MEETING NOTICE AND AGENDA

MANSFIELD PLANNING AND ZONING COMMISSION

AUDREY P. BECK MUNICIPAL BUILDING ▪ 4 SOUTH EAGLEVILLE ROAD ▪ COUNCIL CHAMBER

WEDNESDAY, NOVEMBER 16, 2016 ▪ 6:30 PM

1. CALL TO ORDER AND ROLL CALL
2. APPROVAL OF MINUTES
   - A. November 2, 2016 – Regular Meeting
   - B. November 9, 2016 – Field Trip
3. ZONING AGENT'S REPORT
4. PUBLIC HEARING
   - A. 6:30 P.M.
     SPECIAL PERMIT APPLICATION, RESTAURANT, E. RANDAZZO/APPLICANT, M. MCDONALD/OWNER, 1029 STORRS ROAD, FILE #1344
     Memo from Assistant Planner/Zoning Enforcement Officer
   - B. 6:40 P.M. – CONTINUED PUBLIC HEARING
     WILLARD J. STEARNS & SONS, INC., STEARNS & COVENTRY ROAD, 9 LOT SUBDIVISION, FILE #1343
     Memo from Director of Planning and Development
5. OLD BUSINESS
   - A. SPECIAL PERMIT APPLICATION, RESTAURANT, E. RANDAZZO/APPLICANT, M. MCDONALD/OWNER, 1029 STORRS ROAD, FILE #1344
   - B. WILLARD J. STEARNS & SONS, INC., STEARNS & COVENTRY ROAD, 9 LOT SUBDIVISION, FILE #1343
   - C. OTHER
6. NEW BUSINESS
   - A. OTHER
7. ZONING REGULATIONS AND DESIGN GUIDELINES
8. REPORTS FROM OFFICERS AND COMMITTEES
   - A. CHAIRMAN'S REPORT
   - B. REGIONAL PLANNING COMMISSION
   - C. REGULATORY REVIEW COMMITTEE
   - D. PLANNING AND DEVELOPMENT DIRECTOR'S REPORT
   - E. OTHER COMMITTEES
9. COMMUNICATIONS AND BILLS
   - A. NY Times Article Submitted by A. Hilding
   - B. 10-29-16 Email String from A. Hilding
   - C. Eastern Gateway Study Public Meeting
   - D. OTHER
10. ADJOURNMENT

Charles Ausburger ▪ Binu Chandy ▪ JoAnn Goodwin ▪ Roswell Hall III ▪ Gregory Lewis ▪ Kenneth Rawn ▪ Bonnie Ryan
Vera Stearns Ward ▪ Susan Westa ▪ Paul Aho (A) ▪ Terry Berthelot (A) ▪ Katie Fratoni (A)

MINUTES

DRAFT MINUTES

MANSFIELD PLANNING AND ZONING COMMISSION

AUDREY P. BECK MUNICIPAL BUILDING ▪ 4 SOUTH EAGLEVILLE ROAD ▪ COUNCIL CHAMBER

WEDNESDAY, NOVEMBER 2, 2016 ▪ REGULAR MEETING

MEMBERS PRESENT:	J. Goodwin, R. Hall, G. Lewis, K. Rawn, V. Ward, S. Westa
MEMBERS ABSENT:	C. Ausburger, B. Chandy, B. Ryan
ALTERNATES PRESENT:	K. Fratoni
ALTERNATES ABSENT:	P. Aho, T. Berthelot
STAFF PRESENT:	Linda Painter, Director of Planning and Development
	Janell Mullen, Assistant Planner/Zoning Enforcement Officer

Chairman Goodwin called the meeting to order at 6:55 p.m. and appointed Fratoni to act.

APPROVAL OF MINUTES:

A. October 17, 2016 – Regular Minutes
Rawn MOVED, Westa seconded, to approve the 10-17-2016 minutes. MOTION PASSED with all in favor except Hall who was disqualified.

B. October 22, 2016- Field Trip Notes
Noted.

PUBLIC HEARING:

WILLARD J. STEARNS & SONS, INC., BROWNS & COVENTRY ROADS, 9 LOT SUBDIVISION, FILE #1343
Chairman Goodwin noted that due to an error in The Chronicle's advertisement, this Public Hearing will be opened on 11/16/16.

OLD BUSINESS:

A. WILLARD J. STEARNS & SONS, INC., BROWNS & COVENTRY ROADS, 9 LOT SUBDIVISION, FILE #1343
Item tabled pending 11/16/16 Public Hearing.

B. SPECIAL PERMIT APPLICATION, RESTAURANT, E. RANDAZZO/APPLICANT, M. MCDONALD/OWNER, 1029 STORRS ROAD, FILE #1344
Item tabled pending 11/16/16 Public Hearing.

NEW BUSINESS:

A. 2017 MEETING SCHEDULE
Ward MOVED, Hall seconded, that the Planning & Zoning Commission approve the 2017 meeting schedules for the Planning and Zoning Commission and Inland Wetlands Agency. The meeting will commence at 6:30 p.m., not 7:00 p.m. as noted on the draft schedule. MOTION PASSED UNANIMOUSLY.

B. 8-24 REFERRAL-ACQUISITION OF DEVELOPMENT RIGHTS
Goodwin and Ward recused themselves. Rawn was appointed as acting Chair and Westa was

appointed as acting Secretary. Lewis MOVED, Hall seconded, that the PZC notify the Town Council that the proposed acquisition of development rights for 474, 504 and 519 Mansfield City Road is consistent with the Mansfield Tomorrow Plan of Conservation and Development, particularly Goal 3.1, Strategy A. Nothing in this recommendation shall be construed as support for any future subdivision applications for the land excluded from the agricultural conservation restrictions. MOTION PASSED with all in favor except Goodwin and Ward who were recused.

Hall MOVED, Ward seconded, to add an item to the New Business Agenda regarding Historic Village Request. MOTION PASSED with all in favor except Rawn who recused himself.

C. HISTORIC VILLAGE-REQUEST FOR APPROVAL AT 667 CHAFFEEVILLE ROAD

Hall MOVED, Ward seconded, to authorize the issuance of the zoning permit for the restoration of a front door portico at 667 Chaffeeville Road, which is located in the historic village of Gurleyville. MOTION PASSED with all in favor except Rawn who recused himself.

ZONING REGULATION AND DESIGN GUIDELINES:

Painter distributed several handouts relating to the development of new zoning regulations, which included a conceptual proposal for new zoning districts, information on different building types, and state statutes related to Incentive Housing Zones. After discussion, it was decided that staff will prepare a presentation on different potential approaches to zoning and circulate website links to members via email. Another van tour of the southern end of town was scheduled for Saturday, November 12th at 8 a.m.

REPORTS FROM OFFICERS AND COMMITTEES:

None.

COMMUNICATIONS AND BILLS:

Noted.

ADJOURNMENT:

The Chair declared the meeting adjourned at 8:07 p.m.

Respectfully submitted,

Vera S. Ward, Secretary

MEETING NOTICE AND AGENDA

MANSFIELD INLAND WETLANDS AGENCY
CONSERVATION COMMISSION

SPECIAL JOINT MEETING ▪ FIELD TRIP

FIELD TRIP NOTES

WEDNESDAY, NOVEMBER 9, 2016

IWA Members Present:	B. Ryan, P. Aho, J. Goodwin (item #1), V. Ward
C.C. Members Present:	G. Meitzler, S. Lehman (item #1)
Staff present:	Jennifer Kaufman, Environmental Planner/Inland Wetlands Agent Janell Mullen, Assistant Planner/Zoning Enforcement Office

The field trip began at approximately 3:00 p.m.

W1582- P. & L. LEWIS, RAVINE ROAD (PARCEL ID 14.18.8B), SINGLE FAMILY HOME

Members were met on site by P. and L. Lewis and Peter Ballsieper. Members observed current conditions, and site characteristics. No decisions were made.

P1344- E. RANDAZZO/APPLICANT, M. MCDONALD/OWNER, 1029 STORRS ROAD- SPECIAL PERMIT APPLICATION, RESTAURANT

Members were met on site by E. Randazzo and M. Benzie. Members observed current conditions, and site characteristics. No decisions were made.

The field trip ended at approximately 4:10 p.m.

MANSFIELD DEPARTMENT OF PLANNING AND DEVELOPMENT

ZONING AGENT REPORT ▪ OCTOBER

JANELL MULLEN, ZONING AGENT ISSUED ON OCTOBER 17TH

ZONING PERMITS ISSUED

ADDRESS	DESCRIPTION
5 Highland Road	10' X 12' shed
5 Hillside Circle	6' X 9' deck
11 Southwood	Addition
372 Stearns Rd	15' x 17' shed
205 Pleasant Valley Road	Mounted solar panels
268 Puddin Lane	Lot-line revision
21 Holly Drive	Deck
67 Willowbrook Road	12' X 8' shed
212 S. Bedlam	8' X 22' front porch
315 Mulberry Road	Shed
52 Baxter Road	16' x 20' deck
667 Chaffeeville Road	Portico restoration (Historic Village)

CERTIFICATES OF ZONING COMPLIANCE

ADDRESS	DESCRIPTION
Colonial Townhouses- Foster Dr	16 units 1 bdrm singles & handicap parking
329 N. Eagleville Road	Shed installation
13C Sycamore Drive	10' X 24'
9A-D Sherwood- Storrs Center	Townhouses

ENFORCEMENT ACTIVITY DURING THE MONTH OF SEPTEMBER

ADDRESS/BUSINESS	TYPE OF VIOLATION	DEADLINE TO RESPOND/STATUS
12.72.7	Keeping of farm animals	The animals from 30 Old Kent Road have been relocated to Rt 89. They are subject to DoAg violations and animal control is building a case. Accessory buildings for animal have not been permitted at this time.
141 Storrs Road-Verizon	Violation of the sign regulations	Flags (3) for Verizon being displayed. These are not authorized per zoning regulations on signage.
141 Storrs Road-Big Y	ADA Violation	Sidewalks were not kept clear of carriages and/or pumpkins and pallets.

16 Thornbush	Work being done without a permit	Referred to Bldg Dept since site visit revealed no obvious zoning violations.
17 Olsen Drive	Work performed beyond scope of permit	Significant site grading and retention walls being constructed when a shed was the only permitted part of the project.

PUBLIC HEARINGS

TOWN OF MANSFIELD

DEPARTMENT OF PLANNING AND DEVELOPMENT

DATE: November 9, 2016
TO: Planning and Zoning Commission
FROM: Janell M. Mullen, Assistant Planner/ZEO
SUBJECT: Spring Hill Cafe, 1029 Storrs Road (PZC #1344)

PROJECT OVERVIEW

The applicants are requesting Special Permit Approval to incorporate an additional use on to the existing non-conforming uses on the 1029 Storrs Road site. Existing uses on the site include a second-floor residential apartment, a real estate office Redbird Real Estate, and Stix N' Stones a landscaping and nursery business. The current commercial uses of the site exist as non-conforming uses in this RAR-90 zone. The subject site is 1.4 acres. The current request seeks to add an approximately 1,100 square-foot restaurant use, to be called Spring Hill Cafe. This space was previously occupied by a retail consignment shop, The White Rabbit.

The applicant provided a general description of the restaurant in the Business Summary. The café will serve breakfast and lunch and accommodate 30 seats and take-out service.

Modifications to the site will include the acquisition of a small portion of residential land that abuts the 1029 Storrs Road site in order to expand and upgrade the septic system. Parking on the site will be re-configured and re-striped and signage will be added to identify the café.

APPROVAL CONSIDERATIONS

Pursuant to Article IX, Section D. 3. b. of the Zoning Regulations, expansions of existing non-conforming uses require Special Permit approval.

The Approval Criteria and subsequent Zoning Agent analysis is as follows:

a. THAT ALL APPROVAL CRITERIA IN ARTICLE V, SECTION A.5 (SITE PLAN APPROVAL) HAVE BEEN MET. In reviewing the proposed site plan and the map checklist, it has been determined that all required and necessary information has been provided by the applicant, including, but not limited to: parking and loading, waste disposal, landscaping and buffering, signs, dimensional standards, and other similar special provisions applicable to the subject use.

   The application has considered all other applicable local, state, and federal requirements, including the necessary permits from the Mansfield Inland Wetlands Agency, the Mansfield Fire Marshal, and state and local Health Department requirements.

b. THAT THE PROPOSED USE IS COMPATIBLE WITH THE TOWN'S PLAN OF CONSERVATION AND DEVELOPMENT (POCD) AND ARTICLE I OF THE ZONING REGULATIONS.
Commercial growth and development along Storrs Road (Route 195 corridor) is compatible with the future land use strategy of the Town. Focusing the development along arterial roads helps to preserve residential character in other parts of the community.

The Economic Development chapter of the POCD supports a diversifying the economy and creating an "entrepreneurial environment" that supports business formation, expansion, and retention. The proposed use will be locally owned and operated. The POCD identifies a preference for focusing efforts on businesses with a strong commitment to the Town.

This expansion of use would support an already established commercial development in the Town. The land is already developed and has been historically used as a commercial site.

c. THAT THE LOCATION AND THE SIZE OF THE PROPOSED USE AND THE NATURE AND INTENSITY OF USE IN RELATION TO THE SIZE OF THE LOT WILL BE IN HARMONY WITH THE ORDERLY DEVELOPMENT OF THE TOWN AND COMPATIBLE WITH OTHER EXISTING USES.
The site abuts an existing residence to the immediate south. Abutting land to the north and west is undeveloped. The proposed additional use will not hinder the use of neighboring properties or diminish their value. The site opposite the subject site is zoned PO-1 or Professional Office 1 whereas professional offices are permitted with site plan approval. Given the surrounding context, a small scale restaurant use will not be incompatible with the surrounding properties.

The site is fronted by Route 195 (Storrs Road) which is one of the most trafficked arterial streets in the Town of Mansfield as well as a major roadway leading to UConn. Due to this location and its size (which is over an acre), the lot supports ample parking, good sightlines, and access for emergency vehicles and commercial waste pick-up.

d. THAT PROPER CONSIDERATION HAS BEEN GIVEN TO THE AESTHETIC QUALITY OF THE PROPOSAL, INCLUDING ARCHITECTURAL DESIGN, LANDSCAPING, AND PROPER USE OF THE SITE'S NATURAL FEATURES.
This expansion of use will conform to the aesthetic quality of the existing building on site. The development of Spring Hill Café will introduce site upgrades which include re-striping of the parking lot, additional landscaping, and improved walkways. The grading of the site will remain the same.

The dumpster area will be screened and placed in the back of the site so as not to be visible from the roadway.

The new use is not expected to result in detrimental neighborhood, traffic, or environmental impacts.

ATTACHMENTS

1. Special Permit Application as submitted by Maryellen (Elle) Randazzo on 10/6/2016
2. Map Checklist
3. Eastern Highlands Health District Plan Review Memo
4. Statement of land acquisition agreement from Mr. & Mrs. Maines to the property owner of 1029 Storrs Road, Mr. McDonald.
5. Site Plan dated 7/19/2016
6. Neighborhood Notification Forms
7. Notification to Windham Water Works
8. Spring Hill Café Business Summary

SUMMARY/RECOMMENDATION

If the Commission concurs with the above recommendation and supports the proposed additional use, given that it is not a significant alteration to the non-conforming use of the site.

_____MOVES _____SECONDS to authorize a restaurant use at the 1029 Storrs Road property, as submitted and described by the Special Permit Application. This authorization shall be subject to the following conditions:

1. This authorization shall be limited to the specific proposal submitted for Spring Hill Café. Any additional changes or alterations of the subject use, including hours of operation, and/or any additional building alterations shall require an additional site modification request.
2. All applicable Building and Fire Code requirements shall be met.
3. Prior to the issuance of a Certificate of Zoning Compliance, a lot line modification shall be filed on the land records to account for the property being acquired for the septic system upgrades, on-site parking spaces (including the handicap spaces) shall be delineated with new surface markings and signage as per state and local requirements, and all other proposed site work shall be completed.
4. A separate zoning permit will be reviewed and obtained for site signage.
5. All improvements shown or required on the approved site plan, including parking areas, water supply, waste disposal facilities, lighting and signs, must be maintained on a continuing basis.

TOWN OF MANSFIELD

DEPARTMENT OF PLANNING AND DEVELOPMENT

ITEM 6A ▪ SPECIAL PERMIT APPLICATION ▪ 1029 STORRS ROAD

RECEIPT MOTION

MOVE to receive the Special Permit Application (File #1344) submitted by Maryellen Randazzo for a restaurant on property located at 1029 Storrs Road as shown on plans dated 9/29/2016 and as shown and described in application submissions, and to refer said application to staff and committees for review and comments and to set a Public Hearing for November 16, 2016.

SPECIAL PERMIT APPLICATION
(see Article V, Section B of the Zoning Regulations)

Mansfield Planning and Zoning Commission

File # 1344
Date 10/6/16

1. **Name of development** (where applicable) 1029 Storrs Road, Mansfield CT 06268

2. **Proposed use** of the property is Spring Hill Cafe LLC
in accordance with Sec.(s) _____ of Article ~~VII (Permitted Use provisions)~~ 9 (Non-conforming Use provisions) SUP of the Zoning Regulations

3. **Address/location** of subject property 1029 Storrs Road, Mansfield, CT 06268

Assessor's Map 23 Block 59 Lot(s) 27 Vol. _____ Page _____

4. **Zone** of subject property Commercial RAR-90 **Acreage** of subject property 1.4 ac

5. **Acreage of adjacent land in same ownership** (if any) N/A

6. **APPLICANT** Maryellen Randazzo [signature]
(please **PRINT**) Signature
Street Address 147 Bassetts Bridge Rd. Telephone 860-818-1381
Town Mansfield Center Zip Code 06250

Interest in property: Owner _____ Optionee _____ Lessee X Other _____

(If "Other", please explain) _____

7. **OWNER OF RECORD:** Michael McDonald [signature]
(please **PRINT**) Signature
(**OR** attached Purchase Contract _____ **OR** attached letter consenting to application X)
Street Address _____ Telephone _____
Town _____ Zip Code _____

8. **AGENTS** (if any) representing the applicant who may be directly contacted regarding this application:

Name Brian Long Telephone 860-886-1966
Address 317 Main Street Norwich, CT Zip Code 06360
Involvement (legal, engineering, surveying, etc.) CLA Engineering, Inc.

Name _____ Telephone _____
Address _____ Zip Code _____
Involvement (legal, engineering, surveying, etc.) _____

(over)

9. The following items have been submitted as part of this application:

✓ Application fee in the amount of $ 360 Check #89; Receipt # 744739

✓ Statement of Use further describing the nature and intensity of the proposed use, the extent of proposed site improvements and other important aspects of the proposal. To assist the Commission with its review, applicants are encouraged to be as detailed as possible and to include information justifying the proposed special permit with respect to the approval criteria contained or referenced in Article V, Section B.5.

✓ Site plan (6 copies) as per Article V, Section B.3.d
1 full set and email electronic (15 reduced)

✓ Site plan checklist including any waiver requests

✓ Sanitation report as per Article V, Section B.3.e (copy of B 100) from Sherry McGann

✓ Acknowledgement that certified notice will be sent to neighboring property-owners, as per the provisions of Article V, Section B.3.c (use Neighborhood Notification Form). within 500 ft

✓ As applicable for projects within the watershed of the Willimantic Reservoir, acknowledgement that certified notice will be sent to the Windham Water Works, as per the provisions of Article III, Section l.

✓ As applicable for projects within State designated aquifer protection areas, acknowledgment that the Commissioner of Public Health will be notified as per the provisions of Article III, Section l. The State Department of Public Health's on line form (www.dph.state.ct.us/BRS/Water/Source_Protection/PA0653.htm) shall be used with a copy of the submittal delivered to the Planning Office.

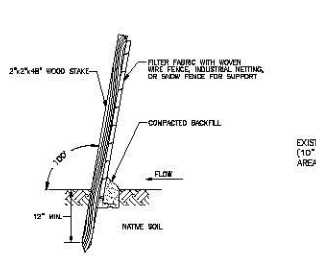
(N/A) Other information (see Article V, Section B.3.g). Please list items submitted (if any):

_____

_____

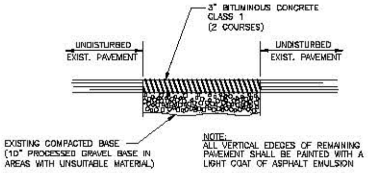
10. **ALL APPLICATIONS, INCLUDING MAPS AND OTHER SUBMISSIONS, MUST COMPLY WITH ALL APPLICABLE SECTIONS OF THE ZONING REGULATIONS, INCLUDING, BUT NOT LIMITED TO:**

Art. X, Sec. E, Flood Hazard Areas, Areas Subject to Flooding
Art. V, Sec. B, Special Permit Requirements (includes procedure, application requirements, approval criteria, additional conditions and safeguards, conditions of approval, violations of approval, and revisions)
Art. VI, Sec. A, Prohibited Uses
Art. VI, Sec. B, Performance Standards
Art. VI, Sec. C, Bonding
Art. VII, Permitted Uses
Art. VIII, Dimensional Requirements/Floor Area Requirements
Art. X, Sec. A, Special Regulations for Designed Development Districts
Art. X, Sec. C, Signs
Art. X, Sec. D, Parking and Loading
Art. X, Sec. H, Regulations regarding filling and removal of materials
Art. X, Sec. S, Architectural and Design Standards



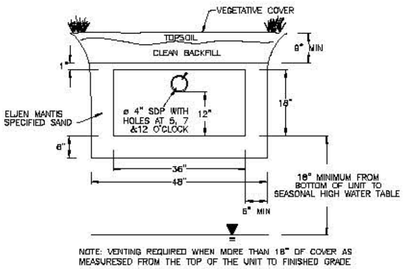
SILT FENCE SECTION

NOT TO SCALE



PERMANENT PAVEMENT

NOT TO SCALE



TYPICAL ELJEN MANTIS 536-8 SECTION

NOT TO SCALE

LEGEND:

	PROPERTY LINE
	DRAINAGE
G	GAS
OH	OVERHEAD WIRE
21	CONTOUR
	GUIDERAIL
	RETAINING WALL
	WOODED AREA
	STONE WALL
	CATCH BASIN
	IRON PIN, IRON PIPE
MS, CHD, MON	MERESTONE, CONNECTICUT HIGHWAY DEPARTMENT MONUMENT, MONUMENT
	TREE
	SWAMP OR WET AREA
	SEPTIC COVER
N/F	NOW OR FORMALY
Vol. Pg.	DEED VOLUME & PAGE
	WETLAND FLAG
	UTILITY POLE

SURVEY NOTES

1. THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 20-300b-1 THRU 20-300b-20 OF THE REGULATIONS FOR STATE AGENCIES "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.
   A. TYPE OF SURVEY: PROPERTY AND TOPOGRAPHIC SURVEY
   B. BOUNDARY DETERMINATION CATEGORY: DEPENDENT RESURVEY
   C. HORIZONTAL ACCURACY: CLASS A-2
      VERTICAL ACCURACY: V-2
      TOPOGRAPHIC ACCURACY: T-2
   D. INTENT: TO DEPICT THE BOUNDARY, EXISTING CONDITIONS AND TOPOGRAPHY OF THE PROPERTY
2. LATEST DATE OF FIELD WORK: 07-05-16
3. SUBJECT PROPERTY IS DEPICTED AS LOT 27 OF ASSESSOR'S MAP 59, BLOCK 23.
4. VERTICAL DATUM IS NAVD88 BASED ON GPS OBSERVATIONS.
5. NO UNDERGROUND UTILITIES, OTHER THAN DRAINAGE PIPES AND STRUCTURES, ARE DEPICTED HEREON.
6. SUBSURFACE AND ENVIRONMENTAL CONDITIONS, OTHER THAN WETLANDS DELINEATION, WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY.

CLA

PARKING CALCULATIONS:

CAFE:	30 SEATS AT 1 SPACE/ 3 SEATS + 5 SPACES=	15 SPACES
LANDSCAPE BUSINESS:	800 S.F. AT 1 SPACE / 200 S.F.=	4 SPACES
REAL ESTATE OFFICE:	800 S.F. AT 1 SPACE / 200 S.F.=	4 SPACES
APARTMENT:		2 SPACES
	TOTAL REQUIRED=	25 SPACES
	TOTAL PROVIDED=	25 SPACES

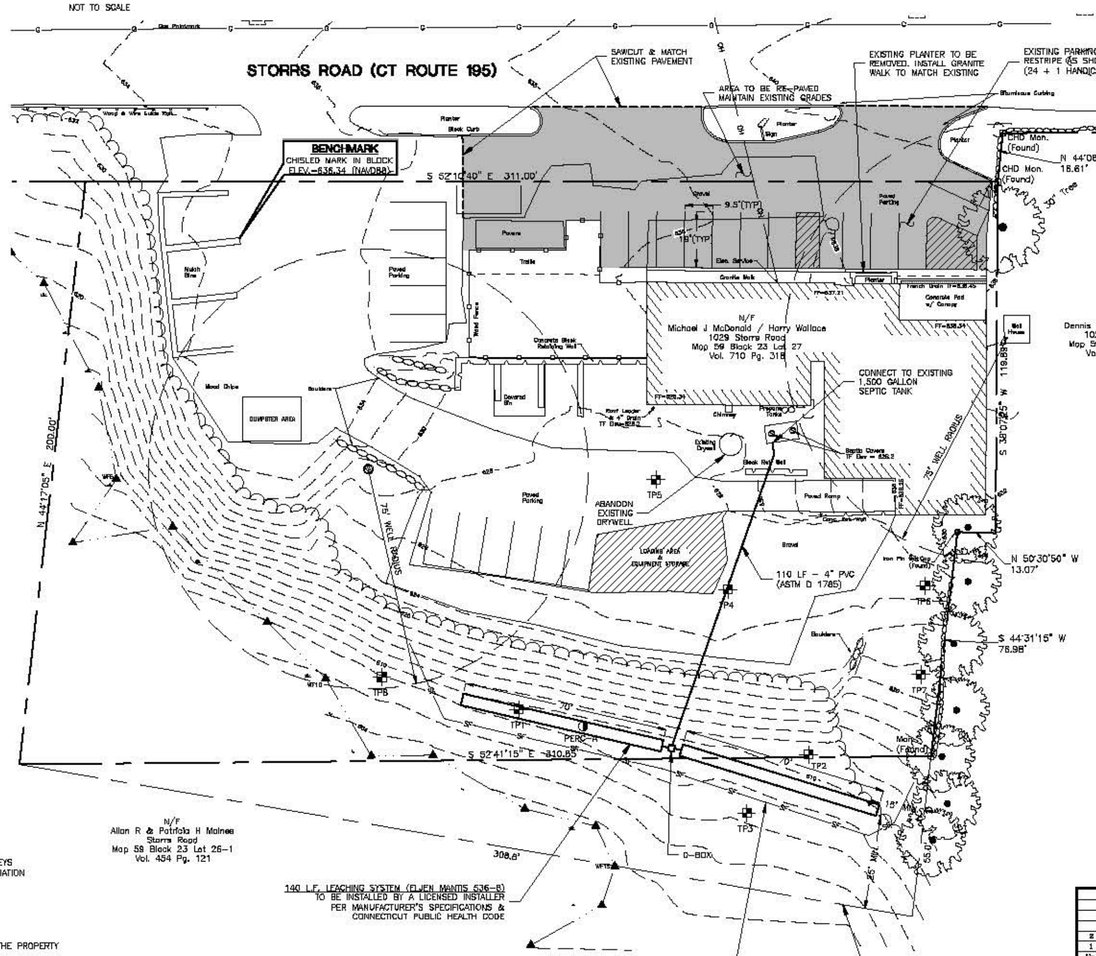
SEPTIC SYSTEM REPAIR

REPAIR SYSTEM:
COMMERCIAL MIXED USE BUILDING W FOOD SERVICE
DESIGN FLOW 1650 GPD
PERCOLATION RATE: 8.0 MIN./INCH
MAX DEPTH INTO EX. GRADE: 7 INCHES
EFFECTIVE LEACHING AREA REQUIRED= 1500 SF
SLOPE= 4.6%
MLSS= HFxFFxPF= 20x5.53x1.2= 133 FT
USING: ELJEN MANTIS 536-8
EFFECTIVE LEACHING AREA OF TRENCH= 11.0 SF/LF
LENGTH OF TRENCH REQUIRED=(1500 SF)/(11.0 SF/LF)= 137 LF
USE ONE ROW OF 140'
LEACHING AREA PROVIDED= 1540 SF

*1,000 GALLON GREASE TRAP REQUIRED FOR CAFE

SEPTIC SYSTEM NOTES

1. ALL WORK AND MATERIAL (SEPTIC TANK, DISTRIBUTION BOX, PIPE) SHALL CONFORM TO THE CONNECTICUT PUBLIC HEALTH CODE REGULATIONS AND STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEM.
2. TRENCH SHALL BE SET LEVEL FOR ENTIRE LENGTH.
3. PIPE FROM SEPTIC TANK TO DISTRIBUTION LINE SHALL BE 4" SOILD PVC CONFORMING TO ASTMD-3034 AND SDR-35.
4. THE AREA WITHIN 5' OF SEPTIC SYSTEM SHALL BE STRIPPED OF EXISTING FILL MATERIAL AND ORIGINAL TOPSOIL LAYER AND REPLACED WITH SELECT FILL CONFORMING TO THE REQUIREMENTS OF THE LOCAL HEALTH DEPARTMENT PRIOR TO INSTALLATION OF SEPTIC SYSTEM.
5. AN INTERIOR AUTOMATIC GREASE RECOVERY UNIT WILL BE USED.



TEST PIT LOGS

OBSERVED BY: SHERRY MCGANN, SANITARIAN
3/8/2016

TP-1
TOTAL DEPTH - 86"
LEDGE - NONE
MOTTLES - 31"
WATER - NONE*
0-18" TOPSOIL
18-31" OB FINE SANDY LOAM W/GRAVEL
31-83" MOTTLED GREY SANDY LOAM TILL
83-86" GROUNDWATER

TP-2
TOTAL DEPTH - 64"
LEDGE - NONE
MOTTLES - 25"
WATER - 41"
0-14" TOPSOIL
14-25" OB FINE SANDY LOAM W/GRAVEL
25-54" MOTTLED GREY SANDY LOAM TILL
54-64" GROUNDWATER

TP-3
TOTAL DEPTH - 72"
LEDGE - NONE
MOTTLES - 28"
WATER - 47"
0-18" TOPSOIL
18-28" OB FINE SANDY LOAM W/GRAVEL
28-63" MOTTLED GREY SANDY LOAM TILL
63-72" GROUNDWATER

OBSERVED BY: SHERRY MCGANN, SANITARIAN & JEFF POLHEMUS, CHIEF SANITARIAN
3/8/2016

TP-4
TOTAL DEPTH - 80"
LEDGE - NONE
MOTTLES - NONE
WATER - NONE
0-57" DISTURBED MIXED GRAVEL FILL / ASPHALT
57-80" GREY/BR. LOAMY FILL
*UNSUITABLE

TP-5
TOTAL DEPTH - 74"
LEDGE - NONE
MOTTLES - NONE
WATER - NONE
0-23" DISTURBED MIXED GRAVEL FILL
23-74" GREY/TN LOAMY TILL
*UNSUITABLE

TP-6
TOTAL DEPTH - 87"
LEDGE - NONE
MOTTLES - 57"
WATER - NONE
0-44" FILL
44-50" ORIGINAL TOPSOIL
50-57" FINE SANDY LOAM
57-87" MOTTLED GREY LOAMY TILL
*UNSUITABLE

TP-7
TOTAL DEPTH - 75"
LEDGE - NONE
MOTTLES - 56"
WATER - NONE*
0-36" FILL
36-44" BURIED TOPSOIL
44-56" OB SANDY LOAM
56-75" MOTTLED GREY/BR LOAMY TILL

TP-8
TOTAL DEPTH - 80"
LEDGE - NONE
MOTTLES - 61"
WATER - NONE*
0-23" FILL
23-38" ORIGINAL TOPSOIL
38-61" OB FINE SANDY LOAM
61-80" MOTTLED GREY SANDY LOAM TILL

PERC. TEST A

RECORDED BY
SHERRY MCGANN, SANITARIAN
ON 3/9/2016
DEPTH: 33"

TIME	READING
	PRESOAK
11:40	1.75"
11:46	3.75"
11:52	5.75"
11:58	7.5"
12:04	8.75"
12:10	10.0"
12:16	10.75"
12:22	11.25"
12:28	12.0"

PERC. RATE= 8 MIN./IN.

SELECT FILL

"SELECT FILL MATERIAL" PLACED WITHIN AND ADJACENT TO PROPOSED LEACHING AREAS SHALL BE COMPRISED OF CLEAN SAND AND GRAVE, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY A PROFESSIONAL ENGINEER FOR USE WITHIN THE LEACHING AREA:

1. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 3".
2. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE (THIS IS THE GRAVEL PORTION OF THE SAMPLE)
3. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN RE-WEIGHED AND THE SIEVE ANALYSIS STARTED.
4. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

SIEVE SIZE	PERCENT PASSING
#4	100
#10	70-100
#40	10-50 (SEE NOTE)
#100	0-20
#200	0-5

NOTE: PERCENT PASSING THE #40 SIEVE CAN BE INCREASED NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.

MAP REFERENCES

1. (A PLAN) PREPARED FOR BARBARA B. GOODALE 1021 STORRS ROAD CONN ROUTE 195 MANSFIELD, CONN SCALE 1"=20' AUGUST 23, 1982 BY DAVID S. MARAICHI
2. CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF MANSFIELD WILLIMANTIC-STORRS ROAD FROM THE FIRST BAPTIST CHURCH NORTHERLY ABOUT 9,300 FEET ROUTE NO. 195 SCALE 1"=40' SHEET 1 OF 3 JUNE 30, 1933

No.	DATE	REVISION
2	9/29/2016	MISC. REVISIONS
1	8/31/2016	MISC. REVISIONS

CLA Engineers, Inc.
CIVIL • STRUCTURAL • SURVEYING
317 Main Street Norwich, CT 06360
(860) 886-1966 Fax (860) 886-9165

MATTHEW BENZE

SPRING HILL CAFE

1029 STORRS ROAD, MANSFIELD, CT

SITE PLAN

Project No. CLA-5708
Proj. Engineer B.R.L.
Date 7/19/2016
Sheet No. 1

Spring Hill Cafe L.L.C.
1029 Storrs Road
Storrs/Mansfield, CT 06268

Spring Hill Cafe
Business Summary

www.springhillcafe.net

Maryellen (Elle) Randazzo and Matt Benzie
Owner/Manager
Elle@springhillcafe.net

Business Summary:

Spring Hill Cafe, is a local start-up cafe, bakery, deli, and coffee shop all in one. Located less than one mile off the University of Connecticut main campus in Storrs, CT, Spring Hill Cafe will serve a diverse community of 25,000 including, students, commuters, and local area residents. Highlighting a breakfast and lunch menu, Spring Hill Cafe will feature breakfast and lunch choices, coffee and specialty drinks, as well as include fresh baked goods and desserts. The Cafe will have a small town local feel and be a welcoming comfortable place for people to sit down for breakfast or lunch, or grab takeout on their way to or from work based on the convenient location.

Business Location Summary:

The cafe would be located at 1029 Storrs Road, a commercial property owned by Mansfield Resident Michael McDonald. Spring Hill Cafe would be leasing and occupying the middle retail space (one of three total spaces). The other two spaces are currently occupied by Stix and Stones Landscape and Design and Red Bird Real Estate. The Cafe's space was previously occupied by a consignment shop for many years. The total retail space for the cafe will be distributed in the following way: approximately 1100 square feet total, 750 square feet of space to include in house dining/seating and counter/cooler display area, 200 square feet dedicated to the kitchen and preparation area, and the remaining 150 square feet for separate office, storage, and accessible rest rooms. The cafe would use counter service for ordering for both in house and take out dining. The only outside changes to the building/ structure would be a repair to the current septic system, repaving and striping of the currently paved areas indicating designated parking, and new signage for the cafe. Eastern Highlands Health Department has already approved the initial B100A application for the cafe along with the repair requirements for the septic system.

List of Products and Services:

Drinks
Specialty organic coffee drinks - brewed, hot and iced, latte, espresso, cappuccino, flavored and seasonal blends

Smoothies - fruit and protein options, flavors vary

Other - bottled soft drinks, water, hot chocolate, hot and iced teas, chai teas, bottled milk, bottled juice

Breakfast - (available all day)
Breakfast sandwiches - bagel and wrap/burrito sandwiches, different varieties/options

Toasted bagels/english muffins - cream cheese, butter, flavored cream cheese, honey (plain, sesame, whole wheat, cinnamon raisin, everything, etc)

Quiche - different varieties/options

Belgium Waffles - fruit and other toppings

French Toast - Fruit and other toppings

Other - oatmeal, yogurt, granola, fruit toppings

Fresh Fruit selections

Lunch
Sandwiches - 10 to 12 specialty options, sandwich of the month, panini style, kids menu options, bread selections including Gluten Free choices,

Soup - soup of the day, cup or bowl

Chili - cup or bowl

Salads - Spring Hill Salad, specialty salads - dressing choice options

Grinders - small and large size, boars head meat, sandwich toppings, etc.

Stuffed breads/stromboli breads

Casseroles/Hot Dish Specials

Deli Platter Special Orders - 48 hour notice for large orders

Baked Goods
Breakfast - Muffins, breads, pastry, etc.

Other - Cupcakes (some seasonal or specialty), cookies, brownies, bar cookies/ desserts, breads, etc.

Baked good special orders - 48 hour notice for large orders

MAP CHECKLIST

FOR USE WITH SITE PLAN OR SPECIAL PERMIT APPLICATIONS

(To be submitted by applicant with other application materials)

PZC File #_____

Date_____

Name of Development 1029 Storrs Rd, Mansfield, CT 06268

Applicant Maryellen Randazzo - Spring Hill Cafe LLC

This checklist is designed to assist applicants as well as the PZC and staff. It is not intended as a substitute for, nor does it contain all of, the information and requirements in the Zoning Regulations and other applicable Town Ordinances and requirements. It is important to note that the Zoning Regulations allow the PZC to waive certain site plan requirements for minor applications where the information is not needed to determine compliance with the Regulations. It is recommended that the Mansfield Director of Planning be contacted if an applicant intends to seek a waiver of certain site plan requirements or if any questions arise. **Any requested waivers must be identified on this checklist.**

Unless waived by the Planning & Zoning Commission, submitted site plans shall include the following information (for more complete and specific descriptions of site plan requirements, see Article V, Section A.3.d of the Zoning Regulations):

	Included	Not Included	Waiver Requested* (see p. 3)
1. Title block: Applicant and owner's name, scale, date & all revision dates	✓		
2. Original signature/seal of surveyor, landscape architect and/or engineer responsible. Unless waived, survey to be to A-2 standards	✓ (one large, 15 reduced)		
3. Location map at 1"=1,000' scale (see Art. V. Sec. A.3.d.4 for more details)		✓	
4. Property lines, sq. footage, setback lines, N. arrow, zone(s)	✓ (except for Sq. ft., Zones, Set Back lines)		
5. Edges of adjacent street, utility poles & underground lines, stone walls, fences, roadside features	✓		
6. Names/addresses of abutting property owners, including those across street (for Special Permit property owners, within 500 ft. of site)	✓		
✱ 7. Existing & proposed buildings, structures, signs, floor plans, buildings on adjacent land that may be affected	✓		
✱ 8. Existing & proposed contours, quantity of material to be added or removed (wetlands)	✓		

(con't.)

	Included	Not Included	Waiver Requested* (see p. 3)
9. Watercourses, wetlands, flood hazard areas, aquifers	✓		
10. Exposed ledge, areas shallow to bedrock	(N/A)	✓	
11A. Waste disposal, water supply facilities	✓		
11B. Test pit & percolation test locations & findings (include test dates)	✓		
12A. Existing & proposed drainage facilities, roadways, bridges, pedestrian ways, utilities (including construction details)		✓	
12B. Existing & proposed easements, rights-to-drain		✓	
12C. Proposed sediment & erosion controls	✓		
13A. Existing & proposed offstreet parking & loading areas, fire access lanes	✓		
13B. Outside storage & refuse areas, fuel & chemical storage tanks	✓		
14. Existing & proposed fencing, walls, landscaping (including plant size & type, historic features)	✓		
15. Existing & proposed outdoor illumination (including method & intensity of lighting)		✓	
16. Existing & proposed outdoor recreation features, with construction details for any recreation improvements	(N/A)		
17. Other information (see Art. V, Sections A.3.g, B.3.g)	(N/A)		

Note: For non-exempt applications subject to Sand and Gravel regulations (Art. X, Sec. H), additional special application provisions must be met.

Maryellen Randazzo
(PRINT)Name of individual completing this form

Signature

10/6/16
Date

(con't.)

Explanation of Waiver Requests

Please identify by number the information item(s) for which a waiver has been requested and explain why the information is not necessary to review the proposed development with respect to applicable approval criteria. (If questions arise regarding waiver requests, please consult with the Director of Planning at 429-3330 or the Zoning Agent at 429-3341.)

#3 - See attached print out from Main Street Maps

Outside of the repair to the Septic System, there are no other physical changes to the current site and Commercial building.

We, Allan Maines and Patricia Maines, are willing to sell a portion of our property to Michael McDonald for the proposed septic repair needed on his property at 1029 Storrs Road, Mansfield, CT.

Dated September 6, 2016

Allan Maines

Allan Maines

860-429-5050

Patricia H. Maines

Patricia Maines

TOWN OF MANSFIELD

DEPARTMENT OF PLANNING AND DEVELOPMENT

Date: November 10, 2016

To: Planning and Zoning Commission

From: Linda M. Painter, AICP, Director

Subject: Mountain View Acres
522 Browns Road (SWC Browns Road/Coventry Road)
Proposed 9-Lot Subdivision (PZC File 1343)

PROJECT OVERVIEW

Willard J. Stearns and Sons, Inc. are proposing to subdivide a36.647 acre parcel into 9 lots. The site is currently developed with a single-family house addressed at 522 Browns Road. The existing house will remain (Lot 8 of the proposed subdivision) and another house lot will be created along Browns Road (Lot 9). Two common driveways are proposed along Coventry Road to access Lots 1 through 7. Lot 1 is located on the west side of the wetland system that runs northwest/southeast through the site and will require a wetland crossing.

In addition to the 9 house lots, the applicant is also proposing to dedicate 2.456 acres at the corner of Browns Road and Coventry Road to the Town for a pocket park overlooking Mountain Dairy. An additional 13.049 acres would be preserved through conservation easements.

COMPLIANCE WITH SUBDIVISION REGULATIONS

Staff has reviewed the proposed subdivision for conformance with the Mansfield Subdivision Regulations and offers the following comments in addition to those provided by the Assistant Town Engineer, Fire Marshal, Open Space Preservation Committee and Conservation Commission. These comments are based on the plan set dated 12/15/15 as revised through 10/13/16. This plan set supersedes the original plans submitted with the application and includes changes made based on preliminary staff comments provided in October.

SECTION 5 ▪ SUBDIVISION DESIGN OBJECTIVES/DESIGN PROCESS

As the proposed subdivision includes more than 4 lots, the applicant were required to complete the two-phase subdivision design process outlined in Section 5 of the regulations. Comments prepared for the Commission and applicant during the subdivision design process are attached to this memo for reference. It should be noted that after consulting with the Town Attorney, staff does not believe the

Commission has the authority to make the developer improve Coventry Road (which is currently gravel) as the proposed subdivision is consistent with RAR-90 zoning. Many of the comments and recommendations made during the preliminary review process have been addressed in the final subdivision design. The most notable exception is the proposed layout for Lot 1, which continues to include a wetland crossing.

SECTION 6 ▪ FINAL PLANS

- General Comments.
  - The symbol used to delineate the 150 foot regulated area appears to be the same as the BAE/DAE boundary even though the legend indicates a different line weight.
  - The final plans only need to indicate the DAE and BAE boundaries; the buildable area envelopes can be removed for clarity as they were reviewed as part of this process and a table is provided indicating that each lot meets the minimum buildable area requirements.
- Final plans need to be signed and sealed by a Landscape Architect licensed in Connecticut. (6.3c)

The following items should be submitted at the time final mylars are provided if the Commission approves the application:

- Engineer's estimate of cost of construction for public improvements (6.10a.1)
- Unexecuted copies of warranty deeds in accordance with Section 15 (6.10a.2)
- Statement from utility company needed approving proposed design of utilities/connections (6.10b).

SECTION 7 ▪ ADDITIONAL SUBDIVISION CRITERIA

- Solar Access/Energy Efficient Design (7.2). The current lot and driveway configuration was derived based on the location of wetlands and other resources identified during the preliminary design phase; the recommendations that curbcuts be limited along Coventry Road and that an undisturbed area be retained along Coventry Road as a buffer; and the recommendation that the common driveways be designed to include a neighborhood feel, such as the inclusion of a tear-drop shaped loop. Due to these factors, it was not feasible to meet all of the solar access/energy efficient criteria. However, there are opportunities during individual site and building design to make adjustments to improve energy efficiency and solar access. As such, staff recommends rephrasing Note 16 to read as follows: "Solar orientation, solar access and other energy efficient measures shall be considered during the design and development of each lot."

- Lot Size (7.4a). While the RAR-90 zone requires a minimum lot size of 90,000 square feet, the Commission can reduce lot sizes to 40,000 square feet or the minimum necessary to address health and safety requirements in order to implement cluster design. While many of the lots exceed 40,000 square feet, actual buildable area ranges from 40,000 to 44,000 square feet with the exception of Lot 6, which has over 56,000 square feet of buildable area.

- Lot lines (Section 7.4c). Lot lines are supposed to be at right angles to street lines or radial to curved lines unless a variation from this regulation will provide a better lot or street plan or will help protect natural and manmade features and scenic views and vistas. Due to the common driveway design for Lots 4, 5, 6 and 7 and the location of conservation easements, the northwestern boundary of Lot 6 is not perpendicular to Coventry Road.

- Potential Reductions or Waivers of Lot Frontage and/or Building Setback Lines (Section 7.6). The proposed layout plan will require frontage waivers for Lots 1, 4, 5 and 7. It also appears that setback reductions for several lots.

  In accordance with Section 6.10a.6, the applicant submitted a Yield Plan dated 5-22-2015 (as revised to 12-15-2015) to demonstrate that 9 lots could be developed on the site without any frontage or setback reductions/waivers. As with the proposed plan, Lot 1 on the Yield Plan requires a wetland crossing. If the wetland crossing is not approved by the Inland Wetlands Agency, the maximum yield would be reduced to 8 lots.

  With regard to the frontage waiver for Lot 1, see discussion under common driveways, below. In addition to the determination that the proposed common driveway meets the criteria established in the Subdivision Regulations, the Commission must also determine that a reduction or waiver will help protect significant natural and manmade features, including aquifer areas, agricultural lands, hilltops or ridges, expanses of valley floors and features along existing roadways and/or scenic views and vistas.

  Many of the proposed DAEs encompass the required buildable area; the applicant should consider reducing BAEs and DAEs where possible to minimize potential for future clearing and development within the vernal pool watershed as identified in the Inland Wetland Agent's report to the IWA. Additionally, the DAE for the existing house on Browns Road should be reduced in area so as not to wrap around the rear of the adjacent house except as needed for the septic reserve area.

- Stone Walls/Historic Features (7.7). The final plans indicate where stone walls will be impacted by driveway and drainage improvements and how stones from those walls will be used. Note 18

prohibits the removal or alteration of stone walls other than as specified on the plans to ensure that future owners are aware that these features are protected.

- Trees (7.8). The revised plans identify significant trees to be preserved; however, there are some trees that are not identified with the preservation symbol nor are they marked through with an "X" indicating removal, including trees within the conservation easements and within rights-of-way. The applicant should clarify that those trees will also be retained unless marked with an "X" (which is not listed as a symbol in the legend). Additionally, a detail needs to be provided regarding tree protection during construction.

- Driveway Slope, Sightlines and Drainage (7.9). The applicant has addressed the Assistant Town Engineer's comments on sightline issues.

- Common Driveways (7.10). The applicant is proposing two common driveways; one which will serve Lots 1, 2 and 3 and the second which will serve Lots 4, 5, 6, and 7. Common driveways are not permitted by right, but may be authorized by the Commission where the driveway meets the design objectives of Section 5.1 and where:

  - Wetlands, steep slopes, or other physical constraints would require extensive grading;
  - The common driveway will enhance vehicular and/or pedestrian safety;
  - The common driveway will protect and preserve natural and manmade features, scenic views and vistas, interior forests and/or existing or potential conservation areas identified in the POCD; or
  - The common driveway will promote cluster development and other design objectives of these regulations.

  Additionally, a ¾ vote of the Commission is required to increase the number of lots served by a common driveway to 4 or 5, and such increase is only authorized if the Commission finds that the doing so would significantly:

  - Reduce impacts on wetlands, steeply sloped areas, significant vegetation or other natural resource features; or
  - Enhance vehicular and/or pedestrian safety; or
  - Protect and preserve natural and man-made features, scenic views and vistas, interior forests and/or other existing or potential conservation areas identified in the POCD; or promote cluster development and other design objectives of these regulations.

As described more fully in the comments from the Open Space Preservation Committee and the Conservation Commission, the driveway proposed to serve Lots 4, 5, 6 and 7 meets the threshold tests described above. The use of this driveway minimizes curbcuts, clusters houses around a natural space and allows for the rural character of Coventry Road to be retained. While the other proposed common driveway reduces the number of curbcuts needed to serve Lots 1, 2 and 3, the wetland crossing proposed to access the buildable portion of Lot 1 runs contrary to the above criteria and the following design objective identified in Section 5.1c:

> *"The protection and enhancement of natural and manmade features, including wetlands, watercourses, aquifer areas, agricultural lands, hilltops or ridges, historic sites and features, expanses of valley floors, interior forests, significant trees and scenic views and vistas on or adjacent to the subdivision site. Wherever appropriate, site features shall be protected through a clustering of streets and house sites and the identification of significant open space areas including agricultural lands, interior forests and other land without physical limitations."*

The comments from the OSPC recommend clustering the three houses on the east side of the wetland as an alternative to the wetland crossing. Additionally, the PZC determined on September 8, 2015 that the prohibition on including easement areas within the minimum required buildable area as described in Article 8, Section 6.a of the Zoning Regulations does not include common driveway easements when the common driveway is facilitating a cluster design or being implemented as a way to retain rural character along the main road by limiting curb-cuts.

If one or both common driveways are approved, a driveway easement that establishes maintenance and liability responsibilities shall be depicted on the plans, filed on the land records and incorporated into the deeds of the subject lots.

- Driveway Length Standards (7.11). This section requires a pull-off area adjacent to the driveway at average intervals of every 300 feet or as deemed necessary by the Commission. Accordingly a pull-off area has been identified on the driveway serving Lots 1, 2 and 3 beyond the proposed individual driveway access points for the houses on Lots 2 and 3.

SECTION 9 ▪ SIDEWALKS/BIKEWAYS/TRAILS

This section requires sidewalks, bikeways, trails and/or other improvements to encourage safe pedestrian and bicycle use in all subdivisions within or proximate to:

- Designated Planned Development areas;
- Schools, playgrounds, parks and other public facilities; or

- Existing or planned walkway, bicycle or trail routes.

While the proposed subdivision is not proximate to any of the above, it does include a proposed open space dedication for a pocket park. As such, the Commission would need to waive the requirement for pedestrian and bicycle improvements by a ¾ vote, unless the proposed open space dedication is changed to a conservation easement.

SECTION 10 ▪ DRAINAGE

- See comments from Assistant Town Engineer.
- The revised plans include rain gardens as part of the stormwater management system. The plans need to be updated to include specific maintenance requirements and instructions for rain garden maintenance. The applicant should also identify how they plan on providing guidance to buyers regarding maintenance responsibilities. These rain gardens also need to be reviewed by EHHD to ensure that they do not impact the septic systems.
- See comments from Conservation Commission regarding assurance that foundation drains have enough slope to function properly, especially in wet periods, given the characteristics of the soil. The applicant has indicated that this concern has been addressed; the Assistant Town Engineer will review and verify prior to the meeting.

SECTION 11 ▪ UTILITIES

- Confirmation from the utility company is needed that the proposed design is acceptable (11.1).
- Notes should be added specifying that all utilities will be provided underground (11.2).
- The proposed septic system locations have been reviewed by the Eastern Highlands Health District; see attached report for specific comments (11.4)

SECTION 13 ▪ OPEN SPACE

- Dedication (13.1). The proposed plans indicate that a total of 15.505 acres will be preserved as open space, including 2.456 acres that will be dedicated to the Town as a pocket park. The remainder will be preserved through conservation easements. In total, 42.31% of the site will be preserved, which exceeds the 40% that the Commission can require as part of a cluster subdivision.

- Referrals (13.2). See attached comments from the Open Space Preservation Committee and Conservation Commission. The OSPC provides recommendations regarding: changes to the

northernmost common driveway serving lots 1, 2 and 3; a suggestion that the width of the conservation easement along Coventry Road be increased if possible; the need for conservation easements to be placed on individual lot deeds; changes to the Town's standard conservation easement to allow for management of invasive species; installation of a fence between the new park and Lot 8 to clearly mark the boundary between public and private property; and relocation of the existing shed prior to acceptance of the park.

After an additional site visit to review a suggested fence location and adjustment to the open space dedication boundary proposed in response to the OSPC recommendation, staff believes that a conservation easement may be a more appropriate option for the corner than a dedicated area. Jennifer Kaufman is reviewing this option with the OSPC on November 15th and will be able to report on their recommendation at the hearing.

- Character of Land to be Dedicated (13.3). The Commission has the ability to require that the character of the land to be dedicated is consistent with the character of the site overall. Based on the percentage of upland areas on the site, the Commission can require that at least 10.54 acres of the proposed open space areas to be preserved contain uplands. The proposed dedications include 10.749 acres of uplands, thereby exceeding the minimum requirement.
- Site Improvements (13.8). The Commission has the right to require a subdivider to make site improvements; the degree to which such improvements shall be required shall be directly associated with the proposed lots. The only site improvement recommended is the installation of a fence to delineate the boundary of the open space dedicated to the Town from the existing house at 522 Browns Road. The location and details for the proposed fence should be included in final plans for approval by the Chair if required.
- Legal Requirements (13.10). Conservation easements and warranty deeds for the open space dedications shall be in a form approved by the Town Attorney and shall be accompanied by Certificates of Title and releases or subordinations of liens an encumbrances where appropriate.

SECTION 14 ▪ COMPLETION OF IMPROVEMENTS/BONDING/AS-BUILT PLANS

- Completion of Improvements (14.1). Required subdivision improvements (including common driveways) are the responsibility of the subdivider and must be completed or bonded pursuant to Sections 14.2-14.7 prior to filing of subdivision plans on the land records.
- As-Built Plans (14.8). As-built plans of public improvements and utilities shall be filed with the Department of Public Works.

SUMMARY/RECOMMENDATION

Public hearings for both the Inland Wetlands Agency and Planning and Zoning Commission are scheduled for November 16, 2016. Items addressed in this report should be addressed by the applicant as part of the public hearing.

NOTES

- The analysis and recommendations contained in this report are based on the following information submitted by the applicant:
  - Subdivision Application submitted August 29, 2016 and received by the PZC on September 6, 2016, including:
    - 7-Sheet Subdivision Plan prepared by Gardner and Peterson Associates, LLC dated 12-15-15 and revised through 1-27-16
    - 2-sheet Yield Plan prepared by Gardner and Peterson Associates, LLC dated 5-22-15 and revised through 1-27-16
    - Site Assessment Map and Offsite and Neighborhood Influences Inventory prepared by John Alexopoulos dated 3-21-15
- The following correspondence has been received:
  - September 14, 2016 memo from Troy Quick with Windham Water Works
  - September 15, 2016 memo from Fran Raiola, Deputy Chief/Fire Marshal
  - September 20, 2016 memo from the Open Space Preservation Committee
  - September 21, 2016 Conservation Commission Minutes
  - October 6, 2016 memo from Sherry McGann, Eastern Highlands Health District
  - October 6, 2016 B100A Plan Approval from from Sherry McGann, Eastern Highlands Health District
  - October 12, 2016 memo from Derek Dilaj, Assistant Town Engineer
  - November 7, 2016 letter from Mark Peterson, P.E. of Gardner and Peterson Associates
- Neighborhood Notification Forms are required to be sent to property owners within 500 feet of the subject property at least 10 days in advance of the scheduled public hearing. According to the Certified Mail receipts provided by the applicant, notices were mailed on August 25, 2016.
- The Public Hearing on this item will be opened on November 16, 2016. The hearing must be closed by December 21, 2016 unless a written extension is granted by the applicants.
- Before rendering a decision, the Planning and Zoning Commission must consider other referral reports including the Inland Wetlands Agency and public hearing testimony. A decision must be made within 65 days of the close of the Public Hearing unless the applicants grant a written extension.

GARDNER & PETERSON ASSOCIATES, LLC

PROFESSIONAL ENGINEERS • LAND SURVEYORS

178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT 06084

KENNETH R. PETERSON, L.S.
ERIC R. PETERSON, P.E., L.S.
MARK A. PETERSON, P.E.
BARRY D. CLARKE, L.S.

TELEPHONE (860) 871-0808
FAX (860) 875-2086
info@GardnerPeterson.com
www.GardnerPeterson.com

November 7, 2016

Ms. Linda M. Painter, AICP
Director of Planning and Development
Town of Mansfield
4 South Eagleville Road
Mansfield, CT 06268

Re: Mountain View Acres

Hi Linda,

I have reviewed your comments dated,October 24, 2016,and offer the following responses:

Section 6 – Final Plans

- The legend has been updated and added to all Site Development Sheets.
- Various line weights have been revised for clarity.
- I have contacted the Landscape Architect to sign and seal plans.
- Topsoil shall be stripped, stockpiled and reused on site along with cellar hole excavations. Fill brought to the site will be clean fill used for driveway base, construction of leachfields and backfill around foundations as necessary. The estimated fill required is as follows:

Lots 1,2,3	180 c.y. for Common Driveway
Lot 1	180 c.y. for leachfield and 450 c.y. for driveway/house.
Lot 2	110 c.y. for leachfield and 150 c.y. for driveway/house.
Lot 3	180 c.y. for leachfield and 150 c.y. for driveway/house.
Lots 4,5,6,7	500 c.y. for Common Driveway
Lot 4	180 c.y. for leachfield and 200 c.y. for driveway/house.
Lot 5	180 c.y. for leachfield and 200 c.y. for driveway/house.
Lot 6	180 c.y. for leachfield and 200 c.y. for driveway/house.
Lot 7	180 c.y. for leachfield and 200 c.y. for driveway/house.
Lot 8	110 c.y. for leachfield.
Lot 9	110 c.y. for leachfield and 150 c.y. for driveway/house.

- Plans have been updated to depict existing improvements within 150' of the subdivision.
- There are no public drinking water wells within 500' of the subdivision.
- Significant trees to be preserved have been shaded on the plans and added to the legend.
- BAE/DAE boundaries have been labeled and added to legend.

- Construction schedule has been updated, Responsible Personnel has been provided along with a narrative on Sheet 6.
- Construction schedule has been updated, Responsible Personnel has been provided along with a narrative on Sheet 6.
- A note has been added to the plan to address solar access.
- The utility company has been contacted but they will not review the plans until Town approvals have been granted.

Section 7 – Additional Subdivision Criteria

- To be discussed at the meeting.
- No response necessary.
- No response necessary.
- The frontages and a list of setback waivers have been provided on Sheet 2.
- A note has been added to the plans about the stonewalls.
- Note 12 has been clarified as requested.
- See response letter to Derek Dilaj.
- The Common Driveways will be discussed with the commission.
- The pull off has been moved to the north to save a significant tree.

Section 10 – Drainage

- See response to Assistance Town Engineer
- The foundation drains have been modified as necessary. All foundation drains discharge to grade.

Section 11- Utilities

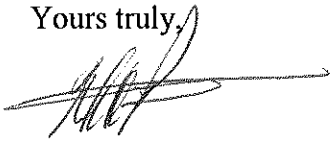
- I have contacted the utility company and they will not review the plans until the Town has approved the project.
- A note has been added to the plans stating utilities will be underground.
- No comment necessary.

Section 13 – Open Space

- The comments pertaining to the common driveway and fencing adjacent to lot 8 will be discussed at the meeting.

If you have any additional comments please contact me.

Yours truly,



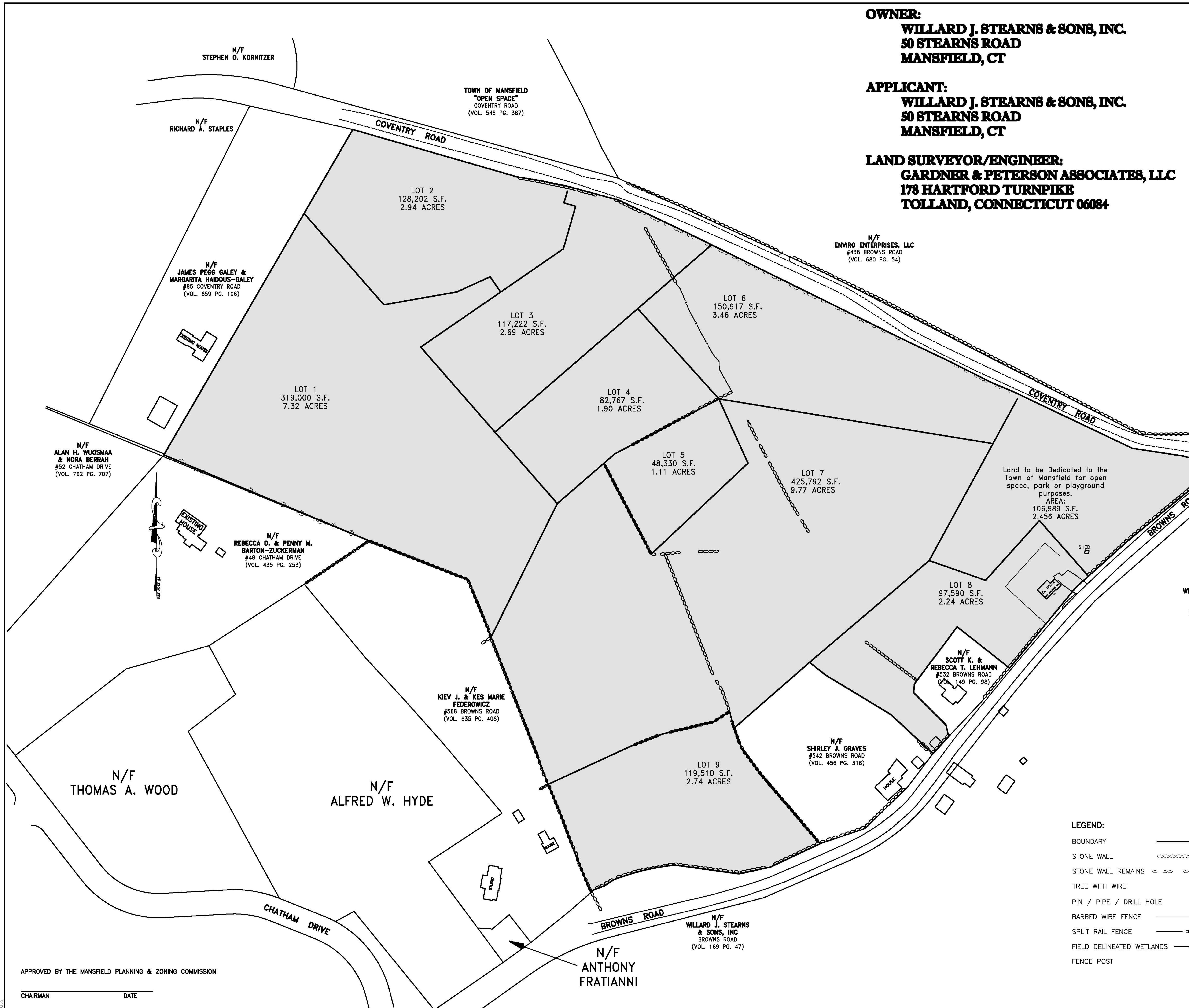
Mark A. Peterson P.E.

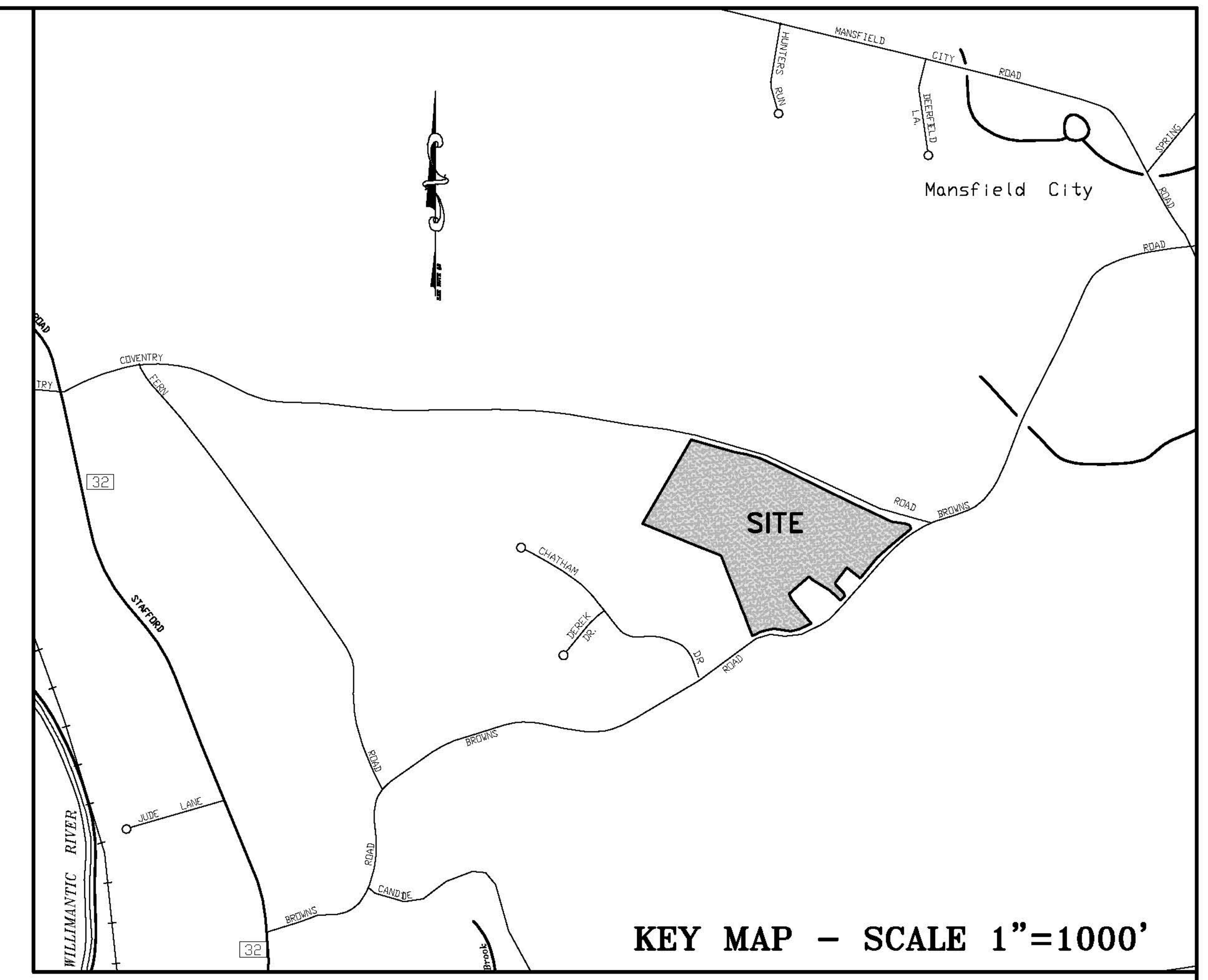
Attachment

OWNER:
WILLARD J. STEARNS & SONS, INC.
50 STEARNS ROAD
MANSFIELD, CT

APPLICANT:
WILLARD J. STEARNS & SONS, INC.
50 STEARNS ROAD
MANSFIELD, CT

LAND SURVEYOR/ENGINEER:
GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT 06084





NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20. THIS IS A SUBDIVISION PLAN, AND IS A FIRST SURVEY OF THE PERIMETER BOUNDARY AND AN ORIGINAL SURVEY OF THE PROPOSED LOT LINES CONFORMING TO HORIZONTAL ACCURACY CLASS A-2.
2. BEARINGS DEPICTED ON THIS PLAN ARE BASED UPON NAD 83/87 (CONNECTICUT STATE PLANE COORDINATES) BASED ON COORDINATES FROM MAP REFERENCE 3A.
3. MAP REFERENCES:
   - A. "PROPERTY SURVEY CERTAIN PROPERTY OF WILLARD J. STEARNS & SONS, INC IDENTIFIED AS FARM 1, FARM 2 AND FARM 3 BROWNS RD., STEARNS RD., MANSFIELD CITY RD., PLEASANT VALLEY RD. MANSFIELD, CONNECTICUT" DATED 9-11-2014 SCALE: 1"=200' BY: F.A. HESKETH & ASSOCIATES, INC.
   - B. "BOUNDARY SURVEY FOR SUBDIVISION ENTITLED CHATHAM HILL BROWNS ROAD MANSFIELD, CONNECTICUT" OWNER & SUBDIVIDER MICHAEL DILAJ TRUSTEE SCALE: 1"=100' DATED1-1-98 REV. 6-15-98 BY: DATUM ENG.
   - C. "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR KIEV FEDEROWICZ PROPOSED HOUSE ADDITION & PROPOSED BARN/STUDIO 568 BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=30' DATED 4-9-13 REV. THROUGH 1-28-15 BY: ROB HELLSTROM LAND SURVEYING LLC
   - D. "CORRECTIONAL MAP LAND OF DANIEL B AND ANN L. COSTELLO AND PATRICIA E. AND JAMES V. LETA SITUATED ON THE SOUTHERLY LINE OF COVENTRY ROAD IN THE TOWN OF MANSFIELD, THE COUNTY OF TOLLAND AND THE STATE OF CONNECTICUT" SCALE 1"=40' DATED 8-14-65 BY: JOHN R. GRIFFIN
   - E. "PROPERTY OF RUSSELL W. & PHYLLIS MARTIN COVENTRY ROAD, BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=100' DATED 2-7-88 BY: KARHU & PRONOVOST ASSOCIATES, INC.
   - F. "SUBDIVISION PLAN SMITH FARMS PREPARED FOR: REJA ACQUISITION CORP. COVENTRY ROAD MANSFIELD, CONNECTICUT" SCALE: 1"=100' DATED: FEB. 2003 REV. THROUGH 4-20-04 BY: MESSIER & ASSOCIATES, INC.
4. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING, OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES, LLC. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.
5. WETLANDS DEPICTED HEREON WERE FIELD DELINEATED BY SOIL SCIENTIST JOHN IANNI.
6. SITE AND ABUTTING PARCELS ARE IN RAR-90 ZONE.
7. PARCEL IS LOCATED IN FLOOD ZONE C, AREAS OF MINIMAL FLOODING, PER FIRM FLOOD INSURANCE RATE MAP TOWN OF MANSFIELD, CONNECTICUT TOLLAND COUNTY PANEL 15 OF 20 COMMUNITY-PANEL NUMBER 090128 0015C EFFECTIVE DATE: JANUARY 2, 1981.
8. PARCEL IS NOT LOCATED WITHIN AN AQUIFER AREA BASED ON "SURFACES AND GROUNDWATER RESOURCES" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
9. PARCEL IS NOT LOCATED WITHIN AN ARCHAEOLOGICAL AREA BASED ON "ARCHAEOLOGICAL ASSESSMENT" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
10. PARCEL IS NOT LOCATED IN AN AREA OF STATE AND FEDERAL LISTED SPECIES & SIGNIFICANT NATURAL COMMUNITIES BASED ON THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION NATURAL DIVERSITY DATA BASE AREA MAP FOR MANSFIELD, CT DATED JUNE 2016.
11. SPEED LIMIT ON BROWNS ROAD (COLLECTOR RD) IS 30 MPH AND 25 MPH ALONG COVENTRY ROAD (NEIGHBORHOOD ROAD).
12. THE PROPOSED TREELINES ARE CONCEPTUAL AND MAY BE MODIFIED BY THE DEVELOPER THOUGH CLEARING IS NOT ALLOWED OUTSIDE THE DEVELOPMENT AREA ENVELOPES. CLEARING LIMITS FOR FOOTING DRAIN DISCHARGES ARE NOT SHOWN AND SHALL BE KEPT TO A MINIMUM.
13. FOOTING DRAINS SHALL BE PROVIDED WITH A MINIMUM 0.5% SLOPE FROM THE FOUNDATION TO DAYLIGHT. LOT 6 WILL REQUIRE A SUMP PUMP.
14. THERE ARE NO PUBLIC DRINKING WATER WELLS WITHIN 500' OF THE SITE.
15. THERE ARE NO IMPROVEMENTS WITHIN 150' OF THE SITE ON THE NORTH SIDE OF COVENTRY ROAD OR ON THE EAST SIDE OF BROWNS ROAD. IMPROVEMENTS ON THE WEST SIDE OF BROWNS ROAD AND THE NORTH SIDE OF CHATHAM DRIVE ARE BASED ON AVAILABLE MAPPING.
16. THE PROPOSED HOUSE LOCATIONS ARE BASED UPON THE SUBDIVISION/CLUSTER LAYOUT. THE MAJORITY OF THE HOMES HAVE THE LONG AXIS OF THE HOUSE FACING SOUTH OR WEST. THE BUILDER IS ALSO ENCOURAGED TO PROVIDE ENERGY EFFICIENT MEASURES IN EACH HOME.
17. REDUCTION AND WAIVERS OF LOT FRONTAGE ARE REQUESTED. ADDITIONAL LOTS MAY NOT BE CREATED DUE TO THESE REDUCTIONS/WAIVERS.
18. STONEWALLS SHALL NOT BE REMOVED OR ALTERED UNLESS SPECIFIED ON THESE PLANS.
19. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.

LEGEND:

- BOUNDARY
- STONE WALL
- STONE WALL REMAINS
- TREE WITH WIRE
- PIN / PIPE / DRILL HOLE
- BARBED WIRE FENCE
- SPLIT RAIL FENCE
- FIELD DELINEATED WETLANDS (WL#200)
- FENCE POST

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

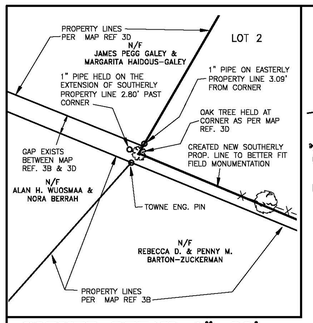
KENNETH R. PETERSON L.S. 10839 REGISTRATION NO.

REVISIONS
01-27-2016
10-13-2016 STAFF COMMENTS

SUBDIVISION PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=100'	12-15-2015	1 OF 7	10590S



CORNER DETAIL 1"=20'

BUILDABLE AREA:

LOT #1	44,000+S.F.
LOT #2	40,000+S.F.
LOT #3	40,800+S.F.
LOT #4	43,000+S.F.
LOT #5	40,100+S.F.
LOT #6	56,000+S.F.
LOT #7	43,000+S.F.
LOT #8	42,800+S.F. −2,000S.F.=40,800+S.F.
LOT #9	40,000+S.F.

BUILDING SETBACK REDUCTIONS:

LOT #1	N/A
LOT #2	5' to easterly S.Y.
LOT #3	20' to easterly S.Y., 15' to westerly S.Y.
LOT #4	10' to east & west S.Y., 40' to F.Y.
LOT #5	10' to east & west S.Y., 48' min to F.Y.
LOT #6	N/A
LOT #7	25' to north S.Y., 10' to west S.Y.
LOT #8	N/A
LOT #9	N/A

OPEN SPACE COMPUTATIONS:

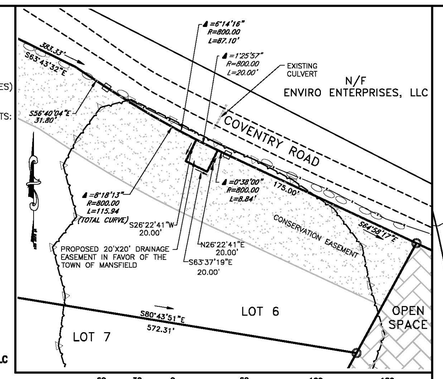
PARCEL AREA:	36.647 ACRES
AREA OF WETLANDS:	9.397 ACRES
AREA OF LEDGE OUTCROPS & SLOPES OVER 20%:	0.90 ACRES
UPLAND AREA	26.35 ACRES
UPLAND PERCENTAGE:	71.9%
OPEN SPACE REQUIRED FOR CLUSTER DEVELOPMENTS	UP TO 40% (14.659 ACRES)
UPLAND OPEN SPACE AREA REQUIRED:	10.54 ACRES

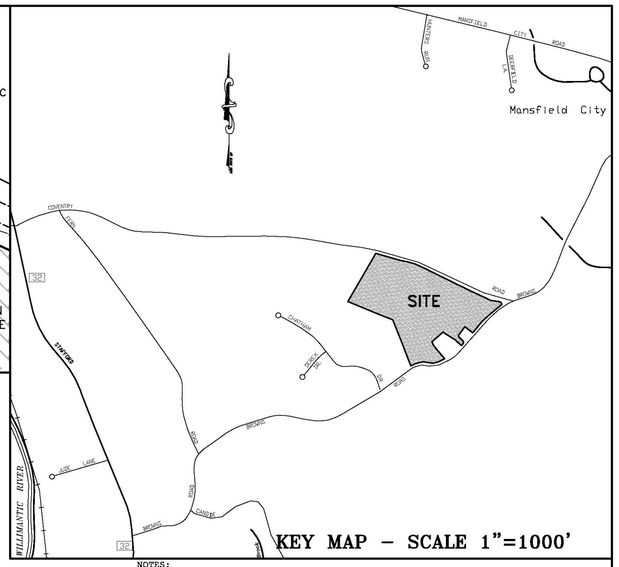
PROP. OPEN SPACE CONSISTS OF LAND DEDICATED TO TOWN OF MANSFIELD & CONSERVATION ESMTS:

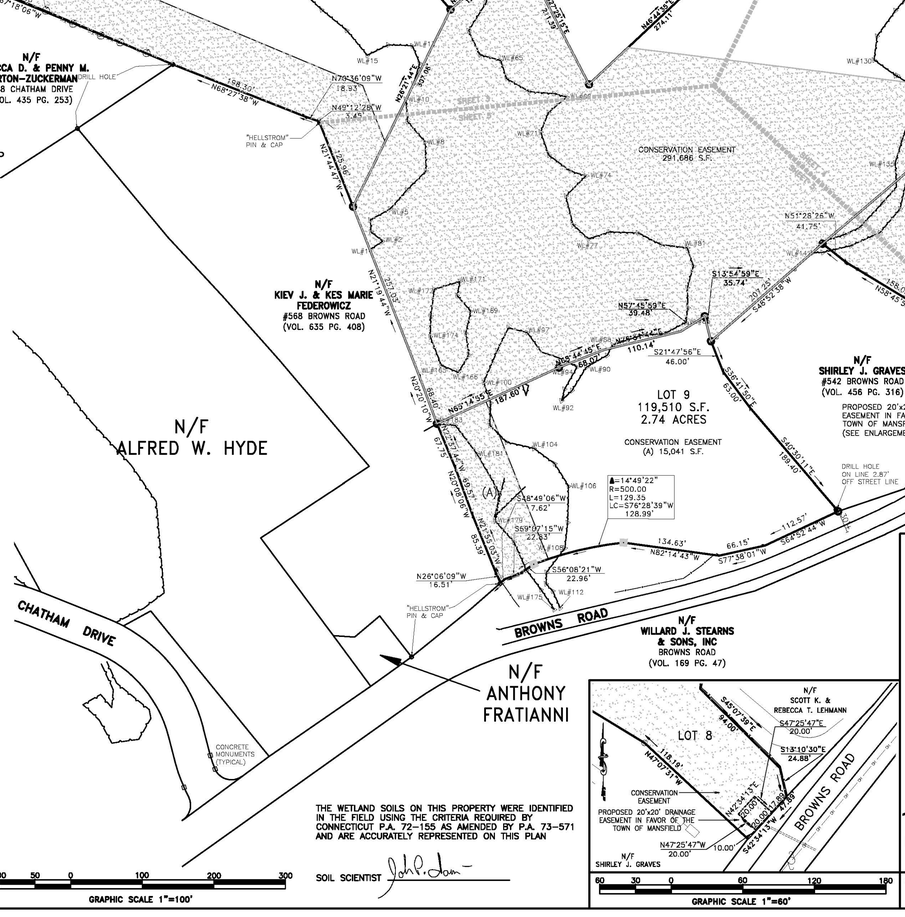
DEDICATED OPEN SPACE:	2.456 ACRES (6.70%)
CONSERVATION EASEMENT (CE):	13.049 ACRES (35.61%)
TOTAL PROVIDED:	15.505 ACRES (42.31)
UPLAND PROVIDED IN OPEN SPACE	1.881 ACRES
UPLAND PROVIDED IN CONSERVATION EASEMENTS	8.868 ACRES
THEREFORE:	10.749 AC. PROVIDED > 10.54 AC. REQUIRED
ZONE:	RAR-90

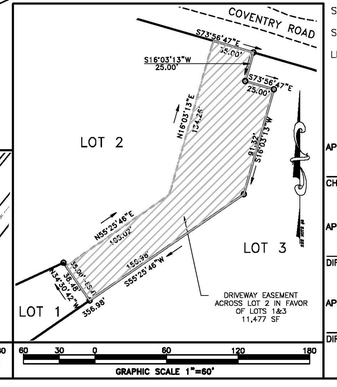
LOT FRONTAGE:

LOT #1	0 L.F.–waiver requried
LOT #2	460.16 L.F.
LOT #3	317.71 L.F.
LOT #4	0 L.F.–waiver requried
LOT #5	0 L.F.–waiver requred
LOT #6	706.07 L.F.
LOT #7	0 L.F.–waiver required
LOT #8	250.55 L.F.
LOT #9	496.11 L.F.









LEGEND:

- BOUNDARY
- STONE WALL
- STONE WALL REMAINS
- TREE WITH WIRE
- PIN / PIPE / DRILL HOLE
- BARBED WIRE FENCE
- SPLIT RAIL FENCE
- FIELD DELINEATED WETLANDS (WL#200)
- FENCE POST
- IRON PIN TO BE SET
- MONUMENT TO BE SET
- CONSERVATION EASEMENT
- CONSERVATION ESMT. AREA
- DRIVEWAY EASEMENT
- SLOPES OVER 20%
- SLOPES 15–20%
- LEDGE OUTCROP

NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20. THIS IS A SUBDIVISION PLAN, AND IS A FIRST SURVEY OF THE PERIMETER BOUNDARY AND AN ORIGINAL SURVEY OF THE PROPOSED LOT LINES CONFORMING TO HORIZONTAL ACCURACY CLASS A-2.
2. BEARINGS DEPICTED ON THIS PLAN ARE BASED UPON NAD 83/87 (CONNECTICUT STATE PLANE COORDINATES) BASED ON COORDINATES FROM MAP REFERENCE 3A.
3. MAP REFERENCES:
   A. "PROPERTY SURVEY CERTAIN PROPERTY OF WILLARD J. STEARNS & SONS, INC IDENTIFIED AS FARM 1, FARM 2 AND FARM 3 BROWNS RD., STEARNS RD., MANSFIELD CITY RD., PLEASANT VALLEY RD. MANSFIELD, CONNECTICUT" DATED 9-11-2014 SCALE: 1"=200' BY: F.A. HESKETH & ASSOCIATES, INC.
   B. "BOUNDARY SURVEY FOR SUBDIVISION ENTITLED CHATHAM HILL BROWNS ROAD MANSFIELD, CONNECTICUT" OWNER & SUBDIVIDER MICHAEL DILAJ TRUSTEE SCALE: 1"=100' DATED:1-1-98 REV. 6-15-98 BY: DATUM ENG.
   C. "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR KIEV FEDEROWICZ PROPOSED HOUSE ADDITION & PROPOSED BARN/STUDIO 568 BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=30' DATED 4-9-13 REV. THROUGH 1-28-15 BY: ROB HELLSTROM LAND SURVEYING LLC
   D. "CORRECTIONAL MAP LAND OF DANIEL B AND ANN L. COSTELLO AND PATRICIA E. AND JAMES V. LETA SITUATED ON THE SOUTHERLY LINE OF COVENTRY ROAD IN THE TOWN OF MANSFIELD, THE COUNTY OF TOLLAND AND THE STATE OF CONNECTICUT" SCALE 1"=40' DATED 8-14-65 BY: JOHN R. GRIFFIN
   E. "PROPERTY OF RUSSELL W. & PHYLLIS MARTIN COVENTRY ROAD, BROWNS ROAD MANSFIELD, CONNECTICUT" SCALE: 1"=100' DATED 2-7-88 BY: KARRU & PRONOVOST ASSOCIATES, INC.
   F. "SUBDIVISION PLAN SMITH FARMS PREPARED FOR: REJA ACQUISITION CORP. COVENTRY ROAD MANSFIELD, CONNECTICUT" SCALE: 1"=100' DATED: FEB. 2003 REV. THROUGH 4-20-04 BY: MESSIER & ASSOCIATES, INC.
4. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING, OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES, LLC. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.
5. WETLANDS DEPICTED HEREON WERE FIELD DELINEATED BY SOIL SCIENTIST JOHN IANNI.
6. SITE AND ABUTTING PARCELS ARE IN RAR-90 ZONE.
7. PARCEL IS LOCATED IN FLOOD ZONE C, AREAS OF MINIMAL FLOODING, PER FIRM FLOOD INSURANCE RATE MAP TOWN OF MANSFIELD, CONNECTICUT TOLLAND COUNTY PANEL 15 OF 20 COMMUNITY-PANEL NUMBER 090128 0015C EFFECTIVE DATE: JANUARY 2, 1981.
8. PARCEL IS NOT LOCATED WITHIN AN AQUIFER AREA BASED ON "SURFACES AND GROUNDWATER RESOURCES" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
9. PARCEL IS NOT LOCATED WITHIN AN ARCHAEOLOGICAL AREA BASED ON "ARCHAEOLOGICAL ASSESSMENT" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
10. PARCEL IS NOT LOCATED IN AN AREA OF STATE AND FEDERAL LISTED SPECIES & SIGNIFICANT NATURAL COMMUNITIES BASED ON THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION NATURAL DIVERSITY DATA BASE AREA MAP FOR MANSFIELD, CT DATED JUNE 2016.
11. SPEED LIMIT ON BROWNS ROAD (COLLECTOR RD) IS 30 MPH AND 25 MPH ALONG COVENTRY ROAD (NEIGHBORHOOD ROAD).
12. THE PROPOSED TREELINES ARE CONCEPTUAL AND MAY BE MODIFIED BY THE DEVELOPER THOUGH CLEARING IS NOT ALLOWED OUTSIDE THE DEVELOPMENT AREA ENVELOPES. CLEARING LIMITS FOR FOOTING DRAIN DISCHARGES S ARE NOT SHOWN AND SHALL BE KEPT TO A MINIMUM.
13. FOOTING DRAINS SHALL BE PROVIDED WITH A MINIMUM 0.5% SLOPE FROM THE FOUNDATION TO DAYLIGHT. LOT 6 WILL REQUIRE A SUMP PUMP.
14. THERE ARE NO PUBLIC DRINKING WATER WELLS WITHIN 500' OF THE SITE.
15. THERE ARE NO IMPROVEMENTS WITHIN 150' OF THE SITE ON THE NORTH SIDE OF COVENTRY ROAD OR ON THE EAST SIDE OF BROWNS ROAD. IMPROVEMENTS ON THE WEST SIDE OF BROWNS ROAD AND THE NORTH SIDE OF CHATHAM DRIVE ARE BASED ON AVAILABLE MAPPING.
16. THE PROPOSED HOUSE LOCATIONS ARE BASED UPON THE SUBDIVISION/CLUSTER LAYOUT. THE MAJORITY OF THE HOMES HAVE THE LONG AXIS OF THE HOUSE FACING SOUTH OR WEST. THE BUILDER IS ALSO ENCOURAGED TO PROVIDE ENERGY EFFICIENT MEASURES IN EACH HOME.
17. REDUCTION AND WAIVERS OF LOT FRONTAGE ARE REQUESTED. ADDITIONAL LOTS MAY NOT BE CREATED DUE TO THESE REDUCTIONS/WAIVERS.
18. STONEWALLS SHALL NOT BE REMOVED OR ALTERED UNLESS SPECIFIED ON THESE PLANS.
19. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND.

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

KENNETH R. PETERSON — L.S. 10839 REGISTRATION NO.

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST John P. Ianni

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN — DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR — DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR — DATE

REVISIONS
01-27-2016
10-13-2016 STAFF COMMENTS

BOUNDARY PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=100' OR AS SHOWN	12-15-2015	2 OF 7	10590S

10590-Brady-Stearns/10590A

LEGEND:
BOUNDARY
STONE WALL
STONE WALL REMAINS
TREE WITH WIRE
PIN / PIPE / DRILL HOLE
BARBED WIRE FENCE
SPLIT RAIL FENCE
FIELD DELINEATED WETLANDS
FENCE POST
IRON PIN TO BE SET
MONUMENT TO BE SET
CONSERVATION EASEMENT
CONSERVATION ESMT. AREA
DRIVEWAY EASEMENT
TEST PIT
PERC TEST
WELL
SILTFENCE
PROPOSED CONTOUR
150' REGULATED AREA
SLOPES OVER 20%
SLOPES 15–20%
LEDGE OUTCROP
SIGNIFICANT TREES TO SAVE
BAE
DAE

GRAPHIC SCALE 1"=40'

SOIL TYPE LEGEND
NUMBER — SOIL TYPE
3 — Ridgebury, Leicester and Whitman soils
46B — Woodbridge fine sandy loam
47C — Woodbridge fine sandy loam
73C — Charlton–Chatfield

COVENTRY ROAD
SNET #3985
TREES WITHIN SIGHTLINE TRIANGLE TO BE REMOVED
BOULDER TO BE RELOCATED
ANTI-TRACK PAD (typ.)
PROPOSED STREET NUMBER SIGN.
200' SIGHTLINE
S73°56'47"E 510.29'
553.03'
Δ=16°13'15" R=1500.00 L=267.58
NO TREES WILL BE REMOVED FOR THE INSTALLATION OF UNDERGROUND UTILITIES ALONG COVENTRY ROAD.
PROPOSED UNDERGROUND UTILITIES. FINAL LOCATION TO BE DETERMINED BY UTILITY CO.
60' CONSERVATION EASEMENT AREA
EXISTING DRIVEWAY
PROPOSED 3'x18' GARBAGE AND RECYCLE STORAGE AREA
APPROXIMATE LOCATION PROPOSED TREELINE
D.A.E.
B.A.E.
GRAVEL DRIVEWAY
REMOVE 35LF OF STONEWALL FOR DRIVEWAY ACCESS. STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.
APPROXIMATE LOCATION PROPOSED UNDERGROUND UTILITIES. FINAL LOCATION TO BE DETERMINED BY THE UTILITY CO.
SHARED DRIVEWAY SHALL HAVE 3% CROSS SLOPE TO THE SOUTH.
SHED RUNOFF FROM COMMON DRIVEWAY TO THE WEST
PROPOSED 3'x24' GARBAGE AND RECYCLE STORAGE AREA
556°40'04"E 383.33'
REMOVE 35LF OF STONEWALL REMAINS FOR DRIVEWAY ACCESS. STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.
THE PROPOSED HOUSE AREA AND DRIVEWAY ON LOT 6 CAN BE USED AS A STOCKPILE AREA DURING COMMON DRIVEWAY CONSTRUCTION. KEEP MATERIAL OFF SEPTIC AREAS.
RAIN GARDEN (typ.)
60' CONSERVATION EASEMENT AREA
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 1
TH 1 – TH 36
PROPOSED HOUSE TW=512.5 BSMT=502.5
PROPOSED HOUSE TW=513.0 BSMT=503.0
PROPOSED HOUSE TW=516.5 BSMT=506.5
PROPOSED HOUSE TW=510.0 BSMT=500.5
PROPOSED HOUSE TW=515.0 BSMT=505.5
PROPOSED HOUSE TW=509.5 BSMT=502.0
PRIMARY SEPTIC
RESERVE SEPTIC
RESERVE AREA IS PUMP REQUIRED
75' RADIUS
WELL
BUILDABLE AREA
BUILDABLE AREA–DAE
SHARED DRIVEWAY SHALL HAVE 3% CROSS SLOPE TO THE WEST.
CONSERVATION EASEMENT AREA
DURING COMMON DRIVEWAY CONSTRUCTION PROTECT TREES IN ISLAND WITH SILTFENCE
REMOVE 10LF OF STONEWALL FOR NORMENCLATURE AND FROM BOUNDARY LINE & STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.
REMOVE 10LF OF STONEWALL FOR NORMENCLATURE AND FROM BOUNDARY LINE & STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.
STREET NUMBER SIGN (typ.)
ONE WAY
COMMON DRIVEWAY EASEMENT
FOUNDATION DRAIN
TIGHT PIPE
RTD
BYPASS AREA
END OF COMMON DRIVEWAY
SHED SURFACE WATER FROM THE COMMON DRIVEWAY TO THE SOUTHEAST.
FOUNDATION DRAIN TIGHT PIPE
THE PROPOSED BYPASS AREA WILL BE USED AS A SEDIMENT STOCKPILE AREA DURING DRIVEWAY CONSTRUCTION.
PROVIDE PERMANENT CHECK DAM
EXISTING LOGGING PATH
(2) 12" RCP Culverts Inv.=500.6 (IN–W) Inv.=500.5 (OUT–E) L=30.1' S=0.33%
16'x30' HAMMERHEAD FOR FIRE TRUCK
150' UPLAND REVIEW AREA
RAIN GARDEN (typ.)
APPROXIMATE LOCATION PROPOSED TREELINE
ROCK OUTCROP
APPROXIMATE LOCATION EXISTING WELL
EXISTING HOUSE
APPROXIMATE LOCATION EXISTING LEACHFIELD
NO IMPROVEMENTS WITHIN 150' OF SITE.
EXISTING LEACHFIELD IS ON THE SOUTH SIDE OF THE HOUSE
EXISTING HOUSE & DRIVEWAY
N30°08'27"E 775.59'
458.53' N67°18'06"W
198.30' N68°27'38"W
N70°36'09"W 18.93'
N49°12'28"W 3.45'
INV.=498.0
75' CONSERVATION EASEMENT AREA
CONSERVATION EASEMENT
FOUNDATION DRAIN
BUILDABLE AREA
DAE
BAE
47C
WL#1 – WL#69

N/F
ENVIRO ENTERPRISES, LLC
#438 BROWNS ROAD
(VOL. 680 PG. 54)

N/F
JAMES PEGG GALEY & MARGARITA HAIDOUS–GALEY
#85 COVENTRY ROAD
(VOL. 659 PG. 106)

N/F
REBECCA D. & PENNY M. BARTON–ZUCKERMAN
#48 CHATHAM DRIVE
(VOL. 435 PG. 253)

N/F
KIEV J. & KES MARIE FEDEROWICZ
#568 BROWNS ROAD
(VOL. 635 PG. 408)

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72–155 AS AMENDED BY P.A. 73–571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST

SEE SHEET #2 FOR NOTES AND CERTIFICATIONS

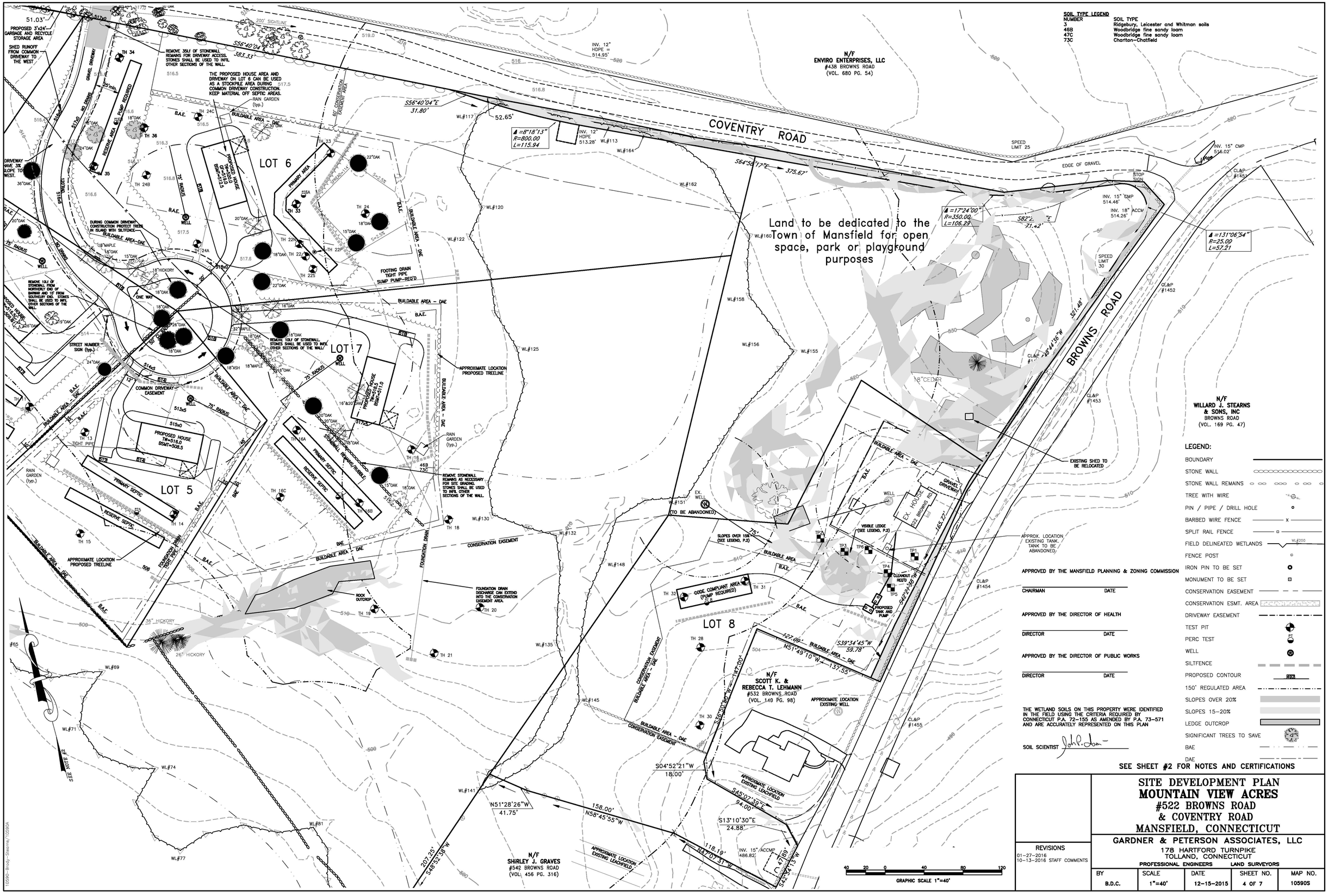
SITE DEVELOPMENT PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD
MANSFIELD, CONNECTICUT

REVISIONS
01-27-2016
10-13-2016 STAFF COMMENTS

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=40'	12-15-2015	3 OF 7	10590S

10590-Brody-Storms / 10590A



SOIL TYPE LEGEND

NUMBER	SOIL TYPE
3	Ridgebury, Leicester and Whitman soils
46B	Woodbridge fine sandy loam
47C	Woodbridge fine sandy loam
73C	Charlton-Chatfield

LEGEND:

- BOUNDARY
- STONE WALL
- STONE WALL REMAINS
- TREE WITH WIRE
- PIN / PIPE / DRILL HOLE
- BARBED WIRE FENCE
- SPLIT RAIL FENCE
- FIELD DELINEATED WETLANDS
- FENCE POST
- IRON PIN TO BE SET
- MONUMENT TO BE SET
- CONSERVATION EASEMENT
- CONSERVATION ESMT. AREA
- DRIVEWAY EASEMENT
- TEST PIT
- PERC TEST
- WELL
- SILTFENCE
- PROPOSED CONTOUR
- 150' REGULATED AREA
- SLOPES OVER 20%
- SLOPES 15-20%
- LEDGE OUTCROP
- SIGNIFICANT TREES TO SAVE
- BAE
- DAE

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN _____ DATE _____

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR _____ DATE _____

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST _____

SEE SHEET #2 FOR NOTES AND CERTIFICATIONS

SITE DEVELOPMENT PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD
MANSFIELD, CONNECTICUT

REVISIONS
01-27-2016
10-13-2016 STAFF COMMENTS

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=40'	12-15-2015	4 OF 7	10590S

LEGEND:

- BOUNDARY
- STONE WALL
- STONE WALL REMAINS
- TREE WITH WIRE
- PIN / PIPE / DRILL HOLE
- BARBED WIRE FENCE
- SPLIT RAIL FENCE
- FIELD DELINEATED WETLANDS (WL#200)
- FENCE POST
- IRON PIN TO BE SET
- MONUMENT TO BE SET
- CONSERVATION EASEMENT
- TEST PIT
- DRIVEWAY EASEMENT
- PERC TEST
- WELL
- SILTFENCE
- PROPOSED CONTOUR (R92)
- 150' REGULATED AREA
- SLOPES OVER 20%
- SLOPES 15–20%
- LEDGE OUTCROP
- SIGNIFICANT TREES TO REMAIN
- BAE
- DAE

SEE SHEET #2 FOR NOTES AND CERTIFICATIONS

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN _____ DATE _____

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR _____ DATE _____

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST _____

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

KENNETH R. PETERSON _____ L.S. 10839 REGISTRATION NO.

10590-Brody-Stearns/10590A

N/F KIEV J. & KES MARIE FEDEROWICZ #568 BROWNS ROAD (VOL. 635 PG. 408)

N/F SCOTT K. & REBECCA T. LEHMANN #532 BROWNS ROAD (VOL. 149 PG. 98)

N/F SHIRLEY J. GRAVES #542 BROWNS ROAD (VOL. 456 PG. 316)

N/F WILLARD J. STEARNS & SONS, INC BROWNS ROAD (VOL. 169 PG. 47)

N/F ANTHONY FRATIANNI CL&P #1461

LOT 8

LOT 9

BROWNS ROAD

HOUSE

STUDIO

Deck

UPLAND

ROCK OUTCROP

FOUNDATION DRAIN DISCHARGE CAN EXTEND INTO THE CONSERVATION EASEMENT AREA.

CODE COMPLIANT AREA (PUMP REQUIRED)

36" HICKORY

26" HICKORY

SEE NOTE #2

CONSERVATION EASEMENT

BUILDABLE AREA - DAE

RESERVE SEPTIC

PRIMARY SEPTIC 4513

PROPOSED HOUSE TOP=498.0 BSMT=488.5

RAIN GARDEN (typ.)

FOUNDATION DRAIN

75' RADIUS WELL

DRILL HOLE

APPROXIMATE LOCATION EXISTING WELL

APPROXIMATE LOCATION EXISTING LEACHFIELD

INV.=498.0

INV. 18" ACCMP 461.48'

INV. 15" ACCMP 486.82'

INV. 15" ACCM 486.12'

INV. 18" ACCMP 458.11'

CL&P #1456

CL&P #1457

CL&P #1458

CL&P #1459

CL&P #1460

N70°36'09"W 18.93'

N68°27'38"W 198.30'

N49°12'28"W 3.45'

N21°44'47"W 125.86'

N21°19'44"W 257.03'

N20°20'10"W 68.40'

N22°31'[illegible] 67.75'

N26°08'09"W 16.51'

N48°08'06"W

N22°56'03"W 85.39'

S48°49'06"W 7.62'

S69°07'15"W 22.83'

S56°08'21"W 22.96'

N16°54'44"E 110.14'

N68°14'43"E 68.07'

N68°14'43"E 187.40'

S13°27'39"E 15.74'

S21°47'58"E 49.00'

S36°41'50"E 63.00'

S40°30'11"E 189.40'

S48°52'38"W 207.25'

S51°38'01"W 66.15'

N82°14'43"W 134

S64°52'44"W

S04°52'21"W 18.00'

N51°28'26"W 41.75'

N58°45'55"W 158.00'

S45°07'39"E 94.00'

S13°10'30"E 24.88'

N47°07'31"W 118.19'

S42°34'13"W 47.89'

N51°49'10"W 137.55'

S39°34'45"W 39.78'

S35°00'50"W 147.00'

127.66' BUILDABLE AREA - DAE

REMOVE 12± LF OF STONEWALL EAST OF BARWAY AND 18± LF OF STONEWALL WEST OF BARWAY FOR DRIVEWAY IMPROVEMENTS. STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.

LOT 9–TREES OVER 9" DBH TO BE REMOVED FOR SIGHTLINE

#1	15" HICKORY
#2	13" MAPLE
#3	7" MAPLE
#4	17" MAPLE
#5	CLUMP OF MAPLES
#6	CLUMP OF MAPLES

SOIL TYPE LEGEND

NUMBER	SOIL TYPE
3	Ridgebury, Leicester and Whitman soils
46B	Woodbridge fine sandy loam
47C	Woodbridge fine sandy loam
73C	Charlton–Chatfield

GRAPHIC SCALE 1"=40'

REVISIONS
01-27-2016
10-13-2016 STAFF COMMENTS

SITE DEVELOPMENT PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD
MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=40'	12-15-2015	5 OF 7	10590S

MINIMUM LEACHING SYSTEM SPREAD (MLSS)

HYDRAULIC FACTOR (HF) X FLOW FACTOR (FF) X PERCOLATION FACTOR (PF)

MLSS = HF X FF X PF **SAMPLE**

HYDRAULIC FACTOR (HF)

DEPTH TO RESTRICTIVE LAYER

	HYDRAULIC GRADIENT (% OF SLOPE)								
	<1	1.1–2	2.1–3	3.1–4	4.1–6	6.1–8	8.1–10	10.1–15	>15
<17.9	SEE	NOTE	#1						
18–22	72	62	54	48	42	34	30	28	26
22.1–26	66	56	48	42	34	30	28	26	24
26.1–30	56	49	42	34	30	28	26	24	20
30.1–36	48	42	34	30	28	26	24	20	18
36.1–42	42	36	30	28	26	24	20	18	16
42.1–48	36	32	28	26	24	20	18	16	14
48.1–60	30	28	24	22	20	18	16	14	10
>60	MLSS NEED NOT BE CONSIDERED								

#1–CANNOT BE APPROVED UNLESS HYDRAULIC ANALYSIS DEMONSTRATES SUITABILITY

FLOW FACTOR (FF) = DESIGN FLOW / 300 SO: 3 BEDROOMS = 450/300 = 1.5

4 BEDROOMS = 600/300 = 2.0

PERCOLATION FACTOR (PF) LESS THAN 5 MIN/IN = 1.0

5.1 – 10 = 1.2
10.1 – 20 = 1.5
20.1 – 30 = 2.0
30.1 – 45 = 3.0
45.1 – 60 = 5.0

MLSS CALCULATIONS

LOT 1
Avg. Depth to restrictive layer: 22.3"
Hydraulic Gradient: 2.1–3%
HF= 48
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 48x 2.0 x 1.2 = 116

LOT 2
Avg. Depth to restrictive layer: 25.6"
Hydraulic Gradient: 2.1–3%
HF= 48
4 Bedrooms, FF= 2.0
Perc Rate 1–5 min/in.
PF= 1.0
MLSS= 48 x 2.0 x 1.0 = 96

LOT 3
Avg. Depth to restrictive layer: 25.3"
Hydraulic Gradient: 3.1–4%
HF= 42
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 42 x 2.0 x 1.2 = 101

LOT 4
Avg. Depth to restrictive layer: 25"
Hydraulic Gradient: 4.1–6%
HF= 34
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 34 x 2.0 x 1.2 = 82

LOT 5
Avg. Depth to restrictive layer: 22.3"
Hydraulic Gradient: 4.1–6%
HF= 34
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 34 x 2.0 x 1.2 = 82

LOT 6
Avg. Depth to restrictive layer: 26.16" (TH's 22,22N,22S,23,24,33)
Hydraulic Gradient: 2.1–3%
HF= 42
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 42 x 2.0 x 1.2 = 101

LOT 7
Avg. Depth to restrictive layer: 26"
Hydraulic Gradient: 1.1–2%
HF= 56
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 56 x 2.0 x 1.2 = 135

LOT 8–Existing House
Avg. Depth to restrictive layer: 26"
Hydraulic Gradient: 6.1–8%
HF= 30
3 Bedrooms, FF= 1.5
Perc Rate 1–5 min/in.
PF= 1.0
MLSS= 30 x 1.5 x 1.0 = 45

LOT 9
Avg. Depth to restrictive layer: 25.3"
Hydraulic Gradient: 6.1–8%
HF= 30
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 30 x 2.0 x 1.2 = 72

CONSTRUCTION NARRATIVE:
Common driveway improvements will be provided by subdivider as required. Construction, E&S questions shall be forwarded to designer. Construction can be performed at any time as there will be no wetland disturbance. Standard hours of operation shall be followed (M–F, 7am–5pm) and the construction sequence shall follow the schedule on this plan.

Single family house construction will follow guidelines on individual permit plans and a responsible person shall be noted on the individual plans. Wetland crossing shall be constructed during a dry period.

Soil Testing Results
Observed By: Eastern Highlands Health District
Others Present: Gardner & Peterson Associates, LLC and Highland Soils
Date Tested: September 3, 2015

TH 1
0–8" Topsoil
8–30" Orange Brown Fine Sandy Loam
30–80" Compact Glacial Till
Mottling @ 27"
Roots to 30"
No groundwater
No ledge

TH 2
0–5" Topsoil
5–18" Orange Brown Fine Sandy Loam
18–78" Compact Glacial Till
Mottling @ 18"
Roots to 18"
No groundwater
No ledge

TH 3
0–4" Topsoil
4–22" Orange Brown Fine Sandy Loam
22–80" Compact Glacial Till
Mottling @ 22"
Roots to 22"
No groundwater
No ledge

TH 4
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–80" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 5
0–4" Topsoil
4–24" Orange Brown Fine Sandy Loam
24–81" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TH 6
0–3" Topsoil
3–27" Orange Brown Fine Sandy Loam
27–76" Compact Glacial Till
Mottling @ 27"
Roots to 27"
No groundwater
No ledge

TH 7
0–7" Topsoil
7–30" Orange Brown Fine Sandy Loam
30–81" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

TH 8
0–6" Topsoil
6–26" Orange Brown Fine Sandy Loam
26–80" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 9
0–5" Topsoil
5–20" Orange Brown Fine Sandy Loam
20–77" Compact Glacial Till
Mottling @ 20"
Roots to 20"
No groundwater
No ledge

TH 10
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–65" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 11
0–4" Topsoil
4–20" Orange Brown Fine Sandy Loam
20–72" Compact Glacial Till
Mottling @ 20"
Roots to 20"
No groundwater
No ledge

TH 12
0–5" Topsoil
5–29" Orange Brown Fine Sandy Loam
29–77" Compact Glacial Till
Mottling @ 29"
Roots to 29"
No groundwater
No ledge

TH 13
0–5" Topsoil
5–19" Orange Brown Fine Sandy Loam
19–70" Compact Glacial Till
Mottling @ 19"
Roots to 19"
No groundwater
No ledge

Soil Testing Results
Observed By: Eastern Highlands Health District
Others Present: Gardner & Peterson Associates, LLC and Highland Soils
Date Tested: September 3, 2015

TH 14
0–6" Topsoil
6–24" Orange Brown Fine Sandy Loam
24–48" Compact Glacial Till
Mottling @ 24"
No groundwater
Ledge @ 48"

TH 15
0–5" Topsoil
5–24" Orange Brown Fine Sandy Loam
24–78" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TH 16
0–5" Topsoil
5–40" Orange Brown Fine Sandy Loam
40–65" Compact Glacial Till
Mottling @ 40"
Roots to 40"
No groundwater
No ledge

TH 16A
0–5" Topsoil
5–20" Orange Brown Fine Sandy Loam
20–80" Compact Glacial Till
Mottling @ 20"
Roots to 20"
No groundwater
No ledge

TH 16B
0–6" Topsoil
6–27" Orange Brown Fine Sandy Loam
27–72" Compact Glacial Till
Mottling @ 27"
Roots to 27"
No groundwater
No ledge

TH 16C
0–5" Topsoil
5–31" Orange Brown Fine Sandy Loam
31–84" Compact Glacial Till
Mottling @ 31"
Roots to 31"
No groundwater
No ledge

TH 17–not dug

TH 18
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–90" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 19
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–50" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 20
0–5" Topsoil
5–30" Orange Brown Fine Sandy Loam
30–90" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

TH 21
0–5" Topsoil
5–31" Orange Brown Fine Sandy Loam
31–64" Compact Glacial Till
Mottling @ 31"
Roots to 31"
No groundwater
No ledge

TH 22
0–6" Topsoil
6–30" Orange Brown Fine Sandy Loam
30–43" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
Ledge @ 43"

TH 23
0–5" Topsoil
5–24" Orange Brown Fine Sandy Loam
24–84" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

Soil Testing Results
Observed By: Eastern Highlands Health District
Others Present: Gardner & Peterson Associates, LLC and Highland Soils
Date Tested: September 3, 2015

TH 24
0–4" Topsoil
4–25" Orange Brown Fine Sandy Loam
25–90" Compact Glacial Till
Mottling @ 25"
Roots to 25"
No groundwater
No ledge

TH 24A
0–5" Topsoil
5–29" Orange Brown Fine Sandy Loam
29–56" Compact Glacial Till
Mottling @ 29"
Roots to 29"
No groundwater
No ledge

TH 24B
0–6" Topsoil
6–24" Orange Brown Fine Sandy Loam
24–84" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TH 24C
0–6" Topsoil
6–23" Orange Brown Fine Sandy Loam
23–82" Compact Glacial Till
Mottling @ 23"
Roots to 23"
No groundwater
No ledge

TH 25
0–7" Topsoil
7–25" Orange Brown Fine Sandy Loam
25–90" Compact Glacial Till
Mottling @ 25"
Roots to 25"
No groundwater
No ledge

TH 26
0–7" Topsoil
7–26" Orange Brown Fine Sandy Loam
26–90" Compact Glacial Till
Mottling @ 25"
Roots to 26"
No groundwater
No ledge

TH 27
0–5" Topsoil
5–25" Orange Brown Fine Sandy Loam
25–77" Compact Glacial Till
Mottling @ 25"
Roots to 25"
No groundwater
No Ledge

TH 28
Ledge @ 24"

TH 29–Not dug

TH 30
0–5" Topsoil
5–30" Orange Brown Fine Sandy Loam
30–64" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

TH 31
0–7" Topsoil
7–26" Orange Brown Fine Sandy Loam
26–50" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
Ledge at 50"

TH 32
0–6" Topsoil
6–30" Orange Brown Fine Sandy Loam
30–64" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

Soil Testing Results
Observed By: Gardner & Peterson Associates, LLC
Date Tested: October 30, 2015

TH 22P
A hole was dug by hand (as discussed with Jeffrey Polhemus, Chief Sanitarian) to a depth of 50" to demonstrate there is no ledge down grade of TH 22 within 48" of the ground surface. Photos were forwarded to his attention.

Soil Testing Results
Observed By: Eastern Highlands Health District
Others Present: Gardner & Peterson Associates, LLC and Highland Soils
Date Tested: October 1, 2015

TH 22N
0–7" Topsoil
7–30" Orange Brown Fine Sandy Loam
30–93" Compact Glacial Till
Mottling @ 36"
Roots to 29"
Restrictive @ 30"
No Groundwater
No Ledge

TH 22S
0–8" Topsoil
8–24" Orange Brown Fine Sandy Loam
24–80" Compact Glacial Till
Mottling @ 24"
Roots to 25"
No Groundwater
No Ledge

TH 33
0–8" Topsoil
8–24" Orange Brown Very Fine Sandy Loam–Silty
24–89" Compact Glacial Till
Mottling @ 24"
Roots to 25"
No groundwater
No ledge

TH 34
0–8" Topsoil
8–21" Orange Brown Fine Sandy Loam–Silty
21–76" Compact Glacial Till
Mottling @ 21"
Roots to 24"
No groundwater
No ledge

TH 35
0–7" Topsoil
7–24" Orange Brown Fine Sandy Loam
24–92" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TH 36
0–8" Topsoil
8–25" Orange Brown Fine Sandy Loam
25–61" Compact Glacial Till
Mottling @ 25"
Roots to 26"
No groundwater
No ledge

Soil Testing Results
By: Eastern Highlands Health District Only
Date Tested: 8/26/2014
Near existing house–522 Browns Road
Only location is on EHHD sketch (south of septic tank)

TP 1
0–9" Topsoil
9–36" Brown medium sandy loam, very rocky
36–65" Gray fine & medium sand & gravel, slightly firm
Ledge @ 65"
No seepage or mottling
Roots to 40"

TP 2
Ledge @ 32"
No seepage or mottling
Roots to 32"

TP 3
0–9" Topsoil
9–25" Brown Fine Sandy Loam
25–37" Tan Medium Sand, slightly firm, rocky
Ledge @ 37"
No Seepage or Mottling
Roots to 28"

TP 4
0–4" Topsoil
4–28" Brown Fine Sandy Loam
Trench hit at 17", flooded pit, deeper depth soils unknown
No Ledge or Mottling
Seepage @ 17"
Roots to 28"

TP 5
Filled & distrubved soils
Secondary Leaching Trench?
No Ledge
Seepage @ 17"
Mottling @ 19"
Roots to 28"

TP 6
0–9" Topsoil
9–25" Brown Fine Sandy Loam
25–36" Gray Fine Sand, Rocky
Machine refusal at 36", probable broken ledge, quite large
Ledge @ 36?
No Seepage
No Mottling
Roots @ 28"

Percolation Test
By: Eastern Highlands Health District
Date Tested: 8/26/2014
Near existing house–522 Browns Road
Only location is on EHHD sketch

Rate: 5 min/in

Percolation Tests
By: Gardner & Peterson Associates LLC
Heavy Rain on September 30, 2015

Perc #1
Presoaked 9/21/15 at 2:47
Presoaked 9/22/15 at 12:40
Depth=20"
Mark Down 0"

TIME	DEPTH
1:21	8"
1:31	11 ½"
1:41	14 ¾"
1:51	15 3/4"
2:01	16 3/4"
2:11	17 3/4"
2:16	18 ½"
2:21	Dry

Rate: 10 min/in

Perc #2
Presoaked 9/21/15 at 2:33
Presoaked 9/22/15 at 10:49
Depth=20"
Mark Down 0"

TIME	DEPTH
1:18	8"
1:27	13"
1:37	16 ½"
1:47	19 ½"
Dry	

Rate: 1–5 min/in

Perc #3
Presoaked 9/21/15 at 3:07
Presoaked 9/22/15 at 10:46
Depth=20"
Mark Down 0"

TIME	DEPTH
1:15	8"
1:25	11 ¼"
1:35	13 ½"
1:45	15 ½"
1:55	16 3/4"
2:05	18"
Dry	

Rate: 5.1–10 min/in

Perc #4
Presoaked 9/21/15 at 3:30
Presoaked 9/22/15 at 10:43
Depth=18"
Mark Down 2"

TIME	DEPTH
11:55	3 ½"
12:05	6"
12:15	7 ½"
12:25	9"
12:35	10"
12:45	11"
12:55	12"
1:05	13"

Rate: 10 min/in

Perc #5
Presoaked 9/21/15 at 3:45
Presoaked 9/22/15 at 10:40
Depth=18"
Mark Down 1 ½"

TIME	DEPTH
11:40	4 ¼"
11:50	8 ½"
12:00	11 ½"
12:10	13"
12:20	14"
Dry	

Rate: 5.1–10 min/in

Perc 6A
Presoaked 10/01/15 at 8:48
Depth=18"
Mark Down 0"

TIME	DEPTH
10:50	6"
11:00	9 ½"
11:10	11 ½"
11:20	13 ¾"
11:30	14 ½"
11:40	15 3/4"
11:50	DRY

Rate: 5.1–10 min/in

Perc 6B
Presoaked 10/01/15 at 8:30
Depth=17"
Mark Down 0"

TIME	DEPTH
10:53	5"
11:03	10"
11:13	13"
11:18	13 3/4"
11:23	14 3/4"
11:28	15 3/4"
11:33	16 ½"
11:38	DRY

Rate: 5.1–10 min/in

Perc 7
Presoaked 10/01/15 at 10:10
Depth=19"
Mark Down 2"

TIME	DEPTH
11:45	3 ½"
11:50	7"
11:55	9 ½"
12:00	10 ½"
12:05	11 ½"
12:10	12 ½"
12:15	13"
12:20	13 ½"
12:25	14"
12:30	14 ½"
12:35	DRY

Rate: 10 min/in

Perc 8
Presoaked 10/01/15 at 10:44
Depth=19"
Mark Down 1"

TIME	DEPTH
12:08	6"
12:13	10"
12:18	12"
12:23	13 ½"
12:28	15"
12:33	16 ½"
12:38	18" DRY

Rate: 1–5 min/in

Perc #9
Presoaked 9/21/15 at 4:20
Presoaked 9/22/15 at 10:24
Depth=19"
Mark Down 0"

TIME	DEPTH
10:56	7 ½"
10:59	10"
11:02	11 ¼"
11:05	12 ½"
11:08	13 3/4"
11:11	14 3/4"
11:14	15 3/4"
11:17	16 ¾"
11:20	16 3/4"
11:23	17 ¾"
11:26	18"
Dry	

Rate: 5.1–10 min/in

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.
2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN.
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE THE FINISHED GRADING OF ALL EXPOSED AREAS.
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
5. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO MINIMIZE EROSION, SLIPPAGE, AND SETTLEMENT. FILL INTENDED TO SUPPORT STRUCTURES, DRAINAGE, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH THE APPROPRIATE STATE AND/OR LOCAL SPECIFICATIONS.
6. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, LARGE ROCKS, LOGS, STUMPS, BUILDING MATERIAL, COMPRESSIBLE MATERIAL, AND OTHER MATERIALS WHICH MAY INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
7. FROZEN MATERIAL OR SOFT MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
8. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.
9. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
10. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH SOUND CONSTRUCTION PRACTICE.
11. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISH GRADING. IF FINISH GRADING IS TO BE DELAYED FOR MORE THAN 30 DAYS AFTER DISTURBANCE IS COMPLETE, TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED. AREAS LEFT OVER 30 DAYS SHALL BE CONSIDERED "LONG TERM" AND SHALL RECEIVE TEMPORARY SEEDING WITHIN THE FIRST 15 DAYS.
12. SITE IS TO BE GRADED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCHING, AND MAINTENANCE UNLESS OTHERWISE SPECIFIED IN THE PLANS.
13. CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2:1. TOPSOIL SHALL BE SPREAD TO A MINIMUM DEPTH OF 4". ADDITIONAL TOPSOIL MAY BE REQUIRED TO MEET MINIMUM DEPTHS. NO TOPSOIL SHALL BE REMOVED FROM THIS SITE.
14. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL CULTIPACKER TYPE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4" TO 1/2" INCH. HYDROSEEDING WHICH IS MULCHED MAY BE LEFT ON THE SOIL SURFACE.
15. WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING WITH A ROLLER OR LIGHT DRAG.
16. FERTILIZER AND LIME ARE TO BE WORKED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OF DISC OPERATION SHOULD BE ALONG THE CONTOUR.
17. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER. REMOVE ALL OTHER DEBRIS SUCH AS WIRE, TREE ROOTS, PIECES OF CONCRETE, OR OTHER UNSUITABLE MATERIALS.
18. INSPECT SEEDBED BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED BEFORE SEEDING, THEN FIRMED AS DESCRIBED ABOVE.
19. WHERE GRASSES PREDOMINATE, FERTILIZE ACCORDING TO SOIL ANALYSIS, OR SPREAD 300 POUNDS OF 10–10–10 OR EQUIVALENT PER ACRE (7.5 POUNDS PER 1000 S.F.).
20. CALCIUM CHLORIDE WILL BE AVAILABLE FOR DUST CONTROL ON GRAVEL TRAVEL SURFACES.

CONSTRUCTION SCHEDULE & EROSION & SEDIMENT CONTROL CHECKLIST

PROJECT NAME: MOUNTAIN VIEW ACRES

LOCATION: BROWN & COVENTRY ROADS

PROJECT DESCRIPTION: RESIDENTIAL SUBDIVISION

PARCEL AREA: 36.6 ACRES

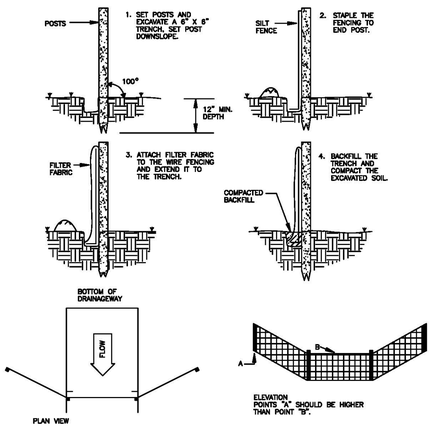
RESPONSIBLE PERSONNEL: MARK PETERSON – GARDNER & PETERSON ASSOC. LLC (860) 871–0808

WORK DESCRIPTION	EROSION & SEDIMENT CONTROL MEASURES	DATE INSTALLED	INITIALS
SUBDIVIDER IS REQUIRED TO CONSTRUCT COMMON DRIVEWAYS.			
LAND SURVEYOR SHALL FLAG LIMIT OF CLEARING.			
CUT TREES.			
INSTALL EROSION CONTROLS.	CONTRACTOR SHALL INSPECT EROSION CONTROLS PRIOR TO AND AFTER ½" STORM EVENTS.		
REMOVE STUMPS.			
STRIP TOPSOIL AND STOCKPILE.	ADD EROSION CONTROLS DOWNGRADE OF STOCKPILES.		
CONSTRUCT COMMON DRIVEWAY.			
FINAL GRADE AND SEED ALL DISTURBED AREAS.	REMOVE E&S WHEN SHOULDERS ARE STABILIZED.		
PERMIT PLAN SHALL BE PREPARED FOR DEVELOPMENT OF EACH LOT FOR LOT OWNER/BUILDER.			

PROJECT DATES:
DATE OF CONSTRUCTION START PER APPROVAL TIMELINES
DATE OF CONSTRUCTION COMPLETION PER APPROVAL TIMELINES

EROSION AND SEDIMENT CONTROL PROCEDURES SHALL ESSENTIALLY BE IN ACCORDANCE WITH THESE PLANS, AS REQUIRED BY TOWN REGULATIONS, AND THE MANUAL "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" FOR CONNECTICUT, BY THE COUNCIL ON SOIL AND WATER CONSERVATION, 1985, REVISED TO 2002.

PLACEMENT AND CONSTRUCTION OF A SYNTHETIC FILTER BARRIER



APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

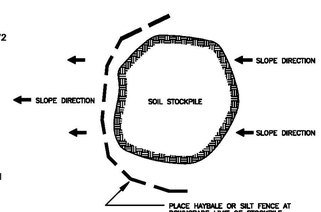
CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE



STOCKPILE EROSION PROTECTION DETAIL
N.T.S.

TEMPORARY SEEDING SCHEDULE:

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
ANNUAL RYEGRASS	40	0.9	3/1–8/15, 8/1–10/1
WINTER RYE	40	0.9	4/15–8/15, 8/15–10/1
SUDANGRASS	11	0.25	5/15–8/15

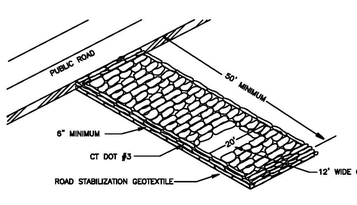
TEMPORARY SEEDING IS NOT LIMITED TO THE SPECIES SHOWN. OTHER SPECIES RECOMMENDED BY THE SCS OR AS LIMITED BY SITE CONDITIONS MAY BE USED.

STRAW MULCH IS TO BE APPLIED TO SEEDED AREA AT THE RATE OF 1–1/2 TO 2 TONS PER ACRE, 70 TO 90 LBS. PER 1000 SQ. FT.

FINAL SEEDING SCHEDULE:

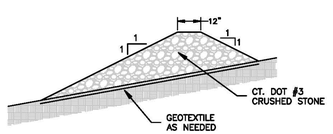
PROVIDE 4 INCHES OF TOPSOIL MINIMUM, FREE OF ROOTS, LARGE STONES, AND OTHER OBJECTS.

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
KENTUCKY BLUEGRASS	40	0.90	4/15–8/15, 8/15–9/15
CREEPING RED FESCUE	120	2.75	
PERENNIAL RYEGRASS	40	0.90	



CONSTRUCTION ENTRANCE

MAINTENANCE SCHEDULE:
THE PROPERTY OWNER OF LOT #1 SHALL MAINTAIN THE STONE CHECK DAM BY REMOVING ANY SEDIMENT BUILDUP FROM THE UPSLOPE SIDE OF THE DAM. THE SEDIMENT SHALL BE DEPOSITED OUTSIDE THE REGULATED AREA. THE INSPECTION SHALL BE PERFORMED AT SIX MONTH INTERVALS.



STONE CHECK DAM DETAIL

SOIL DATA

REVISIONS
01–27–2016
10–13–2016 STAFF COMMENTS

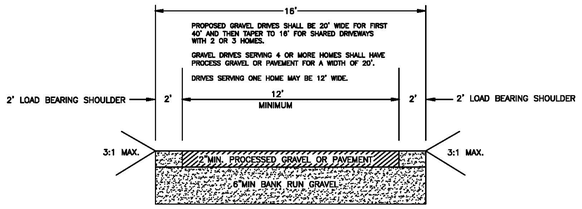
SEDIMENTATION & EROSION CONTROL DETAILS

MOUNTAIN VIEW ACRES
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

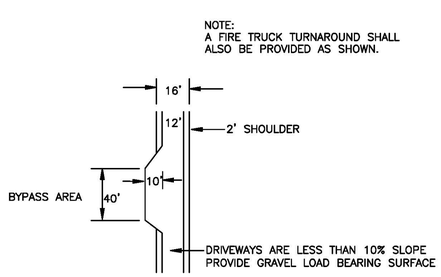
GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	N.T.S.	12–15–2015	6 OF 7	10590S

10590–Brody–Stearns / 10590A

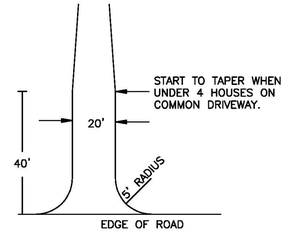


TYPICAL SHARED DRIVEWAY SECTION

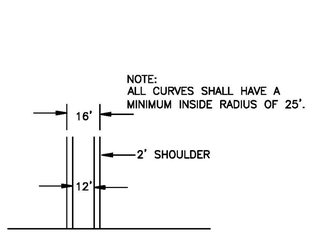


DRIVEWAY OVER 300' LONG

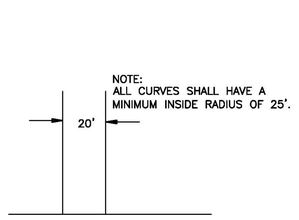
INSIDE RADIUS SHALL BE A MIN. 25'



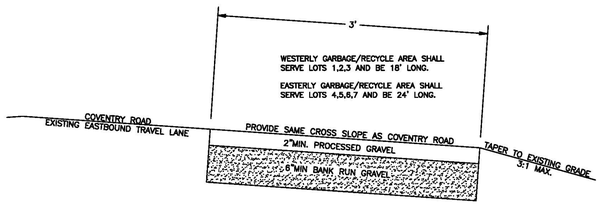
SHARED DRIVEWAY INTERSECTS COVENTRY ROAD



SHARED DRIVEWAY DETAIL WHEN SERVING 2 or 3 HOUSES

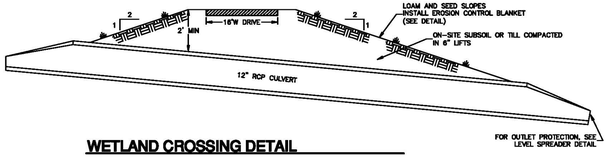


SHARED DRIVEWAY DETAIL WHEN SERVING 4 or MORE HOUSES

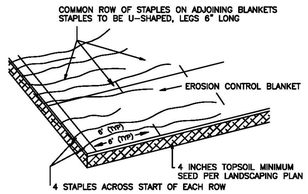


TYPICAL GARBAGE/RECYCLE AREA SECTION

N.T.S.



WETLAND CROSSING DETAIL

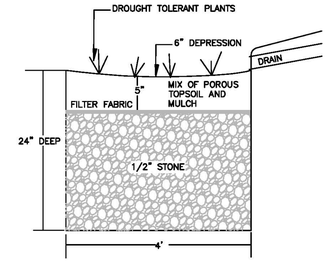


NOTES:
1. APPLY ON SLOPES 2:1 OR GREATER, BUT LESS THAN 3:1.
2. EROSION CONTROL BLANKET TO BE NORTH AMERICAN GREEN S 150 DOUBLE NET STRAW BLANKET OR EQUAL.
3. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

EROSION CONTROL BLANKET

LOW IMPACT DEVELOPMENT:

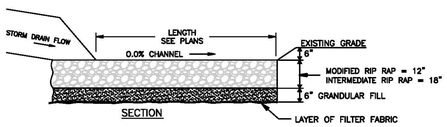
1. EACH NEW HOME SHALL HAVE A LOW IMPACT DEVELOPMENT (LID) COMPONENT INCORPORATED INTO THE PERMIT PLAN DESIGN TO COLLECT AND DISCHARGE THE RUNOFF FROM THE PROPOSED ROOF OF EACH NEW HOUSE.
2. A RAIN GARDEN HAS BEEN SELECTED FOR EACH PROPOSED HOUSE BUT THIS CAN BE MODIFIED TO USE AN ALTERNATIVE MEASURE AT THE TIME THE PERMIT PLAN IS PREPARED. SIZING SHALL BE BASED ON THE LID COMPONENT PROPOSED.

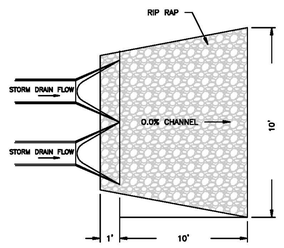


RAIN GARDEN NOTES:
1. THE VICINITY OF THE RAIN GARDEN SHALL BE PROTECTED FROM COMPACTION DURING CONSTRUCTION.
2. ONCE INSTALLED, RAIN GARDEN SHALL BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION.
3. TO PROTECT THE FUNCTION OF THE RAIN GARDEN, THE SURFACE LAYER SHALL BE KEPT FREE OF SEDIMENTATION AND DEBRIS. SEMI-ANNUAL MAINTENANCE SHALL BE REQUIRED BY THE PROPERTY OWNER TO ENSURE THE INFILTRATIVE CAPACITY OF THE SURFACE LAYER.

RAIN GARDEN

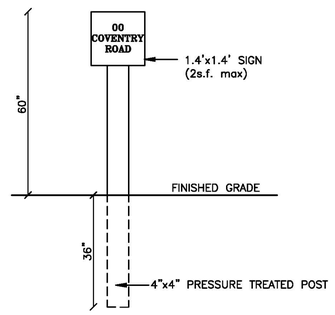
N.T.S.





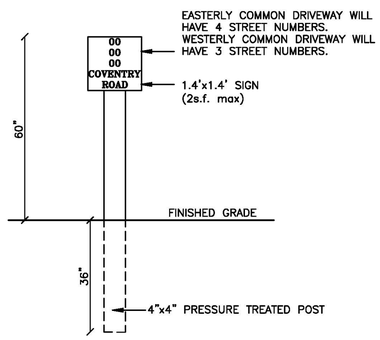
NOTES:
1. WHERE POSSIBLE LEVEL SPREADER TO BE CONSTRUCTED ON UNDISTURBED SOIL.
2. SHAPE THE ENTRANCE TO THE SPREADER IN SUCH A MANNER AS TO INSURE THAT RUNOFF ENTERS DIRECTLY ONTO THE 0.0% CHANNEL.
3. LIP TO BE CONSTRUCTED LEVEL AT 0.0% GRADE TO INSURE UNIFORM SPREADING OF STORM WATER RUNOFF.

LEVEL SPREADER DETAIL



STREET NUMBER SIGN AT INTERSECTION OF COMMON & SINGLE FAMILY DRIVEWAY

N.T.S.



STREET NUMBER SIGN AT COVENTRY ROAD

N.T.S.

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE

REVISIONS
01-27-2016
10-13-2016 STAFF COMMENTS

CONSTRUCTION DETAILS

MOUNTAIN VIEW ACRES
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	N.T.S.	12-15-2015	7 OF 7	10590S

TOWN OF MANSFIELD
DEPARTMENT OF PUBLIC WORKS

Engineering Division

AUDREY P. BECK BUILDING
FOUR SOUTH EAGLEVILLE ROAD
MANSFIELD, CT 06268-2599

From:	Derek M. Dilaj, P.E., Assistant Town Engineer
To:	Linda Painter, AICP, Town Planner
Copy:	John Carrington, P.E., Town Engineer
Date:	October 12, 2016
Date Received:	September 9, 2016
Date Reviewed:	October 11, 2016
Engineering Project #:	E-1617001
Re:	Mountain View Acres
Designer:	Kenneth Peterson, LS Gardner & Peterson Associates, LLC 178 Hartford Turnpike Tolland, Connecticut
Plans:	"Mountain View Acres #522 Browns Road & Coventry Road, Mansfield, Connecticut" 7 Sheets, Endorsed by Kenneth Peterson, LS Dated: December 15, 2015 Revised: January 27, 2016 Stormwater Management Report: Dated July 1, 2016

The purpose of this review is to provide the applicant with comments that are pertinent to the subdivision application and not necessarily directly related to the inland wetlands application however, may have indirect effects on the scope of the project.

General Comments

- The legend should be located on all Site Development Sheets to clarify the symbology used on each sheet.
- Significant areas of polygonal shading are present on Lot No. 9 on sheet 5 without an associated description or symbol.
- The site lines presented for Lot #9 should be increased to account for downgrade.

Stormwater Management

- A sealed and stamped stormwater management report shall be provided.
- The stormwater management report is indicating that a net increase in peak runoff flow rate and will utilize the existing wetland system to the south to mitigate peak flows. The applicant shall demonstrate capacity of the wetland to mitigate the peak flows to have no adverse impact to the culvert on Browns Road.
- It should be noted that new zoning regulations have been enacted to incorporate Low Impact Development. During site planning each building lot will be subject to small scale projects that require property owners to implement a single low impact development technique which will also assist in mitigating peak flows.

- The applicant should consider the use of the 2004 Stormwater Quality Guidelines for conformance to established benchmarks for subdivisions with greater than five (5) dwelling units.
- The applicant should clarify the maintenance responsibility of the stone check dam on Lot No. 1.
- The applicant should confirm the flow path from the northeastern portion of Lot No 3 is not the longest hydraulic flow path.

Erosion and Sedimentation Control Measures

- Silt fencing should be placed downgradient of all disturbed areas. For example, downhill of the foundation drain on Lot No. 1 and northern side of the wetland crossing on Lot No. 1.
- The driveway for Lot No. 9 exceeds 10% and is recommended to be constructed as part of the subdivision improvements.

Open Space Preservation Committee
Tuesday, September 20, 2016
DRAFT Minutes
Mansfield Town Hall, Conference Room B
7:00p.m.

1. **Call to order**
   The meeting was called to order at 7:08 pm.

2. **Attendance**
   Members present: Jim Morrow (chair), Ken Feathers, Quentin Kessel, Vicky Wetherell, Michael Soares, and Jennifer Kaufman (staff)

3. **Opportunity for public comment**
   No members of the public were present.

4. **Review of Minutes**
   Minutes of the August 2016 meeting were approved (Kessel, Soares).

5. **New Business**
   - PZC referral – Mountain View Acres (9-lot subdivision, PZC file #1343)
     See the OSPC's attached memo of Sept 20, 2016 to PZC and Town Planner Linda Painter regarding this application.

6. **Continuing Business**
   - Permanent Preservation Memo to the Town Council
     A memo was drafted to Town Council and Town Manager Matthew Hart and will be finalized at the next meeting. The memo discusses the lack of permanent preservation for the majority of Town-owned land, which was acquired as open space and so understood to be permanently preserved as such, and recommends options to the Town on how to proceed.

7. **Executive Session**
   The committee voted to go into Executive Session at 8:30 and to come out of Executive Session at 8:41.

8. **Communications**
   Minutes
   - Conservation Commission: 8/17/16
   - PZC: 9/6/16
   - IWA: 9/6/16

9. **Adjournment**
   The meeting was adjourned at 8:48.

DRAFT

To PZC, Linda Painter
From Open Space Preservation Committee
Re Mt. View Acres Conservation Subdivision Proposal
Date September 20, 2016

The Open Space Preservation Committee (OSPC) reviewed the proposed conservation subdivision at their September 20 meeting. The following comments address the proposed conservation subdivision plan, the open space dedications and other issues. The OSPC supports the proposal for a conservation subdivision, but some elements of the plan are not in agreement with the concepts of this type of development.

Proposed lots and driveways

The purpose of a conservation subdivision is to preserve the property's natural features. The current plan proposes development of a large wooded area at the rear of the property on Lot 1 rather than including it in a cluster of houses. An appropriate conservation subdivision would keep all building envelopes close together. To accomplish this, smaller lots could be created for Lots 2 and 3 to allow the building envelope for Lot 1 to be located on Coventry Road. Moving the Lot 1 building envelope would avoid placing a driveway across 150 feet of wetlands and maintain the natural wooded area in the rear corner. Lots 1, 2 and 3 could possibly be located on a shared semi-circular driveway to reduce the number of driveway cuts. The Mulwood East development on Wormwood Hill Road is an example of this design. A conservation easement on the wooded area between this driveway and Coventry Road would provide a continuation of the proposed buffer elsewhere along the road.

The committee supports the use of shared driveways within a cluster of houses, but not to develop natural areas on rear land. Thus, the committee does not support the use of a shared driveway for Lot 1 in its current location as a rear lot. Elsewhere in the subdivision, the committee supports a waiver to allow four houses on a shared driveway (Lots 4, 5, 6, and 7) to reduce driveway cuts on Coventry Road. The committee appreciates the proposed cul-de-sac design for Lots 4, 5, 6, and 7, which would create a neighborhood community rather than isolated homes.

Conservation easement areas

The committee supports the proposed conservation easement areas along Coventry Road, which would preserve the natural frontage on the west side of this road (the entire frontage across the road is preserved farm and forest land) and provide a buffer for agricultural operations across the road. A wider buffer area would be more useful if it is possible to increase the width of the conservation easements along the road.

The committee accepts the proposed conservation easements that would serve as buffer areas along the side and rear frontages, but we note that these interior easements would be difficult to monitor and enforce. All conservation easements should be placed on the lots' deeds to insure that they can be enforced. The Town's current easement language needs to be revised to allow management of invasive species in easement areas.

Open space dedication

The committee supports the proposed 2.4-acre open space dedication to the Town at the corner of Coventry and Browns Roads. This would be a "neighborhood" park that would offer scenic farmland views as a complement to the popular walking route along Coventry Road. This open space is close to the existing house on Lot 8. The committee recommends a fence between the park and Lot 8 to clearly mark the boundary between Town and private property. This would prevent private use of Town land and public trespass on Lot 8. An existing shed on the proposed open space should be removed before the Town accepts this land.

Town of Mansfield
CONSERVATION COMMISSION
Meeting of 21 September 2016
Community Room, Mansfield Community Center
(draft) MINUTES

Members present: Aline Booth (Alt.), Neil Facchinetti, Mary Harper (Alt.), Quentin Kessel, Scott Lehmann, Grant Meitzler, Michael Soares. *Members absent*: Robert Dahn, John Silander. *Others present*: Beverly Sims, William Okeson, Allison Hilding, David Sherwood, Elle Randazza, Tom Fahey, George Logan, Dave Ziaks, Tony Giorgio (Storrs Lodges); Jennifer Kaufman (Wetlands Agent).

1. The meeting was **called to order** at 7:34p by Chair Quentin Kessel. In the absence of two members, Alternates Aline Booth & Mary Harper were entitled to participate fully in the business of the meeting.

2. The **draft minutes** of the 17 August 2016 meeting were approved as written. {However, while it accurately reflects the Commission's understanding at the August meeting, the parenthetical phrase "(in particular, the Storrs Lodges application)" in item 4 is incorrect and will not appear in the approved minutes: the PZC had not accepted the Storrs Lodges application before the moratorium went into effect.}

3. IWA referrals. {The order in which the referrals were taken up was altered to accommodate visitors.}

a. **W1577 (Benzie, 1029 Storrs Rd).** The applicant proposes to install a new septic system for a new restaurant in the old Goodale Garage building. The system would be at the bottom of the steep slope behind the building, about 30 ft from wetlands at its closest point. Kaufman has asked for a soil analysis to verify that the proposed system would not endanger the wetland. After brief discussion, the Commission decided to defer to the result of this analysis (**motion:** Kessel, Lehmann): Provided the soil scientist hired by the Town finds no to reason to question the application, the Commission foresees no significant wetlands impact from this project.

b. **W1564-2 (Storrs Lodges, Hunting Lodge Rd).** {Faccinetti, Harper, Kessel, Lehmann, Meitzler, & Soares participated in a Field Trip to the site on 12 September.}

Dave Ziaks presented an overview of the proposed development, with particular emphasis on wetlands issues.

The property amounts to 45.93 acres, of which 24.5 acres would be disturbed (at least temporarily: some of the disturbed area will be re-vegetated with buffer plantings). There are 6.7 acres of wetlands, divided by an old woods road that runs north from Northwood Rd. Wetland to the west of this old road drains to Cedar Swamp Brook; it includes a vernal pool, created by fill for the old road. Wetland to the east of the old road joins a north-south band of wetland across the property that drains to Eagleville Brook.

47 two-story units housing 692 students are proposed, half of them near Northwood Rd, half adjacent to Carriage House Apartments. All would be accessed by a road going west from Hunting Lodge Rd across the north-south band of wetland to the old woods road, which would be followed north to uplands beyond the vernal pool. Emergency access would be via a short extension of Northwood Rd.

To minimize wetland disturbance, the access road would be routed across the north-south wetland over an existing causeway for another old woods road. A 32 ft precast concrete arch

bridge{to be lifted into place by a crane} would span the middle of the wetland, preserving the existing causeway underneath it while reducing the amount of fill required for the 24 ft roadway. 4,400 ft^2 (approximately 0.1 acre) of wetland here would be filled to provide bridge footings and bedding for the wider road on either side of the bridge.

To compensate for this disturbance, the applicant proposes (a) to create wetland in a flat area adjacent to the wetland over which the access road passes (on the east side, north of the road), and (b) to restore wetland by removing old fill across the access road from the vernal pool. These projects would enlarge wetlands by 7,800 ft^2, a net gain of 3,400 ft^2. The applicant also proposes hand-removal of invasive barberry from wetlands on the property.

The decentralized storm-water management system is designed to preserve existing flows to wetlands by collecting runoff from impervious surfaces (roofs, pavement) in dispersed underground reservoirs for infiltration and discharge to bio-retention basins. There would be enough capacity in the reservoirs to handle runoff from a 100-year storm event.

The applicant maintains that the proposed access is superior to alternatives. A wetland crossing cannot be avoided, and the one proposed minimizes wetland disturbance. Access from Northwood Rd or Carriage House Rd is not feasible, as these roads are essentially parking lots that cannot handle a lot more traffic. Moreover, gaining access from Carriage House Rd would require negotiating a right of way with the owners of Carriage House Apartments. Access from Hunting Lodge Rd could be routed across the north-south wetland near the northern property line, but this area is at present undisturbed, whereas the proposed access utilizes a developed corridor.

Questions and answers {the latter provided mostly by George Logan}:

- Q (Harper, 8/12/16 memo to GEI Consultants): What reason is there to think the ground-water infiltration system would work properly, given the often high water table and low permeability of soils? A: Numerous test holes have provided enough information on soils to warrant confidence that the system will work as advertised. Groundwater levels confronted by the system will typically be lower than those that now occur, since the system will be dispersing runoff that now soaks into the soil.
- Q (Harper): How would the storm-water system keep oil and other pollutants from parking lots from entering the groundwater. A: Pollutants attach to solids (sand, sediment), which would be captured in catch-basin sumps (which must be cleaned annually). Each catch basin would receive runoff from a relatively small area. The system is designed to meet the standard of removing 80% of total suspended solids. Runoff would then be released via the underground reservoirs to bio-retention basins, where remaining pollutants would be filtered out before the water enters wetland.
- Q (Soares): What assurance can be given that Storrs Lodges won't add to groundwater problems on Meadowood La? A: An under-drain system along the common property line would direct groundwater to wetland.
- Q (Faccinetti): Are the bio-retention basins going to function properly as filtration devices when groundwater is high? A. Most bio-retention basins would be located in moderately well-drained soils and will have under-drains to keep them from overtopping. Basins in well-drained soils don't need under-drains; basins in poorly drained soils will basically function as extensions of wetlands.
- Q (Kessel): What is known about the longevity of such basins? A: Basins of this design have been in use for 15-20 years with no problems.
- Q (Booth): How will the storm-water system be monitored and maintained? A: The Town will require a performance bond and inspections by an independent agent. It will be easier for the Town to deal with one owner than with a number of owners, as would be the case if the property were subdivided.

question the PZC must address. The CC feels that the northern shared driveway does not respect or promote these objectives, which include (according to Section 7.10.3) protection of scenic views and vistas, interior forests and/or potential conservation areas identified in the Plan of Conservation and Development. Section 7.10.4 states that the common driveway will promote cluster development. To earn the right of having three houses on a shared driveway, the developers should demonstrate a commitment to the design objectives of Section 5.1 before being granted a common driveway for lots 1-3.

Section 5.1 includes the following as benefits of shared driveways:

b. The protection and enhancement of existing and potential public water supply wells and ground water and surface water quality through appropriate design and installation of sanitary systems, roadways, drainage facilities, house sites and other site improvements;
c. The protection and enhancement of natural and manmade features, including wetlands,
watercourses, aquifer areas, agricultural lands, hilltops or ridges, historic sites and features, expanses of valley floors, interior forests, significant trees and scenic views and vistas on and adjacent to the subdivision site. Wherever appropriate, site features shall be protected through a clustering of streets and house sites and the identification and preservation of significant open space areas including agricultural lands, interior forests and other land without physical limitations.

The long driveway to Lot 1 involves approximately 4,800 ft^2 of disturbance to wetlands, a significant impact. Ideally the CC would like to see Lot 1 set aside as open space, or offered for sale to the neighbors, especially those two whose houses will be directly impacted by the proposed placement on Lot 1. In no way does the proposed layout "cluster" the three houses on this shared driveway. The cost of developing Lot 1, with its long driveway through the wetland, and providing wetland mitigation suggests that its sale will not be optimal for the developers.

The CC would also like assurance that the proposed foundation drains have enough slope to function properly, especially in wet periods, given the characteristics of the soil.

d. **W1576 (Russer-Milne, 494 Wormwood Hill Rd)** The applicants propose a 24x24 ft 2-story addition to their house, 43 ft from a stream at its closest point. The Commission agreed (**motion:** Soares, Faccinetti) unanimously that no significant impact on wetlands is to be expected from this project, as long as proper erosion and sedimentation controls are implemented.

e. **Questions for the IWA concerning W1564-2.** At Kaufman's suggestion, the Commission formulated the following questions for the IWA regarding the Storrs Lodges application:

- How is the proper maintenance and functioning of the storm-water system to be assured over the long term?
- How will adequate protection of wetlands be assured during the construction phase? Will there be third-party monitoring?
- What is GEI Consultants' view of the issues raised by Harper (12 August) and Kip Kolesinskas (17 July)?
- Has the alternative of a lower density development been considered?

- Q (Facchinetti): What responses does the applicant have to concerns raised at the 9/06 public hearing about the potential wetland impacts of road salt, pet feces, and large piles of snow? A: Only approved de-icing chemicals would be used on roads and parking areas, pets will not be permitted, and the size of snow piles will be limited by the relatively small size of parking areas.
- Q (Beverly Sims): Would diesel-powered bus service adversely affect the vernal pool? A: Any bus service would go only as far as the proposed Community Center.
- Q (Lehmann): In what sense is it true (as has been claimed) that this project will have no impact on wetlands? A: While there will be short-term impacts during construction (and managed by appropriate controls), the project has been designed so that over the long term wetlands receive water of the same quantity and quality as they do now, and function in the same way in the watershed. (For example, the arch bridge on the access road will preserve the old causeway, which now functions as a dam that slows runoff to Eagleville Brook.)
- Q (Soares): How will construction be managed to minimize wetland impacts? A: In addition to the usual sediment controls, construction will be scheduled to avoid work near the vernal pool when amphibians are using it for breeding.

With exhaustion of issues and participants, discussion ended at 9:22p, and most of the applicant's representatives left the meeting. {But see **3.e** below for questions addressed to the IWA.}

c. **W1575 (Willard J. Stearns & Sons, Inc., Browns & Coventry Rds).** {The Commission has previously commented on a pre-application submission for this project; see item 3 in the minutes for the meeting of 15 April 2015.} A 9-lot subdivision ("Mountain View Acres") is proposed for a 36-acre parcel on the corner of Coventry and Browns Rds. Lots 1-7 would be accessed by two common driveways from Coventry Rd. The northerly one serving Lots 1-3 crosses a wetland to access the house site on Lot 1; approximately 4,800 ft^2 of wetland would be disturbed. House sites on Lots 4-7 are clustered around a circle at the end of the southerly common driveway. Lots 8 & 9 are on Browns Rd; Lot 8 contains the existing house at No. 522. About 2.5 acres at the corner of Browns & Coventry Rds would be dedicated to the Town as open space.

Kessel distributed a draft comment, which was amended slightly in discussion. Harper noted that soils are described as draining "very slowly" and wondered whether the "relatively flat land" permits adequate slope for foundation drains. The Commission then agreed to comment as follows (**motion:** Kessel, Harper; all in favor save Lehmann, who lives at 532 Browns Rd and recused himself):

> The applicant is to be complimented for the new design of the southern shared driveway, the proposed effort to preserve the high ledge on the southeasterly corner, and the easements proposed for the border on Coventry Road and elsewhere. This is consistent with the guidelines of the Conservation Subdivision, whose purpose is preserve natural areas. On the other hand, the northern shared driveway poses a problem for the Mansfield Conservation Commission (CC). It is a blatant misuse of the shared driveway regulation. A portion of the driveway to Lot 1 crosses approximately 150 feet of wetland. This is not consistent with either the Conservation Subdivision Regulations or those for the shared driveways.
>
> As stated in Section 7.10, the use of a common driveway is not a right, but may be authorized where it would promote the design objectives of Section 5.1. That is a

4. **Adjourned** at 9:56p. Next meeting: 7:30p, Wednesday, 19 October 2016.

Scott Lehmann, Secretary, 26 September 2016.

Eastern Highlands Health District

4 South Eagleville Road Mansfield, CT 06268 * Tel (860) 4293-3325 * Fax (860) 429-3321 * www.ehhd.org

B100A PLAN APPROVAL

October 6, 2016

Gardner & Peterson Associates, LLC
178 Hartford Turnpike
Tolland, CT 06084

Proposed Activity: Single family subdivision with one existing house. Reduce size of existing house lot.
Address: 522 Browns Road Mountain View Acres Subdivision
Town: Mansfield

Dear Gardner & Peterson Associates, LLC :

Your application for the above referenced project has been reviewed by the health district for compliance with the requirements of Connecticut Public Health Code section 19-13-B100a.

The application is approved with the following conditions/comments:

1. Proposed lot line modification for creation of a 9 lot single family subdivision with one existing house is approved per plan (Gardner & Peterson Associates, LLC, dated 12/15/15, revised 1/27/16).
2. A code complying area for a future septic system repair has been identified on the property sized for the existing 3 bedroom home located on the remaining 2.24 acre parcel (lot 8).
3. No upgrade to the existing septic system will be required at this time for this project.
4. Additional soil testing may be needed at the time of any future septic system repair/alteration or B100a projects.

We will notify the local building official of this health district approval, but you should contact the town directly to determine when all other required permits will be approved for your project. Please note that any revisions to the approved plans, whether proposed by you or required by others, must be reviewed by the health district to verify compliance with the Public Health Code.

If you have any questions, please call the health district office at 860-429-3325.

Sincerely,

Sherry McGann
Sanitarian II

Cc:Bradford Freeman, Mansfield Assistant Building Official
Janell Mullen, Mansfield Zoning Agent
Willard J. Stearns, Property Owner

Eastern Highlands Health District

4 South Eagleville Road • Mansfield CT 06268 • Tel: (860) 429-3325 • Fax: (860) 429-3321 • Web: www.EHHD.org

Subdivision Plan Review Memo

To: Mark Peterson, P.E.
From: Sherry McGann, R.S.
Date: October 6, 2016
Re: Mountain View Acres Subdivision
Proposed 9 Lot Subdivision
for Willard J. Stearns & Sons, Inc.
522 Browns Road, Mansfield, CT
Plan Prepared by Gardner & Peterson Associates, LLC –
Dated 12/15/2015, Revised 1/27/2016.

The above referenced subdivision plan has been reviewed for compliance with the State of Connecticut Public Health Code (PHC) and Technical Standards. Based on our review, we have the following comments:

1. Lots 1-7 meet the State of Connecticut Public Health Code requirements for on-site sewage disposal and private water supplies for proposed four-bedroom houses on each lot.
2. Lot 8 - a code complying area for a 3-bedroom house has been demonstrated as required for compliance with 19-13-B100a.
3. Lot 9 meets the State of Connecticut Public Health Code requirements for on-site sewage disposal and private water supply for a four-bedroom house.
4. Existing well located at the South end of the area designated as open space (near lot 8) shall be properly abandoned. A Connecticut Licensed Well Driller must submit a permit application to EHHD for the well abandonment.

Town of Mansfield
Mansfield Fire Department

To: Planning and Zoning Commission

From: Fran Raiola, Deputy Chief/Fire Marshal

CC: Linda Painter, Director of Planning

Date: September 15, 2016

Re: Mountain View Acres - Subdivision PZC #1343

After reviewing the revised plans dated January 27, 2016 for the above referenced project for compliance with the Town of Mansfield Regulations for Fire Lanes and Emergency Vehicle Access, I have the following comments.

1. The submitted plans appear to substantially meet the requirements for Fire Lane and Emergency Vehicle Access.
2. Signs with house numbers are required to be located at the entrance to the common driveway (intersection with road) as well as at the specific address.
3. The scope of this review is for compliance with The Town of Mansfield Fire Lane Regulations to ensure adequate access for emergency vehicles only. The applicant is required to apply for a building permit and submit plans and specifications to the Building Department and the Office of the Fire Marshal, to determine compliance with Fire and Building codes.

TOWN OF WINDHAM
WATER WORKS
174 Storrs Road
Mansfield Center, CT 06250
Tel. 860-465-3075 • FAX 860-465-3085

(X) Inland Wetlands Commission
( ) Zoning Commission
(X) Planning & Zoning Commission
( ) Zoning Boards of Appeals

TOWN:	( )	Ashford	( )	Chaplin	( )	Eastford
	( )	Hampton	(X)	Mansfield	( )	Pomfret
	( )	Union	( )	Willington	( )	Windham
	( )	Woodstock				

INSPECTED BY: _____
Troy Quick W.W.W. Watershed Inspector

DATE: September 14 2016, WW File #M0816

The Windham Water Works has received notification of a proposed project per the requirements of Public Act 89-301.

PROJECT DESCRIPTION:

Nine lot subdivision of single family homes with on-site septic systems and wells.

Applicant: Willard J. Stearns & Son Inc

COMMENTS:

The Windham Water Works has reviewed the proposed project and with best management practices and with proper soil and erosion control measures throughout the duration, we would have no objections, we will monitor accordingly.

TOWN OF MANSFIELD

DEPARTMENT OF PLANNING AND DEVELOPMENT

Date: November 2, 2016

To: Planning and Zoning Commission

From: Linda M. Painter, AICP, Director

Subject: Mountain View Acres Subdivision (File 1343)

Staff recommends that the November 2, 2016 hearing on the proposed Mountain View Acres subdivision be opened and immediately tabled to the November 16, 2016 meeting. The applicant has consented to this extension as they are working on revising plans to respond to staff review comments.

RECEIPT OF APPLICATION FOR A SUBDIVISION:

_____, move and _____ seconds to receive the

SUBDIVISION application (File #**1343**)

submitted by **Willard J. Stearns & Sons, Inc.**

for **a 9-lot subdivision**

on property located **at the Southwest corner of Coventry Road and Browns Road**

as shown on plans dated **12/15/15 with a revision date of 01/27/2016**,

and as described in other application submissions, and to refer said application to the Fire Marshal, Assistant Town Engineer, Conservation Commission, and Eastern Highlands Health District, for review and comments and to set a Public Hearing for November 7, 2016

file # 1343
filing date 8-29-16

MANSFIELD PLANNING & ZONING COMMISSION
APPLICATION FOR SUBDIVISION OR RESUBDIVISION APPROVAL

Name of subdivision Mountain View Acres

Name of subdivider (applicant)
Willard J. Stearns & Sons, Inc. Phone # 860-423-9289
(please PRINT)
Address 50 Stearns Road Mansfield CT 06250
(street) (town) (state) (zip)

Signature PAUL I BLOCK PRESIDENT (owner X) (optionee) Date 8/10/16

OWNER **(IF OTHER THAN SUBDIVIDER)**

Name _____ Phone # _____
(please PRINT)
Address _____
(street) (town) (state) (zip)

Signature _____ Date _____

FEES
See Town Council-approved Fee Schedule & Eastern Highlands Health District Review Fee Schedule (Subdivisions will not be reviewed by Eastern Highlands Health District unless an Application for Plan Review has been submitted)

SUBDIVISION DATA
Location:
Southwest corner of Coventry Road and Browns Road

Zoning district RAR-90

Total # of acres 36.9
Total # of lots 9

EXTENSION OF TIME

Pursuant to Section 8-26d, subsection (b) of the Connecticut General Statutes, the undersigned applicant hereby consents to an extension of time within which the Planning and Zoning Commission is required by law to approve, modify and approve or disapprove a subdivision plan known as

_____

and located at/on _____

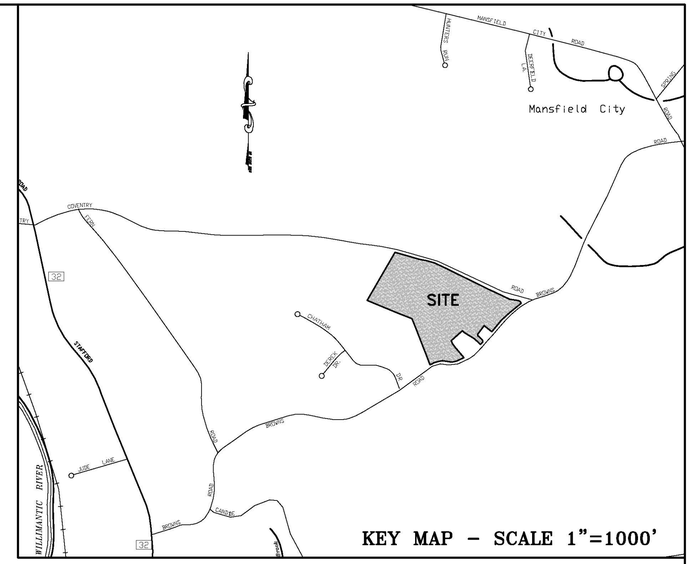
It is agreed that such extension of time shall not exceed 65 days and it is understood that this extension of time is in addition to the first 65-day period after the receipt of the application by the Planning & Zoning Commission.

Signature _____ Date _____

OWNER:
WILLARD J. STEARNS & SONS, INC.
50 STEARNS ROAD
MANSFIELD, CT

APPLICANT:
WILLARD J. STEARNS & SONS, INC.
50 STEARNS ROAD
MANSFIELD, CT

LAND SURVEYOR/ENGINEER:
GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT 06084



N/F
STEPHEN O. KORNITZER

TOWN OF MANSFIELD
"OPEN SPACE"
COVENTRY ROAD
(VOL. 548 PG. 387)

N/F
RICHARD A. STAPLES

COVENTRY ROAD

LOT 2
128,202 S.F.
2.94 ACRES

N/F
ENVIRO ENTERPRISES, LLC
#438 BROWNS ROAD
(VOL. 680 PG. 54)

N/F
JAMES PEGG GALEY &
MARGARITA HAIDOUS-GALEY
#65 COVENTRY ROAD
(VOL. 659 PG. 106)

EXISTING HOUSE

LOT 3
117,222 S.F.
2.69 ACRES

LOT 6
150,917 S.F.
3.46 ACRES

LOT 1
319,000 S.F.
7.32 ACRES

LOT 4
82,767 S.F.
1.90 ACRES

N/F
ALAN H. WUOSMAA
& NORA BERRAH
#52 CHATHAM DRIVE
(VOL. 762 PG. 707)

LOT 5
48,330 S.F.
1.11 ACRES

LOT 7
425,792 S.F.
9.77 ACRES

Land to be Dedicated to the
Town of Mansfield for open
space, park or playground
purposes.
AREA:
106,989 S.F.
2.456 ACRES

N/F
SCOTT NEWTON
499 BROWNS ROAD

EXISTING HOUSE

N/F
REBECCA D. & PENNY M.
BARTON-ZUCKERMAN
#48 CHATHAM DRIVE
(VOL. 435 PG. 253)

SHED

BROWNS ROAD

LOT 8
97,590 S.F.
2.24 ACRES

N/F
WILLARD J. STEARNS
& SONS, INC
BROWNS ROAD
(VOL. 169 PG. 47)

N/F
SCOTT K. &
REBECCA T. LEHMANN
#532 BROWNS ROAD
(VOL. 149 PG. 98)

N/F
KIEV J. & KES MARIE
FEDEROWICZ
#568 BROWNS ROAD
(VOL. 635 PG. 408)

N/F
SHIRLEY J. GRAVES
#542 BROWNS ROAD
(VOL. 456 PG. 316)

LOT 9
119,510 S.F.
2.74 ACRES

HOUSE

SHED

N/F
THOMAS A. WOOD

N/F
ALFRED W. HYDE

CHATHAM DRIVE

BROWNS ROAD

N/F
WILLARD J. STEARNS
& SONS, INC
BROWNS ROAD
(VOL. 169 PG. 47)

N/F
ANTHONY
FRATIANNI

LEGEND:

BOUNDARY
STONE WALL
STONE WALL REMAINS
TREE WITH WIRE
PIN / PIPE / DRILL HOLE
BARBED WIRE FENCE
SPLIT RAIL FENCE
FIELD DELINEATED WETLANDS (WL#200)
FENCE POST

NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20. THIS IS A SUBDIVISION PLAN, AND IS A FIRST SURVEY OF THE PERIMETER BOUNDARY AND AN ORIGINAL SURVEY OF THE PROPOSED LOT LINES CONFORMING TO HORIZONTAL ACCURACY CLASS A-2.
2. BEARINGS DEPICTED ON THIS PLAN ARE BASED UPON NAD 83/87 (CONNECTICUT STATE PLANE COORDINATES) BASED ON COORDINATES FROM MAP REFERENCE 3A.
3. MAP REFERENCES:
   A. "PROPERTY SURVEY CERTAIN PROPERTY OF WILLARD J. STEARNS & SONS, INC IDENTIFIED AS FARM 1, FARM 2 AND FARM 3 BROWNS RD., STEARNS RD., MANSFIELD CITY RD., PLEASANT VALLEY RD. MANSFIELD, CONNECTICUT" DATED 9-11-2014 SCALE: 1"=200' BY: F.A. HESKETH & ASSOCIATES, INC.
   B. "BOUNDARY SURVEY FOR SUBDIVISION ENTITLED CHATHAM HILL BROWNS ROAD MANSFIELD, CONNECTICUT" OWNER & SUBDIVIDER MICHAEL DILAJ TRUSTEE SCALE: 1"=100' DATED1-1-98 REV. 6-15-98 BY: DATUM ENG.
   C. "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR KIEV FEDEROWICZ PROPOSED HOUSE ADDITION & PROPOSED BARN/STUDIO 568 BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=30' DATED 4-9-13 REV. THROUGH 1-28-15 BY: ROB HELLSTROM LAND SURVEYING LLC
   D. "CORRECTIONAL MAP LAND OF DANIEL B AND ANN L. COSTELLO AND PATRICIA E. AND JAMES V. LETA SITUATED ON THE SOUTHERLY LINE OF COVENTRY ROAD IN THE TOWN OF MANSFIELD, THE COUNTY OF TOLLAND AND THE STATE OF CONNECTICUT" SCALE 1"=40' DATED 8-14-65 BY: JOHN R. GRIFFIN
   E. "PROPERTY OF RUSSELL W. & PHYLLIS MARTIN COVENTRY ROAD, BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=100' DATED 2-7-88 BY: KARHU & PRONOVOST ASSOCIATES, INC.
   F. "SUBDIVISION PLAN SMITH FARMS PREPARED FOR: REJA ACQUISITION CORP. COVENTRY ROAD MANSFIELD, CONNECTICUT" SCALE: 1"=100' DATED: FEB. 2003 REV. THROUGH 4-20-04 BY: MESSIER & ASSOCIATES, INC.
4. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING, OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES, LLC. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.
5. WETLANDS DEPICTED HEREON WERE FIELD DELINEATED BY SOIL SCIENTIST JOHN IANNI, CSS.
6. SITE AND ABUTTING PARCELS ARE IN RAR-90 ZONE.
7. PARCEL IS LOCATED IN FLOOD ZONE C, AREAS OF MINIMAL FLOODING, PER FIRM FLOOD INSURANCE RATE MAP TOWN OF MANSFIELD, CONNECTICUT TOLLAND COUNTY PANEL 15 OF 20 COMMUNITY-PANEL NUMBER 090128 0015C EFFECTIVE DATE: JANUARY 2, 1981.
8. PARCEL IS NOT LOCATED WITHIN AN AQUIFER AREA BASED ON "SURFACES AND GROUNDWATER RESOURCES" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
9. PARCEL IS NOT LOCATED WITHIN AN ARCHAEOLOGICAL AREA BASED ON "ARCHAEOLOGICAL ASSESSMENT" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
10. PARCEL IS NOT LOCATED IN AN AREA OF STATE AND FEDERAL LISTED SPECIES & SIGNIFICANT NATURAL COMMUNITIES BASED ON THE CONNSECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION NATURAL DIVERSITY DATA BASE AREA MAP FOR MANSFIELD, CT DATED DECEMBER 2014.
11. SPEED LIMIT ON BROWNS ROAD IS 30 MPH AND 25 MPH ALONG COVENTRY ROAD.
12. THE PROPOSED TREELINES ARE CONCEPTUAL AND MAY BE MODIFIED BY THE DEVELOPER. CLEARING LIMITS ARE NOT SHOWN FOR THE FOOTING DRAIN DISCHARGES.

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN _____ DATE _____

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR _____ DATE _____

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST _____

100 50 0 100 200 300
GRAPHIC SCALE 1"=100'

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

KENNETH R. PETERSON _____ L.S. 10839 REGISTRATION NO.

SUBDIVISION PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

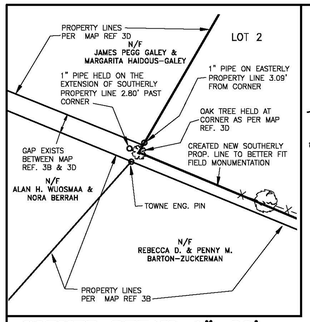
REVISIONS
01-27-2016

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=100'	12-15-2015	1 OF 7	10590S

R:\PLOT\10590\01-27-16\10590SUBS

10590-Brady-Stearns\10590A



CORNER DETAIL 1"=20'

BUILDABLE AREA:

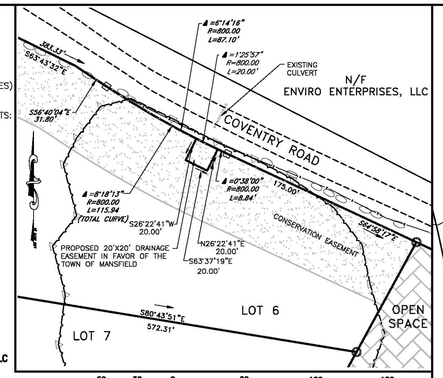
LOT #1	44,000+S.F.
LOT #2	40,000+S.F.
LOT #3	40,800+S.F.
LOT #4	43,000+S.F.
LOT #5	40,100+S.F.
LOT #6	56,000+S.F.
LOT #7	43,000+S.F.
LOT #8	42,800+S.F. −2,000S.F.=40,800+S.F.
LOT #9	40,000+S.F.

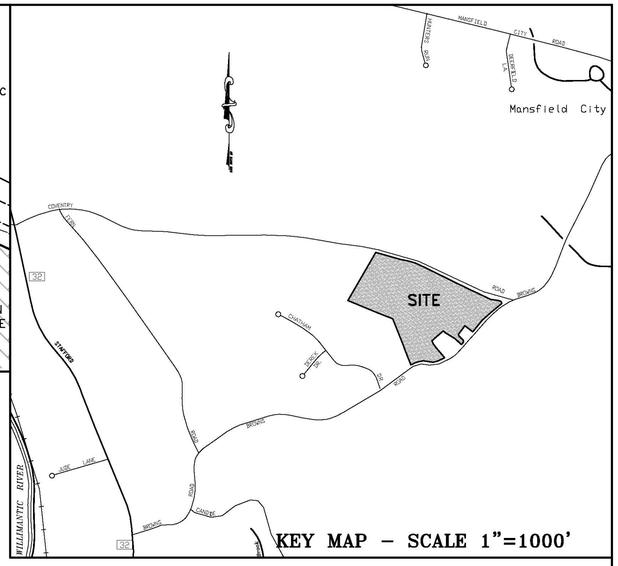
OPEN SPACE COMPUTATIONS:

PARCEL AREA:	36.647 ACRES
AREA OF WETLANDS:	9.397 ACRES
AREA OF LEDGE OUTCROPS & SLOPES OVER 20%:	0.90 ACRES
UPLAND AREA	26.35 ACRES
UPLAND PERCENTAGE:	71.9%
OPEN SPACE REQUIRED FOR CLUSTER DEVELOPMENTS	UP TO 40% (14.659 ACRES)
UPLAND OPEN SPACE AREA REQUIRED:	10.54 ACRES

PROP. OPEN SPACE CONSISTS OF LAND DEDICATED TO TOWN OF MANSFIELD & CONSERVATION ESMTS:

DEDICATED OPEN SPACE:	2.456 ACRES (6.70%)
CONSERVATION EASEMENT (CE):	13.049 ACRES (35.61%)
TOTAL PROVIDED:	15.505 ACRES (42.31)
UPLAND PROVIDED IN OPEN SPACE	1.881 ACRES
UPLAND PROVIDED IN CONSERVATION EASEMENTS	8.868 ACRES
THEREFORE:	10.749 AC. PROVIDED > 10.54 AC. REQUIRED
ZONE:	RAR-90





LEGEND:

- BOUNDARY
- STONE WALL
- STONE WALL REMAINS
- TREE WITH WIRE
- PIN / PIPE / DRILL HOLE
- BARBED WIRE FENCE
- SPLIT RAIL FENCE
- FIELD DELINEATED WETLANDS (WL#200)
- FENCE POST
- IRON PIN TO BE SET
- MONUMENT TO BE SET
- CONSERVATION EASEMENT
- CONSERVATION ESMT. AREA
- DRIVEWAY EASEMENT
- SLOPES OVER 20%
- SLOPES 15–20%
- LEDGE OUTCROP

NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 THROUGH 20-300b-20. THIS IS A SUBDIVISION PLAN, AND IS A FIRST SURVEY OF THE PERIMETER BOUNDARY AND AN ORIGINAL SURVEY OF THE PROPOSED LOT LINES CONFORMING TO HORIZONTAL ACCURACY CLASS A-2.
2. BEARINGS DEPICTED ON THIS PLAN ARE BASED UPON NAD 83/87 (CONNECTICUT STATE PLANE COORDINATES) BASED ON COORDINATES FROM MAP REFERENCE 3A.
3. MAP REFERENCES:
   A. "PROPERTY SURVEY CERTAIN PROPERTY OF WILLARD J. STEARNS & SONS, INC IDENTIFIED AS FARM 1, FARM 2 AND FARM 3 BROWNS RD., STEARNS RD., MANSFIELD CTTY RD., PLEASANT VALLEY RD. MANSFIELD, CONNECTICUT" DATED 9-11-2014 SCALE: 1"=200' BY: F.A. HESKETH & ASSOCIATES, INC.
   B. "BOUNDARY SURVEY FOR SUBDIVISION ENTITLED CHATHAM HILL BROWNS ROAD MANSFIELD, CONNECTICUT" OWNER & SUBDIVIDER MICHAEL DILAJ TRUSTEE SCALE: 1"=100' DATED1-1-98 REV. 6-15-98 BY: DATUM ENG.
   C. "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR KIEV FEDEROWICZ PROPOSED HOUSE ADDITION & PROPOSED BARN/STUDIO 568 BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=30' DATED 4-9-13 REV. THROUGH 1-28-15 BY: ROB HELLSTROM LAND SURVEYING LLC
   D. "CORRECTIONAL MAP LAND OF DANIEL B AND ANN L. COSTELLO AND PATRICIA E. AND JAMES V. LETA SITUATED ON THE SOUTHERLY LINE OF COVENTRY ROAD IN THE TOWN OF MANSFIELD, THE COUNTY OF TOLLAND AND THE STATE OF CONNECTICUT" SCALE 1"=40' DATED 8-14-65 BY: JOHN R. GRIFFIN
   E. "PROPERTY OF RUSSELL W. & PHYLLIS MARTIN COVENTRY ROAD, BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=100' DATED 2-7-88 BY: KARHU & PRONOVOST ASSOCIATES, INC.
   F. "SUBDIVISION PLAN SMITH FARMS PREPARED FOR: REJA ACQUISITION CORP. COVENTRY ROAD MANSFIELD, CONNECTICUT" SCALE: 1"=100' DATED: FEB. 2003 REV. THROUGH 4-20-04 BY: MESSIER & ASSOCIATES, INC.
4. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING, OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES, LLC. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.
5. WETLANDS DEPICTED HEREON WERE FIELD DELINEATED BY SOIL SCIENTIST JOHN IANNI.
6. SITE AND ABUTTING PARCELS ARE IN RAR-90 ZONE.
7. PARCEL IS LOCATED IN FLOOD ZONE C, AREAS OF MINIMAL FLOODING, PER FIRM FLOOD INSURANCE RATE MAP TOWN OF MANSFIELD, CONNECTICUT TOLLAND COUNTY PANEL 15 OF 20 COMMUNITY-PANEL NUMBER 090128 0015C EFFECTIVE DATE: JANUARY 2, 1981.
8. PARCEL IS NOT LOCATED WITHIN AN AQUIFER AREA BASED ON "SURFACES AND GROUNDWATER RESOURCES" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
9. PARCEL IS NOT LOCATED WITHIN AN ARCHAEOLOGICAL AREA BASED ON "ARCHAEOLOGICAL ASSESSMENT" MAP BY PLAN OF CONSERVATION AND DEVELOPMENT APRIL 2006.
10. PARCEL IS NOT LOCATED IN AN AREA OF STATE AND FEDERAL LISTED SPECIES & SIGNIFICANT NATURAL COMMUNITIES BASED ON THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION NATURAL DIVERSITY DATA BASE AREA MAP FOR MANSFIELD, CT DATED DECEMBER 2014.
11. SPEED LIMIT ON BROWNS ROAD (COLLECTOR RD) IS 30 MPH AND 25 MPH ALONG COVENTRY ROAD (NEIGHBORHOOD ROAD).
12. THE PROPOSED TREELINES ARE CONCEPTUAL AND MAY BE MODIFIED BY THE DEVELOPER. CLEARING LIMITS ARE NOT SHOWN FOR THE FOOTING DRAIN DISCHARGES.

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

KENNETH R. PETERSON — L.S. 10839 REGISTRATION NO.

GRAPHIC SCALE 1"=100'

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN — DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR — DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR — DATE

REVISIONS
01-27-2016

BOUNDARY PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD
MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=100' OR AS SHOWN	12-15-2015	2 OF 7	10590S

10590-Brady-Stearns/10590A

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST John P. Joan

GRAPHIC SCALE 1"=40'

SOIL TYPE LEGEND

NUMBER	SOIL TYPE
3	Ridgebury, Leicester and Whitman soils
46B	Woodbridge fine sandy loam
47C	Woodbridge fine sandy loam
73C	Charlton-Chatfield

COVENTRY ROAD

SNET #3985

N/F ENVIRO ENTERPRISES, LLC #438 BROWNS ROAD (VOL. 680 PG. 54)

N/F JAMES PEGG GALEY & MARGARITA HAIDOUS-GALEY #85 COVENTRY ROAD (VOL. 659 PG. 106)

N/F REBECCA D. & PENNY M. BARTON-ZUCKERMAN #48 CHATHAM DRIVE (VOL. 435 PG. 253)

N/F KIEV J. & KES MARIE FEDEROWICZ #568 BROWNS ROAD (VOL. 635 PG. 408)

EXISTING HOUSE

EXISTING HOUSE & DRIVEWAY

EXISTING DRIVEWAY

LOT 1

LOT 2

LOT 3

LOT 4

LOT 5

LOT 6

LOT 7

PROPOSED HOUSE TW=509.0 BSMT=501.5

PROPOSED HOUSE TW=513.5 BSMT=508.0

PROPOSED HOUSE TW=516.5 BSMT=508.5

PROPOSED HOUSE TW=516.0 BSMT=512.5

PROPOSED HOUSE TW=510.0 BSMT=502.5

PROPOSED HOUSE TW=516.5 BSMT=508.5

PROPOSED HOUSE TW=515.0 BSMT=505.5

PROPOSED HOUSE TW=511.0 BSMT=501.0

PROPOSED 3'x18' GARBAGE AND RECYCLE STORAGE AREA

PROPOSED 3'x24' GARBAGE AND RECYCLE STORAGE AREA

PROPOSED STREET NUMBER SIGN.

STREET NUMBER SIGN (typ.)

PROPOSED UNDERGROUND UTILITIES. FINAL LOCATION TO BE DETERMINED BY UTILITY CO.

APPROXIMATE LOCATION PROPOSED UNDERGROUND UTILITIES. FINAL LOCATION TO BE DETERMINED BY THE UTILITY CO.

APPROXIMATE LOCATION PROPOSED TREELINE

TREES WITHIN SIGHTLINE TRIANGLE TO BE REMOVED

NO TREES WILL BE REMOVED FOR THE INSTALLATION OF UNDERGROUND UTILITIES ALONG COVENTRY ROAD.

BOULDER TO BE RELOCATED

ANTI-TRACKING PAD (typ.)

REMOVE 35Lf OF STONEWALL FOR DRIVEWAY ACCESS. STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.

REMOVE 35Lf OF STONEWALL REMAINS FOR DRIVEWAY ACCESS. STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.

REMOVE 10Lf OF STONEWALL FROM NORTHERLY END OF BURNED AND 12' FROM SOUTHERLY END. STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.

REMOVE 10Lf OF STONEWALL. STONES SHALL BE USED TO INFIL OTHER SECTIONS OF THE WALL.

THE PROPOSED HOUSE AREA AND DRIVEWAY ON LOT 6 CAN BE USED AS A STOCKPILE AREA DURING COMMON DRIVEWAY CONSTRUCTION. KEEP MATERIAL OFF SEPTIC AREAS.

THE PROPOSED BYPASS AREA WILL BE USED AS A SEDIMENT STOCKPILE AREA DURING DRIVEWAY CONSTRUCTION.

SHED RUNOFF FROM COMMON DRIVEWAY TO THE WEST

SHED SURFACE WATER FROM THE COMMON DRIVEWAY TO THE SOUTHEAST.

SHARED DRIVEWAY SHALL HAVE 3% CROSS SLOPE TO THE SOUTH.

SHARED DRIVEWAY SHALL HAVE 3% CROSS SLOPE TO THE WEST.

DURING COMMON DRIVEWAY CONSTRUCTION PROTECT TREES IN ISLAND WITH SILTFENCE

PROVIDE PERMANENT CHECK DAM

(2) 12" RCP Culverts Inv.=500.6 (IN-W) Inv.=500.5 (OUT-E) L=30Lf. S=0.33%

16'x30' HAMMERHEAD FOR FIRE TRUCK

COMMON DRIVEWAY EASEMENT

60' CONSERVATION EASEMENT AREA

75' CONSERVATION EASEMENT AREA

CONSERVATION EASEMENT AREA

BUILDABLE AREA

B.A.E.

D.A.E.

FOUNDATION DRAIN

FOUNDATION DRAIN TIGHT PIPE

RESERVE AREA 6" PUMP REQUIRED

PRIMARY SEPTIC

RESERVE SEPTIC

75' RADIUS

WELL

ONE WAY

NO DRAINS

25' min.

200' SIGHTLINE

EXISTING LOGGING PATH

HIGH WETLAND REVIEW AREA

TRIPLE 20"OAK

TWIN 20"OAK & 14"OAK

TWIN 14"MAPLE

S73°56'47"E 510.29'

Δ=19°13'15" R=1500.00 L=267.58

556°40'04" 383.33'

N30°08'27"E 775.59'

458.53' N67°18'06"W

198.30' N68°27'38"W

N70°36'09"W 18.93'

N49°12'28"W 3.45'

SEE SHEET #2 FOR NOTES AND CERTIFICATIONS

REVISIONS
01-27-2016

SITE DEVELOPMENT PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD
MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=40'	12-15-2015	3 OF 7	10590S

10590-Brody-Storms/10590A

SOIL TYPE LEGEND

NUMBER	SOIL TYPE
3	Ridgebury, Leicester and Whitman soils
46B	Woodbridge fine sandy loam
47C	Woodbridge fine sandy loam
73C	Charlton-Chatfield

COVENTRY ROAD

BROWNS ROAD

N/F
ENVIRO ENTERPRISES, LLC
#438 BROWNS ROAD
(VOL. 680 PG. 54)

N/F
WILLARD J. STEARNS
& SONS, INC
BROWNS ROAD
(VOL. 169 PG. 47)

N/F
SCOTT K. &
REBECCA T. LEHMANN
#532 BROWNS ROAD
(VOL. 149 PG. 98)

N/F
SHIRLEY J. GRAVES
#542 BROWNS ROAD
(VOL. 456 PG. 316)

LOT 5

LOT 6

LOT 7

LOT 8

Land to be dedicated to the Town of Mansfield for open space, park or playground purposes

SEE SHEET #2 FOR NOTES AND CERTIFICATIONS

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN _____ DATE _____

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR _____ DATE _____

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST _____

GRAPHIC SCALE 1"=40'

REVISIONS
01-27-2016

SITE DEVELOPMENT PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD
MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=40'	12-15-2015	4 OF 7	10590S

10590-Brody-Stearns/10590A

SOIL TYPE LEGEND

NUMBER	SOIL TYPE
3	Ridgebury, Leicester and Whitman soils
46B	Woodbridge fine sandy loam
47C	Woodbridge fine sandy loam
73C	Charlton–Chatfield

SEE SHEET #2 FOR NOTES AND CERTIFICATIONS

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

KENNETH R. PETERSON — L.S. 10839 REGISTRATION NO.

10590-Brody-Stearns/10590A

SITE DEVELOPMENT PLAN
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD & COVENTRY ROAD MANSFIELD, CONNECTICUT

REVISIONS
01-27-2016

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	1"=40'	12-15-2015	5 OF 7	10590S

MINIMUM LEACHING SYSTEM SPREAD (MLSS)

HYDRAULIC FACTOR (HF) X FLOW FACTOR (FF) X PERCOLATION FACTOR (PF)

MLSS = HF X FF X PF **SAMPLE**

HYDRAULIC FACTOR (HF)

DEPTH TO RESTRICTIVE LAYER

	HYDRAULIC GRADIENT (% OF SLOPE)								
	<1	1.1–2	2.1–3	3.1–4	4.1–6	6.1–8	8.1–10	10.1–15	>15
<17.9	SEE	NOTE	#1						
18–22	72	62	54	48	42	34	30	28	26
22.1–26	66	56	48	42	34	30	28	26	24
26.1–30	56	49	42	34	30	28	26	24	20
30.1–36	48	42	34	30	28	26	24	20	18
36.1–42	42	36	30	28	26	24	20	18	16
42.1–48	36	32	28	26	24	20	18	16	14
48.1–60	30	28	24	22	20	18	16	14	10
>60	MLSS NEED NOT BE CONSIDERED								

#1–CANNOT BE APPROVED UNLESS HYDRAULIC ANALYSIS DEMONSTRATES SUITABILITY

FLOW FACTOR (FF) = DESIGN FLOW / 300 SO: 3 BEDROOMS = 450/300 = 1.5

4 BEDROOMS = 600/300 = 2.0

PERCOLATION FACTOR (PF) LESS THAN 5 MIN/IN = 1.0

5.1 – 10 = 1.2
10.1 – 20 = 1.5
20.1 – 30 = 2.0
30.1 – 45 = 3.0
45.1 – 60 = 5.0

MLSS CALCULATIONS

LOT 1
Avg. Depth to restrictive layer: 22.3"
Hydraulic Gradient: 2.1–3%
HF= 48
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 48x 2.0 x 1.2 = 116

LOT 2
Avg. Depth to restrictive layer: 25.6"
Hydraulic Gradient: 2.1–3%
HF= 48
4 Bedrooms, FF= 2.0
Perc Rate 1–5 min/in.
PF= 1.0
MLSS= 48 x 2.0 x 1.0 = 96

LOT 3
Avg. Depth to restrictive layer: 25.3"
Hydraulic Gradient: 3.1–4%
HF= 42
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 42 x 2.0 x 1.2 = 101

LOT 4
Avg. Depth to restrictive layer: 25"
Hydraulic Gradient: 4.1–6%
HF= 34
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 34 x 2.0 x 1.2 = 82

LOT 5
Avg. Depth to restrictive layer: 22.3"
Hydraulic Gradient: 4.1–6%
HF= 34
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 34 x 2.0 x 1.2 = 82

LOT 6
Avg. Depth to restrictive layer: 26.16" (TH's 22,22N,22S,23,24,33)
Hydraulic Gradient: 2.1–3%
HF= 42
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 42 x 2.0 x 1.2 = 101

LOT 7
Avg. Depth to restrictive layer: 26"
Hydraulic Gradient: 1.1–2%
HF= 56
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 56 x 2.0 x 1.2 = 135

LOT 8–Existing House
Avg. Depth to restrictive layer: 26"
Hydraulic Gradient: 6.1–8%
HF= 30
3 Bedrooms, FF= 1.5
Perc Rate 1–5 min/in.
PF= 1.0
MLSS= 30 x 1.5 x 1.0 = 45

LOT 9
Avg. Depth to restrictive layer: 25.3"
Hydraulic Gradient: 6.1–8%
HF= 30
4 Bedrooms, FF= 2.0
Perc Rate 5.1–10 min/in.
PF= 1.2
MLSS= 30 x 2.0 x 1.2 = 72

Soil Testing Results
Observed By: Eastern Highlands Health District
Others Present: Gardner & Peterson Associates, LLC and Highland Soils
Date Tested: September 3, 2015

TH 1
0–8" Topsoil
8–30" Orange Brown Fine Sandy Loam
30–80" Compact Glacial Till
Mottling @ 27"
Roots to 30"
No groundwater
No ledge

TH 2
0–5" Topsoil
5–18" Orange Brown Fine Sandy Loam
18–78" Compact Glacial Till
Mottling @ 18"
Roots to 18"
No groundwater
No ledge

TH 3
0–4" Topsoil
4–22" Orange Brown Fine Sandy Loam
22–80" Compact Glacial Till
Mottling @ 22"
Roots to 22"
No groundwater
No ledge

TH 4
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–80" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 5
0–4" Topsoil
4–24" Orange Brown Fine Sandy Loam
24–81" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TH 6
0–3" Topsoil
3–27" Orange Brown Fine Sandy Loam
27–76" Compact Glacial Till
Mottling @ 27"
Roots to 27"
No groundwater
No ledge

TH 7
0–7" Topsoil
7–30" Orange Brown Fine Sandy Loam
30–81" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

TH 8
0–6" Topsoil
6–26" Orange Brown Fine Sandy Loam
26–80" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 9
0–5" Topsoil
5–20" Orange Brown Fine Sandy Loam
20–77" Compact Glacial Till
Mottling @ 20"
Roots to 20"
No groundwater
No ledge

TH 10
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–65" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 11
0–4" Topsoil
4–20" Orange Brown Fine Sandy Loam
20–72" Compact Glacial Till
Mottling @ 20"
Roots to 20"
No groundwater
No ledge

TH 12
0–5" Topsoil
5–29" Orange Brown Fine Sandy Loam
29–77" Compact Glacial Till
Mottling @ 29"
Roots to 29"
No groundwater
No ledge

TH 13
0–5" Topsoil
5–19" Orange Brown Fine Sandy Loam
19–70" Compact Glacial Till
Mottling @ 19"
Roots to 19"
No groundwater
No ledge

Soil Testing Results
Observed By: Eastern Highlands Health District
Others Present: Gardner & Peterson Associates, LLC and Highland Soils
Date Tested: September 3, 2015

TH 14
0–6" Topsoil
6–24" Orange Brown Fine Sandy Loam
24–48" Compact Glacial Till
Mottling @ 24"
No groundwater
Ledge @ 48"

TH 15
0–5" Topsoil
5–24" Orange Brown Fine Sandy Loam
24–78" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TH 16
0–5" Topsoil
5–40" Orange Brown Fine Sandy Loam
40–65" Compact Glacial Till
Mottling @ 40"
Roots to 40"
No groundwater
No ledge

TH 16A
0–5" Topsoil
5–20" Orange Brown Fine Sandy Loam
20–80" Compact Glacial Till
Mottling @ 20"
Roots to 20"
No groundwater
No ledge

TH 16B
0–6" Topsoil
6–27" Orange Brown Fine Sandy Loam
27–72" Compact Glacial Till
Mottling @ 27"
Roots to 27"
No groundwater
No ledge

TH 16C
0–5" Topsoil
5–31" Orange Brown Fine Sandy Loam
31–84" Compact Glacial Till
Mottling @ 31"
Roots to 31"
No groundwater
No ledge

TH 17–not dug

TH 18
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–90" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 19
0–5" Topsoil
5–26" Orange Brown Fine Sandy Loam
26–50" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 20
0–5" Topsoil
5–30" Orange Brown Fine Sandy Loam
30–90" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

TH 21
0–5" Topsoil
5–31" Orange Brown Fine Sandy Loam
31–64" Compact Glacial Till
Mottling @ 31"
Roots to 31"
No groundwater
No ledge

TH 22
0–6" Topsoil
6–30" Orange Brown Fine Sandy Loam
30–43" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
Ledge @ 43"

TH 23
0–5" Topsoil
5–24" Orange Brown Fine Sandy Loam
24–84" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

Soil Testing Results
Observed By: Eastern Highlands Health District
Others Present: Gardner & Peterson Associates, LLC and Highland Soils
Date Tested: September 3, 2015

TH 24
0–4" Topsoil
4–25" Orange Brown Fine Sandy Loam
25–90" Compact Glacial Till
Mottling @ 25"
Roots to 25"
No groundwater
No ledge

TH 24A
0–5" Topsoil
5–29" Orange Brown Fine Sandy Loam
29–56" Compact Glacial Till
Mottling @ 29"
Roots to 29"
No groundwater
No ledge

TH 24B
0–6" Topsoil
6–24" Orange Brown Fine Sandy Loam
24–84" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TH 24C
0–6" Topsoil
6–23" Orange Brown Fine Sandy Loam
23–82" Compact Glacial Till
Mottling @ 23"
Roots to 23"
No groundwater
No ledge

TH 25
0–7" Topsoil
7–25" Orange Brown Fine Sandy Loam
25–90" Compact Glacial Till
Mottling @ 25"
Roots to 25"
No groundwater
No ledge

TH 26
0–7" Topsoil
7–26" Orange Brown Fine Sandy Loam
26–90" Compact Glacial Till
Mottling @ 26"
Roots to 26"
No groundwater
No ledge

TH 27
0–5" Topsoil
5–25" Orange Brown Fine Sandy Loam
25–77" Compact Glacial Till
Mottling @ 25"
Roots to 25"
No groundwater
No Ledge

TH 28
Ledge @ 24"

TH 29–Not dug

TH 30
0–5" Topsoil
5–30" Orange Brown Fine Sandy Loam
30–64" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

TH 31
0–7" Topsoil
7–26" Orange Brown Fine Sandy Loam
26–50" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
Ledge at 50"

TH 32
0–6" Topsoil
6–30" Orange Brown Fine Sandy Loam
30–64" Compact Glacial Till
Mottling @ 30"
Roots to 30"
No groundwater
No ledge

Soil Testing Results
Observed By: Eastern Highlands Health District
Date Tested: 8/26/2014
Near existing house–522 Browns Road
Only location is on EHHD sketch (south of septic tank)

TP 1
0–9" Topsoil
9–36" Brown medium sandy loam, very rocky
36–65" Gray fine & medium sand & gravel, slightly firm
Ledge @ 65"
No seepage or mottling
Roots to 40"

TP 2
Ledge @ 32"
No seepage or mottling
Roots to 32"

TP 3
0–9" Topsoil
9–25" Brown Fine Sandy Loam
25–37" Tan Medium Sand, slightly firm, rocky
Ledge @ 37"
No Seepage or Mottling
Roots to 28"

TP 4
0–4" Topsoil
4–28" Brown Fine Sandy Loam
Trench hit at 17", flooded pit, deeper depth soils unknown
No Ledge or Mottling
Seepage @ 17"
Roots to 28"

TP 5
Filled & distrubved soils
Secondary Leaching Trench?
No Ledge
Seepage @ 17"
Mottling @ 19"
Roots to 28"

TP 6
0–9" Topsoil
9–25" Brown Fine Sandy Loam
25–36" Gray Fine Sand, Rocky
Machine refusal at 36", probable broken ledge, quite large
Ledge @ 36?
No Seepage
No Mottling
Roots @ 28"

Percolation Test
By: Eastern Highlands Health District
Date Tested: 8/26/2014
Near existing house–522 Browns Road
Only location is on EHHD sketch

Rate: 5 min/in

Soil Testing Results
By: Eastern Highlands Health District Only
Date Tested: 8/26/2014
Near existing house–522 Browns Road
Only location is on EHHD sketch (south of septic tank)

TP 22N
0–7" Topsoil
7–30" Orange Brown Fine Sandy Loam
30–93" Compact Glacial Till
Mottling @ 36"
Roots to 29"
Restrictive @ 30"
No Groundwater
No Ledge

TP 22S
0–8" Topsoil
8–24" Orange Brown Fine Sandy Loam
24–80" Compact Glacial Till
Mottling @ 24"
Roots to 25"
No Groundwater
No Ledge

TP 33
0–8" Topsoil
8–24" Orange Brown Very Fine Sandy Loam–Silty
24–89" Compact Glacial Till
Mottling @ 24"
Roots to 25"
No groundwater
No ledge

TP 34
0–8" Topsoil
8–21" Orange Brown Fine Sandy Loam–Silty
21–76" Compact Glacial Till
Mottling @ 21"
Roots to 24"
No groundwater
No ledge

TP 35
0–7" Topsoil
7–24" Orange Brown Fine Sandy Loam
24–92" Compact Glacial Till
Mottling @ 24"
Roots to 24"
No groundwater
No ledge

TP 36
0–8" Topsoil
8–25" Orange Brown Fine Sandy Loam
25–61" Compact Glacial Till
Mottling @ 25"
Roots to 26"
No groundwater
No ledge

Percolation Tests
By: Gardner & Peterson Associates LLC
Heavy Rain on September 30, 2015

Perc #1
Presoaked 9/21/15 at 2:47
Presoaked 9/22/15 at 12:40
Depth=20"
Mark Down 0"

TIME	DEPTH
1:21	8"
1:31	11 ½"
1:41	14 ¾"
1:51	15 3/4"
2:01	16 3/4"
2:11	17 3/4"
2:16	18 ½"
2:21	Dry

Rate: 10 min/in

Perc #2
Presoaked 9/21/15 at 2:33
Presoaked 9/22/15 at 10:49
Depth=20"
Mark Down 0"

TIME	DEPTH
1:18	8"
1:27	13"
1:37	16 ½"
1:47	19 ½"
Dry	

Rate: 1–5 min/in

Perc #3
Presoaked 9/21/15 at 3:07
Presoaked 9/22/15 at 10:46
Depth=20"
Mark Down 0"

TIME	DEPTH
1:15	8"
1:25	11 ¼"
1:35	13 ½"
1:45	15 ½"
1:55	16 3/4"
2:05	18"
Dry	

Rate: 5.1–10 min/in

Perc #4
Presoaked 9/21/15 at 3:30
Presoaked 9/22/15 at 10:43
Depth=18"
Mark Down 2"

TIME	DEPTH
11:55	3 ½"
12:05	6"
12:15	7 ½"
12:25	9"
12:35	10"
12:45	11"
12:55	12"
1:05	13"

Rate: 10 min/in

Perc #5
Presoaked 9/21/15 at 3:45
Presoaked 9/22/15 at 10:40
Depth=18"
Mark Down 1 ½"

TIME	DEPTH
11:40	4 ¼"
11:50	8 ½"
12:00	11 ½"
12:10	13"
12:20	14"
Dry	

Rate: 5.1–10 min/in

Perc 6A
Presoaked 10/01/15 at 8:48
Depth=18"
Mark Down 0"

TIME	DEPTH
10:50	6"
11:00	9 ½"
11:10	11 ½"
11:20	13 ¾"
11:30	14 ½"
11:40	15 3/4"
11:50	DRY

Rate: 5.1–10 min/in

Perc 6B
Presoaked 10/01/15 at 8:30
Depth=17"
Mark Down 0"

TIME	DEPTH
10:53	5"
11:03	10"
11:13	13"
11:18	13 3/4"
11:23	14 3/4"
11:28	15 3/4"
11:33	16 ½"
11:38	DRY

Rate: 5.1–10 min/in

Perc 7
Presoaked 10/01/15 at 10:10
Depth=19"
Mark Down 2"

TIME	DEPTH
11:45	3 ½"
11:50	7"
11:55	9 ½"
12:00	10 ½"
12:05	11 ½"
12:10	12 ½"
12:15	13"
12:20	13 ½"
12:25	14"
12:30	14 ½"
12:35	DRY

Rate: 10 min/in

Perc 8
Presoaked 10/01/15 at 10:44
Depth=19"
Mark Down 1"

TIME	DEPTH
12:08	6"
12:13	10"
12:18	12"
12:23	13 ½"
12:28	15"
12:33	16 ½"
12:38	18" DRY

Rate: 1–5 min/in

Perc #9
Presoaked 9/21/15 at 4:20
Presoaked 9/22/15 at 10:24
Depth=19"
Mark Down 0"

TIME	DEPTH
10:56	7 ½"
10:59	10"
11:02	11 ¼"
11:05	12 ½"
11:08	13 3/4"
11:11	14 3/4"
11:14	15 3/4"
11:17	16 ¾"
11:20	16 3/4"
11:23	17 ¾"
11:26	18"
Dry	

Rate: 5.1–10 min/in

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION.
2. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN.
3. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN THE AMOUNT NECESSARY TO COMPLETE THE FINISHED GRADING OF ALL EXPOSED AREAS.
4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
5. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO MINIMIZE EROSION, SLIPPAGE, AND SETTLEMENT. FILL INTENDED TO SUPPORT STRUCTURES, DRAINAGE, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH THE APPROPRIATE STATE AND/OR LOCAL SPECIFICATIONS.
6. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, LARGE ROCKS, LOGS, STUMPS, BUILDING MATERIAL, COMPRESSIBLE MATERIAL, AND OTHER MATERIALS WHICH MAY INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
7. FROZEN MATERIAL OR SOFT MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
8. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.
9. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
10. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH SOUND CONSTRUCTION PRACTICE.
11. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISH GRADING. IF FINISH GRADING IS TO BE DELAYED FOR MORE THAN 30 DAYS AFTER DISTURBANCE IS COMPLETE, TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED. AREAS LEFT OVER 30 DAYS SHALL BE CONSIDERED "LONG TERM" AND SHALL RECEIVE TEMPORARY SEEDING WITHIN THE FIRST 15 DAYS.
12. SITE IS TO BE GRADED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCHING, AND MAINTENANCE UNLESS OTHERWISE SPECIFIED IN THE PLANS.
13. CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2:1. TOPSOIL SHALL BE SPREAD TO A MINIMUM DEPTH OF 4". ADDITIONAL TOPSOIL MAY BE REQUIRED TO MEET MINIMUM DEPTHS. NO TOPSOIL SHALL BE REMOVED FROM THIS SITE.
14. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL CULTIPACKER TYPE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4" TO 1/2" INCH. HYDROSEEDING WHICH IS MULCHED MAY BE LEFT ON THE SOIL SURFACE.
15. WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING WITH A ROLLER OR LIGHT DRAG.
16. FERTILIZER AND LIME ARE TO BE WORKED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC. SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OF DISC OPERATION SHOULD BE ALONG THE CONTOUR.
17. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER. REMOVE ALL OTHER DEBRIS SUCH AS WIRE, TREE ROOTS, PIECES OF CONCRETE, OR OTHER UNSUITABLE MATERIALS.
18. INSPECT SEEDBED BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED BEFORE SEEDING, THEN FIRMED AS DESCRIBED ABOVE.
19. WHERE GRASSES PREDOMINATE, FERTILIZE ACCORDING TO SOIL ANALYSIS, OR SPREAD 300 POUNDS OF 10–10–10 OR EQUIVALENT PER ACRE (7.5 POUNDS PER 1000 S.F.).
20. CALCIUM CHLORIDE WILL BE AVAILABLE FOR DUST CONTROL ON GRAVEL TRAVEL SURFACES.

CONSTRUCTION SCHEDULE & EROSION & SEDIMENT CONTROL CHECKLIST

PROJECT NAME: MOUNTAIN VIEW ACRES

LOCATION: BROWN & COVENTRY ROADS

PROJECT DESCRIPTION: RESIDENTIAL SUBDIVISION

PARCEL AREA: 36.6 ACRES

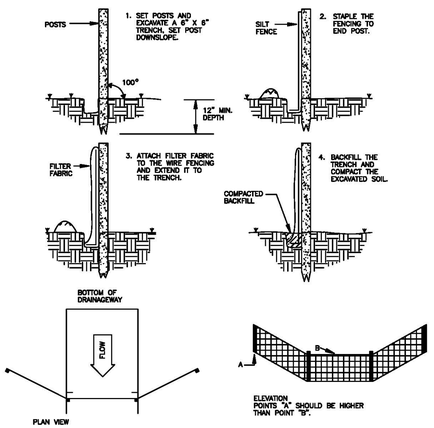
RESPONSIBLE PERSONNEL: MR. PAUL BRODY

WORK DESCRIPTION	EROSION & SEDIMENT CONTROL MEASURES	DATE INSTALLED	INITIALS
SUBDIVIDER IS REQUIRED TO CONSTRUCT COMMON DRIVEWAYS.			
LAND SURVEYOR SHALL FLAG LIMIT OF CLEARING.			
CUT TREES.			
INSTALL EROSION CONTROLS.			
REMOVE STUMPS.			
STRIP TOPSOIL AND STOCKPILE.			
CONSTRUCT COMMON DRIVEWAY.			
FINAL GRADE AND SEED ALL DISTURBED AREAS.			
PERMIT PLAN SHALL BE PREPARED FOR DEVELOPMENT OF EACH LOT FOR LOT OWNER/BUILDER.			

PROJECT DATES:
DATE OF CONSTRUCTION START PER APPROVAL TIMELINES
DATE OF CONSTRUCTION COMPLETION PER APPROVAL TIMELINES

EROSION AND SEDIMENT CONTROL PROCEDURES SHALL ESSENTIALLY BE IN ACCORDANCE WITH THESE PLANS, AS REQUIRED BY TOWN REGULATIONS, AND THE MANUAL "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" FOR CONNECTICUT, BY THE COUNCIL ON SOIL AND WATER CONSERVATION, 1985, REVISED TO 2002.

PLACEMENT AND CONSTRUCTION OF A SYNTHETIC FILTER BARRIER



APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

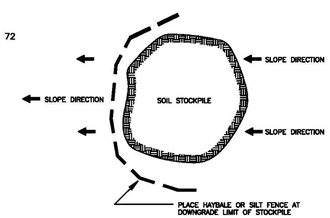
CHAIRMAN _____ DATE _____

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR _____ DATE _____

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR _____ DATE _____



STOCKPILE EROSION PROTECTION DETAIL
N.T.S.

TEMPORARY SEEDING SCHEDULE:

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
ANNUAL RYEGRASS	40	0.9	3/1–8/15, 8/1–10/1
WINTER RYE	40	0.9	4/15–8/15, 8/15–10/1
SUDANGRASS	11	0.25	5/15–8/15

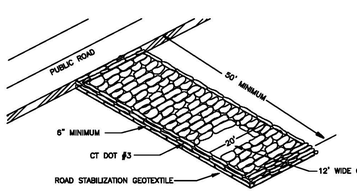
TEMPORARY SEEDING IS NOT LIMITED TO THE SPECIES SHOWN. OTHER SPECIES RECOMMENDED BY THE SCS OR AS LIMITED BY SITE CONDITIONS MAY BE USED.

STRAW MULCH IS TO BE APPLIED TO SEEDED AREA AT THE RATE OF 1–1/2 TO 2 TONS PER ACRE, 70 TO 90 LBS. PER 1000 SQ. FT.

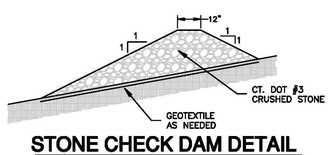
FINAL SEEDING SCHEDULE:

PROVIDE 4 INCHES OF TOPSOIL MINIMUM, FREE OF ROOTS, LARGE STONES, AND OTHER OBJECTS.

SPECIES	LBS/ACRE	LBS/1000SF	SEEDING DATES
KENTUCKY BLUEGRASS	40	0.90	4/15–8/15, 8/15–9/15
CREEPING RED FESCUE	120	2.75	
PERENNIAL RYEGRASS	40	0.90	



CONSTRUCTION ENTRANCE



STONE CHECK DAM DETAIL

SOIL DATA

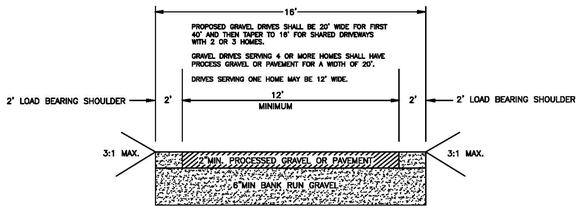
SEDIMENTATION & EROSION CONTROL DETAILS

MOUNTAIN VIEW ACRES
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

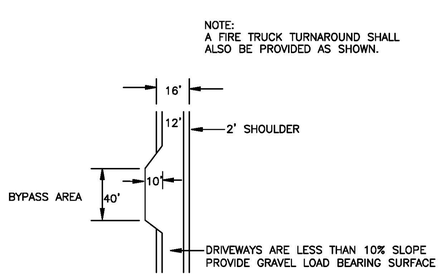
REVISIONS
01-27-2016

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	N.T.S.	12–15–2015	6 OF 7	10590S

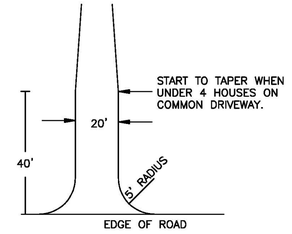


TYPICAL SHARED DRIVEWAY SECTION

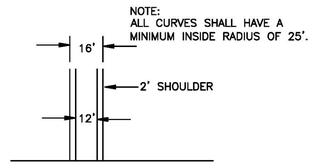


DRIVEWAY OVER 300' LONG

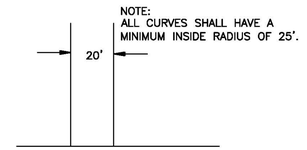
INSIDE RADIUS SHALL BE A MIN. 25'



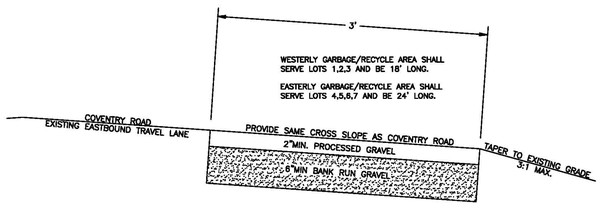
SHARED DRIVEWAY INTERSECTS COVENTRY ROAD



SHARED DRIVEWAY DETAIL WHEN SERVING 2 or 3 HOUSES

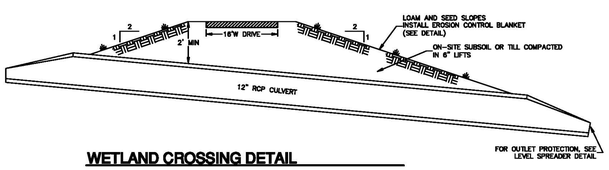


SHARED DRIVEWAY DETAIL WHEN SERVING 4 or MORE HOUSES

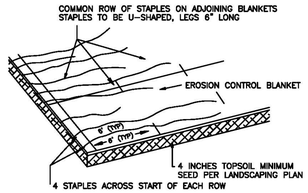


TYPICAL GARBAGE/RECYCLE AREA SECTION

N.T.S.

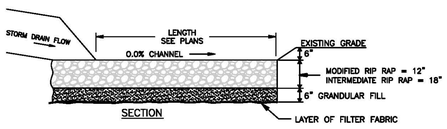


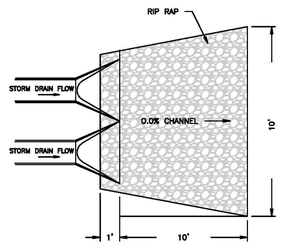
WETLAND CROSSING DETAIL



NOTES:
1. APPLY ON SLOPES 2:1 OR GREATER, BUT LESS THAN 3:1.
2. EROSION CONTROL BLANKET TO BE NORTH AMERICAN GREEN S 150 DOUBLE NET STRAW BLANKET OR EQUAL.
3. INSTALL ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

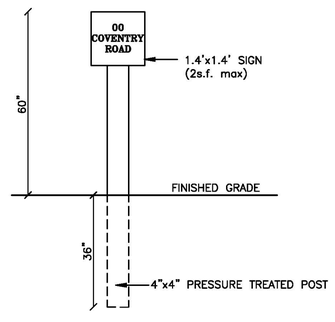
EROSION CONTROL BLANKET





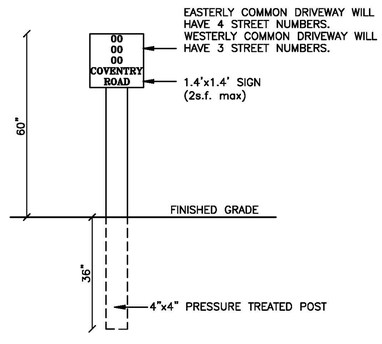
NOTES:
1. WHERE POSSIBLE LEVEL SPREADER TO BE CONSTRUCTED ON UNDISTURBED SOIL.
2. SHAPE THE ENTRANCE TO THE SPREADER IN SUCH A MANNER AS TO INSURE THAT RUNOFF ENTERS DIRECTLY ONTO THE 0.0% CHANNEL.
3. LIP TO BE CONSTRUCTED LEVEL AT 0.0% GRADE TO INSURE UNIFORM SPREADING OF STORM WATER RUNOFF.

LEVEL SPREADER DETAIL



STREET NUMBER SIGN AT INTERSECTION OF COMMON & SINGLE FAMILY DRIVEWAY

N.T.S.



STREET NUMBER SIGN AT COVENTRY ROAD

N.T.S.

APPROVED BY THE MANSFIELD PLANNING & ZONING COMMISSION

CHAIRMAN DATE

APPROVED BY THE DIRECTOR OF HEALTH

DIRECTOR DATE

APPROVED BY THE DIRECTOR OF PUBLIC WORKS

DIRECTOR DATE

REVISIONS
01-27-2016

CONSTRUCTION DETAILS

MOUNTAIN VIEW ACRES
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
B.D.C.	N.T.S.	12-15-2015	7 OF 7	10590S

TOTAL SITE:
36.647 ACRES
CONSERV. EASEMENT
10.9 ACRES
TOWN OPEN SPACE
3.915 ACRES
40.45% OPEN SPACE

LOT 1
5.16 ACRES
BAE 40,295.9 SF

LOT 2
3.25 ACRES
BAE 40,934 SF

LOT 3
2.8 ACRES
BAE 40,112 SF

LOT 4
3.24 ACRES
BAE 42,764 SF

LOT 5
2.94 ACRES
BAE 40,402.7 SF

LOT 6
2.53 ACRES
BAE 40,5538 SF

LOT 7
6.25 ACRES
BAE 43,583.2 SF

LOT 8
2.42 ACRES

LOT 9
2.9 ACRES
BAE 40,399 SF

CONSERVATION EASEMENT

OPEN SPACE DEDICATION
3.915 ACRES

POND

BOULDERS

BAE

50' UPLAND REVIEW AREA

COVENTRY ROAD

BROWNS ROAD

N/F
JAMES PEGG GALEY &
MARGARITA HAIDOUS-GALEY
#85 COVENTRY ROAD
(VOL. 859 PG. 198)

N/F
ENVIRO ENTERPRISES, LLC
#430 BROWNS ROAD
(VOL. 680 PG. 54)

N/F
KIEV J. & KES MERI
FEDEROWICZ
#366 BROWNS ROAD
(VOL. 635 PG. 408)

N/F
WILLARD J. STEARNS
& SONS, INC
BROWNS ROAD
(VOL. 169 PG. 47)

N/F
WILLARD J. STEARNS
& SONS, INC
BROWNS ROAD
(VOL. 169 PG. 47)

SCALE:

LEGEND

- EXISTING CONTOUR
- STONE WALL
- APPROXIMATE WOODS LINE
- EXISTING LEDGE
- WETLAND
- SLOPES 15% OR GREATER WETLAND
- AREA SUITABLE FOR BUILDING
- SIGNIFICANT VIEW/ SIGNIFICANT VANTAGE POINT

CONCEPT PLAN - PROPOSED SUBDIVISION

for WILLARD J. STEARNS & SONS, INC.

COVENTRY & BROWNS ROADS MANSFIELD, CT

JOHN ALEXOPOULOS, LAND. ARCH.

JUNE 5 , 2015

NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300b-1 TEROUGH 20-300b-20. THIS IS A TOPOGRAPHIC SURVEY, AND IS A FIRST SURVEY CONFORMING TO HORIZONTAL ACCURACY CLASS A-2, TOPOGRAPHY CONFORMS TO TOPOGRAPHIC ACCURACY CLASS T-3, TARGETS BY GARDNER & PETERSON ASSOC., AERIAL SURVEY BY POTOMAC AERIAL SURVEYS, INC..
2. BEARINGS DEPICTED ON THIS PLAN ARE BASED UPON NAD 83 (CONNECTICUT STATE PLANE COORDINATES) BASED ON COORDINATES FROM MAP REFERENCE 3a, ELEVATIONS ARE BASED ON NAVD 88 DATUM BASED ON GPS ELEVATIONS BY DESIGN PROFESSIONALS.
3. MAP REFERENCES:
   A. "PROPERTY SURVEY CERTAIN PROPERTY OF WILLARD J. STEARNS & SONS, INC IDENTIFIED AS FARM 1, FARM 2 AND FARM 3 BROWNS RD., STEARNS RD., MANSFIELD CITY RD., PLEASANT VALLEY RD. MANSFIELD, CONNECTICUT" DATED 9-11-2014 SCALE: 1"=200' BY: F.A. HESKETH & ASSOCIATES, INC.
   B. "BOUNDARY SURVEY FOR SUBDIVISION ENTITLED CHATHAM HILL BROWNS ROAD MANSFIELD, CONNECTICUT" OWNER & SUBDIVIDER MICHAEL DILAJ TRUSTEE SCALE: 1"=100' DATED1-1-98 REV. 6-15-98 BY: DATUM ENG.
   C. "BOUNDARY & TOPOGRAPHIC SURVEY PREPARED FOR KIEV PEDERONICZ PROPOSED HOUSE ADDITION & PROPOSED BARN/STUDIO 568 BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=30' DATED 4-9-13 REV. THROUGH 1-28-15 BY: ROB HELLSTROM LAND SURVEYING LLC
   D. "CORRECTIONAL MAP LAND OF DANIEL B AND ANN L. COSTELLO AND PATRICIA E. AND JAMES V. LETA SITUATED ON THE SOUTHERLY LINE OF COVENTRY ROAD IN THE TOWN OF MANSFIELD, THE COUNTY OF TOLLAND AND THE STATE OF CONNECTICUT" SCALE 1"=40' DATED 8-14-65 BY: JOHN R. GRIFFIN
   E. "PROPERTY OF RUSSELL W. & PHYLLIS MARTIN COVENTRY ROAD, BROWNS ROAD MANSFIELD CONNECTICUT" SCALE: 1"=100' DATED 2-7-88 BY: KANEU & PROKOPOSE ASSOCIATES, INC.
   F. "SUBDIVISION PLAN SMITH FARMS PREPARED FOR: REJA ACQUISITION CORP. COVENTRY ROAD MANSFIELD, CONNECTICUT" SCALE: 1"=100' DATED: FEB. 2003 REV. THROUGH 4-20-04 BY: MESSIER & ASSOCIATES, INC.
4. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING, OR OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO GARDNER & PETERSON ASSOCIATES, LLC. THE EXISTENCE, SIZE AND LOCATION OF ALL SUCH FEATURES MUST BE DETERMINED AND VERIFIED IN THE FIELD BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.
5. WETLANDS DEPICTED HEREON WERE FIELD DELINEATED BY SOIL SCIENTIST JOHN IANNI.

YIELD PLAN:

PARCEL AREA:	36.647 ACRES
AREA OF WETLANDS:	9.397 ACRES
AREA OF LEDGE OUTCROPS & SLOPES OVER 20%:	0.90 ACRES
NET AREA:	26.35 ACRES
NET PERCENTAGE:	71.9%
OPEN SPACE REQUIRED:	15% (5.497 ACRES)
NET AREA REQUIRED:	3.95 ACRES

PROPOSED OPEN SPACE CONSISTS OF LAND DEDICATED TO TOWN OF MANSFIELD AND CONSERVATION ESMTS.

DEDICATED OPEN SPACE:	2.37 ACRES
AREA OF WETLANDS:	0.50 ACRES
AREA OF LEDGE OUTCROPS & SLOPES OVER 20%:	0.40 ACRES
NET AREA:	1.47 ACRES
CONSERVATION EASEMENT:	1.03 ACRES (LOTS 1-6-ALL UPLAND)
CONSERVATION EASEMENT:	4.43 ACRES (REAR OF LOT 7)
	1.88 ACRES (UPLAND ON REAR OF LOT 7)
TOTAL:	7.83 ACRES-21.3%
NET AREA PROVIDED:	1.47 AC. + 1.03 AC. + 1.88 AC.=4.38AC. > 3.95 AC.

ALL LOTS HAVE A MINUMUM 200' OF FRONTAGE.
ZONE: RAR-90

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST John P. Ianni

I HEREBY DECLARE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

Kenneth R. Peterson — KENNETH R. PETERSON — L.S. 10839 REGISTRATION NO.

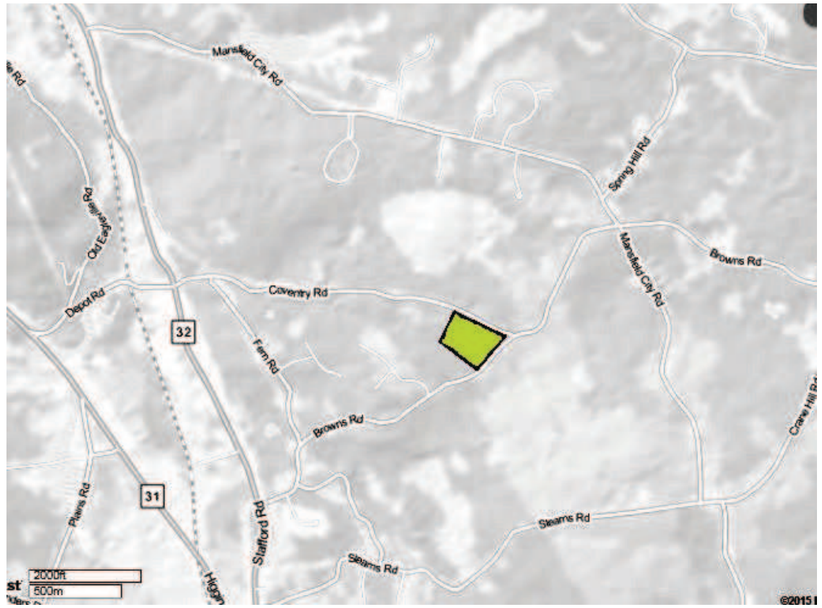
CONCEPTUAL YIELD PLAN

PREPARED FOR
WILLARD J. STEARNS & SONS, INC.
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

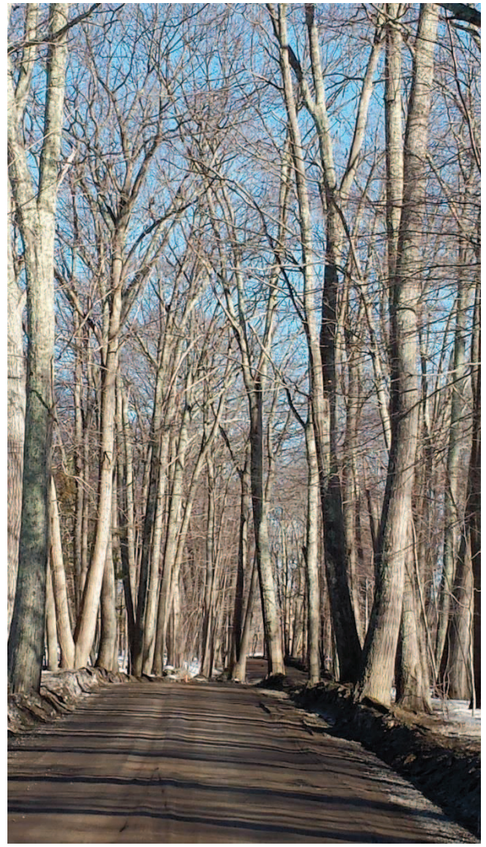
REVISIONS
12-15-2015

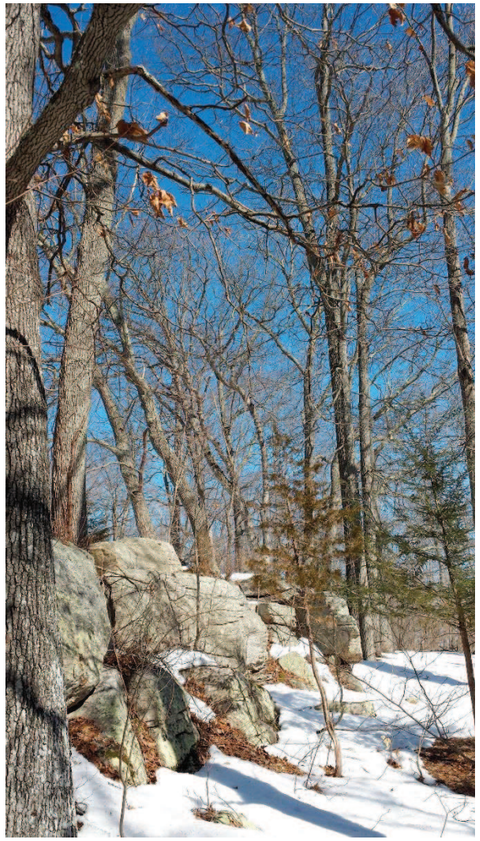
GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
M.A.P.	1"=100'	05-22-2015	1 OF 1	10590Y



SITE LOCATION



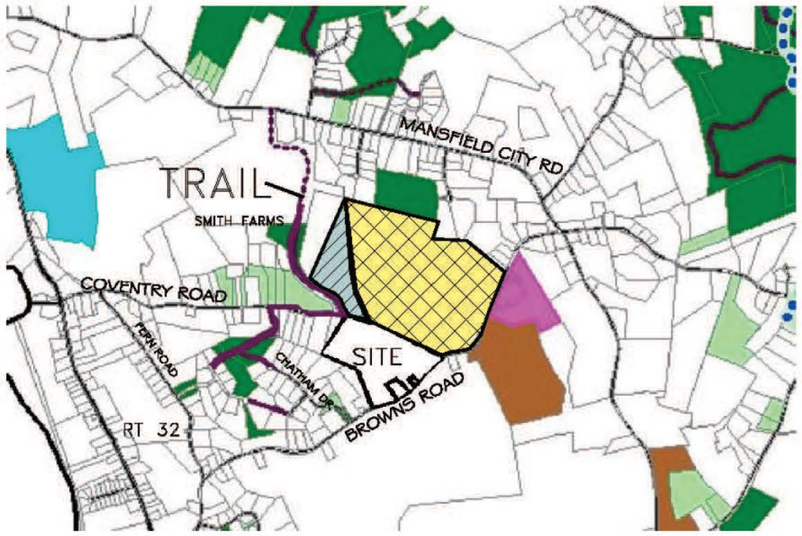


SITE ANALYSIS
NEIGHBORHOOD INFLUENCES

For Willard J. Stearns & Sons, Inc.
Coventry & Brown Roads
Mansfield, CT

John Alexopoulos, RLA, ASLA
March 23, 2015

SITE LOCATION



OFF SITE LAND USES

OPEN SPACE

FARMLAND PROTECTION

TRAIL

March 20, 2015

Off-Site and Neighborhood Influences Analysis:
Proposed Residential Subdivision, Coventry Road and Browns Road
John Alexopoulos, Landscape Architect CT Lic. # 550

Property of Willard J. Stearns and Sons, Inc., Mansfield, CT

I visited the property on several occasions in the months of December 2014 through March of this year.

The property is located on Coventry Road and Browns Road. The 36.9 acre parcel falls within the RAR90 Rural Agricultural Residence 90 zoning district. The surrounding properties are single family developments except for the agricultural lands across Browns Road. A single family home property is found on the western boundary whose driveway connects to Coventry Road, the rear of several single family home lots are found on the south boundary (Chatham Drive) and three residences are found on the eastern side, Browns Road. The residence closest to the intersection of Coventry and Browns Roads is part of this proposed development. The other two residences are separated by a segment of this property.

About half of the eastern portion of the property was likely pasturage in the past save for the wetlands. The 1934 photograph shows this easternmost portion of the property as open pastureland. There is no evidence of old foundations or any other remnant suggesting habitation or structures supporting agriculture. Most all of this portion consists of woods and emerging vegetation. There is a hayfield accessed through a barway along Browns Road. This field is about an acre in size. Excepting some open ground associated with the houses along Browns Road, this is essentially the only open on the property. Most all of the remainder of the property including the wetlands is wooded and recently logged and consists of mostly deciduous second growth trees. There is a small pond within the wetland closest to Coventry Road.

Coventry Road is classified as a local street while Browns Road is classified a collector street. Coventry Road is unpaved for the extent of the property. Coventry Road connects Browns Road with Route 32 some distance away. Brown's Road ends to the south at Route 32 some distance from where Coventry Road joins route 32. Browns Road connects to Mansfield City Road less than a mile to the east. Mansfield Middle School is just about 1.6 miles away from this property via Mansfield City Road and Spring Hill Road and Vinton School is about the same distance via Browns Road and Route 32.

Significant Assets:
The site has several significant features:
- Wetland habitat that extends through the site from north to south
- Outside of the wetland soils and a small area of stone/ledge, about 75 per cent of the site has buildable soils. A small area including the open hayfield is listed as farmland soil.
- Fully canopied for nearly all of the site
- Rock outcroppings adjacent Browns Road
- Rock outcrop adjacent reverting field and associated with larger oak trees
- Group of hemlocks adjacent wall and wetland
- Large trees along Coventry Road and on the western boundary
- Scenic character of Coventry Road, a canopy road
- Notable views of the agricultural fields across Browns Road and of Chestnut Hill– though restricted to small "overlooks" next to Browns Road and from the hayfield
- Some rubbles of stone walls – though not extensive within the property and mostly on property boundaries
- Open Space and preserved farmland opposite Coventry Road and extending the length of this property

Constraints:
- Wetland extending across the site from north to south and wetland adjacent Coventry Road. Access to a portion of property on the west side needs a wetland crossing.
- Stony soils
- Limited area of slopes 15 per cent or over – on the rise close to Browns Road
- Sight line distances along Coventry Road due to existing large trees and due to alignment along Browns Road
- Small areas of rock outcroppings adjacent Browns Road

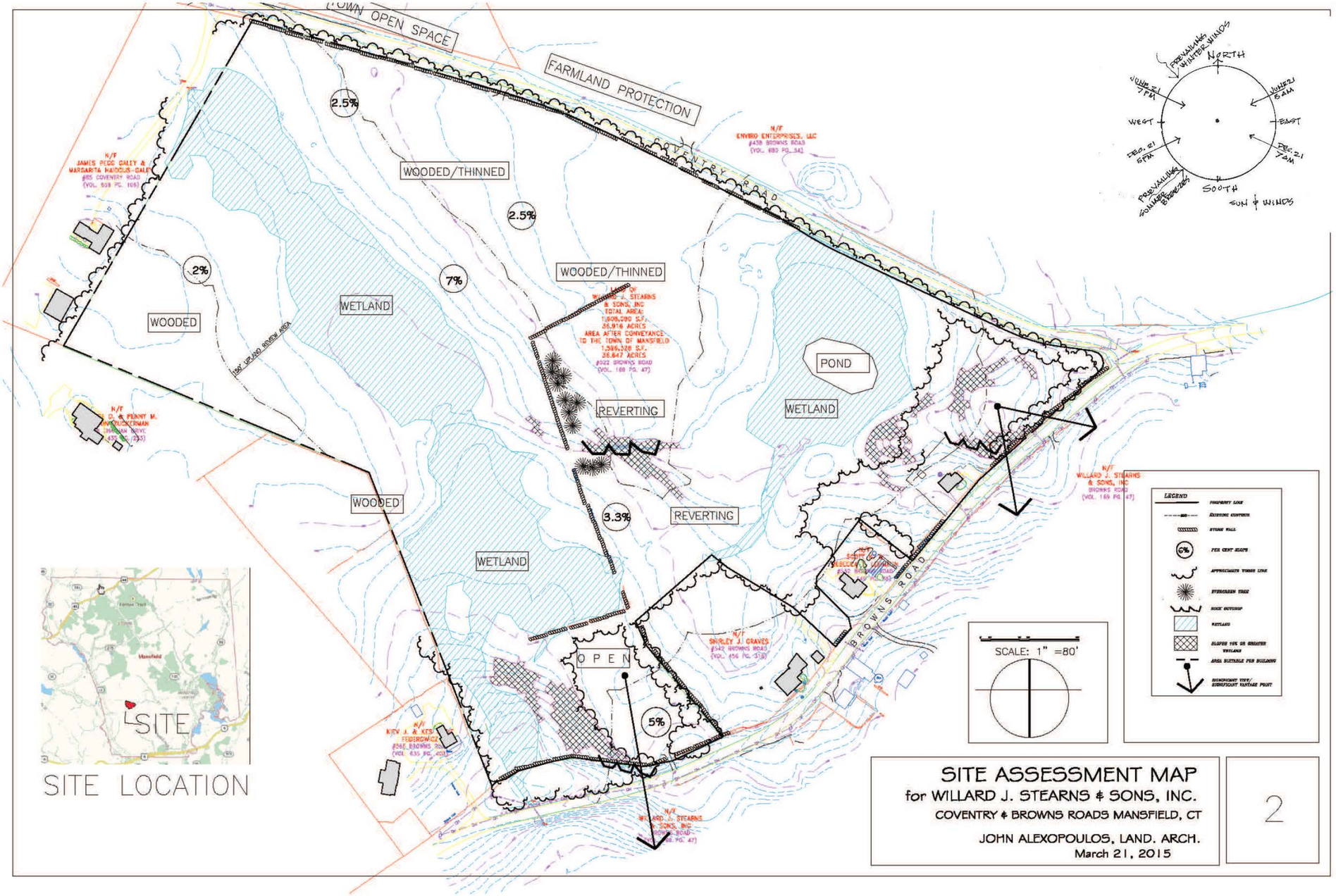
Considerations:
- Limit the number of entrances into property from both Coventry Road or Browns Road.
- Potential driveway entrances have possible restricted sight lines on Coventry Road because of existing trees.
- Limited areas for access from Browns Road due to sight line restrictions regarding slope and alignment. The existing barway into the hayfield appears to be a possible driveway access
- Buildable soils in the western portion require wetland crossing.
- The stone wall along Coventry Road. Where curb cuts are required, any wall section needing removal should be relocated as near to the curb cut as possible.
- Use the group of hemlock trees in the design layout.
- Wetland protection through conservation easement or dedicated open space.

Off-Site Considerations:
- The property is bounded by existing residences on three sides. Chatham Drive residences have their rear properties on the southern boundary, a single home is immediately adjacent on the west boundary and along Browns Road are the three residences. This property connects to Browns Road in several locations between and aside these existing residences. Most houses on Chatham Drive are close to that road so much of the southern border is rear and forested property.
- Across Browns Road is the extensive agricultural property, mostly hay fields, sweeping up to the height of land approaching Stearns Road.
- Across Coventry Road is protected land, consisting of Mansfield Open Space and protected agricultural land. The Open Space is wooded and uses the Smith Farms driveway as the extension of the trail that comes from Chatham I and II. This trail enters Coventry road about a quarter mile from the Smith Farms driveway. The protected farmland is open pasturage.

SITE LOCATION

SITE AREA MAP
for WILLARD J. STEARNS & SONS, INC.
COVENTRY & BROWNS ROADS MANSFIELD, CT
JOHN ALEXOPOULOS, LAND. ARCH.
March 21, 2015

1



SITE ASSESSMENT MAP

for WILLARD J. STEARNS & SONS, INC.

COVENTRY & BROWNS ROADS MANSFIELD, CT

JOHN ALEXOPOULOS, LAND. ARCH.

March 21, 2015

2

March 20, 2015

Off-Site and Neighborhood Influences Analysis:
Proposed Residential Subdivision, Coventry Road and Browns Road
John Alexopoulos, Landscape Architect CT Lic. # 550
Property of Willard J. Stearns and Sons, Inc., Mansfield, CT

I visited the property on several occasions in the months of December 2014 through March of this year.

The property is located on Coventry Road and Browns Road. The 36.9 acre parcel falls within the RAR90 Rural Agricultural Residence 90 zoning district. The surrounding properties are single family developments except for the agricultural lands across Browns Road. A single family home property is found on the western boundary whose driveway connects to Coventry Road, the rear of several single family home lots are found on the south boundary (Chatham Drive) and three residences are found on the eastern side, Browns Road. The residence closest to the intersection of Coventry and Browns Roads is part of this proposed development. The other two residences are separated by a segment of this property.

About half of the eastern portion of the property was likely pasturage in the past save for the wetlands. The 1934 photograph shows this easternmost portion of the property as open pastureland. There is no evidence of old foundations or any other remnant suggesting habitation or structures supporting agriculture. Most all of this portion consists of woods and emerging vegetation. There is a hayfield accessed through a barway along Browns Road. This field is about an acre in size. Excepting some open ground associated with the houses along Browns Road, this is essentially the only open on the property. Most all of the remainder of the property including the wetlands is wooded and recently logged and consists of mostly deciduous second growth trees. There is a small pond within the wetland closest to Coventry Road.

Coventry Road is classified as a local street while Browns Road is classified a collector street. Coventry Road is unpaved for the extent of the property. Coventry Road connects Browns Road with Route 32 some distance away. Brown's Road ends to the south at Route 32 some distance from where Coventry Road joins route 32. Browns Road connects to Mansfield City Road less than a mile to the east. Mansfield Middle School is just about 1.6 miles away from this property via Mansfield City Road and Spring Hill Road and Vinton School is about the same distance via Browns Road and Route 32.

Significant Assets:
The site has several significant features:
Wetland habitat that extends through the site from north to south
Outside of the wetland soils and a small area of stone/ledge, about 75 per cent of the site has buildable soils. A small area including the open hayfield is listed as farmland soil.
Fully canopied for nearly all of the site
Rock outcroppings adjacent Browns Road
Rock outcrop adjacent reverting field and associated with larger oak trees
Group of hemlocks adjacent wall and wetland
Large trees along Coventry Road and on the western boundary
Scenic character of Coventry Road, a canopy road
Notable views of the agricultural fields across Browns Road and of Chestnut Hill– though restricted to small "overlooks" next to Browns Road and from the hayfield.
Some rubbles of stone walls – though not extensive within the property and mostly on property boundaries
Open Space and preserved farmland opposite Coventry Road and extending the length of this property

Constraints:
Wetland extending across the site from north to south and wetland adjacent Coventry Road. Access to a portion of property on the west side needs a wetland crossing.
Stony soils
Limited area of slopes 15 per cent or over – on the rise close to Browns Road
Sight line distances along Coventry Road due to existing large trees and due to alignment along Browns Road
Small areas of rock outcroppings adjacent Browns Road

Considerations:
Limit the number of entrances into property from both Coventry Road or Browns Road.
Potential driveway entrances have possible restricted sight lines on Coventry Road because of existing trees.
Limited areas for access from Browns Road due to sight line restrictions regarding slope and alignment. The existing barway into the hayfield appears to be a possible driveway access.
Buildable soils in the western portion require wetland crossing.
The stone wall along Coventry Road. Where curb cuts are required, any wall section needing removal should be relocated as near to the curb cut as possible.
Use the group of hemlock trees in the design layout.
Wetland protection through conservation easement or dedicated open space.

Site Access:
Access is by Coventry and Browns Road with constraints as noted above. There are no streets adjacent the property.

Topography:
The property generally slopes from Coventry Road south to the large north to south wetland. This wetland flows mostly gently until approaching the Browns Road property line where it is at its steepest. Across this large wetland, the southernmost piece of the property slopes at about two per cent north into the wetland. At the highest point near the intersection of Coventry Road and Browns Road the elevation is about 530 feet while the lowest point on the property is in the southeast corner near Browns Road is about an elevation of 467 feet. The elevation difference is about 63 feet.
Most of the buildable portions of the site range from nearly level in the large area adjacent Coventry Road to about seven per cent near the larger wetland. Steeper slopes, some of which are fifteen per cent or greater are mainly associated with the area close to Browns Road.

Vegetation:
The 1934 aerial photograph of the property shows a portion of the site related to Browns Road that is primarily open land, likely pasture. A variety of tree and shrub species are found throughout the property and are second growth. The area between the large wetland and Coventry Road has been recently logged of mostly oak and the trees remaining are mostly oak mixed with some ash and hickory. There are scattered young pine in this area. There is a high understory on most of the property with very young saplings beneath. Trees in the logged area are mostly oak and generally don't exceed 8" to 10" diameter at breast height (dbh). Larger trees are found on the edges of the open field as well as behind the existing houses and along the outcrop near the rear of one of the Browns Road residences. The wetlands are wooded with typical undergrowth and somewhat larger trees. Most of the site has a limited shrub or small tree understory. Large trees remain along Coventry Road, with dbh exceeding well over 12" for the most part. There is one relatively large grouping of hemlocks associated with the wall in the center of the property. The areas that were pastured and closer to Browns Road are reverting to forest with both shrubs and trees present. Invasive species are mostly found in this area and near the existing houses along Browns Road. Invasive species are multiflora rose, autumn olive, barberry and bittersweet.

Stone Walls:
Stone walls are found along both roads and approximately in the middle of the property. All of these walls are rubbly. The wall along Coventry Road is nearly continuous until reaching the smaller wetland adjacent to the road. This wall has lost what would have been a top layer. There are old barway gaps here and there in these walls.

Views:
Into site --
There are no extensive views or vistas of great or unusual significance from Coventry Road. Views into the site from Browns Road are restricted because of slope, existing houses and vegetation. .
Within site --
Relatively limited except due to logging and the absence of understory vegetation, much of the front portion of the property from the large wetland to Coventry Road can be seen.
Off site –
There are no undesirable views off-site.
Significant potential views of the agricultural fields to the east and Chestnut Hill are possible but from limited vantage points near Browns Road and on the highest points of elevation of the property as well as from the hayfield.

Existing Open Space:
There is adjacent Town of Mansfield Open Space across Coventry Road to the north There is a trail that ascends from Chatham II and Fern Road and reaches Coventry Road some distance from the property, proceeds along Coventry Road and turns left onto the Smith Farms driveway.

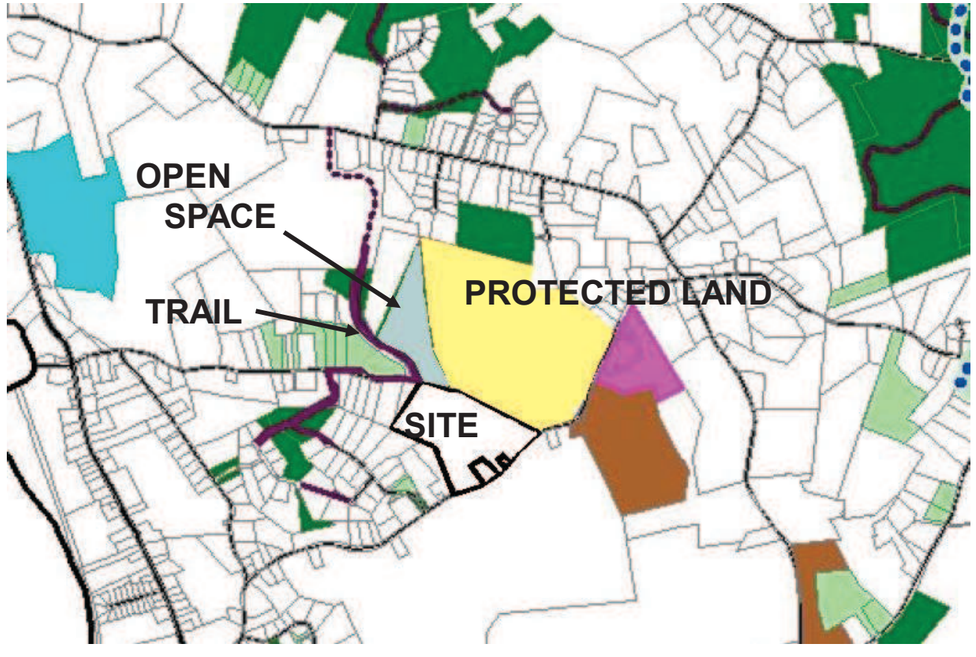
Aquifer Recharge Area or Flood Hazard:
The property does not lie within an aquifer recharge or flood hazard area.

Soils:
Indicated from the Tolland County Soil Survey as either Leicester-Ridgebury-Whitman wetland soils complex, Woodbridge moderately drained upland soils association and Hollis near Browns Road. All soils are stony. The Woodbridge soils are buildable soils and can be used as pasturage. These soils drain very slowly in the spring and after heavy periods of summer rains. The area of the hayfield and about another acre or so above it are listed as farmland soils. The Hollis soils group is found adjacent Browns Road and behind the three residences where the rock outcroppings associated with the high points of the property are found. There are large boulders found throughout the property.

Species endangered, threatened or of special concern:
No species indicated within the property area or adjacent the property according to the State of Connecticut Natural History Database (DEEP Dec. 2014).

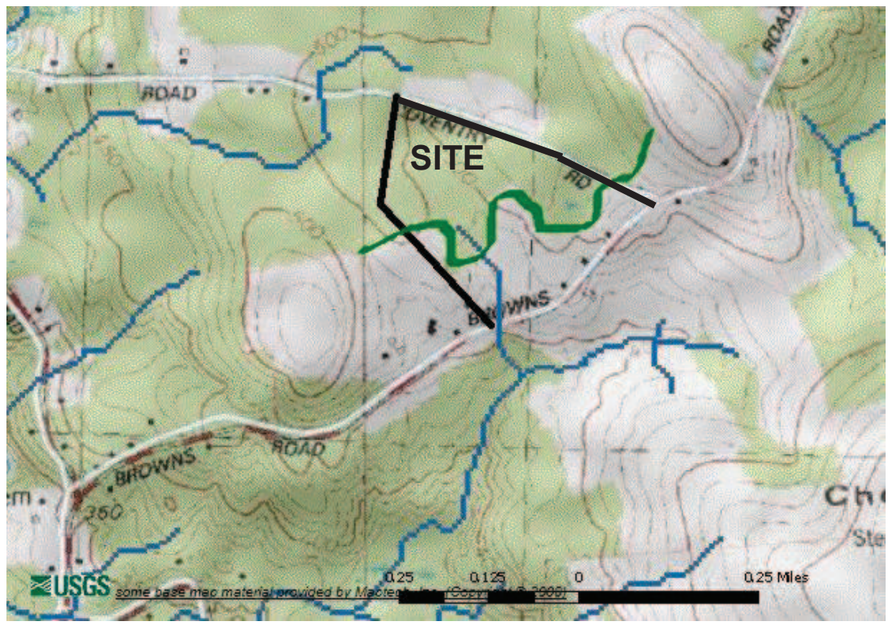
Solar access:
Residences can be oriented such that there is a maximum potential for solar gain and some attenuation of winter winds. There are no slopes on most of this property where orientation is dictated by slope aspect. It is possible that one or two house sites could be located adjacent Browns Road affording a southern aspect.

Off-Site Considerations:
The property is bounded by existing residences on three sides. Chatham Drive residences have their rear properties on the southern boundary, a single home is immediately adjacent on the west boundary and along Browns Road are the three residences. This property connects to Browns Road in several locations between and aside these existing residences. Most houses on Chatham Drive are close to that road so much of the southern border is rear and forested property.
Across Browns Road is the extensive agricultural property, mostly hay fields, sweeping up to the height of land approaching Stearns Road.
Across Coventry Road is protected land, consisting of Mansfield Open Space and protected agricultural land. The Open Space is wooded and uses the Smith Farms driveway as the extension of the trail that comes from Chatham I and II. This trail enters Coventry road about a quarter mile from the Smith Farms driveway. The protected farmland is open pasturage.

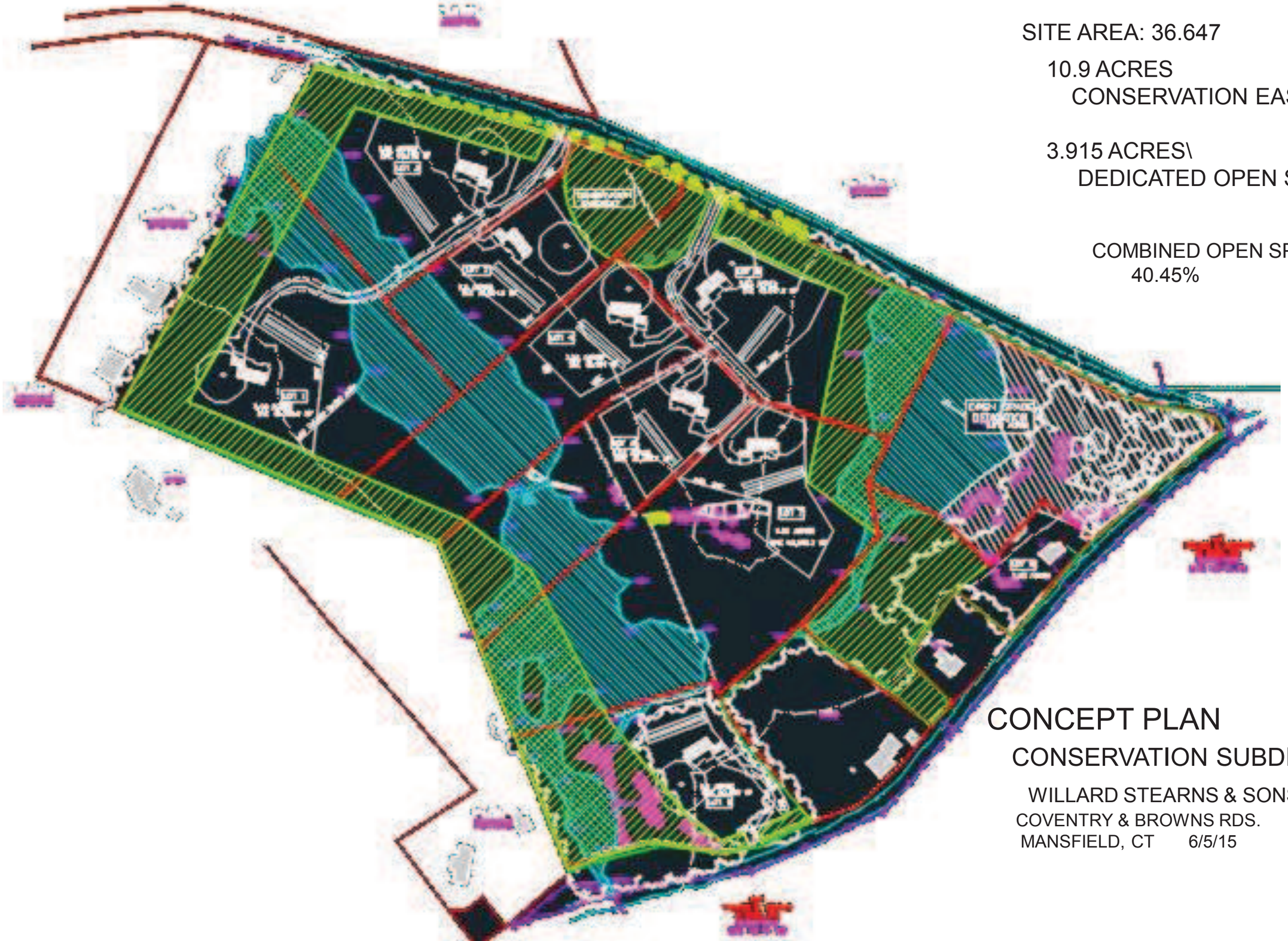


EXISTING OPEN SPACE/ PROTECTED LANDS

AGRICULTURAL LAND



1983 PASTURE/WOODS EXTENT



SITE AREA: 36.647

10.9 ACRES
CONSERVATION EASEMENT

3.915 ACRES\
DEDICATED OPEN SPACE

COMBINED OPEN SPACE
40.45%

CONCEPT PLAN

CONSERVATION SUBDIVISION

WILLARD STEARNS & SONS, INC.
COVENTRY & BROWNS RDS.
MANSFIELD, CT 6/5/15

MOUNTAIN VIEW ACRES

522 Browns Road &
Coventry Road
Mansfield, Connecticut

STORMWATER MANAGEMENT REPORT

July 1, 2016

PREPARED FOR: Willard J. Stearns & Sons, Inc.
50 Stearns Road
Mansfield, Connecticut

PREPARED BY: Gardner & Peterson Associates, LLC
178 Hartford Turnpike
Tolland, CT 06084

Mountain View Acres

Summary:

This project proposes to subdivide approximately 36 acres of land located in the RAR-90 Zone on the south side of Coventry Road and west side of Browns Road into nine building lots. The lots will be served by subsurface sewage disposal systems and private wells while protecting over 7.5 acres of land with conservation easements and dedicating nearly 2.5 acres to the Town of Mansfield.

Existing Conditions:

The site contains one house that fronts on Browns Road which will be located on Lot #8 of the subdivision. The site is mainly wooded, though the land along Coventry Road was logged within the past ten years. The site primarily drains from Coventry Road to the south where surface flow is collected in a wetland which drains from west to east and under Browns Road through an 18" culvert which is at the bottom of the watershed analyzed in this report. The soils in the upland areas are primarily a Woodbridge Fine Sandy Loam per the Natural Resources Conservation Service, Web Soil Survey.

Based on the Flood Insurance Rate Map (FIRM) the site is located in Flood Zone C, area of minimal flooding. Test pits were excavated on site with the Eastern Highlands Health Department to determine septic suitability. Suitable areas were found on all lots and restrictive soil layers average approximately 24" below grade.

In addition, the site is not located in an aquifer area based on "Surfaces and Groundwater Resources" map by plan of conservation and development, April 2006 and the parcel is not located within an archaeological area based on "Archaeological Assessment" map by plan of conservation and development April 2006.

Stormwater Management:

Based on reviews by various town committees and town staff the applicant has been advised to provide and Open Space Subdivision to avoid a traditional layout and minimize the number of curb cuts. Common driveways are provided and stormwater runoff will sheet flow from disturbed areas in the direction it is headed today. This report includes the design of a cross culvert to convey the limited flow under the proposed driveway on Lot #1 and an overall site analysis to evaluate pre-development and post-development flows.

Hydraflow Hydrographs Extension was used to determine the peak flows mentioned above. The twin 12" culverts under the proposed driveway on Lot 1 has been designed to convey the flow from a 10 year storm. When comparing the existing and proposed flow rates from the overall site, there is no change in the watershed area or

travel time. Due to the proposed improvements, the runoff coefficient will increase which results in a small increase in the flow rate off site from 47.3cfs to 52.5 cfs for a 25 year storm frequency. The runoff will shed through an undisturbed, vegetated buffer over relatively flat slopes before reaching the wetland corridor. The wetland corridor consists of a flat area that will provide flood storage and potential reduction the rate of runoff and a defined channel for water conveyance at the easterly end of the wetland.

Erosion & Sediment Control:

The erosion & sediment control plan for this site consists of the use of soil stockpile areas, silt fence and/or hay bales down gradient of all disturbed areas and seeding schedules. An undisturbed vegetated area down gradient of the proposed developed areas will also remain. An anti-tracking pad will be installed at both entrances to the site though it may be unnecessary due the existing and proposed gravel surfaces.

_____

Mark A. Peterson, P.E. 20905

Watershed Model Schematic

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

1 - Ex. Watershed

3 - Prop. Watershed

5 - Subwatershed to proposed culvert

Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	Rational	------	-------	27.10	-------	-------	40.12	47.28	-------	-------	Ex. Watershed
3	Rational	------	-------	30.11	-------	-------	44.58	52.53	-------	-------	Prop. Watershed
5	Rational	------	-------	4.063	-------	-------	5.970	7.035	-------	-------	Subwatershed to proposed culvert

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	27.10	1	34	55,280	------	------	------	Ex. Watershed
3	Rational	30.11	1	34	61,422	------	------	------	Prop. Watershed
5	Rational	4.063	1	28	6,825	------	------	------	Subwatershed to proposed culvert

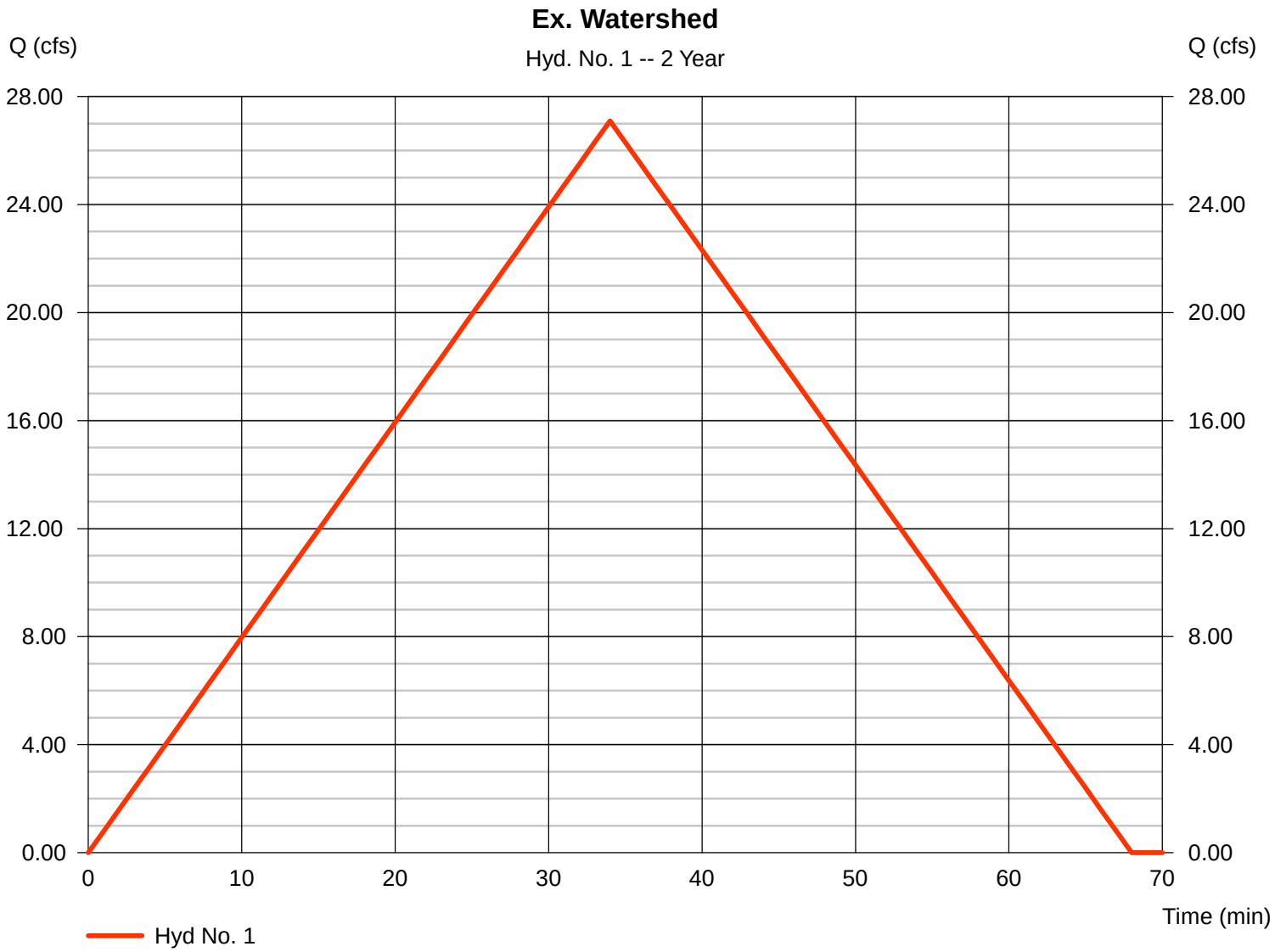
Hydrograph Report

Hyd. No. 1

Ex. Watershed

Hydrograph type	=	Rational	Peak discharge	=	27.10 cfs
Storm frequency	=	2 yrs	Time to peak	=	34 min
Time interval	=	1 min	Hyd. volume	=	55,280 cuft
Drainage area	=	57.200 ac	Runoff coeff.	=	0.27*
Intensity	=	1.755 in/hr	Tc by User	=	34.00 min
IDF Curve	=	CT-DOT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.420 x 0.90) + (0.920 x 0.85) + (2.200 x 0.40) + (53.660 x 0.25)] / 57.200



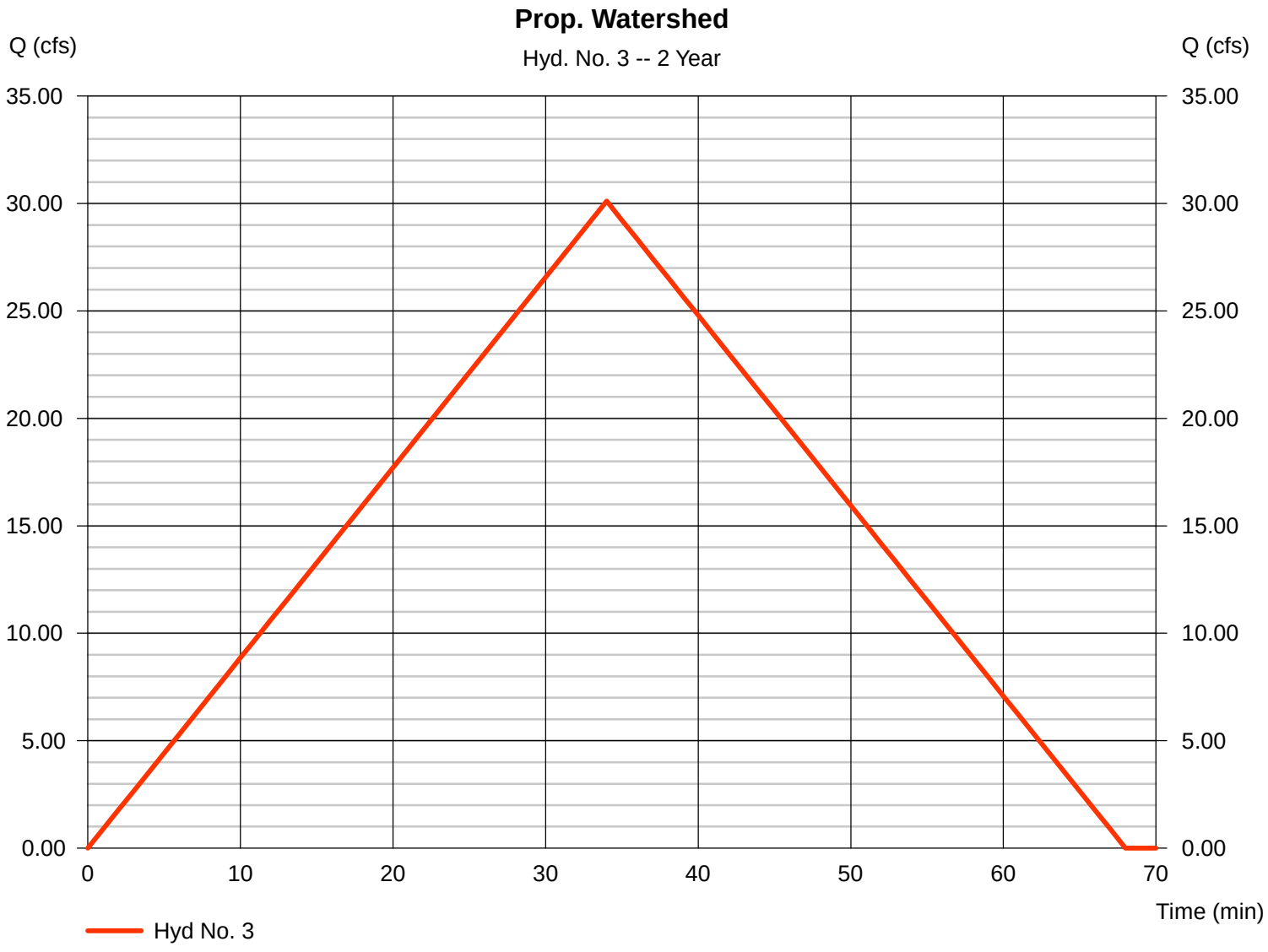
Hydrograph Report

Hyd. No. 3

Prop. Watershed

Hydrograph type	=	Rational	Peak discharge	=	30.11 cfs
Storm frequency	=	2 yrs	Time to peak	=	34 min
Time interval	=	1 min	Hyd. volume	=	61,422 cuft
Drainage area	=	57.200 ac	Runoff coeff.	=	0.3*
Intensity	=	1.755 in/hr	Tc by User	=	34.00 min
IDF Curve	=	CT-DOT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.850 x 0.90) + (1.880 x 0.85) + (6.330 x 0.40) + (48.140 x 0.25)] / 57.200



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	40.12	1	34	81,844	------	------	------	Ex. Watershed
3	Rational	44.58	1	34	90,938	------	------	------	Prop. Watershed
5	Rational	5.970	1	28	10,030	------	------	------	Subwatershed to proposed culvert

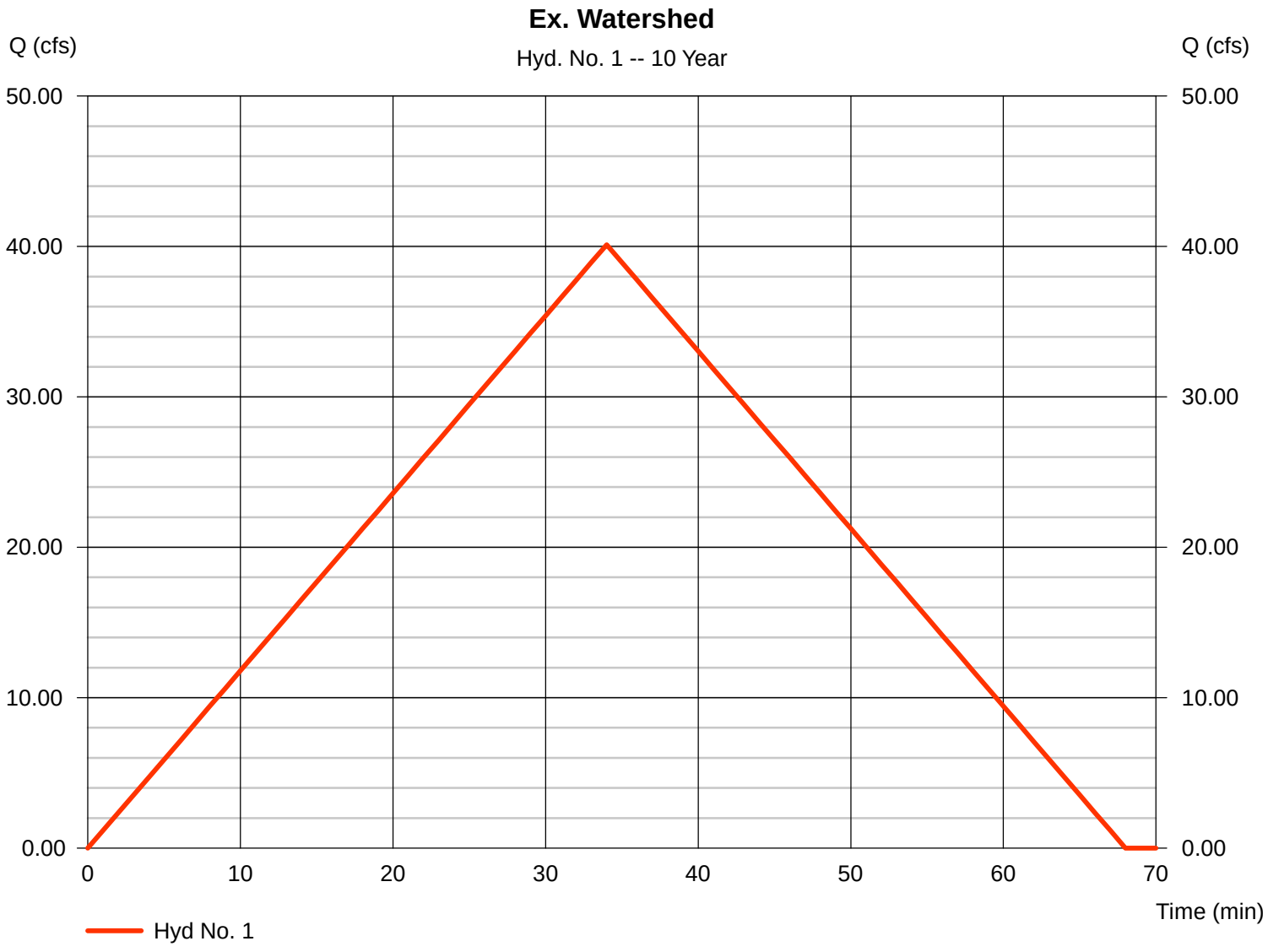
Hydrograph Report

Hyd. No. 1

Ex. Watershed

Hydrograph type	=	Rational	Peak discharge	=	40.12 cfs
Storm frequency	=	10 yrs	Time to peak	=	34 min
Time interval	=	1 min	Hyd. volume	=	81,844 cuft
Drainage area	=	57.200 ac	Runoff coeff.	=	0.27*
Intensity	=	2.598 in/hr	Tc by User	=	34.00 min
IDF Curve	=	CT-DOT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.420 x 0.90) + (0.920 x 0.85) + (2.200 x 0.40) + (53.660 x 0.25)] / 57.200



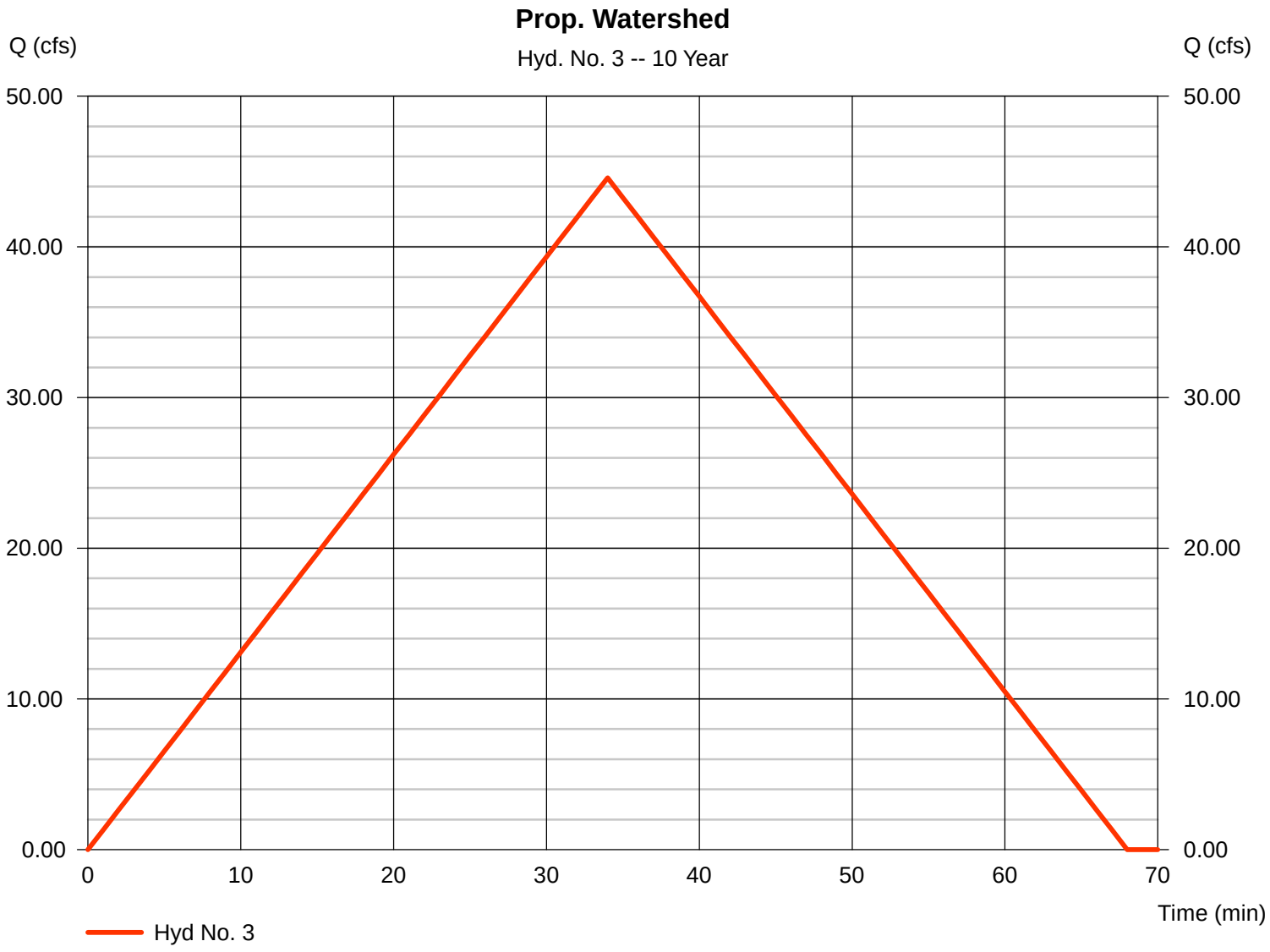
Hydrograph Report

Hyd. No. 3

Prop. Watershed

Hydrograph type	=	Rational	Peak discharge	=	44.58 cfs
Storm frequency	=	10 yrs	Time to peak	=	34 min
Time interval	=	1 min	Hyd. volume	=	90,938 cuft
Drainage area	=	57.200 ac	Runoff coeff.	=	0.3*
Intensity	=	2.598 in/hr	Tc by User	=	34.00 min
IDF Curve	=	CT-DOT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.850 x 0.90) + (1.880 x 0.85) + (6.330 x 0.40) + (48.140 x 0.25)] / 57.200



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	47.28	1	34	96,445	------	------	------	Ex. Watershed
3	Rational	52.53	1	34	107,161	------	------	------	Prop. Watershed
5	Rational	7.035	1	28	11,818	------	------	------	Subwatershed to proposed culvert

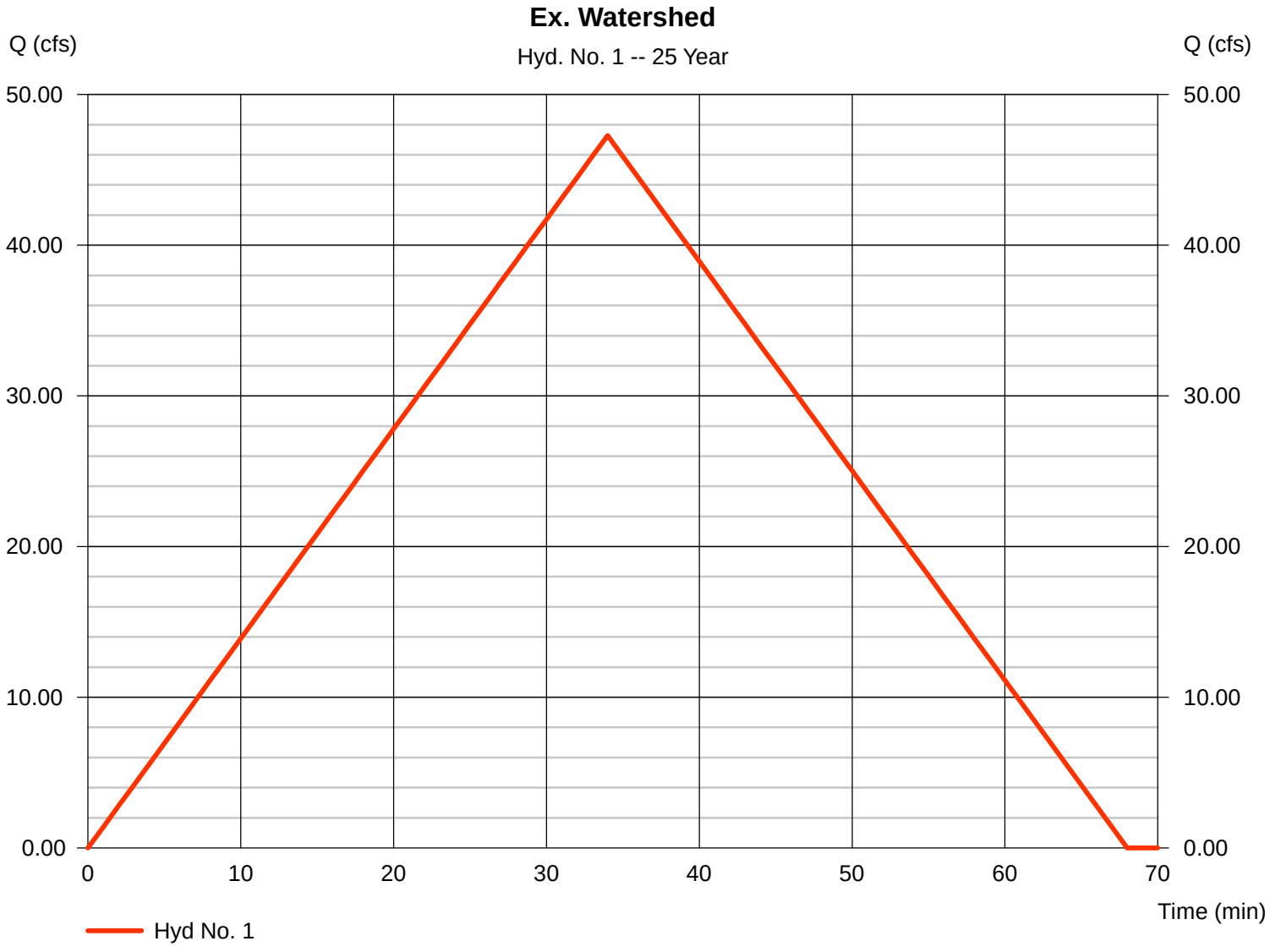
Hydrograph Report

Hyd. No. 1

Ex. Watershed

Hydrograph type	=	Rational	Peak discharge	=	47.28 cfs
Storm frequency	=	25 yrs	Time to peak	=	34 min
Time interval	=	1 min	Hyd. volume	=	96,445 cuft
Drainage area	=	57.200 ac	Runoff coeff.	=	0.27*
Intensity	=	3.061 in/hr	Tc by User	=	34.00 min
IDF Curve	=	CT-DOT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.420 x 0.90) + (0.920 x 0.85) + (2.200 x 0.40) + (53.660 x 0.25)] / 57.200



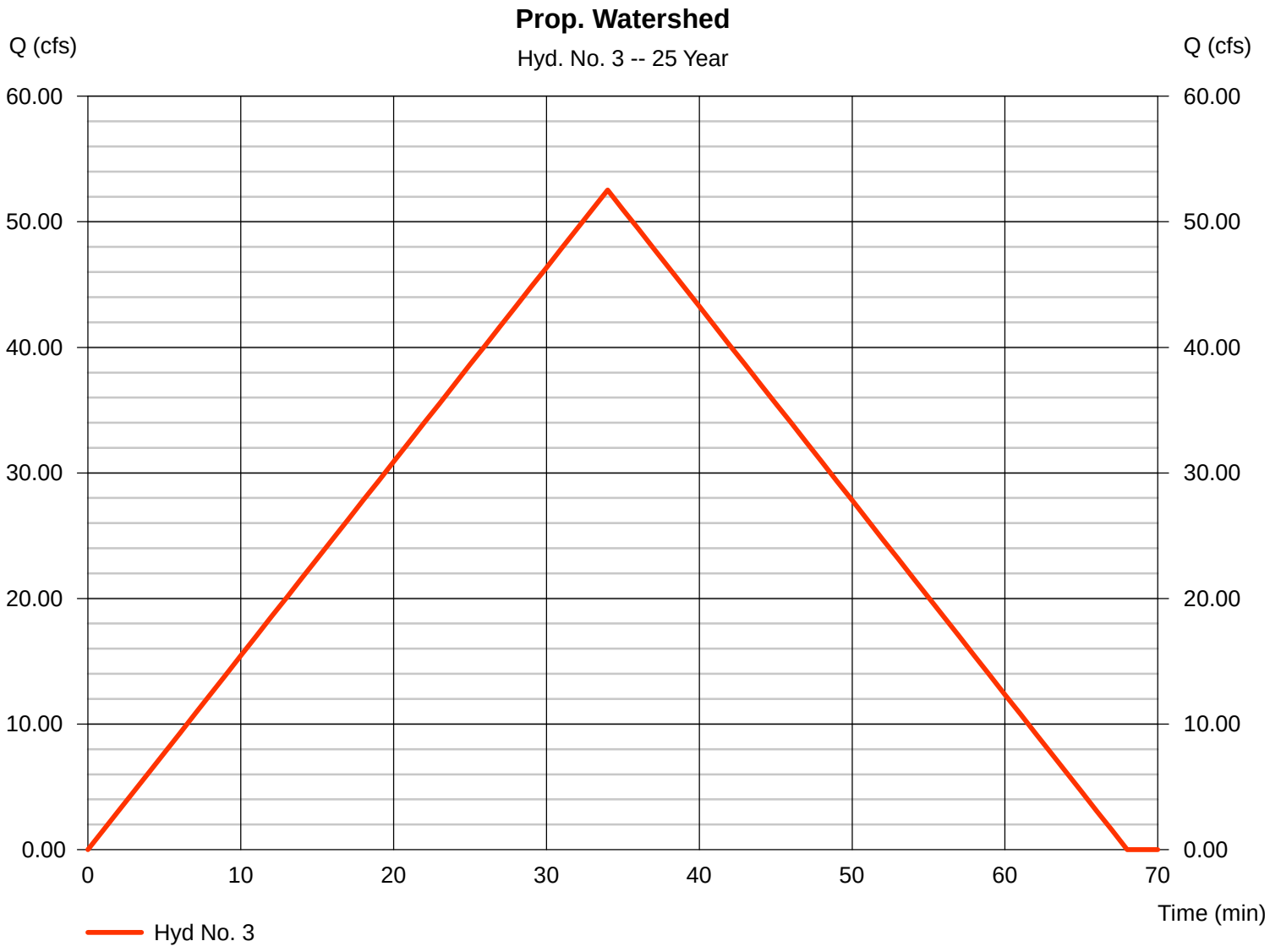
Hydrograph Report

Hyd. No. 3

Prop. Watershed

Hydrograph type	=	Rational	Peak discharge	=	52.53 cfs
Storm frequency	=	25 yrs	Time to peak	=	34 min
Time interval	=	1 min	Hyd. volume	=	107,161 cuft
Drainage area	=	57.200 ac	Runoff coeff.	=	0.3*
Intensity	=	3.061 in/hr	Tc by User	=	34.00 min
IDF Curve	=	CT-DOT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.850 x 0.90) + (1.880 x 0.85) + (6.330 x 0.40) + (48.140 x 0.25)] / 57.200



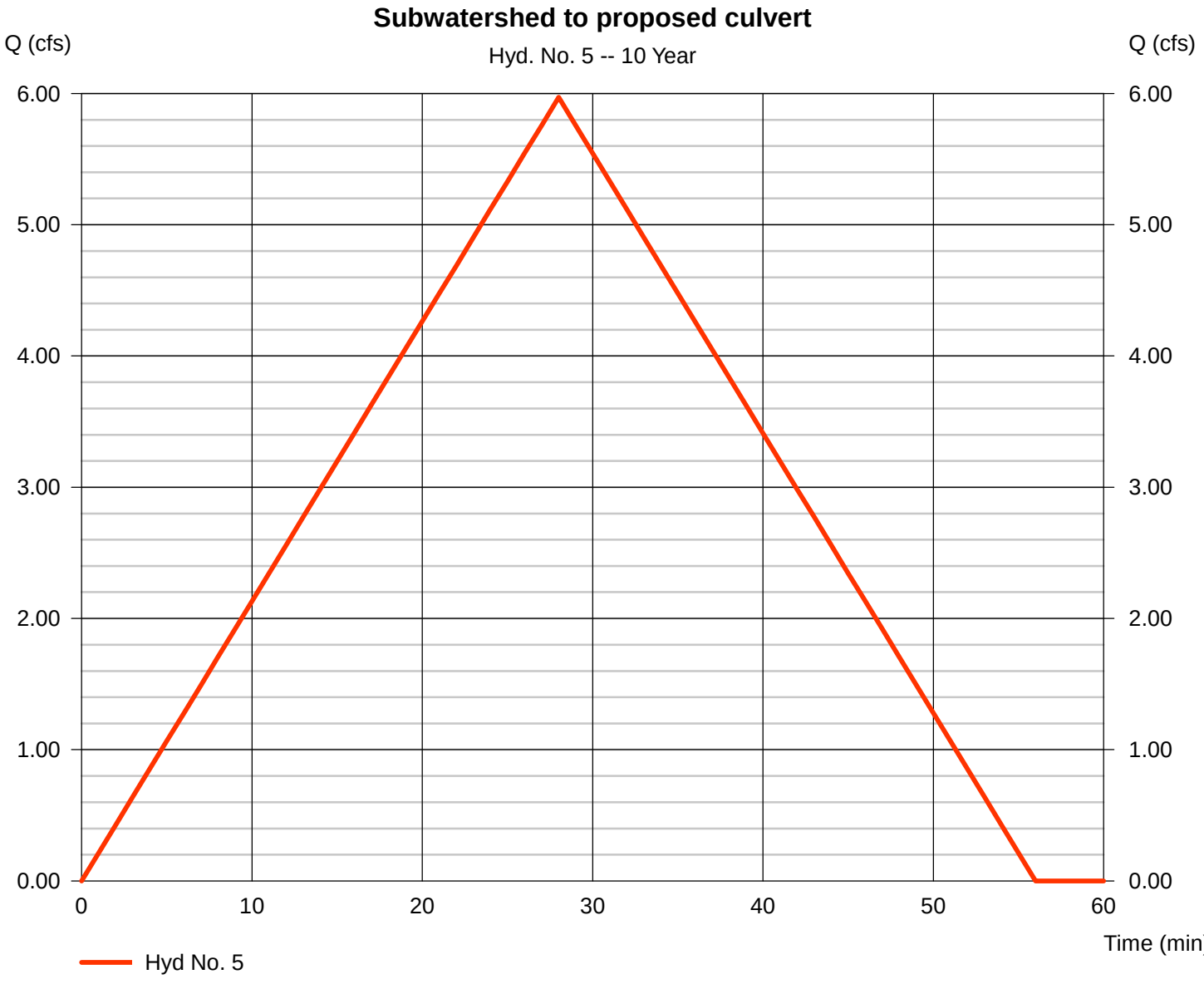
Hydrograph Report

Hyd. No. 5

Subwatershed to proposed culvert

Hydrograph type	=	Rational	Peak discharge	=	5.970 cfs
Storm frequency	=	10 yrs	Time to peak	=	28 min
Time interval	=	1 min	Hyd. volume	=	10,030 cuft
Drainage area	=	5.120 ac	Runoff coeff.	=	0.4*
Intensity	=	2.915 in/hr	Tc by TR55	=	28.00 min
IDF Curve	=	CT-DOT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(0.300 x 0.75) + (0.060 x 0.90) + (1.000 x 0.24) + (3.760 x 0.40)] / 5.120



TR55 Tc Worksheet

Hyd. No. 5

Subwatershed to proposed culvert

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.400		0.011		0.011		
Flow length (ft)	=	100.0		0.0		0.0		
Two-year 24-hr precip. (in)	=	3.20		0.00		0.00		
Land slope (%)	=	3.00		0.00		0.00		
Travel Time (min)	**=**	**18.26**	**+**	**0.00**	**+**	**0.00**	**=**	**18.26**
Shallow Concentrated Flow								
Flow length (ft)	=	460.00		360.00		0.00		
Watercourse slope (%)	=	1.70		0.40		0.00		
Surface description	=	Unpaved		Unpaved		Paved		
Average velocity (ft/s)	=	2.10		1.02		0.00		
Travel Time (min)	**=**	**3.64**	**+**	**5.88**	**+**	**0.00**	**=**	**9.52**
Channel Flow								
X sectional flow area (sqft)	=	0.00		0.00		0.00		
Wetted perimeter (ft)	=	0.00		0.00		0.00		
Channel slope (%)	=	0.00		0.00		0.00		
Manning's n-value	=	0.015		0.015		0.015		
Velocity (ft/s)	=	0.00		0.00		0.00		
Flow length (ft)	=	0.0		0.0		0.0		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

Total Travel Time, Tc ..... 28.00 min

Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	26.1693	6.2000	0.7786	--------
2	30.1225	6.6000	0.7676	--------
3	0.0000	0.0000	0.0000	--------
5	52.3308	9.8000	0.8367	--------
10	54.7383	10.8000	0.8016	--------
25	101.9813	15.8000	0.8971	--------
50	98.1551	15.7000	0.8577	--------
100	106.5909	17.0000	0.8462	--------

File name: CT-DOT.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	3.99	2.99	2.43	2.06	1.80	1.60	1.45	1.32	1.22	1.14	1.06	1.00
2	4.59	3.49	2.85	2.43	2.13	1.90	1.72	1.58	1.46	1.36	1.27	1.20
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	5.49	4.30	3.57	3.06	2.69	2.40	2.17	1.99	1.84	1.71	1.60	1.50
10	5.99	4.81	4.04	3.51	3.11	2.80	2.55	2.35	2.18	2.03	1.91	1.80
25	6.70	5.52	4.71	4.12	3.66	3.30	3.01	2.76	2.56	2.38	2.23	2.10
50	7.30	6.06	5.20	4.57	4.09	3.70	3.38	3.12	2.90	2.71	2.54	2.40
100	7.79	6.55	5.68	5.02	4.51	4.10	3.76	3.48	3.24	3.04	2.86	2.70

Tc = time in minutes. Values may exceed 60.

Precip. file name: Sample.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	2.60	3.20	0.00	4.10	4.80	5.50	6.20	6.90
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Culvert Report

Cir Culvert

Invert Elev Dn (ft)	=	500.50
Pipe Length (ft)	=	30.00
Slope (%)	=	0.33
Invert Elev Up (ft)	=	500.60
Rise (in)	=	12.0
Shape	=	Cir
Span (in)	=	12.0
No. Barrels	=	2
n-Value	=	0.013
Inlet Edge	=	Projecting
Coeff. K,M,c,Y,k	=	0.0045, 2, 0.0317, 0.69, 0.5

Embankment

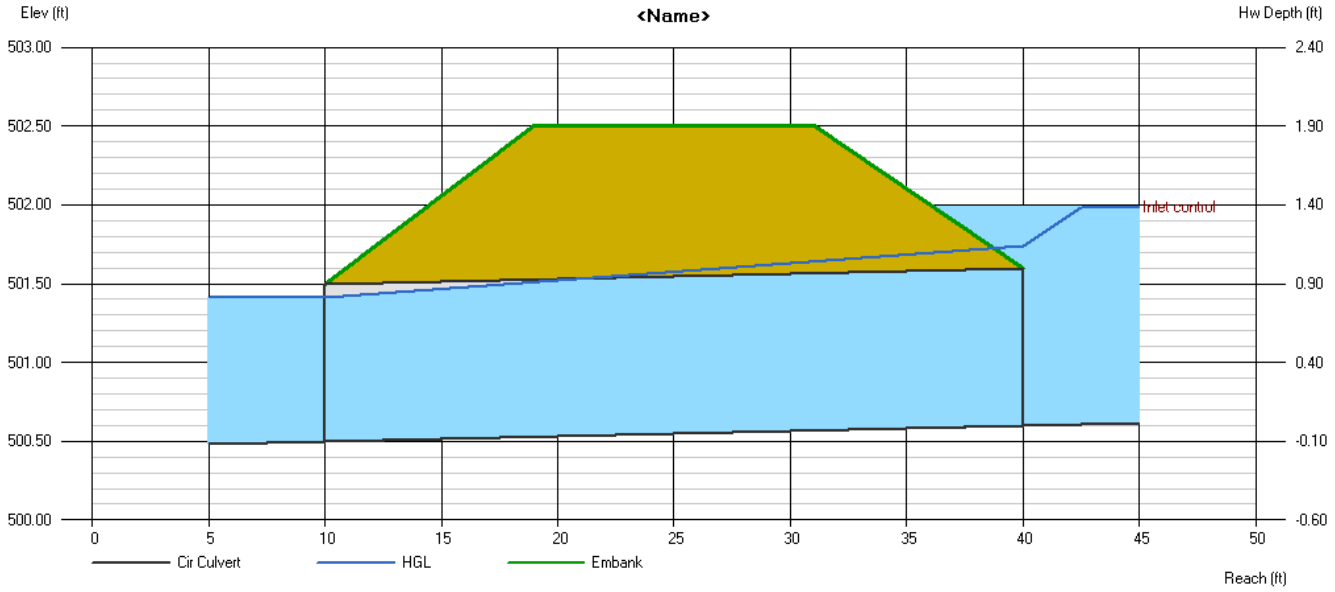
Top Elevation (ft)	=	502.50
Top Width (ft)	=	12.00
Crest Width (ft)	=	110.00

Calculations

Qmin (cfs)	=	7.36
Qmax (cfs)	=	7.36
Tailwater Elev (ft)	=	(dc+D)/2

Highlighted

Qtotal (cfs)	=	7.36
Qpipe (cfs)	=	7.36
Qovertop (cfs)	=	0.00
Veloc Dn (ft/s)	=	4.90
Veloc Up (ft/s)	=	4.69
HGL Dn (ft)	=	501.41
HGL Up (ft)	=	501.74
Hw Elev (ft)	=	501.98
Hw/D (ft)	=	1.38
Flow Regime	=	Inlet Control



SOIL TYPE LEGEND

NUMBER	SOIL TYPE
3	Ridgebury, Leicester and Whitman soils
46B	Woodbridge fine sandy loam
47C	Woodbridge fine sandy loam
73C	Charlton–Chatfield

TOWN OF MANSFIELD
"OPEN SPACE"
COVENTRY ROAD
(VOL. 548 PG. 387)

DRAINAGE AREA

N/F
ENVIRO ENTERPRISES, LLC
#438 BROWNS ROAD
(VOL. 481 PG. 54)

N/F
JAMES PEGG GALEY &
MARGARITA HAIDOS–GALEY
#85 COVENTRY ROAD
(VOL. 530 PG. 106)

THE DRAINAGE AREA DEPICTED IN THIS LOCATION IS BASED ON A REVIEW OF THE TOPOGRAPHY FROM THE WINCOG WEBSITE.

COVENTRY ROAD

LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9

HOUSE

TRAVEL TIME

N/F
ALAN H. WUOSMAA
& NORA BERRAH
#52 CHATHAM DRIVE
(VOL. 762 PG. 707)

EXISTING CULVERT

N/F
REBECCA D. & PENNY M.
BARTON–ZUCKERMAN
#48 CHATHAM DRIVE
(VOL. 435 PG. 253)

WETLANDS PER
REFERENCED MAP

N/F
SCOTT NEWTON
499 BROWNS ROAD

BROWNS ROAD

N/F
WILLARD J. STEARNS
& SONS, INC
BROWNS ROAD
(VOL. 169 PG. 47)

SHED

N/F
SCOTT KO &
REBECCA T. LEHMANN
#532 BROWNS ROAD
(VOL. 1140 PG. 98)

THE DRAINAGE AREA DEPICTED IN THIS LOCATION IS BASED ON A REVIEW OF ABUTTING MAPS AND TOPOGRAPHY FROM THE WINCOG WEBSITE.

N/F
KIEV J. & KES MARIE
FEDEROWICZ
#568 BROWNS ROAD
(VOL. 635 PG. 108)

CHATHAM DRIVE

N/F
SHIRLEY J. GRIMES
#542 BROWNS ROAD
(VOL. 456 PG. 31)

N/F
WILLARD J. STEARNS
& SONS, INC
BROWNS ROAD
(VOL. 169 PG. 47)

EXISTING 18" ACCMP

EXISTING WATERSHED
POINT OF DESIGN–EXISTING CULVERT UNDER BROWNS ROAD AT SOUTHWEST CORNER OF PARCEL.
DRAINAGE AREA: 57.2 ACRES
SEE DRAINAGE REPORT FOR FLOW RATES.

PROPOSED WATERSHED
POINT OF DESIGN–EXISTING CULVERT UNDER BROWNS ROAD AT SOUTHWEST CORNER OF PARCEL.
DRAINAGE AREA: 57.2 ACRES
SEE DRAINAGE REPORT FOR FLOW RATES.

LEGEND:

- BOUNDARY
- STONE WALL
- STONE WALL REMAINS
- TREE WITH WIRE
- PIN / PIPE / DRILL HOLE
- BARBED WIRE FENCE
- SPLIT RAIL FENCE
- FIELD DELINEATED WETLANDS
- DRAINAGE AREA

100 50 0 100 200 300
GRAPHIC SCALE 1"=100'

DRAINAGE AREA MAP

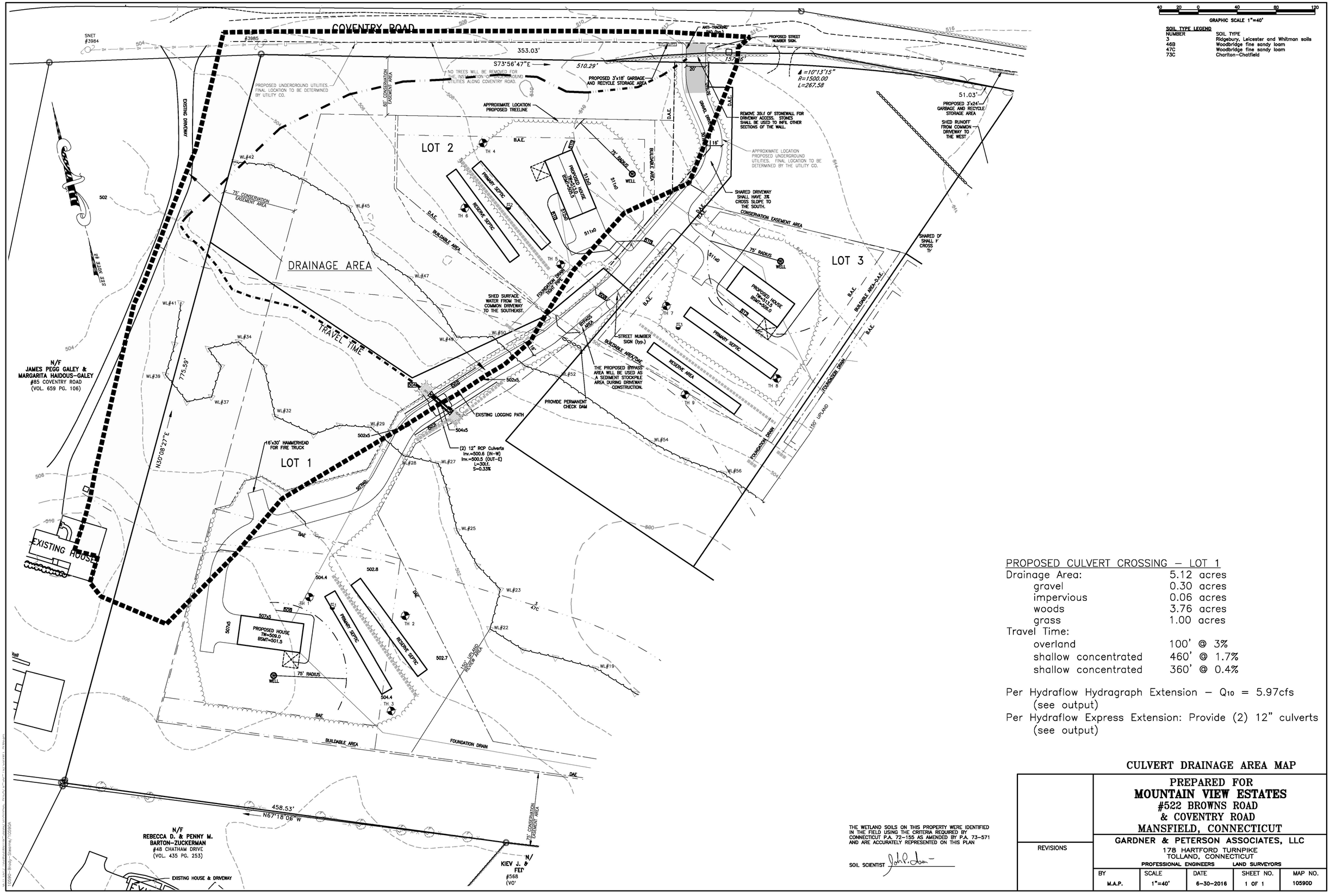
PREPARED FOR
MOUNTAIN VIEW ACRES
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

REVISIONS

BY	SCALE	DATE	SHEET NO.	MAP NO.
M.A.P.	1"=100'	06–30–2016	1 OF 1	10590 DA

10590–Brody–Stearns/10590A/Drainage Area Map



SOIL TYPE LEGEND

NUMBER	SOIL TYPE
3	Ridgebury, Leicester and Whitman soils
46B	Woodbridge fine sandy loam
47C	Woodbridge fine sandy loam
73C	Charlton-Chatfield

PROPOSED CULVERT CROSSING – LOT 1

Drainage Area:	5.12 acres
gravel	0.30 acres
impervious	0.06 acres
woods	3.76 acres
grass	1.00 acres
Travel Time:	
overland	100' @ 3%
shallow concentrated	460' @ 1.7%
shallow concentrated	360' @ 0.4%

Per Hydraflow Hydragraph Extension – Q_{10} = 5.97cfs (see output)

Per Hydraflow Express Extension: Provide (2) 12" culverts (see output)

THE WETLAND SOILS ON THIS PROPERTY WERE IDENTIFIED IN THE FIELD USING THE CRITERIA REQUIRED BY CONNECTICUT P.A. 72-155 AS AMENDED BY P.A. 73-571 AND ARE ACCURATELY REPRESENTED ON THIS PLAN

SOIL SCIENTIST

CULVERT DRAINAGE AREA MAP

PREPARED FOR
MOUNTAIN VIEW ESTATES
#522 BROWNS ROAD
& COVENTRY ROAD
MANSFIELD, CONNECTICUT

REVISIONS

GARDNER & PETERSON ASSOCIATES, LLC
178 HARTFORD TURNPIKE
TOLLAND, CONNECTICUT
PROFESSIONAL ENGINEERS LAND SURVEYORS

BY	SCALE	DATE	SHEET NO.	MAP NO.
M.A.P.	1"=40'	6-30-2016	1 OF 1	10590D

TOWN OF MANSFIELD

DEPARTMENT OF PLANNING AND DEVELOPMENT

Date: November 10, 2016

To: Planning and Zoning Commission

From: Linda M. Painter, AICP

Subject: Director's Report

If there are any other items or questions, I will address them at the November 16th meeting.

ECONOMIC DEVELOPMENT

Innovation Places Grant. CME Associates has received a $50,000 grant from CTNext to prepare a master plan for the Northeast Connecticut Innovation Hub. The planning process kicked off on November 9th with a preliminary stakeholder meeting. The master plan is required to be completed by the end of February if the coalition plans on submitting an application for an implementation grant in 2017. The state has allocated $5 million per year for five years to the Innovation Places program. A copy of the application is attached to this memo for your information.

INFRASTRUCTURE

Eastern Gateways Project. Three public information meetings have been scheduled for early December to share what has been learned about existing conditions in the Route 44 and Route 195 corridors and to get feedback from the public on how to improve mobility in the region. The December 8th meeting will be held in the Town Council Chambers. The Open House will start at 6:30 p.m. and a formal presentation will begin at 7:00 p.m. If you cannot attend that meeting, there are also meetings being held in Coventry on December 1st and in Tolland on December 6th. Those meetings start 30 minutes later than the one in Mansfield. A meeting flyer is included in the communications portion of your packet.

Water Conservation Alerts. Due to drought conditions, we continue to remind residents to conserve water where possible. Mandatory conservation measures are required for customers of the UConn water system.

Central Region Water Utility Coordinating Committee (WUCC). The draft Final Water Supply Assessment has been completed for the Central Region and is available for review at http://www.ct.gov/dph/lib/dph/drinking_water/pdf/central_wucc_draft_final_wsa.pdf.

CT NEXT Innovation Places

Project Name

Northeast Connecticut Innovation Hub

Contact Person

John P. Guszkowski, AICP, LEED-AP, ENV-SP
Director of Planning & Real Estate Development

Affiliation/ Company

CME Associates, Inc.

Phone

860-928-7848

Email

jguszkowski@cmeengineering.com

Please list all Partners

Organization	Name	Sector	Phone	Email
Cafemantic	Andrew Gutt	Private	860-423-4243	agutt@cafemantic.com
CME Associates, Inc.	John Guszkowski	Private - Engineering/Design	860-928-7848	jguszkowski@cmeengineering.com
Connecticut Innovations	Glendowlyn Thames	Quasi-Public	860.257.2332	Glendowlyn.Thames@ctinnovations.com
Connecticut Small Business Development Center	Greg Lewis	Nonprofit - Business Development	860-942-0701	gregory.v.lewis@uconn.edu
Connecticut Transportation Institute	James Mahoney	Research and Education	860-486-9299	JAMES.MAHONEY@uconn.edu
Day Kimball Healthcare	Robert Smanik	Hospital/ Healthcare	860-486-2166	hadi.bozorgmanesh@uconn.edu
EASTCONN	Maureen Crowley	Education	860-455-1513	mcrowley@eastconn.org
Eastern Advanced Manufacturing Alliance	Kelli Vallieres, President	Private - Manufacturing Coalition	860-859-4100	KVallieres@soundmfg.com
Eastern Connecticut State University	Dr. Polly Silva	Higher Education	860-465-0655	silvap@easternct.edu

Eastern CT Workforce Investment Board	John Beauregard, President	Workforce Development	860-859-4100	beauregardj@ewib.org
Innovative-Diffusion	David Oyanadel, CTO	Technology, Entrepreneur	860-455-6123	innovativediffusion@outlook.com
Mansfield Downtown Partnership	Cynthia van Zelm, Exec. Director	Nonprofit-Downtown organization	860-429-2740	vanzelmca@mansfieldct.org
Mechatronic Energy Systems	Sam Shifrin, CEO	Technology Entrepreneur	860-423-7800	sam@mechaenergy.com
NECCOG	John Filchak, Exec. Director	Regional Council of Governments	860-774-1253	john.filchak@neccog.org
Nerac & XcellR8	Kevin Bouley, CEO	Private - Technology/ Entrepreneur	860-872-7000	kbouley@nerac.com
Northeast Connecticut Economic Alliance	Ellen Parent	Nonprofit- Small Business Lender	860-465-5141	eparent@nealliance.com
Northeastern Connecticut Chamber of Commerce	Betti Kuszaj, Exec. Director	Nonprofit - Business Network	860-774-8001	elizabeth.kuszaj@snet.net
Quinebaug Valley Community College Advanced Manufacturing Initiative	Andrew Morrison	Higher Education & Workforce Training	860-932-4177	amorrison@qvcc.commnet.edu
State Representative	Greg Haddad	State Government	860-240-8585	gregory.haddad@cga.ct.gov
State Representative	Christine Rosati Randall	State Government	860-240-8585	christine.randall@cga.ct.gov
State Representative	Susan Johnson	State Government	860-240-8585	Susan.Johnson@cga.ct.gov
State Representative	Danny Rovero	State Government	860-240-8585	danny.rovero@cga.ct.gov
State Senator/CGA	Mae Flexer	State Government	860-240-8600	mae.flexer@cga.ct.gov
The STEMIE Coalition	Danny Briere, CEO	Private - Entrepreneur	860-429-0100	dbriere@telechoice.com
Town of Killingly Economic Development	Elsie Bisset	Municipal	860-779-5350	ebisset@killinglyct.gov
Town of Mansfield	Matthew Hart, Town Manager	Municipal	860-429-3336	hartmw@mansfieldct.org
Town of Putnam Economic & Community Development	Delpha Very	Municipal	860-963-6834	delpha.very@putnamct.us
Town of Tolland	Heidi Samokar	Municipal	860-871-3601	hsamokar@tolland.org

Town of Windham Economic Development	Jim Bellano	Municipal	860-465-3045	jbellano@windhamct.com
UConn Entrepreneurship & Innovation Consortium	Hadi Bozorgmanesh	Higher Education	860-486-2166	hadi.bozorgmanesh@uconn.edu
UConn Innovation Society (Student Organization)	Justin Hall	Millennials	860-486-2166	justin.hall@uconn.edu
UConn Office of the Vice Provost for Research	Andrew Zehner	Higher Education and Research	860-486-1339	andrew.zehner@uconn.edu
UConn School of Engineering and Research Centers	Michael Accorsi	Higher Education and Research	860-486-4198	michael.accorsi@uconn.edu
UConn Technology Park	Radenka Maric	Innovation and Technology Development	860-486-1450	radenka.maric@uconn.edu
Updike, Kelly & Spellacy	Ben Wiles	Private - Attorney	860-548-2657	bwiles@uks.com
Windham Region Chamber of Commerce	Diane Nadeau	Nonprofit - Business Network	860-423-6389	diane@windhamchamber.com

Overview

1. Vision

Inspired by Silicon Valley and North Carolina's Research Triangle, Northeast Connecticut (NECT) is a leader in research, technology, and innovation. Comprising a similarly-sized area, NECT is home to a full spectrum of higher education institutions, including Connecticut's flagship university, and a dense cluster of small- and medium-size advanced manufacturing businesses. More importantly, NECT expands the Innovation Place concept to include a network of culturally and historically rich communities with assets unique in the state. Together, the municipalities, educational institutions, and private sector partners, such as the companies of the Eastern Advanced Manufacturing Alliance (EAMA), offer the collective potential to attract and retain talent. With exceptional regional assets in research, education, and workforce training, a vibrant entrepreneurship and innovation community, an important business sector (including manufacturing companies and entrepreneurial ventures), and a variety of classic, charming urban spaces, NECT has the foundation to become a nationally-recognized Innovation Place. The planning phase will result in an action plan for a Hub that is both a physical space for convening, networking, and innovation and an organizational construct to move the region forward as an Innovation Place. (See Appendix A for a detailed vision statement.)

2. Private-sector leadership (pre-requisite)

Representatives from key private sector groups, including EAMA, technology and manufacturing companies, and entrepreneurs (see partner list), will be involved in the planning process as members of the steering committee and as contributors through the collective engagement model to be

implemented during the planning process (see sections 10, 12, and 13). The engineering and design firm CME Associates, headquartered in Storrs Center, will lead the project.

3. Public-sector experience (pre-requisite)

This project's public sector partners, including municipalities, UConn, ECSU, and QVCC, rely on public sector funding for their daily operations and routinely participate in multi-stakeholder processes using public funding. The municipal partners are transparent public entities that work to serve the populations and businesses of NECT. In addition, the Eastern Connecticut Workforce Investment Board (EWIB) received nearly $20 million in funding from the US Department of Labor and State of Connecticut to support programs that deliver innovative workforce support. CME Associates has managed many projects supported by public funding, including dozens of federally-funded bridge replacements for the Connecticut DOT and a well-field replacement for Putnam.

4. Entrepreneurial experience (highly-weighted)

The NECT Innovation Hub engages individuals and organizations that have extensive experience promoting successful entrepreneurial ventures, including the Connecticut Innovation and Entrepreneurship Consortium (UConn), Nerac, the Quiet Corner Innovation Cluster (QCIC), and Connecticut Innovations. QCIC and the Connecticut Manufacturing Simulation Center at the UConn TechPark bring innovation and entrepreneurship to the region's Small and Medium-sized Enterprises (SMEs). Institutional partners at UConn have supported the establishment of several hundred companies based on research discoveries. In addition, UConn offers several dozen courses in innovation and entrepreneurship. Nerac, a key member of the planning team, is a global research and advisory firm supporting companies developing innovative products and technologies.

5. Research experience

UConn provides scientific capital and research experience to spur technology-based innovation. The planning team will engage the UConn Tech Park, the School of Engineering, the UConn Entrepreneurship & Innovation Consortium, and the newly-established QCIC and Connecticut Manufacturing Simulation Center, which have experience translating research outcomes to innovative products and processes. Through its Sustainable Energy Institute, ECSU is a leader in sustainable energy technology and policy.

The many research centers of excellence at UConn receive support from major companies and federal research contracts. These centers include: the Additive Manufacturing Innovation Center, Center for Clean Energy Engineering, Center for Transportation and Livable Systems, the Connecticut Transportation Institute, UTC Institute for Advanced Systems Engineering, the Institute of Materials Science, Pratt & Whitney Center of Excellence in Aerospace Systems, the Comcast Center of Excellence for Security Innovation (CSI), the Eversource Energy Center, and the FEI Center for Advanced Microscopy and Materials Analysis.

6. Planning process experience

This is a deeply experienced and diverse planning team. This project's lead, CME Associates, has been one of the most prominent planning and design firms in NECT for over 40 years. CME has led multi-stakeholder planning processes, including recent master plans for Brooklyn, Essex, and Clinton, and downtown revitalization planning for Putnam and Manchester. Each of the project's municipalities has undertaken numerous planning initiatives, including municipal master plans, and two joint studies, the WINCOG/NECCOG joint Comprehensive Economic Development Strategy (CEDS) and the HUD-funded "Sustainable Eastern Connecticut" plan. The multi-stakeholder Advanced Manufacturing Initiative was the result of planning efforts by partners including QVCC, EAMA, and EWIB.

7. Diversity and representation of population to be impacted

The participants represent the perspectives and experiences needed to build an innovation place that leverages the assets of the community, responds to the needs and preferences of Millennials, and is grounded in sound, experience-based community planning (See Appendix B). The planning team includes members of the 18-44 target demographic, and the planning process engagement strategy seeks out the ideas and input of millennials, for example by engaging students at QCIC, ECSU, and UConn. Equally important, the planning team includes heavy representation from entrepreneurs and business leaders, including young graduates, who can advise on the conditions required for a thriving business and innovation community.

8. Planning process funding match (highly weighted)

Within successful complex, multi-stakeholder planning processes, the most valuable contribution and commitment that project partners can make is that of **time**, not money. The commitment and dedication of time and energy from the broad group of stakeholders is what will yield an exceptional product. Each of the project team members is prepared to make a substantial commitment of staff time, including approximately 40-50 hours per Steering Committee member. The value of these hours is included in the attached budget worksheet.

In addition to the substantial in-kind expenditure, several team members are contributing funds from, in many cases, very limited government and non-profit budgets. The Towns of Killingly and Putnam, through the Eastern Connecticut Enterprise Corridor (ECEC) will be contributing $2500 and the Towns of Mansfield and Windham will be contributing $1,000 each.

PLANNING PROCESS

9. Budget attachment (separate)

10. Quality of strategy development process (highly weighted)

The strategy development process follows a collective action model engaging all partners and stakeholders. A first-week meeting of the stakeholders will be held to begin the dialogue and to select representatives from each sector to serve on a steering committee.

The first responsibility of the steering committee will be to form working groups to investigate and address priority areas for realizing the economic development potential of the Innovation Place. Priority areas are envisioned to cluster around sectors, such as municipalities, technology companies, education, and entrepreneurship resources, but could also target topics such as attracting millennials and talent to the region, leveraging unique regional assets related to quality of place, transportation, or other priorities.

The working groups will produce plans for their sectors or priority areas. These plans will be subject to analysis of emerging conditions, aligned capabilities and identification of the scope of the opportunity to develop businesses, technology, and housing, transit, and community development upgrades in the urban cores. This analysis will help the teams identify strategies to convert weaknesses to opportunities.

Next, the steering committee led by CME will integrate the plan elements developed by working groups. In the final three weeks of the planning phase, the plan will be refined, written, and submitted to CTNext. See Appendix D for project timeline and engagement process diagram.

To facilitate collective action, CME will establish a web/social media platform that will serve as a virtual meeting place and message board where partners can contribute ideas and participate in the planning process. The web platform will supplement face-to-face meetings, video conferences and conference calls among the stakeholders.

11. Baseline data collection plan

The development of a solid understanding of the entrepreneurial environment, R&D capacity, demographic, economic, employment, and geographic nature of the place is a critical early step. Rather than attempt to undertake a new analysis, the team will collect and organize recently-developed databases.. The CEDS study, the NECCOG and CRCOG regional Plans, the Sustainable Eastern Connecticut Study, EWIB's employment studies, UConn Extension's GIS and CLEAR databases, town data, and the SBDC resources will all be collected. These data will provide context and background to early conversations about risks, opportunities, and capabilities of the region, and "ground truth" regarding the ability of the region or individual places within the region, to support a dynamic Innovation Place.

12. Governance structure for planning process (highly weighted)

CME will act as the convener and moderator of the planning process. As described in section 10, A steering committee selected at a meeting of all participants and stakeholders will provide strategic leadership and guidance.

The participants and stakeholders will be convened very early in the planning phase to select a steering committee consisting of representatives from each sector impacted by the Innovation Place. Based on discussions, the steering committee will form working groups to address priority impact areas and sectors (such as municipalities, urban spaces, millennials, entrepreneurs) as well as cross-sector interactions. The reports of the working groups will form the backbone of the plan for the Hub. The steering committee members will provide strategic direction to the working groups, will guide planning processes, will facilitate collection of ideas and information from their respective sectors, will participate in vetting ideas and completing analysis of emerging conditions and aligned capabilities, developing a model for the innovation place, facilitate completion of an organizational business, and provide input on the implementation plan. The aim is to actively engage all sectors to maximize the potential of the Innovation Place to revitalize the urban centers of NECT and to ensure buy in from communities, institutions, and individuals affected by the plan.

A description of the engagement process and a project timeline is provided in the appendix.

13. Quality of stakeholder and community engagement (highly weighted)

The steering committee is responsible for engaging the broad spectrum of perspectives held by the large and diverse stakeholder group. The steering committee will coordinate outreach initiatives throughout the area. A hub-and-satellite constellation model will be employed to facilitate community-level and cross-sector communications (See Appendix). Outreach meetings, beginning with the Steering Committee and radiating out to businesses, community leaders, and service providers will seek to develop a vision for the Hub. From these meetings, commitments to participate will be made and other stakeholders and resources identified. Numerous methods of stakeholder outreach will be employed, including website/social media, online polling and scheduling, in-person forum events and open committee meetings.

PLACE

14. Intent to have zoning for mixed-use development (20%) (pre-requisite)

All of the primary communities involved in this project have made significant investment in making their urban community cores available for higher-density, mixed use development- and critically, for redevelopment. Putnam's Industrial Heritage Overlay District (IHOD) and Killingly's Mill Mixed Use Development District (MMUDD) promote the mixed-use redevelopment of the many mill complexes in the downtown areas of those communities. Similarly, Windham's Planned Development Districts, such as ArtSpace and the Frog Bridge District, promote mixed-use redevelopment. Mansfield's new downtown, Storrs Center, is an innovative design district, and the Four Corners area adjacent to the UConn Tech Park has been identified for redevelopment into a compact mixed-use district. The commitment of partnering municipalities to pursuing mixed use (re)development is strong and evident in municipal master plans and regulations.

15. Public transportation accessibility (pre-requisite)

The Nash-Zimmer Transportation Center in Storrs serves as a gateway between NECT, Hartford and other major cities by functioning as a central hub with connections between the UConn shuttle system, Windham Region Transit, Peter Pan interstate bus service and the planned easterly expansion of CTfastrak. Circulation within NECT itself is provided by both the Windham Transit District and the NECT Transit District. Strengthening transportation linkages between the urban centers of the Hub, including rail lines, is anticipated to be a significant focus of this initiative, as is the commitment to improving in-town pedestrian networks.

16. Presence of anchor institutions (pre-requisite) -

NECT is home to the full spectrum of higher education institutions including UConn, ECSU and QVCC as well as healthcare institutions such as Day-Kimball and Windham Hospitals. Other anchor institutions in the private and entrepreneurial sectors include the QCIC (UConn), the UConn Entrepreneurship and Innovation Consortium, Nerac, EAMA, and the Northeast Connecticut Economic Alliance. These institutions are further supported by numerous community economic development agencies and chambers of commerce.

17. Existing research and/or entrepreneurship activity (prerequisite)*

NECT draws talent from across the state, nation, and the world, and is an emerging hub for innovation, entrepreneurship, and technology-based enterprises. UConn supports annual research expenditures in excess of $250M and entrepreneurship and technology development through the Technology Park, the Entrepreneurship and Innovation Consortium, the Technology Incubation Program, and through the Office of the Vice President for Research. ECSU is a leader in sustainable energy technology and policy, and supports education and innovation that attracts talent to Willimantic and its entrepreneur-ready repurposed space in its mill district. QVCC supports educational initiatives that are tailored to staff the changing needs of technology employers in the region.

In the private sector, Nerac has contributed to the development of several hundred innovative companies and holds conferences with entrepreneurs that accelerate innovation by connecting venture capital and industry mentors to aspiring technology entrepreneurs. Nerac also provides seed funding, houses startups, and has extensive consulting capabilities that support entrepreneurs and innovation-based enterprises.

18. Quality of amenities (e.g., vibrancy, streetscape, meeting places, entertainment, arts)*

NECT offers exceptional quality of place amenities. The towns involved in this project offer downtown infrastructure; theater, music, and arts and entertainment venues; walkable spaces, and cafes and restaurants. Uniquely, NECT offers parks and green spaces, recreation opportunities, as well as community-supported agriculture and farmers markets that significantly enhance livability and quality of place. These amenities are further described in the Appendix E.

19. High-speed Internet/broadband access*

Mansfield, the likely physical home for the NECT Innovation Hub, is served by numerous data infrastructure options. The Frontier Fiber network is available with a 20MB internet line with potential for expansion; Lightower has recently added Storrs Center and the Four Corners to its Dark Fiber network, and Charter Spectrum is also exploring expanded options for the area, providing high-speed service for businesses and individual consumers. As a leading research university, UConn has computing infrastructure adequate to support data-intensive distributed research and multi-site collaborations.

20. Mixed-income housing accessibility*

NECT offers some of the most affordable housing in the state, including urban residential districts and walkable communities. The home prices of the three traditional urban areas in this project are substantially below State levels: median home sales price for Putnam, Killingly, and Windham are 35%, 30%, and 40% below the State median, respectively. The home, rent, and development land prices in Windham County are easily the lowest in the State, making development costs for additional residential real estate comparatively attractive. In addition to these baseline advantages, the communities have been striving to add more residential development in their urban cores. See Appendix E for more detail.

21. Relation to larger region and leverage of regional assets*

Silicon Valley and the Research Triangle are commonly thought of as single "places," but, like NECT, are really collections of numerous places, businesses, gathering spots, and communities scattered across multiple municipalities and anchored by large, keystone institutions. This project will bring together the stakeholders, innovators, investors, experts, and partners across the region to plan and act more as a single "place" and ultimately form a collaborative network that supports business development, employment expansion, transit connections, housing growth, and commercial investment throughout the region. With regional assets such as UConn and the companies of EAMA leading the way and a variety of classic, charming urban spaces, NECT has a real opportunity to become a nationally-recognized Innovation Place.

Project Budget: Northeast Connecticut Innovation Hub

Applicant: CME Associates, Inc.

Section A. - Summary

		Sources of Support			
	Use of Funds (populated from Section B.)	CTNext	Cash	In-kind	Total
Planning Process	$40,600	$40,600		$108,000	$148,600
Meeting/Event costs	$4,500		$4,500		$4,500
Data Compilation	$3,400	$3,400		$10,000	$13,400
Report Generation	$6,000	$6,000		$10,000	$16,000
Other					$0
Total	**$54,500**	**$50,000**	**$4,500**	**$128,000**	**$182,500**

Section B. - Use details

Planning Consultant				
Name	Hourly Rate	Hours/month	mos. in contract	Total
John Guszkowski (CME Associates)	$155.00	60	4	$37,200
Susannah Judd (CME Associates)	$85.00	10	4	$3,400
				$0
Total				**$40,600**

Meeting/Event Costs		
Event	Purpose	
Steering Committee	Meeting expenses	$3,000
Outreach Meetings	Stakeholder outreach	$1,500
Total		**$4,500**

Data Compilation & Analysis	
Description	Amount
Uconn Resources	$3,400
Total	**$3,400**

Report Development & Graphics	
Description	Amount
Uconn Resources	$6,000
Total	**$6,000**

Section C. - Source details

Cash			
Source Entity	Role in Applicant Group	Purpose of Support	Support Amount
NE CT Enterprise Corridor	Steering Committee	Meeting/Event costs	$2,500
Town of Mansfield	Steering Committee	Meeting/Event costs	$1,000
Town of Windham	Meeting/Outreach	Meeting/Event costs	$1,000
Total			**$4,500**

In-kind			
Source Entity	Role in Applicant Group	Description of Support	Amount
Stakeholder Representative*	Meeting/Outreach	In-Kind (time/overhead)	$ 48,000.00
Steering Committee Member**	Meeting/Planning	In-Kind (time/overhead)	$ 60,000.00
CME & Uconn Organization	Project Management	Additional time/resources	$20,000
Total			**$128,000**

*Assume 24 stakeholder representative participating at 20 total hours each for Planning Phase

**Assume 12 Steering Committee representatives participating at 40 total hours each in Planning Phase

Northeast Connecticut Innovation Hub

Appendix A

VISION

Why Northeast Connecticut?

Northeast Connecticut offers unique regional assets that support innovation and entrepreneurship as well as quality of place. Home to many small and medium sized companies and a strong higher-education infrastructure, NECT provides ample opportunities for high-quality employment and a dedication to growing innovation, investment, and connectivity. The region also offers a wide variety of lifestyle options, from small-scale urban to rural, that appeal to young professionals who are not interested in the larger-city, urban experience, a group that includes approximately one-third of millennials according to a Rockefeller Foundation and Smart Growth America study.

What we have to offer

A regional quadrangle anchored by Mansfield, Putnam, Killingly, and Windham at its vertices, the Northeast Connecticut Innovation Hub affords numerous opportunities for creators and innovators to mix, mingle and collaborate in a low-key, amenity rich environment. Key assets include:

- Full spectrum of **higher education institutions** including UConn, Eastern Connecticut State University (ECSU), and Quinebaug Valley Community College (QVCC).
- Vibrant and culturally rich downtowns including the **historic urban centers** of Putnam, Danielson, and Willimantic as well as the new Storrs Center development in Mansfield.
- A dense cluster of small- and medium-size **advanced manufacturing businesses** supported in their efforts by **workforce development organizations** such as the Eastern Advanced Manufacturing Association (EAMA), the QVCC Advanced Manufacturing Technology Center and the Eastern Workforce Investment Board (EWIB).
- The **research** and **technology transfer** assets of the University of Connecticut, including the UConn Entrepreneurship & Innovation Consortium and the UConn Tech Park.
- An **entrepreneurial environment** that includes the CEOs of Nerac and The Stemie Coalition, financial and technical support from a network of attorneys, venture and traditional funders, and micro-lending through the Northeast CT Economic Alliance, and business support services from area Chambers of Commerce and Connecticut's Small Business Development Center.
- Strong **municipal and regional commitment** from the towns of Mansfield, Putnam, Killingly, Windham and Tolland to providing the types of places that will foster and support the growth of an innovation economy.
- A **strong connection to nature** with endless opportunities for recreation and enjoying fresh, local food from our abundant farms.

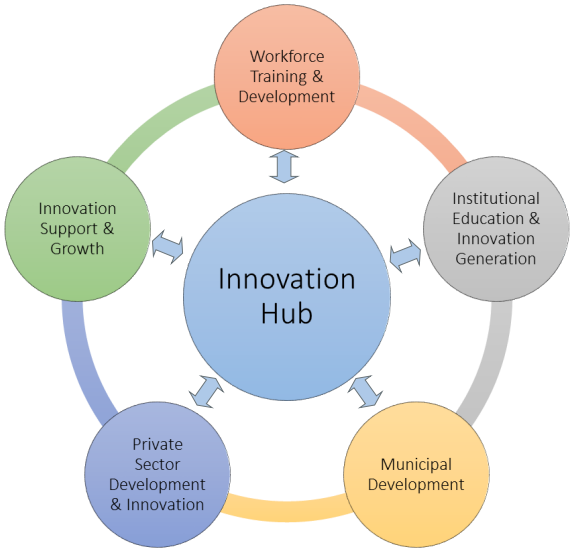
Creating a Hub

As Northeast Connecticut comprises a similarly-sized area to both Silicon Valley and the Research Triangle, a strong focus of this Innovation Places project will be to strengthen connections between our communities and anchor institutions. Enhancements to transportation, infrastructure and communication systems will help to promote the continued revitalization of the technology, business, workforce, housing, and cultural centers of this region.

To facilitate the actions that will be needed to transform Northeast Connecticut into a dynamic leader in research and innovation, we envision the development of an Innovation Hub that brings together the collective knowledge, experience and commitment of several key sectors.

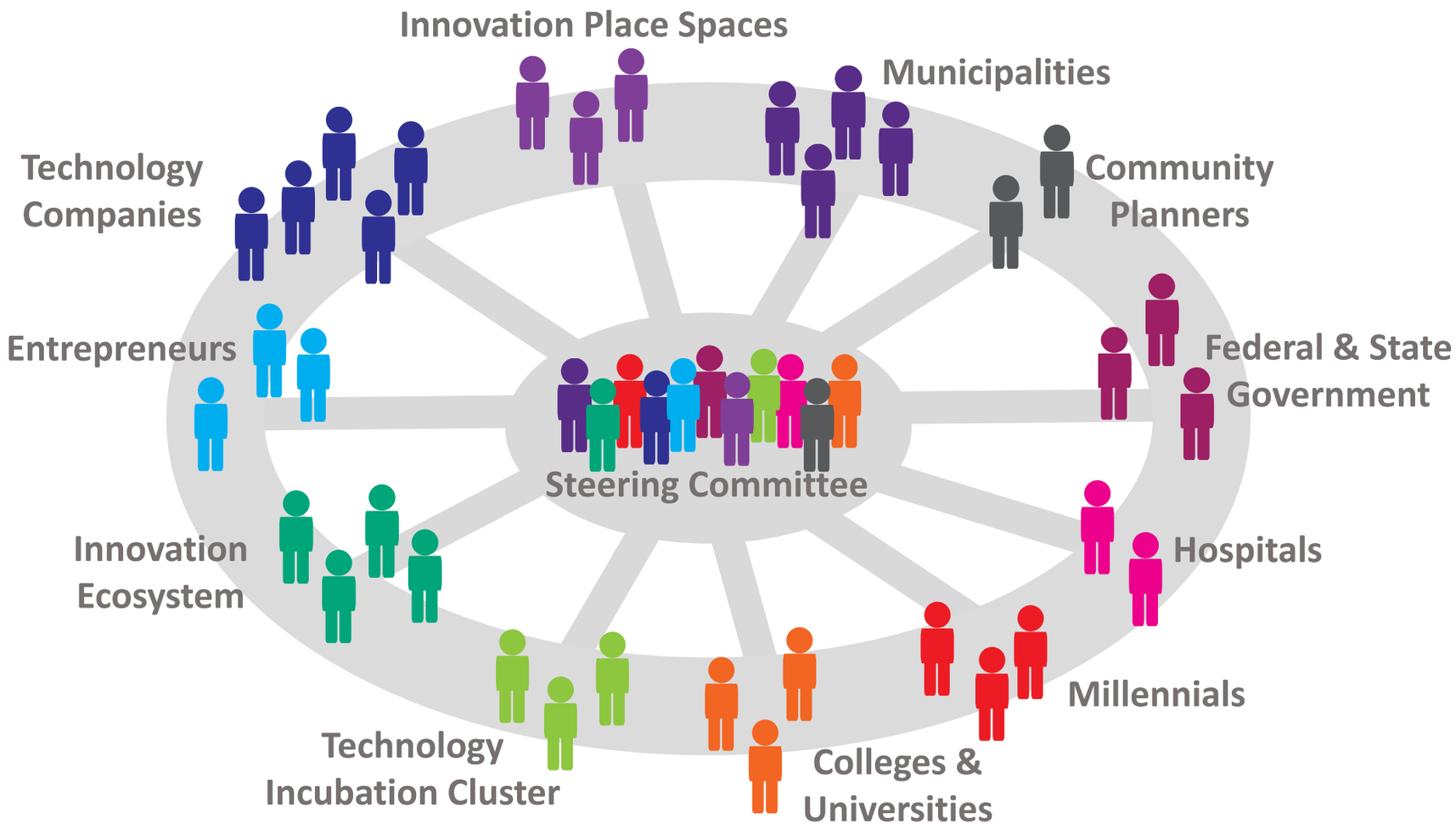
The Hub is envisioned to be both a physical space and an organizational construct. The **organizational construct** will be a formal network with a membership and management structure, based on a collective impact model to ensure that the shared vision of the group fosters collaboration within sectors and deep and active connections between sectors. All elements will seek to be mutually supporting to benefit students, entrepreneurs, workers, businesses, and communities.

The **physical space** will be a Hub headquarters, located within one of the vibrant urban centers, where partners, entrepreneurs, resources, and processes can connect, meet, work, and drive innovation and growth forward. At the end of the Planning Grant phase, which will be driven by extensive outreach and collaboration, a plan for a physical location and space for the Hub and an organizational/business structure for the Hub will be delivered.



Northeast Connecticut Innovation Hub Planning Partners

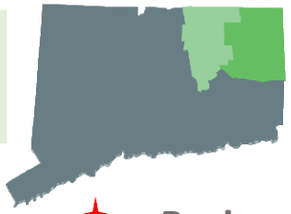
APPENDIX B



- Towns of Killingly, Mansfield Putnam, Tolland, Windham
- Industry Parks, Repurposed Mills, Small Urban Centers
- Eastern Advanced Manufacturing Alliance, SMEs, OEMs
- NERAC, Entrepreneurs, Start-up Companies
- CT Small Business Dev. Center, NE CT Economic Alliance, Accountants, Legal Services, Venture Capital, Mentors, etc.
- Technology Park, Proof of Concept Center, Technology Incubators, Simulation Center, NERAC
- UConn, ECSU, QVCC
- Student Leaders Sector Representatives Age 18-44
- Day Kimball Hospital, Windham Hospital
- State and Federal Elected Officials, DECD, Connecticut Innovations
- CME Associates, Inc., Municipal Planning Officers, UConn School of Business

Northeast Connecticut Innovation Hub – Concept Map

APPENDIX C



Innovation Hub

Regional Urban Partner Places

CME Community Planner

Regional cluster of 30+ small- & medium-sized manufacturers

NECT Innovation Places Quadrant

APPENDIX D

Northeast Connecticut Innovation Hub Planning Process

Northeast Connecticut Innovation Hub –DRAFT Planning Phase Time Line

Action / Week Ending	November 2016				December 2016					January 2017				February 2017				
	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1-27	2/3	2/10	2/17	2/24	3/3
Establish web/social media collective action project platform																		
Convene stakeholder meeting																		
Select steering committee																		
Form sector-based working groups																		
Working groups develop plans for networking and tasks																		
Review working group plans and seek aligned capability																		
Steering committee retreat to review plans and progress																		
Working groups formalize recommendations and identify resources needed to implement tasks																		
Review and integrate working group plans into concept for Innovation Hub and Hub network organizational structure																		
Refine and write plan for submission																		
Submit plan to CTNext																		

KEY: Full Stakeholder Group Activities | Working Group Activities | Steering Committee Activities | Organizational Activities

Northeast Connecticut Innovation Hub

Appendix E

Amenities & Housing

Mansfield

Storrs Center, Mansfield's new downtown, includes numerous dining and shopping opportunities as well as cultural amenities such as the Ballard Institute and Museum of Puppetry and a town square with concert venue that complement the activities found across the street on UConn's campus such as sporting events and the Connecticut Repertory Theatre. These amenities combined with the presence of an anchor grocery store and the project's convenient location near the Mansfield Community Center and the site of the Storrs Farmers Market have led to the rapid lease-up of both residential and retail space. This project has added 619 rental units, 42 ownership units and over 168,000 square feet of commercial and office space since 2012.

Additional mixed-use development is anticipated in the Four Corners area adjacent to the UConn Tech Park upon completion of water and sewer service extension projects. Mansfield is also in the process of updating its multi-family regulations to strengthen minimum affordability requirements to promote a wider range of price points.

Putnam

Downtown Putnam is home to a unique restaurant row featuring popular outdoor 'piazza' style dining; the landmark Bradley Playhouse; a hugely popular riverside park with an outdoor concert venue; and a riverside trail system that connects Downtown to a Farmer's Market Pavilion and new regional YMCA facility. These amenities and vibrant downtown spirit have led to a recent decision by 1st Alliance Lending to move 40+ employees to a historic building downtown.

Downtown Putnam has 1,964 housing units within its 2.6 square mile area. Another 80 mixed-income units will be added to this inventory in a reuse project for the Cargill Falls Mill, which is located less than a quarter mile walk from the center of Downtown.

Killingly

Killingly's historic Borough of Danielson has a classic Main Street, which has been the subject of extensive streetscape upgrades, including sidewalks, streetlights, benches, and plantings. It is also in the process of rolling out a $1 million+ facade improvement program to continue to expand attractiveness to residents and businesses.

The Central Business District has 79 parcels, of which 27 are developed with residential uses. Apartments are allowed by-right in downtown commercial buildings, a fact that the Town is actively promoting. Over the next two years, a historic mill on the south side of Downtown will be transformed into The Lofts at Killingly with 32 mixed-income housing units.

Photo Credit: www.willimanticstreetfest.com

Windham

Downtown Willimantic features numerous quirky dining and gathering places including the Willimantic Brewing Company and CafeMantic. These venues supplement a lively street scene anchored by the 3rd Thursday Street Fest, a weekly street festival held from May to September and the Willimantic Farmers Market. The nearby presence of ECSU and ArtSpace Windham provides a mix of both student and artist populations.

Willimantic has over 113, 000 square feet of residential space in the city center, including ArtSpace Windham which converted a historic mill building into 48 units of mixed-income housing. Additional residential development is anticipated along Main Street, including 20 units at 669 Main.

COMMUNICATIONS

The New York Times | http://nyti.ms/2dQByB2

No Kegs, No Liquor: College Crackdown Targets Drinking and Sexual Assault

Dozens of universities have introduced stricter rules on alcohol, especially at fraternities. We sent reporters to five campuses to examine the new measures.

By THE NEW YORK TIMES OCT. 29, 2016

The backyard fraternity party was in full dancing, drinking mode on a recent Saturday morning. To the sounds of "No Problem" by Chance the Rapper, Breanna DeCocker, 20, a junior at the University of Michigan in Ann Arbor, Mich., ducked through the crowd holding a clipboard.

"Give me that," she said, snatching a bag of white wine from a female classmate in a Michigan T-shirt who was holding the bag aloft and guzzling from the nozzle.

"You don't want no problem, no problem with me," the song warned, and it was clear that no one wanted any problem with Ms. DeCocker, either.

For the second time that morning, she had foiled a round of Slap the Bag, the popular pastime of chugging cheap wine out of a plastic bladder liberated from its box. Under the new university rules to combat drinking, it is prohibited.

Drinking games with red Solo cups of beer, "pregaming" with Fireball shots, swigging 190-proof grain alcohol punch on the way to blacking out: It's party time at college campuses across the country, even when there is no football game.

But this year, dozens of universities are taking new measures to kill the party mood, increasingly worried about student safety and the relationship between alcohol and sexual assault complaints.

At Indiana University, hard liquor is now prohibited at fraternity parties. At Michigan fraternity parties, new student patrols enforce bans on kegs. In addition to banning hard liquor at undergraduate parties, Stanford limits the size of bottles students may possess.

Every countermeasure, though, seems to meet an obstacle. Ohio State recently permitted beer sales at its football stadium, an irresistible revenue boost for the university, even as security personnel work to catch underage drinkers. At Stanford, students said they were continuing to sip, gulp and chug, rules or no rules.

To capture the uneasy balance between the forces promoting alcohol and those trying to control it, The New York Times sent reporters to five campuses. Here is what they found:

Student self-policing

ANN ARBOR, Mich. — At Michigan, Ms. DeCocker, from Orland Park, Ill., was one of a dozen students volunteering to patrol parties attended by fraternity and sorority members, who have been seen, especially recently, as destructive and out of control. The low point may have been in January 2015, when a group of students vacationing at a ski resort in northern Michigan wrecked their hotel rooms in a drunken fray, causing, the hotel said, more than $400,000 in damage.

Michigan's president, Mark Schlissel, warned that the Greek system could self-destruct, and he has since cited the connection between drinking and campus sexual assault. In a 2015 fact sheet, the National Institute on Alcohol Abuse and Alcoholism estimated that alcohol was a factor in 97,000 cases of sexual assault and date rape each year among college-age students.

Michigan's Greek system promised to self-police, and this semester a new set of rules was introduced for game days, when this city teems with tens of thousands of students decked out in the university's colors of maize and blue. Ms. DeCocker and

the other student volunteers — in conspicuous orange shirts — were putting the restrictions to the test on this crisp, sunny Saturday, as Michigan prepared to play Penn State. They were determined to inspect each fraternity party.

Caroline Alford, 22, a senior from Los Angeles, explained what qualified as a violation. Handles of alcohol being passed around. Kegs. People on the roof. A lack of "sober monitors," fraternity members who abstain from drinking and supervise the party.

As the monitors passed a dilapidated house where students were drinking beer on a front porch, one pointed at the ambassadors. "They're here to shut down the vibe!" he shouted. Ms. Alford did not flinch.

The patrol arrived at a party at Sigma Phi Epsilon. Three students sat on the roof, their sneakers dangling off the side. "Can you get the people off the roof?" Andy Tripp, another ambassador, asked one of the members.

Tyler Bryant, the chapter president of Kappa Sigma, nervously surveyed a party outside his fraternity, where rust-colored Keystone Light cans littered the grass.

"We have that negative stereotype, and we're trying to reverse it," he said, pausing to admonish a partygoer who had lightly doused a reporter and another guest with beer. JULIE BOSMAN

Stadium beer

COLUMBUS, Ohio — "Let me hug you," said John Jacob, 21, a senior from Cincinnati, as a stranger approached him in the concession area of Ohio State's stadium. He was one of many fans in high spirits as the university's football team demolished Rutgers, 58-0.

Mr. Jacob, holding a Budweiser, had gathered near other students who waited in lines during the third quarter. Beer sales would soon end.

"Our friend just got stopped," said Savannah Renshaw, 21, a senior from Dayton, as she stood with Mr. Jacob and other friends. "Security came up to her and said, 'Can I see your ID?'"

Nearby, a young woman leaned over a garbage can. “We’ve all been there,” said her boyfriend, who claimed she had not been drinking. In the stands, a similar mess was being cleaned up with disinfectant.

At Ohio State, 42 percent of undergraduates reported having drunk five or more drinks in one sitting in the previous two weeks, according to a 2014 survey, a record similar to that of many large public universities. It is, though, a higher rate of what is considered binge drinking than the 36 percent found nationally in the same study. Yet in June, the university joined the more than 35 universities that sell beer to general-admission ticket holders at their football stadiums.

Unlike most other Big Ten universities, critics said, Ohio State succumbed to the allure of additional revenue.

“I don’t think that’s a wise thing, as we’re trying to teach our kids to moderate and to enjoy both alcohol and nonalcohol activities,” said Mr. Schlissel, the Michigan president.

But Mr. Jacob, a finance major, noting the Ohio State stadium’s nearly 105,000 seats, said, “Obviously, it’s a huge potential market.”

Officials reported $412,000 in sales for the first three games, about 16,000 beers per game.

Some students said that because the rules permitted the purchase of two beers at a time, it was relatively easy to buy for a friend, then hand it over in the stands without detection.

A university spokesman, Christopher Davey, said that could occur even if only one beer were sold at a time, and that the university was also enforcing the law. Ten people at the Rutgers game were cited in and around the stadium for offenses related to providing fake IDs, underage drinking and furnishing alcohol to minors, he said.

Officials at Ohio State say there have been no major incidents related to its beer sales.

But as he left the game, W. Carlton Weddington, 46, a former state representative from Columbus, warned: “At the end of the year, when the national championship is on the line, things get rowdy. We’ll see what happens.”
STEPHANIE SAUL

Night squad

BOSTON — While many colleges are combating excessive drinking by encouraging students to drink safely, Boston University, in the middle of a bustling city of more than 650,000, is drilling down on law and order.

On a recent night, sitting in an unmarked police car and wearing plain clothes, Sgt. Larry Cuzzi and two officers with the university’s police department staked out a liquor store inside a grocery at the edge of campus.

Boston University does not have a football team, but other local sporting events, including one of the final games for the Red Sox star David Ortiz, known as Big Papi, provided ample reasons for a party — not that students needed one.

The officers had not been parked five minutes when one, Nancy O’Laughlin, spotted her first targets: two lanky young men, one wearing an empty backpack — a red flag because it suggests that one might be purchasing on behalf of the other. She bolted out of the car and waited to ask them for IDs as they left the store.

“They’re not really afraid of the courts,” said Sergeant Cuzzi, a 20-year veteran of the force who runs its alcohol enforcement program. “But they are afraid of the university.”

In addition to revoking scholarship money, the university can take away student housing and impose athletic sanctions on students caught buying alcohol for anyone under 21, or with fake IDs.

Before the program started in 2011, officers were calling ambulances for more than 300 students a year because of drunkenness — the majority of them freshmen. Those numbers have dropped by nearly half, but binge drinking and the problems that come with it, including sexual assaults, have not disappeared.

One night earlier, the officers had sent six dangerously drunk students to the hospital by ambulance. Officer O'Laughlin had found one of them, an 18-year old woman, naked and unresponsive inside a fraternity house.

At the liquor store, Officer O'Laughlin pulled one of the young men by the shoulder as they left. He had a backpack full of beer. Both said they were 21, presenting IDs to prove it, so the officers let them go.

But as the night went on, the officers issued summonses to half a dozen underage students, including two freshmen carrying wine and a pair of convincing fake IDs, complete with holograms.

As 11 p.m. approached, closing time for liquor stores, Officer O'Laughlin spied a young man wearing skinny jeans and a backward cap urinating on a gate outside the market.

Glassy-eyed and slurring his words, the young man said he was 19. After giving Sergeant Cuzzi some attitude — "Whatever you say, man — you're the law" — he was handcuffed. Later the officers would send him to the hospital to sober up. CAITLIN DICKERSON

A scary path

PALO ALTO, Calif. — It's long been known as the scary path, a wooded shortcut between fraternity houses renowned for its convenience and its lack of lighting. At the end of the path is the Dumpster near which a young woman was sexually assaulted last year by Brock Turner, a Stanford swimmer, after a night of heavy drinking at the Kappa Alpha fraternity.

On a recent October evening, another party at Kappa Alpha was in full swing.

Fraternity brothers crushed cans of Natural Light in drinking games at a row of long wooden tables. Music coursed through the building, a mansion with a golf cart out front.

Mr. Turner's much-criticized six-month jail sentence this year helped bring fresh scrutiny to Stanford's party culture. But even before the controversy, the

university was working on initiatives to combat sexual assault and drinking on campus. Its effort to roll out those programs this fall — and the resistance by students and faculty members — demonstrate just how hard it is to find the right measures.

The most talked-about new rule limits possession of hard alcohol to bottles smaller than 750 milliliters and bans liquor from undergraduate parties. Ralph J. Castro, the head of the university's office of alcohol policy and education, said the policy was not a reaction to the Turner case, but to the 30 or so students each fall who were sent to the hospital after heavy drinking.

But some here, particularly women, said the move would drive drinking behind closed doors, into dorm rooms where rape was more likely to occur. So far this fall, at least two women have reported sexual assaults in campus housing.

The new rules brought attention to a page on the alcohol office's website, titled "Female Bodies and Alcohol," that explained that women often become drunk faster than men because they tend to be smaller. The page was swiftly denounced as blaming women's bodies — not the actions of men — for sexual assault. It was quickly changed, but the damage had been done.

"The website focused on stopping women from drinking hard alcohol," said Stephanie Pham, 20, a junior from Monterey Park and the founder of a campus anti-assault group, Stanford ASAP. "Why doesn't Stanford focus on discouraging rapists from raping?"

(The university's new programs include an overhaul of its assault investigation process and a 90-minute seminar for freshmen that covers sexual consent.)

On campus, several students said their resident advisers had announced that they would not enforce the liquor rules.

Susannah Meyer, 19, a sophomore from Manhattan, said she'd already seen students downing extra liquor before parties for fear they wouldn't find it later. "They're like, 'Nothing is going to be there when I go out, so I have to get it done now,'" she said. "That's really the attitude — a sense of urgency."

But Mr. Castro is encouraged. During the first three weeks of the quarter, Stanford had three alcohol-related hospital transports of students.

It normally has three or four times as many. JULIE TURKEWITZ

Drinks with breakfast

BLOOMINGTON, Ind. — The Indiana University football team's humiliating loss to Wake Forest University did not hamper the festivities at Kilroy's on Kirkwood.

The D.J.'s music pulsated, and a crowd of students danced, some on the tables.

Unlike Indiana's football team, Kilroy's is a powerhouse, one of the most popular college bars in the country.

The line to enter had snaked around the corner before dawn, with students awaiting the Kilroy's game-day tradition of a breakfast buffet.

Fourteen bartenders were ready at 7 a.m. to make mixed drinks — Sex on the Beach, Kamikaze, Woo Woo, Peaches 'n' Cream, Girl Scout Cookie, Blue Suede Shoes, Liquid Cocaine, Alabama Slammer, Water Long Island.

A $5 cover charge pays for the buffet and a T-shirt. Drinks are extra.

Kilroy's — with three locations within walking distance of campus — has perfected the art of freebies and promotions that attract students: $2 Tuesdays and $3 Thursdays for certain liquor, beer and food, and free burgers and pizza on Friday evenings. Yet those deals come with another price. Research has shown that alcohol specials increase binge drinking.

On home game days, there are more sexual assaults at universities, particularly in the first couple of months of classes.

This fall, Indiana imposed a rule prohibiting hard liquor at its fraternity houses after several accusations of sexual assault last year and a sex tape from one house, which was shut down.

How much these efforts will work is an open question, despite some research showing that limiting alcohol on campus is effective. Yet off-campus drinking may be even more difficult to control. The Indiana campus is still reeling from recent violent episodes — the sort of stories that figure into the nightmares of parents — connected to the busy off-campus bar scene.

A 52-year-old man was sentenced last month to 80 years in prison for the 2015 murder of a 22-year-old Indiana senior, whom he followed home after she had spent a night drinking with friends. The case, and a related indictment, was similar to the unsolved disappearance in 2011 of Lauren Spierer, a 20-year-old Indiana student from Edgemont, N.Y., after a night at Kilroy's Sports Bar in Bloomington, where she left behind her shoes.

Kilroy's, which rents its Kirkwood location from the Indiana University Foundation, was cited for serving alcohol to an underage person in the Spierer case. Since then, its ownership has changed hands, and students say there has been increased enforcement of underage drinking. Kilroy's manager, Ross Freeman, did not respond to requests for comment.

As the evening progressed, the floor at Kilroy's grew slippery with beer and grime, and the restrooms emitted telltale odors of overindulgence.

"They drink early," said Chief Michael Diekhoff of the Bloomington Police Department. "They may or may not go to the game. Then they'll take a nap. Then they'll get up and start again." STEPHANIE SAUL

A version of this article appears in print on October 30, 2016, on page A14 of the New York edition with the headline: No Kegs, No Liquor: Colleges Crack Down.

Linda M. Painter

From: Alison Hilding <aahilding@gmail.com>
Sent: Saturday, October 29, 2016 1:46 PM
To: Benjamin A. Wiles
Cc: Town Council; PlanZoneDept; Rebecca Shafer; mae.flexer@cga.ct.gov; Gregory Haddad
Subject: Re: Zoning Regulations, Student Drinking Problems, and also Sexual Violence

Ben,

The proliferation of fake ID's is mindboggling. My point is that Mansfield has done little, over the decades, to try and reduce the students' heavy use of alcohol and I do see recent zoning changes as serving to promote further use. Furthermore, I believe that the town is all too anxious to profit from increased sales of alcohol -- through property tax dollars associated with these establishments. And the notion that providing more bars will keep drinking out of neighborhoods is absurd since much of the drinking in our neighborhoods is done by underage students who should not be able to drink in the bars anyway. What does the Town of Mansfield do to promote other activities for students or more importantly, to put pressure on UCONN to do so, and also to better assist students in making the choice not to drink and especially until they blackout?

The large alcohol manufactures have done a fantastic job promoting the use of alcohol among a youthful population and we have all come to see this use as normal. The acceptance of this as normal or appropriate is what needs to change for everyone's well being. Anyway, if there are going to be more bars in Mansfield, then some of them should be on the UCONN campus. It's their problem, let them deal with it. Lastly, I don't think you will find the brew pub at the downtown to be too pleasant a place to visit if it is full of drunk students. Do you enjoy the clientele at either of the bars near the UCONN police station? Most adults don't enjoy drinking with college students. I have no problem with a brew pub in the abstract, and I made that clear from the get-go, I just think in the context of a town and a university with long-standing alcohol issues that the creation of more drinking establishments is promoting and encouraging further use. I imagine that you will see crime in the downtown go up too once there is a bar there. Already the frequency of emergency calls to the downtown is noticeable. And I hope I am totally wrong in that prediction and it turns out to be a pleasant tame establishment -- totally distinct from the student drinking habits and associated destruction that I have witnessed in my neighborhood for decades. As for national statistics regarding crime and rape that occur off-campus and the role of alcohol in those situations -- well I leave you to reflect on that.

Alison

On Sat, Oct 29, 2016 at 12:08 PM, Benjamin Wiles <wiles.benjamin@gmail.com> wrote:

> To the extent that I am being implicated in Alison's observations, I would like to clarify that I completely disagree with the conclusions that Alison had drawn as they relate to the town's alcohol regulations. I, along with virtually every other father of young children that I know in town, look forward to the new bar in Storrs Center with great anticipation. We have been waiting for a decent place to meet for a beer for some time. In my view, high quality "watering holes" increase community connectedness in the same way as MCC and the library. In trying to attract new families to town, the lack of a place to get a decent cocktail in town does not help.
>
> If the objective is to reduce student access to alcohol, more aggressive enforcement of state liquor regulations at the town package stores would be appropriate. I do not think thay underage students would not choose to,

nor be able to, drink alcohol at the reputable alcohol-serving establishments that I hope our town can attract. Best, Ben

On Oct 29, 2016 10:32 AM, "Alison Hilding" <aahilding@gmail.com> wrote:

Dear Members of the Mansfield PZC,

http://www.nytimes.com/2016/10/30/us/college-crackdown-drinking-sexual-assault.html?hp&action=click&pgtype=Homepage&clickSource=story-heading&module=second-column-region&region=top-news&WT.nav=top-news

Please see the above link to a front page article in today's New York Times entitled "*No Kegs, No Liquor: Colleges Target Drinking and Sexual Assault*"

Also please note that at the end of this article the listing of other recent articles addressing drinking and college campuses.

I did not agree with PZC's decision to change Mansfield from "damp" to "wet" and felt that the previous regulations were better suited to a town with a large student population with alcohol problems. Likewise, with a mindfulness to the sexual assault issues associated with excessive student drinking, these regulation changes seemed to me to be both irresponsible and unkind. I think it is unconscionable for the town to be seeking tax dollars through the sale of alcohol given the high student population in Mansfield and the existing problems with alcohol consumption. Pushing a brew pub in the downtown, (next to student residents), more bars on King Hill Road (right between dorms and the mess of unsupervised Greek frats and sorority houses on Hunting Lodge Road and N Eagleville Road) to me was totally irresponsible and fails to recognize or deal with existing alcohol problems. In fact, these zoning decisions serve to worsen the student drinking problems in Mansfield. I stated this in the Zoning Focus Group. I also raised similar concerns at your June 2016 public hearing on alcohol regs. Creating zoning regulations that allow any establishment to serve alcohol that serves as little food as a potato chip is not in the interest of the health or safety of the UCONN student body or in the interest of year-round residents who drive on our roads or live next to students who tank up at these establishments. Essentially, the recent changes to the availability of alcohol in Mansfield, and in particular the new locations of bars and pubs so near campus, serve to aid and enable the existing drinking problems and therefore the associated health and safety issues, including sexual violence, among the UCONN student population and therefore throughout our town. Mansfield's thirst for tax dollars no matter the social, health, or safety consequence to anyone is shameful. Yes, students drink, but for the town to try to profit from this problem -- and effectively encourage and increase it through zoning changes-- is just horrible.

Similarly, grasping for tax dollars for off-campus student apartments where students do not benefit from the supervision provided by Resident Advisors, or campus security, nor the amenities provided by a college campus, is another dimension of seeking tax dollars to the detriment of students, and in this case to the detriment of the local environment and to neighborhood stability as well.

Sincerely,

Alison Hilding

PUBLIC MEETING

Thursday
December 8

6:30 PM – 8:30 PM

Mansfield Town Council
Chambers
4 South Eagleville Road
Mansfield, CT

What's YOUR view???

The Capitol Region Council of Governments is leading the **Eastern Gateways Study** to focus on solutions to address increasing travel demand along the Route 44 and Route 195 corridors. At three public meetings, the study team will share what it's learned so far about today's existing conditions and will seek public input on potential opportunities to improve mobility in the region for all travelers – pedestrians, bicyclists and motorists. Please bring your ideas and be ready to give the study team feedback at an information session held on:

Thursday, December 8
Open House starting at **6:30 PM**
Formal Presentation at **7:00 PM**
Mansfield Town Council Chambers
4 South Eagleville Road
Mansfield, CT

Can't make this meeting but want to be engaged in the study? Two other meetings will be held on:

Thursday, December 1
Open House starting at **7:00 PM**
Formal Presentation at **7:30 PM**
Coventry Town Hall Annex
1712 Main Street
Coventry, CT

Tuesday, December 6
Open House starting at **7:00 PM**
Formal Presentation at **7:30 PM**
Tolland High School
1 Eagle Hill Road
Tolland, CT

For more information
see study website:

www.cteasterngateways.com

Eastern Gateways Study
Bolton • Coventry • Mansfield • Tolland • UCONN

CRCOG CAPITOL REGION COUNCIL OF GOVERNMENTS
Working together for a better region.