



Firehouse Study Committee

Phase III Property & Space Requirements Review

December 2014

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Executive summary

The Deep River Fire House Study Committee is pleased to provide this Phase III Report to the Board of Selectman and Board of Finance. A brief history of the fire house activity since 2006 is included in Appendix A.

On April 8, 2014, the Board of Selectman chartered this committee to:

- identification of a single, viable location;
- a reassessment of essential space needs - - emergency vehicles, equipment storage, office, training/meeting space. Non-essentials, such as Beulah, the Ladder Wagon and other memorabilia, may have to be housed separately

The committee visited and/ or discussed fire house building designs, requirements and “what would you do different” aspects with fire department leadership of Old Saybrook, Essex, North Branford, Norwich, and Jerome, AZ, to better understand fire station requirements and considerations.

This report is organized into three sections following the charter;

- **Program Section** – detailing an assessment of a Fire House space needs
- **Property Section** – detailing an assessment of property locations and their benefits/liabilities
- **Recommendation** – This committee’s recommendation

The following pages provide detailed analysis in fulfillment of the assigned charter. Appendices provide additional documentation. In summary, this committee recommends program space needs between 9500 and 10,100 square feet to be sited at 57 Union Street where the current fire station is located.

Respectfully submitted by:

Tim Lee, Tim Ballantyne, Paul Carlson, Alan Paradis, Angus McDonald and Dave Oliveria

1 Program Summary

Proposed Program Space Needs

The proposed program ranges between 9,500 and 10,100 net square feet including approximately 5,000 sf of equipment bays. This is a total net program reduction of 2,000 square feet from the prior proposal dated October 2012. The proposed program meets foreseeable needs and with the exception of modest space programmed for the antique vehicles, does not propose construction of space for any future needs, however, the ultimate design of the facility should identify how the facility might be expanded for long term needs or expanded services. This is beyond the Phase I and Phase II studies that made space recommendations for the next 20 years.

Programming Process

The recommended space program was developed through a process of evaluating prior proposals for the new Deep River Fire House, visiting comparable facilities within the region, and literature research on standards for firehouse facilities.

The existing fire station and recent proposals for its replacement were used as a base line for the proposed program. These studies are included or referenced in Appendix B, “Needs Assessment & Building Requirements” (combination of Phase I and Phase II studies). Evaluation of the prior proposed facilities for Deep River challenged the premises of business as usual and focused on necessary functions. The objective was to identify the most efficient use of space and to identify essential functions that may have been overlooked. The result of that evaluation resulted in a net reduction of area but actually increased the actual number of spaces for critical functions.

The committee conducted tours of the Essex and Old Saybrook fire stations. The respective Chiefs provided insight on the construction/renovation process and validity of certain assumptions made during the programming and design process.

Included in the literature research were report recommendations by the Whole Building Design Guide, a program of the National Institute of Building Sciences. Some of the guidelines from that publication are referenced in this study.

Space Requirements

The proposed fire station must accommodate a variety of functions, including administration, training, equipment and vehicle storage, equipment and vehicle maintenance, and hazardous materials storage. While it is usually only occupied by trained personnel, the facility may

occasionally accommodate the general public for community education or outreach programs. Towards this end, the facility is required to be fully ADA compliant.

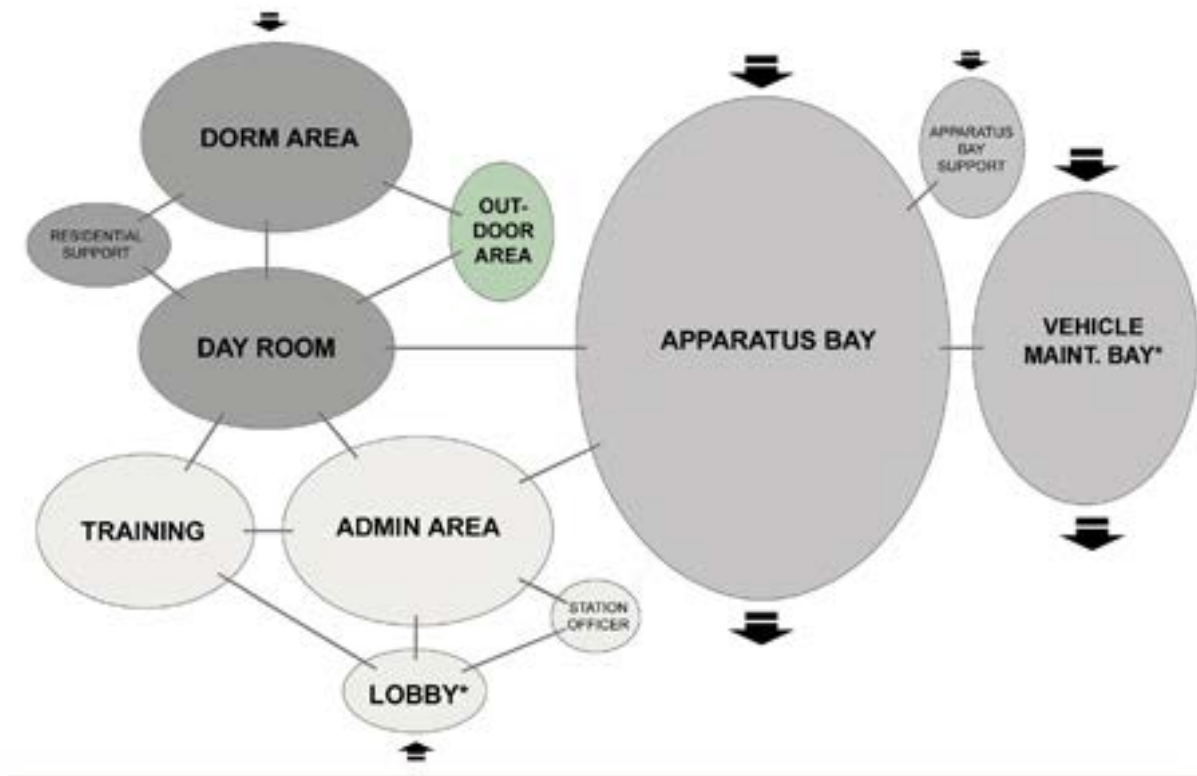
Major fire station functional areas include the following:

- Apparatus bay(s): This is where the fire fighting and emergency response vehicles are stored.
- Apparatus bay support and vehicle maintenance: These spaces are where the vehicles and equipment are cleaned, maintained, and stored. The proposed program includes specific equipment rooms such as the Self Contained Breathing Apparatus (SCBA) compressor & maintenance room. It is proposed that the larger equipment pieces (trucks) be maintained in a typical apparatus bays with one bay equipped with adjacent work benches, tools, and maintenance equipment like compressors, exhaust evacuation, and heated floors.
- Administrative and training areas: These include offices, dispatch facilities, and training and conference rooms.

Administrative areas include standard offices and conference and training rooms. The area will also likely include additional specialized spaces such as the chief's office and training/testing facilities for firefighter continuing education. The facility also includes a radio room for receiving emergency calls from the public. Presently, the radio room also functions as the day room. During emergency situations, both of these functions are necessary but from a practical standpoint, they cannot function in the same space. The proposed program has these two functions designated in two distinct and separate spaces.

The Conference/Classroom space type requires flexibility, durable finishes to anticipate maximum use, and integrated utility lines such as voice, data, and power to accommodate a variety of multimedia presentations and tele- and videoconferences.

- Residential areas: These include temporary dorm space, day room/kitchen, and residential support areas such as bathrooms and fitness spaces. As a volunteer fire department, these facilities are minimal, however, the dayroom function is essential for the volunteer department culture and some interim sleeping facilities are necessary in emergency situations. It is the recommendation of this study that the training room has the ability to be converted to temporary co-ed sleeping accommodations in emergency situations. It is not the recommendation of this study to provide designated dormitory or sleeping facilities.



Sample adjacency diagram for a fire station developed by DMJM Design, Arlington, VA

Program modifications from prior studies or proposals

The primary reduction of area was the result of decreasing the size of the meeting room. The meeting room has been defined specifically as a training room and proposed for capacity driven by the anticipated FD membership only. Previously, the meeting room had been proposed as a multi-purpose public hall with a capacity in excess of that required for a membership training session. The revision resulted in a net reduction of 750 square feet. John Winthrop Middle School and Valley Regional High School are available for large capacity meetings.

Another significant modification from prior proposals was the reduction of the Engineer room and designation of a specific engineer's office and separate storage facilities for equipment and materials.

Another reduction in program area was the elimination of the weight/fitness room. The committee recognizes the value and importance of this function, but also recognized the potential liability as well as the potential limitation of use of a fitness facility. While common in fire stations that are staffed full time, it was thought that this function would be best served by using public fitness facilities with appropriate staffing.

During the discussion of the conference room, it had been recommended that a portion of the meeting/training room be temporarily partitioned to accommodate smaller meetings or conferences. During discussions with the fire chief in Essex, it became clear that the primary function of the conference room was to be available in the event of an emergency as a situation room with the necessary data, white boards, and private meeting space. As such, it could not be integral with a larger meeting or function space and should be adjacent to the administrative offices.

Similar discussions relative to the function of the Radio room with the Old Saybrook Fire Chief clarified the need to separate the Radio Room from the Day Room as it presently functions in the Deep River Fire station. During an emergency, the Radio Room needs to function as an operations room. Non-essential personnel in the space hinder the efficiency of that function. The Radio room should be optimized for two persons with unobstructed view to the equipment bays and the apron to facilitate emergency response.

Space Needs assessment

The proposed program was generated by gathering data associated with the general goals for the facility and the specific functions in the firehouse rather than by a list of rooms. This approach was taken to ensure that the specific activities were accommodated and allowed for the potential for some spaces to serve dual functions or use shared space for optimal efficiency and flexibility. The spaces were evaluated based on who and how many persons would be in the space and what functions needed to be supported. This included identifying equipment and furniture for each space and noting special requirements such as adjacencies, services, or public access.

BASIS OF DESIGN - Is there a current station prototype to follow?

The New fire station needs were assessed against the existing facilities, comparable fire stations within the region, and published standards for fire station design.

SIZE -How large will the staff be—current and future? The existing fire department is comprised of 50 senior and 10 junior volunteers. The proposed facility anticipates membership to range between 50 and 75 members in the foreseeable future.

FUTURE EXPANSION -What is the predicted future expansion of this station?

It is expected that the proposed facility will meet the needs of the department for the next 20 years and beyond. Some flexibility in the equipment bays has been accommodated by inclusion of ancillary pieces including the antique vehicles and the rescue boat. Provided that the department remains a volunteer department, no additional facilities are required. A staffed fire department would require the addition of dormitory, resident support, and additional office facilities.

PUBLIC ACCESS - Will the public have access to and use of this station?

The facility is being designed for the explicit use by the fire fighters. Because for the emergency function of the firehouse, use of the meeting room for other public functions is not recommended and not included in the programming of the spaces with the exception of events hosted by the department with invited public.

OFFICES -What size and type of offices are required—private and shared?

The department is staffed by a Chief, Deputy Chief, two Assistant Chiefs, and officers who assume the responsibilities of secretary and treasurer. The nature of the responsibilities of Fire Chief requires a private enclosed office. The Officers require designated workstations. There are occasions when they will be working at the same time and so a designated work station and lockable file storage are required. However, the work stations can be within a shared space and would benefit from shared resources. In addition to the Officer's room, an additional shared office with two workstations for the secretary and treasurer is required. This space requires locked file storage. It was also determined that the Chief's office typically included a meeting space where private meetings could be conducted. If that meeting space was required by personnel other than the chief, the Chief would be displaced from his or her office. It was determined that a meeting room adjacent to the chief's office was more versatile than a large office with integral meeting space.

APPARATUS AND EQUIPMENT - What type and size of apparatus will be used—current and future?

While the exact size of future equipment cannot be determined, a mix of large, medium and small equipment can be anticipated. The current mix of equipment includes 1 large, 6 medium, and 2 small pieces of equipment housed at two facilities. The Winthrop facility houses 3 medium pieces . The main facility houses 1 large, 3 medium and 2 small. In addition to the emergency equipment, 2 antique pieces are maintained by the fire department. It was determined that it would be appropriate to house these pieces at the main facility for two important reasons: The antique equipment is a source of heritage and pride among the volunteers and helps maintain a presence at the facility, and the space for the antique equipment allows space within the facility in the future if it is determined that new equipment is required.

EQUIPMENT BAY CONFIGURATION - Will there be drive-through bays?

Drive-through bays would be desirable to provide additional ease of maneuvering equipment. Discussions with other fire departments have determined that while desirable, they are not essential. Care needs to be given to ensure that the range of response situations can be accommodated without the need of moving equipment out of the way of other equipment. An adequate quantity of bays with strategic stacking of

equipment is more important. A minimum of five equipment bays 70 feet deep are required.

GEAR CLEANING - Where is protective gear cleaned and stored?

Provision has been made for storage and cleaning of protective gear. Not all of the cleaning and decontamination will be handled internally. Some of the emergency equipment will still be sent out for decontamination.

Hoses are presently dried on the floor of the firehouse. Other facilities like Essex still use a hose tower. It was the opinion of the department that drying the hoses on the apparatus bay floor was acceptable. Towards that end, it is recommended that in slab radiant heating be provided in designated areas for drying hoses. It is further recommended that these areas also be planned as the maintenance areas where a radiant floor is also beneficial to health and comfort of the firemen during the routine maintenance of equipment.

STORAGE NEEDS - What are the present and future storage needs?

Storage of equipment, uniforms, parts and materials for maintenance, response gear, and seasonal items was reviewed. Space has been designated for all of the items, however, a more detailed inventory is required to provide distinct and appropriately located storage rooms and closets with proper controlled access. Within the program, certain inventory was stored with office spaces, mechanical rooms, or other spaces. It is essential that appropriately design storage is provided and other functional spaces are not just oversized to accommodate ad hoc storage.

Apparatus Review

Sizing the apparatus bay is critical and it should be designed to accommodate variable vehicle sizes. Typically, the entire room is sized based on the bay size for the largest vehicle in the fleet or the largest anticipated vehicle. Bays also include vehicle exhaust removal systems, compressed air and power drop lines, and hot and cold water connections. Bay doors must also accommodate the largest vehicle and include a manual means to open in case of power failure. Ideally, the site will accommodate drive-through bays.

It was determined that a bay width of 16 feet wide was suited for all equipment, allowing appropriate clearances around the vehicles for service and maneuvering. Review of existing and proposed equipment determined that the longest single piece of equipment requires a bay length of 55 feet. Allowing for service and maneuverability, the medium equipment required a length of 40 feet and the smaller equipment required a length of 30 feet. Considering the optimal configuration for stacking equipment for response, a 70 foot long bay would accommodate a medium and a small piece of equipment to stack, or a large piece of equipment

with allowance for an additional 15 feet of clear area within the bay for maintenance including tools, benches, and lay-down area. As an initial basis for planning, a standard equipment bay module of 16'x70' is recommended for efficiency and flexibility.

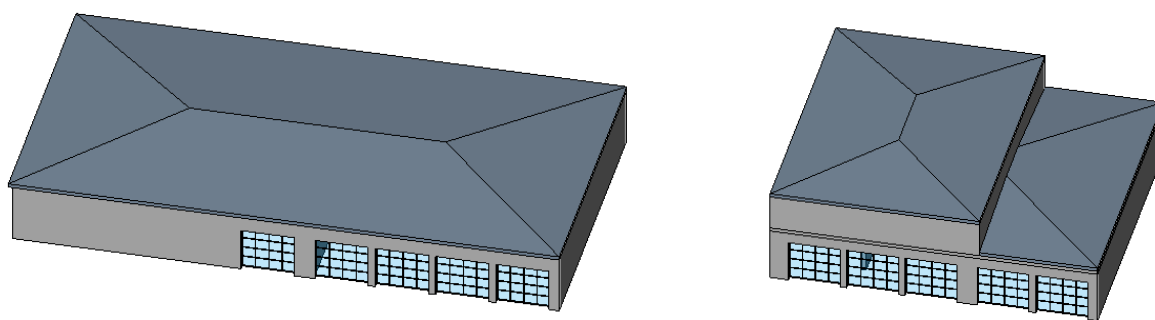
Single Story versus Two Story

It is often desirable to attempt to construct a single-story building within the allowable limits of the site. Many of the potential sites included the existing site are constrained, particularly when considering the site requirements for parking and an apron to stage equipment between the station and the road. In order to properly evaluate the potential sites, the program was evaluated based on a single story and a two story option. One approach is to locate administrative functions on the second level and maintain, as much as possible, response functions on the first floor. The program spaces were reviewed to determine what spaces were required to be on the first floor such as the equipment bays, equipment and maintenance spaces, and the radio room. Administrative spaces, meeting and training rooms, and other support spaces are appropriately located on a second level.

One-story structures are often less expensive than two stories, primarily due to the fact that two-story stations will require an elevator and vertical circulation. However, effective stacking of program results in a significantly smaller footprint resulting in significant reductions in foundation and roof area to enclose the same volume of area. Two story structures may also have long term operation and maintenance cost benefits. This study did not evaluate the specific construction or operation costs associated with the options, but studied the option one and two story scenarios relative to site and design opportunity.

A single story fire station would require approximately 9,545 net square feet with a building footprint of approximately 11,450 GSF based on a gross area multiplier of 1.2 to account for structure, wall thickness, risers, etc. A two story structure would have a program area of approximately 500 net square feet larger to accommodate the additional requirement of a fire stair and elevator (it was assumed that an external stair could accommodate the second means of egress.) The program distribution would not result in a direct stacking of the second floor program over the first floor. As the detailed program document shows, the first floor would have approximately 1,400 sf of program in addition to approximately 5,000 sf of equipment bay area. The second floor program is estimated at approximately 3,600 sf.

Diagrams of one and two story massing concepts are shown below.



The two story option has several advantages from feasibility and a design perspective. A single story building of this size would require significantly more site area and limits building configuration on the site, especially when by necessity the equipment bays must front on the street. From a design perspective, a two story structure, although potentially taller than typical residential structures, will have proportions and massing much more compatible with the context of the town. The additional height of a two story fire station relative to a two story residence would be in the range of 6 to 8 feet driven by the required height of the equipment bays and longer span structure. The two story structure would be well within the zoning ordinance and a modestly taller building would be appropriate for a municipal building. During the design phase of the project, single and multiple story options should be considered.

Detail Program with comparison to existing, comparables, and previous proposals are shown on the following page.

PROGRAM-

FUNCTION	1960	1997	2013			notes/comments
	Existing DR	Essex	Noyes Vogt	1 story	2 story	
	NASF	NASF	NASF	NASF	footprint	
GRAND TOTAL	5687	4922	12196	9545	10045 6445	
Foot print				135x70	92x70	
					Floor 1 Floor 2	
					20x70 70x52	
	2239	4922	6588	4545	1405 3600	
Fire Chief Office	378	260	275	125	125	
Chief's Conference				150	150	Communicating door to Chiefs office with separate public entrance
Officer's Room		312	196	225	225	3 workstations for Deputy Chief and (2) Assistant Chiefs
Business Office		318.5	196	125	125	secretary & treasurer stations with locking file cabinets
Radio Room	243	169		150	150	adjacent to apparatus bays
						Room available for emergency operations or as a meeting room on a dialy, non emergency basis.
Situation/Conference Room		222	260	225	225	
Lobby	108			100	100	Reception and trophy display
Meeting room		962.5	1600	850	850	10 sf/person, used for training in lecture or table and chair configurations.
Kitchen	208	324	300	250	250	
Dayroom	512		591	320	320	contiguous w/ meeting room *or in tower
Meeting Room Storage			220	100	100	table and chair storage
Closet	30	44				
General Storage		350	40	200	100 100	
Men	128	418	300	250	250	
Women	104	304	300	150	150	
EMS office - confidential matls.				125	125	
Engineer Room	160		810	125	125	
Workroom		236.25		250	250	
Equipment Room				400	200 200	
Storage			250			
SCBA compressor & maintenance	160	125.56	210	125	125	Exterior access
Medical Storage		120		0		Inclcd in EMS office
Hose Storage		210				
Hose Tower		161				Provided radiant heat in floor for hose dryir
Disinfection		116.8				
Mechanical	208	268.4		250	250	
Fitness Room			440	0		Liability?
Bunk Room						Utilize multipurpose room as required
Laundry				50	50	
Recreation Room						Included in Dayroom
Radio Center???						in radio room (150 sf located at FD museum
Elevator			na		80 80	
Stair exterior						
Stair			600		150 150	
Apparatus and Equipment	3448		5608	5000	width x length	
Engine			640	640	16 40	
Engine			640	640	16 40	
Tower Ladder			880	880	16 55	High Bay
Rescue Truck			640	640	16 40	
Fire/Rescue Boat			640	480	16 30	
Utility Pickup Truck			416	480	16 30	
Antique Engine			560	480	16 30	
Antique Ladder Wagon			312	360	16 22.5	
Maintenance Bay			880			Utilize high bay
Auxilliary unconditioned storage				400	16 25	
Existing Winthrop Facility			1920	1920	1920	
Tanker Truck			640	640	640	
Brush Truck			640	640	640	
Engine			640	640	640	
GRAND TOTAL						

Relevant Codes and Standards

Standard federal and state building codes apply, as appropriate. There are also numerous codes and standards that apply to the staffing and operation of a fire/rescue department; key standards include the following:

- Airport Rescue and Firefighting Station Building Design Advisory Circular 150/5210-15, by U.S. Department of Transportation, Federal Aviation Administration (FAA). 1987.
- Fire Suppression Rating Schedule (FSRS), by Insurance Services Office, Inc. (ISO).
- NFPA 403: Standard for Aircraft Rescue and Fire Fighting Services at Airports, by National Fire Protection Association (NFPA). 2003.
- NFPA 1500: Fire Department Occupational Safety and Health Program, by NFPA. 2002.
- NFPA 1581: Fire Department Infection Control Program, by NFPA. 2005.
- NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, by NFPA. 2004.
- NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments, by NFPA. 2004.

2 Property Assessment / Validation

The Deep River Firehouse Study Committee looked at a number of properties that were identified from the Phase II study along with other possible sites. The Committee investigated these properties and researched the differences between them; it became clear that many of them would not be a good fit for a new firehouse. Some of the reasons were that the current owners were unwilling to sell, lack of sufficient space to meet the needs of a firehouse (a minimum of 1 acre would be needed), and lack of access to the property See Appendix C for all properties reviewed.

The Committee narrowed the search to three different properties. The first is 57 Union Street "site of the existing firehouse," the second is 208 Main Street, and third is 423 Main Street. It was determined that these three properties had adequate space, and the two Main Street properties at the time of this study were available for purchase for a new firehouse location.

57 Union Street, Current DRFD Headquarters



Description

This is the site of the current Deep River Firehouse and Headquarters. The property at 57 Union Street and adjacent, vacant parcel at 55 Union Street are owned by the Town Of Deep River with total area of 0.72 acres. The third lot to the south at 51 Union Street is owned by "Deep River Fire Department Inc," a non-profit organization owned and managed by members of the Deep River Fire Department (DRFD) with total area of .27 acres. If all three lots were combined, the total parcel of .99 acres is available. Appendix D has this parcel's Property Card and Meets & Bounds Map (siting map & detail).

Benefits

The following positive factors would be realized with this property:

- The town owns the current site (55 and 57 Union Street) and the third lot (51 Union Street) with house is available for purchase to expand available space
- A new, attractive firehouse here would create a better “gateway” into town from the West
- Maintaining the central location allows the firefighters to respond to calls in an expeditious manner and its location at Union and West Elm streets provides quick access to all major roads in town
- Reuse of existing site would not alter existing building fabric or DRFD culture
- The existing location maintains town familiarity, already existing, important to current volunteers and could maintain interest for future recruits.
- Completing the new building would allow the old firehouse on River Street to be sold and put back on tax rolls

Liabilities

The following negative factors were identified with this property:

- This site lies just inside a FEMA identified flood plain; the land will need to be raised at least 18” to be utilized during a 100 year flood; See Appendix E
- Fire fighter access to this site could be limited during a 100 year flood (portions of West Elm and North Union streets are within the flood plain, Union Street in front of this property is outside the FEMA flood plain)
- The property does not favor a one-story facility, a two-story solution suggested in Section 1 of this report would work well
- Town would need to purchase the 51 Union Street property for additional parking and it would be removed from the tax rolls (the house on this property may need to come down and that will upset some residents)
- Future expansion limited if even possible
- Using this site will require temporary heated/ cooled housing of apparatus, offices and storage and temporary site during demolition and new construction
- A committee will be needed to oversee temporary facilities
 - identify and negotiating a temporary location
 - identify and arrange temporary buildings for apparatus, offices and storage
 - coordinating move-out to temporary site
 - coordinating tear-down and return of temporary buildings
- DRFD volunteers will need to pack, move and unpack gear and offices twice
- Drills and meetings would need to be located at a different site

- Lot layout does not lend itself to building the new structure in the vacant lot concurrent with using the existing structure
 - Not enough room concurrently for both
 - Removes available parking for drill nights and responses
 - No construction stockpiling space available
 - New structure would be closer to residential structures, removing transition space

208 Main Street



Description

208 Main Street it is situated just to the south of Lafayette Street and is a 1.5 acre parcel of flat land. The property is currently being rented and the owner has indicated that he would be willing to sell to the town for the new fire house. Appendix F has this parcel's Property Card and Meets & Bounds Map (siting map & detail).

Benefits

The following positive factors would be realized with this property:

- Room for future growth
- Near central location allows fire fighters to respond to calls in expeditious manner with quick access to all major roads from Main Street
- 57 Union Street property available to be sold to offset purchasing new property
- Only one move of equipment required from current fire house to new fire house when new building finished

- Owner renting now, agreeable to selling property and house to town
- House could potentially remain, sell, or rental (create easement for access, remains on tax roll) or become a potential use for fire department

Liabilities

The following negative factors were identified with this property:

- Requires the town to purchase property
- Requires existing older (possibly historic) home in town to be razed/ demolished
- Property taken off tax rolls
- Front floods in rain, necessitating building up ground above flood area
- Access from Main Street only
- 57 Union Street building would be sold, town would not have control of it's use (e.g. could be used for indoor and outdoor storage that would detract from entrance to town)
- Detracts from character and streetscape presence on Main Street
- In the neighborhood area, people could be reluctant to change
- Busy road use in area, congested at times

423 Main Street



Description

423 Main Street it is situated to the south of Kelsey Hill Road on the east side of Main Street and is a 1.58 acre parcel of flat land. The property is currently being leased for 12 months and

the owner has indicated that he would be willing to sell to the town for the new fire house. Appendix G has this parcel's Property Card and Meets & Bounds Map (siting map & detail).

Benefits

The following positive factors would be realized with this property:

- Has room for future growth
- New fire house here creates attractive structure on Main Street entering from South
- Access to all major roads from Main Street
- 57 Union Street property available to be sold to offset purchasing new property
- Only one move of equipment from current fire house to new fire house when new building finished
- Owner renting now, agreeable to selling property and house to town
- Dry area, could build 1 or 2-story structure
- Location high visibility, less congestion
- Good land orientation provides numerous possibilities for land use
- Few if any potential conflicts, no adjacent neighbors

Liabilities

The following negative factors were identified with this property:

- Requires town to purchase property
- Requires existing older home in town with no architectural qualities to be razed/demolished
- Property taken off tax rolls
- Access from Main Street only
- 57 Union Street building would be sold, town would not have control of it's use (e.g. could be used for indoor and outdoor storage that would detract from entrance to town)
- Standard Operating Guidelines (SOG) require fire fighters to go to the station unless the call is between the fire fighter and the station; with this station site at the end of town, there may not be enough fire fighters to arrive at the station site to man the apparatus
- Response to River Road lengthy, farther for FF's to respond to station and then off to emergency
- Site farthest south on Main Street; this may affect town ISO rating, Fire fighters may not be supportive of this site due to distance from town center to station and then return to emergency

3 Recommendations

Program Summary – The committee recommends using the revised Program Summary of room and square foot allocations as noted. During the design phase of the project, single and multiple story options should be considered.

Property Summary – With consensus, the committee recommends 57 Union Street (site of the current DRFD Headquarters and Fire Station) as the preferred location for the new fire house. However, while the site represents an ideal location, it has a fundamental issue to overcome; providing adequate facilities for the fire department during the construction of the new facility. Considering the potential additional cost and difficult logistics associated with interim facilities, it remains the recommendation of this committee that 57 Union Street should be the location for the new firehouse and that the necessary resources should be committed to develop an acceptable plan for this site.

Our assessment and space validation did not include a cost-benefit assessment of alternatives and so we included information regarding the two next-best alternatives should our choice be cost prohibitive to pursue.

Recommended Next Course of Action – The committee recommends the following course of action to ensure success and continued momentum to see this project to fruition:

- Establish a building committee to liaison with architect
- Retain architect with the following objectives:
 - Develop a plan based on the vetted Program contained in Section One for the property of 57 & 55 Union Street in Section Two
 - Analyze and develop a plan to temporarily locate the current DRFD apparatus, stored equipment, offices and fire fighter parking needs to maintain services during demolition and reconstruction phase – this plan will require the Board of Fire Commissioners review and approval
 - Develop a Rough Order of Magnitude (ROM) cost estimate for the total project, broken down into; 1) demolition, 2) construction, 3) temporary DRFD Fire House operations

Appendix A – Deep River Fire Department Building Update History

The need to update the current Deep River Fire Station began in 2006 and has continued through Phase III. The chart below identifies the efforts taken to assess the need and to develop plans to improve the site.

	2006				2007				2008				2009				2010				2011				2012				2013				2014			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Milestones																																				
DRFD Committee				x	x	x	x																													
Referendum; \$3.9M																																				
DRFD Committee									x	x	x	x	x	x	x	x	x																			
Referendum; \$2.4M																																				
DRFD Study Phase I																					x	x														
DRFD Study Phase II																																				
Noyes Vogt Sketches																																				
DRFD Study Phase III																																				

2006

The Deep River Fire Department (DRFD) assigned a Building Committee to work with an architect to develop plans for renovating the current 1960's era fire station. Efforts included bringing the building up to Americans with Disabilities Act (ADA) and other regulatory compliance.

2007

The Building Committee presented plans to the Board of Selectmen and Board of Finance to vote on for the \$3.8 million plan and approve for referendum. The boards approved the plans and the vote was taken to the citizens on November 27, 2007. The referendum was defeated by a vote of 229 for and 766 against. Note that the Town Hall renovations were voted by referendum the previous month and defeated.

2008-2010

The DRFD Building Committee reviewed and revised their approach to fire station renovations for a lower cost project. Robert Raymond, Chairman of the Building Committee, made a presentation detailing the changes made from the previous plan. The new plan called for a truss roof and a slightly larger footprint to accommodate stairway access to a second floor. It would add 1500 square feet upstairs and 5000 square feet downstairs including a 10 foot "bump-out" to accommodate longer vehicles. Costs were saved by not adding a full second floor. An exercise room was included to help keep insurance costs lower and boost morale. The bunk room was for stormy nights when repeated calls made standing by at the fire house all night

necessary. The DRFD Inc-owned house next door would be used for storage of personnel records.

Many upgrades were necessary for code compliance. The large meeting room, or multi-purpose room, was necessary to eliminate having to move vehicles outside for meetings. They would need to be kept running in the winter to prevent freezing. This room would also be used for regional meetings and as an emergency shelter if necessary.

The new plans were brought to the Board of Selectmen and Board of Finance to vote on for the lower \$2.4 million plan and approve for referendum. The boards approved the plans and the vote was taken to the citizens on July 13, 2010. The referendum was narrowly defeated by a vote of 312 for and 347 against.

2011-2012

On December 16, 2010, the Board of Selectman commissioned the Deep River Fire Station Study Committee to perform extended research into a solution for the current building and make recommendations. The commission was divided into two phases; 1) Assess requirements and 2) Recommend a solution.

Phase I – Equipment / Apparatus Requirements

- Performing a thorough evaluation / study of Deep River Fire Department's equipment / apparatus / manpower needs to adequately respond to all areas within town limits.
- The study will include current needs and will project future needs through 2031 with consideration towards population / structures growth & shift within town limits.
- Resources available to the committee include ISO, Kemco Insurance, experience of similar town fire departments, applicable state standards, statutory requirements, etc.
- The committee will provide a report / presentation to the Board of Selectmen & the Board of Finance within three months of this commission. This documented / referenced / footnoted report will provide the foundation for Phase II. The report will include a recommended twenty-year plan for equipment / apparatus acquisition and / or replacement.

Phase I efforts began in February 2011 and the Phase I report was presented to the board on April 2011. Following their presentation, the Board of Selectmen commissioned Phase II.

Phase II – Building Requirements & Alternatives

- Describe the space that will be required to house the fire department equipment, personnel, and programs.

- List all options for housing fire department equipment, personnel, and programs. That list may include, but not be limited to the following:
- Do nothing (West Elm / Union Street and Winthrop stations remain unchanged). Pros / Cons, Pluses / Minuses, Efficiencies / Deficiencies, Strengths / Weaknesses of each option should be described in detail.
- Renovate / expand the existing facilities to meet identified space needs.
- Store some existing / future equipment outside of existing facilities.
- Construct a new facility / facilities at a more central location to better serve the community.
- Cost, if known or can be reasonably estimated, can be part of the description of each of the options.
- The Committee's Phase II report may include their recommendation of the most reasonable choice for this community, along with the rationale / cost of alternatives.

Phase II efforts began the following month and concluded with presentations and report to the combined Board of Selectman/ Board of Finance in October 2012. The concluding recommendation called for:

The long term solution for the town will continue to require two fire houses, one main headquarters fire house and one smaller fire house. The current Union Street station will be downsized to a new, smaller fire house. Two new firehouses to be built, with the headquarters station between Winthrop Road/ Bahr Road, and a satellite location on the current property at Union Street and West Elm Street.

The recommendation required acquiring the Winthrop/ Bahr Roads property and, while several attempts were made, the owner did not appear to be interested in selling the parcel of land.

2013

DRFD fire house discussions continued after the Phase II report was released. Neyes Vogt architects developed a sketch of possible floor plan with "drive-through" bay access and using all three properties (51, 55 and 57 Union Street parcels). The plan utilized two floors and aesthetic exterior features to make the structure blend into the local community. This approach was not pursued. Drawings for this project are included at the end of this appendix.

2014

Discussion continued on the DRFD fire house solution. The First Selectman commissioned a new panel, chartered to assess and validate 1) property location and 2) fire house space

requirements. Phase III began April 2014 and met bi-weekly through October 2014. This report provides detailed assessment and validates both and provides a final recommendation to the BOS/BOF.

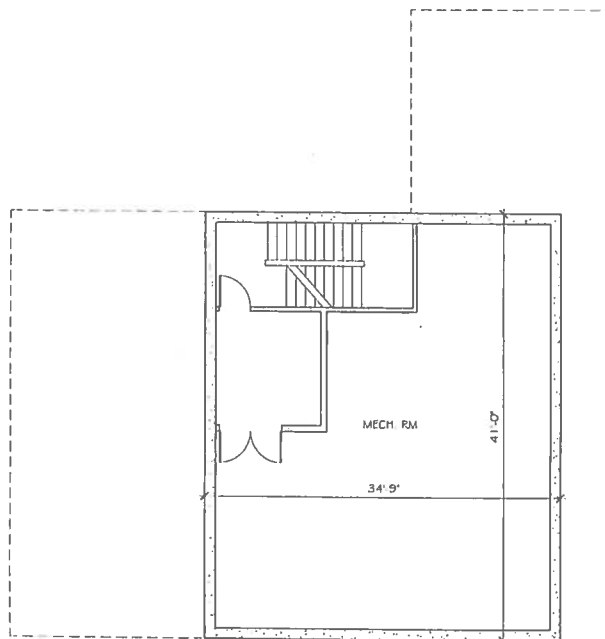
Original Committee Members

Bob Raymond
Tim Lee
Tim Ballantyne
Rick Daniels, Board of Selectman
Skip Routh, Board of Finance

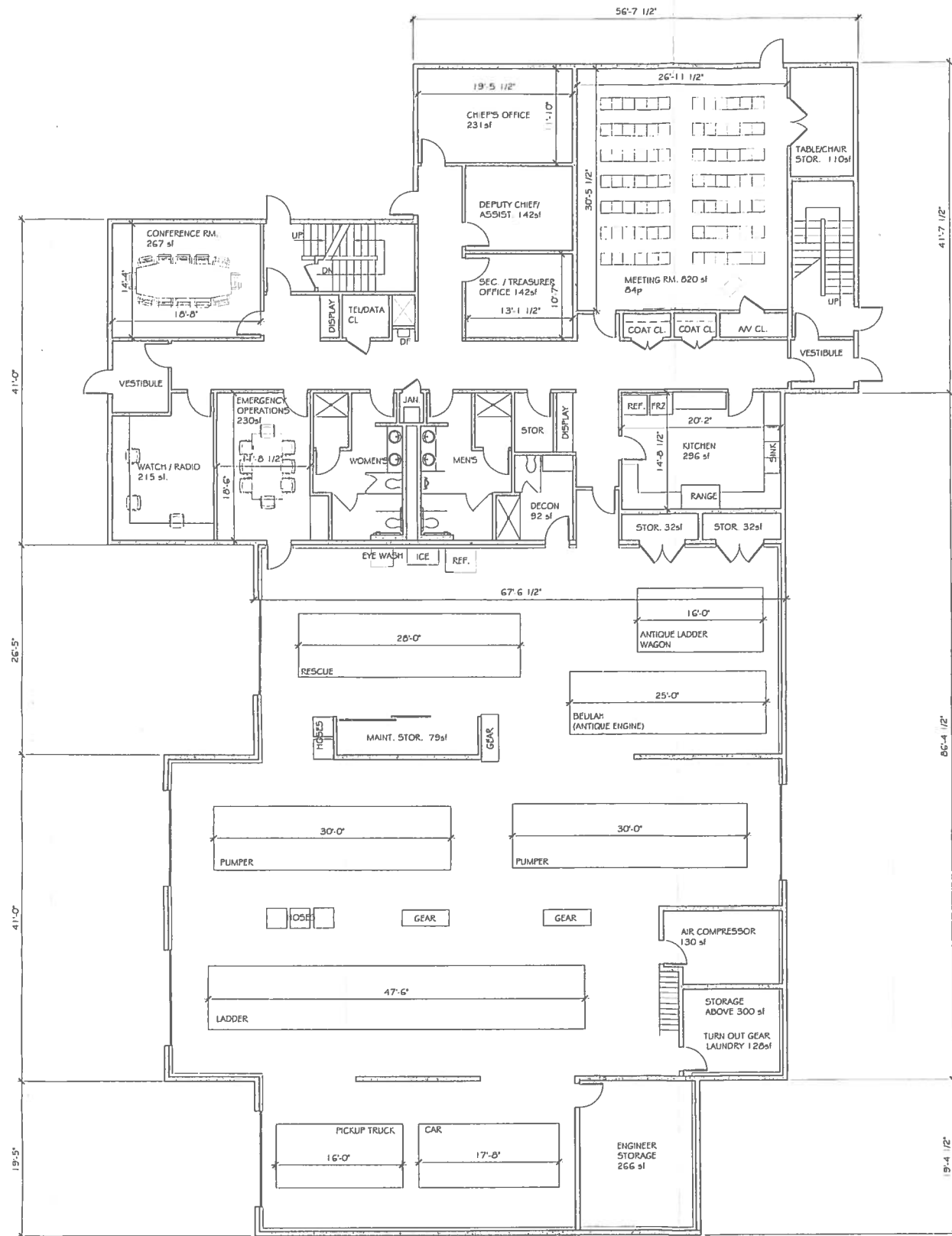
Commission Members

	start	end	Phase 1	Phase 2	Phase 3
Ballantyne, Timothy	12/14/2010		x	x	x
Carlson, Paul	11/23/2010		x	x	x
Lee, Timothy M.	12/28/2010		x	x	x
Kollmer, John R.	12/14/2010	Oct 2012*	x	x	
Berardis, David M.	12/14/2010	Oct 2012*	x	x	
David, Steven L.	11/23/2010	Oct 2012*	x	x	
Hostetler, Linda	4/12/2011	Oct 2012*		x	
Larsen, Ronald	4/12/2011	Oct 2012*		x	
McDonald, Angus L, Jr.	4/8/2014				x
Oliveria, David	4/8/2014				x
Watts, Susan	4/8/2014	5/27/2014			x
Paradis, Alan	5/27/2014				x

* Commissions not reactivated for Phase 3



1
A1
BASEMENT FLOOR PLAN
SCALE: 1/8" = 1'-0"
1,424sf



2
A1
FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"
10,952sf



NOYES VOGT ARCHITECTS
191 WOODLEY AVENUE, SUITE 2A
P.O. BOX 370
CHESTER, CONNECTICUT 06412
TEL: (860) 526-2900
FAX: (860) 526-5825

DEEP RIVER FIRE DEPARTMENT
57 UNION STREET
DEEP RIVER, CT

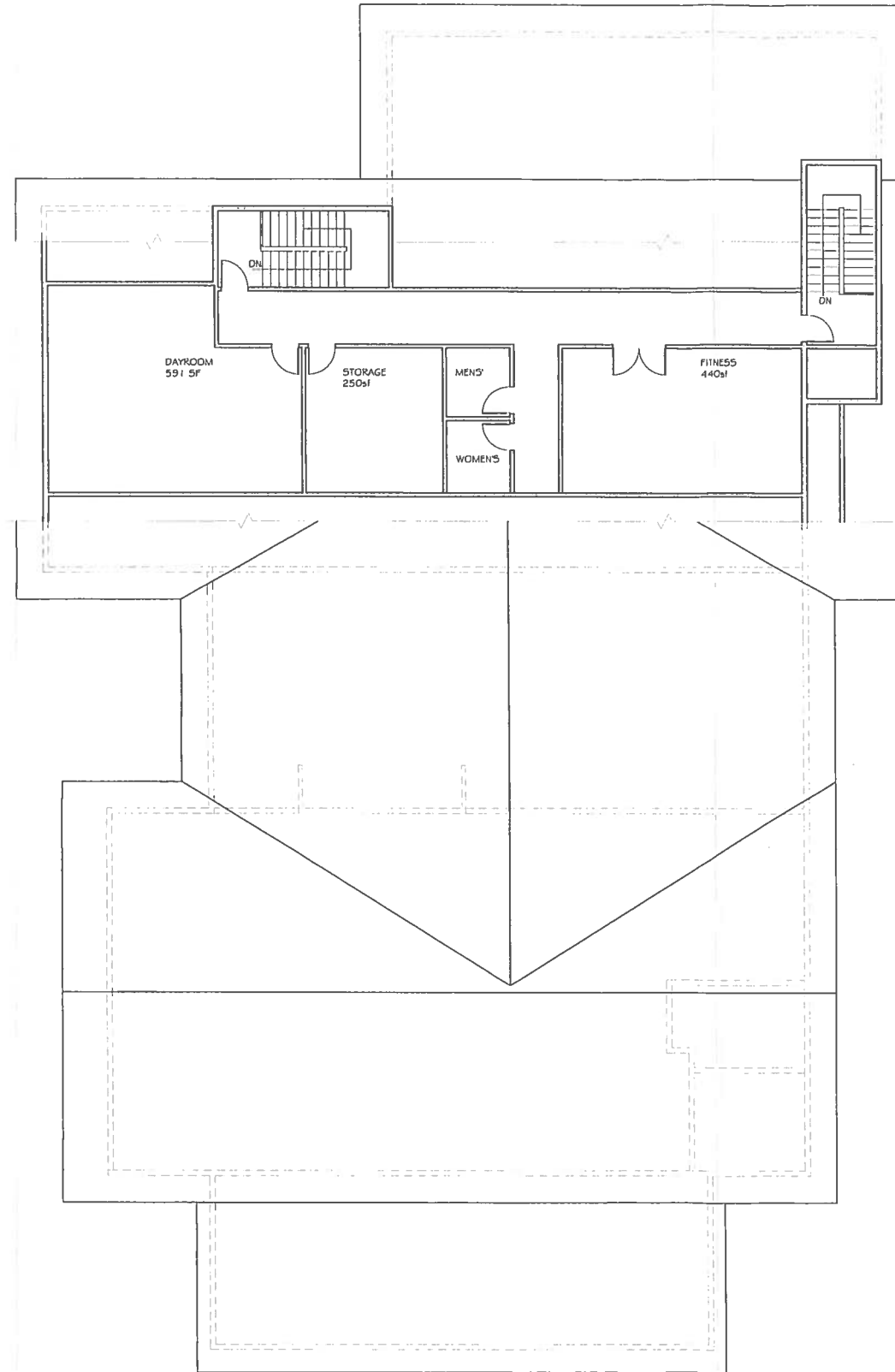
PRELIMINARY - NOT FOR CONSTRUCTION
REVISIONS
BASEMENT & FIRST FLOOR PLAN

SCALE: AS NOTED
DRAWN BY: -
DATE: MARCH 26, 2012

NVA JOB NUM 2012

A1

SHEET - OF -



1
A1.1
SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"
2,443sf



PRELIMINARY - NOT FOR CONSTRUCTION

SECOND FLOOR
PLAN

SCALE: AS NOTED
DRAWN BY: -
DATE: MARCH 26, 2013

NVA JOB NUM.: 2012-16

A1.1

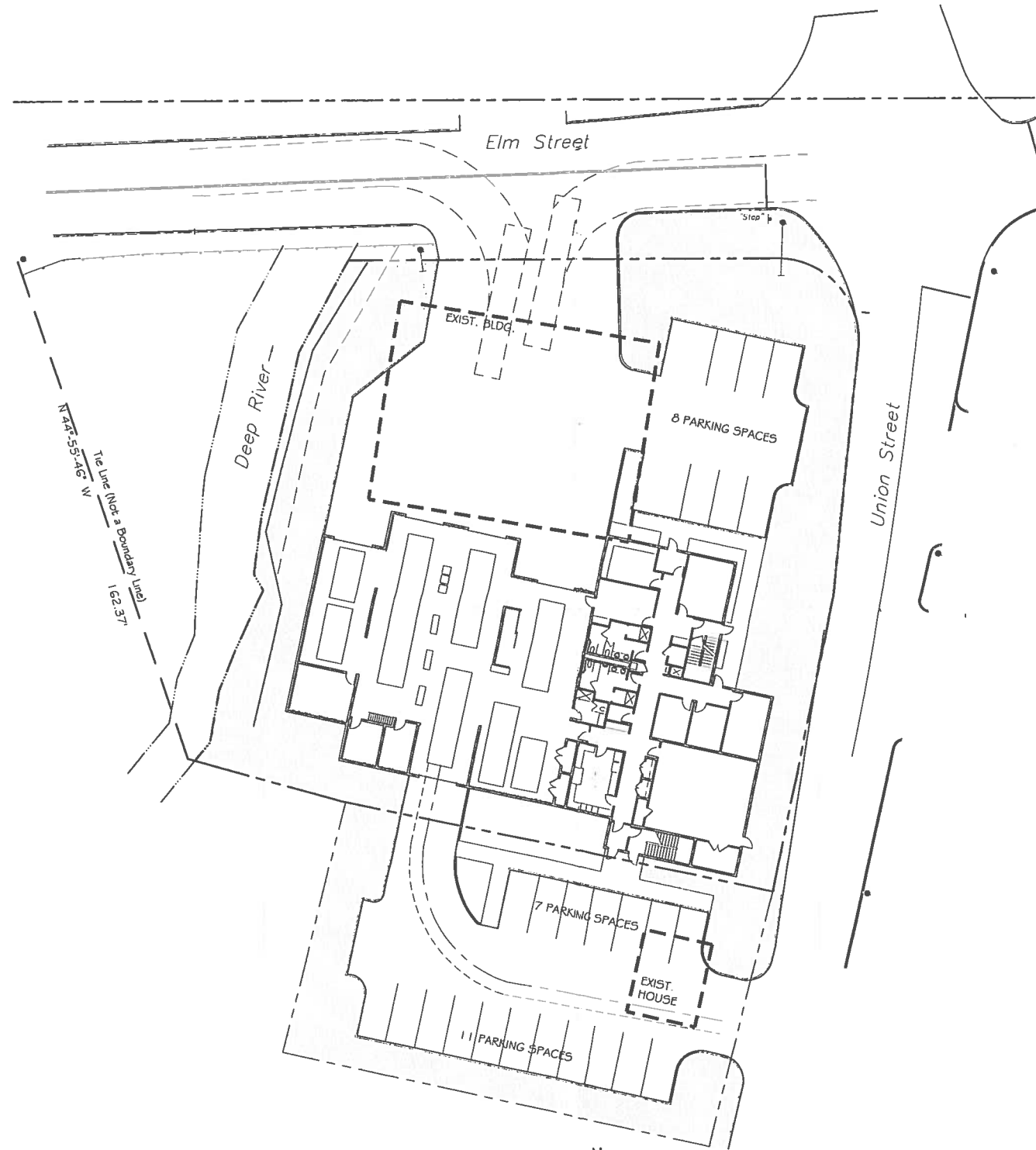
SHEET: - OF: -

DEEP RIVER FIRE DEPARTMENT

57 UNION STREET
DEEP RIVER, CT

NOYES VOGT ARCHITECTS

191 WINDLESEX AVENUE, SUITE 2A
CHESTER, CONNECTICUT 06412
TEL: (860) 535-2000
FAX: (860) 535-6835



SITE PLAN - option 2.1
 SCALE: 1"=20' 0"



PRELIMINARY - NOT FOR CONSTRUCTION

SITE PLAN
 Option 2.1

SCALE: AS NOTED
 DRAWN BY: -
 DATE: MARCH 26, 2013

NVA JOB NUM.: 2012.1

C1

SHEET: - OF: -

DEEP RIVER FIRE DEPARTMENT

57 UNION STREET
 DEEP RIVER, CT

NOYES VOGT ARCHITECTS

191 MIDDLESEX AVENUE, SUITE 2A
 P.O. BOX 100
 CHESTER, CONNECTICUT 06412
 TEL: (860) 538-2000
 FAX: (860) 538-8825

Appendix B – Needs Assessment & Building Requirements/ October 2012



Firehouse Study Committee

Needs Assessment & Building Requirements

Deep River Fire Department

October, 2012

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Deep River Firehouse Study Committee

On December 16th, 2010 the Deep River Board of Selectman commissioned the Deep River Firehouse Study Committee to review and evaluate the current and future firefighting / protection needs for our community. We are a group of Deep River residents and it is our mission to inform residents of the reasons behind the need for expanded firehouse space, as we try to find a middle ground that will be beneficial to all. This study was conducted in two phases with the results of Phase I providing the requisite information to pursue Phase II. The Committee has looked at, but not limited to; replacing the existing building, adding on to the existing building or consolidating the two current stations, Union Street and Winthrop.

The Deep River Volunteer Fire Department was created to protect our businesses, our schools, our homes and most importantly our families. The existing Fire Department headquarters, located at the corner of Union Street and West Elm Street, was built in 1961. At that time it was sufficient for the fire department needs. Now 50 years later the facility does not meet many of the newer commercial building codes as a public building. Also, the change in equipment over the past 50 years has created critical space issues. Assessing the present building and current NFPA (National Fire Protection Association) requirements helped guide the committee as it endeavored to find the right solution for the Town of Deep River, allowing the department to continue providing the necessary services we have all relied on for over a century.

Thank you.

The Members of the Deep River Firehouse Study Committee

John Kollmer, Firefighter & Committee Chairman	Steve David, Resident
Tim Lee, Firefighter	Paul Carlson, Resident
Tim Ballantyne, Firefighter	Linda Hostetler, Resident
Dave Beradis, Board of Fire Commission	Ron Larson, Resident

Phase I – Equipment / Apparatus Requirements

- Performing a thorough evaluation / study of Deep River Fire Department's equipment / apparatus / manpower needs to adequately respond to all areas within town limits.
- The study will include current needs and will project future needs through 2031 with consideration towards population / structures growth & shift within town limits.
- Resources available to the committee include ISO, Kemco Insurance, experience of similar town fire departments, applicable state standards, statutory requirements, etc.
- The committee will provide a report / presentation to the Board of Selectmen & the Board of Finance within three months of this commission. This documented / referenced / footnoted report will provide the foundation for Phase II. The report will include a recommended twenty-year plan for equipment / apparatus acquisition and / or replacement.

Phase II – Building Requirements & Alternatives

- The Fire Department Study Committee is tasked with:
- Describe the space that will be required to house the fire department equipment, personnel, and programs.
- List all options for housing fire department equipment, personnel, and programs. That list may include, but not be limited to the following:
 - Do nothing (West Elm / Union Street and Winthrop stations remain unchanged). Pros / Cons, Pluses / Minuses, Efficiencies / Deficiencies, Strengths / Weaknesses of each option should be described in detail.
 - Renovate / expand the existing facilities to meet identified space needs.
 - Store some existing / future equipment outside of existing facilities.
 - Construct a new facility / facilities at a more central location to better serve the community.
- Cost, if known or can be reasonably estimated, can be part of the description of each of the options.
- The Committee's Phase II report may include their recommendation of the most reasonable choice for this community, along with the rationale / cost of alternatives.
- In the event of conflicting points of view within the committee, the Phase II report should reflect the differing opinions.

Deep River Fire Department & Equipment

Established in 1896, the Deep River Fire Department is an all volunteer fire department which currently operates out of two stations. The department is equipped with three engines, a rescue truck, a ladder truck, a tanker, a brush truck, a utility truck and a fire / rescue boat. The department is a key member of the Valley Shore Mutual-Aid Association (VSMA) and makes use of both mutual and automatic aid via this association.

Services Provided

The Deep River Fire Department provides the following specific services:

- Fire suppression
- Motor vehicle extrication and rescue
- Hazardous materials response via VSMA HazMat Team
- Marine rescue and fire suppression on the Connecticut River
- Public service
- While the Deep River Ambulance Association provides EMS services to the Town, the fire department provides assistance to the Association on an as needed basis.

The Deep River Fire Department members meet weekly to train and practice firefighting and rescue skills. In addition to the weekly training members are encouraged to take the State of Connecticut Firefighter I basic firefighting course, which is required for all first line firefighters. This course takes over 190 hours to complete and the core of this course no longer covers just fighting fires. They include specialized training in vehicle extrication, hazardous materials, etc. Once a firefighter completes this course there is continued in-house training to satisfy NFPA and OSHA requirements, as well as other specialized courses to meet the needs of the department. Today's "volunteer" firefighters are being trained to the same level as paid career firefighters.

With these added training and safety regulations comes the added responsibility of maintaining detailed and accurate records for all personnel training and equipment inventory. These administrative duties are rarely really seen by the general public, but are crucial when verifying a department's level of service and training.

A Deep River Fire Department volunteer puts in 180 hours of their time protecting our community. 50 hours of training, 90 hours on calls and another 40 hours of miscellaneous duties. Officers and administrative personnel will likely log double the amount of hours. Another factor to consider, volunteers who are self-employed or who are not paid to leave their workplace for calls during the day in most cases lose some of their personal income while they are serving / volunteering for the Town.

Organization and Staffing Levels

The Deep River Fire Department has 45 active volunteer members classified within the following ranks / positions:

Position	#	Key Roles and Responsibilities
Chief	1	The Chief, as Chief Executive Officer, is responsible for the readiness, efficiency, and training of the Department. He shall assume command on all occasions, officiate as chairman at all Department meetings, and at his discretion call special meetings. He shall represent the Department as a member of the board of Fire Commissioners.
Deputy Chief	1	The Deputy Chief shall act as Chief in the absence of the Chief, but he shall not have a tie breaking vote as an ex officio member of any and all committees. He shall represent the Department as a member of the board of Fire Commissioners.
Assistant Chief	2	The two (2) Assistant Chiefs shall assist the Chief and the Deputy as needed, and if both the Chief and the Deputy are absent, the two (2) Assistant Chiefs shall equally assume command at any emergency.
Secretary	1	The Secretary shall be the recorder for the Department and the custodian of all its records and where any committee needs any records for the proper performance of its duties.
Treasurer	1	The Treasurer shall receive all money of the Department collected by the Secretary or other members of the Department, and give receipt for the same.
Chief Engineer	1	The Engineer shall be responsible to the Chief for the material upkeep of fire fighting apparatus, communications equipment, and alarm systems. The Engineer shall make periodic inspections of the above apparatus and make routine overhauls and repairs, using Department personnel as practicable. The Engineer will arrange for the maintenance, overhaul, or repairs beyond the capacity of the Department, and act as inspector for the department.
Captains	8	The Captains are responsible to the Engineer for the cleanliness and overall readiness of the vehicles in their charge. The Captains shall have a crew, appointed by the Executive Committee, to assist in cleaning, minor maintenance, and training. This crew is required to follow their directions.
Firefighter	31	The duty of every firefighter is to respond as needed to fire and hazardous incidents as dispatched and perform any duty to which they are assigned and to his or her level of training.

Training and Compensation

The Deep River Fire Department reimburses all members upon completion of State and local firefighting classes and other specialized training programs. The Town of Deep River also offers a Tax Abatement and Retirement Program to qualified members.

The Deep River Fire Department consists of two separate entities, The Deep River Fire Department and the Deep River Fire Department, Inc.

The Deep River Fire Department is funded by the Town of Deep River with an annual operating budget of \$124,065.00. These funds directly support the purchase of equipment, training, building utilities, apparatus maintenance and incentive plan. The Fire Department has consistently worked within their budget and, according to records, has never exceeded their annual operating budget.

The Deep River Fire Department, Incorporated was established in 1857. This incorporation allows the Department liability protection, the ability to raise funds and receive tax breaks. Today, the Deep River Fire Department, Inc. has an annual operating budget of just under \$17,000.00. All of these funds are raised annually by various fund raisers and donations and support the internal expenses of the Department. Some of these expenses are equipment, uniform reimbursement, fire prevention and benevolent expenses.

Over the years, the Department, Inc. has purchased many pieces of apparatus and equipment with these funds such as the Brush Truck, Pick-up Truck and Fire / Rescue Boat. Most recently, the Department added a one garage bay addition to the Winthrop Station. All of these expenses were at no cost to the Town or taxpayers. In addition, the house next door to Fire Headquarters was purchased by the Department in 2007, not the Town, in order to allow more space for their expansion plans. Also, all of the architectural plans and consulting fees were paid for from Fire Department funds.

Fire and Emergency Responses

On average the Deep River Fire Department responds to 16 calls per month with motor vehicle accidents, automatic alarms and public service calls being the top responses.

2010 the Deep River Fire Department responded to 195 calls

Motor Vehicle Accidents	55	Marine	4
Automatic Alarms	48	Outside Fires	3
Public Service	29	Chimney Fires	3
Mutual Aid	17	Carbon Monoxide	2
Wires Down	10	Structure	2
Hazardous Materials	3	Brush Fires	1
Good Intent	9	Car Fires	1
EMS Assistance	8		

2009 the Deep River Fire Department responded to 192 calls

Motor Vehicle Accidents	63	Marine	3
Automatic Alarms	36	Chimney Fires	3
Public Service	32	Carbon Monoxide	3
EMS Assistance	12	Car Fires	2
Mutual Aid	11	Structure Fires	2
Wires Down	8	False Alarms	1
Hazardous Materials	5	Appliance Fires	1
Brush Fires	5	Good Intent	1
Outside Fires	4		

2008 the Deep River Fire Department responded to 202 calls.

Motor Vehicle Accidents	57	Marine	5
Automatic Alarms	33	Good Intent	5
Public Service	32	Brush Fires	4
Mutual Aid	24	Carbon Monoxide	4
Wires Down	11	Structure Fires	4
EMS Assistance	9	Chimney Fires	3
Outside Fires	8	Car Fires	3

Resource: Deep River Fire Marshal's Office and <http://www.deepriverfd.com/call-stats-10.htm>

NFPA Standards

Over the past thirty years, the design of fire engines has changed considerably. Fire apparatus has increased in length, width, and height due to many reasons. Fire departments that operate the vehicles, the manufacturers of apparatus, and the general public have come to demand safer vehicles to protect the firefighter occupants of the apparatus.

The traditional open cabs are no longer permitted and have been replaced by fully enclosed cabs. These fully enclosed cabs have specially designed seats, complete with seat belts and restraints, along with special mounting for the self-contained breathing apparatus (SCBA) that firefighters need for fighting fires. The cabs are heated and air conditioned to protect and rehabilitate the firefighters. This increases the length of the cab and, therefore, the length of the truck.

New National Fire Protection Association (NFPA) standards required stricter standards of safety, service, durability, and performance. Manufacturers now include slip-resistant, diamond plate for stepping surfaces where there is a need to have aggressive tread for slip and fall protection, as well as more grips and handles for safely climbing and entering and exiting the vehicle. Automatic transmissions have become required for fire engines for ease-of-use among a vast array of drivers. Weight and balance have become key design criteria. The engines in the apparatus, the exhaust controls, and other newly required advanced systems have caused an overall increase in the size of fire apparatus.

Rollover stability controls or apparatus that meets new rollover stability criteria is now mandatory under the new standards. A tire air pressure monitoring system is now required on all new apparatus. A secondary braking system is required for all vehicles greater than 36,000 pounds. All these changes required for fire apparatus design cause an increase in overall size of the vehicles.

Fire engines now carry various types of rescue equipment and supplies necessary for motor vehicle accidents, medical emergencies, and other types of incidents in addition to fighting fires. These even include medical kits, Automatic External Defibrillators (AED), etc. Spare air tanks for SCBA are also required to be kept on board the vehicles.

New fire apparatus are far more complicated than the older equipment from just a few decades ago, incorporating such systems as hydraulics, pneumatics, generators, and very advanced plumbing systems.

The improvements in apparatus design, safety, performance, and functionality are readily apparent. These many changes in fire apparatus construction ensure the safety of our firefighters and our collective preparedness to respond to emergencies in a new climate with technically-enhanced apparatus designed to provide a safe response, durable life, and service to the communities they serve. However, all the new advantages of the fire fighting apparatus of the last 20-30 years, enabled by latest technologies, have one major disadvantage...and that is an overall larger vehicle. This becomes much more of a problem when trying to house these larger vehicles in a building designed in the 1950s for fire engines of that era.

Deep River Fire Department Fire Apparatus



1989 FMC Pumper has a 1,000 gallon water tank with a pumping capacity of 1,250 gallons per minute. This attack pumper goes directly to the scene to attack the fire. It was purchased by the town for \$198,000 and is housed at Headquarters. (Call sign 5-5-2)

Suggested replacement or refurbishment in: 2021



1983 Pierce-Dash Pumper has a 750 gallon water tank with a pumping capacity of 1,250 gallons per minute. Purchased by the town for \$115,594, this piece of apparatus is housed at Winthrop Station. (Call sign 5-5-3)

Suggested replacement or refurbishment in: 2015



2004 Ferrara/Spartan Pumper features a six man, four door fully enclosed cab, a 1,500 gallons per minute pump, a 1,000 gallon water tank, built in Class A foam system and an all aluminum body construction. It was purchase by the town for \$375,000 and is housed at Winthrop Fire Station. (Call sign 5-5-4)

Suggested replacement or refurbishment in: 2036



1977 Osh Kosh LTI Tower Ladder arrived in August of 1999. It has an 85' aerial platform, an assortment of ground ladders, a 4" pre-piped waterway to a deck gun. It was purchased by the town for \$65,000. This truck was partially refurbished by the Department and entered service in November of 1999. The Ladder is housed at Headquarters. (Call sign 5-7-1)

Suggested replacement or refurbishment in: 2011



1989 Ford Tanker/Tender has a 1,800 gallon water tank with a pumping capacity of 500 gallons per minute. This tanker is used as mobile water supply for fires where water resources are limited. It was purchased by the Department for \$5,000 and was generously refurbished by George Atwood of Atwood's Auto Appearance. The Tanker/Tender is housed at Winthrop Station. (Call sign 5-6-1)

Suggested replacement or refurbishment in: 2023



2009 Spartan Gladiator Walk-Around Rescue is a custom built walk-around heavy duty rescue with a 30 kW PTO generator, Street level roll up doors, Three 100' pre-piped hydraulic hose reels for extrication tools, Two 300' electric cord reels, Assortment of roll out trays and tool boards for rescue and fire suppression items, 9000 watt telescoping light tower. It was purchase by the town for \$389,000 and is housed at Headquarters. (Call sign 5-9)

Suggested replacement or refurbishment in: 2036



1982 Chevrolet 4x4 Brush Truck is equipped with a 250 gallon water tank with 85 gallon per minute Hale pump. It also carries various tools and equipment for fighting brush and wild fires. This truck was purchase by the Department for \$20,037. This truck is housed at Winthrop Station. (Call sign 5-8)

Suggested replacement or refurbishment in: N/A



1991 Chevrolet 2500 pickup truck is used for traffic safety on highway calls and for utility work within the Department. Purchased through Department fundraisers at a cost of \$18,414. (Call sign 5-9-6)

Suggested replacement or refurbishment in: N/A



2004 Munson Packman High Speed Landing Craft vessel is used for marine fire and rescue on the Connecticut River. This 24' is equipped with a 500 gallon per minute pump, miscellaneous tools and first aid equipment. This boat was purchased for \$59,000 using Department funds raised through various fundraisers. This vessel is kept in a slip at donated by Brewer's Marina from April & December. (Call sign 5-2)

Suggested replacement or refurbishment in: N/A

Fire Apparatus Life Expectancy for Rural Departments

It was determined that the Deep River Department has an outstanding maintenance program and their apparatus exceed the normal life expectancy.

Years of Apparatus in Active Service (Average Expected)

Pumper	18
Aerial	21
Rescue	16

Years of Apparatus in Reserve Service (Average Expected)

Pumper	14
Aerial	13
Rescue	11

Years of Total Service Life (Active Plus Reserve)

Pumper	32
Aerial	34
Rescue	27

Resource: Fire Apparatus Manufacturer's Association, Chassis Technical Committee "Fire Apparatus Duty Cycle White Paper"
<http://www.fama.org/resourceLibrary/toolsForTruck.cfm>

Other Key Equipment

Turn Out Gear

40 complete sets, 30 of which were purchased through Federal Grants in 2007. (Stored on racks on apparatus floor, in personal vehicles and spare sets in the Engineers Office)

SCBA Air Packs

20 packs and 40 bottles, purchased through Federal Grants in 2005 (Most airpacks and bottles are kept on the apparatus)

Vehicle Extrication Equipment

Purchased through Federal Grant in 2002 (Kept on the Rescue Truck)

UHF Radios

15 mobile and 25 portable, purchased with Federal Grants and department funds in 2010 (Installed in the apparatus and the officers personal vehicles)

Spare Hose

1,100' of 1" $\frac{3}{4}$ ", 200' of 1" $\frac{1}{2}$ " and 300' of 3" (Stored on a rack on the apparatus floor)

Dewatering Pumps

6 various gallon per minute pumps. Stored in the boiler room at the Firehouse

Space Requirements for the Deep River Fire Department

The current firehouse was built in 1961 and served the Department well over the years as merely a “garage” space. The Department has no separate space to train and meet other than moving apparatus outside and holding training classes at another meeting facility in Town would make it difficult to transition from classroom teaching to hands instruction when apparatus and equipment are at the firehouse.

Chief’s Office - 275 sq. ft.

This office needs a desk and small table so that 3 - 4 people can meet. It can be utilized when all 4 Chiefs need to meet to discuss fire department business. File cabinets will be needed as well. Files must be kept for a number of years before they are destroyed; personnel files need to be kept for 20 years after a member has left the department. The Chief also has the day to day paperwork to take care of and file. This may include correspondences with different vendors and other departments.

Deputy Chief & Assistant Chiefs Office - 196 sq. ft.

This office would require 2 desks that these three positions can share. Their responsibilities are designated by the Chief and by-laws.

Secretary / Treasurer Office – 196 sq. ft.

The Secretary is responsible for taking and maintaining the minutes of the meetings and logging in the attendance at calls and drills. He is also responsible for assisting the Chief with correspondences and contacting members concerning training. He is also the contact with the media.

Small Conference Room – 260 sq. ft.

The small conference room would allow different groups within the department to meet. The Board of Fire Commissioners consisting of 8 members meets monthly. There is a Captain’s meeting monthly that consists of the 4 Chiefs, 2 Engineers and 8 Captains. There are times when the Executive Committee and Trustees also meet. This would allow them to conduct their business in a quiet and private area.

Engineer Room - 810 sq. ft.

This office would require a desk and storage space. The engineer is responsible for maintaining all of the equipment, from the apparatus to the turnout gear and radios. The engineers issue the gear to the membership and do yearly checks to make sure that it is safe for the firefighter. They store the gear (turnout, radios, pagers etc.) in their area of the firehouse. It is inventoried and obsolete equipment is removed from service. The proper storage of this equipment is important so that it maintains its integrity.

Meeting / Training Room – 1,600 sq. ft.

There are times when different courses are offered to the members, and also those in the Valley Shore Mutual Aid Association. Some of these classes are classroom style with an instructor presenting material to those attending. These classes tend to be at full capacity with up to 100 firefighters attending. An example of this is the Smoke Reading class. This class dealt with looking at the color and intensity of the

smoke, and where it was venting from in order to extinguish the fire safely and with minimal property damage. Other times there are classes on SCBA (self-contained breathing apparatus) maintenance. Because the SCBA is part of the class, the size of the class is limited due to space requirements. This is also true for CPR classes where floor space needs to be used for the practical aspect of the course.

Kitchen – 300 sq. ft.

The Deep River Fire Department needs a kitchen for a number of reasons. There are regular meetings of the department where food is served. The Chicken BBQ and Roast Beef Dinner are fundraisers that are held each year. The Department hosts the Valley Shore Mutual Aid Association and the Middlesex County Chiefs Association each year where the dinner is served before the meeting. The Auxiliary also will make coffee and food at extended incidents for those at the scene.

Table & Chair Room – 220 sq. ft.

When tables and chairs are not needed in the Meeting / Training room, they need to be stored in an area that allows the different classes to take place.

Equipment Room – 210 sq. ft.

The Fire Department has equipment that is used on an as needed basis. An example of this equipment would be the various pumps that are used during flooding to help people pump out their basements. There are also foam applicators that can be used during Hazardous incidents. Some of the equipment is stored for spare parts, saving money over buying new parts.

Exercise Room – 200 sq. ft.

A small exercise room, approx. 15' x 15', is provided for some basic gym equipment, to be used to keep firefighters physically fit.

Total Space Required = 9,260 sq. ft.*

*This does not include Restrooms or HVAC / Utilities Room

Current Location of Deep River Firehouse and Problems / Solutions Matrix

57 UNION STREET (DEEP RIVER FIREHOUSE)



MBLU : 57 / / 55 / / /
Location: 57 UNION ST
Owner Name: TOWN OF DEEP RIVER

Land Information
0.35 AC
Zone
R20

Parcel Value

Appraised Value	Assessed Value
793,900	555,730



[illegible]

Potential Solutions	Pro's	Con's
Do Nothing	Short-term cost savings	In long-term, cost savings evaporate as building deteriorates; safety issues are not addressed, leading to increased likelihood of an costly accident, both in economic costs and human costs; and morale suffers, leading to possible loss of significant number of volunteer members causing necessity of some paid FD members
"Band-Aid Fix" - 10-ft. Bump-out on front of existing building	Least expensive of any of the solutions that only marginally address overcrowding on the floor.	Although provides for minimal extra space on floor, allowing for more parking in firehouse, does not address training area / meeting room, office space, exhaust system, heating, etc.
Build Additional Bay, and 10-ft. Bump-out on front of existing building	More extensive solution of overcrowding on floor, by providing additional truck bay. Addresses safety concerns from overcrowding.	Although provides for sufficient extra space on floor, allowing for more parking in firehouse, does not address training area / meeting room, office space, exhaust system, heating, etc.
Major Addition & Renovation to Existing Building, same as or similar to plan that was offered at recent referendum	Provides solutions for all issues, such as overcrowding on floor, space for new equipment, training room, office, ventilation system, heating system, kitchen, ADA, etc. Likely more cost-effective to construct a new building than to modify and upgrade the existing building. More flexibility in design for constructing a new building vs. upgrading existing. Good value for money spent. Does not require any additional land. Neighbors already used to a firehouse at this location, so don't have to contend with any zoning or "NIMBY" issues of a new location.	Likely most expensive option. After completion of project, we still have a 60-year old structure for much of the building. This option will not allow the building to be used during construction in the winter, as the trucks require a heated environment.
New Firehouse construction on current lot, in 2 steps: (1) Build New Firehouse next to existing, and (2) Demolish existing after completion of new building	Provides solutions for all issues, such as overcrowding on floor, space for new equipment, training room, office, ventilation system, heating system, kitchen, ADA, etc. With a large enough property, allows for "drive through" firehouse, where trucks can enter building from rear, and pull out the front. Eliminates the need for backing into firehouse.	More expensive than any solution except the Major Addition & Renovation solution above. Requires demolition of old house on adjacent property to firehouse (house is owned by DRFD Inc., i.e. members).
New Firehouse construction at new location (General solution)	Provides solutions for all issues, such as overcrowding on floor, space for new equipment, training room, office, ventilation system, heating system, kitchen, ADA, etc. Allows for "drive through" firehouse, where trucks can enter building from rear, and pull out the front. Eliminates the need for backing into firehouse.	Requires new location, purchase of new property, zoning issues, etc. No current property is known of in town that is large enough for a firehouse & parking, has proper zoning, is available & for sale, is in a suitable location, and is located at reasonable mileage from both extremes in town (Winthrop & Winterberry). Cost implications of purchase of new building lot.
New Firehouse construction at new location. * Specific solution for property across from Olson's on Rt. 80, which would be Fire Dept. main building and HQ. * Keep current building on Union & Elm, which would be the new "satellite" station which would town lose ISO rating. * Consolidate Winthrop station into new building between Bahr Rd & Winthrop Rd. Sell property at Winthrop station to help fund project.	Provides solutions for all issues, such as overcrowding on floor, space for new equipment, training room, office, ventilation system, heating system, kitchen, ADA, etc. Allows for "drive through" firehouse, where trucks can enter building from rear, and pull out the front. Eliminates the need for backing into firehouse. Property across from Olson's on Rt. 80 would be ideal, as trucks can enter firehouse property via Bahr road, and pull out onto Rt. 80. Between Bahr & Winthrop Rd would be ideal location. Allows building on Union & Elm to be kept as is, with only minor improvements, since it will no longer be HQ, and meetings & training will occur at other facility. House adjacent to property can be kept and rented for income, or sold. Sufficient parking. Sale of property at Winthrop station generates revenue to help fund project and construction.	Main problem is that property is not currently for sale. Requires new location, purchase of new property, zoning issues, etc. Cost implications of purchase of new building lot. According to the ISO, closing both stations and moving into one central location in the center of the jurisdiction could have a negative impact on your overall score in the ISO rating and could cause the department to Retrogress to a worse class then what the department currently has. No public water supply for refilling apparatus.

House & Property Owned by the Deep River Fire Department, Inc.

Below is the property purchased by the Department in August of 2007 for \$270,000 with the intent of removing the building for additional space for the fire house expansion.

51 UNION ST



MBLU : 57 / / 57 / / /
Location: 51 UNION ST
Owner Name: DEEP RIVER FIRE DEPARTMENT INC.

Land Information
0.25 AC
Zone
R20

Parcel Value

Appraised Value	Assessed Value
219,200	153,440

A feasibility study has been conducted on the property currently owned by the Town and the Deep River Fire Department, Inc. to see if both properties can be properly utilized for an expansion for the Fire Department.

Fire Department Comparisons by Town

Connecticut Towns of the similar population density as Deep River

Town	1990	2000	2009	Project 2014	Land Area sq. mi.
Ashford	3,765	4,098	4,470	4,304	39
Middlefield	3,925	4,203	4,462	4,403	13
Deep River	4,332	4,610	4,683	4,644	14
Preston	5,006	4,688	4,955	5,269	31
Canterbury	4,467	4,692	5,128	4,979	40
Bolton	4,575	5,017	5,155	5,051	14
Chester*	3,417	3,743	3,832	3,679	16
Essex*	5,904	6,505	6,810	6,543	10

Town Data Resource: <http://www.cerc.com/TownProfiles/>

Fire Department Data

Town	Incidents / Calls (3 year Avg.)	Key Apparatus*	Firehouse Size	2nd Station
Ashford	140	5	10,192 sq.ft.	3,000 sq.ft.
Middlefield	126	6	8,464 sq.ft.	N / A
Deep River	169	7	5,084 sq.ft.	2,484 sq.ft.
Preston	208	4	4,000 sq.ft.	N / A
Canterbury	199	5	6,280 sq.ft.	N / A
Bolton	138	5	8,956 sq.ft.	N / A
Chester**	112	6	6,658 sq.ft.	N / A
Essex**	138	9	24,450 sq.ft.	2,992 sq.ft.

Incident Data Resource: <http://www.dir.ct.gov/dps/CFIRS/ReportList.aspx>

Firehouse Size Data: <http://www.visionappraisal.com/databases/ct/index.htm> and
<http://www.equalitycama.com>

*Key apparatus only, not including boats, pickup trucks, etc.

**The Towns of Chester and Essex are not equal in population density, but are included as geographical comparison.

ISO Ratings and its Importance to a Community

ISO is a leading source of information about property / casualty insurance risk. For a broad spectrum of commercial and personal lines of insurance, they provide statistical, actuarial, underwriting, and claims data; policy language; information about specific locations; fraud-identification tools; consulting services; and information for marketing, loss control, and premium audit.

ISO's Public Protection Classification (PPC™) Program

To help establish appropriate fire insurance premiums for residential and commercial properties, insurance companies need reliable, up-to-date information about a community's fire-protection services. ISO provides that information through the Public Protection Classification (PPC™) program.

The Town of Deep River has been classified at a 5 / 9 rating. For this rating, businesses and homes must be within 5 road miles of a station. Deep River is the 5, with buildings 1000 feet from a hydrant / water source. Winthrop is a 9, where the water sources are not within 1000 feet of structures.

What is the PPC program?

ISO collects information on municipal fire-protection efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data using our Fire Suppression Rating Schedule (FSRS). They then assign a Public Protection Classification from 1 to 10. Class 1 generally represents superior property fire protection, and Class 10 indicates that the area's fire-suppression program doesn't meet ISO's minimum criteria.

The Deep River Fire Department's ISO Classification is a Class 5

By classifying communities' ability to suppress fires, ISO helps the communities evaluate their public fire-protection services. The program provides an objective, countrywide standard that helps fire departments in planning and budgeting for facilities, equipment, and training. And by securing lower fire insurance premiums for communities with better public protection, the PPC program provides incentives and rewards for communities that choose to improve their firefighting services.

ISO has the Town of Deep River listing 3 pumpers, 1 tanker, 1 rescue, 1 ladder, 1 brush truck and a fire / rescue boat. Movement of apparatus will not affect the ratings. As long as the apparatus is stationed within the town and in service, it does not matter where it is placed. The closing of the Winthrop Station and moving it to Route 80 / Bahr Road will still keep all buildings in the Winthrop section within 5 road miles of a station.

Distances from the entrance of Plattwood Park:

- To Essex Town Line, Westbrook Road to Bushy Hill Road = 3.4 miles
- To Westbrook Town Line on Westbrook Road = 3.7 miles
- To Westbrook Town Line on Stevenstown Road = 3.0 miles
- To Chester Town Line on Cedar Lake Road = 3.1 miles
- To 38 Oak Ridge Road = 2.9 miles

Alternate Property Locations for New Firehouse

Below are possible alternate locations for a new firehouse to built with “pros & cons” for each property’s location.

208 MAIN ST



MBLU : 57 / / 78 / / /
Location: 208 MAIN ST
Owner Name: MOZZOCHI ALBERT JR & LOUIS P SR

Land Information
1.50 AC
Zone
R80

Parcel Value

Appraised Value	Assessed Value
323,900	226,730

Pros & Cons:

Pros – Centrally located
Meets ISO code requirement
Ample size property

Cons – Comes off tax base
Possible objections by neighbors
Not on market
Land configuration
Access



245 MAIN ST (OPEN LOT NORTH OF DRIVEWAY)



MBLU : 57 / / 142 / / /
Location: 245 MAIN ST
Owner Name: DEEP RIVER HISTORICAL SOCIETY

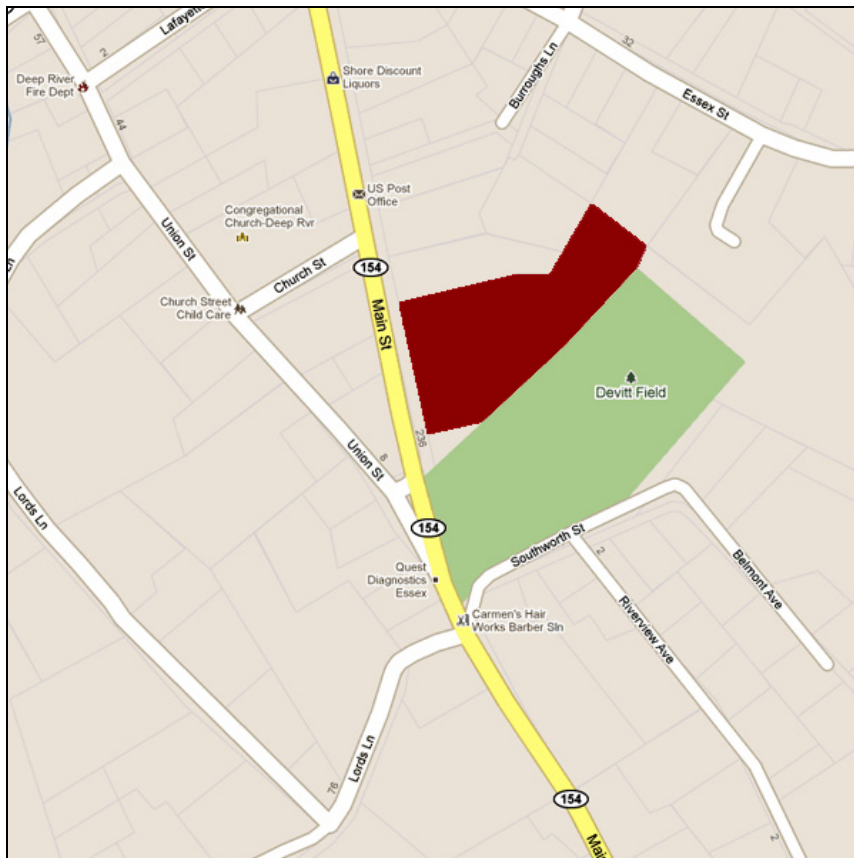
Land Information
10.52 AC
Zone
R80

Parcel Value

Appraised Value	Assessed Value
756,500	529,550

Pros & Cons:

Legally not possible, land willed to trust



246 MAIN ST



MBLU : 57 / / 88 / / /
Location: 246 MAIN ST
Owner Name: SLATER DONALD E
Account Number: 00151200

Land Information
0.48 AC
Zone
CG

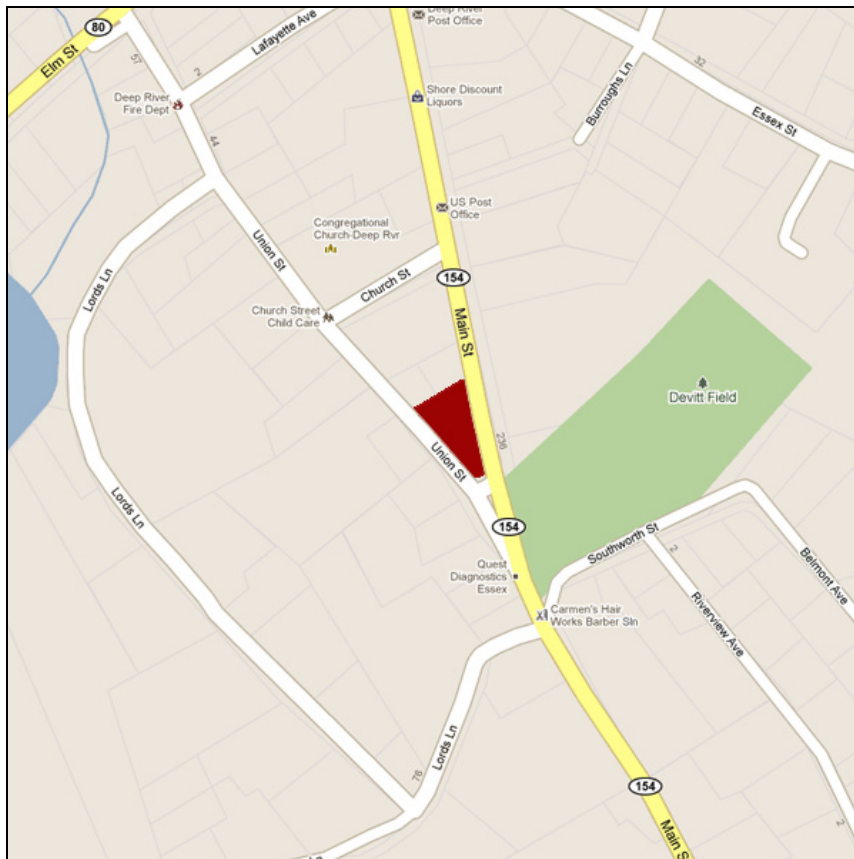
Parcel Value

Appraised Value	Assessed Value
321,600	225,120

Pros & Cons:

Pros – Centrally located
Meets ISO code requirement
Currently on Market
Commercially zoned

Cons – Property configuration and size
Comes off tax base, commercially
zoned, multiple store fronts
Possible objections by neighbors
Property would have to be purchased
Access potentially hazardous



SOUTHWORTH ST (DEVITT FIELD)



MBLU : 57 / / 139 / / /
Location: SOUTHWORTH ST
Owner Name: TOWN OF DEEP RIVER
Account Number: 00138700

Land Information
3.75 AC
Zone
R80

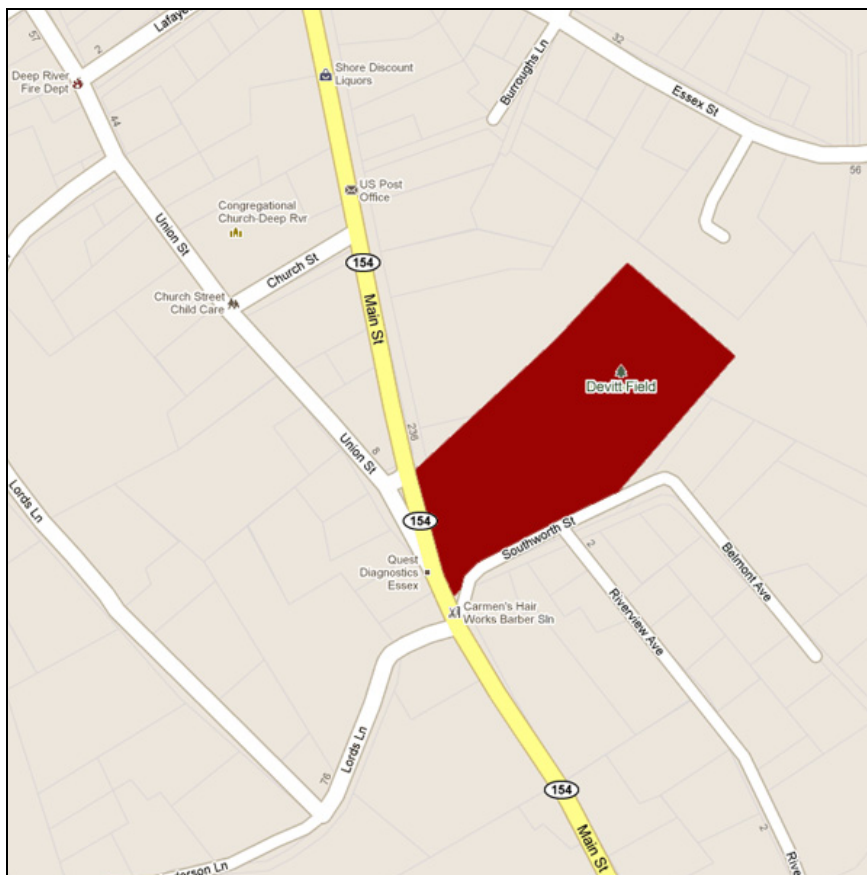
Parcel Value

Appraised Value	Assessed Value
383,200	268,240

Pros & Cons:

Pros – Centrally located
Already owned by the Town
Meets ISO code requirement
No impact on tax base

Cons – Narrow road access, poor turning area
Takes away public area / grounds,
recreational use
Possible objections by neighbors



1 WINTHROP RD (LAND ON LOWER DRIVEWAY)



MBLU : 43 / / 4A / / /
Location: 1 WINTHROP RD
Owner Name: JOHN WINTHROP JR HIGH SCHOOL
Account Number: 00055400

Land Information
66.05 AC
Zone
R80

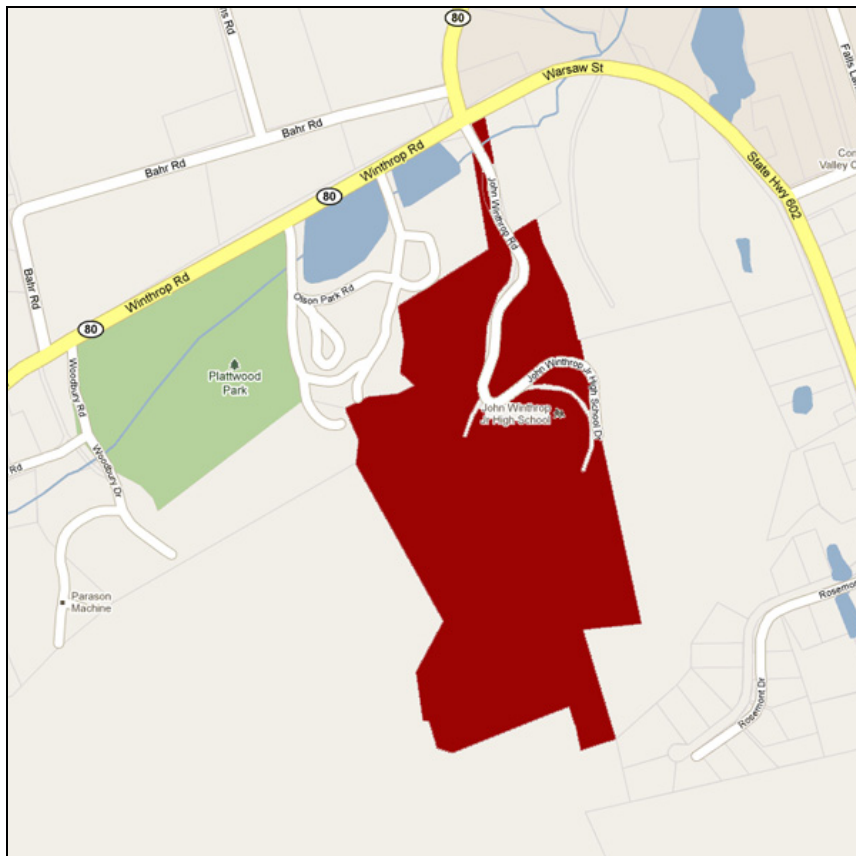
Parcel Value

Appraised Value	Assessed Value
29,345,300	20,541,710

Pros & Cons:

Pros – Town owned
Large area available
No impact on tax base
Potential consolidation of firehouses

Cons – Take away recreational area
Potential safety issues when school in session
No city water or sewer
Seasonal weather issues due to road layout and equipment size could impact service
Probably would not meet ISO rating for residences on Winterberry Road



12 WINTHROP RD



MBLU : 43 / / 3 / / /
Location: 12 WINTHROP RD
Owner Name: DIFFENDALL WARREN E ESTATE OF
Account Number: 00054500

Land Information
3.50 AC
Zone
R80

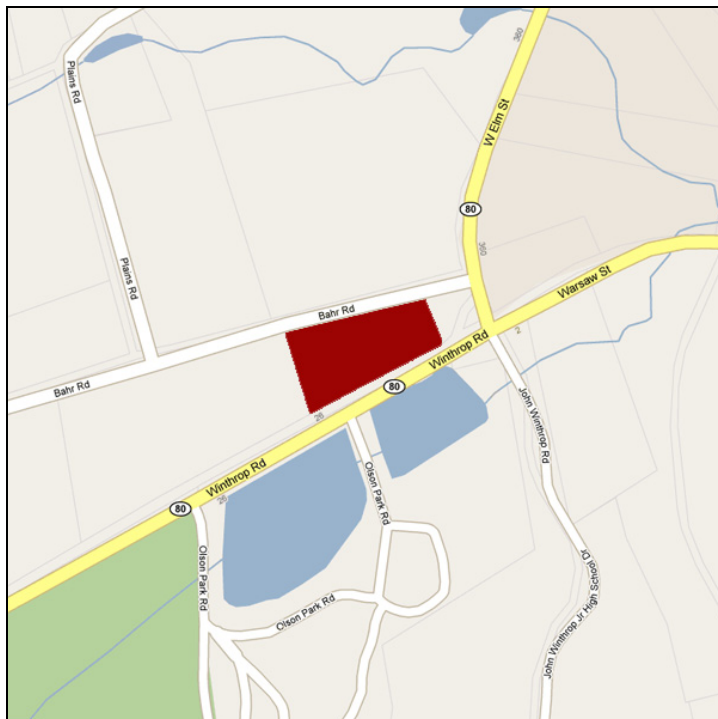
Parcel Value

Appraised Value	Assessed Value
286,600	200,620

Pros & Cons:

Pros – Good access and location
Large property
Potential consolidation of firehouses at one location

Cons – Not currently on market
Property would have to be purchased
No city water or sewer
Comes off tax base
Probably would not meet ISO rating for residences on Winterberry Road.
According the ISO, closing both stations and moving into one central location in the center of the jurisdiction could have a negative impact on your overall score in the ISO rating and could cause the department to Retrogress to a worse class then what the department currently has.



BAHR RD (ACROSS FROM PLATTWOOD PARK)



MBLU : 38 / / 3 / / /
Location: Bahr Rd
Owner Name: DEEP RIVER PROPERTIES INC
Account Number: 00050500
Land Information
14.08 AC
Zone
R80

Parcel Value

Appraised Value	Assessed Value
184,600	129,220

Pros & Cons:

Pros – Centrally located
Large area
Good access
Potential consolidation of firehouses

Cons – Not on market
Land would have to be purchased
History, owners not interested in selling to Town
Probably would not meet ISO rating
Comes off tax base
No city water or sewer



77 WINTHROP RD (PLATTWOOD PARK)



MBLU : 38 / / 6C / / /
Location: 77 WINTHROP RD
Owner Name: TOWN OF DEEP RIVER
Account Number: 00050700

Land Information
23.34 AC
Zone
R80

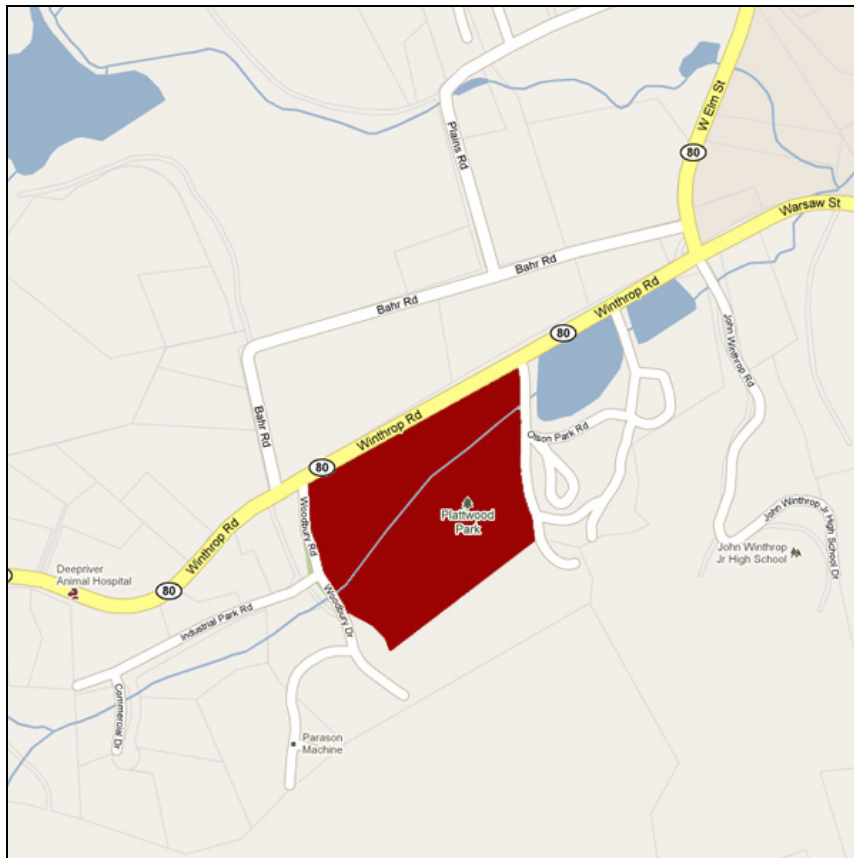
Parcel Value

Appraised Value	Assessed Value
700,700	490,490

Pros & Cons:

Pros – Town owned
Large area
No deduction in tax base

Cons – Take away recreational area
Probably does meet ISO code requirement
No city water or sewer



206 WINTHROP RD (DEEP RIVER TOWN GARAGE)



MBLU : 33 / / 3 / / /
Location: 206 WINTHROP RD
Owner Name: TOWN OF DEEP RIVER
Account Number: 00047100

Land Information
11.00 AC
Zone
R40

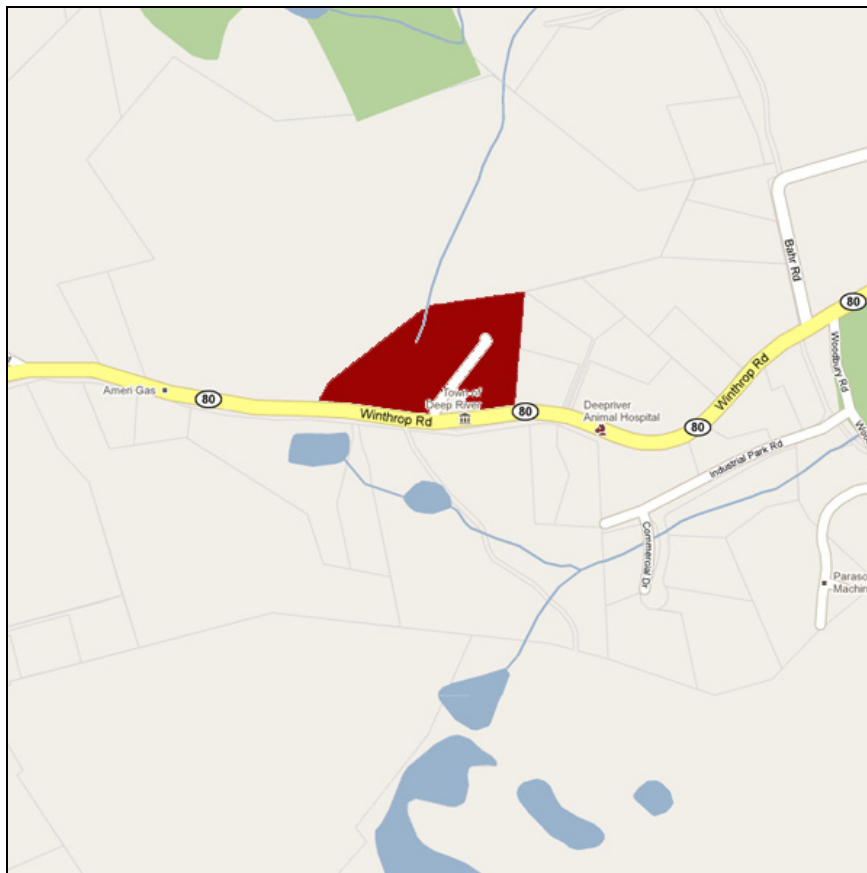
Parcel Value

Appraised Value	Assessed Value
425,700	297,990

Pros & Cons:

Pros – Town owned
Large area
No reduction in tax base

Cons – Doesn't meet ISO code requirements
No city water or sewer
Property formerly a dumping location, not able to be built on



RECOMMENDATION

The following recommendation is presented by the Deep River Firehouse Study Committee after approximately 18 months of work. This committee was chartered by the Board of Selectmen to look at all options including the recent plans put forward by the Deep River Fire Dept., evaluate the pros and cons of each, and make a recommendation to the town that takes into account the needs of the Deep River Fire Department, offers the best possible fire protection for the citizens of the town of Deep River, and makes fiscally and financially good sense. After dozens of meetings with the members of the committee alone, and also reporting to the Board of Selectmen and the Board of Finance, the recommendation is hereby complete and available for presentation to the town.

The long term solution for the town will continue to require two firehouses, one main headquarters firehouse and one smaller satellite firehouse. The current Union Street station will be downsized to a new, smaller firehouse. Two new firehouses to be built, with the headquarters station between Winthrop Rd. / Bahr Rd. and a satellite location on the current property at Union St. / W. Elm St.

SUMMARY: The final recommendation is for a solution that comprises of several steps:

1. Obtain new property (Blakeslee's) between Winthrop Rd. and Bahr Rd. to be used for the new Fire Dept. headquarters and main firehouse
2. New construction of a large, multi-bay firehouse, with ample space for apparatus, training & meeting area, etc. and with space for future additions as necessary.
3. After completion of new main firehouse, the current Winthrop station will be closed. The apparatus will be moved to the new main facility and the property will be turned back to the town or sold.
4. After completion of new main firehouse, a new smaller facility will be built on the Union Street property, adjacent to the current firehouse, to serve as a satellite station. This will be a 2-bay facility to house the ladder truck and one additional engine.
5. After completion of the new Union Street satellite station, the current Union Street / Elm Street facility will be demolished, and the lot will be used for parking.
6. The River Street station will be sold, and revenue used to supplement building of the two new firehouses. The antique apparatus and museum collection will be moved into the new Headquarters station in one of the new bays.

Detailed Plan:

1. **Obtain new property between Winthrop Rd. and Bahr Rd.**
 - a. This property has unique advantages such as:
 - An easily accessible location, right off a major state road Route 80
 - The property is adjacent to two roads, which makes it possible to build a drive-through firehouse with front and rear garage entrances
 - The front of the property faces a main road with a wide street and relatively light traffic, all which makes it easy and safe to pull trucks out onto the street.
 - Flat lot. Requires no major excavation, blasting, or clearing.
 - b. The area of this parcel of land is 14 acres. Preference would be to use the entire property, however if the land must be split into two parcels, a 7 acre plot of land would still be acceptable.
 - c. Appraised value is \$184,600. Current market value of this property is far less than \$300,000.

- d. Dick Smith will talk to the current owners of the property between Winthrop Road and Bahr Road and discuss terms of a sale. There is some indication that the property owners may be interested in selling the land. Dick to work to acquire the property for the town.
- e. The land is currently not being used, and there are no plans for its use, which makes it desirable for both the town and property owners to sell the land to the town.
- f. Advantages of a large property such as this include the following:
 - Adequate space for building and parking
 - Space for future building additions to add more bays as necessary over the next 50-100 years.
 - Space for future add-ons over the next 50-100+ years for other municipal functions, such as police dept., medical / ambulance facility, highway dept., etc. and any other additions which could become necessary decades into the future.
 - Space to add bunking quarters over the next 50-100+ years in case paid members are ever required for the fire dept.

2. New construction of a large, multi-bay firehouse

- a. The new firehouse will be built using steel beam / block construction with a brick facade on the front face to provide an attractive looking building without extensive costs.
- b. The building will be designed and built with 9 garage bays, sufficient for the following:
 - Engine #554
 - Engine #553
 - *Note: The determination as to which engine/pumper will be housed in which firehouse will be the determination of the Chief.*
 - Rescue truck #59
 - Tanker truck #561
 - Brush truck #58
 - Pickup truck #596
 - Additionally, winter storage for the marine fireboat (#52) and trailer will be inside the new firehouse, with a garage bay reserved for the boat, allowing maintenance on it in the heated garage.
 - One separate bay will be reserved for maintenance on any of the apparatus.
 - The antique engine and the ladder wagon will be stored in the new firehouse.
- c. The floor space required for each bay for the apparatus is listed in Addendum 'A'.
- d. The sedan (Car 5) will be parked outside, at this new firehouse. During the spring/summer/fall seasons when the boat is at the marina, the sedan (Car 5) can be stored inside.
- e. All bays of the firehouse will be parallel and side-by-side, to facilitate front access to Winthrop Road, and rear access from Bahr Road.
- f. The building will be designed for future expansion for possible additional bays adjacent to the side of the building.
- g. Construction of a new building of sufficient size will be less costly than major building renovations to achieve this size on the current firehouse on Union St.
- h. Since building site is a fill site from an old quarry, deeper footings and foundations will be required.
- i. The building will be designed and built to include the following, in addition to garage bays:
 - Training room / meeting room
 - Small conference room
 - Chief's office
 - Deputy & Assistant Chief's office
 - Secretary & Treasurer's office
 - Kitchen
 - Bunking area in case of emergency requiring overnight staffing at the firehouse
 - Small exercise room, for some basic gym equipment, to be used to keep firefighters physically fit.
 - Engineer's / mechanic's room
 - Adequate storage for all equipment, hoses, pumps, tables/chairs, etc.
 - The floor space required for various sections of the firehouse is listed in Addendum 'B'.

- j. This main firehouse facility will be referred to as the headquarters station.
- k. Other advantages of building in this location include:
 - Away from most residences, so there should be no complaints from residents
 - Easy to pull apparatus out of firehouse onto main road (Rt. 80)
 - Ample space for required number of parking spaces
 - Ability to design firehouse for future expansion, due to ample available space.
 - New firehouse will be ADA-compliant.

3. The current Winthrop station will be closed.

- a. When the new headquarters firehouse between Winthrop Rd. and Bahr Rd. is complete, the apparatus from the current Winthrop satellite station will be moved to the new HQ firehouse.
- b. The Winthrop station will then be permanently closed.
- c. The Winthrop station will be turned back over to the town for use to be determined by the Board of Selectmen, which may include sale of the building and property for use as a private garage or other use.
- d. The current Winthrop station is in need of ventilation system, major mechanicals upgraded or replaced, and structural building upgrades. By closing this station, the town is saved the cost of spending funds to renovate an old and obsolete building.

4. Smaller facility will be built on the Union Street property

- a. When the new HQ firehouse between Winthrop Rd. and Bahr Rd. is complete, construction on a new, smaller firehouse will be built on the Union Street property.
- b. The building will be designed and built with 2 garage bays, sufficient for one engine/pumper (#552) and the tower truck (#571).
 - *The determination as to which engine/pumper will be housed in which firehouse will be the determination of the Chief, however the new Union Street facility will have one bay long enough to house the tower truck.*
- c. The garage bay for the tower truck will be located in such a fashion that the tower truck can be pulled out of the garage safely, and can easily make the swing onto Elm St.
- d. Keeping these two primary attack apparatus close to the center of town will maintain the current ISO rating throughout town.
- e. This new firehouse on Union Street will be designed with a more “residential” look and feel, such that it better blends in with the neighboring properties. It will look like it belongs into the neighborhood, and will look less like a square, flat-topped garage.
- f. This smaller facility will be referred to as the satellite station.

5. The current Union Street facility will be demolished

- a. The current Union Street station is in need of ventilation system, major mechanicals upgraded or replaced, and structural building upgrades. By demolishing this station, the town is saved the cost of spending funds to renovate an old and obsolete building.
- b. When the new, smaller firehouse is completed on the Union Street property, the current firehouse will be demolished.
- c. The area will be used as parking for the satellite station.

6. The River Street station will be sold

- a. All apparatus from the River Street station (antique engine and ladder wagon) and all equipment and museum pieces will be moved to the new headquarters station between Winthrop Rd. and Bahr Rd.
- b. The building on River Street currently used as a museum and to house the antique engine will be sold by the town. Revenue from the sale can be used to help fund the construction of the two new firehouse buildings.

Floor Space Required for Apparatus at both Firehouses

Apparatus Area – Headquarters station at Winthrop Rd. / Bahr Rd.

Two "Attack Engines" 30' Long 8' Wide 12' wide with doors open, 5' front and back for 40' x 16'
One "Rescue Truck" 28' Long 8' Wide 12' wide with doors open, 5' front and back for 40' x 16'
One "Tanker Truck" ___' Long 8' Wide 12' wide with doors open, 5' front and back for 40' x 16'
One "Brush Truck" ___' Long 8' Wide 12' wide with doors open, 5' front and back for 40' x 16'
One "Fire / Rescue Boat & Trailer" 30' Long 9' Wide 12', 5' front and back for 40' x 16'
One Utility "Pickup Truck" 16' Long 8' Wide 12' wide with doors open, 5' front and back for 26' x 16'
One "Antique Engine" 25' Long 8' Wide 12' wide with doors open, 5' front and back for 35' x 16'
One "Antique Ladder Wagon" 16' Long 8' Wide 12', 5' front and back for 26' x 12'
One Maintenance bay for working on the apparatus, 55' x 16'

Apparatus Area – Headquarters station at Winthrop Rd. / Bahr Rd.

One "Attack Engine" 30' Long 8' Wide 12' wide with doors open, 5' front and back for 40' x 16'
One "Tower Ladder" 45' Long 8' Wide 12' wide with doors open, 5' front and back for 55' x 16'

All square footage below are approximate and should be determined by the future building committee

Summary

The Deep River Firehouse Study Committee has determined that the Deep River Fire Department is currently staffed and equipped to provide the Town of Deep River with adequate fire service protection.

They maintain two firehouses, one near the center of town on the corner of Union and West Elm Streets and a much smaller one in the Winthrop section of town on Route 80 near Westbrook Road. The Union Street station is considered their headquarters and the Winthrop station is primarily a “satellite station”.

The Union Street station was built in 1961 and currently does not meet the needs of the Department with regard to newer apparatus sizes, meeting and training, equipment storage, building codes and efficiency.

Over the past thirty years the size of fire apparatus has grown. National Fire Protection Association (NFPA) standards require stricter standards of safety, service, durability, and performance of fire apparatus. Fire departments that operate the vehicles, the manufacturers of apparatus, and the general public have come to demand safer vehicles to protect the firefighter occupants of the apparatus. These changing requirements have led to much larger size trucks.

The Engine / Pumper Trucks that years ago just had an enclosed cab with open jump seats behind the driver, and a running board for firefighters to hang on to the back of the truck when responding to calls now have fully enclosed cabins, often with enough seats for up to eight firefighters to respond to a call inside the truck. These trucks also have much more equipment, larger water tanks, and overall are much larger and longer than they were just a few decades ago. The Rescue Trucks that were once the size of a pick-up truck are now practically the same size as Pumpers. Many citizens of Deep River would not be able to distinguish our new Rescue Truck from a typical Pumper Truck. Lastly, when the current firehouse was built, there was no ladder truck in the town's fire service. A Ladder Truck, also known as a Tower Truck or Aerial Truck, is much longer and taller than a pumper. The current firehouse is not sized adequately for any of these new trucks in the fire service today, leading to an overcrowding and dangerous situation in a very small area of the firehouse.

The average Deep River firefighter volunteers 180 hours a year of their time for their community. Officers and administrative staff will sometimes double those hours. Today's “volunteer” firefighters are also being trained to the same level as paid career firefighters. This requires members to train more often than in years past. The current firehouse has no training area. A new firehouse must have a training area.

During times of emergencies, such as severe storms, the firehouse requires members to be able to bunk inside the building overnight to provide continuous coverage. There is no provision or space within the current building to offer a place for a couple firefighters to sleep. A new firehouse should have at least a minimal provision for firefighters to bunk.







In summary, the current firehouse is far too small, both in the garage bays where the trucks are parked, and also in the living space where training should take place, but there is no space. The current firehouse is over 50 years old, is not up to code, has inadequate storage space, and requires immediate and substantial upgrades in ventilation and major mechanicals. We do not believe it is in the town's best interest to spend large sums of money upgrading a firehouse that is still far too small. It is therefore in this commission's opinion that a new, larger firehouse be built for this town.

This is the unanimous and agreed upon decision of the eight members of the town-appointed Firehouse Study Commission.







Appendix C – Property Assessment Matrix

DRFD Station Phase III

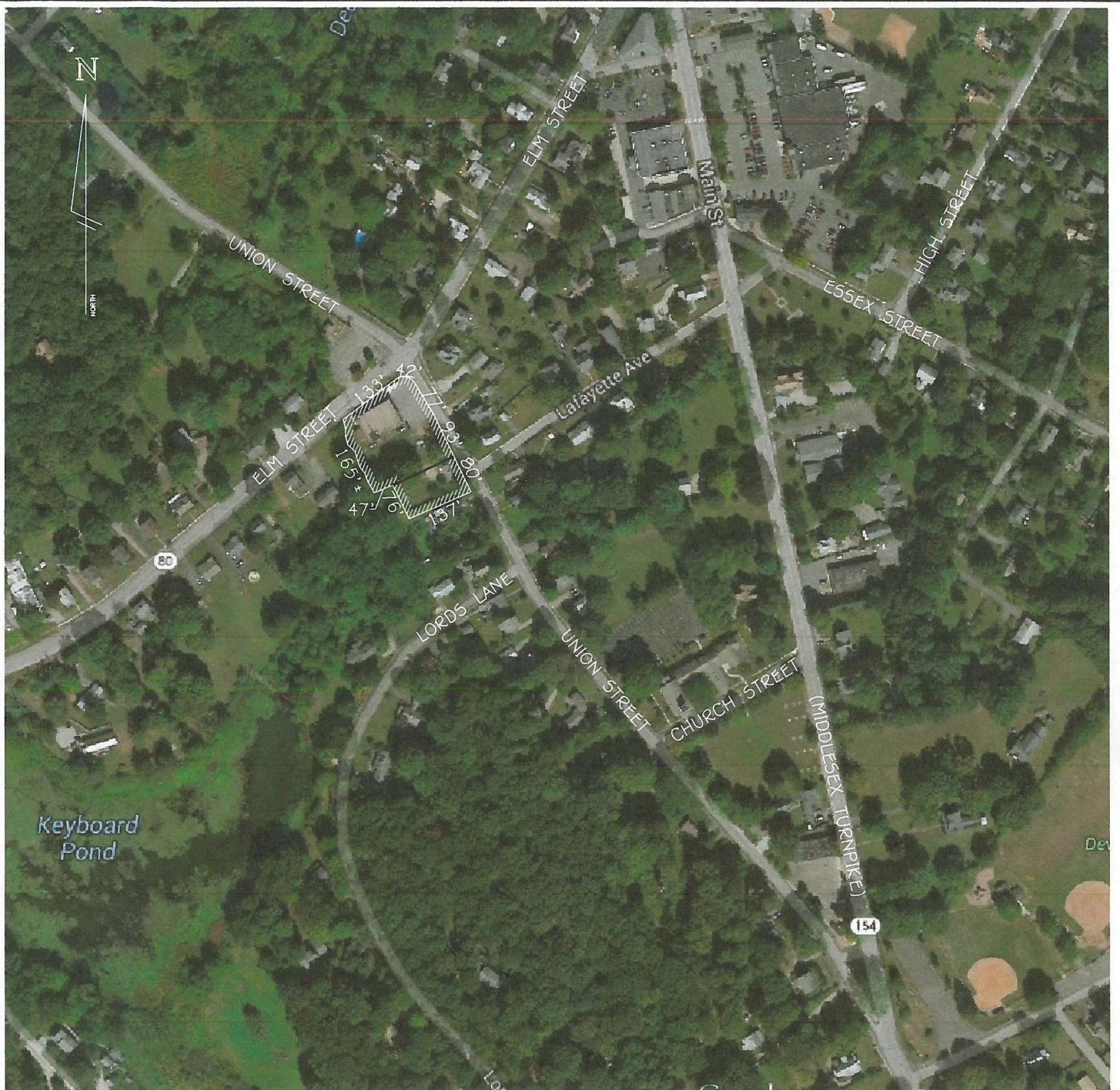
PROPERTY BENEFITS/ LIABILITY SUMMARY

Property	 Current DRFD Station 55 & 57 Union St	 53, 55 & 57 Union St (+ House)	 208 Main St	 423 Main St	 144 Main St	306 Main St	 12 Winthrop	Winthrop (Bahr Rd)	16 Grove St
ACRES	0.72	0.27	1.50	1.58	1.71	12.00		14.08	2.30
REFERENCE	Current Fire House	Current Fire House plus house	Louis Mozzochi rental	Old Adult Daycare Center	Paschall Family	Mozzochi 12 acres		Blakesley	Eve's Addition
WATER/ SEWER	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes				Yes Yes
Flood Plain Notes	Just within FEMA 200 year flood plain (Union Street outside of flood plain)	Just within FEMA 200 year flood plain (Union Street outside of flood plain)	Flood zone potential	No flood plain concerns	Adust Dropoff	Access Road			
Parking Notes	25 spaces on site, 25 spaces across street	50 spaces on site and with DRFD house	50+ spaces on site and with DRFD house	50+ spaces on site and with DRFD house					
Building Demo (k)	Raze Mortor/ Brick Building	Raze Mortor/ Brick Building & House(?)	Raze wooden structure	Raze wooden structure					
Temporary Temp Controlled Office & Secure Storage	14 Month temporary apparatus storage, temporary office storage, etc	14 Month temporary apparatus storage, temporary office storage, etc							
BENEFITS	<ul style="list-style-type: none">- Town owns the property- New fire house here creates attractive entrance to town from west- Central location allows fire fighters to respond to calls in expeditious manner with quick access to all major roads- Fire Fighters prefer current location/ close by, (poll by all fire fighters)- 25 spaces on site, 25 spaces across the street	<ul style="list-style-type: none">- Town owns the property- New fire house here creates attractive entrance to town from west- Central location allows fire fighters to respond to calls in expeditious manner with quick access to all major roads- Fire Fighters prefer current location/ close by, (poll by all fire fighters)- 50 spaces on site, overflow across street- All fire fighters would be able to park at this facility	<ul style="list-style-type: none">- Room for future growth- New fire house here creates attractive structure on Main Street- Near central location allows fire fighters to respond to calls in expeditious manner with quick access to all major roads from Main Street- 50 spaces on site with room for more space- All fire fighters would be able to park at this facility- 57 Union Street property available to be sold to offset purchasing new property- Only one move of equipment from current fire house to new fire house when new building finished- Owner renting now, agreeable to selling property and house to town	<ul style="list-style-type: none">- Room for future growth- New fire house here creates attractive structure on Main Street entering from South- access to all major roads from Main Street- 50 spaces on site with room for more space- All fire fighters would be able to park at this facility- 57 Union Street property available to be sold to offset purchasing new property- Only one move of equipment from current fire house to new fire house when new building finished- Owner renting now, agreeable to selling property and house to town- Dry area, on market, could build 1 or 2-story	Drop-off allowing access from bottom out rear and top out front. Abuts library parking lot; shared parking				Exiting building has great potential for conversion
LIABILITIES	<ul style="list-style-type: none">- This site lies just inside a FEMA identified flood plain; the land will need to be raised at least 18" to be utilized during a 100 year flood- Fire fighter access to this site could be limited during a 100 year flood (portions of West Elm and North Union streets are within the flood plain, Union Street in front of this property is outside the FEMA flood plain)- The property does not favor a one-story facility, a two-story solution suggested in Section 1 of this report would work well- Half of volunteer fire fighters could not park on fire house property	<ul style="list-style-type: none">- This site lies just inside a FEMA identified flood plain; the land will need to be raised at least 18" to be utilized during a 100 year flood- Fire fighter access to this site could be limited during a 100 year flood (portions of West Elm and North Union streets are within the flood plain, Union Street in front of this property is outside the FEMA flood plain)- The property does not favor a one-story facility, a two-story solution suggested in Section 1 of this report would work well	<ul style="list-style-type: none">- Requires town to purchase property- Requires exisiting older (historic?) home in town to be razed/ demolished- Property taken off tax rolls- Front floods in rain, necessitating building up ground above flood area- Access from Main Street only- 57 Union Street building would be sold, town would not have control of it's use (e.g. could be used for indoor and outdoor storage that would detract from entrance to town)	<ul style="list-style-type: none">- Requires town to purchase property- Requires exisiting older (historic?) home in town to be razed/ demolished- Property taken off tax rolls- Access from Main Street only- 57 Union Street building would be sold, town would not have control of it's use (e.g. could be used for indoor and outdoor storage that would detract from entrance to town)- Response to River Road lengthy, farther for FF's to respond to station	Yes, historical home. May not be possible to raze.	Good distance from current station			Narrow Grove St access, limited parking (25 stalls?), wetlands on property

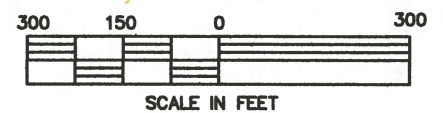
PROPERTY BENEFITS/ LIABILITY SUMMARY

Property	 Current DRFD Station 55 & 57 Union St	 53, 55 & 57 Union St (+ House)	 208 Main St	 423 Main St	 144 Main St	306 Main St	 12 Winthrop	Winthrop (Bahr Rd)	16 Grove St
Other Comments	<p>TEMPORARY SITE (Temporary Dilemma)</p> <ul style="list-style-type: none">- Using this site will require temporary heated/ cooled housing of apparatus, offices and storage and temporary site during demolition and new construction- A committee will be needed to oversee temporary facilities<ul style="list-style-type: none">o identify and negotiating a temporary locationo identify and arrange temporary buildings for apparatus, offices and storageo coordinating move-out to temporary siteo coordinating tear-down and return of temporary buildings• DRFD volunteers will need to pack, move and unpack gear and offices twice• Drills and meetings would need to be located at a different site• Lot layout does not lend itself to building the new structure in the vacant lot concurrent with using the existing structure<ul style="list-style-type: none">o Not enough room concurrently for botho Removes available parking for drill nights and responseso No construction stockpiling space availableo New structure would be closer to residential structures, removing transition space		- Requires demolishing existing older house and that may be a very large barrier in going this route	- Site farthest south on Main Street; will this affect our ISO rating? Fire fighters may not be supportive of this site.					
COMMENTS	DRFD wants to stay at this site	DRFD wants to stay at this site	Not significant move from current Fire Station to this location		Historical significance Recently available on market for \$700K?	Paul will check with niece and get back to us.	(Old info) Won't sell if house torn down. (New info) Being fixed up?	(Old) Didn't reply to inquiries	
STATUS	Open	Open	Open	Open	Closed; Wetland Issues, Historic Value	Closed; Lack of interest in selling, major work to build entrance through rock ledge	Closed; no interest in selling, located near Plattwood Park and would require small station in town and close old Winthrop Station	Closed; no interest in selling, located near Plattwood Park and would require small station in town and close old Winthrop Station	Closed; Entrance too narrow for apparatus egress, tight streets

Appendix D – 57 Union Street – Meets & Bounds Maps, Property Card



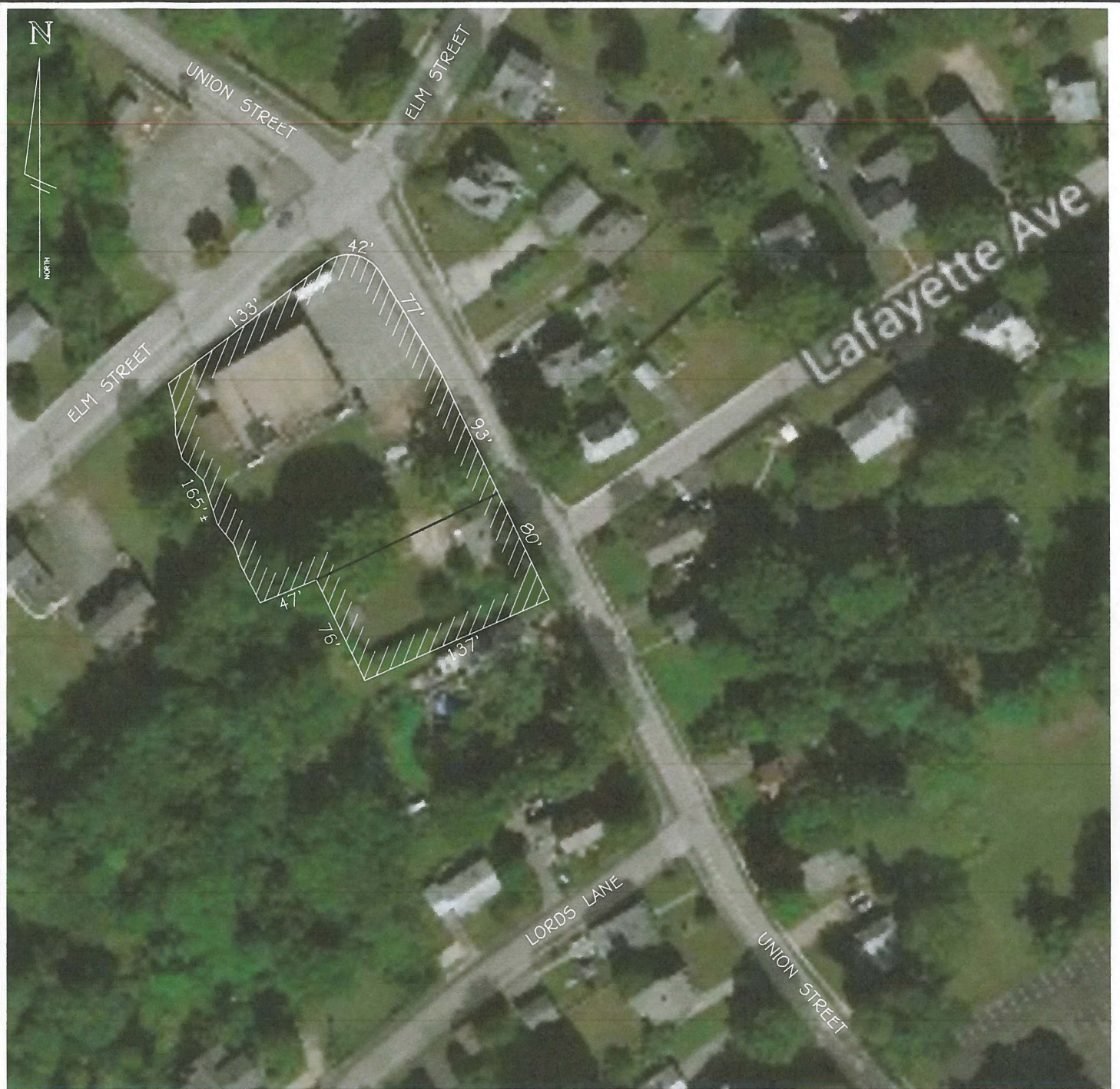
57 UNION STREET
 AREA=0.97 ACRES
 MAP#57 LOT# 55-57



AREA PLAN
 PREPARED FOR
TOWN OF DEEP RIVER
 MULTIPLE LOCATIONS
 DEEP RIVER, CONNECTICUT
 DATED: OCTOBER 16, 2014

REVISIONS:

DR'N JWF	CK'D	APP'D
SHEET 3 OF 6		JOB NO. 065304



57 UNION STREET
 AREA=0.97 ACRES
 MAP#57 LOT# 55-57

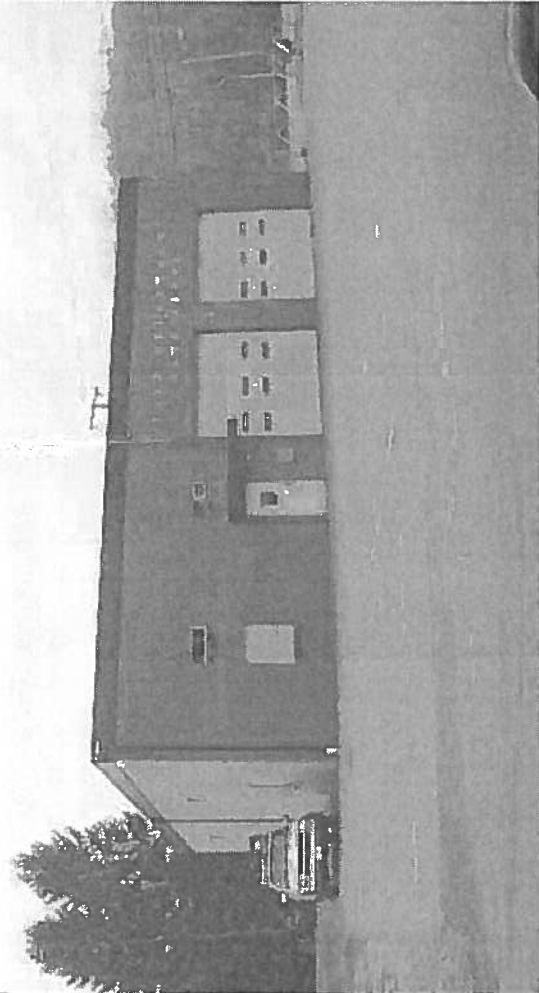
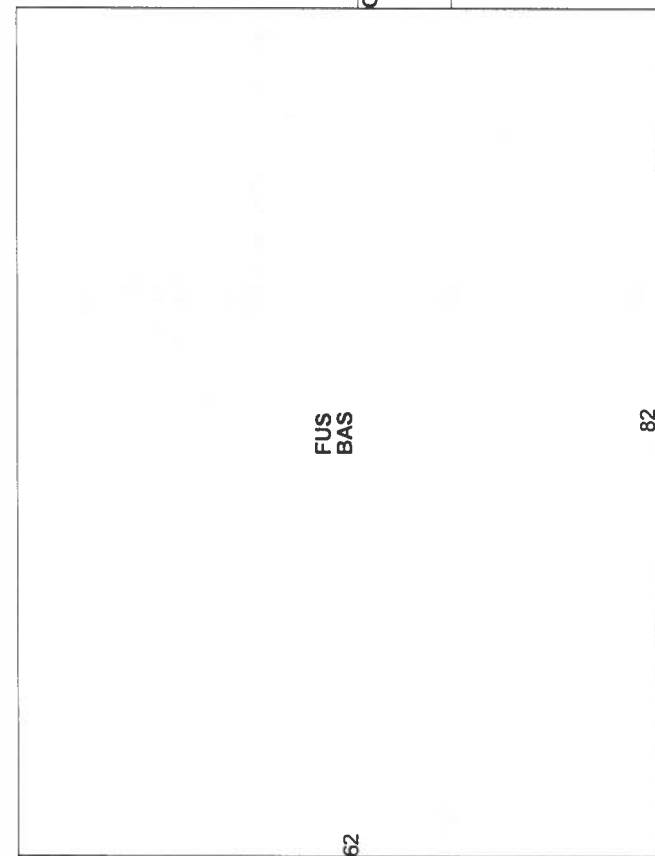


AREA PLAN
 PREPARED FOR
TOWN OF DEEP RIVER
MULTIPLE LOCATIONS
 DEEP RIVER, CONNECTICUT
 DATED: OCTOBER 16, 2014

REVISIONS:

DR'N JWF	CK'D	APP'D
SHEET 4 OF 6	JOB NO. 065304	

CONSTRUCTION DETAIL			CONSTRUCTION DETAIL (CONTINUED)								
Element	Cd.	Ch. Description	Element	Cd.	Ch. Description						
Style	59	Fire Station									
Model	96	Ind or Comm									
Grade	04	Above Ave									
Stories	1										
Occupancy	1										
Exterior Wall 1	15	Concr/Cinder									
Exterior Wall 2											
Roof Structure	02	Shed									
Roof Cover	04	Tar & Gravel									
Interior Wall 1	01	Minim/Masonry									
Interior Wall 2											
Interior Floor 1	03	Concr-Finished									
Interior Floor 2											
Heating Fuel	02	Oil									
Heating Type	05	Hot Water									
AC Type	01	None									
Bldg Use	9032	MUN FIRE									
Total Rooms	00										
Total Bedrms	0										
Total Baths											
Heat/AC	00	NONE									
Frame Type	03	MASONRY									
Baths/Plumbing	02	AVERAGE									
Ceiling/Wall	05	SUS-CEIL & WL									
Rooms/Prtns	02	AVERAGE									
Wall Height	16										
% Conn Wall	0										
OB-OUTBUILDING & YARD ITEMS(L) / XF-BUILDING EXTRA FEATURES(B)											
Code	Description	Sub	Sub Description	L/B Units	Unit Price	Yr	Gde	Dp Rt	Cnd	%Cnd	Apr Value
PAV1	PAVING-ASPH			L	7,600	2.20	2000	0		100	16,700
SHSD1	SHED FRAME			L	300	14.00	1994	0		100	4,200
LT1	LIGHTS-IN W			L	2	750.00	2000	0		100	1,500
MEZ2	FINISHED			B	1,208	23.00	1980	1		100	19,400
BUILDING SUB-AREA SUMMARY SECTION						BUILDING SUB-AREA SUMMARY SECTION					
Code	Description	Living Area	Gross Area	Eff. Area	Unit Cost	Undeprc. Value					
BAS	First Floor	5,084	5,084	5,084	86.74	440,961					
CAN	Canopy	0	36	7	16.87	607					
FUS	Upper Story, Finished	5,084	5,084	4,830	82.40	418,930					
Ttl. Gross Liv/Lease Area:		10,168	10,204	9,921		860,498					



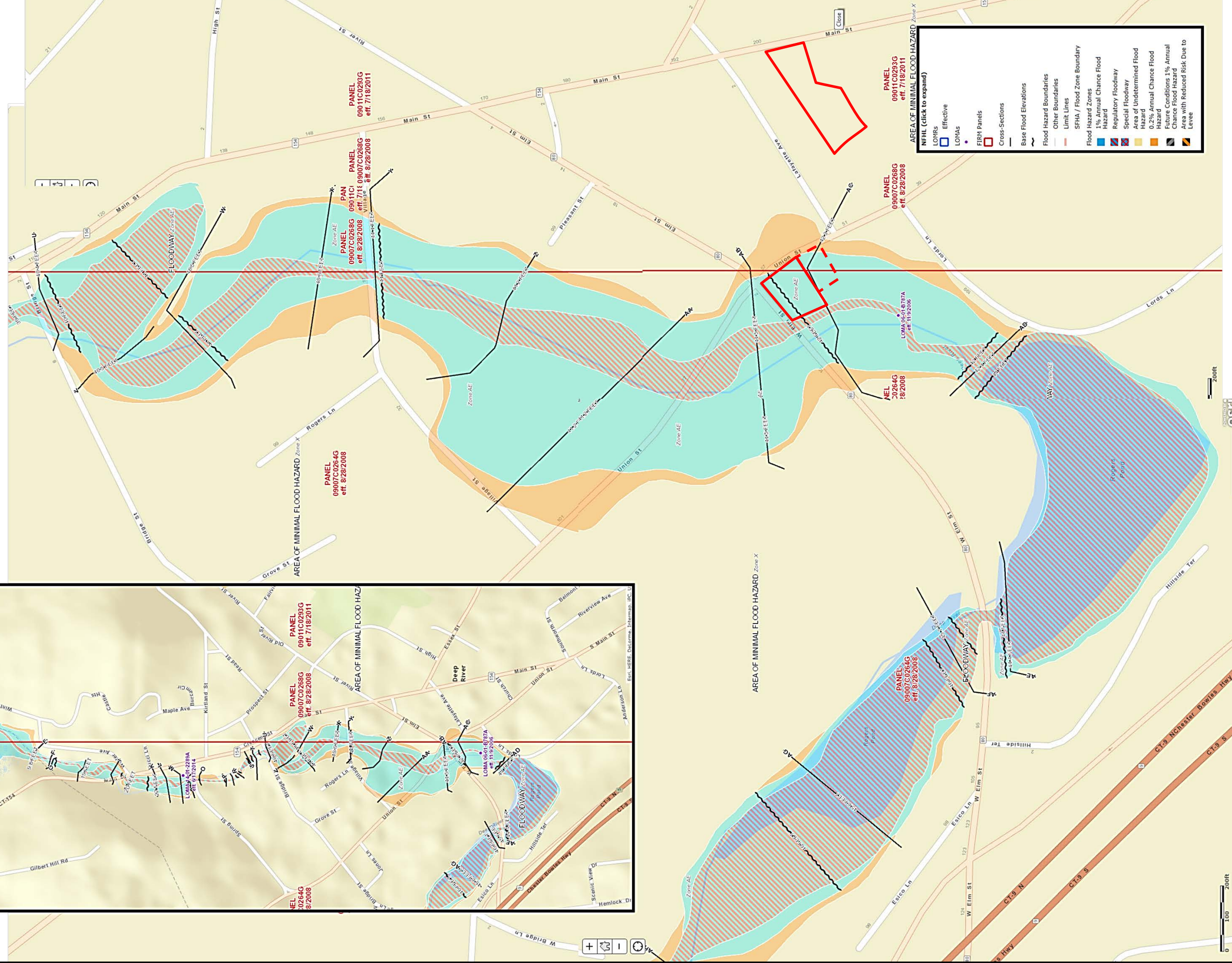
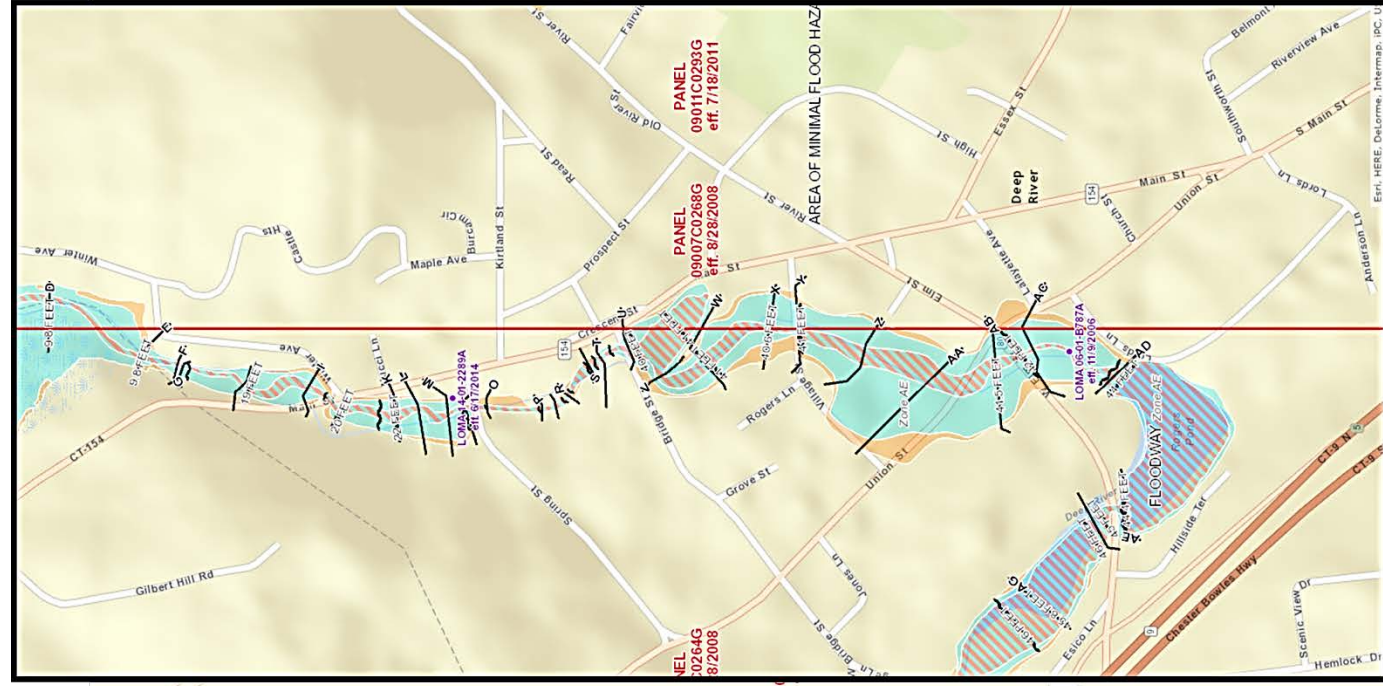
CAN
9
4

FUS
BAS

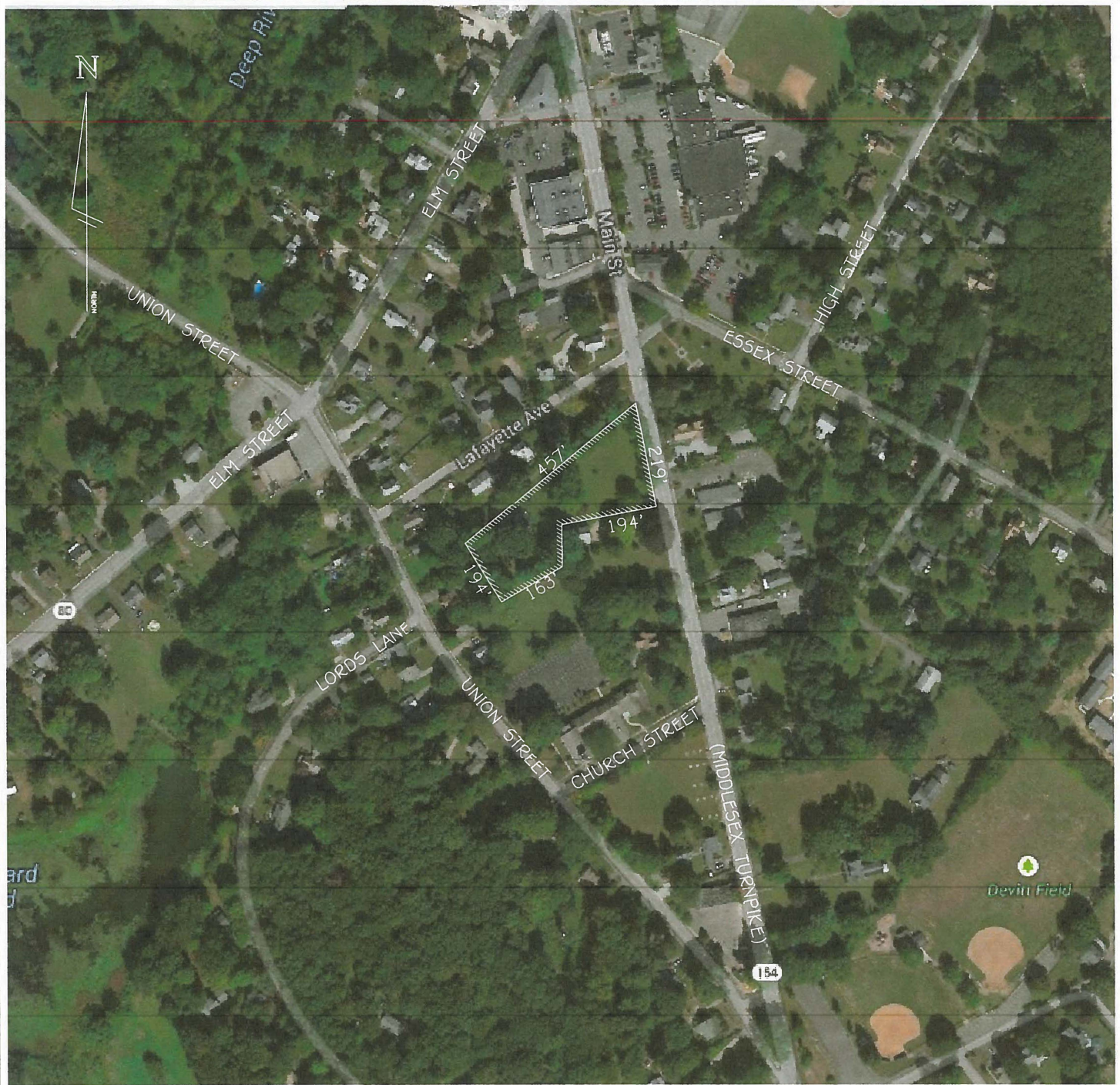
82

Appendix E – FEMA Flood Plain Map

FEMA Flood Plain Map of Deep River, CT



Appendix F – 208 Main Street – Meets & Bounds Maps, Property Card



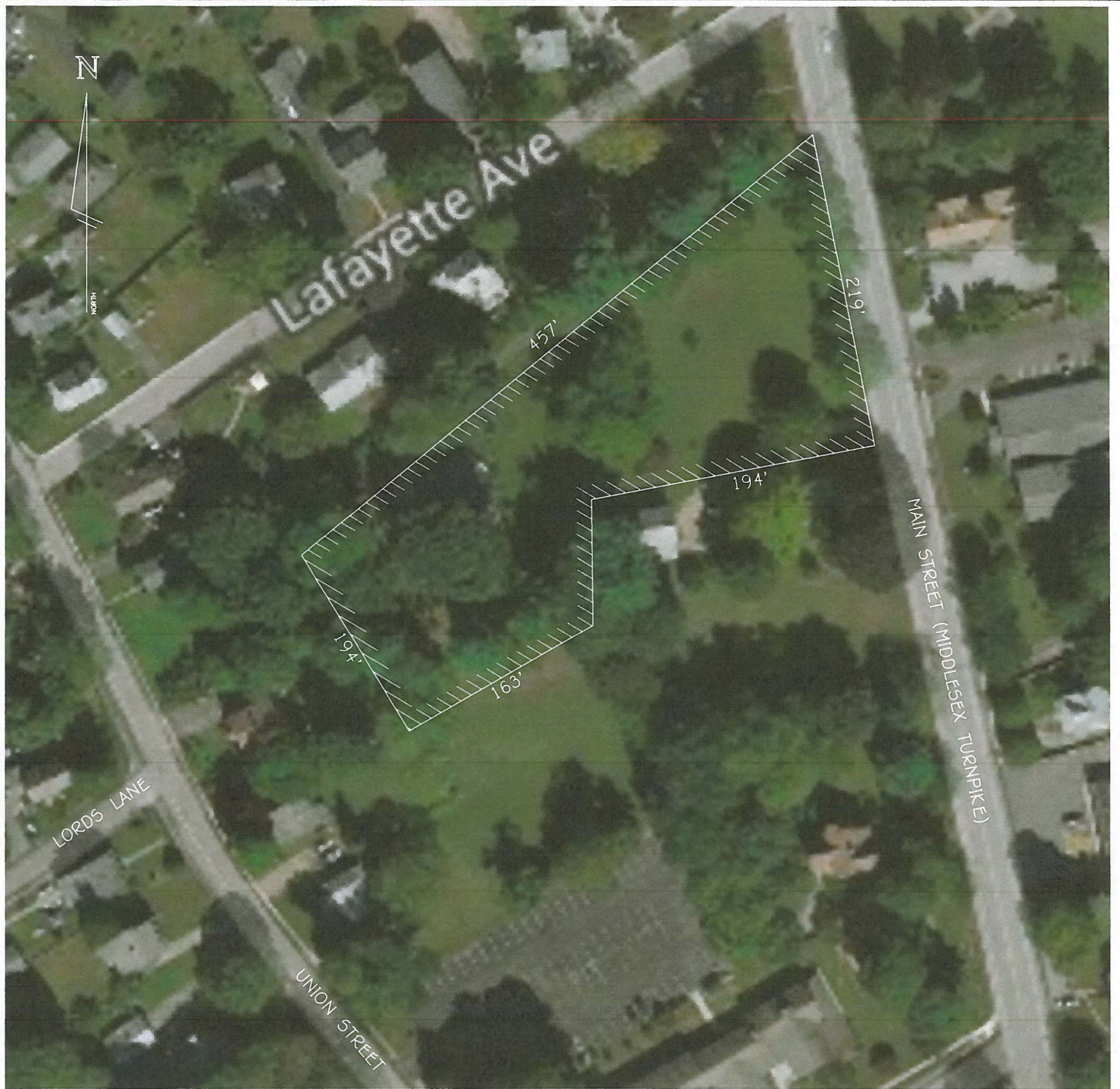
208 MAIN STREET
 AREA=1.40 ACRES
 MAP#57 LOT# 78



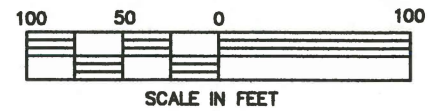
AREA PLAN
 PREPARED FOR
TOWN OF DEEP RIVER
 MULTIPLE LOCATIONS
 DEEP RIVER, CONNECTICUT
 DATED: OCTOBER 16, 2014

REVISIONS:

DR'N JWF	CK'D	APP'D
SHEET 1 OF 6		
JOB NO. 065304		



208 MAIN STREET
 AREA=1.40 ACRES
 MAP#57 LOT# 78



AREA PLAN
 PREPARED FOR
TOWN OF DEEP RIVER
MULTIPLE LOCATIONS
 DEEP RIVER, CONNECTICUT
 DATED: OCTOBER 16, 2014

REVISIONS:

DR'N JWF	CK'D	APP'D
SHEET 2 OF 6	JOB NO. 065304	

Property Location: 208 MAIN ST
Vision ID: 1669

Account #00150000

MAP ID: 571 / 78 / 1

State Use: 1010

Bldg Name: 6036
DEEP RIVER, CT

Print Date: 2014 10:10

of 1

Bldg #:

1 of 1

Card 1 of 1

Sec #:

1

TOPO.

UTILITIES

STRT./ROAD

LOCATION

1 Paved

2 Suburban

RES LAND

RES EXCES

DWELLING

RES OUTBL

Other ID:

ROUTING

DV MAP #

DV LOT #

CENSUS TRCT 620100000000

CERT OF OCC

ASSOC PID#

W36

SUPPLEMENTAL DATA

RECORD OF OWNERSHIP

BK-VOL/PAGE

SALE DATE

q/u

v/i

SALE PRICE

V.C.

29

0

0

0

MOZZOCHI ALBERT JR & LOUIS P SR

MOZZOCHI ALBERT JR&LOUIS P& ALBERT C

MOZZOCHI ALBERT C

MOZZOCHI ALBERT C & ROSE E ESTATE OF

EXEMPTIONS

Year

Type

Description

Amount

Code

Description

Number

Amount

Comm. Int.

ASSESSING NEIGHBORHOOD

STREET INDEX NAME

TRACING

BATCH

NOTES

GRAY/BLUE EG IG

WATER DAMAGE FROM LEAKY

ROOF + GUTTER

10/04 EDIT ACT YR BUILT

FULL REAR DRMR

BUILDING PERMIT RECORD

Permit ID

Issue Date

Type

Description

Amount

Insp. Date

% Comp.

Date Comp.

Comments

13-082

05/29/2013

RS

Residential

1,000

09/30/2013

100

10/01/2013

INSTALL 60 GALLON

13-057

04/30/2013

RS

Residential

350

09/30/2013

100

10/01/2013

RUN GAS LINE FOR L

LAND LINE VALUATION SECTION

B

Use

Code

Zone

D

Frontage

Depth

Units

Unit Price

I.

Factor

S.A.

Disc

Acre

C.

Factor

ST.

Idx

Adj

Notes- Adj

Special Pricing

Adj. Unit Price

Land Value

1

1010

Single Fam MDL-01

R20

1.38 AC

66,600.00

0.77

5

1.0000

1.00

1.0000

0

1.0000

0055

1.05

74,300

1

1010

Single Fam MDL-01

R20

0.12 AC

7,000.00

1.00

0

1.0000

1.00

1.0000

0

1.0000

0055

1.05

7,350.00

Total Card Land Units:

1.50 AC

Parcel Total Land Area:1.5 AC

Total Land Value:

75,200

CURRENT ASSESSMENT

Code

Appraised Value

Assessed Value

1-1

74,300

52,010

1-2

900

630

1-3

244,000

170,800

1-4

4,700

3,290

PREVIOUS ASSESSMENTS (HISTORY)

Yr.

Code

Assessed Value

Yr.

Code

Assessed Value

2013

1-1

52,010

2011

1-1

52,010

2013

1-2

630

2011

1-2

630

2013

1-3

170,800

2011

1-3

170,800

2013

1-4

3,290

2011

1-4

3,290

APPRAISED VALUE SUMMARY

Appraised Bldg. Value (Card)

239,500

Appraised XF (B) Value (Bldg)

4,500

Appraised OB (L) Value (Bldg)

4,700

Appraised Land Value (Bldg)

75,200

Special Land Value

0

Total Appraised Parcel Value

323,900

Valuation Method:

C

Adjustment:

0

Net Total Appraised Parcel Value

323,900

VISIT/CHANGE HISTORY

Date

Type

IS

CD

Purpose/Result

8/13/2010

DM

11

Review

7/23/2010

VA

57

Letter requesting Interior

4/2/2010

RS

02

Measur+2Visit

1/8/2010

RS

01

Measur+1Visit

10/1/2004

RO

41

No Change - Review Requ

CONSTRUCTION DETAIL			CONSTRUCTION DETAIL (CONTINUED)									
Element	Cd.	Ch. Description	Element	Cd.	Ch. Description							
Style	03	Colonial										
Model	01	Residential										
Grade	06	Good										
Stories	2	2 Stories										
Occupancy	1											
Exterior Wall 1	14	Wood Shingle										
Exterior Wall 2												
Roof Structure												
Roof Cover	03	Gambrel										
Interior Wall 1	03	Asph/F GlS/Cmp										
Interior Wall 2	05	Plastered										
Interior Flr 1	12	Drywall/Sheet										
Interior Flr 2	14	Hardwood										
Heat Fuel	02	Carpet										
Heat Type	05	Oil										
AC Type	01	Hot Water										
Total Bedrooms	04	None										
Total Bthrms	2	4 Bedrooms										
Total Half Baths	0											
Total Xtra Fixtrs												
Total Rooms	9	9 Rooms										
Bath Style	02	Average										
Kitchen Style	03	Good										
OB-OUTBUILDING & YARD ITEMS(L) / XF-BUILDING EXTRA FEATURES(B)			OB-OUTBUILDING & YARD ITEMS(L) / XF-BUILDING EXTRA FEATURES(B)									
Code	Description	Sub	Sub Description	L/B Units	Unit Price	Yr	Gde	Dp	Rt	Cnd	%Cnd	Apr Value
FGRI	GARAGE-AVH	L	450	35.00	1935		0				30	4,700
FPL3	2 STORY CHI	B	1	4,400.00	1990		1				100	3,500
FPO	EXTRA FPL O	B	1	1,200.00	1990		1				100	1,000
COST/MARKET VALUATION			COST/MARKET VALUATION									
Adj. Base Rate:			91.88									
Section. RCN:			294.096									
Net Other Adj:			5,320.00									
Replace Cost			299,416									
AYB			1928									
Dep Code			G									
Remodel Rating												
Year Remodeled												
Dep %			20									
Functional Obslnc			0									
External Obslnc			0									
Cost Trend Factor			1									
Condition												
% Complete			80									
Overall % Cond			239,500									
Apprais Val			0									
Dep % Ovr			0									
Dep Ovr Comment			0									
Misc Imp Ovr			0									
Misc Imp Ovr Comment			0									
Cost to Cure Ovr			0									
Cost to Cure Ovr Comment			0									
Unit Cost			91.88									
Undeprec. Value			147,370									
Unit Cost			37.01									
Undeprec. Value			2,664									
Unit Cost			551									
Undeprec. Value			6,064									
Unit Cost			91.88									
Undeprec. Value			105,474									
Unit Cost			9.20									
Undeprec. Value			21,132									
Unit Cost			13.78									
Undeprec. Value			276									
Ttl. Gross Liv/Lease Area:			299,416									

CONSTRUCTION DETAIL			CONSTRUCTION DETAIL (CONTINUED)									
Element	Cd.	Ch. Description	Element	Cd.	Ch. Description							
Style	03	Colonial										
Model	01	Residential										
Grade	06	Good										
Stories	2	2 Stories										
Occupancy	1											
Exterior Wall 1	14	Wood Shingle										
Exterior Wall 2												
Roof Structure												
Roof Cover	03	Gambrel										
Interior Wall 1	03	Asph/F GlS/Cmp										
Interior Wall 2	05	Plastered										
Interior Flr 1	12	Drywall/Sheet										
Interior Flr 2	14	Hardwood										
Heat Fuel	02	Carpet										
Heat Type	05	Oil										
AC Type	01	Hot Water										
Total Bedrooms	04	None										
Total Bthrms	2	4 Bedrooms										
Total Half Baths	0											
Total Xtra Fixtrs												
Total Rooms	9	9 Rooms										
Bath Style	02	Average										
Kitchen Style	03	Good										
OB-OUTBUILDING & YARD ITEMS(L) / XF-BUILDING EXTRA FEATURES(B)			OB-OUTBUILDING & YARD ITEMS(L) / XF-BUILDING EXTRA FEATURES(B)									
Code	Description	Sub	Sub Description	L/B Units	Unit Price	Yr	Gde	Dp	Rt	Cnd	%Cnd	Apr Value
FGRI	GARAGE-AVH	L	450	35.00	1935		0				30	4,700
FPL3	2 STORY CHI	B	1	4,400.00	1990		1				100	3,500
FPO	EXTRA FPL O	B	1	1,200.00	1990		1				100	1,000
COST/MARKET VALUATION			COST/MARKET VALUATION									
Adj. Base Rate:			91.88									
Section. RCN:			294.096									
Net Other Adj:			5,320.00									
Replace Cost			299,416									
AYB			1928									
Dep Code			G									
Remodel Rating												
Year Remodeled												
Dep %			20									
Functional Obslnc			0									
External Obslnc			0									
Cost Trend Factor			1									
Condition												
% Complete			80									
Overall % Cond			239,500									
Apprais Val			0									
Dep % Ovr			0									
Dep Ovr Comment			0									
Misc Imp Ovr			0									
Misc Imp Ovr Comment			0									
Cost to Cure Ovr			0									
Cost to Cure Ovr Comment			0									
Unit Cost			91.88									
Undeprec. Value			147,370									
Unit Cost			37.01									
Undeprec. Value			2,664									
Unit Cost			551									
Undeprec. Value			6,064									
Unit Cost			91.88									
Undeprec. Value			105,474									
Unit Cost			9.20									
Undeprec. Value			21,132									
Unit Cost			13.78									
Undeprec. Value			276									
Ttl. Gross Liv/Lease Area:			299,416									

FSP

BAS

41

UAT
FUS
BAS
UBM

22

24

12

12

12

6

FOP

7

4

UOP

45

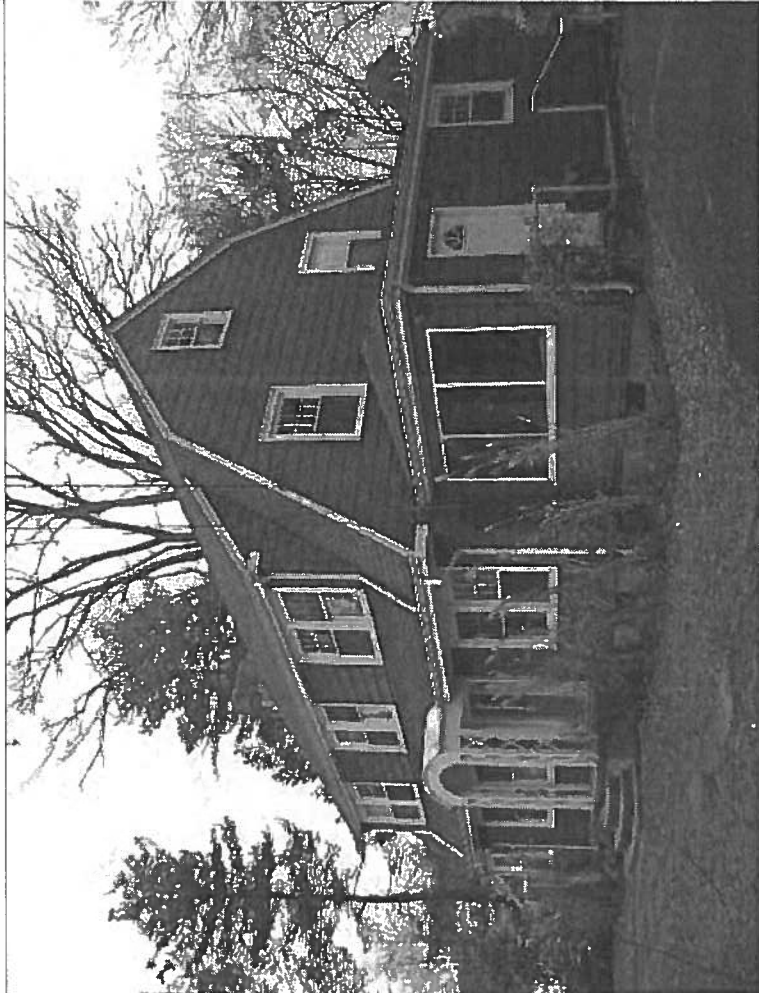
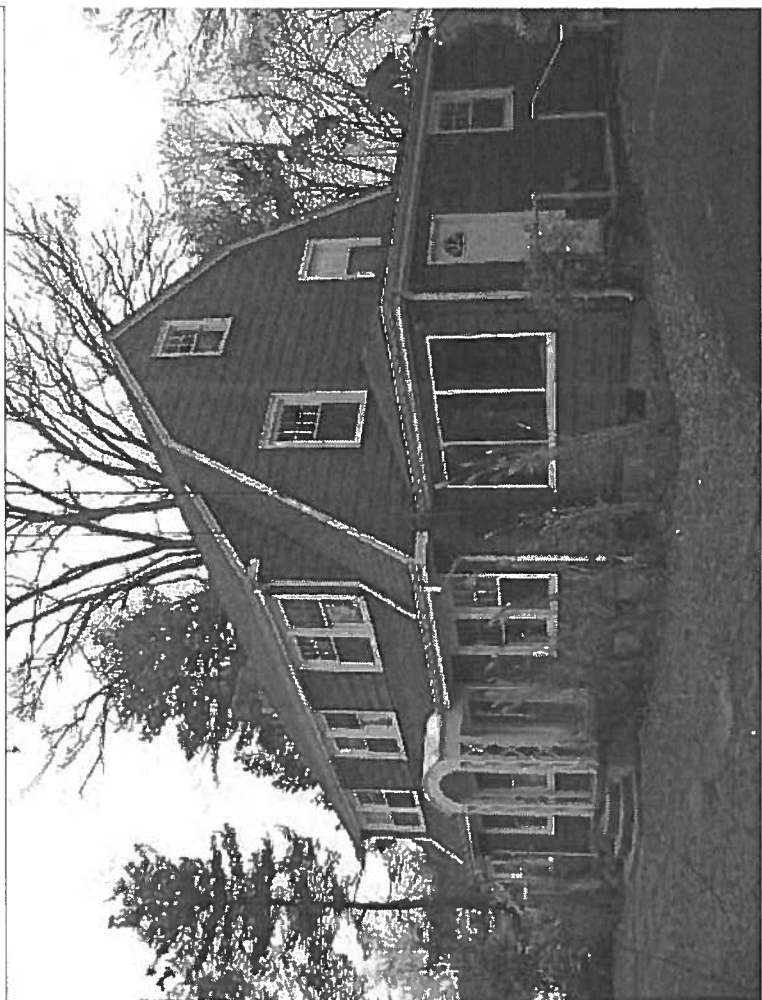
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14

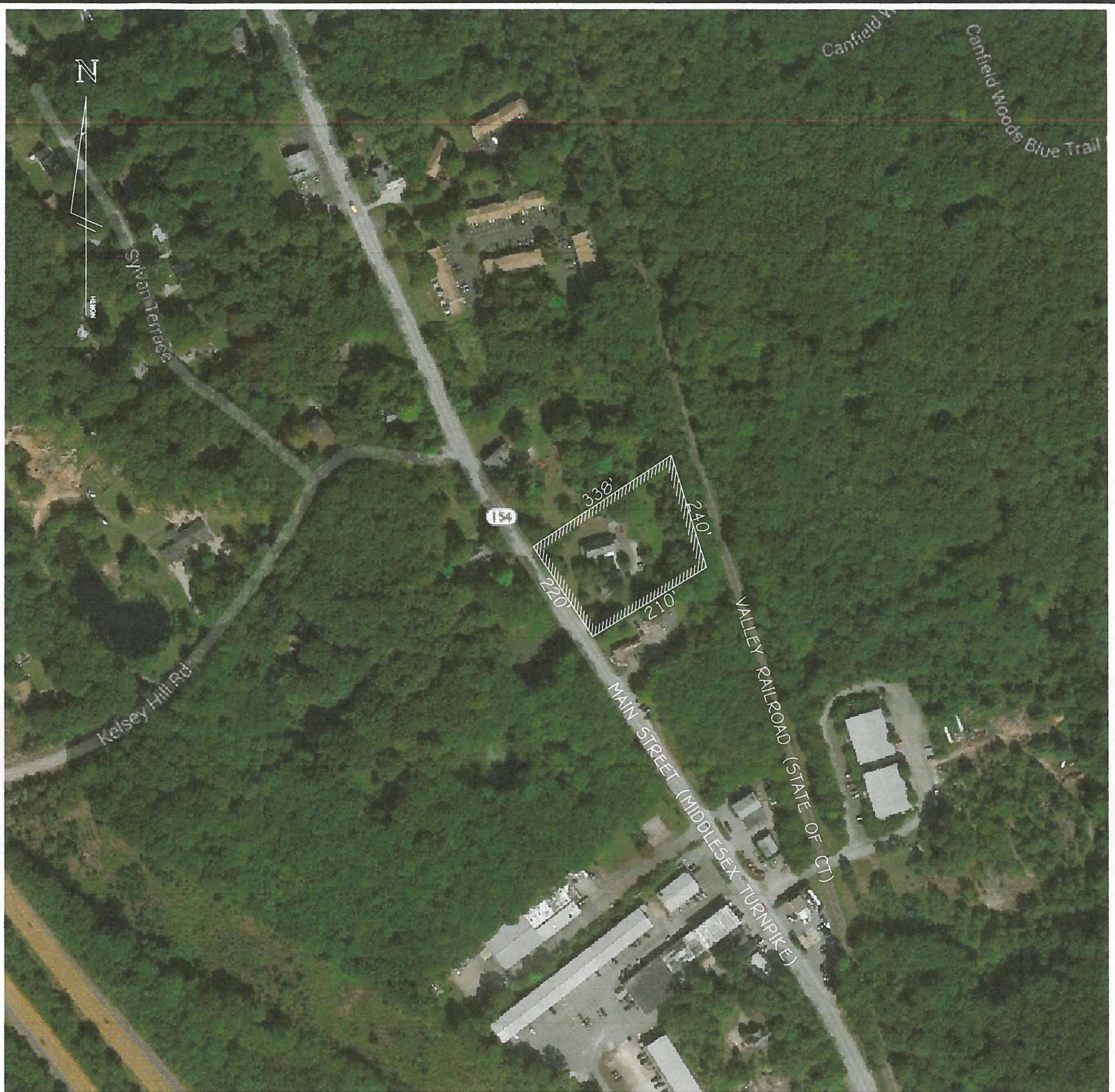
12

12

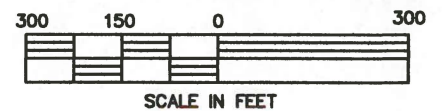
28



Appendix G – 423 Main Street – Meets & Bounds Maps, Property Card



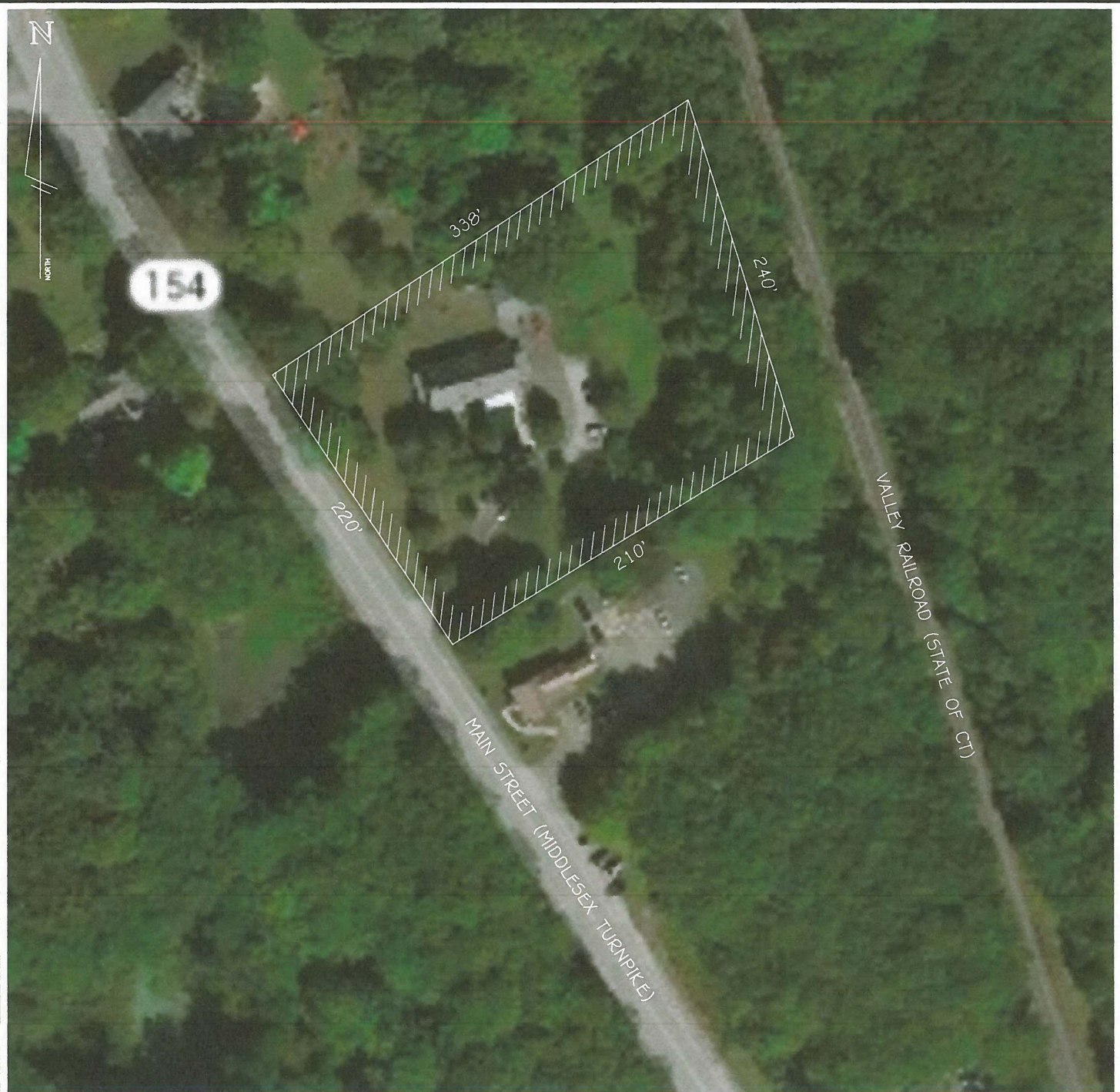
423 MAIN STREET
 AREA=1.58 ACRES
 MAP#59 LOT# 13A



AREA PLAN
 PREPARED FOR
TOWN OF DEEP RIVER
 MULTIPLE LOCATIONS
 DEEP RIVER, CONNECTICUT
 DATED: OCTOBER 16, 2014

REVISIONS:

DR'N JWF	CK'D	APP'D
SHEET 5 OF 6		JOB NO. 065304



423 MAIN STREET
 AREA=1.58 ACRES
 MAP#59 LOT# 13A



AREA PLAN
 PREPARED FOR
TOWN OF DEEP RIVER
 MULTIPLE LOCATIONS
 DEEP RIVER, CONNECTICUT
 DATED: OCTOBER 16, 2014

REVISIONS:

DRN JWF	CK'D	APP'D
SHEET 6 OF 6	JOB NO. 065304	

Property Location: 423 MAIN ST
Vision ID: 1870

Account #00169200

MAP ID: 59/ / 13A/ /

Bldg Name: 1 of 1
Bldg #: 1 of 1
Card 1 of 1
Sec #: 1 of 1

State Use: 322R
Print Date: 5/2014 10:07

CURRENT OWNER

BLAIS MICHAEL & BEATY KATHRYN A

198 HUNTER'S TRAIL

MADISON, CT 06443

Additional Owners:

TOPO.

Level

6 At Grade

ROUTING

DV MAP #

DV LOT #

CENSUS TRCT 620100000000

CERT OF OCC 04/20/2005 04-254

GIS ID:

UTILITIES

3 Public Sewer

7 Electric

2 Public Water

Other ID:

E70A

STRT./ROAD

1 Paved

LOCATION

2 Suburban

RECORD OF OWNERSHIP

BLAIS MICHAEL & BEATY KATHRYN A

SCHMELZER GEORGE V & ROSEMARIE

BK-VOL/PAGE

0187/0158

0097/0072

SALE DATE

06/25/2004

08/27/1980

Q

1

SALE PRICE

363,500

0

V.C.

00

EXEMPTIONS

Year

Type

Description

Amount

Code

Description

Number

Amount

Comm. Int.

ASSESSING NEIGHBORHOOD

NBHD NAME

0060/A

NBHD SUB

0060/A

STREET INDEX NAME

TRACING

BATCH

NOTES

WHITE R-60 ZONE

1 FAM + APT, HANDICAP RAMP

1 EXTRA SS

1 STACK, 0 OPENING, FPO - UBM

4 SKYLIGHTS, WDS TV, A/C 1ST FL

SPECIAL PERMIT NOTICE

V-0189 P-1036

ADULT DAY CARE RESI PROPERTY

10/05 ADD WDK

RENOVS AFTER SALE

10/08 ADD 1/2 BTH

BUILDING PERMIT RECORD

Permit ID

Issue Date

Type

Description

Amount

Insp. Date

% Comp.

Date Comp.

Comments

08-073

05/26/2008

RS

Residential

6,800

10/01/2008

100

10/01/2008

ADD 1/2 BATH TO FIRE

04-254

01/26/2005

RS

Residential

7,000

10/01/2005

100

10/01/2005

CONSTRUCT ACCESS

LAND LINE VALUATION SECTION

B

Use

Code

Use

Description

Zone

D

Frontage

Depth

Units

Unit Price

Acres

Factor

S.A.

Disc

Factor

C.

St.

Idx

Adj.

1

322R

COMM BLDG

MDL-01

R60

1.38 AC

66,600.00

0.77

5

1.0000

1.00

1.0000

1.00

0060

1.20

1

322R

COMM BLDG

MDL-01

R60

0.20 AC

7,000.00

1.00

0

1.0000

1.00

1.0000

1.00

0060

1.20

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05/26/2008

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1/28/2010

RS

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Measur+Listed

04-254

01/26/2005

RS

Residential

10/1/2008

RO

26

Building Permi

10/1/2005

RO

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4/17/2001

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