posted 2/22/2023 sbranch

RECEIVED BY EMAIL

TOWN OF VERNON

Planning & Zoning Commission (PZC)

Meeting Notice & Agenda

Thursday, March 2, 2023 7:30 PM

Town Hall Memorial Building- 3rd Floor Council Chambers

14 Park Place

Vernon, CT 06066

RECEIVED
VERNON TOWN CLERK
23FEB22 PM 2:18

AGENDA

1. **Call to Order & Roll Call by Roland Klee, Chairman**

2. **Administrative Actions/Requests**

   2.1 Amendment/Adoption of Agenda - Additional business to be considered under agenda item #6 "Other Business" requires a Commission vote.

   2.2 Approval of the Minutes from **February 16, 2023**

3. **New Application(s) for receipt, if any:**

   3.1.

4. **Public Hearing(s) and Action on Applications:**

   4.1 PZ-2023-03 - 0 Gerber Boulevard An application of Clifton Chapman for Site Plan and Special Permits [**4.24.4.3.1; 4.24.4.3.4.; 4.24.4.3.6; 4.24.4.3.10; 4.24.4.3.11; 4.24.4.3.15.1; 4.24.4.3.15.4**] to construct two 14,000 square feet buildings for light industrial/commercial uses. Property is zoned Planned Development Zone - Gerber Farm (PDZ) [Map #04, Block #0004, Lot #008A7]

5. **8-24 Referrals, if any**

6. **Other Business/Discussion**

   6.1

7. **Public Comments Received**

8. **Adjournment**

TOWN OF VERNON
Planning & Zoning Commission (PZC)
Meeting Minutes
Thursday, February 16, 2023 7:30 PM
Town Hall Memorial Building- 3rd Floor Council Chambers
14 Park Place
Vernon, CT 06066

Draft Minutes

1. **Call to Order & Roll Call by Roland Klee, Chairman**

- Meeting Start Time: 7:30pm
- Regular Members Present: Roland Klee, Robin Lockwood, William Nicholson, Carl Bard, Michael Baum, Iris Mullan
- Alternate Members Present: Steve Ransom sitting for Joseph Miller
- Staff Present: Ashley Stephens, Town Planner
  Shawn Gately, Director of Development Services
- Absent Members: Yelena Damsky, Eva Perrina, Joseph Miller
- Recording Secretary: Meriline Sarkar

2. **Administrative Actions/Requests**

2.1 Amendment/Adoption of Agenda - Additional business to be considered under agenda item #6 "Other Business" requires a Commission vote.

2.2 Election of Officers

- Motion to removed the Election of Officers made by Robin Lockwood, Seconded by William Nicholson. The motion carried Unanimously.

2.2 Approval of the Minutes from **February 2, 2023**

- Motion to accept the minutes from **February 2, 2023** meeting made by Robin Lockwood, Seconded by William Nicholson. The motion carried unanimously.

3. **New Application(s) for receipt, if any**

- None

4. **Public Hearing(s) and Action on Applications:**

4.1 **PZ 2023-02 - 10 Snipsic St.** Application of Adam Wing, Connecticut Water Company for Site Plan and Special Permits (4.18.3.3.2, 4.18.3.3.4.) to construct a 5,200 sq. ft. building for new aeration equipment to replace the aging infrastructure and storage building for equipment that is stored onsite for the treatment plant and reservoir. Property is zoned Restricted Watershed [Map #45, Block #123, Lot #3].

- Roland Klee, Chairman, read the Public Hearing Rules.
- Ashley Stephens, Town Planner, read the Public Notice.
- Mr. Adam Wing presented on behalf of the Connecticut Water Company. He explained his plans in details and answered questions from the commission members. Discussion ensued.
- Roland Klee, Chairman, opened the floor to anyone wishing to speak in favor or opposition of the application. None spoke.
- Robin Lockwood made a motion to close the Public Hearing, seconded by Iris Mullen and motion carried unanimously at 7:40pm.
- Robin Lockwood made a motion to approve the application **PZ 2023-02 - 10 Snipsic St.** Application of Adam Wing, Connecticut Water Company for Site Plan and Special Permits (4.18.3.3.2, 4.18.3.3.4.) to construct a 5,200 sq. ft. building for new aeration equipment to replace the aging infrastructure and storage building for equipment that is stored onsite for the treatment plant and reservoir. William Nicholson seconded the motion and the motion carried unanimously.

4.2 **PZ 2023-21-234 Talcottville Road**-An application of Benjamin Tinsley (Prime Wellness of Connecticut) for Site Plan and Special Permits (4.9.4.10 and 4.9.4.15.6) for a hybrid cannabis dispensary and cannabis retailer. The property is zoned Commercial [Map #10, Block #15, Lot #40].

- Ashley Stephens, Town Planner, read the Public Notice.
- Ben Tinsley presented the application first. He explained his plans for the site and the concept of hybrid cannabis. He was followed by Eric Peterson, Engineer and Surveyor. He explained the changes proposed in the plan of the layout and the exterior of the structure. He answered questions of the commission members. Karen Olson presented plans on the aesthetics of the exterior and interior of the structure. She explained in details of customer experience and community involvement. Al Domeika explained to process of ordering and picking up drugs. Dean Marino, the Head of Security, explained in details the plan of the security measures would be taken to keep the premises to the dispensary safe for the customers. Charles Baker presented the traffic data of the Talcottville Road. He answered questions of the commission members.
- Roland Klee, Chairman, opened the floor to anyone wishing to speak in favor or opposition of the application.

- William Goff, a local business owner, spoke in support of the hybrid cannabis dispensary and cannabis retailer.
- Kristen Burksit, Mike Spegal, Jean Mary and several others spoke in opposition.
- On request of the applicant, PZ 2023-21-234 Talcottville Road, Robin Lockwood made a motion to recess, William Nicholson seconded and the motion carried unanimously at 9:19pm
- Commission reconvened the meeting at 9:27pm.
- Eric Peterson, Charlie Baker and Al Domeika presented again for the benefit of the public.
- Robin Lockwood made a motion to close the Public Hearing. William Nicholson seconded the motion and the motion carried unanimously at 9:39 PM.
- Robin Lockwood made a motion to approve the application **PZ 2023-21-234 Talcottville Road**-An application of Benjamin Tinsley (Prime Wellness of Connecticut) for Site Plan and Special Permits (4.9.4.10 and 4.9.4.15.6) for a hybrid cannabis dispensary and cannabis retailer. The property is zoned Commercial [Map #10, Block #15, Lot #40]. Seconded by Carl Bard. The motion carried to approve the application 6 in favor and 1 in opposition.
- Iris Mullen exited the meeting at 9:45pm.

5. 8-24 Referrals, if any

- None

6. **Other Business/Discussion**

6.1 Discussion - Mandatory State Training Session

- Ashley Stephens, Town Planner, reminded the commission to provide dates of their completed Training Sessions and answered questions from the commission members.

7. **Public Comments Received**

- None

8. **Adjournment**

- Motion to Adjourn made by Robin Lockwood at 9:47pm and Seconded by William Nicholson. The Motion carried unanimously.

Respectfully submitted,

Meriline Sarkar
Recording Secretary

TOWN OF VERNON PLANNING & ZONING COMMISSION (PZC) APPLICATION

(Revised August 2022)

The PZC may require additional information to be provided by the applicant in the course of reviewing the application and during the monitoring of the project. Provide all the information requested.

APPLICANT (S)

NAME: Clifton B. Chapman

COMPANY: _____

ADDRESS: 75 Hockanum Boulevard, Vernon, CT 06066

TELEPHONE: 860-871-1000 EMAIL: apt01@hotmail.com

PROPERTY OWNER (S)

NAME: Clifton B. Chapman

ADDRESS: 75 Hockanum Boulevard, Vernon, CT 06066

TELEPHONE: 860-871-1000 EMAIL: apt01@hotmail.com

If the applicant is not the property owner, include a letter from the property owner authorizing the applicant to seek approval by the PZC, if no signature accompanies the application.

PROPERTY

ADDRESS: 0 Gerber Boulevard

ASSESSOR'S ID CODE: MAP # 04 BLOCK # 0004 LOT/PARCEL # 0087A

LAND RECORD REFERENCE TO DEED DESCRIPTION: VOLUME 1305 PAGE 2149

DOES THIS SITE CONTAIN A WATERCOURSE AND/OR WETLANDS? (SEE THE INLAND WETLANDS MAP AND REGULATIONS)

☐ NO ☑ YES

☐ REGULATED ACTIVITY WILL BE DONE

☐ IWC APPLICATION HAS BEEN SUBMITTED

ZONING DISTRICT PDZ

IS THIS PROPERTY LOCATED WITHIN FIVE HUNDRED (500) FEET OF A MUNICIPAL BOUNDARY?

☐ NO

☑ YES: South Windsor

Name of Town

CHECK IF HISTORIC STATUS APPLIES:

____ LOCATED IN HISTORIC DISTRICT: _____

____ INDIVIDUAL HISTORIC PROPERTY

RECEIVED

FEB 02 2023

PLANNING OFFICE

PROJECT SUMMARY

Describe the project briefly in regard to the purpose of the project and the activities that will occur. Attach to this application a complete and detailed description with maps and documentation as required by the **"Town of Vernon Zoning Regulations"** and **"Town of Vernon Subdivision Regulations"**.

PURPOSE: Expansion of The Park at Hockanum Crossing (see cover letter)

GENERAL ACTIVITIES: Construct two (2) 14,000 sf buildings for light industrial/commercial use (see cover letter).

Activies to include earthwork,building construction and utility installation.

APPROVAL REQUESTED

____**SUBDIVISION OR RESUBDIVISION**

____ SUBDIVISION (SUB. SEC. 4, 5, 6)
____ RESUBDIVISION (SUB. SEC. 4, 5, 6)
____ MINOR MODIFICATION OF SUBDIVISION OR RESUBDIVISION (SUB. SEC. 4.6)
____ AMENDMENT OF SUBDIVISION REGULATIONS (SUB. SEC. II)

SEE SUBDIVISION REGULATIONS SEC. 4 FOR APPLICATION FEE SCHEDULES.

X **SOIL EROSION AND SEDIMENT CONTROL PLAN (ESCP)** (SUBDIVISION REGULATIONS 6.14)

X **SITE PLAN OF DEVELOPMENT (POD)**

____ POD APPROVAL
____ MODIFICATION OF AN APPROVED POD
____ MINOR MODIFICATION OF A SITE POD

X **SPECIAL PERMIT(S)** SECTION: 4.24.4.3.1, 4.24.4.3.4, 4.24.4.3.6, 4.24.4.3.10 + 4.24.4.3.11 - uses
4.24.4.3.15.1 - more than 40 parking spaces
4.24.4.3.15.4 - Aggregatte square footing

____**ZONING:**

____ SITE SPECIFIC CHANGE OF ZONING DISTRICT AND MAP
____ AMENDMENT OF ZONING REGULATIONS

CERTIFICATION AND SIGNATURE

The applicant, undersigned, has reviewed the "Town of Vernon Planning and Zoning Regulations" and completed the application with complete and accurate information:

Property Owner, Applicant, or Applicant's Agent:

APPLICANT OR AGENT SIGNATURE	Timothy A. Coon PRINTED NAME	2/2/23 DATE
OWNER'S SIGNATURE, IF DIFFERENT	PRINTED NAME	DATE

VOL 1305PG0209 DOC/INST # 002149

(2)

STATUTORY FORM WARRANTY DEED

KNOW YE, THAT I, **EDWIN W. GERBER,** of the Town of Vernon, County of Tolland and State of Connecticut

for the consideration of FIVE HUNDRED TWENTY THOUSAND AND 00/100THS ($520,000.00) DOLLARS

received to my full satisfaction of **CLIFTON B. CHAPMAN** of the Town of Ellington, County of Tolland and State of Connecticut do grant, bargain, sell and confirm unto the said **CLIFTON B. CHAPMAN** with WARRANTY COVENANTS:

A certain piece or parcel of land situated in the Town of Vernon, County of Tolland and State of Connecticut, and being more particularly bounded and described in SCHEDULE A attached hereto and made a part hereof.

Said premises are conveyed subject to the following:

1. Any and all provisions of any ordinance, municipal regulation, or public or private law.

2. Taxes due the Town of Vernon on the List of October 1, 2000, which taxes the Grantees herein assume and agree to pay as part consideration for this conveyance.

3. Easement in favor of Connecticut Light and Power Company, dated July 16, 1954, and recorded in Volume 98 at Page 513 of the Vernon Land Records. ✓

4. Sewer pipe line easement in favor of the Town of Vernon dated March 25, 1992, and recorded in Volume 929 at Page 267 of the Vernon Land Records. ✓

5. Certificate of Notice of Assessment and Deferral of Payment by the Town of Vernon, Water Pollution Control Authority recorded February 11, 1997 in Volume 1090 at Page 15 of the Vernon Land Records; and a Caveat regarding Deferral of Assessment in favor of the Town of Vernon, Water Pollution Control Authority dated April 18, 1997, and recorded in Volume 1097 at Page 29 of the Vernon Land Records, which the Grantee assumes and agrees to pay with respect to the above described property.

6. A Drainage Easement in favor of Quail Hollow Associates and the Town of Vernon, dated July 3, 2000, and recorded in Volume 1260 at Page 284 of the Vernon Land Records. ✓

7. A Sewer Easement from Edwin W. Gerber in favor of Quail Hollow Associates, LLC, dated April 25, 2001, and recorded in the Vernon Land Records.

F:\DOC\Edwin\Gerber, Edwin (Vernon Sale) - War Deed to Chapman.wpd

CONVEYANCE TAX RECEIVED
STATE $ 2600.00 TOWN $ 572.00
Joyce P. Mascuch
TOWN CLERK OF VERNON

8. Riparian rights of others in and to the Hockanum River which flows along the Easterly boundary of said premises.

9. All easements and notes as shown on the map described in Schedule A attached hereto and made a part hereof.

Signed this 25th day of April, 2001.

Signed, sealed and delivered
in the presence of:

Edwin W. Gerber
Edwin W. Gerber

STATE OF CONNECTICUT)
ss: Vernon April 25, 2001
COUNTY OF TOLLAND)

Personally appeared Edwin W. Gerber, signer and sealer of the foregoing instrument and acknowledged the same to be his free act and deed, before me.

Leonard Jacobs, Esq.
Commissioner of the Superior Court

Grantees' Address:

F:\DOC\Eileen\Gerber, Edwin (Vernon Sale) - War Deed to Chapman.wpd

SCHEDULE A

A certain piece or parcel of land, situated in the Town of Vernon, County of Tolland and State of Connecticut, shown as "LOT #1 2,311,770 sq. ft. 53.07 acres +/-" on a map entitled "RESUBDIVISION PLAN PREPARED FOR EDWIN W. GERBER VERNON, CONNECTICUT GARDNER & PETERSON ASSOCIATES 178 HARTFORD TURNPIKE TOLLAND, CONNECTICUT PROFESSIONAL ENGINEERS LAND SURVEYORS BY D.A.C. SCALE 1" = 100' DATE 10-13-2000 SHEET NO. 2 OF 3 MAP NO. 9521G-SUB", which map or plan is on file in the Office of the Town Clerk of Vernon, to which reference may be had. Said premises are more particularly bounded and described as follows: 4137

NORTHERLY: by land "N/F REMAINING LAND OF EDWIN W. GERBER", 2,346.24 feet;

EASTERLY: by the Hockanum River;

SOUTHERLY: by land shown on said map as Lot #1 Hockanum Crossing, Gerber Boulevard, Lot #2 Hockanum Crossing and Lot #3 Hockanum Crossing, in part by each, in all, 2,785.03 +/- feet; and

WESTERLY: By the Vernon/South Windsor Town Line, 922.49 feet.

RECEIVED-TOWN OF VERNON
Joyce P. Mascena
JOYCE P. MASCENA, TOWN CLERK
2001 APR 26 AM 9:48
RECORDED IN
VERNON LAND RECORDS

F:\DOC\Litsen\Gerber, Edwin (Vernon Sale) - War Deed to Chapman.wpd

TOWN OF VERNON

LOW IMPACT DEVELOPMENT (LID) CHECKLIST

Applicants must complete and submit the following checklist with the application.

Date: 1-25-23 **Project:** 0 Gerber Boulevard

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided by the applicant in the space provided below. Comments will be reviewed with Town Staff at the scheduled Development Staff Meeting and documented.

Item	Description	Verified	Comments
1	An Existing Conditions Plan is provided documenting sensitive natural resources including but not limited to existing wetlands (as designated by a Certified Soils Scientist in Connecticut), streams, ponds, vernal pools, flood zones, stream channel encroachment lines, soil types and infiltration rates, wells, tree lines, property boundaries, and other items that may be requested by the Town.	TAC	
2	Utilizing the Existing Conditions Plan as a guide, development has been located to maximize preservation of contiguous natural sensitive areas.	TAC	
3	Proposed site developments for residential or two family dwellings on more than one individual parcel, all commercial, industrial, and retail developments have been guided by the applicable requirements of the Town's Low Impact Development Stormwater Quality Manual and the Connecticut Storm Water Quality Manual.	TAC	
4	Bioretention Basins or Rain Gardens have been incorporated within yards, median strips, cul-de-sacs islands, and parking lot islands.		Runoff from all impervious areas will be collected and diverted to an infiltration basin for treatment and recharge. Soils within parking + islands not good for infiltration.

Date: 1-25-23 **Project:** 0 Gerber Blvd

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided below. Comments will be reviewed with Town Staff at the scheduled development staff meeting and documented.

Item	Description	Verified	Comments
5	Dry Wells have been incorporated into the design to control roof and pavement runoff.		Roof runoff to be conveyed to the infiltration basin.
6	Permeable (Porous) Pavement has been incorporated into areas of low traffic, parking lots, residential and light commercial use driveways, walkways, bike paths, etc.		Soils in parking areas not suitable for infiltration. All runoff to be conveyed to infiltration basin.
7	Natural areas including woodlands, regulated wetland areas, naturally vegetated areas have been preserved/ and or replicated to the maximum extent practical.	TAC	
8	Post Development stormwater runoff is at or less than the predevelopment runoff.	TAC	
9	Stormwater infiltration has been provided by the use of underground storage units, devices, and/or infiltration swales/trenches.	TAC	
10	Level spreaders/vegetation have been provided at storm drainage outfalls to enhance water quality and mitigate erosion.	TAC	

Date: 1-25-23 **Project:** 0 Gerber Blvd

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided below. Comments will be reviewed with Town Staff at the scheduled development staff meeting and documented.

Item	Description	Verified	Comments
11	On-Site retention/detention facilities have been provided to address water quality and storm water runoff.	TAC	
12	Rain Barrels, cisterns, and/or other rainwater harvesting techniques to reuse rainwater for irrigation and other non-potable uses are incorporated into the design.		Not applicable
13	An Erosion and Sedimentation Control Plan conforming to the Standards of the Connecticut Guidelines for Soil Erosion and Sediment Control is included in the design.	TAC	
14	A yearly maintenance plan of all components of best management practices associated with storm water management has been provided.	TAC	
15	Impervious area percentages for pre and post development have been provided.	TAC	
16	When conflicts exist between the Town's Low Impact Development Stormwater Quality Manual and the Connecticut Storm Water Quality Manual the State Manual shall govern.	TAC	

04-0004-008A6
VERNON SELF STORAGE CENTERS LLC
PO BOX 68
WILBRAHAM MA 01095

04-0004-008A7
CHAPMAN CLIFTON B
75 HOCKANUM BLVD
VERNON CT 06066

04-0004-0001F-0111
TOBACK MARTIN J & CHARLOTTE
111 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0113
BROUILLARD THOMAS D & MARY E
113 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0115
CLAYTON CAROL M
115 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0117
DOYLE LORRAINE MILLER
117 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0107
BOISVERT DANIEL M & NANCY J
107 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0109
LYON ARTHUR G III & MARY ELLEN
109 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0105
MORALES JULIO JR
105 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0103
ARTILES ANTONIO F & MARTHA
103 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0101
DOTY GAIL P
101 PHEASANT RUN
VERNON CT 06066

04-0004-0001F-0099
CARAMANELLO MAURA B TRUSTEE
HEVEY FAMILY TRUST AGREEMENT
99 PHEASANT RUN
VERNON CT 06066

04-0004-0001E-0097
GORDON BARBARA S
97 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0095
FONTAINE LOUISE L
95 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0093
ROBINSON NELSON S & ELSA G
93 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0091
WAUDBY MARGARET E
91 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0089
ST PIERRE WILHELMINA Y
C/O PATRICIA ANN MATHEWS
54675 RAY BEER RD
SCAPPOOSE OR 97056

04-0004-0001E-0087
GARVEY JEAN A
87 MEADOWVIEW DR
VERNON CT 06066

04-0004-0001E-0085
POULIN JOSEPH & PAULA
85 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0083
GANNON JOHN V & MARY S TRUSTEES
THE JOHN V GANNON REVOCABLE TRUST
83 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0081
KASSMAN SAUL STEVEN & BROWN CHERYL L
81 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0079
BARDES CHARLES R & URSULA W
79 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0077
MAGNAN EDMOND & CLAUDIA
77 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0075
STEINBERG HOWARD L & PAMELA R
75 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0073
SULLIVAN THOMAS A & CLAIRE L
73 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0071
HOLLAND MALCOLM R & MARY G
71 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0069
CARPENTER RALPH & JOANNE
69 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0067
TERZO LOUIS N & JOAN D
67 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0068
OKEEFE ANNETTE L
68 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0070
NAPHEN JEFFREY T & MARY A
70 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0072
KLYBAS ROBERT P & CATHLEEN P
72 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0074
BERNIER ROLAND & CYNTHIA J
74 MEADOWVIEW LN
VERNON CT 06066-2759

04-0004-0001E-0076
BOUDREAU JOAN
76 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0078
LAZZARIS THOMAS M & BETTE-ANN
78 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0080
MURASKI KENNETH J & SHELBY S
80 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001E-0082
ENGELSON DAVID A TRUSTEE
THE DAVID A ENGELSON REVOC TRUST
82 MEADOWVIEW LN
VERNON CT 06066

04-0004-0001G-0035
HORAN ROGER H & GAIL K
35 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0036
HEUITSON COLLEEN & ZINK ANDREW
36 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0037
GIBSON MARION B
37 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0038
SHERIDAN PHILIP W (LU) & SANDRA D (LU) &
READE MEGHAN TTEE SHERIDAN CHILDREN TR
38 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0039
BZOWYCKYJ LISA A TRUSTEE
PATRICK AND FRANCES PELLETIER IRREVOC TR
PO BOX 708
SOUTH WINDSOR CT 06074-0708

04-0004-0001G-0040
MARINETTI MATTHEW CRAIG
40 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0041
BYRNE MICHAEL J & MAUREEN E
41 VISTA VIEW
VERNON CT 06066-2756

04-0004-0001G-0042
DORSEY BEVERLY
42 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0043
GALIZIA MARIE R (LU) &
HATHAWAY ANGELA G ETALS
158 FRAZER FIR
SOUTH WINDSOR CT 06074

04-0004-0001G-0044
ANDERSON MARYBETH & JOHN R JR TTEES &
TAVERNIER MICHAEL J&TAVERNIER GERALD JR
44 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0049
INA-LEE JESSEY
49 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0050
KOZIKIS PAUL K & JULIA C
50 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0051
MOODY M LISA
51 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0045
COOPER ROSALIND
45 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0046
STAIGER ALAN L (LU) & NOREEN (LU) &
STAIGER BRIAN A TTEE STAIGER FAMILY TR
46 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0047
ABBOTT S ARDIS
47 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0048
MCCABE GEORGE & PATRICIA
48 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0056
BOTTICELLO MARY G
56 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0055
CURTIS ROBERT L & KATHRYN A
55 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0054
VIVIANO ANN L (LU) & VIVIANO SCOTT M
54 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0053
OUELLET ANNETTE M & CARMEL DAVID I
53 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0052
KOWALCZYK ROBERT
52 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001B-0039
BONZANI FRANK P & BARBARA
33 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0040
FITZGERALD KENNETH W & SHARON L
32 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0041
OGARA SANDRA S TRUSTEE
THE WILLIS E SHAW IRREV FAMILY TRUST
31 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0042
MALIN JILL E & CHAPDELANE ANN C TRUSTEES
FORRESTER FAMILY IRREVOCABLE TRUST
30 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0043
SCHAEFFER GUDRUN M
29 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0044
DEBONA GERALD J
28 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0045
ACCARPIO DOMINIC P SR(LU) & EVA R (LU) &
ACCARPIO DOMINIC P JR ETAL
27 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0047
BINETTE JACQUELINE A
25 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0048
RATAIC JOAN P
23 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0037
PAULL MADELYN M TRUSTEE
MADELYN M PAULL TRUST
24 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0038
TAYLOR CRAIG J & ROBIN L
26 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0036
NOELTE MARY E
22 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0049
NEILIWOCKI CELINE L
21 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0050
CORTESE MARIA (LU) & CORTESE VITO
19 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0035
BANNON KATHLEEN M
26 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0074
BITTERMAN MICHAEL & CATHERINE
32 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0073
THE LARSON REVOCABLE TRUST UTD
34 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0072
HELDMANN JAMES F & KAREN E TRUSTEES
THE KAREN E HELDMANN REVOCABLE TRUST
41 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0071
CLEARY CORNELIUS F & LINDA A
40 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001G-0057
CUBETA JUDITH C (LU)&DIFRANCESCA KAREN &
CUBETA-GILEAU KIMBERLY
57 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0058
KOZIOL JOHN J & SARA D
58 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001B-0070
ROSENTHAL JOAN TRUSTEE OF THE JOAN
ROSENTHAL TRUST
39 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0069
SUSCA DOROTHY (LU)& SUSCA STEVEN J &
SHEPARDSON KAREN
38 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0068
LAZINSK ERIC M & DIANE S
37 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0067
POPILLO RICHARD J
36 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0064
CAMPISE SUSAN J
35 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0063
IZZO EDWARD J & JEANETTE A
33 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0062
ROSSITTO RICHARD & BARBARA
31 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0061
LIVINGSTON SANDRA P
29 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0060
SARTORI BRENDA D
27 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0059
LEIGHTON SALLY D TRUSTEE OF THE SALLY D
LEIGHTON REVOCABLE TRUST AGREEMENT
25 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0058
JONES RICHARD D & MAUREEN A
17 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0034
WHITHAM JOHN E
23 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0033
BOOTH ADAH N TRUSTEE OF THE
BOOTH FAMILY LIVING TRUST
21 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0028
MERKER RICHARD O & INGE L
24 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0027
BRODEUR EDMOND R & ELAINE F
22 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0026
ARONSON CAROL V
20 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0025
LEGER ROBERT J & CLARICE M
18 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001G-0059
DEMARCO CLAUDICE M (LU) &
CLARK GINA M & PAUL R CO-TTEES
59 HIGH RIDGE DR
VERNON CT 06066

04-0004-0001G-0060
ADAMS WILLIAM M (ESTATE OF)
C/O ADAMS LEANNE M
43 WESTGATE LN
STORRS CT 06268

04-0004-0001G-0061
FRADIANNI GERALDINE M
61 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0062
NAVICKAS ALBERT H & PATRICIA D (LU)
& JAWORSKI KRISTEN E
62 VISTA VIEW
VERNON CT 06066

04-0004-0001B-0024
WHITE NELSON H JR & PATRICIA C
16 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0032
MAGNOLI WILLIAM & LINDA
19 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0057
BROCHU FRANCIS P & NANCY E
15 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0056
BRADLEY JAMES
13 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0055
TRICHKA WARRENA B TRUSTEE
THE WARRENA B TRICHKA REVOC TRUST
11 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0053
BEST CAROLE J TRUSTEE
CAROL J BEST LIVING TRUST
12 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0052
YOUNG JOHN H & AUDREY H TRUSTEES
THE AUDREY H YOUNG REVOC TRUST
14 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0030
BENOIT JEROME C (LU) & CAROL A (LU) &
BENOIT PETER J KEVIN J JEFFREY T& LORI K
15 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0031
GOZDECK THEODORE T & NANCY N
17 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0023
GARCEAU PHILIP E & GAIL-LYNNE CO TTEES
THE GARCEAU LIVING TRUST
14 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0020
SCHUMACHER JUDITH ANN AKA JUDITH G
13 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0017
SYME ROSEMARIE
8 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0054
DAMON MARY A & LONGO LYNN D TRUSTEES
D A DAMON FAM TRST & M A DAMON TRUST
10 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0014
SMITH JANET L
9 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0013
TINA GARY A & SUSAN R
7 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0012
MILLERD GAIL S
5 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0011
WARD JOYCE M
3 OAKVIEW PL
VERON CT 06066

04-0004-0001B-0016
VASSEUR LYNN & VASSEUR PAUL
4 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0019
PATERNO ROBERT J & DIANE M
11 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0022
BUTT HASSAN
12 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001G-0063
GANGER THEODORE G &ROSALIE B TRUSTES
GANGER FAMILY LIVING TRUST
63 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0064
WHITTLE DONALD L & GIRARDIN LAURENE A
64 VISTA VIEW
VERNON CT 06066

04-0004-0001G-0065
NOLET SUSAN E TRUSTEE & GRIFFIN JAMES M
(ESTATE OF) THE SUSAN E NOLET LIVING TR
65 VISTA VIEW
VERNON CT 06066

04-0004-0001B-0021
GILBERT RUSSELL H & LORRAINE M
10 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0015
LOMBARDO PAMELA B
2 OAKVIEW PL
VERNON CT 06066

04-0004-0001B-0010
ZIM RUTH
9 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0009
CUMMINGS ISABEL B
8 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0008
THONAKKARAPARAYIL THOMAS M & STELLA T
7 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0007
MARTIN PATRICIA
6 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0006
VAN KUREN MARGARET
5 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0005
MICHAUD JOSEPH & GERALDINE
4 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0004
BUERK ALOIS JOSEPH JR &
ROBERTA LOUISE
3 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0003
WILLIAMS JOANN F
2 QUAIL HOLLOW CLOSE
VERNON CT 06066

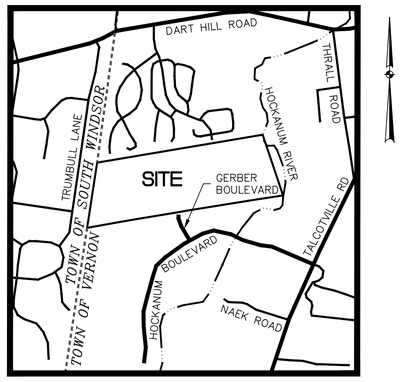
04-0004-0001B-0002
PROBULIS GERARD J & BARBARA M
1 QUAIL HOLLOW CLOSE
VERNON CT 06066

04-0004-0001B-0001
WILLARD WILLIAM J & DEBORA M
1 OAKVIEW PL
VERNON CT 06066

04-0004-0001G-0066
COVELL JAMES A & CAROL M
66 VISTA VIEW
VERNON CT 06066

Expansion of
The Park at Hockanum Crossing

0 Gerber Boulevard
Vernon, Connecticut
Map 04 Block 0004 Lot 008A7 Zone: PDZ



KEY MAP
1"=1000'

Owner/Applicant

Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

Prepared By

RUSSO
SURVEYORS • ENGINEERS
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DRAWING INDEX

SHEET TITLE	SHEET NO.	LATEST REVISION
CIVIL		
COVER SHEET	1 of 13	2–22–2023
BOUNDARY SURVEY	2 of 13	1–24–2023
OVERALL LAYOUT PLAN	3 of 13	2–22–2023
EXISTING CONDITIONS	4 of 13	2–22–2023
LAYOUT PLAN	5 of 13	2–22–2023
GRADING & EROSION CONTROL PLAN	6 of 13	2–22–2023
STORM SEWER PLAN	7 of 13	2–22–2023
UTILITY PLAN	8 of 13	2–22–2023
LANDSCAPE PLAN	9 of 13	2–22–2023
CONSTRUCTION NOTES & DETAILS	10 of 13	1–24–2023
DETAILS	11 of 13	1–24–2023
DETAILS	12 of 13	2–22–2023
DETAILS	13 of 13	1–24–2023

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TOWN OF SOUTH WINDSOR / TOWN OF VERNON

N/F
Jody A. Maura, Jr. &
Stefanie L. Coughlin
(Vol. 2799, Pg. 133)

N/F
John F. & Sandra
O'Brien
(Vol. 2290, Pg. 29)

N/F
John F. & Sandra
O'Brien
(Vol. 1146, Pg. 24)

N18°43'42"E
922.49'

N/F
Erik J. & Christine
M. Wenzel
(Vol. 2598, Pg. 342)

N/F
Stephen & Jeanne
M. Heslin
(Vol. 1121, Pg. 1)

N/F
Robert C. & Judith
C. Goodwin
(Vol. 2068, Pg. 207)

N/F
Harinder &
Maninder Randhawa
(Vol. 1267, Pg. 71)

TOWN OF SOUTH WINDSOR / TOWN OF VERNON

Quail Hollow Close &
Oakview Place
Condominiums

Vista View & High
Ridge Drive
Condominiums

Pheasant Run
Condominiums

Quail Crossing

Meadowview Lane
Condominiums

N/F
Town of Vernon
(Vol. 1773,
Pg. 157)

N/F
Briar Knoll NCM, LLC
(Vol. 2467, Pg. 268)

N80°25'48"E
2346.24'

175' Right of Way
in Favor of CL&P
(Vol. 98, Pg. 513)

25' Drainage Easement in
Favor of Quail Hollow
Associates, LLC & the
Town of Vernon
(Vol. 1260, Pg. 284 &
Vol. 1631, Pg. 139)

Right to Drain Easement
in Favor of Quail
Hollow Associates, LLC
(Vol. 1631, Pg. 139)

60' Area Reserved for
Extension of Gerber
Boulevard in Favor of
Edwin W. Cerber
(Vol. 1305, Pg. 212)

SUBJECT PARCEL
Area=51.3± Ac.
(Vol. 1305, Pg. 209)

20' Sewer Pipeline
Easement in Favor of
the Town of Vernon
(Vol. 929, Pg. 267)

S18°31'08"E
894.00'

LIMIT OF 100-YEAR
FLOOD ZONE

Water Quality Treatment
Easement in Favor of
Quail Hollow Associates,
LLC & the Town of Vernon
(Vol. 1631, Pg. 139)

30' Sanitary Sewer Easement in Favor of
Quail Hollow Associates, LLC
(Vol. 1260 Pg. 280 & Vol. 1305, Pg. 206)

Grading Rights in Favor
of Hockanum Crossing

396.00'
S81°10'30"W

N/F
Town of Vernon
(Vol. 1358, Pg. 185)

944.65'
S80°50'58"W

934.67'
S80°30'07"W

499.71'
S79°44'48"W

N/F
Park at Hockanum
Crossing, LLC
(Vol. 1359, Pg. 200)

N/F
The Mansions, LLC
(Vol. 1273, Pg. 160)

N/F
Clifton B. Chapman
(Vol. 1273, Pg. 164)

N/F
Vernon Self Storage
Centers, LLC
(Vol. 2550, Pg. 289)

Gerber Boulevard

Hockanum Boulevard

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

LEGEND

⊡	EXISTING MONUMENT (FOUND)
o	EXISTING IRON PIN (FOUND)
— — —	PROPERTY LINE
— — —	EASEMENT LINE

Reference Maps:

1. Map 3276
"Plan Showing Sanitary Sewer Easement Some Land of Edwin W. Gerber, Vernon-South Windsor, Conn., Comm. No: 86-1424, Date: Jan. 30, 1990, Scale: 1"=100'" by A.R. Lombardi Associates, Inc.

2. Map 4057
"Subdivision Plan, Hockanum Crossing, Vernon, Connecticut, Scale: 1"=100', Date: 12-30-99, Rev. 8-30-2000, Map No. 9521-SUB" by Gardner & Peterson Associates

3. Map 4163 (Revised version from Gardner & Peterson)
"Easement Plan Prepared For Edwin W. Gerber, Vernon, Connecticut, Scale: 1"=100', Date: 3-14-2001, Rev. 4/1/04, Map No. 9521E" by Gardner & Peterson Associates.

Notes:

1. Portion of the parcel is located in a flood hazard zone, panel no. 090131 0005 C, effective 8/9/1999.

2. Horizontal datum based on N.A.D. 1983. Elevations based on N.A.V.D. 1988 Datum.

3. All underground utility locations on this plan are approximate and may not be complete. Anyone using this information without verifying the locations does so at their own risk. No construction will be done on this site prior to utility mark out. "Call Before You Dig 1-800-922-4455".

This survey and map has been prepared in accordance with Sections 20-300b-1 thru 20-300b-20 of the Regulations of Connecticut State Agencies – "Minimum Standards for Surveys and Maps in the State of Connecticut" as endorsed by the Connecticut Association of Land Surveyors, Inc. It is a Property Survey based on a Resurvey conforming to Horizontal Class A-2.

This document and copies thereof are valid only if they bear the live signature and embossed seal of the designated professional. Unauthorized alterations render any declaration hereon null and void.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

RUSSO
SURVEYORS·ENGINEERS
SERVING CT & MA
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1 Shoham Rd East Windsor, CT 06088 • CT 860.623.0569 • MA 413.785.1158
www.jrrusso.com • info@jrrusso.com

REVISIONS

BY:	CHK:
LF/TAC	JEU

The Park at Hockanum Crossing

0 Gerber Boulevard, Vernon, CT 06066

MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Boundary Survey

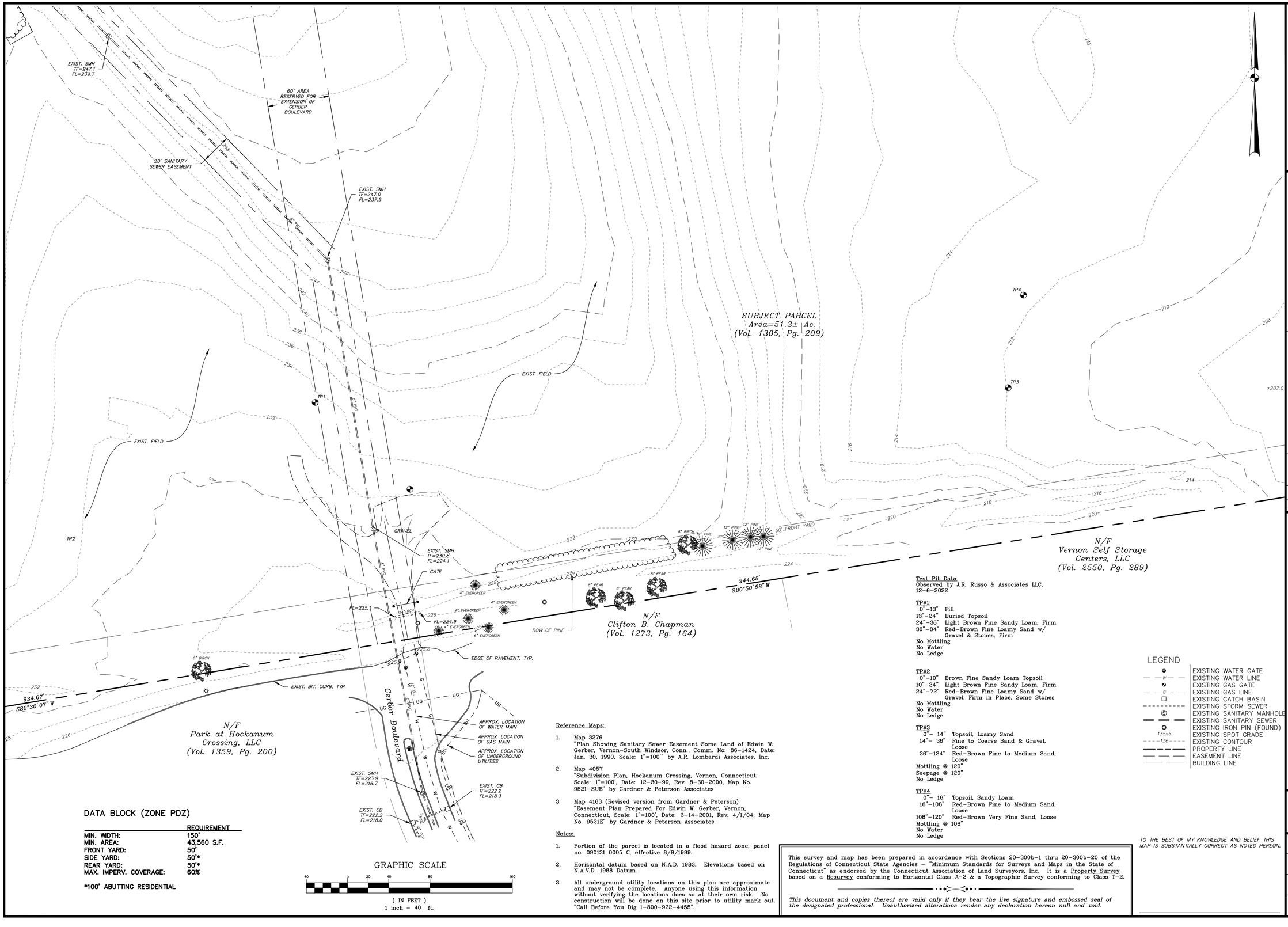
DATE
1-24-2023

SCALE
1"=100'

JOB NUMBER
2022-059

SHEET
2 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg



DATA BLOCK (ZONE PDZ)

	REQUIREMENT
MIN. WIDTH:	150'
MIN. AREA:	43,560 S.F.
FRONT YARD:	50'
SIDE YARD:	50'*
REAR YARD:	50'*
MAX. IMPERV. COVERAGE:	60%

*100' ABUTTING RESIDENTIAL

Reference Maps:

1. Map 3276
"Plan Showing Sanitary Sewer Easement Some Land of Edwin W. Gerber, Vernon-South Windsor, Conn., Comm. No: 86-1424, Date: Jan. 30, 1990, Scale: 1"=100'" by A.R. Lombardi Associates, Inc.

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3. All underground utility locations on this plan are approximate and may not be complete. Anyone using this information without verifying the locations does so at their own risk. No construction will be done on this site prior to utility mark out. "Call Before You Dig 1-800-922-4455".

Test Pit Data
Observed by J.R. Russo & Associates LLC, 12-6-2022

TP#1
0"-13" Fill
13"-24" Buried Topsoil
24"-36" Light Brown Fine Sandy Loam, Firm
36"-84" Red-Brown Fine Loamy Sand w/ Gravel & Stones, Firm
No Mottling
No Water
No Ledge

TP#2
0"-10" Brown Fine Sandy Loam Topsoil
10"-24" Light Brown Fine Sandy Loam, Firm
24"-72" Red-Brown Fine Loamy Sand w/ Gravel, Firm in Place, Some Stones
No Mottling
No Water
No Ledge

TP#3
0"- 14" Topsoil, Loamy Sand
14"- 36" Fine to Coarse Sand & Gravel, Loose
36"-124" Red-Brown Fine to Medium Sand, Loose
Mottling @ 120"
Seepage @ 120"
No Ledge

TP#4
0"- 16" Topsoil, Sandy Loam
16"-108" Red-Brown Fine to Medium Sand, Loose
108"-120" Red-Brown Very Fine Sand, Loose
Mottling @ 108"
No Water
No Ledge

LEGEND

W	EXISTING WATER GATE
W	EXISTING WATER LINE
G	EXISTING GAS GATE
G	EXISTING GAS LINE
	EXISTING CATCH BASIN
	EXISTING STORM SEWER
S	EXISTING SANITARY MANHOLE
S	EXISTING SANITARY SEWER
135x5	EXISTING IRON PIN (FOUND)
	EXISTING SPOT GRADE
136	EXISTING CONTOUR
	PROPERTY LINE
	EASEMENT LINE
	BUILDING LINE

This survey and map has been prepared in accordance with Sections 20-300b-1 thru 20-300b-20 of the Regulations of Connecticut State Agencies – "Minimum Standards for Surveys and Maps in the State of Connecticut" as endorsed by the Connecticut Association of Land Surveyors, Inc. It is a Property Survey based on a Resurvey conforming to Horizontal Class A-2 & a Topographic Survey conforming to Class T-2.

This document and copies thereof are valid only if they bear the live signature and embossed seal of the designated professional. Unauthorized alterations render any declaration hereon null and void.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

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www.jrrusso.com • info@jrrusso.com

Applicant/Owner
Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

REVISIONS

BY:	CHK:
LF/TAC	JEU

The Park at Hockanum Crossing
of
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Existing Conditions Plan

DATE
1-24-2023
SCALE
1"=40'
JOB NUMBER
2022-059
SHEET
4 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg

TOWN OF SOUTH WINDSOR
TOWN OF VERNON

N/F
Jody A. Maura, Jr. &
Stefanie L. Coughlin
(Vol. 2799, Pg. 133)

Quail Hollow Close &
Oakview Place
Condominiums

Vista View & High
Ridge Drive
Condominiums

Pheasant Run
Condominiums

Quail Crossing

Meadowview Lane
Condominiums

N/F
Town of Vernon
(Vol. 1773,
Pg. 157)

N/F
Briar Knoll NCM, LLC
(Vol. 2467, Pg. 268)

N/F
John F. & Sandra
O'Brien
(Vol. 2290, Pg. 29)

530.0'

530.0'

SUBJECT PARCEL
Area=51.3± Ac.
(Vol. 1305, Pg. 209)

1,224.1'

916.8'

N/F
John Fr & Sandra
O'Brien
(Vol. 1146, Pg. 24)

STORMWATER
INFILTRATION
BASIN

N/F
Erik J. & Christine
M. Wenzel
(Vol. 2598, Pg. 342)

141.0'

141.0'

N/F
Stephen & Jeanne
M. Heslin
(Vol. 1121, Pg. 1)

N/F
Town of Vernon
(Vol. 1358, Pg. 185)

N/F
Vernon Self Storage
Centers, LLC
(Vol. 2550, Pg. 289)

N/F
Clifton B. Chapman
(Vol. 1273, Pg. 164)

N/F
Robert C. & Judith
C. Goodwin
(Vol. 2068, Pg. 207)

N/F
Park at Hockanum
Crossing, LLC
(Vol. 1359, Pg. 200)

Gerber Boulevard

N/F
The Mansions, LLC
(Vol. 1273, Pg. 160)

N/F
Harinder &
Maninder Randhawa
(Vol. 1267, Pg. 71)

Hockanum Boulevard

WINDSOR
VON

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg

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REVISIONS	
BY: LF/TAC	CHK: JEU
2-22-23	ADD BIKE RACKS, EXTEND SIDEWALK

Expansion of The Park at Hockanum Crossing

0 Gerber Boulevard, Vernon, CT 06066

MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

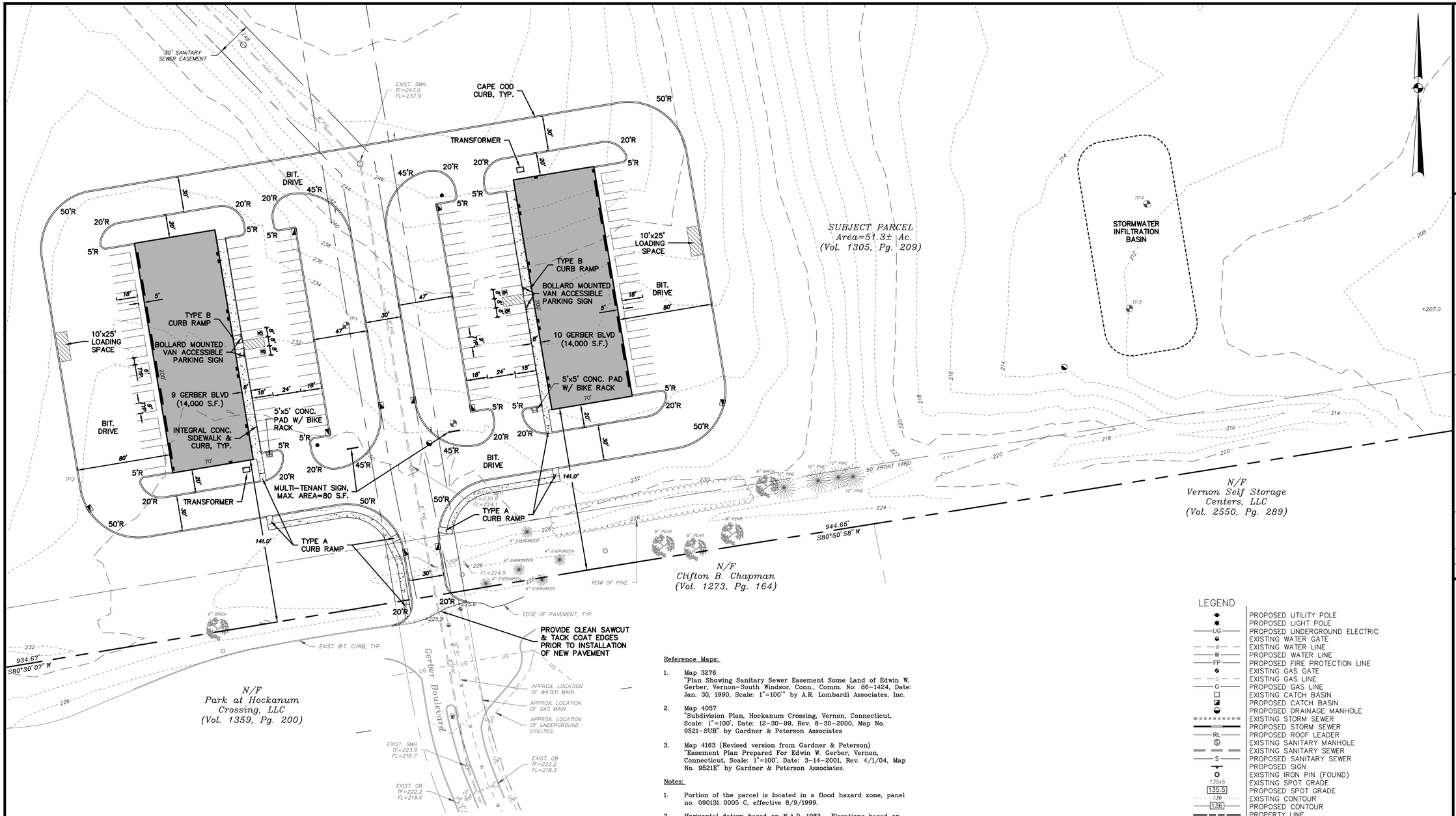
Overall Layout Plan

DATE
1-24-2023

SCALE
1"=100'

JOB NUMBER
2022-059

SHEET
3 of 13



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

ZONING INFORMATION (ZONE PDZ)		
USE	OFFICE/RETAIL/PERSONAL SERVICE/CUSTOM SHOP	
	REQUIRED	PROPOSED
MIN. LOT AREA	1 ACRE	51.3± ACRES
MIN. LOT WIDTH	150'	2,346.24±'
FRONT YARD	50'	120.8'
REAR YARD	100'	549.3'
SIDE YARD	100'	923.1'
MAX. LOT COVERAGE	60%	6.3%
PARKING SPACES	112 SPACES	112 SPACES

PARKING REQUIREMENTS
1 SPACE/250 S.F. * 14,000 S.F./BUILDING * 2 BUILDINGS = 112 SPACES

TOTAL SPACES REQUIRED: 112 SPACES
TOTAL SPACES PROVIDED: 112 SPACES (4 HANDICAP ACCESSIBLE)

Reference Maps:

1. Map 3276
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Notes:

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LEGEND

- PROPOSED UTILITY POLE
- PROPOSED LIGHT POLE
- UG — PROPOSED UNDERGROUND ELECTRIC
- EXISTING WATER GATE
- W — EXISTING WATER LINE
- W — PROPOSED WATER LINE
- FP — PROPOSED FIRE PROTECTION LINE
- EXISTING GAS GATE
- G — EXISTING GAS LINE
- G — PROPOSED GAS LINE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- PROPOSED DRAINAGE MANHOLE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- RL — PROPOSED ROOF LEADER
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY SEWER
- S — PROPOSED SANITARY SEWER
- PROPOSED SIGN
- EXISTING IRON PIN (FOUND)
- 135x5 — EXISTING SPOT GRADE
- 135.5 — PROPOSED SPOT GRADE
- 136 — EXISTING CONTOUR
- 136 — PROPOSED CONTOUR
- PROPERTY LINE
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Applicant/Owner
Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

REVISIONS

BY:	CHK:	
LF/TAC	JEU	2-22-23 ADD BIKE RACKS, EXTEND SIDEWALK

Expansion of
The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Layout Plan

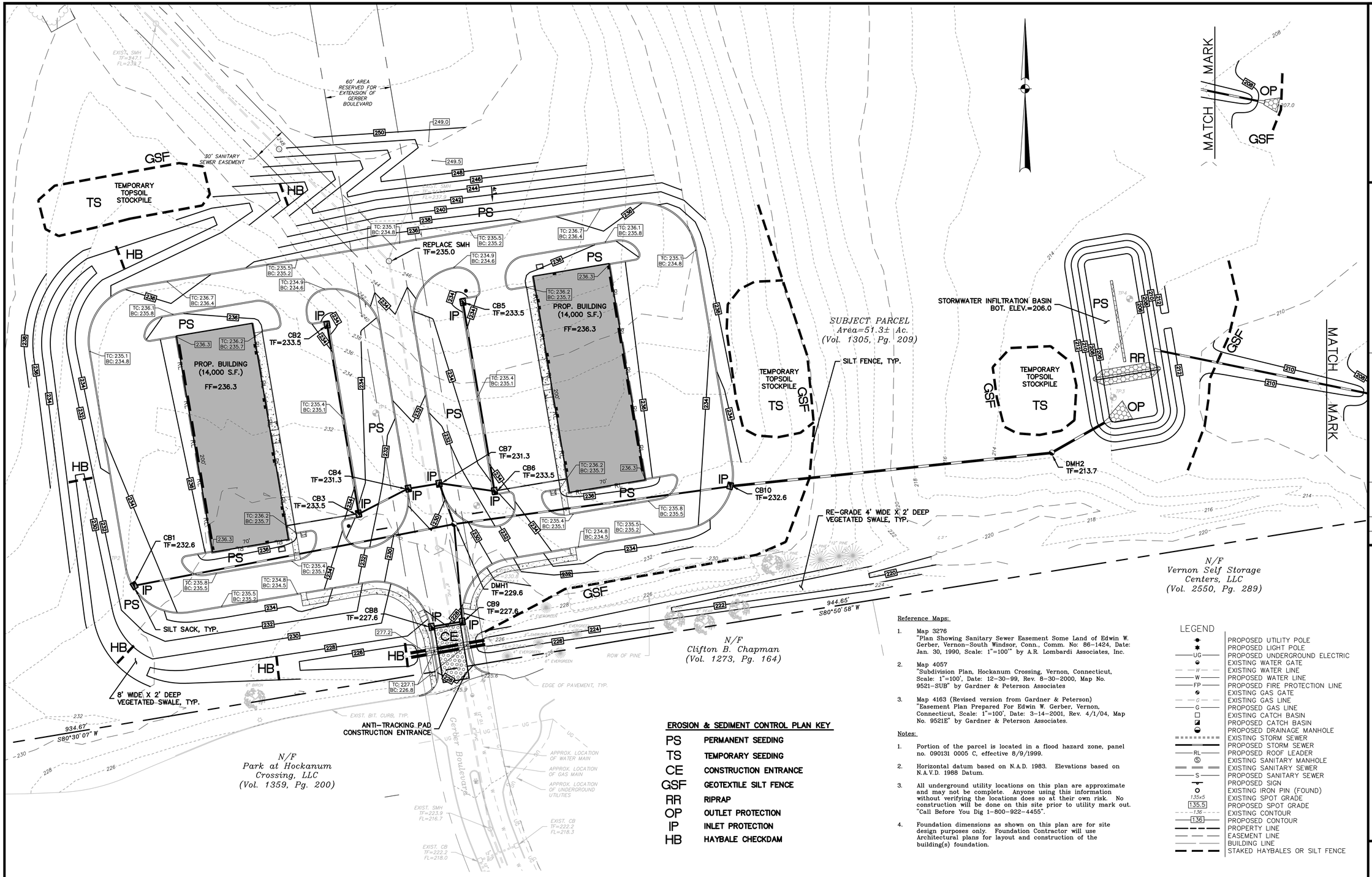
DATE
1-24-2023

SCALE
1"=40'

JOB NUMBER
2022-059

SHEET
5 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg



EROSION & SEDIMENT CONTROL PLAN KEY

PS	PERMANENT SEEDING
TS	TEMPORARY SEEDING
CE	CONSTRUCTION ENTRANCE
GSF	GEOTEXTILE SILT FENCE
RR	RIPRAP
OP	OUTLET PROTECTION
IP	INLET PROTECTION
HB	HAYBALE CHECKDAM

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)

1 inch = 40 ft.

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	PROPOSED LIGHT POLE
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	EXISTING WATER GATE
W	EXISTING WATER LINE
W	PROPOSED WATER LINE
FP	PROPOSED FIRE PROTECTION LINE
	EXISTING GAS GATE
G	EXISTING GAS LINE
G	PROPOSED GAS LINE
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	PROPOSED DRAINAGE MANHOLE
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
RL	PROPOSED ROOF LEADER
S	EXISTING SANITARY MANHOLE
S	EXISTING SANITARY SEWER
S	PROPOSED SANITARY SEWER
	PROPOSED SIGN
	EXISTING IRON PIN (FOUND)
135x5	EXISTING SPOT GRADE
135.5	PROPOSED SPOT GRADE
136	EXISTING CONTOUR
136	PROPOSED CONTOUR
	PROPERTY LINE
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	BUILDING LINE
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Applicant/Owner
Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

REVISIONS		
BY: LF/TAC	CHK: JEU	
ADD BIKE RACKS, EXTEND SIDEWALK	2-22-23	

Expansion of The Park at Hockanum Crossing

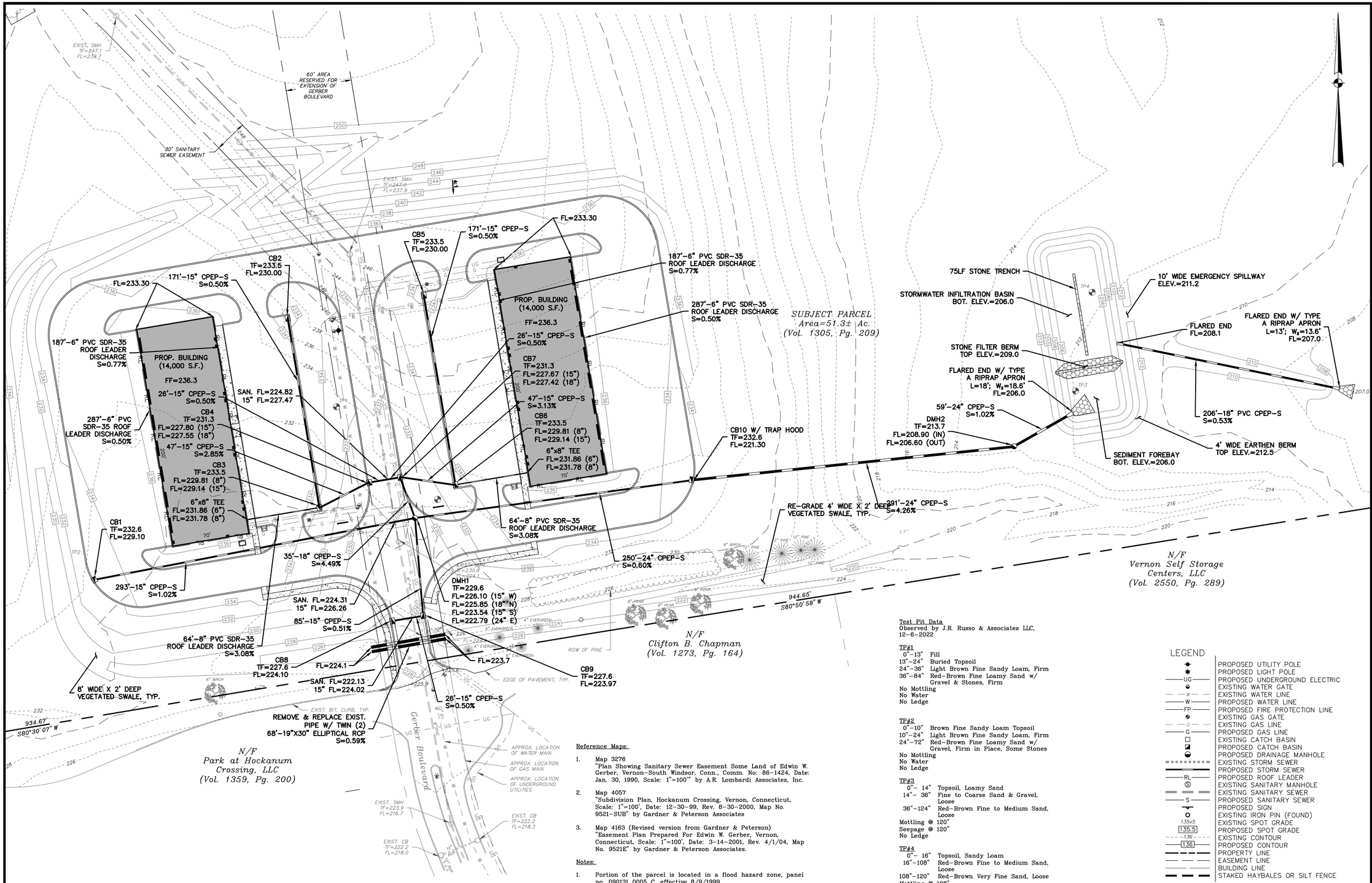
0 Gerber Boulevard, Vernon, CT 06066

MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Grading & Erosion Control Plan

DATE: 1-24-2023
SCALE: 1"=40'
JOB NUMBER: 2022-059
SHEET: 6 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg



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(IN FEET)
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Test Pit Data
Observed by J.R. Russo & Associates LLC, 12-6-2022

TP#1
0"-13" Fill
13"-24" Buried Topsoil
24"-36" Light Brown Fine Sandy Loam, Firm
36"-84" Red-Brown Fine Loamy Sand w/ Gravel & Stones, Firm
No Mottling
No Water
No Ledge

TP#2
0"-10" Brown Fine Sandy Loam Topsoil
10"-24" Light Brown Fine Sandy Loam, Firm
24"-72" Red-Brown Fine Loamy Sand w/ Gravel, Firm in Place, Some Stones
No Mottling
No Water
No Ledge

TP#3
0"- 14" Topsoil, Loamy Sand
14"- 36" Fine to Coarse Sand & Gravel, Loose
36"-124" Red-Brown Fine to Medium Sand, Loose
Mottling @ 120"
Seepage @ 120"
No Ledge

TP#4
0"- 16" Topsoil, Sandy Loam
16"-108" Red-Brown Fine to Medium Sand, Loose
108"-120" Red-Brown Very Fine Sand, Loose
Mottling @ 108"
No Water
No Ledge

LEGEND

●	PROPOSED UTILITY POLE
✱	PROPOSED LIGHT POLE
UG	PROPOSED UNDERGROUND ELECTRIC
⊕	EXISTING WATER GATE
W	EXISTING WATER LINE
W	PROPOSED W WATER LINE
FP	PROPOSED FIRE PROTECTION LINE
⊕	EXISTING GAS GATE
G	EXISTING GAS LINE
G	PROPOSED GAS LINE
□	EXISTING CATCH BASIN
◪	PROPOSED CATCH BASIN
◒	PROPOSED DRAINAGE MANHOLE
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
RL	PROPOSED ROOF LEADER
Ⓢ	EXISTING SANITARY MANHOLE
	EXISTING SANITARY SEWER
S	PROPOSED SANITARY SEWER
⊸	PROPOSED SIGN
○	EXISTING IRON PIN (FOUND)
135x5	EXISTING SPOT GRADE
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REVISIONS		
BY:	CHK:	
LF/TAC	JEU	ADD BIKE RACKS, EXTEND SIDEWALK 2-22-23

Expansion of
The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Storm Sewer Plan

DATE 1-24-2023
SCALE 1"=40'
JOB NUMBER 2022-059
SHEET 7 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Luminaire Lumens	Luminaire Watts	LLF	BUG Rating	Mounting Height	Description
	6	SL3H	Single	11929	102.1727	0.900	B1-U0-G3	25	Lithonia DSX1 LED P3 40K 70CRI T3M MVOLT SPA PIR HS DBLXD - SSS 24 4C DM19AS DBLXD 24FT POLE on 1FT BASE
	4	SL4H	Single	13739	123.9373	0.900	B2-U0-G3	25	Lithonia DSX1 LED P4 40K 70CRI TFTM SPA PIR HS DBLXD - SSS 24 4C DM19AS DBLXD 24FT POLE on 1FT BASE
	4	SL5-2	Back-Back	14602	102.17	0.900	B4-U0-G3	25	Lithonia DSX1 LED P3 40K 70CRI T5M MVOLT SPA PIR DBLXD - SSS 24 4C DM28AS DBLXD 24FT POLE on 1FT BASE

NOTE: CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE BYPASS PUMPING OF EXISTING SANITARY SEWER FLOWS AS NECESSARY TO ALLOW FOR PROPOSED SEWER MAIN IMPROVEMENTS. COORDINATE WITH THE VERNON WPC.

EXIST. SMH TF=247.1 FL=239.7

60' AREA RESERVED FOR EXTENSION OF GERBER BOULEVARD

INSTALL NEW SMH OVER EXIST. SAN. MAIN. TF=247.5 FL=238.7± (MATCH EXIST.)

REMOVE & REPLACE SEWER MAIN W/ 138'-8" PVC SDR-35 S=8.12%

TERMINATE WATER, GAS, ELECTRIC & TELECOM. UTILITIES BEYOND EDGE OF PAVEMENT COORD. W/ UTILITY COMPANIES, TYP.

30' SANITARY SEWER EASEMENT

REMOVE & REPLACE SMH NEW TF=235.0 FL=227.50

CONNECT TO NEW SEWER MAIN FL=227.0±

CONNECT FIRE PROTECTION & WATER LATERAL TO NEW WATER MAIN. COORD. W/ WATER COMPANY, TYP.

CONNECT TO NEW GAS MAIN. COORD. W/ GAS COMPANY, TYP.

TRANSORMER

128'-6" PVC SDR-35 S=3.36%

CLEANOUT

SAN. FL=231.3

PROP. BUILDING (14,000 S.F.) FF=236.3

REMOVE & REPLACE SEWER MAIN W/ 261'-8" PVC SDR-35 S=1.30%

HYDRANT

SAN. FL=224.82 15" FL=227.47

CONNECT TO NEW SEWER MAIN FL=224.5±

133'-6" PVC SDR-35 S=5.04%

SAN. FL=231.3

TRANSORMER

SAN. FL=224.31 15" FL=226.26

LOWER SMH TF TF=229.5 FL=224.1± (EXIST.)

SAN. FL=222.13 15" FL=224.02

EXTEND GAS MAIN, WATER MAIN, & UNDERGROUND UTILITIES. COORD. W/ UTILITY COMPANIES

SAWCUT PAVEMENT INSTALL PERMANENT PATCH

EXIST. BIT. CURB, TYP.

EDGE OF PAVEMENT, TYP.

ROW OF PINE

Gerber Boulevard

APPROX. LOCATION OF WATER MAIN

APPROX. LOCATION OF GAS MAIN

APPROX. LOCATION OF UNDERGROUND UTILITIES

EXIST. SMH TF=223.9 FL=216.7

EXIST. CB TF=222.2 FL=218.3

EXIST. CB TF=222.2 FL=218.0

SUBJECT PARCEL
Area=51.3± Ac.
(Vol. 1305, Pg. 209)

N/F
Clifton B. Chapman
(Vol. 1273, Pg. 164)

N/F
Park at Hockanum Crossing, LLC
(Vol. 1359, Pg. 200)

N/F
Vernon Self Storage Centers, LLC
(Vol. 2550, Pg. 289)

934.67' S80°30'07" W

944.65' S80°50'58" W

TP1 TP2 TP3 TP4

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

LEGEND

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- PROPOSED LIGHT POLE
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BY:	CHK:	
LF/TAC	JEU	2-22-23 ADD BIKE RACKS, EXTEND SIDEWALK

The Park at Hockanum Crossing

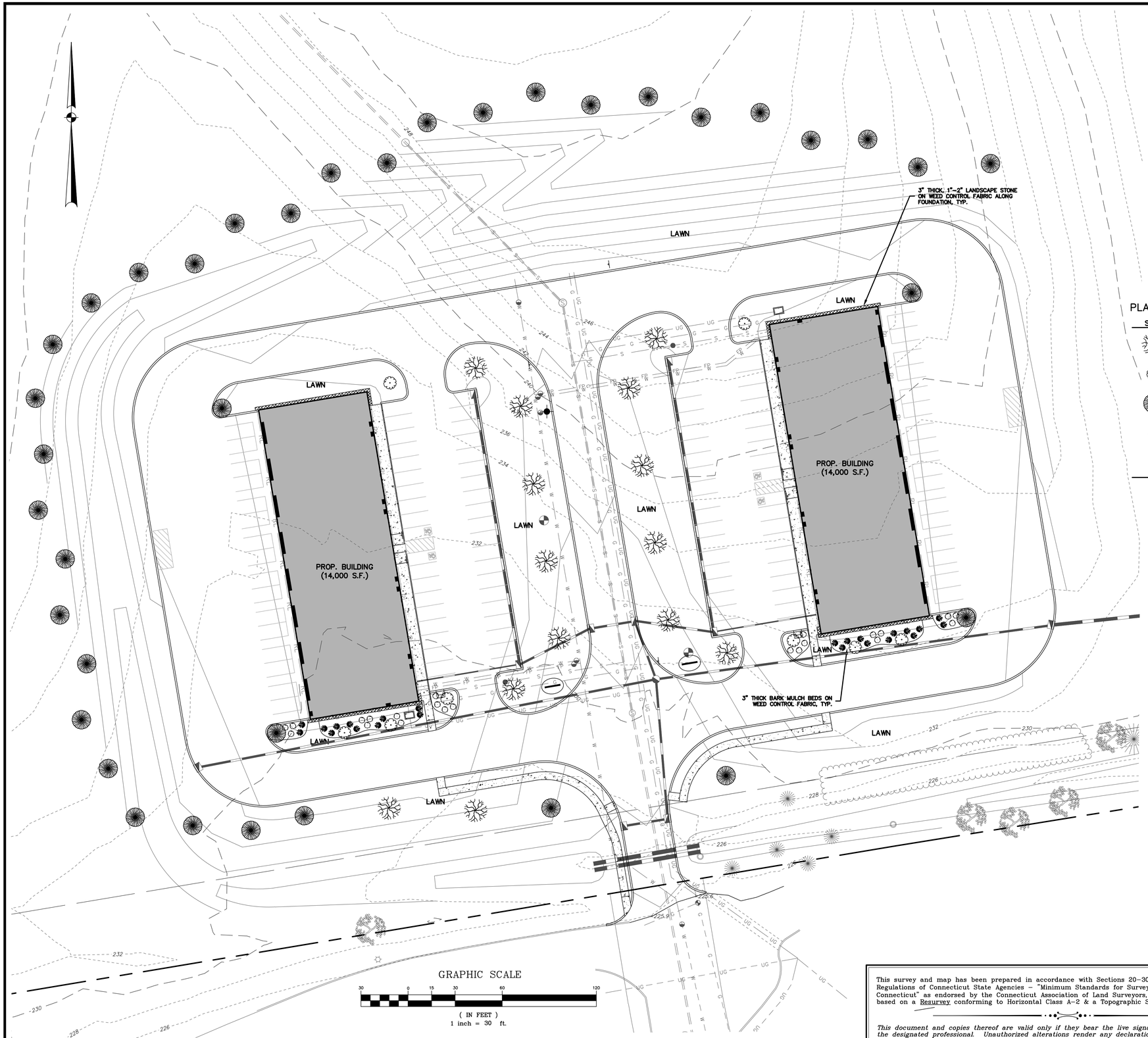
0 Gerber Boulevard, Vernon, CT 06066

MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Utility Plan

DATE: 1-24-2023
SCALE: 1"=40'
JOB NUMBER: 2022-059
SHEET: 8 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg



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PLANT SCHEDULE

SYM.	QTY.	BOTANICAL & COMMON NAME	SIZE
	14	Ornamental Pear (Pyrus Calleryana 'Chanticleer')	2.0"-2.5" Cal., B&B
	8	River Birch (Betula Nigra)	2.0"-2.5" Cal., B&B
	37	White Spruce (Picea Glauca)	6', B&B
	22	Creeping Juniper (Juniperus Horizontalis)	2 GAL
	24	Doublefile Viburnum (Viburnum Plicatum F. Tomentosum)	2 GAL

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Expansion of
The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Landscape Plan

DATE
1-24-2023
SCALE
1"=30'
JOB NUMBER
2022-059
SHEET
9 of 13

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PERMANENT SEEDING (PS)

SPECIFICATIONS

Time Of Year

Seeding dates in Connecticut are normally April 1 through June 15 and August 15 through October 1. Spring seedings give the best results and spring seedings of all mixes with legumes is recommended. There are two exceptions to the above dates. The first exception is when seedings will be made in the areas of Connecticut known as the Coastal Slope and the Connecticut River Valley. The Coastal Slope includes the coastal towns of New London, Middlesex, New Haven, and Fairfield counties. In these areas, with the exception of crown vetch (when crown vetch is seeded in late summer, at least 35% of the seed should be hard seed (unscarified), the final fall seeding dates can be extended and additional 15 days. The second exception is frost crack or dormant seeding, the seed is applied during the time of year when no germination can be expected, normally November through February. Germination will take place when weather conditions improve, mulching is extremely important to protect the seed from wind and surface erosion and to provide erosion protection until the seeding becomes established.

Site Preparation

Grade in accordance with the Land Grading measure which is in the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.

Install all necessary surface water controls.

For areas to be mowed remove all surface stones 2 inches or larger. Remove all other debris such as wire, cable tree roots, pieces of concrete, clods, lumps, or other unsuitable material.

Seed Selection

Lawn Areas: Premium Seed Mix for Sun and Shade.
Stormwater Basin: New England Erosion Control/Restoration Mix by New England Wetland Plants, Inc. or approved equal.

Seedbed Preparation

Apply topsoil, if necessary, in accordance with the Topsoiling measure which is in the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.

Apply ground limestone and fertilizer according to soil test recommendations (such as those offered by the University of Connecticut Soil Testing Laboratory or other reliable source).

Where soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10–10–10 or equivalent and limestone at 4 tons per acre or 200 pounds per 1,000 square feet.

Work lime and fertilizer into the soil to a depth of 3 to 4 inches with a disc or other suitable equipment.

Inspect seedbed just before seeding. If the soil is compacted, crusted or hardened, scarify the area prior to seeding.

Seed Application

Apply selected seed at rates per manufacturer's recommendations uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder (slurry including seed, fertilizer). Normal seeding depth is from 0.25 to 0.5 inch. Increase seeding rates by 10% when hydroseeding or frost crack seeding. Seed warm season grasses during the spring period only.

Mulching

See guidelines in the Mulch For Seed measures.

MAINTENANCE

Inspect temporary soil protection area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater during the first growing season.

Where seed has been moved or where soil erosion has occurred, determine the cause of the failure and repair as needed.

TEMPORARY SEEDING (TS)

SPECIFICATIONS

Site Preparation

Install needed erosion control measures such as diversions, grade stabilization structures, sedimentation basins and grassed waterways in accordance with the approved plan.

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application and mulch anchoring.

Seedbed Preparation

Loosen the soil to a depth of 3–4 inches with a slightly roughened surface. If the area has been recently loosened or disturbed, no further roughening is required. Soil preparation can be accomplished by tracking with a bulldozer, discing harrowing, raking or dragging with a section of chain link fence.

Apply ground limestone and fertilizer according to soil test recommendations (such as those offered by the University of Connecticut Soil Testing Laboratory or other reliable source).

If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 300 pounds per acre or 7.5 pounds per 1,000 square feet of 10–10–10 or equivalent.

Seeding

Apply seed uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder. The temporary seed shall be Rye (grain) applied at a rate of 120 pounds per acre. Increase seeding rates by 10% when hydroseeding.

Mulching

See guidelines in the Mulch For Seed measures.

MAINTENANCE

Inspect temporary seeding area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater for seed and mulch movement and rill erosion.

Where seed has been moved or where soil erosion has occurred, determine the cause of the failure and repair as needed.

MULCH FOR SEED (MS)

SPECIFICATIONS

Materials

Types of Mulches *within this specification include, but are not limited to:*

1. Hay: *The dried stems and leafy parts of plants cut and harvested, such as alfalfa, clovers, other forage legumes and the finer stemmed, leafy grasses. The average stem length should not be less than 4 inches. Hay that can be windblown should be anchored to hold it in place.*

2. Straw: *Cut and dried stems of herbaceous plants, such as wheat, barley, cereal rye, or brome. The average stem length should not be less than 4 inches. Straw that can be windblown should be anchored to hold it in place.*

3. Cellulose Fiber: *Fiber origin is either virgin wood, post–industrial/pre–consumer wood or post consumer wood complying with materials specification (collectively referred to as "wood fiber"), newspaper, kraft paper, cardboard (collectively referred to as "paper fiber") or a combination of wood and paper fiber. Paper fiber, in particular, shall not contain boron, which inhibits seed germination. The cellulose fiber must be manufactured in such a manner that after the addition to and agitation in slurry tanks with water, the fibers in the slurry become uniformly suspended to form a homogeneous product. Subsequent to hydraulic spraying on the ground, the mulch shall allow for the absorption and percolation of moisture and shall not form a tough crust such that it interferes with seed germination or growth. Generally applied with tackifier and fertilizer. Refer to manufacturer's specifications for application rates needed to attain 80%–95% coverage without interfering with seed germination or plant growth. Not recommended as a mulch for use when seeding occurs outside of the recommended seeding dates.*

Tackifiers *within this specification include, but are not limited to: Water soluble materials that cause mulch particles to adhere to one another, generally consisting of either a natural vegetable gum blended with gelling and hardening agents or a blend of hydrophilic polymers, resins, viscosifiers, sticking aids and gums. Good for areas intended to be mowed. Cellulose fiber mulch may be applied as a tackifier to other mulches, provided the application is sufficient to cause the other mulches to adhere to one another.* ***Emulsified asphalts are specifically prohibited for use as tackifiers due to their potential for causing water pollution following its application.***

Nettings *within this specification include, but are not limited to: Prefabricated openwork fabrics made of cellulose cords, ropes, threads, or biodegradable synthetic material that is woven, knotted or molded in such a manner that it holds mulch in place until vegetation growth is sufficient to stabilize the soil. Generally used in areas where no mowing is planned.*

Site Preparation

Grade according to plans and allow for the use of appropriate equipment for seedbed preparation, seeding, mulch application and mulch anchoring.

Application

Timing: *Applied immediately following seeding. Some cellulose fiber may be applied with seed to assist in marking where seed has been sprayed, but expect to apply a second application of cellulose fiber to meet the requirements of* ***Mulch For Seed*** *in the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.*

Spreading: *Mulch material shall be spread uniformly by hand or machine resulting in 80%–95% coverage of the disturbed soil when seeding within the recommended seeding dates. Applications that are uneven can result in excessive mulch smothering the germinating seeds. For hay or straw anticipate an application rate of 2 tons per acre. For cellulose fiber follow manufacture's recommended application rates to provided 80%–95% coverage.*

When seeding outside the recommended seeding dates, increase mulch application rate to provide between 95%–100% coverage of the disturbed soil. For hay or straw anticipate an application rate to 2.5 to 3 tons per acre.

When spreading hay mulch by hand, divide the area to be mulched into approximately 1,000 square feet and place 1.5–2 bales of hay in each section to facilitate uniform distribution.

For cellulose fiber mulch, expect several spray passes to attain adequate coverage, to eliminate shadowing, and to avoid slippage.

Anchoring: *Expect the need for mulch anchoring along the shoulders of actively traveled roads, hill tops and long open slopes not protected by wind breaks.*

When using netting, the most critical aspect is to ensure that the netting maintains substantial contact with the underlying mulch and the mulch, in turn, maintains continuous contact with the soil surface. Without such contact, the material is useless and erosion can be expected to occur.

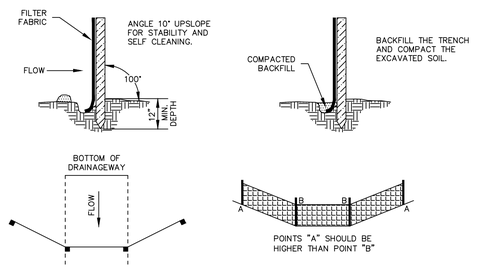
MAINTENANCE

Inspect mulch for seed area at least once a week and within 24 hours of the end of a storm with a rainfall amount of 0.5 inch or greater until the grass has germinated to determine maintenance needs.

Where mulch has been moved or where soil erosion has occurred, determine the cause of the failure and repair as needed.

SOIL ERSOION & SEDIMENT CONTROL NOTES

1. *The contractor/developer shall notify the Town Staff prior to construction in accordance with the local approvals and permits.*
2. *All soil erosion and sediment control work shall be done in strict accordance with the Connecticut Guidelines For Soil Erosion and Sediment Control latest edition.*
3. *Any additional erosion/sediment control deemed necessary by the engineer during construction, shall be installed by the developer. In addition, the developer shall be responsible for the repair/replacement and/or maintenance of all erosion control measures until all disturbed areas are stabilized to the satisfaction of the town staff.*
4. *All soil erosion and sediment control operations shall be in place prior to any grading operations and installation of proposed structures or utilities and shall be left in place until construction is completed and/or area is stabilized.*
5. *In all areas, removal of trees, bushes and other vegetation as well as disturbance of the soil is to be kept to an absolute minimum while allowing proper development of the site. During construction, expose as small an area of soil as possible for as short a time as possible.*
6. *The developer shall practice effective dust control per the soil conservation service handbook during construction and until all areas are stabilized or surface treated. The developer shall be responsible for the cleaning of nearby streets of any debris from these construction activities.*
7. *All fill areas shall be compacted sufficiently for their intended purpose and as required to reduce slipping, erosion or excess saturation. Fill intended to support buildings, structures, conduits, etc., shall be compacted in accordance with local requirements or codes.*
8. *Topsoil is to be stripped and stockpiled in amounts necessary to complete finished grading of all exposed areas requiring topsoil. The stockpiled topsoil is to be located as designated on the plans. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or seeding.*
9. *Any and all fill material is to be free of brush, rubbish, timber, logs vegetative matter and stumps in amounts that will be detrimental to constructing stable fills. Maximum side slopes of exposed surfaces of earth to be 3:1 or as otherwise specified by local authorities.*
10. *Soil stabilization should be completed within 5 days of clearing or inactivity in construction.*
11. *Waste Materials – All waste materials (including wastewater) shall be disposed of in accordance with local, state and federal law. Litter shall be picked up at the end of each work day.*
12. *The Contractor shall maintain on–site additional erosion control materials as a contingency in the event of a failure or when required to shore up existing BMPs. At a minimum, the on–site contingency materials should include 30 feet of silt fence and 5 straw haybales with 10 stakes.*

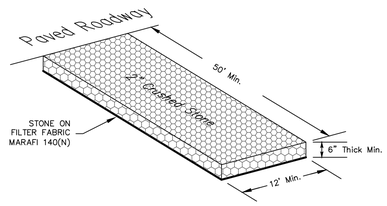


PLAN VIEW ELEVATION

SOURCE: U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, STORRS, CONNECTICUT

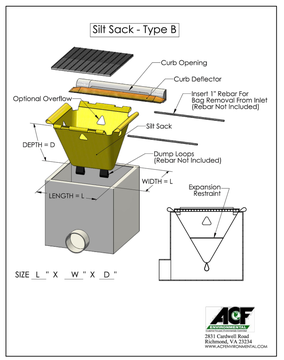
GEOTEXTILE SILT FENCE (GSF)

NOT TO SCALE



ANTI-TRACKING EXIT PAD DETAIL (CE)

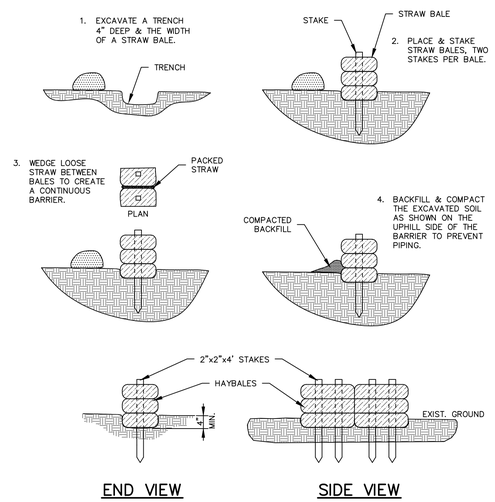
NOT TO SCALE



NOTE:
SILT SACK SHALL BE SIZED TO FIT EACH INLET GRATE (SINGLE OR DOUBLE) AND SHALL BE CLEANED AND MAINTAINED UNTIL THE CONTRIBUTING WATERSHED IS STABILIZED WITH VEGETATION AND/OR COMPACTED PROCESSED STONE BASE.

CB GRATE INLET PROTECTION (SILT SACK)

NOT TO SCALE



END VIEW SIDE VIEW

NOTE: HAYBALES TO BE EMBEDDED 4" IN EXISTING GROUND BUTTED END TO END/STAKED SECURELY.

STAKED HAYBALE SEDIMENTATION BARRIER (HB)

NOT TO SCALE

CHECKLIST FOR EROSION CONTROL PLAN

PROJECT: 0 Gerber Boulevard

LOCATION: 0 Gerber Boulevard, Vernon, CT

PROJECT DESCRIPTION: Construction of two buildings and parking lot

PARCEL AREA: 53.1± acres

RESPONSIBLE PERSONNEL: Clifton Chapman 860–871–1000

EROSION AND SEDIMENT CONTROL PLAN PREPARER: J.R. Russo & Associates, LLC

CHECKLIST:

Work Description Erosion & Sediment Control Measures	Location	Date Installed	Initials	Date Removed	Initials
Install construction entrance	As shown on plan.				
Install perimeter sediment barriers	As shown on plan.				
Install inlet protection at CBs	As installed				
Install haybale checkdams in swale	As installed				

MAINTENANCE OF MEASURES:

Location	Description or Number	Date	Initials

Project Dates:

Date of groundbreaking for project:

Date of final stabilization:

PROJECT NARRATIVE AND CONSTRUCTION SEQUENCE

This project is located at 0 Gerber Boulevard in Vernon, Connecticut. The proposed activity is the construction of two 14,000 square foot buildings. The suggested schedule of construction is as follows:

1. Install construction anti–tracking pad (CE).
2. Install sediment barriers (GSF) at project perimeters.
3. Strip topsoil. Stockpile suitable amount of topsoil for reuse on–site in areas shown. Stockpiles shall be surrounded by sediment barriers (GSF).
4. Begin building construction.
5. Construct stormwater management basin and install drainage. Seed basin as soon as practicable.
6. Install other site utilities.
7. Install parking lot and driveway base.
8. Pave binder course.
9. Stabilize remaining areas to receive topsoil and permanently seed as soon as possible.
10. Install landscaping.
11. Install pavement top course in all areas. Sweep binder course and apply tack coat prior to placing pavement top course.
12. Apply paint striping.
13. Remove sediment barriers after site is fully stabilized.

Construction of this site is anticipated to begin in the spring of 2023 and be complete by January 2024, pending approvals. Temporary erosion control measures shall be installed prior to any soil disturbance and maintained throughout construction until soils have been stabilized with permanent vegetation.

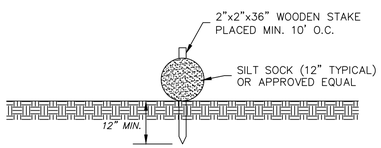
The Contractor shall keep the area of disturbance to a minimum and establish vegetative cover on exposed soils as soon as practical. All soil and erosion control measures shall be installed and maintained in accordance with these plans and the "Connecticut DEP Guidelines for Soil Erosion and Sediment Control", as amended. The Contractor shall verify all conditions noted on the plans and shall immediately notify the Engineer of any discrepancies.

The developer shall be responsible for the repair/replacement/maintenance of all erosion control measures until all disturbed areas are stabilized. Accumulated sediment shall be removed as required to keep silt fence functional. In all cases, deposits shall be removed when the accumulated sediment has reached one–half above the ground height of the silt fence. This material is to be spread and stabilized in areas not subject to erosion, or to be used in areas which are not to be paved or built on. Silt fence (GSF) is to be replaced as necessary to maintain proper filtering action. Silt fence (GSF) are to remain in place and shall be maintained to insure efficient sediment capture until all areas above the erosion checks are stabilized and vegetation has been established.

POST CONSTRUCTION MAINTENANCE NOTES:

The property owner shall be responsible for performing the following post construction maintenance schedule:

1. Maintain lawn & landscape areas with minimal pesticides.
2. Sweep parking lot and paved areas at least once per year in the spring.
3. Inspect catch basins and storm manholes at least twice per year, including after sweeping. Clean at least once per year in April and as necessary to prevent the discharge of pollutants from structures. Remove accumulated oil, trash and excessive sediment with vac–truck. Check condition of hoods (if applicable).
4. Inspect infiltration basin annually for evidence of hydrocarbons and remove by vac–truck. Repair eroded areas and replace riprap and vegetation as required. Dredge bottom of forebay to remove accumulated sediment every 10 years or when significant volume reduction is observed. Mow infiltration basin on a regular basis to maintain as lawn area for filtering of pollutants. Inspect inlet pipes monthly and remove trash and debris as needed.



NOTE: MAY BE USED AS ALTERNATIVE TO GEOTEXTILE SILT FENCE.

PERIMETER SEDIMENT BARRIER

NOT TO SCALE

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J.R. Russo & Associates, LLC
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www.jrussocs.com • info@jrussocs.com

Applicant/Owner
Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

REVISIONS

BY: LF/TAC	CHK: JEU

The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Construction Notes & Details

DATE
1–24–2023

SCALE
1"=40'

JOB NUMBER
2022–059

SHEET
10 of 13

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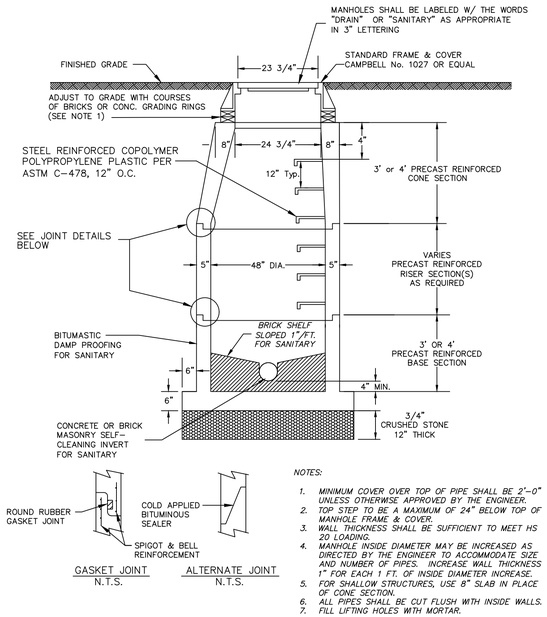
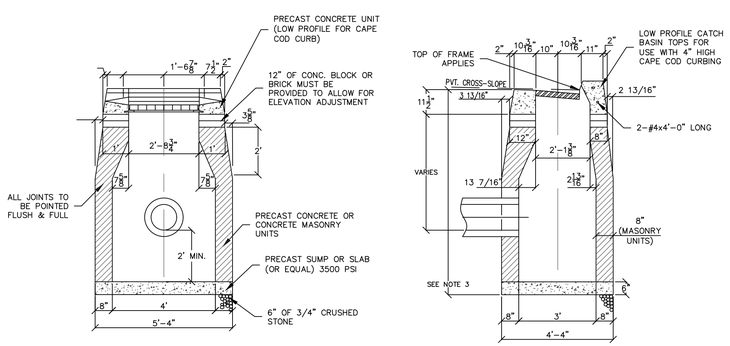


NOTES:

1. *MINIMUM COVER OVER TOP OF PIPE SHALL BE 2'-0" UNLESS OTHERWISE APPROVED BY THE ENGINEER.*
2. *TOP STEP TO BE A MAXIMUM OF 24" BELOW TOP OF MANHOLE FRAME & COVER.*
3. *WALL THICKNESS SHALL BE SUFFICIENT TO MEET HS 20 LOADING.*
4. *MANHOLE INSIDE DIAMETER MAY BE INCREASED AS DIRECTED BY THE ENGINEER TO ACCOMMODATE SIZE AND NUMBER OF PIPES. INCREASE WALL THICKNESS 1" FOR EACH 1 FT. OF INSIDE DIAMETER INCREASE.*
5. *FOR SHALLOW STRUCTURES, USE 8" SLAB IN PLACE OF CONE SECTION.*
6. *ALL PIPES SHALL BE CUT FLUSH WITH INSIDE WALLS.*
7. *FILL LIFTING HOLES WITH MORTAR.*

PRECAST CONCRETE MANHOLE

NOT TO SCALE



FRONT ELEVATION

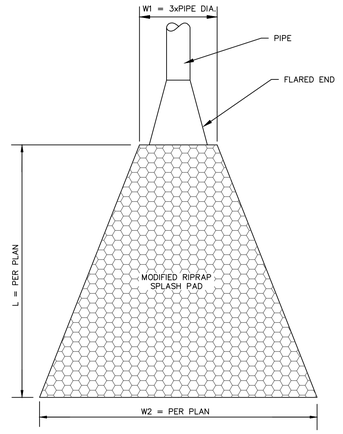
SIDE ELEVATION

NOTES:

1. MINIMUM COVER OVER TOP OF PIPE SHALL BE 2'-0".
2. WALL THICKNESS SHALL BE SUFFICIENT TO MEET HS 20 LOADING.
3. WALL THICKNESS FOR STRUCTURES OVER 10' HIGH IS 12" FOR CONCRETE BLOCK UNITS, INSIDE DIMENSIONS REMAIN THE SAME.
4. ALL PIPES SHALL BE CUT FLUSH WITH INSIDE WALLS.
5. ALL BRICKS SHALL BE CONCRETE.

TYPE "C" CATCH BASIN

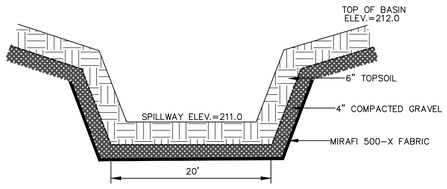
NOT TO SCALE



NOTE:
MODIFIED RIPRAP APRON (12" THICK) ON 6" GRANULAR BASE (M.02.01) ON MIRAFI 140N FABRIC OR EQUAL

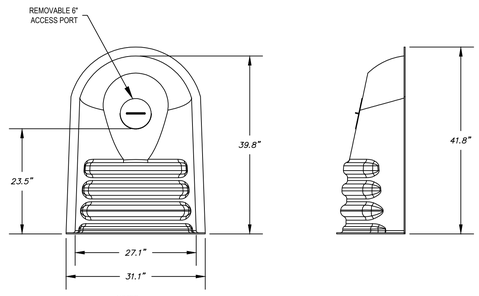
TYPE A RIPRAP APRON (OP)

N.T.S.



EARTHEN SPILLWAY

NOT TO SCALE

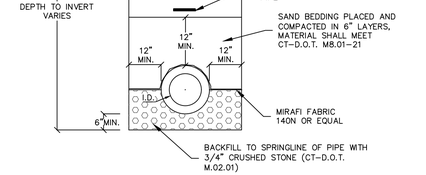


NOTES:

1. *HIGH DENSITY POLYETHYLENE NYROPLAST ENVIROHOOD MODEL 24F FOR FLAT CONCRETE STRUCTURES.*
2. *INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.*

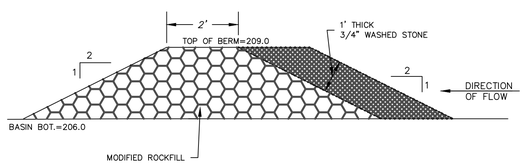
NYLOPLAST ENVIROHOOD DETAIL

NOT TO SCALE



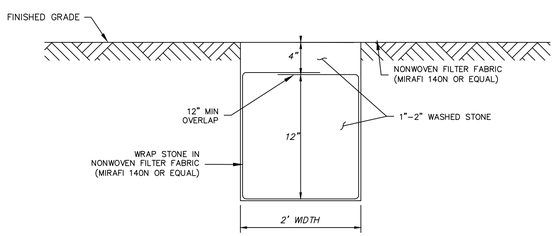
STANDARD STORM DRAIN DETAIL

NOT TO SCALE



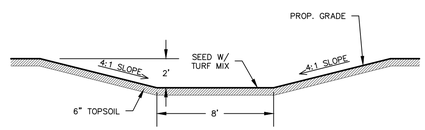
STONE FILTER BERM

NOT TO SCALE



STONE TRENCH IN INFILTRATION BASIN

NOT TO SCALE



VEGETATED SWALE DETAIL

NOT TO SCALE

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Applicant/Owner
Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

REVISIONS

BY: LF/TAC	CHK: JEU

Expansion of The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Details

DATE
1-24-2023
SCALE
1"=40'
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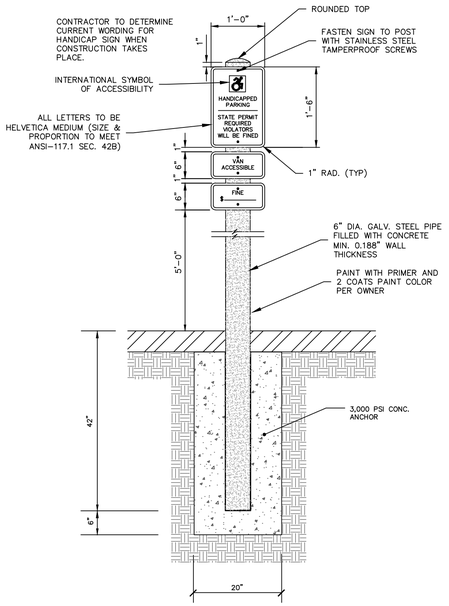
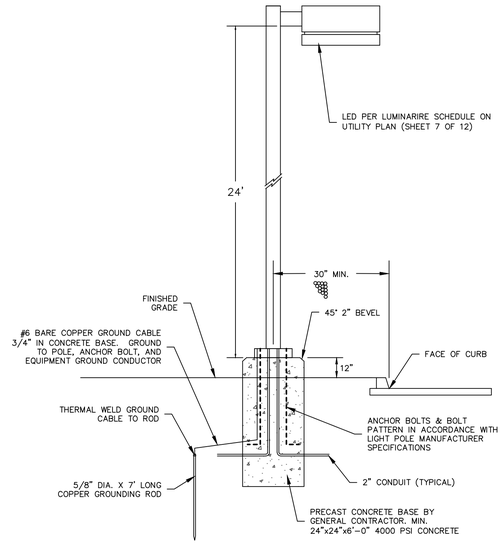


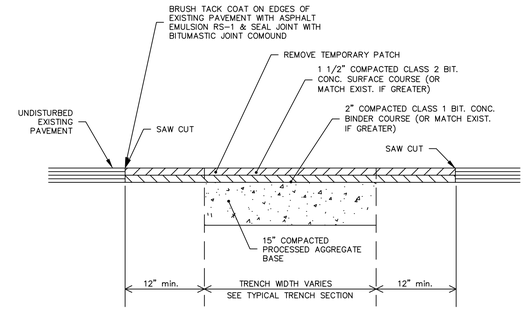
HANDICAP SIGN & BOLLARD

NOT TO SCALE



POLE MOUNTED EXTERIOR LIGHT

NOT TO SCALE

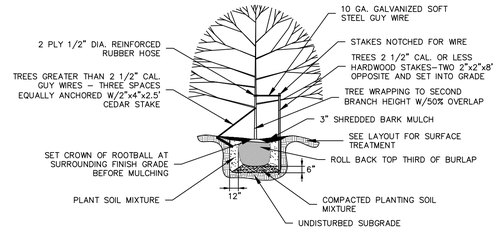


NOTES:

1. ALL SAW CUT AND SEALED JOINTS TO BE EITHER PARALLEL WITH, OR PERPENDICULAR TO, THE CENTER-LINE OF THE PIPE.
2. ALL MATERIALS ARE TO MEET CONN. DOT SPECIFICATIONS FORM 816 AS AMENDED.

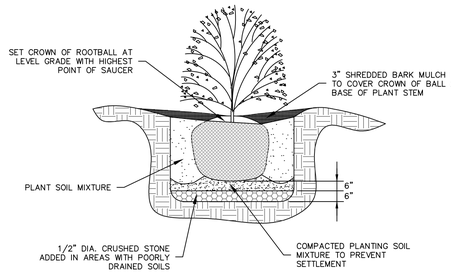
PERMANENT PAVEMENT PATCH

NOT TO SCALE



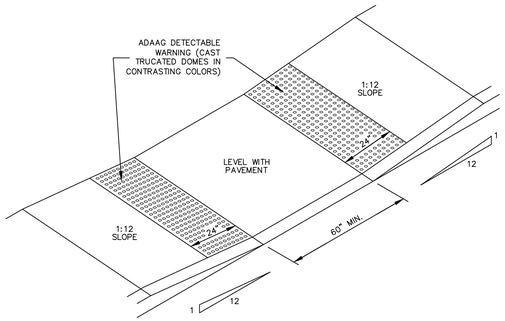
TREE PLANTING

NOT TO SCALE



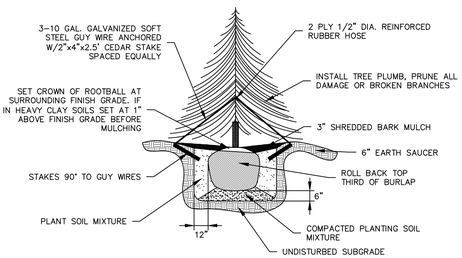
SHRUB PLANTING

NOT TO SCALE



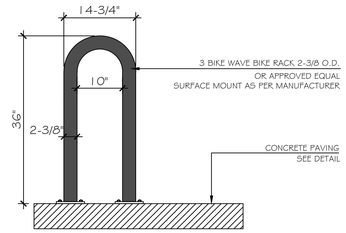
SIDEWALK RAMP TYPE B

NOT TO SCALE



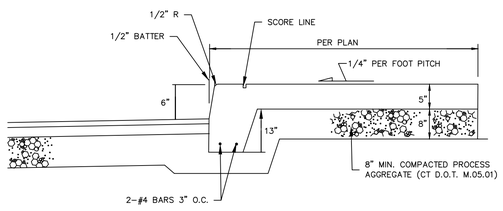
EVERGREEN TREE PLANTING

NOT TO SCALE



BIKE RACK

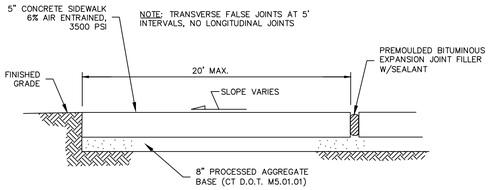
NOT TO SCALE



NOTE: FINISH PER TYPICAL SIDEWALK DETAIL

INTEGRAL SIDEWALK & CURB DETAIL

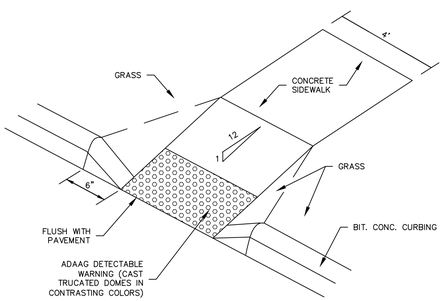
NOT TO SCALE



NOTE: EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE, AT CURBS, OR AT PENETRATING STRUCTURES.

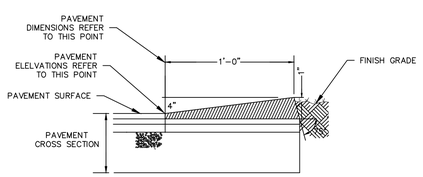
TYPICAL SIDEWALK DETAIL

NOT TO SCALE



SIDEWALK RAMP TYPE A

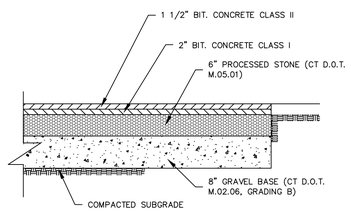
NOT TO SCALE



NOTE: TO BE USED ALONG ACCESS DRIVE TO MAINTENANCE BUILDING WITHIN ELECTRICAL EASEMENT.

CAPE-COD STYLE CURB

NOT TO SCALE



NOTE: WHERE SUBGRADES ARE ON WET SILT OR CLAY, CONTRACTOR TO INSTALL ADDITIONAL 12" OF ¾" CRUSHED STONE ON TENSAR TRIAX GEOGRID BELOW GRAVEL SUBBASE.

PAVEMENT DETAIL

NOT TO SCALE

RUSSO SURVEYORS·ENGINEERS SERVING CT & MA
J.R. Russo & Associates, LLC
1 Sheham Rd East Windsor, CT 06088 • CT 860.623.0569 • MA 413.785.1158
www.jrrusso.com • info@jrrusso.com

Applicant/Owner
Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

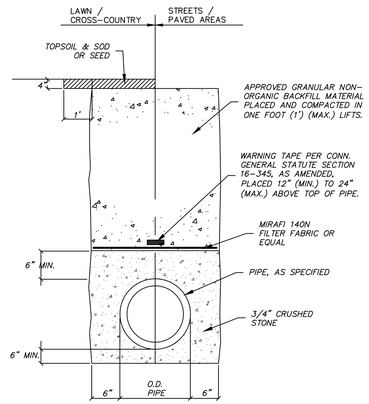
REVISIONS		
BY: LF/TAC	CHK: JEU	
		ADD BIKE RACK, SIDEWALK RAMP
		2-22-23

Expansion of
The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Details

DATE: 1-24-2023
SCALE: 1"=40'
JOB NUMBER: 2022-059
SHEET: 12 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg

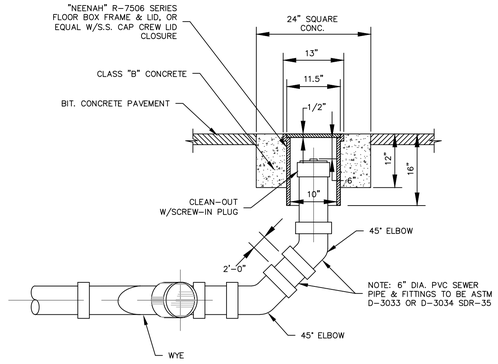


NOTE:

1. INSTALL CLAY STOPS WHERE NECESSARY.

TYPICAL SANITARY SEWER TRENCH SECTION

NOT TO SCALE

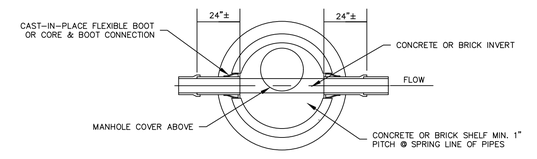


NOTE:

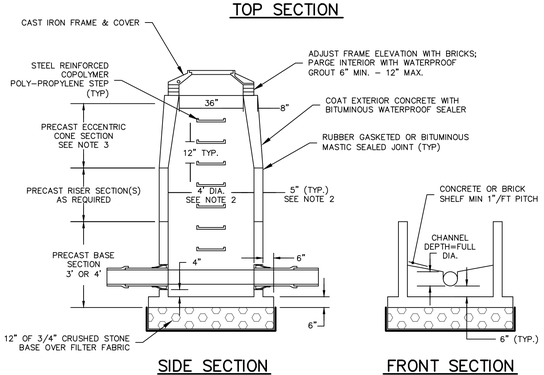
1. INSTALL CLEANOUTS AT BENDS AND MAX. 100'± INTERVALS ALONG SANITARY LATERALS.

CLEAN-OUT

NOT TO SCALE



TOP SECTION



SIDE SECTION

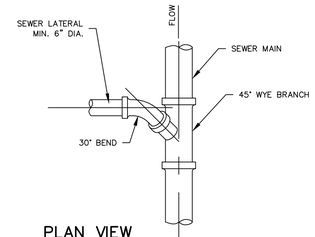
FRONT SECTION

NOTES:

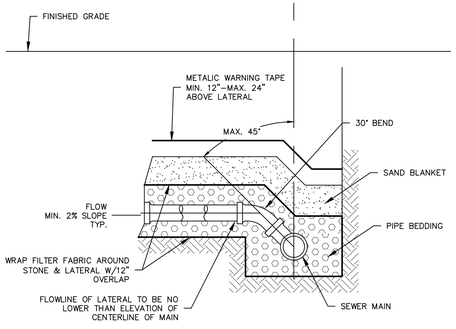
1. WALL THICKNESS SHALL BE SUFFICIENT TO MEET H-20 LOADING.
2. MANHOLE INSIDE DIAMETER MAY BE INCREASED AS DIRECTED BY THE ENGINEER TO ACCOMMODATE SIZE AND NUMBER OF PIPES AND DROPS. INCREASE WALL THICKNESS 1" FOR EACH 1" OF INSIDE DIAMETER INCREASE.
3. FOR SHALLOW STRUCTURES, 8" TOP SLAB MAY BE USED IN PLACE OF CONE SECTION W/ENGINEER'S APPROVAL.
4. ALL PIPES SHALL BE CUT FLUSH WITH INSIDE WALLS.
5. MORTAR ALL JOINTS AND LIFTING HOLES ON INSIDE OF MANHOLE.
6. ALL BRICKS, FOR SHELF OR ADJUSTING FRAME & COVER, SHALL BE BURNT BRICK OR KANE BRICK.
7. PARGE ALL INTERIOR AND EXTERIOR JOINTS WITH WATERPROOF GROUT.
8. TOP STEP TO BE MAXIMUM 24" BELOW MANHOLE COVER.
9. ALL MATERIALS ARE TO MEET CONN. D.O.T. SPECIFICATIONS FORM 816 AS AMENDED.

PRECAST SANITARY MANHOLE

NOT TO SCALE



PLAN VIEW



SECTION

NOTE: SANITARY LATERALS SHALL CONFORM TO TYPICAL SANITARY TRENCH SECTION.

LATERAL CONNECTION

NOT TO SCALE

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J.R. Russo & Associates, LLC
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www.jrrusso.com • info@jrrusso.com

Applicant/Owner
Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

REVISIONS

BY: LF/TAC	CHK: JEU

Expansion of
The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

Details

DATE
1-24-2023

SCALE
1"=40'

JOB NUMBER
2022-059

SHEET
13 of 13

S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Russo Drawings\2022-059.dwg

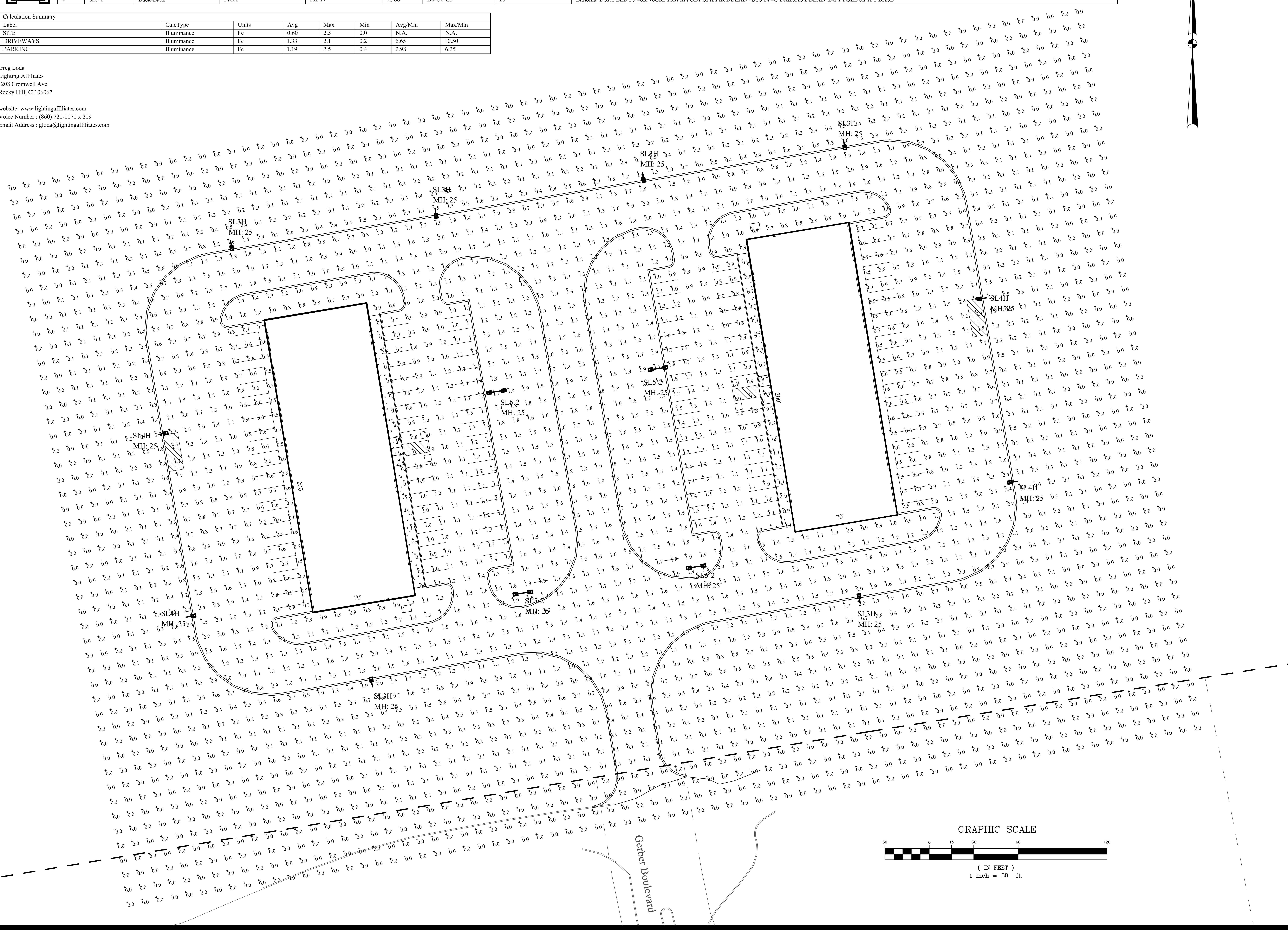
Filename: 0 Gerber Blvd Site Lighting - Vernon - Revision 2.AGI

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Luminaire Lumens	Luminaire Watts	LLF	BUG Rating	Mounting Height	Description
	6	SL3H	Single	11929	102.1727	0.900	B1-U0-G3	25	Lithonia DSX1 LED P3 40K 70CRI T3M MVOLT SPA PIR HS DBLXD - SSS 24 4C DM19AS DBLXD 24FT POLE on 1FT BASE
	4	SL4H	Single	13739	123.9373	0.900	B2-U0-G3	25	Lithonia DSX1 LED P4 40K 70CRI TFTM SPA PIR HS DBLXD - SSS 24 4C DM19AS DBLXD 24FT POLE on 1FT BASE
	4	SL5-2	Back-Back	14602	102.17	0.900	B4-U0-G3	25	Lithonia DSX1 LED P3 40K 70CRI T5M MVOLT SPA PIR DBLXD - SSS 24 4C DM28AS DBLXD 24FT POLE on 1FT BASE

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Illuminance	Fc	0.60	2.5	0.0	N.A.	N.A.
DRIVEWAYS	Illuminance	Fc	1.33	2.1	0.2	6.65	10.50
PARKING	Illuminance	Fc	1.19	2.5	0.4	2.98	6.25

Greg Loda
Lighting Affiliates
1208 Cromwell Ave
Rocky Hill, CT 06067

website: www.lightingaffiliates.com
Voice Number : (860) 721-1171 x 219
Email Address : gloda@lightingaffiliates.com



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www.jrrusso.com · info@jrrusso.com

REVISIONS

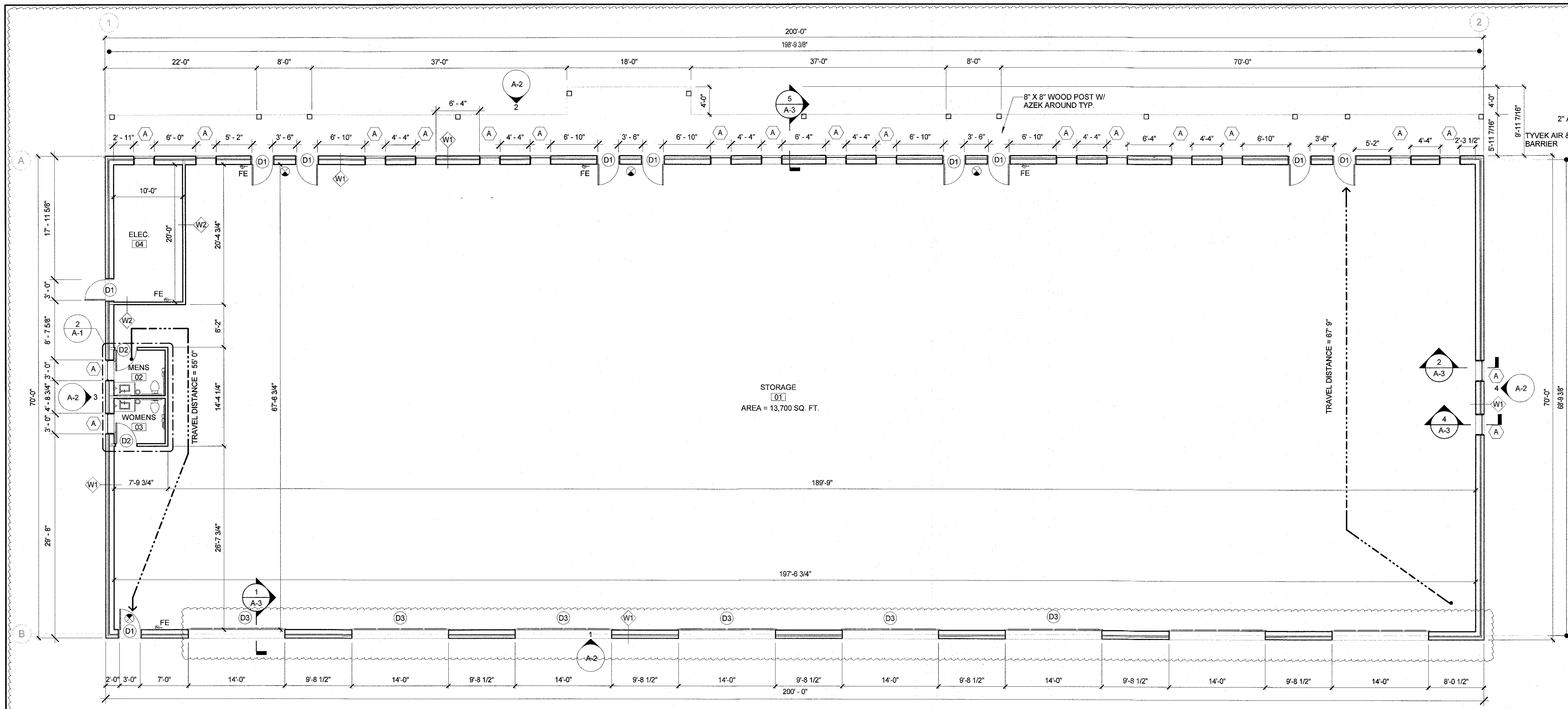
BY: LF/TAC CHK: JEU

Expansion of
The Park at Hockanum Crossing
0 Gerber Boulevard, Vernon, CT 06066
MAP 04 BLOCK 0004 LOT 008A7 (ZONE: PDZ)

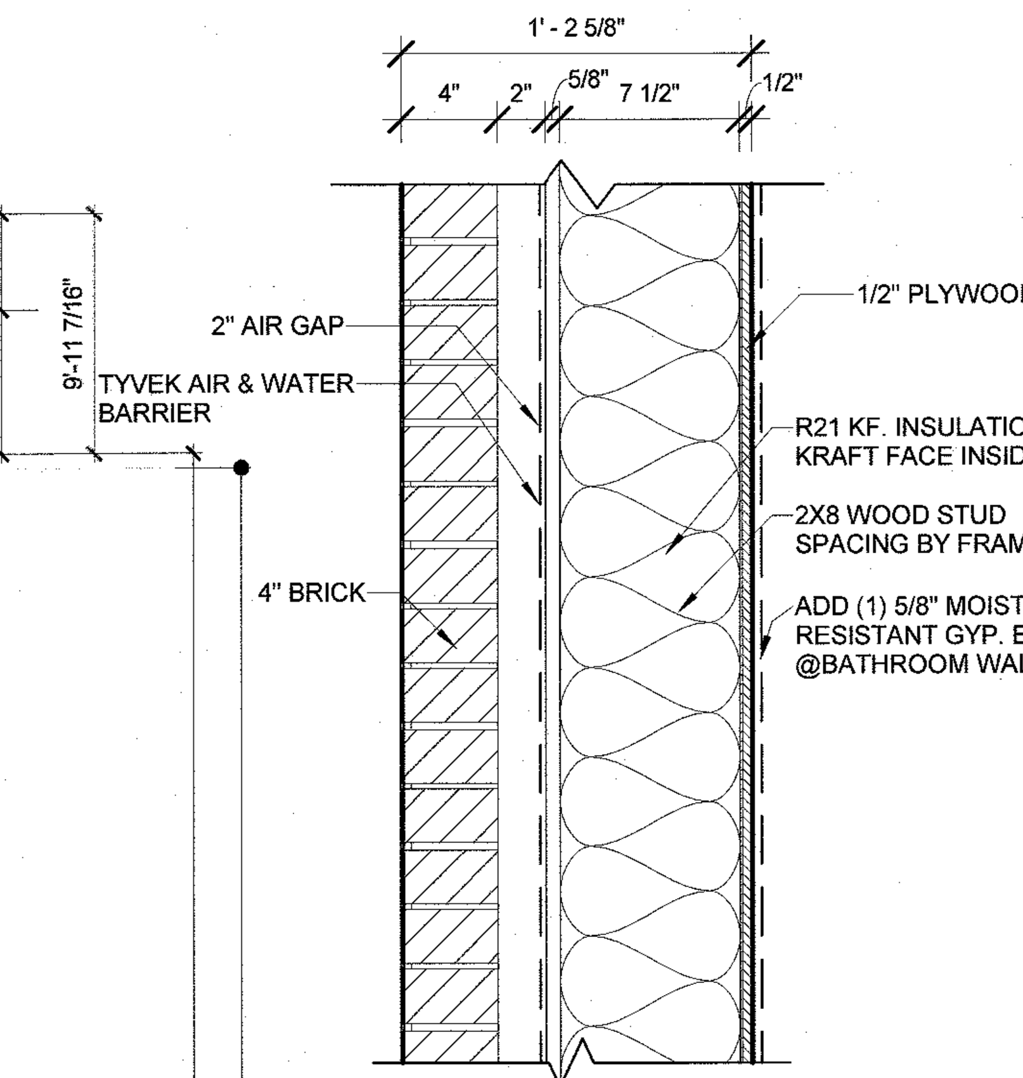
Photometric Plan

DATE
12-26-22
SCALE
1"=40'
JOB NUMBER
2022-059
SHEET
1 of 1

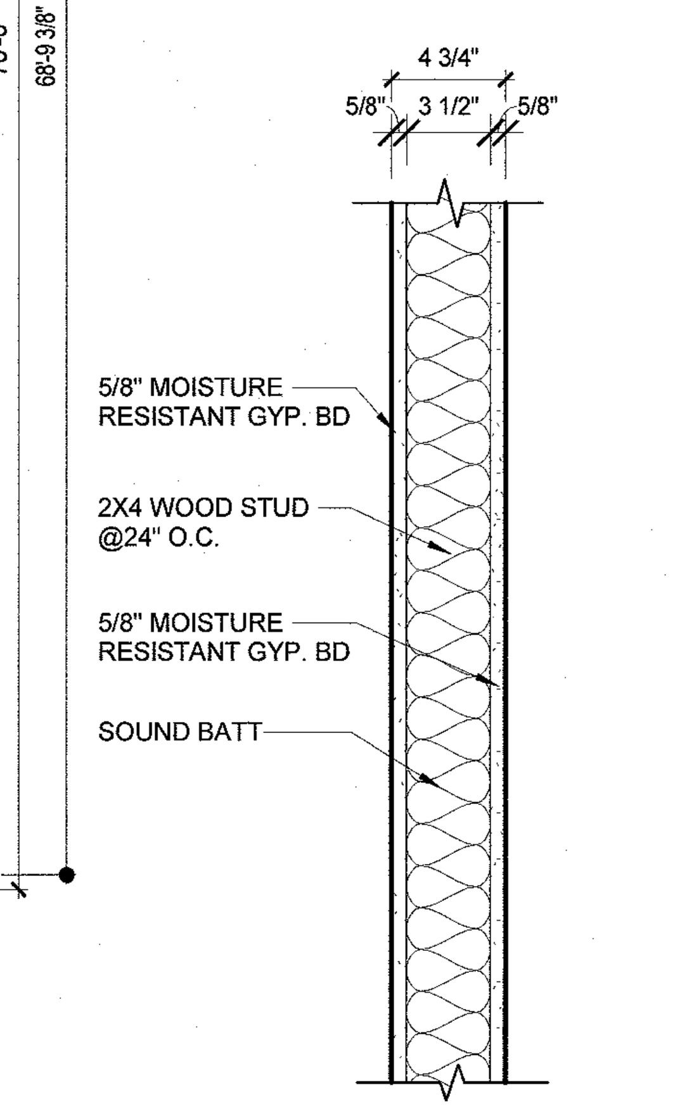
S:\Acad\2022 Civil 3D\2022-059 Cliff Chapman-Gerber Drive\Files From Others\Lighting\0 Gerber Blvd Site Lighting - Vernon - Revision 2.dwg



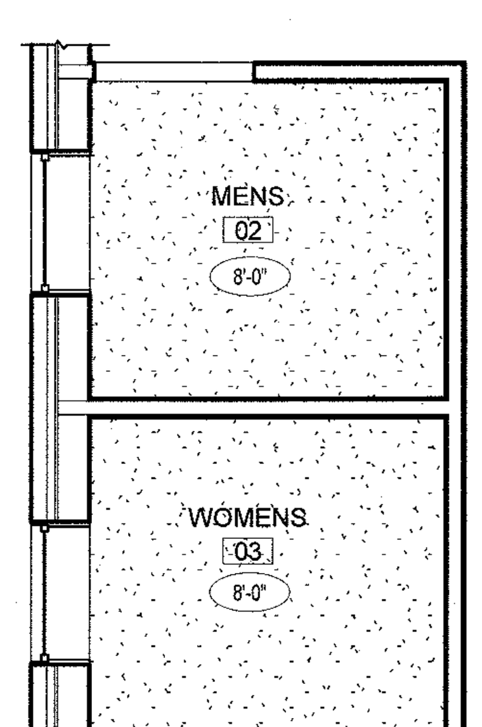
1 FLOOR PLAN
A-1 1/8" = 1'-0"



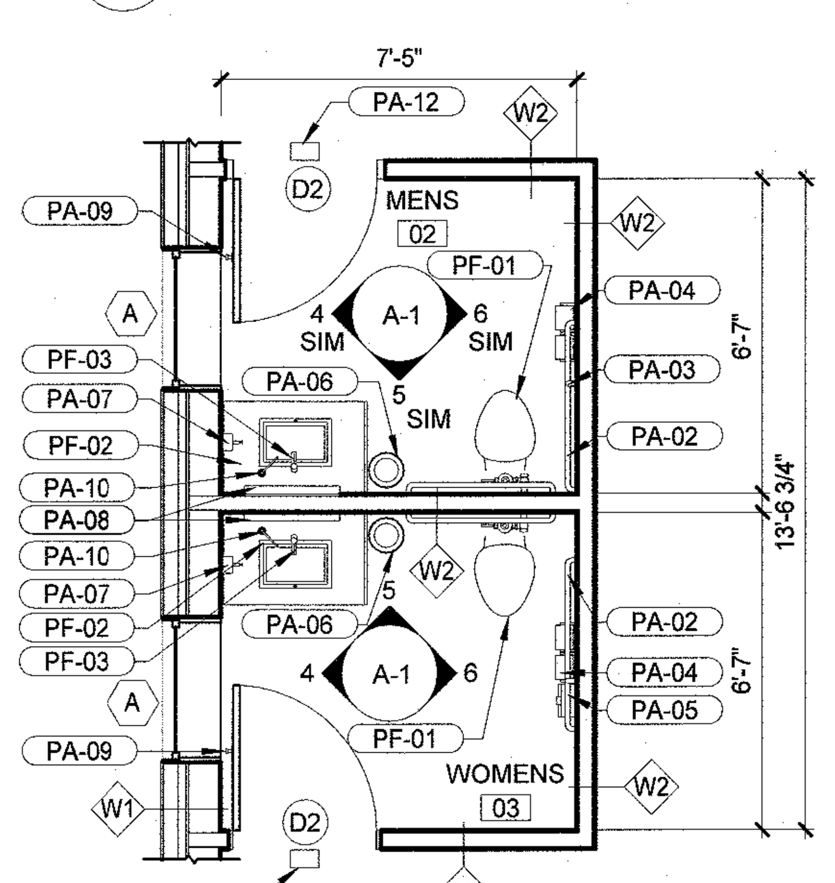
W1 EXTERIOR WALL
SCALE: 1 1/2" = 1'-0"



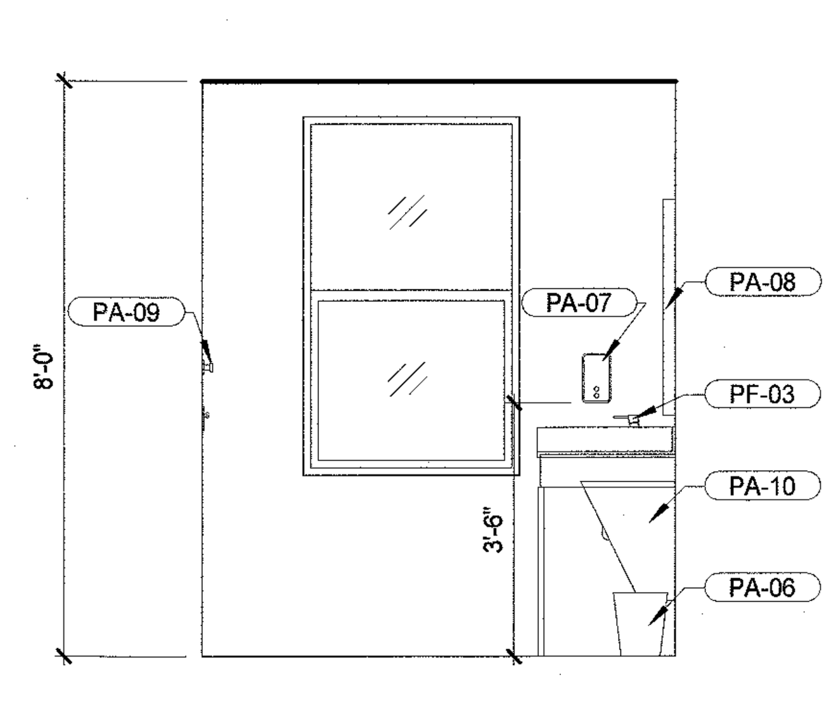
W2 PARTITION WALL
SCALE: 1 1/2" = 1'-0"



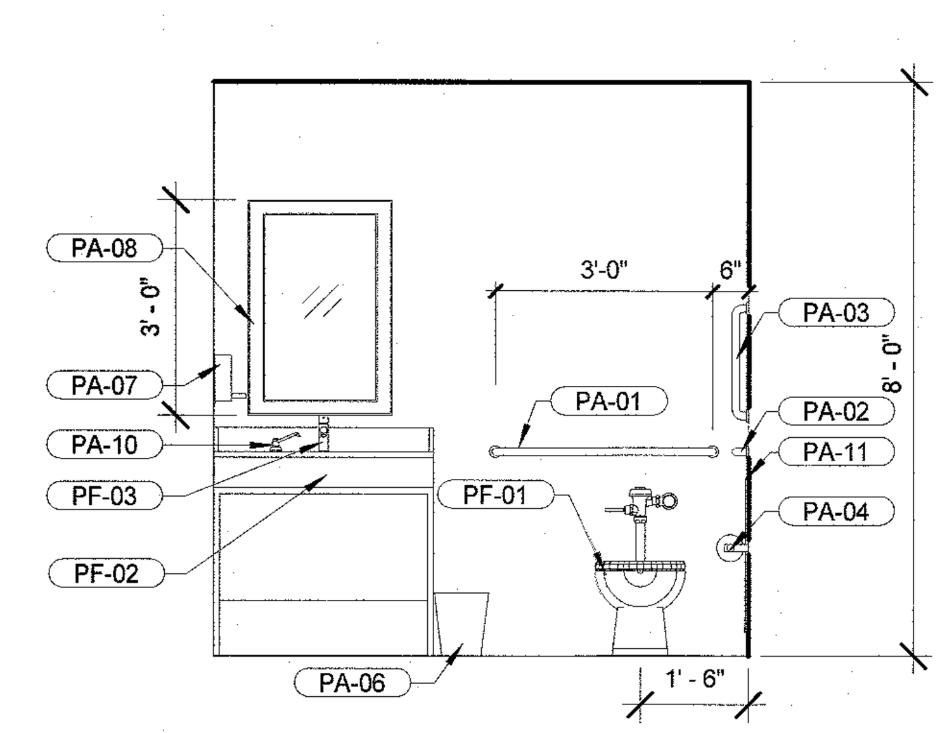
3 ENLARGED BATHROON RCP PLAN
A-1 1/4" = 1'-0"



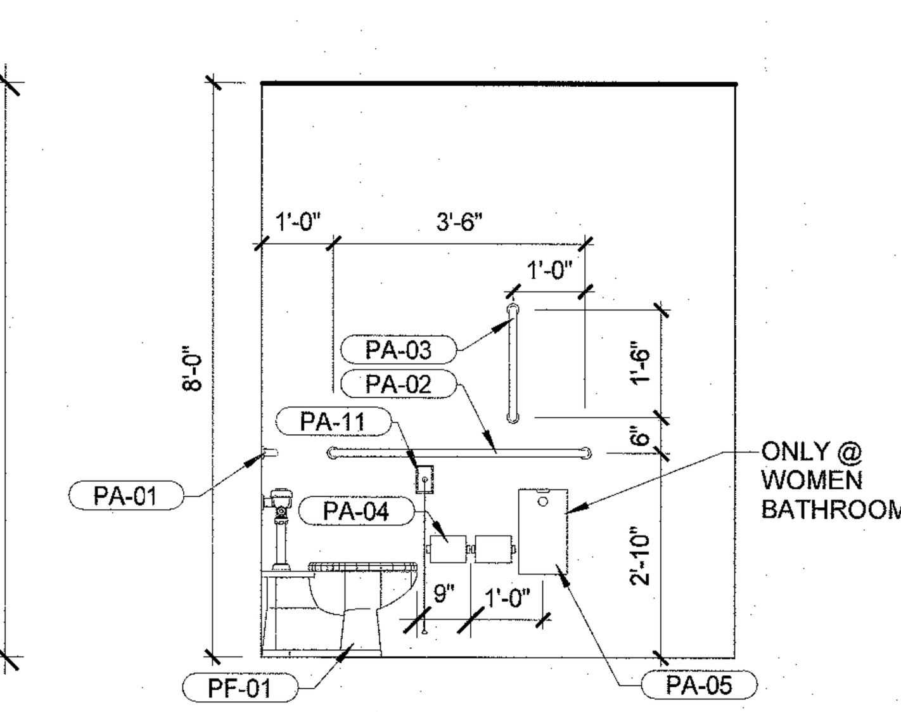
2 ENLARGED BATHROOM PLAN
A-1 1/4" = 1'-0"



4 BATH ELEVATION
A-1 3/8" = 1'-0"



5 BATH ELEVATION
A-1 3/8" = 1'-0"



6 BATH ELEVATION
A-1 3/8" = 1'-0"

RATING PLAN LEGEND

- TRAVEL DISTANCE
- EXIT SIGN

PLUMBING FIXTURE SCHEDULE

TAG	DESRIPTION	MANUFACTURER	MODEL
PF-01	WATER CLOSET	AMERICAN STANDARD	2854.016.020
PF-02	LAVATORY, VANITY TOP, VITREOUS CHINA	KOHLER	K-2214-0
PF-03	VANITY FAUCET	KOHLER COMPANY (MARRIOT/HILTON)	99491-4-CP

PLUMBING ACCESSORIES SCHEDULE

TAG	DESRIPTION	MANUFACTURER	MODEL
PA-01	GRAB BAR 36"	BOBRICK	B-6806 X 36
PA-02	GRAB BAR 42"	BOBRICK	B-6806 X 42
PA-03	GRAB BAR 18"	BOBRICK	B-6806 X 18
PA-04	TOILET TISSUE HOLDER	BOBRICK	B-2892
PA-05	SANITARY NAPKIN DISPOSAL	BOBRICK	B-270
PA-06	TRASH RECEPTACLE	BOBRICK	B-2300
PA-07	PAPER TOWEL DISPENSER	BOBRICK	B-4262
PA-08	MIRROR 24"X36"	BOBRICK	B-165 24 X 36
PA-09	ROBE HOOK	BOBRICK	B-7671
PA-10	SOAP DISPENSER DECK MOUNTED	BOBRICK	B-829
PA-11	CALL FOR AID PULL STRING	EDWARDS SIGNALING	CFA-SERIES 6537
PA-12	CALL FOR AID BUZZER / STROBE	EDWARDS SIGNALING	CFA-SERIES 7007B-N5

SYMBOL LEGEND

- NEW DOOR. FOR DOOR SCHEDULE SEE SHEET A-4
- NEW WINDOWS. FOR WINDOW SCHEDULE SEE SHEET A-4
- WALL TYPES REFER TO SHEETS A-1
- ROOM NAME & NUMBER
- DIMENSION TAKEN TO GRIDLINE (CENTER TO CENTER)
- DIMENSION TAKEN FROM FACE OF FINISH TO FACE OF FINISH
- NEW WALL

RUSSELL AND DAWSON INC.
ARCHITECTURE & ENGINEERING
1111 Main Street, East Hartford CT 06108
TEL: (860) 289-1100 FAX: (860) 289-3272 E-MAIL: info@rdaep.com

REVISIONS

NO.	DESCRIPTION	DATE	BY
1	GENERAL REVISION	11/18/2022	UKP
2	REVISION 2	12/05/2022	UKP

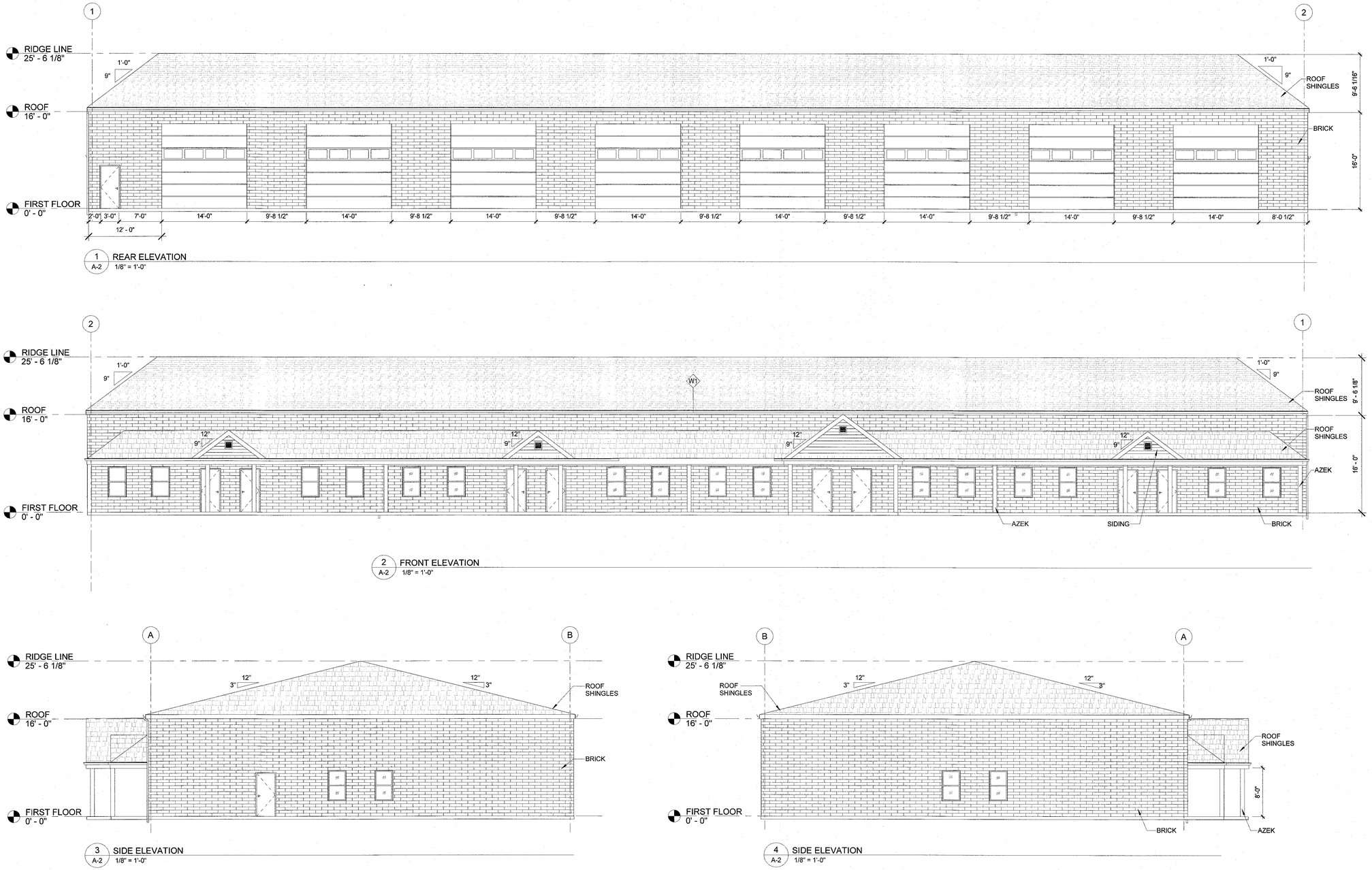
STAMP:

PROJECT: MAINTENANCE BUILDING
0 GERBER BLVD, VERNON CT

FILE NO:	19124
SCALE:	AS NOTED
DATE:	12/16/2019
DRAWN BY:	Author
CHECKED BY:	Checker

SHEET TITLE: FLOOR PLAN, WALL TYPE & PLUMBING FIXTURES & ACCESSORIES SCHEDULE

SHEET NUMBER: A-1



RUSSELL AND DAWSON INC.
ARCHITECTURE & ENGINEERING
1111 Main Street, East Hartford CT 06108
TEL: (860) 289-1100 FAX: (860) 289-1572 E-MAIL: info@rdainc.com

REVISIONS

NO.	DESCRIPTION	DATE	BY
1	GENERAL REVISION	11/19/2022	LMP
2	REVISION 2	12/05/2022	LMP

STAMP:

PROJECT: MAINTENANCE BUILDING
0 GERBER BLVD, VERNON CT

FILE NO:	19124	PROJECT:	
SCALE:	AS NOTED	DATE:	12/16/2019
DRAWN BY:	Author	CHECKED BY:	Checker

SHEET TITLE: ELEVATION

SHEET NUMBER: A-2

RUSSO
SURVEYORS·ENGINEERS
1 Shoham Rd · East Windsor, CT 06088
CT: (860) 623-0569
MA: (413) 785-1158

LETTER OF TRANSMITTAL

DATE: 2-2-23	JOB NO. 2022-059
ATTN: Ashley Stephens	
RE:	
Expansion of The Park at Hockanum Crossing	
0 Gerber Boulevard	
Vernon, CT	

TO Town of Vernon Planning & Zoning Commission
56 West Main Street, 2nd Floor
Vernon, CT 06066

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover Via delivery, the following items:

☐ Cover Letter ☐ Paper Prints ☒ Mylars ☐ Specifications ☐ Report ☐ Other

COPIES	DATE	SHEET NO.	DESCRIPTION
5	1-26-23		Cover Letter
5	1-26-23		PZC Application Form
5			Property Deed
5	1-26-23		LID Checklist
5	1-26-23		Traffic Statement
5	2-01-23		Fiscal Impact Analysis
5	1-24-23	-/13	Site Plans
5	12-16-19	-/2	Architectural Floor Plans & Elevations
5	1-26-23		Building & Sign Photos
5	1-26-23		Photometric Plan & Site Lighting Cut Sheets
2	1-24-23		Drainage Report
1			Abutters mailing labels
1			Town Fee (Check #)
1			NCCD Fee (Check #)

THESE ARE TRANSMITTED (as checked below):

☒ For approval ☐ For your use ☐ For review and comment ☐ As requested

☐ For signature ☐ For your records ☐ Returned after loan to us ☐ For bids due_____

REMARKS:

cc: Cliff Chapman

SENT BY: Timothy Coon

RUSSO
SURVEYORS•ENGINEERS

January 26, 2023

Vernon Planning & Zoning Commission
Attn. Ashley Stephens
55 West Main Street, 2nd Floor
Vernon, CT 06066

Re: Expansion of The Park at Hockanum Crossing
0 Gerber Boulevard

Dear Ashely,

On behalf of the Cliff Chapman, I am pleased to submit the attached application for approval of a Site Plan of Development and Special Permit associated with the proposed expansion of The Park at Hockanum Crossing at 0 Gerber Boulevard in Vernon. The property consist of 51.3 acres maintained as a hay field located at the northern end of Gerber Boulevard. The site is zoned Planned Development Zone (PDZ).

The proposed development will involve the construction of two (2) 14,000 square foot buildings which will be a shorter version (200' long instead of 300') of the existing building at 5 Gerber Boulevard within The Park at Hockanum Crossing. The buildings will contain up to eight (8) tenant spaces. Future tenants are unknown at this time. However, potential future uses are anticipated to fall within the following allowable uses in the zone:

- Manufacturing, storing, printing, publishing, processing, fabricating, packaging or assembling activities wholly within the buildings;
- Research and experimental laboratories, veterinary hospitals and animal care services (excluding kennels) and medical facilities;
- Professional and general office space;
- Indoor recreation/fitness facilities, educational facilities, religious facilities, cultural, non-profit, and philanthropic activities; and
- Plumbing, heating, electrical, industrial, and general contracting establishments.

Although the actual uses are not known at this time, the required parking was calculated using the higher requirement for office space of 1 parking space for each 250 square foot of floor area. This resulted in a requirement of 56 parking spaces per building, or a total of 112 parking spaces for both buildings. The proposed plan provides exactly this number of spaces.

Runoff from the proposed development will be collected and conveyed to a new infiltration basin designed to provide treatment, ground water recharge, and peak flow attenuation in accordance with the Connecticut Stormwater Quality Manual.

If there are any questions, or you require further information, please call me at (860) 623-0569.

Very truly yours,

Timothy A. Coon, P.E.
J.R. Russo & Associates, LLC

Attachments
cc: Cliff Chapman

TOWN OF VERNON PLANNING & ZONING COMMISSION (PZC) APPLICATION

(Revised August 2022)

The PZC may require additional information to be provided by the applicant in the course of reviewing the application and during the monitoring of the project. Provide all the information requested.

APPLICANT (S)

NAME: Clifton B. Chapman

COMPANY: _____

ADDRESS: 75 Hockanum Boulevard, Vernon, CT 06066

TELEPHONE: 860-871-1000 EMAIL: apt01@hotmail.com

PROPERTY OWNER (S)

NAME: Clifton B. Chapman

ADDRESS: 75 Hockanum Boulevard, Vernon, CT 06066

TELEPHONE: 860-871-1000 EMAIL: apt01@hotmail.com

If the applicant is not the property owner, include a letter from the property owner authorizing the applicant to seek approval by the PZC, if no signature accompanies the application.

PROPERTY

ADDRESS: 0 Gerber Boulevard

ASSESSOR'S ID CODE: MAP # 04 BLOCK # 0004 LOT/PARCEL # 0087A

LAND RECORD REFERENCE TO DEED DESCRIPTION: VOLUME 1305 PAGE 2149

DOES THIS SITE CONTAIN A WATERCOURSE AND/OR WETLANDS? (SEE THE INLAND WETLANDS MAP AND REGULATIONS)

☐ NO ☑ YES

☐ REGULATED ACTIVITY WILL BE DONE

☐ IWC APPLICATION HAS BEEN SUBMITTED

ZONING DISTRICT PDZ

IS THIS PROPERTY LOCATED WITHIN FIVE HUNDRED (500) FEET OF A MUNICIPAL BOUNDARY?

☐ NO

☑ YES: South Windsor

Name of Town

CHECK IF HISTORIC STATUS APPLIES:

____ LOCATED IN HISTORIC DISTRICT: _____

____ INDIVIDUAL HISTORIC PROPERTY

PROJECT SUMMARY

Describe the project briefly in regard to the purpose of the project and the activities that will occur. Attach to this application a complete and detailed description with maps and documentation as required by the **"Town of Vernon Zoning Regulations"** and **"Town of Vernon Subdivision Regulations"**.

PURPOSE: Expansion of The Park at Hockanum Crossing (see cover letter)

GENERAL ACTIVITIES: Construct two (2) 14,000 sf buildings for light industrial/commercial use (see cover letter).

Activies to include earthwork,building construction and utility installation.

APPROVAL REQUESTED

____**SUBDIVISION OR RESUBDIVISION**

____ SUBDIVISION (SUB. SEC. 4, 5, 6)
____ RESUBDIVISION (SUB. SEC. 4, 5, 6)
____ MINOR MODIFICATION OF SUBDIVISION OR RESUBDIVISION (SUB. SEC. 4.6)
____ AMENDMENT OF SUBDIVISION REGULATIONS (SUB. SEC. II)

SEE SUBDIVISION REGULATIONS SEC. 4 FOR APPLICATION FEE SCHEDULES.

X **SOIL EROSION AND SEDIMENT CONTROL PLAN (ESCP)** (SUBDIVISION REGULATIONS 6.14)

X **SITE PLAN OF DEVELOPMENT (POD)**

____ POD APPROVAL
____ MODIFICATION OF AN APPROVED POD
____ MINOR MODIFICATION OF A SITE POD

X **SPECIAL PERMIT(S)** SECTION: 4.24.4.3, 4.24.4.3.15.1 & 4.24.4.3.15.4

____**ZONING:**

____ SITE SPECIFIC CHANGE OF ZONING DISTRICT AND MAP
____ AMENDMENT OF ZONING REGULATIONS

CERTIFICATION AND SIGNATURE

The applicant, undersigned, has reviewed the "Town of Vernon Planning and Zoning Regulations" and completed the application with complete and accurate information:

Property Owner, Applicant, or Applicant's Agent:

	Timothy A. Coon	2/2/23
APPLICANT OR AGENT SIGNATURE	PRINTED NAME	DATE
OWNER'S SIGNATURE, IF DIFFERENT	PRINTED NAME	DATE

VOL 1305 PG 0209 DOC/INST # 002149

(2)

STATUTORY FORM WARRANTY DEED

KNOW YE, THAT I, **EDWIN W. GERBER,** of the Town of Vernon, County of Tolland and State of Connecticut

for the consideration of FIVE HUNDRED TWENTY THOUSAND AND 00/100THS ($520,000.00) DOLLARS

received to my full satisfaction of **CLIFTON B. CHAPMAN** of the Town of Ellington, County of Tolland and State of Connecticut do grant, bargain, sell and confirm unto the said **CLIFTON B. CHAPMAN** with WARRANTY COVENANTS:

A certain piece or parcel of land situated in the Town of Vernon, County of Tolland and State of Connecticut, and being more particularly bounded and described in SCHEDULE A attached hereto and made a part hereof.

Said premises are conveyed subject to the following:

1. Any and all provisions of any ordinance, municipal regulation, or public or private law.

2. Taxes due the Town of Vernon on the List of October 1, 2000, which taxes the Grantees herein assume and agree to pay as part consideration for this conveyance.

3. Easement in favor of Connecticut Light and Power Company, dated July 16, 1954, and recorded in Volume 98 at Page 513 of the Vernon Land Records. ✓

4. Sewer pipe line easement in favor of the Town of Vernon dated March 25, 1992, and recorded in Volume 929 at Page 267 of the Vernon Land Records. ✓

5. Certificate of Notice of Assessment and Deferral of Payment by the Town of Vernon, Water Pollution Control Authority recorded February 11, 1997 in Volume 1090 at Page 15 of the Vernon Land Records; and a Caveat regarding Deferral of Assessment in favor of the Town of Vernon, Water Pollution Control Authority dated April 18, 1997, and recorded in Volume 1097 at Page 29 of the Vernon Land Records, which the Grantee assumes and agrees to pay with respect to the above described property.

6. A Drainage Easement in favor of Quail Hollow Associates and the Town of Vernon, dated July 3, 2000, and recorded in Volume 1260 at Page 284 of the Vernon Land Records. ✓

7. A Sewer Easement from Edwin W. Gerber in favor of Quail Hollow Associates, LLC, dated April 25, 2001, and recorded in the Vernon Land Records.

F:\DOCS\Joan\Gerber, Edwin (Vernon Sale) - War Deed to Chapman.wpd

CONVEYANCE TAX RECEIVED
STATE $ 2600.00 TOWN $ 572.00
Joyce P. Mascera
TOWN CLERK OF VERNON

8. Riparian rights of others in and to the Hockanum River which flows along the Easterly boundary of said premises.

9. All easements and notes as shown on the map described in Schedule A attached hereto and made a part hereof.

Signed this 25th day of April, 2001.

Signed, sealed and delivered
in the presence of:

Edwin W. Gerber

STATE OF CONNECTICUT)
ss: Vernon April 25, 2001
COUNTY OF TOLLAND)

Personally appeared Edwin W. Gerber, signer and sealer of the foregoing instrument and acknowledged the same to be his free act and deed, before me.

Leonard Jacobs, Esq.
Commissioner of the Superior Court

Grantees' Address:

F:\DOC\Eileen\Gerber, Edwin (Vernon Sale) - War Deed to Chapman.wpd

SCHEDULE A

A certain piece or parcel of land, situated in the Town of Vernon, County of Tolland and State of Connecticut, shown as "LOT #1 2,311,770 sq. ft. 53.07 acres +/-" on a map entitled "RESUBDIVISION PLAN PREPARED FOR EDWIN W. GERBER VERNON, CONNECTICUT GARDNER & PETERSON ASSOCIATES 178 HARTFORD TURNPIKE TOLLAND, CONNECTICUT PROFESSIONAL ENGINEERS LAND SURVEYORS BY D.A.C. SCALE 1" = 100' DATE 10-13-2000 SHEET NO. 2 OF 3 MAP NO. 9521G-SUB", which map or plan is on file in the Office of the Town Clerk of Vernon, to which reference may be had. Said premises are more particularly bounded and described as follows: 4137

NORTHERLY: by land "N/F REMAINING LAND OF EDWIN W. GERBER", 2,346.24 feet;

EASTERLY: by the Hockanum River;

SOUTHERLY: by land shown on said map as Lot #1 Hockanum Crossing, Gerber Boulevard, Lot #2 Hockanum Crossing and Lot #3 Hockanum Crossing, in part by each, in all, 2,785.03 +/- feet; and

WESTERLY: By the Vernon/South Windsor Town Line, 922.49 feet.

RECEIVED-TOWN OF VERNON
Joyce P. Mascena
JOYCE P. MASCENA, TOWN CLERK
2001 APR 26 AM 9:48
RECORDED IN
VERNON LAND RECORDS

F:\DOCS\Lasen\Gerber, Edwin (Vernon Sale) - War Deed to Chapman.wpd

TOWN OF VERNON

LOW IMPACT DEVELOPMENT (LID) CHECKLIST

Applicants must complete and submit the following checklist with the application.

Date: 1-25-23 **Project:** 0 Gerber Boulevard

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided by the applicant in the space provided below. Comments will be reviewed with Town Staff at the scheduled Development Staff Meeting and documented.

Item	Description	Verified	Comments
1	An Existing Conditions Plan is provided documenting sensitive natural resources including but not limited to existing wetlands (as designated by a Certified Soils Scientist in Connecticut), streams, ponds, vernal pools, flood zones, stream channel encroachment lines, soil types and infiltration rates, wells, tree lines, property boundaries, and other items that may be requested by the Town.	TAC	
2	Utilizing the Existing Conditions Plan as a guide, development has been located to maximize preservation of contiguous natural sensitive areas.	TAC	
3	Proposed site developments for residential or two family dwellings on more than one individual parcel, all commercial, industrial, and retail developments have been guided by the applicable requirements of the Town's Low Impact Development Stormwater Quality Manual and the Connecticut Storm Water Quality Manual.	TAC	
4	Bioretention Basins or Rain Gardens have been incorporated within yards, median strips, cul-de-sacs islands, and parking lot islands.		Runoff from all impervious areas will be collected and diverted to an infiltration basin for treatment and recharge. Soils within parking + islands not good for infiltration.

Date: 1-25-23 **Project:** 0 Gerber Blvd

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided below. Comments will be reviewed with Town Staff at the scheduled development staff meeting and documented.

Item	Description	Verified	Comments
5	Dry Wells have been incorporated into the design to control roof and pavement runoff.		Roof runoff to be conveyed to the infiltration basin.
6	Permeable (Porous) Pavement has been incorporated into areas of low traffic, parking lots, residential and light commercial use driveways, walkways, bike paths, etc.		Soils in parking areas not suitable for infiltration. All runoff to be conveyed to infiltration basin.
7	Natural areas including woodlands, regulated wetland areas, naturally vegetated areas have been preserved/ and or replicated to the maximum extent practical.	TAC	
8	Post Development stormwater runoff is at or less than the predevelopment runoff.	TAC	
9	Stormwater infiltration has been provided by the use of underground storage units, devices, and/or infiltration swales/trenches.	TAC	
10	Level spreaders/vegetation have been provided at storm drainage outfalls to enhance water quality and mitigate erosion.	TAC	

Date: 1-25-23 **Project:** 0 Gerber Blvd

Conformance with the following criteria shall be initialed in the spaces provided below by a Connecticut Registered Professional Engineer, Land Surveyor, or Certified Soils Scientist as appropriate. If conditions cannot be met comments addressing each item should be provided below. Comments will be reviewed with Town Staff at the scheduled development staff meeting and documented.

Item	Description	Verified	Comments
11	On-Site retention/detention facilities have been provided to address water quality and storm water runoff.	TAC	
12	Rain Barrels, cisterns, and/or other rainwater harvesting techniques to reuse rainwater for irrigation and other non-potable uses are incorporated into the design.		Not applicable
13	An Erosion and Sedimentation Control Plan conforming to the Standards of the Connecticut Guidelines for Soil Erosion and Sediment Control is included in the design.	TAC	
14	A yearly maintenance plan of all components of best management practices associated with storm water management has been provided.	TAC	
15	Impervious area percentages for pre and post development have been provided.	TAC	
16	When conflicts exist between the Town's Low Impact Development Stormwater Quality Manual and the Connecticut Storm Water Quality Manual the State Manual shall govern.	TAC	

RUSSO
SURVEYORS • ENGINEERS

January 26, 2023

Vernon Planning & Zoning Commission
Attn. Ashley Stephens
55 West Main Street, 2nd Floor
Vernon, CT 06066

Re: Traffic Statement
0 Gerber Drive

Dear Ashley,

Cliff Chapman is proposing the construction of two 14,000 square foot buildings on his property at 0 Gerber Drive in Vernon, CT. The property consist of 51.3 acres located at the northern end of Gerber Boulevard. The proposed buildings will be accessed via a new 30' wide access drive extended from the existing cul-de-sac at the northern end of Gerber Boulevard. Gerber Boulevard is an approximate 450' long dead end Boulevard that extends north from Hockanum Boulevard to an existing cul-de-sac at the south end of the subject property. Hockanum Boulevard originates at a signalized intersection with Talcottville Road (Rte. 83) approximately 1,800 feet to the east and extends to the west past Gerber Boulevard into The Mansions at Hockanum Crossing, a 700-unit apartment complex. Although not a thru-street, within The Mansions at Hockanum Crossing there are two gated emergency access drives; one connecting to Overbrook Drive to the south, and one connecting to Kingsley Drive in South Windsor to the west.

The proposed development buildings will be a smaller version of the existing building previously constructed by Mr. Chapman at 5 Gerber Boulevard. The buildings will contain up to eight (8) tenant spaces. Future tenants are unknown at this time. However, potential future uses are anticipated to fall within the following allowable uses in the zone:

- Manufacturing, storing, printing, publishing, processing, fabricating, packaging or assembling activities wholly within the buildings;
- Research and experimental laboratories, veterinary hospitals and animal care services (excluding kennels) and medical facilities;
- Professional and general office space;
- Indoor recreation/fitness facilities, educational facilities, religious facilities, cultural, non-profit, and philanthropic activities; and
- Plumbing, heating, electrical, industrial, and general contracting establishments.

According to Section 12.1 of the Zoning Regulations, the number of parking spaces required for the potential uses listed above vary. For example, the parking required for manufacturing is based on the number of employees, while the requirement for office or institution is based on the square footage of floor area. Not knowing the exact uses, the required parking was calculated based on a conservative approach using the requirement for office of 1 parking space for each 250 square foot of floor area. This resulted in a requirement of 56 parking spaces per building, or a total of 112 parking spaces for both buildings. The proposed plan provides exactly this number of spaces.

The traffic generated by the project will ultimately depend on the final uses of the buildings. For example, if the buildings are occupied by contractor uses, the generated traffic is likely to be much less than if the buildings end up as office space. However, for the purpose of this analysis, the higher traffic generation for office use was used to estimate the generated traffic. According to the ITE Trip Generation Manual,

7th Edition, the two buildings totaling 28,000 square feet of general office space is estimated to generate approximately 308 Average Daily Trips (ADT) to and from the site. This includes an AM peak hour generation of 43 trips and a PM peak hour generation of 42 trips.

As discussed above, the proposed development will generate less than 1 vehicle trip per minute during the peak hours. Thus, it is safe to say that the proposed development is not expected to have a significant impact on the surrounding roadway network.

If there are any questions, or you require further information, please call me at (860) 623-0569.

Very truly yours,

Timothy A. Coon

Timothy A. Coon, P.E.
J.R. Russo & Associates, LLC

cc: Cliff Chapman

RUSSO
SURVEYORS • ENGINEERS

February 1, 2023

Vernon Planning & Zoning Commission
Attn. Ashley Stephens
55 West Main Street, 2nd Floor
Vernon, CT 06066

Re: Fiscal Impact Analysis
0 Gerber Drive

Dear Ashley,

In accordance with the requirements of Section 4.24.6.1 of the Vernon Zoning Regulations, I have completed a Fiscal Impact Analysis for the proposed expansion at The Park at Hockanum Crossing in Vernon. The subject property, 0 Gerber Boulevard, consist of 51.2 acres located at the northern end of Gerber Boulevard. The proposed development includes the construction of two (2) 14,000 square foot multi-tenant buildings for commercial and light industrial use. The purpose of this fiscal impact analysis is to determine the impact of the proposed development to the Town of Vernon's budget.

New income to the Town resulting from the proposed development is anticipated to be derived solely from real estate property taxes. To determine the new income from property taxes, the assessment of the to-be-built structures was estimated by comparison to the two existing developments with similar structures within The Park at Hockanum Crossing located at 5 Gerber Boulevard and 48 Hockanum Boulevard. These existing parcels are developed with similar style buildings and contain the similar commercial and light industrial uses. According to Assessor's records, the most recent 2021 assessment for these comparable properties are as follows:

Address	Assessment	Total Square Feet	Assessment per sq ft	Year Built
5 Gerber Blvd	$896,910	24,000	$37.37	2001
48 Hockanum Blvd	$2,094,330	42,000	$49.87	2004 & 2010

The proposed buildings will be of similar quality, but newer. Therefore, the higher assessment of $49.87 per square foot was selected to be used for the proposed development understanding that this rate will likely underestimate the actual assessment of the new buildings. The resulting estimated assessment for the development is then calculated as:

Assessment = 2 bldgs x 14,000 sf x $49.87 psf = $1,396,360

Based on the current mill rate of 33.39, the resulting estimated annual real estate property tax to be generated from the development is:

Estimate Real Estate Tax = $1,396,360 x 33.39 mills = $46,624

To reflect the true change in annual income, the current property taxes for the subject parcel must be subtracted out. The subject property is currently maintained as hay field and has been taxed as agricultural land under the provisions of Public Act 490 since 2012. The current assessment of the subject property is $40,870 (adjusted due to the 490 classification). The resulting real estate taxes currently paid are:

Current Real Estate Tax = $40,870 x 33.39 mills = $1,365

Thus, the total increase in estimated annual income from real estate tax for the proposed development is $46,624 - $1,365 = $45,259.

As a small commercial development, the Town's expenses resulting from the development are not expected to be significant. As a commercial development, the expense for education associated with residential development does not exist. Similarly, the expense for emergency services are expected to significantly less that those associated with a residential development. The expenses associated with refuse and recycling collection and disposal, as well as snow removal, will not be impacted by the development as these services are provided by the owner. In addition to the potential minor increase in expense for emergency services, the only other expenses potentially impacted by this development include a minor increase in the expense for general government to account for the additional businesses and a very minor increase in the expense for general road maintenance associated with the small amount of additional traffic generated by the development. It is difficult to quantify these potential expenses. However, the total annual expense attributable to the development is expected to be significantly less than the $45,259 increase in income generated by the development.

If there are any questions, or you require further information, please call me at (860) 623-0569.

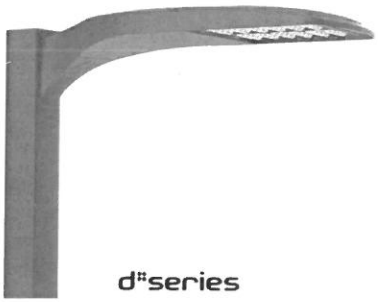
Very truly yours,

Timothy A. Coon

Timothy A. Coon, P.E.
J.R. Russo & Associates, LLC

cc: Cliff Chapman


THE PARK
AT
Hockanum Crossing
PERTECH
MEDCAIRE
ANCHORED FITNESS
5 Gerber Boulevard
BUILDING A



D-Series Size 1
LED Area Luminaire

Catalog Number

Notes

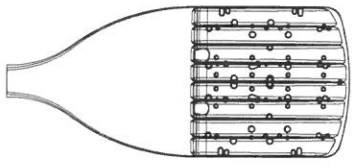
Type

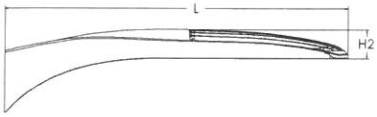
Hit the Tab key or mouse over the page to see all interactive elements

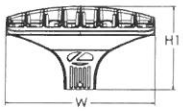
d#series

Specifications

EPA:	0.69 ft² (0.06 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)







Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature[2]	Color Rendering Index[2]	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics** P1 P6 P2 P7 P3 P8 P4 P9 P5 **Rotated optics** P10[1] P12[1] P11[1] P13[1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	 70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare[3] T4M Type IV medium T4LG Type IV low glare[3] TFTM Forward throw medium T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control[3] BLC4 Type IV backlight control[3] LCCO Left corner cutoff[3] RCCO Right corner cutoff[3]	MVOLT (120V-277V)[4] HVOLT (347V-480V)[5,6] XVOLT (277V - 480V)[7,8]	**Shipped included** SPA Square pole mounting (#8 drilling) RPA Round pole mounting (#8 drilling) SPA5 Square pole mounting #5 drilling[9] RPA5 Round pole mounting #5 drilling[9] SPA8N Square narrow pole mounting #8 drilling WBA Wall bracket[10]

Control options		Other options		Finish *(required)*	
Shipped installed		**Shipped installed**		DDBXD	Dark Bronze
NLTAIR2 PIRHN	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[11,12,20,21]	SPD20KV	20KV surge protection	DBLXD	Black
PIR	High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[13,20,21]	HS	Houseside shield (black finish standard)[22]	DNAXD	Natural Aluminum
PER	NEMA twist-lock receptacle only (controls ordered separate)[14]	L90	Left rotated optics[1]	DWHXD	White
PER5	Five-pin receptacle only (controls ordered separate)[14,21]	R90	Right rotated optics[1]	DDBTXD	Textured dark bronze
PER7	Seven-pin receptacle only (controls ordered separate)[14,21]	CCE	Coastal Construction[23]	DBLBXD	Textured black
FAO	Field adjustable output[15,21]	**Shipped separately**		DNATXD	Textured natural aluminum
BL30	Bi-level switched dimming, 30%[16,21]	EGS	External Glare Shield (reversible, field install required, matches housing finish)	DWHGXD	Textured white
BL50	Bi-level switched dimming, 50%[16,21]	BS	Bird Spikes (field install required)		
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]				
DS	Dual switching[18,19,21]				

DONAGHUE DELPHINE R
119 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

TUCKER ROBERT N & MADELINE G
49 HIGH RIDGE DR
VERNON, CT 06066

HORAN ROGER H & GAIL K
35 VISTA VIEW
VERNON, CT 06066

GIBSON MARION B
37 VISTA VIEW LN
VERNON, CT 06066

BZOWYCKYJ LISA A TRUSTEE
15454 SARATOGA DR
BROOKSVILLE, FL 34604

GALIZIA MARIE R
43 VISTA VIEW
VERNON, CT 06066

SOCCOCCIA PHILOMENA & GENOVA JOSEPH
36 VISTA VIEW
VERNON, CT 06066

MARINETTI MATTHEW CRAIG
40 VISTA VIEW
VERNON, CT 06066

COVELL JAMES A & CAROL M
66 VISTA VIEW
VERNON, CT 06066

GANGER THEODORE G &ROSALIE B TRUSTES
63 VISTA VIEW
VERNON, CT 06066

WHITTLE DONALD L & GIRARDIN LAURENE A
64 VISTA VIEW
VERNON, CT 06066

COOPER ROSALIND
45 VISTA VIEW
VERNON, CT 06066

STAIGER ALAN L (LU) & NOREEN (LU) &
46 VISTA VIEW
VERNON, CT 06066

ABBOTT S ARDIS
47 HIGH RIDGE DR
VERNON, CT 06066

CURTIS ROBERT L & KATHRYN A
55 HIGH RIDGE DR
VERNON, CT 06066

SHERIDAN PHILIP W (LU) & SANDRA D (LU) &
38 VISTA VIEW
VERNON, CT 06066

BYRNE MICHAEL J & MAUREEN E
41 VISTA VIEW
VERNON, CT 06066-2756

OUELLET ANNETTE M & CARMEL DAVID I
53 HIGH RIDGE DR
VERNON, CT 06066

ADAMS WILLIAM M & SIMMONDS DORIS ANN
60 VISTA VIEW
VERNON, CT 06066

TAVERNIER BARBARA A
44 VISTA VIEW
VERNON, CT 06066

CUBETA PAUL J JR & JUDITH C
57 HIGH RIDGE DR
VERNON, CT 06066

NAVICKAS ALBERT H & PATRICIA D
62 VISTA VIEW
VERNON, CT 06066

MCCABE GEORGE & PATRICIA
48 HIGH RIDGE DR
VERNON, CT 06066

QUAIL HOLLOW II ASSOCIATION
34 VISTA VIEW
VERNON, CT 06066

NOLET SUSAN E TRUSTEE
65 VISTA VIEW
VERNON, CT 06066

HATHAWAY CHARLES H III & ANGELA G
158 FRAZER FIR RD
SOUTH WINDSOR, CT 06074

KOZIKIS PAUL K & JULIA C
50 HIGH RIDGE DR
VERNON, CT 06066

KOWALCZYK ROBERT
52 HIGH RIDGE DR
VERNON, CT 06066

FRADIANNI GERALDINE M
61 VISTA VIEW
VERNON, CT 06066

BOTTICELLO JOSEPH C & MARY G
56 HIGH RIDGE DR
VERNON, CT 06066

KOZIOL JOHN J & SARA D
58 HIGH RIDGE DR
VERNON, CT 06066

PITRUZZELLO STEPHEN M & KATHRYN KELLEY
179 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

MICHAUD JOSEPH & GERALDINE
4 QUAIL HOLLOW CLOSE
VERNON, CT 06066

DEMARCO CLAUDICE M (LU) & CLARK GINA M
59 HIGH RIDGE DR
VERNON, CT 06066

CISLAK JEREMIAH E & AMANDA M
31 WATSON RD
VERNON, CT 06066-3905

POPILLO RICHARD J
36 QUAIL HOLLOW CLOSE
VERNON, CT 06066

REDFIELD GEORGE & AUDREY
51 HIGH RIDGE DR
VERNON, CT 06066

VERNON TOWN OF
14 PARK PL
VERNON, CT 06066

GILROY MARESA H
25 QUAIL HOLLOW CLOSE
VERNON, CT 06066

VIVIANO ANN L
54 HIGH RIDGE DR
VERNON, CT 06066

DEAN ANDREW D & CHERYL R
107 TRUMBULL LA
SOUTH WINDSOR, CT 06074

ZIM RUTH
9 QUAIL HOLLOW CLOSE
VERNON, CT 06066

CHAPMAN CLIFTON B
75 HOCKANUM BLVD
VERNON, CT 06066

OBRIEN JOHN F & SANDRA A
131 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

GILBERT RUSSELL H & LORRAINE M
10 QUAIL HOLLOW CLOSE
VERNON, CT 06066

EMMONS DAVID E & BASSETT JESSICA L
35 WATSON RD
VERNON, CT 06066

WENZEL ERIK J & CHRISTINE M
139 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

PETRAGLIA CLAUDETTE A
13 OAKVIEW PL
VERNON, CT 06066

TOWN OF VERNON
14 PARK PL
VERNON, CT 06066

HESLIN STEPHEN & JEANNE M
147 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

ROSSITTO RICHARD & BARBARA
31 QUAIL HOLLOW CLOSE
VERNON, CT 06066

OBRIEN JOHN F & SANDRA
131 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

BRIAR KNOLL NCM LLC
PO BOX 309
BRIDGEPORT, CT 06601

BUERK ALOIS JOSEPH JR &
3 QUAIL HOLLOW CLOSE
VERNON, CT 06066

GOODWIN ROBERT C & JUDITH C
159 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

FORRESTER JAMES N
30 OAKVIEW PL
VERNON, CT 06066

NEILIWOCKI CELINE L
21 OAKVIEW PL
VERNON, CT 06066

RANDHAWA HARINDER & MANINDER
171 TRUMBULL LANE
SOUTH WINDSOR, CT 06074

ELLIOTT ERNESTINE D
4 OAKVIEW PL
VERNON, CT 06066

MAGNOLI WILLIAM & LINDA
19 QUAIL HOLLOW CLOSE
VERNON, CT 06066

BREHM GEORGE J TRUSTEE
22 QUAIL HOLLOW CLOSE
VERNON, CT 06066

CAMPISE SUSAN J
35 QUAIL HOLLOW CLOSE
VERNON, CT 06066

DEBONA GERALD J
28 OAKVIEW PL
VERNON, CT 06066

FITZGERALD KENNETH W & SHARON L
32 OAKVIEW PL
VERNON, CT 06066

OGARA SANDRA S TRUSTEE
31 OAKVIEW PL
VERNON, CT 06066

SARTORI BRENDA D
27 QUAIL HOLLOW CLOSE
VERNON, CT 06066

WARD JOYCE M
3 OAKVIEW PL
VERON, CT 06066

PATERNO ROBERT J & DIANE M
11 QUAIL HOLLOW CLOSE
VERNON, CT 06066

TRICHKA WARRENA B TRUSTEE
11 OAKVIEW PL
VERNON, CT 06066

BINETTE MARCEL J & JACQUELINE A
25 OAKVIEW PL
VERNON, CT 06066

YOUNG JOHN H & AUDREY H TRUSTEES
14 OAKVIEW PL
VERNON, CT 06066

PAULL MADELYN M TRUSTEE
24 OAKVIEW PL
VERNON, CT 06066

WILLARD WILLIAM J & DEBORA M
1 OAKVIEW PL
VERNON, CT 06066

TINA GARY A & SUSAN R
7 OAKVIEW PL
VERNON, CT 06066

OBRIEN MARCIA J
17 OAKVIEW PL
VERNON, CT 06066

BROCHU FRANCIS P & NANCY E
15 OAKVIEW PL
VERNON, CT 06066

MERKER RICHARD O & INGE L
24 QUAIL HOLLOW CLOSE
VERNON, CT 06066

MILLERD GAIL S
5 OAKVIEW PL
VERNON, CT 06066

BONZANI FRANK P & BARBARA
33 OAKVIEW PL
VERNON, CT 06066

BANNON KATHLEEN M
26 QUAIL HOLLOW CLOSE
VERNON, CT 06066

GARCEAU PHILIP E & GAIL-LYNNE CO TTEES
14 QUAIL HOLLOW CLOSE
VERNON, CT 06066

RATAIC JOSEPH F & JOAN P
23 OAKVIEW PL
VERNON, CT 06066

BUTT HASSAN
12 QUAIL HOLLOW CLOSE
VERNON, CT 06066

BOOTH DONALD A & ADAH N TRUSTEES
21 QUAIL HOLLOW CLOSE
VERNON, CT 06066

WHITHAM JOHN E
23 QUAIL HOLLOW CLOSE
VERNON, CT 06066

ACCARPIO DOMINIC P SR(LU) & EVA R (LU) &
27 OAKVIEW PL
VERNON, CT 06066

MOORE GREGORY L & NICOLE T TRUSTEES
14 HUNDREDS CIR
WELLESLEY, MA 02481

SCHUMACHER JUDITH ANN AKA JUDITH G
13 QUAIL HOLLOW CLOSE
VERNON, CT 06066

LOMBARDO PAMELA B
2 OAKVIEW PL
VERNON, CT 06066

PARENCHUCK MARGARET R (LU) &
6 QUAIL HOLLOW CLOSE
VERNON, CT 06066

HELDMANN JAMES F & KAREN E TRUSTEES
41 QUAIL HOLLOW CLOSE
VERNON, CT 06066

ROSENTHAL JOAN
39 QUAIL HOLLOW CLOSE
VERNON, CT 06066

THONAKKARAPARAYIL THOMAS M & STELLA T
7 QUAIL HOLLOW CLOSE
VERNON, CT 06066

PROBULIS GERARD J & BARBARA M
1 QUAIL HOLLOW CLOSE
VERNON, CT 06066

CLEARY CORNELIUS F & LINDA A
40 QUAIL HOLLOW CLOSE
VERNON, CT 06066

SUSCA DOROTHY (LU)& SUSCA STEVEN J &
38 QUAIL HOLLOW CLOSE
VERNON, CT 06066

BENOIT JEROME C & CAROL A TRUSTEES
15 QUAIL HOLLOW CLOSE
VERNON, CT 06066

DAMON MARY A & LONGO LYNN D TRUSTEES
10 OAKVIEW PL
VERNON, CT 06066

GOZDECK THEODORE T & NANCY N
17 QUAIL HOLLOW CLOSE
VERNON, CT 06066

WEISSMAN SANDRA M
33 QUAIL HOLLOW CLOSE
VERNON, CT 06066

LESSOFF SUSAN G
8 OAKVIEW PL
VERNON, CT 06066

CORTESE MARIA
19 OAKVIEW PL
VERNON, CT 06066

BITTERMAN MICHAEL & CATHERINE
32 QUAIL HOLLOW CLOSE
VERNON, CT 06066

WHITE NELSON H JR & PATRICIA C
16 QUAIL HOLLOW CLOSE
VERNON, CT 06066

JOYSE CECILE T
2 QUAIL HOLLOW CLOSE
VERNON, CT 06066

ITALIANO NANCY R
34 QUAIL HOLLOW CLOSE
VERNON, CT 06066

LIVINGSTON SANDRA P
29 QUAIL HOLLOW CLOSE
VERNON, CT 06066

CUMMINGS ISABEL B
8 QUAIL HOLLOW CLOSE
VERNON, CT 06066

KOWALSKI JOAN M & RIVARD EVELYN M
9 OAKVIEW PL
VERNON, CT 06066

LAZINSK ERIC M & DIANE S
37 QUAIL HOLLOW CLOSE
VERNON, CT 06066

TOWN OF VERNON
14 PARK PL
VERNON, CT 06066

LEGER ROBERT J & CLARICE M
18 QUAIL HOLLOW CLOSE
VERNON, CT 06066

BEST CAROLE J TRUSTEE
12 OAKVIEW PL
VERNON, CT 06066

JTF PROPERTIES LLC
818 SULLIVAN AVE
SOUTH WINDSOR, CT 06074

NOELTE MARY E
22 OAKVIEW PL
VERNON, CT 06066

SECRETARY OF HOUSING & URBAN DEVELOPMENT
2401 NW 23RD ST STE 1D
OKLAHOMA CITY, OK 73107

CHAPMAN CLIFTON B
75 HOCKANUM BLVD
VERNON, CT 06066

ARONSON CAROL V
20 QUAIL HOLLOW CLOSE
VERNON, CT 06066

SCHAEFFER GUDRUN M
29 OAKVIEW PL
VERNON, CT 06066

KASSMAN SAUL STEVEN & BROWN CHERYL L
81 MEADOWVIEW LN
VERNON, CT 06066

POULIN JOSEPH & PAULA
85 MEADOWVIEW LN
VERNON, CT 06066

ST PIERRE WILHELMINA Y
89 MEADOWVIEW LN
VERNON, CT 06066

HOLLAND MALCOLM R & MARY G
71 MEADOWVIEW LN
VERNON, CT 06066

LAZZARIS THOMAS M & BETTE-ANN
78 MEADOWVIEW LN
VERNON, CT 06066

GANNON JOHN V & MARY S TRUSTEES
83 MEADOWVIEW LN
VERNON, CT 06066

OKEEFE ANNETTE L
68 MEADOWVIEW LN
VERNON, CT 06066

MAGNAN EDMOND & CLAUDIA
77 MEADOWVIEW LN
VERNON, CT 06066

GARVEY JEAN A
87 MEADOWVIEW DR
VERNON, CT 06066

BARDES CHARLES R & URSULA W
79 MEADOWVIEW LN
VERNON, CT 06066

ROBINSON NELSON S & ELSA G
93 MEADOWVIEW LN
VERNON, CT 06066

DESNOYERS RICHARD & CONCETTA
97 MEADOWVIEW LN
VERNON, CT 06066

BOISVERT DANIEL M & NANCY J
107 PHEASANT RUN
VERNON, CT 06066

FORNABI ANNE R (LU) & FORNABI PAULA A
80 MEADOWVIEW LN
VERNON, CT 06066

WAUDBY MARGARET E
91 MEADOWVIEW LN
VERNON, CT 06066

DOTY GAIL P
101 PHEASANT RUN
VERNON, CT 06066

SULLIVAN THOMAS A & CLAIRE L
73 MEADOWVIEW LN
VERNON, CT 06066

BERNIER ROLAND & CYNTHIA J
74 MEADOWVIEW LN
VERNON, CT 06066-2759

MORALES JULIO JR
105 PHEASANT RUN
VERNON, CT 06066

FONTAINE LOUISE L
95 MEADOWVIEW LN
VERNON, CT 06066

CARPENTER RALPH & JOANNE
69 MEADOWVIEW LN
VERNON, CT 06066

ARTILES ANTONIO F & MARTHA
103 PHEASANT RUN
VERNON, CT 06066

HEBERT RUSSELL T & JEANNE B
72 MEADOWVIEW LN
VERNON, CT 06066

STEINBERG HOWARD L & PAMELA R
75 MEADOWVIEW LN
VERNON, CT 06066

CARAMANELLO MAURA B TRUSTEE
99 PHEASANT RUN
VERNON, CT 06066

COHEN STANLEY H
67 MEADOWVIEW LN
VERNON, CT 06066

ENGELSON DAVID A TRUSTEE
82 MEADOWVIEW LN
VERNON, CT 06066

DOYLE LORRAINE MILLER
117 PHEASANT RUN
VERNON, CT 06066

NAPHEN JEFFREY T & MARY A
70 MEADOWVIEW LN
VERNON, CT 06066

BOUDREAU JOAN
76 MEADOWVIEW LN
VERNON, CT 06066

MORAN TERRANCE E & PAULINE L
113 PHEASANT RUN
VERNON, CT 06066

TOBACK MARTIN J & CHARLOTTE
111 PHEASANT RUN
VERNON, CT 06066

LYON ARTHUR G III & MARY ELLEN
109 PHEASANT RUN
VERNON, CT 06066

CLAYTON CAROL M
115 PHEASANT RUN
VERNON, CT 06066

PARK AT HOCKANUM CROSSING L.L.C.
75 HOCKANUM BLVD OFC
VERNON, CT 06066-4093

MANSIONS LLC THE
75 HOCKANUM BLVD
VERNON, CT 06066

VERNON SELF STORAGE CENTERS LLC
PO BOX 68
WILBRAHAM, MA 01095

DRAINAGE REPORT
0 Gerber Boulevard
Vernon, CT

January 24, 2023

Prepared for:

Clifton B. Chapman
75 Hockanum Boulevard
Vernon, CT 06066

Project No. 2022-059

Prepared by:

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(860) 623-0569

I. INTRODUCTION

A. Project Description

The applicant is proposing to develop the existing parcel at 0 Gerber Boulevard in Vernon. The proposed project includes the construction of two 14,000 s.f. buildings and accompanying parking lot. The project will result in an increase in impervious area of approximately 3.2 acres. Runoff from the development area will be collected and diverted to a new infiltration basin designed to provide treatment, ground water recharge, and peak flow attenuation in accordance with the Connecticut Stormwater Quality Manual.

B. Existing Conditions

The subject parcel consists of an existing 53.1-acre parcel at 0 Gerber Boulevard. The parcel is located at the end of Gerber Boulevard off of Hockanum Boulevard. The parcel is currently maintained as a hay field. The eastern property line is the Hockanum River. The parcel slopes south and east towards the river. Runoff from the Quail Hollow Condominium complex to the northwest and the northwestern portion of the field flows southerly into a swale located along the southern property line. This swale discharges to an existing stormwater management basin in the southeastern portion of the parcel within a "Water Quality Treatment Easement" in Favor of the Quail Hollow Condominiums.

Based on a review of the USDA Soil Survey of the State of Connecticut, the soil in the area of the proposed development is classified as Cheshire fine sandy loam, Narragansett silt loam, or Sudbury sandy loam (See Soils Map in Appendix 1). The USDA Soil Survey defines groups of soils into Hydrologic Soil Groups (HSG) according to their runoff-producing characteristics. Soils are assigned to four groups (A, B, C, and D Groups). In group A, are soils having a high infiltration rate when thoroughly wet and having a low runoff potential. They typically are deep, well drained, and sandy or gravelly. In group D, at the other extreme, are soils having a very slow infiltration rate and thus a high runoff potential. They have a hardpan or clay layer at or near the surface, have a permanent high-water table, or are shallow over nearly impervious bedrock or other nearly impervious material. The HSG classification of the soils on site are HSG B.

On December 6, 2022, four test pits were performed at the site to characterize existing soil conditions for stormwater management. Test pits #1 and #2 were excavated in the proposed landscaped islands on either side of the main access drive in the development area. Soils encountered in these test pits consisted of fill and topsoil over a thin layer of light brown fine sandy loam, overlying a compact and firm loamy sand and gravel. These pits were excavated to depths of 84 and 72 inches, respectively. No evidence of the seasonal high water table was encountered in these pits. Test pits #3 and #4 were excavated to depths of 124 inches in the location of the proposed infiltration basin to the east of the development area. Soils encountered in these test pits consisted of 14-16 inches of topsoil loose sand. Mottling indicative of the seasonal high water table was encountered in these pits at depths

of 120 and 108, inches respectively. These depths correspond to approximate elevation 203.0. Test pit logs are provided on the Site Plans.

C. Proposed Stormwater Management System

As mentioned above, runoff from the Quail Hollow development to the north flow across the northwestern portion of the subject site into the swale along the southern property line which conveys it to an existing stormwater management basin to the east. In order to avoid overburdening the existing basin, the proposed development will be graded such that runoff from the north and west will be collected in swales and diverted around the development area. As a result, the runoff characteristics of the areas outside of the development area envelope will remain unchanged and are not included in the drainage study.

The development area will be equipped with a series of catch basins and piping to collect and isolate the runoff from the development area. The drainage system will discharge directly to a new infiltration basin located to the east of the development area in the sandy soils encountered in test pits #3 and #4. The infiltration basin will be equipped with a forebay separated from the main part of the basin by a stone filter berm. The bottom of the basin will be set at elevation 206.0. A stone trench will be installed within the basin bottom to facilitate infiltration in the event the ground is frozen. The basin will be equipped with an 18" primary outlet pipe to the east set at an elevation of 208.1. The basin will also be equipped with an emergency 10-foot wide earthen spillway at elevation 211.2. The proposed storage capacities of the infiltration basin below the primary outlet was sized to exceed the water quality volume. Likewise, the surface basin forebay was sized to contain a minimum of 25% of the WQV per the requirements for infiltration basins. WQV calculations are provided in Appendix 5.

II. STORMWATER RUNOFF ANALYSIS

A. Methodology

Peak runoff flow rates were determined for pre- and post-development conditions using Applied Microcomputer System's HydroCAD™ Stormwater Modeling System. This computer software employs the SCS Technical Release 55 and 20 (TR-55 & TR-20) methodology. The potential stormwater impacts downstream were evaluated for the 2-yr, 10-yr, 25-yr, and 100-yr; 24-hour storm events. The rainfall for these storm events was taken from NOAA Atlas 14 provided in Appendix 2.

Based on the present drainage patterns, runoff from the proposed development area sheet flows east through the field. The proposed infiltration basin will be in the middle of the field on the east side of the development. As a result, the edge of disturbance on the east side of the proposed basin was selected as the design point.

B. Pre-Development Hydrology

The pre-development area of the site was modeled as a single subcatchment as shown on the pre-development drainage area map in Appendix 3. Subcatchment 1S includes the development site that sheet flows east through the field. The pre-development runoff characteristics of the contributing area are provided on the HydroCAD data sheets in Appendix 4. The pre-development discharge rates from the site during the design storms are summarized in Table 1.

C. Post-Development Hydrology

The project will result in the addition of approximately 3.2 acres of impervious area, including two 14,000 s.f. buildings and accompanying parking lot. In order to mitigate the increase in runoff resulting from the increase in impervious area, a drainage system will be installed within the parking lot to collect and convey runoff to a stormwater infiltration basin. Based on the loose, sandy soils encountered in the test pits within the area of the proposed basin, a Rawls Rate of 2.41 inches/hour for loamy sand was used as the infiltration rate for the design of the infiltration basin.

The post development site is divided into 13 subcatchments as shown on the post-development drainage area map in Appendix 3. Subcatchments S1-S10 include the proposed parking lot and lawn that will be collected by the ten new catch basins. Subcatchment S11 includes the area of the field that will sheet flow directly into the new stormwater management basin. Subcatchments S12 and S13 include the buildings' roof runoff that will be collected and piped into the drainage system. The post development subcatchment characteristics are summarized in the attached HydroCAD data sheets in Appendix 4.

The post development drainage area map is provided in Appendix 3. The post development runoff characteristics of the subcatchments are provided on the HydroCAD data sheets in Appendix 4. As shown in Table 1, the post-development peak rates of runoff from the site to the design point is less than the pre-development rates for each of the design storms.

TABLE 1 – COMPARISON OF PRE- & POST-DEVELOPMENT DISCHARGE RATES (CFS) TO DESIGN POINT

	2-year	10-year	25-year	100-year
Pre-Development	1.1	6.3	10.7	18.6
Post Development	0.1	5.2	8.5	11.5

D. Pipe Sizing

The piping proposed at the site consists of smooth bore corrugated high density polyethylene pipe with smooth interior walls (CPEP-S). The roughness coefficient used for

this pipe type is 0.012. The analysis provided in Appendix 4 indicates headwater elevation in the structure at each pipe inlet for the design storms and compares it to the flood elevation, which corresponds to the top of frame of the structure. The calculations indicate that all proposed pipes will have sufficient capacity to convey the 25-year storm event without surcharging out of the top of the structures.

E. Outlet Protection

Outfall protection for the pipe discharge into and out of the infiltration basin will consists of Type A riprap aprons.

F. Summary of Results

The proposed design and analysis indicates that the proposed development will not result in negative impacts downstream.

Appendix 1:
SOILS INFORMATION

Custom Soil Resource Report
Soil Map

Map Scale: 1:2,870 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 22, Sep 12, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 24, 2019—Oct 24, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6	Wilbraham and Menlo soils, 0 to 8 percent slopes, extremely stony	0.3	1.4%
23A	Sudbury sandy loam, 0 to 5 percent slopes	1.0	4.9%
33B	Hartford sandy loam, 3 to 8 percent slopes	0.5	2.5%
37C	Manchester gravelly sandy loam, 3 to 15 percent slopes	0.4	1.8%
63B	Cheshire fine sandy loam, 3 to 8 percent slopes	4.0	19.0%
64B	Cheshire fine sandy loam, 3 to 8 percent slopes, very stony	5.9	28.4%
64C	Cheshire fine sandy loam, 8 to 15 percent slopes, very stony	1.4	6.8%
66C	Narragansett silt loam, 8 to 15 percent slopes	3.4	16.4%
109	Fluvaquents-Udifluvents complex, frequently flooded	0.1	0.5%
305	Udorthents-Pits complex, gravelly	3.8	18.2%
Totals for Area of Interest		**20.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a

Hydric soil rating: No

23A—Sudbury sandy loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 9lkv
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Sudbury and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sudbury

Setting

Landform: Terraces, outwash plains
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy and gravelly glaciofluvial deposits derived from granite and/or schist and/or gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 5 inches: sandy loam
Bw1 - 5 to 17 inches: gravelly sandy loam
Bw2 - 17 to 25 inches: sandy loam
2C - 25 to 60 inches: stratified gravel to sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Ecological site: F144AY027MA - Moist Sandy Outwash

Hydric soil rating: No

Minor Components

Merrimac

Percent of map unit: 5 percent
Landform: Terraces, outwash plains, kames
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ninigret

Percent of map unit: 5 percent
Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Agawam

Percent of map unit: 5 percent
Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Tisbury

Percent of map unit: 3 percent
Landform: Terraces, outwash plains
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Walpole

Percent of map unit: 2 percent
Landform: Drainageways on terraces, depressions on terraces
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

33B—Hartford sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9lmw
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hartford and similar soils: 80 percent

Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hartford

Setting

Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits derived from sandstone and/or basalt

Typical profile

Ap - 0 to 8 inches: sandy loam
Bw1 - 8 to 20 inches: sandy loam
Bw2 - 20 to 26 inches: loamy sand
2C - 26 to 65 inches: stratified very gravelly coarse sand to loamy fine sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Ecological site: F145XY008MA - Dry Outwash
Hydric soil rating: No

Minor Components

Manchester

Percent of map unit: 5 percent
Landform: Terraces, outwash plains, kames, eskers
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Branford

Percent of map unit: 5 percent
Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Penwood

Percent of map unit: 5 percent
Landform: Terraces, outwash plains
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Ellington

Percent of map unit: 5 percent
Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

37C—Manchester gravelly sandy loam, 3 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9ln6
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Manchester and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Manchester

Setting

Landform: Terraces, outwash plains, kames, eskers
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and gravelly glaciofluvial deposits derived from sandstone and shale and/or basalt

Typical profile

Ap - 0 to 9 inches: gravelly sandy loam
Bw - 9 to 18 inches: gravelly loamy sand
C - 18 to 65 inches: stratified extremely gravelly coarse sand to very gravelly loamy sand

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F145XY008MA - Dry Outwash
Hydric soil rating: No

Minor Components

Hartford

Percent of map unit: 5 percent
Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Penwood

Percent of map unit: 5 percent
Landform: Terraces, outwash plains
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Branford

Percent of map unit: 3 percent
Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Ellington

Percent of map unit: 3 percent
Landform: Terraces, outwash plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Unnamed, gravelly loamy sand surface

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, nongravelly surface

Percent of map unit: 2 percent
Hydric soil rating: No

63B—Cheshire fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9lpw
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches

Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Cheshire and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cheshire

Setting

Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy melt-out till derived from basalt and/or sandstone and shale

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 16 inches: fine sandy loam
Bw2 - 16 to 26 inches: fine sandy loam
C - 26 to 65 inches: gravelly sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F145XY013CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Wilbraham

Percent of map unit: 5 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Yalesville

Percent of map unit: 3 percent
Landform: Ridges, hills
Down-slope shape: Convex
Across-slope shape: Linear

Hydric soil rating: No

Wethersfield

Percent of map unit: 3 percent
Landform: Hills, drumlins
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Watchaug

Percent of map unit: 3 percent
Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Menlo

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Unnamed, brown subsoil

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, less sloping

Percent of map unit: 2 percent
Hydric soil rating: No

64B—Cheshire fine sandy loam, 3 to 8 percent slopes, very stony

Map Unit Setting

National map unit symbol: 9lpz
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Cheshire and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cheshire

Setting

Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Linear

Parent material: Coarse-loamy melt-out till derived from basalt and/or sandstone and shale

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 16 inches: fine sandy loam
Bw2 - 16 to 26 inches: fine sandy loam
C - 26 to 65 inches: gravelly sandy loam

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F145XY013CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Wilbraham

Percent of map unit: 5 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Yalesville

Percent of map unit: 5 percent
Landform: Ridges, hills
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Wethersfield

Percent of map unit: 5 percent
Landform: Hills, drumlins
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Watchaug

Percent of map unit: 3 percent
Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Menlo

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

64C—Cheshire fine sandy loam, 8 to 15 percent slopes, very stony

Map Unit Setting

National map unit symbol: 9lq0
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 140 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Cheshire and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cheshire

Setting

Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy melt-out till derived from basalt and/or sandstone and shale

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 16 inches: fine sandy loam
Bw2 - 16 to 26 inches: fine sandy loam
C - 26 to 65 inches: gravelly sandy loam

Properties and qualities

Slope: 8 to 15 percent
Surface area covered with cobbles, stones or boulders: 1.6 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: B
Ecological site: F145XY013CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Wethersfield

Percent of map unit: 5 percent
Landform: Hills, drumlins
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Wilbraham

Percent of map unit: 5 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Yalesville

Percent of map unit: 5 percent
Landform: Ridges, hills
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Watchaug

Percent of map unit: 3 percent
Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Menlo

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

66C—Narragansett silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9lq4
Elevation: 0 to 1,200 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F

Frost-free period: 140 to 185 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Narragansett and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Narragansett

Setting

Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Coarse-loamy eolian deposits over sandy and gravelly melt-out till derived from gneiss and/or schist and/or sandstone and shale

Typical profile

Ap - 0 to 6 inches: silt loam
Bw1 - 6 to 15 inches: silt loam
Bw2 - 15 to 24 inches: silt loam
Bw3 - 24 to 28 inches: gravelly silt loam
2C - 28 to 60 inches: very gravelly loamy coarse sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Broadbrook

Percent of map unit: 5 percent
Landform: Till plains, hills, drumlins
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Canton

Percent of map unit: 5 percent
Landform: Hills
Down-slope shape: Linear
Across-slope shape: Convex

Hydric soil rating: No

Wapping

Percent of map unit: 3 percent
Landform: Till plains, hills
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Charlton

Percent of map unit: 3 percent
Landform: Hills
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Leicester

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Sutton

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

109—Fluvaquents-Udifluvents complex, frequently flooded

Map Unit Setting

National map unit symbol: 9ljw
Elevation: 0 to 2,000 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 120 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents, frequently flooded, and similar soils: 50 percent
Udifluvents, frequently flooded, and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents, Frequently Flooded

Setting

Landform: Flood plains
Down-slope shape: Concave

Across-slope shape: Concave
Parent material: Alluvium

Typical profile

A - 0 to 4 inches: silt loam
Cg1 - 4 to 14 inches: fine sand
Cg2 - 14 to 21 inches: very fine sand
Ab1 - 21 to 38 inches: silt loam
Ab2 - 38 to 45 inches: fine sandy loam
C'g3 - 45 to 55 inches: sand
A'b3 - 55 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Description of Udifluvents, Frequently Flooded

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 2 inches: fine sandy loam
C - 2 to 4 inches: loamy fine sand
Ap - 4 to 12 inches: fine sandy loam
AC - 12 to 18 inches: fine sandy loam
C1 - 18 to 35 inches: loamy sand
C2 - 35 to 38 inches: very gravelly loamy sand
C3 - 38 to 60 inches: very gravelly coarse sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (0.57 to 35.99 in/hr)
Depth to water table: About 72 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Riverwash

Percent of map unit: 5 percent
Landform: Flood plains
Hydric soil rating: Yes

Rippowam

Percent of map unit: 3 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Saco

Percent of map unit: 3 percent
Landform: Flood plains
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Occum

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Pootatuck

Percent of map unit: 2 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

305—Udorthents-Pits complex, gravelly

Map Unit Setting

National map unit symbol: 9lmf
Elevation: 0 to 2,000 feet
Mean annual precipitation: 43 to 54 inches
Mean annual air temperature: 45 to 55 degrees F
Frost-free period: 120 to 185 days

Farmland classification: Not prime farmland

Map Unit Composition

Udorthents and similar soils: 65 percent
Pits: 25 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Gravelly outwash

Typical profile

A - 0 to 5 inches: loam
C1 - 5 to 21 inches: gravelly loam
C2 - 21 to 80 inches: very gravelly sandy loam

Properties and qualities

Slope: 0 to 35 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 1.98 in/hr)
Depth to water table: About 24 to 54 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Pits

Typical profile

C - 0 to 65 inches: very gravelly sand

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: Unranked

Minor Components

Windsor

Percent of map unit: 2 percent
Landform: Terraces, outwash plains, kames
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Hinckley

Percent of map unit: 2 percent
Landform: Terraces, outwash plains, kames, eskers
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Merrimac

Percent of map unit: 2 percent
Landform: Terraces, outwash plains, kames
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Gloucester

Percent of map unit: 2 percent
Landform: Hills
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Sudbury

Percent of map unit: 1 percent
Landform: Terraces, outwash plains
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ninigret

Percent of map unit: 1 percent
Landform: Outwash plains, terraces
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: No

Appendix 2:
RAINFALL DATA

NOAA Atlas 14, Volume 10, Version 3
Location name: Vernon Rockville, Connecticut, USA*
Latitude: 41.8441°, Longitude: -72.4938°
Elevation: 214.26 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.332** (0.254-0.434)	**0.403** (0.309-0.527)	**0.520** (0.397-0.682)	**0.617** (0.468-0.812)	**0.750** (0.553-1.03)	**0.850** (0.616-1.20)	**0.955** (0.673-1.39)	**1.07** (0.719-1.60)	**1.24** (0.805-1.92)	**1.38** (0.877-2.18)
10-min	**0.471** (0.360-0.614)	**0.572** (0.437-0.747)	**0.737** (0.562-0.966)	**0.874** (0.663-1.15)	**1.06** (0.783-1.46)	**1.20** (0.872-1.70)	**1.35** (0.954-1.97)	**1.52** (1.02-2.27)	**1.76** (1.14-2.72)	**1.96** (1.24-3.08)
15-min	**0.554** (0.424-0.723)	**0.672** (0.514-0.879)	**0.866** (0.660-1.13)	**1.03** (0.779-1.35)	**1.25** (0.921-1.72)	**1.42** (1.02-1.99)	**1.59** (1.12-2.32)	**1.79** (1.20-2.66)	**2.07** (1.34-3.20)	**2.31** (1.46-3.63)
30-min	**0.748** (0.573-0.976)	**0.909** (0.696-1.19)	**1.17** (0.894-1.54)	**1.39** (1.06-1.84)	**1.69** (1.25-2.33)	**1.92** (1.39-2.70)	**2.16** (1.52-3.15)	**2.43** (1.63-3.62)	**2.82** (1.82-4.34)	**3.13** (1.98-4.93)
60-min	**0.942** (0.721-1.23)	**1.15** (0.877-1.50)	**1.48** (1.13-1.94)	**1.76** (1.33-2.32)	**2.14** (1.58-2.95)	**2.43** (1.76-3.41)	**2.73** (1.92-3.98)	**3.07** (2.05-4.57)	**3.56** (2.30-5.48)	**3.96** (2.51-6.22)
2-hr	**1.21** (0.933-1.58)	**1.47** (1.13-1.91)	**1.88** (1.44-2.46)	**2.23** (1.70-2.92)	**2.70** (2.01-3.72)	**3.06** (2.23-4.30)	**3.44** (2.45-5.03)	**3.89** (2.61-5.76)	**4.57** (2.96-7.01)	**5.16** (3.27-8.05)
3-hr	**1.40** (1.08-1.81)	**1.69** (1.30-2.19)	**2.16** (1.66-2.82)	**2.56** (1.96-3.35)	**3.10** (2.31-4.26)	**3.50** (2.57-4.92)	**3.94** (2.82-5.77)	**4.47** (3.01-6.61)	**5.30** (3.44-8.09)	**6.00** (3.82-9.34)
6-hr	**1.76** (1.36-2.27)	**2.13** (1.65-2.75)	**2.74** (2.12-3.55)	**3.25** (2.49-4.23)	**3.94** (2.95-5.39)	**4.46** (3.28-6.24)	**5.02** (3.62-7.33)	**5.72** (3.86-8.40)	**6.81** (4.44-10.3)	**7.76** (4.95-12.0)
12-hr	**2.17** (1.69-2.78)	**2.65** (2.06-3.40)	**3.44** (2.66-4.43)	**4.09** (3.16-5.30)	**4.99** (3.75-6.79)	**5.65** (4.18-7.88)	**6.38** (4.62-9.27)	**7.29** (4.94-10.6)	**8.70** (5.69-13.1)	**9.94** (6.36-15.3)
24-hr	**2.55** (1.99-3.25)	**3.15** (2.46-4.03)	**4.14** (3.23-5.32)	**4.97** (3.85-6.40)	**6.10** (4.61-8.27)	**6.93** (5.16-9.62)	**7.85** (5.72-11.4)	**9.01** (6.12-13.1)	**10.8** (7.11-16.3)	**12.5** (7.99-19.0)
2-day	**2.87** (2.26-3.65)	**3.60** (2.83-4.58)	**4.80** (3.75-6.12)	**5.79** (4.50-7.42)	**7.15** (5.44-9.67)	**8.14** (6.10-11.3)	**9.25** (6.81-13.4)	**10.7** (7.29-15.5)	**13.1** (8.58-19.5)	**15.1** (9.75-23.0)
3-day	**3.12** (2.46-3.96)	**3.92** (3.09-4.98)	**5.23** (4.11-6.66)	**6.32** (4.93-8.08)	**7.81** (5.96-10.5)	**8.90** (6.68-12.3)	**10.1** (7.47-14.7)	**11.7** (8.00-16.9)	**14.3** (9.43-21.3)	**16.7** (10.7-25.2)
4-day	**3.35** (2.65-4.24)	**4.20** (3.32-5.32)	**5.60** (4.40-7.11)	**6.75** (5.28-8.62)	**8.34** (6.37-11.2)	**9.50** (7.15-13.1)	**10.8** (7.99-15.6)	**12.5** (8.54-17.9)	**15.3** (10.1-22.6)	**17.7** (11.5-26.7)
7-day	**3.99** (3.16-5.02)	**4.94** (3.92-6.24)	**6.51** (5.14-8.23)	**7.81** (6.13-9.93)	**9.59** (7.35-12.8)	**10.9** (8.22-14.9)	**12.3** (9.14-17.7)	**14.2** (9.76-20.3)	**17.3** (11.4-25.4)	**20.0** (12.9-29.9)
10-day	**4.62** (3.67-5.81)	**5.64** (4.48-7.09)	**7.30** (5.77-9.21)	**8.67** (6.82-11.0)	**10.6** (8.10-14.1)	**12.0** (9.02-16.3)	**13.5** (9.97-19.2)	**15.4** (10.6-21.9)	**18.5** (12.3-27.2)	**21.2** (13.8-31.7)
20-day	**6.64** (5.30-8.31)	**7.72** (6.16-9.67)	**9.49** (7.54-11.9)	**11.0** (8.66-13.8)	**13.0** (9.96-17.1)	**14.5** (10.9-19.4)	**16.1** (11.8-22.4)	**18.0** (12.4-25.4)	**20.8** (13.8-30.2)	**23.1** (15.0-34.3)
30-day	**8.36** (6.70-10.4)	**9.47** (7.57-11.8)	**11.3** (8.99-14.1)	**12.8** (10.1-16.1)	**14.8** (11.4-19.4)	**16.4** (12.3-21.8)	**18.0** (13.1-24.7)	**19.8** (13.7-27.8)	**22.3** (14.9-32.3)	**24.3** (15.8-35.9)
45-day	**10.5** (8.44-13.1)	**11.7** (9.35-14.5)	**13.5** (10.8-16.9)	**15.1** (12.0-18.9)	**17.2** (13.2-22.2)	**18.8** (14.1-24.8)	**20.5** (14.8-27.7)	**22.1** (15.4-30.8)	**24.2** (16.2-34.9)	**25.8** (16.8-37.9)
60-day	**12.3** (9.92-15.3)	**13.5** (10.8-16.8)	**15.4** (12.3-19.2)	**17.0** (13.5-21.3)	**19.2** (14.7-24.7)	**20.9** (15.7-27.3)	**22.5** (16.3-30.2)	**24.1** (16.8-33.5)	**25.9** (17.4-37.3)	**27.2** (17.8-39.9)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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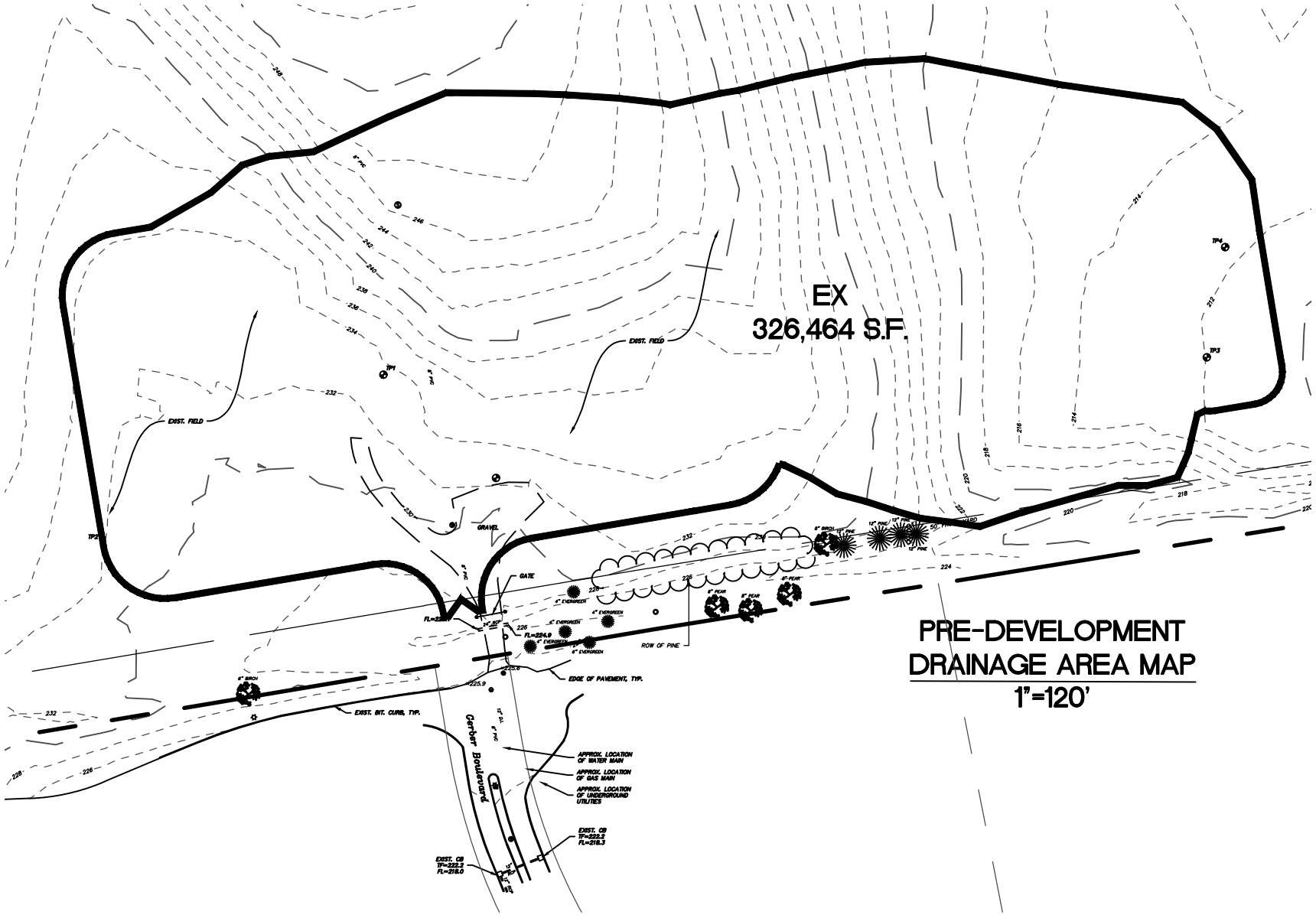
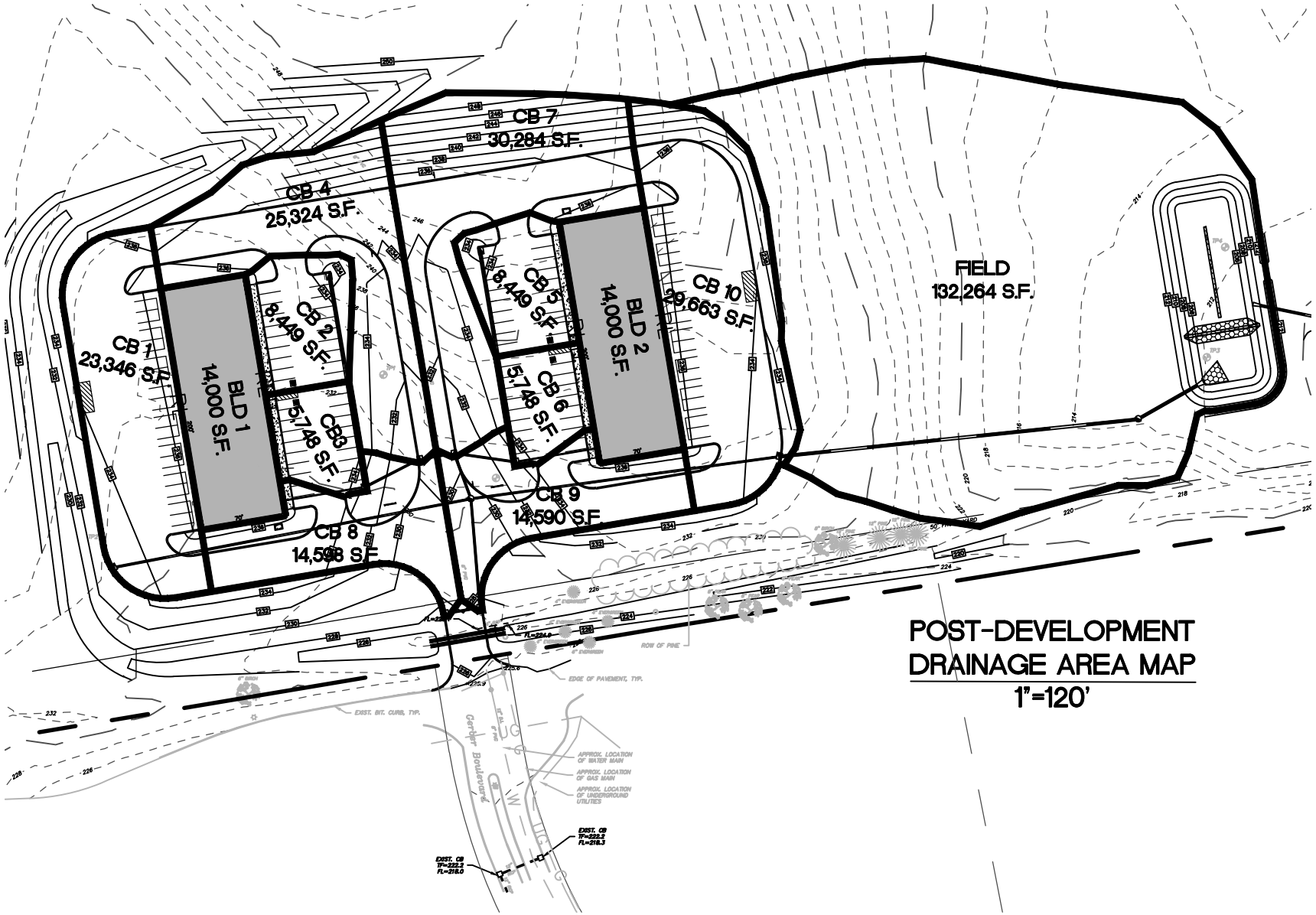
PF graphical

Appendix 3:
DRAINAGE AREA MAPS



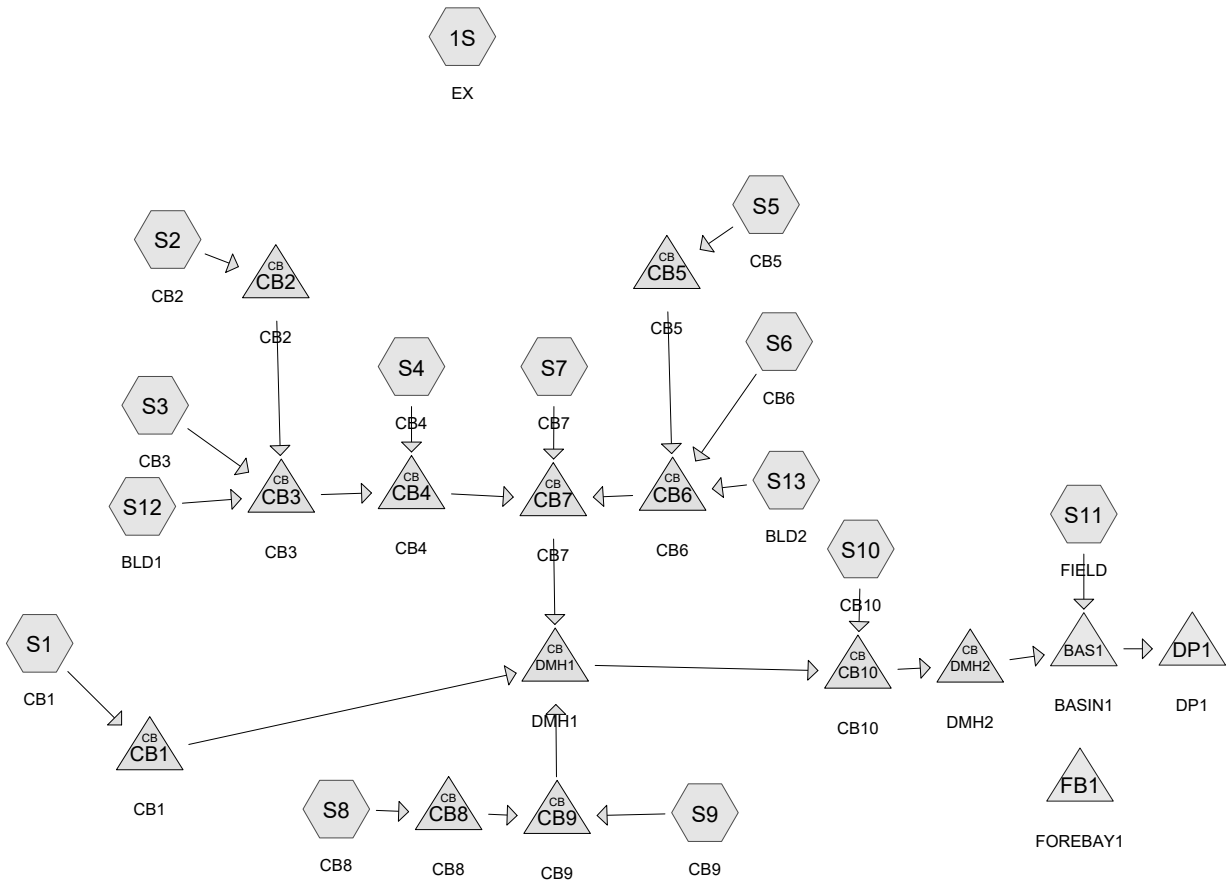
PRE-DEVELOPMENT
DRAINAGE AREA MAP
1"=120'



POST-DEVELOPMENT DRAINAGE AREA MAP

1"=120'

Appendix 4:
HYDROCAD ANALYSIS



Subcat Reach Pond Link

Routing Diagram for 2022-059 Chapman - Gerber Dr REV2
Prepared by J.R. Russo & Associates LLC, Printed 1/24/2023

Summary for Subcatchment 1S: EX

Runoff = 10.71 cfs @ 12.25 hrs, Volume= 1.136 af, Depth= 1.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
326,464	58	Meadow, non-grazed, HSG B
326,464		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	100	0.0329	0.14		**Sheet Flow, GR** Grass: Dense n= 0.240 P2= 3.20"
4.9	480	0.0541	1.63		**Shallow Concentrated Flow, GR** Short Grass Pasture Kv= 7.0 fps
16.6	580	Total			

Summary for Subcatchment S1: CB1

Runoff = 3.30 cfs @ 12.07 hrs, Volume= 0.257 af, Depth= 5.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
937	61	>75% Grass cover, Good, HSG B
22,409	98	Paved parking, HSG B
23,346	97	Weighted Average
937		4.01% Pervious Area
22,409		95.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S10: CB10

Runoff = 3.83 cfs @ 12.07 hrs, Volume= 0.274 af, Depth= 4.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
7,254	61	>75% Grass cover, Good, HSG B
22,409	98	Paved parking, HSG B
29,663	89	Weighted Average
7,254		24.45% Pervious Area
22,409		75.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S11: FIELD

Runoff = 6.26 cfs @ 12.14 hrs, Volume= 0.524 af, Depth= 2.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
132,264	61	>75% Grass cover, Good, HSG B
132,264		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	100	0.0430	0.23		**Sheet Flow, GR** Grass: Short n= 0.150 P2= 3.20"
2.2	235	0.0660	1.80		**Shallow Concentrated Flow, GR** Short Grass Pasture Kv= 7.0 fps
9.4	335	Total			

Summary for Subcatchment S12: BLD1

Runoff = 1.99 cfs @ 12.07 hrs, Volume= 0.157 af, Depth> 5.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
14,000	98	Roofs, HSG B
14,000		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S13: BLD2

Runoff = 1.99 cfs @ 12.07 hrs, Volume= 0.157 af, Depth> 5.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
14,000	98	Roofs, HSG B
14,000		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S2: CB2

Runoff = 1.13 cfs @ 12.07 hrs, Volume= 0.082 af, Depth= 5.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
1,652	61	>75% Grass cover, Good, HSG B
6,797	98	Paved parking, HSG B
8,449	91	Weighted Average
1,652		19.55% Pervious Area
6,797		80.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S3: CB3

Runoff = 0.82 cfs @ 12.07 hrs, Volume= 0.064 af, Depth> 5.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
0	61	>75% Grass cover, Good, HSG B
5,748	98	Paved parking, HSG B
5,748	98	Weighted Average
5,748		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S4: CB4

Runoff = 2.45 cfs @ 12.07 hrs, Volume= 0.168 af, Depth= 3.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
15,064	61	>75% Grass cover, Good, HSG B
10,260	98	Paved parking, HSG B
25,324	76	Weighted Average
15,064		59.49% Pervious Area
10,260		40.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S5: CB5

Runoff = 1.13 cfs @ 12.07 hrs, Volume= 0.082 af, Depth= 5.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
1,652	61	>75% Grass cover, Good, HSG B
6,797	98	Paved parking, HSG B
8,449	91	Weighted Average
1,652		19.55% Pervious Area
6,797		80.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S6: CB6

Runoff = 0.82 cfs @ 12.07 hrs, Volume= 0.064 af, Depth> 5.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
0	61	>75% Grass cover, Good, HSG B
5,748	98	Paved parking, HSG B
5,748	98	Weighted Average
5,748		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S7: CB7

Runoff = 2.76 cfs @ 12.08 hrs, Volume= 0.189 af, Depth= 3.27"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
20,024	61	>75% Grass cover, Good, HSG B
10,260	98	Paved parking, HSG B
30,284	74	Weighted Average
20,024		66.12% Pervious Area
10,260		33.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S8: CB8

Runoff = 1.82 cfs @ 12.07 hrs, Volume= 0.129 af, Depth= 4.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
4,190	61	>75% Grass cover, Good, HSG B
10,408	98	Paved parking, HSG B
14,598	87	Weighted Average
4,190		28.70% Pervious Area
10,408		71.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Subcatchment S9: CB9

Runoff = 1.82 cfs @ 12.07 hrs, Volume= 0.129 af, Depth= 4.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-year Rainfall=6.10"

Area (sf)	CN	Description
4,219	61	>75% Grass cover, Good, HSG B
10,371	98	Paved parking, HSG B
14,590	87	Weighted Average
4,219		28.92% Pervious Area
10,371		71.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Summary for Pond BAS1: BASIN1

Inflow Area = 7.495 ac, 42.64% Impervious, Inflow Depth = 3.64" for 25-year event
Inflow = 29.60 cfs @ 12.12 hrs, Volume= 2.276 af
Outflow = 9.19 cfs @ 12.46 hrs, Volume= 2.324 af, Atten= 69%, Lag= 20.7 min
Discarded = 0.65 cfs @ 12.46 hrs, Volume= 1.152 af
Primary = 8.54 cfs @ 12.46 hrs, Volume= 1.172 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 210.00' @ 12.46 hrs Surf.Area= 11,583 sf Storage= 36,093 cf
Flood Elev= 212.50' Surf.Area= 15,172 sf Storage= 69,509 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 186.0 min (986.1 - 800.1)

Volume	Invert	Avail.Storage	Storage Description
#1	206.00'	69,509 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.00	6,579	0	0
208.00	8,968	15,547	15,547
210.00	11,584	20,552	36,099
212.00	14,426	26,010	62,109
212.50	15,172	7,400	69,509

Device	Routing	Invert	Outlet Devices
#1	Discarded	206.00'	**2.410 in/hr Exfiltration over Surface area**
#2	Primary	208.10'	**18.0" Round Culvert** L= 206.0' Ke= 0.500 Inlet / Outlet Invert= 208.10' / 207.00' S= 0.0053 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf
#3	Primary	211.20'	**10.0' long x 10.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64

Discarded OutFlow Max=0.65 cfs @ 12.46 hrs HW=210.00' (Free Discharge)
└**1=Exfiltration** (Exfiltration Controls 0.65 cfs)

Primary OutFlow Max=8.54 cfs @ 12.46 hrs HW=210.00' TW=0.00' (Dynamic Tailwater)
└**2=Culvert** (Barrel Controls 8.54 cfs @ 4.93 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Pond CB1: CB1

Inflow Area = 0.536 ac, 95.99% Impervious, Inflow Depth = 5.74" for 25-year event
Inflow = 3.30 cfs @ 12.07 hrs, Volume= 0.257 af
Outflow = 3.30 cfs @ 12.08 hrs, Volume= 0.257 af, Atten= 0%, Lag= 0.6 min
Primary = 3.30 cfs @ 12.08 hrs, Volume= 0.257 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 230.05' @ 12.08 hrs
Flood Elev= 232.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	229.10'	**15.0" Round Culvert** L= 293.0' Ke= 0.500 Inlet / Outlet Invert= 229.10' / 226.10' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=3.30 cfs @ 12.08 hrs HW=230.05' TW=226.60' (Dynamic Tailwater)
1=Culvert (Inlet Controls 3.30 cfs @ 3.31 fps)

Summary for Pond CB10: CB10

Inflow Area = 4.458 ac, 71.68% Impervious, Inflow Depth = 4.72" for 25-year event
Inflow = 23.50 cfs @ 12.10 hrs, Volume= 1.752 af
Outflow = 23.50 cfs @ 12.11 hrs, Volume= 1.752 af, Atten= 0%, Lag= 0.6 min
Primary = 23.50 cfs @ 12.11 hrs, Volume= 1.752 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 224.71' @ 12.11 hrs
Flood Elev= 232.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	221.30'	**24.0" Round Culvert** L= 291.0' Ke= 0.500 Inlet / Outlet Invert= 221.30' / 208.90' S= 0.0426 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=23.45 cfs @ 12.11 hrs HW=224.70' TW=211.17' (Dynamic Tailwater)
1=Culvert (Inlet Controls 23.45 cfs @ 7.47 fps)

Summary for Pond CB2: CB2

Inflow Area = 0.194 ac, 80.45% Impervious, Inflow Depth = 5.06" for 25-year event
Inflow = 1.13 cfs @ 12.07 hrs, Volume= 0.082 af
Outflow = 1.13 cfs @ 12.08 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.6 min
Primary = 1.13 cfs @ 12.08 hrs, Volume= 0.082 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 231.49' @ 12.12 hrs
Flood Elev= 233.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	230.00'	**15.0" Round Culvert** L= 171.0' Ke= 0.500

Inlet / Outlet Invert= 230.00' / 229.14' S= 0.0050 '/' Cc= 0.900
n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.00 cfs @ 12.08 hrs HW=230.92' TW=231.03' (Dynamic Tailwater)
1=Culvert (Controls 0.00 cfs)

Summary for Pond CB3: CB3

Inflow Area = 0.647 ac, 94.14% Impervious, Inflow Depth > 5.62" for 25-year event
Inflow = 3.92 cfs @ 12.07 hrs, Volume= 0.303 af
Outflow = 3.92 cfs @ 12.08 hrs, Volume= 0.303 af, Atten= 0%, Lag= 0.6 min
Primary = 3.92 cfs @ 12.08 hrs, Volume= 0.303 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 231.44' @ 12.11 hrs
Flood Elev= 233.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	229.14'	**15.0" Round Culvert** L= 47.0' Ke= 0.500 Inlet / Outlet Invert= 229.14' / 227.80' S= 0.0285 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=2.76 cfs @ 12.08 hrs HW=231.08' TW=230.86' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.76 cfs @ 2.25 fps)

Summary for Pond CB4: CB4

Inflow Area = 1.229 ac, 68.77% Impervious, Inflow Depth > 4.60" for 25-year event
Inflow = 6.36 cfs @ 12.08 hrs, Volume= 0.471 af
Outflow = 6.36 cfs @ 12.09 hrs, Volume= 0.471 af, Atten= 0%, Lag= 0.6 min
Primary = 6.36 cfs @ 12.09 hrs, Volume= 0.471 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 231.05' @ 12.10 hrs
Flood Elev= 231.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	227.55'	**18.0" Round Culvert** L= 26.0' Ke= 0.500 Inlet / Outlet Invert= 227.55' / 227.42' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=5.88 cfs @ 12.09 hrs HW=230.98' TW=230.50' (Dynamic Tailwater)
1=Culvert (Inlet Controls 5.88 cfs @ 3.33 fps)

Summary for Pond CB5: CB5

Inflow Area = 0.194 ac, 80.45% Impervious, Inflow Depth = 5.06" for 25-year event
Inflow = 1.13 cfs @ 12.07 hrs, Volume= 0.082 af
Outflow = 1.13 cfs @ 12.08 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.6 min
Primary = 1.13 cfs @ 12.08 hrs, Volume= 0.082 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 231.04' @ 12.11 hrs
Flood Elev= 233.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	230.00'	**15.0" Round Culvert** L= 171.0' Ke= 0.500 Inlet / Outlet Invert= 230.00' / 229.14' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.63 cfs @ 12.08 hrs HW=230.80' TW=230.71' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 0.63 cfs @ 1.08 fps)

Summary for Pond CB6: CB6

Inflow Area = 0.647 ac, 94.14% Impervious, Inflow Depth > 5.62" for 25-year event
Inflow = 3.92 cfs @ 12.07 hrs, Volume= 0.303 af
Outflow = 3.92 cfs @ 12.08 hrs, Volume= 0.303 af, Atten= 0%, Lag= 0.6 min
Primary = 3.92 cfs @ 12.08 hrs, Volume= 0.303 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 230.92' @ 12.10 hrs
Flood Elev= 233.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	229.14'	**15.0" Round Culvert** L= 47.0' Ke= 0.500 Inlet / Outlet Invert= 229.14' / 227.67' S= 0.0313 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=3.26 cfs @ 12.08 hrs HW=230.75' TW=230.44' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 3.26 cfs @ 2.66 fps)

Summary for Pond CB7: CB7

Inflow Area = 2.571 ac, 65.72% Impervious, Inflow Depth > 4.50" for 25-year event
Inflow = 13.02 cfs @ 12.08 hrs, Volume= 0.964 af
Outflow = 13.02 cfs @ 12.09 hrs, Volume= 0.964 af, Atten= 0%, Lag= 0.6 min
Primary = 13.02 cfs @ 12.09 hrs, Volume= 0.964 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 230.51' @ 12.09 hrs
Flood Elev= 231.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	227.42'	**18.0" Round Culvert** L= 35.0' Ke= 0.500 Inlet / Outlet Invert= 227.42' / 225.85' S= 0.0449 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=12.99 cfs @ 12.09 hrs HW=230.50' TW=227.07' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 12.99 cfs @ 7.35 fps)

Summary for Pond CB8: CB8

Inflow Area = 0.335 ac, 71.30% Impervious, Inflow Depth = 4.61" for 25-year event
Inflow = 1.82 cfs @ 12.07 hrs, Volume= 0.129 af
Outflow = 1.82 cfs @ 12.08 hrs, Volume= 0.129 af, Atten= 0%, Lag= 0.6 min
Primary = 1.82 cfs @ 12.08 hrs, Volume= 0.129 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 227.47' @ 12.13 hrs
Flood Elev= 227.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	224.10'	**15.0" Round Culvert** L= 26.0' Ke= 0.500 Inlet / Outlet Invert= 224.10' / 223.97' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.00 cfs @ 12.08 hrs HW=226.00' TW=226.40' (Dynamic Tailwater)
1=Culvert (Controls 0.00 cfs)

Summary for Pond CB9: CB9

Inflow Area = 0.670 ac, 71.19% Impervious, Inflow Depth = 4.61" for 25-year event
Inflow = 3.64 cfs @ 12.08 hrs, Volume= 0.258 af
Outflow = 3.64 cfs @ 12.09 hrs, Volume= 0.258 af, Atten= 0%, Lag= 0.6 min
Primary = 3.64 cfs @ 12.09 hrs, Volume= 0.258 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 227.40' @ 12.12 hrs
Flood Elev= 227.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	223.97'	**18.0" Round Culvert** L= 85.0' Ke= 0.500 Inlet / Outlet Invert= 223.97' / 223.54' S= 0.0051 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=0.00 cfs @ 12.09 hrs HW=226.64' TW=226.85' (Dynamic Tailwater)
1=Culvert (Controls 0.00 cfs)

Summary for Pond DMH1: DMH1

Inflow Area = 3.777 ac, 70.99% Impervious, Inflow Depth > 4.69" for 25-year event
Inflow = 19.90 cfs @ 12.09 hrs, Volume= 1.478 af
Outflow = 19.90 cfs @ 12.10 hrs, Volume= 1.478 af, Atten= 0%, Lag= 0.6 min
Primary = 19.90 cfs @ 12.10 hrs, Volume= 1.478 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 227.25' @ 12.11 hrs
Flood Elev= 229.60'

Device	Routing	Invert	Outlet Devices
#1	Primary	222.79'	**24.0" Round Culvert** L= 250.0' Ke= 0.500

Inlet / Outlet Invert= 222.79' / 221.30' S= 0.0060 '/' Cc= 0.900
n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=19.54 cfs @ 12.10 hrs HW=227.19' TW=224.69' (Dynamic Tailwater)
└**1=Culvert** (Outlet Controls 19.54 cfs @ 6.22 fps)

Summary for Pond DMH2: DMH2

Inflow Area = 4.458 ac, 71.68% Impervious, Inflow Depth = 4.72" for 25-year event
Inflow = 23.50 cfs @ 12.11 hrs, Volume= 1.752 af
Outflow = 23.50 cfs @ 12.12 hrs, Volume= 1.752 af, Atten= 0%, Lag= 0.6 min
Primary = 23.50 cfs @ 12.12 hrs, Volume= 1.752 af

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs
Peak Elev= 211.36' @ 12.13 hrs
Flood Elev= 213.70'

Device	Routing	Invert	Outlet Devices
#1	Primary	206.60'	**24.0" Round Culvert** L= 59.0' Ke= 0.500 Inlet / Outlet Invert= 206.60' / 206.00' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=23.00 cfs @ 12.12 hrs HW=211.30' TW=208.99' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 23.00 cfs @ 7.32 fps)

Summary for Pond DP1: DP1

Inflow Area = 7.495 ac, 42.64% Impervious, Inflow Depth = 1.88" for 25-year event
Inflow = 8.54 cfs @ 12.46 hrs, Volume= 1.172 af
Primary = 8.54 cfs @ 12.47 hrs, Volume= 1.172 af, Atten= 0%, Lag= 0.6 min

Routing by Sim-Route method, Time Span= 1.00-72.00 hrs, dt= 0.01 hrs

Summary for Pond FB1: FOREBAY1

Volume	Invert	Avail.Storage	Storage Description
#1	206.00'	6,883 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
206.00	1,523	0	0
208.00	2,571	4,094	4,094
209.00	3,006	2,789	6,883

Device	Routing	Invert	Outlet Devices
#1	Discarded	206.00'	**0.520 in/hr Exfiltration over Surface area**

Discarded OutFlow Max=0.00 cfs @ 1.00 hrs HW=0.00' (Free Discharge)
└**1=Exfiltration** (Controls 0.00 cfs)

Time span=1.00-72.00 hrs, dt=0.01 hrs, 7101 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment1S: EX Runoff Area=326,464 sf 0.00% Impervious Runoff Depth=0.32"
Flow Length=580' Tc=16.6 min CN=58 Runoff=1.08 cfs 0.202 af

SubcatchmentS1: CB1 Runoff Area=23,346 sf 95.99% Impervious Runoff Depth=2.81"
Tc=5.0 min CN=97 Runoff=1.67 cfs 0.125 af

SubcatchmentS10: CB10 Runoff Area=29,663 sf 75.55% Impervious Runoff Depth=2.04"
Tc=5.0 min CN=89 Runoff=1.67 cfs 0.116 af

SubcatchmentS11: FIELD Runoff Area=132,264 sf 0.00% Impervious Runoff Depth=0.42"
Flow Length=335' Tc=9.4 min CN=61 Runoff=0.80 cfs 0.107 af

SubcatchmentS12: BLD1 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth=2.92"
Tc=5.0 min CN=98 Runoff=1.02 cfs 0.078 af

SubcatchmentS13: BLD2 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth=2.92"
Tc=5.0 min CN=98 Runoff=1.02 cfs 0.078 af

SubcatchmentS2: CB2 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=2.21"
Tc=5.0 min CN=91 Runoff=0.51 cfs 0.036 af

SubcatchmentS3: CB3 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth=2.92"
Tc=5.0 min CN=98 Runoff=0.42 cfs 0.032 af

SubcatchmentS4: CB4 Runoff Area=25,324 sf 40.51% Impervious Runoff Depth=1.12"
Tc=5.0 min CN=76 Runoff=0.76 cfs 0.054 af

SubcatchmentS5: CB5 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=2.21"
Tc=5.0 min CN=91 Runoff=0.51 cfs 0.036 af

SubcatchmentS6: CB6 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth=2.92"
Tc=5.0 min CN=98 Runoff=0.42 cfs 0.032 af

SubcatchmentS7: CB7 Runoff Area=30,284 sf 33.88% Impervious Runoff Depth=1.00"
Tc=5.0 min CN=74 Runoff=0.80 cfs 0.058 af

SubcatchmentS8: CB8 Runoff Area=14,598 sf 71.30% Impervious Runoff Depth=1.87"
Tc=5.0 min CN=87 Runoff=0.76 cfs 0.052 af

SubcatchmentS9: CB9 Runoff Area=14,590 sf 71.08% Impervious Runoff Depth=1.87"
Tc=5.0 min CN=87 Runoff=0.76 cfs 0.052 af

Pond BAS1: BASIN1 Peak Elev=208.27' Storage=17,970 cf Inflow=10.83 cfs 0.857 af
Discarded=0.52 cfs 0.919 af Primary=0.11 cfs 0.023 af Outflow=0.63 cfs 0.942 af

Pond CB1: CB1 Peak Elev=229.73' Inflow=1.67 cfs 0.125 af
15.0" Round Culvert n=0.012 L=293.0' S=0.0102 '/' Outflow=1.67 cfs 0.125 af

Pond CB10: CB10 Peak Elev=222.77' Inflow=10.17 cfs 0.750 af
24.0" Round Culvert n=0.012 L=291.0' S=0.0426 '/' Outflow=10.17 cfs 0.750 af

Pond CB2: CB2 Peak Elev=230.42' Inflow=0.51 cfs 0.036 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=0.51 cfs 0.036 af

Pond CB3: CB3 Peak Elev=229.83' Inflow=1.94 cfs 0.146 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0285 '/' Outflow=1.94 cfs 0.146 af

Pond CB4: CB4 Peak Elev=228.75' Inflow=2.70 cfs 0.200 af
18.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=2.70 cfs 0.200 af

Pond CB5: CB5 Peak Elev=230.42' Inflow=0.51 cfs 0.036 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=0.51 cfs 0.036 af

Pond CB6: CB6 Peak Elev=229.83' Inflow=1.94 cfs 0.146 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0313 '/' Outflow=1.94 cfs 0.146 af

Pond CB7: CB7 Peak Elev=228.59' Inflow=5.44 cfs 0.404 af
18.0" Round Culvert n=0.012 L=35.0' S=0.0449 '/' Outflow=5.44 cfs 0.404 af

Pond CB8: CB8 Peak Elev=224.74' Inflow=0.76 cfs 0.052 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=0.76 cfs 0.052 af

Pond CB9: CB9 Peak Elev=224.65' Inflow=1.52 cfs 0.104 af
18.0" Round Culvert n=0.012 L=85.0' S=0.0051 '/' Outflow=1.52 cfs 0.104 af

Pond DMH1: DMH1 Peak Elev=224.24' Inflow=8.59 cfs 0.634 af
24.0" Round Culvert n=0.012 L=250.0' S=0.0060 '/' Outflow=8.59 cfs 0.634 af

Pond DMH2: DMH2 Peak Elev=208.27' Inflow=10.17 cfs 0.750 af
24.0" Round Culvert n=0.012 L=59.0' S=0.0102 '/' Outflow=10.17 cfs 0.750 af

Pond DP1: DP1 Inflow=0.11 cfs 0.023 af
Primary=0.11 cfs 0.023 af

Pond FB1: FOREBAY1 Peak Elev=0.00' Storage=0 cf
Discarded=0.00 cfs 0.000 af

Total Runoff Area = 14.989 ac Runoff Volume = 1.059 af Average Runoff Depth = 0.85"
78.68% Pervious = 11.793 ac 21.32% Impervious = 3.196 ac

Time span=1.00-72.00 hrs, dt=0.01 hrs, 7101 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment1S: EX Runoff Area=326,464 sf 0.00% Impervious Runoff Depth=1.15"
Flow Length=580' Tc=16.6 min CN=58 Runoff=6.27 cfs 0.720 af

SubcatchmentS1: CB1 Runoff Area=23,346 sf 95.99% Impervious Runoff Depth=4.62"
Tc=5.0 min CN=97 Runoff=2.68 cfs 0.206 af

SubcatchmentS10: CB10 Runoff Area=29,663 sf 75.55% Impervious Runoff Depth=3.74"
Tc=5.0 min CN=89 Runoff=3.01 cfs 0.212 af

SubcatchmentS11: FIELD Runoff Area=132,264 sf 0.00% Impervious Runoff Depth=1.35"
Flow Length=335' Tc=9.4 min CN=61 Runoff=3.87 cfs 0.342 af

SubcatchmentS12: BLD1 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth>4.73"
Tc=5.0 min CN=98 Runoff=1.62 cfs 0.127 af

SubcatchmentS13: BLD2 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth>4.73"
Tc=5.0 min CN=98 Runoff=1.62 cfs 0.127 af

SubcatchmentS2: CB2 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=3.95"
Tc=5.0 min CN=91 Runoff=0.89 cfs 0.064 af

SubcatchmentS3: CB3 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth>4.73"
Tc=5.0 min CN=98 Runoff=0.66 cfs 0.052 af

SubcatchmentS4: CB4 Runoff Area=25,324 sf 40.51% Impervious Runoff Depth=2.51"
Tc=5.0 min CN=76 Runoff=1.77 cfs 0.122 af

SubcatchmentS5: CB5 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=3.95"
Tc=5.0 min CN=91 Runoff=0.89 cfs 0.064 af

SubcatchmentS6: CB6 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth>4.73"
Tc=5.0 min CN=98 Runoff=0.66 cfs 0.052 af

SubcatchmentS7: CB7 Runoff Area=30,284 sf 33.88% Impervious Runoff Depth=2.34"
Tc=5.0 min CN=74 Runoff=1.97 cfs 0.136 af

SubcatchmentS8: CB8 Runoff Area=14,598 sf 71.30% Impervious Runoff Depth=3.54"
Tc=5.0 min CN=87 Runoff=1.42 cfs 0.099 af

SubcatchmentS9: CB9 Runoff Area=14,590 sf 71.08% Impervious Runoff Depth=3.54"
Tc=5.0 min CN=87 Runoff=1.41 cfs 0.099 af

Pond BAS1: BASIN1 Peak Elev=209.31' Storage=28,441 cf Inflow=22.05 cfs 1.701 af
Discarded=0.60 cfs 1.087 af Primary=5.15 cfs 0.675 af Outflow=5.75 cfs 1.762 af

Pond CB1: CB1 Peak Elev=229.93' Inflow=2.68 cfs 0.206 af
15.0" Round Culvert n=0.012 L=293.0' S=0.0102 '/' Outflow=2.68 cfs 0.206 af

Pond CB10: CB10 Peak Elev=223.77' Inflow=18.32 cfs 1.359 af
24.0" Round Culvert n=0.012 L=291.0' S=0.0426 '/' Outflow=18.32 cfs 1.359 af

Pond CB2: CB2 Peak Elev=230.63' Inflow=0.89 cfs 0.064 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=0.89 cfs 0.064 af

Pond CB3: CB3 Peak Elev=230.28' Inflow=3.17 cfs 0.243 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0285 '/' Outflow=3.17 cfs 0.243 af

Pond CB4: CB4 Peak Elev=229.89' Inflow=4.93 cfs 0.364 af
18.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=4.93 cfs 0.364 af

Pond CB5: CB5 Peak Elev=230.59' Inflow=0.89 cfs 0.064 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=0.89 cfs 0.064 af

Pond CB6: CB6 Peak Elev=230.14' Inflow=3.17 cfs 0.243 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0313 '/' Outflow=3.17 cfs 0.243 af

Pond CB7: CB7 Peak Elev=229.56' Inflow=10.04 cfs 0.743 af
18.0" Round Culvert n=0.012 L=35.0' S=0.0449 '/' Outflow=10.04 cfs 0.743 af

Pond CB8: CB8 Peak Elev=225.42' Inflow=1.42 cfs 0.099 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=1.42 cfs 0.099 af

Pond CB9: CB9 Peak Elev=225.38' Inflow=2.82 cfs 0.198 af
18.0" Round Culvert n=0.012 L=85.0' S=0.0051 '/' Outflow=2.82 cfs 0.198 af

Pond DMH1: DMH1 Peak Elev=225.23' Inflow=15.50 cfs 1.146 af
24.0" Round Culvert n=0.012 L=250.0' S=0.0060 '/' Outflow=15.50 cfs 1.146 af

Pond DMH2: DMH2 Peak Elev=209.65' Inflow=18.32 cfs 1.359 af
24.0" Round Culvert n=0.012 L=59.0' S=0.0102 '/' Outflow=18.32 cfs 1.359 af

Pond DP1: DP1 Inflow=5.15 cfs 0.675 af
Primary=5.15 cfs 0.675 af

Pond FB1: FOREBAY1 Peak Elev=0.00' Storage=0 cf
Discarded=0.00 cfs 0.000 af

Total Runoff Area = 14.989 ac Runoff Volume = 2.420 af Average Runoff Depth = 1.94"
78.68% Pervious = 11.793 ac 21.32% Impervious = 3.196 ac

Time span=1.00-72.00 hrs, dt=0.01 hrs, 7101 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment1S: EX Runoff Area=326,464 sf 0.00% Impervious Runoff Depth=1.82"
Flow Length=580' Tc=16.6 min CN=58 Runoff=10.71 cfs 1.136 af

SubcatchmentS1: CB1 Runoff Area=23,346 sf 95.99% Impervious Runoff Depth=5.74"
Tc=5.0 min CN=97 Runoff=3.30 cfs 0.257 af

SubcatchmentS10: CB10 Runoff Area=29,663 sf 75.55% Impervious Runoff Depth=4.83"
Tc=5.0 min CN=89 Runoff=3.83 cfs 0.274 af

SubcatchmentS11: FIELD Runoff Area=132,264 sf 0.00% Impervious Runoff Depth=2.07"
Flow Length=335' Tc=9.4 min CN=61 Runoff=6.26 cfs 0.524 af

SubcatchmentS12: BLD1 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth>5.86"
Tc=5.0 min CN=98 Runoff=1.99 cfs 0.157 af

SubcatchmentS13: BLD2 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth>5.86"
Tc=5.0 min CN=98 Runoff=1.99 cfs 0.157 af

SubcatchmentS2: CB2 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=5.06"
Tc=5.0 min CN=91 Runoff=1.13 cfs 0.082 af

SubcatchmentS3: CB3 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth>5.86"
Tc=5.0 min CN=98 Runoff=0.82 cfs 0.064 af

SubcatchmentS4: CB4 Runoff Area=25,324 sf 40.51% Impervious Runoff Depth=3.47"
Tc=5.0 min CN=76 Runoff=2.45 cfs 0.168 af

SubcatchmentS5: CB5 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=5.06"
Tc=5.0 min CN=91 Runoff=1.13 cfs 0.082 af

SubcatchmentS6: CB6 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth>5.86"
Tc=5.0 min CN=98 Runoff=0.82 cfs 0.064 af

SubcatchmentS7: CB7 Runoff Area=30,284 sf 33.88% Impervious Runoff Depth=3.27"
Tc=5.0 min CN=74 Runoff=2.76 cfs 0.189 af

SubcatchmentS8: CB8 Runoff Area=14,598 sf 71.30% Impervious Runoff Depth=4.61"
Tc=5.0 min CN=87 Runoff=1.82 cfs 0.129 af

SubcatchmentS9: CB9 Runoff Area=14,590 sf 71.08% Impervious Runoff Depth=4.61"
Tc=5.0 min CN=87 Runoff=1.82 cfs 0.129 af

Pond BAS1: BASIN1 Peak Elev=210.00' Storage=36,093 cf Inflow=29.60 cfs 2.276 af
Discarded=0.65 cfs 1.152 af Primary=8.54 cfs 1.172 af Outflow=9.19 cfs 2.324 af

Pond CB1: CB1 Peak Elev=230.05' Inflow=3.30 cfs 0.257 af
15.0" Round Culvert n=0.012 L=293.0' S=0.0102 '/' Outflow=3.30 cfs 0.257 af

Pond CB10: CB10 Peak Elev=224.71' Inflow=23.50 cfs 1.752 af
24.0" Round Culvert n=0.012 L=291.0' S=0.0426 '/' Outflow=23.50 cfs 1.752 af

Pond CB2: CB2 Peak Elev=231.49' Inflow=1.13 cfs 0.082 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=1.13 cfs 0.082 af

Pond CB3: CB3 Peak Elev=231.44' Inflow=3.92 cfs 0.303 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0285 '/' Outflow=3.92 cfs 0.303 af

Pond CB4: CB4 Peak Elev=231.05' Inflow=6.36 cfs 0.471 af
18.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=6.36 cfs 0.471 af

Pond CB5: CB5 Peak Elev=231.04' Inflow=1.13 cfs 0.082 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=1.13 cfs 0.082 af

Pond CB6: CB6 Peak Elev=230.92' Inflow=3.92 cfs 0.303 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0313 '/' Outflow=3.92 cfs 0.303 af

Pond CB7: CB7 Peak Elev=230.51' Inflow=13.02 cfs 0.964 af
18.0" Round Culvert n=0.012 L=35.0' S=0.0449 '/' Outflow=13.02 cfs 0.964 af

Pond CB8: CB8 Peak Elev=227.47' Inflow=1.82 cfs 0.129 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=1.82 cfs 0.129 af

Pond CB9: CB9 Peak Elev=227.40' Inflow=3.64 cfs 0.258 af
18.0" Round Culvert n=0.012 L=85.0' S=0.0051 '/' Outflow=3.64 cfs 0.258 af

Pond DMH1: DMH1 Peak Elev=227.25' Inflow=19.90 cfs 1.478 af
24.0" Round Culvert n=0.012 L=250.0' S=0.0060 '/' Outflow=19.90 cfs 1.478 af

Pond DMH2: DMH2 Peak Elev=211.36' Inflow=23.50 cfs 1.752 af
24.0" Round Culvert n=0.012 L=59.0' S=0.0102 '/' Outflow=23.50 cfs 1.752 af

Pond DP1: DP1 Inflow=8.54 cfs 1.172 af
Primary=8.54 cfs 1.172 af

Pond FB1: FOREBAY1 Peak Elev=0.00' Storage=0 cf
Discarded=0.00 cfs 0.000 af

Total Runoff Area = 14.989 ac Runoff Volume = 3.413 af Average Runoff Depth = 2.73"
78.68% Pervious = 11.793 ac 21.32% Impervious = 3.196 ac

Time span=1.00-72.00 hrs, dt=0.01 hrs, 7101 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment1S: EX Runoff Area=326,464 sf 0.00% Impervious Runoff Depth=3.00"
Flow Length=580' Tc=16.6 min CN=58 Runoff=18.60 cfs 1.876 af

SubcatchmentS1: CB1 Runoff Area=23,346 sf 95.99% Impervious Runoff Depth>7.49"
Tc=5.0 min CN=97 Runoff=4.27 cfs 0.335 af

SubcatchmentS10: CB10 Runoff Area=29,663 sf 75.55% Impervious Runoff Depth=6.54"
Tc=5.0 min CN=89 Runoff=5.10 cfs 0.371 af

SubcatchmentS11: FIELD Runoff Area=132,264 sf 0.00% Impervious Runoff Depth=3.33"
Flow Length=335' Tc=9.4 min CN=61 Runoff=10.39 cfs 0.843 af

SubcatchmentS12: BLD1 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth>7.61"
Tc=5.0 min CN=98 Runoff=2.57 cfs 0.204 af

SubcatchmentS13: BLD2 Runoff Area=14,000 sf 100.00% Impervious Runoff Depth>7.61"
Tc=5.0 min CN=98 Runoff=2.57 cfs 0.204 af

SubcatchmentS2: CB2 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=6.78"
Tc=5.0 min CN=91 Runoff=1.48 cfs 0.110 af

SubcatchmentS3: CB3 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth>7.61"
Tc=5.0 min CN=98 Runoff=1.05 cfs 0.084 af

SubcatchmentS4: CB4 Runoff Area=25,324 sf 40.51% Impervious Runoff Depth=5.02"
Tc=5.0 min CN=76 Runoff=3.53 cfs 0.243 af

SubcatchmentS5: CB5 Runoff Area=8,449 sf 80.45% Impervious Runoff Depth=6.78"
Tc=5.0 min CN=91 Runoff=1.48 cfs 0.110 af

SubcatchmentS6: CB6 Runoff Area=5,748 sf 100.00% Impervious Runoff Depth>7.61"
Tc=5.0 min CN=98 Runoff=1.05 cfs 0.084 af

SubcatchmentS7: CB7 Runoff Area=30,284 sf 33.88% Impervious Runoff Depth=4.79"
Tc=5.0 min CN=74 Runoff=4.04 cfs 0.278 af

SubcatchmentS8: CB8 Runoff Area=14,598 sf 71.30% Impervious Runoff Depth=6.30"
Tc=5.0 min CN=87 Runoff=2.45 cfs 0.176 af

SubcatchmentS9: CB9 Runoff Area=14,590 sf 71.08% Impervious Runoff Depth=6.30"
Tc=5.0 min CN=87 Runoff=2.45 cfs 0.176 af

Pond BAS1: BASIN1 Peak Elev=211.29' Storage=52,165 cf Inflow=41.77 cfs 3.215 af
Discarded=0.75 cfs 1.227 af Primary=11.53 cfs 2.020 af Outflow=12.28 cfs 3.248 af

Pond CB1: CB1 Peak Elev=232.35' Inflow=4.27 cfs 0.335 af
15.0" Round Culvert n=0.012 L=293.0' S=0.0102 '/' Outflow=4.27 cfs 0.335 af

Pond CB10: CB10 Peak Elev=226.65' Inflow=31.55 cfs 2.372 af
24.0" Round Culvert n=0.012 L=291.0' S=0.0426 '/' Outflow=31.55 cfs 2.372 af

Pond CB2: CB2 Peak Elev=236.77' Inflow=1.48 cfs 0.110 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=1.48 cfs 0.110 af

Pond CB3: CB3 Peak Elev=236.70' Inflow=5.09 cfs 0.397 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0285 '/' Outflow=5.09 cfs 0.397 af

Pond CB4: CB4 Peak Elev=236.15' Inflow=8.60 cfs 0.640 af
18.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=8.60 cfs 0.640 af

Pond CB5: CB5 Peak Elev=235.95' Inflow=1.48 cfs 0.110 af
15.0" Round Culvert n=0.012 L=171.0' S=0.0050 '/' Outflow=1.48 cfs 0.110 af

Pond CB6: CB6 Peak Elev=235.87' Inflow=5.09 cfs 0.397 af
15.0" Round Culvert n=0.012 L=47.0' S=0.0313 '/' Outflow=5.09 cfs 0.397 af

Pond CB7: CB7 Peak Elev=235.27' Inflow=17.68 cfs 1.315 af
18.0" Round Culvert n=0.012 L=35.0' S=0.0449 '/' Outflow=17.68 cfs 1.315 af

Pond CB8: CB8 Peak Elev=231.65' Inflow=2.45 cfs 0.176 af
15.0" Round Culvert n=0.012 L=26.0' S=0.0050 '/' Outflow=2.45 cfs 0.176 af

Pond CB9: CB9 Peak Elev=231.52' Inflow=4.89 cfs 0.352 af
18.0" Round Culvert n=0.012 L=85.0' S=0.0051 '/' Outflow=4.89 cfs 0.352 af

Pond DMH1: DMH1 Peak Elev=231.23' Inflow=26.76 cfs 2.001 af
24.0" Round Culvert n=0.012 L=250.0' S=0.0060 '/' Outflow=26.76 cfs 2.001 af

Pond DMH2: DMH2 Peak Elev=214.29' Inflow=31.55 cfs 2.372 af
24.0" Round Culvert n=0.012 L=59.0' S=0.0102 '/' Outflow=31.55 cfs 2.372 af

Pond DP1: DP1 Inflow=11.53 cfs 2.020 af
Primary=11.53 cfs 2.020 af

Pond FB1: FOREBAY1 Peak Elev=0.00' Storage=0 cf
Discarded=0.00 cfs 0.000 af

Total Runoff Area = 14.989 ac Runoff Volume = 5.091 af Average Runoff Depth = 4.08"
78.68% Pervious = 11.793 ac 21.32% Impervious = 3.196 ac

Appendix 5:
MISCELLANEOUS CALCULATIONS

J.R. RUSSO & ASSOCIATES, LLC
Professional Engineers & Surveyors
SERVING CONNECTICUT & MASSACHUSETTS
1 Shoham Rd. • East Windsor, CT 06088
CONN (860) 623-0569 • MASS (413) 785-1158
www.jrrusso.com

JOB 2022-059
SHEET NO. 1 OF 1
CALCULATED BY CJC DATE 1-24-2023
CHECKED BY _____ DATE _____
SCALE _____

Water Quality Volume (WQV) Calculations

$WQV = (1'')\,RA/12$
$R = 0.05 + 0.009I$

I = percent impervious coverage
R = volumetric runoff coefficient
A = contributing area

A = 326,464 s.f.
$I = \frac{139,207 \text{ s.f. impervious}}{326,464 \text{ s.f. total}} = 42.64\%$
$R = 0.05 + 0.009(42.64) = 0.434$
$WQV = (1'')(0.434)(326,464)/12 =$ **11,728 c.f.**

Forebay = 25% of WQV = 0.25(11,728) = **2,932 c.f.**

WQV Check:

Basin storage below outlet = 16,450 c.f. > 11,728 c.f. ✓
Forebay storage volume = 6,883 c.f. > 2,932 c.f. ✓

North Central District Health Department

 Enfield—31 North Main Street, Enfield, CT 06082 * (860) 745-0383 Fax (860) 745-3188
 Vernon—375 Hartford Turnpike, Room 120, Vernon, CT 06066 * (860) 872-1501 Fax (860) 872 1531
 Windham—Town Hall, 979 Main Street, Willimantic, CT 06226 * (860) 465-3033 Fax (860) 465-3034
 Stafford—Town Hall, 1 Main Street, Stafford Springs, CT 06076 * (860) 684-5609 Fax (860) 684-1768

Patrice A. Sulik, MPH, R.S.
Director of Health

February 22, 2023

Ms Ashley Stephens
Vernon Town Planner
55 West Main Street
Vernon, Connecticut 06066

Re: The Expansion of the Park at Hockanum Crossing
0 Gerber Blvd
Vernon, Connecticut

Dear Ms. Stephens:

I am writing regarding the proposed expansion at the above referenced address.

North Central District Health Department (NCDHD) has the following comments regarding the proposed Expansion:

- If any of the proposed fitness/recreational facilities and/or educational facilities are offering any type of food service to the public (i.e. protein shake bar) then a food service plan review with this department will be required:
    - The proposed business shall submit a scalable floor plan of the kitchen/bar layout;
        - The floor plan must show the location of each piece of equipment, floor and counter, clearly labeled with its common name.
    - A menu of food items that will be served to the public shall be submitted along with the floor plan for review;
    - The NCDHD food service plan review application and the application fee is required to be submitted.
- The NCDHD has the following comments on any proposed veterinarian hospitals and/or animal care facilities.
    - The NCDHD strongly suggests that any proposed animal facilities consult and follow the State of Connecticut Department of Agriculture regulations Concerning Kennels, Pet Shops, Grooming Facilities, Training Facilities, Animal Importers, and Animal Shelters Sanitation section when designing and constructing their facility. The sanitation section is as follows:
        - All buildings, grounds, runs, pens, primary enclosures, exercise areas

and any place where dogs or cats are kept shall be maintained in a sanitary manner to minimize the harborage, breeding or attraction of insects or vermin. Trash and food containers shall be kept closed or covered when not in use.

- All removable resting surfaces, furniture-type fixtures, equipment or objects within the facility shall be constructed in a manner or made of materials that allow them to be cleaned and disinfected, or removed or replaced when worn or soiled.;
- Excreta and all food waste shall be removed as often as necessary, but at a minimum, at least once daily, from all runs, primary enclosures, and exercise areas. Runs and all hard surfaces shall be clean and disinfected and maintained in a sanitary manner. Excreta and all food waste shall be disposed of in a sanitary manner..

- Dumpsters will be required to reside on a concrete pad or equivalent.
- According to the site plan public water and public sewer are available. The Expansion at the Park will be required to connect to public water and public sewer.

Should anyone have any additional questions regarding this matter, I am reachable via email at bbielawiec@ncdhd.org. You can also call me at the NCDHD office at 860-745-0383, extension 114.

Sincerely,

Brian Bielawiec, M.P.H., R.S.
Registered Sanitarian III

From: Brenda Dubay Sartori
To: Stephens, Ashley
Subject: [EXTERNAL] Notice of Application of Clifton Chapman for Site Plan & Special Permits
Date: Saturday, February 18, 2023 4:10:20 PM

Good Afternoon,

I am responding to this announcement, if indeed, the plans are to make access thru the Quail Hollow Community. It's not really clear from your letter.

As a senior resident of the Quail Hollow 55+ Community, I hereby state I am TOTALLY AGAINST this.

This is a private senior community. To have a thoroughfare coming thru is just the most terrible, disrupting idea. Our seniors range from ages in their 60's, 70's, 80's and some 90's. It's a peaceful, quiet, set apart community in which we feel safe. This is why I bought a home here. Having the public drive thru would certainly affect that. We have zero crime level. Seniors are up early and retire early. Some walk in the wee hours of the morning and some walk during dusk. There are a lot of areas where there are no sidewalks. A lot of residents have dogs that they walk as well. To have cars coming in and out is a total disruption of our peace and quiet.

People moved here to be quiet, active and safe. A good amount of folks have been here since these homes were built some 20 years ago. There are reasons why we are here. I, myself, live alone and in my 70's. Neighbors are here for each other and I can assure you that everyone is probably going to feel the same, if in fact this is true.

Another issue would be people exiting thru here onto Dart Hill. As it is on any given day, it is dangerous and difficult to exit left from here, looking out for whatever is coming down at you from the hill. More so when the sun is setting from that end. When coming up Dart Hill with speeding traffic and trying to take a left into the community, that is also a danger. Any additional traffic is a potential disaster. Traffic exiting our complex would be backed up.

If it is indeed the intent to come thru Quail Hollow, great consideration should be given to denying this application. I don't know who came up with the idea when the future owners of these said buildings can enter and exit onto Route 83 like everyone else does for their purposes. If I'm correct, there is a traffic light there.

Please, NO NOT ALLOW THIS! If the intent is not to disrupt our neighborhood, then I apologize for jumping to conclusions. I look forward to either hearing or being told that I am totally wrong.

Respectfully,

Brenda Sartori
27 Quail Hollow Close

From: mamabratji@aol.com
To: Stephens, Ashley
Cc: craigct538@aol.com
Subject: [EXTERNAL] P-2023-03-0 Gerber Boulevard application of Clifton Chapman for Stire PLan & Special Permits
Date: Tuesday, February 21, 2023 9:00:54 PM

Good morning Ms. Stephens. I see in the notice to abutters that you encourage written comments in advance so we are sending you this email along with us attending the March 2nd meeting along with many of our neighbors voicing our concerns to the proposal. Per an email that went out to all residents at Quail Hollow Condos, there is consideration for the main road coming into the complex, Quail Crossing, to be continued over to the two proposed 14,000 sq ft buildings. We have many concerns regarding this consideration and are against the proposal. Our main concerns are:

- The traffic using our complex as a cut through would increase drastically. Not only would the trucks and vehicles from the new businesses use this as a cut-through, but right now, the only way out of the all of the units at the Mansions along with the other businesses on that road is going out to Talcottville Road. If the access road connects with our road, all of the residents and other businesses would use this road to cut over to Dart Hill Road.
-
- Lighting on the roads in our complex is minimal and not conducive to heavy traffic especially during the winter months when it gets dark so early.
-
- I do not know how familiar you or anyone on the planning committee is with our complex but it is a quiet retirement community with residents anywhere from 55 to 90+ with a vast variety of mobility abilities. One thing that most residents enjoy regardless of their level of mobility is walks, scooter rides, mobile wheelchair "walks", walker walks, etc. Most of the community does not have sidewalks and the main road only has a sidewalk on one side so many of the residents travel in the road. Many go out early in the morning and again at dusk to stay active. The increase in traffic would create a safety issue for them and hamper their daily activity.
-
- Many residents have dogs and they too walk them several times a day in the complex. They would be impacted as well with these plans.
-
- One thing that many residents love to do is sit out on their decks in the morning and enjoy a cup of coffee or just enjoy the morning. Listening to trucks and vehicles traveling through would disrupt this relaxation.
-
- Right now, it is already hard at times to pull out onto Dart Hill Road. The increased traffic would create a bigger burden.
-
- This is a quiet, secure, retirement community and this consideration would change our environment as well as our property value.

We strongly oppose any consideration being given to granting access to our community road for access for the new proposed businesses.

Robin and Craig Taylor

From: Paul Vasseur
To: Stephens, Ashley
Cc: Paul Vasseur
Subject: [EXTERNAL] REF: 2 Mar 2023, Thursday, 7:30 pm meeting in Vernon Town Hall
Date: Monday, February 20, 2023 12:27:22 PM

We are hereby submitting several concerns/questions pertaining to our recent notice dated 14 Feb 2023 (Gerber Boulevard; An application of Clifton Chapman for Site Plan and Special Permits)

1. How may acres is the building site?
2. Will Quail Hollow Close become an access road?
3. What will be done for noise reduction? Will there be a tall fence/barrier separating our community from the site building? How many feet away will the facility be from the nearest homes in Quail Hollow?
4. We understand how this new industry will benefit the company - How does it benefit the town and tax payers?
5. How will this affect our home values?
6. What type of product will this company be producing? Is there any hazardous waste involved?

Quail Hollow is a 55+ community that values its privacy and ability to walk and bike without worry of a lot of through traffic, especially commercial and industrial vehicles. Most of us moved here for the tranquility and would not want a lot of noise from trucks and facility itself.

Respectfully,

Lynn & Paul Vasseur
4 Oakview Pl
Vernon, CT

TOWN OF VERNON

55 WEST MAIN STREET, VERNON, CT 06066
(860) 870-3640
astephens@vernon-ct.gov

OFFICE OF THE
TOWN PLANNER

February 6, 2023

Ms. Bonnie Armstrong, Town Clerk
1540 Sullivan Ave.
South Windsor, CT 06074

Sent via Certified Mail# 7020 0640 0001 9478 3722

Dear Ms. Armstrong:

Pursuant to Connecticut General Statutes Section 8-7d(f), please accept this letter as notification of a pending application received by the Town of Vernon Planning and Zoning Commission.

Public Notice- Town of Vernon

The Vernon Planning & Zoning Commission (PZC) will hold the following public hearing at a regular meeting on Thursday, **March 2, 2023** at 7:30 p.m. This meeting will be held at Vernon Town Hall, 14 Park Place, 3rd Floor Council Chambers.

Application **[PZ-2023-03]** of the Town of Vernon's Planning Department, at **0 Gerber Boulevard [Map 04- Block- 0004- Lot-008A7]** for two 14,000 square feet buildings for light industrial/ commercial uses. This application will require the following special permits:

- **4.24.4.3.1.-** Manufacturing, storing, printing, publishing, processing, fabricating, packaging or assembling activities wholly within the buildings.
- **4.24.4.3.4.-**Research and experimental laboratories, veterinary hospitals and animal care services (excluding kennels) and medical facilities.
- **4.24.4.3.6-** Professional office buildings; general office buildings, and office parks.
- **4.24.4.3.10-** Recreation facilities, education facilities, religious faculties, cultural, non-profit, and philanthropic activities.
- **4.24.4.3.11**- Plumbing, heating, electrical, industrial, and general contracting establishments, which may include showrooms.
- **4.24.4.3.15.1-** More than 40 off street parking spaces are required.
- **4.24.4.3.15.4-** The aggregate square footage for all structures on any parcel exceeds twenty-five thousand square feet (25,000 sq ft).

The application is attached. If you have any questions or wish to review the file, please feel free to contact me.

With regards,

Ashley Stephens
Town Planner

NORTH CENTRAL CONSERVATION DISTRICT, INC.
AVON ▪ BLOOMFIELD ▪ BOLTON ▪ BRISTOL ▪ BURLINGTON ▪ CANTON ▪ COVENTRY ▪ EAST GRANBY ▪ EAST WINDSOR ▪ EAST HARTFORD ▪ ELLINGTON
ENFIELD ▪ FARMINGTON ▪ GLASTONBURY ▪ GRANBY ▪ HARTFORD ▪ MANCHESTER ▪ PLAINVILLE ▪ SIMSBURY ▪ SOMERS ▪ SOUTH WINDSOR
STAFFORD ▪ SUFFIELD ▪ WEST HARTFORD ▪ WETHERSFIELD ▪ TOLLAND ▪ VERNON ▪ WILLINGTON ▪ WINDSOR ▪ WINDSOR LOCKS

Date: February 22, 2023

To: Ashley Stephens, AICP, Town Planner
Town of Vernon Planning & Zoning Commission

From: Cameron Covill, Natural Resources Specialist
Barbara Kelly, Professional Soil Scientist, SSSSNE; CPESC #2180

Re: Expansion of the Park at Hockanum Crossing, 0 Gerber Boulevard, Vernon, Connecticut- PZ-2023-03

****

This review is conducted pursuant to Section 18 of the Town of Vernon Zoning Regulations. The review is limited to certification of the erosion control plan, based on compliance with the **2002 Connecticut Guidelines for Soil Erosion and Sediment Control** (Guidelines).

District staff inspected the site on February 10, 2023 and February 15, 2023. The plans prepared by J.R. Russo & Associates, LLC, titled "Expansion of the Park at Hockanum Crossing" (Plan) with a revision date of January 24, 2023, were reviewed. Prior to the on-site visit, District staff also reviewed current and historical aerial, topographic, and other related maps of the site.

The parcel on the plans contains an open, undeveloped field that is currently maintained as a grassland/meadow. Site work is proposed in the current field, located at 0 Gerber Avenue. Site grading, the construction of two 14,000 sqft buildings, extension of Gerber Avenue, and the construction of associated parking, sidewalks and lighting is proposed. Soil erosion and sediment control (E&S) measures proposed in the Plan include a construction entrance, temporary and permanent seeding, silt fencing, infiltration swales, haybale check dams, and a stormwater basin. Maintenance and seeding expectations are among the topics addressed in the Construction Notes and Details.

Background & Observations

Based on the Natural Resources Conservation Service Web Soil Survey (WSS), soils throughout the majority of the proposed construction area are mapped as Cheshire Fine Sandy Loam and Narragansett Silt Loam, well-drained soils. The erosion hazard of the majority of these soils is rated Moderate or Severe. The WSS also notes Wilbraham and Menlo wetland soils just outside of the project area, west and downgradient of the proposed work.

In contrast to the topography and aerial photo shown in the Plan, the area where buildings are proposed had been cleared of trees, graded, and left with an exposed soil surface. Large stockpiles were also present. No soil erosion or sediment control measures were in place.

Comment & Recommendations

Even in advance of any Plan approval, in accordance with the Guidelines, E&S measures should be promptly implemented.

- Establish perimeter controls such as straw bales or silt fence around the entire disturbed area.
- Surround stockpiles with perimeter control measures. Stabilize inactive soil piles with mulch, seed, &/or soil tackifier.

An existing swale, located between the current parking area for 75 Hockanum Boulevard and the proposed development, conveys water to the wetland area to the west.

- Install a perimeter control between the construction area and the swale, or install check dams in the swale, to prevent the transport of sediment to the wetland.

Maintenance of Measures section in the Checklist for Erosion Control Plan on page 10 of the Plans does not note any maintenance measures or schedules for the proposed erosion control activities.

- Recommend any and all erosion controls proposed for this project follow the maintenance procedures and schedules detailed in the Guidelines.

Conclusion

Based on the observed site conditions, and if promptly implemented, the soil erosion and sediment control measures incorporated in the Plan are adequate and appropriate. With the addition of the recommendations as noted above, the District certifies that the plan complies with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

Thank you for the opportunity to comment.

TOWN OF VERNON

55 West Main St., VERNON, CT 06066-3291
(860) 870-3640
Astephens@vernon-ct.gov

OFFICE OF THE
TOWN PLANNER

MEMORANDUM

TO: Planning & Zoning Commission

FROM: Ashley Stephens, Town Planner

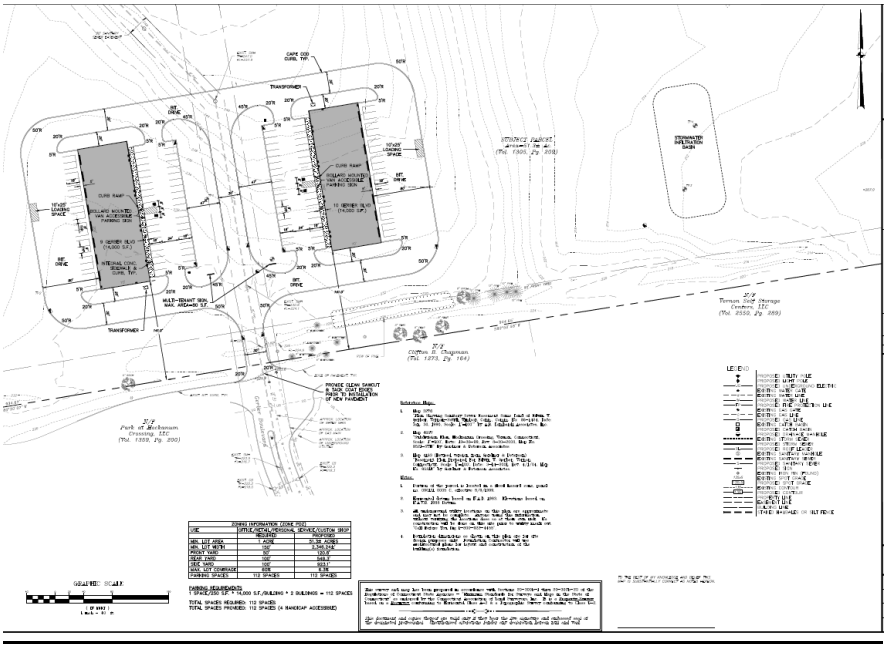
SUBJECT: PZ 2023-03- 0 Gerber Boulevard

DATE: March 2, 2023

REQUEST

PZ 2023-03 – **0 Gerber Boulevard [Map 04- Block- 0004- Lot-008A7]** An application of Clifton Chapman for a Site Plan, Erosion & Sedimentation Control Plan and Special Permits (**4.24.4.3.1.; 4.24.4.3.4; 4.24.4.3.6; 4.24.4.3.10; 4.24.4.3.11; 4.24.4.3.15.1; 4.24.4.3.15.4)** to construct two 14,000 square foot buildings for light industrial/ commercial uses. The property is zoned Planned Development Zone.

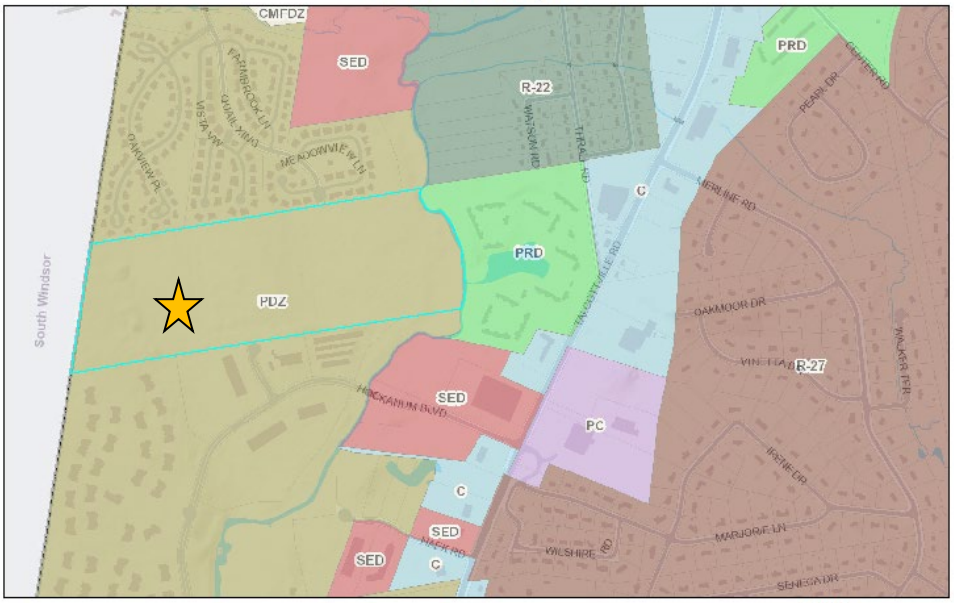
Site Location



Town of Vernon, CT

February 2, 2023
TaxParcelPublishing 2019
Red: Band_1
Green: Band_2
Blue: Band_3
1:8,000
0 0.05 0.1 0.2 mi
0 0.1 0.2 0.4 km
Bloomfield Township MI, Esri, Inc.
GIS Dept
Copyright 2020

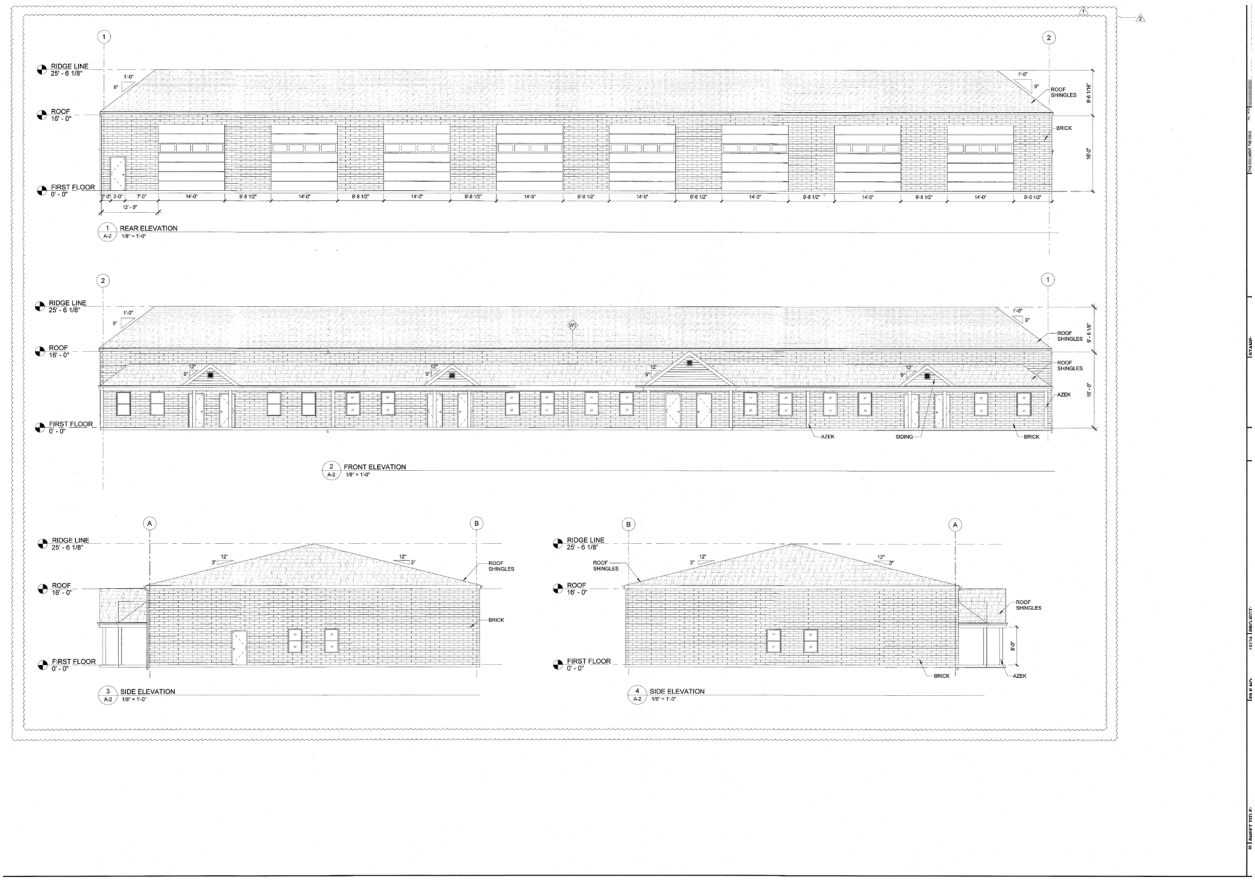
Town of Vernon, CT



February 2, 2023
TaxParcelPublishing
Zoning
C
CMFD
HD-I
HD-RC
I
MHP
NR-10
Open Space
PC
PDZ
PDZ-EXT 67
PND
PRD
R-10
R-15
R-22
1:8,000
0 0.05 0.1 0.2 mi
0 0.1 0.2 0.4 km
Bloomfield Township MI, Esri, Inc.
GIS Dept
Copyright 2020

SUMMARY

The applicant proposes to construct two 14,000 square foot buildings for light industrial/ commercial uses. The applicant submitted an application with a site plan, drainage plan, photometric plan, architectural elevations, traffic statement, and fiscal impact analysis and an erosion and sedimentation control plan, all included with the agenda packet.



STAFF REVIEWS:

Traffic Authority: The Traffic Authority met on 2-9-23 and had no issues or stipulations with the application.

Conservation: N/A

Town Engineer: The Engineer stated that they do not see the proposed project having any adverse impacts to the surrounding water resources and will recharge the stormwater runoff consistent with our Low Impact Development criteria. The E&S Control plan provides adequate control measures and flexibility to minimize any short-term impacts associated with the construction of this type.

Please see the attached Erosion & Sediment Control Review from NCCD

Building Official: Building Department Comments:

- All construction must comply with the adopted 2022 Connecticut State Building Code
- All building demolition, alterations and additions must be permitted
- No work shall begin until construction plans have been submitted and all permits have been approved by the Building Department and Fire Marshal's Office

Fire Marshal: No concerns.

Wetlands Commission: While there are some wetlands on the property, they are not within the regulated setbacks.

Zoning Review: The plans conform with all zoning regulations regarding setbacks, dumpster requirements, screening, parking, sidewalks, loading zone, photometric and design standards.

Health Department: Please see attached.

Town Planner Summary:

The applicant's proposals require special permits for multiple items in the Planned Development Zone. The applicant requests approval to construct two (2) 14,000 square foot buildings for light industrial/ commercial uses specifically by special permit for the following sections:

1. 4.24.4.3.1- Manufacturing, storing, printing, publishing, processing, fabricating, packaging or assembling activities wholly within a building or unified complex of buildings;

2. 4.24.4.3.4- Research and experimental laboratories, veterinary hospitals and animal care services (excluding kennels), and medical facilities;
3. 4.24.4.3.6- Professional office buildings, general office buildings, and office parks;
4. 4.24.4.3.10- Recreation facilities, education facilities, religious facilities, cultural, non-profit, and philanthropic activities;
5. 4.24.4.3.11- Plumbing, heating, electrical, industrial, and general contracting establishments, which may include showrooms. Any outside storage of materials or equipment, shall be screened from abutting properties and views from public streets through landscape buffering which may include fencing;

The plan requires a special permit for more than 40 parking spaces (4.24.4.3.15.1) and the aggregate square footage for all structures on any parcel exceeds twenty-five (25) thousand (4.24.4.3.15.4).

There are very similar parking requirements for each of these uses. The applicant created sufficient parking for each use based on 1 parking space per 250 square feet of floor area. This is consistent with our parking requirements.

The applicant's proposed plan of development meets the Town of Vernon's site plan requirements under section 14.

In order to approve a special permit, the Commission must find that the application meets the general special permit criteria of Section 17.3.1, specifically:

17.3.1.1 It shall not create a hazardous condition relative to public health and safety
17.3.1.2 It shall be compatible with neighboring uses;
17.3.1.3 It shall not create a nuisance;
17.3.1.4 It shall not hinder the future sound development of the community;
17.3.1.5 It shall conform to all applicable sections of this ordinance;
17.3.1.6 N/A
17.3.1.7 N/A
17.3.1.8 The Commission may at its discretion require the submission of a Site Plan for approval as outlined in Section 14 of this ordinance.

In order to approve a special permit, the Commission must also find that the application meets the Architectural & Design Review Regulations, specifically section 21.

The proposal is permitted by special permits in the Planned Development Zone: Gerber Farm Area. The applicant is proposing several different industrial uses for the buildings, all of which fall under a special permit in the PDZ zone and shall not affect the surrounding properties.

The proposal is in harmony with the orderly development of the area and compatible with other neighboring uses. The two properties south of 0 Gerber at 5 and 6 Gerber Blvd are a part of the same PDZ zone, with the same uses. The proposal does not create a hazardous condition

relating to public health or safety; it is compatible with neighboring commercial uses; it will not create a nuisance nor will it hinder the future sound development of the community.

The development is proposed is over 500 feet away from the closest home at Quail Hollow. The proposal does not connect the development to Quail Crossing, the main road that runs through Quail Hollow.

The proposal includes pedestrian and bicycle access which includes bike racks and public sidewalks connecting to the new development.

The proposal also includes a fiscal impact analysis. This shows what the proposed buildings assessment total will be, along with the estimated real estate property tax to be generated from the development ($45,259). The town's expenses from this development are not expected to be significant. There will be no educational expenses and no refuse/recycling collection or disposal or snow removal. The development has a potential minor increase in emergency services and the minor expense for general road maintenance.

The application meets Section 17.3.1. for a special permit, as well as Section 21 for design review. Staff recommends the approval of the special permit request.

Proposed motion:

A. I move that the Planning & Zoning Commission Approve PZ 2023-03, a special permit to construct two (2) 14,000 sq foot buildings on the premise that they will exceed 25,000 square feet for all structures on the parcel (Section 4.24.4.3.15.4); the development will have more than forty (40) parking spaces (Section 4.24.4.3.15.1); the development will allow the following sections for uses:

    6. 4.24.4.3.1- Manufacturing, storing, printing, publishing, processing, fabricating, packaging or assembling activities wholly within a building or unified complex of buildings;
    7. 4.24.4.3.4- Research and experimental laboratories, veterinary hospitals and animal care services (excluding kennels), and medical facilities;
    8. 4.24.4.3.6- Professional office buildings, general office buildings, and office parks;
    9. 4.24.4.3.10- Recreation facilities, education facilities, religious facilities, cultural, non-profit, and philanthropic activities;
    10. 4.24.4.3.11- Plumbing, heating, electrical, industrial, and general contracting establishments, which may include showrooms. Any outside storage of materials or equipment, shall be screened from abutting properties and views from public streets through landscape buffering which may include fencing;

    with the following conditions:

- If a use other than one listed above is considered for one of the rental spaces at 0 Gerber Blvd, the property owner will need to obtain a special permit for the new use.

Or

B. I propose another motion