Amherst Studio Apartments

- 132 Northampton Road, Amherst -

Chapter 40B Comprehensive Permit Application

Submitted To: Amherst Zoning Board of Appeals

By: Valley Community Development Corporation

May 2020

Town of AMHERST Massachusetts

TOWN HALL • 4 BOLTWOOD AVENUE • AMHERST, MA 01002-2302

MAY 28 '20 PM 12:38 TOWN CLERK

Zoning Board of Appeals APPLICATION

For Office Use Only:

Application #: ZBA 2020-39

Reference #: 56327

Fee Paid: $ 659.00

Public Hearing Date: 6-25-20

Decision Date:

Book #: 1116 Page #: 2020-39

Received by Planning Dept: 5-26-2020

Filed with Town Clerk: 5-28-2020

(65 days from date filed):

Town Clerk

APPLICANT INFORMATION:

Applicant: Valley Community Development Corp

Address: 256 Pleasant St, Suite A
Northampton, MA 01060

Telephone: 413-586-5855

Fax: 413-586-7521

Email: lb@valleycdc.com

ATTORNEY/DESIGNER/CONSULTANT:

Berkshire Design Group

Address: 4 Allen Place
Northampton, MA 01060

Telephone: 413-582-7000

Fax:

Email: rachel@berkshiredesign.com

TYPE OF APPLICATION:

- ☐ Special Permit
- ☐ Variance
- ☒ Comprehensive Permit
- ☐ Appeal from Decision of Building Commissioner

PROPERTY INFORMATION:

Property Address/Description:
132 Northampton Road
Parcel # 14C-8

PROPERTY OWNER:

Same as applicant
(if different from applicant)

Address:

Telephone:

Email:

DEED OF PROPERTY RECORDED IN:

☒ Hampshire Cty. Reg. of Deeds ☐ Mass. Land Court

Book: 13182 Page: 330, 334

Map/Parcel: 14C-8

Zoning District: R-G

APPLICABLE ZONING BYLAW SECTION(S): ZBA Rules and Regulations, Article III, Section 1.3

Signature of applicant(s)

Signature of property owner(s)

To be filled out by Amherst Building Commissioner:

5-28-20

Date Received

Amherst Building Commissioner

Rev. 05/17

NATURE OF REQUEST AND BRIEF DESCRIPTION OF PROJECT:

Pursuant to the provisions of Chapter 40A of the General Laws of the Commonwealth of Massachusetts and the Amherst Zoning Bylaws, application is hereby made to the Amherst Zoning Board of Appeals to do the following:

Valley is seeking approval under Chapter 40B to construct a new 2 1/2 story residential multifamily building containing 28 small studio apartments and related common areas. All units will be affordable and restricted to tenant households earning 80% of the Area Median Income or less.

WAIVER(S) ARE REQUESTED FROM:

If you are requesting a waiver from any of the plan requirements, please list them below, along with your reasons. The Board shall have the right to modify or waive any of the submittal requirements, or to request additional information necessary to render a decision.

Please see list of requested waivers attached.

Checklist for the ZBA Application Process:

It is best to review the requirements with the Zoning staff before you begin your application.

It is the responsibility of the applicant to furnish all supporting documentation with the application. Please check items on this list to indicate that you have done so, or indicate your requests for waivers at the end of the list.

One hard copy of the following shall be submitted:

- ☑ **Application**: Every application shall be submitted on the official application form of the Board, provided by the Planning Department. Please provide only the original application form, no copies are needed. All information must either be typed or printed clearly.
- ☑ A **request for a certified list of abutters** must accompany all site plan applications. The **Planning Department will submit the application** for an Abutters List to the Assessor's Office and send out the abutters notices. It may take up to 10 business days for your certified list to be produced.
- ☑ **Fees:** All applications filed with the Town Clerk shall be accompanied by cash or check made payable to the Town of Amherst in the specified amount. See schedule of fees in this application packet.
- ☑ **Electronic submission:** Every application shall be accompanied by one hard copy of all submitted materials, including full size plans, to scale. All applications shall include one electronic copy of all information (except the Certified List of Abutters and fee) in a PDF form. All PDF's and electronic information should be labeled. Submissions may be accepted via email, thumb-drive, or on CD/DVD.

  Please note: Prior to a public hearing, Town staff may request up to five hard copies of full size plans for distribution. This will be requested and coordinated by Town staff.

For the following plans, and any other supplemental materials submitted as part of an application, one full size original hard copy AND one digital copy shall be submitted.

- ☑ **Site Plans**: Unless waived by the Board, all site plans shall be prepared by a Registered Engineer, Surveyor or Landscape Architect, and shall include the following:
  - name of property owner, developer and name of engineer/surveyor/landscape architect or builder
  - date, title and scale of plan
  - separate locus map showing site location and location of buildings on surrounding properties, north arrow

- all existing lot lines, easements, rights-of-way, size of property in square feet, as well as setback, side and rear yard dimensions as set forth in Table 3 of the Bylaw and zoning district
- location and use of all existing and proposed buildings and structures, including dimensions and heights
- location and names of existing or proposed streets, curb cuts, entrances and exits, parking areas, sidewalks, loading/service areas, utility systems
- existing and proposed contours and finished grade elevations, including location and volume of significant filling or excavations
- location of all natural features, including significant watercourses, wetlands, water bodies, bedrock outcroppings, stone walls and all trees, including drip lines, of eight (8) inch diameter at breast height (DBH) or larger on the subject property. In addition, all stone walls and trees, including drip lines, to be affected by clearing and/or construction within any portion of any public right-of-way immediately adjacent to the subject property shall also be shown, according to provisions of MGL Ch.40, Section 15C (Scenic Roads Act) and MGL Ch.87 (Shade Tree Act).
- location of containers and enclosures for storage and disposal of waste, recyclables and, where applicable, waste kitchen oil
- number and location of parking spaces required (2 parking spaces are required per unit)
- calculation of total lot area, wetlands, building coverage and total lot coverage

☑ **Building Plans** shall include accurate, scaled renderings of:

- Elevations, showing exterior facades indicating height, materials, architectural features and colors proposed.
- Floor Plans with dimensions showing schematic layout, use of interior spaces and means of egress

☑ **Management Plan**: Please see attached Management Plan Form.

☑ **Landscape Plan** showing proposed vegetation to be planted, including street and shade trees, shrubs and other planting. Parking lot screening, by species and type shall be detailed. Existing vegetation of note (see "Site Plans" above) and any intermittent or year-round streams, ponds or other wetlands shall also be shown.

☑ **Lighting Plan** showing location and type of outdoor lighting and lighting fixtures, said lighting to be designed to minimize glare and light spillover onto adjacent properties, streets and the night sky

☐ **Sign Plan**, including, but not limited to, dimensions, color, graphics, placement, lettering and any sign lighting N/A

In addition, the Board may require submission of the following information/plans:

☑ **Soil Erosion Plan**, if applicable, showing measures to be taken to prevent or reduce erosion both during and after construction

☐ **Traffic Impact Statement**: Details may be found in Appendix A of the Board's Rules and Regulations Traffic Study Provided

☐ **Outside Consultants**: Details may be found in Appendix B of the Board's Rules and Regulations

☐ If the property for which the permit is being sought has any tenants or lessees, they must be notified of the application. Please ask for the Planning Department's **"Tenant/Lessee Notification"** instruction sheet. N/A

☑ All applications shall be supported by a written project summary detailing all relevant facts of the application.

☑ All plans and information shall be labeled with the applicant's name, project address and be dated.

The petitioner shall submit the application and accompanying documents outlined above to the Planning Department, who shall file the application with the Town Clerk for certification.

For time requirements pertaining to public hearings and Board actions, please see the *Zoning Board of Appeals Rules and Regulations*, which are available at the Planning Department or on the Town website at **amherstma.gov.**

APPENDIX B
APPLICATION FEES

Fees accompanying applications to the Board of Appeals shall conform to the schedule below. **In addition to ALL application fees, a flat fee of $75 dollars is required for legal advertisement.** Payment for legal advertisement must be submitted with application.

Please note: If and after a Special Permit is granted, there is a $10 filing fee with the Town Clerk and a $75 dollar filing fee at the Registry of Deeds.

High Impact Uses – **Non-residential = $500**
Residential = $300 + $50/ new dwelling unit

- PURDs
- Residential uses with more than 6 units – e.g., Town Houses, Apartments, Subdividable/Converted Dwellings, Hotel or Motels, Inns, Hostel, Congregate housing for the elderly and disabled, fraternities/sororities
- Institutional Uses – e.g., Medical or residential institutions, cemetery, private lodge or club)
- Government and Public Service Uses
- Research and Industrial Uses

Moderate Impact Uses – **Non-residential** = $300
Residential = $150 + $50/ new dwelling unit

- Residential uses with 6 or fewer total units – e.g., Town Houses, Apartments, Subdividable/Converted Dwellings, Hotel or Motels, Inns, Hostel, Two-family detached
- Dwelling units in combination with stores or other permitted business or commercial uses
- Lodgers/Boarders/Roomers/Bed and Breakfast
- Supplemental apartments
- Retail, Business and Consumer Service Uses
- Motor Vehicle Related Uses
- Extensive Uses
- Flag lots ($150 per flag lot)

Low Impact Uses - $50

- Applications for/by owner-occupied single family properties– e.g., accessory uses, other than supplemental apartments, fences, signs

Other:

- Variances = $300
- Appeals from a decision of the Building Commissioner = $110
- Amendments or modifications to existing permits = Same fee as use

Comprehensive Permits *& Affordable Housing Projects* * = $500 + 50 / new dwelling unit

- ~~Limited Dividend Organizations~~ - $9 per unit
- Non-Profit Organizations - $3 per unit
- ~~Public Agencies and Local; Local~~ Initiative pursuant to 760 CMR 45.00 - $0

** Projects including 10% or more affordable units as defined under Section 12.20, Amherst Zoning Bylaw are considered Affordable Housing Projects.*

Town Projects – The application fee for certain Town projects may be waived administratively by the Director of Conservation and Development.

Fee change approved January 14, 2014 and effective on February 1, 2014

FOR SECURITY PURPOSES, THE FACE OF THIS DOCUMENT CONTAINS A COLORED BACKGROUND AND MICROPRINTING IN THE BORDER

Valley Community Development

Building Access. Opportunity.

VALLEY COMMUNITY DEVELOPMENT
256 PLEASANT STREET, STE A
NORTHAMPTON, MA 01060
(413) 586-5855

FLORENCE BANK
85 MAIN STREET
FLORENCE, MA 01062

24883

4/17/2020

PAY TO THE ORDER OF

Town of Amherst

$ **659.00

Six Hundred Fifty-Nine and 00/100**********

DOLLARS

OVER $5000 REQUIRES 2 SIGNATURES

Town of Amherst
4 Boltwood Ave.
Amherst, MA 01002

MEMO

AUTHORIZED SIGNATURE

SECURITY LOCKS WILL DISAPPEAR WHEN COPIED OR WITH NORMAL BODY HEAT

⑈024883⑈ ⑆211871688⑆ 02 25 054785⑈

www.compuchecks.com 888-356-5581

VALLEY COMMUNITY DEVELOPMENT

WWW.COMPUCHECKS.COM 888 356 5581

24883

Town of Amherst

4/17/2020

Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
4/17/2020	Bill	Special Permit	659.00	659.00		659.00
					Check Amount	659.00

Cash Checking-FSB #

659.00

$500 – Base Fee for Comp Permit
+$84 – $3 per unit for Non-Profit ($3x28)
+$75 – Legal Ad Fee

$659 – Total Permit Fee

Amherst Studio Apartments
Comprehensive Permit Application

Submitted to: Amherst Zoning Board of Appeals ("ZBA")

Submitted by: Valley Community Development Corporation ("Valley")

May 26, 2020

PROJECT SUMMARY

Name and Address of Applicant

Valley Community Development Corporation
256 Pleasant Street, Suite A
Northampton, MA 01060

Contact: Laura Baker, Real Estate Project Manager
413-586-5855, ext. 100
lb@valleycdc.com

The Applicant is a 501(c)(3) non-profit corporation.

Site Location and Description

The site is located at 132 Northampton Road (aka State Highway Route 9) in Amherst. It is parcel 14C-8 and is predominantly located in the R-G zoning district.

The parcel is just under an acre in size (.88 acres). It slopes gradually east to west and most of the parcel is cleared. Soil tests reveal sandy loam soil conditions absent large rock or ledge. Ground-water is relatively high. There are no wetlands on or adjacent to the site. The site is not within a floodplain nor within an endangered species or critical habitat zone.

It is improved by a single-family house, currently vacant. The house is situated to the far rear of the parcel and is served by an existing driveway / curb cut from Northampton Road. The structural engineer who evaluated the building estimates it was constructed in the 1930s. Town assessor records date its construction to 1946. It is not an individually significant nor a contributing historic structure. It is not located in an historic district. The house is considerably smaller than neighboring buildings and is believed to have originated as an out-building (carriage house or small barn) of the much larger and older neighboring house located at 126 Northampton Road. It is presumed that this out-building was then improved

into a habitable dwelling. It may be that the conversion to single family residential use is reflected in the assessor records date of 1946.

Utilities available at the site include public water, sewer, and electricity. Hydrant flow tests performed on Orchard Street and Northampton Road demonstrate sufficient water supply and pressure for the domestic and fire protection needs of the proposed development. The existing sewer line from the house to the Town sewer main is a 6" line, which is sufficient for the proposed use. A camera run through the line provided video footage showing the 6" sewer line is in good condition, with no cracks or root incursions. Current plans are to connect the proposed new development to this existing sewer line.

There is no natural gas serving this location. The existing house is heated by oil. The applicant hopes to avoid the use of fossil fuels at the proposed development. Current plans rely entirely upon electricity (including potential for PV solar electric production) for heating, cooling, and domestic hot water.

This site abuts a state highway that is managed by the MA Department of Transportation (DOT). The DOT typically does not permit stormwater from private property to enter its storm-sewer system. Therefore, the project civil engineer designed a stormwater management system to contain stormwater on site, to filter and treat run-off, and to balance the pre- and post-construction storm flow conditions. This system is shown on Plan LC-121. A Stormwater Management Report is attached to this application.

Site feasibility studies performed to date include:

- ✓ Boundary and topographical surveys.
- ✓ Phase I Environmental Site Assessment & Limited Subsurface Testing (no open Reportable Environmental Conditions).
- ✓ Hazardous Materials Survey of the House. The house contains lead paint and asbestos, which will be properly abated by qualified professionals prior to demolition.
- ✓ Soils Test Pits & Soils Analysis. The storm-water management plan was informed by soil analysis results showing sandy loam soil conditions with relatively shallow estimated seasonal high ground water.
- ✓ A Project Notification Form was filed with the Massachusetts Historical Commission (MHC) for demolition of the existing house. The response from MHC was a finding that this demolition is "…unlikely to affect significant historical or archeological resources." (See attached.)
- ✓ A NEPA Environmental Review was conducted by the Town Planning Department, and approved by the MA Department of Housing & Community Development, resulting in a *Finding of No Significant Impact*.

The neighborhood is mixed residential. The site is located at the juncture of three different zoning districts (General Residential, Neighborhood Residential, and Educational) and is itself almost entirely within the General Residential (R-G) zone. See zoning map attached. The proposed project is consistent with the Town definition of the R-G zone, which is excerpted below from the Amherst Zoning By-Law:

R-G General Residence

> *The purpose of the R-G District is to provide for residential neighborhoods of medium to higher density in areas both near the Town Center and between the University and the Town Center. Such areas are convenient to the services, facilities, institutions and/or employment opportunities provided in the Town Center or by the University.*

Immediate neighbors to 132 Northampton Road are:

- Amherst College's Conway Field House and Pratt Field (an athletic field)
- A large single family owner-occupied home that formerly served as an Inn / Bed & Breakfast
- Duplex tenant-occupied rental owned by Amherst College

On the opposite side of Northampton Road are:

- Two-family owner-occupied house
- 6-unit condominium in which all units are rentals; this building contains 14 bedrooms with projected occupancy between 14 – 20 persons; the owner resides out of state
- a single-family home that is for sale

Abutters to the property (Town definition of 300' from the property bounds) include a majority of residential units with the largest parcel being the Amherst College fields. Within this 300' bound:

- Most uses are residential (consistent with the proposed development) and are single or small multi-family buildings.
- Approximately half of the housing units are tenant–occupied. Some of the rental properties are owned by Amherst College.

The site is situated along a busy stretch of State Highway between University Drive to the west and the Amherst Town Center to the east. This is a major transit connector and is where future tenants will primarily drive, bike, and walk. The character of this corridor is renter-occupied housing. Of the 45 parcels on this section of Northampton Road, only 14 (31%) include an owner occupant. Of the total residential units (144) on Northampton Road, only 14 are owner occupied (less than 10%). Nearby side streets off of Northampton Road are primarily single-family owner-occupied houses or small multi-family properties.

While the neighborhood is primarily single and small multi-family houses, there are other densely settled parcels along Northampton Road, such as the Amherst College residence

halls. Assessors' records show three residence halls having 18, 27, and 45 bedrooms respectively. Located 1,100 feet by map from this site is a 78-unit assisted living facility that contains efficiency, one-bedroom, and two-bedroom rental units, and is home to an estimated 85 seniors.

Northampton Road between University Drive and the Town Center is currently improved with sidewalks along the full length of the north side of the road. On the south side, sidewalks extend from the Amherst College field, past 132 Northampton Road, and into the Town Center. Plans are currently in process (75% design completion phase) by MA Department of Transportation, which maintains Northampton Road (a State highway), to improve sidewalks on Northampton Road, creating 5' wide walkways from University Drive to the Town Center on both sides of the road, and adding two crosswalks with blinking lights at the Orchard and Hazel cross streets. This will place one crosswalk just east of 132 Northampton Road and one just west of the site. (Please also see Locus Maps.)

Proposed New Building

There is one proposed building containing 28 rental apartments. All are studio apartments averaging 230 sf each for typical units and 393 sf each for handicapped accessible units. Each studio apartment includes a kitchenette and bathroom.

Buildings	# of Floors	# of Units	Unit Types	Unit Sizes	Total Square Footage
Multi-unit residential building	2.5	28	(28) studios (2) of which are handicapped accessible	Average 230 gsf for typical units; average 393 gsf for accessible units	11,983 gsf*

**Note: Gross Square Footage has increased from the time of the Project Eligibility Letter application. This is due to the applicant's effort to achieve a high level of energy efficiency, including electric air source heat pump hot water system and Passive House certification, which requires a thicker exterior building envelope. Interior living spaces are primarily unchanged.*

This building will be secured via locks and a camera system. Entry by guests will require use of an intercom mounted by the main entry. The main entry will be equipped with push panel for persons with disabilities. The entry lobby will include resident mailboxes. This lobby is adjacent to the property management office, with an interior viewing window connecting the lobby and the office. The main entry is located at grade and the building includes an elevator for full vertical access. (All units and common areas are visit-able by a person using

a wheelchair.) Two units will be fully handicapped accessible and one additional unit will be equipped for a tenant with a sensory impairment.

Interior common areas include:

Multi-purpose Common Room
Accessible public bathroom
Laundry Room

Other interior uses are:

Office for use by Resident Services Coordinator (adjacent to Common Room)
Office for use by on-site Property Management staff (adjacent to lobby entry)

Exterior features include:

Outdoor patio for common use
Designated areas for gardening
Storage shed for gardening supplies and / or property management use
Designated, outdoor smoking area including covered bench
16 parking spaces, including 2 accessible space: plans show (8) parking spaces with blacktop surface and (8) with grass-crete pavers
Dumpster enclosure and turn-around area for trash hauling truck and other emergency vehicles
Covered Bike Rack
Pedestrian walkways connecting the building to the sideway along Northampton Road and connecting to the patio

Project Details

The original impetus for this development was the Town's desire to provide suitable housing for homeless individuals in Amherst. For this reason, 10 of the 28 units have a priority for homeless persons. The Town also articulated its preference that homeless persons not be housed in a segregated environment. For this reason, the proposed development includes a mix of income tiers, as outlined below, that will result in a variety of tenants including persons who are working, retired, and disabled.

Income Restrictions by Unit Type:

# of Units	Unit Size	Income Restriction	Unit / Tenant Type	Proposed Rent	Project Based Subsidy
10	Studio	30% AMI	Homeless preference	$737	MRVP
2	Studio	30% AMI	FCF (clients of the Dept. of Mental Health	$737	MRVP
8	Studio	50% AMI	Low Income	$740	None
8	Studio	80% AMI	Moderate Income	$795	None

Proposed Rents: Rents include all standard utilities (heat, central air conditioning, hot water, all electricity including stove). Tenants will pay for phone, internet, and cable service separately. Proposed MRVP rents are subject to annual adjustment in keeping with HUD Fair Market Rents. Non-subsidized rents are subject to annual adjustment in keeping with cost of living, HUD Income Limits, LIHTC rent limits, and future Market Study findings.

Income Restriction	Current income Max 1 person HH*	Max. Income available for housing (32% gross income)	Affordability Range
30% AMI	$17,950	$479	0-30% AMI (with project based rental subsidy)
50% AMI	$29,900	$797	46-50% AMI
80% AMI	$47,850	$1196	51%-80%

**FY 20 HUD Income Limits, effective April 1, 2020*

Duration of Restrictions requiring Low and Moderate Income Housing: It is expected that this housing will include an affordable housing restriction placed by the Town of Amherst, as well as one or more from funding agencies. Alternatively, the Town may elect to enter into a joint affordable housing restriction with other funders. The period of affordability is expected to be 99 years (or "in perpetuity").

Management Plan: Per application requirements, a Management Plan form and narrative are attached. A Sample Lease and Sample Resident Handbook are also supplied.

Supportive Housing: The proposed development includes supportive services for vulnerable tenants. Earlier this year, a detailed, draft Supportive Services Plan was made available to the public during the Project Eligibility Letter review process. This draft Supportive Services Plan will undergo review and approval by the MA Department of Housing & Community Development prior to funding award.

Local Support: This site was identified and early feasibility work was paid for using a CDBG planning grant from the Town of Amherst. The Town has articulated the need to create housing for homeless and other low income persons within the following documents:

Amherst Community Development Strategy (CDS)

This project is consistent with the Town's CDS which states: "The focus of many in the community is the extreme need for housing for the non-student population, in particular, low- and moderate-income households and permanent supportive housing, including enhanced single room occupancy (ESRO) units, for extremely low-income (ELI) people and those transitioning out of homelessness." In its CDS list of Priority Projects, #1 is: "Create affordable and fair housing options (rental and ownership) for the chronically homeless and extremely low income, low- and moderate-income families, individuals,

seniors and the disabled that includes the purchase, renovation or construction of housing and associated infrastructure."

Housing Trust Strategic Plan FY 18-22, which identifies the need for: "Smaller affordable units for individuals, including persons now accommodated in the shelter" (p. 8)

Housing Production Plan, 2013, lists among its priorities:

"Housing for at risk and special needs populations.

Housing should continue to be developed to serve those who are at risk of homelessness and/or have special needs that require supportive services. Providing stable and affordable opportunities for those transitioning out of shelters or special programs remains a high priority." (p. 59)

Local support is further demonstrated by an additional commitment of $200,000 in CDBG funds for design / pre-development costs and $500,000 in CPA funds for project implementation. When neighbors wrote to the Town Council to express concerns relative to this development, it prompted an outpouring of support letters and press from the wider community and, more recently, from students at Amherst College.

The extensive amount of discussion led to the Town establishing a web page for this project. See https://www.amherstma.gov/3489/Northampton-Road-Project for letters and press, including letters provided at the time of the Project Eligibility Letter application.

In April 2019, Valley invited abutters to an informational meeting. Valley also met with the following local persons or groups during the course of project planning:

- Neighbors and abutters individually and in small groups
- Town Councilors
- Town Finance Committee
- Community Preservation Act Committee
- CDBG Advisory Committee
- Amherst Housing Authority Board
- Board of Craig's Doors
- Amherst Community Connections
- Amherst Homeless Systems Group
- Planning Department Staff
- Town Manager
- Amherst Municipal Affordable Housing Trust
- Amherst Affordable Housing Coalition
- Amherst College Administration
- Amherst College Campus Police
- The Interfaith Housing Corporation

- Amherst Historical Commission
- Amherst Planning Board

Valley and / or its design team have consulted with:

- Amherst Tree Warden
- Amherst Public Works Superintendent
- Amherst Building Inspector
- Amherst Fire Department
- Amherst Town Engineer

In June 2019, Amherst Town Council sponsored an Open Meeting of Residents with this proposed development as the sole topic. This meeting was attended by more than 80 persons.

Although many of the abutter and neighbor concerns are reflected in the letters posted on the Town website, an attached Table of Concerns and Responses highlights some primary concerns, as well as Valley's response (as of the current phase of planning) to these concerns. As is typical, changes to the project may be a byproduct of the permitting process.

Local Preference: In general, Valley considers housing a regional resource and some low-income Amherst residents currently reside in affordable housing in neighboring communities. It is at the Town's discretion whether the Town wishes to request local preference for this development from the Department of Housing & Community Development, according to its rules and requirements.

Project Plans

A schematic level plan set dated May 8, 2020 is provided. The plan set includes:

- ✓ Architectural Plans—floor plans; elevations; sections; and 3-D renderings
- ✓ Code Summary
- ✓ Street View Analysis
- ✓ Site Plans—illustrated layout plan; existing conditions; demolition; site materials, planting, and layout; utilities and drainage; photometric; site details; and cut & fill analysis

Approach to building massing, relationship to adjacent properties, and exterior building materials:

The design inspiration for the proposed building comes from traditional residential halls located on nearby college campuses, including the Amherst College campus. Valley's goal is for the building to be clearly defined as a residential structure and blend with the traditional architectural style of its neighbors. One adjacent building (the Conway Field House at Pratt Field) is a new structure (constructed in 2013), however, it is built in a traditional style using

traditional materials (brick and stone). Many other residences in the immediate neighborhood are traditional / Victorian in form.

The proposed architectural plans make use of the sloped site to reduce the perceived size of the building, since a portion of the building is below grade. Mixed materials reduce the overall appearance of mass, as do articulated building facades, and a varied, complex roofline incorporating traditional roof pitches.

Exterior materials that are traditional in style have been selected, including brick or stone cladding for the ground-floor level and clapboard or shingles (cementitious board "Hardi" material) for upper stories. Classic 2 over 1 windows and architectural asphalt shingles are shown.

Trim details at the entry porch and front porch enhance the traditional appearance. Trim details on the building (wide corner boards, wide rake board, differentiated upper window trim and wide frieze trim) are also shown.

The specific trim details, exterior siding textures, and final building colors will continue to evolve as the design advances with the goal of building a structure that, while not pretending to be historic, blends with its surroundings.

Other important design goals include energy efficiency, eliminating the use of fossil fuels, using sustainable materials, and providing healthy indoor air quality.

Examples of sustainable materials likely to be used include: cementitious board siding (aka Hardi panel); cellulose or mineral wool insulation. Healthy indoor air quality will be achieved through (1) elimination of materials that produce unhealthy off-gases (for example, press board, certain glues in plywood, etc.); non-VOCs paint will be specified; and (2) a mechanical fresh air exchange system (Energy Recovery Ventilator) serving every dwelling unit and common area.

This building design is currently undergoing a feasibility study for Passive House Certification. It is our hope that this will be a Passive House Certified property, meeting one of the highest standards for energy efficiency.

Energy efficiency and low carbon footprint is expected to be achieved through: compact, efficient use of space; building envelope with high R-values of insulation; energy efficient triple or double-pane windows with low U values; ERV (Energy Recovery Ventilator) for mechanical fresh air; highly efficient HVAC system (Variant Refrigerant Flow mini-split system is anticipated); high efficiency air source heat pump domestic hot water heaters; Energy Star

appliances; energy efficient LED lighting coupled with some exterior solar-powered LED lighting. As budget permits, Photovoltaic panels maximizing roof surface will be included.

By locating this building in a highly walkable location, in close proximity to services, shopping, medical facilities, the bike trail, and multiple bus stops, the number of tenants who own cars, and therefore the number of vehicular trips per day, will be minimized. This reduces energy use associated with the property.

Relationship to Adjacent Properties

Scale: The scale of the proposed building was planned to be in keeping with immediate neighbors. At 11,983 gross square feet (gsf) excluding the attic, it is smaller than one immediate neighbor, the Conway Field House at Pratt Field (over 17,000 gsf), and larger than its other immediate neighbor, 126 Northampton Road (8,051 gsf excluding the attic). It is larger than the single family homes in the neighborhood and more proportionate to a 6-family building across the street (8,666 gsf). Its height is in keeping with neighboring buildings and is below the height restriction for the R-G zone (40' height restriction). A street-view analysis is attached showing how the appearance and massing of the proposed building relate to neighboring properties. Although the proposed building will be taller than the existing house, it will have the same number of living levels (i.e. finished basement, 1st floor, and 2nd floor).

Placement on Site: Like the existing house, the proposed building is situated toward the rear of the property. This creates a buffer from the traffic noise along Northampton Road and enhances the streetscape by preserving much of the existing green space adjacent to Northampton Road. The front of the proposed new building is set back more than 100' from Northampton Road. Because the proposed building sits back away from Northampton Road, its size appears smaller than if it were situated directly adjacent to the Road.

Landscaping: Currently much of the site is grassy lawn. There are scatted small fruit trees and a row of overgrown evergreens screening the existing house from Northampton Road. The proposed site plan will improve the quality of landscaping on the property by removing the overgrown evergreens blocking the house and planting a variety of trees and shrubs. In keeping with neighbor preference, the applicant proposes to remove the row of spruce trees along the driveway, which are located on the eastern property line. In their place, an 8' cedar privacy fence is proposed, along with screening vegetation. Screening vegetation is also provided along the rear and west lot lines (to provide separation from Pratt Field), around the parking area, the patio, and the smoking area. See Plan LC-111 for planting plan.

Density: Each unit within the proposed development is very small (aka as a "micro" apartment) and intended for single person occupancy. Valley compared the density of the proposed development with the density of bedrooms in other properties along Northampton Road. Density at these properties ranged from a low of 1.21 bedrooms per acre to a high of 62.90 bedrooms per acre, with a median of 10.56 bedrooms / acre, reflecting the high density of student housing in the area. The proposed development is 32 bedrooms per acre.

Most surrounding properties have fewer units than the proposed development. Early in project planning, Valley's architect prepared conceptual "fit tests" for the site. The purpose of these fit tests was to determine how many units could be constructed on the site. Given that the site is almost an acre, relatively level, with no unbuildable areas, fit tests revealed that as many as 50 or more small studio units could be constructed if site were "built out" to its full potential. Because this size of building and density seemed out of proportion to the area, Valley selected a smaller build-out of 28 units, with an overall building square footage and number of bedrooms closer to neighboring properties.

Parking and Traffic Patterns

Based on parking demand at similar properties, Valley's goal was to create between .25 and .5 parking spaces per residential unit. The current site plan shows 16 spaces (.57 spaces / unit). In Valley's direct experience, this amount of parking is adequate given that 12 of the 28 residents will be extremely low income and unlikely to be able to afford a car. The remaining residents will also have limited income and a proportion of these will not own a car. The location, with services, amenities, bus stops, a bike trail, and more within walking distance is well suited for those travelling by foot, bike, or bus. The times of highest demand for staff parking (weekdays) correlate with times of lowest demand for tenant parking, as a proportion of tenants with cars will drive to work on weekdays. The inverse is also true. The peak time for tenant parking (overnight and weekends) correlates with times when there will be little or no demand for staff parking. A Parking Study included in this application provides data from comparable housing developments and from various 3rd party parking studies to support the adequacy of the proposed number of parking spaces.

The volume of traffic passing this site is considerable. Northampton Road is a State highway and the main travel route between Amherst, Hadley and Northampton. The addition of up to 16 cars from the planned development will not have a measurable impact on the existing heavy flow of traffic. Valley conducted a preliminary consultation with a Traffic Engineer regarding site lines and these were assessed as being adequate. A Traffic Study prepared by the civil engineer is included with this application. He affirms that site lines are adequate in both directions and that the proposed development "…will result in a very small incremental increase in traffic volumes on Route 9 that will have minimal impact on traffic operations on Route 9 or any other adjacent roadways or intersections."

Need and Demand for the Proposed Housing

There is currently no comparable type of housing in Amherst. By applying varied income tiers and tenant preferences, the proposed development will help meet several critical housing needs.

Housing for Homeless Individuals

There is a profound need for housing for homeless persons. The only homeless shelter in Town, Craig's Doors, is a seasonal shelter located less than a mile from the project site. When the shelter closes for the season each spring, many of the shelter guests have no place to live and are found sleeping on the streets, in ATMs, in the parking garage, or in tents behind public and private buildings.

The need for affordable housing for extremely low income (ELI) and homeless individuals is documented in the Town's current (2013) Housing Production Plan. Unmet housing needs are identified as follows: 1,970 units for ELI households, 505 for VLI households, and 575 for LMI households, as well as 15 for persons who are homeless. The Plan sets the production goal to address these needs at 200 affordable rental units over the coming 5 years (for ELI, VLI, and homeless).

Data provided by Craig's Doors documents the characteristics and needs of homeless individuals. During three shelter seasons (2011-12, 2012-13, 2013-14) the shelter provided beds for between 143 and 161 individuals each season totaling 2,800 - 4,100 bed-nights. Of shelter guests, 48% had a history of mental illness, 45% had a history of substance abuse, and 41% were physically disabled.[1]

During the 2017-2018 season, Craig's Doors shelter served 172 unique guests (131 men and 41 women) who stayed an average of 10-30 nights. There was an increase from the prior year in the number of nights when people were turned away from the shelter due to lack of space. Guests served self-reported the following: 26% had a chronic health problem; 63% had a mental health problem; 22% had a physical disability; 31% reported substance use; 38% reported alcohol use; 35% reported a history of domestic violence; 26% reported a dual diagnosis; 11% had a developmental disability.[2]

This development will allow currently homeless individuals to enter stable, permanent housing and improve their ability to address other major life challenges. It will provide on-going supportive services so that, once housed, these tenants will retain their housing and prevent future incidents of homelessness. At Valley's homeless-preference units located in Northampton, typically 95-100% of homeless tenants retain their tenancy after one year.

[1] Present, Past, and Future of the Amherst Seasonal Homeless Shelter, a Preliminary Report of the Amherst Housing & Sheltering Committee, December 2014
[2] Data from Craig's Doors Staff (Jade Lovett)

Without appropriate supportive, low-cost housing, homeless individuals will have shortened life-spans and a higher social cost in terms of other public services (hospitalization, emergency response, and police services).

Housing for low and moderate income individuals

Census data reveals that 57% of Amherst renter households are "cost burdened" (pay more than 30% of income for rent; while an extremely high 42% are "severely cost burdened" (pay more than 50% of income for rent). This is compared to only 14% of owner households who are cost burdened and 5% who are severely cost burdened.[3]

According to its 2016 Annual Report, the Amherst Housing Authority reports that as of March 31, 2016 there were a total of 2,457 waiting list applicants for its affordable rental units. Of these, 381 were applicants for elderly/disabled housing and 1,874 applied for family housing. Of the total, 1,199 applicants are seeking a one-bedroom apartment.[4] The Housing Authority also cites over 800 applicants on a centralized Section 8 waiting list that have a local preference for Amherst.

At two private affordable housing rental developments in Amherst (Olympia Oaks and Butternut Farms) there are more than 200 applicants on waiting lists for one-bedroom apartments.[5]

Way Finders, Inc. maintains a regional waiting list for its Section 8 mobile voucher program. As of December 2016 there were over 28,000 applicants on this list, with applicants from 2004 receiving current vouchers (a 14 year wait).

In nearby Northampton, Valley's current Wait List for similar small studio apartments is more than 150 applicants. A housing lottery held in January 2020 for a similar small studio apartment building with 31 units drew 250 approved applicants. Of these, 152 reported being homeless.

Market Rate Housing

A review of apartments listing in January 2020 on Craig's List shows studio apartments in Amherst range from $950 (basement studio) to $1,600 per month for rent. One-bedroom units range from $950 to $1,950 per month. In most cases, rents do not include utilities. The proposed project has self-pay rental units priced at $740 to $795 including heat, central air conditioning, hot water, and electricity. While the proposed studios are smaller than a typical studio unit, there do not appear to be comparably priced units in the unrestricted housing market in Amherst.

[3] US Census ACS 2013-2017
[4] The Housing Authority does not have SRO units, or efficiencies, so one-bedroom units are the closest comparable.
[5] There are no SRO units, or efficiencies, in these two developments, so one-bedroom units are the closest comparable.

The three institutions of higher education located in Amherst (UMass, Amherst College, and Hampshire College) are large employers within the region. While these institutions provide student housing for a portion of students and, in some cases, faculty housing, they generally do not provide housing for staff. Many employees (lower level administrative, grounds, maintenance, dining services, janitorial, adjunct faculty) commute to Amherst due to lack of affordable housing. The proposed project, with 80% AMI units having an income cap of $47,850, will fill a critical need for workforce housing in Amherst.

Market Study

A third party Market Study will be prepared at the time of application for State financing. Proposed rents for self-pay units (50% and 80% AMI units) may be adjusted in keeping with findings from the Market Study.

ATTACHMENTS

Development Team Biographies

Abutters List Request Form

Locus Maps

Zoning Map

Table of Community Concerns and Responses

Table of Zoning Waiver Requests

Architectural and Site Plans

Stormwater Management Report & Calculations

Management Plan Form & Narrative

Sample Lease, Sample Tenant Handbook, and attachments

Parking Study

Traffic Study

Site Control: Property Deed

Site Approval Letter (aka Project Eligibility Letter) from the MA Department of Housing & Community Development

Finding of "no adverse impact" from MA Historical Commission

Letters from Municipal Boards

Development Team Biographies

Valley Community Development — Developer & Sponsor

Valley Community Development (Valley) is a non-profit corporation formed in 1988 to address the growing needs of low and moderate income people through developing and preserving affordable rental and ownership housing, cultivating economic self-sufficiency and fostering community leadership.

Since its inception, Valley Community Development has produced 279 affordable rental and ownership housing units in one of Massachusetts' most competitive and coveted real estate markets.

These homes provide economic stability and an opportunity for economic advancement to low and moderate incomes residents wanting to live and contribute to the communities of Northampton, Amherst and Easthampton in Hampshire County. Housing development remains a core service of Valley Community Development. A few samples are below and more can be seen on Valley's website at www.valleycdc.com.

683-687 Main Street, Amherst
11 Affordable Family Apartments

96-98 King Street, Northampton
10 Affordable Studios

82 Bridge Street, Northampton (under construction)
31 Affordable Studio Apartments

71 Parsons Street, Easthampton
38 Affordable Family Apartments

Housing Management Resources — Property Manager

Housing Management Resources (HMR) is a professional property management company established in 2001. HMR manages over 8,000 rental housing units spanning 11 states. HMR Leadership consists of a cohesive, experienced team who understands how to approach the complexities of affordable housing. Its expertise encompasses Low Income Housing Tax Credits and the full range of HUD programs, with a special emphasis on the layering of funding programs.

Since 2015, HMR has managed Valley's portfolio, including 53 single person occupancy apartments. For the past two years, HMR has also managed Valley's 11 family apartments located 683-687 Main Street in Amherst. HMR has a dedicated team of administrative and maintenance staff for the Northampton / Amherst region.

Austin Design Inc. Architect

Operating since 1993, Austin Design Inc. (ADI) provides architectural design services to institutional, commercial, and residential clients throughout New England. ADI, with offices in Greenfield, MA and Brattleboro, VT, has extensive experience and expertise working on existing, historic municipal and public buildings, including wood frame and timber structures. ADI also has a strong track-record designing affordable housing and highly energy efficient buildings. A few samples are below:

Pioneer Valley Cohousing, Amherst, MA

Pomeroy Lane Cooperative, Amherst, MA

Goshen Affordable Senior Housing, Goshen, MA

Wisdom Way Solar Village, Greenfield, MA

Berkshire Design Group — Site Planner / Landscape Architect / Civil Engineer

The Berkshire Design Group, Inc. (BDG) is a nationally recognized award-winning firm of landscape architects, civil engineers and land surveyors headquartered in Northampton. Since 1984 BDG has provided creative and successful solutions for a wide range of public, private, institutional, and civic clients. BDG is a cross-disciplinary team, whose work emphasizes sustainable design principals. Samples of work in Amherst are:

Valley Main Street Affordable Housing

Amity Place Condominiums

Amherst Streetscape Design

Hitchcock Center, Hampshire College, Net Zero Environmental Ed Center

MBL Housing and Development LLC — Affordable Housing Development Consultant

MBL Housing and Development (MBL) is a long time real estate development and consulting firm who understands the complexities involved in affordable housing development and financing projects. For more than two decades, MBL has worked with project sponsors to develop and protect over 4,500 units of housing throughout Massachusetts.

Valley and MBL collaborated on several successful developments including The Lumber Yard (55 affordable family apartments) and Parsons Village (38 affordable family apartments).

Felicity Hardee Law Practice — Attorney

Attorney Hardee has decades of experience in real estate law, with a specialty in affordable housing and is a longtime Amherst resident. Attorney Hardee represents clients in a wide range of complex real estate matters, including permitting, conveyancing, leasing and financing multifamily housing, commercial and industrial property. She assists clients developing and financing affordable and mixed use housing projects involving multiple financing sources, tax credits, federal and state subsidy and soft debt. Her practice includes Housing Court litigation and she represents clients in all aspects of real estate disputes and appears in state and federal court and before local agencies and regulators.

AMHERST BOARD OF ASSESSORS
REQUEST FOR CERTIFIED LIST OF ABUTTERS

Note: THE ASSESSORS OFFICE REQUIRES 10 BUSINESS DAYS TO PREPARE AN ABUTTERS LIST. WE THEREFORE ADVISE YOU NOT TO SCHEDULE A HEARING UNTIL YOU HAVE THIS LIST.

Please Print

132 Northampton Road
STREET ADDRESS

14C — **MAP**
8 — **PARCEL**

Valley Community Development Corp
OWNER'S NAME

Same
APPLICANT'S NAME

256 Pleasant St, Suite A
STREET

STREET

Northampton — **CITY**
MA 01060 — **ST**

CITY **STATE** **ZIP**

Laura Baker (413) 586-5855, ext. 100
CONTACT PERSON & PHONE #

*****Please note that if requesting abutters lists for two different departments for the same parcel, you must fill out separate abutters request forms.*****

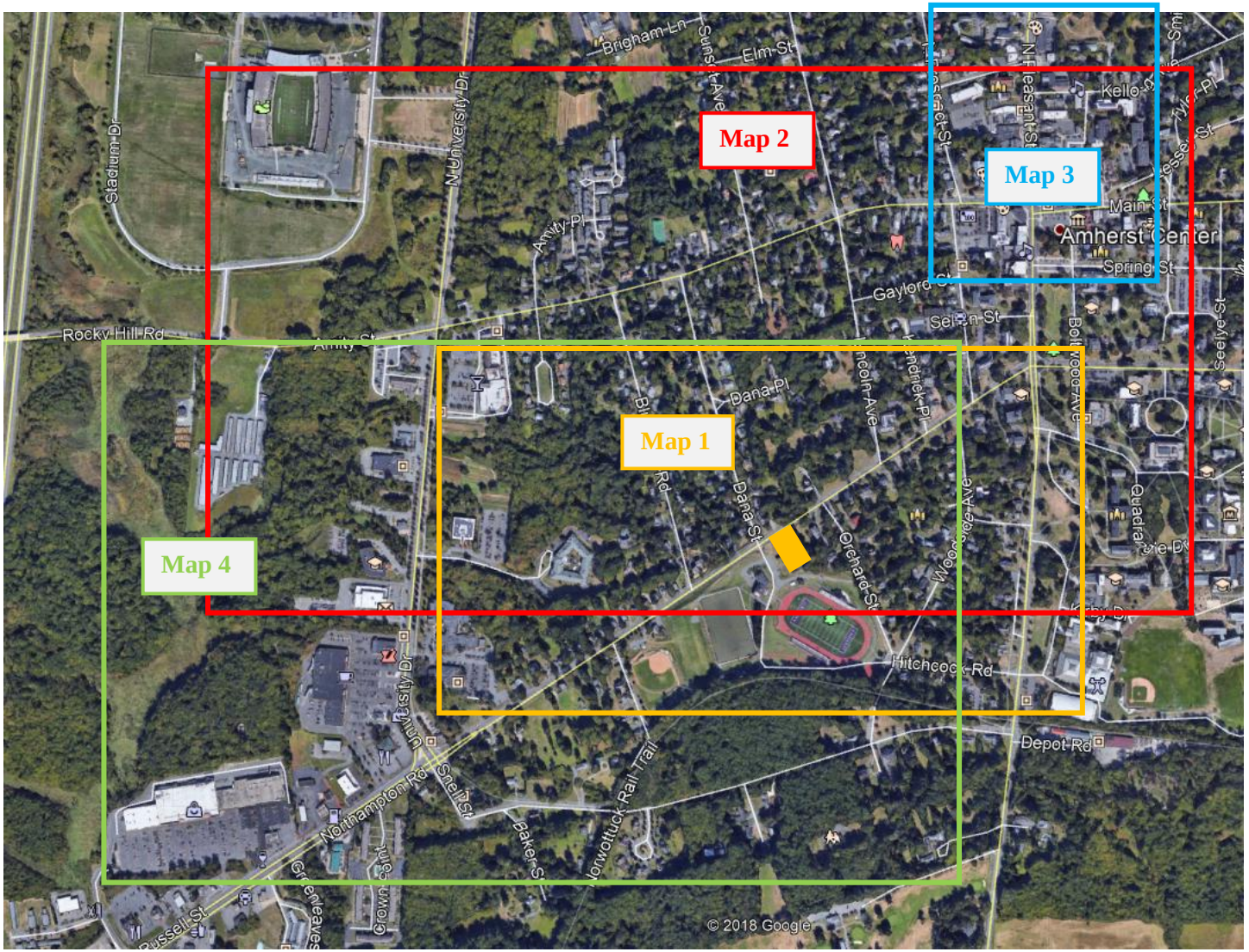
Please circle type of permit or variance requested:

- ☐ **A:** **Liquor License – Immediate abutters, also 500' from all borders for churches/hospitals/public & private schools.**
- ☐ **B:** **Planning Board – Subdivision or Special Permit - 300'**
- ✔ **C:** **Zoning: - Special Permit or Variance Appeals - 300'**
- ☐ **D:** **Conservation: -Wetland Hearing - 300'**
- ☐ **E:** **Planning - Site Plan Review 300'**
- ☐ **F:** **Selectboard - 300'**

NOTE: **THE ABUTTERS LIST IS <u>ONLY OFFICIAL FOR A PERIOD OF 30 DAYS</u> FROM THE DATE OF CERTIFICATION BY THE ASSESSOR. AFTER 30 DAYS, YOU WOULD NEED TO REAPPLY FOR A NEW LIST.**

RECEIVED

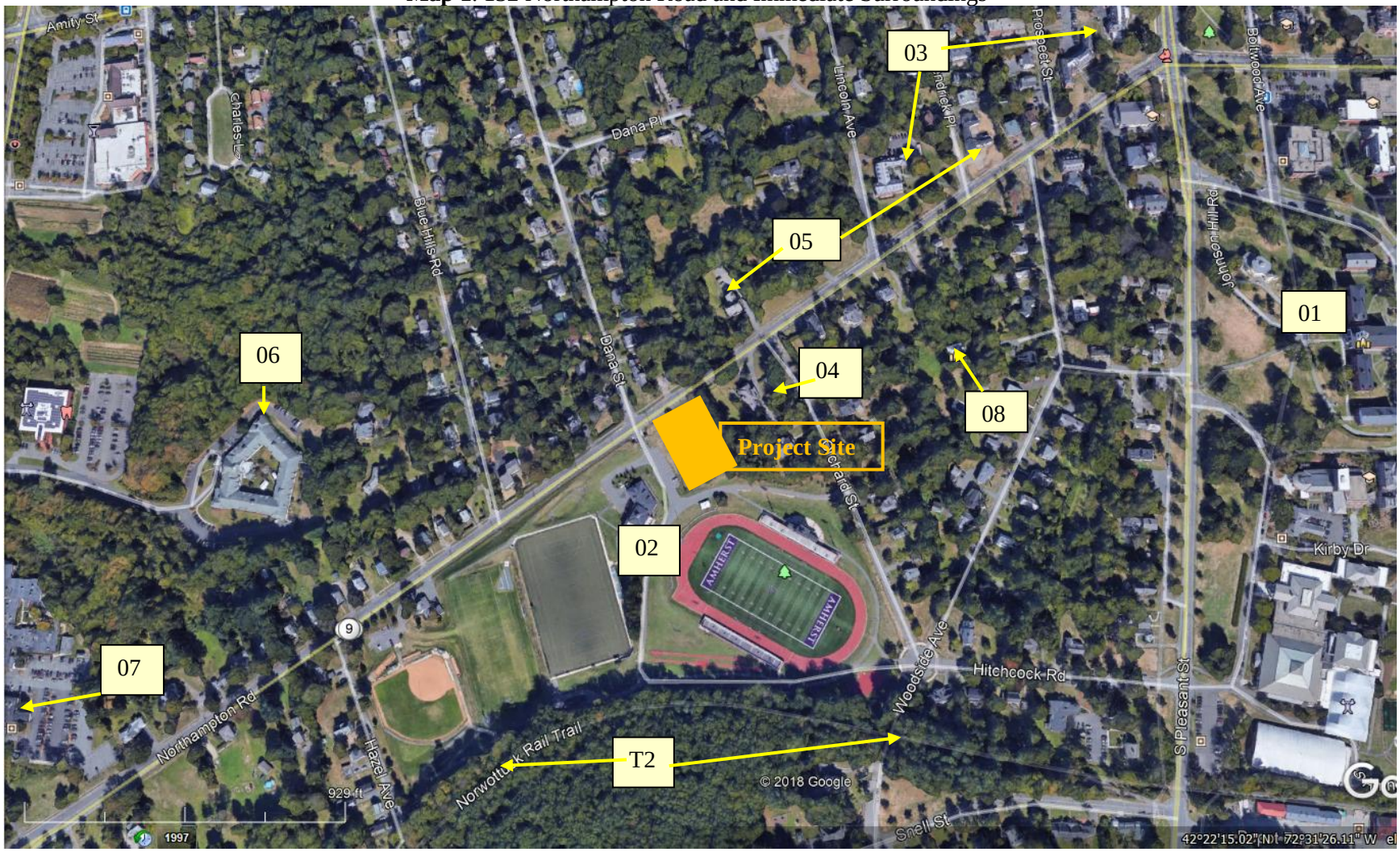
132 Northampton Road Locus Maps



Project Context Showing Locations of Detail Maps below

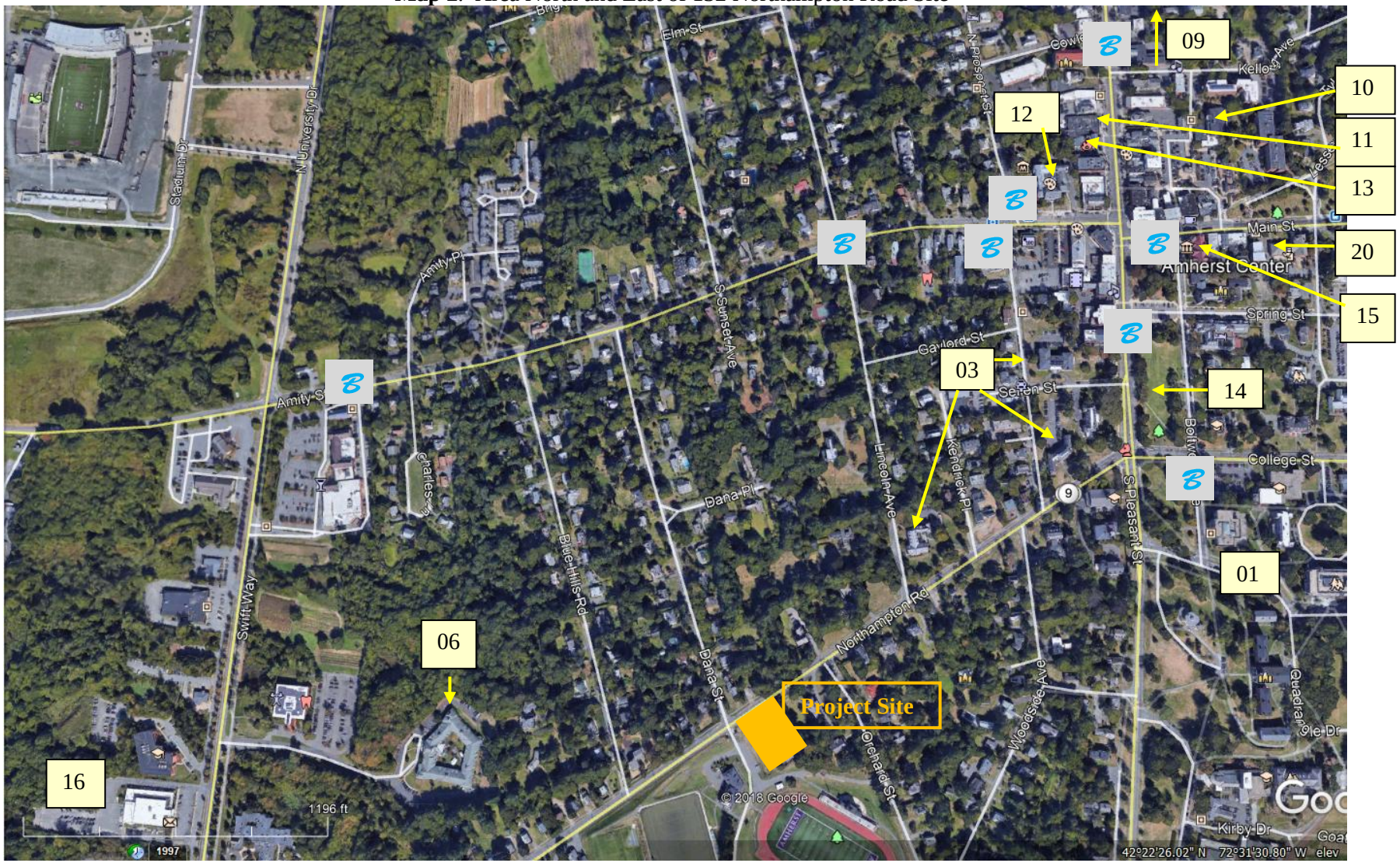
132 Northampton Rd

Map 1. 132 Northampton Road and Immediate Surroundings



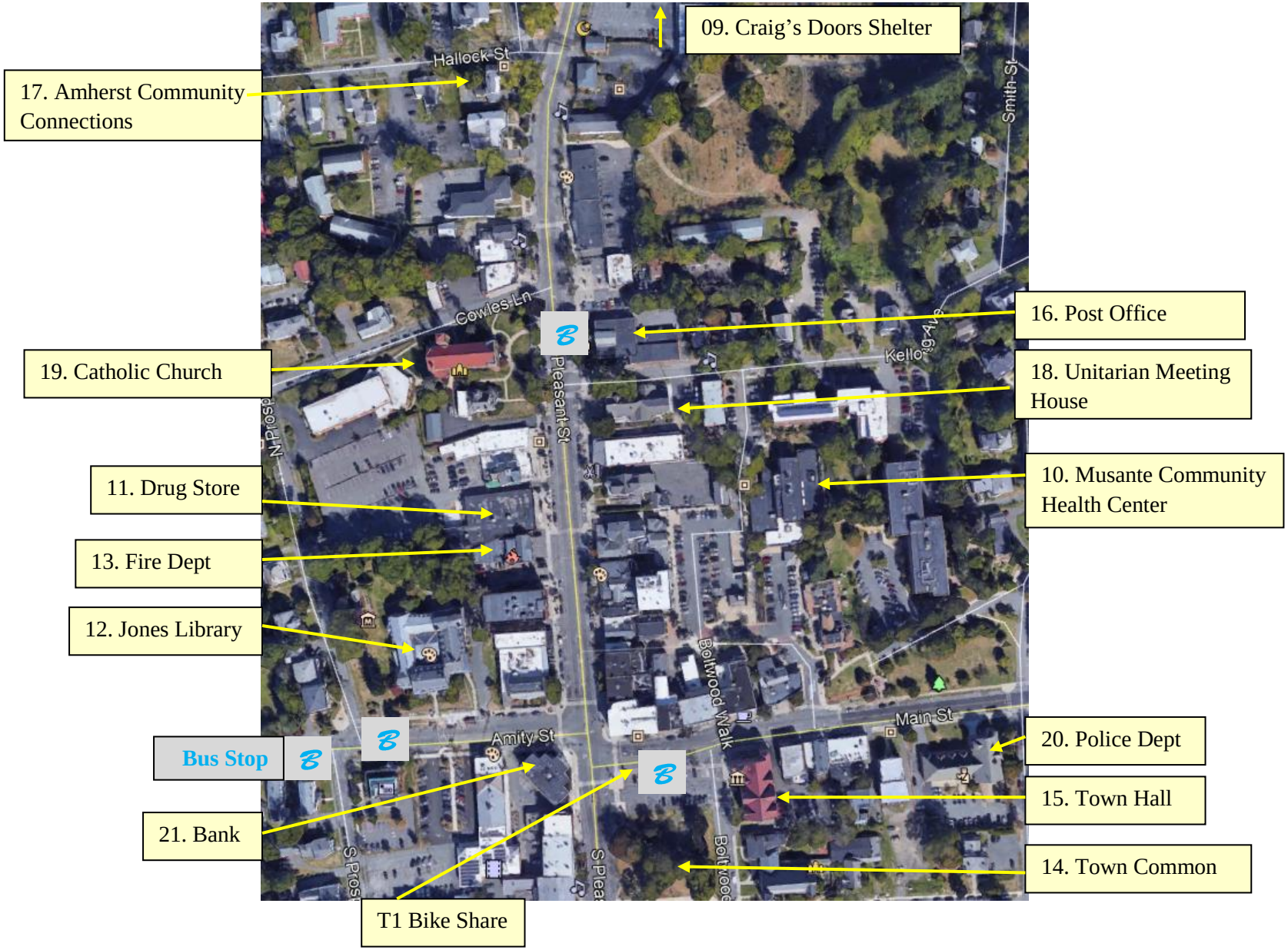
01-Amherst College 02-Pratt Field 03-Dorms 04-B&B/Inn 05-Private Multi-Family Residences 06-The Arbors
07-AEIOU Urgent Care 08 Goodwin AME Church T2-Bicycle Trail

Map 2. Area North and East of 132 Northampton Road Site



01-Amherst College 03-Dorms 06-The Arbors 09-Craig's Doors ¾ mile North 10-Community Health Center 11-Drug Store
12-Jones Library 13-Fire Dept 14-Town Common 15-Town Hall 16-Post Office 20-Police Dept Bus Stop

Map 3. Amherst Center



Map 4. Area West of 132 Northampton Road Site

02-Pratt Field 03-Dorms 04-B&B/Inn 05-Private Multi-Family Residences 06-The Arbors 07-AEIOU Urgent Care
08 AME Church 11-Drug Store 16-Post Office 22-University Drive Shopping Plaza 23 Northampton Rd Shopping Plaza
24-Planned Crosswalks 25-Planned Sidewalks (to center of town) T1-Bicycle Share Rack T2-Bicycle Trail Bus Stop

MAP LEGEND

Subject Property: 132 Northampton Road

Bus stops – indicated by Blue Symbol

01 Amherst College Main Campus
02 Amherst College Pratt Field
03 Amherst College residence halls
04 Bed and Breakfast/Inn
05 Private Residence-Multifamily
06 The Arbors Assisted Living
07 AEIOU Walk-In Urgent Care
08 Goodwin Memorial AME Zion Church
09 Craig's Doors Resource Center and Seasonal Homeless Shelter; approximately ¾ of a mile north of Town Hall
10 Musante Health Center and Bangs Community Center
11 Drug Stores (2)
12 Jones Public Library
13 Amherst Fire Department
14 Amherst Town Common
15 Amherst Town Hall
16 Post Office (2)
17 Amherst Community Connections,
18 Unitarian Meeting House
19 Roman Catholic Church
20 Amherst Police Department
21 Bank
22 Shopping Plaza-University Drive
- Good Will
- Big Y Grocery Store
- CVS Pharmacy

23 Shopping Plaza-Northampton Rd
- Stop & Shop Grocery Store
- TJ Maxx
- Dollar Tree
- AAA
- Auto Zone Auto Parts
- Johnny's Roadside Diner
- Gas Stations

24 Cross Walks to be installed by MassDOT
25 Sidewalks to be installed by MassDOT

T1 Bicycle Share Rack (2);
T2 Bicycle Trail between Northampton and Belchertown

amherstma.gov/maps

AMHERST MAPS

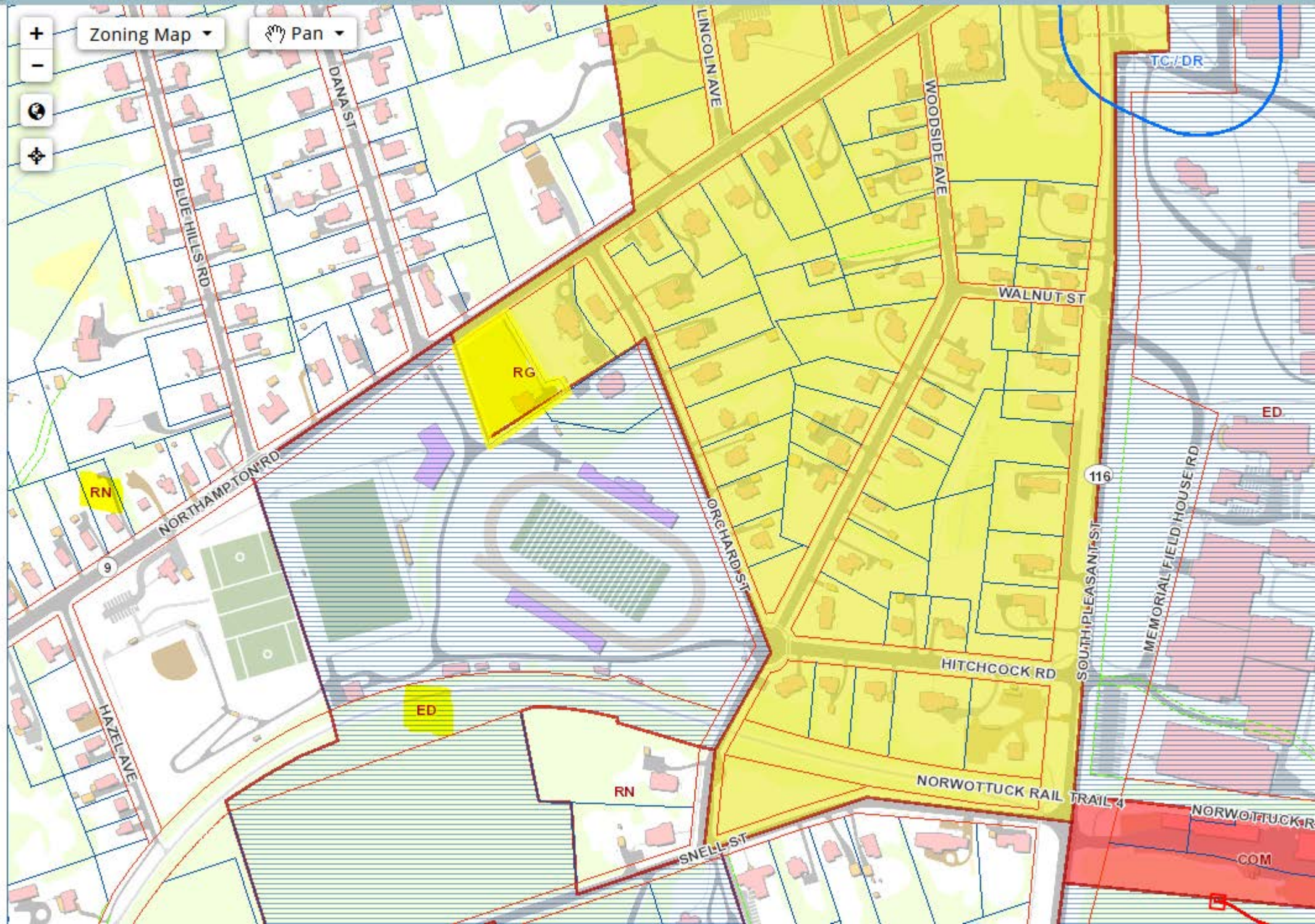


TABLE OF COMMUNITY CONCERNS AND RESPONSES

Community Concern or Request	Valley Response – at Comprehensive Permit Application Phase
At 28 units, this development is too dense; there are too many units.	Valley created alternate budgets for fewer numbers of units, but found these created negative impacts by reducing revenue for on-site staff and jeopardizing the long-term financial sustainability of the housing. Valley notes that current R-G zoning would permit construction of 7 units at this particular site given the lot size. Were these to be 7 four-bedroom units, it would create the same level (or more) of per capita density as the proposed 28 small studio apartments suitable for single person occupancy.
The building has too many stories: counting the ground floor and attic, there will be 4 living levels.	Revised plans reduce the building to 2 ½ stories with three living levels: (1) the ground floor / walk-out basement ½ story; (2) the first floor; and (3) the second floor. Units have been removed from the attic area. The proposed development has the same number of living levels as the existing house, which has a finished bedroom and bathroom in the walk-out basement level; living spaces, including a bedroom, on the 1st floor; and 3 bedrooms on the 2nd floor.
Provide more on-site services	Valley has increased both the budget (from $25,000 per annum to $45,000 per annum) for the Resident Services Coordinator and the expected number of on-site hours (from 20 per week to 27.5 - 30 per week).
Provide a live-in manager	Valley interviewed providers of similar housing as well as those with live-in managers. We found that live-in managers are most common at larger developments and at those housing developments serving more vulnerable populations (i.e. frail seniors, unaccompanied homeless youth; homeless persons with tri-morbidity, etc.). Live-in managers are not typical at the proposed type of housing and Valley concluded this is not the best use of resources at this property. At the Open Meeting of Residents in June, former tenants as well as service providers argued that these adult tenants do not want nor do they need overnight supervision. This is housing for individuals who can live independently with supports.
Provide more specifics about how services will be delivered and by whom	A detailed, draft Supportive Services Plan was included in the Project Eligibility Letter application. This Plan defines roles and documents commitments from a variety of community-based providers. This Plan will be carefully reviewed by the MA Department of Housing & Community Development and must be approved prior to funding.
Build family housing rather than single person housing at this location	This development is a response to a specific, clearly articulated need by the Town to house homeless individuals in a non-segregated manner. Valley searched for properties in Amherst for more than 2 years to identify this site to respond to this particular need.
Include a mix of unit sizes	Valley prepared budget scenarios for a building that had fewer overall units—reduced number of studios and added one-bedroom units—with the same total number of bedrooms. On both the construction

	and operating side, these budgets did not prove viable. Reduced total revenue had a negative impact on Valley's ability to provide on-site services.
Create more separation / buffer between the proposed building and the Amherst College's Pratt Field	The existing house's rear porch is located within 10' of the rear property boundary with Pratt Field. The prior plan (which re-used a portion of the existing house) would have increased this separation to 16' by removing the existing rear porch. Revised plans attached to this application increase the separation to 30'-6" by removing the existing house entirely and shifting the new building north. This added space increases the buffer area and a more robust vegetative screen is shown on current plans. This will enhance privacy for tenants living at 132 Northampton Road and will provide a better visual and sound buffer between Pratt Field and the new building.
Constructing the proposed development will adversely impact surrounding property values	Valley provided several studies for neighbor review that demonstrate construction of affordable housing does not negatively impact surrounding property values.
Construction of the development will result in closure of Pratt Field for public use by Amherst College because tenants are likely to create incidents on the athletic field	Amherst College has stated it does not foresee closure of Pratt Field to public access as a consequence of the proposed development. As is the case for anyone who creates an incident on Amherst College property currently, Campus Police will respond case by case and, as they now do, may trespass an individual and not allow that individual access to the campus.
Will this property pay real estate taxes?	Yes. Valley has consulted with the Town Assessor to estimate the after-construction valuation of the development. It is expected that annual property taxes will be approximately 4 times the current amount.
Northampton Road is too dangerous for tenants on foot. It is not safe to cross and the sidewalk does not extend all the way to University Drive on the south side of Northampton Road.	Valley believes its adult tenants will be able to safely cross Northampton Road and make use of available sidewalks in the same way that other current residents of all ages do. In addition, the planned improvements to Northampton Road by MA DOT will widen, improve, and extend the current sidewalks. There will be continuous sidewalk from the property to University Drive on the south side of Northampton Road. There will be safe crossing locations (crosswalks with lights) both to the east and the west of 132 Northampton Road (at Orchard Street and Hazel Street junctions).
Tenants will disproportionately use emergency services (police, fire, ambulance). This will be a cost burden to the Town and a disruption or hazard to neighbors. The level of 911 calls at Valley's comparable Northampton properties indicate that those tenants have unmet needs.	Extensive analysis of call data at Valley's other properties, as well as other multi-family Amherst properties, show that there is no enhanced danger or threat to neighbors. Valley believes that its current tenants do sometimes use 911 for non-emergency situations. We plan to reduce this kind of use at 132 Northampton Road through enhanced on-site staff and coordinated service provision. The majority of 911 calls from comparable properties are emergency medical calls. The draft Supportive Services Plan demonstrates the wealth of medical services and supports that are within walking distance of, or near to, 132 Northampton Road. Tenants who can easily access preventative and urgent care will use fewer emergency services. Presently Amherst Police report that 12% of their call volume

	relates to homeless persons. By housing some of these persons, overall call volume to the Police Department may decrease.
Tenants will disable smoke detectors in order to smoke in the building. This will create a fire hazard.	The proposed building will be equipped with state of the art hard wired fire alarm systems and full building sprinklers. In the case of hard-wired fire and smoke alarm systems, any disruption or tampering will cause the alarm to sound and therefore the issue will be immediately identified and addressed.
Shift any potential designated tenant smoking area away from the running track.	Valley proposes that this will be a non-smoking building. We considered designating the grounds non-smoking as well, but, based on past experience, this can result in tenants smoking on the public sidewalk directly in front of the property, which can be an undesirable outcome for neighbors and other pedestrians. Plans currently show a covered bench as the only approved smoking location on site. This is separated from the common use outdoor patio, from the track, set away from the building and building windows, and separated from the closest residential neighbor at 126 Northampton Road. Smoking secession supports will be available on-site to tenants on a voluntary basis.
Allow tenants to have overnight guests	At its other single person properties, Valley does not permit overnight guests due to the very small size of the units and as a way to control building entry and increase tenant safety. Valley will explore a revised policy that allows overnight guests with limitations—tenants can have a guest for up to 3 nights with prior notice to Property Management. Should overnight guests prove disruptive or unsafe, Valley reserves the right to adjust this policy, as needed.
Relocate the driveway from its current location (far east side of the property) to the far west side of property adjacent to Amherst College	Valley explored this relocation with the MA Department of Transportation (DOT), which owns and maintains Northampton Road, which is a State highway. MA DOT did not recommend moving the driveway to the far west side of the property, as it could create traffic congestion (and consequently less safe vehicular conditions) due to closer proximity to the Pratt Field parking entry and to the intersection of Dana Street with Northampton Road. MA DOT did advise the driveway should be moved slightly to the west so that the apron radius was within the property bound. The driveway shown on plan has shifted approximately 14' west of its original location.
Improve the visual and sound buffer between the proposed building and the immediate residential neighbor	Valley proposes installation of a solid cedar fence (8' in height) along the full boundary separating the two properties. Fence will be installed on Valley property as close to the property line as permitted by zoning bylaw. In keeping with neighbor preference, the existing row of tall evergreens located on the property line will be removed to allow planting of evergreen, understory plants to provide improved visual and sound buffer. Valley is offering to provide funds for this neighbor to plant additional vegetative screening on their property also along this fence line, should they so choose.
Relocate parking area from the east side of the property to the west side and / or in front of the building to	Due to grading and storm-water management constraints, Valley is not able to make this change in the location of the proposed parking. The

mitigate noise and dust for immediate neighbor	parking has been shifted approximately 14' farther from the eastern boundary in the current site plan.
There is insufficient on-site parking provided	Valley's initial goal for parking at this property was .25 - .5 spaces per unit. Earlier site plans achieved .5 spaces per unit. Current parking has been increased from 14 to 16 spaces (from .5 spaces per unit to .57 spaces per unit and has increased from 1 to 2 handicapped accessible spaces. This number exceeds Valley's experience for parking demand at other properties housing low income tenants that are situated in walkable locations. Applicant has provided a Parking Study providing parking demand data from comparable housing developments.
Relocate the main building entry farther from the eastern side of the property to mitigate sound	The main entry of the current house faces east and is located on the far eastern side of the building. In the current plan, the main entry is no longer located on the eastern end of the building. It is located within the elbow of the L-shaped building and is farther to the west.
Make the building easily accessible to persons with disabilities	The prior plan relied upon a long ramp for wheelchair users to access the building. The revised plan uses principles of "universal design" so that entry for all users is at grade and no ramp is needed. Interior stairs and an elevator allow access vertically to all building levels. All indoor and outdoor common areas are accessible. All walkways meet universal design guidelines. Two accessible parking spaces are situated close to the building's main entry.
The project is too expensive	This past summer, Valley provided a number of comparables to show that the former budgeted project cost (approximately $172,000 total development cost per unit) was low. In the current budget, the total development cost per unit has increased to approximately $265,000. This is due to several factors: (1) there is notable escalation in construction labor and materials costs; (2) we anticipate this escalation will continue during the time we are planning this project; (3) the high levels of energy efficiency we seek to meet, including use of PV solar panels, add expense; (4) increasing funding for the Resident Services Coordinator is accomplished by establishing a Capitalized Services Reserve within the development budget—this adds to the development cost; (5) meeting community and neighbor design requests has added costs; (6) all of the above cost increases caused Valley to change the financing approach for this project. Current budgets include use of Low Income Housing Tax Credits. Using this source results in other soft costs, particularly legal costs and construction loan interest, to increase.
The Town has committed money to the project. Will it be asked for more money at a later time?	Even though the overall project cost has increased, Valley does not anticipate asking the Town for more financial resources.
Provide cover for bike racks	Bike racks have been re-situated and provided with cover
Provide cover for the smoking bench	An open air structure is provided as cover from sun, rain, snow for the smoking bench
Provide space for outdoor storage of gardening supplies	A small shed attached to the dumpster enclosure provides space to store miscellaneous outdoor or gardening supplies. Hose bibs located

	near potential garden areas have been added to facilitate watering gardens.
Relocate dumpsters so they won't be so visible from the driveway	The design team attempted to relocate the dumpsters but found no viable alternate location that would provide the necessary turning space for the dumpster truck. The dumpsters will be screened by solid cedar fence enclosure. Although this enclosure is located at the end of a straight driveway, the location is more than 200' from Northampton Road, so the dumpster enclosure will not have a high visual impact on persons passing the site.
Use graphics to show how the size of the proposed building compares to surrounding buildings	This application includes a graphic representation showing how the proposed building size appears relative to neighboring buildings.

LIST OF REQUESTED EXEMPTIONS/ EXCEPTIONS/WAIVERS FROM THE APPLICABLE TOWN OF AMHERST BYLAWS AND REGULATIONS

ZONING BYLAW - Effective August 5, 2019

Section	Provision	Requested Exemption / Exception / Waivers and Notes
3.323 - Number of Units in Apartment Building	Apartments: no fewer than 3, nor more than 24 dwelling units allowed in apartment buildings (allowed by Special Permit in Zone R-G).	To waive the requirement in order to allow Apartment Building having 28 dwelling units, as shown on plans.
3.323 and 5.00 - General Accessory Uses	Wherever a Principal Use is allowed by Special Permit from the Board of Appeals then Accessory Uses to the Principal Use shall be subject to a Special Permit, unless otherwise provided in this Article	To waive the requirement for the Special Permit application for an Apartment Building and accessory use of on-site Offices related to the Principal Use. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
3.323 - Max percentage of units of one type	No more than 50% of units can be of any one size (# of bedrooms). In buildings where all units meet the definition of affordable, the permitting authority can waive this requirement.	To grant waiver allowing all units to be the same size (# of bedrooms) because, in the proposed development, all units meet the Town definition of affordable (reserved for tenants whose income is at or below 80% AMI), per Section 12.25.
3.323 - Location	The site or lot upon which one or more apartment buildings are proposed shall be located: 1) close to a heavily traveled street or streets, 2) close to a business, commercial or educational district, or 3) in an area already developed for multi-family use.	Grant permit for proposed apartment building at selected location which is: 1) on a heavily traveled street, 2) next to an educational district, and 3) in an area with a mix of single-family and multi-family residential uses.
3.323 - Design Review Requirements (Sections 3.2040 and 3.2041)		To grant waiver to the requirement, as it may be applicable, for separate Design Review Board review and / or permitting and allow the ZBA to administer design review standards as part of this Comprehensive Permit.
Article 4 - Development Methods	Bylaw "permits" four development methods which may be utilitized to develop land for residential purposes where such Uses are permitted in Section 3.3	To grant a waiver of the application of the development methods set forth in Article 4
5.10 - Filling of Land (See Sections 3.121 & 3.122)	Any filling of land accessory to the development of property, which raises the existing grade of any portion of a property 5,000 square feet or more in area by an average of two (2) feet or more.....shall require a Special Permit from the Special Permit Granting Authority authorized to act under the applicable section of the bylaw.	To allow quantities of cut / fill as shown on Cut / Fill Summary plan without a separate Special Permit. Necessary cut and fill is partly a function of storm-water management and partly a function of making the building and outdoor areas handicapped accessible.
Article 6, Table 3 - Additional Lot Area per Family, under Footnote "m"	Basic lot minimum = 12,000 sf; plus 4,000 sf for each additional unit for apartment	To grant waiver from requiring additional lot area per family, pursuant to Article 6, Table 3, footnote "m" to allow 28 studio units on .88 acre lot (38,253 sf).
Article 6, Table 3 -Max Lot Coverage	Max lot covereage is 40%, including pervious and impervious materials	To grant waiver allowing higher lot coverage for the proposed Development as shown on the Plans.

6.131 & 6.132 - Side Yard	An accessory structure having a height of six feet or less shall be set back a minimum of three feet from the side lot line. An accessory structure over six feet in height shall be setback a distance equal to its height. In the General Residence (R-G) District, a single-story garage, tool shed, gazebo or similar accessory structure may, under a Special Permit, be located within the side yard behind the frontline of the principal building if such use, location, and proposed dimensions are consistent with the prevailing pattern of existing development for such structures in the neighborhood.	To grant a waiver to allow a bike storage shed located within the side yard, as shown per plan, without a separate Special Permit. This single-story bike storage shed will be shielded from the neighboring property by a proposed 8' tall screening fence. See Plan LC-111 for placement of bike shed and Plan LC-506 for appearance of bike shed. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
6.140 - Rear Yard	The minimum rear yard shall be a similar unbroken area along the rear lot line, subject to the same provision regarding accessory buildings and structures as the rear portion of the required side yard. No part of the body of any building or accessory structure, except eaves, gutters, architectural elements, and uncovered steps, shall be placed within or protrude into the area between the side lot line and the side yard setback line.	To grant a waiver to allow a fenced dumpster enclosure and single-story storage and gardening shed to be located within the rear yard, and covered bicycle storage shed, as shown per plan, without a separate Special Permit. See Plan LC-111 for placement of dumpster enclosure, adjacent shed, and covered bicycle storage shed. See Plan LC-505 for typical appearance of dumpster enclosure. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
6.24 - Fence Height	Fences and walls shall not exceed six (6) feet in height along that portion of side lot lines between the minimum front setback line and rear lot line, and along the rear lot line.	To grant a waiver to allow up to 8' high fence along the east side of the property to accommodate neighbor preference.
6.25 - Fence Setback	Fences located in the rear and side yards exceeing 6' shall be set back an equal distance to their height.	To grant a waiver to allow up to 8' high fence along the east side of the property (within side and rear yards) to accommodate neighborbor preference and to locate this fence as show on Plan.
7 - Parking Spaces	2 parking spaces required for each dwelling unit	To waive the parking requirement and to allow the proposed Development as shown on the Plans. The proposed Development will contain 16 parking spaces for the dwelling units, a ratio of .57 parking spaces per dwelling unit.
7.104 - Compact Car Spaces	The Zoning Board of Appeals (SP) or the Planning Board (SPR) may allow, upon application, small car parking spaces (8 feet x 16 feet) to be substituted for up to fifty percent of the standard parkingspaces.	To allow 50% of proposed parking spaces (8 of 16 total spaces) to be designed and designated for small cars. These spaces are 8.5' x 20'.
7.110 - Landscaping for parking area	Parking areas of 10 or more spaces shall provide a minimum of 10 percent of the total parking area as landscaped open space. (this may be included in the calculation of open space area under Table 3: Dimensional Regulation: Maximum Lot Coverage).	To grant a waiver, as needed, to allow parking area landscaping as shown on plan, which includes: 183 SF for a landscaped tree island, 1694 SF of Asphalt Paving for parking and ADA spaces, and 1371 SF of dedicated grass paved parking.
7.200 - Shared Parking	Shared parking may be allowed with permission…	To grant a waiver to allow the proposed Development as shown on the Plans which includes shared parking for tenants and guests, as well as accessory parking uses (staff, service provider).
7.718 Driveway Length	There shall be a turnaround located at the end of the common driveway adequate for fire and other emergency vehicles	To the extent a turnaround for fire vehicles may be required for a driveway that is not shared, to allow a turnaround at the end of the driveway as shown on plan.

7.721 - Separate Engineered Plans	The Planning Board may require engineered plans for the driveways and drainage if it deems such plans necessary.	To grant a waiver to allow the proposed Development as shown on the submitted Plans without requirement for separate engineered plans. Plans for the driveway, site improvements, and drainage are provided in this application and are stamped by a licensed civil engineer.
8.101 - Sign Requirements	In the case of a permitted or authorized use other than a dwelling or use accessory thereto, or in the case of sale or lease of the premises – two (2) signs pertaining to such use, sale or lease provided that the combined total area of such signs clearly visible from any point off the premises shall exceed twelve (12) square feet only under a Special Permit issued by the Special Permit Granting Authority.	To grant a waiver to allow a temporary project sign to be erected on the property during the construction period of a size not to exceed 3' x 5'. To allow funders and contractors to install temporary signs during the construction period. To waive the requirement for separate Special Permit, as might be applicable, for temporary construction signs. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
10.387 - Traffic Impact Report	If the Special Permit Granting Authority deems the proposal likely to have a significantly adverse impact on traffic patterns, it shall be permitted to require a traffic impact report, and the proposal shall comply with Section 11.2437 of this Bylaw.	To allow the permiting body to deem the Traffic Report submitted by the applicant with this permit application as sufficient and, given minimal traffic impact from the proposed development, to not require additional preparation of a Traffic Impact Report.
11.2 - Separate Site Plan Review	Establishes requirements for Site Plan Review.	To waive the requirement for Site Plan Review and to allow the proposed Development as shown on the Plans, including the proposed uses. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
Article 13 – Demolition Delay	Establishes demolition delay procedure for significant structures.	To the extent that the existing structure proposed for demolition is subject to Article 13, to waive the requirement for demolition delay and to allow the demolition of the designated structure. This application includes a written finding from the MA Historical Commission that demolition of the designated structure is "unlikely to affect significant historic or archeological resources." A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
15.12- Inclusionary Zoning	Requires establishment of housing restrictions to ensure that affordable housing units will be available to eligible renters.	To waive the application of Section 15.12 and acknowledge the application of Section 15.13 that assistance programs used for construction of the project will govern affordability.
15.14- Inclusionary Zoning	Requires affordable units to be comparable to market rate units.	To waive requirement that affordable units be comparable to market rate units as all units will be affordable.
2.04 & 3.21 - Educational Uses	In an Educational District any use of land and buildings is permitted which may legally be carried on by, or under the auspices of the College or University which owns or manages the property in said District... It is intended that the Zoning Map shall include in Educational Districts only land which is in fact owned or managed by Amherst College, Hampshire College, or the University of Massachusetts	Due to a minor mapping discrepancy, the current zone line dividing the ED zone from the RG zone crosses the extreme rear of the site (parcel 14C-8). When these zones were adopted by the Town, the zone line and property line were identical and the intent of the ED district is to only apply to land owned by Amherst College, Hampshire College, or the University of Massachusetts. None of these entities owns or manages, or has in the past owned or managed, parcel 14C-8 located at 132 Northampton Road. Section 2.02 further states that "..."[b]oundaries which appear to follow public or institutional property lines shall coincide with such property lines." The primary zone for parcel 14C-8 is R-G. For these reasons, the applicant requests a waiver from the educational use requirements in Sections 2.04 and 3.21 to any extent that the ZBA deems ED uses are applicable to this parcel.

GENERAL BYLAWS - May 2020

3.3 - Work in Town Road	No person shall make any excavation in a public way, disturb its curbing or pavement, pave any unpaved portion thereof, or remove earth or gravel therefrom, without first obtaining a written permit from the Town Manager.	To waive the requirements of this provision of the General Bylaws and allow the Zoning Board of Appeals to allow any necessary excavation or disturbance of any public way needed for the construction and operation of the Development, as shown on the Plans, with final administrative approval of the Town Manager and/or Town Engineer. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
3.3 - Local Driveway Permit	...nor shall any person construct or alter that portion of a driveway lying within a way in the Town over which the public has a right to travel without first securing a permit from the Town Manager.	To waive the requirements of this provision of the General Bylaws and allow the Zoning Board of Appeals to allow any necessary driveway permits and approvals needed for the construction and operation of the Development, as shown on the Plans, with final administrative approval of the Town Manager and/or Town Engineer. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
3.45 - Emergency Access	Approval of style, type, and location of key vault by the Fire Department.	To waive separate approval by the Fire Department, but to include the Fire Department in approval of proposed plans with regard to emergency access. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
3.50(G)(1)(b) - Rental Permit, Subsidized Housing	Where residential rental units are regularly inspected under the requirements of the Commonwealth or federal government, no Self-Inspection and Certification shall be required. Annual certification by the Owner that a rental unit has been inspected in accordance with the law of the Commonwealth or federal law shall be provided to the Town and shall be accepted by the Town as evidence of Self-Inspection as part of any permit application or renewal.	To permit applicant to provide annual certification that inspection instead of self-certification.

OTHER REGULATIONS / APPROVALS / REQUIREMENTS

Landscaping Guidelines	Guidelines require consultation with Tree Warden prior to removing any tree(s) along or near a public road.	To waive the requirement for separate Tree Warden approval, but to include Tree Warden input during Comprehensive Permit process. To waive compliance with the Amherst Landscaping Guidelines and allow tree and vegetation removal and new plantings as shown on submitted plans. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
Sewer Connection Permit – Engineering Department	Requires Engineering Department approval for sewer connection.	To waive the requirement for separate Engineering Department approval and to allow sewer connection for proposed Development, but to include Engineering Department input during Comprehensive Permit process. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
Water Connection Permit	Requires Inspection Services Department approval for water connection.	To waive the requirement for separate Inspection Services Department approval and to allow water connection for proposed Development, but to include Inspection Services input during Comprehensive Permit process. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.

Demolition Permit	Requires Inspection Services approval prior to demolition of existing structure.	To waive the requirement for separate Inspection Services approval to allow demolition of existing structures that will be removed prior to commencing construction of the proposed Development, but to include Inspection Services input during Comprehensive Permit process. A Comprehensive Permit may provide all local permits and approvals per M.G.L. c. 40B.
Development Per Plans	Any applicable local by-laws or regulation not specifically cited above	To allow waivers to requirements in local bylaws and regulations relating to dimensional and use requirements to the extent necessary to build the Project as presented on the plans and any subsequent Final Plans that may be subject to permitting authority approval

Amherst Studio Apartments

132 Northampton Rd. Amherst, MA 01002

Not For Construction

Comprehensive Permit Submission

8 May, 2020

Building Code Narrative

Part 1: Project Summary

The proposed development consists of 28 studio units of affordable housing on a .88 acre lot at 132 Northampton Road in Amherst, MA. An existing home on the lot will be demolished, and a new 11,983 square foot 2 ½ half story building with apartments on 3 levels will be constructed. The building is accessed thru a main at-grade lobby with an open stair leading down to the walk-out basement level and up to the first floor. Egress stairs at each end provide direct access from all floors to the exterior. A 4-stop elevator connects the lobby and all floors. Interior common and support spaces include a resident common room, accessible public bathroom, resident services coordinator office, property manager office and laundry room.

Unit Break Down:

Floor Level	Unit Type	Net Area Each (sf)	Total Units
Basement	Typical Studio Unit	230	6
	Corner Unit	266	1
	Accessible Unit	393	0
	Subtotal Basement		**7**
First Floor	Typical Studio Unit	230	7
	Corner Unit	266	2
	Accessible Unit	393	1
	Subtotal First Floor		**10**
Second Floor	Typical Studio Unit	230	9
	Corner Unit	266	1
	Accessible Unit	393	1
	Subtotal Second Floor		**11**
	Total Project		**28**

Universal Design and Accessible Features

- Site layout and features provide an accessible route from the street to parking and all building entrances. Accessible parking spaces are located adjacent to the main building entrance.
- Vertical access to all floors is achieved by on-grade entrances and a 4 stop elevator. All units are visitable with MAAB Group 1 floor and door clearances, kitchens, baths; 2 units are MAAB Group 2A fully accessible, and 1 unit is visual and hearing impaired.

Construction Features

- Site work includes excavation, filling and grading, stormwater utilities, water and sewer and electric utilities, driveway and walk paving, retaining walls, fencing and planting.
- Construction is slab on grade and frost wall foundation, wood exterior and interior framing, open web floor trusses, and truss and dimensional lumber roof framing. Roofing is asphalt shingles, solar ready, siding is HardiePlank clapboards above ground floor veneer stone. Interiors include resilient flooring, drywall finishes, kitchens and baths.
- High levels of insulation and air barrier systems provide enhanced energy efficiency and sustainability throughout with a goal to reach Passive House performance levels.
- MEP work includes sanitary sewer, water service and distribution, ERV ventilation and a VRF heating and cooling system with ductless split indoor conditioning units. Hot water will be heated with electric heat pump water heaters. The building will be fully sprinklered in accordance with NFPA 13 and will include fire alarm and emergency lighting systems.

DRAWING INDEX

A0.00 COVER

A0.10 3d RENDERS
A1.10 CODE SUMMARY
A1.15 STREET VIEW

LC 001 ILLUSTRATIVE SITE PLAN
LC 100 EXISTING CONDITIONS SITE PLAN
LC 101 SITE DEMOLITION PLAN
LC 111 SITE MATERIALS, PLANTING & LAYOUT PLAN
LC 121 GRADING DRAINAGE PLAN
LC 131 UTILITY PLAN
LC 141 PHOTOMETRIC PLAN
LC 501 SITE DETAILS
LC 502 SITE DETAILS
LC 503 SITE DETAILS
LC 504 SITE DETAILS
LC 505 SITE DETAILS
LC 506 SITE DETAILS
LC 601 CUT FILL ANALYSIS
LC 602 CUT FILL ANALYSIS

A3.00 BASEMENT FLOOR PLAN
A3.10 1ST FLOOR PLAN
A3.20 2ND FLOOR PLAN
A3.30 ROOF PLAN

A5.10 EXTERIOR ELEVATIONS
A5.20 EXTERIOR ELEVATIONS
A5.30 EXTERIOR ELEVATIONS
A5.40 EXTERIOR ELEVATIONS

A6.10 WALL SECTION
A6.12 BUILDING SECTIONS
A6.14 BUILDING SECTIONS
A6.20 STAIR SECTIONS

A8.10 LARGE SCALE PLANS
A8.20 LARGE SCALE PLANS

AUSTIN DESIGN
Greenfield MA 01301 - 413 624 9669
167 Main St Brattleboro VT 05301 - 802-451-5966

© Austin Design Inc.

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

S&A Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

SOUTHEAST PERSPECTIVE

NORTHEAST PERSPECTIVE

SOUTHWEST PERSPECTIVE

NORTHWEST PERSPECTIVE

AUSTIN DESIGN
architecture for enjoying life

2 Mead St
Greenfield MA 01301
413 624 9669

167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

A0.10

© Austin Design Inc.

Core Building Data: Actual *(Code Requirement)* if different

New 2 1/2 story building housing 28 studio apartment units

- Total Gross sf area = 11,983 gsf
  - 4,021 gsf Basement Flr.; 4,021 gsf 1st Flr.; 3,941 gsf 2nd Flr.
  - Ground floor covered area including porches and all roof overhangs: 4,799 sf
  - 230 nsf Typical studio units; 393 nsf Typical accessible studio units.
- Use group and Occupancy: Mixed use – non separated:
  - R2 28 residential units: 6,910 sf, Total Occupancy 35
  - B Common Room, Offices, Laundry: 720 sf, Total Occupancy 8
  - Total Occupancy = 159
- Table 504.3 Allowable Building Height: Type VB, S, R&B, 42.5' *(60)*
  - Average Building Height Per Amherst Zoning 38'-4" (40)
- Table 504.4 Allowable No. of Stories: Type VB, S, R-2&B, 3 stories *(3)*
- Table 506.2 Allowable Floor Area per Flr: Type VB, S, R-2&B, 4,021 *(21,000)*
- Construction Type Table 601 Type VB
- Partition Ratings:
  - Stairs 1 hr, 1hr. dr.
  - Corridors .5hr, .5hr. dr.
  - Unit separations .5hr, .5hr. dr.
- Fire Protection (Fire Area =12,761 sf) NFPA 13 Sprinkler and Alarm Systems
- Egress
  - Number of Exits 4 *(2)*
  - Stairway Width 36" Min. (36" Min.)
  - Corridor Width 42" Min. (36" Min.)
  - Travel Distance 61' *(250')*
  - Egress Illumination Yes
  - Exit Signs Yes
  - Emergency Escape Yes
- Accessibility:
  - Common Spaces Fully Accessible
  - Units Group 1
  - 2 Units Group 2 *(2)*

Applicable Codes:

- 2015 IBC International Building Code with MA Amendments 780 CMR Ninth Addition.
- 2018 IECC International Energy Code.
- 2009 IMC International Mechanical Code with MA Amendments 780 CMR Eighth Addition.
- NFPA 13
- 521 CMR Massachusetts Architectural Access Board, January 27, 2006 (MAAB)
- Uniform Federal Accessibility Standards (UFAS), 24 C.F.R.
- Fair housing Act

Applicable Code Review Summary:
2015 IBC with Ma Amendments

Relevant Sections of 2015 IBC as amended by 780 CMR 9th Edition:

2015 IBC Chapter 4 Special Detailed Requirements Based On Use And Occupancy:

- 420.2 Separation Walls: *Walls separating units in the same building shall be constructed as fire partitions in accordance with Section 709.*
- 420.3 Horizontal Separation: *floor assemblies separating sleeping or dwelling units from other occupancies shall be constructed as fire partitions in accordance with Section 711.*

2015 IBC Chapter 7 Fire and Smoke Protection Systems:

- 708.3 Fire partitions, Fire resistance Rating: *Fire partitions to have a 1 hr rating except:*
  - *Dwelling unit and sleeping unit separations in buildings of type VB construction shall fire-resistance rating of not less than ½ hr in buildings equipped throughout with automatic sprinkler system in accordance with Section 903.3.1.1*
- 708.4 Fire Partitions, Continuity: Fire partitions shall be continuous to underside slab or deck or have fireblocking or draft stopping at the partitions line.
  - Exception 5: Fireblocking or draftstopping is not required at partition line in R2 buildings that do not exceed 4 stories and where attic space does not exceed 3,000 sf or above every 2 dwelling units.
- 711.2.4.3 Dwelling units and sleeping units: *Horizontal assemblies serving as dwelling or sleeping unit separations in accordance with Section 420.3 shall be not less than 1-hour fire-resistance-rated construction.*
  - Exception: Horizontal assemblies separating dwelling units and sleeping units shall be not less than ½ hour fire-resistance-rated construction in a building of Type IIB, IIIB and VB construction, where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.
- 713.4 Fire-resistance Rating: *Shaft enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less than 1 hour where connecting less than four stories. The number of stories connected by the shaft enclosure shall include any basements but not any mezzanines. Shaft enclosures shall have a fire- resistance rating not less than the floor assembly penetrated, but need not exceed 2 hours. Shaft enclosures shall meet the requirements of Section 703.2.1.*
- 714.3.1 Through Penetrations:
  - *Exception 2: Where penetrating items are steel, ferrous, copper pipes tubes or conduits the annular space between the item and the rated wall can be a protected with fire rated caulk.*
- 714.4.2 Membrane Penetrations: *Penetrations of membranes that are part of a horizontal assembly shall comply with Section 714.4.1.1 or 714.4.1.2. Where floor/ceiling assemblies are required to have a fire-resistance rating, recessed fixtures shall be installed such that the required fire resistance will not be reduced. Exceptions: 1. Membrane penetrations by steel, ferrous or copper conduits, pipes, tubes or vents, or concrete or masonry items where the annular space is protected either in accordance with Section 714.4.1 or to prevent the free passage of flame and the products of combustion. The aggregate area of the openings through the membrane shall not exceed 100 square inches (64 500 mm2) in any 100 square feet (9.3 m2) of ceiling area in assemblies tested without penetrations.*
- 715.1 Fire resistive joint Systems: *Joints installed between fire resistive rated walls, floor, roof/ceiling assemblies to be protected by a fire caulk or other fire stop system rated for not less than the wall rating.*
- *717.5.4* Ducts and Transfer openings, Dampers, Where Required, Fire partitions: *Ducts and air transfer openings that penetrate fire partitions shall be protected with listed fire dampers installed in accordance with their listing.*
  Exceptions: Such walls are penetrated by ducted HVAC systems have a required fire-resistance rating of 1 hour or less, and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
- *717.6.2* Ducts and Transfer openings, Horizontal Assemblies, Membrane Penetrations: *Ducts and air transfer openings constructed of approved materials in accordance with the International Mechanical Code that penetrate the ceiling membrane of a fire-resistance-rated floor/ceiling or roof/ceiling assembly shall be protected with one of the following:*
  3. A listed ceiling radiation damper installed at the ceiling line where a diffuser with no duct attached penetrates the ceiling of a fire-resistance-rated floor/ ceiling or roof/ceiling assembly.
- *717.6.2.1* Ducts and Transfer openings, Horizontal Assemblies, Ceiling Radiation Dampers: *Ceiling radiation dampers are not required where one of the following applies:*
  2. Where exhaust duct penetrations are protected in accordance with Section 714.4.2, are located within the cavity of a wall and do not pass through another dwelling unit or tenant space.
- 718.4.2 *Draftstopping* in Attics Groups R1 and R2: *Draftstopping is required except as below:*
  3. *Fireblocking or draftstopping is not required at partition line in R2 buildings that do not exceed 4 stories and where attic space does not exceed 3,000 sf or above every 2 dwelling units.*

2015 IBC Chapter 8 Interior Finishes:

- Table 803.11 Interior Wall and Ceiling Finish Requirements By Occupancy: Group R2 rooms and Enclosed Spaces: *Class C*

2015 IBC Chapter 9 Fire Protection Systems:

- 903.2.8 Automatic Sprinkler Systems Where Required: Group R: *An automatic sprinkler system installed in accordance with Section 903.3 is required throughout all buildings with a Group R fire area.*
- 906.1 Portable fire Extinguishers Where Required: *Required in new and existing facilities.*
- 907.2.9.1 Manual Fire Alarm Systems Group 1: *3 stories above grade, Group 3: The building contains more than 16 dwelling or sleeping units.*
- 907.2.11 Single and Multiple Station Smoke Alarms, Group R-2: *Shall be installed in the specified locations.*
- [F] 915.1 General: *Carbon monoxide detection shall be installed in accordance with Sections 915.1.1 through 915.6.*

2015 IBC Chapter 10 Means of Egress:

- 1006.1 Number of Exits and Exit Access Doorways: *The number of exits required shall comply with Section 1006.3 for stories*
- 1008.1 Means Of Egress Illumination: *The means of egress, including the exit discharge shall be illuminated at all times except as follows:*
  3. *Dwelling units and sleeping units in Groups R-1, R-2 and R-3.*
- 1013.1 Exit Signs Where Required: *Exits and exit access doors shall have an illuminated exit sign except as follows:*
  3. *Dwelling units and sleeping units in Groups R-1, R-2 and R-3.*
- 1030 Emergency Escape and Rescue: *Group R-2 occupancies shall comply with emergency escape and rescue requirements from tables 1006.3.2(1) and 1006.3.2(2) and R-3 occupancies. All sleeping rooms located below fourth floor and above grade plane shall have at least one exterior emergency escape and rescue opening in accordance with this section.*
- 1030.5.1 Minimum Size: Minimum horizontal area to be 9 square feet and minimum horizontal dimension to be 36". Windows shall open fully.
- 1030.5.2 Ladders or Steps: Windows exceeding 44" in horizontal depth shall be equipped with a ladder. Ladders shall comply with this section.

NFPA 13:

- *9.2.1.7* Sprinkler Location Requirements, Concealed Spaces not Requiring Sprinkler Protection: *Concealed space filled with non-combustible insulation shall not require sprinkler protection.*
- *9.2.1.7.1* Sprinkler Location Requirements, Concealed Spaces not Requiring Sprinkler Protection: *A maximum 2" air gap at the top of the space shall be permitted.*

2015 IBC Chapter 11 Accessibility:

- *See Accessibility Code Section below.*

2015 IECC Energy Conservation:

- *301.1* General. *Climate zones from Figure R301.1 or Table R301.1 shall be used in determining the applicable requirements from Chapters 4 and 5.*
  Climate Zone 5A.
- *402.1.1* Vapor Retarder: *Wall assemblies in the building thermal envelope shall comply with vapor retarder requirements of Section R702.7 of the IRC or Section 1405.3 of the IBC, as applicable.*
  - *Table IRC 2015 R702.7.1 Class III Vapor retarders: Permitted with continuous insulation ≥ 7.5 over 2x6 wall. Otherwise class I or Class II required.*
  - *IBC 2015 1405.3.2 Class III Vapor retarders: Only class II vapor retarders shall be used on the interior side of wood framed walls where insulated sheathing with a perm rating of less than 1 is applied to the exterior wall in accordance with Table 1405.3.2: continuous insulation ≥ 7.5 over 2x6 wall.*
- *402.1.2* Insulation and fenestration criteria. *The building thermal envelope shall meet the requirements of Tables R402.1.2 based on the climate zone specified in Chapter 3 (zone 5A).*
- *Table R402.1.2*
  - *Fenestration U Factor: 0.32*
  - *Ceiling R-Value: 49*
  - *Wood frame Wall R-Value: 20 or 13+5*
  - *Slab R-value and Depth: 10, 2ft*
- *MA Stretch Code:*
- *Energy Star Thermal Bypass Checklist*
- *HERS rating:*

Accessibility Codes:

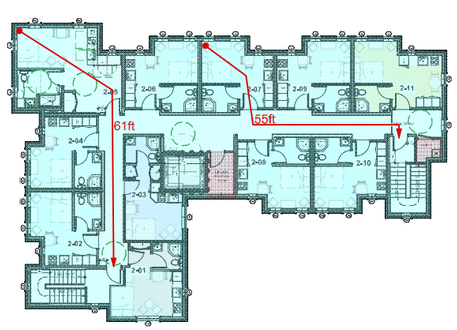
Summary:

521CMR is the applicable building code for the project. Requirements of the Fair Housing Act and UFAS apply due to funding sources. Since the project consists of individual units only and no public accommodations the ADA does not apply. While some details of the individual codes vary, the project is designed to 521CMR as that is the governing regulatory body.

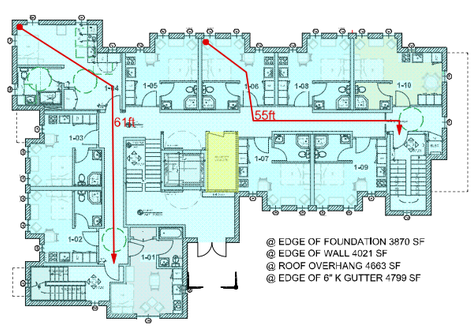
521 CMR:

- 3.2 Jurisdiction, New Construction: *All new construction of public buildings/facilities shall comply fully with 521 CMR.*
- 9.2 Applicability: *new construction multiple dwellings shall meet the requirements of 9.3, Group 1 or 9.4, group 2 Dwelling Units.*
- 9.3 Group 1 Dwelling Units: *In multiple dwellings, for which building permits for new construction are issued on or after September 1, 1996, that are for rent, hire, lease or sale and that are equipped with an elevator, all dwelling units must be constructed as Group 1 Dwelling Units, except those covered in 521 CMR 9.4, Group 2 Dwelling Units.*
- 9.4 Group 2 Dwelling Units: *In multiple dwellings that are for rent, hire, or lease (but not for sale) and contain 20 or more units, at least 5% of the dwelling units must be Group 2A units. Group 2A units must comply with 521 CMR 9.5, Dwelling Unit Interiors; and 521 CMR 44.00: GROUP 2 BATHROOMS; and 521 CMR 45.00: GROUP 2 KITCHENS; and 521 CMR 47.00: GROUP 2 BEDROOMS. 9.5 Dwelling Unit interiors*
  - *9.5.1: Doorways: Only entry door to comply with 26.11 Door Hardware*
  - *9.5.2.a Entries: peephole at 60", vison panel or sidelight at 60" max to bottom edge.*
  - *9.5.3 Buzzers/bels, intercoms to comply with reach range requirements.*
  - *9.5.4 Accessible routes 36" wide*
  - *9.5.6 Electrical outlets, switches and controls 15"-48" above floor One outlet on same wall as telephone jack and door chime.*
  - *9.5.8 Controls and alarms between 36" and 48" above floor.*
  - *9.8 Closet shelves and poles able to be relocatable between 42" and 82" above floor.*
- 9.4.2 Distribution: Group 2A dwelling units shall be proportionally distributed across the total number of units according to number of bedrooms, size, quality, price and location.
- 9.7 Sleeping Accommodations For Persons Who Are Deaf Or Hard Of Hearing: *In addition to those units required to be accessible by 521 CMR 9.4, Group 2 Dwelling Units, 2% of the total number of dwelling units in the complex or project, but not less than one shall comply with the following:*
- *10.1* Public Use And Common Use Spaces In Multiple Dwellings *General: The public use and common use spaces of multiple dwellings in existing buildings consisting of 12 or more units in a building, shall be accessible and shall comply with 521 CMR. The public use and common use spaces of multiple dwellings in new construction consisting of three or more units shall comply with 521 CMR. Public and common use spaces are those spaces inside or outside a building that are used by residents and/or visitors. Public use and common use spaces shall include but not be limited to community facilities, meeting rooms, restaurants, recreation spaces, health facilities, pools, public toilet rooms, laundry areas, trash areas, storage areas, mailboxes, walks, sidewalks, parking lots and garages, entrances, elevators, lobbies and foyers, as well as corridors and stairways leading to dwelling units.*
- 42.1 Group 1 Bathrooms General: *In Group 1 dwelling units, (see 521 CMR 9.2, Applicability) bathrooms and half bathrooms shall comply with the following:*
- *42.4.1 Operation: Doors may swing into the bathroom if the swing of the door does not impede clear floor space. If the door impedes the clear floor space, the doors shall be capable of being adapted to swing out, fold or slide.*
- 43.1 Group 1 Kitchens General: *In Group 1 dwelling units, (see 521 CMR 9.2, Applicability) bathrooms and half bathrooms shall comply with the following:*
- 44.1 Group 2 Bathrooms General: *In Group 1 dwelling units, (see 521 CMR 9.2, Applicability) bathrooms and half bathrooms shall comply with the following:*
- 45.1 Group 2 Kitchens General: *In Group 1 dwelling units, (see 521 CMR 9.2, Applicability) bathrooms and half bathrooms shall comply with the following:*
- 46 Group 1 Bedrooms: *bedrooms shall comply with the requirements of 4.2: Doors; 46.3: Closets; 46.4 electrical outlets and Controls; and 46.5 Alarms.*
- 47 Group 2 Bedrooms: *bedrooms shall comply with the requirements of 4.2: Doors; 46.3: Closets; 46.4 electrical outlets and Controls; and 46.5 Alarms.*

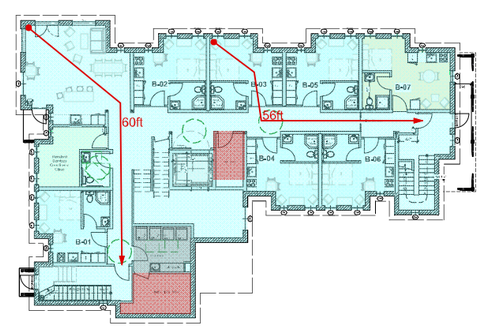
Total Building Gross Square Feet = 11,983GSF



3 A1.11 Second Floor Gross Floor Area = 3,941 GSF
Scale: 1/16" = 1'-0"

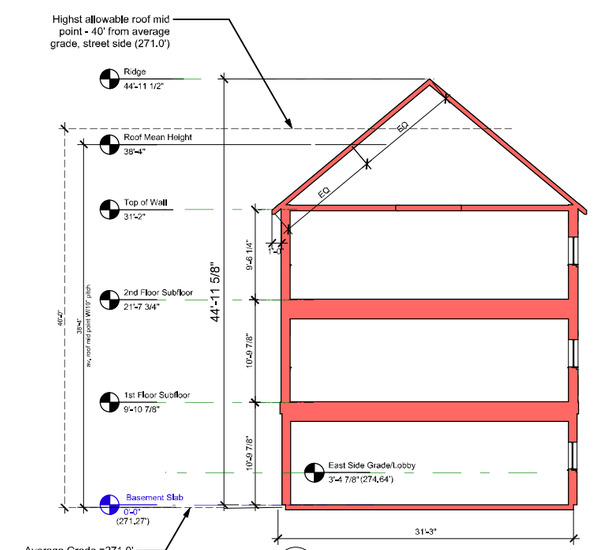


2 A1.11 First Floor Gross Floor Area = 4,021 GSF
Scale: 1/16" = 1'-0"



1 A1.11 Basement Gross Floor Area = 4,021 GSF
Scale: 1/16" = 1'-0"

0 10 20 30 40 50 FT



4 A1.10 Mean Roof Height
Scale: 1/8" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life

2 Mead St
Greenfield MA 01301
413 624 9669

167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

STEVENS & ASSOCIATES, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

Note, Code Summery

A1.10

© Austin Design Inc.

AMHERST STUDIO APARTMENTS

BUILDING

SIDEWALK VIEW

96 # 104 # 126 # 132 # 150 # 150

TO AMHERST

TO HADLEY

67 # 99 # 115 NORTHAMPTON ROAD # 143 # 155 # 183

SIDEWALK VIEW

BUILDING

N

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

STREETSCAPE

A1.15

© Austin Design Inc.

AUSTIN DESIGN
architecture for enjoying life

2 Mead St
Greenfield MA 01301
413 624 9669

167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

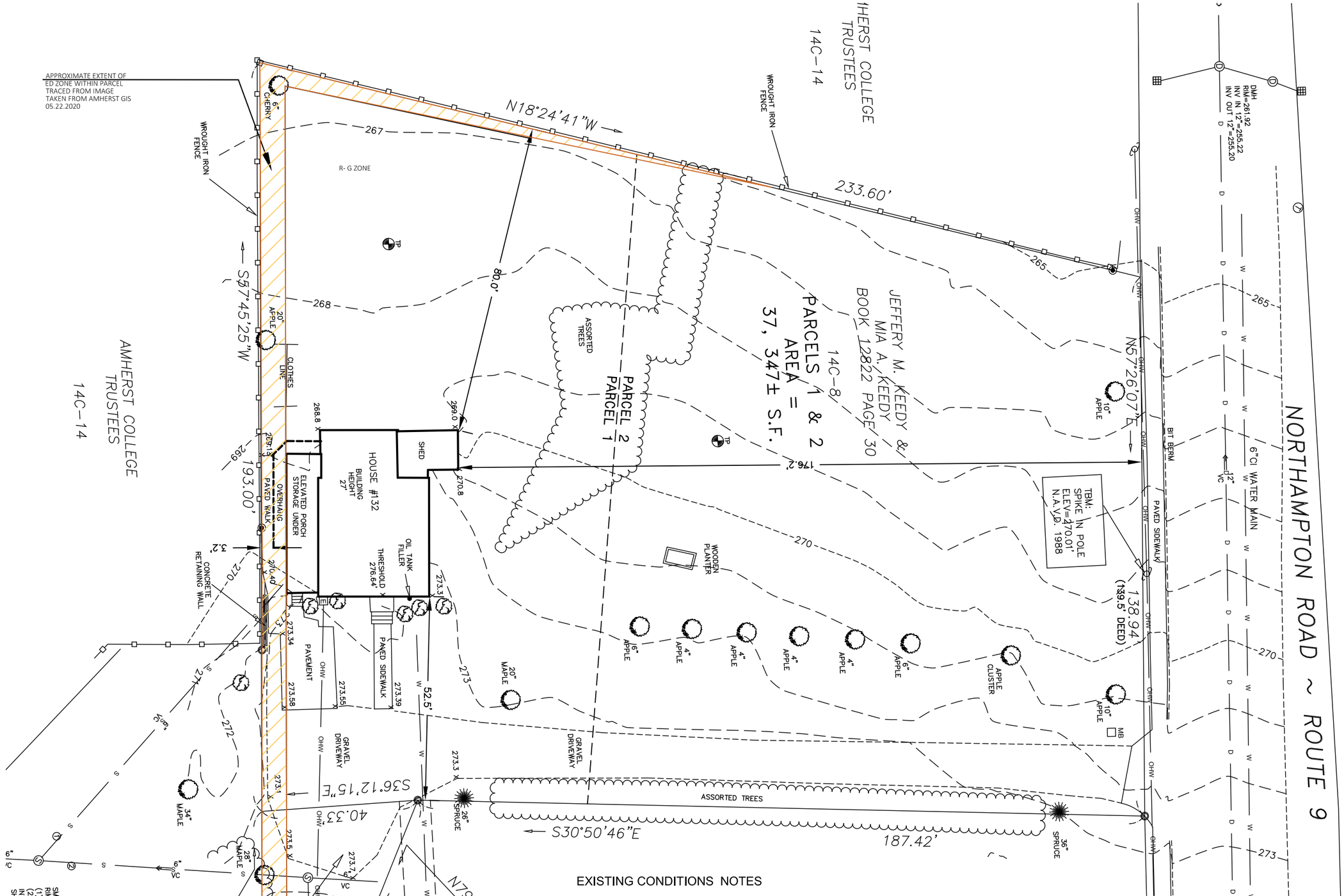
ILLUSTRATIVE SITE PLAN

North

Drawn By: RL
Checked By: MBD

LC- 001

© Austin Design Inc.



EXISTING CONDITIONS NOTES

SURVEY PREPARED BY HERITAGE SURVEYS
NOTES FROM THEIR FILE:

1. FOR REFERENCE TO ENCLOSED PERIMETER SEE BOOK 12822 PAGE 30, PLAN BOOK 59 PAGE 60 AND PLAN BOOK 46 PAGE 78A.

2. UNDERGROUND UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON SURFACE FEATURES AS LOCATED BY SURVEY AND AVAILABLE RECORD DATA, AND ARE APPROXIMATE. ACTUAL LOCATIONS SHOULD BE VERIFIED WITH THE APPROPRIATE UTILITY COMPANY AND/OR MUNICIPAL DEPARTMENT PRIOR TO FINAL DESIGN AND/OR CONSTRUCTION.

3. ELEVATIONS ARE BASED ON THE 1988 N.A.V.D. SYSTEM.

4. THE SURVEYED PARCEL DOES NOT LIE IN A FLOOD HAZARD AREA AS DEFINED BY NATIONAL FLOOD INSURANCE RATE MAP COMMINITY PANEL No. 250 156 0005C, DATED 12/15/83.
5. THERE WERE NO WETLAND FLAGS OBSERVED ON THE SURVEYED PARCEL.

NOTE 11/29/2018
THIS MAP AND SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1-4, 7c, 8, 11, 13, & 16-19 OF TABLE "A" THEREOF. THE FIELD WORK WAS COMPLETED ON 11/29/2018.

NOTE 05.22.2020 FROM BERKSHIRE DESIGN GROUP
AMHERST GIS INDICATES THAT THE PARCEL HOLDS TWO ZONING DESIGNATIONS:
ED EDUCATIONAL ZONE AND
R-G- RESIDENTIAL GENERAL ZONE. INFO TAKEN FROM AMHERST GIS WEBSITE ON 05.22.2020
LINE IS APPROXIMATE AND TO BE VERIFIED BY HERITAGE SURVEYS

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

EXISTING CONDITIONS

SCALE 1"=25'-0"
(if printed full size @ 11" x 17")
0' 12.5' 25'

North

Prepared by Heritage Surveys

LC- 100

© Austin Design Inc.

EROSION CONTROL NOTES

1. Erosion control measures shall be incorporated in the sequence of construction to prevent sediment-laden runoff from leaving the site, and shall, where applicable, consist of at least the following procedures:

a. A siltation fence along downslope site boundaries prior to commencing any other work. Fence material shall be Mirafi 140N, Trevira 1127, or approved equal.

b. Temporary barrier of haybales around catch basins and drain inlets to prevent sediment-laden runoff from entering drainage system.

c. New or regraded slopes of 3:1 or greater shall receive spread straw and/or seed and fertilizer as per plans. New or regraded slopes of 2:1 or greater shall be blanketed with Curlex erosion control matting, or approved equal; provide temporary slope erosion control where required.

d. Fill and grading shall be treated with slope stabilization seeding or ground cover and straw mulch upon completion.

2. All haybale and silt fence erosion and sedimentation checks shall be placed prior to beginning work as per the plan and as per the appropriate detail specification.

3. Wherever haybale or silt fence filters are used, they shall be maintained in good working condition until ground cover is reestablished. Silt fence shall be periodically cleaned as necessary to assure proper and effective functioning. Haybales shall also be replaced as necessary, to provide adequate function.

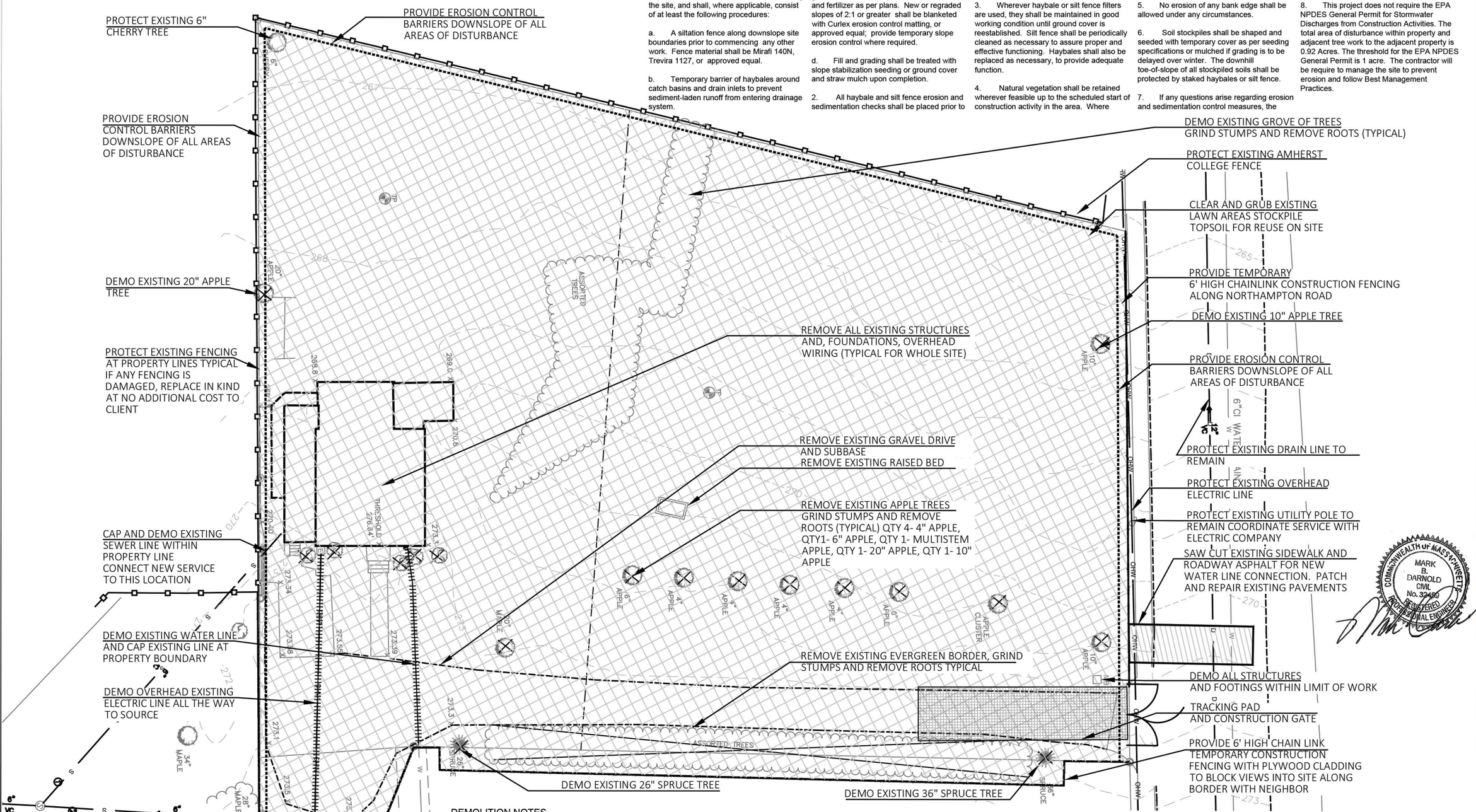
4. Natural vegetation shall be retained wherever feasible up to the scheduled start of construction activity in the area. Where possible, clearing shall immediately precede construction activity.

5. No erosion of any bank edge shall be allowed under any circumstances.

6. Soil stockpiles shall be shaped and seeded with temporary cover as per seeding specifications or mulched if grading is to be delayed over winter. The downhill toe-of-slope of all stockpiled soils shall be protected by staked haybales or silt fence.

7. If any questions arise regarding erosion and sedimentation control measures, the Project Landscape Architect shall be consulted immediately.

8. This project does not require the EPA NPDES General Permit for Stormwater Discharges from Construction Activities. The total area of disturbance within property and adjacent tree work to the adjacent property is 0.92 Acres. The threshold for the EPA NPDES General Permit is 1 acre. The contractor will be require to manage the site to prevent erosion and follow Best Management Practices.



DEMOLITION NOTES

1. The Contractor shall be responsible for a thorough site examination to determine the extent of demolition necessary to prepare the site for construction and shall verify all items to be demolished or salvaged with the Landscape Architect prior to beginning work.

2. Care shall be taken not to damage any items designated to remain; repair or replacement of damaged items designated to remain shall be at the Contractors' expense.

3.. Disposal of property designated to be removed shall be at the direction of the Landscape Architect or Owner, and shall conform to all applicable laws and regulations. All salvageable material shall be delivered by the Contractor to storage areas designated by the Landscape Architect. Contractor shall remove all existing unsuitable materials from the site.

6. The Contractor shall protect existing trees to remain with 2"x 4"x 6'-0" stakes and snow fencing. Prior to removing trees, Contractor to notify Landscape Architect within 14 days for review of all trees to remain and be removed.

7. All topsoil shall be stripped from grass areas to be removed and stockpiled in an area designated by the Owner.

8. The Contractor shall use temporary fencing to control the site during construction. Prior to the finalization of the project, the Contractor shall remove all temporary fencing and barricades.

9. The locations of existing underground utilities are shown in an approximate way only based on available data and all utilities may not be shown. Prior to construction, the contractor shall contact Dig Safe at 1-800-322-4844 to request utilities to be marked on the ground. The contractor shall be responsible for determining the exact location of all existing utilities before commencing work. The contractor agrees to be fully responsible for any and all damages which might be occasioned by his/her failure to exactly locate and preserve any and all utilities.

10. All boundary monuments shall be protected and/or preserved during demolition and construction. Should any boundary monument be destroyed and/or altered as a result of demolition and construction, it shall be the responsibility of the party incurring the damage to obtain the services of a professional land surveyor to replace and reset said monument.

11. Refer to structural and geotech drawings for excavation and fill requirements under foundations.

12. Field Verify the location and inverts of all existing utilities. Notify the landscape architect/ civil engineer of any changes.

13. Coordinate work and permits with any utility providers and municipal entities.

14. Work is proposed to take place within the MDOT right of way in front of this project. The project timeline may or may not coincide with this project scope. Prior to mobilization coordinate proposed work with MDOT roadway improvement scope.

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

COMMONWEALTH OF MASSACHUSETTS
MARK B. DARNOLD
CIVIL
No. 32489
REGISTERED PROFESSIONAL ENGINEER

Not For Construction

SITE DEMOLITION PLAN

SCALE 1"=25'-0"
(if printed full size @ 11" x 17")

0' 12.5' 25'

North

Drawn By: RL
Checked By: MBD

LC- 101

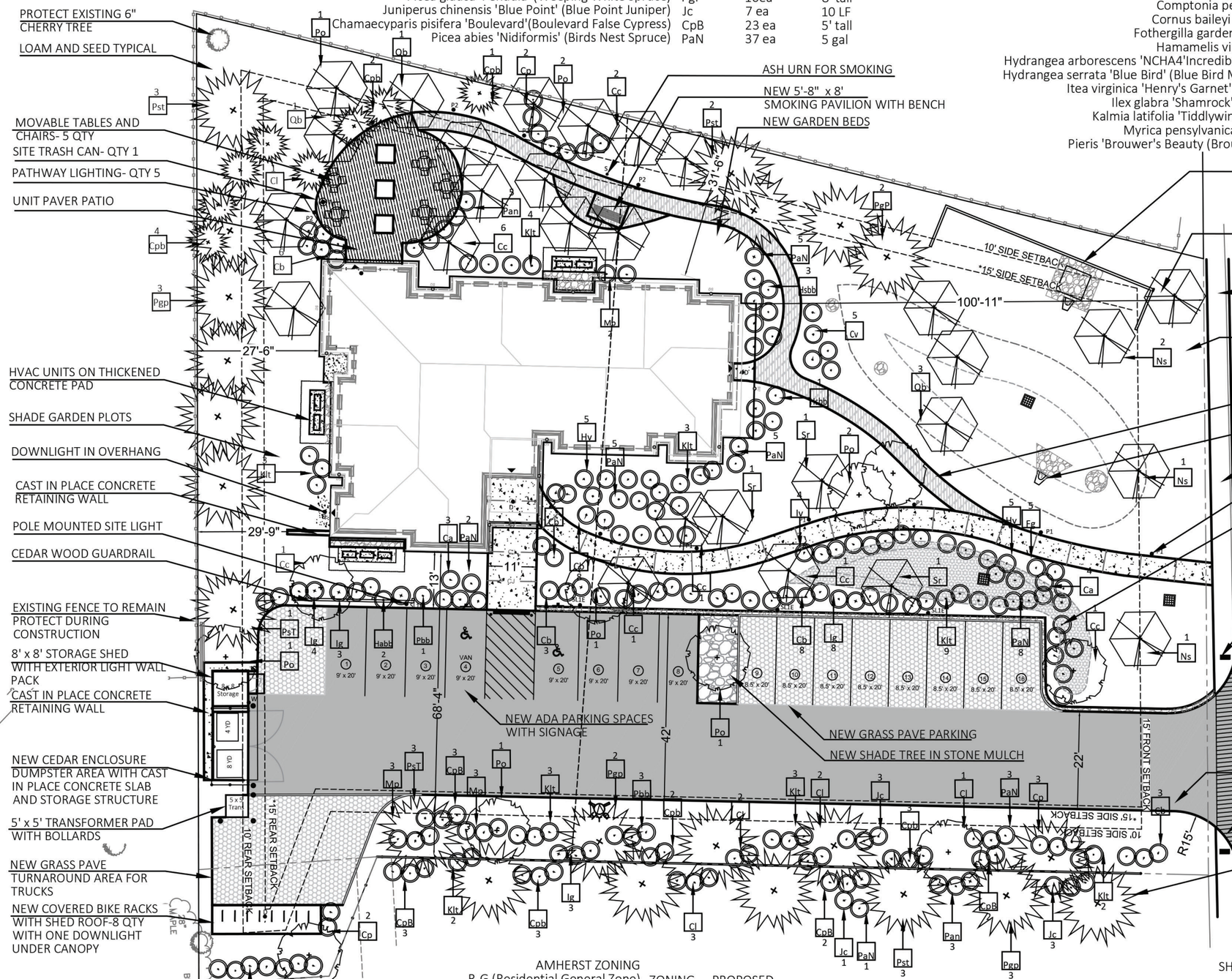
© Austin Design Inc.

EVERGREEN TREES AND SHRUBS

	SYMBOL	QTY	SIZE
Chamaecyparis lawsoniana 'Silver Queen' (Silver Queen Lawson cypress)	Cl	9 ea	5' tall
Pinus strobus 'Torulosa' (Twisted White Pine)	PsT	12 ea	8' tall
Picea glauca 'Pendula' (Weeping White Spruce)	PgP	10ea	8' tall
Juniperus chinensis 'Blue Point' (Blue Point Juniper)	Jc	7 ea	10 LF
Chamaecyparis pisifera 'Boulevard'(Boulevard False Cypress)	CpB	23 ea	5' tall
Picea abies 'Nidiformis' (Birds Nest Spruce)	PaN	37 ea	5 gal

FLOWERING SHRUBS

	SYMBOL	QTY	SIZE
Calluna vulgaris 'Spring Torch' (Heather)	Cv	5 ea	3 gal
Clethra alnifolia 'Hummingbird' (Summersweet)	Ca	7 ea	3 gal
Comptonia peregrina (Sweet Fern)	Cp	7 ea	5 gal
Cornus baileyi (Red Twig Dogwood)	Cb	55 ea	1 gal
Fothergilla gardenii (Dwarf Fothergilla)	Fg	5 ea	3 gal
Hamamelis virginiana (Witchhazel)	Hv	10 ea	3 gal
Hydrangea arborescens 'NCHA4'Incrediball (Blush Hydrangea)	HaBB	5 ea	3 gal
Hydrangea serrata 'Blue Bird' (Blue Bird Mountain Hydrangea)	Hsbb	1 ea	3 gal
Itea virginica 'Henry's Garnet' (Virginia Sweetspire)	Iv	4 ea	3 gal
Ilex glabra 'Shamrock' (Shamrock Inkberry)	Ig	15 ea	3 gal
Kalmia latifolia 'Tiddlywinks (Mountain Laurel)	Klt	29 ea	3 gal
Myrica pensylvanica(Northern Bayberry)	Mp	6 ea	5 gal
Pieris 'Brouwer's Beauty (Brouwer's Beauty Pieris)'	Pbb	4 ea	5 gal



AMHERST ZONING

R-G (Residential General Zone)	ZONING	PROPOSED
Min Lot Size	12,000 SF	38,253 SF
Min Lot Frontage	100 LF	138.9 LF
Min Front Setback	15 LF	100'-11" LF
Min Side/ Rear Setbacks	10 LF *	31'-6"Side, 68'-4" Side, 27'-6" Rear
Max Building Coverage	25%	4799 SF/ 12.55%
Max Lot Coverage	40%	45%
Max # Floors	3 STORIES	2.5 STORIES
Max Height	40 VF	44' 11 5/8" to ridge, 38'-4" AV HEIGHT AT STREET SIDE

* Setbacks to increase 2' each story for side and rear. Therefore Min Side and Rear for this project will be 15 LF

SHADE & FLOWERING TREES

	SYMBOL	QTY	SIZE
Nyssa Sylvatica (Black tupelo)	Ns	5 ea	3" cal
Quercus bicolor (Swamp White Oak)	Qb	7 ea	3" cal
Platanus occidentalis (Eastern Sycamore)	Po	9 ea	3" cal
Syringa reticulata (Japanese Tree Lilac)	Sr	3 ea	2" cal
Celtis laevigata (Sugar Hackberry)	Cla	1 ea	3" cal
Cercis canadensis 'Forest Pansy (Eastern Redbud)	Cc	13 ea	2" cal

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

S&A Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

COMMONWEALTH OF MASSACHUSETTS
MARK B. DARNOLD
CIVIL
No. 32489
REGISTERED PROFESSIONAL ENGINEER

SITE MATERIALS, PLANTING, AND LAYOUT PLAN

SCALE 1"=25'-0"
(if printed full size @ 11" x 17")

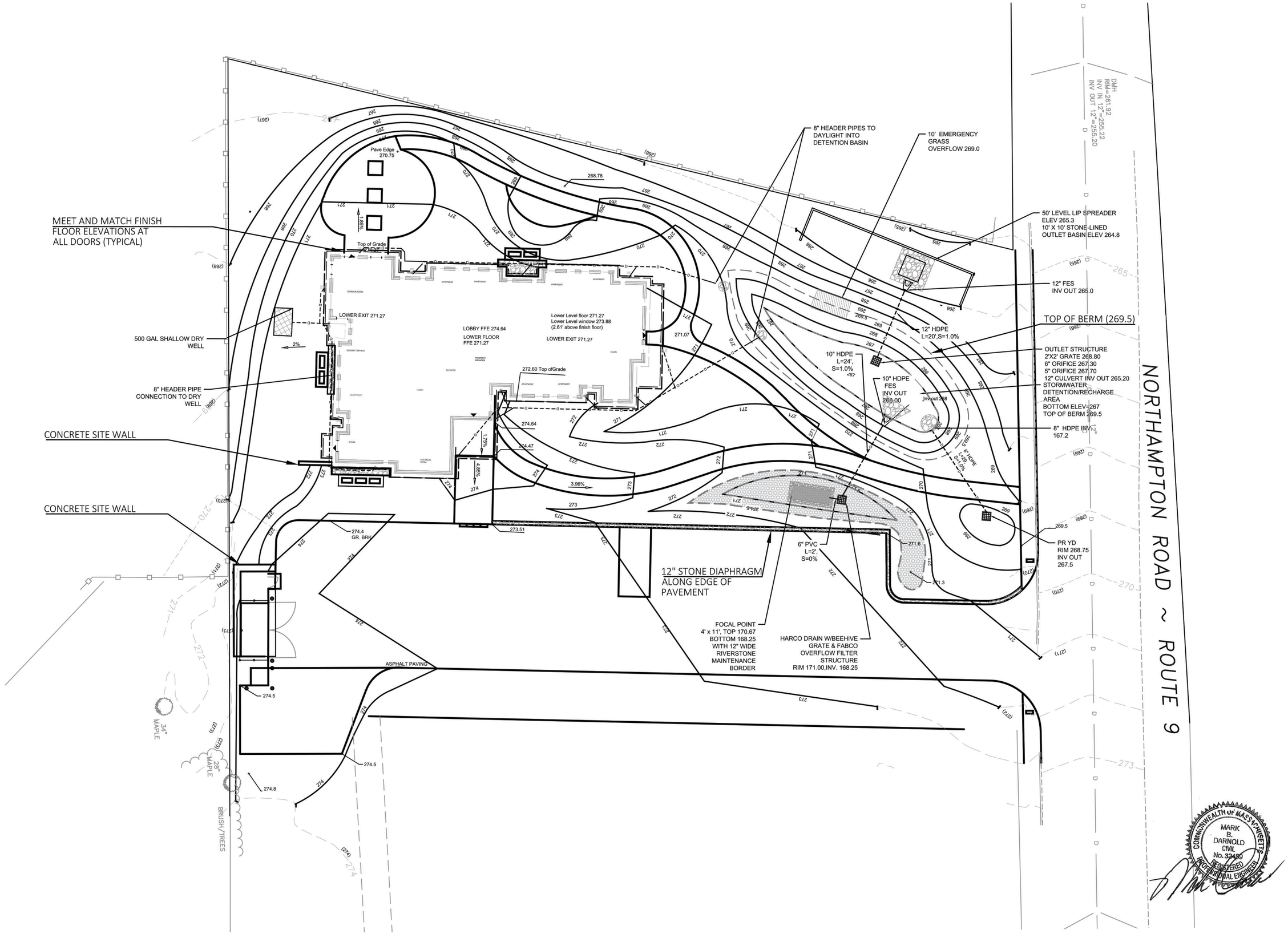
0' 12.5' 25'

North

Drawn By: RL
Checked By: MBD

LC- 111

© Austin Design Inc.



AUSTIN DESIGN
architecture for enjoying life

2 Mead St
Greenfield MA 01301
413 624 9669

167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

SITE GRADING & DRAINAGE PLAN

SCALE 1"=25'-0"
(if printed full size @ 11" x 17")
0' 12.5' 25'

North

Drawn By: RL, LC
Checked By: MBD

LC- 121

© Austin Design Inc.

DRAINAGE & UTILITIES NOTES

1. All materials and construction methods shall conform to the construction standards and specifications of the Town of Amherst and the Massachusetts Department of Public Works.

2. All dimensions, elevations and layout shall be verified in the field by the contractor and approved by the Landscape Architect prior to beginning work.

3. All new or adjusted manholes, gas gates, water gates and water services to be flush with finished grade.

4. All storm drain piping shall be double-wall, smooth interior HDPE, except as noted.

5. All catch basins shall be constructed with hooded outlet and 4' (min.) sump. Hood and deep sump shall not be required for yard drains. All new or adjusted catch basin rims shall be set 1/2 inch below finished grade.

6. All inverts of drain lines to be a min 3.5' below finish grade.

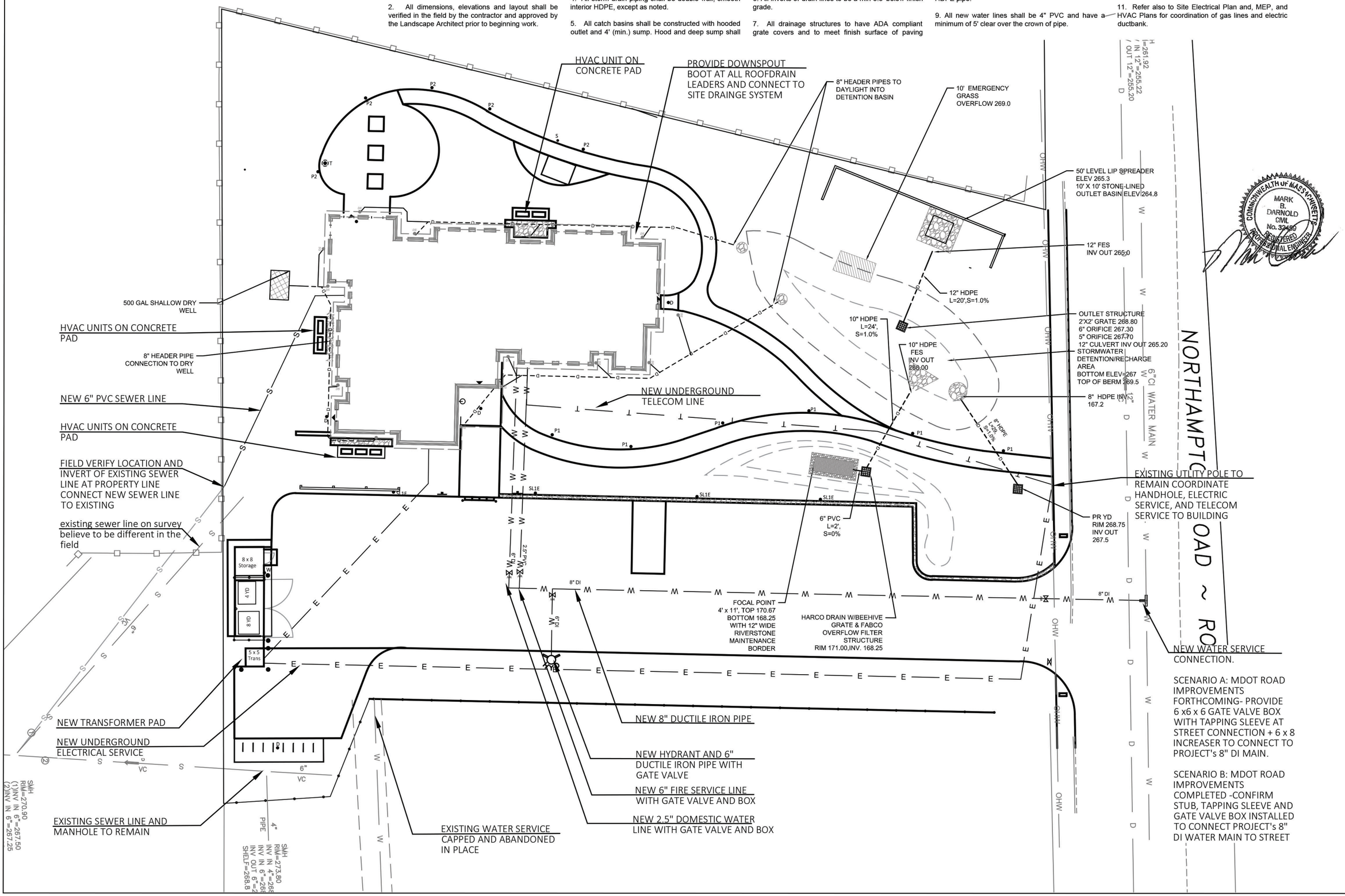
7. All drainage structures to have ADA compliant grate covers and to meet finish surface of paving flush.

8. Unless otherwise noted, all downspout piping connecting downspouts to storm structures shall be 6" HDPE pipe.

9. All new water lines shall be 4" PVC and have a minimum of 5' clear over the crown of pipe.

10. Thrust blocks shall be constructed for all water lines at all angles, bends, branches, plugs and wherever else is necessary to prevent disruption of proper functioning of the line.

11. Refer also to Site Electrical Plan and, MEP, and HVAC Plans for coordination of gas lines and electric ductbank.



AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5566

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

UTILITY PLAN

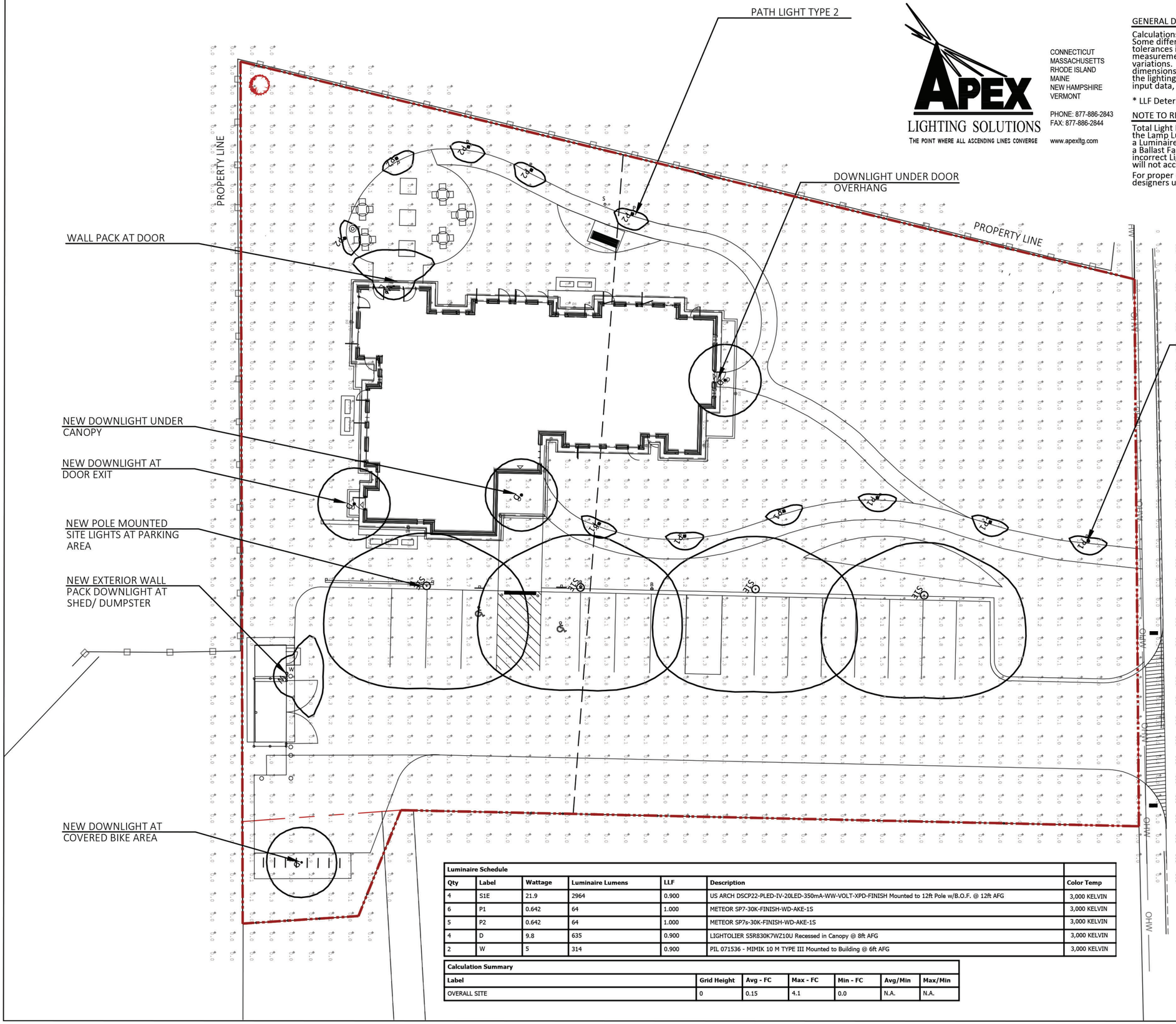
SCALE 1"=25'-0"
(if printed full size @ 11" x 17")
0' 12.5' 25'

North

Drawn By: RL
Checked By: MBD

LC- 131

© Austin Design Inc.



APEX LIGHTING SOLUTIONS
THE POINT WHERE ALL ASCENDING LINES CONVERGE

CONNECTICUT
MASSACHUSETTS
RHODE ISLAND
MAINE
NEW HAMPSHIRE
VERMONT

PHONE: 877-886-2843
FAX: 877-886-2844

www.apexltg.com

GENERAL DISCLAIMER:

Calculations have been performed according to IES standards and good practice Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

* LLF Determined Using Current Published Lamp Data

NOTE TO REVIEWER:

Total Light Loss Factor (LLF) applied at time of design is determined by applying the Lamp Lumen Depreciation (LLD) from current lamp manufacturer's catalog, a Luminaire Dirt Depreciation Factor (LDD) based on IES recommended values and a Ballast Factor (BF) from current ballast specification sheets. Application of an incorrect Light Loss Factor (LLF) will result in forecasts of performance that will not accurately depict actual results.

For proper comparison of photometric layouts, it is essential that you insist all designers use correct Light Loss Factors.

Luminaire Schedule						
Qty	Label	Wattage	Luminaire Lumens	LLF	Description	Color Temp
4	S1E	21.9	2964	0.900	US ARCH DSCP22-PLED-IV-20LED-350mA-WW-VOLT-XPD-FINISH Mounted to 12ft Pole w/B.O.F. @ 12ft AFG	3,000 KELVIN
6	P1	0.642	64	1.000	METEOR SP7-30K-FINISH-WD-AKE-1S	3,000 KELVIN
5	P2	0.642	64	1.000	METEOR SP7s-30K-FINISH-WD-AKE-1S	3,000 KELVIN
4	D	9.8	635	0.900	LIGHTOLIER S5R830K7WZ10U Recessed in Canopy @ 8ft AFG	3,000 KELVIN
2	W	5	314	0.900	PIL 071536 - MIMIK 10 M TYPE III Mounted to Building @ 6ft AFG	3,000 KELVIN

Calculation Summary						
Label	Grid Height	Avg - FC	Max - FC	Min - FC	Avg/Min	Max/Min
OVERALL SITE	0	0.15	4.1	0.0	N.A.	N.A.

PATHWAY LIGHT TYPE 2

D — DOWNLIGHT

SLE — POLE MOUNTED SITE LIGHT

W — FULL CUT OFF WALL PACK

P2 — 20" TALL PATHWAY LIGHT

P3 — 36" TALL PATHWAY LIGHT

* NOTE ALL LIGHTS ARE 3000k COLOR TEMPERATURE

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5566

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

PHOTOMETRIC SITE PLAN

SCALE 1"=25'-0"
(if printed full size @ 11" x 17")

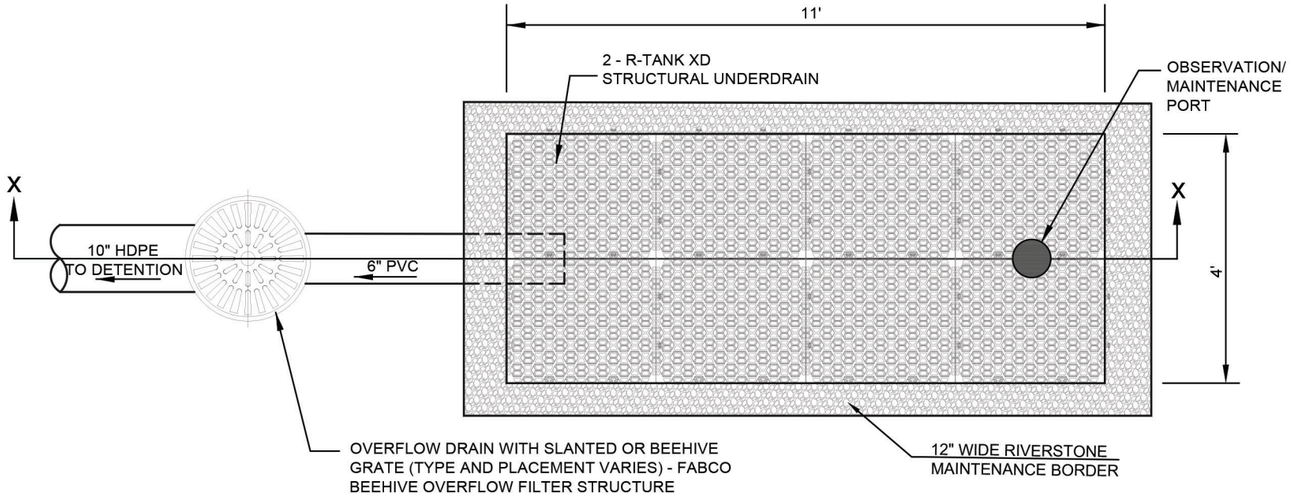
0' 12.5' 25'

North

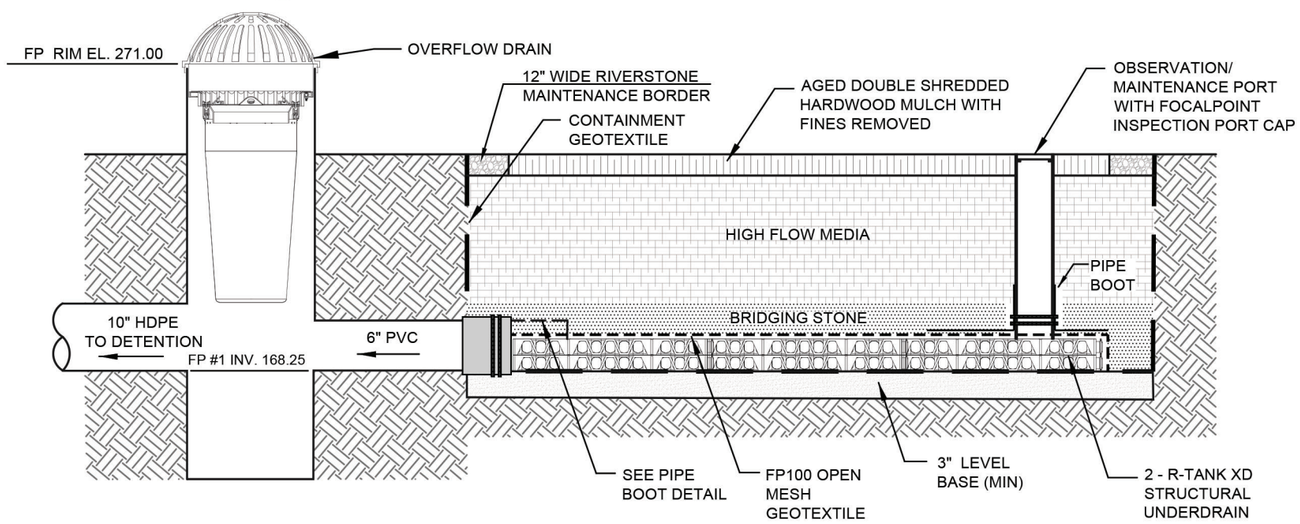
Drawn By: DC
APEX LIGHTING

LC- 141

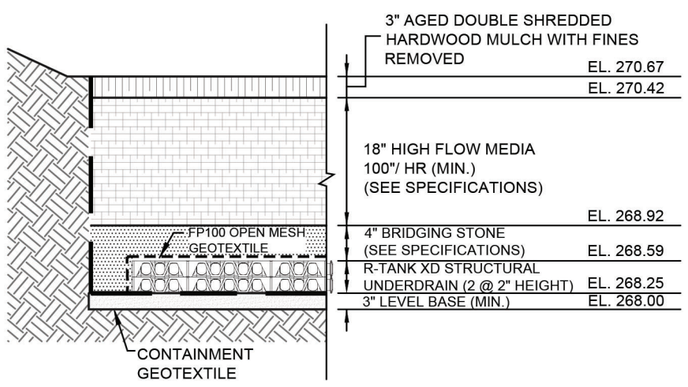
© Austin Design Inc.



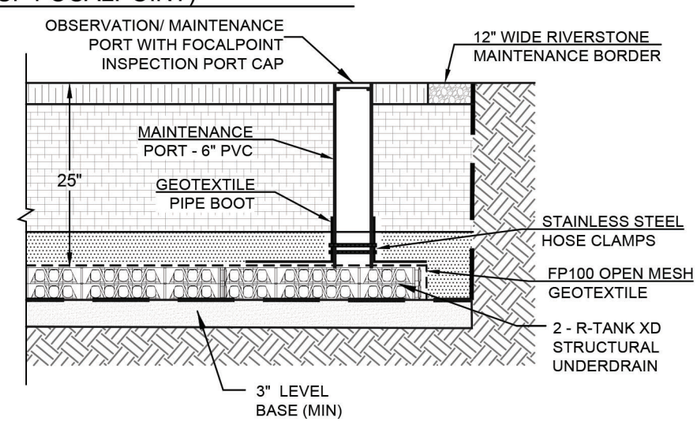
01 BIOFILTRATION PLAN VIEW (ACF FOCALPOINT)
SCALE: NTS



02 BIOFILTRATION AREA SECTION X-X (ACF FOCALPOINT)
SCALE: NTS



03 BIOFILTRATION PROFILE (ACF FOCALPOINT)
SCALE: NTS



04 MAINTENANCE PORT & PIPE BOOT CONNECTION
SCALE: NTS

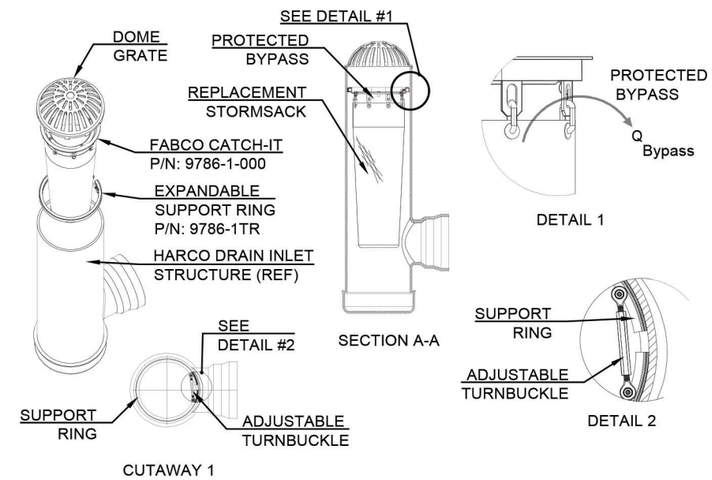
FOCALPOINT HP PERFORMANCE SPECIFICATION:

HIGH PERFORMANCE MEDIA

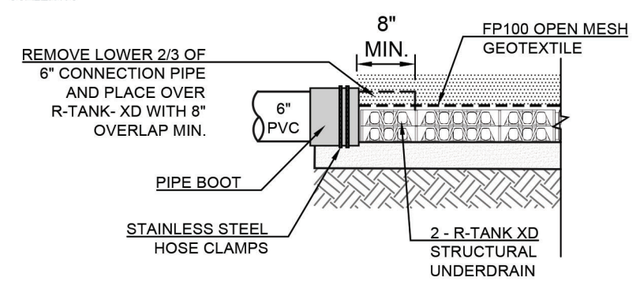
HIGH PERFORMANCE MEDIA MUST MEET A MINIMUM OF 100" PER HOUR INFILTRATION RATE.
FIELD HYDRAULIC CONDUCTIVITY TESTING MUST BE CONDUCTED WITHIN 30 DAYS OF INSTALLATION.
FIELD TEST MUST BE CONDUCTED WITH PROSCRIBED INFILTROMETER AND SOP (SEE SPECIFICATION).
FAILURE TO MEET FIELD TESTING WILL RESULT IN THE REMOVAL OF MEDIA AND REPLACEMENT FROM ALTERNATE BATCH.

HIGH PERFORMANCE STRUCTURAL UNDERDRAIN

MUST HAVE A MINIMUM OF 19 SQUARE INCHES OF ORIFICE OPENING PER SQUARE FOOT.
MUST MEET H20 LOADING REQUIREMENTS.
MUST BE MODULAR IN NATURE AND ASSEMBLED ON SITE.
MUST HAVE MINIMUM 90% INTERIOR VOID SPACE.



05 FABCO BEEHIIVE OVERFLOW STRUCTURE DETAILS
SCALE: NTS



06 PIPE BOOT CONNECTION FOR FOCAL POINTS
SCALE: NTS

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

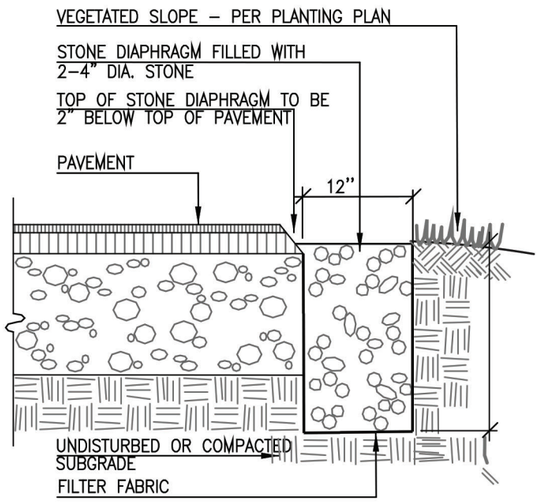
Not For Construction

SITE DETAILS

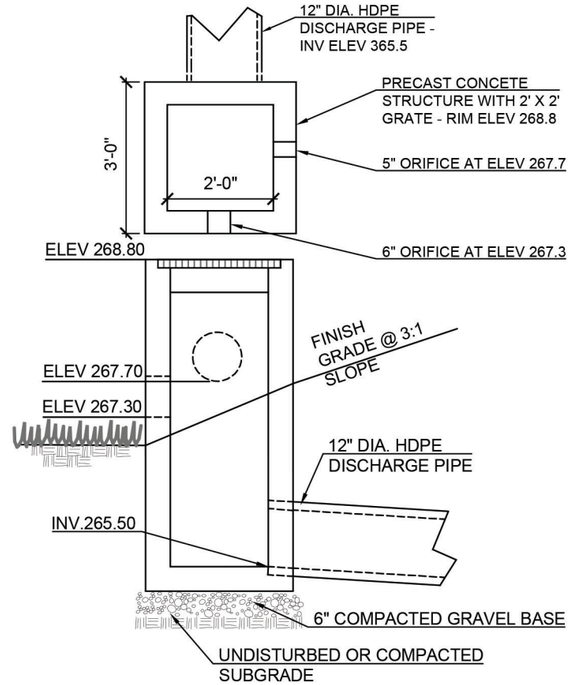
Drawn By: LC
Checked By: MBD

LC- 501

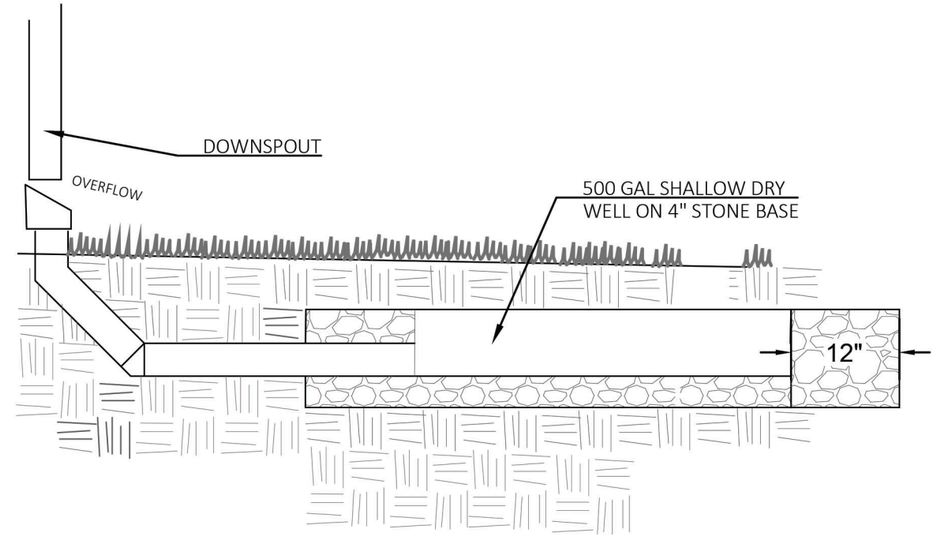
© Austin Design Inc.



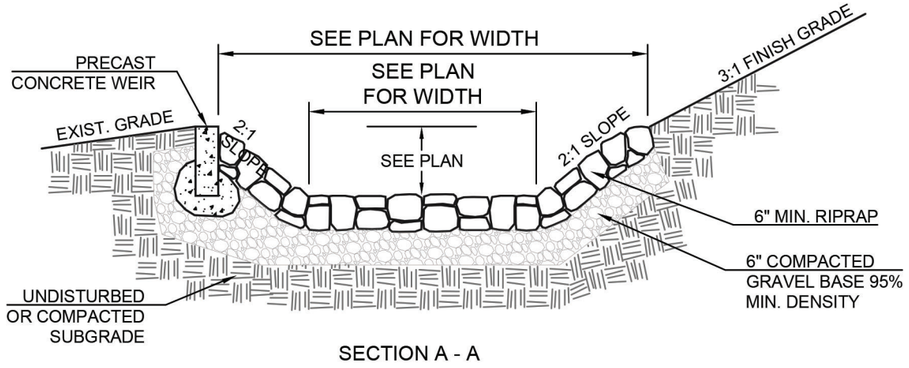
01 STONE DIAPHRAGM
SCALE: NOT TO SCALE



03 OUTLET CONTROL STRUCTURE
SCALE: NTS

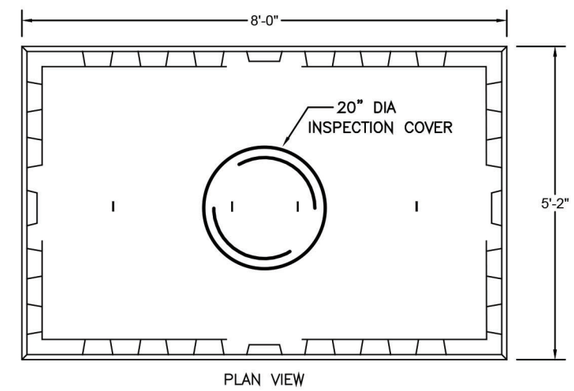


04 DOWNSPOUT DRY WELL CONNECTION
SCALE: NTS

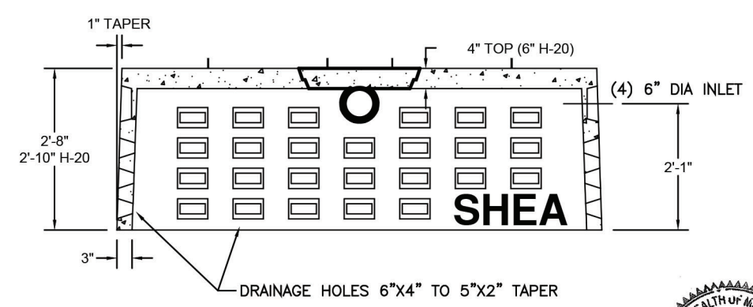


SECTION A - A

02 LEVEL LIP SPREADER
SCALE: NTS



PLAN VIEW



SECTION VIEW

NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. ALSO AVAILABLE IN AASHTO HS–20 LOADING.

05 500 GALLON DRY WELL
SCALE: NTS

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855
Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085
Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

SITE DETAILS

Drawn By: LC
Checked By: MBD

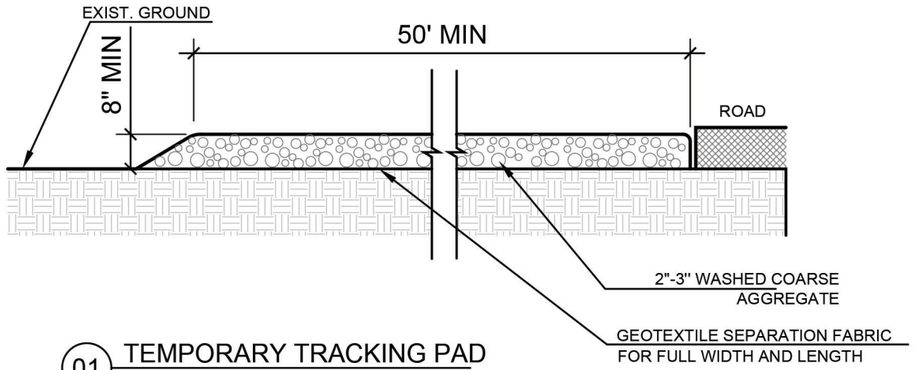
LC- 502

© Austin Design Inc.

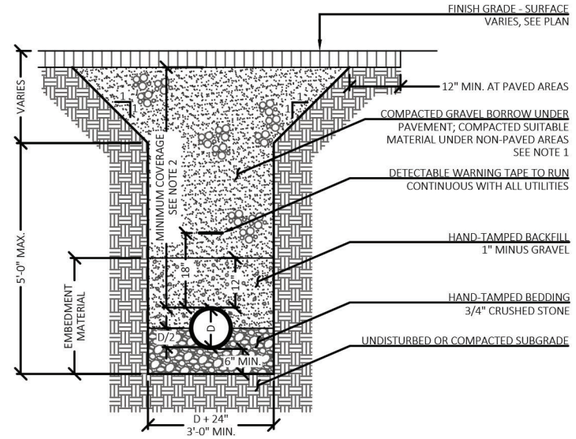
STABILIZED CONSTRUCTION ACCESS NOTES:

1. DIMENSIONS: WIDTH: 15' FLARED TO 25' AT ROADWAY
LENGTH: 50' MIN.
GRADE AND CROSS SLOPE: 2%

2. CLEAR ACCESS OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
3. GRADE THE ROAD SUBGRADE SO THAT THE ACCESS WILL NOT DRAIN OFF SITE.
4. MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD, SEDIMENT, ETC. FROM LEAVING THE SITE. SHOULD MUD/SEDIMENT BE TRACKED OR WASHED INTO THE PUBLIC ROAD IT SHALL BE REMOVED IMMEDIATELY.



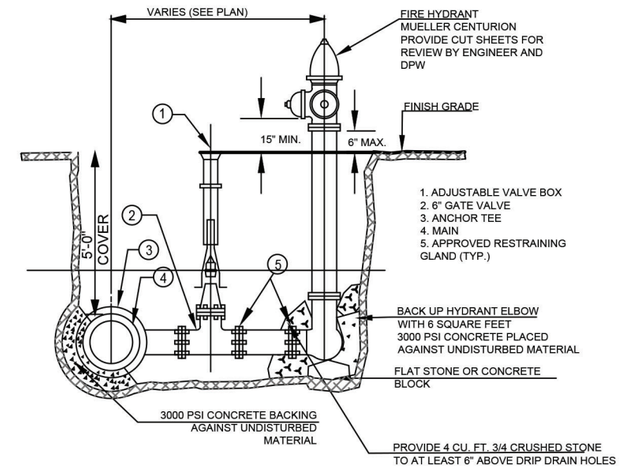
01 TEMPORARY TRACKING PAD
SCALE: NTS



NOTES

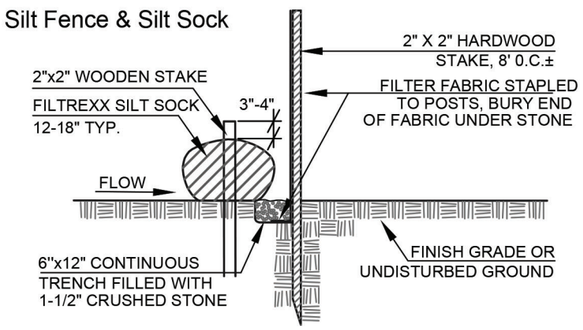
1. NATIVE EXCAVATED MATERIAL THAT MEETS THE SPECIFICATIONS FOR SUITABLE FILL MAY BE USED AS BACKFILL IN NON-PAVED AREAS. SUITABILITY SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. MINIMUM COVERAGE REQUIREMENTS:
WATER: 5'-0"
SANITARY: 4'-0"
GAS: 2'-6"
ELECTRICAL/COMMUNICATION: 2'-0"
3. ENTIRE PIPE LENGTH SHALL BE FIRMLY SUPPORTED ON BEDDING.

03 UTILITY TRENCH
SCALE: NTS



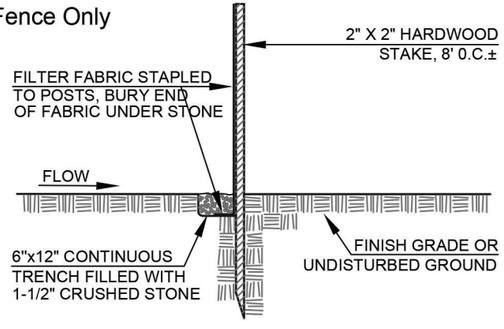
05 FIRE HYDRANT
SCALE: NTS

A. Silt Fence & Silt Sock

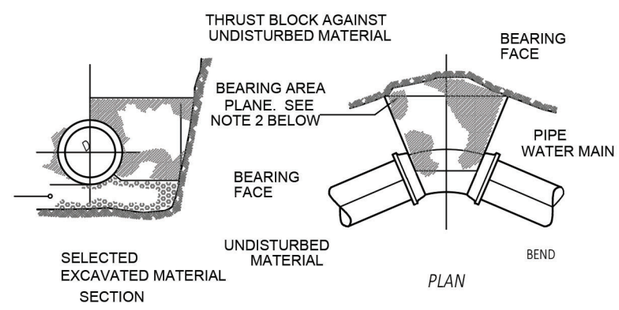


NOTE:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS
2. SILTSOXX COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS SILTSOXX DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE LANDSCAPE ARCHITECT.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY THE LANDSCAPE ARCHITECT
4. LOCAL INSTALLER: NORTHEAST ENVIRONMENTAL SOLUTIONS, AMHERST, MA 866-870-4NES.

B. Silt Fence Only



02 EROSION CONTROL BARRIER
SCALE: NTS



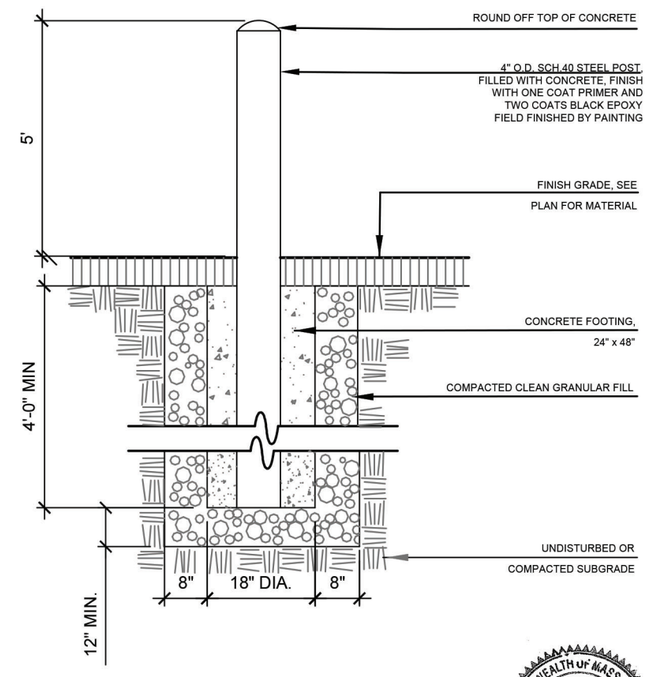
NOTES:
1. CONCRETE THRUST BLOCKS AND RODS SHALL BE REQUIRED ON ALL BENDS, TEES, ETC. RODDING SHALL BE TO THE FIRST FULL LENGTH OF PIPE ON EACH SIDE OF THE FITTINGS TO BE RESTRAINED UNLESS CONDITIONS REQUIRE ADDITIONAL RESTRAINTS.

2. REQUIRED BEARING AREA TO BE CALCULATED ON VERTICAL PLANE 90° TO RADIAL PLANE PASSING THROUGH MIDPOINT OF BEND.

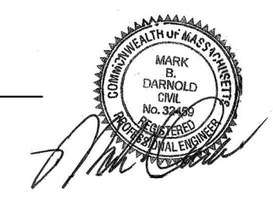
3. MINIMUM BEARING AREA: 2.0 SQ. FT.

04 THRUST BLOCK
SCALE: NTS

NOTE: 1. BOLLARD TO MEET NATIONAL GRID SPECIFICATIONS



06 UTILITY BOLLARD
SCALE: NTS



AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

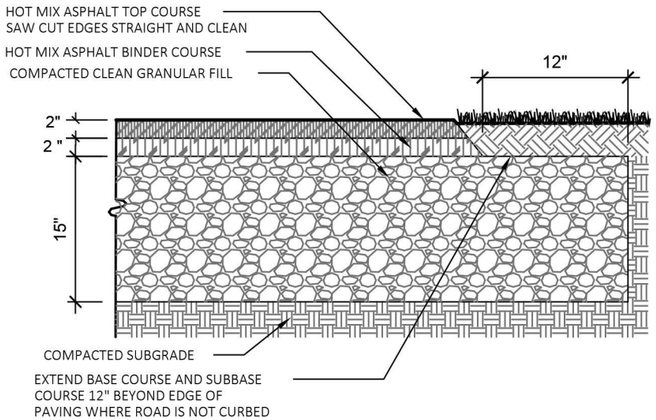
Not For Construction

SITE DETAILS

Drawn By: LC
Checked By: MBD

LC- 503

© Austin Design Inc.

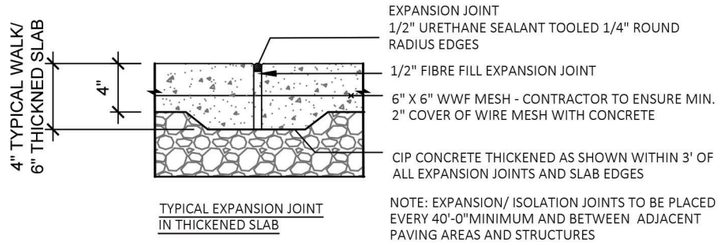


NOTE: IF UNSUITABLE CONDITIONS ARE ENCOUNTERED, DEPTH OF BASE MATERIAL MAY BE INCREASED IN THE FIELD.

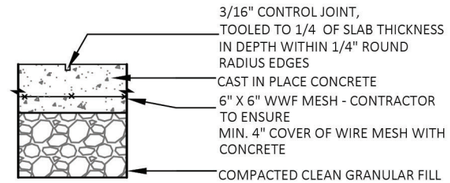
1. ALL MATERIALS & CONSTRUCTION SHALL IN ADDITION TO COMPLYING WITH ALL PERTINENT CODES AND REGULATIONS, COMPLY WITH REFERENCED PORTIONS OF STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, MASSACHUSETTS DEPARTMENT OF TRASPORTATION (MDOT).

01 TYPICAL ASPHALT PAVING

SCALE: 1"= 1'-0"



TYPICAL EXPANSION JOINT IN THICKENED SLAB

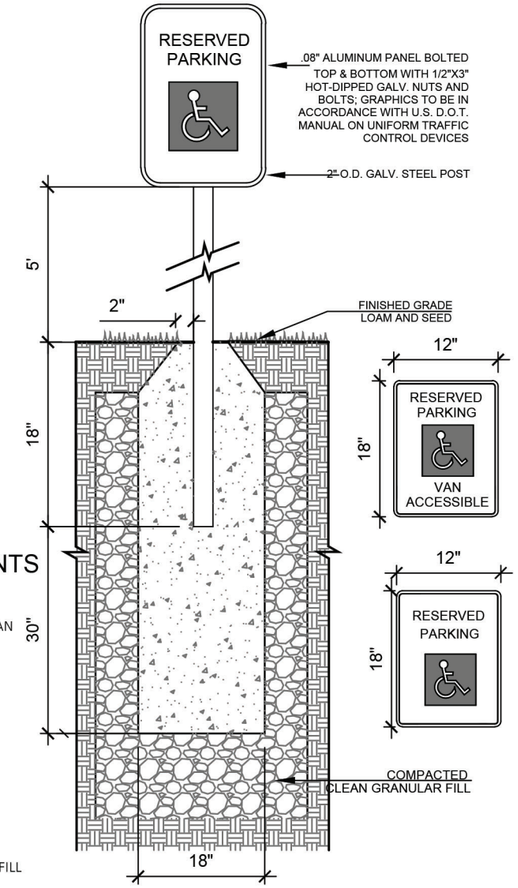


TYPICAL CONTROL JOINT IN CONCRETE SLAB

NOTE: CONTROL JOINTS TO BE PLACED AT 5' O. C. MINIMUM

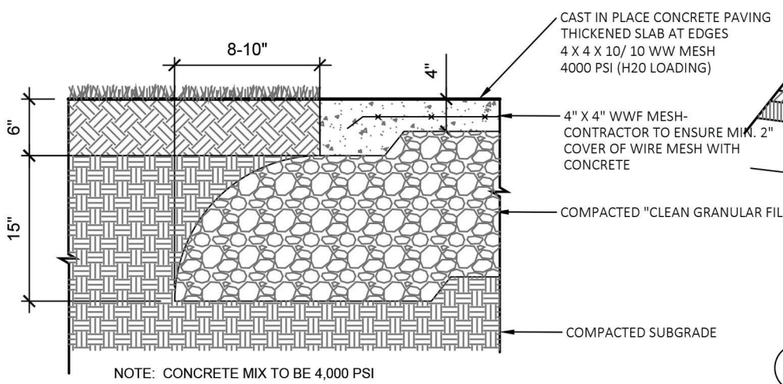
04 TYPICAL CONCRETE PAVING CONTROL & EXPANSION / ISOLATION JOINTS

SCALE: 1" =1'-0"



07 TYPICAL PANEL SIGNS

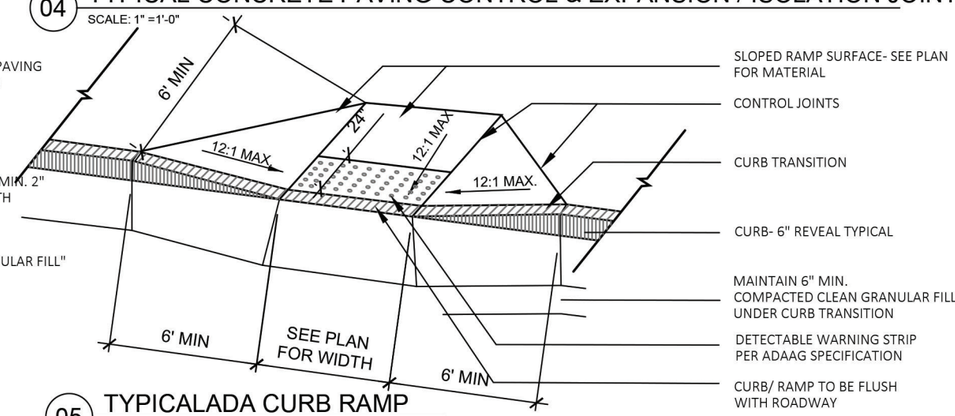
SCALE: 1" =1'-0"



NOTE: CONCRETE MIX TO BE 4,000 PSI

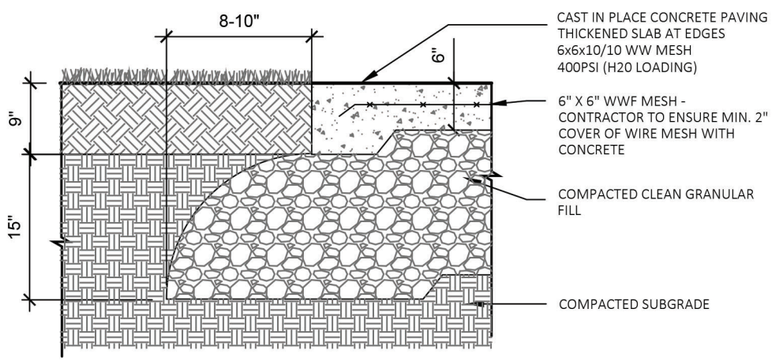
02 TYPICAL CONCRETE PAVING

SCALE: 1"= 1'-0"



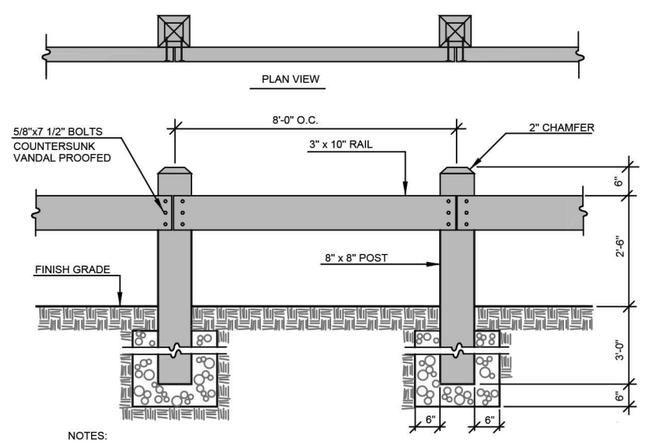
05 TYPICALADA CURB RAMP

SCALE: 1" =1'-0"



03 THICKENED CONCRETE SLAB

SCALE: 1"= 1'-0"

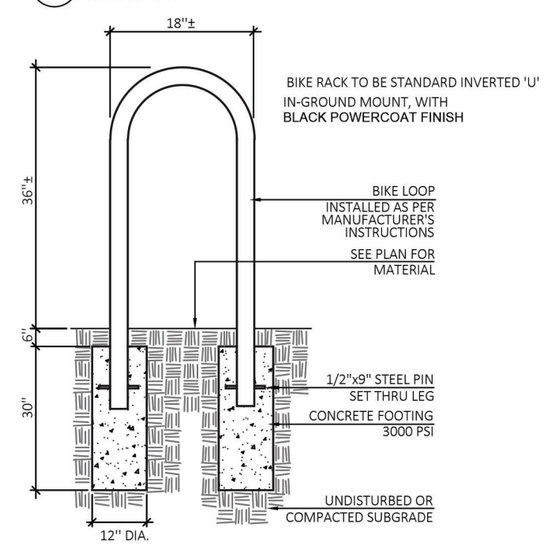


NOTES:
1. ALL WOOD TO BE PRESSURE TREATED, SELECT PINE GRADE 'B' OR BETTER
2. ALL HARDWARE TO BE GALVANIZED
3. SET POSTS 3' - 6" DEEP IN WELL-TAMPED GRAVEL BACKFILL

06 TYPICAL WOOD GUARDRAIL

SCALE: 1" =1'-0"

COMMONWEALTH OF MASSACHUSETTS
MARK B. DARNOLD
CIVIL
No. 32480
REGISTERED PROFESSIONAL ENGINEER



08 TYPICAL BIKE RACKS

SCALE: 1" =1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

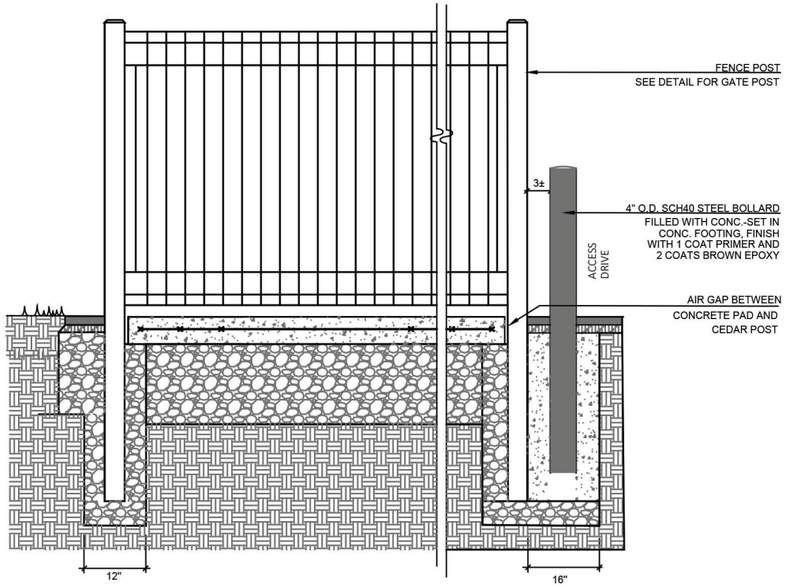
Not For Construction

SITE DETAILS

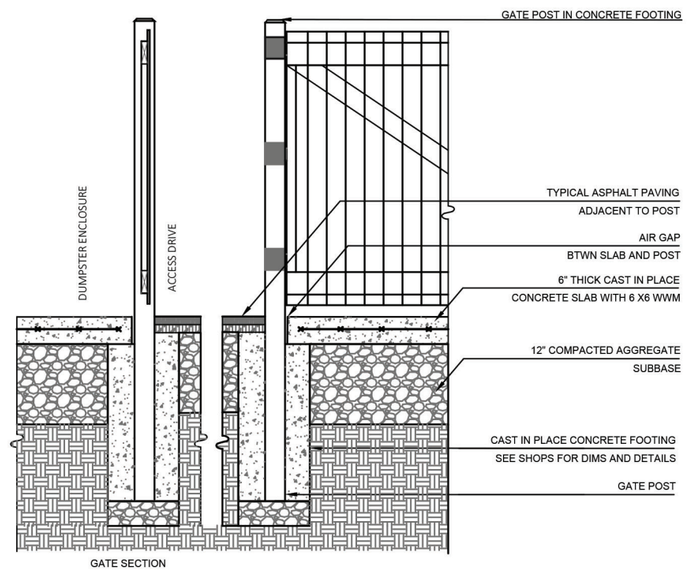
Drawn By: LC
Checked By: MBD

LC- 504

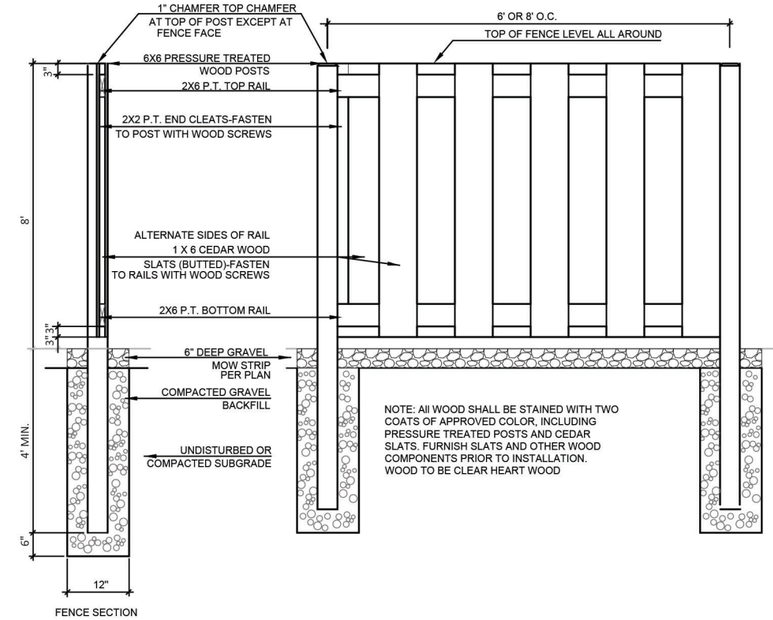
© Austin Design Inc.



DUMPSTER ENCLOSURE-
SECTION THROUGH FENCE AND FENCE POSTS + BOLLARDS



DUMPSTER ENCLOSURE- SECTION THROUGH GATE AND GATE POSTS



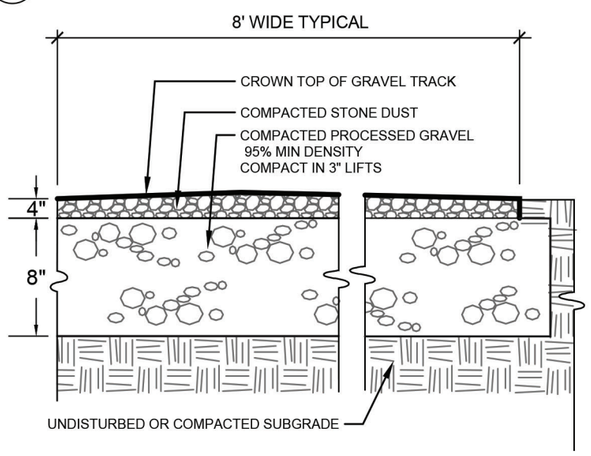
FENCE SECTION

01 TYPICAL DUMPSTER ENCLOSURE

SCALE: nts

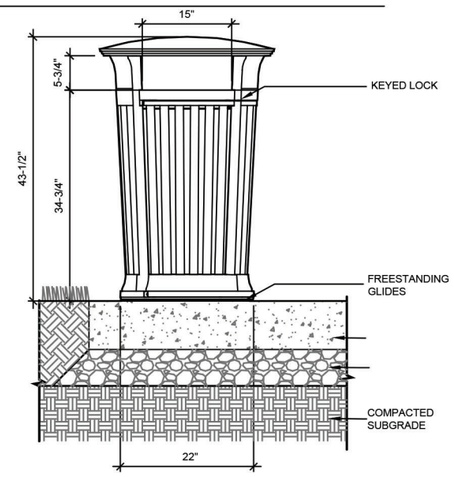
02 TYPICAL WOOD SCREEN FENCE

SCALE: nts



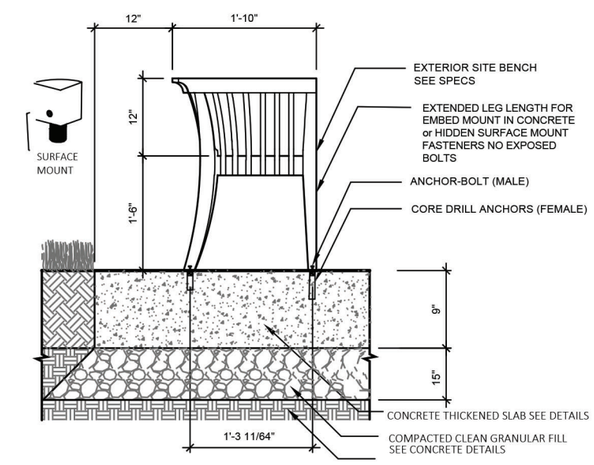
03 TYPICAL STONE DUST PAVING

SCALE: nts



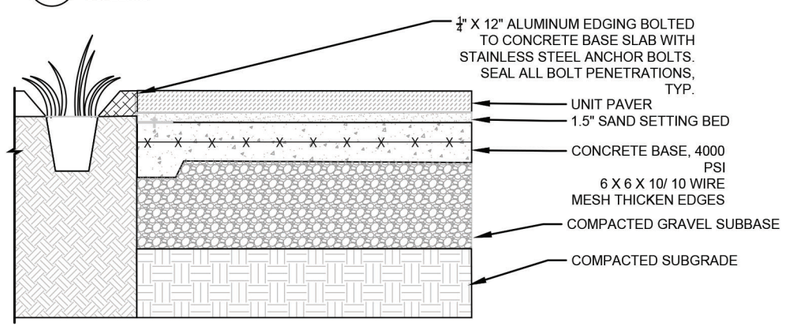
05 TYPICAL TRASH/ RECYLING UNIT

SCALE: nts



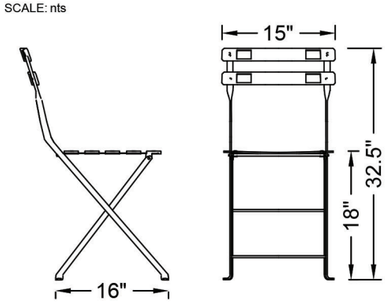
06 TYPICAL SITE BENCH

SCALE: nts



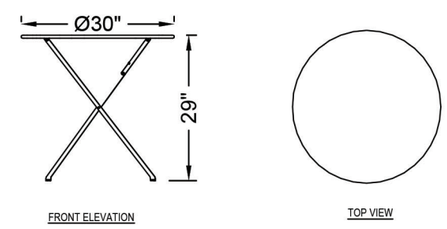
04 TYPICAL UNIT PAVING

SCALE: nts



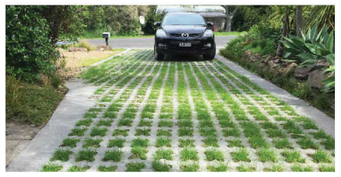
07 TYPICAL MOVABLE CHAIR

SCALE: nts



08 TYPICAL MOVABLE TABLE

SCALE: nts



09 GRASS CRETE PAVERS

SCALE: nts

COMMONWEALTH OF MASSACHUSETTS
MARK B. DARNOLD
CIVIL
No. 32499
REGISTERED PROFESSIONAL ENGINEER

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

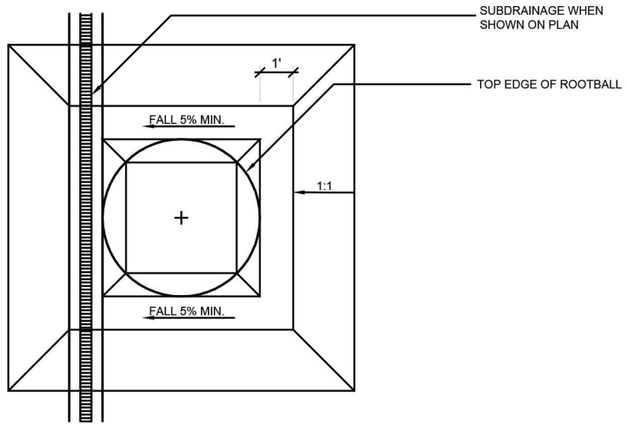
Not For Construction

SITE DETAILS

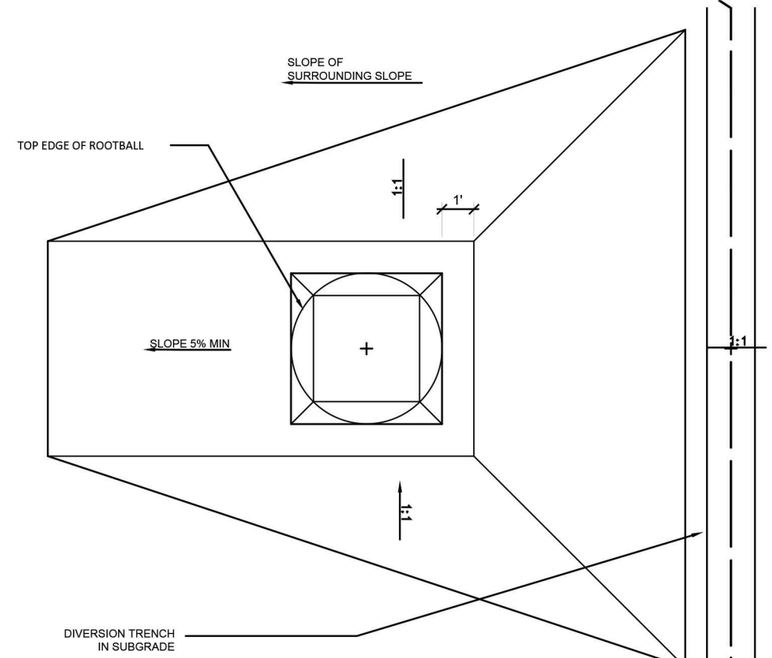
Drawn By: rl
Checked By: MBD

LC- 505

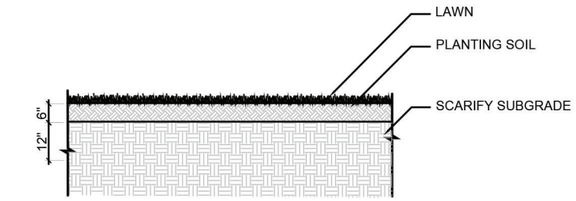
© Austin Design Inc.



SUBGRADE PLAN



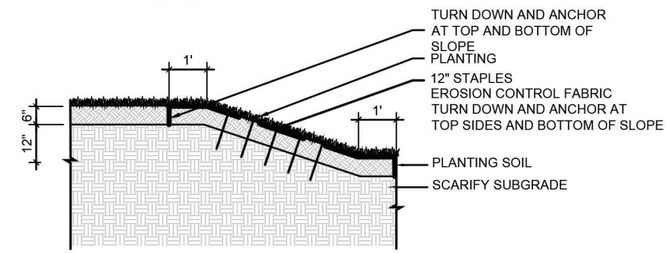
SUBGRADE PLAN



03 LAWN PLANTING

SCALE: 1/2" = 1'-0"

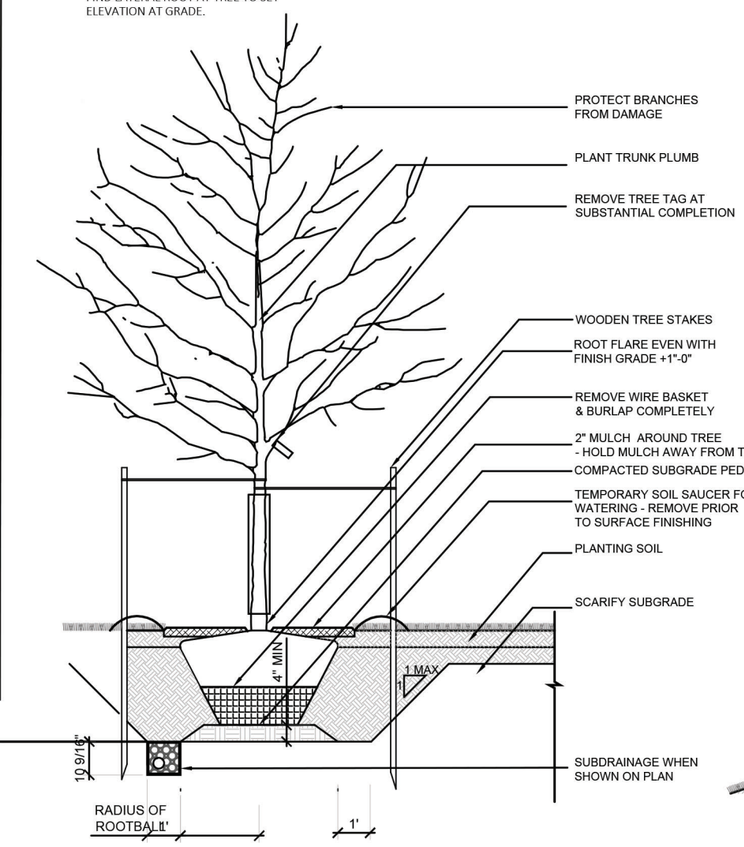
SEED MIX FOR ALL AREAS DISTURBED BY CONSTRUCTION:
Green Wave Hybrid Sun & Shade
30% Zodiac Chewings Fescue
25% Marvel Creeping Red Fescue
15% SPF30 Hybrid Bluegrass
15% Spark Perennial Ryegrass
10% Benchmark Perennial Ryegrass
5% Gaelic Kentucky Bluegrass



04 PLANTING ON SLOPE

SCALE: 1/2" = 1'-0"

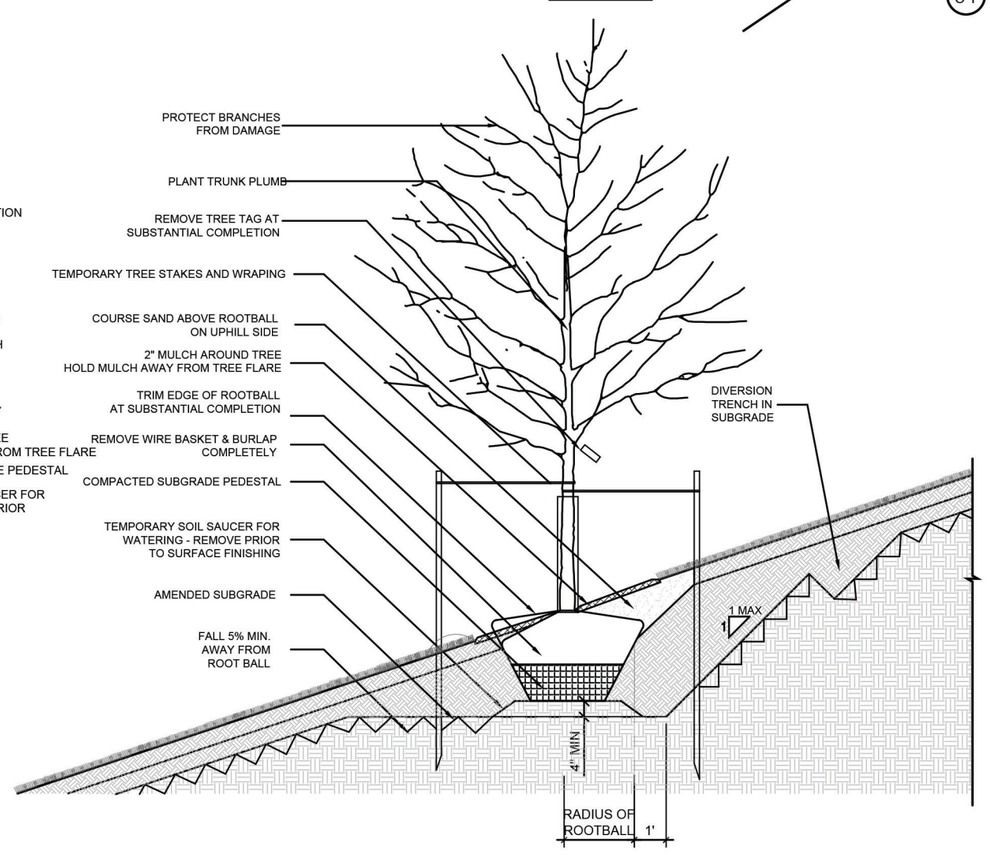
NOTE:
FIND LATERAL ROOT AT TREE TO SET ELEVATION AT GRADE.



SECTION

01 TYPICAL TREE PLANTING

SCALE: nts



SECTION

02 TYPICAL TREE PLANTING ON SLOPE

SCALE: nts

05 SMOKING PAVILION

SCALE: nts

06 BIKE SHED ROOF AND STRUCTURE

SCALE: nts

COMMONWEALTH OF MASSACHUSETTS
MARK B. DARNOLD
CIVIL
No. 32499
REGISTERED PROFESSIONAL ENGINEER

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

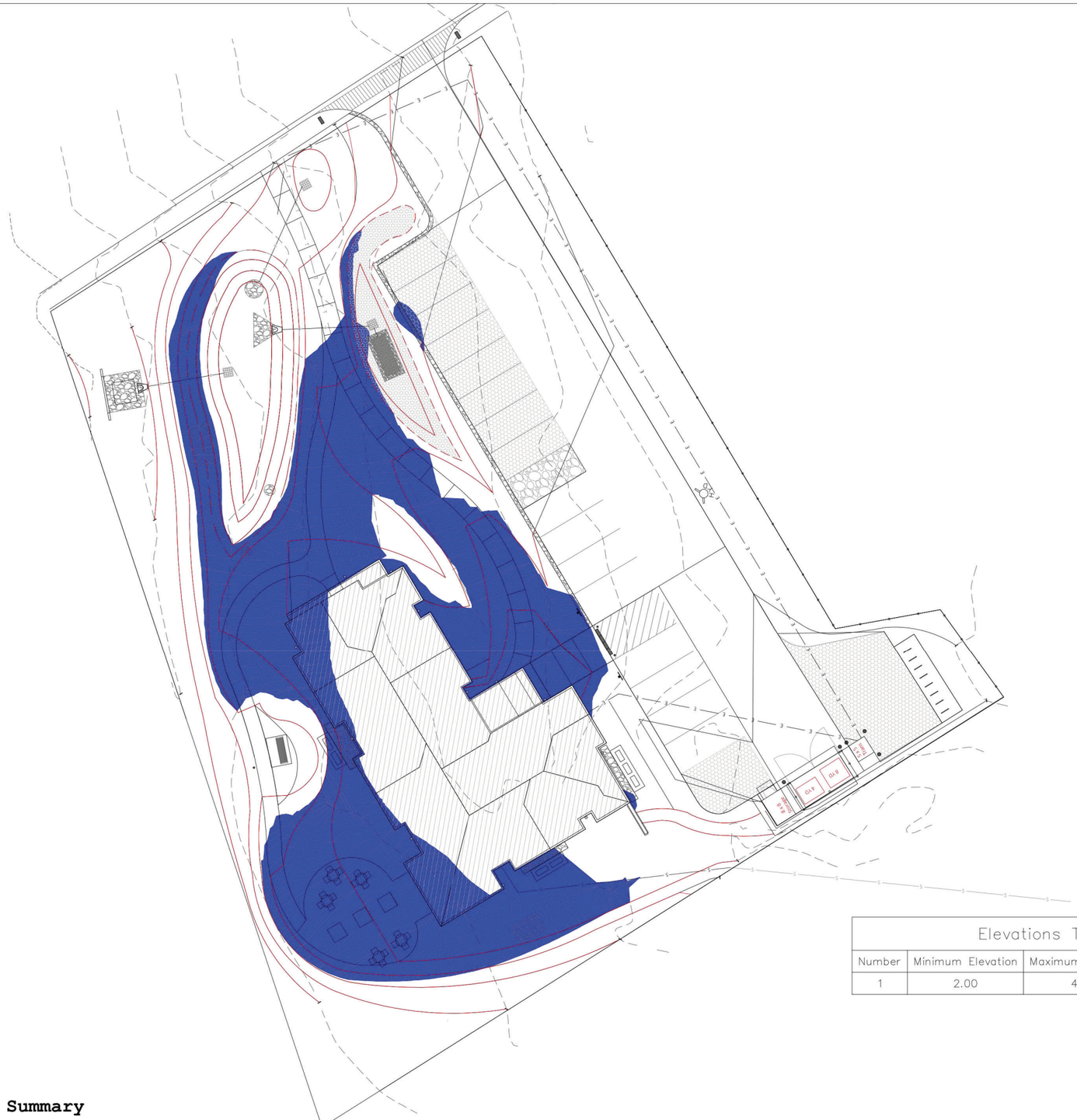
Not For Construction

SITE DETAILS

Drawn By: RL
Checked By: MBD

LC- 506

© Austin Design Inc.



Elevations Table				
Number	Minimum Elevation	Maximum Elevation	Area	Color
1	2.00	4.37	8912.89	

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Cut-Fill Volume	1.000	1.000	37488.42 Sq. Ft.	51.14 Cu. Yd.	1710.91 Cu. Yd.	1659.78 Cu. Yd.<Fill>
Totals			37488.42 Sq. Ft.	51.14 Cu. Yd.	1710.91 Cu. Yd.	1659.78 Cu. Yd.<Fill>

COMMONWEALTH OF MASSACHUSETTS
MARK B. DARNOLD
CIVIL
No. 32489
REGISTERED PROFESSIONAL ENGINEER

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5566

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

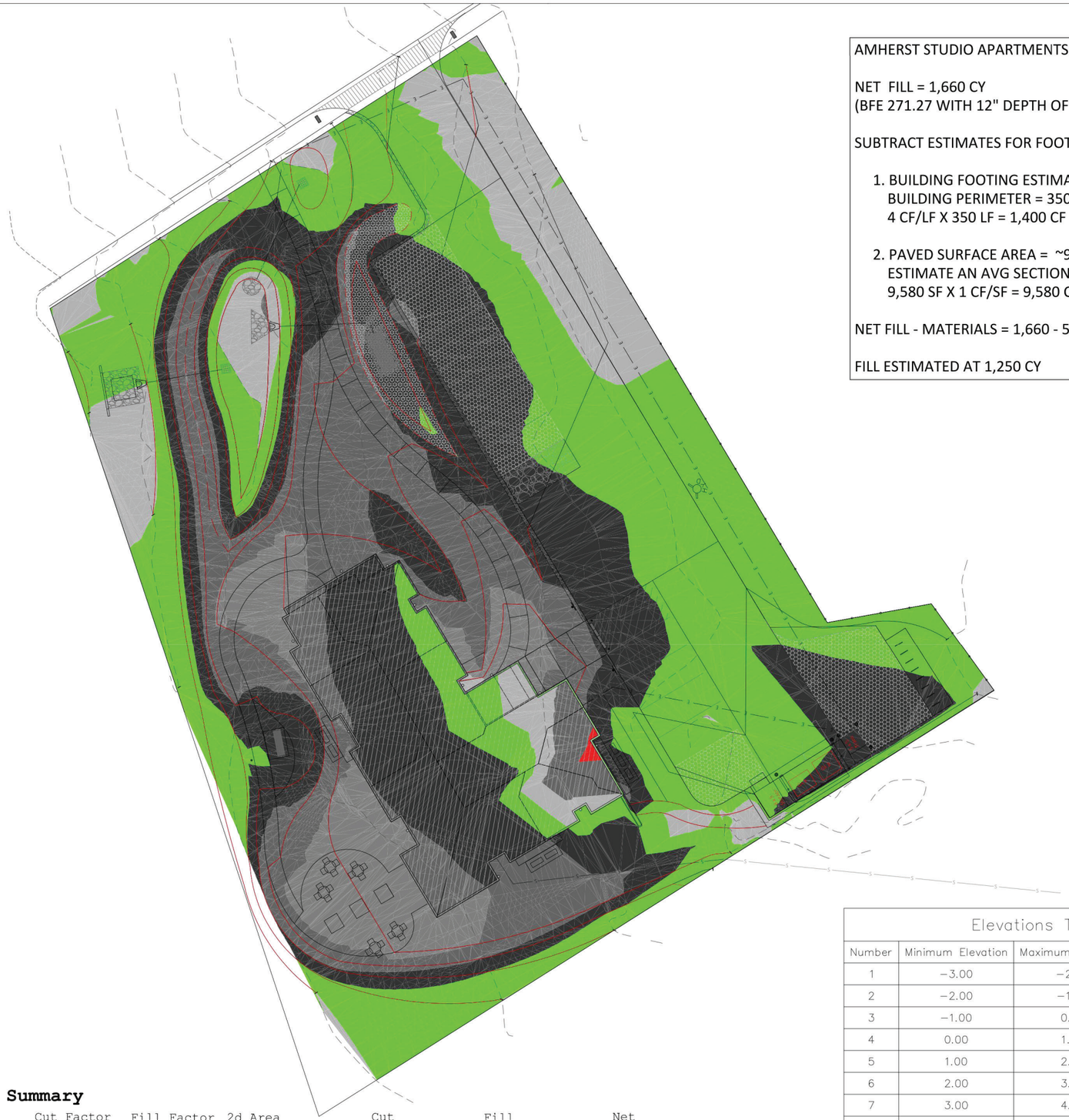
Not For Construction

CUT FILL ANALYSIS

Drawn By: LC
Checked By: MBD

LC- 601

© Austin Design Inc.



AMHERST STUDIO APARTMENTS - CUT/FILL ANALYSIS

NET FILL = 1,660 CY
(BFE 271.27 WITH 12" DEPTH OF FLOOR AND STONE BASE)

SUBTRACT ESTIMATES FOR FOOTING VOLUME AND PAVED AREA SECTIONS

1. BUILDING FOOTING ESTIMATED AT 4 CF/LF.
   BUILDING PERIMETER = 350 LF
   4 CF/LF X 350 LF = 1,400 CF = 52 CY

2. PAVED SURFACE AREA = ~9,580 SF
   ESTIMATE AN AVG SECTION OF 12"
   9,580 SF X 1 CF/SF = 9,580 CF = 355 CY

NET FILL - MATERIALS = 1,660 - 52 - 355 = 1,253 CY

FILL ESTIMATED AT 1,250 CY

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Area	Color
1	−3.00	−2.00	22.82	
2	−2.00	−1.00	351.18	
3	−1.00	0.00	3982.42	
4	0.00	1.00	13201.26	
5	1.00	2.00	11017.85	
6	2.00	3.00	6427.38	
7	3.00	4.00	2468.05	
8	4.00	5.00	17.47	

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Cut-Fill Volume	1.000	1.000	37488.42 Sq. Ft.	51.14 Cu. Yd.	1710.91 Cu. Yd.	1659.78 Cu. Yd.<Fill>
Totals			37488.42 Sq. Ft.	51.14 Cu. Yd.	1710.91 Cu. Yd.	1659.78 Cu. Yd.<Fill>

COMMONWEALTH OF MASSACHUSETTS
MARK B. DARNOLD
CIVIL
No. 32480
REGISTERED PROFESSIONAL ENGINEER

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5566

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

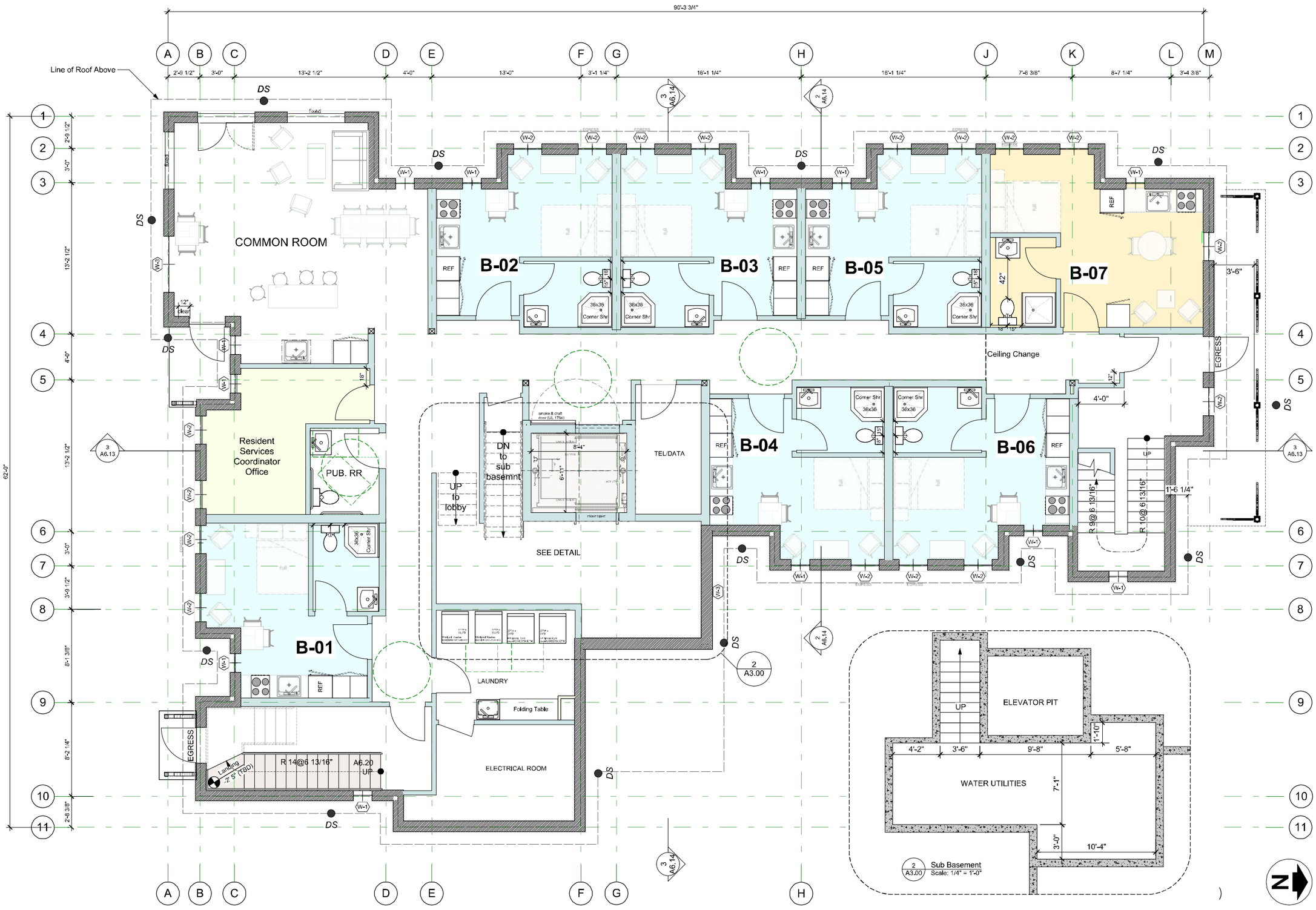
Not For Construction

CUT FILL ANALYSIS

Drawn By: LC
Checked By: MBD

LC- 602

© Austin Design Inc.



AUSTIN DESIGN
architecture for enjoying life

2 Mead St
Greenfield MA 01301
413 624 9669

167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

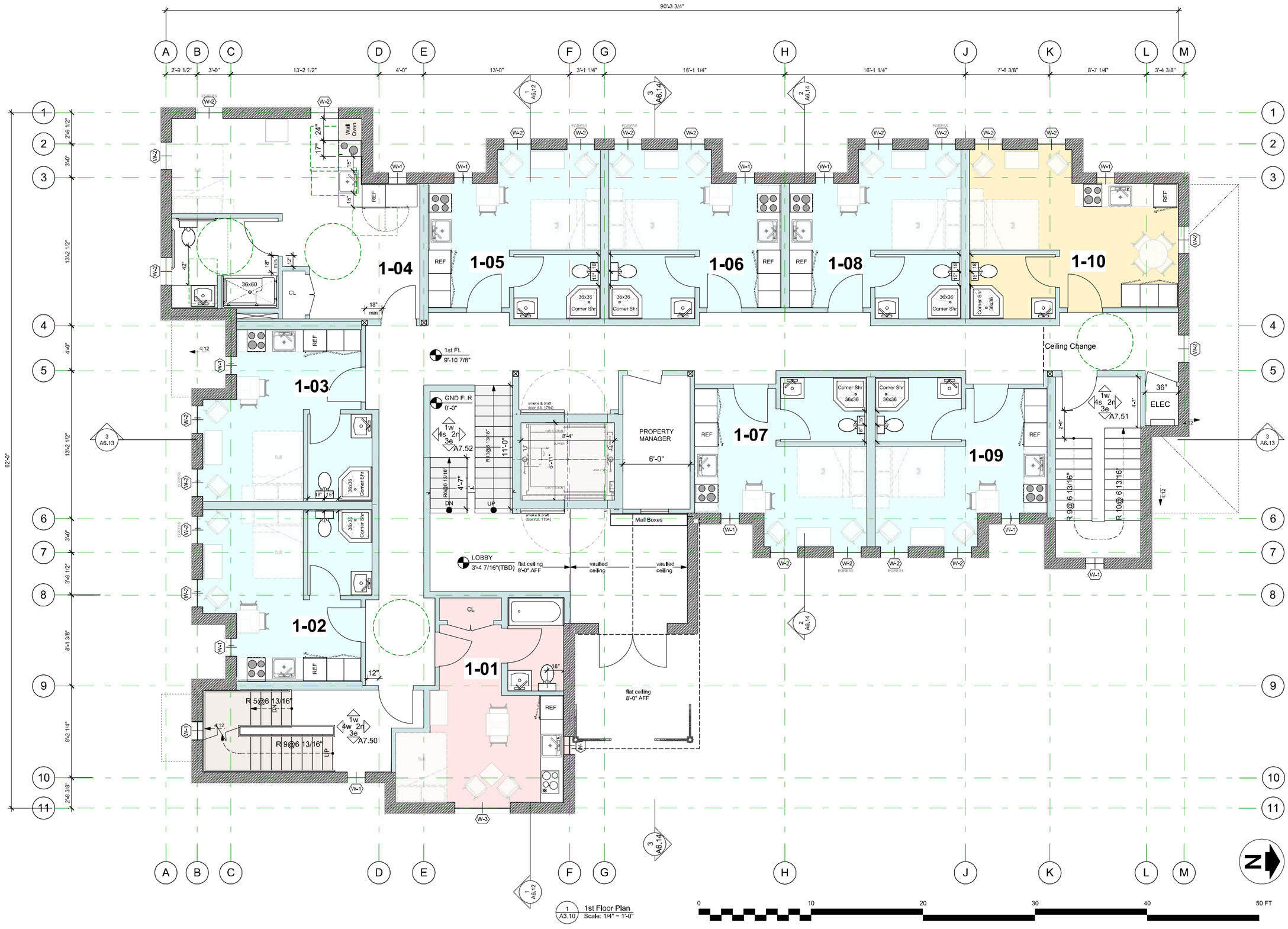
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

Basement Plan

A3.00

© Austin Design Inc.



1 A3.10 1st Floor Plan
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life

2 Mead St
Greenfield MA 01301
413 624 9669

167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

STEVENS & ASSOCIATES, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

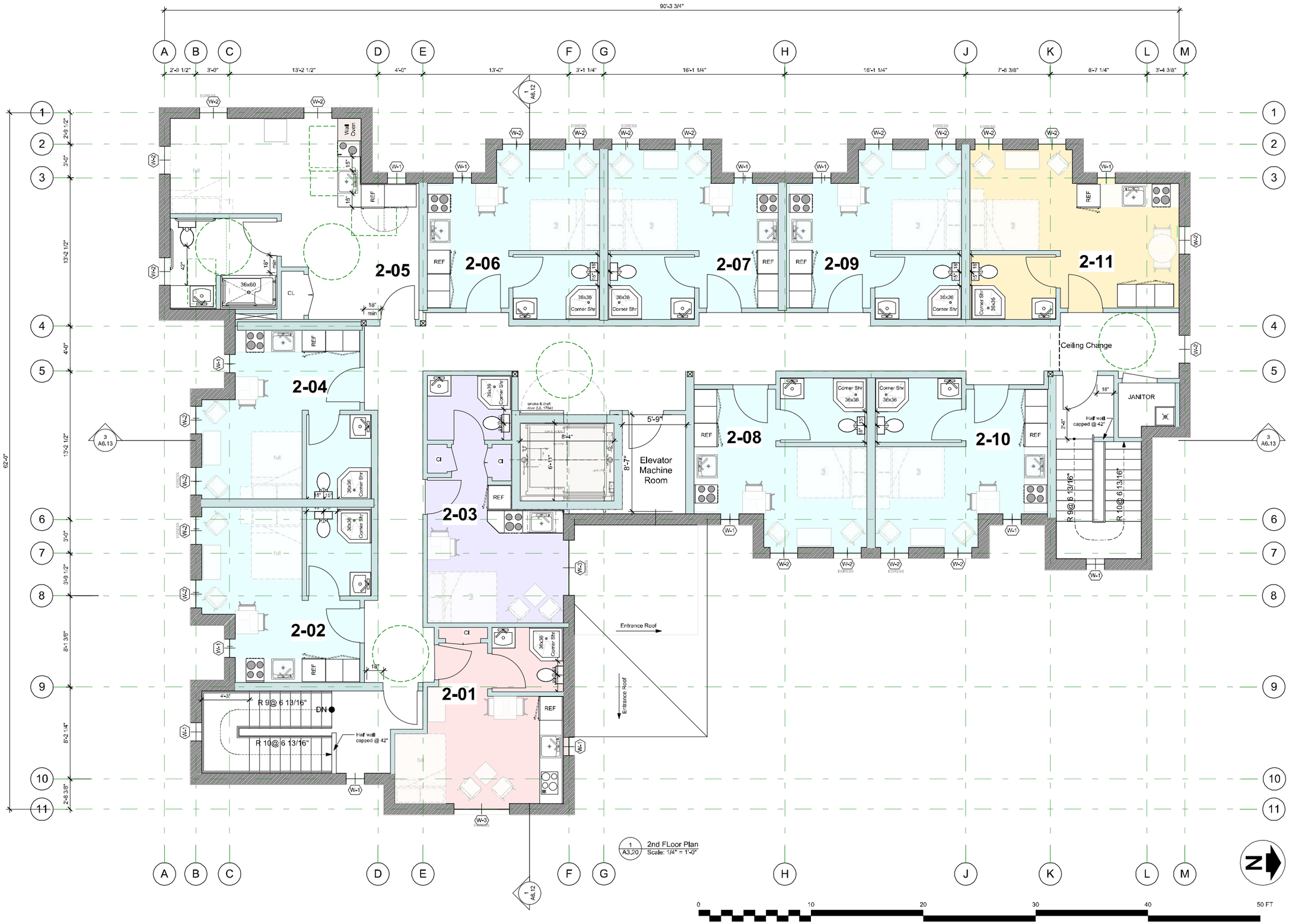
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

1st Floor Plan

A3.10

© Austin Design Inc.



AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

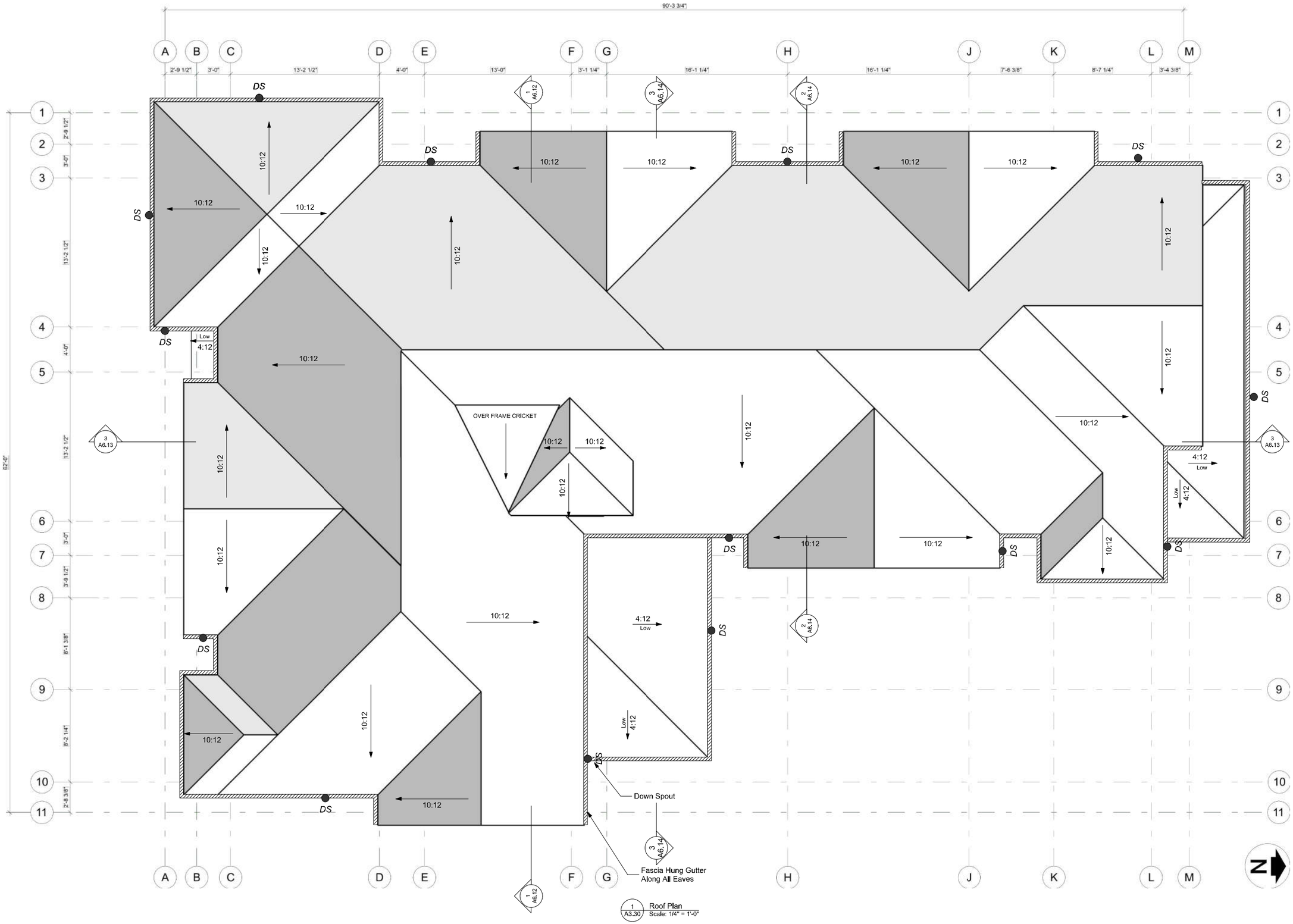
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

2nd Floor Plan

A3.20

© Austin Design Inc.



1 A3.30 Roof Plan
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

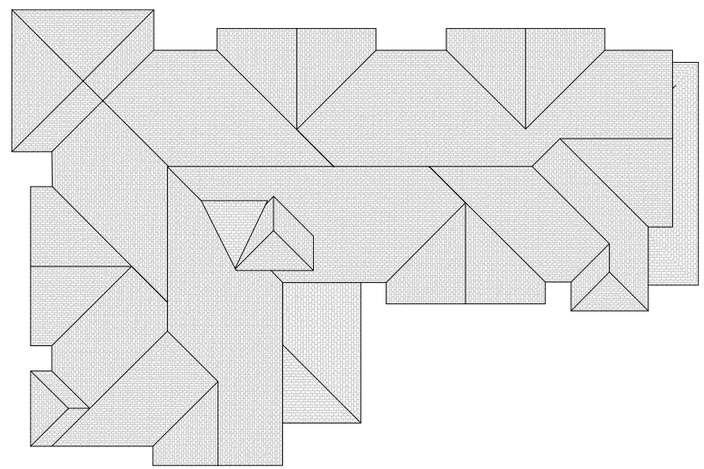
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

Roof Plan

A3.30

© Austin Design Inc.



1 A5.00 Roof and Elevation Sketches
Scale: 3/32" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855
Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085
S&A Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

A5.00

© Austin Design Inc.

1. A5.10 WEST ELEVATION
Scale: 1/4" = 1'-0"

Not For Construction

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

A5.10

© Austin Design Inc.

1 A5.20 East Elevation
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

A5.20

© Austin Design Inc.

1 A5.30 North Elevation
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855
Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085
S&A Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

A5.30

© Austin Design Inc.

1 / A5.40 South Elevation
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

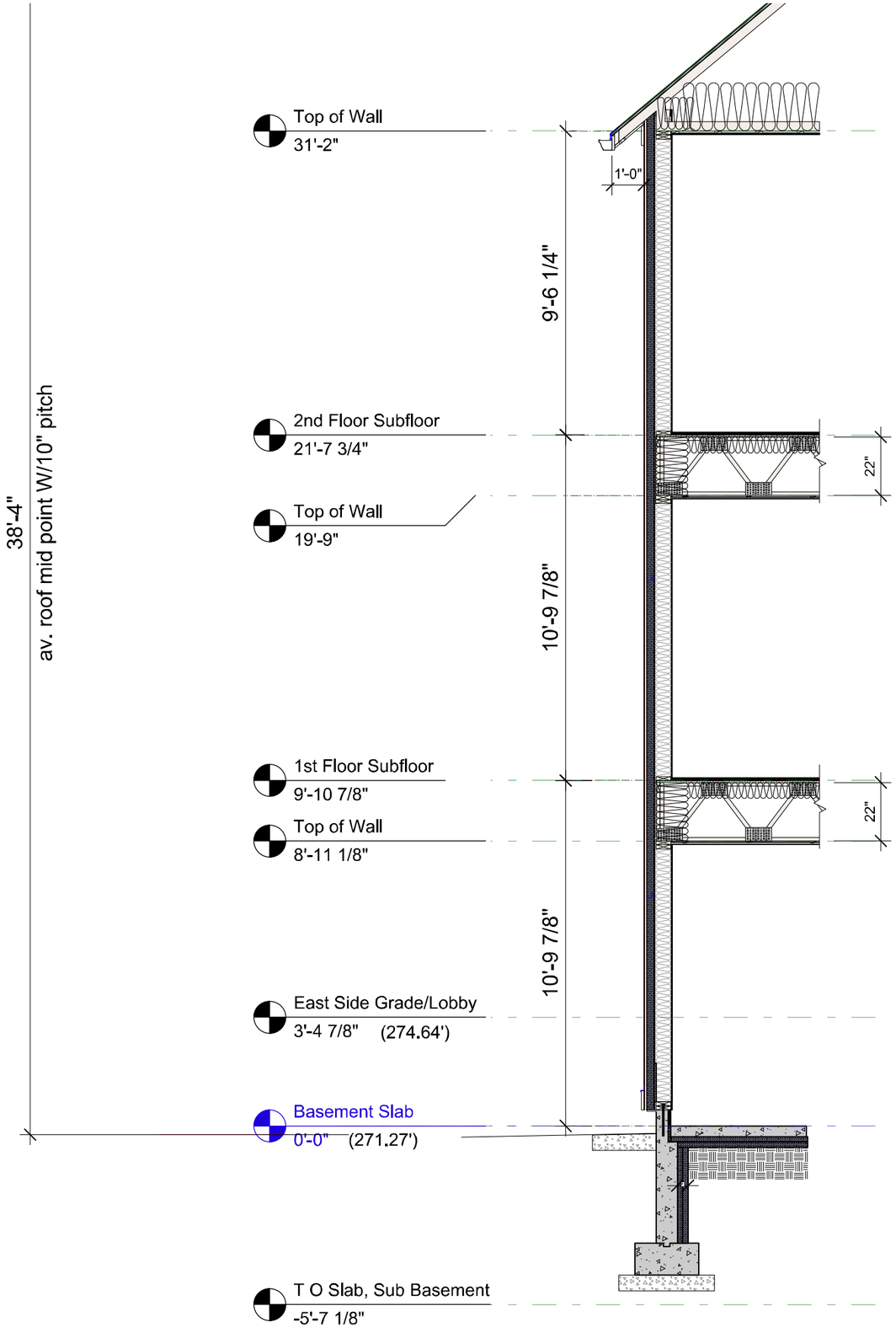
8 May 2020

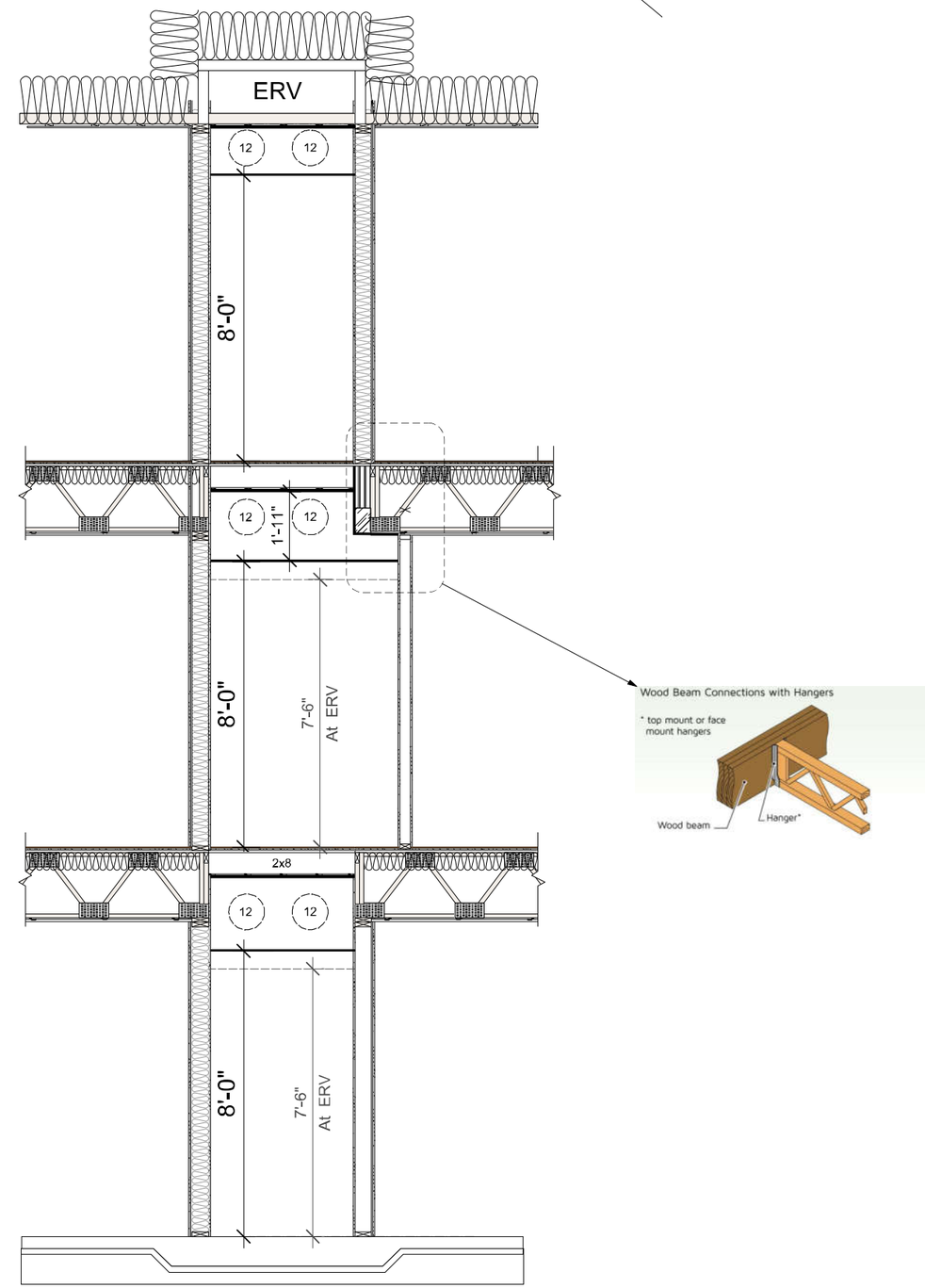
Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855
Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085
S&A Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

A5.40

© Austin Design Inc.





1 A6.10 Wall Sections
Scale: 1/2" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life

2 Mead St
Greenfield MA 01301
413 624 9669

167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

Building Sections

A6.10

© Austin Design Inc.

1 / A6.11 section
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

Building Sections

A6.11

© Austin Design Inc.

4
A6.14
[Drawing Title]
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

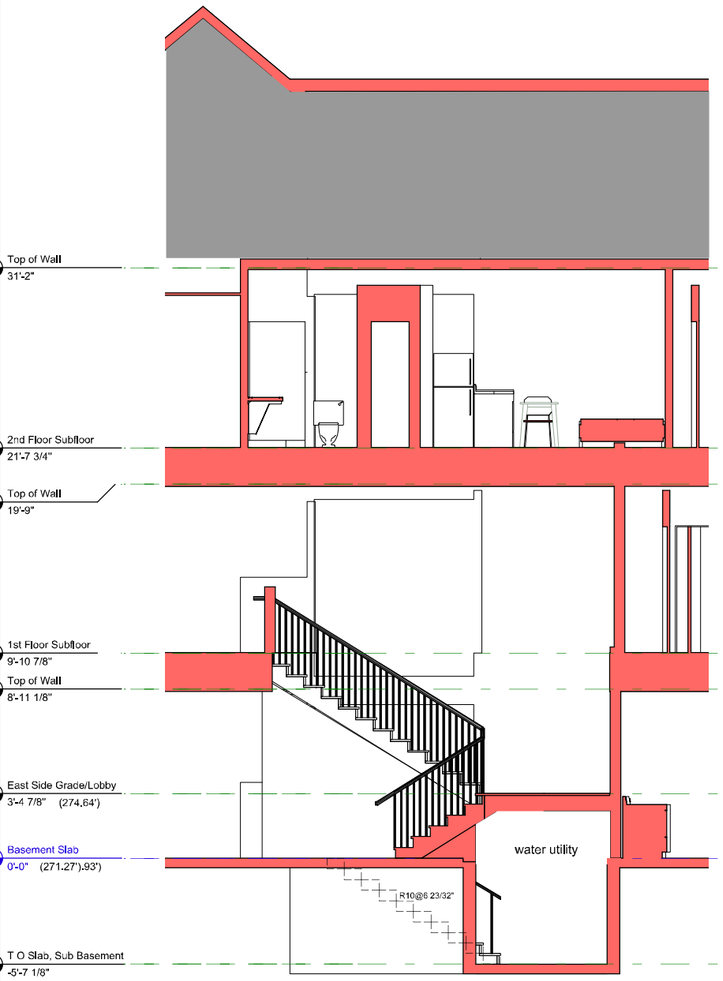
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

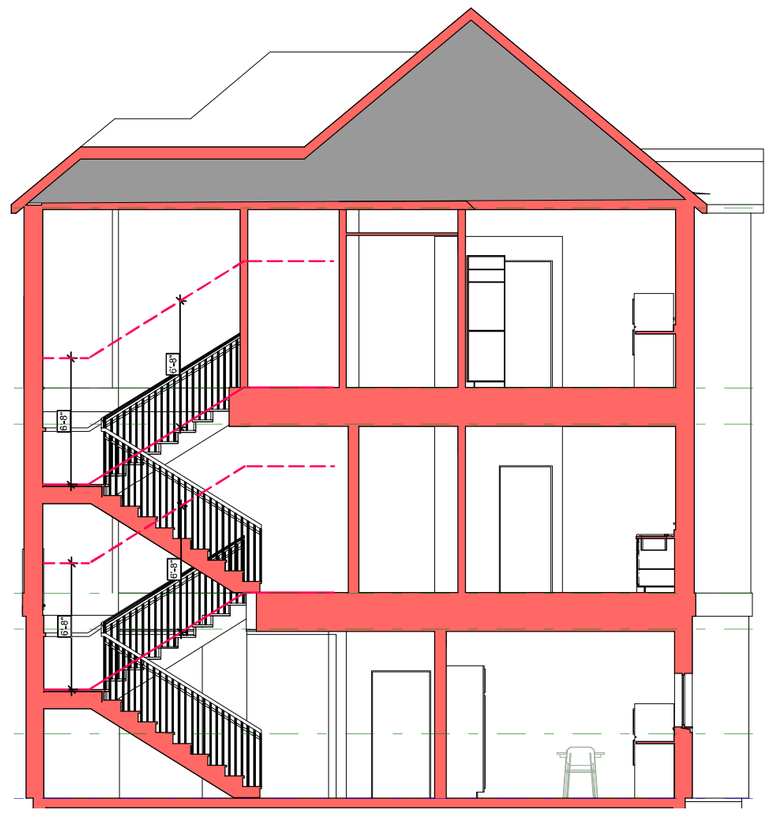
Building Sections

A6.14

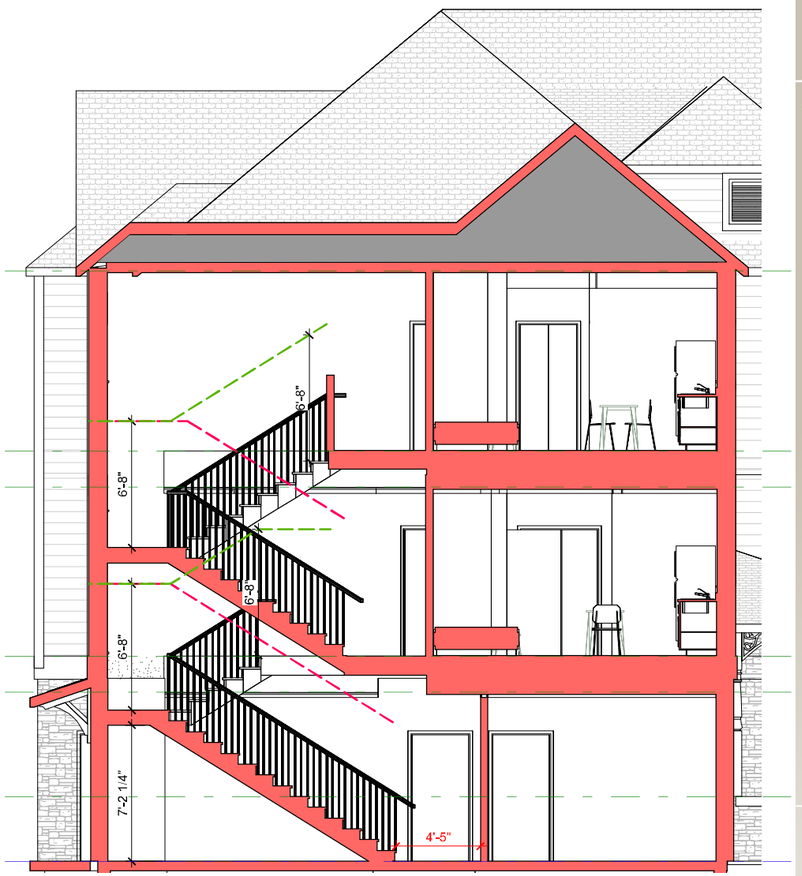
© Austin Design Inc.



3 A6.20 Lobby Stair
Scale: 1/4" = 1'-0"



2 A6.10 NORTH STAIR
Scale: 1/4" = 1'-0"



1 A6.20 SE STAIR
Scale: 1/4" = 1'-0"

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

S&A Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

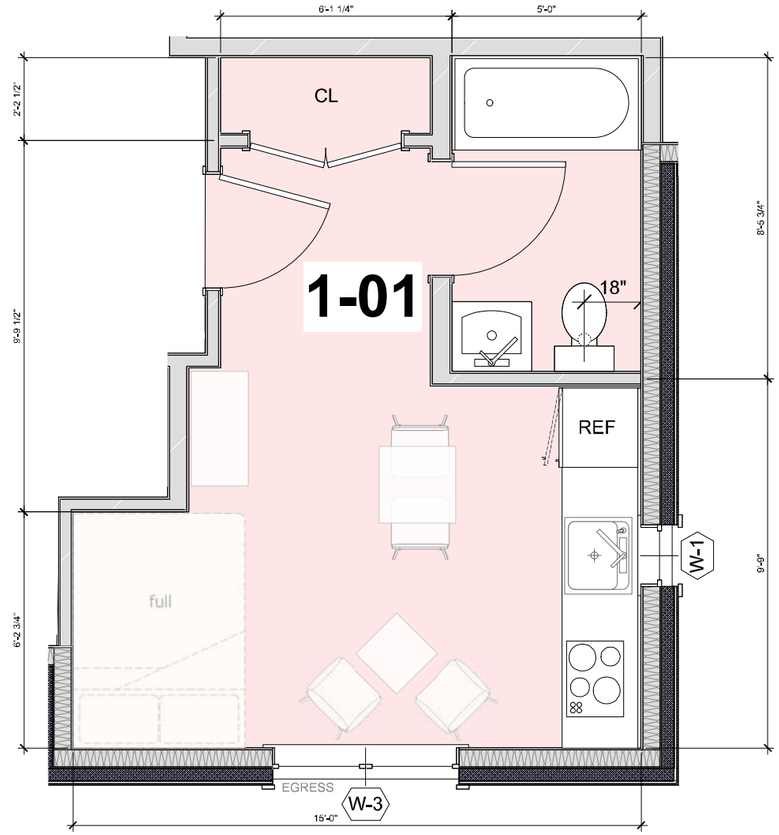
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

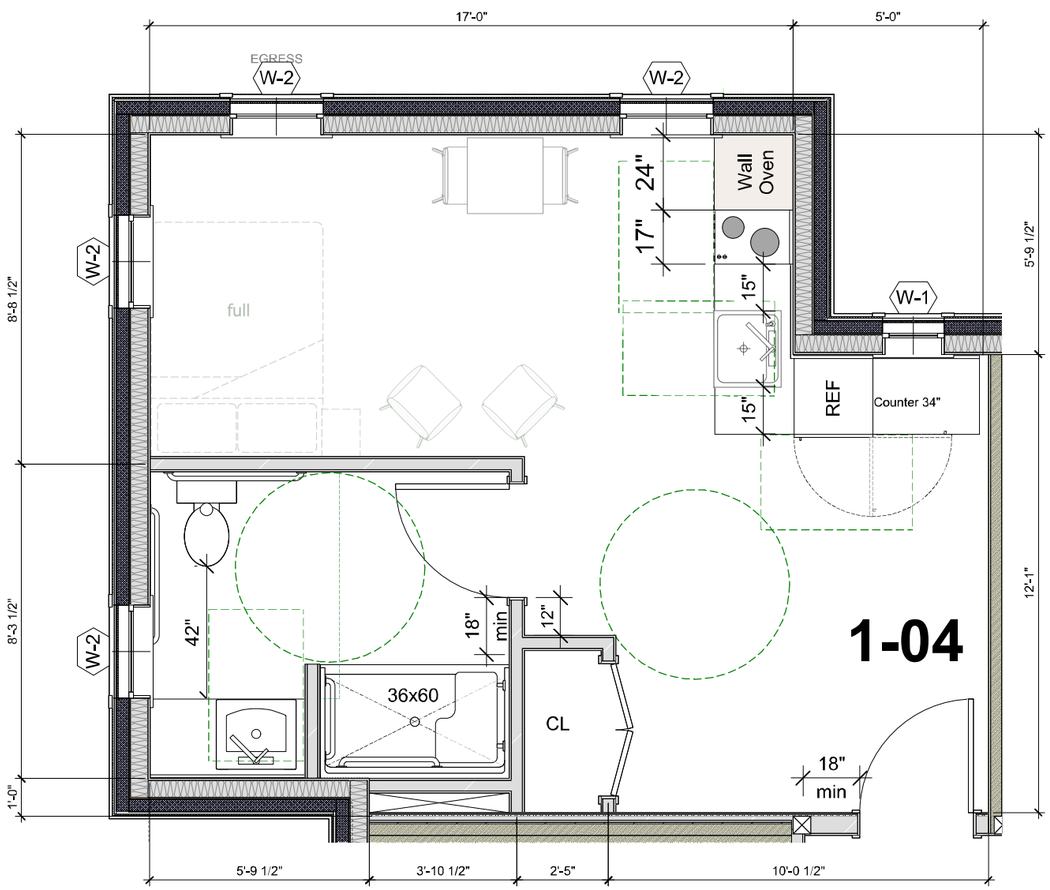
Stair Sections

A6.20

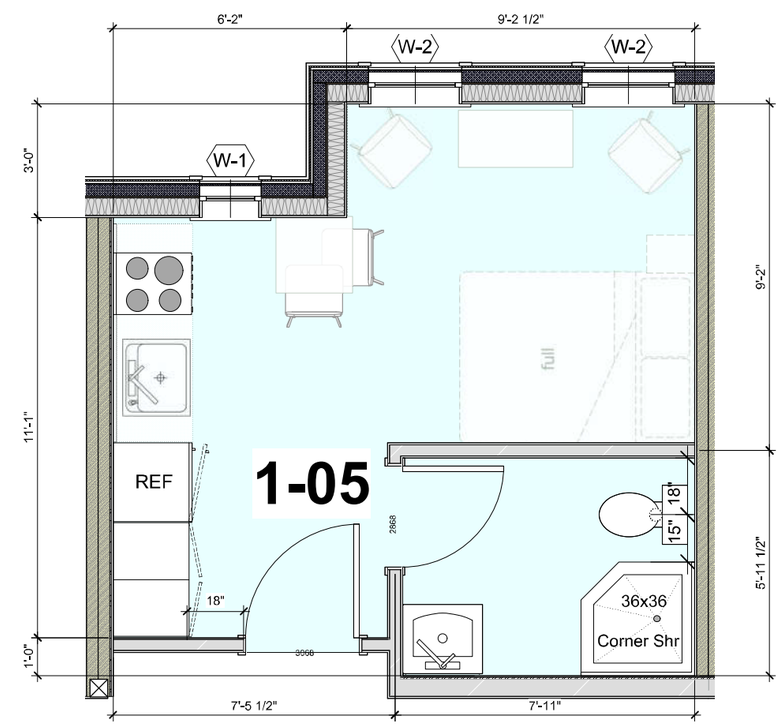
© Austin Design Inc.



3 A8.10 Unit 8 Scale: 1/2" = 1'-0" 259 gsf



2 A8.10 Accessible Unit, Typ Scale: 1/2" = 1'-0" 393 gsf



1 A8.10 Standard Unit, Typ Scale: 1/2" = 1'-0" 230 gsf

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

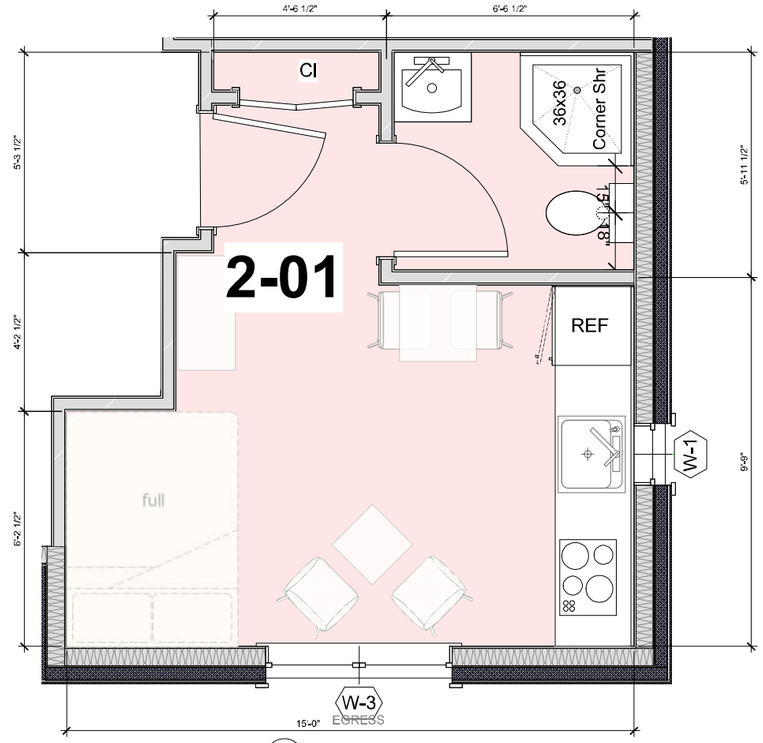
Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

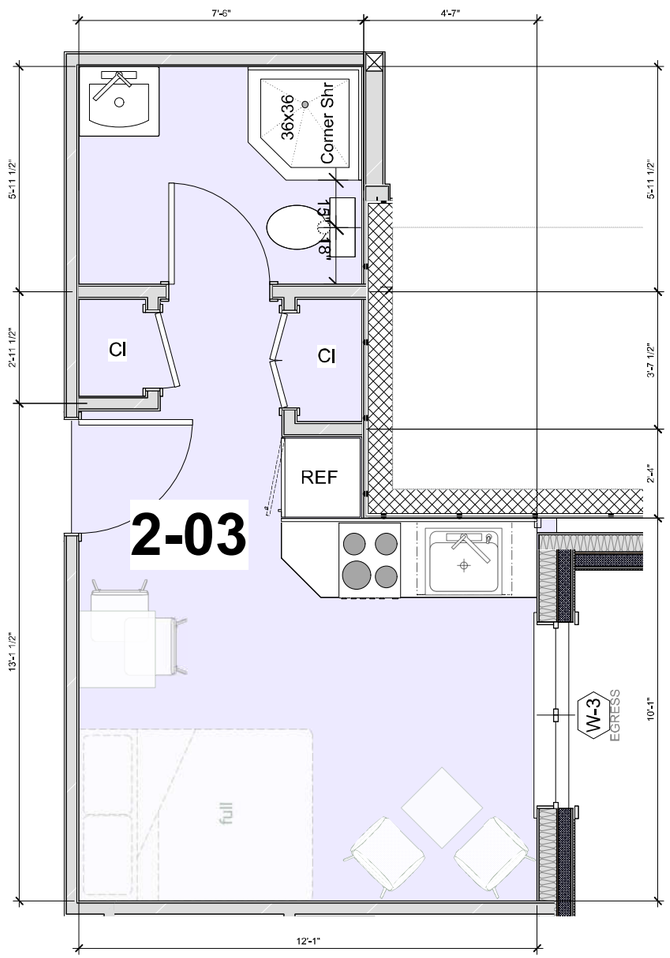
LARGE SCALE VIEWS

A8.10

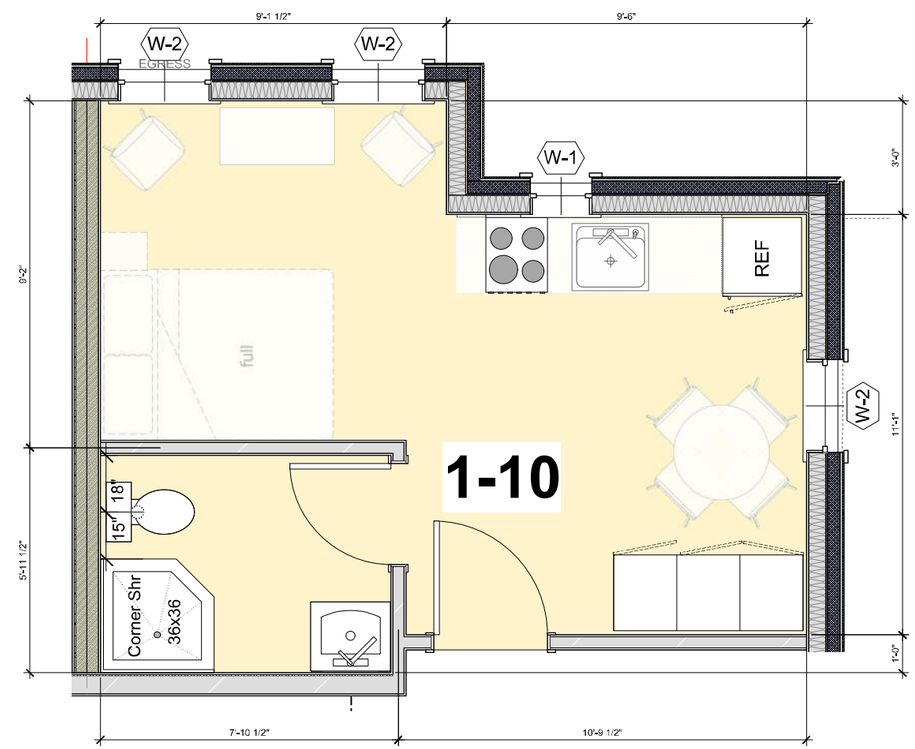
© Austin Design Inc.



2 A8.20 Unit 19
Scale: 1/2" = 1'-0" 230 GSF



3 A8.20 Unit 18
Scale: 1/2" = 1'-0" 225 GSF



1 A8.20 NE Corner Unit
Scale: 1/2" = 1'-0" 266 GSF

AUSTIN DESIGN
architecture for enjoying life
2 Mead St
Greenfield MA 01301
413 624 9669
167 Main St
Brattleboro VT 05301
802 451 5966

AMHERST COMMUNITY APPARTMENTS
132 Northampton Rd.
Amherst, MA. 01002

Comprehensive Permit Submission

8 May 2020

Valley Community Development
Valley Community Development
256 Pleasant Street, Suite A
Northampton, MA 01060
413-586-5855

Tighe&Bond
Engineers | Environmental Specialists
53 Southampton Road
Westfield, MA
01085

Stevens & Associates, P.C.
95 MAIN ST
BRATTLEBORO, VT
05301
802-257-9329

Berkshire Design Group
Berkshire Design Group
4 Allen Place
Northampton, MA
01060
413-582-7000

Not For Construction

LARGE SCALE VIEWS

A8.20

© Austin Design Inc.

Stormwater Management Report

---

for

Amherst Studio Apartments
132 Northampton Road
Amherst, MA

May 11, 2020

Prepared by:

Berkshire Design Group

4 Allen Place, Northampton, Massachusetts 01060

Table of Contents

I. **Introduction 2**

II. **Existing Conditions 2**

III. **Proposed Conditions 3**

IV. **Calculations and Design 4**

V. **MADEP Stormwater Standards Compliance 5**

Figures

Figure 1 **Location Plan**

Figure 2 **Existing Conditions Plan**

Figure 3 **Existing Conditions – Overall Hydrology**

Figure 4 **Existing Hydrology**

Figure 5 **Proposed Conditions Plan**

Figure 6 **Proposed Hydrology**

Appendix

Appendix A **NRCS Soil Report**

Appendix B **Soils Report**

Appendix C **Stormwater Hydrology Calculations**

Appendix D **Groundwater Recharge**

Appendix E **Water Quality Calculations**

Appendix F **Stormwater Management System – Operation & Maintenance Plan**

Appendix G **Massachusetts DEP Stormwater Checklist**

Referenced Documents

Plans:

Amherst Studio Apartments - 132 Northampton Rd, Amherst MA - Permit Set

Valley Community Development Corporation is proposing to build a new multi-unit apartment building at 132 Northampton Road in Amherst, Massachusetts. The existing single-family house on the parcel will be demolished as part of the redevelopment of the parcel. The existing driveway and parking apron will be reconfigured and enlarged to serve the multi-unit building.

Berkshire Design Group has prepared a Stormwater Management plan for the site in compliance with the Massachusetts Stormwater Handbook. This report summarizes the design of the system and documents how the design complies with those standards.

I. Introduction

The project is the redevelopment of the 0.88-acre parcel located at 132 Northampton Road. The existing single-family home and driveway will be replaced with a multi-unit apartment building, access driveway, parking, outdoor patio and walkways.

The parcel is located on the south side of Northampton Road (aka State Highway Route 9) in Amherst about one half mile from the town center and adjacent to Amherst College's Pratt Field (See **Figure 1**).

Soil Data

NRCS Soil Survey

The NRCS Soil Survey reports that the on-site soils consist of Paxton-Charlton-Urban Land Complex, predominantly hydrologic soil group (HSG) C. The USGS Surficial Geology survey indicates that the parcel is located in thin till overlaid by coarse deposits. The NRCS Soil Report for the site is attached in **Appendix A**.

Subsurface Exploration

Two test pits were completed by Cold Spring Environmental Consultants Inc. in December 2018 and witnessed by the Amherst DPW. The report is attached as **Appendix B**. The soils were generally fine sandy loam and sandy loam to 10'. Shallow estimated seasonal high groundwater was encountered at 28-32" below grade.

Based on the NRCS soil report HSG C is used in the hydrologic modelling.

Site Limits

Site limits were based on the parcel lines. Runoff generally flows southwest and west toward Pratt Field and Northampton Road as sheet and shallow concentrated flow across the west and south boundaries. Two study points were used to model pre and post peak runoff (**see Figure 3**).

II. Existing Conditions

An Existing Conditions Plan is shown on **Figure 2**. Hydrology for the general area including existing drainage infrastructure within Northampton Road and Pratt Field is shown on **Figure 3**. On site detailed hydrology is shown on **Figure 4**.

The existing hydrology was analyzed as two drainage areas, E1 and E2, each including impervious areas and open space.

Drainage area E1 includes most of the gravel driveway, the north facing roof of the existing home and open space area adjacent to the Pratt field access road and Northampton Road. Runoff from this area sheet flows to Northampton Road and to the Pratt field access road which in turn flows to Northampton Road. This area encompasses 0.66 acres.

Drainage area E2 includes the portion of the site which generally flows south/southwest towards Pratt Field. E2 includes the remainder of the gravel driveway, the asphalt apron, roof area and some open areas. This area encompasses 0.22 acres.

III. Proposed Conditions

The proposed conditions plan is provided on **Figure 5** and the proposed hydrology is shown on **Figure 6**. The proposed work maintains existing stormwater flow patterns and includes a FocalPoint biofiltration system, shallow detention area and dry well. A level spreader is used to ensure sheet flow at the outlet of the detention basin.

The proposed site is modeled with two main drainage areas matching the pattern found in existing conditions.

Drainage area P1 includes the new driveway and parking, a portion of the proposed building and walkways. It encompasses 0.71 acres. As in existing conditions drainage area P1 is tributary to Northampton Road. P1 is divided into four sub-areas to model and size the shallow detention area.

Area P1A encompasses the driveway entrance and surrounding open space. Area P1B is the area tributary to the detention pond and includes the majority of the driveway and parking and the main sidewalk connection to Northampton Road. Area P1C is the roof area tributary to the detention pond. And P1D is the remaining open space areas west of the detention pond and building. This area also includes some walkway area.

Drainage area P2 includes the southern portion of the site and encompasses 0.17 acres. Area P2A includes the roof area tributary to the dry well. Area P2 includes the remaining open space, terrace and walkways.

Water Quality

Existing impervious area at the site includes 2,445 sf of roofs, driveways and aprons and 3,715 sf of gravel for a total of 6,160 sf of impervious area. The proposed development includes a total of 16,865 sf of impervious area consisting of building roof, driveway, equipment pads, walkway and terrace and grass paver parking.

The proposed design provides treatment for most of the driveway and parking by directing these surfaces to a FocalPoint high performance modular biofiltration system.

Roof runoff is directed either to a dry well or to the detention basin for recharge.

Areas treated for water quality exceed new impervious areas created by the project (see Section IV and Appendix D).

IV. Calculations and Design

Water Quantity

Drainage calculations were performed on HydroCAD Stormwater Modeling System version 10.0 using Soil Conservation Service (SCS) TR-20 methodology. The SCS method is based on rainfall observations, which were used to develop the Intensity-Duration-Frequency relationship, or IDF curve. The mass curve is a dimensionless distribution of rainfall over time, which indicates the fraction of the rainfall event that occurs at a given time within a 24-hour precipitation event. This synthetic distribution develops peak rates for storms of varying duration and intensities. The SCS distribution provides a cumulative rainfall at any point in time and allows volume-dependent routing runoff calculations to occur. These calculations are included in **Appendix C**. Rainfall values are taken from the latest Northeast Regional Climate Center (NRCC) and are listed in Table 1.

The watershed boundaries for calculation purposes are divided according to the proposed site grading and the parcel boundary. The curve numbers (CNs) for the existing and proposed sub-catchment area are based on the soil type and the existing and proposed cover conditions at the site. Because this is a small site the site times of concentration are all set at the minimum of 5 minutes.

Calculations were performed for the 2-, 10-, and 100-year frequency storms under existing and proposed conditions. The results of the calculations are presented in Table 1 below. **Appendix C** presents the HydroCAD output reports.

Table 1. Runoff Summary Table

Point of Analysis	2-Year Storm 3.07”	10-Year Storm 4.47”	100-Year Storm 7.68”
	Peak Flow Rate(cfs)	Peak Flow Rate(cfs)	Peak Flow Rate(cfs)
Existing Study Point 1	1.19	2.18	4.55
Proposed Study Point 1	1.13	1.75	4.29
Existing Study Point 2	0.47	0.81	1.62
Proposed Study Point 2	0.36	0.62	1.24

*Peak flow after storage/attenuation within the detention pond

Runoff from the site shows a decrease in peak flow for all storms between pre and post conditions.

Water Quality

Water quality volume is provided for 1/2” of runoff over the increased impervious area. The volume provided exceeds the required volume for the increased impervious area (see **Table 2**).

Table 2. Water Quality Volume

Increase in Impervious Area (sf)	Water Quality Volume Required on increase (cf)	Water Quality Volume Provided in all facilities (cf)
10,705	446	477

Water quality at the proposed site is addressed with a FocalPoint biofiltration system for the driveway and parking areas. Water quality is also provided for a portion of the roof runoff within a dry well.

The majority of the parking lot and driveway is tributary to the FocalPoint system which provides 91% TSS removal. Considering the entire driveway and parking area, the Total Suspended Solids removal provided by the biofiltration system is 82%.

Calculations supporting these conclusions are included in **Appendix D**.

Erosion & Sedimentation Control

The project plan set includes provisions for erosion control during construction.

Erosion control barrier is included below all road and wall construction and around the new apartment construction. to prevent migration of sediment offsite during construction.

Straw wattles combined with silt fence are proposed for down-slope protection.

V. MADEP Stormwater Standards Compliance

The following section details how the project will meet the DEP Stormwater Management Policy's ten stormwater management standards.

LID

The project includes the demolition of an existing home and driveway and the redevelopment with a multi-unit apartment building, driveway and parking. The possibility for LID is limited due to the shallow depth of seasonal groundwater. Nevertheless, water quality is enhanced from existing conditions by conveying the majority of the impervious surfaces to a FocalPoint biofiltration system and to a shallow vegetated detention area with a level spreader outlet. A shallow dry well captures a portion of the roof and additional recharge is proposed within the detention basin. Approximately one half of the parking area includes grass pavers and a gravel diaphragm lines the edge of pavement.

Standard 1 - Untreated Stormwater Discharge

The proposed project includes a FocalPoint biofiltration system and a shallow detention pond designed to capture runoff from the impervious surfaces created and provide water quality treatment prior to discharge to the vegetated buffers.

Standard 2 - Post-Development Peak Discharge Rates

The proposed detention facility provides attenuation of discharge rates such that post development discharge rates *are less than* pre-development peak discharge rates leaving the site.

These results are discussed in detail under "Peak Runoff Rate" in **Section IV**, above.

Standard 3 - Recharge to Groundwater

Recharge of the increased impervious area is provided within the proposed dry well and detention pond based on the target depth factor of 0.25" for HSG C soils. For the proposed increase in impervious area, the required recharge volume is 254 cf. The design includes capacity to recharge 254 cf which exceeds the required volume. Calculations of recharge are included within **Appendix D**.

Standard 4 – Water Quality

The water quality volume is calculated based on 1/2" of runoff. For the proposed increase in impervious area, the required water quality volume is 446 cu. ft. The proposed facilities provide 477 cf thereby providing water quality for all additional impervious areas proposed.

Further discussion of this standard is included under "Water Quality" in Section III and in **Appendix E**.

Standard 5 - Higher Potential Pollutant Loads

This is not applicable to this project.

Standard 6 - Protection of Critical Areas

The project is not located in a critical area.

Standard 7 - Redevelopment Projects

This project is the development of a previously developed parcel with untreated impervious areas. Treatment and recharge is provided on the increase in impervious area proposed by the new development.

Standard 8 - Erosion/Sediment Control

Proposed erosion and sediment controls are shown on the drainage plan for the site.

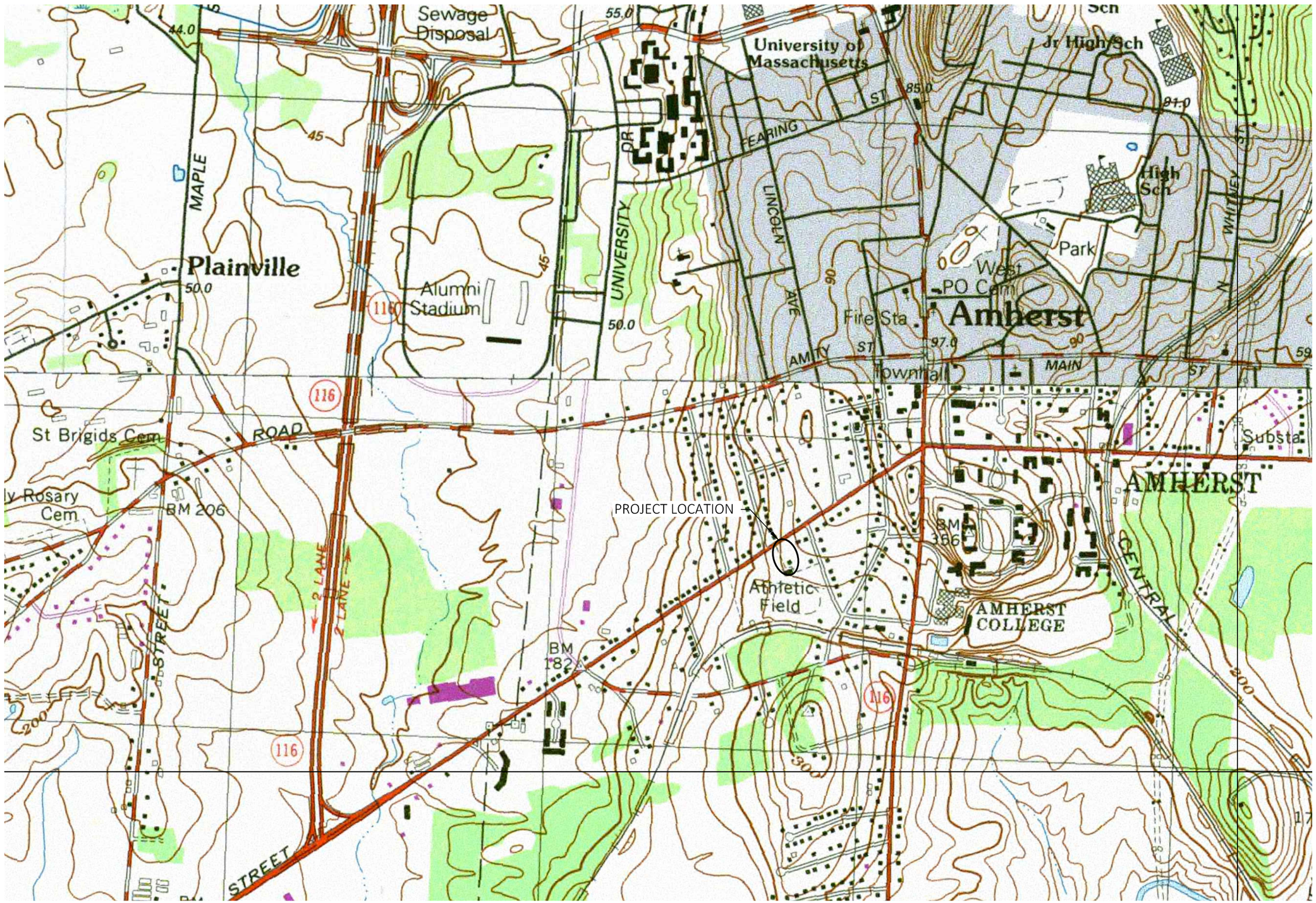
Standard 9 - Operation/Maintenance Plan

An Operation and Maintenance Plan for the proposed project is included in **Appendix F**. It includes general controls for construction and long term maintenance of the FocalPoint and other stormwater improvements.

Standard 10 – Prohibition of Illicit Discharges

No Illicit Discharge Compliance Statement is included with this report. It will be the responsibility of the owner to submit a statement prior to the discharge of any stormwater to post-construction BMPs.

FIGURES



Berkshire Design Group

Landscape Architecture
Civil Engineering
Planning
Land Surveying

4 Allen Place, Northampton, Massachusetts 01060
(413) 582-7000 • FAX (413) 582-7005

Email: bdg@berkshiredesign.com
Web: http://www.berkshiredesign.com

This drawing is not intended nor shall it be used for construction purposes unless the signed professional seal of a registered landscape architect, civil engineer or land surveyor employed by The Berkshire Design Group, Inc. is affixed above.

Do not scale drawing for quantity take-offs or construction. Use written dimensions only. If dimensions are incomplete, contact The Berkshire Design Group Inc. for clarification.

© Copyright The Berkshire Design Group, Inc.
This drawing and all of its contents are the express property of The Berkshire Design Group, Inc., and shall not be copied or used in any way without the written consent of The Berkshire Design Group, Inc.

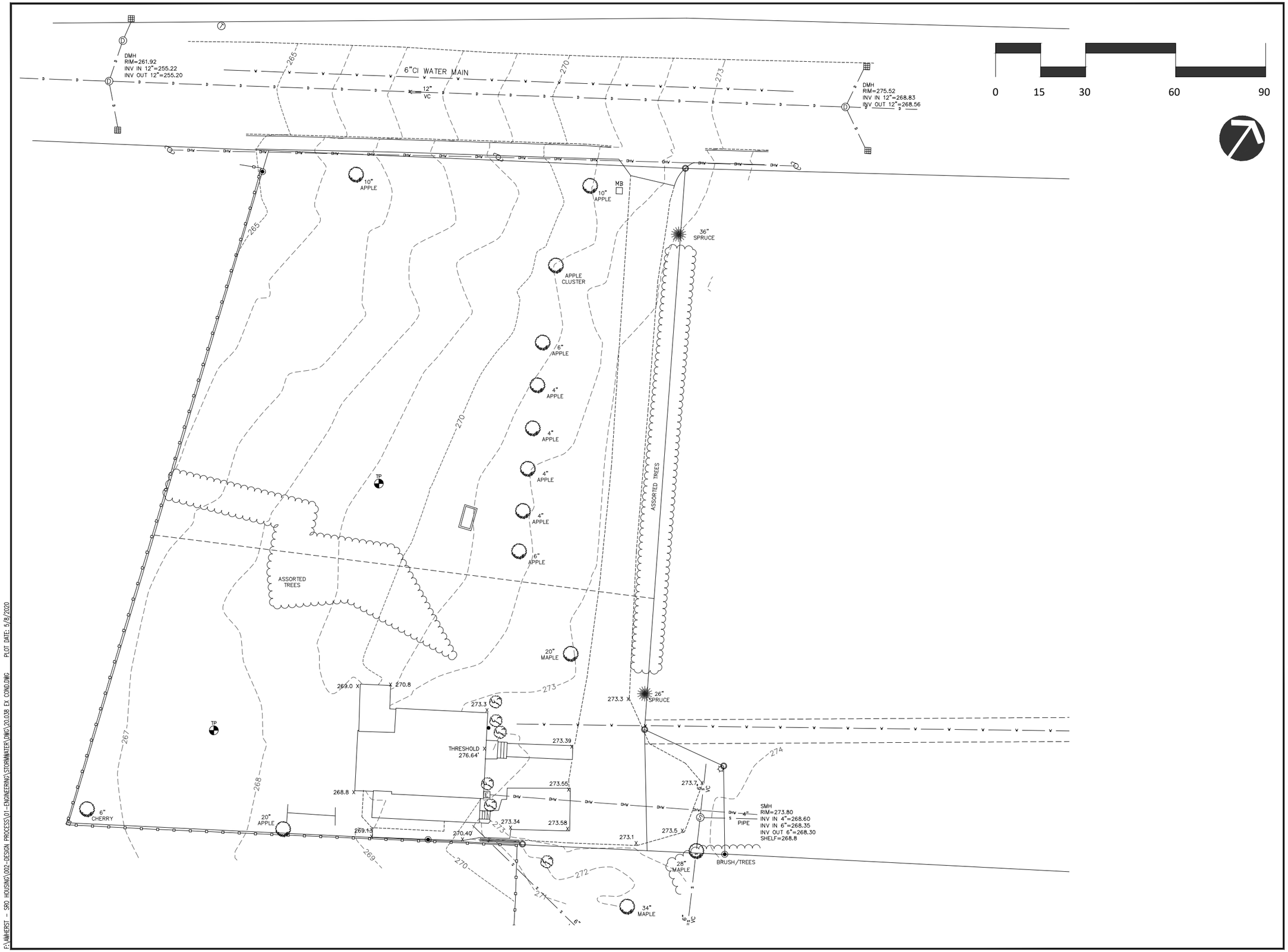
AMHERST SRO HOUSING
132 NORTHAMPTON RD
AMHERST, MA

LOCATION PLAN

Revisions

Date: APRIL 27, 2020	Sheet Number
Scale: 1"=1,000'	FIG 1
Drawn By: LMC	
Checked By: MBD	

F:\AMHERST - SRO HOUSING\002-DESIGN\ PROCESS\01-ENGINEERING\STORM\WATER\DWG\20.038. LOCATION.DWG PLOT DATE: 5/8/2020



Berkshire Design Group

Landscape Architecture
Civil Engineering
Planning
Land Surveying

4 Allen Place, Northampton, Massachusetts 01060
(413) 582-7000 • FAX (413) 582-7005

Email: bdg@berkshiredesign.com
Web: http://www.berkshiredesign.com

This drawing is not intended nor shall it be used for construction purposes unless the signed professional seal of a registered landscape architect, civil engineer or land surveyor employed by The Berkshire Design Group, Inc. is affixed above.

Do not scale drawing for quantity take-offs or construction. Use written dimensions only. If dimensions are incomplete, contact The Berkshire Design Group Inc. for clarification.

© Copyright The Berkshire Design Group, Inc.
This drawing and all of its contents are the express property of The Berkshire Design Group, Inc., and shall not be copied or used in any way without the written consent of The Berkshire Design Group, Inc.

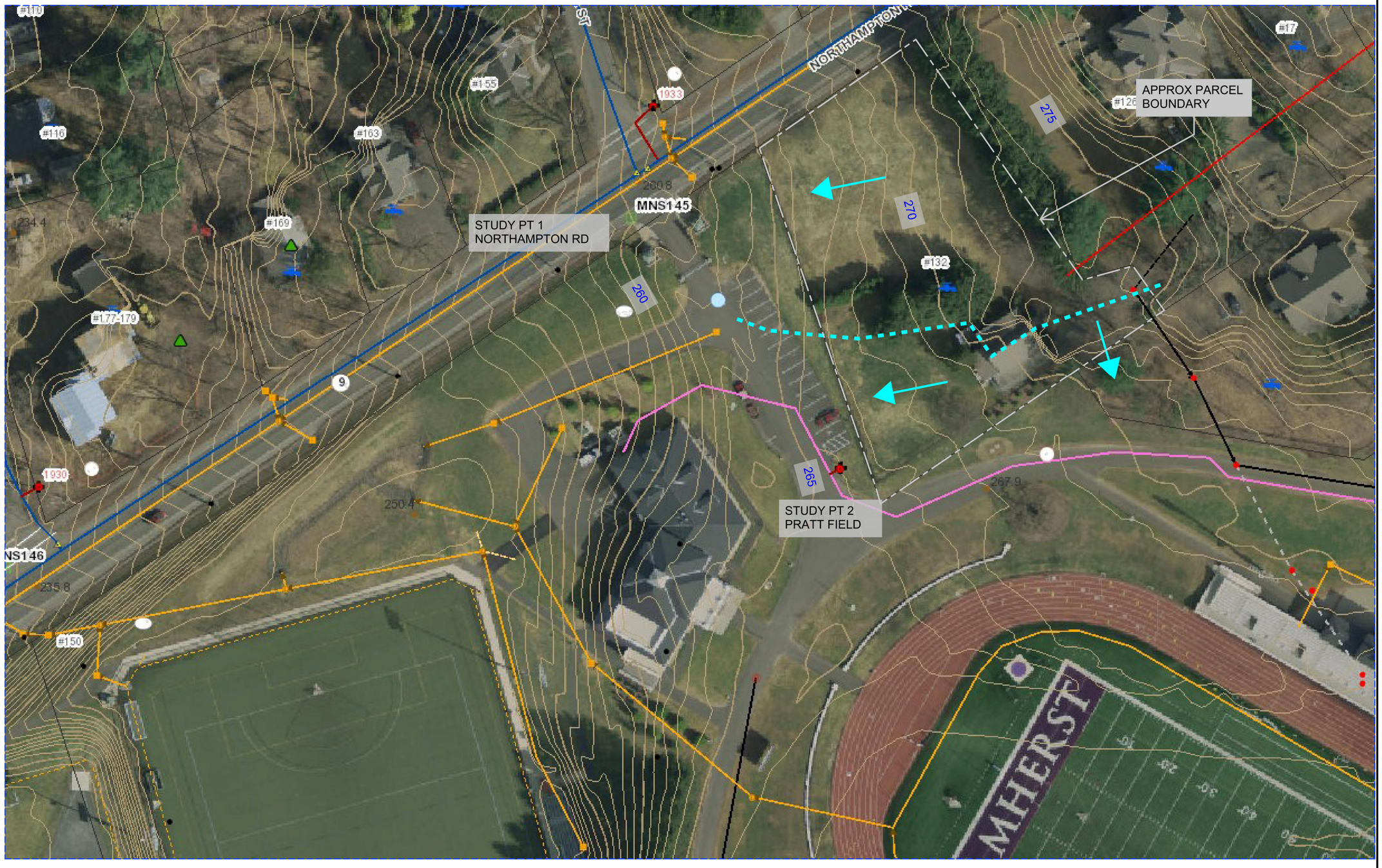
AMHERST SRO HOUSING
132 NORTHAMPTON RD
AMHERST, MA

EXISTING CONDITIONS PLAN

Revisions

Date: APRIL 27, 2020	Sheet Number FIG 2
Scale: 1"=30'	
Drawn By: LMC	
Checked By: MBD	

F:\AMHERST - SRO HOUSING\002-DESIGN PROCESS\01-ENGINEERING\STORMWATER\DWG\20.038 EX COND.DWG PLOT DATE: 5/8/2020



Berkshire Design Group

Landscape Architecture
Civil Engineering
Planning
Land Surveying

4 Allen Place, Northampton, Massachusetts 01060
(413) 582-7000 • FAX (413) 582-7005

Email: bdg@berkshiredesign.com
Web: http://www.berkshiredesign.com

This drawing is not intended nor shall it be used for construction purposes unless the signed professional seal of a registered landscape architect, civil engineer or land surveyor employed by The Berkshire Design Group, Inc. is affixed above.

Do not scale drawing for quantity take-offs or construction. Use written dimensions only. If dimensions are incomplete, contact The Berkshire Design Group Inc. for clarification.

©Copyright The Berkshire Design Group, Inc.
This drawing and all of its contents are the express property of The Berkshire Design Group, Inc., and shall not be copied or used in any way without the written consent of The Berkshire Design Group, Inc.

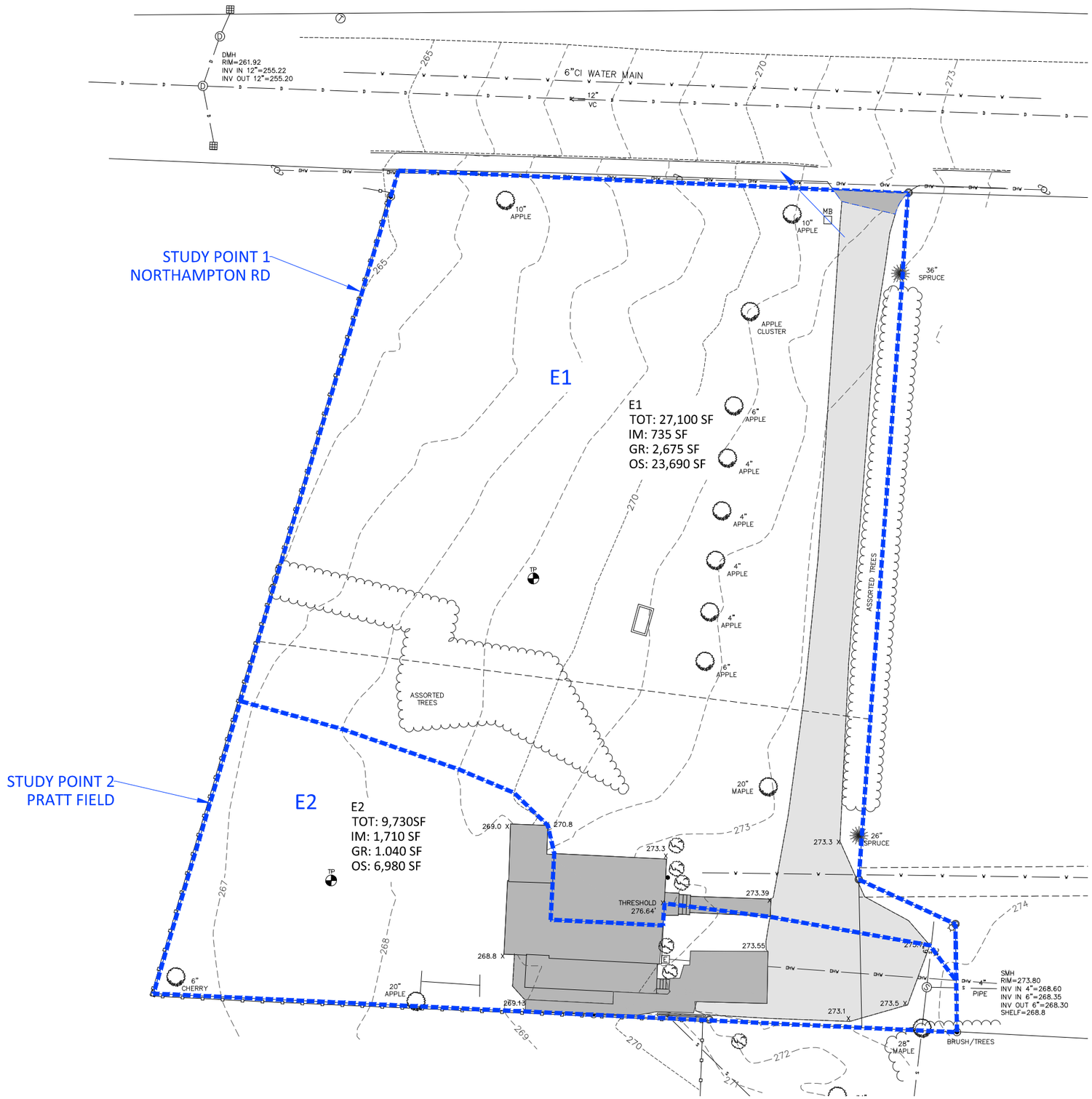
AMHERST SRO HOUSING
132 NORTHAMPTON RD
AMHERST, MA

EXISTING CONDITIONS
OVERALL HYDROLOGY

Revisions

Date: APRIL 27, 2020	Sheet Number FIG 3
Scale: NTS	
Drawn By: LMC	
Checked By: MBD	

F:\AMHERST - SRO HOUSING\002-DESIGN PROCESS\01-ENGINEERING\STORMWATER\DWG\20.038 EX COND.DWG PLOT DATE: 5/8/2020



0 15 30 60 90

IMPERVIOUS AREA

IMPERVIOUS AREA- GRAVEL

TOT = TOTAL AREA
IM = IMPERVIOUS AREA
GR = GRAVEL
0S - OPEN SPACE (FAIR)

NOTES:

1. SOILS ON THE PARCEL ARE PAXTON-CHARLTON URBAN LAND COMPLEX, HSG C.
2. TWO STUDY POINTS WERE IDENTIFIED FROM AMHERST UTILITY MAPPING AND TOPOGRAPHY. SEE FIGURE 3

Berkshire Design Group
Landscape Architecture
Civil Engineering
Planning
Land Surveying

4 Allen Place, Northampton, Massachusetts 01060
(413) 582-7000 • FAX (413) 582-7005

Email: bdg@berkshiredesign.com
Web: http://www.berkshiredesign.com

This drawing is not intended nor shall it be used for construction purposes unless the signed professional seal of a registered landscape architect, civil engineer or land surveyor employed by The Berkshire Design Group, Inc. is affixed above.

Do not scale drawing for quantity take-offs or construction. Use written dimensions only. If dimensions are incomplete, contact The Berkshire Design Group Inc. for clarification.

© Copyright The Berkshire Design Group, Inc.
This drawing and all of its contents are the express property of The Berkshire Design Group, Inc., and shall not be copied or used in any way without the written consent of The Berkshire Design Group, Inc.

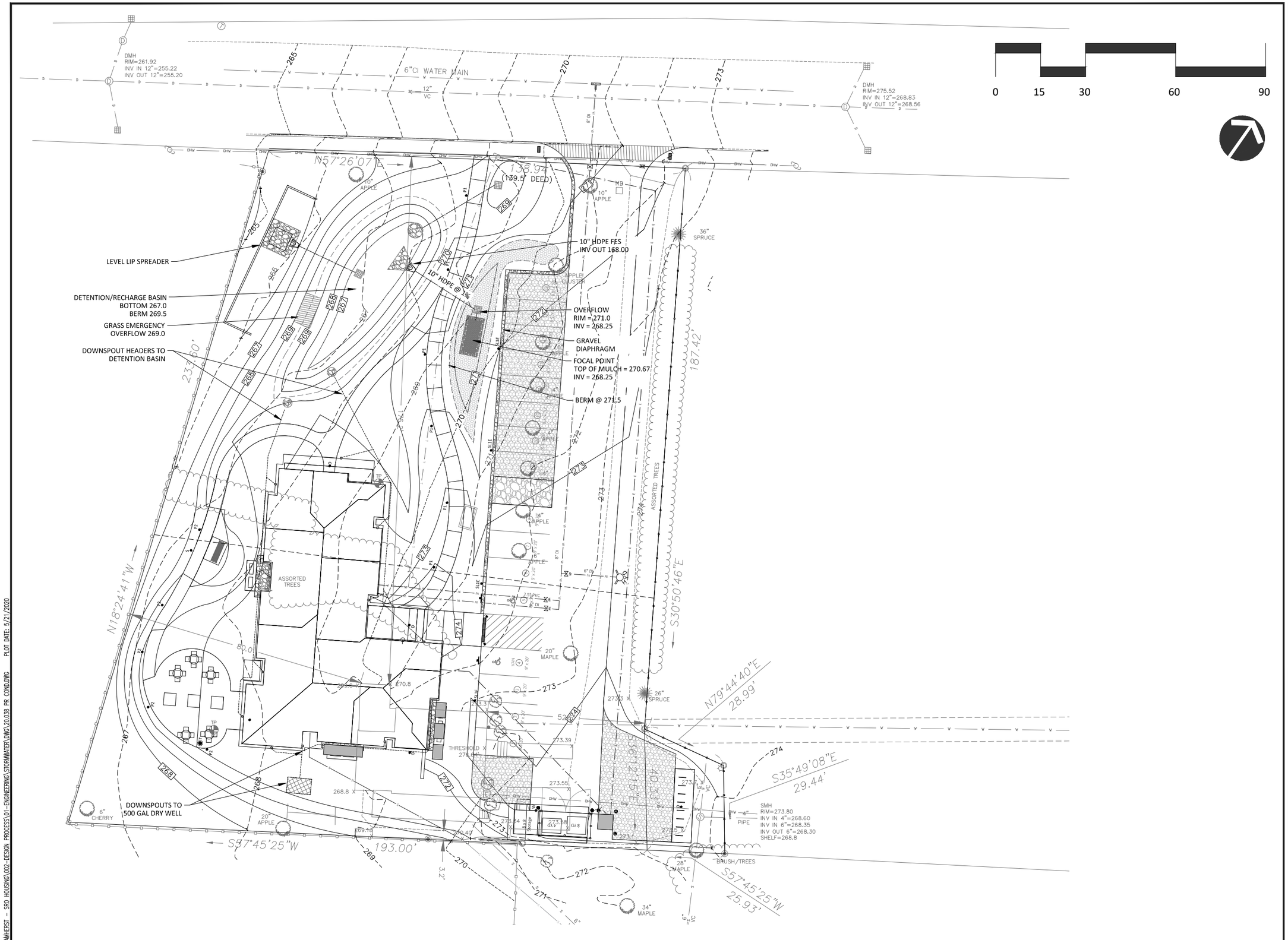
AMHERST SRO HOUSING
132 NORTHAMPTON RD
AMHERST, MA

EXISTING HYDROLOGY

Revisions

Date: APRIL 27, 2020	Sheet Number FIG 4
Scale: 1"=30'	
Drawn By: LMC	
Checked By: MBD	

E:\AMHERST - SRO HOUSING\002-DESIGN PROCESS\01-ENGINEERING\STORMWATER\DWG\20.038 EX COND.DWG PLOT DATE: 5/8/2020



Berkshire Design Group

Landscape Architecture
Civil Engineering
Planning
Land Surveying

4 Allen Place, Northampton, Massachusetts 01060
(413) 582-7000 • FAX (413) 582-7005

Email: bdg@berkshiredesign.com
Web: http://www.berkshiredesign.com

This drawing is not intended nor shall it be used for construction purposes unless the signed professional seal of a registered landscape architect, civil engineer or land surveyor employed by The Berkshire Design Group, Inc. is affixed above.

Do not scale drawing for quantity take-offs or construction. Use written dimensions only. If dimensions are incomplete, contact The Berkshire Design Group Inc. for clarification.

© Copyright The Berkshire Design Group, Inc.
This drawing and all of its contents are the express property of The Berkshire Design Group, Inc., and shall not be copied or used in any way without the written consent of The Berkshire Design Group, Inc.

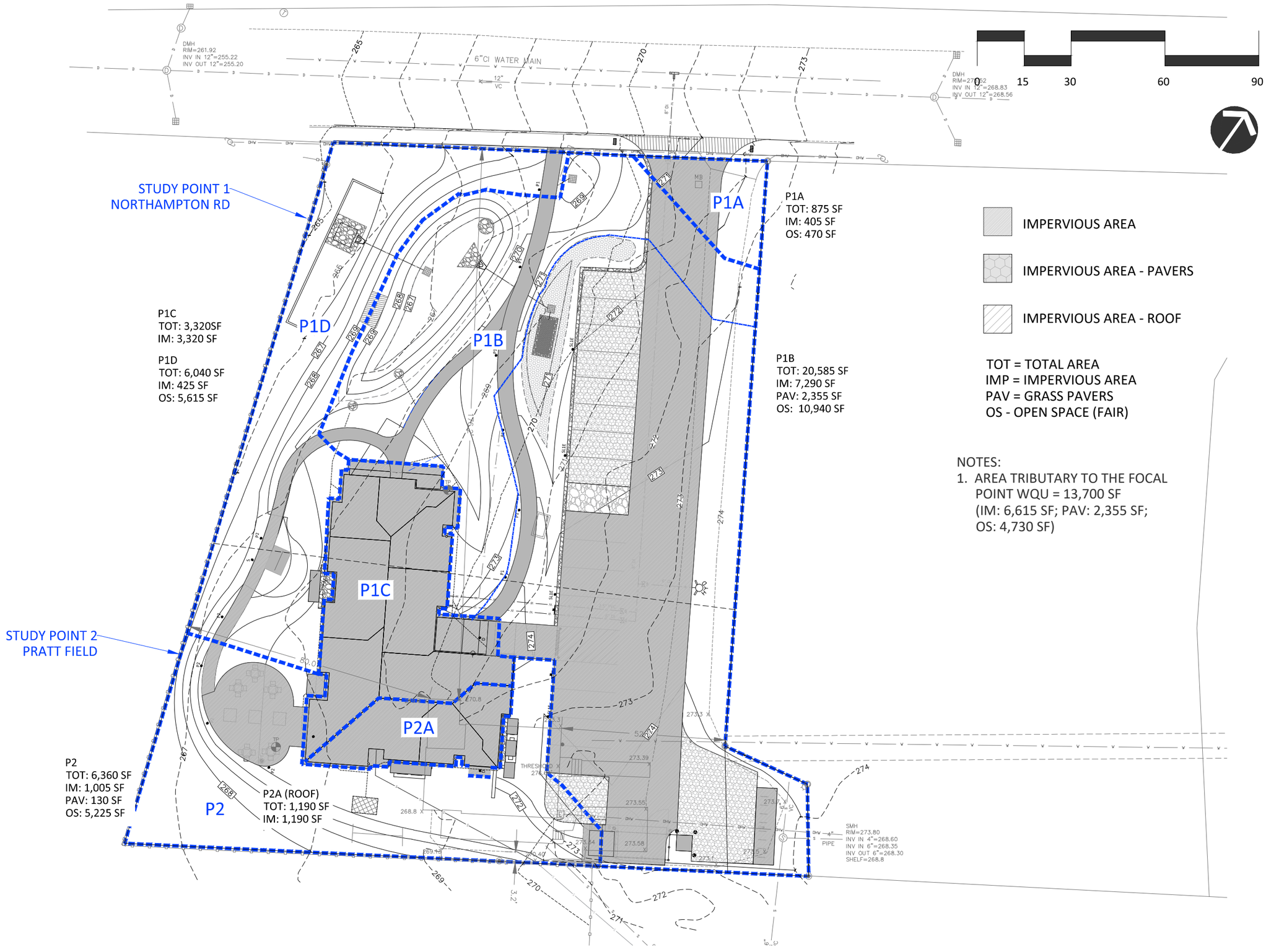
AMHERST SRO HOUSING
132 NORTHAMPTON RD
AMHERST, MA

PROPOSED CONDITIONS PLAN

Revisions

Date: MAY 11, 2020	Sheet Number FIG 5
Scale: 1"=30'	
Drawn By: LMC	
Checked By: MBD	

F:\AMHERST - SRO HOUSING\002-DESIGN PROCESS\01-ENGINEERING\STORMWATER\DWG\20.038 PR COND.DWG PLOT DATE: 5/21/2020



IMPERVIOUS AREA

IMPERVIOUS AREA - PAVERS

IMPERVIOUS AREA - ROOF

TOT = TOTAL AREA
IMP = IMPERVIOUS AREA
PAV = GRASS PAVERS
OS - OPEN SPACE (FAIR)

NOTES:

1. AREA TRIBUTARY TO THE FOCAL POINT WQU = 13,700 SF (IM: 6,615 SF; PAV: 2,355 SF; OS: 4,730 SF)

Berkshire Design Group

Landscape Architecture
Civil Engineering
Planning
Land Surveying

4 Allen Place, Northampton, Massachusetts 01060
(413) 582-7000 • FAX (413) 582-7005

Email: bdg@berkshiredesign.com
Web: http://www.berkshiredesign.com

This drawing is not intended nor shall it be used for construction purposes unless the signed professional seal of a registered landscape architect, civil engineer or land surveyor employed by The Berkshire Design Group, Inc. is affixed above.

Do not scale drawing for quantity take-offs or construction. Use written dimensions only. If dimensions are incomplete, contact The Berkshire Design Group Inc. for clarification.

© Copyright The Berkshire Design Group, Inc.
This drawing and all of its contents are the express property of The Berkshire Design Group, Inc., and shall not be copied or used in any way without the written consent of The Berkshire Design Group, Inc.

AMHERST SRO HOUSING
132 NORTHAMPTON RD
AMHERST, MA

PROPOSED HYDROLOGY

Revisions

Date: MAY 11, 2020	Sheet Number FIG 6
Scale: 1"=30'	
Drawn By: LMC	
Checked By: MBD	

F:\AMHERST - SRO HOUSING\002-DESIGN PROCESS\01-ENGINEERING\STORMWATER\DWG\20.038 PR COND.DWG PLOT DATE: 5/21/2020

Appendix A– NRCS Soils Report

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Hampshire County, Massachusetts, Central Part

132 Northampton Road, Amherst MA

April 27, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface..... 2
Soil Map..... 5
Soil Map.....6
Legend.....7
Map Unit Legend..... 9
Map Unit Descriptions..... 9
Hampshire County, Massachusetts, Central Part.....11
747C—Paxton-Charlton-Urban land complex, 3 to 15 percent slopes.....11
References.....14

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

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 1:15,800.

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: Hampshire County, Massachusetts, Central Part
Survey Area Data: Version 14, Sep 13, 2019

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

Date(s) aerial images were photographed: Sep 29, 2013—Oct 16, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

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
747C	Paxton-Charlton-Urban land complex, 3 to 15 percent slopes	1.7	100.0%
Totals for Area of Interest		**1.7**	**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 particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Hampshire County, Massachusetts, Central Part

747C—Paxton-Charlton-Urban land complex, 3 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2x1k7
Elevation: 50 to 420 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Paxton and similar soils: 40 percent
Charlton and similar soils: 20 percent
Urban land: 20 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Paxton

Setting

Landform: Drumlins, ground moraines, hills
Landform position (two-dimensional): Backslope, summit, shoulder
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear, convex
Across-slope shape: Convex
Parent material: Coarse-loamy lodgment till derived from gneiss, granite, and/or schist

Typical profile

Ap - 0 to 8 inches: fine sandy loam
Bw1 - 8 to 15 inches: fine sandy loam
Bw2 - 15 to 26 inches: fine sandy loam
Cd - 26 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: 18 to 39 inches to densic material
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 18 to 37 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Charlton

Setting

Landform: Ridges, ground moraines, hills
Landform position (two-dimensional): Summit, backslope, shoulder
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Linear, convex
Across-slope shape: Convex
Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or schist

Typical profile

Ap - 0 to 7 inches: fine sandy loam
Bw - 7 to 22 inches: gravelly fine sandy loam
C - 22 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water storage in profile: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Description of Urban Land

Typical profile

M - 0 to 10 inches: cemented material

Properties and qualities

Slope: 3 to 15 percent
Depth to restrictive feature: 0 inches to manufactured layer
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Available water storage in profile: Very low (about 0.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: D
Hydric soil rating: Unranked

Minor Components

Woodbridge

Percent of map unit: 9 percent
Landform: Drumlins, ground moraines, hills
Landform position (two-dimensional): Footslope, summit, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Ridgebury

Percent of map unit: 6 percent
Landform: Hills, drainageways, depressions, ground moraines
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Whitman

Percent of map unit: 5 percent
Landform: Hills, drainageways, ground moraines, drumlins, depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

Appendix B – Test Pit Results

Cold Spring Environmental Consultants Inc.

- 21E Site Investigations
- Subsurface Investigations
- Pollution Remediation
- LSP on Staff
- Forensic Septic Investigations
- Percolation Tests
- Septic Designs
- Regulatory Compliance
- Recycling and Solid Waste
- Second Opinions

December 3, 2018

Rachel Loeffler, RLA, ASLA
The Berkshire Design Group, Inc,
4 Allen Place
Northampton, MA 01060

Greetings,

RE: Soil Evaluation 132 Northampton Road Amherst, MA

The soil evaluation requested by you and performed by us on November 28 2018 in the presence of Paul Dethier of Amherst DPW at the abovementioned property is attached. The soil evaluation attached (and photos) confirmed the existence of Class B or Class 2 Fine sandy Loam Substrata to a depth of more than 10 feet below grade and shallow Estimated Seasonal High Groundwater conditions from 28 to 32" below grade. These conditions are consistent with the southwest Drumloidal landscape sloping to the southwest in this portion of Amherst.

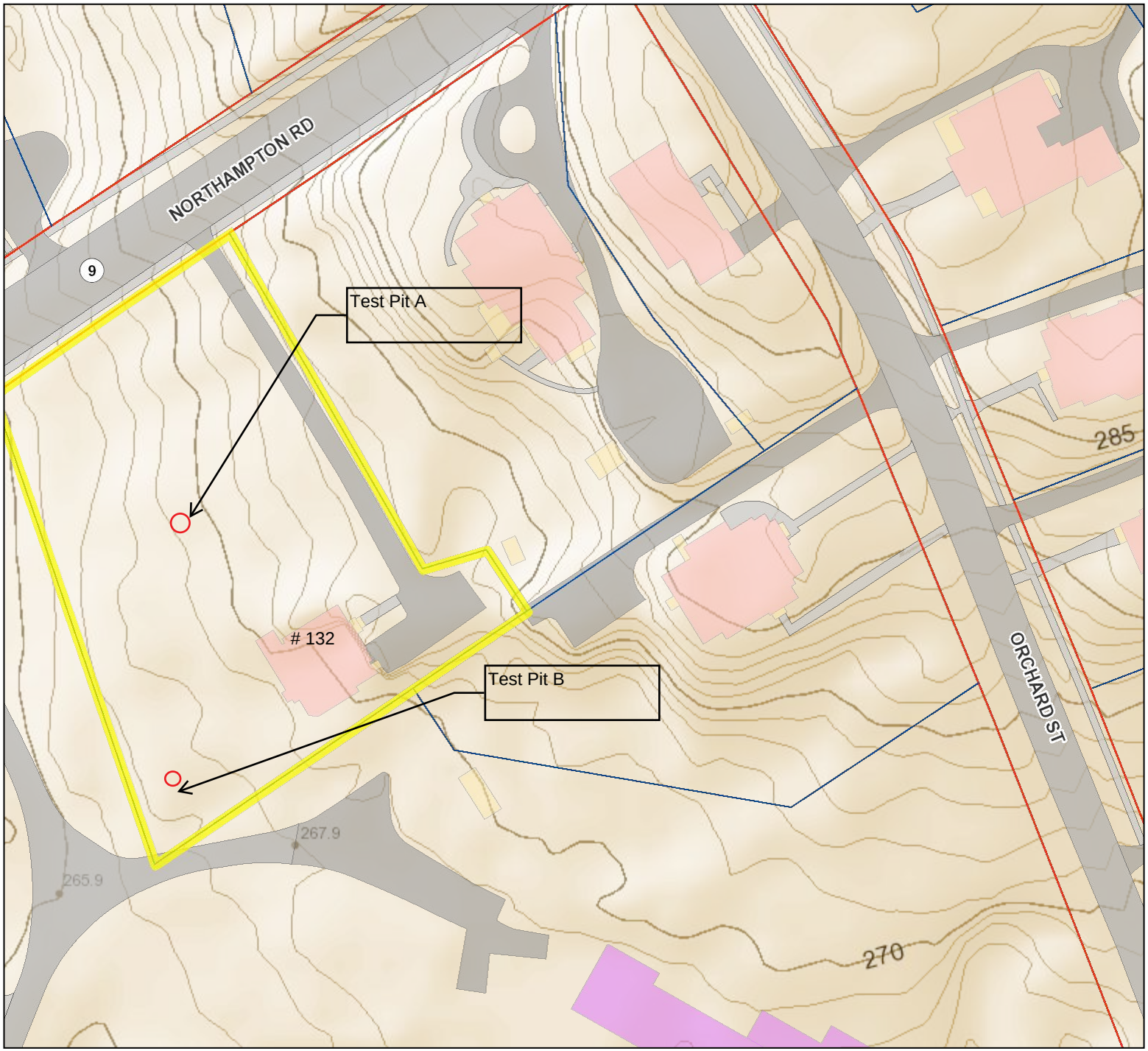
Please feel free to contact me with any questions or further evaluation

Sincerely,

Cold Spring Environmental Consultants, Inc.

Alan E. Weiss, M.S., R.S., L.S.P.
Licensed Soil Evaluator # 2568, since 1995
Principal Hydrogeologist
Massachusetts Public Health Sanitarian Lic. #933

350 Old Enfield Road ▪ Belchertown, MA. 01007 ▪ Phone: 413.323.5957 Fax 413.323.4916
email: aeweiss@charter.net



Property Map

Property Lines
- Property Line
- Hydrographic Property Line
- Right of Way Line
- Town Boundary
- Easements
- Adjacent Towns Parcels

Basemap
- Trails
- Rail Lines

Structures
- Building
- Outbuilding, Deck, Stairs, Etc
- Water Storage Tank
- Swimming Pool
- Sketched Structure

Rivers and Streams
- Streams
- Major Culverts
- Hydro Connector
- Headwalls, Floodwalls

Water Bodies
- Dams
- Rivers, Ponds & Reservoirs
- Retent. Pond/Flood Basin
- Wetland
- Forested Wetland

Driveways
- Paved Driveway
- Unpaved Driveway

- Sidewalks

Transportation
- Paved Roadway
- Unpaved Roadway

Horizontal Datum: MA Stateplane Coordinate System, Zone 4151, NAD83, Feet; Vertical Datum: NAVD88, FT Planimetric & topographic basemap compiled at 1"=40' scale from April, 2009 Aerial Photography. Parcels compiled to match the basemap; revisions are ongoing.

The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition, regulatory interpretation, or property conveyance purposes. Utility structures & underground utility locations are approximate & require field verification.

The Town of Amherst makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of these data, & does not assume any liability associated with the use or misuse of these data.

1" = 94 ft

amherstma.gov/maps

December 4, 2018

Commonwealth of Massachusetts
City/Town of AMHERST

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

A. Facility Information

C/O BDG Inc
Owner Name

132 Northampton Road — 14C/8
Street Address — Map/Lot #

Amherst — MA — 01002
City — State — Zip Code

B. Site Information

1. (Check one) ☐ New Construction ☐ Upgrade ☒ Repair

2. Soil Survey Available? ☒ Yes ☐ No If yes: Cal web USDA (Source) 547C (Soil Map Unit)

   Paxton Charlton (Soil Name) Well Drained (Soil Limitations)

3. Surficial Geological Report Available? ☒ Yes ☐ No If yes: USGS current (Year Published/Source) gis (Publication Scale) Paxton (Map Unit)

   till (Geologic/Parent Material) Moraine (Landform)

4. Flood Rate Insurance Map

   Above the 500-year flood boundary? ☒ Yes ☐ No Within the 100-year flood boundary? ☐ Yes ☒ No

   Within the 500-year flood boundary? ☐ Yes ☒ No Within a velocity zone? ☐ Yes ☒ No

5. Wetland Area: Wetlands Conservancy Program Map - (Map Unit) (Name)

6. Current Water Resource Conditions (USGS): Currnet (Month/Year) Range: ☒ Above Normal ☐ Normal ☐ Below Normal

7. Other references reviewed:

Commonwealth of Massachusetts
City/Town of AMHERST

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (*minimum of two holes required at every proposed primary and reserved disposal area)*

Deep Observation Hole Number: A | 11.28.2018 (Date) | 0930 (Time) | - (Weather)

1. Location

Ground Elevation at Surface of Hole: shown Location (identify on plan): -

2. Land Use: grassy (e.g., woodland, agricultural field, vacant lot, etc.) | no (Surface Stones) | 2-4 (Slope (%))

decidous grass mix (Vegetation) | terrace drumlin (Landform) | shown (Position on Landscape (attach sheet))

3. Distances from:

Open Water Body	100'+ feet	Drainage Way	100'+ feet	Possible Wet Area	50'+ feet
Property Line	20'+ feet	Drinking Water Well	100'+ feet	Other	- feet

4. Parent Material: Moraine/Glacial Till Unsuitable Materials Present: ☐ Yes ☒ No

If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Impervious Layer(s) ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: 32" (Depth Weeping from Pit) | - (Depth Standing Water in Hole)

Estimated Depth to High Groundwater: 28"+ inches _____ elevation

Commonwealth of Massachusetts
City/Town of AMHERST

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (continued)

Deep Observation Hole Number: A

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-8	A	10 YR 3.3				FSL			FRIABLE		
8-24	B	10 YR 5.6				LS			F SANDY		
24-126	C1	10 yr 5/3	28"	2.5 y 4.1		SL	5-10	5	S. TILL	Masive	
				7.5 yr 5.8							
			"	"		"	"	"	"	"	

Additional Notes:

Commonwealth of Massachusetts
City/Town of AMHERST

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (continued)

Deep Observation Hole Number: B | 11.28.2018 (Date) | 1000 (Time) | " (Weather)

1. Location

Ground Elevation at Surface of Hole: shown Location (identify on plan): _____

2. Land Use: Grassy (e.g., woodland, agricultural field, vacant lot, etc.) | no (Surface Stones) | 2-4 (Slope (%))

decidous grass mix (Vegetation) | terrace drumlin (Landform) | _____ (Position on Landscape (attach sheet))

3. Distances from:

Open Water Body	100'+ feet	Drainage Way	100'+ feet	Possible Wet Area	50'+ feet
Property Line	20'+ feet	Drinking Water Well	100'+ feet	Other	- feet

4. Parent Material: Moraine/Glacial Till Unsuitable Materials Present: ☐ Yes ☒ No

If Yes: ☐ Disturbed Soil ☐ Fill Material ☐ Impervious Layer(s) ☐ Weathered/Fractured Rock ☐ Bedrock

5. Groundwater Observed: ☒ Yes ☐ No If yes: _____ (Depth Weeping from Pit) _____ (Depth Standing Water in Hole)

Estimated Depth to High Groundwater: 32" (inches) _____ (elevation)

Commonwealth of Massachusetts
City/Town of AMHERST

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

C. On-Site Review (continued)

Deep Observation Hole Number: B

Depth (in.)	Soil Horizon/ Layer	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features (mottles)			Soil Texture (USDA)	Coarse Fragments % by Volume		Soil Structure	Soil Consistence (Moist)	Other
			Depth	Color	Percent		Gravel	Cobbles & Stones			
0-40"	A & B	10YR 3.3				FSL			FRIABLE	A + B	mixed
											fill
40-124"	C1	7.5 Y 5.2	32"	2.5Y4.1	10%	SL	5-10	5	S TILL	MASSIVE	
				7.5yr 5.6							

Additional Notes:

Commonwealth of Massachusetts
City/Town of AMHERST

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

D. Determination of High Groundwater Elevation

1. Method Used:

☒ Depth observed standing water in observation hole	A. 120 inches	B. 120 inches
☒ Depth weeping from side of observation hole	A. 32 inches	B. 36 inches
☒ Depth to soil redoximorphic features (mottles)	A. 28 inches	B. 32
☐ Groundwater adjustment (USGS methodology)	A. - inches	B. - inches

2. Index Well Number: _____ Reading Date: _____ Index Well Level: _____

Adjustment Factor: _____ Adjusted Groundwater Level: _____

E. Depth of Pervious Material

1. Depth of Naturally Occurring Pervious Material

   a. Does at least four feet of naturally occurring pervious material exist in all areas observed throughout the area proposed for the soil absorption system?

   ☒ Yes ☐ No

   b. If yes, at what depth was it observed? Upper boundary: 40" (fill in B) inches Lower boundary: 124 inches

Commonwealth of Massachusetts
City/Town of AMHERST

Form 11 - Soil Suitability Assessment for On-Site Sewage Disposal

F. Certification

I certify that I am currently approved by the Department of Environmental Protection pursuant to 310 CMR 15.017 to conduct soil evaluations and that the above analysis has been performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. I further certify that the results of my soil evaluation, as indicated in the attached Soil Evaluation Form, are accurate and in accordance with 310 CMR 15.100 through 15.107.

	11.28.2018
Signature of Soil Evaluator	Date
ALAN WEISS, RS #933, SE #2568, Cold Spring Env. Inc.	6/1995
Typed or Printed Name of Soil Evaluator / License #	Date of Soil Evaluator Exam
Paul Dethier, DPW	AMHERST
Name of Board of Health Witness	Board of Health

Note: In accordance with 310 CMR 15.018(2) this form must be submitted to the approving authority within 60 days of the date of field testing, and to the designer and the property owner with Percolation Test Form 12.

Field Diagrams

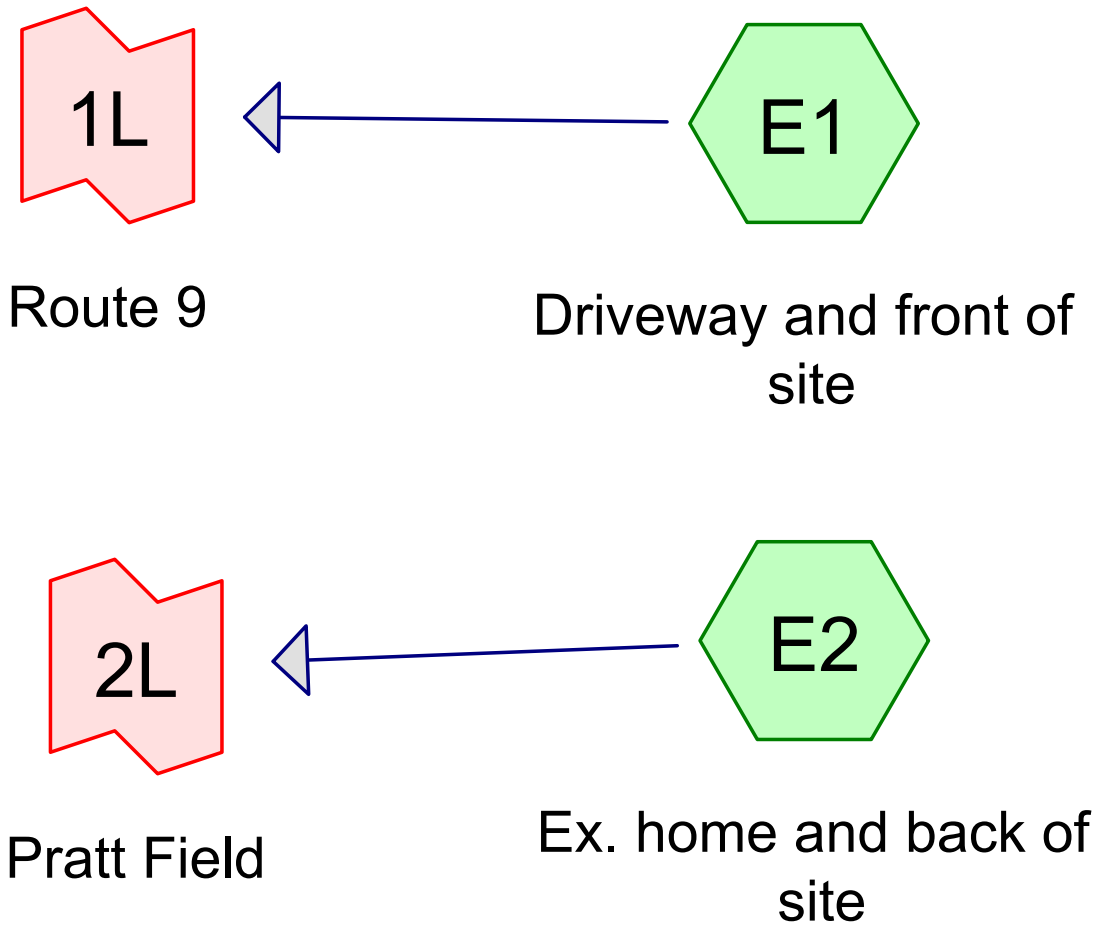
Use this sheet for field diagrams:

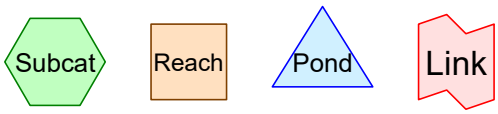
132 Northampton Road
Amherst, MA
November 28, 2018

Test Pit A (Rear)
132 Northampton Road
Amherst, MA
November 28, 2018

Test Pit B (Rear)
132 Northampton Road
Amherst, MA
November 28, 2018

Appendix C – Stormwater Hydrology Calculations





Routing Diagram for 20.038 Ex Cond
Prepared by Berkshire Design Group, Printed 5/8/2020
HydroCAD® 10.00-24 s/n 10759 © 2018 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.737	79	50-75% Grass cover, Fair, HSG C (E1, E2)
0.061	96	Gravel surface, HSG C (E1)
0.024	96	gravel (E2)
0.039	98	roof (E2)
0.017	98	roof, paths (E1)
0.879	**82**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.799	HSG C	E1, E2
0.000	HSG D	
0.080	Other	E1, E2
0.879		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.737	0.000	0.000	0.737	50-75% Grass cover, Fair	E1, E2
0.000	0.000	0.061	0.000	0.000	0.061	Gravel surface	E1
0.000	0.000	0.000	0.000	0.024	0.024	gravel	E2
0.000	0.000	0.000	0.000	0.039	0.039	roof	E2
0.000	0.000	0.000	0.000	0.017	0.017	roof, paths	E1
0.000	**0.000**	**0.799**	**0.000**	**0.080**	**0.879**	**TOTAL AREA**	

Summary for Subcatchment E1: Driveway and front of site

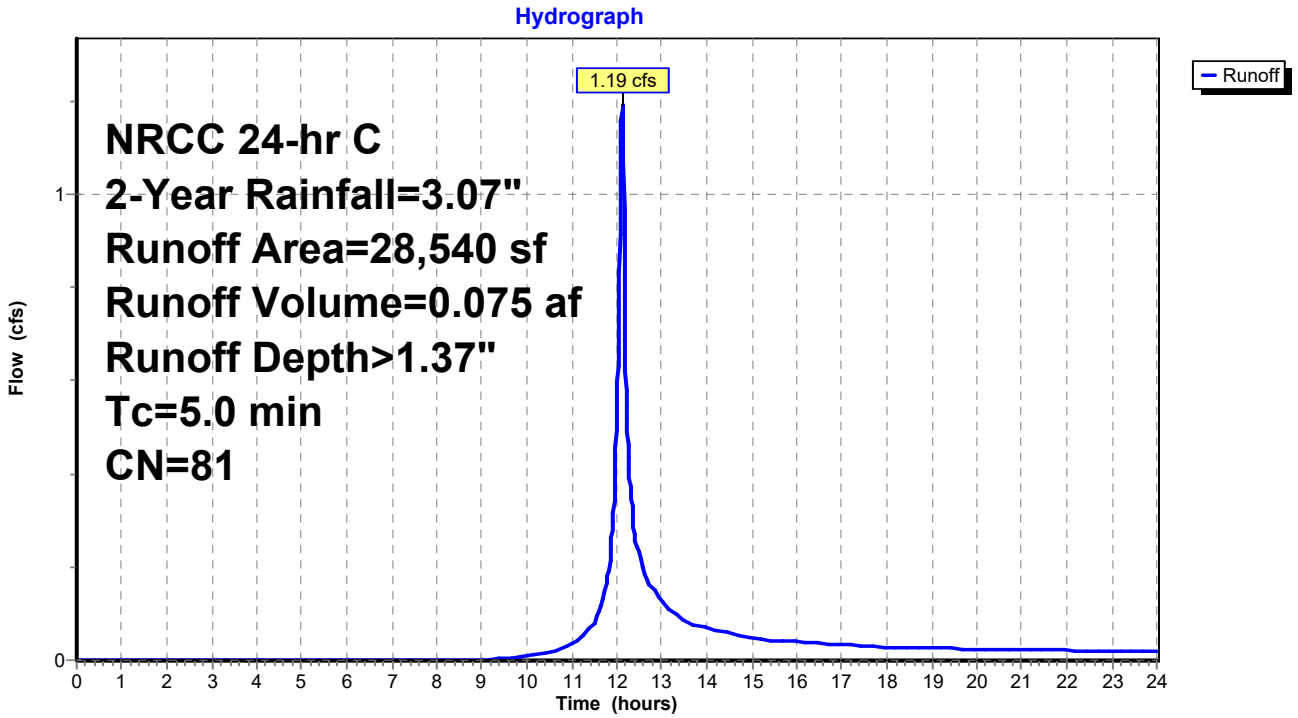
Runoff = 1.19 cfs @ 12.13 hrs, Volume= 0.075 af, Depth> 1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	735	98	roof, paths
	2,675	96	Gravel surface, HSG C
	25,130	79	50-75% Grass cover, Fair, HSG C
	28,540	81	Weighted Average
	27,805		97.42% Pervious Area
	735		2.58% Impervious Area

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

Subcatchment E1: Driveway and front of site



Summary for Subcatchment E2: Ex. home and back of site

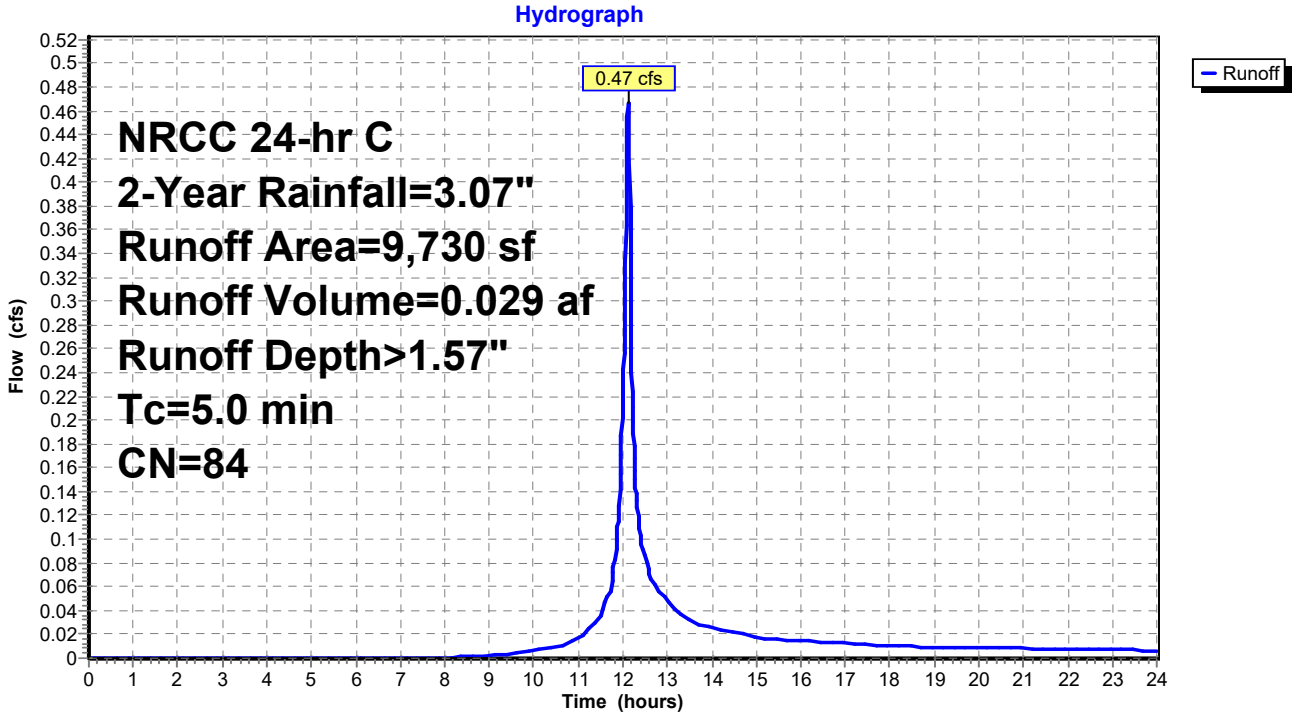
Runoff = 0.47 cfs @ 12.12 hrs, Volume= 0.029 af, Depth> 1.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	1,710	98	roof
*	1,040	96	gravel
	6,980	79	50-75% Grass cover, Fair, HSG C
	9,730	84	Weighted Average
	8,020		82.43% Pervious Area
	1,710		17.57% Impervious Area

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

Subcatchment E2: Ex. home and back of site

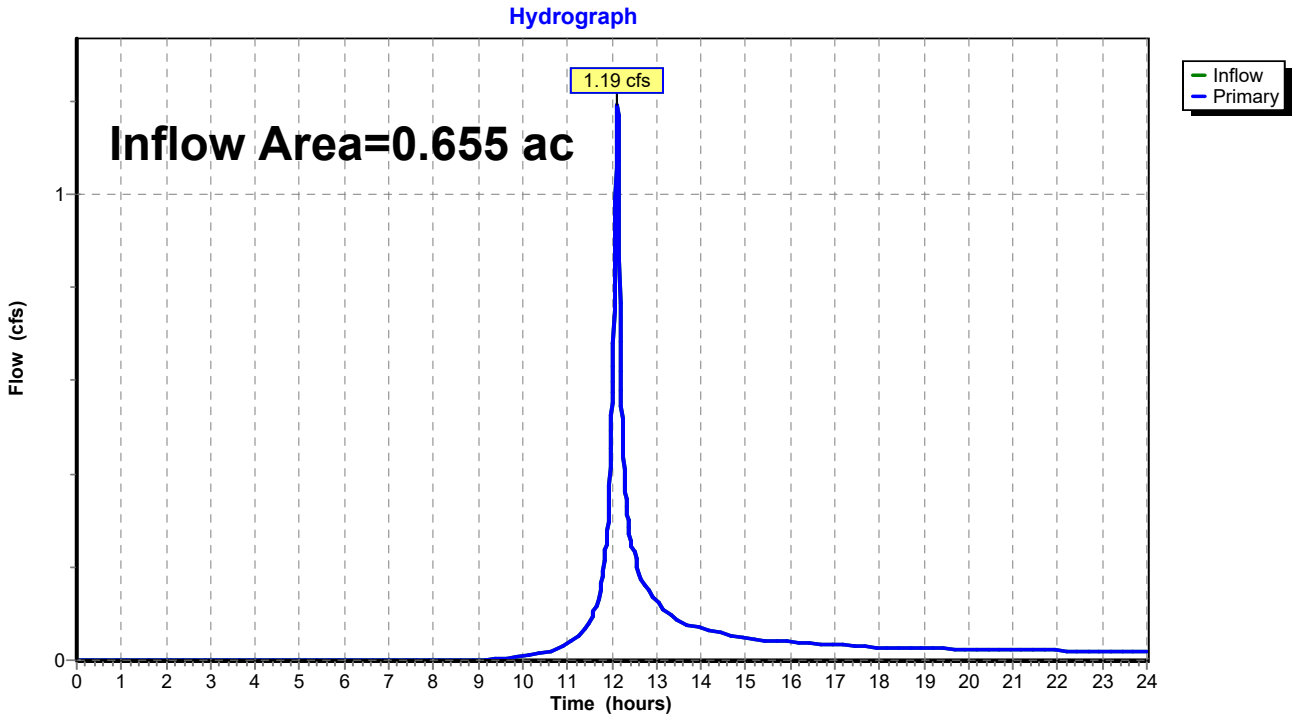


Summary for Link 1L: Route 9

Inflow Area = 0.655 ac, 2.58% Impervious, Inflow Depth > 1.37" for 2-Year event
Inflow = 1.19 cfs @ 12.13 hrs, Volume= 0.075 af
Primary = 1.19 cfs @ 12.13 hrs, Volume= 0.075 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 1L: Route 9

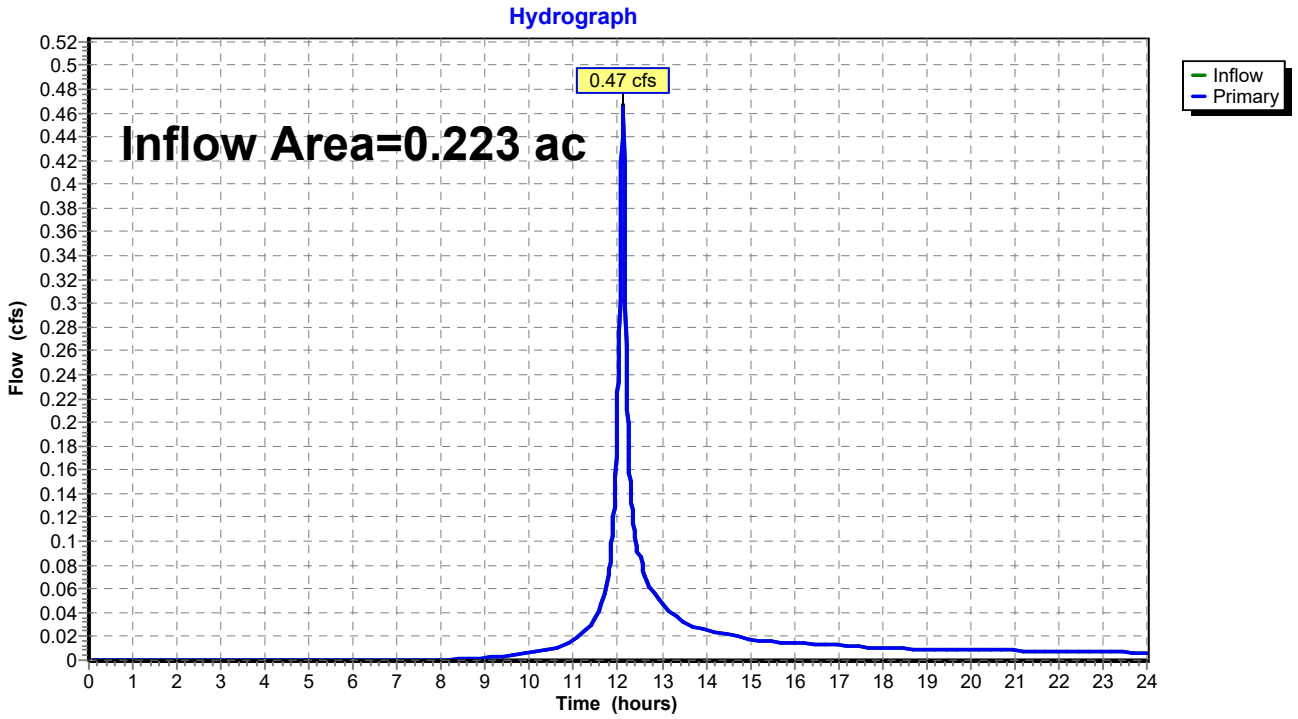


Summary for Link 2L: Pratt Field

Inflow Area = 0.223 ac, 17.57% Impervious, Inflow Depth > 1.57" for 2-Year event
Inflow = 0.47 cfs @ 12.12 hrs, Volume= 0.029 af
Primary = 0.47 cfs @ 12.12 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 2L: Pratt Field



Summary for Subcatchment E1: Driveway and front of site

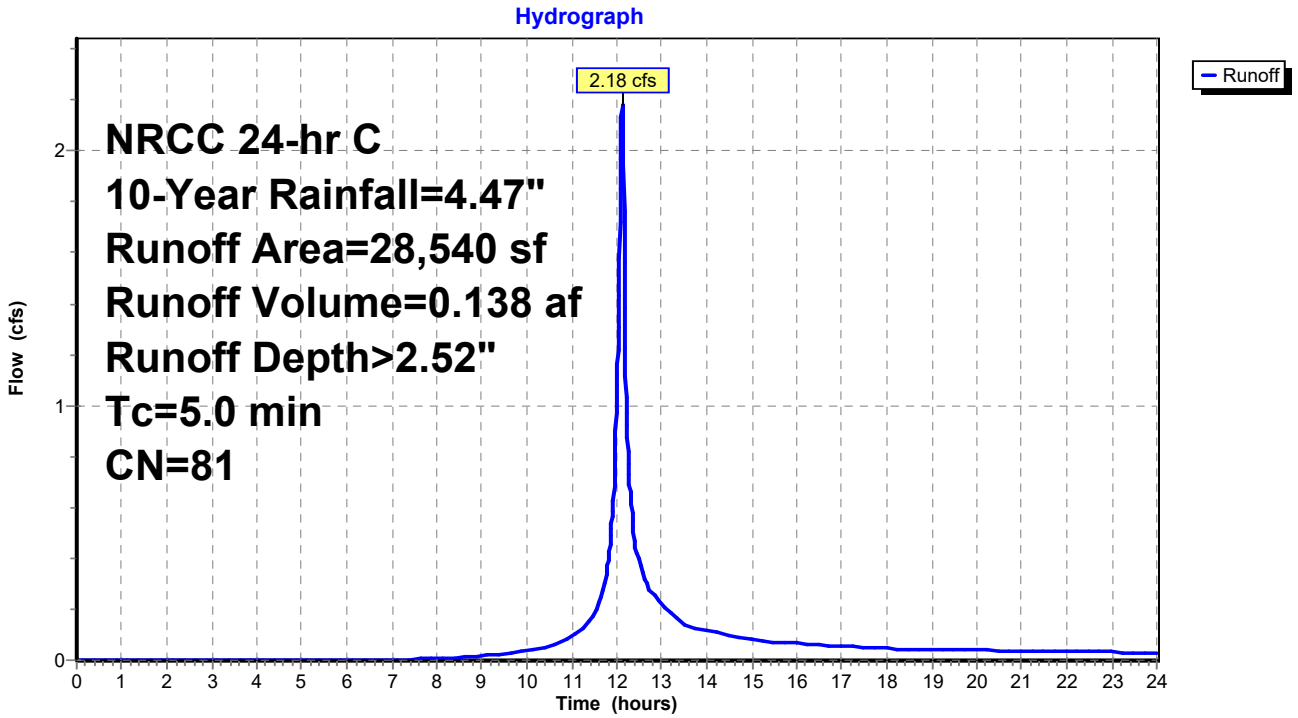
Runoff = 2.18 cfs @ 12.12 hrs, Volume= 0.138 af, Depth> 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	735	98	roof, paths
	2,675	96	Gravel surface, HSG C
	25,130	79	50-75% Grass cover, Fair, HSG C
	28,540	81	Weighted Average
	27,805		97.42% Pervious Area
	735		2.58% Impervious Area

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

Subcatchment E1: Driveway and front of site



Summary for Subcatchment E2: Ex. home and back of site

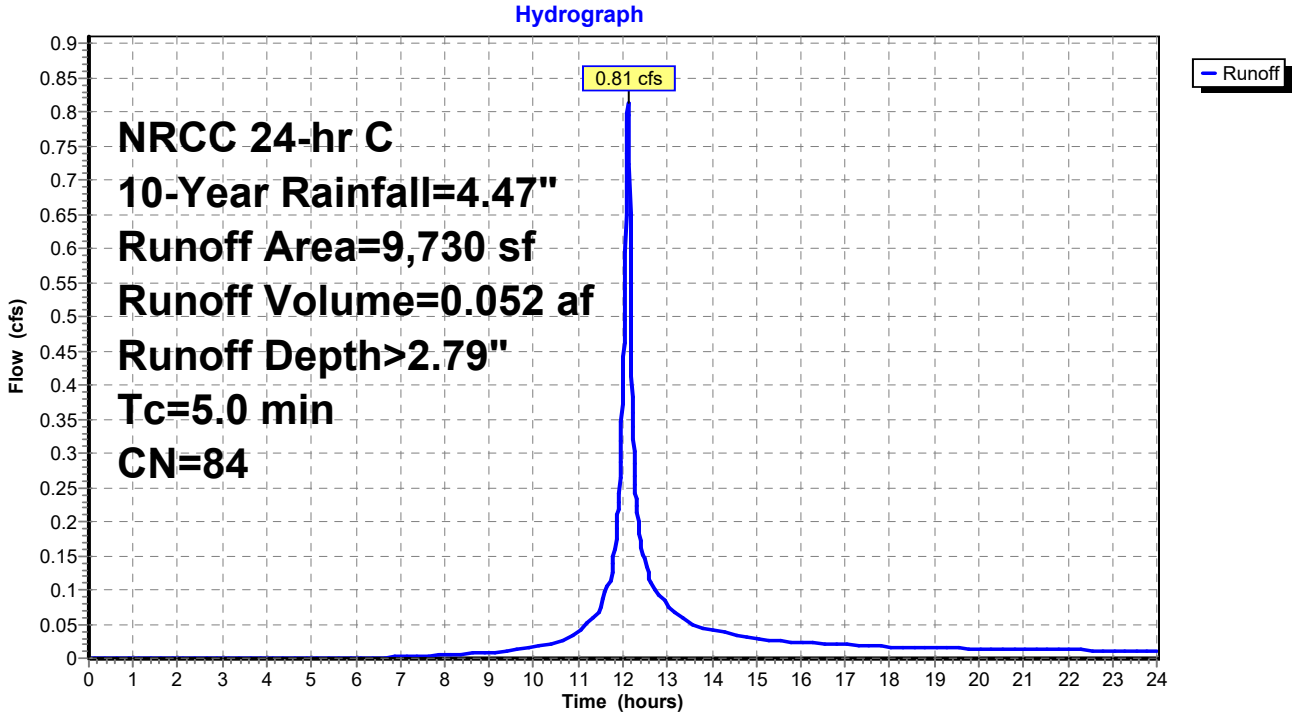
Runoff = 0.81 cfs @ 12.12 hrs, Volume= 0.052 af, Depth> 2.79"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	1,710	98	roof
*	1,040	96	gravel
	6,980	79	50-75% Grass cover, Fair, HSG C
	9,730	84	Weighted Average
	8,020		82.43% Pervious Area
	1,710		17.57% Impervious Area

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

Subcatchment E2: Ex. home and back of site

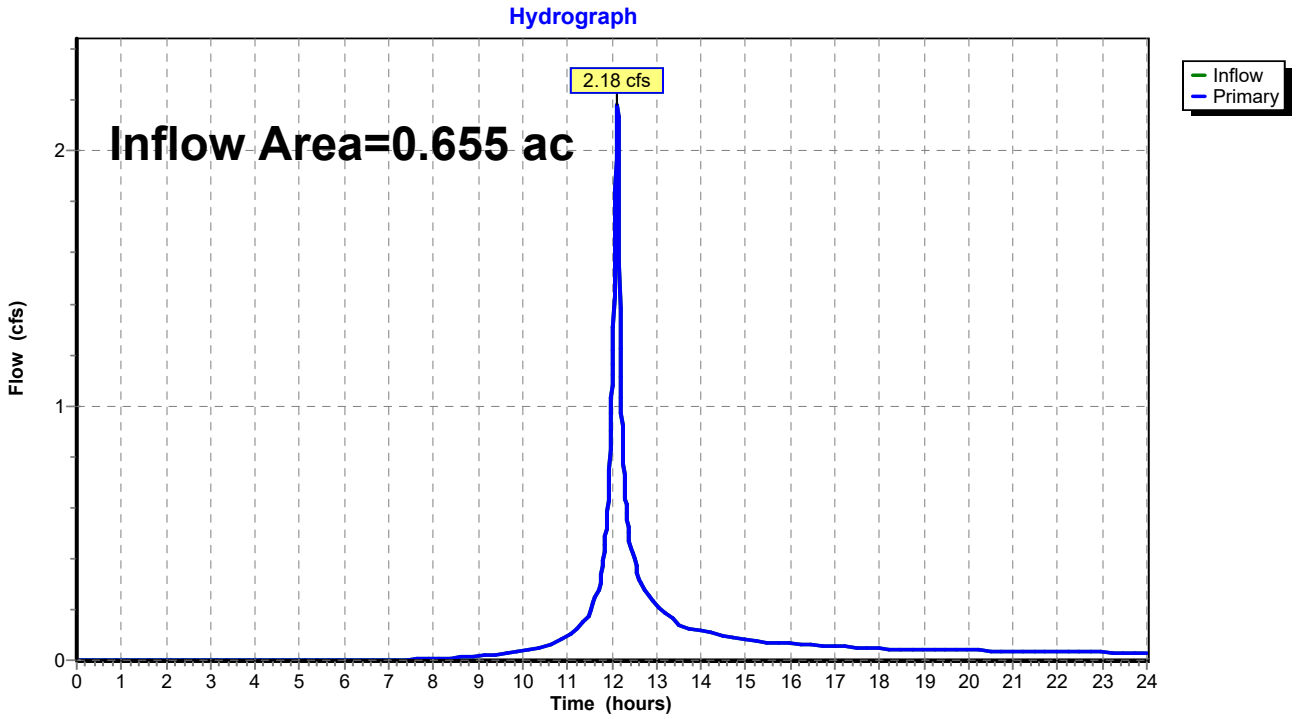


Summary for Link 1L: Route 9

Inflow Area = 0.655 ac, 2.58% Impervious, Inflow Depth > 2.52" for 10-Year event
Inflow = 2.18 cfs @ 12.12 hrs, Volume= 0.138 af
Primary = 2.18 cfs @ 12.12 hrs, Volume= 0.138 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 1L: Route 9

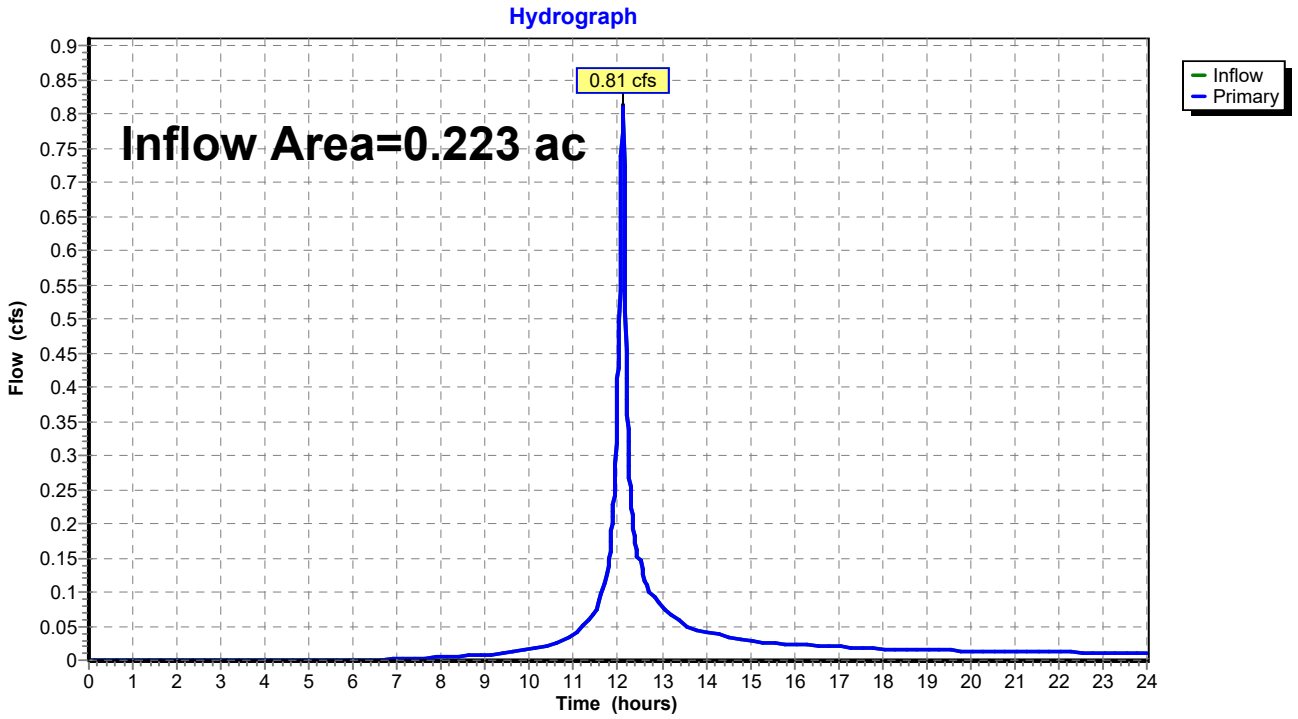


Summary for Link 2L: Pratt Field

Inflow Area = 0.223 ac, 17.57% Impervious, Inflow Depth > 2.79" for 10-Year event
Inflow = 0.81 cfs @ 12.12 hrs, Volume= 0.052 af
Primary = 0.81 cfs @ 12.12 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 2L: Pratt Field



Summary for Subcatchment E1: Driveway and front of site

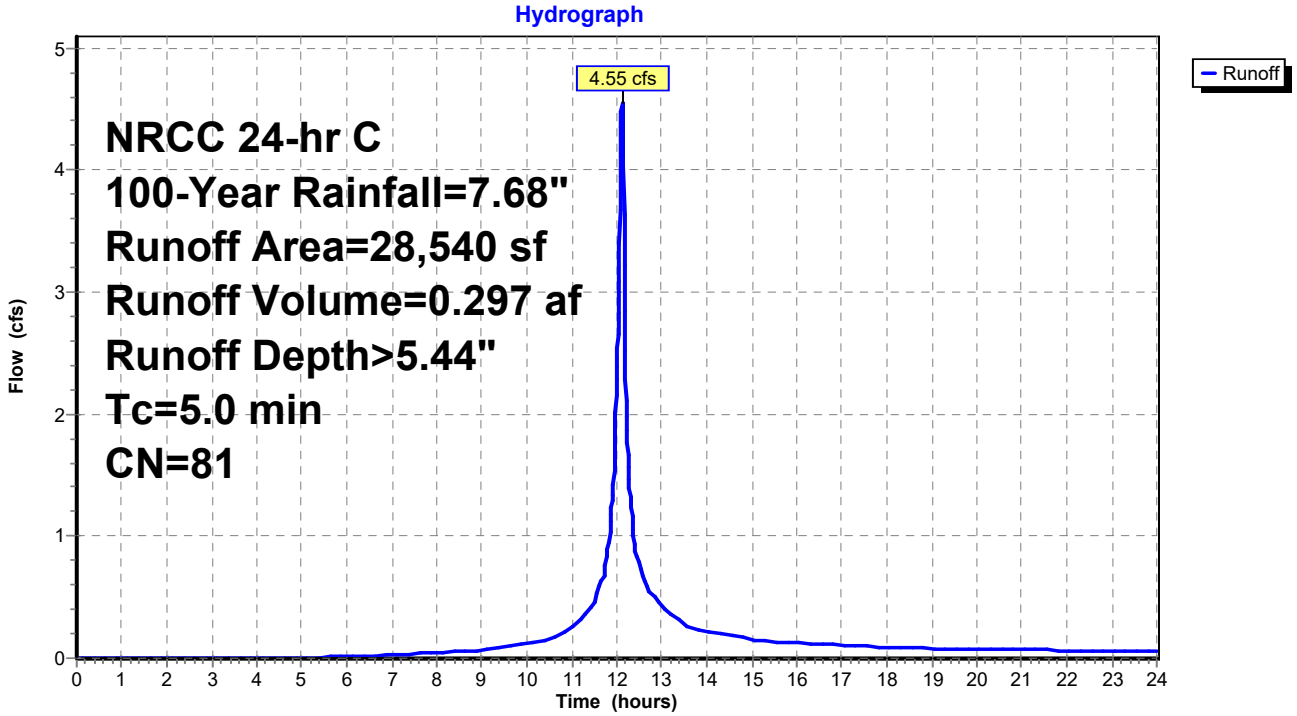
Runoff = 4.55 cfs @ 12.12 hrs, Volume= 0.297 af, Depth> 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	735	98	roof, paths
	2,675	96	Gravel surface, HSG C
	25,130	79	50-75% Grass cover, Fair, HSG C
	28,540	81	Weighted Average
	27,805		97.42% Pervious Area
	735		2.58% Impervious Area

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

Subcatchment E1: Driveway and front of site



Summary for Subcatchment E2: Ex. home and back of site

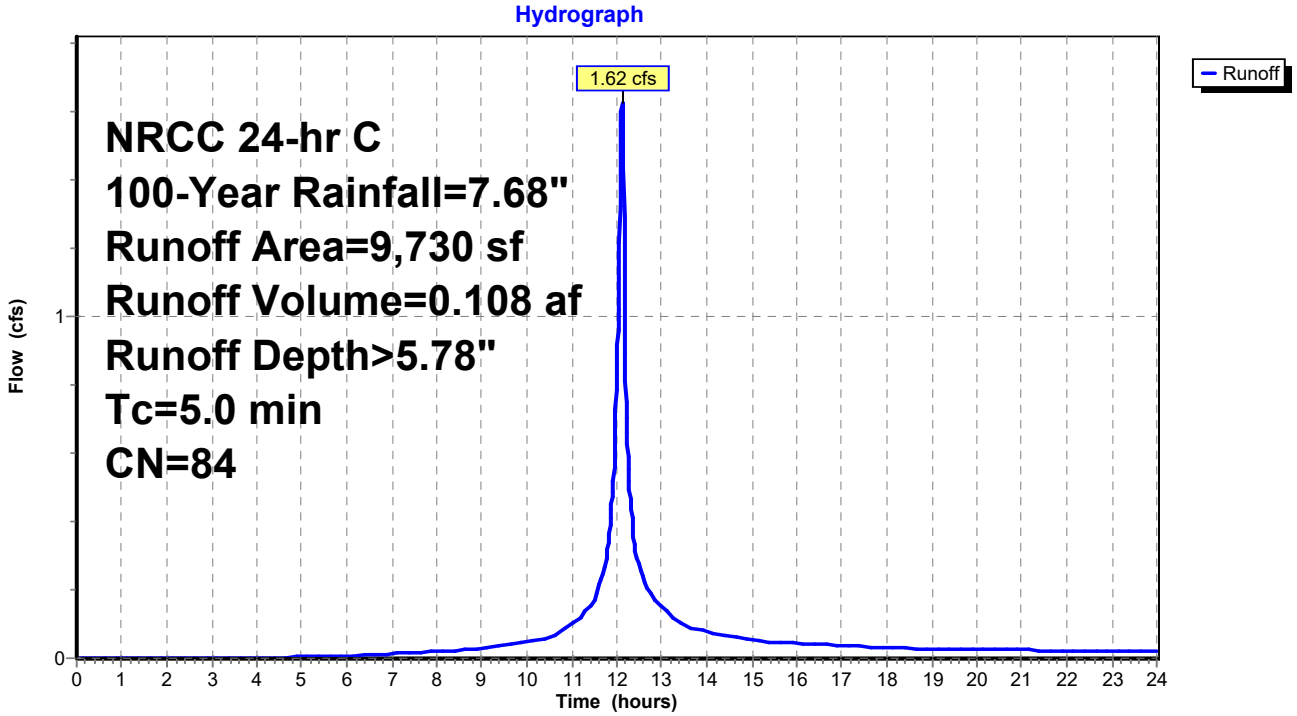
Runoff = 1.62 cfs @ 12.12 hrs, Volume= 0.108 af, Depth> 5.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	1,710	98	roof
*	1,040	96	gravel
	6,980	79	50-75% Grass cover, Fair, HSG C
	9,730	84	Weighted Average
	8,020		82.43% Pervious Area
	1,710		17.57% Impervious Area

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

Subcatchment E2: Ex. home and back of site

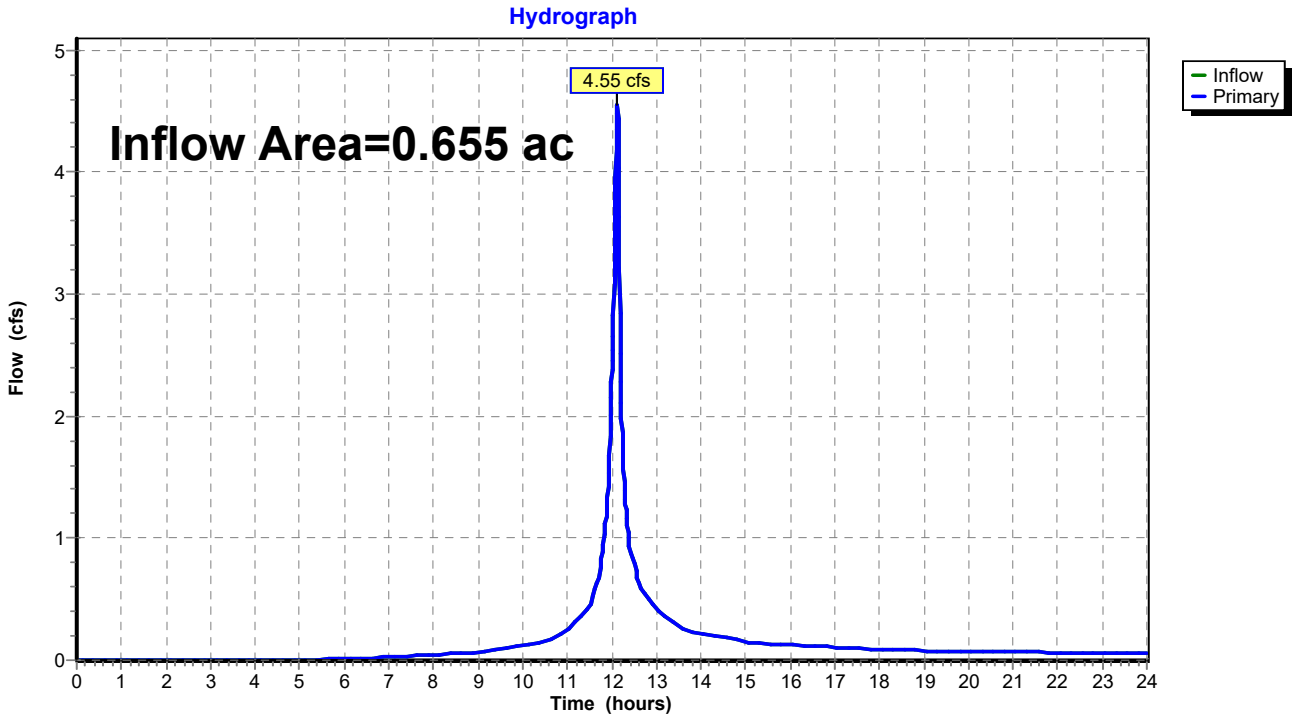


Summary for Link 1L: Route 9

Inflow Area = 0.655 ac, 2.58% Impervious, Inflow Depth > 5.44" for 100-Year event
Inflow = 4.55 cfs @ 12.12 hrs, Volume= 0.297 af
Primary = 4.55 cfs @ 12.12 hrs, Volume= 0.297 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 1L: Route 9

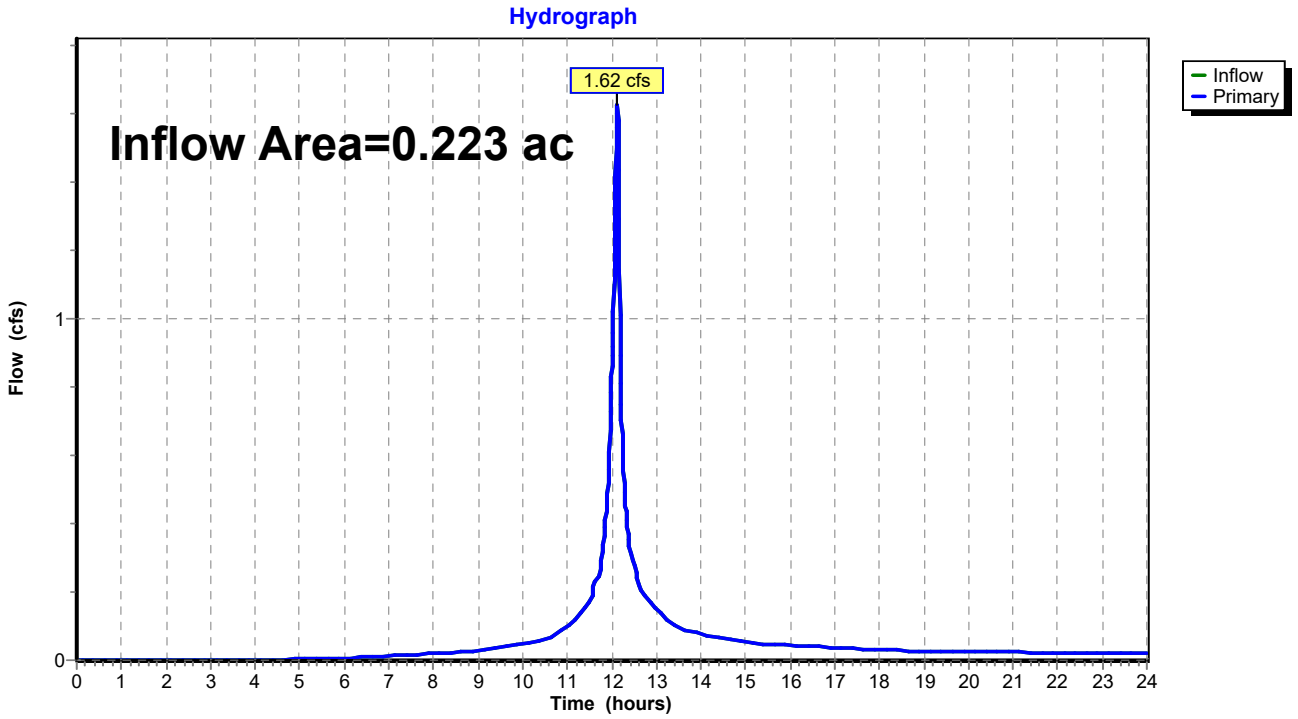


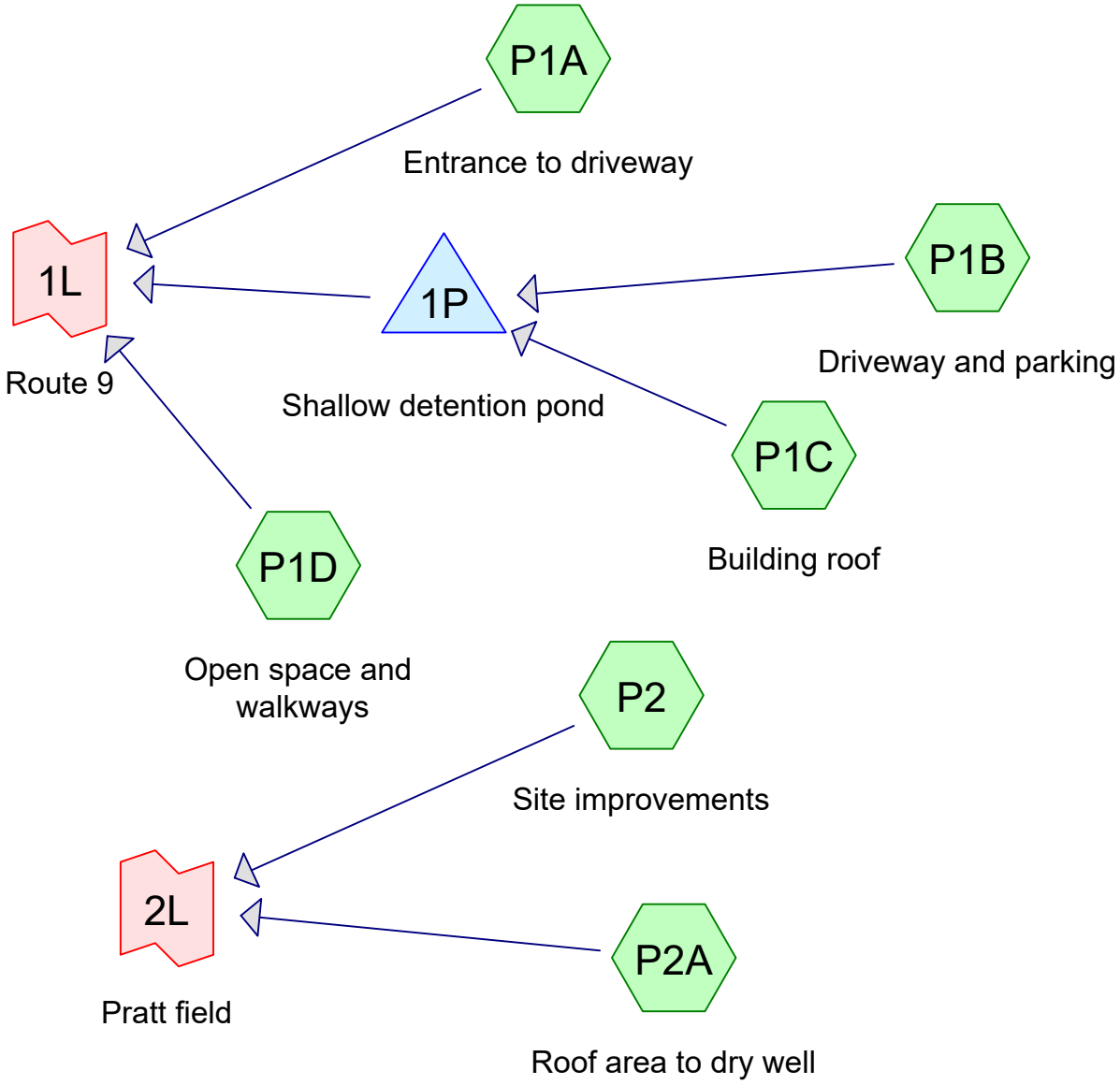
Summary for Link 2L: Pratt Field

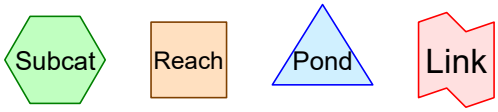
Inflow Area = 0.223 ac, 17.57% Impervious, Inflow Depth > 5.78" for 100-Year event
Inflow = 1.62 cfs @ 12.12 hrs, Volume= 0.108 af
Primary = 1.62 cfs @ 12.12 hrs, Volume= 0.108 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 2L: Pratt Field







Routing Diagram for 20.038 Pr Cond
Prepared by Berkshire Design Group, Printed 5/11/2020
HydroCAD® 10.00-24 s/n 10759 © 2018 HydroCAD Software Solutions LLC

Project Notes

Rainfall events imported from "NRCS-Rain.txt" for 4007 MA Amherst Hampshire County

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.491	79	50-75% Grass cover, Fair, HSG C (P1A, P1B, P1D, P2)
0.009	98	driveway, path (P1A)
0.010	98	path (P1D)
0.023	98	patio, walkways (P2)
0.057	96	pavers (P1B, P2)
0.110	98	roof (P1C, P2A)
0.178	98	roof, paths (P1B)

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.491	HSG C	P1A, P1B, P1D, P2
0.000	HSG D	
0.387	Other	P1A, P1B, P1C, P1D, P2, P2A

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.491	0.000	0.000	0.491	50-75% Grass cover, Fair	P1A, P1B, P1D, P2
0.000	0.000	0.000	0.000	0.009	0.009	driveway, path	P1A
0.000	0.000	0.000	0.000	0.010	0.010	path	P1D
0.000	0.000	0.000	0.000	0.023	0.023	patio, walkways	P2
0.000	0.000	0.000	0.000	0.057	0.057	pavers	P1B, P2
0.000	0.000	0.000	0.000	0.110	0.110	roof	P1C, P2A
0.000	0.000	0.000	0.000	0.178	0.178	roof, paths	P1B

Summary for Subcatchment P1A: Entrance to driveway

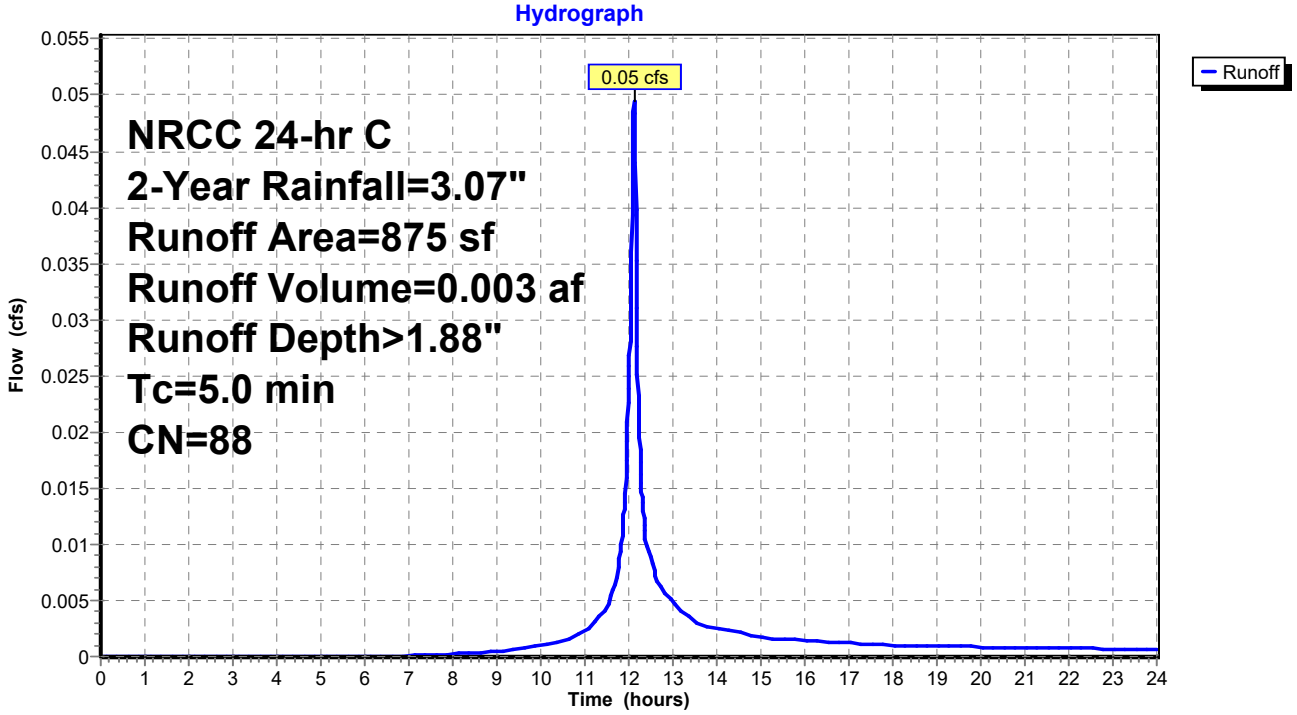
Runoff = 0.05 cfs @ 12.12 hrs, Volume= 0.003 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	405	98	driveway, path
	470	79	50-75% Grass cover, Fair, HSG C
	875	88	Weighted Average
	470		53.71% Pervious Area
	405		46.29% Impervious Area

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

Subcatchment P1A: Entrance to driveway



Summary for Subcatchment P1B: Driveway and parking

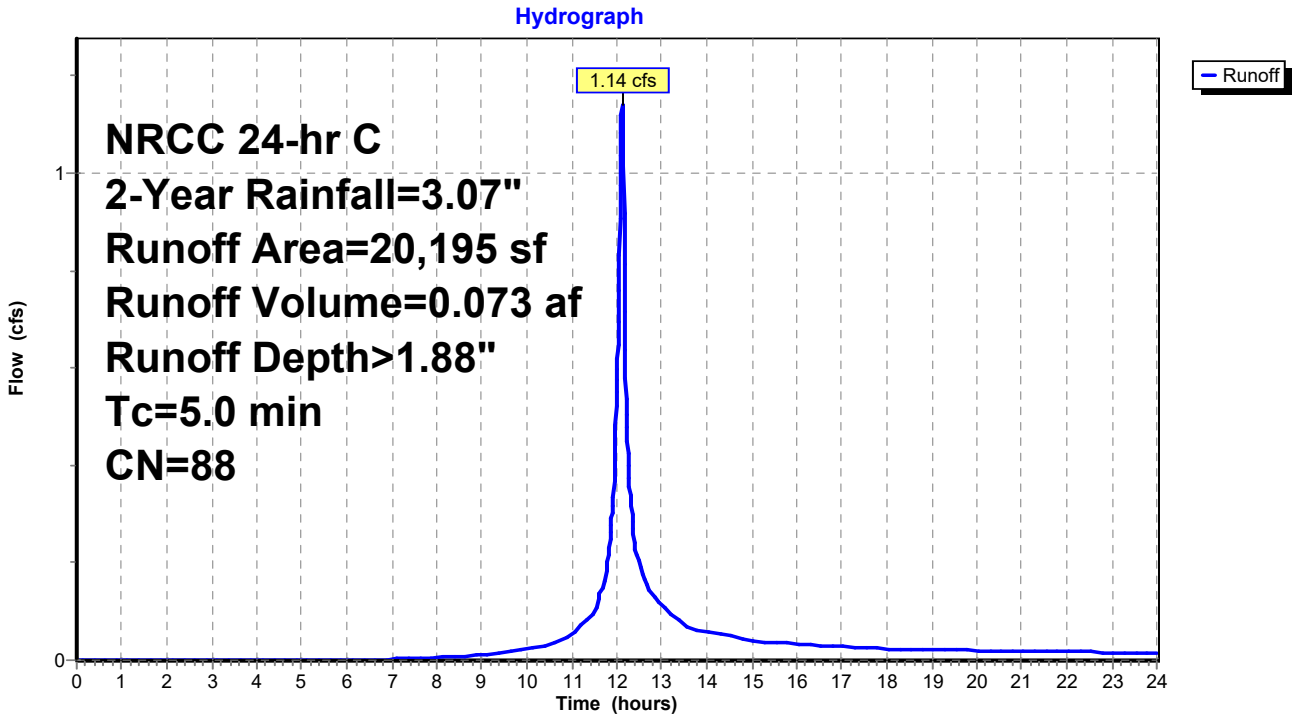
Runoff = 1.14 cfs @ 12.12 hrs, Volume= 0.073 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	7,745	98	roof, paths
*	2,355	96	pavers
	10,095	79	50-75% Grass cover, Fair, HSG C
	20,195	88	Weighted Average
	12,450		61.65% Pervious Area
	7,745		38.35% Impervious Area

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

Subcatchment P1B: Driveway and parking



Summary for Subcatchment P1C: Building roof

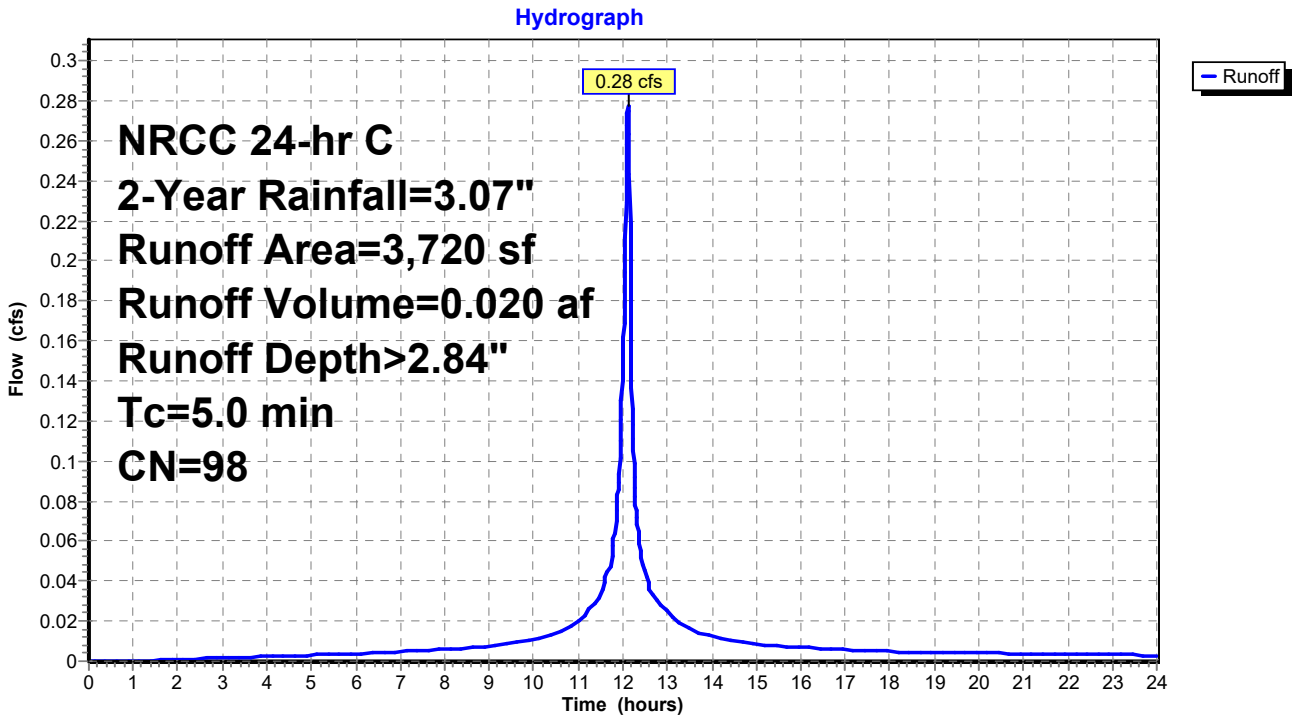
Runoff = 0.28 cfs @ 12.12 hrs, Volume= 0.020 af, Depth> 2.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	3,720	98	roof
	3,720		100.00% Impervious Area

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

Subcatchment P1C: Building roof



Summary for Subcatchment P1D: Open space and walkways

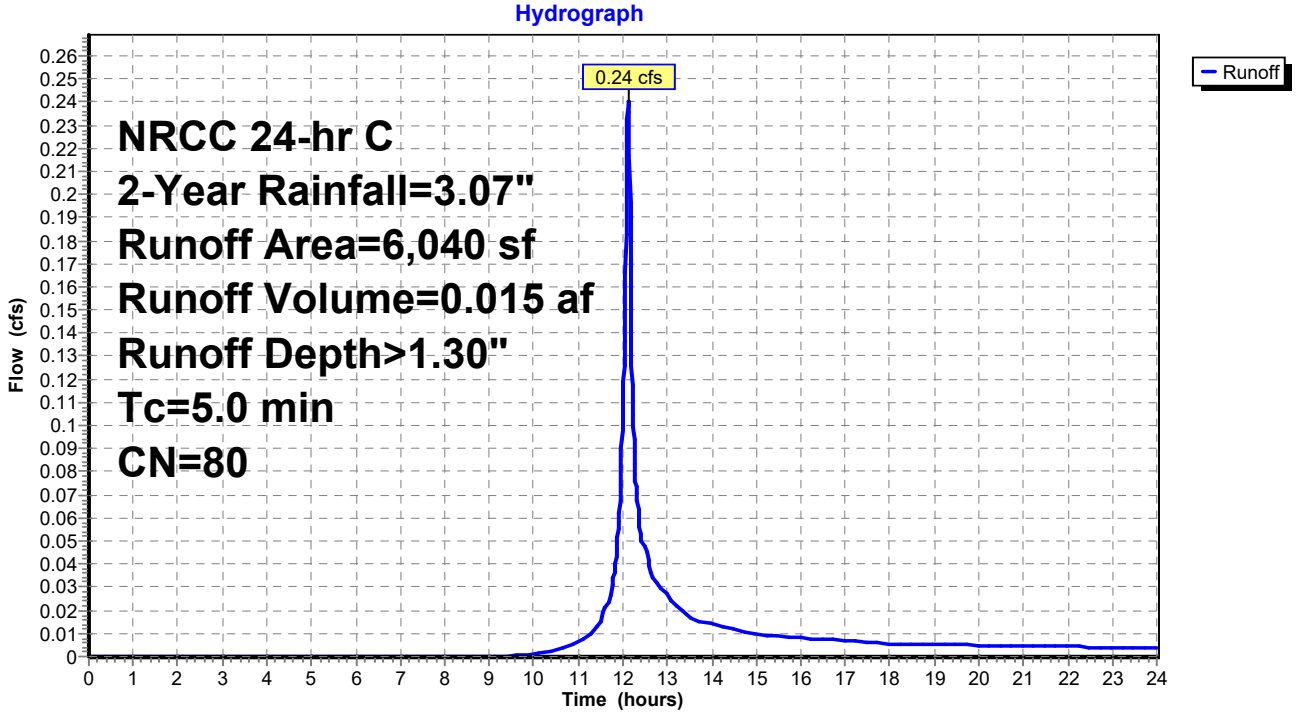
Runoff = 0.24 cfs @ 12.13 hrs, Volume= 0.015 af, Depth> 1.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	425	98	path
	5,615	79	50-75% Grass cover, Fair, HSG C
	6,040	80	Weighted Average
	5,615		92.96% Pervious Area
	425		7.04% Impervious Area

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

Subcatchment P1D: Open space and walkways



Summary for Subcatchment P2: Site improvements

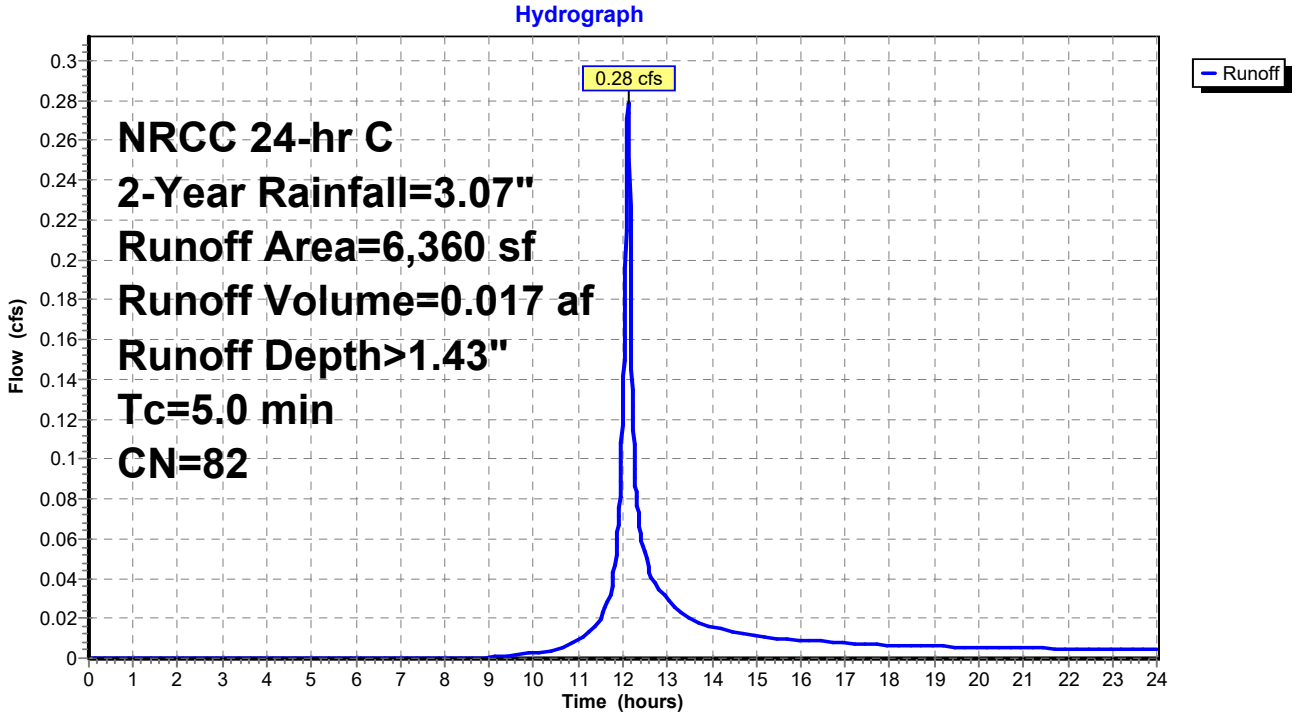
Runoff = 0.28 cfs @ 12.13 hrs, Volume= 0.017 af, Depth> 1.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	1,005	98	patio, walkways
*	130	96	pavers
	5,225	79	50-75% Grass cover, Fair, HSG C
	6,360	82	Weighted Average
	5,355		84.20% Pervious Area
	1,005		15.80% Impervious Area

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

Subcatchment P2: Site improvements



Summary for Subcatchment P2A: Roof area to dry well

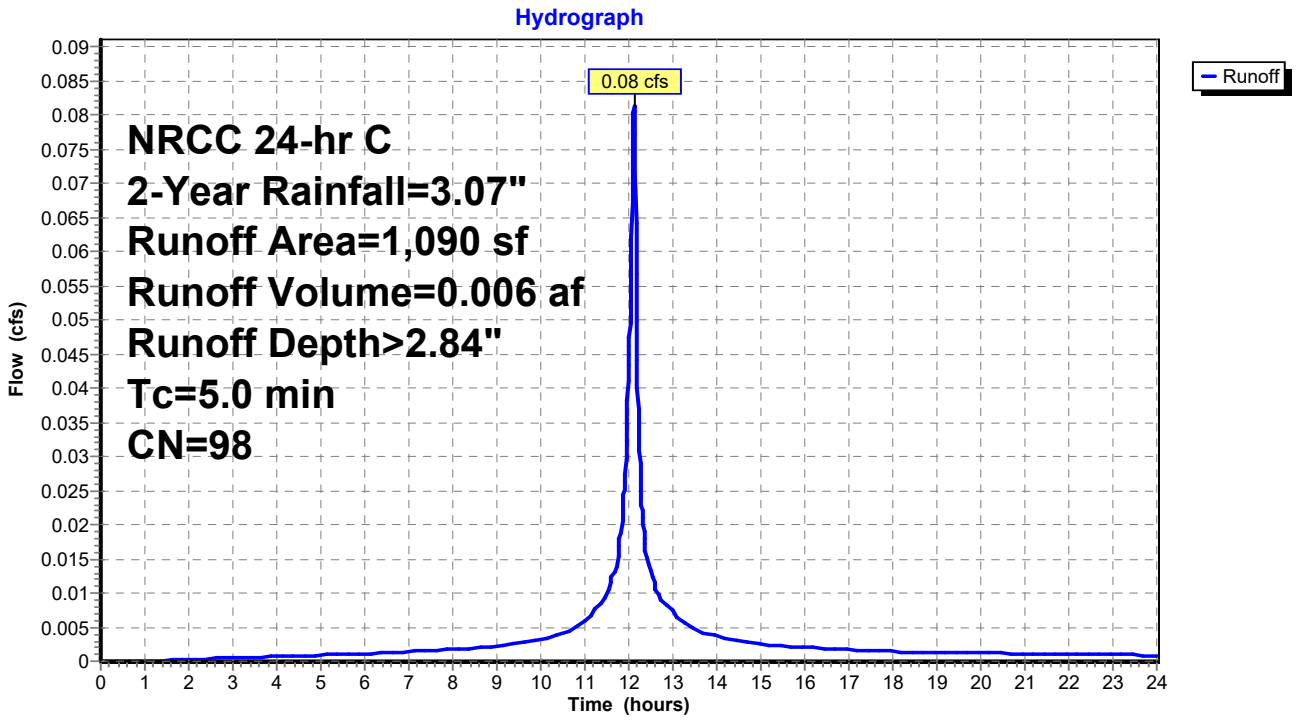
Runoff = 0.08 cfs @ 12.12 hrs, Volume= 0.006 af, Depth> 2.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 2-Year Rainfall=3.07"

	Area (sf)	CN	Description
*	1,090	98	roof
	1,090		100.00% Impervious Area

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

Subcatchment P2A: Roof area to dry well



Summary for Pond 1P: Shallow detention pond

Inflow Area = 0.549 ac, 47.94% Impervious, Inflow Depth > 2.03" for 2-Year event
Inflow = 1.42 cfs @ 12.12 hrs, Volume= 0.093 af
Outflow = 0.90 cfs @ 12.18 hrs, Volume= 0.087 af, Atten= 37%, Lag= 3.4 min
Primary = 0.90 cfs @ 12.18 hrs, Volume= 0.087 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 268.04' @ 12.18 hrs Surf.Area= 1,005 sf Storage= 808 cf

Plug-Flow detention time= 64.6 min calculated for 0.087 af (94% of inflow)
Center-of-Mass det. time= 31.5 min (840.8 - 809.3)

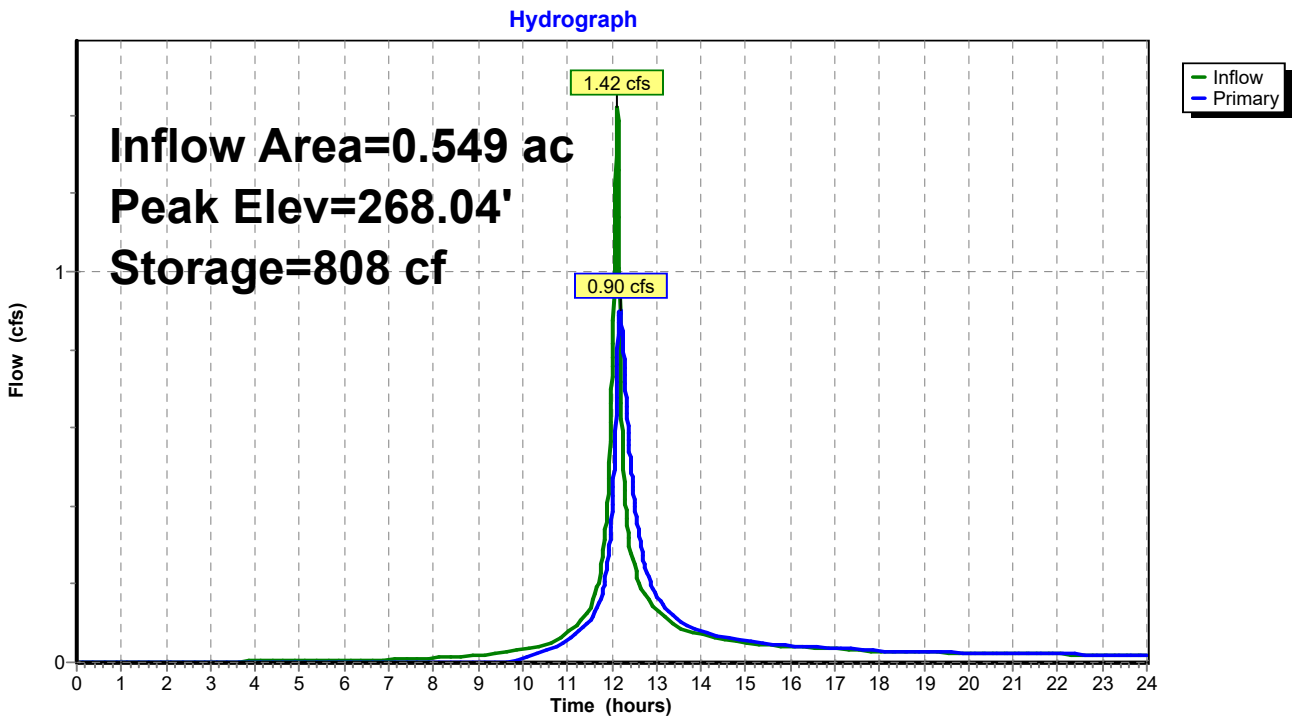
Volume	Invert	Avail.Storage	Storage Description
#1	267.00'	2,852 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
267.00	568	128.0	0	0	568
268.00	986	150.0	767	767	1,074
269.00	1,503	174.0	1,235	2,003	1,714
269.50	1,900	190.0	849	2,852	2,186

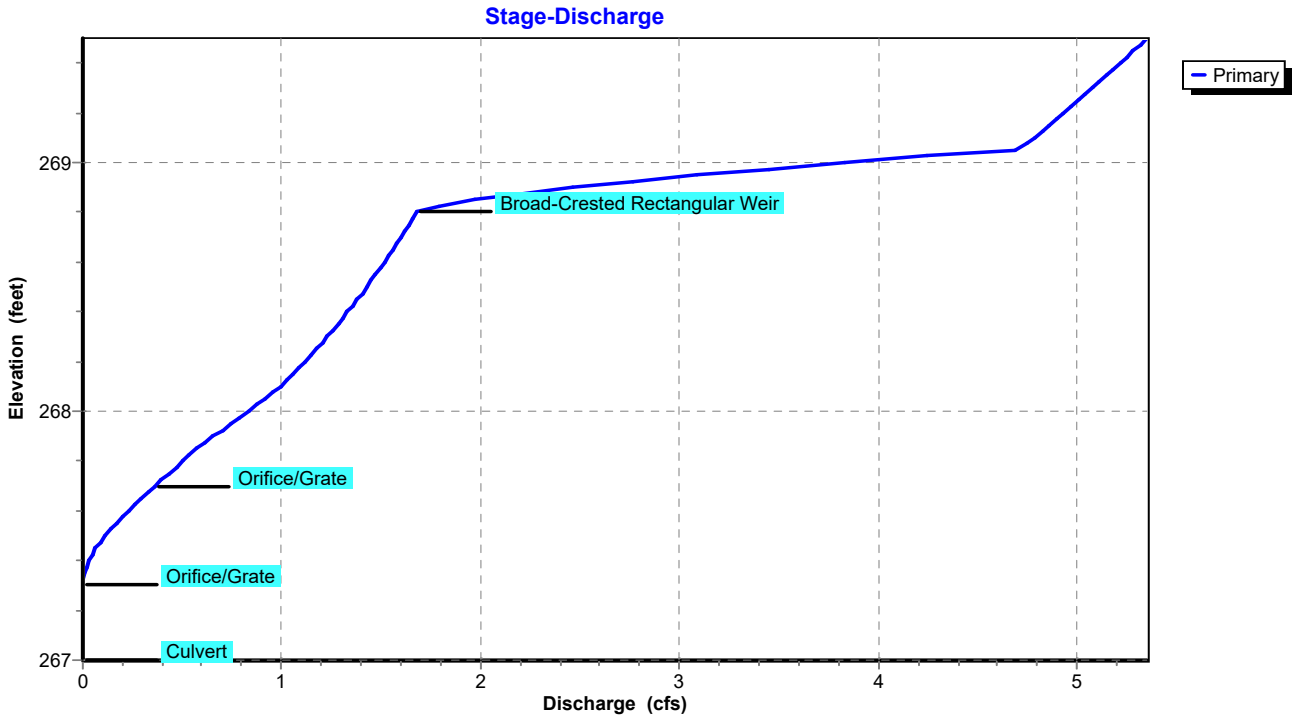
Device	Routing	Invert	Outlet Devices
#1	Primary	267.00'	**12.0" Round Culvert** L= 20.0' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 267.00' / 266.50' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	267.30'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	267.70'	**5.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	268.80'	**8.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.90 cfs @ 12.18 hrs HW=268.04' (Free Discharge)
└─**1=Culvert** (Passes 0.90 cfs of 2.78 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.66 cfs @ 3.37 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 0.24 cfs @ 1.99 fps)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

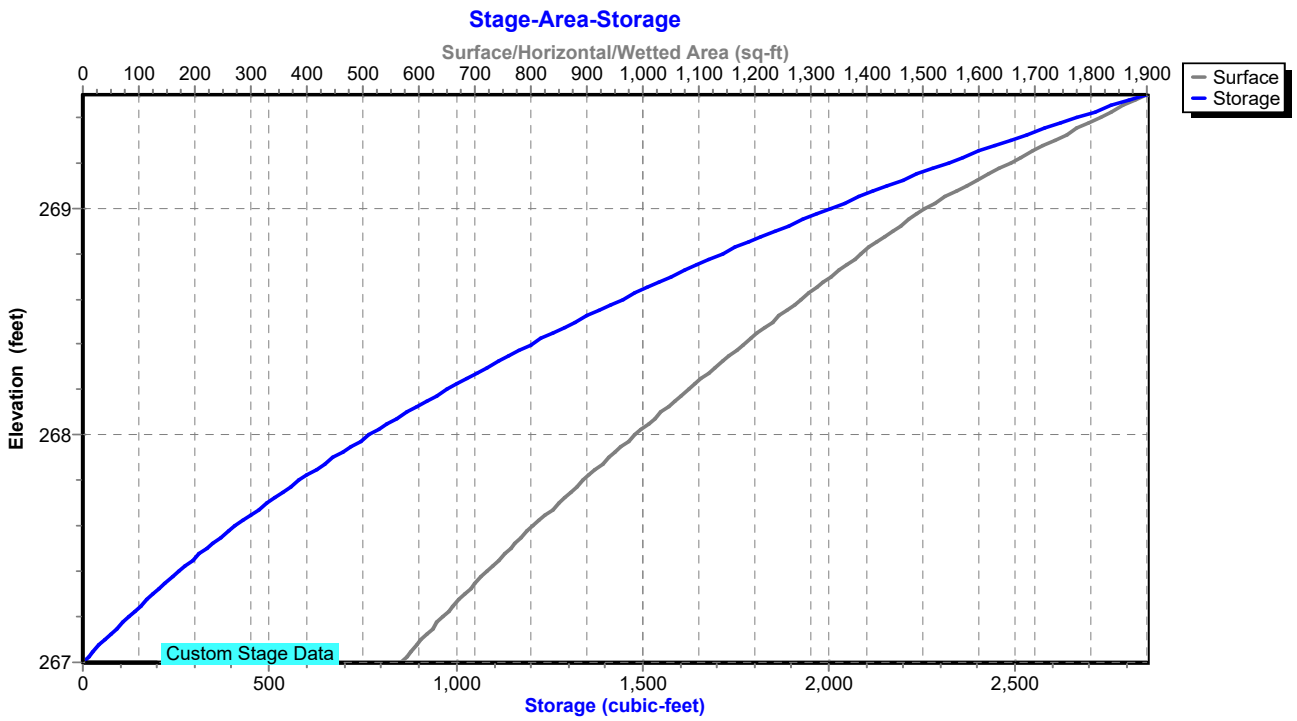
Pond 1P: Shallow detention pond



Pond 1P: Shallow detention pond



Pond 1P: Shallow detention pond

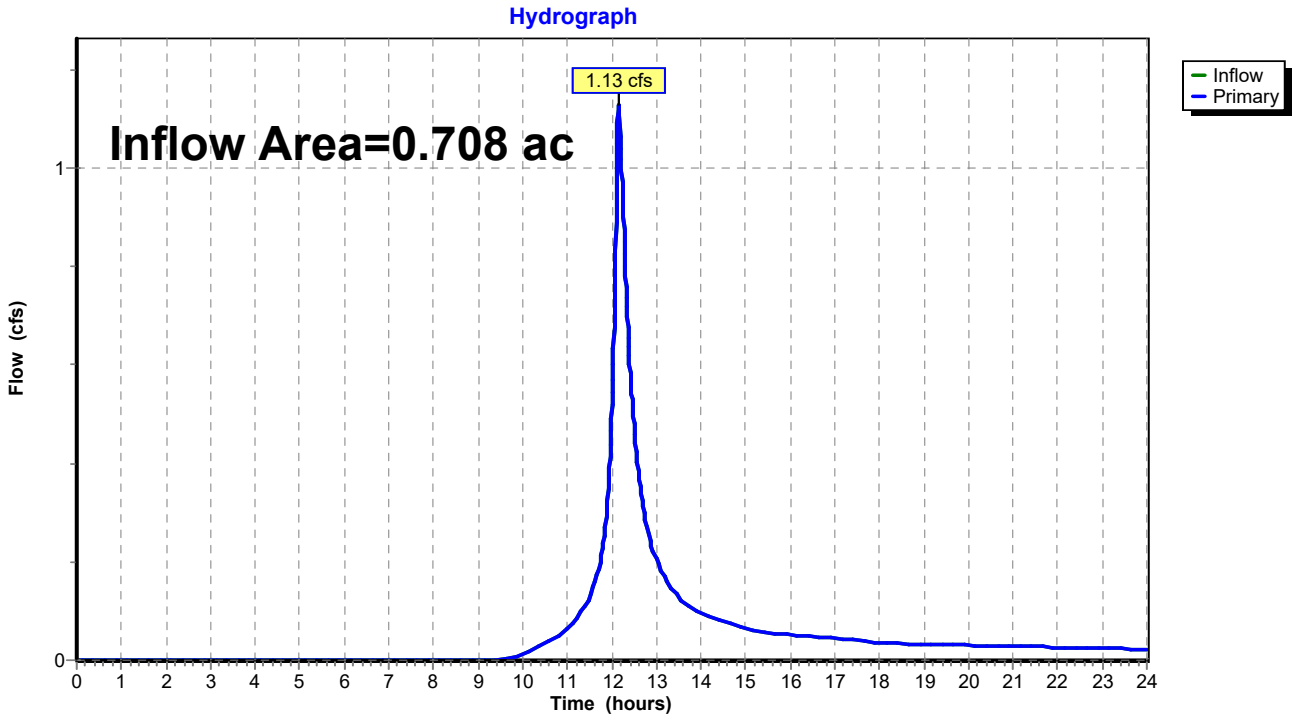


Summary for Link 1L: Route 9

Inflow Area = 0.708 ac, 39.88% Impervious, Inflow Depth > 1.79" for 2-Year event
Inflow = 1.13 cfs @ 12.15 hrs, Volume= 0.105 af
Primary = 1.13 cfs @ 12.15 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 1L: Route 9

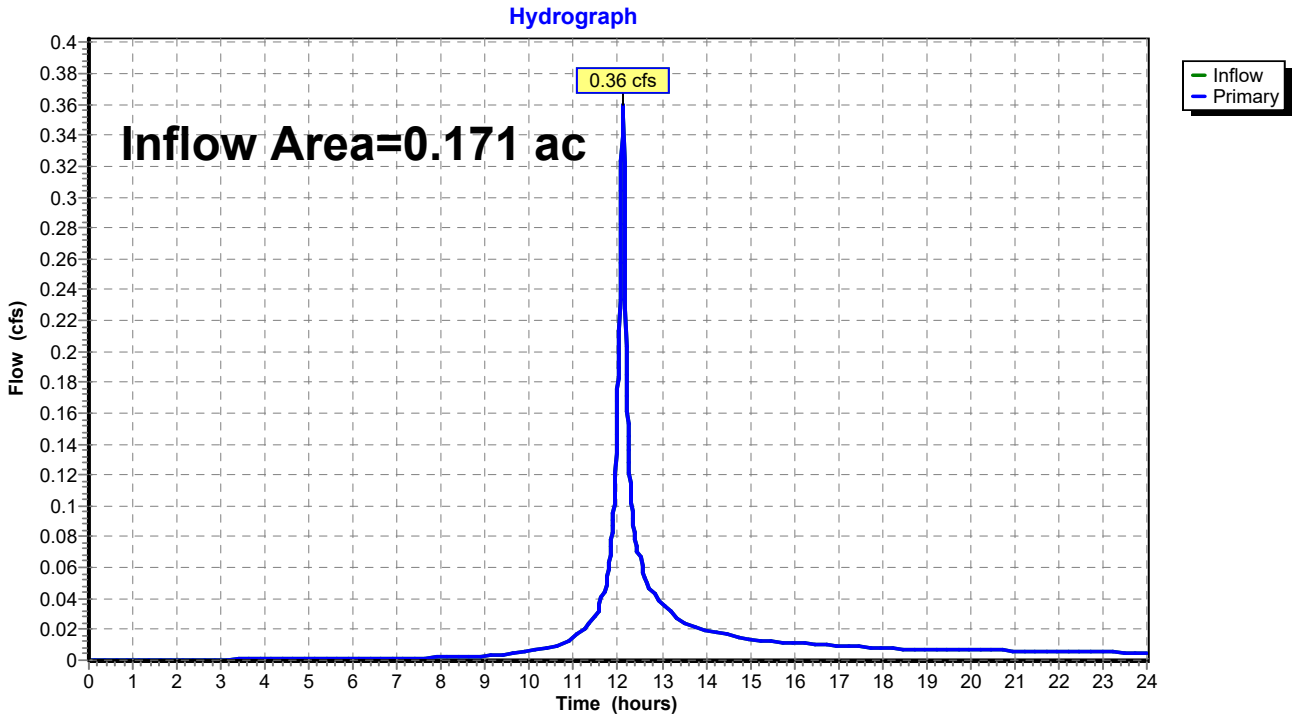


Summary for Link 2L: Pratt field

Inflow Area = 0.171 ac, 28.12% Impervious, Inflow Depth > 1.64" for 2-Year event
Inflow = 0.36 cfs @ 12.12 hrs, Volume= 0.023 af
Primary = 0.36 cfs @ 12.12 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 2L: Pratt field



Summary for Subcatchment P1A: Entrance to driveway

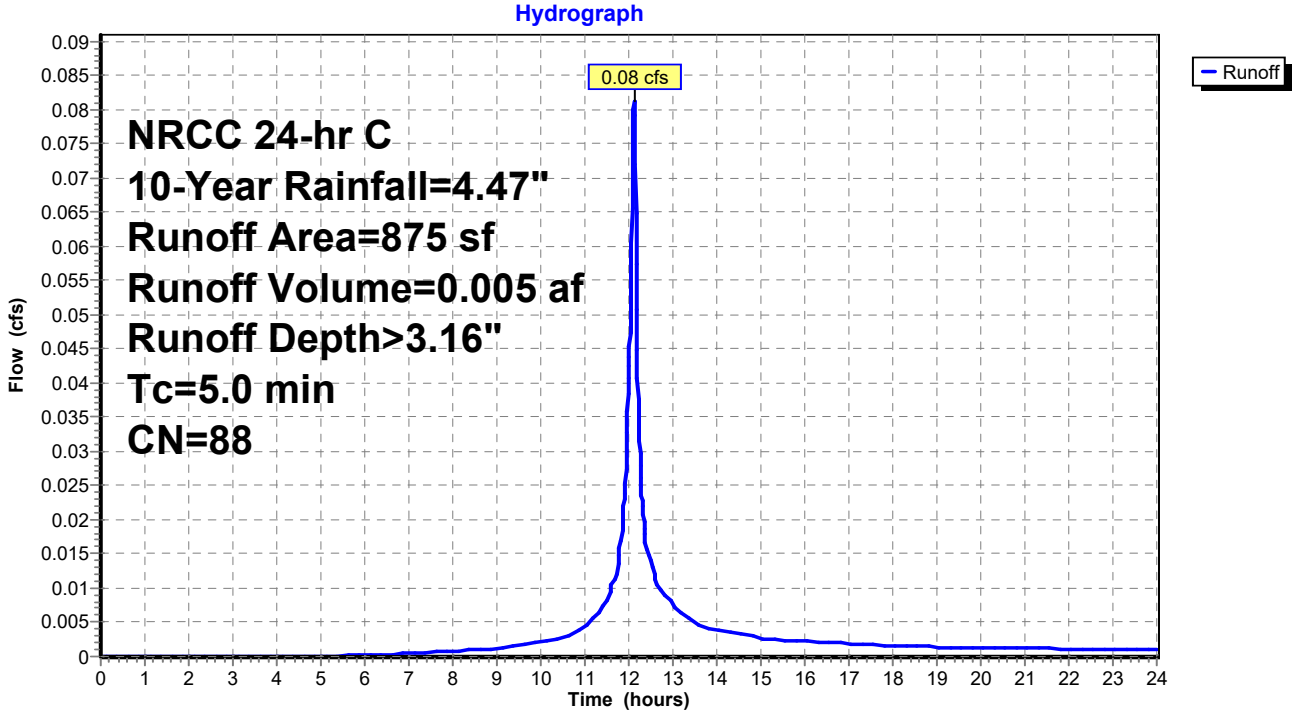
Runoff = 0.08 cfs @ 12.12 hrs, Volume= 0.005 af, Depth> 3.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	405	98	driveway, path
	470	79	50-75% Grass cover, Fair, HSG C
	875	88	Weighted Average
	470		53.71% Pervious Area
	405		46.29% Impervious Area

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

Subcatchment P1A: Entrance to driveway



Summary for Subcatchment P1B: Driveway and parking

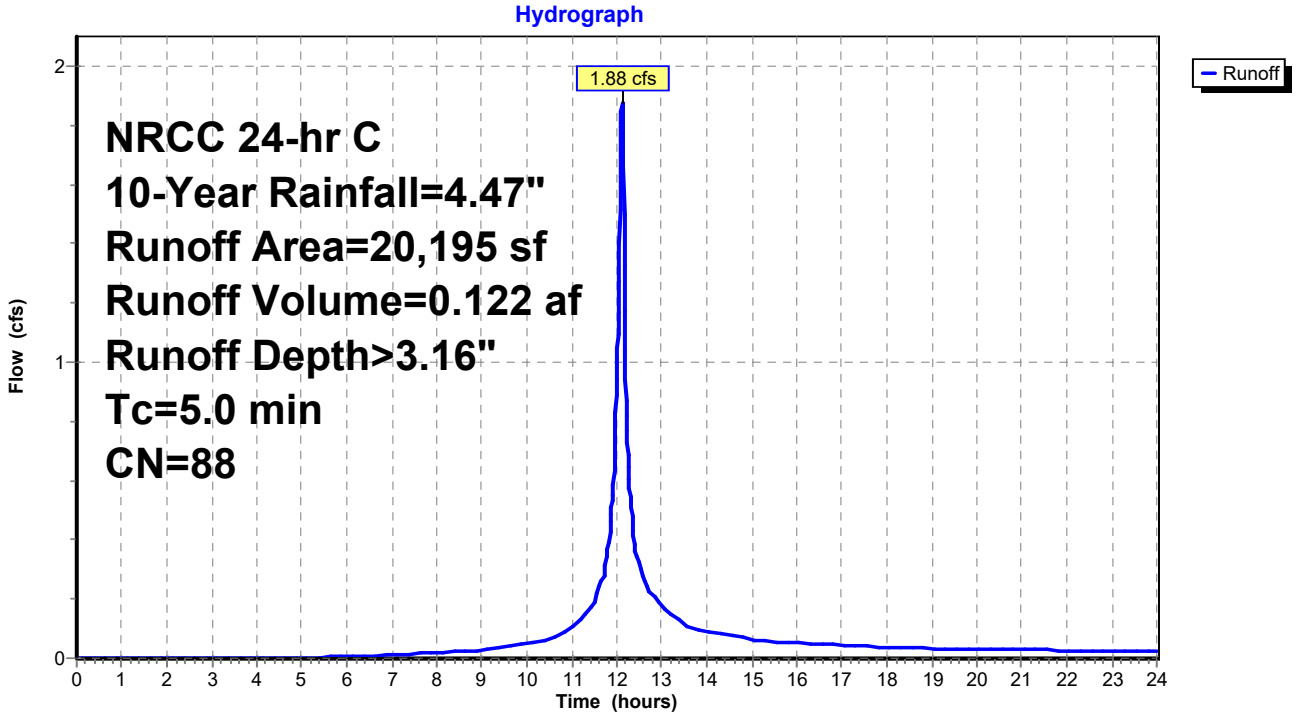
Runoff = 1.88 cfs @ 12.12 hrs, Volume= 0.122 af, Depth> 3.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	7,745	98	roof, paths
*	2,355	96	pavers
	10,095	79	50-75% Grass cover, Fair, HSG C
	20,195	88	Weighted Average
	12,450		61.65% Pervious Area
	7,745		38.35% Impervious Area

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

Subcatchment P1B: Driveway and parking



Summary for Subcatchment P1C: Building roof

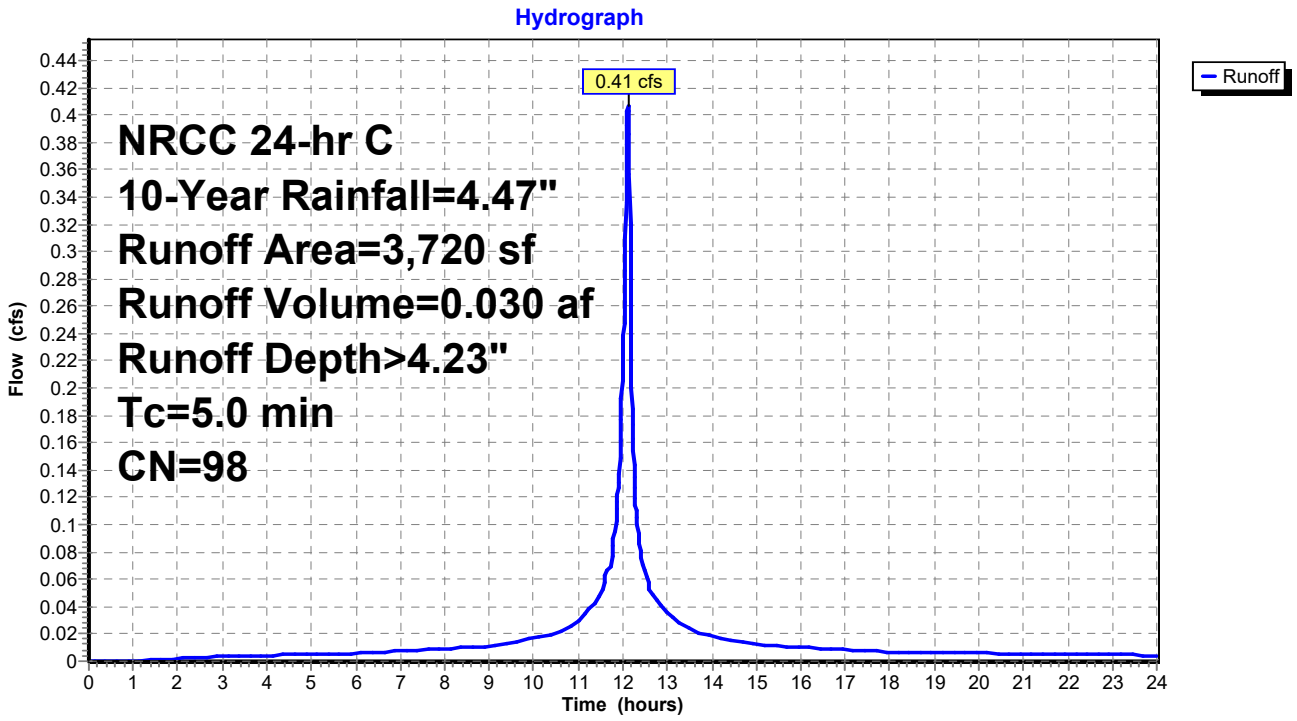
Runoff = 0.41 cfs @ 12.12 hrs, Volume= 0.030 af, Depth> 4.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	3,720	98	roof
	3,720		100.00% Impervious Area

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

Subcatchment P1C: Building roof



Summary for Subcatchment P1D: Open space and walkways

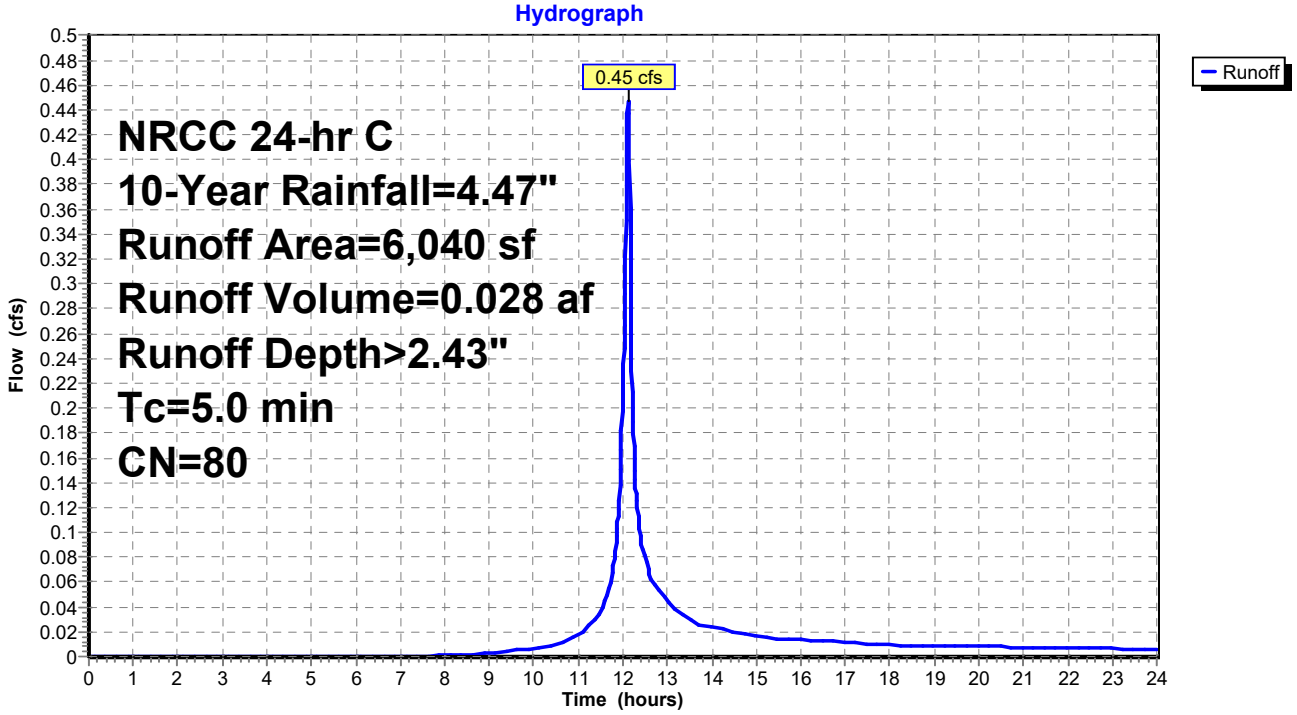
Runoff = 0.45 cfs @ 12.12 hrs, Volume= 0.028 af, Depth> 2.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	425	98	path
	5,615	79	50-75% Grass cover, Fair, HSG C
	6,040	80	Weighted Average
	5,615		92.96% Pervious Area
	425		7.04% Impervious Area

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

Subcatchment P1D: Open space and walkways



Summary for Subcatchment P2: Site improvements

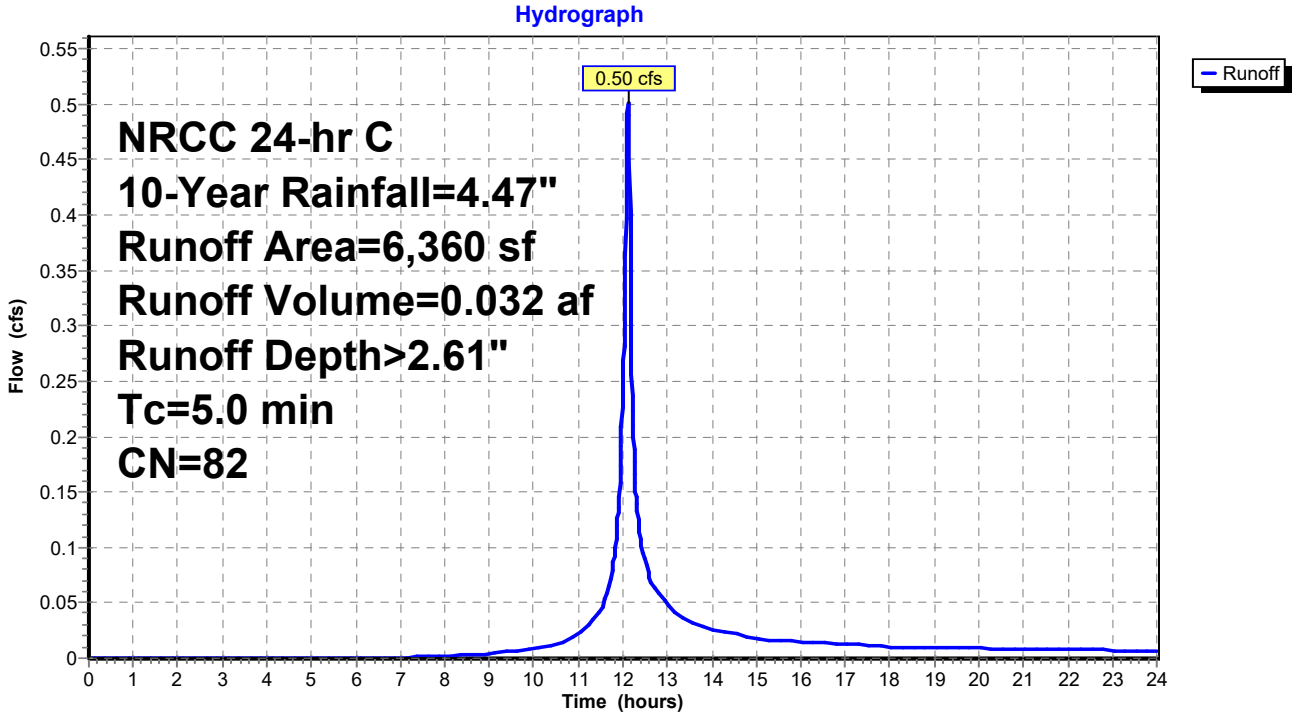
Runoff = 0.50 cfs @ 12.12 hrs, Volume= 0.032 af, Depth> 2.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	1,005	98	patio, walkways
*	130	96	pavers
	5,225	79	50-75% Grass cover, Fair, HSG C
	6,360	82	Weighted Average
	5,355		84.20% Pervious Area
	1,005		15.80% Impervious Area

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

Subcatchment P2: Site improvements



Summary for Subcatchment P2A: Roof area to dry well

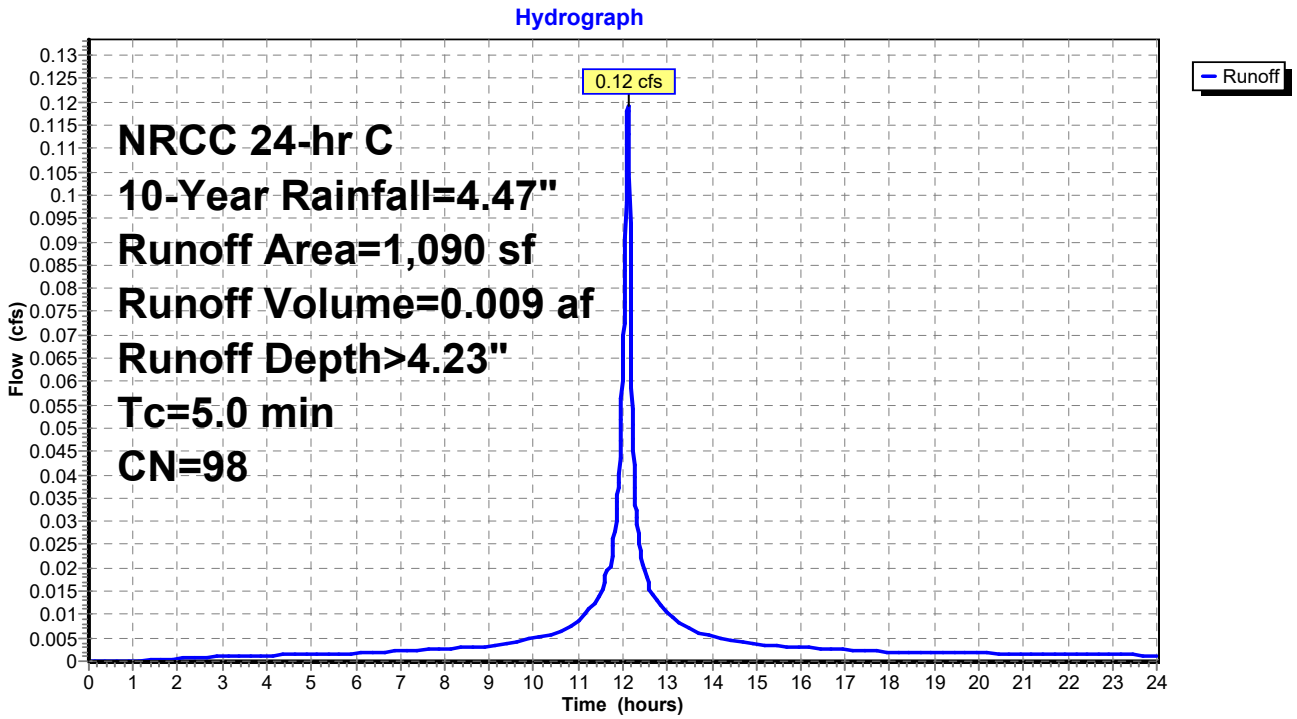
Runoff = 0.12 cfs @ 12.12 hrs, Volume= 0.009 af, Depth> 4.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 10-Year Rainfall=4.47"

	Area (sf)	CN	Description
*	1,090	98	roof
	1,090		100.00% Impervious Area

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

Subcatchment P2A: Roof area to dry well



Summary for Pond 1P: Shallow detention pond

Inflow Area = 0.549 ac, 47.94% Impervious, Inflow Depth > 3.33" for 10-Year event
Inflow = 2.28 cfs @ 12.12 hrs, Volume= 0.152 af
Outflow = 1.31 cfs @ 12.19 hrs, Volume= 0.147 af, Atten= 43%, Lag= 3.9 min
Primary = 1.31 cfs @ 12.19 hrs, Volume= 0.147 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 268.38' @ 12.19 hrs Surf.Area= 1,169 sf Storage= 1,176 cf

Plug-Flow detention time= 48.6 min calculated for 0.147 af (96% of inflow)
Center-of-Mass det. time= 26.1 min (822.1 - 795.9)

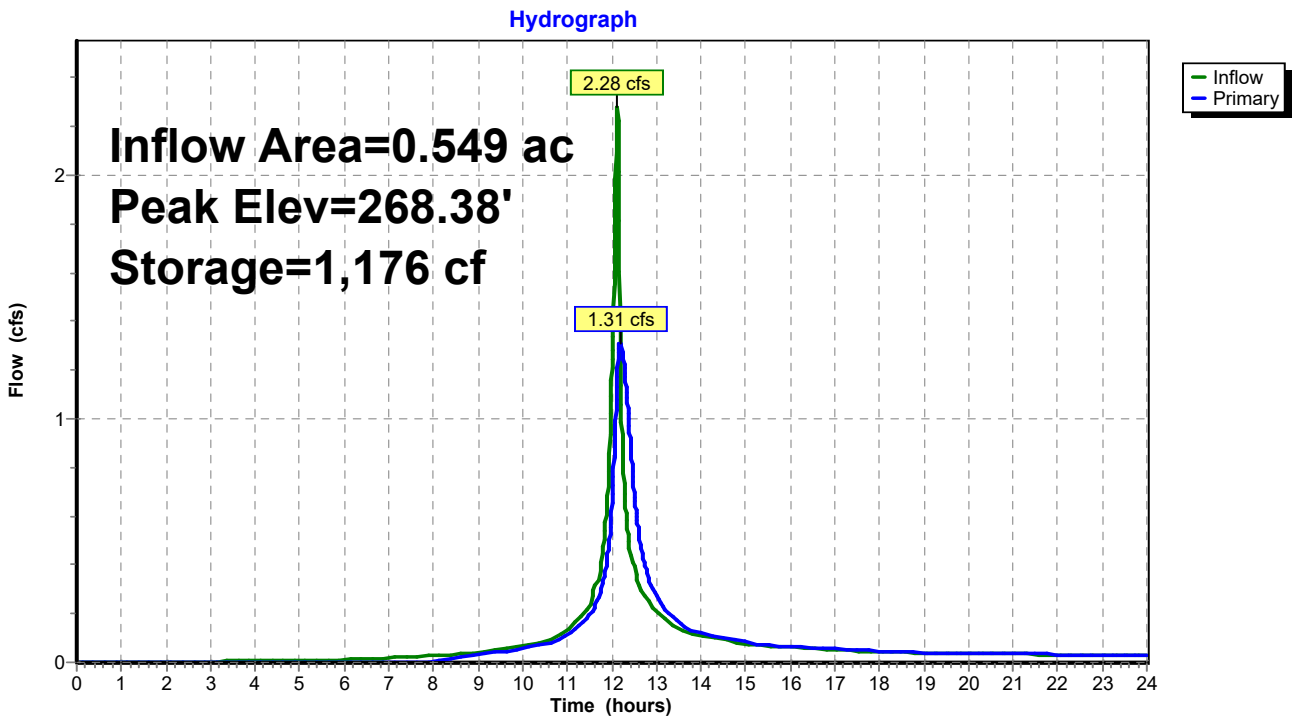
Volume	Invert	Avail.Storage	Storage Description
#1	267.00'	2,852 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
267.00	568	128.0	0	0	568
268.00	986	150.0	767	767	1,074
269.00	1,503	174.0	1,235	2,003	1,714
269.50	1,900	190.0	849	2,852	2,186

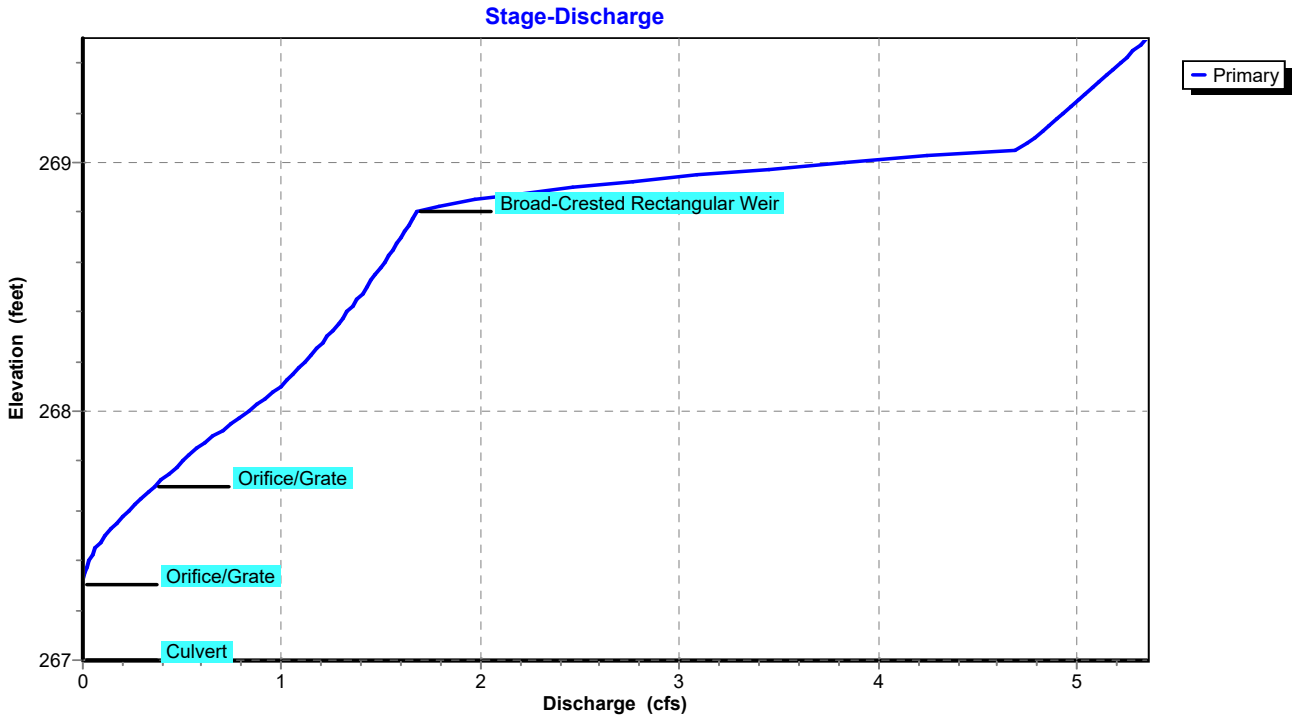
Device	Routing	Invert	Outlet Devices
#1	Primary	267.00'	**12.0" Round Culvert** L= 20.0' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 267.00' / 266.50' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	267.30'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	267.70'	**5.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	268.80'	**8.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.31 cfs @ 12.19 hrs HW=268.38' (Free Discharge)
└─**1=Culvert** (Passes 1.31 cfs of 3.55 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.86 cfs @ 4.38 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 0.45 cfs @ 3.30 fps)
  └─**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

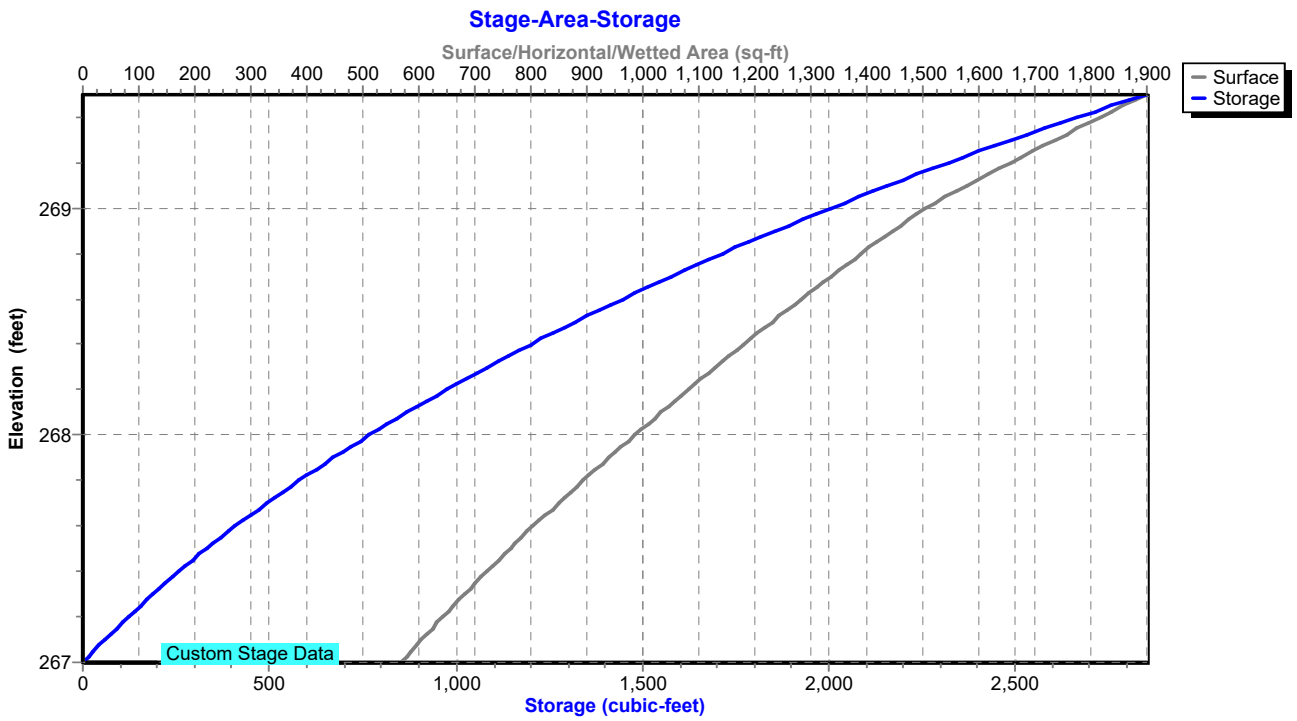
Pond 1P: Shallow detention pond



Pond 1P: Shallow detention pond



Pond 1P: Shallow detention pond

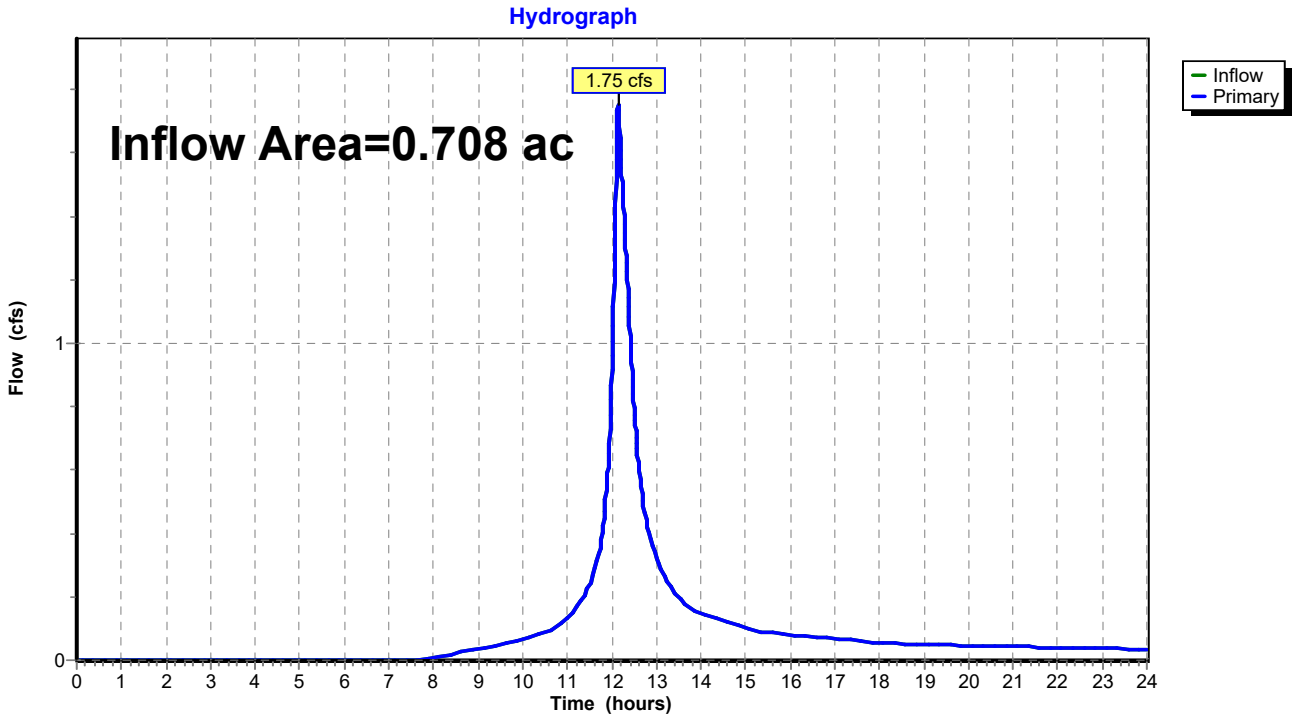


Summary for Link 1L: Route 9

Inflow Area = 0.708 ac, 39.88% Impervious, Inflow Depth > 3.05" for 10-Year event
Inflow = 1.75 cfs @ 12.14 hrs, Volume= 0.180 af
Primary = 1.75 cfs @ 12.14 hrs, Volume= 0.180 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 1L: Route 9

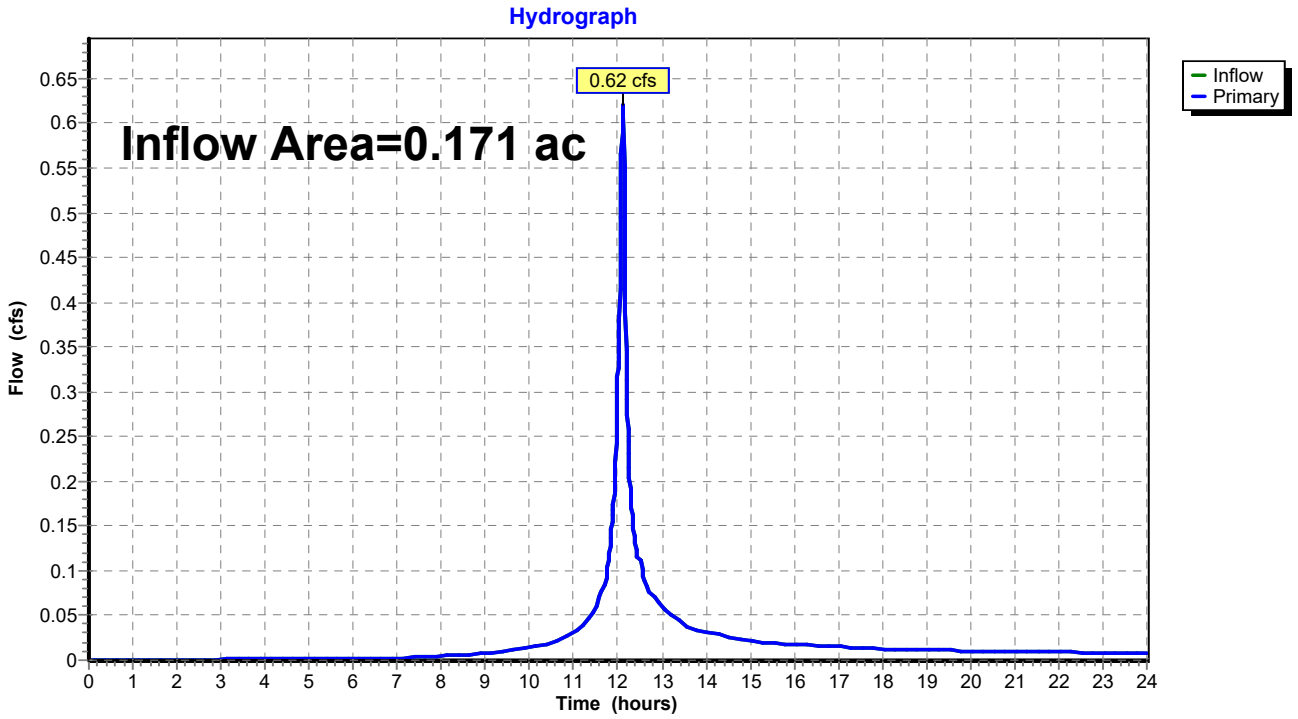


Summary for Link 2L: Pratt field

Inflow Area = 0.171 ac, 28.12% Impervious, Inflow Depth > 2.84" for 10-Year event
Inflow = 0.62 cfs @ 12.12 hrs, Volume= 0.041 af
Primary = 0.62 cfs @ 12.12 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 2L: Pratt field



Summary for Subcatchment P1A: Entrance to driveway

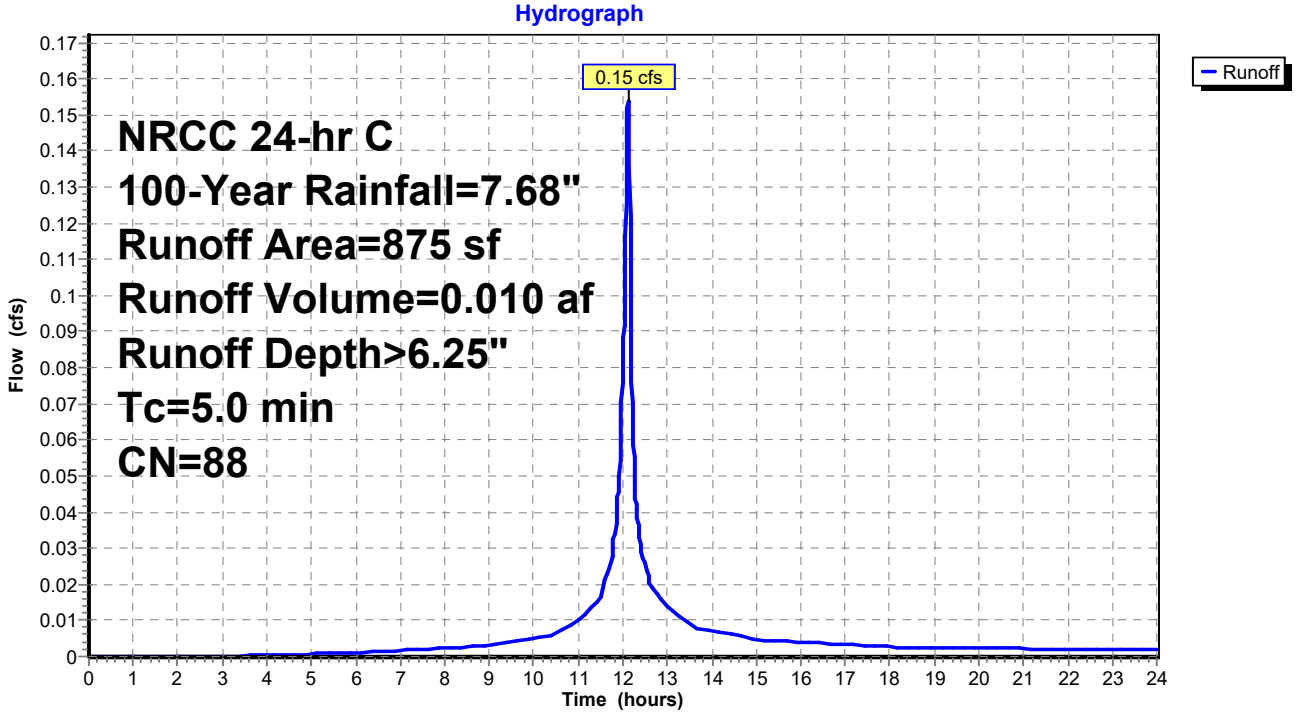
Runoff = 0.15 cfs @ 12.12 hrs, Volume= 0.010 af, Depth> 6.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	405	98	driveway, path
	470	79	50-75% Grass cover, Fair, HSG C
	875	88	Weighted Average
	470		53.71% Pervious Area
	405		46.29% Impervious Area

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

Subcatchment P1A: Entrance to driveway



Summary for Subcatchment P1B: Driveway and parking

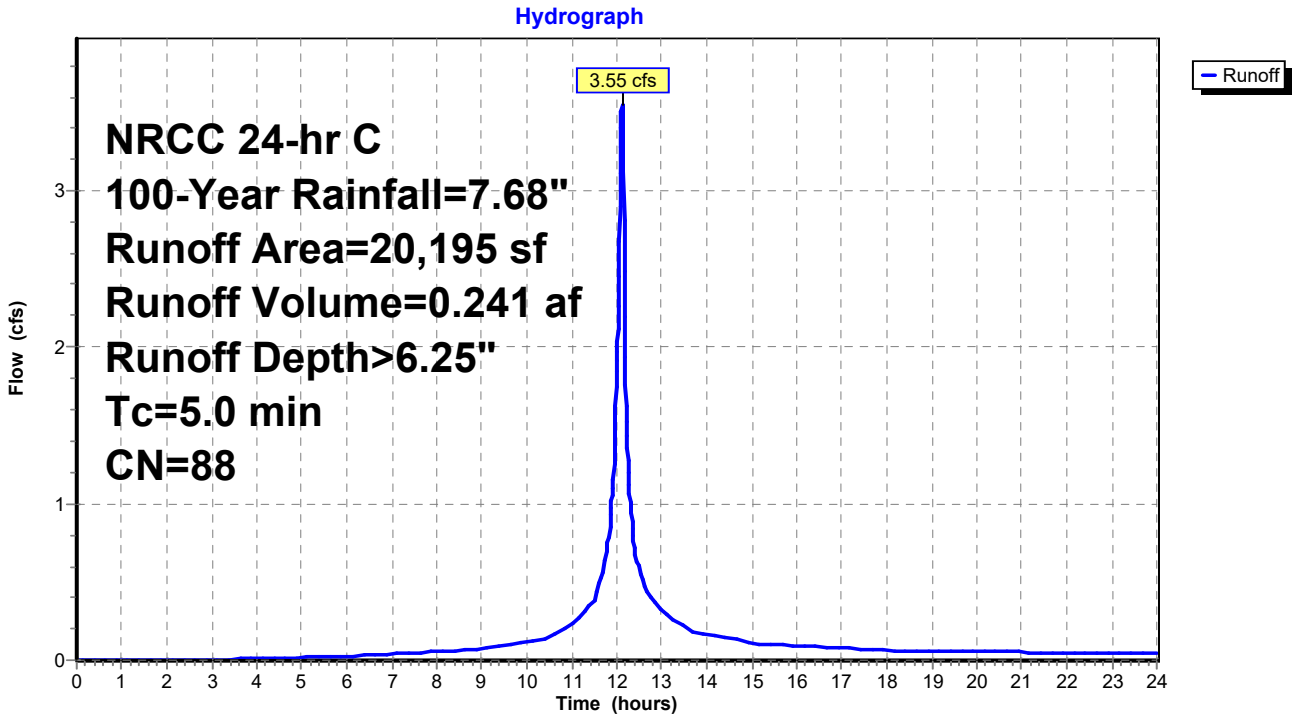
Runoff = 3.55 cfs @ 12.12 hrs, Volume= 0.241 af, Depth> 6.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	7,745	98	roof, paths
*	2,355	96	pavers
	10,095	79	50-75% Grass cover, Fair, HSG C
	20,195	88	Weighted Average
	12,450		61.65% Pervious Area
	7,745		38.35% Impervious Area

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

Subcatchment P1B: Driveway and parking



Summary for Subcatchment P1C: Building roof

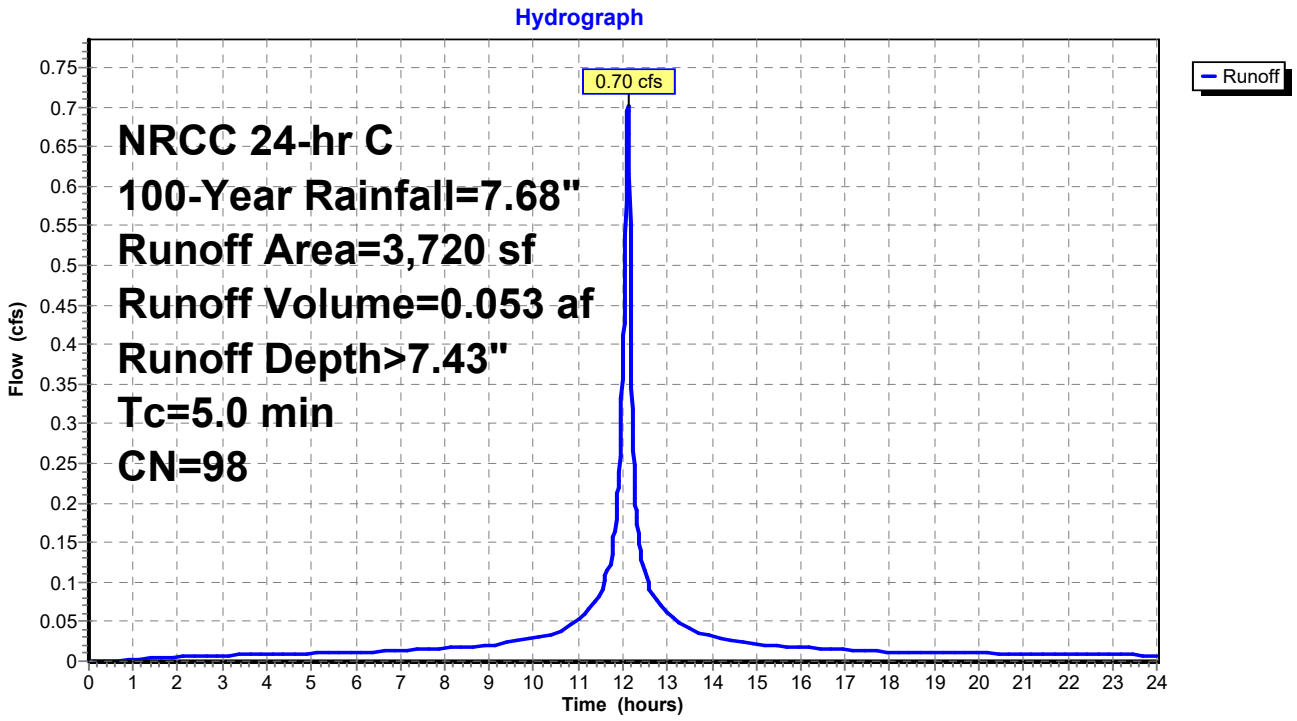
Runoff = 0.70 cfs @ 12.12 hrs, Volume= 0.053 af, Depth> 7.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	3,720	98	roof
	3,720		100.00% Impervious Area

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

Subcatchment P1C: Building roof



Summary for Subcatchment P1D: Open space and walkways

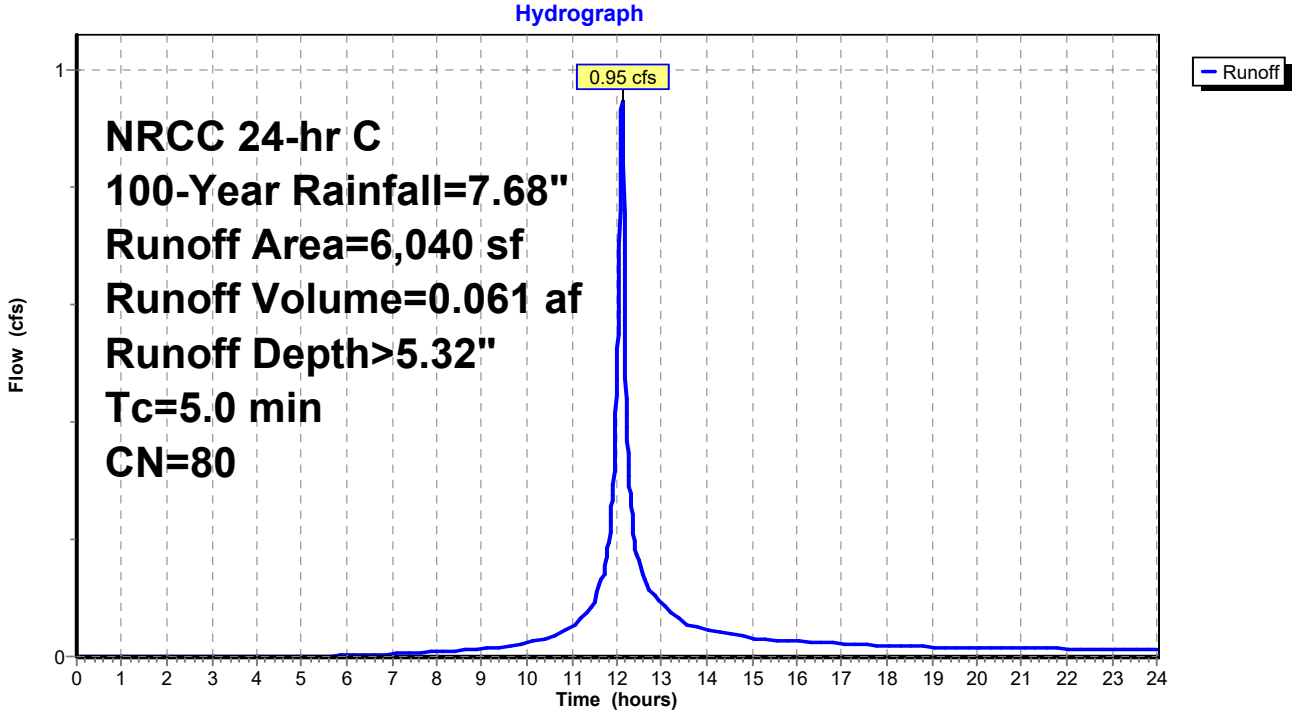
Runoff = 0.95 cfs @ 12.12 hrs, Volume= 0.061 af, Depth> 5.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	425	98	path
	5,615	79	50-75% Grass cover, Fair, HSG C
	6,040	80	Weighted Average
	5,615		92.96% Pervious Area
	425		7.04% Impervious Area

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

Subcatchment P1D: Open space and walkways



Summary for Subcatchment P2: Site improvements

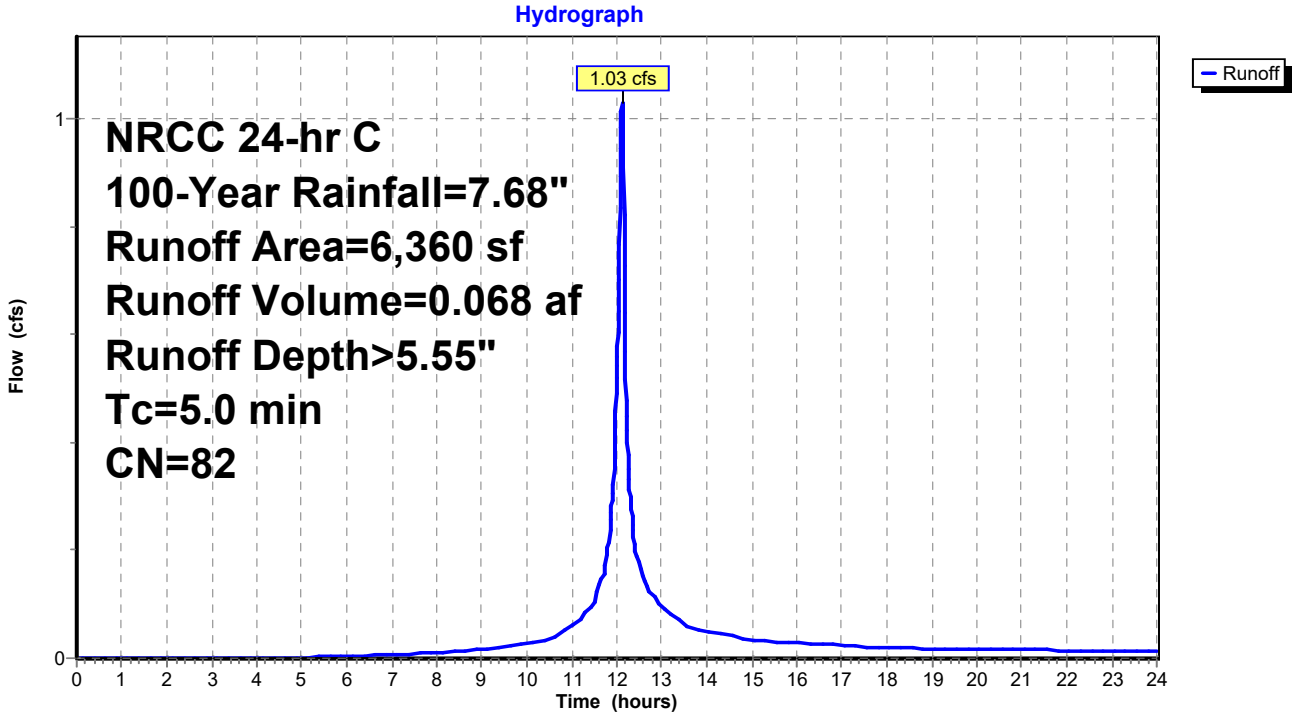
Runoff = 1.03 cfs @ 12.12 hrs, Volume= 0.068 af, Depth> 5.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	1,005	98	patio, walkways
*	130	96	pavers
	5,225	79	50-75% Grass cover, Fair, HSG C
	6,360	82	Weighted Average
	5,355		84.20% Pervious Area
	1,005		15.80% Impervious Area

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

Subcatchment P2: Site improvements



Summary for Subcatchment P2A: Roof area to dry well

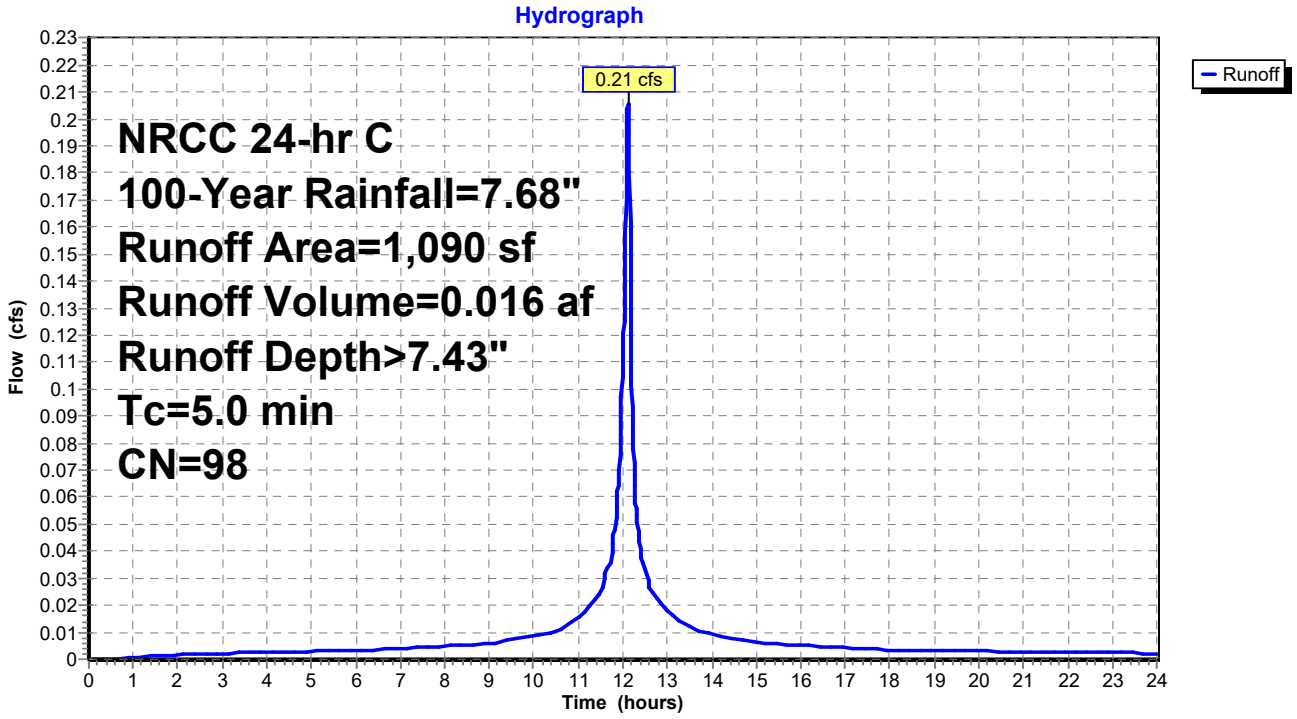
Runoff = 0.21 cfs @ 12.12 hrs, Volume= 0.016 af, Depth> 7.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
NRCC 24-hr C 100-Year Rainfall=7.68"

	Area (sf)	CN	Description
*	1,090	98	roof
	1,090		100.00% Impervious Area

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

Subcatchment P2A: Roof area to dry well



Summary for Pond 1P: Shallow detention pond

Inflow Area = 0.549 ac, 47.94% Impervious, Inflow Depth > 6.43" for 100-Year event
Inflow = 4.25 cfs @ 12.12 hrs, Volume= 0.294 af
Outflow = 3.37 cfs @ 12.16 hrs, Volume= 0.288 af, Atten= 21%, Lag= 2.4 min
Primary = 3.37 cfs @ 12.16 hrs, Volume= 0.288 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Peak Elev= 268.97' @ 12.16 hrs Surf.Area= 1,486 sf Storage= 1,958 cf

Plug-Flow detention time= 33.9 min calculated for 0.288 af (98% of inflow)
Center-of-Mass det. time= 20.4 min (798.8 - 778.4)

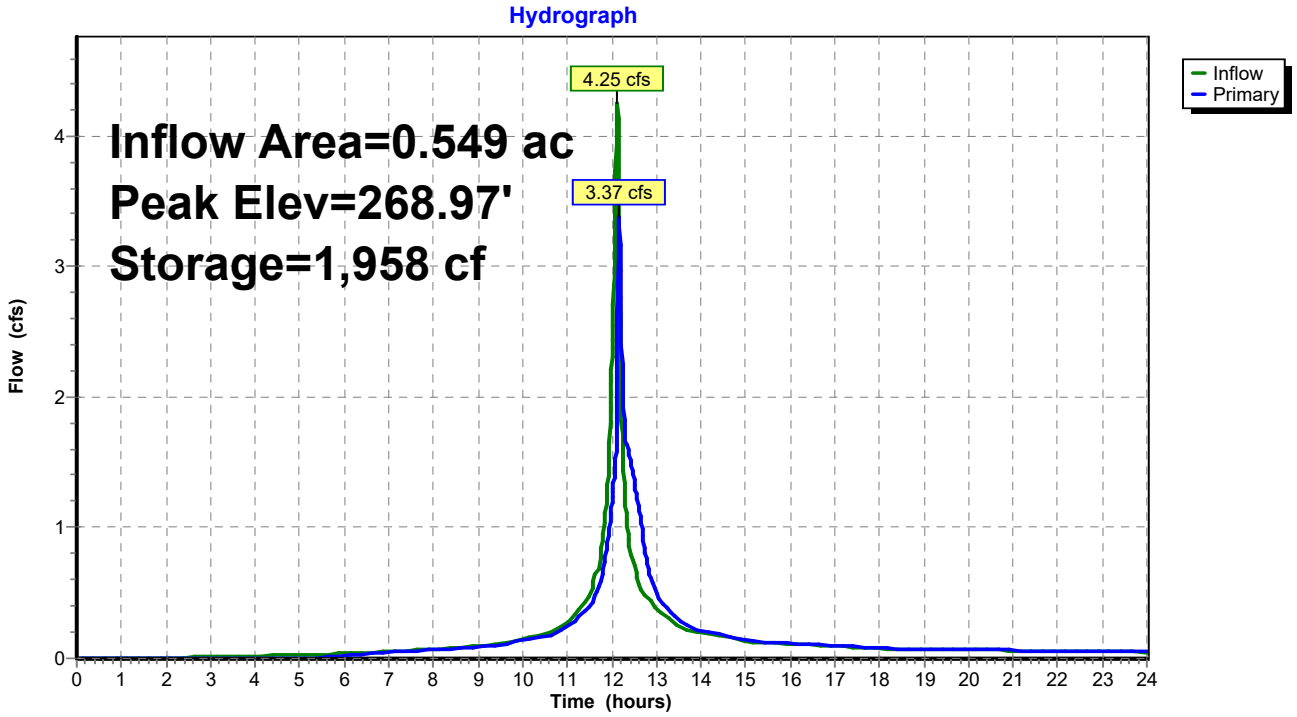
Volume	Invert	Avail.Storage	Storage Description
#1	267.00'	2,852 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
267.00	568	128.0	0	0	568
268.00	986	150.0	767	767	1,074
269.00	1,503	174.0	1,235	2,003	1,714
269.50	1,900	190.0	849	2,852	2,186

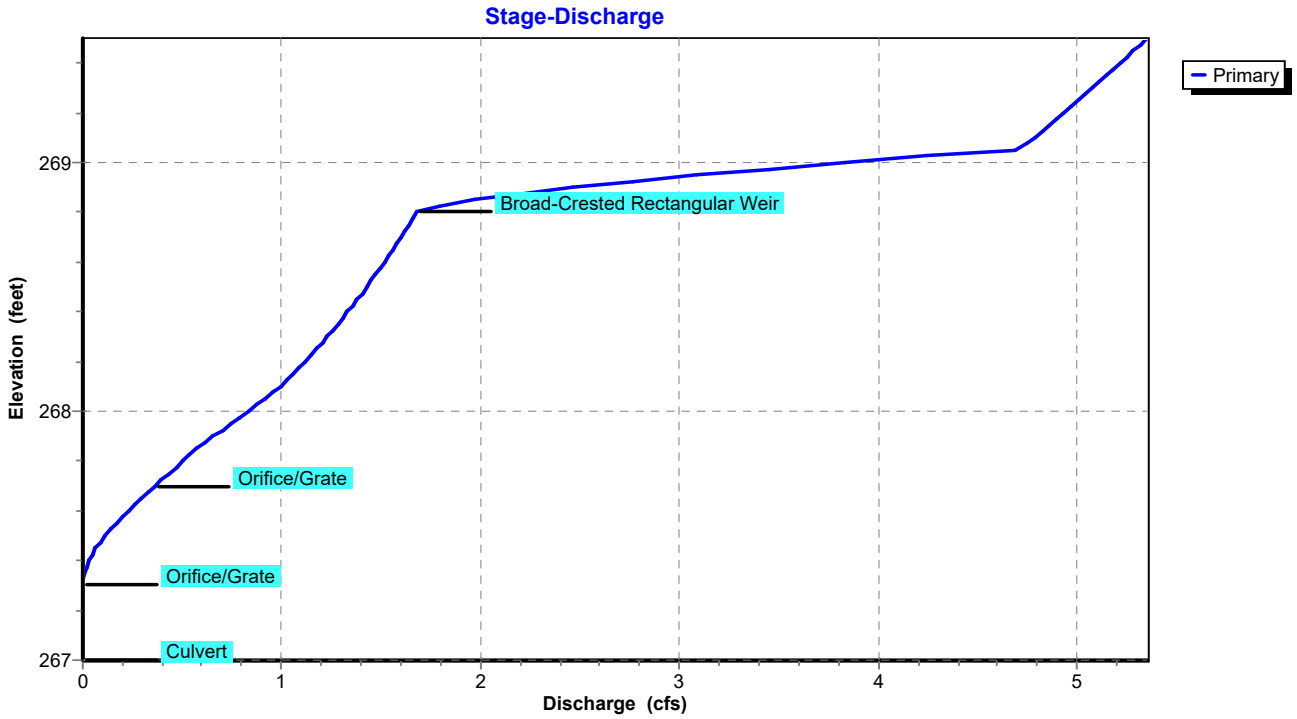
Device	Routing	Invert	Outlet Devices
#1	Primary	267.00'	**12.0" Round Culvert** L= 20.0' Box, headwall w/3 square edges, Ke= 0.500 Inlet / Outlet Invert= 267.00' / 266.50' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	267.30'	**6.0" Vert. Orifice/Grate** C= 0.600
#3	Device 1	267.70'	**5.0" Vert. Orifice/Grate** C= 0.600
#4	Device 1	268.80'	**8.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=3.37 cfs @ 12.16 hrs HW=268.97' (Free Discharge)
└─**1=Culvert** (Passes 3.37 cfs of 4.58 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 1.13 cfs @ 5.74 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 0.68 cfs @ 4.96 fps)
  └─**4=Broad-Crested Rectangular Weir** (Weir Controls 1.56 cfs @ 1.15 fps)

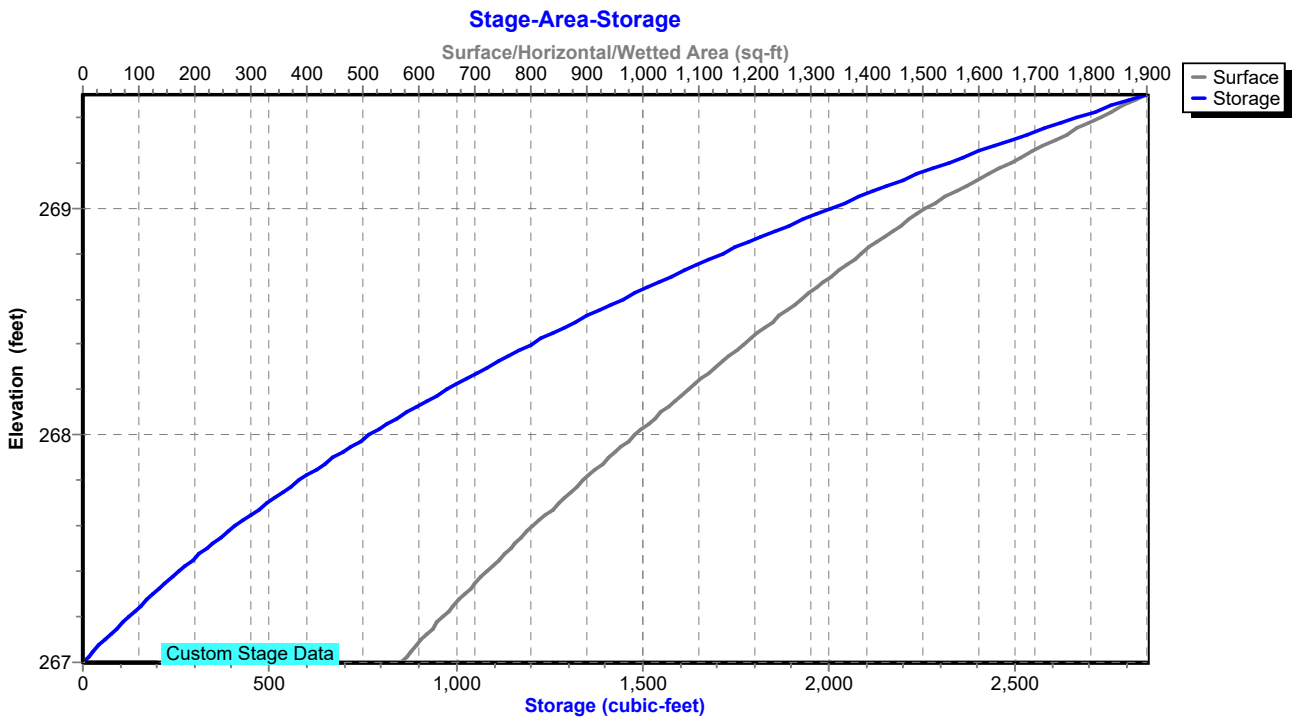
Pond 1P: Shallow detention pond



Pond 1P: Shallow detention pond



Pond 1P: Shallow detention pond

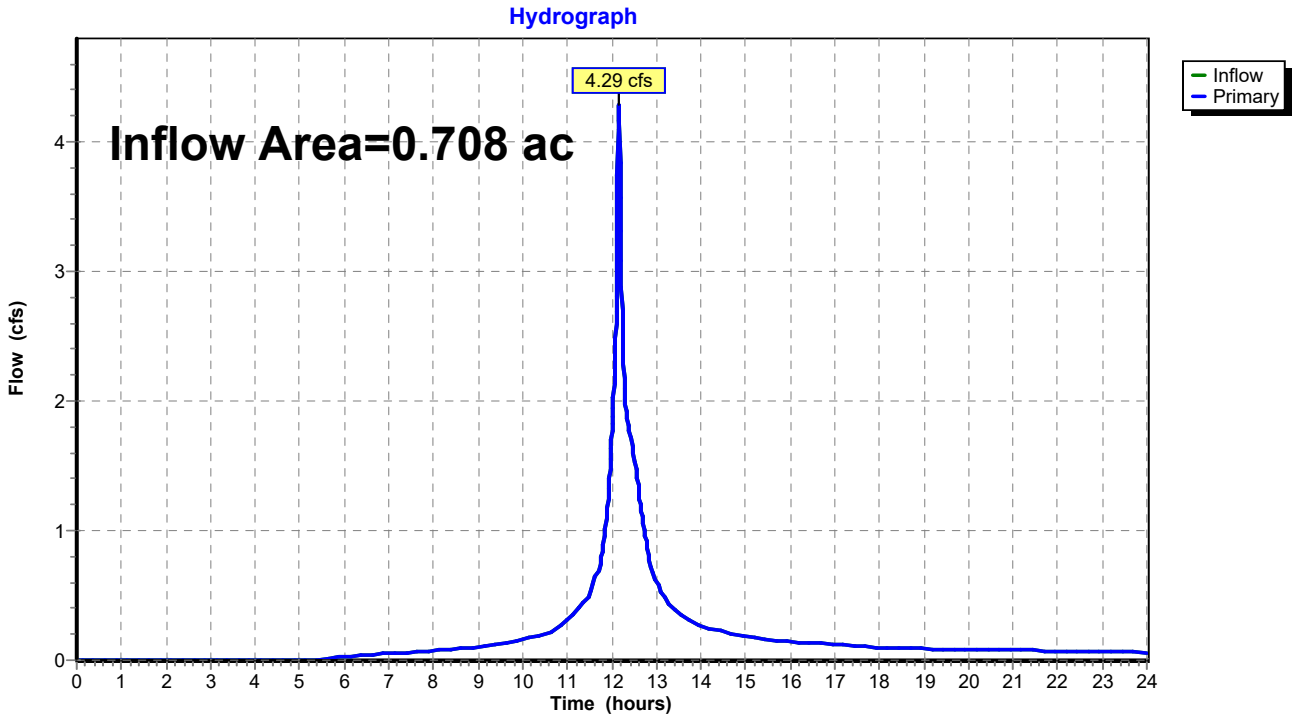


Summary for Link 1L: Route 9

Inflow Area = 0.708 ac, 39.88% Impervious, Inflow Depth > 6.10" for 100-Year event
Inflow = 4.29 cfs @ 12.15 hrs, Volume= 0.360 af
Primary = 4.29 cfs @ 12.15 hrs, Volume= 0.360 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 1L: Route 9

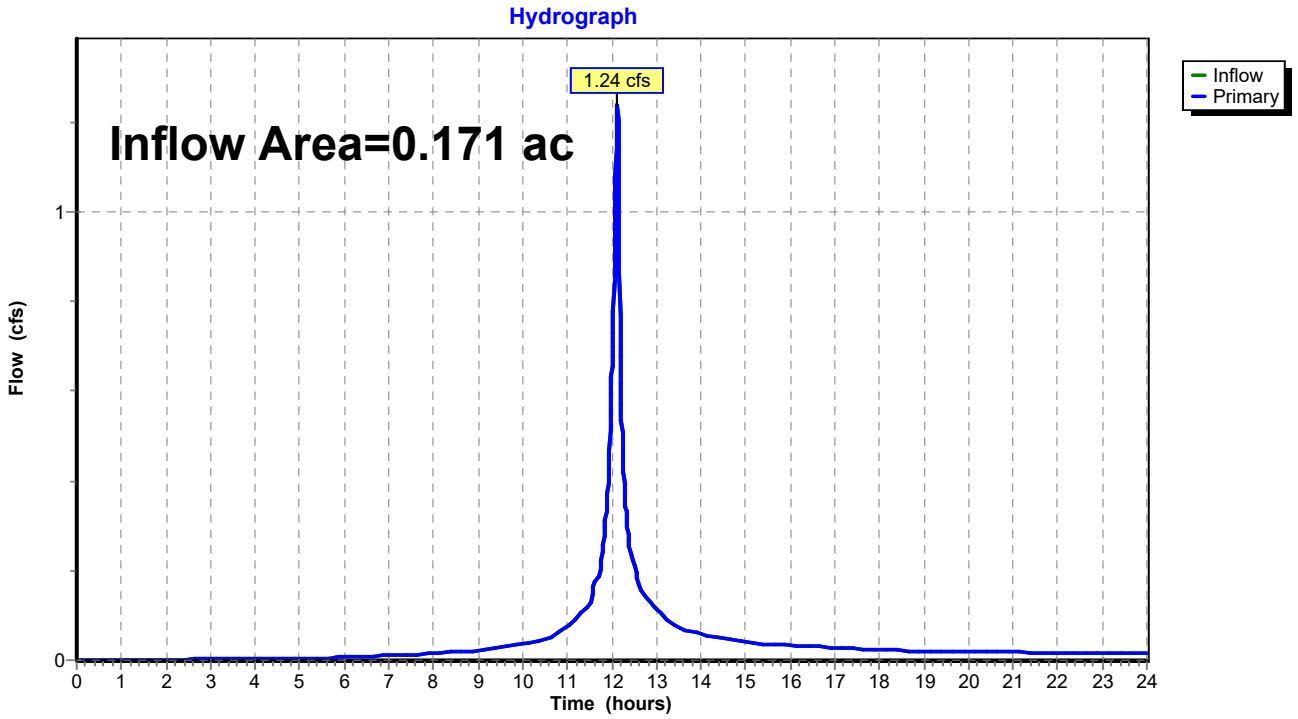


Summary for Link 2L: Pratt field

Inflow Area = 0.171 ac, 28.12% Impervious, Inflow Depth > 5.83" for 100-Year event
Inflow = 1.24 cfs @ 12.12 hrs, Volume= 0.083 af
Primary = 1.24 cfs @ 12.12 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs

Link 2L: Pratt field



Appendix D – Groundwater Recharge Calculations

Berkshire Design Group

May 11, 2020

Amherst – 132 Northampton Road
Stormwater Standard 3 – Recharge Calculations

Existing Impervious Area

Table 1 shows the existing and proposed impervious and gravel/paver areas on the site.

Table 1. Existing and Proposed Impervious Area

	Existing Area (sf)	Proposed Area (sf)	Increase in Area (sf)
Impervious	2,445	14,380	11,935
Gravel / Pavers	3,715	2,485	(1,230)
TOTAL	6,160	16,865	10,705

Proposed Impervious Area & Required Recharge Volume

For the purposes of these calculations, gravel/pavers are considered impervious by the Town of Amherst. **Table 2** shows the required recharge volume.

Required Recharge Volume is calculated by applying the following equation:

Required Recharge Volume, $Rv = F \times I$

Where, $F =$ Target Depth Factor, 0.25" (for HSG C)
$I =$ Impervious Area

Table 2. Proposed Increase in Impervious Area and Required Recharge Volume

Increase in Impervious area (sq. ft.)	Required Recharge Volume (cu. ft.)	Required recharge w/ capture area adjustment (see below)	Provided Recharge Volume (cu. ft.)
10,705	223	254	254

The storage volume provided in **Table 2** is provided through storage in the dry well (67 cf) and the volume below the outlet of the detention area (187 cf).

This analysis utilizes the "Static Method" for determining required storage volume for infiltration features. Therefore, the minimum required storage volume is equal to the Required Recharge Volume, tabulated above.

The provided infiltration storage volume of 254 cu. ft. equals the Required Recharge Volume of 254 cu. ft. (considering all new impervious surfaces at the future site).

Capture Area Adjustment

The Massachusetts Stormwater Handbook requires an increase in storage capacity of infiltration features if only a portion of the site's impervious area is tributary to the stormwater practices. At 132 Northampton Road, 1,965 sf of impervious area (a portion of the driveway and walkways) out of a total of 16,310 sf is not tributary to an infiltration practice.

16,310 sf/14,345 sf = 1.14

Increase required recharge by a factor of 1.14

Drawdown Time

Test pits done at the site characterize the soils as sandy loam and fine sandy loam. The Rawls infiltration rate for sandy loam is estimated at 1.02 in/hour and loam at 0.52 inches per hour (Massachusetts Stormwater Standards). Because of the fine sandy loam reported, the slower rate of 0.52 in/hour is used for the drawdown calculations.

Drawdown time is dependent on the depth of the system. Ponding within the dry well is 25". Drawdown time is estimated by the following:

$$22\ in/(0.52\ in/hr) = 42.3hr$$

The dry well should draw down in approximately 42 hours which is below the 72-hour requirement.

The ponding within the detention basin is set by the elevation of the lowest orifice at 0.3 feet above the bottom of the basin. Drawdown for the detention basin is estimated at:

$$3.6\ in/(0.52\ in/hr) = 6.9\ hr$$

The ponding within the detention pond should drawdown in approximately 7 hours. This is also below the 72-hour requirement.

Appendix E – Water Quality Calculations

Berkshire Design Group

May 11, 2020

132 Northampton Road, Amherst, MA
Stormwater Standard 4 – Water Quality Volume

Existing conditions include untreated gravel and impervious areas of 6,160 sf. Proposed conditions include 16,865 sf of impervious areas (driveway, parking areas (asphalt and pavers), walkways and roofs) The increase in impervious area is 10,705 sf (**Table 1**).

Table 1. Existing and Proposed Impervious Areas

	Existing Area (sf)	Proposed Area (sf)	Increase in Area (sf)
Impervious	2,445	14,380	11,935
Gravel / pervious pavers	3,715	2,485	(1,230)
TOTAL	6,160	16,865	10,705

Required Water Quality Volume is calculated by applying the following equation:

Required Water Quality Volume, $WQV = D \times I$

Where, D = *Depth Factor, 0.5"* I = *Impervious Area*

Provided water quality volume is the storage provided within the dry well and the FocalPoint biofiltration system. **Table 2** summarizes the water quality volume required and provided for the site.

Table 2. Required and Provided WQv

Increase in Impervious Area (sf)	Water Quality Volume Required on increase (cf)	Water Quality Volume Provided in all facilities* (cf)
10,705	446	477

- WQv is provided within the Focal Point system (410 cu. ft) and within the dry well (67 cu. ft.)

The water quality volume provided exceeds the water quality volume required on the increase in impervious area.

TSS removal for the runoff from the driveway/parking areas is provided within the FocalPoint which is conveyed by sheet flow off the driveway. A portion of the driveway at the Northampton Road access is not tributary to the FocalPoint because of the lower grade in this area. This discharge is considered de minimis meeting the requirements of the MA Stormwater Management Standards. The weighted average method is used to show that the 80% TSS removal rate is achieved for the driveway and parking areas (see **Table 3**).

Table 3. Proposed Impervious Areas and TSS Removal

	Area (sf)	% TSS Removal
Driveway to Focal Point	9,570	91
Driveway not tributary	1,010	0
TOTAL	10,580	82.3

Roof runoff is directed through downspouts and headers to a dry well on the back of the building and the detention area on the front.

DESIGN WORKSHEET

FOCALPOINT

MASSACHUSETTS DEP/CONSERVATION COMMISSION

1. **Determine FocalPoint bed area (minimum 174 sf/acre of impervious area - ex: 0.2 acres = 35 sf)**
   See step 2 to determine if minimum size is appropriate.
   - Tributary impervious area: = 0.206 ac **(A)**
   - Tributary pervious area: = 0.109 ac **(B)**
   - Minimum FocalPoint bed area required: **= ((A x 1.0) + (B x 0.4)) * 174** = _____ sf
   - FocalPoint bed area provided: = 44 sf
   - Dimensions of proposed FocalPoint: = 4 ft x 11 ft

2. **Model a Type II & III 24-hr rainfall event that generates the water quality volume to demonstrate that the entire storm volume is treated prior to activation of the overflow (typically set at 6 - 12 in above the mulch). Note: a 1.2 - 1.3 in rainfall event usually generates 1.0 in of runoff.**
   Contact ACF for a sample HydroCAD node.
   - Water quality volume (WQv) goal: = 375 ft^3
   - Type II & III 24-hr rainfall depth to generate WQv: = 1 in
   - Temporary storage depth provided: = 4 in (typically 6 - 12 in)
   - Temporary storage volume provided at above depth: = 294 ft^3
   - Peak ponding depth from Type III 24-hr storm event: = 0 in

3. **Size the Harco PVC domed overflow riser.**
   Note: ACF recommends installation of a Fabco domed overflow filter kit for overflow protection.
   - Domed overflow riser diameter: = 12 in
   - Rim elevation of overflow riser: = 271.00 in (typically 6 - 12 in above mulch surface)
   - 6 in invert in elevation from FocalPoint: = 268.25 ft (typically 3 ft below mulch surface)
   - ____ in invert out elevation: = 268.25 in

4. **Provide flood control – peak flow attenuation of major storms - if applicable**
   The treated flow and bypass flow can be routed to a detention system of either an open pond or a subsurface system such as an expanded R-Tank system. Contact ACF Environmental for additional information on designing expanded R-Tank systems.

5. **Prepare a landscape plan for the FocalPoint bed area** ☑

6. **Design review and installation oversight by manufacturer's representative**
   - The design has been reviewed by ACF Environmental ☑
   - Engineer will coordinate installation inspection with ACF Environmental ☑

Contact Rob Woodman - Senior Stormwater Engineer
Phone: 800.448.3636 | Email: rwoodman@acfenv.com

ACF ENVIRONMENTAL

DESIGNING WITH FOCALPOINT IN MASSACHUSETTS

FocalPoint (High Performance Modular Biofiltration System) meets the Massachusetts DEP water quality treatment guidelines for Proprietary Stormwater BMPS. TAPE level third party field testing has been performed to meet the "evaluation of proprietary stormwater systems" criteria in Chapter 4 of the Massachusetts Stormwater Handbook.

SIZING CRITERIA SUMMARY

- The surface area of the media within FocalPoint must be a minimum of 174 sf per 1.0 acre of impervious area (26 sf per 0.15 acres). The thickness of the media is to be no less than 1.5 ft (18 in).
- The system must be modelled in HydroCAD (or similar TR-55 modeling software) to demonstrate that the entire volume of a Type III 24-hr storm is treated prior to activation of the bypass/overflow (typically set at 6 - 12 in above the mulch surface). Note: A 1.20 - 1.30 in rainfall event typically generates 1.0 in of runoff.
- The R-Tank modular underdrain can be expanded beyond the footprint of the FocalPoint media bed to meet recharge requirements and peak flowrate control from major storm events.

FOCALPOINT SYSTEMS:

FOCALPOINT ACCESSORIES:

Pretreatment - Rain Guardian Turret

Pretreatment - Rain Guardian Foxhole

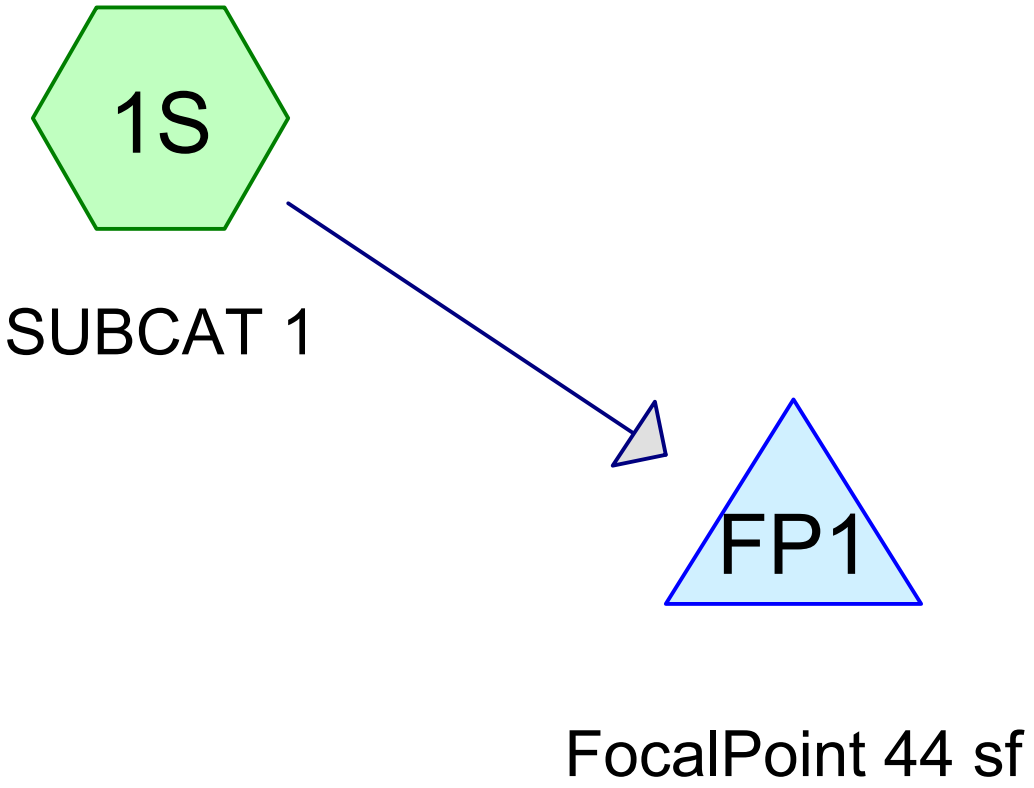
Pretreatment - PreTx

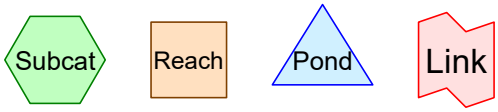
Bypass protection - Domed overflow with filter insert

For additional information please visit: www.acfenvironmental.com

Contact Rob Woodman - Senior Stormwater Engineer
Cell: 207.272.4431 | Email: rwoodman@acfenv.com

ACF ENVIRONMENTAL





Routing Diagram for FocalPoint Sample Node Type III AMERST SRC
Prepared by Berkshire Design Group, Printed 5/8/2020
HydroCAD® 10.00-24 s/n 10759 © 2018 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
4,730	79	50-75% Grass cover, Fair, HSG C (1S)
2,355	96	grass pavers (1S)
6,615	98	impervious (1S)
13,700	**91**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
4,730	HSG C	1S
0	HSG D	
8,970	Other	1S
13,700		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
0	0	4,730	0	0	4,730	50-75% Grass cover, Fair	
0	0	0	0	2,355	2,355	grass pavers	
0	0	0	0	6,615	6,615	impervious	
0	**0**	**4,730**	**0**	**8,970**	**13,700**	**TOTAL AREA**	

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: SUBCAT1 Runoff Area=13,700 sf 48.28% Impervious Runoff Depth=0.36"
Tc=5.0 min CN=91 Runoff=0.13 cfs 410 cf

Pond FP1: FocalPoint44 sf Peak Elev=269.60' Storage=9 cf Inflow=0.13 cfs 410 cf
Primary=0.10 cfs 410 cf Secondary=0.00 cfs 0 cf Outflow=0.10 cfs 410 cf

Total Runoff Area = 13,700 sf Runoff Volume = 410 cf Average Runoff Depth = 0.36"
51.72% Pervious = 7,085 sf 48.28% Impervious = 6,615 sf

Summary for Subcatchment 1S: SUBCAT 1

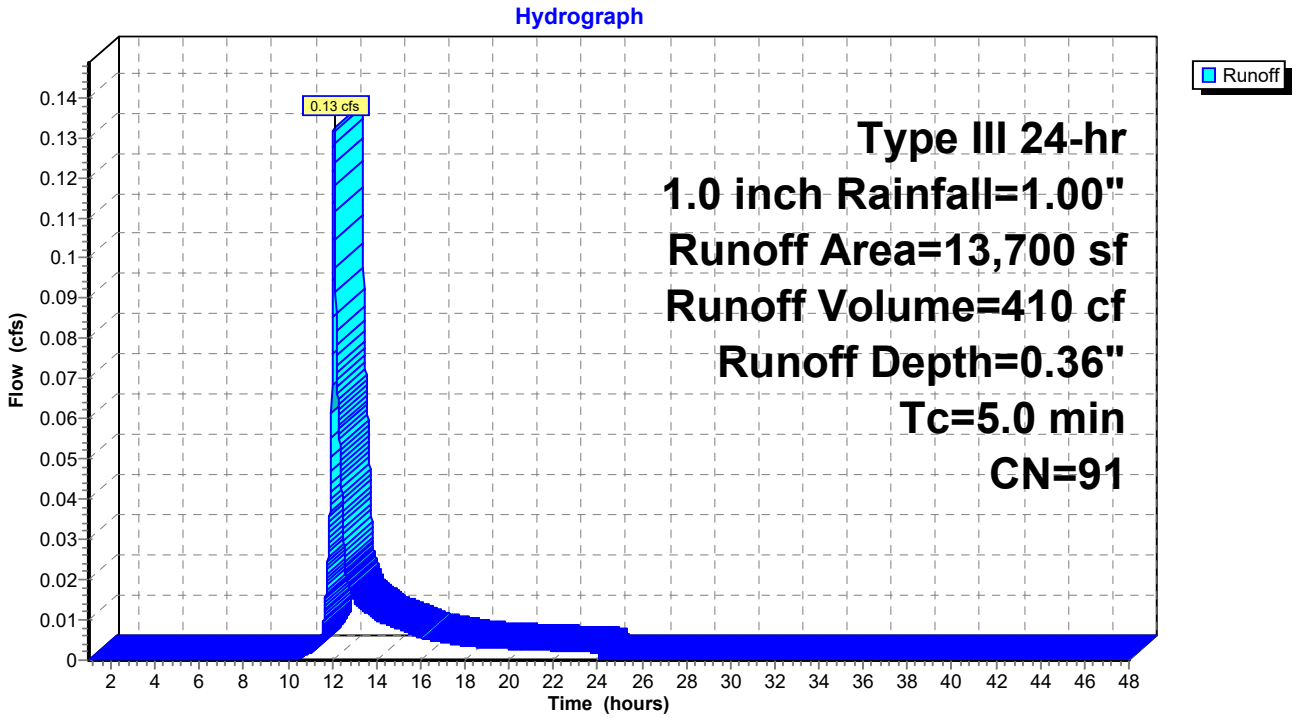
Runoff = 0.13 cfs @ 12.08 hrs, Volume= 410 cf, Depth= 0.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 1.0 inch Rainfall=1.00"

	Area (sf)	CN	Description
*	6,615	98	impervious
	4,730	79	50-75% Grass cover, Fair, HSG C
*	2,355	96	grass pavers
	13,700	91	Weighted Average
	7,085		51.72% Pervious Area
	6,615		48.28% Impervious Area

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

Subcatchment 1S: SUBCAT 1



Summary for Pond FP1: FocalPoint 44 sf

[42] Hint: Gap in defined storage above volume #1 at 270.66'

Inflow Area =	13,700 sf, 48.28% Impervious, Inflow Depth = 0.36" for 1.0 inch event				
Inflow =	0.13 cfs @	12.08 hrs,	Volume=	410 cf	
Outflow =	0.10 cfs @	12.04 hrs,	Volume=	410 cf,	Atten= 23%, Lag= 0.0 min
Primary =	0.10 cfs @	12.04 hrs,	Volume=	410 cf	
Secondary =	0.00 cfs @	1.00 hrs,	Volume=	0 cf	

Routing by Dyn-Stor-Ind method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 269.60' @ 12.14 hrs Surf.Area= 44 sf Storage= 9 cf

Plug-Flow detention time= 0.3 min calculated for 410 cf (100% of inflow)
Center-of-Mass det. time= 0.3 min (855.1 - 854.8)

Volume	Invert	Avail.Storage	Storage Description
#1	268.58'	18 cf	**4.00'W x 11.00'L x 2.08'H FocalPoint** 92 cf Overall x 20.0% Voids
#2	270.67'	294 cf	**Surface Bowl Area (Prismatic)** Listed below (Recalc) -Impervious
		312 cf	Total Available Storage

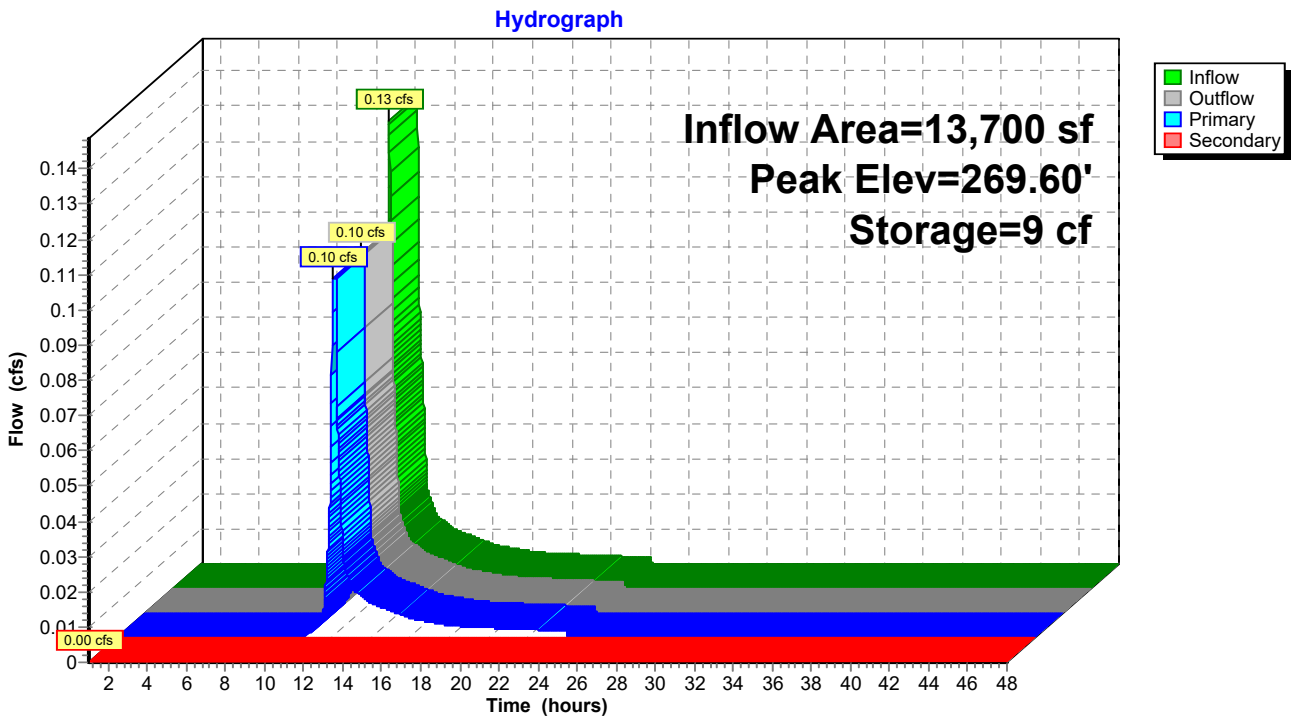
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
270.67	50	0	0
271.00	310	59	59
271.50	627	234	294

Device	Routing	Invert	Outlet Devices
#1	Primary	268.58'	**100.000 in/hr Exfiltration over Surface area** Phase-In= 0.10'
#2	Secondary	271.00'	**12.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.10 cfs @ 12.04 hrs HW=268.71' (Free Discharge)
└─**1=Exfiltration** (Exfiltration Controls 0.10 cfs)

Secondary OutFlow Max=0.00 cfs @ 1.00 hrs HW=268.58' (Free Discharge)
└─**2=Orifice/Grate** (Controls 0.00 cfs)

Pond FP1: FocalPoint 44 sf



Appendix F – Stormwater Management System – Operation & Maintenance Plan

Stormwater Management System
Operation & Maintenance Plan

During Construction

The Contractor shall be responsible for inspection and maintenance during construction.

At all times, siltation fabric fencing, stakes and straw bales/wattles, sufficient to construct a sedimentation control barrier a minimum of 50 feet long, shall be stockpiled on the site in order to repair established barriers which may be damaged or breached.

An inspection of all erosion control and stormwater management systems shall be conducted by the Contractor at least once a week and during all rain storms until the completion of construction. In case of any noted breach or failure, the Contractor shall immediately make appropriate repairs to any erosion control system and notify the engineer of any problems involving stormwater management systems.

A rain storm shall be defined as any of the following:

- A storm in which rain is predicted to last for twelve consecutive hours or more.
- A storm for which a flash flood watch or warning is issued.
- A single storm predicted to have a cumulative rainfall of greater than one-half inch.
- A storm not meeting the previous three thresholds but which would mark a third consecutive day of measurable rainfall.

The Contractor shall also inspect the erosion control and stormwater management systems at times of significant increase in surface water runoff due to rapid thawing when the risk of failure of erosion control measures is elevated.

In such instances as remedial action is necessary, the Contractor shall repair any and all significant deficiencies in erosion control systems within two days.

The Amherst Department of Public Works shall be notified of any significant failure of stormwater management systems or erosion and sediment control measures, and shall be notified of any release of pollutants to a water body (stream, brook, pond, etc.).

The Contractor shall remove the sediment from behind the fence of the sedimentation control barrier when the accumulated sediment has reached one-half of the original installed height of the barrier.

Post-Construction

Stormwater Management System Owner:

Valley Community Development Corporation

Party Responsible for Operation & Maintenance:

Valley Community Development Corporation

Inspection & Maintenance Schedule:

1) *Driveway and Parking Lot Sweeping*

Driveway and parking area sweeping shall take place annually during the spring cleanup.

2) *Yard Drains*

Yard drains should be inspected quarterly and cleaned annually or more often if required. Oil and sediments should be removed and disposed of in accordance with local, state and federal guidelines and regulations. In the case of an oil or bulk pollutant release, the system must be cleaned immediately following the spill and the proper authorities notified.

3) *Dry Wells*

Dry wells should be inspected to ensure that they dewater after rainfall stops. Because of relatively shallow groundwater, dry wells may retain water during times of high groundwater (late winter through spring). Therefore, inspections should occur in late summer/early fall. Water levels should be observed through the observation port in the top of the dry wells after an intense rainfall. Water should fully infiltrate within 72 hours after rainfall stops. If water does not fully infiltrate an engineer or other competent professional should be engaged for further investigation.

4) *Gravel Diaphragm*

Gravel diaphragm shall be inspected annually for sediment buildup and evidence of bypassing. Apron shall be cleaned by removing and replacing stone and removing any sediment. Stone may be washed and re-used. Sediment shall be removed and disposed of in accordance with local, state and federal guidelines and regulations. Inspections shall identify any damage or signs of erosion within and adjacent to diaphragm, which shall be repaired immediately. It is recommended that sediment removal be performed after the completion of the spring snow melt.

5) *Stormwater Detention Areas*

The Amherst SRO site includes a stormwater detention area with an engineered outlet structure. Detention areas should be mowed at least once per year but may be mowed more often at the discretion of the property owner. Trees may be planted within the detention areas.

6) Outlet Control Structures

The outlet control structures for the stormwater detention area shall be inspected quarterly and after large storms (greater than 2" in 24-hours) to ensure no debris is prohibiting flow through the outlet orifices in the outlet box and the culvert. Inspection should confirm that there is no standing water in the structure, that the bottom is visible and that the culvert is free of debris. All materials removed from the outlet control structure and culvert shall be disposed of in accordance with local, state, and federal guidelines and regulations.

7) Storm Drain Outlet Protection

The integrity of riprap outlet armoring shall be inspected twice per year for signs of dislodged stones or erosion at the perimeter of the apron. Any damage shall be repaired to return the apron to the condition shown in the contract documents. While some growth of herbaceous plants is expected, regular trimming is required to prevent growth from restricting the free flow of water across the apron.

8) Level Lip Spreader

Inspect level lip spreaders multiple times in the first few months after construction and twice per year thereafter. Clean out any debris or sediment as needed. Note and repair any erosion or low spots at the ends of the curb of the spreader. It is recommended that sediment removal, if any, be performed after the completion of the spring snow melt.

9) FocalPoint Biofiltration System

See attached.

FocalPoint

BIOFILTRATION SYSTEMS

HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM (HPMBS)

Operations & Maintenance

ACF ENVIRONMENTAL

Customer Focused, Environmentally Committed

GENERAL DESCRIPTION

The following general specifications describe the general operations and maintenance requirements for the FocalPoint® High Performance Modular Biofiltration System (HPMBS). The system utilizes physical, chemical and biological mechanisms of a soil, plant and microbe complex to remove pollutants typically found in urban stormwater runoff. The treatment system is a fully equipped, modular, constructed in place system designed to treat contaminated runoff.

Stormwater enters the FocalPoint® HPMBS, is filtered by the High Flow Biofiltration Media and passes through to the underdrain/storage system where the treated water is detained, retained or infiltrated to sub-soils, prior to discharge to the storm sewer system of any remaining flow.

Higher flows bypass the FocalPoint® HPMBS via a downstream inlet or other overflow conveyance. Maintenance is a simple, inexpensive and safe operation that does not require confined space entry, pumping or vacuum equipment, or specialized tools. Properly trained landscape personnel can effectively maintain FocalPoint® HPMBS by following instructions in this manual.

BASIC OPERATIONS

FocalPoint® is a modular, high performance biofiltration system that often works in tandem with other integrated management practices (IMP). Contaminated stormwater runoff enters the biofiltration bed through a conveyance swale, planter box, or directly through a curb cut or false inlet. Energy is dissipated by a rock or vegetative dissipation device and is absorbed by a 3-inch layer of aged, double shredded hardwood mulch, with fines removed, (when specified) on the surface of the biofiltration media.

As the water passes through the mulch layer, most of the larger sediment particles and heavy metals are removed through sedimentation and chemical reactions with the organic material in the mulch. Water passes through the biofiltration media where the finer particles are removed and numerous chemical reactions take place to immobilize and capture pollutants in the soil media.

The cleansed water passes into the underdrain/storage system and remaining flows are directed to a storm sewer system or other appropriate discharge point. Once the pollutants are in the soil, bacteria begin to break down and metabolize the materials and the plants begin to uptake and metabolize the pollutants. Some pollutants such as heavy metals, which are chemically bound to organic particles in the mulch, are released over time as the organic matter decomposes to release the metals to the feeder roots of the plants and the cells of the bacteria in the soil where they remain and are recycled. Other pollutants such as phosphorus are chemically bound to the soil particles and released slowly back to the plants and bacteria and used in their metabolic processes. Nitrogen goes through a variety of very complex biochemical processes where it can ultimately end up in the plant/bacteria biomass, turned to nitrogen gas or dissolves back into the water column as nitrates depending on soil temperature, pH and the availability of oxygen. The pollutants ultimately are retained in the mulch, soil and biomass with some passing out of the system into the air or back into the water.

DESIGN AND INSTALLATION

Each project presents different scopes for the use of FocalPoint® HPMBS. To ensure the safe and specified function of this stormwater BMP, Convergent Water Technologies and/or its Value Added Resellers (VAR) review each application before supply. Information and design assistance is available to the design engineer during the planning process. Correct FocalPoint® sizing is essential to optimum performance. The engineer shall submit calculations for approval by the local jurisdiction when required. The contractor and/or VAR is responsible for the correct installation of FocalPoint® HPMBS units as described in approved plans. A comprehensive installation manual is available at www.convergentwater.com.

MAINTENANCE

Why Maintain?

All stormwater treatment systems require maintenance for effective operation. This necessity is often incorporated in your property's permitting process as a legally binding BMP maintenance agreement. Other reasons for maintenance include:

- Avoid legal challenges from your jurisdiction's maintenance enforcement program.
- Prolong the lifespan of your FocalPoint® HPMBS.
- Avoid costly repairs.
- Help reduce pollutant loads leaving your property.

Simple maintenance of the FocalPoint® HPMBS is required to continue effective pollutant removal from stormwater runoff before any discharge into downstream waters. This procedure will also extend the longevity of the living biofiltration system. The unit will recycle and accumulate pollutants within the biomass, but may also subjected to other materials entering the surface of the system. This may include trash, silt and leaves etc. which will be contained above the mulch and/or biofiltration media layer. Too much silt may inhibit the FocalPoint's® HPMBS flow rate, which is a primary reason for system maintenance. Removal of accumulated silt/sediment and/or replacement of the mulch layer (when specified), is an important activity that prevents over accumulation of such silt/sediment.

When to Maintain?

Convergent Water Technologies and/or its VAR includes a 1-year maintenance plan with each system purchased. Annual included maintenance consists of two (2) scheduled maintenance visits. Additional maintenance may be necessary depending on sediment and trash loading (by Owner or at additional cost). The start of the maintenance plan begins when the system is activated for full operation. Full operation is defined as when the site is appropriately stabilized, the unit is installed and activated (by VAR), i.e., when mulch (if specified) and plantings are added.

Activation should be avoided until the site is fully stabilized (full landscaping, grass cover, final paving and street sweeping completed). Maintenance visits are scheduled seasonally; the spring visit aims to clean up after winter loads including salts and sands. The fall visit helps the system by removing excessive leaf litter.

A first inspection to determine if maintenance is necessary should be performed at least twice annually after storm events of greater than (1) one inch total depth (subject to regional climate). Please refer to the maintenance checklist for specific conditions that indicate if maintenance is necessary.

It has been found that in regions which receive between 30-50 inches of annual rainfall, (2) two visits are generally required. Regions with less rainfall often only require (1) one visit per annum. Varying land uses can affect maintenance frequency.

Some sites may be subjected to extreme sediment or trash loads, requiring more frequent maintenance visits. This is the reason for detailed notes of maintenance actions per unit, helping the VAR/Maintenance contractor and Owner predict future maintenance frequencies, reflecting individual site conditions.

Owners must promptly notify the VAR/Maintenance contractor of any damage to the plant(s), which constitute(s) an integral part of the biofiltration technology. Owners should also advise other landscape or maintenance contractors to leave all maintenance of the FocalPoint® HPMBS to the VAR/Maintenance contractor (i.e. no pruning or fertilizing).

EXCLUSION OF SERVICES

It is the responsibility of the owner to provide adequate irrigation when necessary to the plant(s) in the FocalPoint® HPMBS.

Clean up due to major contamination such as oils, chemicals, toxic spills, etc. will result in additional costs and are not covered under the VAR/Maintenance contractor maintenance contract. Should a major contamination event occur, the Owner must block off the outlet pipe of the FocalPoint® (where the cleaned runoff drains to, such as drop-inlet) and block off the point where water enters of the FocalPoint® HPMBS. The VAR/Maintenance contractor should be informed immediately.

MAINTENANCE VISIT SUMMARY

Each maintenance visit consists of the following simple tasks (detailed instructions below).

1. Inspection of FocalPoint® HPMBS and surrounding area
2. Removal of debris, trash and mulch
3. Mulch replacement
4. Plant health evaluation (including measurements) and pruning or replacement as necessary
5. Clean area around FocalPoint® HPMBS
6. Complete paperwork, including date stamped photos of the tasks listed above.

MAINTENANCE TOOLS, SAFETY EQUIPMENT AND SUPPLIES

Ideal tools include: camera, bucket, shovel, broom, pruners, hoe/rake, and tape measure. Appropriate Personal Protective Equipment (PPE) should be used in accordance with local or company procedures. This may include impervious gloves where the type of trash is unknown, high visibility clothing and barricades when working in close proximity to traffic and also safety hats and shoes.

Inspection of FocalPoint® HPMBS and surrounding area

Record individual unit before maintenance with photograph (numbered). Record on Maintenance Report (see example in this document) the following:

- Standing Water yes | no
- Is Bypass Inlet Clear? yes | no
- Damage to HPMBS System yes | no
- to Overflow conveyance yes | no

Removal of Silt / Sediment / Clay

Dig out silt (if any) and mulch and remove trash & foreign items.

- Silt / Clay Found? yes | no
- Cups / Bags Found? yes | no
- Leaves? yes | no
- Volume of material removed _____ (volume or weight)

Removal of debris, trash and mulch

After removal of mulch and debris, measure distance from the top of the FocalPoint® HPMBS engineered media soil to the flow line elevation of the adjacent overflow conveyance. If this distance is greater than that specified on the plans (typ. 6" - 12"), add media (not top soil or other) to recharge to the distance specified.

- Distance to media surface to flow line of overflow conveyance (inches) _____
- # of Buckets of Media Added _____

Mulch Replacement

Most maintenance visits require only replacement mulch (if utilized) which must be, aged, double shredded hardwood mulch with fines removed. For smaller projects, one cubic foot of mulch will cover four square feet of biofiltration bed, and for larger projects, one cubic yard of mulch will cover 108 square feet of biofiltration bed. Some visits may require additional FocalPoint® HPMBS engineered soil media available from the VAR/Contractor.

- Add double shredded, aged hardwood mulch which has been screened to remove fines, evenly across the entire biofiltration media bed to a depth of 3".
- Clean accumulated sediment from energy dissipation system at the inlet to the FocalPoint® HPMBS to allow for entry of trash during a storm event.

Plant health evaluation and pruning or replacement as necessary

Examine the plant's health and replace if dead or dying.
Prune as necessary to encourage growth in the correct directions

- Height above Grate (feet) _____
- Width at Widest point (feet) _____
- Health alive | dead
- Damage to Plant yes | no

Clean area around FocalPoint® HPMBS

- Clean area around unit and remove all refuse to be disposed of appropriately.

Complete paperwork

- Deliver Maintenance Report and photographs as appropriate.
- Some jurisdictions may require submission of maintenance reports in accordance with approvals.
- It is the responsibility of the Owner to comply with local regulations.

FocalPoint

BIOFILTRATION SYSTEM

FocalPoint Warranty

Seller warrants goods sold hereunder against defects in materials and workmanship only, for a period of (1) year from date the Seller activates the system into service. Seller makes no other warranties, express or implied.

Seller's liability hereunder shall be conditioned upon the Buyer's installation, maintenance, and service of the goods in strict compliance with the written instructions and specifications provided by the Seller. Any deviation from Seller's instructions and specifications or any abuse or neglect shall void warranties.

In the event of any claim upon Seller's warranty, the burden shall be upon the Buyer to prove strict compliance with all instructions and specifications provided by the Seller.

Seller's liability hereunder shall be limited only to the cost or replacement of the goods. Buyer agrees that Seller shall not be liable for any consequential losses arising from the purchase, installation, and/or use of the goods.

Maintenance Checklist

Element	Problem	What To Check	Should Exist	Action
Inlet	Excessive sediment or trash accumulation	Accumulation of sediment or trash impair free flow of water into FocalPoint	Inlet free of obstructions allowing free flow into FocalPoint System	Sediments or trash should be removed
Mulch Cover	Trash and floatable debris accumulation	Excessive trash or debris accumulation.	Minimal trash or other debris on mulch cover	Trash and debris should be removed and mulch cover raked level. Ensure that bark nugget
Mulch Cover	Ponding of water on mulch cover	Ponding in unit could be indicative of clogging due to excessive fine sediment accumulation or spill of petroleum oils	Stormwater should drain freely and evenly over mulch cover.	Contact VAR for advice.
Plants	Plants not growing, or in poor condition	Soil/mulch too wet, evidence of spill. Pest infestation. Vandalism to plants.	Plants should be healthy and pest free.	Contact VAR for advice.
Plants	Plant growth excessive	Plants should be appropriate to the species and location of FocalPoint		Trim/prune plants in accordance with typical landscaping and

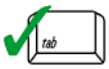
Appendix G – Massachusetts DEP Stormwater Checklist

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

A. Introduction

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.[1] This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8[2]
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification

---

[1] The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

[2] For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.

B. Stormwater Checklist and Certification

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands Program

Checklist for Stormwater Report

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature

Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

☐ New development

☐ Redevelopment

☒ Mix of New Development and Redevelopment

Checklist (continued)

Checklist for Stormwater Report

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- ☒ No disturbance to any Wetland Resource Areas
- ☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- ☐ Reduced Impervious Area (Redevelopment Only)
- ☐ Minimizing disturbance to existing trees and shrubs
- ☐ LID Site Design Credit Requested:
  - ☐ Credit 1
  - ☐ Credit 2
  - ☐ Credit 3
- ☒ Use of "country drainage" versus curb and gutter conveyance and pipe
- ☒ Bioretention Cells (includes Rain Gardens)
- ☐ Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- ☐ Treebox Filter
- ☐ Water Quality Swale
- ☒ Grass Channel
- ☐ Green Roof
- ☐ Other (describe): _____

Standard 1: No New Untreated Discharges

- ☐ No new untreated discharges
- ☒ Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- ☒ Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.

Checklist (continued)

Checklist for Stormwater Report

Standard 2: Peak Rate Attenuation

☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.

☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.

☒ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

☒ Soil Analysis provided.

☒ Required Recharge Volume calculation provided.

☐ Required Recharge volume reduced through use of the LID site Design Credits.

☒ Sizing the infiltration, BMPs is based on the following method: Check the method used.

☒ Static ☐ Simple Dynamic ☐ Dynamic Field[1]

☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.

☒ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.

☒ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.

☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:

- ☐ Site is comprised solely of C and D soils and/or bedrock at the land surface
- ☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
- ☐ Solid Waste Landfill pursuant to 310 CMR 19.000
- ☐ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.

☒ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.

☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

---

[1] 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.

Checklist (continued)

Checklist for Stormwater Report

Standard 3: Recharge (continued)

☐ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.

☐ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
- Provisions for storing materials and waste products inside or under cover;
- Vehicle washing controls;
- Requirements for routine inspections and maintenance of stormwater BMPs;
- Spill prevention and response plans;
- Provisions for maintenance of lawns, gardens, and other landscaped areas;
- Requirements for storage and use of fertilizers, herbicides, and pesticides;
- Pet waste management provisions;
- Provisions for operation and management of septic systems;
- Provisions for solid waste management;
- Snow disposal and plowing plans relative to Wetland Resource Areas;
- Winter Road Salt and/or Sand Use and Storage restrictions;
- Street sweeping schedules;
- Provisions for prevention of illicit discharges to the stormwater management system;
- Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
- Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
- List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.

☐ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.

☐ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:

- ☐ is within the Zone II or Interim Wellhead Protection Area
- ☐ is near or to other critical areas
- ☐ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
- ☐ involves runoff from land uses with higher potential pollutant loads.

☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.

☒ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.

Checklist (continued)

Checklist for Stormwater Report

Standard 4: Water Quality (continued)

☒ The BMP is sized (and calculations provided) based on:

- ☒ The ½" or 1" Water Quality Volume or
- ☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.

☒ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.

☐ A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.

☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted ***prior to*** the discharge of stormwater to the post-construction stormwater BMPs.

☐ The NPDES Multi-Sector General Permit does ***not*** cover the land use.

☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.

☐ All exposure has been eliminated.

☐ All exposure has ***not*** been eliminated and all BMPs selected are on MassDEP LUHPPL list.

☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

☐ The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.

☐ Critical areas and BMPs are identified in the Stormwater Report.

Checklist (continued)

Checklist for Stormwater Report

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

☒ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:

- ☐ Limited Project
- ☐ Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
- ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
- ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
- ☐ Bike Path and/or Foot Path
- ☐ Redevelopment Project
- ☒ Redevelopment portion of mix of new and redevelopment.

☐ Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.

☐ The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
- Construction Period Operation and Maintenance Plan;
- Names of Persons or Entity Responsible for Plan Compliance;
- Construction Period Pollution Prevention Measures;
- Erosion and Sedimentation Control Plan Drawings;
- Detail drawings and specifications for erosion control BMPs, including sizing calculations;
- Vegetation Planning;
- Site Development Plan;
- Construction Sequencing Plan;
- Sequencing of Erosion and Sedimentation Controls;
- Operation and Maintenance of Erosion and Sedimentation Controls;
- Inspection Schedule;
- Maintenance Schedule;
- Inspection and Maintenance Log Form.

☐ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.

Checklist (continued)

Checklist for Stormwater Report

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has ***not*** been included in the Stormwater Report but will be submitted ***before*** land disturbance begins.

☒ The project is ***not*** covered by a NPDES Construction General Permit.

☐ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.

☐ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

☒ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:

- ☒ Name of the stormwater management system owners;
- ☒ Party responsible for operation and maintenance;
- ☒ Schedule for implementation of routine and non-routine maintenance tasks;
- ☐ Plan showing the location of all stormwater BMPs maintenance access areas;
- ☐ Description and delineation of public safety features;
- ☐ Estimated operation and maintenance budget; and
- ☐ Operation and Maintenance Log Form.

☐ The responsible party is ***not*** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:

- ☐ A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
- ☐ A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

☐ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;

☐ An Illicit Discharge Compliance Statement is attached;

☒ NO Illicit Discharge Compliance Statement is attached but will be submitted ***prior to*** the discharge of any stormwater to post-construction BMPs.

Town of AMHERST Massachusetts

TOWN HALL • 4 BOLTWOOD AVENUE • AMHERST, MA 01002-2302

MANAGEMENT PLAN FORM

The Rules and Regulations of both the Planning Board and the Zoning Board of Appeals require that applicants submit a management plan as part of the process for most applications.

APPLICANT INFORMATION:

Applicant: Valley Community Development Corporation

Address: 256 Pleasant Street, Suite A
Northampton, MA 01060

Telephone: 413-586-5855, ext 100

Email: lb@valleycdc.com

Owner: Same as applicant
(if different from applicant)

Address: _____

Telephone: _____

Email: _____

PROJECT INFORMATION:

Project Address and Description:

132 Northampton Road
Construction of a new 2 1/2 story residential multi-family building containing 28 small studio apartments with common areas, all reserved for low and moderate income single person households earning at or below 80% of the Area Median Income.

Amendment to previously approved management plan?

☐ yes ☑ no

INFORMATION REQUIRED FOR ALL PROJECTS:
(Attach additional sheets as necessary)

Trash and recycling, including storage location, enclosure or screening, with frequency of pickup and name of hauling company, and responsible party to contact in case of complaint:

Please see Management Plan Narrative attached.

Parking, including size and number of spaces, location, screening, provision for handicapped spaces:

Lighting, including hours of illumination by location, types and wattage of fixtures:

Signage, including location, size, materials, and any illumination:

_____
_____
_____
_____
_____

Landscape Maintenance, including annual schedule of watering, fertilizing, mowing, pruning, leaf pick-up, and so forth, and maintenance and replacement schedule of site furnishings:

_____
_____
_____
_____
_____

Snow Removal, including name of contractor:
(Please see Article IV of the Town Bylaw for regulations regarding the removal of snow and ice from sidewalks)

_____
_____
_____
_____
_____

ADDITIONAL INFORMATION FOR SPECIFIC PROJECT TYPES (ATTACH ADDITIONAL SHEETS):

ADDITIONAL INFORMATION REQUIRED FOR RESTAURANTS:
Type of menu
Number of seats (indoor and outdoor)
Is any outdoor dining on public or private land?
Number of employees
Hours of operation
Alcohol
Plans for delivery and/or take-out service
Live or prerecorded entertainment
Noise management of patrons, music, fans and HVAC
Management of patrons gathering outdoors on property
Odor mitigation measures
Waste kitchen oil management
Litter control
Deliveries to or from the site

ADDITIONAL INFORMATION REQUIRED FOR PERMIT RENEWALS:
Special permit #
Date of issuance
Any changes to the proposal
Any changes to the neighborhood

ADDITIONAL INFORMATION REQUIRED FOR APARTMENTS:
Number of units, existing and proposed
Number of bedrooms, existing and proposed
Number of tenants
Owner-occupied?
On-site manager?
Copy of standard lease
Noise management of tenants, parties, music, and any outdoor HVAC equipment
Material, equipment, and large household goods storage
On-site recreational facilities

ADDITIONAL INFORMATION REQUIRED FOR HOME OCCUPATIONS:
Type of business
Number of Employees
Hours of operation
Deliveries to the site
Equipment used/ Noise generated
Material and equipment storage

MANAGEMENT PLAN NARRATIVE

Amherst Studio Housing – 132 Northampton Road, Amherst

Overview

The existing property is .88 acres, improved by one 4-bedroom single-family house, which is currently vacant. The site is not in an historic district and the existing house is not listed as historically significant as an individual nor as a contributing structure. There is currently provision for approximately 5-6 vehicles.

The parcel is developed and mostly cleared. It slopes slightly east to west. The building is served by public water and sewer. The current house is situated to the far rear of the parcel, approximately 8' from the rear lot line.

Valley Community Development ("Valley") proposes to demolish the existing house and construct a single new building. This building (as presented on accompanying plans) will have 2 ½ stories, with 3 levels of living area (including the basement level). It will contain 28 small, studio rental apartments suitable for single-person occupancy. These are considered 0-bedroom units. The property is expected to house a total of 28 adult tenants.

The property will not be owner-occupied. It will have part-time on-site property management, approximately 20 hours per week. Because this housing incorporates supportive services, it will also have a Resident Services Coordinator on site for 27.5 – 30 hours per week. Valley provided a draft Supportive Services Plan within its PEL application and this is posted on the Town website. All units will meet the Town's definition of "affordable"—which means they will be reserved for households earning at or below 80% of the Area Median Income and rents will be restricted so as to be affordable to low and moderate income households.

Valley has owned and managed affordable rental housing since 1990, including 11 affordable family rental units in Amherst since 2008. Since 2015, Valley has contracted with Housing Management Resources (HMR) to provide professional property management services to Valley's portfolio of almost 100 rental apartments. HMR is a multi-state property management company, established in 2001, with a service portfolio of over 8,000 rental units, many of them affordable rentals. In order to effectively manage Valley's local units, HMR established a property management office in Florence, MA. The development proposed at 132 Northampton Road includes a dedicated office for property management staff, who will use this as their home-base to manage units at 132 Northampton Road as well as 11 units located on Main Street.

HMR maintains a 24 hour / 7 day per week call service for property emergencies.

Sustainability and Energy Efficiency

Valley and its design team are working to create a near zero net property and we hope to eliminate use of on-site fossil fuels for operations. HVAC systems and hot water production are proposed to be electric. Valley will seek Passive House certification for the property, which involves an extremely well insulated building envelope as well as highly energy efficient mechanical operations. Valley plans to include PV solar panels to the extent feasible.

Sustainable materials, such as cement board siding, will be incorporated whenever feasible. Indoor air quality will be a priority and plans include a mechanical fresh air ventilation system that will serve each unit and common areas. Zero VOC paints and building materials free of formaldehydes and other unhealthy off-gasses will be specified.

Trash and recycling, including storage location, enclosure or screening, with frequency of pickup and name of hauling company, and responsible party to contact in case of complaint

Valley expects at least weekly pick-up of trash and recycling. As per plan, a dumpster area with a full cedar fence enclosure is proposed. The dumpster area is sized to include space for a trash bin and a single-stream recycling bin. The site plan provides turning area for the dumpster truck, so that it can enter the driveway, turn, pick up trash, and exit front ways onto Northampton Road. HMR will be responsible for procuring and contracting with a local trash hauler and will be the responsible party to contact in case of complaint. Typically trash pickup contracts are bid every year or every few years in order to obtain competitive pricing for this service.

Parking, including size and number of spaces, location, screening, provision for handicapped spaces

Based upon historic demand for parking spaces at similar properties, Valley's goal for parking at this development was between .25 and .5 spaces / unit, or between 7-14 spaces for the proposed 28 units. (16) spaces (.57 spaces / unit) are currently proposed. There are two handicapped spaces located near the main walkway to the building as shown on the site plan. Screening for parking is provided by a variety of trees and shrubs. See landscaping plan for details.

Because it is possible that not all of the provided parking will be needed on a daily basis, approximately half of the parking area is proposed to be grass-crete, a pervious parking material that creates more green space on site, and reduces the amount of pavement.

Pathways are also proposed to be made of a pervious material.

Please also see the attached Parking Study for more information about the adequacy of proposed on-site parking.

This application also includes a Traffic Report that calculates the anticipated trip generation for the proposed development and quantifies impact on surrounding traffic conditions.

Lighting, including hours of illumination by location, types and wattage of fixtures

The goal for site lighting is to provide warm, low levels of light. Color temperature of fixtures shall be 3,000K or less (warmer color range). All lighting fixtures will be full cut-off and dark sky compliant. All fixtures will be low energy LED lighting. Wherever feasible, fixtures will solar powered (pathway lights). The attached photometric plan demonstrates zero light spill onto abutting properties, as well as a relatively low foot candle lighting average over the site, with no particular "hot spots."

Pathway lights are dimmable and motion sensitive, so they will only illuminate when someone is using the pathway. Care has been taken to light the pathway from the building to the designated smoking area.

Signage, including location, size, materials, and any illumination

We propose standard street signage (street number) at the junction of the driveway and Northampton Road for public safety purposes. We do not propose any illuminated or free standing signage.

Landscape Maintenance, including annual schedule of watering, fertilizing, mowing, pruning, leaf pick-up, and so forth, and maintenance and replacement schedule of site furnishings

As with trash hauling, HMR will procure, contract with, and manage a third party landscape company. Their scope of work will include a spring clean-up (pick up vegetative debris, pruning, fertilizing); mowing weekly during the growing season; and a fall-clean (leaf removal, etc.). HMR will also coordinate any other landscaping needs, for example, removing a dead tree or dropped limbs.

Use of native, non-invasive, and drought tolerant plantings will reduce the need for watering. Except in extremely dry conditions, we do not expect to water the landscaping. Should tenants plant garden areas, water will be provided through a hose from a nearby exterior hose bib.

Organic and / or environmentally sensitive fertilizers and pest / weed control methods will be used, as needed.

Snow Removal, including name of contractor

HMR will procure, contract with, and manage a third party snow removal contractor. Scope of work will include plowing the driveway, vehicle turn-around, and parking areas; clearing snow from walkways on the property, as well as the sidewalk along Northampton Road (in keeping with local rules and regulations); applying sand and de-icer, as needed, to keep vehicular ways and walkways safe.

Given the size of the parcel and amount of green space, we expect that cleared snow can be managed on site. If this is not possible, in the event of a major storm, surplus snow that cannot be stored on site will be trucked off-site.

Small items for use by property maintenance staff (snow shovel and bucket of sand for occasional use) will be stored in a small shed adjacent to the dumpster enclosure.

On-Site Recreational Facilities

In addition to indoor common areas, the property will incorporate an outdoor patio for resident use. A covered bicycle rack will be provided. Potential gardening areas are designated on the site plan; their development and use will be dependent upon the level of resident interest in gardening.

Designated Smoking Area

All indoor areas at this property will be smoke-free, as will the majority of the site. Valley is proposing a designated smoking area on site because we understand that some tenants will smoke. Designating the entire property as non-smoking can result in tenants smoking at the nearest location to the property—the front sidewalk—creating an undesirable situation for pedestrians using the sidewalk.

Valley in no way encourages tenants to smoke and will offer smoking cessation support to those tenants who wish to reduce or quit smoking.

Originally designed as a simple bench, the designated smoking area has been enhanced to include a covered structure. (Community feedback was that we provide cover or shelter for this area.)

Outdoor HVAC Equipment

Preliminary HVAC plans call for air source heat pump (aka “mini split”) or Variable Refrigerant Flow (VRF) heating and cooling. Both systems rely upon air condensers which must be located outside. Due to the small size of the proposed units, we anticipate that multiple apartments will be served by a single condenser. The site plan shows proposed locations for these condensers. Other mechanical equipment is expected to be located in the building interior (including Energy Recovery Ventilation equipment, hot water heating equipment, fire safety equipment, electrical equipment, etc.). Valley plans to include as many PV solar roof panels as will be efficient given the building design and orientation and as budget will permit. These PV solar roof panels are shown in estimated locations on the plan elevations, but final designs have not yet been developed.

Standard Lease

Please see a copy of a sample standard lease as well as House Rules and Regulations. These documents address issues related to noise management. Other sample lease addenda are also provided.

Material, equipment, and large household goods storage

With the exception of outdoor bicycle storage, tenant storage will be limited to closets and cabinets within each apartment.

Property management will have interior storage for attic stock, cleaning, and general maintenance supplies. As mentioned above, they will also have some space within a small outdoor storage shed adjacent to the dumpster enclosure. Should tenants become active in gardening, this shed is sized to accommodate the needs of both property management and gardening equipment.

There will be no large equipment or household goods storage allowed on site. Because most maintenance functions (trash hauling, landscaping, plowing) will be performed by 3rd party contractors, there is no need for large maintenance equipment to be stored on site.

Housing Management Resources
16C North Maple St
Florence, MA 01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

Valley Community Development Corporation

Amherst Studio Apartments
132 Northampton Road, Amherst
SAMPLE LEASE

LEASE made __date_____ by and between Amherst Studio Apts. c/o HMR, 132 Northampton Road, Amherst, MA, Hampshire County, Massachusetts (hereinafter referred to as "the Landlord"), and _____ (hereinafter referred to as "the Tenant").

1. **Apartment Location:** 132 Northampton Road, Unit #__, Amherst, MA 01002

2. **TERMS:** The term of this Lease commence _date_ and end _date_ or until sooner terminated by breach of the terms and conditions of the Lease. The Landlord may terminate the Lease upon giving a thirty (30) day notice to quit for any reason, including non-payment of rent.

3. **RENT:** The total rent is $_____ per month, payable in monthly installments of which is due by tenant on the first day of each and every month of the said term.

4. **SECURITY DEPOSIT:** Upon signing the Lease the Tenant agrees to pay a security deposit equal to one month of the tenant's portion of the rent. Your security deposit is $_____. The security deposit must then be deposited in an escrow account earning the current interest rate. The name and location of the bank and the account number must also be given to the tenant. Failure of a Landlord to furnish this information within thirty (30) days of receipt will entitle the tenant immediate return of said deposit. The security deposit shall be returned to the Tenant in accordance with the Massachusetts General Laws thirty (30) days after termination of this Lease. If the Landlord deducts from the deposit any amount for damage beyond ordinary wear and tear, such deductions must be supported by bills or estimates for repairs and unpaid rent. **SECURITY DEPOSIT SHALL NOT BE USED AS LAST MONTH'S RENT** without specific written consent from the Landlord.

5. **INSPECTION BY TENANT:** The tenant has inspected the Property and accepts the same AS IS. Landlord shall be under no obligation to improve the Property except as provided by law. A Statement of Condition of Property has been issued to the Tenant and is incorporated herein by this reference. Copy of the form of statement is attached hereto.
NOTE: LANDLORD IS NOT RESPONSIBLE FOR LOSS OR THEFT OF TENANT'S VALUABLES.

6. DAMAGES, REPAIRS AND INSPECTION BY LANDLORD: The Tenant agrees to be responsible for any damage caused to the Property by the Tenant ***or any person under the control of the Tenant or in the Property with the consent of the Tenant,*** *reasonable wear and tear excluded.* The Landlord shall have the right to enter and inspect the Property and to make repairs or necessary improvements and to show the Property to prospective tenants. **The Landlord or its representative shall arrange for access with the Tenant in advance so as not to unreasonably disturb the Tenant. In emergencies and to effect urgent repairs, advance notice will not be required.**

EQUAL HOUSING OPPORTUNITY

Housing Management Resources, Inc.
16C North Maple St Florence, MA 01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

7. **HOUSE RULES AND TENANT'S OBLIGATIONS:** The Tenant understands that breaking the following house rules may result in nullification of the Lease and possible eviction. The Tenant agrees, and has separately acknowledged in writing, that breaking rules stated in the ***Tenant Handbook*** (attached to this Lease) may result in nullification of the Lease and possible eviction. Knowing this, the tenant agrees:

a) to use the Property as a residence and not as a business (or storage room) and to maintain the Property in a clean, neat and undamaged condition at all times. No one other than the Tenant named herein shall occupy the Property;

b) to keep the Property in good repair and condition and to pay for damage caused to the Property as provided in paragraph six (6) within five (5) days of presentation of an itemized statement of such damage and the cost of repair; **NOTE:** Resident shall not permit any unusual or objectionable odors to permeate or emanate from the unit;

c) to be liable for any loss or damage to personal property of the Tenant except if damage is caused by the Landlord's gross negligence. The Tenant understands and agrees that it shall be their obligation if they wish to insure their own personal property through renter's or tenant's insurance (available everywhere and not terribly expensive);

d) to place garbage and refuse in proper containers to prevent any unsanitary conditions from arising on the Property;

e) to give prompt notice to the Landlord of any necessary maintenance or repairs in writing or in emergencies by telephone;

f) to make no alteration, addition, repair or improvement in or to the Property without the prior permission of the Landlord in writing (the Landlord agrees not to unreasonably refuse any such request but may impose additional requirements as a precondition to permission). All alterations, additions, repairs or improvements built, constructed or placed on the property, shall, unless otherwise provided by written agreement, become the property of the Landlord and remain on the Property at the expiration or sooner termination of this Lease;

g) to use all appliances and fixtures provided by the Landlord in the proper manner and not to add or relocate any appliances or equipment without prior written permission of the Landlord;

h) to not bring waterbeds or similar furnishings to the property, except upon the express written consent of the Landlord;

i) to expressly respect the rights of others to live in a quiet and peaceful environment;

j) to conserve energy costs through reasonable use of all facilities and utilities;

k) to keep or have on the Property no article or thing of a dangerous, flammable, or explosive character that might unreasonably increase the danger of fire in the Property or that might be considered hazardous or extra-hazardous by any responsible insurance carrier; to keep unit from excessive piling of clutter, boxes, papers/newspapers and other articles which might be deemed dangerous to tenant(s) and a possible fire hazard;

EQUAL HOUSING OPPORTUNITY

Housing Management Resources, Inc.
16C North Maple St Florence, MA 01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

NOTE that: Halls, entryways, stairwells, stairways, attics, basements, backyard, cellars and/or other common areas **are not storage areas** unless so designated in writing. Storage in these areas is not permitted. Personal property placed or left in these areas (or any common area) is not permitted Personal property placed or left in these areas may be disposed of at Landlord's option at Tenant's expense. The Landlord is not responsible for any items left in common areas. **NOTE THAT** personal property or furniture left after tenant moves out of the premises shall be treated as abandoned property and **may** be disposed of by Landlord at Tenant's expense or as Landlord sees fit.

l) to keep no unregistered or unused vehicles/motorcycles stored upon or around the Property. Tenant understands that such vehicles will be towed at the Tenant's expense. ALSO no repairs of any vehicles/motorcycles upon or around the property permitted at any time;

m) not to take or keep drugs on or around the premises. Tenant agrees not to bring guests to the house that are under the influence of drugs or alcohol or that have such in their possession;

n) no guests are permitted in the house after 10:00 p.m. No overnight guests are permitted on the premises unless tenant has received prior approval from Landlord. No overnight guest may stay more than 3 consecutive nights. Landlord reserves the right to deny or discontinue permission for overnight guests should there be problems arising from such guests. ABSOLUTELY no persons permitted in the house who have been served with a Trespass Order by Valley CDC or who have been evicted by Valley CDC

Failure to observe the foregoing provisions of the Lease shall operate to terminate this Lease for the breach thereof at the sole option and discretion of the Landlord and any waiver of any breach at any time shall not constitute a waiver of any subsequent breach and Landlord is not required to give notice thereof to the Tenant except as required by law.

8. **RECERTIFICATION OF INCOME:** At least annually, Tenant will provide to Owner all information requested for the purpose of determining continued eligibility under the affordability restrictions imposed by the LIHTC (tax credit) program, Housing Stabilization Fund, and/or any other subsidy program which requires certification of income and/or other eligibility. Tenant will be required to sign any income verification or other related forms Such information will include, at minimum, verification of total household income and names and ages of all persons living in the apartment. Failure to provide this information will be considered a material violation of this lease and may result in eviction. In addition, the Tenant understands and agrees to notify the Management Agent within 30 days of any permanent change in the number of persons living in the household. All units at 132 Northampton Road units are designed for single person occupancy.

9. **LANDLORD'S OBLIGATIONS:** The Landlord agrees:

a) to maintain in good safe working order the electrical, plumbing, sanitary, and other facilities and appliances supplied by the Landlord;

b) to maintain the Property in a structurally sound condition and to comply with applicable local and state laws, codes, and ordinances;

c) to allow the Tenant to peaceably hold and enjoy the Property during the Lease Term without interruption, except in the case of the Tenant's breach of the Lease.

10. **ASSIGNMENT AND SUBLETTING:** The tenant shall not assign or sublet the Property during the Lease Term without the prior written consent of the Landlord.

EQUAL HOUSING OPPORTUNITY

11. **PETS:** Absolutely no pets and/or visiting pets allowed at any time under any circumstances. Service animals must be documented and approved by Landlord prior to being allowed on the property: Your initials _ _ _ _ _

12. **RECISION:** If the Landlord shall be unable to give the Tenant occupancy of the Property at the commencement of the Lease Term for any reason or if damage by fire or other casualty renders the Property uninhabitable, then this Lease shall terminate at the election of either party.

13. **NOTICE:** Notice to the Landlord shall be deemed given if mailed or delivered to the Landlord or its officer or agent at such address as shall be designated in writing. Notice to the Tenant shall be deemed given if mailed or delivered to the tenant at the address of the property. All notices must be in writing. Oral communications are not effective as notice. FAILURE to give appropriate notice may result in loss of security deposit.

14. **SURRENDER OF PROPERTY:** At the expiration of the Lease Term, the Tenant shall quit and surrender the Property in as good state and condition as it was at the commencement of this Lease, with the exception of reasonable use and wear and damage by the elements.

15. **HOLDOVER BY TENANTS:** Should the Tenant remain in possession of the Property with the consent of the Landlord after the actual expiration of this Lease or any renewal thereof, a new tenancy at will shall be created between the parties, which shall be subject to all the terms and conditions of the Lease, but shall terminable by either party upon thirty days' written notice.

16. **EVICTION AND COLLECTION:** All eviction and collection proceedings shall be in accordance with Massachusetts law. If this Lease is terminated for breach of its terms or in the event of litigation, the prevailing party may recover its costs and attorney's fees actually incurred.

17. **UTILITIES:** The Landlord shall provide the following utilities included in the Tenant's rent: Heat, Hot Water, Air Conditioning, Electricity, Water, and Sewer. The Tenant shall be responsible for any phone, internet, or cable TV service charges. Landlord shall provide trash removal, landscaping, and snow removal.

18. **ADDITIONAL PROVISIONS AND CHANGES:** Additional provisions, if any, shall be attached, initialed and dated by both parties, and shall become part of this Lease. No changes or additions to this Lease shall be made except by written agreement between the parties. This Lease and any attachments represent the entire agreement between the Landlord and the Tenants.

19. **COPY OF LEASE TO TENANTS:** The Landlord will provide the Tenant with a signed copy of this agreement, including all appendices, within thirty days of Tenant signing the agreement.

NOTE: No drinking in the common areas of the premises by tenant or guests at any time. No drunken behavior on the premises. No guests under the influence of alcohol at any time. Our objective is to create a safe, secure, and home-like atmosphere.

CRIMINAL BEHAVIOR OF ANY KIND AND/OR THREATENING OR VIOLENT BEHAVIOR OF ANY KIND WILL BE CONSIDERED AS POSSIBLE GROUNDS FOR IMMEDIATE EVICTION.

I certify that I have read this document carefully, It is clear to me (and I understand) that by signing this Lease I am agreeing to abide by all the rules of the house. I also certify that before signing this Lease, the Property Manager explained each and every rule to me and asked me if I had any questions or concerns.

Please Note: "It is the tenants' responsibility to maintain and keep the smoke detector(s) operational at all times. Circuit breakers are to remain in the "on" position and batteries

EQUAL HOUSING OPPORTUNITY

kept in place at all times. Should the tenant disconnect the smoke detector, management assumes no responsibility for any resulting damage. It is essential the detector be kept operational."

IN WITNESS THEREOF, the parties have executed this Lease
first above written.

_____	_____
Tenant Signature	Property Manager

IN CASE OF EMERGENCY PLEASE CONTACT:

Name:_____ _____ **Relation:**_____

Address: _____

Telephone Number PLUS Area Code: _____

EQUAL HOUSING OPPORTUNITY

Housing Management Resources, Inc.
16C North Maple St
Florence, MA01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

State Funding Lease Addendum

This must be completed for all state funded units (HOME, IIlF, HSF, AHT, etc.)

1) **The tenant has been offered a one-year lease term**

2) **Prohibited lease terms.** The lease **MAY NOT** contain any of the following provisions:
   a) Agreement to be sued. Agreement by the tenant to be sued, to admit guilty, or to take a judgment in favor of the owner in a lawsuit brought in connection with the lease;

   b) Treatment of property. Agreement by the tenant that the owner may take, hold, or sell personal property of the household members without notice to the tenant and a court decision on the rights of parties. This prohibition, however, does not apply to an agreement by the tenant concerning disposition of personal property remaining in the housing unit after the tenant has moved out of the unit. The owner may dispose of this personal property in accordance with the state law ;

   c) Excusing owner from responsibility. Agreement by the tenant not to hold the owner or the owner's agents legally responsible for any action or failure to act, whether intentional or negligent;

   d) Waiver of notice. Agreement of the tenant that the owner may institute a lawsuit without notice of the tenant;

   e) Waiver of legal proceeding. Agreement by the tenant that the owner may evict the tenant or household members without instituting a civil court proceeding in which tenant has the opportunity to present a defense, or before a court decision on the rights of the parties;

   f) Waiver of jury trial. Agreement by the tenant to waive any right to a trial by jury;

   g) Waiver of right to appeal court decision. Agreement by the tenant to waive the tenant' s right to appeal, or to otherwise challenge in court, a court decision in connection with the lease;

   h) Tenant chargeable with cost of legal actions regardless of outcome. Agreement by the tenant to pay attorney ' s fees and other legal costs even if the tenant wins in a court proceeding by the owner against tenant. The tenant, however, may be obligated to pay costs if the tenant loses.

EQUAL HOUSING OPPORTUNITY

Housing Management Resources
16C North Maple St
Florence, MA 01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

Valley Community Development Corporation

Amherst Studio Apartments
132 Northampton Road, Amherst
SAMPLE LEASE

LEASE made __date_____ by and between Amherst Studio Apts. c/o HMR, 132 Northampton Road, Amherst, MA, Hampshire County, Massachusetts (hereinafter referred to as "the Landlord"), and _____ (hereinafter referred to as "the Tenant").

1. **Apartment Location:** 132 Northampton Road, Unit #__, Amherst, MA 01002

2. **TERMS:** The term of this Lease commence _date_ and end _date_ or until sooner terminated by breach of the terms and conditions of the Lease. The Landlord may terminate the Lease upon giving a thirty (30) day notice to quit for any reason, including non-payment of rent.

3. **RENT:** The total rent is $_____ per month, payable in monthly installments of which is due by tenant on the first day of each and every month of the said term.

4. **SECURITY DEPOSIT:** Upon signing the Lease the Tenant agrees to pay a security deposit equal to one month of the tenant's portion of the rent. Your security deposit is $_____. The security deposit must then be deposited in an escrow account earning the current interest rate. The name and location of the bank and the account number must also be given to the tenant. Failure of a Landlord to furnish this information within thirty (30) days of receipt will entitle the tenant immediate return of said deposit. The security deposit shall be returned to the Tenant in accordance with the Massachusetts General Laws thirty (30) days after termination of this Lease. If the Landlord deducts from the deposit any amount for damage beyond ordinary wear and tear, such deductions must be supported by bills or estimates for repairs and unpaid rent. **SECURITY DEPOSIT SHALL NOT BE USED AS LAST MONTH'S RENT** without specific written consent from the Landlord.

5. **INSPECTION BY TENANT:** The tenant has inspected the Property and accepts the same AS IS. Landlord shall be under no obligation to improve the Property except as provided by law. A Statement of Condition of Property has been issued to the Tenant and is incorporated herein by this reference. Copy of the form of statement is attached hereto.
NOTE: LANDLORD IS NOT RESPONSIBLE FOR LOSS OR THEFT OF TENANT'S VALUABLES.

6. DAMAGES, REPAIRS AND INSPECTION BY LANDLORD: The Tenant agrees to be responsible for any damage caused to the Property by the Tenant ***or any person under the control of the Tenant or in the Property with the consent of the Tenant,*** *reasonable wear and tear excluded.* The Landlord shall have the right to enter and inspect the Property and to make repairs or necessary improvements and to show the Property to prospective tenants. **The Landlord or its representative shall arrange for access with the Tenant in advance so as not to unreasonably disturb the Tenant. In emergencies and to effect urgent repairs, advance notice will not be required.**

EQUAL HOUSING OPPORTUNITY

Housing Management Resources, Inc.
16C North Maple St Florence, MA 01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

7. **HOUSE RULES AND TENANT'S OBLIGATIONS:** The Tenant understands that breaking the following house rules may result in nullification of the Lease and possible eviction. The Tenant agrees, and has separately acknowledged in writing, that breaking rules stated in the ***Tenant Handbook*** (attached to this Lease) may result in nullification of the Lease and possible eviction. Knowing this, the tenant agrees:

a) to use the Property as a residence and not as a business (or storage room) and to maintain the Property in a clean, neat and undamaged condition at all times. No one other than the Tenant named herein shall occupy the Property;

b) to keep the Property in good repair and condition and to pay for damage caused to the Property as provided in paragraph six (6) within five (5) days of presentation of an itemized statement of such damage and the cost of repair; **NOTE:** Resident shall not permit any unusual or objectionable odors to permeate or emanate from the unit;

c) to be liable for any loss or damage to personal property of the Tenant except if damage is caused by the Landlord's gross negligence. The Tenant understands and agrees that it shall be their obligation if they wish to insure their own personal property through renter's or tenant's insurance (available everywhere and not terribly expensive);

d) to place garbage and refuse in proper containers to prevent any unsanitary conditions from arising on the Property;

e) to give prompt notice to the Landlord of any necessary maintenance or repairs in writing or in emergencies by telephone;

f) to make no alteration, addition, repair or improvement in or to the Property without the prior permission of the Landlord in writing (the Landlord agrees not to unreasonably refuse any such request but may impose additional requirements as a precondition to permission). All alterations, additions, repairs or improvements built, constructed or placed on the property, shall, unless otherwise provided by written agreement, become the property of the Landlord and remain on the Property at the expiration or sooner termination of this Lease;

g) to use all appliances and fixtures provided by the Landlord in the proper manner and not to add or relocate any appliances or equipment without prior written permission of the Landlord;

h) to not bring waterbeds or similar furnishings to the property, except upon the express written consent of the Landlord;

i) to expressly respect the rights of others to live in a quiet and peaceful environment;

j) to conserve energy costs through reasonable use of all facilities and utilities;

k) to keep or have on the Property no article or thing of a dangerous, flammable, or explosive character that might unreasonably increase the danger of fire in the Property or that might be considered hazardous or extra-hazardous by any responsible insurance carrier; to keep unit from excessive piling of clutter, boxes, papers/newspapers and other articles which might be deemed dangerous to tenant(s) and a possible fire hazard;

EQUAL HOUSING OPPORTUNITY

Housing Management Resources, Inc.
16C North Maple St Florence, MA 01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

NOTE that: Halls, entryways, stairwells, stairways, attics, basements, backyard, cellars and/or other common areas **are not storage areas** unless so designated in writing. Storage in these areas is not permitted. Personal property placed or left in these areas (or any common area) is not permitted Personal property placed or left in these areas may be disposed of at Landlord's option at Tenant's expense. The Landlord is not responsible for any items left in common areas. **NOTE THAT** personal property or furniture left after tenant moves out of the premises shall be treated as abandoned property and **may** be disposed of by Landlord at Tenant's expense or as Landlord sees fit.

l) to keep no unregistered or unused vehicles/motorcycles stored upon or around the Property. Tenant understands that such vehicles will be towed at the Tenant's expense. ALSO no repairs of any vehicles/motorcycles upon or around the property permitted at any time;

m) not to take or keep drugs on or around the premises. Tenant agrees not to bring guests to the house that are under the influence of drugs or alcohol or that have such in their possession;

n) no guests are permitted in the house after 10:00 p.m. No overnight guests are permitted on the premises unless tenant has received prior approval from Landlord. No overnight guest may stay more than 3 consecutive nights. Landlord reserves the right to deny or discontinue permission for overnight guests should there be problems arising from such guests. ABSOLUTELY no persons permitted in the house who have been served with a Trespass Order by Valley CDC or who have been evicted by Valley CDC

Failure to observe the foregoing provisions of the Lease shall operate to terminate this Lease for the breach thereof at the sole option and discretion of the Landlord and any waiver of any breach at any time shall not constitute a waiver of any subsequent breach and Landlord is not required to give notice thereof to the Tenant except as required by law.

8. **RECERTIFICATION OF INCOME:** At least annually, Tenant will provide to Owner all information requested for the purpose of determining continued eligibility under the affordability restrictions imposed by the LIHTC (tax credit) program, Housing Stabilization Fund, and/or any other subsidy program which requires certification of income and/or other eligibility. Tenant will be required to sign any income verification or other related forms Such information will include, at minimum, verification of total household income and names and ages of all persons living in the apartment. Failure to provide this information will be considered a material violation of this lease and may result in eviction. In addition, the Tenant understands and agrees to notify the Management Agent within 30 days of any permanent change in the number of persons living in the household. All units at 132 Northampton Road units are designed for single person occupancy.

9. **LANDLORD'S OBLIGATIONS:** The Landlord agrees:

a) to maintain in good safe working order the electrical, plumbing, sanitary, and other facilities and appliances supplied by the Landlord;

b) to maintain the Property in a structurally sound condition and to comply with applicable local and state laws, codes, and ordinances;

c) to allow the Tenant to peaceably hold and enjoy the Property during the Lease Term without interruption, except in the case of the Tenant's breach of the Lease.

10. **ASSIGNMENT AND SUBLETTING:** The tenant shall not assign or sublet the Property during the Lease Term without the prior written consent of the Landlord.

EQUAL HOUSING OPPORTUNITY

11. **PETS:** Absolutely no pets and/or visiting pets allowed at any time under any circumstances. Service animals must be documented and approved by Landlord prior to being allowed on the property: Your initials _ _ _ _ _

12. **RECISION:** If the Landlord shall be unable to give the Tenant occupancy of the Property at the commencement of the Lease Term for any reason or if damage by fire or other casualty renders the Property uninhabitable, then this Lease shall terminate at the election of either party.

13. **NOTICE:** Notice to the Landlord shall be deemed given if mailed or delivered to the Landlord or its officer or agent at such address as shall be designated in writing. Notice to the Tenant shall be deemed given if mailed or delivered to the tenant at the address of the property. All notices must be in writing. Oral communications are not effective as notice. FAILURE to give appropriate notice may result in loss of security deposit.

14. **SURRENDER OF PROPERTY:** At the expiration of the Lease Term, the Tenant shall quit and surrender the Property in as good state and condition as it was at the commencement of this Lease, with the exception of reasonable use and wear and damage by the elements.

15. **HOLDOVER BY TENANTS:** Should the Tenant remain in possession of the Property with the consent of the Landlord after the actual expiration of this Lease or any renewal thereof, a new tenancy at will shall be created between the parties, which shall be subject to all the terms and conditions of the Lease, but shall terminable by either party upon thirty days' written notice.

16. **EVICTION AND COLLECTION:** All eviction and collection proceedings shall be in accordance with Massachusetts law. If this Lease is terminated for breach of its terms or in the event of litigation, the prevailing party may recover its costs and attorney's fees actually incurred.

17. **UTILITIES:** The Landlord shall provide the following utilities included in the Tenant's rent: Heat, Hot Water, Air Conditioning, Electricity, Water, and Sewer. The Tenant shall be responsible for any phone, internet, or cable TV service charges. Landlord shall provide trash removal, landscaping, and snow removal.

18. **ADDITIONAL PROVISIONS AND CHANGES:** Additional provisions, if any, shall be attached, initialed and dated by both parties, and shall become part of this Lease. No changes or additions to this Lease shall be made except by written agreement between the parties. This Lease and any attachments represent the entire agreement between the Landlord and the Tenants.

19. **COPY OF LEASE TO TENANTS:** The Landlord will provide the Tenant with a signed copy of this agreement, including all appendices, within thirty days of Tenant signing the agreement.

NOTE: No drinking in the common areas of the premises by tenant or guests at any time. No drunken behavior on the premises. No guests under the influence of alcohol at any time. Our objective is to create a safe, secure, and home-like atmosphere.

CRIMINAL BEHAVIOR OF ANY KIND AND/OR THREATENING OR VIOLENT BEHAVIOR OF ANY KIND WILL BE CONSIDERED AS POSSIBLE GROUNDS FOR IMMEDIATE EVICTION.

I certify that I have read this document carefully, It is clear to me (and I understand) that by signing this Lease I am agreeing to abide by all the rules of the house. I also certify that before signing this Lease, the Property Manager explained each and every rule to me and asked me if I had any questions or concerns.

Please Note: "It is the tenants' responsibility to maintain and keep the smoke detector(s) operational at all times. Circuit breakers are to remain in the "on" position and batteries

EQUAL HOUSING OPPORTUNITY

kept in place at all times. Should the tenant disconnect the smoke detector, management assumes no responsibility for any resulting damage. It is essential the detector be kept operational."

IN WITNESS THEREOF, the parties have executed this Lease
first above written.

_____	_____
Tenant Signature	Property Manager

IN CASE OF EMERGENCY PLEASE CONTACT:

Name:_____ _____ **Relation:**_____

Address: _____

Telephone Number PLUS Area Code: _____

EQUAL HOUSING OPPORTUNITY

Housing Management Resources, Inc.
16C North Maple St
Florence, MA01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

State Funding Lease Addendum

This must be completed for all state funded units (HOME, IIlF, HSF, AHT, etc.)

1) **The tenant has been offered a one-year lease term**

2) **Prohibited lease terms.** The lease **MAY NOT** contain any of the following provisions:
   a) Agreement to be sued. Agreement by the tenant to be sued, to admit guilty, or to take a judgment in favor of the owner in a lawsuit brought in connection with the lease;

   b) Treatment of property. Agreement by the tenant that the owner may take, hold, or sell personal property of the household members without notice to the tenant and a court decision on the rights of parties. This prohibition, however, does not apply to an agreement by the tenant concerning disposition of personal property remaining in the housing unit after the tenant has moved out of the unit. The owner may dispose of this personal property in accordance with the state law ;

   c) Excusing owner from responsibility. Agreement by the tenant not to hold the owner or the owner's agents legally responsible for any action or failure to act, whether intentional or negligent;

   d) Waiver of notice. Agreement of the tenant that the owner may institute a lawsuit without notice of the tenant;

   e) Waiver of legal proceeding. Agreement by the tenant that the owner may evict the tenant or household members without instituting a civil court proceeding in which tenant has the opportunity to present a defense, or before a court decision on the rights of the parties;

   f) Waiver of jury trial. Agreement by the tenant to waive any right to a trial by jury;

   g) Waiver of right to appeal court decision. Agreement by the tenant to waive the tenant' s right to appeal, or to otherwise challenge in court, a court decision in connection with the lease;

   h) Tenant chargeable with cost of legal actions regardless of outcome. Agreement by the tenant to pay attorney ' s fees and other legal costs even if the tenant wins in a court proceeding by the owner against tenant. The tenant, however, may be obligated to pay costs if the tenant loses.

EQUAL HOUSING OPPORTUNITY

HOUSING MANAGEMENT RESOURCES
16C NORTH MAPLE STREET
FLORENCE, MA 01062
413-570-4916
413-570-4921- FAX

SAMPLE
RESIDENT HANDBOOK FOR AMHERST STUDIO APARTMENTS
132 Northampton Road
Amherst, MA 01002

It is our intention and purpose to operate **AMHERST STUDIO APARTMENTS** as an outstanding residential development. Housing Management Resources (HMR) will strive to render prompt, efficient services and will maintain this property in the best manner possible.

Your cooperation is greatly appreciated in adhering to the rules set forth in this handbook. Any expense incurred by the Management as a result of violation of these rules will, insofar as feasible, be assessed against the resident responsible.

Promptly notify the Management of any needed repairs to equipment or fixtures. This community is your home; we request that you treat it that way and make it an attractive and safe environment for all.

Management reserves the right to change these policies whenever they believe it is in the best interest of the property and the residents.

EMERGENCY TELEPHONE NUMBERS

FIRE.....911

AMBULANCE.....911

POLICE.....911

EMERGENCY MAINTENANCE REQUEST

For after hour emergency maintenance requests (after 5 P.M.) please call (413) 570-4916. When calling in your request, we ask that you give the nature of the emergency, name, full address, and phone number.

All routine calls and general maintenance calls should be called into the office during regular business hours Monday – Friday- 9 a.m. - 5 p.m. After hours, weekends and holidays you should call (413) 570-4916.

1. **AIR CONDITIONERS**:
   Window air conditioning units are not permitted at this property, as it is equipped with central air conditioning, including temperature controls in each individual apartment.

2. **ANTENNAS:**
Installation of CB or any other auxiliary antennas is ***expressly forbidden*** on the building or anywhere else on the property.

3. **APPLIANCES**:
For your convenience, your apartment is equipped with a range (oven and cook top), a microwave, and a refrigerator. You are required to use the appliances in the manner they were intended. The use of hot plates, toaster ovens, or space heaters are strictly prohibited. Additional refrigerators/freezers are only allowed with permission from HMR.

4. **ATTACHMENTS AND ALTERATIONS:**
No attachments or alterations to any portion of the apartment or exterior of the building are permitted unless explicit permission is given by the Management.

5. **BICYCLES:**
Tenants may store bicycles only in the covered bicycle rack provided on the property. It is prohibited to bring bicycles into or store them in the building. Tenants are advised to lock bicycles stored in the common bicycle rack.

6. **CABLE TV / PHONE / INTERNET:**
Your building is equipped for cable TV, phone, and internet services. You must make your own arrangements for these services with area providers.

7. **DISPOSAL OF LARGE ITEMS:**
If you have large items to dispose of, please contact the management office and we will help you arrange for proper disposal of the item. You are not allowed to dispose of any large item in the dumpster. If you dispose of an item in the dumpster you will be charged for the disposal.

8. **DISTURBANCES, NOISES, ETC.:**
Loud noises and other disturbing acts in the apartment or on adjoining property that interferes with the rights, comforts, or convenience of other residents are prohibited at all times. Repeated disturbances are a lease violation and the basis of termination action. Tenants shall observe quiet hours between 10 PM and 8 AM.

9. **DRUGS:**
Resident, guest, or other person under the Resident's control **shall not engage in criminal activity, including drug-related criminal activity**, on or near property premises. "Drug-related criminal activity" means the illegal manufacture, sale, distribution, or use, or possession with intent to manufacture, sell, distribute, or use of a Controlled Substance 21 U.S.C. 802.

a) Resident, guest, or other person under the Resident's control **shall not engage in any act intended to facilitate criminal activity**, including drug-related criminal activity, on or near property premises.
b) Resident **will not permit the dwelling unit to be used for, or to facilitate, criminal activity,** including drug-related criminal activity, regardless of whether the individual engaging in such activity is the resident or a guest.
c) Resident **will not engage in the manufacture, sale, or distribution of illegal drugs at any location**, whether on or near the property premises or anywhere else.

d) Resident, guest, or other person under the Resident's control **shall not engage in acts of violence or threats of violence**, including, but not limited to, the unlawful discharge of firearms on or near property premises.

e) VIOLATION OF THE ABOVE PROVISION SHALL BE A MATERIAL VIOLATION OF THE LEASE AND GOOD CAUSE FOR TERMINATION OF TENANCY. A single violation of any of the provisions of this policy shall be deemed a serious violation and a material noncompliance with the lease. It is understood and agreed that single violation shall be good cause for termination of the lease. Unless otherwise provided by law, proof of violation shall not require criminal conviction, but shall be by a preponderance of the evidence.

10. **ELEVATOR**

The elevator is provided as a service and should be used as such. There is NO SMOKING allowed in the elevator at any time. If you are aware of a maintenance issue with the elevator, please contact management immediately.

11. **ENTRANCES AND HALLWAYS**:

In compliance with the Fire Code, no articles are to be left at the entrances of the hallways and doorways at any time. All entrance and hallway doors must be kept closed. No doors are to be propped open at any time.

12. **FIREARMS/WEAPONS:**

Resident, guest, or other person under the Resident's control **shall not engage in acts of violence or threats of violence**, including, but not limited to, the unlawful discharge of firearms on or near property premises. Firearms and/or weapons of any kind are strictly prohibited. Weapons include, but are not limited to, guns, knives, martial arts weapons, etc.

13. **FLOOR CARE**:

In most cases, dusting will be all that is necessary to care for your flooring. Spills may be blotted up with a damp cloth or sponge.
It is important not to soak your flooring with soap and water, as this type of treatment will damage the finish.

14. **GUESTS**:

Each tenant will assume full responsibility for the appropriate conduct of his/her guests. The rules in this Handbook apply to all guests. Residents must make sure that their guests abide by the rules of this handbook and are responsible for guests who violate these rules.

Guests are not permitted on the premises after 10:00 pm or before 8:00 am. Guests are only allowed on the premises between the hours of 8:00am and 10:00 pm.

Overnight guests are only permitted with prior notice to Management and may only stay for a period up to and include 3 consecutive nights. Management reserves the right to deny overnight guests or change this policy should there be any problems.

15. **HEATING:**

Your rent includes heat and air conditioning and you have an individual thermostat in your apartment. Thermostats can be adjusted within minimum and maximum settings. Levels of heat are more than adequate and are always within the requirements of the housing code standards.

Heat, however, is not unlimited and conservation of energy is required by all residents. At no time should tenants be running heat and having windows open. If your heat is not working, you should call our office for service. Our maintenance staff will service the problem and call in additional repairmen, if necessary.
Space heaters, electric or otherwise, are not permitted in the apartment, they are a ***Fire Hazard.***

16. **INSPECTIONS- ANNUAL**

It is our policy to conduct annual preventive maintenance inspections of all apartments. These inspections are done so that HMR can proactively assess maintenance needs. Each resident will be informed of the annual inspection in advance of the scheduled date in writing. The annual inspection does not replace your obligation to inform HMR of maintenance needs as they occur.

INSPECTIONS-HOUSING AUTHORITIES AND CONTRACTOR

It may also be necessary to conduct other periodic apartment inspections, of which you will be notified. You will be informed, in writing, in advance of the inspection, and your cooperation is appreciated. The annual maintenance inspection does not replace your obligation to inform us of maintenance needs as they occur.

17. **INTERCOM**

The intercom system is provided as a means of security for the building. Please report any problems with this system to management at once. At no time should you use the system to allow anyone into the building that you do not know personally. Do not allow unknown people into the building by buzzing them in with the intercom system. Any resident violating this rule will be subject to termination of their lease.

18. **KEYS AND LOCKS:**

Apartment and mailbox keys are issued at the time of occupancy. Alterations or replacement of locks or installation of bolts, door knockers, mirrors or other attachments to the interior or exterior of any door is prohibited. Tenant will be charged for any replacement keys and/or lock changes required because the resident loses their apartment or mailbox key.

19. **LAUNDRY AREA:**

The laundry room must be kept clean at all times. A trash receptacle is supplied for rubbish. Please be sure that the lights are turned off, when you leave the area. Laundry should be done between the hours of 8 a.m. and 10 p.m. only. Only Tenants, or their Home Health Aides, may use the laundry facilities.

20. **LIGHT BULBS**:
Each apartment will be equipped, at the time of occupancy, with electric light bulbs. Please contact the office when bulbs need to be replaced.

21. **LOCK-OUT CHARGES:**
Authorized personnel will admit residents who have been locked out of their apartments, upon presentation of proper documentation/identification. However, a charge will be levied and resident will be responsible for paying such charge within 30 days.
Lock out charges as follows: Weekdays: $10.00, Weeknights $20.00, Weekends $25.00 and Holidays $30.00.

22. **LOITERING:**
Loitering in front of the building, either by residents, their guests, or non-residents, is not permitted.

23. **MAINTENANCE:**
Please make requests for repairs or maintenance by telephoning the management office between 9 a.m. and 5 p.m., Monday through Friday at ***(413)570-4916***. During times that the office is closed or on weekends or holidays please also call (413)570-4916 and leave a message. No routine requests should be called in at night, weekends or holidays. No charge is made for repairs or adjustments to residents' unit unless necessitated by negligence or mistreatment. Charges payable by the resident will be due in full within 30 days of billing.

When you request maintenance service, the maintenance staff will enter your apartment to do the work **unless** you designate differently. ***If there is a maintenance emergency, staff will enter without permission.*** Maintenance staff work between the hours of 8:00am and 4:00pm. They are not available to do work, except emergencies, during non-work hours. Therefore, if you do not want maintenance to enter your unit unless you are at home you must make arrangements to be home during work hours.

24. **MOVING OUT**:
A calendar month's written notice effective on the last day of the month, must be given to Management to meet your obligation when you wish to vacate. If you are receiving a subsidy from a housing authority or rental assistance program, you must provide them with a copy of the notice.

You are expected to leave your apartment in a clean and neat condition, and to remove all of your belongings from the apartment and storage area. If items are left behind, they will be considered abandoned and will be disposed of with an appropriate charge against your security deposit. Separate charges will be assessed for the dumping of large items of furniture and for appliances. You will also be charged for any damages to the apartment, excepting normal wear and tear.

25. **OCCUPANCY:**
All apartments at 132 Northampton Road are single person occupancy. You are the only person allowed to reside in your apartment. Please see information above regarding

policy for guests.

26. **PEST CONTROL:**
Management provides pest control services (extermination). Please contact the office if you have a specific problem. Your cooperation is needed so that a pest free environment is enjoyed by all residents. You must not leave opened food containers or dirty dishes in your apartment. Garbage should be brought out to the dumpster and not left in your apartment.

27. **PETS:**
No pets are allowed. If you have a service animal, please contact Management so they can review documentation with you.

28. **PICTURE HANGING:**
When one desires to hang a picture, please use small combination nail and picture hanger unit that can be purchased at any hardware or department store. Please ***DO NOT*** use sticker type of hangers as when they are removed, they damage the wall surface.

29. **REFRIGERATORS**:
Please defrost your refrigerator regularly. This keeps the refrigerator working more efficiently, less costly to run, and prevents maintenance problems. It is also important to keep the floor underneath your refrigerator free of dirt and dust, to keep the compressor from getting clogged.

30. **RENT:**
All rents are due on the first of each month. ***Monthly bills are not rendered, and cash is not accepted***. Please make checks or money orders payable to: _____ and mail or deliver to the management office. Please write your apartment number and street address on your check or money order, so that it is properly credited to your account.
There is a charge for any check returned for insufficient funds. This is charged to your account and should be paid promptly.
Legal notices are issued if rent payments are not received by the 5th of each month. If a nonpayment case against you is filed with the Housing Court and you do not pay by the entry date on the Summary Process, you will be charged for the legal costs. These charges will be billed to you.
If you are receiving a subsidy from a housing authority or another agency, they will receive a copy of the legal notice.

31. **RENTER'S INSURANCE:**
HMR recommends renter's insurance coverage for all residents. Property Insurance that is carried to cover the building does not include coverage for the personal belongings of residents.
   a. The importance of renter's insurance is to cover your personal property in case of theft, fire, flood, or any other incident/natural disaster that may occur without warning.
   b. Landlord is not responsible for replacing personal property of the resident.
   c. Landlord's insurance does not provide coverage for personal belongings of the resident.

d. Landlord's insurance does not provide liability coverage for the acts or omissions of the resident. In fact resident must pay all costs of repair if damages are due to negligence of the resident(s), guest(s), or family member(s).

32. **SCREENS:**

Damaged or missing screens must be reported to Management. Once reported, maintenance staff will remove and repair/replace the damaged screen(s).
Residents are responsible for the repair/replacement costs of screens if the damage/loss was a result of tenant negligence.

33. **SECURITY**

Locks are changed after each tenancy to ensure the security of new residents. It is important that you use these locks, and keep exterior common doors closed and locked at all times.
Residents can provide the best building security by reporting immediately any problems with unauthorized people in the building, alarm systems, lighting, etc. Residents must only allow their visitors into the building through the intercom system. Do not allow unknown people into the building by buzzing them in with the intercom system.
Residents are not permitted to install security alarm systems in their apartments.
The Fire Escape Exits are only to be used during emergencies. Residents are not allowed to use these exits at any other time.

34. **SHOWER UNITS:**

Shower units should not be cleaned with an abrasive cleaner. This type of cleanser will scratch the surface making it dull and difficult to clean. We recommend a liquid cleanser.

35. **SIGNS AND ATTACHMENTS:**

No items shall be placed on, or hung from the outside of the building, windows and/or, doors. No signs or advertising notices of any kind shall be attached to any part of the outside of the building. Management has the right to remove any such signs or attachments without notice.

36. **SMOKE DETECTORS/FIRE PROCEDURES:**

Each unit is equipped with a ***hard-wired smoke detector.*** Hard-wired smoke detectors may or may not have a battery back up.
If the smoke detector begins to give off a periodic beep, it means there is a problem. Please call the office and report this.
Tampering with the detector, turning the circuit-breaker to the "off" position is a violation of the lease. Tenants are advised that tampering with smoke detectors will cause the alarm to sound.
The hallways are also wired with smoke detectors. If the alarm goes off, please vacate the building immediately by going to the nearest available exit.

37. **SMOKING:**

This is a non-smoking building and non-smoking property, with the exception of one outdoor designated smoking area. A cigarette disposal container / ashtray is provided in the designated smoking area. No smoking materials or cigarette butts shall be thrown on the ground in any location. Tenants who are smoking shall ensure that all smoking

materials are properly extinguished so as not to pose a fire risk.

38. **SOLICITING**:
Soliciting of any type is no permitted, except by individual appointment with resident. Residents should notify management if an uninvited solicitor appears and appropriate action will be taken.

39. **SUPPORTIVE SERVICES:**
All residents are encouraged to avail themselves of on-site service coordination provided by the Resident Services Coordinator. Services are provided for the benefit of residents. Participation in services or service coordination is voluntary and not a condition of tenancy.

40. **TRANSFER:**
It is not our policy to transfer residents from one apartment to another, except in extreme circumstances.

41. **TRASH:**
Please keep the premises clean by using the dumpster located outside. It is imperative that all trash be put in bags and placed in the dumpster. Trash must not be left on the steps or hallways at any time. A separate dumpster is provided for recyclables.

42. **UNLAWFUL ACTIVITY:**
Tenant agrees not to engage in any unlawful activity at the property, including but not limited to:
- Using, distributing, or possessing illegal drugs,
- Theft or possession of stolen goods,
- Violence against tenants, staff or others,
- Prostitution or promotion of prostitution.

43. **WATER BEDS:**
Water beds are not allowed.

44. **WATER USAGE:**
Residents are expected to conserve water. Please report any leaky faucets or running toilet immediately.

45. **WINDOW SHADES, BLINDS AND CURTAIN RODS**:
Window blinds are provided in your apartment, as well as hardware to install curtains.

Installation of sheets, bedspreads, etc., in place of shades or blinds is not permitted.
If blinds are replaced as the result of other than normal wear and tear, residents will be charged.

My signature below indicates that I have received a copy of the Resident Handbook for 132 Northampton Road a property managed by Housing Management Resources (HMR). By signing

this document, I agree to abide by the rules and regulations outlined in the Handbook.

_____	_____
Signature	**Date**
_____	_____
Property Manager	**Date**

Housing Management Resources Resident Fire Safety

Cooking safety is very important because cooking-related fires continue to be a leading cause of fires in people's homes. Practicing safe cooking behaviors can help keep you and your family safe.

- **Never leave your range or cooktop unattended while cooking.** If you have to leave the room, turn your range or cooktop off. Unattended cooking is the leading cause of kitchen fires.
- **Never over heat cooking oil or fats.** Oil and fats can ignite and catch fire at high temperatures on the cook top or in the oven
- **Wear short, close-fitting or tightly rolled sleeves.** Loose clothing can hang down onto hot surfaces and can catch fire if it comes in contact with a gas flame or electric burner.
- **Keep your cooking area clean and free of combustible materials.** Food wrappers, paper towels. oven mitts or other materials left on or near the stove may catch fire.
- **Be sure to clean up any spilled or splattered oil and grease.** Built-up grease can catch fire in the oven or on the cooktop. Ovens and cook tops should be cleaned on a regular basis to prevent fires and to promote proper operation of the appliance.
- **Never throw hot grease in the garbage as it can ignite combustible materials.** Be sure to let grease cool and dispose of it in a metal or glass can or jar.
- **Do not store any items in your oven.** It can be easy to forget there is an item in your oven, and this could catch fire while preheating. This includes food, all paper products, pots and pans with plastic or rubber handles, and pans containing grease.

What to Do If a Cooking Fire Flares Up

By exercising caution at all times in your kitchen, you can help reduce the risk of a kitchen fire. But if a fire does start, these steps can help you to safely resolve the issue.

- **Your safety should always come first.** If you are unsure about whether it is safe to fight the fire, leave the scene, call 911 for help, and let the fire department control the fire.
- **If a small fire flares up and you are going to attempt to extinguish it, call 911 for help first.** A fire may grow out of control more quickly than you anticipate. It is safer to have help already on the way.
- **Two fire stops have been installed in the hood range over the cook top.** The fire stops are in place to help extinguish any fires that start on the cook top. There will be one fire stop on the left and right side of the hood range, they should not be removed at any time by the resident. When a fire starts on the cook top the fire stop will deploy fire retardant that will put out or knock down the flames of the fire.
- **Do not remove pots or pans from cook top if a fire occurs.** All range hoods have fire stops installed that will help put out a fire on the cook top. If the pan is removed the fire stops will not be able to help put out the fire.

- **Smother a grease or oil fire – Never throw water on a grease fire and never remove the pan from the burner.** The super-heated water can change to steam, and can cause severe burns. Oil also can splash and spread the fire. If a grease fire starts in a pan, smother the flames by sliding the lid – while wearing an oven mitt – over the pan. If safe to do so, turn off the heat source. Do not move the pan, and keep the lid on until the fire is out and the pan is completely cool.
- **If a fire starts in your oven, keep the door closed and turn off the heat source.** Keeping the door closed will help smother the flames. Do not open the door until the flames are completely out.
- **If a fire starts in your microwave, turn off the microwave and do not open it until the fire is completely out.** Unplug the microwave only if you can safely do so.
- **Never turn on an overhead fan during a grease fire.** The fire and smoke would be carried through the vent and set the whole building on fire.
- **Report all fires to the site manager or main office.** All fires must be reported immediately, if the office is closed the fire must be reported to the emergency maintenance on call line.

If you have any other questions please feel free to reach out to your manager or the main office and we would be happy to discuss any concerns you might have.

I/we agree to follow the safety measures in the above fire safety policy.

_____ _____
Signature Date

_____ _____
Signature Date

_____ _____
Signature Date

_____ _____
Signature Date

96-98 King Street
16C North Maple St
Florence, MA 01062
Phone: 413-570-4916
TTY: 1-800-439-2370
Fax: 413-570-4921

Notice of Insurance Smoke Detector and Drug Policy

Insurance Acknowledgement

We Strongly recommend renter's insurance coverage; a few dollars a month could save you thousands later!
The undersigned acknowledges receipt of the following information:

1. The importance of renter's insurance is to cover your personal property in case of theft, fire, flood, or any other incident/natural disaster that may occur without warning.
2. Landlord is not responsible for replacing personal property of the resident.
3. Landlord's insurance does not provide coverage for personal belongings of the resident.
4. Landlord's insurance does not provide liability coverage for the acts or omissions of the resident. In fact, resident must pay all costs of repair if damages are due to negligence of the resident(s), guest(s), or family member(s).

Smoke Detector Policy

This policy is designed to further clarify the Tenant(s) responsibility under the Lease Agreement in which the Tenant(s) agree to give the Landlord written notification of needed repairs.
The Tenant(s) will periodically check the smoke detector(s) in the unit designated in the initial lease agreement and will notify the Landlord in writing of the fact that a smoke detector needs to be repaired or replaced. The Tenant(s) is responsible for replacing the batteries in the battery operated smoke detector(s) during the term of the lease.
The Tenant(s) acknowledges and understands that a smoke detector is a valuable safety device, designed to save lives in the event of fire, by warning occupants of excess smoke in the unit. The Tenant(s) also acknowledges a clear understanding of how to test the smoke detector(s) in the unit.

Drug Free Housing Policy

In consideration of the execution or renewal of a lease of the dwelling unit identified in the lease, Management and Resident agree as follows:

Resident, any member of the Resident's household, guest, or other person under the Resident's control **shall not engage in criminal activity, including drug-related criminal activity**, on or near property premises. "Drug-related criminal activity" means the illegal manufacture, sale, distribution, or use, or possession with intent to manufacture, sell, distribute, or use of a Controlled Substance 21 U.S.C. 802.

1. Resident, any member of the Resident's household, guest, or other person under the Resident's control **shall not engage in any act intended to facilitate criminal activity**, including drug-related criminal activity, on or near property premises.
2. Resident or members of the household **will not permit the dwelling unit to be used for, or to facilitate, criminal activity,** including drug-related criminal activity, regardless of whether the individual engaging in such activity is a member of the household or a guest.
3. Resident or members of the household **will not engage in the manufacture, sale, or distribution of illegal drugs at any location**, whether on or near the property premises or anywhere else.
4. Resident, any member of the Resident's household, guest, or other person under the Resident's control **shall not engage in acts of violence or threats of violence**, including, but not limited to, the unlawful discharge of firearms on or near property premises.
5. VIOLATION OF THE ABOVE PROVISION SHALL BE A MATERIAL VIOLATION OF THE LEASE AND GOOD CAUSE FOR TERMINATION OF TENANCY. A single violation of any of the provisions of this policy shall be deemed a serious violation and a material noncompliance with the lease. It is understood and agreed that single violation shall be good cause for termination of the lease. Unless otherwise provided by law, proof of violation shall not require criminal conviction, but shall be by a preponderance of the evidence.

_____ _____
Head of Household Signature Date

_____ _____
Owner/Agent Signature Date

Equal Housing Opportunity

HMR MOLD PREVENTION POLICY

YOU ARE REQUIRED TO MAINTAIN YOUR APARTMENT IN ACCORDANCE WITH THIS POLICY TO MINIMIZE MOISTURE IN YOUR APARTMENT AND PREVENT MOLD.

TENANT(S) AGREE TO:

- Use air-conditioning and heating systems to keep your apartment between 65 – 78 degrees.
- Make sure all air conditioner vents are not blocked.
- Doors and windows should be closed while air conditioning is on.
- Keep your apartment clean and uncluttered.
- On dry days, turn off air conditioning and ventilate your home by opening doors and windows.
- Use hood vents when cooking, cleaning and dishwashing.
- Avoid excessive amounts of indoor plants.
- Use exhaust fans or open window when showering and leave on for a sufficient amount of time to remove moisture.
- Use ceiling fans if present.
- Open blinds/curtains to allow light into premises.
- Hang shower curtains inside bathtub when showering.
- Use dryer to dry wet clothes, sheets and towels.
- Report all leaks (faucets, under sinks, ceilings) to management promptly.

TERMINATION OF TENANCY: Management reserves the right to terminate the tenancy if Tenant's action or inactions are causing a condition which is conducive to mold growth.

I acknowledge that I received the following materials along with this policy:

- Guide to Preventing Mold & Moisture in Your Home
- Mold Flyer: Did you know that you can stop mold before it even begins?

_____ _____ _____

Tenant - Head of Household __ Date Owner or Owner's Agent
Apartment #

_____ _____ _____

Tenant = Household Member Date Tenant – Household Member
Apartment # Apartment #

Equal Housing Opportunity

DID YOU KNOW THAT YOU CAN STOP MOLD BEFORE IT EVEN BEGINS?

What is mold anyway?

You may not realize it, but mold spores surround you, both indoors and outdoors. Mold spores are nature's microscopic helpers that break down leaves, wood and other plants after their growing season, so growing outdoors is very helpful. All they need to do their job is water and the right temperature!

How does mold get indoors?

Mold spores drift through the air and can land on anything that is outside that you eventually bring inside, even on you! They can blow in through your window screens when you open the windows.

How can I stop mold from growing in my home?

1. **ALWAYS** use exhaust fans in bathrooms during and for at least 30 minutes after showering.

2. **ALWAYS** use kitchen exhaust fans while cooking.

3. **Keep your air conditioner running,** especially during the hot and humid times of the year. Did you know that air conditioners do not just provide cool air, but they "condition the air" in your apartment by removing moisture.

4. **Vacuum and clean** your home regularly to remove mold spores that come in from your shoes, clothing, lawn furniture, pets, etc.

Do you have what it takes to stop mold before it begins?

Residents and property manager/ owners both have responsibilities for addressing water and moisture problems that can cause mold.

1. Fixing leaks is management's responsibility.

2. Managing moisture in your home is your responsibility. Please operate your cooling/ heating and ventilation systems properly to reduce water condensation, and notify your property manager promptly of any water leaks, moisture problems including musty odors.

Bed Bug Policy

This policy dated _____ between VCDC hereby known as Owner/Agent and _____ hereby known as Tenant(s) for the premises located at _____, located at _____.

- Tenant(s) acknowledge that the Owner/Agent has inspected the unit and is aware of no bedbug infestation.
- Tenant(s) claim that all furnishings and personal properties that will be moved into the premises are free of bedbugs.

_____(Tenant Initials) _____(Tenant Initials) _____(Tenant Initials)
Tenant(s) hereby agree to prevent and control possible infestation by adhering to the below list of responsibilities:

1. Check for bedbugs. Do not collect or use extreme caution when acquiring used or secondhand beds, couches, and other used furniture and items. If you stay in a hotel or another home, inspect your clothing, luggage, shoes, and personal belongings for signs of bedbugs before re-entering your apartment. Check backpacks, shoes and clothing after using public transportation or visiting theaters. After guests visit, inspect beds, bedding and upholstered furniture for signs of bedbug infestation.

2. Minimize clutter to reduce potential bed bug harborage.

3. Maintain regular vacuuming regimen and bed linen laundering.

4. Owner/Agent recommends that Tenant purchase mattress covers for all their mattresses. While mattress covers will not prevent bed bugs, they prevent them from getting into the mattress and aid in their detection.

5. Tenant(s) shall report any problems immediate to Owner/Agent. (Within 24 hours when possible). Even a few bedbugs can rapidly multiply to create a major infestation that can spread to other units. The Owner/Agent will rely on the opinion of a licensed pest control specialist to determine estimated length of infestation.

6. Tenant shall cooperate with pest control efforts. If your unit or a neighbor's unit is infested, a pest management professional may be called in to eradicate the problem. Tenant(s) must comply with recommendations and requests from the pest control specialist prior to professional treatment, which may include:
    a. Allowing entry with 24 hour notice.
    b. Placing all bedding, drapes, curtains and small rungs in bags for transport to laundry or dry cleaners.
    c. Heavily infested mattresses are not salvageable and must be sealed in plastic and disposed of properly.

d. Empty dressers, night stands and closets. Remove all items from floors, bag all clothing, shoes, boxes, toys, etc. Bag and tightly seal washable and non-washable items separately. Used bags must be disposed of properly.
e. Vacuum all floors, including inside closets. Vacuum all furniture including inside drawers and nightstands.
f. Vacuum mattresses and box springs. Carefully remove vacuum bags sealing them tightly in plastic and discarding of properly.
g. Wash all machine-washable bedding, drapes, and clothing, etc. on the hottest water temperature and dry on the highest heat setting. Take other items to the dry cleaner making sure to inform the dry cleaner that the items are infested with bedbugs. Discard any items that cannot be decontaminated.
h. Move furniture toward the center of the room so that technicians can easily treat carpet edges where bedbugs congregate, as well as walls and furniture surfaces. Be sure to leave easy access to closets.

7. Tenant agrees to not attempt to self treat with bug bombs or other pesticides as this can be unsafe and can create health problems if not properly applied, and could interfere with the treatment plan of the professional pest control contractor.

8. Tenant agrees to indemnify and hold the Owner/Agent harmless from any actions, claims, losses, damages and expenses including but not limited to attorneys' fees that Owner/Agent may incur as a result of the negligence of the Tenant(s) or any guest occupying or using the premises.

9. It is acknowledged that the Owner/Agent shall not be liable for any loss of personal property to the Tenant as a result of an infestation of bedbugs.

By signing below, the undersigned Tenant(s) agree and acknowledge having read and understood this policy.

_____	_____
Tenant	Date
_____	_____
Tenant	Date
_____	_____
Owner/Agent	Date

TENANT CHARGE LIST:

Locks/Keys

Dead Bolt lock only	Actual Cost
Mail Box lock	Actual Cost
Exterior Entry Lock	Actual Cost
Interior Privacy Lock	Actual Cost
House key (duplicate)	Actual Cost
Mail Box key (duplicate)	Actual Cost
Change locks (lost keys)	Actual Cost

Windows/ Light Fixtures

Window Double glazed	Invoice plus labor
Storm Door glass	Actual Cost
Back door glass	Actual Cost
Light Globe (hallway, bedroom, bathroom)	Actual Cost
Light Globe	Actual Cost
Light bulb	Actual Cost
Appliance bulb	Actual Cost
Fluorescent bulb	Actual Cost
Smoke Alarm	Actual Cost
Blinds	Actual Cost
Screens	Actual Cost

Refrigerator/ Stove & Hood

Refrigerator	Invoice Price
Stove	Invoice Price
Range Hood	Invoice Price
Ice Trays	Actual Cost
Refrig. Crisper Cover	Actual Cost
Refrig. shelves	Actual Cost
Stove rings	Actual Cost
Stove pans	Actual Cost

Bathroom

Toilet seat	Actual Cost
Soap dish	Actual Cost
Toothbrush /Toilet tissue holder	Actual Cost
Bath towel rack	Actual Cost
Bath shower rod	Actual Cost
Medicine cabinet	Actual Cost
Commode	Actual Cost
Remove toilet & replace seal	Actual Cost

Kitchen Items

Cabinet parts	Invoice plus labor
Counter tops	Invoice plus labor

Floors/Doors

Interior closet doors	Invoice plus labor
Front Entrance door	Invoice plus labor
Storm door	Invoice plus labor
Door Jam & Trim	Actual Cost
Interior door	Actual Cost
Exterior Steel Door	Actual Cost
Flooring	Invoice plus labor

Special Charges

Open locked door (office hours)	Actual Cost
Open Locked door (non office hours)	Actual Cost
Trash- picking up around dumpster, building, etc.	Actual Cost
Wall holes - large	Actual Cost
Small (finger size	Actual Cost
Nail holes (excessive)	labor per hour

Paint – material & labor prorated on 5 year basis

Labor Charge for work performed by Outside Contractors- The labor charge for work performed by an Outside Contractors will be actual cost as billed by contractor, plus an administrative fee of 10%.

Labor charge for work performed by HMR Staff- The labor charge will be $15.00 per hour during normal office hours, or $22.00 per hour if repairs are made anytime the office is not open. The minimum charge is based on the half hour.

_____ _____
Tenant Signature Date

_____ _____
Co-Tenant Signature Date

_____ _____
Landlord or Designated Representative Date

_____ _____
Community UNIT

Parking Study / AMHERST STUDIO HOUSING Development

132 Northampton Road, Amherst, MA
Parcel 14C-8

Prepared by Berkshire Design Group & Valley CDC
May 19, 2020

The project proposes to locate 28 low to moderate income studio residential units within walking distance of downtown. The selected parcel is located less than ½ mile to Amherst Town Center with amenities such as Town Hall, the Library, and many restaurants and shops. The 0.88-acre parcel has frontage along Northampton Road/ Route 9. The parcel is bordered to the north by Route 9, a residential property to the east, and by Amherst College's Pratt Field to the south and west.

Plans are currently in process (75% design completion phase) by MA Department of Transportation, which owns and maintains Northampton Road (a State Highway), to improve sidewalks on Northampton Road, creating 5' wide walk-ways. There will be a new sidewalk connecting the building with the sidewalks on Northampton Road, with the sidewalk onsite safely separated from the site driveway and parking area.

The project is proposing 16 parking spaces at a ratio of 0.57 spaces per unit. 132 Northampton Road is a highly walk-able location, 4/10 mile from nearest bus stop, and close to the bike trail. From a review of locally verifiable information, the parking utilized or needed for these types of facilities has consistently shown a reduced requirement for onsite parking below the 0.57 ratio we are proposing.

On February 19, 2020, the applicant met with the Amherst Planning Board to provide an overview of the proposed development and allow for comment. The Planning Board Chair commented that that amount of parking (at that time only 14 spaces, or .5 spaces / unit) seemed "appropriate" for the use, as did the use of a portion of grass-crete paved parking area.

There are four combined factors that reduce the parking demand for the proposed development from a residential average. Studies, as cited later in this document, show that: (1) rental housing generates less parking demand than ownership housing; (2) small units generate less parking demand than larger units; (3) affordable housing generates less demand than market rate housing; (4) housing in walk-able locations, in proximity to public transit, generates less demand than housing in less central locations.

The accessory use of this property (service coordination) will naturally be timed so as to share parking with tenant uses. On-site staff (1-2 persons at any given time) and service provider visits will occur primarily during weekday business hours. Whereas peak demand for tenant parking will occur overnight and on weekends. Based on experience at other properties, up to 50% of tenants with cars will drive to work or other daily activities, freeing up parking spaces during the weekday for staff or providers.

The table on the following page gives multiple, similar local examples of actual parking provided and utilized for low to moderate income housing:

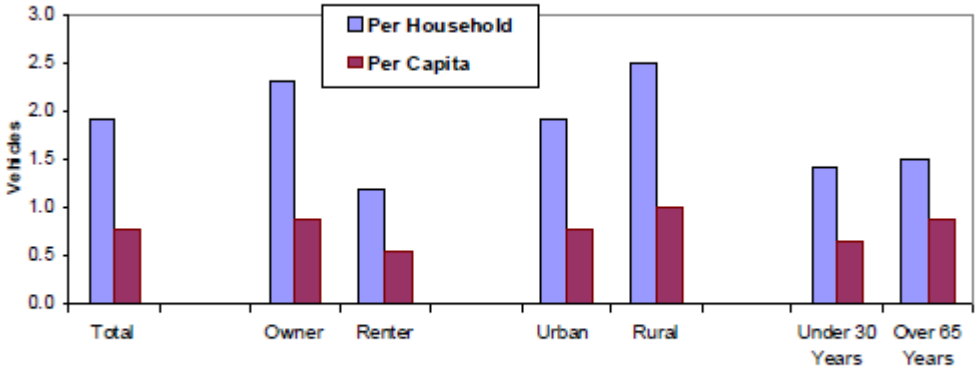
Location	Number of Units	Property Type	Number of Occupying Adults	Parking Provided	Average Daily Parking Utilized	Utilization Ratio per Occupying Adult
96-98 King Street Northampton	10	Affordable Single Person Studio Apts.	10	0	0	0
82 Bridge Street Northampton	15	Affordable Lodging House	15	8	4	.5
16 N Maple Street Florence	11	Affordable Single Person Studio Apts.	11	0	0	0
1-3 N Main Street Florence	17	Affordable Lodging House	17	0	0	0
Sergeant House Expansion Northampton	31	Affordable Single Person Studio Apts.	31	14	Permitted Not Yet Occupied	N/A
Earle Street Northampton	14	Affordable Single Person Studio Apts.	14	16	8	.57
The Lorraine, 96 Pleasant Street, Northampton	28	Affordable Single Person Studio Apts.	28	0	0	0
Live 155, 155 Pleasant Street, Northampton	70	Mixed income studios and 1-bedroom Apts.	70+	0	0	0
The Lumber Yard	55	Affordable Family Housing (1,2,3 bedroom Apts.)	64	41	37	.58
Chestnut Crossings, 275 Chestnut Street, Springfield	101	Affordable Single Person Studio Apts.	101	100	34	.34
Average Utilization for All Properties						.22
Average Utilization for Properties that Provide Parking						**.49**

I. Rental Housing Generates Less Parking Demand than Ownership Housing

Parking studies, such as the example excerpted below, document that statistically rental housing as a type of housing generates lower demand for parking spaces than ownership housing types.

"Vehicle holdings and parking demand for apartment renters are much lower than for owners. This is consistent with prior research. In purpose-built market rental sites, the parking demand range is 0.58 – 0.72 vehicles per apartment unit."[1]

Figure 5 Vehicles Per Household (BLS, 2002)



Household vehicle ownership rates vary depending on factors such as home tenure, location and resident age.

Source of Figure: *Parking Requirement Impacts on Housing Affordability* Victoria Transport Policy Institute, March 2020, p 5

As the figure above illustrates, typical per capita vehicles for rental households is 0.5. Per capital rates are most applicable to the proposed development, which includes only single person occupancy units.

II. Small housing units generate less parking demand

"Auto ownership increases with the number of bedrooms."[2]

Many Cities and Towns are starting to directly address the disproportionate impact of "one size fits all" per unit parking requirements on small or micro housing units. Both Northampton, MA and Berkley, CA have residential zones that prescribe the required number of parking spaces based upon gross square footage (GSF) of living area, requiring one parking space for every 1,000 GSF of living space. An excerpt from Northampton's zoning bylaw, Section 350-8.1, below is applicable to all zones in Northampton with the exception of the Central Business Zone, which does not require parking. In all zones other than Central Business, one parking space is required for every:

---

[1] The Metro Vancouver Apartment Parking Study, Technical Report, Sept 2012, p iv

[2] The Metro Vancouver Apartment Parking Study, Technical Report, Sept 2012, p 13

Multifamily dwelling for elderly and people with disabilities, lodging house, dormitory, SRO, and halfway house	*1,000 square feet of gross floor area, up to a maximum of one per dwelling unit for multifamily dwellings*

Providing one parking space for every 1,000 GSF in the proposed development at 132 Northampton Road (which is just under 12,000 GSF) would require 12 parking spaces.

Seattle's Planning Department recommended one parking space for every four micro dwelling units. By this standard, the proposed development would require 7 parking spaces.[3]

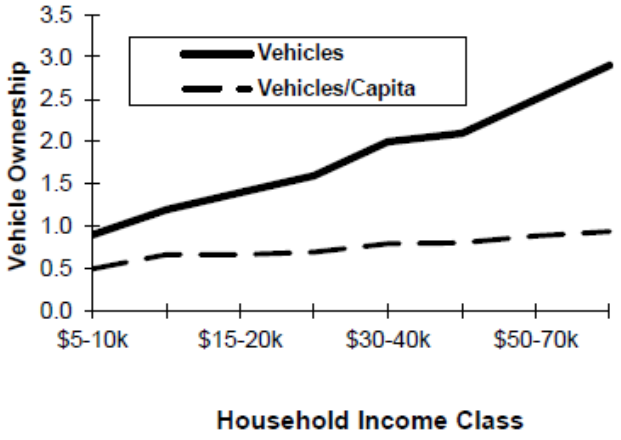
III. Affordable Housing generates less parking demand

"The likely residents of affordable housing do not require a great deal of parking. Studies show that the correlation between income and vehicle ownership is strong, with the likelihood of owning more than one vehicle increasing with income. Low-income families, seniors, and special needs populations are less likely to require the use of more than one parking space, if that at all. The need for parking also decreases for residents in dense areas near transit."[4]

Parking Demand by Households

Automobile ownership varies significantly, and is affected by demographic, geographic and management factors ("Parking Evaluation," VTPI, 2005; Hexagon Transportation Consultants 2008; San Diego 2011; Metro Vancouver 2012). Twelve percent of U.S. households do not own a motor vehicle, with higher rates of zero-vehicle households in larger cities and lower-income communities (BLS, 2003). Motor vehicle ownership rates tend to increase with income and household size, as indicated in figures 2 through 5 (also see Rice, 2004; CNU, 2008).

Figure 2 **Vehicle Ownership by Household Income** (BLS, 2003)



Lower income households own fewer automobiles than wealthier households.

---

[3] City of Seattle Department of Planning and Development, Director's Report and Recommendation Micro-housing and Congregate Residences, October 1, 2013, p 22

[4] Parking Requirements Guide for Affordable Housing Developers, Southern California Association of Non-Profit Housing, 2004, p 3

Source of Figure: ***Parking Requirement Impacts on Housing Affordability*** **Victoria Transport Policy Institute, March 2020, p 4**

As illustrated above, and as evidenced by the parking counts from local affordable housing properties, the lower a household's income, the fewer vehicles that household is likely to own. In the above chart, the per capita ownership rates (which are most comparable to the proposed development) remain well below 1.0 cars per capita in the low and mid-range income brackets.

IV. Parking demand is less in walkable locations near public transit

"Numerous studies of other regions, the Bay Area and San Francisco have shown that vehicle ownership is lower in neighborhoods that provide quality alternatives to driving such as neighborhood shopping and frequent, high quality transit service."[5]

Locus Maps provided in this permit application illustrate the wide array of community amenities that are within walking distance (typically less than 6/10 of a mile) from the site. Several bus stops are located 4/10 of a mile from the site. A well-used bike trail is nearby. With the increase in electric bikes, bike transportation is becoming more popular and available to persons in a wider range of ages and fitness levels. There are two electric bike share locations within walking distance of the site.

"High parking levels work in a cycle that actually increases congestion. *In housing, here's how it works: lots of parking means its price is "free" (despite its cost), free parking reduces the cost of, and thus increases the rate of car ownership, more vehicles means more driving on local roads. Breaking the cycle means ending mandates for high parking supplies…..Fewer cars mean more trips by walking and on transit, which serve to reduce neighborhood congestion.*[6]

The increasing use of ride services, such as Uber, also reduce the need for every individual to own their own car.

Summary:

The proposed parking ratio of 0.57 is more than what other similar facilities are providing. Additional parking would be unused and unnecessary extra paved surfaces. Studies show that: (1) rental housing generates less parking demand than ownership housing; (2) small units generate less parking demand than larger units; (3) affordable housing generates less parking demand than market rate housing; (4) housing in walk-able locations, in proximity to public transit, generates less parking demand than housing in less central locations.

[5] Rethinking Residential Parking: Myths & Facts, Non-Profit Housing Association of Northern California (NPH), April 2001, p 3
[6] Rethinking Residential Parking: Myths & Facts, Non-Profit Housing Association of Northern California (NPH), April 2001, p 5

Traffic Study / AMHERST STUDIO HOUSING Development

132 Northampton Road, Amherst, MA
Parcel 14C-8

Prepared By Berkshire Design Group
May 19, 2020

The project proposes to locate 28 studio residential units within walking distance of downtown. The selected parcel is located in Amherst on the south side of the road just east of the Amherst College Pratt Field and less than ½ mile to Amherst Town Center with amenities such as Town Hall, the Library, and many restaurants and shops. The 0.88 acre parcel has frontage along Northampton Road/ Route 9. The parcel is bordered to the north by Route 9, a residential property to the east, and by Amherst College's Pratt Field to the south and west.

Plans are currently in process (75% design completion phase) by MA Department of Transportation, which owns and maintains Northampton Road (a State Highway), to improve sidewalks on Northampton Road, creating 5' wide walk-ways from University Drive to the Town Center on both sides of the road, and adding two crosswalks with blinking lights at the Orchard and Hazel cross streets. This will place one crosswalk just east of 132 Northampton Road and one just west of the site. The site contains an internal walkway system which separates the pedestrians from the drive. The walkways connect to the existing and proposed to be improved walkways on Northampton Road

The project proposes to demolish the existing house at 132 Northampton Road, and construct the new 28 unit studio residences in a single building near the rear of the parcel. The Drive has been relocated about 14 feet to the west of the original location. This is mostly to allow for turning radius required by MA DOT but also to accommodate immediate residential neighbor by providing a larger area for a planting buffer between the new driveway location and the property boundary. This location also provides the safest entry/exit from the site in that it separates the entrance at the furthest/safest distance from the Pratt Field entrance and the Dana Street/Route 9 intersection. There is adequate and safe sight distance at this location, which is over 400 ft to the east and over 800 feet to the west.

Between the Building and Route 9 the project is proposing 16 parking spaces at a ratio of 0.57 spaces per unit. The width of the access drive to these units is 20' with a 5' sidewalk to the west of the drive. The drive terminates in a hammerhead which also provides storage for dumpsters on site and services as an emergency vehicle turn around space.

Traffic Generation

The Institute of Transportation Engineers (ITE) "Trip Generation" report uses actual field surveys to estimate trips associated with a variety of land uses and is a nationally accepted standard. Although the ITE report does not specifically have traffic date for low income housing, which typically has much lower traffic generation than apartments, the traffic generation for apartments as listed in the ITE report was used to project traffic volumes for the proposed use of the property. Weekday Average Daily Traffic, (ADT), AM and PM Weekday Peak Hour, and Saturday ADT and Saturday Peak Hour generation values were developed.

The ITE report was used to project existing and proposed traffic volumes for the property. The existing use for the property is a single family residence and ITE Land Use Code 210 -*Single Family Detached Housing* was us for computation of existing traffic generation. The ITE Land Use Code 220 – A*partments* was used assuming 28 units. Traffic generation from low income housing are typically less that an average apartment, and the trip generations listed in this report are actually higher than anticipated and as such reflect conservative estimate

of traffic impacts and the trip generations listed in this report are actually higher than anticipated and as such reflect a conservative estimate of traffic impacts.

A conservative estimate of the traffic to be generated by the project during the weekday morning peak hour, the weekday evening peak hour and the total weekday daily traffic is summarized below:

Traffic generation based upon ITE Land Use Code 220 – Apartment and 210 Single Family

Weekday ADT		Rate/Unit	% Enter	Trips enter	% Exit	Trips exit	Total trips
28 Residential Units		6.7	50	94	50	94	188
Minus 1 Single Family Unit		10	50	5	50	5	10
TOTAL				89		89	178

Weekday AM Peak		Rate	% Enter	Trips enter	% Exit	Trips exit	Total trips
28 Residential Units		0.75	36	8	64	13	21
Minus 1 Single Family Unit		0.75	35	1	65	1	1
TOTAL				**7**		**12**	**20**

Weekday PM Peak		Rate	% Enter	Trips enter	% Exit	Trips exit	Total trips
28 Residential Units		1.01	60	17	40	11	28
Minus 1 Single Family Unit		1.01	58	1	42	1	1
TOTAL				**16**		**10**	**27**

The current 75 % Mass DOT design plans list traffic counts conducted in 2016 which shows an average daily traffic, (ADT) on Route 9 in the vicinity of the project as 14,514 vehicles per day. The plans also listed as the Design Hourly Volume, (DHV) as 1,313,vehicles per hour, and the Directional Design Hourly Volume (DDHV) as 656 vehicles per hour.

Summary:

The site drive is located with adequate and safe sight distance, the site has an internal walkway separating pedestrians from driveway traffic, and the site will have pedestrian access to the central downtown amenities, thereby reducing the requirements for auto traffic generation by the residents

The anticipated MAXIMUM peak hour traffic to be generated by this project results in a traffic generation of only 27 vehicles per hour, or approximately 2 minutes between trips. In reality, it is anticipated that this number will actually be much less. This in comparison with the existing peak hour traffic on Route 9 of 1,313 vehicles per hour indicate that the additional traffic generated by this project will result in a very small incremental increase in traffic volumes on Route 9 that will have minimal impact on traffic operations on Route 9 or any other adjacent roadways or intersections.

2019 00001050
Bk: 13182Pg: 330 Page: 1 of 4
Recorded: 01/18/2019 12:41 PM

MASSACHUSETTS EXCISE TAX
Hampshire District ROD #13 001
Date: 01/18/2019 12:41 PM
ctrl# 043232 19167 Doc# 00001050
Fee: $1,855.92 Cons: $407,000.00

Affected Premises:
132 Northampton Road
Amherst, Massachusetts

QUITCLAIM DEED

KNOW ALL PERSONS BY THESE PRESENTS

That We, **JEFFREY M. KEEDY and MIA A. KEEDY,** husband and wife, both of 49 Rocky Hill Road, Hadley, Hampshire County, Massachusetts

for consideration paid, and in full consideration of FOUR HUNDRED SEVEN THOUSAND . and 00/100 ($407,000.00) DOLLARS

grant to **VALLEY COMMUNITY DEVELOPMENT CORPORATION,** a Massachusetts Corporation with a principal address of 30 Market Street, Northampton, Hampshire County, Massachusetts

with QUITCLAIM COVENANTS

The land in Amherst, Hampshire County, Massachusetts, bounded and described on Exhibit "A" attached hereto and incorporated herein.

As per M.G.L. c 188 sec 13, the Grantors herein, under oath and subject to the pains and penalties of perjury, do hereby depose, state and certify that: (i) we release all rights of Homestead in the subject realty, (ii) that no spouse, no non-owner spouse, former spouse, or any other person resides in the home, and (iii) at the time of delivery of this deed, no spouse, former spouse, or any other person is entitled to claim the benefit of an existing estate of homestead.

NO NEW BOUNDARIES ARE CREATED AS A RESULT OF THIS CONVEYANCE.

BEING the same premises conveyed to the Grantors herein by Deed

recorded with the Hampshire County Registry of Deeds in Book 12822, Page 30. (See also Deed recorded with the Hampshire County Registry of Deeds in Book 11764, Page 221.)

Witness our hands and seals this 18 day of January, 2019.

Witness: JEFFREY M. KEEDY

Witness: MIA A. KEEDY

COMMONWEALTH OF MASSACHUSETTS

County of Hampshire

On this 18 day of January, 2019, before me, the undersigned notary public, personally appeared **Jeffrey M. Keedy and Mia A. Keedy,** proved to me through satisfactory evidence of identification, which were Massachusetts Drivers Licenses as to each, to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose as their free act and deed.

Notary Public:
PHILIP C. CICCARELLI
My Commission Expires:
February 21, 2025

EXHIBIT "A"

132 Northampton Road
Amherst, MA 01002

The land in Amherst, bounded and described as follows:

PARCEL 1:

Beginning at an iron post marking the southwest corner of the land herein conveyed; said iron post marks the southwest corner of the land conveyed to Vincent Grandonico and Maria Grandonico by deed of Sarah D. Morse Baker, dated January 5, 1945, recorded in Hampshire County Registry of Deeds, Book 987, Page 177;

Thence from said iron post, northerly along an iron fence marking the easterly line of land of Amherst College, one hundred (100) feet to an iron pipe;

Thence N. 74° 45' E. along land now or formerly of Maria Grandonico, one hundred sixty-six (166) feet to an iron pipe;

Thence S. 20° 30' E. along land now or formerly of Maria Grandonico, eighty-four (84) feet to an iron pipe set in the northerly line of land owned by Amherst College;

Thence westerly along land of Amherst College one hundred ninety-three (193) feet to the place of beginning; together with a fifteen (15) foot wide right of way for any and all purposes, including the right to lay and maintain sewer, water and drain pipe, and electric and telephone wires, on the poles or in the ground, from the northeasterly corner of the land conveyed to the southerly line of Northampton Road, bounded and described as follows:

Beginning at an iron pipe marking the northeast corner of the land conveyed;

Thence N. 20° 30' W. along land now or formerly of Maria Grandonico to a point in the southerly line of Northampton Road;

Thence westerly along the southerly line of Northampton Road fifteen (15) feet to a point;

Thence S. 20° 30' E. along land now or formerly of Maria Grandonico to a point in the northerly line of the land by this deed conveyed;

Thence N. 74° 45' E along the northerly lone of the land conveyed fifteen (15) feet to the iron pin marking the point of beginning of the right of way herein described;

PARCEL 2:

Beginning at an iron pipe set in the southerly line of Northampton Road, said iron pipe marks the northeasterly corner of the land herein described and the northwesterly corner of land conveyed by Maria Grandonico to Robert R. Ullman et ux;

Thence S. 17° 20" E. along land now or formerly of said Ullman, to an iron pipe marking the northeasterly corner of land now or formerly owned by Victor A. Keedy;

Thence S. 74° 30" W. along land now or formerly of said Keedy, one hundred sixty-six (166) feet to an iron pipe and land owned by Amherst College; said iron pipe marks the northwesterly corner of land owned by said Keedy and the southwesterly corner of the land herein described.

Thence northerly along land of said Amherst College, one hundred thirty-three and six tenths (133.6) feet to an iron pipe and the southerly line of Northampton Road; thence easterly, along Northampton Road, one hundred thirty-nine and five tenths (139.5) feet to the point of beginning.

ATTEST: HAMPSHIRE, Mary Olberding, REGISTER
MARY OLBERDING

2019 00001051
Bk: 13182Pg: 334 Page: 1 of 3
Recorded: 01/18/2019 12:41 PM

MASSACHUSETTS EXCISE TAX
Hampshire District ROD #13 001
Date: 01/18/2019 12:41 PM
ctrl# 043233 21103 Doc# 00001051
Fee: $2.28 Cons: $500.00

Affected Premises:
132 Northampton Road
Amherst, Massachusetts

QUITCLAIM DEED

KNOW ALL PERSONS BY THESE PRESENTS

That We, **JEFFREY M. KEEDY,** as Personal Representative of the Estate of Victor A. Keedy, Hampshire County Probate and Family Court Docket #HS18P0635EA, a married man, of 49 Rocky Hill Road, Hadley, Hampshire County, Massachusetts, joined by his spouse **MIA A. KEEDY,** also of 49 Rocky Hill Road, Hadley, Hampshire County, Massachusetts

for consideration paid, and in full consideration of FIVE HUNDRED and 00/100 ($500.00) DOLLARS

grant to **VALLEY COMMUNITY DEVELOPMENT CORPORATION,** a Massachusetts Corporation with a principal address of 30 Market Street, Northampton, Hampshire County, Massachusetts

with QUITCLAIM COVENANTS

The land in Amherst, Hampshire County, Massachusetts, bounded and described on Exhibit "A" attached hereto and incorporated herein.

As per M.G.L. c 188 sec 13, the Grantors herein, under oath and subject to the pains and penalties of perjury, do hereby depose, state and certify that: (i) we release all rights of Homestead in the subject realty, (ii) that no spouse, no non-owner spouse, former spouse, or any other person resides in the home, and (iii) at the time of delivery of this deed, no spouse, former spouse, or any other person is entitled to claim the benefit of an existing estate of homestead.

NO NEW BOUNDARIES ARE CREATED AS A RESULT OF THIS CONVEYANCE.

BEING the same premises conveyed to Victor A. Keedy and Itala Grandonico Keedy by Deed recorded with the Hampshire County Registry of Deeds in Book 1325, Page 188.

Witness our hands and seals this 18 day of January, 2019.

Witness:

JEFFREY M. KEEDY, As Personal Presentative of the Estate of Victor A. Keedy

Witness:

MIA A. KEEDY

COMMONWEALTH OF MASSACHUSETTS

County of Hampshire

On this 18 day of January, 2019, before me, the undersigned notary public, personally appeared **Jeffrey M. Keedy, as Personal Representative of the Estate of Victor A. Keedy and Mia A. Keedy,** proved to me through satisfactory evidence of identification, which were Massachusetts Drivers Licenses as to each, to be the persons whose names are signed on the preceding or attached document, and acknowledged to me that they signed it voluntarily for its stated purpose as their free act and deed.

Notary Public:
PHILIP C. CICCARELLI
My Commission Expires:
February 21, 2025

EXHIBIT "A"

132 Northampton Road
Amherst, MA 01002

The land in Amherst, bounded and described as follows:

Beginning at an iron pin at the southwesterly corner of the premises hereby conveyed at the southeasterly corner of other land now or formerly of said Victor A. Keedy et ux, forty (40) feet to an iron pin; thence running easterly along other land of said Robert E. Ullman et ux, thirty (30) feet to an iron pin; thence running southeasterly along said land of Robert E. Ullman et ux, twenty-nine and five-tenths (29.5) feet to an iron pin at land of Amherst College; thence running southwesterly along land of said Amherst College, twenty-eight (28) feet to the place of beginning.

ATTEST: HAMPSHIRE, Mary Olberding, REGISTER
MARY OLBERDING

Commonwealth of Massachusetts
DEPARTMENT OF HOUSING & COMMUNITY DEVELOPMENT
Charles D. Baker, Governor ◆ Karyn E. Polito, Lt. Governor ◆ Jennifer D. Maddox, Undersecretary

March 30, 2020

Laura Baker
Valley Community Development Corporation
256 Pleasant Street, Suite A
Northampton, MA 01060

RE: Amherst Supportive Studio Apartments, Amherst, MA– Project Eligibility Letter

Dear Ms. Baker:

I am pleased to inform you that your application for project eligibility determination for the proposed Amherst Supportive Studio Apartments project located in Amherst, Massachusetts, has been approved under the Low Income Housing Tax Credit (LIHTC) program. The property is located at 132 Northampton Road in Amherst, Massachusetts. This approval indicates that the proposed plan is for the demolition of the existing single-family house and the new construction of a two-story building with three living levels containing 28 residential units. Twenty units, or 71.4%, will be affordable at no more than 60% of area median income and will be considered LIHTC units, while an additional eight units, or 28.6%, will be income restricted at no more than 80% of area median income. The proposed development will consist of 28 studio units reserved for households with income tiers at 30%, 50% and 80% of the area median income.

The rental structure as described in the application is generally consistent with the standards for affordable housing to be included in the community's Chapter 40B affordable housing stock. This approval does not constitute a guarantee that LIHTC funds will be allocated to the Amherst Supportive Studio Apartments project. It does create a presumption of fundability under 760 CMR 56.04, and permits Valley Community Development Corporation (the applicant) to apply to the Amherst Zoning Board of Appeals for a comprehensive permit. The applicant should note that a One Stop submission for funding for this project must conform to all Department of Housing and Community Development (DHCD) program limits and requirements in effect at the time of submission.

As part of the review process, DHCD has made the following findings:

1. The proposed project appears generally eligible under the requirements of the Low Income Housing Tax Credit program based on the proposal for a 28-unit building of which 20 units, or 71.4%, will be reserved for residents earning no more than 60% of area median income, and 8 units, or 28.6%, will be reserved for residents earning no more 80% of area median income.

2. DHCD performed an on-site inspection of the proposed project on February 10, 2020. DHCD has determined that the proposed site is an appropriate location for the project. The site, containing a single-family house that will be demolished, is located in a residential area. The site is located within a half mile to the Amherst Center and two shopping plazas. It is also located in close proximity to public transportation and a bike trail.

3. The proposed housing design is appropriate for the site. The existing, single-family house will be demolished. The new housing development will include the construction of a two-story, building located on the Northampton Road corridor between University Drive and the Amherst Town. Appropriate details have been incorporated into the design of the apartment units, common spaces, corridors and multi-purpose areas.

4. The proposed project appears financially feasible in the context of the Amherst housing market where there is a demonstrated need for affordable rental housing. The Town's 2013 Housing Production Plan documented housing needs and set a production goal to address these needs at 200 affordable rental units over the coming 5 years. Additionally, the Amherst Housing Authority's 2016 Annual Report indicated that there were 2,457 waiting list applicants for its affordable rental units.

5. The initial proforma for the project appears financially feasible and consistent with the requirements for cost examination and limitations on profits on the basis of estimated development and operating costs. Please note again that a One Stop submission for funding for this project must conform to all DHCD program limits and requirements in effect at the time of submission.

6. A third-party appraisal has been completed and reviewed by DHCD. The Low-Income Housing Tax Credit Program Guidelines state that the allowable acquisition value of a site with a comprehensive permit must be equal to or less than the value under pre-existing zoning, plus reasonable carrying costs.

7. Valley Community Development Corporation is a non-profit organization, and meets the general eligibility standards of the Low Income Housing Tax Credit program. The ownership entity for the site will be either the applicant, Valley Community Development Corporation, or an entity controlled by the applicant, and shall be a Limited Dividend Organization as defined in 760 CMR 56.02.

8. The applicant is the owner of the site, as evidenced by the property deed.

9. DHCD received the attached comments from the Town of Amherst during the review period, and we anticipate concerns will be addressed during various Town approval processes.

The proposed Amherst Supportive Studio Apartments project will have to comply with all state and local codes not specifically exempted by a comprehensive permit. In applying for a comprehensive permit, the applicant should identify all aspects of the proposal that will not comply with local requirements.

If a comprehensive permit is granted, construction of this project may not commence without DHCD's issuance of final approval pursuant to 760 CMR 56.04 (7) and an award of LIHTC funds. This project eligibility determination letter is not transferable to any other project sponsor or housing program without the express written consent of DHCD. When construction is complete, a Chapter 40B cost certification

and an executed and recorded 40B Regulatory Agreement in compliance with DHCD's requirements pertaining to Chapter 40B must be submitted and approved by DHCD prior to the release of a Low-Income Housing Tax Credit Form 8609.

This letter shall expire two years from this date, or on March 30, 2022, unless a comprehensive permit has been issued.

We congratulate you on your efforts to work with the Town of Amherst to increase its supply of affordable housing.

Sincerely,

Catherine Racer
Associate Director

Cc: Joanne Campbell, Valley Community Development Corporation
Cc: Shavena Martin, Town Clerk, Town of Amherst

LS

RECEIVED
DEC 0 2 2019
MASS. HIST. COMM
RC. 67407

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A
MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: Amherst Supportive Studio Apartments

Location / Address: 132 Northampton Road

City / Town: Amherst, MA

Project Proponent

Name: Town of Amherst

Address: 4 Boltwood Avenue

City/Town/Zip/Telephone: Amherst, MA 01002 (413) 259-3282

After review of MHC files and the materials you submitted, it has been determined that this project is unlikely to affect significant historic or archaeological resources.

1/2/20
Linda Santoro
Preservation Planner
Massachusetts Historical Commission
Date

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
MA DHCD	Mini-entitlement CDBG funds
Town of Amherst	Community Preservation Act funds
Other sources and funding still TBD	

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.

There is an existing single family structure that is proposed to be demolished.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.

The project is in early design phases, and although the most conservative approach is to consider a full demolition, the project may involve partial demolition of the single-family home and then rehabilitaiton.

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

The project includes the construction of a new structure that would include approximately 28 studio apartments with common space.

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.
The structure was once a barn associated with 126 Northampton Road (AMH.300). Around 1950 the barn and surrounding land were separated into a new parcel and the barn was converted to a single family home.
What is the total acreage of the project area?

Woodland	acres	Productive Resources:	
Wetland	acres	Agriculture	acres
Floodplain	acres	Forestry	acres
Open space	acres	Mining/Extraction	acres
Developed 0.88	acres	Total Project Acreage 0.88	acres

What is the acreage of the proposed new construction? 0.88 acres

What is the present land use of the project area?
The property is zoned for General Residence and it is currently used as a single family home.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: Nathl Malley Date: 12-2-2019

Name: Nathaniel Malley

Address: Town Hall, 4 Boltwood Ave

City/Town/Zip: Amherst, MA 01002

Telephone: 413-259-3322

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

TOWN OF
AMHERST
MASSACHUSETTS

Town Council
4 Boltwood Avenue
Amherst, MA 01002
(413) 259-3002
towncouncil@amherstma.gov

February 24, 2020

Rebecca Frawley Wachtel, Director
Low Income Housing Tax Credit Program
Department of Housing and Community Development
100 Cambridge Street, 3rd Floor
Boston, MA 02114

Re: Proposed Single Room Occupancy (SRO) Supportive Housing at 132 Northampton Road, Amherst MA

Dear Ms. Wachtel,

Thank you for the opportunity to provide comments on the application for Project Eligibility for the Proposed Single Room Occupancy (SRO) Supportive Housing at 132 Northampton Road, Amherst MA, submitted by Valley Community Development Corporation (Valley CDC). Valley CDC is proposing to develop approximately 28 units of affordable housing at 132 Northampton Road. The project is seeking a Comprehensive Permit per M.G.L Chapter 40B for the development of affordable housing. The Comprehensive Permit allows all local permitting to take place with the Zoning Board of Appeals.

Valley CDC is a local non-profit corporation formed in 1988 that addresses the growing needs of low and moderate income people through developing and preserving affordable rental and ownership housing and providing economic opportunities through small business assistance (summarized from Valley CDC's website: (http://valleycdc.com/about-us/).

The project on Northampton Road is in response to the local need for small affordable rental units for extremely low- and low-income individuals. The Town of Amherst Master Plan (2010) and Housing Production Plan (2013) identify the severe lack of this type of housing, and recommend the creation of these types of units. The project would be one building that includes 28 small studio apartments as well as a multi-purpose common room, a laundry room, and office space for the part-time Resident Services Coordinator and part-time Property Management. The project also includes the provision of support services for tenants.

Prior to Valley CDC's neighbor meeting on April 24, 2019, discussion of Valley CDC's Supportive Housing Project had taken place mainly at three board/committee venues—the Community Development Block Grant (CDBG) Advisory Committee, Amherst Municipal Affordable Housing Trust (AMAHT), and the Community Preservation Act Committee (CPAC). At the 2017 Annual Town Meeting the Planning Board also supported, and Representative Town Meeting passed, a zoning change to allow an affordable project with the same unit type, such as small studio apartments.

As background on the topic of housing for low-income and homeless people, we include the following:

- The Town of Amherst has long recognized the need for housing for low income and homeless people. This is identified in the community's Master Plan (2010), Housing Production Plan (2013) and the Comprehensive Housing Market Study (2015).
- Craig's Doors at the First Baptist Church opened 8 years ago as a seasonal behavior-based overnight shelter for homeless people; in 2018, it housed 172 individuals during the months of December through April.
- In July of 2016, the town held a public forum on homelessness that was attended by over 100 people. Representatives of several service providers spoke about the region-wide need for shelter and housing for low-income people. Residents came together to address issues related to housing for low-income and homeless people. Similar Amherst housing forums including these topics have been held annually by a variety of groups.

The timeline below indicates when Valley CDC's supportive housing project was discussed at a public meeting or hearing, and when there was local media coverage of the project. *Please note that the Town of Amherst adopted the Town Council/Manager form of government, which became effective on December 3, 2018.*

January 2017

- Valley CDC submits a request for $51,000 in CDBG funds for site assessments and feasibility studies to help identify a site for a supportive enhanced small studio apartment development.
- Valley CDC discusses small studio apartments with Planning Board's Zoning Subcommittee to February 2017 CDBG Advisory Committee holds public hearing and votes to recommend funding for Valley CDC.

March 2017

- Planning Board holds a public hearing to discuss the zoning amendment related to allowing the same size units if all affordable, and votes to recommend the zoning amendment to Town Meeting.

April 2017

- Daily Hampshire Gazette article describing Valley CDCs efforts to find a site for supportive housing project.

April - May 2017

- Planning Board presents Article 35 Report to Select Board, Town Meeting Coordinating Committee and League of Women Voters.

- Annual Spring Town Meeting approves Article 35: Zoning – Apartment Bedroom Mix (Planning Board) VOTED Yes 145, No 25 with 10 abstaining to amend the Standards and Conditions of Section 3.323, Apartments, by adding the language in bold italics, as follows:

  "*. . . No more than 50% of the total number of dwelling units shall be of any one size (i.e., # of bedrooms). For projects in which all dwelling units provided, other than those occupied by resident manager(s), are Affordable (see Article 12, Definitions), the Permit Granting Board or Special Permit Granting Authority authorized to act under the applicable section of the Bylaw for this use may waive or modify this requirement.* "

A management plan, as defined in terms of form and content in the Rules and Regulations adopted by the Permit Granting Board or Special Permit Granting Authority shall be included as an integral part of any application under this section. In all districts, the Permit Granting Board or Special Permit Granting Authority shall apply the provisions of Sections 3.2040 and 3.2041 to any construction, renovation, or expansion resulting in the creation of new dwelling unit under this section. Action taken 5/15/17.

November 2017

- The Town of Amherst and Valley CDC enters into a CDBG contract for site selection. The initial contract ended in September 2018 and was extended through February 2019.

June 2018

- The CDBG Advisory Committee holds a Public Hearing on current activities, including an update on the Valley CDC site selection process.

November 2018

- The Amherst Municipal Affordable Housing Trust sponsors a public forum with Valley CDC that discusses the need for small affordable units, including SRO housing.
- Valley CDC discusses their planned CPA proposal for the project with the Housing Trust.

December 2018

- The Housing Trust votes to support Valley CDC's planned CPA proposal.
- Valley CDC submits CDBG proposal for $200,000 to fund architectural fees and energy consulting for the supportive housing project.
- Valley CDC submits CPA proposal for $500,000 for general costs of the project.
- Daily Hampshire Gazette Article describing Valley CDC's CDBG proposal.

January 2019

- CDBG Advisory Committee recommends funding Valley CDC's proposal.
- Daily Hampshire Gazette article about Valley CDC's project moving forward.
- Valley CDC purchases property at 132 Northampton Road.
- Location and number of units made public.

February—March 2019

- CPA Committee discusses Valley CDC's $500,000 CPA proposal.
- The Housing Trust discussed progress and process of Valley CDC's project.
- The Town submits CDBG application to State, including Valley CDC's request for $200,000.

April 2019

- Daily Hampshire Gazette Article about Valley CDC's FY20 CPA Proposal for $500,000 for the project.
- Valley CDC holds a community meeting at the Bangs Center to hear comments from neighbors.

May-June 2019

- Town Council reviews and discusses Valley CDC's project and their CPA proposal.
- The Town receives comments from the community, including neighbors with questions and concerns about the project
- Town Council Community Resources Committee reviews CPAC request.
- June 24th – Town Council holds Open Meeting of the Residents
- June 25 – Finance Committee review of CPAC request
- July 1 – Town Council votes on CPAC request, approving it by a vote of 11 in favor with 1 abstention. One Councilor was absent from the meeting.
- January-February 2020
- January 6 – Valley CDC provides an update and answers questions at the Town Council
- January 31 – DHCD review period for comments opens
- February 10 – DHCD site visit attended by three Town Councilors

Consistent with the previous actions of various governing and advisory bodies of the Town of Amherst, the Amherst Town Council, expresses its strong support for the proposed Single Room Occupancy (SRO) Supportive Housing at 132 Northampton Road, Amherst MA, submitted by Valley Community Development Corporation (Valley CDC). We continue to encourage residents to share their views during the DHCD review period as well as at future Zoning Board of Appeals hearings.

Sincerely,

Lynn Griesemer on behalf of the Amherst Town Council

TOWN OF
AMHERST
MASSACHUSETTS

Office of the Town Manager
(413) 259-3002
townmanager@amherstma.gov

January 14, 2020

Valley Community Development
256 Pleasant Street, Suite A
Holyoke Street Entrance
Northampton, Massachusetts 01060

To Whom It May Concern:

The Town of Amherst is pleased to support Valley Community Development Corporation's supportive studio project planned for 132 Northampton Road. The project helps meet the high need for small affordable rental units that was identified in the Town's Housing Production Plan, and it is consistent with many goals of the community's Master Plan.

As part of the effort to move the project forward, the Town has made a sizable commitment of funds to the project, including $700,000 in Mini-entitlement Community Development Block Grant (CDBG) funds and Community Preservation Act (CPA) funds and extensive staff support.

In July 2019, Amherst's Town Council approved the $500,000 CPA request because of the project's many benefits. The $200,000 of CDBG funds has been allocated to assist with architectural services and energy efficient design. These local funds augment the ongoing staff and committee support for this project, which will add approximately 28 units for extremely low- and low-income individuals.

Valley CDC has a proven track record of developing affordable housing, and the Town offers its support to make this project a success. Please contact me if there are any questions or there is a requirement for more information.

Sincerely,

Paul Bockelman
Town Manager

TOWN OF
AMHERST
MASSACHUSETTS

Planning Department
phone: (413) 259-3040
planning@amherstma.gov

February 21, 2020

Ms. Rebecca Frawley Wachtel, Director
Low Income Housing tax Credit Program
DHCD
100 Cambridge Street, 3rd Floor
Boston, MA 02114

Re: Amherst Supportive Studio Apartments
Valley Community Development Corporation
132 Northampton Road, Amherst, MA 01002

Dear Ms. Wachtel:

At its February 19, 2020, meeting the Amherst Planning Board heard a presentation from Valley Community Development Corporation on their proposed affordable studio housing development, containing 28 studio apartments and 14 parking spaces and site improvements, at 132 Northampton Road in Amherst.

After the presentation and following discussion, the Planning Board voted 7-0-0 to express support for the proposed project and to forward its comments to DHCD.

The Planning Board's comments and recommendations are as follows:

1. That the Board appreciates the forms, scale and context of the proposal and the thoughtful manner in which the project was presented;
2. That the applicant may wish to consider including some one-bedroom apartments for people with children and people who may experience custody issues and have visitation rights;
3. That the applicant consider installing a roof over the smoking area to protect smokers from weather;
4. That the applicant may wish to consider relocating the dumpsters so that people won't see them when driving into the site;
5. That the applicant consider using graphics to show how the size of the proposed building compares with existing surrounding buildings.

Sincerely,

Christine M. Brestrup
Planning Director

Cc: Laura Baker, Real Estate Project Manager for VCDC, Applicant
Christine Gray-Mullen, Chair, Amherst Planning Board

Town of

AMHERST *Massachusetts*

TOWN HALL
4 Boltwood Avenue
Amherst, MA 01002-2351

AMHERST MUNICIPAL AFFORDABLE
HOUSING TRUST
(413) 259-3040
(413) 259-2410 [Fax]

TO: Nate Budington, Chair, Community Preservation Act Committee (CPAC)
Sonia Aldrich, Interim Finance Director

FROM: John Hornik, Chair
Amherst Municipal Affordable Housing Trust (AMAHT)

RE: Recommendations for Community Housing Proposal Submitted for CPA Funding

DATE: January 23, 2019

Members of the Housing Trust met on January 10th to consider the six community housing proposals submitted for CPA funding. This included the following:

1) Studio Apartment Supportive Housing - Valley Community Development
2) Consulting Support for Affordable Housing - Municipal Affordable Housing Trust, Town of Amherst
3) Development Support for Affordable Housing - Municipal Affordable Housing Trust, Town of Amherst
4) First Time Home Buyers Mortgage Subsidy Program - Valley Community Development
5) Rental Subsidy Program - Amherst Community Connections
6) Phase III Supportive Housing Program - Amherst Community Connections

By a vote of 5-0, members of the Housing Trust voted to recommend the following:

- CPA support for all six proposals.
- Place the highest priority on Proposals 1 and 2.
- No comparative rankings among the remaining four proposals.
- Bonding of the proposals 1 and 3

Explanation of Recommendations

As described below, we believe that each proposal is worthy of CPA funding. Although the proposals are quite different from each other, each contributes to the goal of significantly expanding access to affordable housing. As described further below, by bonding the larger proposals, CPAC can accommodate all of them within a multi-year budget.

Priority 1: Studio Apartment Supportive Housing - Valley CDC

The Trust is recommending that the CPAC recommend to Town Council full funding of the $500,000 requested by Valley Community Development to support the creation of 28 affordable studio apartments close to the center of Amherst. To the best of our knowledge, there is no equivalent structure in Amherst, although there are at least four in Northampton. Valley CDC promises to include studios with a range of affordability. This will accommodate persons with very low income, including persons with less than 80% AMI and persons who are currently homeless with even lower income.

According to the Housing Production Plan (2013) there are a large number of individuals who would benefit from this development, much larger than 28 units can accommodate. Nonetheless, it is a good start, and one that this community has been slow to recognize. We applaud the work that Valley Community Development has done to bring this project to its current status. Because of the large amount of funding requested, we further recommend that the $500,000 be bonded over a reasonable period of years.

Priority 2: Consulting Support for Affordable Housing - Municipal Affordable Housing Trust, Town of Amherst

The Trust is also strongly recommending the continuation of funding of a Housing Trust consultant. As described in the proposal, this person has played a critical role in supporting the development of the Trust's East Street School project, including the development of the Request for Proposals (RFP), and due diligence in assessing wetlands issues, site survey, and architectural and land use possibilities. Without this professional support, the East Street School project would still be back in the "hmmm…what shall we do about this" stage of development, rather than providing a draft RFP to Town Council that should result in 20-30 units of affordable housing.

We expect that the East Street School project is only the first of Trust projects that will go into the affordable housing development pipeline. Our goal, as described in a plan for expanding affordable housing in Amherst, is to see the development of 240 total units over the next five years. In order to make this pipeline a reality, the continuing services of a housing consultant are a critical need.

Priorities 3 Plus:

- Development Support for Affordable Housing - Municipal Affordable Housing Trust, Town of Amherst
- First Time Home Buyers Mortgage Subsidy Program - Valley CDC
- Rental Subsidy Program - Amherst Community Connections
- Phase III Supportive Housing Program - Amherst Community Connections

As stated above, we are not presenting the remaining requests in a priority order. The order below is a convenience for presentation.

3a. Expansion of Housing Trust Fund to Support Development of Affordable Housing.

As stated above, our goal is to see the development of 240 total units over the next five years. We will be seeking CPA support for these initiatives. We do not expect to act as developers, but as facilitators of development. The East Street School project is a good example. We are bringing this project to the point where an experienced developer, responding to an RFP, can take over the project and move it to completion. We have $150,000 of CPA funds in reserve that can be used for this purpose. However, it is very likely that a developer of the East Street Project will require additional local funding for a project of the size anticipated. We would like to be in a position to provide funding for this or other projects. In order to accomplish this, we have taken two actions.

- First, we have requested funding for Trust development projects this year, and will continue to do so in subsequent years;
- Second, we have developed an application for Trust funding that can be found here [https://www.amherstma.gov/DocumentCenter/View/46367/AMAHT-Program-Guidelines-and-Application-Form] The criteria for Housing Trust funding are consistent with CPA criteria, but exceed them.

The expansion of funding that we have in reserve to support new developments is obviously a high Trust priority.

3b. First Time Homebuyers Mortgage Subsidy Program

Valley Community Development is requesting support for a first-time homebuyers' mortgage subsidy program. We have previously submitted a letter of support to CPAC for this program. Briefly, we are supporting this proposal because

1. It creates permanent affordable housing (affordable for 30 years);
2. It promotes the important goal of home ownership; and
3. It does this at a very reasonable cost to CPA, about $60,000 per unit.

Valley Community Development has a record of successfully adding four affordable homeownership houses to Amherst for 30 years as a result of prior support from

CPA. Increasing access to homeownership is different than increasing access to rental units and should be part of the CPA funding mix. The request to support four additional units deserves our full support.

3c. Rental Subsidy Program - Amherst Community Connections
3d. Phase III Supportive Housing Program - Amherst Community Connections

Projects 1 and 3a are 2-3 years away from the day that the first tenant will walk through the door of a new residential unit. Yet we have many persons in need now, as identified in the Housing Production Plan (2013). While we wait for the development of new units of affordable housing, we cannot ignore the current need. Both proposed programs 3c and 3d provide us with a path to meeting some of the need. The Rental Subsidy Proposal and the Phase III Supportive Housing Proposal together can help, per year---at least nine (9) Amherst residents who are homeless and/or at risk of becoming homeless to get off the streets and to secure stable housing. This helps to meet part of the goal of providing 40 units of housing per year for persons who are homeless and at risk of becoming homeless.

By creating local rental subsidy programs, we support another way to address a part of the unmet need in the community. Although a different mechanism for providing access to affordable housing than the other proposals, it also should be a part of the CPA funding mix.

I would be pleased to provide additional information and respond to questions, either in writing or in person. Thank you for your consideration.

AMHERST HOUSING AUTHORITY
33 KELLOGG AVENUE
AMHERST, MA 01002

February 27, 2020

SUPPORT LETTER FOR VALLEY CDC DEVELOPMENT AT 132 NORTHAMPTON ROAD

The Amherst Housing Authority Board of Commissioners enthusiastically supports the Valley Community Development Corporation's proposal to build a twenty-eight unit Single Room Occupancy Dwelling on Northampton Road in Amherst. The Housing Authority is a key player in the effort to assist low income families and individuals to secure affordable housing in Amherst. We see the urgent need for affordable housing for our voucher holders. Unfortunately, many of our voucher holders cannot find affordable apartments in Amherst and must move from this community to other towns and cities. For example, in 2019 the AHA issued thirty Section 8 Housing Choice vouchers and only eleven voucher holders were able to lease-up in Amherst. Eight voucher holders found affordable housing in surrounding communities and the remaining eleven vouchers expired.

The Valley CDC is a community leader in providing well-constructed, safe and secure housing for low income people. In 2005, the AHA and the Valley CDC collaborated in developing eleven units of housing for families and single adults at 683-687 Main Street. We were impressed with the CDC's expertise as a developer and their sense of long term responsibility to the tenants, the Housing Authority and to the Amherst community.

We are eager to support the CDC and to work with them to bring a valuable housing resource to the Town of Amherst.

Thank you,

Michael Burkart
Chair, Amherst Housing Authority Board of Commissioners