10"	SEPTIC	
CHERRY	12"	SEPTIC	
LOCUST	16"	PARKING	
LOCUST	18"	DRIVEWAY	
LOCUST	18"	DRIVEWAY	TWIN TREES
LOCUST	12"	DRIVEWAY	
MULBERRY	8"	DRIVEWAY	
LOCUST	16"	PARKING	
LOCUST	16"	PARKING	
LOCUST	16"	PARKING	
MAPLE	14"	PARKING	
LOCUST	10"	PARKING	NOW REMOVE FOR RET. WALL
MAPLE	8"	PARKING	
LOCUST	12"	PARKING	
LOCUST	12"	PARKING	
LOCUST	12"	PARKING	
MAPLE	10"	PARKING	
LOCUST	8"	PARKING	NOW REMOVE FOR RET. WALL
MAPLE	12"	PARKING	NOW REMOVE FOR RET. WALL
LOCUST	10"	PARKING	
LOCUST	8"	PARKING	
LOCUST	8"	PARKING	
LOCUST	14"	PARKING	
LOCUST	10"	PARKING	NOW REMOVE FOR RET. WALL
MAPLE	12"	PARKING	
LOCUST	14"	PARKING	
LOCUST	8"	PARKING	
MAPLE	8"	PARKING	
CHERRY	10"	PARKING	
LOCUST	12"	PARKING	
LOCUST	10"	RETAINING WALL	PROTECT WITH RO5
LOCUST	12"	RETAINING WALL	PROTECT WITH RO5
MAPLE	10"	RETAINING WALL	PROTECT WITH RO5
LOCUST	8"	RETAINING WALL	
LOCUST	12"	RETAINING WALL	PROTECT WITH RO5
MAPLE	8"	LAND GRADING	NOW REMOVE FOR PARKING
LOCUST	10"	LAND GRADING	NOW REMOVE FOR PARKING
LOCUST	10"	LAND GRADING	NOW REMOVE FOR RET. WALL
MAPLE	14"	LAND GRADING	
MAPLE	**10"**	**LAND GRADING**	ADDITIONAL RO5 REMOVAL
MAPLE	**10"**	**LAND GRADING**	ADDITIONAL RO5 REMOVAL
LOCUST	**14"**	**LAND GRADING**	ADDITIONAL RO5 REMOVAL
LOCUST	18"	LAND GRADING	DOUBLE TRUNK
MAPLE	16"	WATER WELL	
LOCUST	12"	BUILDING	
LOCUST	18"	BUILDING	
MAPLE	24"	BUILDING	TRIPLE TRUNK
LOCUST	18"	BUILDING	
CHERRY	10"	BUILDING	
CHERRY	10"	BUILDING	



WETLANDS LEGEND

Flag — W — W — Flag No. 460

Wetland boundary flags as set by Michael Pirlane on April 26, 1999 on July 9, 1999

LEGEND

- PROPOSED HOUSE SEWER
- PROPOSED DRILLED WELL
- PROPOSED WATER SERVICE
- PROPOSED BUIRIED ELECTRIC SERVICE
- SILT FENCE (SEDIMENT CONTROL)
- COMPOST FILTER SOCK (SEDIMENT CONTROL)
- TEMPORARY STABILIZED CONSTRUCTION ACCESS (SEDIMENT CONTROL)
- PROPOSED ROLLED EROSION CONTROL BLANKET INSTALLATION
- PROPOSED LIMIT OF DISTURBANCE
- WB — 100' WETLANDS BUFFER BOUNDARY
- 450 — PROPOSED MAJOR CONTOUR ELEVATION
- 448 — PROPOSED MINOR CONTOUR ELEVATION
- 6 — DEEP HOLE TEST PIT W/ DESIGNATION
- C — PERCOLATION TEST HOLE W/ DESIGNATION
- RIP-RAP PIPE OUTLET PROTECTION
- SF — SF — SOIL STOCKPILE
- GRASS-LINED SWALE
- STONE-LINED SWALE
- FILTER SOCK INLET PROTECTION

TREE PLAN LEGEND

- WB — 100' WETLAND BUFFER BOUNDARY
- PROPOSED LIMIT OF DISTURBANCE
- EXISTING TREE TO BE PROTECTED DURING CONSTRUCTION
- EXISTING TREE TO BE REMOVED

DRY WELL DESIGN

ONE (1) 8' DIA. PRECAST CONCRETE DRY WELL, SURROUNDED BY 12" OF CRUSHED STONE
SOIL PERCOLATION TEST = 3" DROP IN 2 MIN (STANDARD P.C.D.H. PROCEDURE)

SURFACE AREA OF CYLINDER, (Ac) = πDh
Ac = 3.14 x 1ft x (4.5in / 12in/ft) = 1.18sf

BOTTOM AREA OF CYLINDER, (Ab) = πr²
Ab = 3.14 x 0.5² = 0.785sf

AREA OF PERCOLATION, (Ap) = Ac + Ab
Ap = 1.18sf + 0.785sf = 1.97sf

VOLUME OF PERCOLATION, (Vp) = Ab x h
Vp = 0.785sf x (3in / 12in/ft) = 0.196cf

SOIL PERCOLATION RATE, (Sr)
Sr = VOLUME / AREA / TIME
Sr = 0.196cf / 1.97sf / 2min/in = 0.0497 cf/sf/min
0.0497 cf/sf/min x 60 min x 24 hr = 71.6 cf/sf/day
APPLY 25% CLOGGING FACTOR
71.6 cf/sf/day – (71.6 x 0.25) = 53.7 cf/sf/day

VOLUME PER DRYWELL, (Vw)
Vw = πrh + πDhp
Vw = (π(4ft)²x4ft) + π(8ft)(1ft)(4ft)(1/3) = 235 cf

24-HOUR PERCOLATION VOLUME PER DRY WELL, (Vd)
Vd = πDh x Sr
Vd = 3.14 x 8ft x 4ft x 53.7 cf/sf/day = 5,398 cf/day

24-HOUR VOLUME PER DRY WELL, (Vt) = Vw + Vd
Vt = 235 cf + 5,398 cf = **5,633 cf**

REQUIRED STORAGE VOLUME, (Vs)
Vs = WATER QUALITY VOLUME (WQv)
WQv = [(P)(Rv)(A)]/12
IMPERVIOUS AREA = 10,134sf = SITE AREA (A)
90% RAINFALL EVENT NUMBER (P) = 1.4
I = IMPERVIOUS COVER (%) = 98
Rv = 0.05 + 0.009(I) = 0.932
WQv = 1.4*0.932*10,134/12 = **1,102 cf**

THEREFORE, THE DRYWELL PROPOSED WILL TREAT THE WATER QUALITY VOLUME FROM NEW IMPERVIOUS SURFACES

TREE LEGEND

OK14TW
- ATTRIBUTE (TW = TWIN)
- CALIPER (14 = 14")
- SPECIES (OK = OAK)
- TREE LOCATION

KEY

SPECIES

AS ASH	LC LOCUST
BL BOX ELDER	MA MAPLE
BP BLACK BIRCH	MU MULBERRY
CA CATALPA	UK UNKNOWN
CH CHERRY	WN WALNUT
HC HICKORY	

ATTRIBUTES

*DB DOUBLE	TR TRIPLE
	*TW TWIN

*DOUBLE TREES ARE THOSE WHERE THE TRUNK SPLITS AT 4.5 FEET OR HIGHER, TWIN TREES ARE THOSE WHERE THE TRUNK SPLITS BELOW 4.5 FEET.

SLOPE ANALYSIS

- EXISTING SLOPE RANGE FROM 0–20%
- EXISTING SLOPE RANGE FROM 20–35% (NONE)
- EXISTING SLOPES GREATER THAN 35% (NONE)

ZONING DATA

DISTRICT: OFFICE/COMM./INDUSTRY MIXED USE (OC)

	Required	Existing	Proposed
Maximum density (conservation)	2 oc/du	–	n/a
Minimum lot size (conventional/ODA)	2 oc	4.71 oc	4.71 oc
Minimum lot size (conservation)*	varies	–	n/a
Minimum road frontage for conventional subdivision			
Town road	200 ft	525.47 ft	525.47 ft
County/state road	200 ft	347.00 ft	347.00 ft
ODA ROW	–	n/a	n/a
Minimum front yard setback			
Town road	50 ft	–	89.3 ft
County/state road	100 ft	–	n/a
Minimum side yard setback	20 ft	–	110.0 ft
Minimum rear yard setback	35 ft	–	n/a
Max. impervious surface coverage	60%	0%	5%
Maximum height	40 ft	–	35.4 ft
Max. footprint for non-res struct.	200,000 sf	n/a	3,200 sf

OVERLAY DISTRICTS

175–13 Floodplain Overlay District – NFIP Map (FPO)	– WITHIN
175–18.1 Mobile Home Overlay District (MHO)	– NOT WITHIN
175–14 Cold Spring Reservoir Water Shed Overlay (WSO)	– NOT WITHIN
175–15 Scenic Protection Overlay (SPO)	– NOT WITHIN
175–16 Aquifer Overlay District (AQO) Town-wide Regional Aquifer (RA) only.	– NOT WITHIN
175–18 Open Space Conservation Overlay District (OSO)	– NOT WITHIN
175–35 Within 100' Buffer of Wetlands or Watercourse	– WITHIN
175–36 Steep Terrain	– NOT WITHIN
175–36 Ridge Line Protection	– NOT WITHIN
175–37 Protection of Agriculture	– NOT ABUTTING

WARNING STAMP

ALTERATION OF THIS DOCUMENT, IN ANY WAY, BY ANY PERSON NOT UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, AS APPROPRIATE, IS A VIOLATION OF THE EDUCATION LAW OF THE STATE OF NEW YORK

FIELD TEST RESULTS

DEEP TEST HOLES

NO. 1	NO. 2	NO. 3	NO. 4	–	SOIL LAYER DESCRIPTION
0 6	0 6	0 6	0 6		TOPSOIL
6 36	– –	– –	– –		SILTY LOAM
36 84	6 36	6 84	6 84		SANDY LOAM
– –	36 84	– –	– –		SAND

NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	SOIL LAYER DESCRIPTION
0 4	0 4	0 4	0 4	0 4	TOPSOIL
4 30	– –	– –	– –	– –	DARK BROWN LOAM
– –	– 4	48 –	– –	– –	MEDIUM BROWN LOAM
– –	– –	– –	– –	4 48	GRAY–BROWN SANDY LOAM
30 54	– –	– –	– –	– –	LIGHT BROWN SILTY LOAM W/ CLAY
54 90	– –	48 66	– –	– –	DARK BROWN SANDY LOAM
– –	4 36	66 84	– –	– –	LIGHT BROWN SANDY LOAM
– –	36 96	– –	– –	– –	MEDIUM BROWN MEDIUM SAND
– –	– –	84 108	– –	– –	GRAY–BROWN MEDIUM SAND
– –	– –	– 4	66 –	– –	MEDIUM BROWN SANDY LOAM
– –	– –	66 114	48 108	– –	LIGHT BROWN SAND

NOTE: ALL DEPTHS ARE IN INCHES FROM TOP OF HOLE.
HOLES NO. 1–4 LOGGED BY THE P.C.D.H. ON 05/25/2000.
HOLES NO. 5–9 LOGGED BY THE P.C.D.H. ON 07/01/2022.
NO GROUNDWATER ENCOUNTERED ANYTIME.
NO MOTTLING OBSERVED ANYTIME.
NO IMPERVIOUS LAYERS ENCOUNTERED ANYTIME.

PERCOLATION TESTS

NO.	DATE	DEPTH	RATE	COMMENTS
A	11/16/99	30"	2 MIN/IN	ORIGINAL SUBDIVISION TESTING
B	06/01/00	30"	2 MIN/IN	ORIGINAL SUBDIVISION TESTING
C	06/01/00	30"	1 MIN/IN	ORIGINAL SUBDIVISION TESTING
D	09/11/13	30"	5 MIN/IN	RENEW EXPIRED TESTING
E'	09/11/13	30"	3 MIN/IN	RENEW EXPIRED TESTING
F'	09/11/13	30"	2 MIN/IN	RENEW EXPIRED TESTING
G'	09/11/13	30"	2 MIN/IN	RENEW EXPIRED TESTING
E	07/02/22	26"	5 MIN/IN	RELOCATE COMMERCIAL SYSTEM
F	07/02/22	24"	2 MIN/IN	RELOCATE COMMERCIAL SYSTEM
G	07/02/22	25"	4 MIN/IN	RELOCATE COMMERCIAL SYSTEM
H	07/02/22	24"	1 MIN/IN	RELOCATE COMMERCIAL SYSTEM
I	07/02/22	24"	1 MIN/IN	RELOCATE COMMERCIAL SYSTEM

NOTE: ALL DEPTHS ARE IN INCHES FROM TOP OF HOLE.
ALL HOLES THOROUGHLY PRE-SOAKED 24–HOURS PRIOR.

SOILS LEGEND

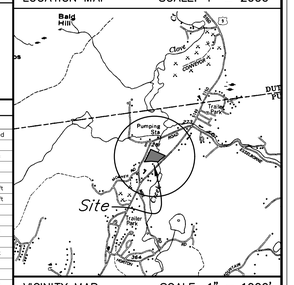
Map Symbol	Hydrologic Group	Soil Name
ChB	B	CHARLTON loam, 2–8% Slopes
ChC	B	CHARLTON loam, 8–15% Slopes
CrC	B	CHARLTON–CHATFIELD complex, rolling, very rocky
Ff	B/D	FLUVAQUENTS–UDIFLUVENTS complex, frequently flooded
RhB	B	RIVERHEAD loam, 3–8% Slopes
SuB	B	SUTTON loam, 3–8% Slopes
Ub	–	UDORTHENTS, smoothed

——— = Soil delineation (boundary) lines

Soils classifications and delineated lines have been derived from U.S. Department of Agriculture, Soil Conservation Service "Soil Survey of Putnam & Westchester Counties, New York" issued September 1994.

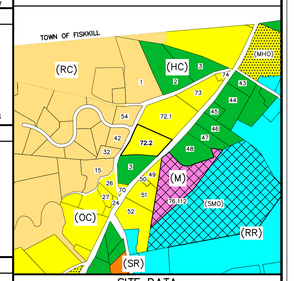
LOCATION MAP

SCALE: 1" = 2000'



VICINITY MAP

SCALE: 1" = 1000'



SITE DATA

TAX MAP NO: 17.–1–72.2
LOT AREA: 4.71 ACES
ZONING DISTRICT: MIXED USE (OC)
PROPOSED USE: BUSINESS/UPPER FLOOR APTS.
SCHOOL DISTRICT: HALDANE C.S.D.
FIRE: NORTH HIGHLANDS ENGINE CO. NO. 1
AMBULANCE: PHILIPSTOWN VOL. AMB. CORPS
SUBDIVISION: LOT 2 CARL L. & DONA L. THOMSON FILED MAP NO. 2845 ON SEPT 29, 2000.

MAP NOTES

1. SURVEY DATA AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS AS SHOWN ON THAT CERTAIN MAP ENTITLED "SUBDIVISION PLAT PREPARED FOR CARL L. & DONA L. THOMSON.," PREPARED BY BADEY & WATSON, SURVEYING & ENGINEERING, P.C. DATED MAY 6, 1999. LAST REVISED ON JULY 6, 2000.
2. UNDERGROUND IMPROVEMENTS IF ANY ARE NOT SHOWN HEREON.
3. WETLANDS BUFFER LINE ON LOT 2 IS TO BE STAKED AND CERTIFIED BY A LICENSED LAND SURVEYOR IMMEDIATELY PRIOR TO ANY CONSTRUCTION ON LOT 2.

REVISIONS

DATE	DESCRIPTION
03/16/22	ORIGINAL DRAWING (PRE–APP SKETCH)
04/07/22	INITIAL PLANNING BOARD SUBMISSION
05/05/22	COORDINATE WITH SEPTIC PLAN
07/07/22	RELOCATE BUILDING AND SEPTIC
07/15/22	PREPARE TREE PLAN
07/20/22	ADDRESS 07/18/22 MEMO
09/01/22	ADDITIONAL REVISIONS PER MEMO ABOVE
10/06/22	ADDRESS 09/12/22 RJG MEMO

PLANNING BOARD APPROVAL

Final site plan approval granted by Resolution #_____ on _____. No certificate of occupancy may be applied for until this site plan is signed below by an authorized representative of the planning board.

BY _____, 2022.
RONALD J. GAINER, P.E., TOWN ENGINEER DATE

The signature below indicates that the site plan has been revised in accordance with Resolution #_____ and that all other pertinent outstanding requirements of Resolution #_____ have been satisfied.

PHILIPSTOWN PLANNING BOARD

BY _____, 2022.
NEAL ZUCKERMAN, CHAIRMAN DATE

PROJECT LOCATION

OLD ALBANY POST ROAD NORTH, COLD SPRING
TOWN OF PHILIPSTOWN
COUNTY OF PUTNAM
STATE OF NEW YORK

PROJECT DESCRIPTION

NEW CONSTRUCTION OF A 4–BAY EQUIPMENT GARAGE FOR A SERVICE BUSINESS, WITH TWO (2) 2–BEDROOM UPPER FLOOR APARTMENTS IN A MIXED–USE BUILDING. THE GARAGE IS PERMITTED BY RIGHT, SUBJECT TO SITE PLAN REVIEW BY THE PLANNING BOARD. THE APARTMENTS ARE PERMITTED BY SPECIAL PERMIT ISSUED BY THE PLANNING BOARD. THE MIXED–USE BUILDING WILL BE SERVED BY A SEPARATE SUBSURFACE SEWAGE TREATMENT SYSTEM AND A PRIVATE DRILLED POTABLE WATER WELL.

PROPERTY OWNER

FORREST KINGSLEY & IAN KINGSLEY
16 RESERVOIR LANE
COLD SPRING, NY 10516

SITE GRADING, DRAINAGE AND EROSION & SED. CONTROL PLAN

MAJOR SITE PLAN SET

SCALE: 1" = 20'

PRELIMINARY

PRINTED
October 6, 2022

BADEY & WATSON
Surveying & Engineering, D.P.C.

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877.3.141593 (Toll Free)

SHEET 2 OF 3

DRAWING NAME: SP26264___RO8_V22 LAYOUT: E&SC W.O. NO. 26264 CHECKED BY MSM DRAWN BY JRS

FILE NO. 79–107