



ADVISORY & FINANCE COMMITTEE

The following meeting of the Advisory & Finance Committee has been posted and will be held

At: Plymouth Town Hall - Mayflower II Meeting Room
11 Lincoln Street, Plymouth, MA 02360

On: Thursday, September 15, 2016 at 7:00PM

Items on the agenda will include but are not limited to the following.

Other discussion may include items that were not reasonably anticipated by the Chairman 48-hours in advance of the meeting posting.

Call to Order

Announcements

Public Comment

Fall Town Meeting Articles

- Article 4A: Capital - Fiber Loop Joe Young, IT Manager
- Article 4C: Capital - Parking Deck Melissa Arrighi, Town Manager
Leighton Price, PGDC President
John Burke, Park Plymouth Director
- Article 4E: Capital- Plymouth Beach Revetment David Gould, Marine & Environmental Director
- Article 4F: Capital - Plymouth Beach Sea Wall “
- Article 4D: Capital-Pumping Engine Ed Bradley, Fire Chief
- Article 5: 15 Hedge Road Melissa Arrighi, Town Manager
Ed Bradley, Fire Chief
- Article 13: PILOT Agreements Lynne Barrett, Director of Finance
- Article 10: Mount Pleasant Melissa Arrighi, Town Manager
- Article 8: Long Ridge Road “

Old/New/Other Business

- Sub-Committee & Committee Liaison Updates

Public Comment

Adjournment

Next Meeting: Saturday, October 15, 2016 at 7:30AM at Plymouth North High School

FALL ANNUAL TOWN MEETING WARRANT
October 15, 2016

ARTICLE 4:

To see if the Town will vote to raise and appropriate, transfer from available funds or borrow a sum of money for the construction and/or repair and/or purchase and/or lease and/or replacement of departmental buildings and/or equipment and/or capital facilities and/or for feasibility studies and other types of studies for the various departments of the Town substantially as follows:

- A. Fiber Loop**
- B. Wastewater Treatment Plant Audit
- C. Parking Deck
- D. Pumping Engine
- E. Plymouth Beach Revetment
- F. Plymouth Beach Sea Wall
- G. GPS Field Survey Grade equipment
- H. Airport Delta Taxiway

or take any other action relative thereto.

BOARD OF SELECTMEN

Town of Plymouth

TO: Board of Selectmen
Advisory and Finance Committee

FROM: Joseph Young
IT Manager

RE: Fiber Infrastructure Relocation

DATE: September 7, 2016

The reason for my request of \$100,000 is to relocate (384) fiber strands from 11 Lincoln Street to South Russel Street. The fiber infrastructure is the backbone on which all municipal data, voice and video is transported. We have over 40 Town and School sites connected via municipal fiber.

In order to maintain connectivity during this transition we need to incorporate a phased approach. We will move half of the fibers to new location, once new equipment is up and running we will then relocate the second half of the fibers.

We need to get the fiber stock ordered ASAP because of limited available supplies.

Thank You for your consideration in this matter.

FALL ANNUAL TOWN MEETING WARRANT
October 15, 2016

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or take any other action relative thereto.

BOARD OF SELECTMEN

TOWN OF PLYMOUTH
 11 Lincoln Street
 Plymouth, MA 02560
 (508) 747-1620

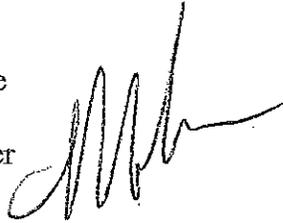
OFFICE OF TOWN MANAGER
 MEMORANDUM

To: Board of Selectmen
 Advisory and Finance Committee
 Lynne Barrett, Director of Finance
 Chris Badot, Selectmen's Office

From: Melissa G. Arrighi, Town Manager

Date: August 18, 2016

Re: Fall Town Meeting, Article 4C



ARTICLE 4C: *(condensed article language) To see if the Town will vote to borrow a sum of money for the construction of a parking deck:*

When 26 Court Street was considered as a site for the new Town Hall, the adequacy of parking spaces was reviewed. We had parking data from a variety of sources including a visitor's survey that Park Plymouth conducted, parking supply from the Town Hall Feasibility Study Report, and a parking utilization survey conducted by VHB. Although those studies found that "the number of parking lot spaces is sufficient to accommodate the Town Hall's total projected demand", there were many that remained quite skeptical. We committed at that time to establishing "Park 1820", a Town Hall Parking Committee, to discuss management and regulation of the on-and-off street parking around 26 Court Street.

Today, over two years later, while the construction of the new Town Hall is progressing, parking still remains a valid concern for many, particularly by those who truly know the area and how it is utilized.

Rather than setup this "Park 1820" committee to look at the existing parking, we have been approached by the Plymouth Growth and Development Corporation (PGDC) to consider a parking deck on South Russell Street.

History of PGDC— At the Fall 2001 Town Meeting, Town Meeting representatives authorized the Selectmen to petition the general court to enact legislation establishing the Plymouth Development Corporation (now Plymouth Growth and Development Corporation (PGDC)). Among other purposes, this non-profit public corporation, made up of Plymouth citizens, was needed to manage, operate, and develop off street and structured parking facilities in the Plymouth Downtown-Waterfront area.

Now, in 2016, the PGDC would like to move forward with establishing a two level parking deck at the new Town Hall. If approved at Town Meeting, the Town would bond for the project, the Building Committee would oversee the construction, the PGDC would pay the costs of building the parking deck, and they would also oversee its management. The architectural firm, the contractor, and the project manager for the new town hall would also be the individuals involved in building the parking deck.

We believe this will provide for a continuity in design, construction, and scheduling.

The current parking lot has 63 parking spaces. If a parking deck is built at that exact location, the preliminary design provides for 152+/- parking spots.

We believe this project is feasible and that the PGDC's financial model can support the 25 year expenditure. In addition, we believe this results in a parking model that will accomplish two very important goals: (1) substantial parking for the new town hall, and (2) visitor parking, downtown workers parking, and local resident parking through a structured process (such as after normal business hours).

Based on the above, I would ask that you support Article 4C.

Enclosures:

PGDC Letter

Financial Model

PLYMOUTH GROWTH & DEVELOPMENT CORPORATION
40 Court Street, Floor 1, Unit 1
Plymouth, MA02738

September 1, 2016

Melissa Arrighi
Town Manager
Town of Plymouth
11 Lincoln Street
Plymouth, MA02360

SUBJECT: Proposed South Russell Street Parking Deck

Dear Melissa,

The PGDC Board of Directors approved funding for the South Russell Street Parking Deck Feasibility Study completed for the Town and PGDC by DBVW Architects in July, and it has authorized funding the design and construction of a new 2-level, 152-space parking deck in coordination with the Town Hall construction project. Although the PGDC will be paying for the entire project, we are requesting that the Town bond the construction for a 30-year term to take advantage of competitive interest rates and borrowing terms that will lower overall project costs.

Purpose and Need

PGDC believes the new parking deck will provide ample parking to accommodate parking needs of Town Hall while providing additional parking supply to the growing Town Center, which has a documented shortage of on- and off-street parking. The new parking deck will increase the number of spaces in the South Russell Street lot from 63 to 152, providing parking for both Town Hall employees and visitors, but also for other downtown employees, visitors and residents.

The proposed operating plan would provide reserved parking for Town employees on the top floor of the deck during the work week (M-F) while allowing general public parking on the first floor at the downtown parking rate of \$1/hour. On nights, weekends and holidays, both floors of the deck would be available to visitors and the general public and would be managed to ensure sufficient availability in the facility when Town Hall night meetings are scheduled. It is proposed that the first floor of the parking deck be access/gate controlled and available for parking 24 hours/day, 7 days/week. Monthly permits for deck parking would also be sold.

Construction Cost Comparison and Facade

The feasibility study concluded that a simple two-level, 152-space parking deck could be constructed on the existing Town Hall parking lot at an estimated construction cost of \$3,178,000. The construction cost

per structured parking space is \$20,908, which is lower than the average cost for constructing structured parking in the Boston Metropolitan area (\$25,000/space)¹. It is also lower than the estimated construction cost per space of structured parking on the Town's Main Street Extension parking lot (\$30,000/space) or Middle Street parking lot (\$40,000/space) based on previous PGDC parking studies. It is significantly lower than the estimated construction cost per space of the proposed 204-space downtown parking garage approved by the City of Newburyport, MA earlier this year (\$34,310/space) as well as the proposed 600-space downtown parking garage approved by the City of Portsmouth, NH in 2015 (\$30,000/space).

The lower cost of the proposed parking deck is due in large part to it being a simple structure devoid of internal ramps, elevators, ventilation/sprinkler requirements, and because it is screened on three sides by Burial Hill. An attractive façade, sympathetic to the Town Hall design, is provided on the front-facing portion of the structure while keeping the muted views from Burial Hill consistent with its current state as a surface parking lot. Architectural renderings and elevations have been prepared by DBVW Architects.

Project Delivery and Schedule

It is assumed that the parking deck will be designed and constructed by the Town's current contractors on the active Town Hall project through a negotiated change order. This will save on bidding costs, contractor mobilization costs (contractor is already mobilized), and schedule and price escalation costs. The construction project would continue to be overseen by the Town's Building Committee. The estimated design and construction schedule for the parking deck is 12 to 16 months.

PGDC Funding and Town Bonding

With regard to funding the project, PGDC would pay for all "soft costs" including the design and engineering oversight of the parking garage out of PGDC cash reserves. The PGDC already provided funding for the feasibility study that was completed earlier. We estimate the soft costs to be \$590,000 or 15% of the total project cost. The PGDC would also make a 10% down payment on deck construction and on installation of \$150,000 worth of security cameras and revenue control equipment which amounts to an additional \$332,800. In other words, the PGDC would fund \$922,800 in "up-front" costs from cash reserves. The remaining \$2,995,200 in construction costs would be bonded by the Town and paid for by the PGDC over the 30-year bond term. The debt service costs of the bond and the operating costs of the deck would be paid from PGDC parking revenues.

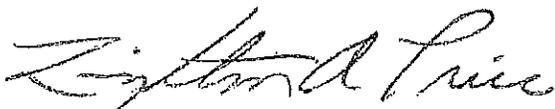
Financial Model

A draft financial model for the garage has been prepared showing the total project costs, revenues, and operating assumptions/expenses for the opening year condition. Given the current cash reserves and net positive cash flow of the PGDC from operating the entire parking program (meters, pay-by-phone, permits and enforcement), we are confident that paying the debt service and operating expenses associated with this project will have minimal negative impact on the parking program.

¹ Access Magazine, Donald Shoup, UCLA, 2016.

We are happy to meet with you to discuss the proposal further and look forward to working with the Town on this important downtown project.

Sincerely,

A handwritten signature in cursive script, appearing to read "Leighton Price".

Leighton Price, President
Plymouth Growth & Development Corporation

Cc: PGDC Board of Directors

South Russell Street Parking Deck - Financial Model

Estimated Project Costs

Soft Costs (design/engineering, OPM, legal, bidding, const. admin, testing, etc.)	\$ 590,000	15% of total project cost
Hard Costs		
Construction of 152-space, 2-Floor Parking Deck including contingency and escalation	\$ 9,179,000	SDI Engineering Cost Estimate
Revenue Control Equipment and Security Camera System	\$ 150,000	Budgeted
Subtotal Hard Costs (total construction)	\$ 3,329,000	
Total Project Cost	\$ 3,918,000	

Operating Revenues & Expenses

Key Assumptions:

- Design in 2016/2017 and construction in 2017/2018 through contract change order with Town Hall designer, OPM and contractor.
- PGDC funds estimated soft costs (\$590,000) from cash reserves in 2017 and 2018.
- PGDC funds 10% down payment (\$332,800) on construction in 2017 from cash reserves with the other 90% (\$2,995,200) bonded over 30 years @ 5.0% (Town GO Bond).
- PGDC funds monthly payments on debt service (Town GO Bond).
- Upper floor (76 spaces) reserved for town employees weekdays until 5 pm and open to the general public (parking passes and transients) - \$1/hr., 24/7, year-round
- Lower floor (76 spaces) w/gated access open to the general public (parking passes and transients) - \$1/hr., 24/7, year-round
- On-street time limits in the immediate vicinity of Town Hall are set at 1-hour or less.
- Parking deck is automated (no cashiers). Regular monitoring and on-call services by current Park Plymouth staff.

Revenues & Operating Expense Assumptions - Opening Year

REVENUE	spaces	rate	% avg use	Assumptions
Transient Revenue (Lower Floor)	76	\$ 1.00	0.30	\$1/hr. gated access 24/7
Transient Revenue (Upper Floor)	76	\$ 1.00	0.40	\$1/hr. nights, weekends & holidays until 7 pm
Parking Pass Revenue (Lower Floor)				24/7 Pass, Weekday Pass, etc.
Town reimbursement for emp. parking oper. exp.				28.6% of deck annual operating cost*
Russell St. metered parking (nights/weekends)				\$22,100 34 spaces @ \$650/yr./space
Citation Fines/Fees				\$35,950 Associated with metered parking & upper deck
Gross Revenue				\$775,407

OPERATING EXPENSE

Parking Deck Operating Exp.	\$50 /space/mo.	152 spaces	utilities, maint, plowing, supplies, ins, etc.
Major Repair & Replacement Fund	\$100 /space/yr.	152 spaces	No expected repairs until at least 2020
Pay Station/Permit Fees - credit card, gateway, etc			7.5% for pay stations, meter & permit rev.
Citation Fees - ticket/cc processing, hearings, etc.			\$4,314 12% of citation fee and fine revenue
Gross Operating Expenses			\$126,569

NET OPERATING INCOME

NET OPERATING INCOME	\$146,838	Gross Revenue minus Gross Operating Expenses
DEBT SERVICE	\$194,842	
NET CASH FLOW	-\$48,004	Net operating income minus debt service

BALANCING CASH FROM PARK PL/MOUTH SYSTEM

Permanent Debt Service Assumptions			
General Obligation Bonds	Interest	Amortization	Payment
	5.00%	30	\$ 194,842
			Loan Amount
			\$ 2,995,200

Notes:

*Total reimbursement for Town employee parking equates to 28.6% of total deck operational cost since employees use 50% of the deck for 40 out of 70 paid parking hours: 0.5 x 40/70 = 28.6

7-Sep-16

FALL ANNUAL TOWN MEETING WARRANT
October 15, 2016

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or take any other action relative thereto.

BOARD OF SELECTMEN

**EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DAM, LEVEE AND SEAWALL REPAIR AND REMOVAL**

ADMINISTRATIVE SUMMARY

PROJECT TITLE:	Warrens Cove Revetment Repair	STATE ID #	#057-041-000-029-100 #035-053-000-042-200
LOCATION COORDINATES:	Latitude	42° 56' 30"	Longitude -70° 37' 15"

RESPONDING ORGANIZATION

Contact Name: David Gould, Town of Plymouth, Department of Marine & Environmental Affairs

Address: 11 Lincoln Street, Plymouth, MA 02360

Telephone: 508-747-1620 ext 134

Facsimile: 508-830-4140

Internet Address: DGould@townhall.plymouth.ma.us

PROJECT CATEGORY (CHOOSE ONE):

- Category 1 - Dams and similar unregulated impoundments
- Category 2 - Seawalls, coastal flood and/or foreshore protection
- Category 3 - Inland flood control structures and levees, excluding dams and similar unregulated impoundments

FUNDS SOUGHT FROM PROGRAM

State Funds via EEA \$810,993

Anticipated Matching Funds (*cash and in-kind*) \$270,307

Sources (*Federal? State? Local?*): Local

AUTHORIZED APPLICATION SIGNATURE

Signature _____ Date _____

Print Name and Title David Gould, Director

**EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DAM, LEVEE AND SEAWALL REPAIR AND REMOVAL:
APPLICATION FOR FUNDING – CONSTRUCTION FINANCE**

RESPONSE PROPOSAL

Introduction

This response to the Executive Office of Energy and Environmental Affairs (EOEEA), Request for Quotes (RFQ) is being submitted by the Town of Plymouth to repair and reconstruct portions of the 720 linear feet of revetment primarily fronting Bert's Cove Restaurant and the Pilgrim Sands Motel. The existing stone revetment fronts a vertical concrete seawall. The proposed revetment work will consist of dismantling the existing structure in selected locations, placement of filter fabric, and reconstruction of the structure with appropriately sized stone. The revetment will be reconstructed to the same overall dimensions (height and slope) as the existing structure. Areas where revetment reconstruction will be performed are shown on the attached plan (Attachment A).

This project provides improvements to storm damage protection to the properties landward of the seawall. Over the past several decades, northeast storm events have continued to cause significant damage to coastal infrastructure in Warren's Cove. Specifically, the low lying landform at the south end of Plymouth Beach (including the Town beach parking lot, Bert's Cove Restaurant, and Pilgrim Sands Motel) have experienced wave overtopping during severe storm events. Most recently, the series of severe northeast storms over the 2012-2013 winter season (including the influence of Hurricane Sandy) caused continued lowering of the fronting beach and moderate damage to the revetment. Although the seawall and revetment have remained intact, the repairs performed following the 1991 northeaster ("the Halloween Storm") did not return the structure to its "as-built" condition. More recent work in 2002 re-established the revetment to design conditions; however, portions of the revetment have settled over the past 10+ years as the beach continues to lower, allowing wave action to destabilize portions of the revetment. Although much of the property directly landward of the wall is private, the integrity of the concrete seawall and the stone revetment fronting this seawall is the responsibility of the Town. The seawall is owned and maintained by the Town of Plymouth, where public access along the seawall is provided from the Town parking lot immediately north of the project area (along the crest of the concrete seawall that is a continuation of the seawall in the project area). In addition, the revetment and seawall also protect Warren Avenue (Route 3A) directly landward of the restaurant and motel. This roadway serves as one of the primary evacuation routes from the Pilgrim Nuclear Generating Station.

Between 1978 and 2001, total FEMA claims paid to the two property owners protected by the existing revetment was \$1,069,976, where a total of nine (9) claims were filed over this 23-year period. With on-going sea-level rise, the storm damage

costs are anticipated to escalate in the future and reconstruction of the revetment is required to (a) provide direct shore protection needs to the properties and roadway, and (b) reduce wave overtopping during significant coastal storms.

The estimated commencement date for the Project is October, 2016 with completion in June, 2017. This is a Category 2 project as failure of the wall would likely cause loss of life and/or serious public infrastructure damage.

Part I: Project Identification and Narrative

Section A: Review of Current Conditions

The Project Area is located at the southern limit of Plymouth Long Beach in the Town of Plymouth. The Warren Cove shore protection consists of 720 linear feet of seawall and revetment structure located on the east side of the barrier beach system along Warren Avenue (Route 3A). The location of the Project is shown on the USGS topographic map shown in Figure 1 and a more detailed aerial photograph in Figure 2. The beach and seawall may be accessed by the public Town immediately north of the project area (along the crest of the concrete seawall that is a continuation of the seawall in the project area). This roadway serves as one of the primary evacuation routes from the Pilgrim Nuclear Generating Station, as well as numerous other properties in the Plymouth Beach vicinity. However, the road often becomes overwashed with sediment and debris during severe storms as a result of excessive overtopping of the seawall.

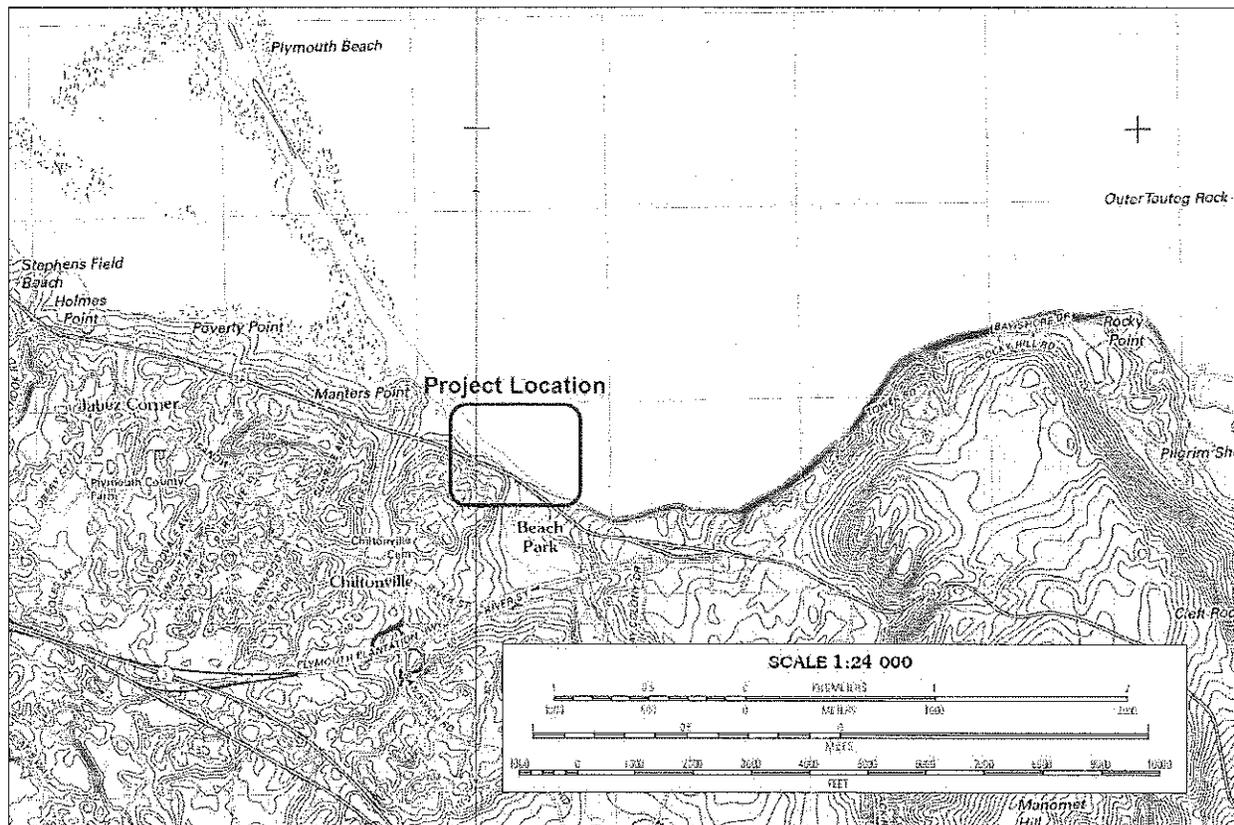


Figure 1. Project Area vicinity showing Plymouth Beach and Warren Cove (map from USGS).



Figure 2. Project Area close-up aerial photograph, where red box indicates specific project area (photo from Google Earth).

The low lying landform at the south end of Plymouth Beach (including the Town beach parking lot, Bert's Cove Restaurant, and Pilgrim Sands Motel) have experienced wave overtopping during severe storm events. Most recently, the series of severe northeast storms over the 2012-2013 winter season (including the influence of Hurricane Sandy) caused continued lowering of the fronting beach and moderate damage to the revetment. Although the seawall and revetment have remained intact, the repairs performed following the 1991 northeaster ("the Halloween Storm") did not return the structure to its "as-built" condition. More recent work in 2002 re-established the revetment to design conditions; however, portions of the revetment have settled over the past decade, allowing wave action to destabilize portions of the revetment. Although much of the property landward of the wall is private, the integrity of the concrete seawall and the stone revetment fronting this seawall is the responsibility of the Town. As stated in a 1977 Memorandum from the Engineering Division, "upon completion of the construction this [the seawall/revetment] was turned over to the Town of Plymouth to maintain." Based on this understanding, the Town of Plymouth requested Applied Coastal Research and Engineering, Inc. (Applied Coastal) to review the existing condition of the revetment and recommend areas that required reconstruction. This analysis was completed in April 2014 (see report in Attachment B).

The 2007 "South Shore Coastal Infrastructure Inventory and Assessment Demonstration Project" by Bourne Consulting Engineers identified the wall as #057-041-000-029-100 and #035-053-000-042-200 and gave it a Condition C (Fair) rating. The report assigned a Priority IV (High) rating stating "(I)andform may not be sufficient to fully protect shoreline during a major coastal storm". An excerpt from the report is included as Attachment C.

The Project Area has a long history of storm damage. Repair plans dating back to 1946 state that seawall and revetment have been replaced and/or reinforced several times. The most recent plans from 2001 called for extensive reconstruction of the revetment fronting the seawall. Figure 3 illustrates typical storm-induced wave overtopping that leads to long-term degradation of the structure.



Figure 3. Splash-over and wave overtopping at Warrens Cove during Hurricane Sandy (photo from Terence O'Neill).

Section B: Environmental Concerns

As mentioned, primary evacuation routes from the Pilgrim Nuclear Generating Station. In addition, emergency response time to the Plymouth homes south of this overwash area is substantially increased when the road is impassable due to flooding. The storm wave overtopping is also directly responsible for the significant repetitive loss FEMA claims for the Project Area. Both properties in the Project Area have received flood reimbursements from FEMA and are severe repetitive loss properties.

Approximately \$1.1 million in federal claims have been paid out between 1978 and 2001, with an average of \$119,000 per claim.

Section C: Project Plan

In 2013, the Town of Plymouth funded a condition survey and engineering design for repairs to the shore protection infrastructure along this stretch of the Warren Cove seawall/revetment. A Notice of Intent (NOI) was prepared and an Order of Conditions was received in 2014. Available funding from the Town is \$220,307, with a private match of \$50,000, totaling \$270,307.

The design conditions for the seawall and revetment were based on the 100-year storm. The proposed design calls for repair and reconstruction of damaged portions of the 720 linear feet of revetment primarily fronting Bert's Cove Restaurant and the Pilgrim Sands Motel. The existing stone revetment fronts a vertical concrete seawall. The proposed revetment work will consist of dismantling the existing structure in selected locations, placement of filter fabric, and reconstruction of the structure with appropriately sized stone. The revetment will be reconstructed to the same overall dimensions (height and slope) as the existing structure. Areas where revetment reconstruction will be performed are shown on the attached plan (Attachment A).

The proposed seawall and revetment is designed to structurally withstand the 100-year storm wave condition. In addition, the rough-faced configuration of the proposed revetment repairs will reduce wave overtopping volumes. Wave overtopping runoff and debris that flows onto Warren Avenue is expected to be modestly reduced by proposed design.

It was not possible to incorporate sea level rise projections into the proposed design, as extensive structure enlargement (higher seawall, higher revetment crest, larger footprint, etc.) would be required to further mitigate storm damage. This larger structure would have substantially higher construction costs, as well as significantly greater environmental impacts to adjacent Land Under the Ocean resources. In addition, the surrounding landform (i.e. the remainder of the barrier beach fronting Eel River on Plymouth Beach) would also need to be raised to mitigate storm damage to the roadway. In the future, the seawall and revetment may require additional armoring and/or other shore protection solutions to reduce overtopping to acceptable volumes depending on the magnitude of sea level rise; however, it does not appear that the substantial costs and expanded environmental impacts are warranted at this time.

All environmental regulatory permits are in place for the proposed revetment repairs and reconstruction effort. In addition, a bid package has been developed by the Town.

Chapter 91 public access is provided along the crest of this publically maintained seawall.

Part II: Proponent Qualifications

The project proponent is the Town of Plymouth, in Plymouth County, Massachusetts. The Town was officially incorporated in 1620.

The primary contact for the project will be David Gould, Director, Department of Marine and Environmental Affairs. The secondary contact will be Kerin McCall, Environmental Technician. Copies of the resumes for these key personnel are attached.

Engineering and design of this project was done by Applied Coastal Research and Engineering, Inc. (Applied Coastal) in association with Sullivan Engineering. Additional engineering services for this project will be contracted with Applied Coastal. Resumes for the primary Applied Coastal engineers (John Ramsey and Hugh "Trey" Ruthven) are attached.

Part III: Project Schedule and Cost Estimates

The estimated commencement date for the Project is October 2016 with completion in June, 2017. The total requested EOEEA Grant Funding is \$810,993, with Town Match totaling an additional \$270,307 (25% of the total project cost). A detailed cost estimate is provided in Attachment D.

Part IV: Ongoing Operations and Maintenance Plans

Because the coastal structure in the Project Area plays such an important role by protecting both upland property and critical infrastructure, the Town of Plymouth is committed to ongoing care and maintenance of the Warren Cove revetment/seawall. The Town has been proactively maintaining this structure since 1991.

As part of the project, the Town and Applied Coastal will develop an operations and maintenance plan for the structure that will include a routine inspection component. The engineering inspection process will utilize a methodology consistent with the state South Shore Coastal Infrastructure Inventory and Assessment Demonstration Project, as Applied Coastal was one of the collaborators with Bourne Consulting Engineers on this project.

LIST OF ATTACHMENTS

Attachment A: Project Design Plans

See attached permitting plans by Applied Coastal and Sullivan Engineering.

Attachment B: Planning Report(s) used as project basis: Applied Coastal 2014 Analysis

See attached excerpts from Applied Coastal.

Attachment C: Planning Report(s) used as project basis

See attached excerpts from Bourne Engineering.

Attachment D: Detailed Cost Estimate

See attached cost estimate.

Attachment E: Resumes

Resume of David Gould, Kerin McCall, John Ramsey, and Hugh Ruthven

**Warren Cove Seawall Removal and Reconstruction
Cost Estimate**

Item No.	Item	Quantity	Unit	Cost/Unit	Total
1	Mobilization/Demobilization	1	lump sum	\$80,000	\$80,000
2	Site Work/Demo/removal	1	lump sum	\$50,000	\$30,000
4	Seawall Construction	200	linear feet	\$3,000	\$600,000
5	Revetment Reconstruction	200	linear feet	\$500	\$100,000
					\$810,000

Total Construction Cost **\$810,000**
Contingency (20%) **\$162,000**
Total with Contingency **\$972,000**

FALL ANNUAL TOWN MEETING WARRANT
October 15, 2016

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or take any other action relative thereto.

BOARD OF SELECTMEN

**EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DAM, LEVEE AND SEAWALL REPAIR AND REMOVAL**

ADMINISTRATIVE SUMMARY

PROJECT TITLE:	Design and Permitting for Long Beach Seawall	STATE ID #	#057-039-000-010B-100	
LOCATION COORDINATES:	Latitude	42° 56' 36"	Longitude	-70° 37' 07"

RESPONDING ORGANIZATION

Contact Name: David Gould, Town of Plymouth, Department of Marine & Environmental Affairs

Address: 11 Lincoln Street, Plymouth, MA 02360

Telephone: 508-747-1620 ext 134

Facsimile: 508-830-4140

Internet Address: DGould@townhall.plymouth.ma.us

PROJECT CATEGORY (CHOOSE ONE):

- Category 1 - Dams and similar unregulated impoundments
- Category 2 - Seawalls, coastal flood and/or foreshore protection
- Category 3 - Inland flood control structures and levees, excluding dams and similar unregulated impoundments

FUNDS SOUGHT FROM PROGRAM

State Funds via EEA \$93,563

Anticipated Matching Funds (*cash and in-kind*) \$31,188

Sources (*Federal? State? Local?*): Local

AUTHORIZED APPLICATION SIGNATURE

Signature _____ Date _____

Print Name and Title David Gould, Director

**EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
DAM, LEVEE AND SEAWALL REPAIR AND REMOVAL:
APPLICATION FOR FUNDING – DESIGN AND PERMIT**

RESPONSE PROPOSAL

Introduction

This response to the Executive Office of Energy and Environmental Affairs (EOEEA), Request for Quotes (RFQ) is being submitted by the Town of Plymouth to perform design and environmental permitting services for the reconstruction/upgrading of approximately 900 linear feet of revetment primarily fronting the Plymouth Long Beach parking lot and Route 3A. The existing vertical concrete seawall has failed at several locations and does not provide an appropriate design for the lowered condition of the beach. The proposed seawall and revetment design will consist of providing an appropriate concrete gravity seawall to an elevation that reduces overtopping volumes during nor'easters. The fronting revetment will be designed within the existing revetment footprint, where the height of the structure will be similar to existing conditions. Areas where seawall/revetment reconstruction is planned are shown on the attached existing conditions plan (Attachment A).

This project provides improvements to storm damage protection to the properties landward of the seawall. Over the past several decades, northeast storm events have continued to cause significant damage to coastal infrastructure in Warren's Cove and the Plymouth Long Beach parking lot. Specifically, the low lying landform at the south end of Plymouth Long Beach (including the Town beach parking lot, Bert's Cove Restaurant, and Pilgrim Sands Motel) have experienced wave overtopping during severe storm events. Recently, the series of severe northeast storms over the 2012-2013 winter season (including the influence of Hurricane Sandy) caused continued lowering of the fronting beach and moderate damage to the revetment and seawall. In February 2016, a minor nor'easter caused an approximate 200-foot section of seawall to completely fail and collapse toward the ocean. This complete failure, along with several areas where repairs have been made when sections of the upper seawall have been sheared off since 2005, are indicative that the structure is beyond its serviceable life. The property directly landward of the wall is public, where the revetment and seawall protect Warren Avenue (Route 3A) directly landward of the parking lot. This roadway serves as one of the primary evacuation routes from the Pilgrim Nuclear Generating Station.

The estimated commencement date for the Project is September, 2016 with completion in April, 2017. This is a Category 2 project as failure of the wall would likely cause serious public infrastructure damage.

Part I: Project Identification and Narrative

Section A: Review of Current Conditions

The Project Area is located at the southern limit of Plymouth Long Beach in the Town of Plymouth. The shore protection consists of approximately 900 linear feet of seawall and revetment structure located on the east side of the barrier beach system along Warren Avenue (Route 3A). The location of the Project is shown on the USGS topographic map in Figure 1 and a more detailed existing conditions plan is provided in Attachment A. The beach and seawall may be accessed by the public Town along the entire length of the project area, as the entire area is Town property. The Town parking lot landward of the seawall fronts both Warren Avenue (Route 3A) and a portion of Eel River. Warren Avenue serves as one of the primary evacuation routes from the Pilgrim Nuclear Generating Station, as well as numerous other properties in the Plymouth Beach vicinity. Even moderate storms wash tons of sand, rock, and debris over the seawalls and into Eel River, blocking flow. In addition, debris washes across Warren Avenue, often causing temporary closure of the roadway. The source of most of the overwash material is the gravel and stone parking lot for Plymouth Long Beach. The earth moving equipment is often tasked, and at considerable expense, with removing tons of sand from the river. The blockage causes upstream flooding as well as damage to the river and its biota.

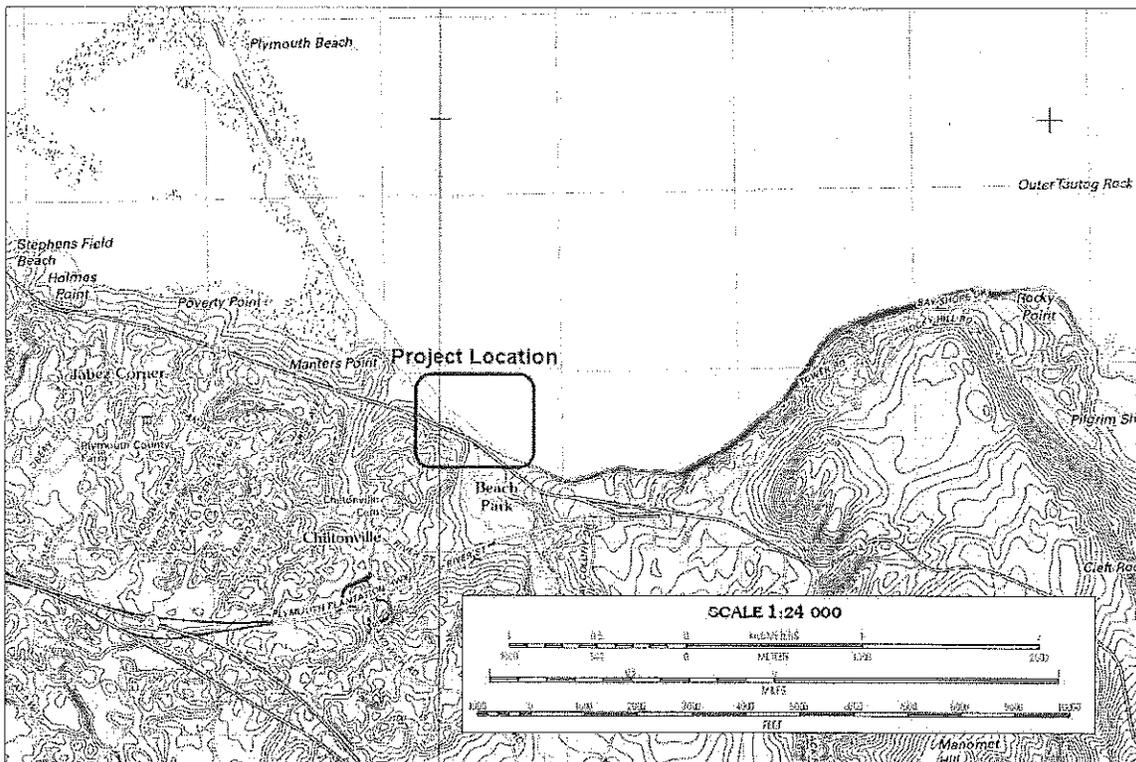


Figure 1. Project Area vicinity showing Plymouth Beach and Warren Cove (map from USGS).

The low lying landform at the south end of Plymouth Beach has experienced wave overtopping during severe storm events. Recently, the series of severe northeast storms over the 2012-2013 winter season. Damage during a Nor'easter in January 2013 is typical of problems at Plymouth Beach after storms. During this event Route 3A had to be closed due to flooding and waves overtopping the seawall washed sand and gravel into the Eel River. It took five days to dredge out the river with a large backhoe. The dredged material is typically put back on the parking lot area and used in reconstruction of the parking area. Dredging is done under emergency permits. Storm damage and the failure of an approximate 200-foot length of seawall after a February 2015 nor'easter is documented in Figures 2 and 3.



Figure 2. Failed section of seawall following a moderate nor'easter in February 2016 (view towards the south).



Figure 3. Failed section of seawall following a moderate nor'easter in February 2016 (view towards the north). Excavation equipment is shown in the background performing emergency dredging of the Eel River blockage.

From a historical perspective, in 1969, the State constructed a 1,050-foot concrete seawall running northerly from the end of the 1958 wall to the Federal stone dike at the Manters Point footbridge over Eel River at a cost of \$106,000. As stated in a 1977 Memorandum from the Engineering Division, "upon completion of the construction this [the seawall/revetment] was turned over to the Town of Plymouth to maintain." The elevation of the top of this seawall was 20 feet above mean low water. On the bay side of this wall and 5 feet below its crest, a stone apron was built extending towards the ocean. A more complete description of the shore protection efforts on the seawall fronting the beach parking lot is shown below:

- Pre-1943: A concrete seawall was constructed some time prior to 1943, extending from the Plymouth Beach bathhouse south approximately 1,820 feet (555 meters). This seawall protected numerous private properties and was constructed either by private interests or the Commonwealth of Massachusetts, or a combination thereof.

- 1958-1969: The Commonwealth of Massachusetts completed a concrete seawall with stone apron in the vicinity of the Town Beach, extending from the Plymouth Beach bathhouse to the Federal stone dike at the Manters Point footbridge over the Eel River. Sometime between 1951 and 1965 a single groin was constructed in front of Bert's Restaurant. During the Fall of 1969, two stone groins 180 feet (55 meters) long and spaced 460 feet (140 meters) apart were constructed on Plymouth Beach, to the north of the pre-existing groin at Bert's Restaurant.
- 1972-1978: Two additional groins were installed on Plymouth Beach to the north of the pre-existing groins. The addition of these two groins made a total of five groins between Bert's Restaurant and the Manters Point footbridge over the Eel River.

Although much of the 900-foot seawall section that is the subject of this proposal has remained intact, numerous repairs to both the fronting revetment and seawall have been required over the past 10 years, including re-casting portions of the wall that have sheared off (see Figure 4), placement of flowable fill and revetment construction to prevent wall undermining/failure (see Figure 5), and emergency placement of boulders against failed sections of the seawall to prevent collapse.

The 2007 "South Shore Coastal Infrastructure Inventory and Assessment Demonstration Project" by Bourne Consulting Engineers identified the wall as #057-039-000-010B-100 and gave it a Condition C (Fair) rating. The report assigned a Priority II (Low) rating stating "inshore structures present with limited potential for significant infrastructure damage". An excerpt from the report is included as Attachment B. Based on more recent failures of the structure, it is clear that the condition should be degraded to an F, as demonstrated in Figures 2 and 3. In addition, the inventory tends to focus upon infrastructure immediately landward of the coastal structure without assessing the wider flood plain influence of the structure. Along this portion of Plymouth Long Beach, structural failure of the seawall could lead to complete blockage of Eel River (and the associated upstream flooding), as well as increased flood damage to Warren Avenue (Route 3A), which is a critical evacuation route.

The overall goal for a redesigned seawall is to provide appropriate longevity of the combined seawall and revetment over the next 50 years. The design will evaluate increased structure height necessary to achieve long-term coastal resiliency goals.



Figure 4. Failed section of seawall following a moderate nor'easter in early 2011 showing area that had been sheared off from the top of the seawall. This portion of seawall had the cap recast in late 2011, as part of emergency repairs.



Figure 5. Undermining of seawall as beach erosion causes lowering of the seaward beach profile and exposing the foundation. This undermining required emergency repairs in 2009.

Section B: Environmental Concerns

As mentioned, Warren Avenue serves as a primary evacuation route from the Pilgrim Nuclear Generating Station. In addition, emergency response time to the Plymouth homes south of this overwash area is substantially increased when the road is impassable due to flooding.

At present, the low elevation fronting beach is a sand/gravel/cobble material that is completely submerged at high tide. Groins constructed along the shoreline prevent alongshore movement of littoral sediments. The long-term effect of this highly armored shoreline has been a loss of sediment supply to the beach; however, the existence of the seawall is critical to sustaining upland infrastructure. A separate project through the MCZM Coastal Resilience Grant Program is evaluating the enhancement of shore protection through placement of a cobble berm; however, reconstruction of the seawall will still be required. When combined with the cobble berm project, the proposed

seawall improvements and cobble berm will increase storm damage protection and re-establish the depleted littoral drift.

The proposed seawall and revetment reconstruction will occur within the same footprint as the existing structures; therefore, the environmental concerns are limited. There are no endangered species mapped within the project limits. The proposed project is not anticipated to adversely impact ecological health of this high-energy coastal beach system. In addition, a reduction in wave overtopping will prevent storm-induced blockage of Eel River, an anadromous fish passage. Therefore, the project will provide an overall ecological benefit to the barrier beach system by providing long-term protection to the Eel River habitat.

Section C: Project Plan

Due to the condition of the seawall and the demonstrated structural failures over the past decade, it is clear that the structure has exceeded its serviceable life. Emergency work in 2009 was performed to prevent undermining of the seawall. In 2011, the Town of Plymouth performed emergency repairs to the upper half of the seawall and reconstructed the revetment along an approximate 100-foot section near the southern limits of the proposed project. However, based on more recent failures, the structural integrity of the seawall along this entire ±900-foot section is compromised and requires replacement.

It is anticipated that the updated design will be based on the 100-year storm conditions. In addition, sea-level rise will be accounted for by assuming an increase in tide elevation of 2 feet over the next 50 years (i.e. the planned serviceable life of the new structure). Wave analyses will be performed to optimize both the vertical wall height, as well as the fronting revetment height. As described above, a concurrent effort to provide a cobble berm fronting the seawall also is planned; however, reconstruction of the seawall will still be required to ensure long-term sustainability of the landform. The approximate areas where the reconstructed revetment and seawall are required is shown on the attached existing conditions plan (Attachment A).

The proposed seawall and revetment will be designed to structurally withstand the 100-year storm wave condition. In addition, the rough-faced configuration of the proposed revetment repairs will reduce wave overtopping volumes. Wave overtopping runoff and debris that flows onto Warren Avenue and across the parking lot into the Eel River channel is expected to be modestly reduced by proposed design.

To a limited extent, sea level rise projections will be accounted for in the proposed design. Specifically, armor stone size will be established based on future depth-limited wave conditions. However, due to the relatively low-lying nature of the historic barrier beach, the structure will not eliminate storm wave overtopping either under existing or future storm conditions.

The required environmental regulatory permits for the proposed seawall/revetment reconstruction effort are shown in Table 1. Chapter 91 public access is provided along the entire length of the project, as the structure fronts Town-owned land.

Table 1: Required environmental regulatory permits for reconstruction/upgrading of approximately 900 linear feet of revetment and seawall fronting the Plymouth Long Beach Parking Lot and Route 3A

1	Notice of Intent under the MA Wetlands Protection Act (state DEP and local)
2	Chapter 91 License (eroded beach causes structure to fall below MHW)
3	U.S. Army Corps 404 Permit (Category I)

Part II: Proponent Qualifications

The Project proponent is the Town of Plymouth, in Plymouth County, Massachusetts. The Town was officially incorporated in 1620.

The primary contact for the project will be David Gould, Director of the Department of Marine and Environmental Affairs. The secondary contact will be Kerin McCall, Environmental Technician. Copies of the resumes for these key personnel are attached.

Engineering and design of this project will be performed by Applied Coastal Research and Engineering, Inc. (Applied Coastal) in association with Sullivan Engineering (survey) and CLE Engineering (structural/geotechnical design). Resumes for the primary Applied Coastal engineers (John Ramsey, P.E. and Sean Kelley, P.E.) are provide in Attachment D.

Part III: Project Schedule and Cost Estimates

The estimated commencement date for the Project is October 2016 with completion of environmental permitting in June 2017. It is anticipated that the design would be completed by January 2017, allowing approximately 5 months for the environmental permitting effort. The total requested EOEEA Grant Funding is \$93,563, with Town Match totaling an additional \$31,188 (25% of the total project cost). A detailed cost estimate is provided in Attachment C.

Part IV: Ongoing Operations and Maintenance Plans

Because the coastal structure in the Project Area plays such an important role by protecting both upland property and critical infrastructure, the Town of Plymouth is committed to ongoing care and maintenance of the Plymouth Long Beach revetment/seawall. The Town has been proactively maintaining this structure since 1969.

As part of the project, the Town and Applied Coastal will develop an operations and maintenance plan for the structure that will include a routine inspection component. The engineering inspection process will utilize a methodology consistent with the Massachusetts South Shore Coastal Infrastructure Inventory and Assessment Demonstration Project as Applied Coastal was one of the collaborators with Bourne Consulting Engineers on this project.

LIST OF ATTACHMENTS

Attachment A: Project Existing Condition Plans

See attached permitting plans by Applied Coastal and Sullivan Engineering.

Attachment B: Planning Report(s) used as project basis

See attached excerpts from Bourne Engineering.

Attachment C: Detailed Cost Estimate

See attached cost estimate.

Attachment D: Resumes

Resume of David Gould, Kerin McCall, John Ramsey, and Sean Kelley

**Seawall at Plymouth Long Beach Fronting Parking Lot and Route 3A
Cost Estimate for Design and Permitting Services**

Item No.	Item	Total
1	Design Analysis and Optimization	\$19,000
2	SPT Borings (11 @ \$3,250 each)	\$35,750
3	Structural Design Analysis/Cross-Section Drawings	\$15,000
4	Site Plans and Typical Cross-Sections (Permit Format)	\$14,000
5	Environmental Permitting	\$41,000
		\$124,750

Total Design/Permitting Cost	\$124,750
Design/Permitting Cost (Town)	\$31,188
EEA Grant	\$93,563
Percent Town Funding	25%

FALL ANNUAL TOWN MEETING WARRANT
October 15, 2016

ARTICLE 4:

To see if the Town will vote to raise and appropriate, transfer from available funds or borrow a sum of money for the construction and/or repair and/or purchase and/or lease and/or replacement of departmental buildings and/or equipment and/or capital facilities and/or for feasibility studies and other types of studies for the various departments of the Town substantially as follows:

- A. Fiber Loop
- B. Wastewater Treatment Plant Audit
- C. Parking Deck
- D. Pumping Engine**
- E. Plymouth Beach Revetment
- F. Plymouth Beach Sea Wall
- G. GPS Field Survey Grade equipment
- H. Airport Delta Taxiway

or take any other action relative thereto.

BOARD OF SELECTMEN

TOWN OF PLYMOUTH CAPITAL IMPROVEMENT PLAN REQUEST FORM
5 YEAR PLANNING - FY17 REQUEST FORM

Department: Fire Department	Priority #:
Project Title and Description: Purchase and Equip new Engine 9	Total Project Cost: \$598,600.00

Department/Division Head: Chief Bradley

Check if project is: New Resubmitted Cost estimate was developed: Internally Externally

For project re-submittals, list prior year(s):

Basis of Estimated Costs (attach additional information if available)			If project has impact on 5 Year Plan and future operating budgets, insert estimated amounts.		
Capital:	Cost	Comments	Fiscal Year:	Capital	O & M
<i>Planning and Design</i>			<i>FY17</i>		
<i>Labor and Materials</i>			<i>FY18</i>		
<i>Administration</i>			<i>FY19</i>		
<i>Land Acquisition</i>			<i>FY20</i>		
<i>Equipment</i>	\$598,600.00		<i>FY21</i>		
<i>Other</i>					
<i>Contingency</i>					
Total Capital					

Possible sources and amounts of funding, if known:

Project Justification and Objective: Please see the attached documents.

For Capital Project Requests:

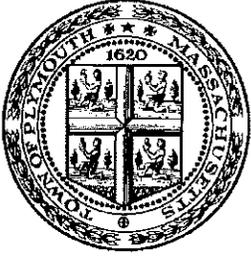
Will this project be phased over more than one fiscal year? If yes, enter it on the 5 Year Plan Yes No
Can this project be phased over more than one fiscal year? Yes No

For Capital Equipment Requests:

XX Check if equipment requested is replacement and enter the year, make & model, VIN and present condition of existing equipment

1994 Pierce Arrow pumping engine, (Ma. Registration MF 6247, VIN 4P1CA02D4RA000446). Will be removed from service December 2016, if not sooner.

Attach additional information, estimates, or justification.



Town of Plymouth
Fire Department
114 Sandwich Street
Plymouth, Massachusetts 02360
508-830-4213
Fax 508-830-4174

To: Lynne Barrett, Kere Gillette

From: Chief Bradley

Date: August 26, 2014

Let me provide a little background that supports this pumper request.

In 2005 and continuing in 2006 the Fire Department's apparatus status was dismal. There were days that there were not enough Engines in service to place one in each of the Town's seven fire stations. During this period there were shifts that a station had a car to transport personnel and a pick-up truck to carry gear to an emergency, but no pumper or water! Planned replacement requests had been delayed or suspended over a period of time due to various reasons; the result was the department was forced to request funding to purchase multiple apparatus at one time. Such requests are extremely expensive and leave the town and Department in the same predicament 10 to 12 years later as the apparatus is all due for replacement at once.

I have attached an article that appeared in the Old Colony Memorial newspaper October 1, 2005. This article provides some history of the "state of the fleet" during those dismal years when regular apparatus replacements were ignored.

Town Meeting appropriated funding at the FATM in 2005 for a new ladder truck and two new pumping engines, that appropriate was \$1.24 million. Although the ladder truck (tower) purchase was a heavy duty custom chassis to ensure years of service, the pumping engines purchased were prefabricated commercial chassis and not heavy custom pumpers; this was an attempt to keep the total cost low. At the time of purchase it was stated that these commercial trucks would last ten years. That time limit has now arrived; the two pumping engines were built on 2006 International Chassis were delivered to Plymouth in February 2007.

Those two pumpers are Engine 6 and Engine 3. Of these two engines, Engine 6 has had more down time and repairs. We have noticed an increase in "down time" for E6 and more complex repairs, many requiring the apparatus to be sent to specialized vendors for repairs (some of these repairs have already been done to Engine 3). Last year E6 was out of service 33 times, not including regular maintenance, this year (January to August) it has been taken out of service 19 times. This is a clear indication of the need to move this apparatus from "front line" to ready

reserve. The sister engine, Engine 3 will be close behind however I hope it can remain a "front line" apparatus until FY19, a year earlier than indicated on the Five Year Plan.

In addition, the Town purchased two additional new pumping engines in 2008, all four of these pumpers are seeing more use than in past years due to the call volume and could "wear out" to the failure point at the same time unless we break up the replacement cycle. We are trying to "break up" the replacement years to avoid the need for multiple purchases in one fiscal year, this will require apparatus purchases in each of the coming years.

Engine 9 is a "ready reserve" engine; it is a 1994 Pierce Arrow pumping Engine equipped with a 750 gallon water tank, both Class A and B foam capabilities and a 1,500 gallon per minute fire pump. This apparatus has 97,750 odometer miles, 8,800 engine hours which calculate to 369,600 road miles. (Ma. Registration MF 6247, VIN 4P1CA02D4RA000446).

This replacement is on the Department's Five Year plan for FY18; its recent failure has us moving the request to FATM. The realization that this apparatus would fail minimal requirements as an emergency response apparatus and the extreme cost to make the apparatus comply came in late February, too late for consideration at the 2016 Spring Annual Town Meeting.

Over its lifetime, this apparatus has had an automatic transmission replacement and a rebuilt diesel engine in 2006. The apparatus had an earlier (in September 2000) automatic transmission replacement after a catastrophic failure due to a wiring problem. A wiring circuit "cross connected" causing the pump to engage while the apparatus was responding to a fire. The result was the transmission, along with the pump transmission, were destroyed scattering parts over a 75 foot area. The engine was towed from the scene and was out of service for over three months waiting repairs. The Department records indicate that we have spent more funding on this apparatus than we have on any other that we now own.

Last December this vehicle did not pass its annual Federal Motor Vehicle and State Safety inspection. Our mechanics were able to perform limited repairs and on a re-inspection the vehicle passed, however the rust and corrosion to the frame and body structure made it obvious that it would be the last inspection without major work.

Early this spring the diesel engine and transmission had issues that required the truck be taken out of service. Those repairs were made but we capped the expenses at \$5,000.00 due to its age and condition, these repairs made the apparatus reliable for the short term.

Quotes to repair the apparatus to minimal standards are well over the worth of the vehicle and only addressed the safety and structural issues, the pump, engine and transmission pricing would increase the repairs by another \$130,000.

All of the major Fire Apparatus manufacturers plan a yearly price increase, the NFPA has tracked the manufacturers yearly price increases and report that, on an average, the prices in the past ten years have increase 5 to 7 % yearly. These yearly price increases almost doubles the cost of an apparatus over a ten year period. Our experience has been that apparatus manufacturers have historically increased their pricing, on an average, 6% each year. Much of that increase recently has been due to federally mandated equipment changes and emission upgrades.

This year the top four manufactures have again announced increase of 4 to 6 %, most beginning September or October of this year. E-One has announced 4% increase for November of this year, therefore, if we are poised to move quickly after the October meeting we could save just under \$20,000 by placing the order before the increase. Basically the truck's purchase price will increase by \$20,000 overnight; we have a chance to avoid this increase.

This purchase will;

- Provide a new "front line" apparatus to replace Engine 6 at the Cedarville Station
- Relieve the current Engine 6 from "front line" activity, allow the mechanics to make it a reliable safe "ready reserve" pumping engine which will,
- Replace a 22 year old failing pumping engine that will be removed from service December 2016.

If we wait for Spring Town Meeting the department will be "down" a pumping engine for at least a full year's time, authorizing the funding at FATM will decrease that time by seven months and save almost \$20,000.

Fire chiefs hope town meeting will buy new fire engines

Last week old vehicles fell apart

by Daniel Axelrod
APG Newspapers

PLYMOUTH — For Deputy fire chief Art Lamb, Sept. 22 was "Black Thursday."

Three out of Plymouth's nine fire engines were out of service; firefighters used a ladder truck as a substitute engine and trucks just kept breaking.

"It was like we were hanging by the hand and someone stepped on our knuckles," Lamb said. "Normally, your bad luck stops, but it kept going on."

Had multiple fires and emergencies occurred across town, the department's remaining resources would have been seriously taxed.

Now, Lamb and chief James Pierson hope town meeting representatives approve Article 4F at the fall town meeting, or \$1.24 million to purchase a new ladder truck and two new fire engines.

Lamb also hopes Plymouth officials hire an extra mechanic and implement a long-range plan to regularly spend on bigger capital expenditures like fire trucks rather than waiting until vehicles fall apart.

"We went from this sleepy little town to really a city," Lamb said.

"The town needs to look into the methods of funding capital purchases; whether for the DPW, the fire department, we need a more rigorous schedule to get things replaced."

Under a perfect scenario, nine fire engines would sit in Plymouth's even stations. One reserve engine would be stored at the West Plymouth station on Samoset Street and another would be at the State Road station in South Plymouth.

But Lamb's perfect scenario hasn't existed for some time.

During Sept. 22, the department was already short an engine at the fourth Plymouth station. A ladder truck was running in its place.

Plus, both backup fire engines were being used full-time at the fourth Plymouth fire station on Bourne Road, so there were no reserve engines to serve 56,000 Plymouth residents.

Suddenly, the department was short a reserve engine, too.

The steering box in Engine 9, a 1975 Farrar, simply fell to pieces. The truck is so old the Farrar Company no longer exists. Fire officers scrambled to track down a steering box, but it would take five days to get the part shipped across the country.

The truck was limping along to begin with. The 30-year-old engine's radiator problems were so bad, the truck was close to being taken off the road already.

"The truck's pump pipes and hangers were so corroded from all these years of use, you were certain you were going to blow a pipe when you were using it," Lamb said.

Then, right around Sept. 22, the



Staff photo

The replacement — The fire department wants to purchase of two International quad pump engines that carry up to five firefighters.

department mechanic yanked Engine 6, a 1986 Ford, off the road. Its frame was rotten. Its springs were dead. So, it was put in the repair shop.

DPW director George Crombie's plan to use fewer chemicals when clearing the roads was helpful with the corrosion problem. But, as citizens' complaints spurred local towns to use increasingly exotic road chemicals like magnesium chloride to remove ever more ice and snow, the chemicals contributed to the corrosion of Engine 6's wiring harnesses and rotted its frame.

"Black Thursday" carried into Friday, Sept. 23, and by week's end three out of nine engines were out of service.

"We had to do a reshuffling of engines," Lamb said. "How were we going to cover this station at this period of time? That night we put a rescue truck and brush truck up at the Samoset Street station in West Plymouth."

"A brush truck has a hose and water but no pumping capability and ladders, and the rescue truck's capabilities are similar."

Lamb said building-filled village centers such as North Plymouth and downtown were most vulnerable to a major fire.

"With a big fire we can get equipment to things quickly because we would respond with six engines and a ladder," Lamb said. "Plus, chiefs in the surrounding counties have a mutual aid plan to have another five engines and a ladder there within 15 minutes."

"But what would be hard is if we had a car fire in downtown Plymouth, a dumpster fire and then a medical call all at once; then that gets hard to handle because we wouldn't initially respond to those calls."

The department was so short on fire trucks Friday, Pierson called up neighboring fire chiefs to temporarily renege on Plymouth's agreement to respond to emergencies in the areas of other towns along Plymouth's borders.

Since then, the 1975 Farrar is back in action, and Plymouth is honoring its agreement with neighboring towns. And between calls, firefighters have taken to helping the mechanic identify and fix the department's trucks.

But Lamb said despite Plymouth's firefighters' best intentions, they're not trained fire truck mechanics. Fire officials hope fall town meeting representatives will fund another mechanic.

The department had two mechanics for more than 20 years until one retired four years ago.

"We believe if there was another mechanic, he'd save his salary in preventing these problems," Lamb said. "A big trucking company is always greasing springs and pins and if we had a mechanic, he could keep up with adjusting the brakes and keeping all the other bushings and bearings in proper order."

Some trucks simply aren't worth fixing though, Pierson said, and now he thinks it's time to get new trucks.

Years of budget crunching by town officials led former chief Thomas Fugazzi to open the Pine Hills station in 2002 without a new fire engine.

"The chief had originally asked for the new truck, but he took it out because of the budget constraints," Lamb said.

Fire department officials studied whether it was worth fixing the broken-down trucks. They decided it was a better value to buy new trucks.

"These are prefabricated trucks,

but just because they're cheaper doesn't mean they're poor quality," Pierson said.

The manufacturer would use special kits to assemble the new trucks Pierson wants to buy. Fire officials would choose what options they want, making the trucks less costly.

The department is currently protecting more than 14,000 acres of forest, plus Plymouth homes and businesses, with one ladder truck. A second ladder truck would cost \$850,000.

Each fire engine costs \$390,000. They're likely to last only 10 years because of the massive number of calls they'll respond to.

"It's not so much mileage with fire engines; it's use since the engines are put under tremendous stress while helping pump at fires," Lamb said. "When the engines hit 5,000 hours, they're on the verge of self-destruction."

The Bourne Road station's engine has 6,000 hours on it.

As fire officials await fall town meeting representatives' decision, they're hopeful a study will be done sometime after December by the consulting firm hired after spring town meeting to evaluate ways to improve the department's present and future performance.

That study will likely suggest Plymouth implement a regular maintenance and replacement schedule for fire trucks instead of the current fix it and replace it as it breaks policy.

If the department doesn't get the new fire trucks and a second mechanic, Pierson and Lamb said the department will make do.

However, Pierson said things wouldn't get any easier.

"I can understand putting a cobbled response together to get you through a day or two, but it's not a way to run an entire department," Pierson said.

FALL ANNUAL TOWN MEETING WARRANT

October 15, 2016

ARTICLE 5:

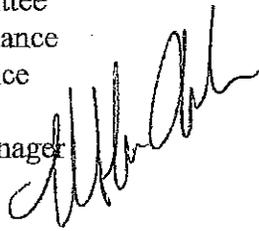
To see if the Town will vote to raise and appropriate, transfer from available funds or borrow a sum of money, and to authorize the Board of Selectmen to acquire by purchase, gift, eminent domain, or otherwise, and to accept the deed to the property and building located at 15 Hedge Road, Plymouth, on such terms and conditions as the Board of Selectmen deems appropriate, and to accept a deed to the Town of Plymouth of a fee simple interest for the premises at 15 Hedge Road, Plymouth, shown on Assessors' Map 6 Lot 60 D and Parcel No. 006-000-060D-000, for the purposes of locating Public Safety facilities thereon, said land or interest to be managed by the Board of Selectmen, and to authorize the Board of Selectmen to enter into any and all agreements and execute any and all instruments as may be necessary on behalf of the Town to effectuate the purposes of this Article; or to take any other action relative thereto.

BOARD OF SELECTMEN

TOWN OF PLYMOUTH
11 Lincoln Street
Plymouth, MA 02360
(508) 747-1620

OFFICE OF TOWN MANAGER
MEMORANDUM

To: Board of Selectmen
Advisory and Finance Committee
Lynne Barrett, Director of Finance
Chris Badot, Selectmen's Office

From: Melissa G. Arrighi, Town Manager 

Date: August 18, 2016

Re: Fall Town Meeting, Article 5 – 15 Hedge Road

ARTICLE 5: *(condensed article language) To see if the Town will vote to authorize the Board of Selectmen to acquire by purchase... the property and building located at 15 Hedge Road, Plymouth...for the purposes of Public Safety....*

For some years now, the Town of Plymouth has understood that the North Plymouth Fire Station is woefully inadequate. Some of the problems there include:

1. Age of Structure –The building was constructed in 1906 to house horse drawn steam engines. The building had a major rehab around 1974, that included removing the wooden apparatus floor (which had failed) and installing a concrete floor system as well as updates to the living quarters and heating plant. Currently the heating system is in need of replacement, there is no cooling system, and the electrical system is in poor condition and does not support the emergency generator in automatic mode. Crews must manually switch between street power and generator power during outages. The concrete apparatus floor has buckled in many areas creating a trip hazard and much of the reinforcement bar in the concrete is badly corroded thus weakening the floor structure. The slate roof system is original and loses heavy slate pieces due to rotting fasteners and roof sheathing.
2. Size – The station itself is small. The station has two bays that are inadequate to accommodate modern apparatus. The apparatus floor measures 31' wide (2 bays, each 15 foot wide) x 50' deep. As compared to other Plymouth Stations with apparatus bays between 18 and 19 feet wide by 50 foot deep. In addition, the apparatus bay door is 9'11" wide whereby other stations have doors that are between 12'-14' wide. A pumper truck (engine) is 102 inches wide plus the mirrors – about 10' wide in total. They have had to plane back the door casings to gain an extra 1" width to accommodate the mirrors.

Our firefighters have barely any clearance on each side of the \$570,000 truck as they maneuver out in an emergency.

3. Special Equipment to accommodate size – A few years ago, the Town funded the replacement of Engine 7, located at North Plymouth. This apparatus required special manufacturing instructions to ensure the truck would fit in the station. The necessary width and height restrictions added to the cost of building the apparatus. In addition we removed trim boards and modified the entrance at the apparatus doors to widen the opening for the new apparatus. Even with the modifications and size restrictions of the apparatus, there are only 2 inches of clearance for the apparatus to exit and enter the building. When Engine 7 is out for service or maintenance, we are limited on replacement apparatus. Finally, most mutual aid crews cannot back apparatus into the building when they are called to cover the area.
4. Lot size - The Fire Station structure is less than 17 feet from the edge of the roadway leaving no apron, driveway or approach at the entrance to accommodate the apparatus once out of the building. This requires the apparatus to pull out of the station and into the roadway at a three-street intersection whenever entering or leaving the station. The apparatus is in the roadway blocking one lane before it has completely exited the building. During an emergency response the operator will ease out of the station, block the roadway waiting for the crew to close the station door and climb onboard the apparatus. This is tricky enough during daylight hours, and especially dangerous at night, during rainstorms, snowstorms and winter conditions when the roadway is snow and ice covered. The same actions are repeated, in reverse, when the apparatus returns from a call for service, each time the crew is working in the roadway at a busy three-way intersection. Finally, this situation leaves no room for the crew to adequately inspect the apparatus for readiness or after returning from an incident, many times the crew will drive to a business parking lot to complete a truck check. The lack of space within the building requires the crews to perform such checks outside the fire station.

As you may recall, North Plymouth accounts for approximately 1080 annual calls for service out of 7136 calls town wide. These are counts of emergency responses only. The crews also respond to hundreds of other non-emergent calls for service annually. Station 7 has the largest number of mercantile inspections to perform on a twice yearly schedule as compared to the other station areas (412). The crews at Station 7 also perform over 150 yearly new and resale inspections of residential properties.

At the 2015 Fall Town Meeting, town meeting members showed support for moving the Fire Station by approving an article to set aside \$25,000 so that if and when we found a suitable location, the Town would have the immediate ability to sign a P&S contingent upon further Town Meeting vote to fund the full purchase. As was explained to Selectmen, Advisory & Finance Committee members, and Town Meeting members, we knew we would have some difficulty finding another area in North Plymouth that can house a Fire Station, and that was certainly the case.

Thus it has taken a year to appear back before Town Meeting. However, at this time, I am pleased to say that we have tentatively secured a site at 15 Hedge Road, (some may know that as the Sgarzi Home), that is well located and is large enough to provide for a suitably sized future fire station. We have also completed an appraisal that showed a \$335,000 value, received a

second appraisal from the sellers that showed a \$365,000 appraisal, and we have completed a Wetland Delineation Report (attached). We have negotiated a purchase price of \$350,000.

Maryann Bonaparte, one of the owners, wrote this to me, "Our family has very strong feelings regarding the future of the Sgarzi property. Paul [Sgarzi] was a dear friend of ours and our decision making is keeping that fact a priority in the property's future....we genuinely feel in our hearts that Paul would not oppose the idea of providing the town with a site that would forever remain an integral part of the community, like a Firehouse would".

I share that with you only so that you will understand why we have also agreed, if Town Meeting approves this purchase, to erect some sort of small tribute, such as a plaque, to the Sgarzi family on the grounds at 15 Hedge Road.

The Fire Chief and I believe that the Town will be well served in acquiring this site for a future Fire Station and we would ask that you support Article 5 that will allow us to acquire the site for \$350,000.

Thank you.

A handwritten signature, possibly "P", enclosed in a hand-drawn oval.

15 Hedge
 Future Fire Station
 Card 1 of 1

Location 15 HEDGE RD | Property Account Number 60401 | Parcel ID 006-000-060D-000
 Old Parcel ID 1100 -G01 -006*0011*

Current Property Mailing Address

Owner PAUL J SGARZI REVOC TRUST 2008 SGARZI PAUL J TR Address 15 HEDGE RD	City PLYMOUTH State MA Zip 02360 Zoning R20M
--	---

Current Property Sales Information

Sale Date 4/23/2008 Sale Price 0	Legal Reference 35880-257 Grantor(Seller) SGARZI,PAUL J
-------------------------------------	--

Current Property Assessment

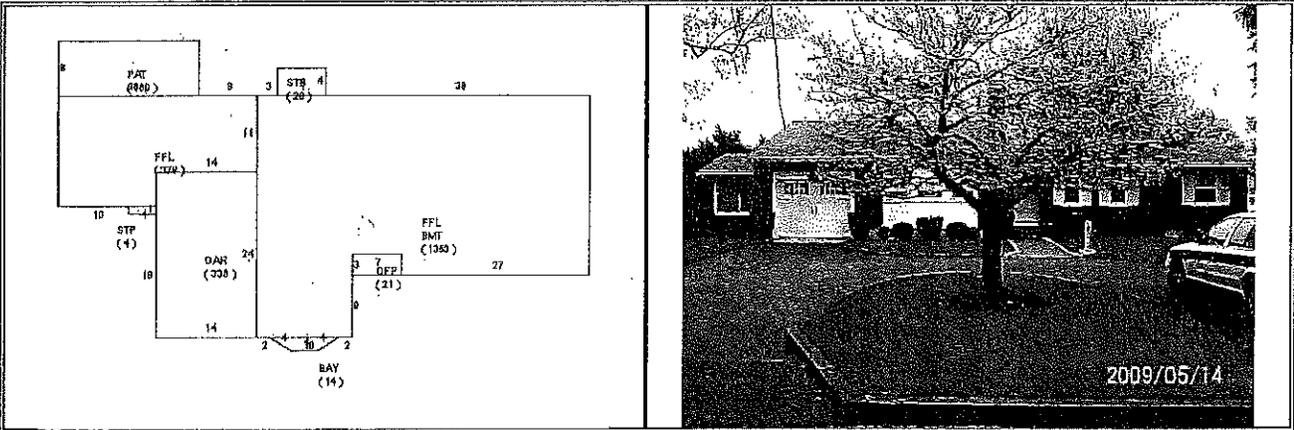
Year 2016 Land Area 2.249 acres	Card 1 Value Building Value 125,400 Xtra Features Value 1,900 Land Value 136,100 Total Value 263,400
--	---

Narrative Description

This property contains 2.249 acres of land mainly classified as ONE FAM with a(n) Ranch style building, built about 1957 , having Frame/Shingl exterior and Asphalt roof cover, with 1 unit(s), 6 total room(s), 2 total bedroom(s), 1 total bath(s), 1 total half bath(s), 0 total 3/4 bath(s).

Legal Description

Property Images







CHURCHEY APPRAISAL

www.ChurcheyAppraisal.com

15 Mooring Circle
Plymouth, MA 02360
1 (508) 224 9476

May 10, 2016

Jessica Casey
Economic Development Director
Town of Plymouth
11 Lincoln Street
Plymouth, MA 02360

Professional fee due for appraisal the single family residence, As Is, located at 15 Hedge Road, Plymouth, MA 02360.

\$500

Thank You,

Brandon Churchey

APPRAISAL OF REAL PROPERTY



LOCATED AT

15 Hedge Rd
Plymouth, MA 02360
Plymouth County Registry of Deeds Book 35880 Page 257

FOR

Jessica Casey - Town of Plymouth
11 Lincoln Street, Plymouth, MA 02360

OPINION OF VALUE

\$335,000

AS OF

05/06/2016

BY

Brandon D Churchey
Churchey Appraisal, Inc
15 Mooring Circle
Plymouth, MA 02360
508-224-9476
Brandon@Churcheyappraisal.com

Uniform Residential Appraisal Report

File # R1458

The purpose of this summary appraisal report is to provide the lender/client with an accurate, and adequately supported, opinion of the market value of the subject property.

Property Address **15 Hedge Rd** City **Plymouth** State **MA** Zip Code **02360**
 Borrower **Town of Plymouth** Owner of Public Record **See Addenda** County **Plymouth**
 Legal Description **Plymouth County Registry of Deeds Book 35880 Page 257**
 Assessor's Parcel # **6-60D** Tax Year **2016** R.E. Taxes \$ **4,285**
 Neighborhood Name **North Plymouth** Map Reference **14454** Census Tract **5302.00**
 Occupant Owner Tenant Vacant Special Assessments \$ **64** PUD HOA \$ **0** per year per month
 Property Rights Appraised Fee Simple Leasehold Other (describe)
 Assignment Type Purchase Transaction Refinance Transaction Other (describe) Opinion of Market Value, "As Is"
 Lender/Client **Jessica Casey - Town of Plymouth** Address **11 Lincoln Street, Plymouth, MA 02360**
 Is the subject property currently offered for sale or has it been offered for sale in the twelve months prior to the effective date of this appraisal? Yes No
 Report data source(s) used, offering price(s), and date(s). **MLS**

I did did not analyze the contract for sale for the subject purchase transaction. Explain the results of the analysis of the contract for sale or why the analysis was not performed.
 Contract Price \$ _____ Date of Contract _____ Is the property seller the owner of public record? Yes No Data Source(s) _____
 Is there any financial assistance (loan charges, sale concessions, gift or downpayment assistance, etc.) to be paid by any party on behalf of the borrower? Yes No
 If Yes, report the total dollar amount and describe the items to be paid.

Note: Race and the racial composition of the neighborhood are not appraisal factors.

Neighborhood Characteristics		One-Unit Housing Trends		One-Unit Housing		Present Land Use %	
Location <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban <input type="checkbox"/> Rural	Property Values <input type="checkbox"/> Increasing <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Declining	PRICE	AGE	One-Unit	85 %		
Built-Up <input type="checkbox"/> Over 75% <input checked="" type="checkbox"/> 25-75% <input type="checkbox"/> Under 25%	Demand/Supply <input checked="" type="checkbox"/> Shortage <input type="checkbox"/> In Balance <input type="checkbox"/> Over Supply	\$ (000)	(yrs)	2-4 Unit	%		
Growth <input type="checkbox"/> Rapid <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Slow	Marketing Time <input checked="" type="checkbox"/> Under 3 mths <input type="checkbox"/> 3-6 mths <input type="checkbox"/> Over 6 mths	180	Low	15	Multi-Family	10 %	
Neighborhood Boundaries East to Plymouth Harbor, North to Kingston, West to Route # 3, South to Plymouth Center		650	High	200	Commercial	5 %	
Neighborhood Description See Addenda		265	Pred.	100	Other	%	

Market Conditions (including support for the above conclusions) **Market pricing for single family dwellings has been somewhat erratic over the past few years per the Warren Group Town Stats. So far this year it states there is a 12% increase in single family dwellings. However, this is due to a limited market sample. There is currently limited inventory in the town and surrounding towns which is beginning to increase pricing.**
 Dimensions **Irregular - 82.87' frontage** Area **2.25 ac** Shape **Irregular** View **N,Res;**
 Specific Zoning Classification **R20MF - Residential** Zoning Description **20,000 SF Min Lot/90' Width**
 Zoning Compliance Legal Legal Nonconforming (Grandfathered Use) No Zoning Illegal (describe)
 Is the highest and best use of subject property as improved (or as proposed per plans and specifications) the present use? Yes No If No, describe _____

Utilities	Public	Other (describe)	Public	Other (describe)	Off-site Improvements - Type	Public	Private
Electricity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water	<input checked="" type="checkbox"/>	Street Paved	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sanitary Sewer	<input checked="" type="checkbox"/>	Alley	<input type="checkbox"/>	<input type="checkbox"/>
FEMA Special Flood Hazard Area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	FEMA Flood Zone	X	FEMA Map #	25023C0356J	FEMA Map Date	07/17/2012
Are the utilities and off-site improvements typical for the market area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If No, describe _____						
Are there any adverse site conditions or external factors (easements, encroachments, environmental conditions, land uses, etc.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, describe _____						

General Description	Foundation	Exterior Description	materials/condition	Interior	materials/condition
Units <input checked="" type="checkbox"/> One <input type="checkbox"/> One with Accessory Unit	<input type="checkbox"/> Concrete Slab <input type="checkbox"/> Crawl Space	Foundation Walls	Concrete/Avg	Floors	Hdwd/Lnfm/Avg
# of Stories 1	<input checked="" type="checkbox"/> Full Basement <input type="checkbox"/> Partial Basement	Exterior Walls	WdShngles/Gd	Walls	Paint/Wallpaper/Av
Type <input checked="" type="checkbox"/> Det. <input type="checkbox"/> Att. <input type="checkbox"/> S-Det./End Unit	Basement Area 1,353 sq.ft.	Roof Surface	Asphalt/Avg	Trim/Finish	Wood/Avg
<input checked="" type="checkbox"/> Existing <input type="checkbox"/> Proposed <input type="checkbox"/> Under Const.	Basement Finish 0 %	Gutters & Downspouts	Aluminum/Avg	Bath Floor	Tile/Avg
Design (Style) Ranch	<input type="checkbox"/> Outside Entry/Exit <input type="checkbox"/> Sump Pump	Window Type	Double-Hung/Avg	Bath Wainscot	None
Year Built 1957	Evidence of <input type="checkbox"/> Infestation None	Storm Sash/Insulated	Yes/Avg	Car Storage	<input type="checkbox"/> None
Effective Age (Yrs) 40	<input type="checkbox"/> Dampness <input type="checkbox"/> Settlement	Screens	Yes/Avg	<input checked="" type="checkbox"/> Driveway	# of Cars 4
Attic <input type="checkbox"/> None <input type="checkbox"/> Stairs	Heating <input checked="" type="checkbox"/> FWA <input type="checkbox"/> HWBB <input type="checkbox"/> Radiant	Amenities	<input type="checkbox"/> Woodstove(s) # 0	Driveway Surface	Asphalt
<input checked="" type="checkbox"/> Drop Stair <input type="checkbox"/> Floor	<input type="checkbox"/> Other <input type="checkbox"/> Fuel Natural Gas	<input checked="" type="checkbox"/> Fireplace(s) # 1	<input checked="" type="checkbox"/> Fence Wood	<input checked="" type="checkbox"/> Garage	# of Cars 1
<input type="checkbox"/> Finished <input type="checkbox"/> Heated	Cooling <input type="checkbox"/> Central Air Conditioning	<input checked="" type="checkbox"/> Patio/Deck 1	<input type="checkbox"/> Porch None	<input type="checkbox"/> Carport	# of Cars 0
Appliances <input type="checkbox"/> Refrigerator <input checked="" type="checkbox"/> Range/Oven <input checked="" type="checkbox"/> Dishwasher <input type="checkbox"/> Disposal <input type="checkbox"/> Microwave <input type="checkbox"/> Washer/Dryer <input type="checkbox"/> Other (describe)	<input type="checkbox"/> Individual <input checked="" type="checkbox"/> Other None	<input type="checkbox"/> Pool None	<input type="checkbox"/> Other None	<input checked="" type="checkbox"/> Att.	<input type="checkbox"/> Det. <input type="checkbox"/> Built-in

Finished area above grade contains: **6 Rooms 3 Bedrooms 1.1 Bath(s) 1,745 Square Feet of Gross Living Area Above Grade**
 Additional features (special energy efficient items, etc.). **Attached one car garage, rear patio, wood framed gazebo**
 Describe the condition of the property (including needed repairs, deterioration, renovations, remodeling, etc.). **C4; No updates in the prior 15 years; The subject property has been well maintained over the past 10+ years, however, has a somewhat dated interior. It contains 1.1 bathrooms, but they are adjacent to each other. The town states that the dwelling has 2 bedrooms. Based on interior inspection three rooms could be used for three bedrooms. The exterior has been well maintained and the site itself features mature plantings and is rated as good to very good.**
 Are there any physical deficiencies or adverse conditions that affect the livability, soundness, or structural integrity of the property? Yes No If Yes, describe _____
 Does the property generally conform to the neighborhood (functional utility, style, condition, use, construction, etc.)? Yes No If No, describe _____

Uniform Residential Appraisal Report

File # R145B

There are <u>0</u> comparable properties currently offered for sale in the subject neighborhood ranging in price from \$ <u>0</u> to \$ <u>0</u>															
There are <u>3</u> comparable sales in the subject neighborhood within the past twelve months ranging in sale price from \$ <u>260,000</u> to \$ <u>365,000</u>															
FEATURE		SUBJECT		COMPARABLE SALE #1			COMPARABLE SALE #2			COMPARABLE SALE #3					
Address		15 Hedge Rd Plymouth, MA 02360		15 Duck Plain Rd Plymouth, MA 02360			50 Braunecker Rd Plymouth, MA 02360			51 Forest Avenue Ext Plymouth, MA 02360					
Proximity to Subject				1.09 miles S			0.86 miles S			0.55 miles W					
Sale Price		\$		\$ 315,000			\$ 364,900			\$ 259,900					
Sale Price/Gross Liv. Area		\$ sq.ft.		\$ 174.03 sq.ft.			\$ 248.23 sq.ft.			\$ 211.64 sq.ft.					
Data Source(s)				MLS71862813;DOM 34			MLS71740438;DOM 190			MLS71858273;DOM 84					
Verification Source(s)				Broker/Public Records			Broker/Public Records			Broker/Public Records					
VALUE ADJUSTMENTS		DESCRIPTION		DESCRIPTION		+(-) \$ Adjustment		DESCRIPTION		+(-) \$ Adjustment		DESCRIPTION		+(-) \$ Adjustment	
Sales or Financing Concessions				Arml.Lth Conv;0				Arml.Lth Conv;0				Arml.Lth Conv;0			
Date of Sale/Time				s03/16;c02/16				s05/15;c03/15				s09/15;c08/15			
Location		N;Res;		N;Res;				N;Res;				N;Res;			
Leasehold/Fee Simple		Fee Simple		Fee Simple				Fee Simple				Fee Simple			
Site		2.25 ac		1.0 ac				0 23522 sf		+18,245		19602 sf		+19,492	
View		N;Res;		N;Res;				N;Res;				N;Res;			
Design (Style)		DT1;Ranch		DT1;Ranch				DT1;Ranch				DT1;Ranch			
Quality of Construction		Q3		Q3				Q3		-18,245		Q3		+12,995	
Actual Age		59		38		0 18		0 18		0 60		0 60		0	
Condition		C4		C3		-15,750		C3		-18,245		C4		+12,995	
Above Grade		Total Bdrms. Baths		Total Bdrms. Baths				Total Bdrms. Baths				Total Bdrms. Baths			
Room Count		6 3 1.1		6 3 1.1				6 3 2.0		-3,000		5 3 1.0		+3,000	
Gross Living Area		1,745 sq.ft.		1,810 sq.ft.		0		1,470 sq.ft.		+11,000		1,228 sq.ft.		+20,680	
Basement & Finished Rooms Below Grade		1353sf0sfin		1456sf0sfin		0		1470sf0sftwo		0		1228sf0sfin		0	
Functional Utility		Average		Below Average		+15,750		Average				Average			
Heating/Cooling		FHA/Gas		FHA/Oil				FHW/Gas/CAir		-4,000		FHA/Oil/CAir		-4,000	
Energy Efficient Items		None		None				None				None			
Garage/Carport		1ga4dw		10dw		+4,000		1qbl4dw		0		6dw		+4,000	
Porch/Patio/Deck		Patio/Gazebo		FrontPrch/Deck		0		Front Porch		0		EnclPorch		+2,500	
Fireplace		One		One				One				None		+2,000	
Net Adjustment (Total)				<input checked="" type="checkbox"/> + <input type="checkbox"/> - \$ 4,000				<input type="checkbox"/> + <input checked="" type="checkbox"/> - \$ -14,245				<input checked="" type="checkbox"/> + <input type="checkbox"/> - \$ 73,662			
Adjusted Sale Price of Comparables				Net Adj. 1.3 % Gross Adj. 11.3 % \$ 319,000				Net Adj. 3.9 % Gross Adj. 19.9 % \$ 350,655				Net Adj. 28.3 % Gross Adj. 31.4 % \$ 333,562			
<input checked="" type="checkbox"/> did <input type="checkbox"/> did not research the sale or transfer history of the subject property and comparable sales. If not, explain															
My research <input type="checkbox"/> did <input checked="" type="checkbox"/> did not reveal any prior sales or transfers of the subject property for the three years prior to the effective date of this appraisal. Data Source(s) Public Records															
My research <input type="checkbox"/> did <input checked="" type="checkbox"/> did not reveal any prior sales or transfers of the comparable sales for the year prior to the date of sale of the comparable sale. Data Source(s) Public Records															
Report the results of the research and analysis of the prior sale or transfer history of the subject property and comparable sales (report additional prior sales on page 8).															
ITEM		SUBJECT		COMPARABLE SALE #1			COMPARABLE SALE #2			COMPARABLE SALE #3					
Date of Prior Sale/Transfer															
Price of Prior Sale/Transfer															
Data Source(s)		Public Records		Public Records			Public Records			Public Records					
Effective Date of Data Source(s)		05/06/2016		05/06/2016			05/06/2016			05/06/2016					
Analysis of prior sale or transfer history of the subject property and comparable sales See Addenda															
Summary of Sales Comparison Approach See Addenda															
Indicated Value by Sales Comparison Approach \$ 335,000															
Indicated Value by: Sales Comparison Approach \$ 335,000 Cost Approach (if developed) \$ Income Approach (if developed) \$															
See Addenda															
This appraisal is made <input checked="" type="checkbox"/> "as is", <input type="checkbox"/> subject to completion per plans and specifications on the basis of a hypothetical condition that the improvements have been completed, <input type="checkbox"/> subject to the following repairs or alterations on the basis of a hypothetical condition that the repairs or alterations have been completed, or <input type="checkbox"/> subject to the following required inspection based on the extraordinary assumption that the condition or deficiency does not require alteration or repair:															
Based on a complete visual inspection of the interior and exterior areas of the subject property, defined scope of work, statement of assumptions and limiting conditions, and appraiser's certification, my (our) opinion of the market value, as defined, of the real property that is the subject of this report is \$ 335,000, as of 05/06/2016, which is the date of inspection and the effective date of this appraisal.															

Uniform Residential Appraisal Report

File# R1456

This report form is designed to report an appraisal of a one-unit property or a one-unit property with an accessory unit; including a unit in a planned unit development (PUD). This report form is not designed to report an appraisal of a manufactured home or a unit in a condominium or cooperative project.

This appraisal report is subject to the following scope of work, intended use, intended user, definition of market value, statement of assumptions and limiting conditions, and certifications. Modifications, additions, or deletions to the intended use, intended user, definition of market value, or assumptions and limiting conditions are not permitted. The appraiser may expand the scope of work to include any additional research or analysis necessary based on the complexity of this appraisal assignment. Modifications or deletions to the certifications are also not permitted. However, additional certifications that do not constitute material alterations to this appraisal report, such as those required by law or those related to the appraiser's continuing education or membership in an appraisal organization, are permitted.

SCOPE OF WORK: The scope of work for this appraisal is defined by the complexity of this appraisal assignment and the reporting requirements of this appraisal report form, including the following definition of market value, statement of assumptions and limiting conditions, and certifications. The appraiser must, at a minimum: (1) perform a complete visual inspection of the interior and exterior areas of the subject property, (2) inspect the neighborhood, (3) inspect each of the comparable sales from at least the street, (4) research, verify, and analyze data from reliable public and/or private sources, and (5) report his or her analysis, opinions, and conclusions in this appraisal report.

INTENDED USE: The intended use of this appraisal report is for the lender/client to evaluate the property that is the subject of this appraisal for a mortgage finance transaction.

INTENDED USER: The intended user of this appraisal report is the lender/client.

DEFINITION OF MARKET VALUE: The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: (1) buyer and seller are, typically motivated; (2) both parties are well informed or well advised, and each acting in what he or she considers his or her own best interest; (3) a reasonable time is allowed for exposure in the open market; (4) payment is made in terms of cash in U. S. dollars or in terms of financial arrangements comparable thereto; and (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions* granted by anyone associated with the sale.

*Adjustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs which are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparisons to financing terms offered by a third party institutional lender that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.

STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS: The appraiser's certification in this report is subject to the following assumptions and limiting conditions:

1. The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it, except for information that he or she became aware of during the research involved in performing this appraisal. The appraiser assumes that the title is good and marketable and will not render any opinions about the title.
2. The appraiser has provided a sketch in this appraisal report to show the approximate dimensions of the improvements. The sketch is included only to assist the reader in visualizing the property and understanding the appraiser's determination of its size.
3. The appraiser has examined the available flood maps that are provided by the Federal Emergency Management Agency (or other data sources) and has noted in this appraisal report whether any portion of the subject site is located in an identified Special Flood Hazard Area. Because the appraiser is not a surveyor, he or she makes no guarantees, express or implied, regarding this determination.
4. The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand, or as otherwise required by law.
5. The appraiser has noted in this appraisal report any adverse conditions (such as needed repairs, deterioration, the presence of hazardous wastes, toxic substances, etc.) observed during the inspection of the subject property or that he or she became aware of during the research involved in performing the appraisal. Unless otherwise stated in this appraisal report, the appraiser has no knowledge of any hidden or unapparent physical deficiencies or adverse conditions of the property (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) that would make the property less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied. The appraiser will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because the appraiser is not an expert in the field of environmental hazards, this appraisal report must not be considered as an environmental assessment of the property.
6. The appraiser has based his or her appraisal report and valuation conclusion for an appraisal that is subject to satisfactory completion, repairs, or alterations on the assumption that the completion, repairs, or alterations of the subject property will be performed in a professional manner.

Uniform Residential Appraisal Report

File# R1458

APPRAISER'S CERTIFICATION: The Appraiser certifies and agrees that:

1. I have, at a minimum, developed and reported this appraisal in accordance with the scope of work requirements stated in this appraisal report.
2. I performed a complete visual inspection of the interior and exterior areas of the subject property. I reported the condition of the improvements in factual, specific terms. I identified and reported the physical deficiencies that could affect the livability, soundness, or structural integrity of the property.
3. I performed this appraisal in accordance with the requirements of the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
4. I developed my opinion of the market value of the real property that is the subject of this report based on the sales comparison approach to value. I have adequate comparable market data to develop a reliable sales comparison approach for this appraisal assignment. I further certify that I considered the cost and income approaches to value but did not develop them, unless otherwise indicated in this report.
5. I researched, verified, analyzed, and reported on any current agreement for sale for the subject property, any offering for sale of the subject property in the twelve months prior to the effective date of this appraisal, and the prior sales of the subject property for a minimum of three years prior to the effective date of this appraisal, unless otherwise indicated in this report.
6. I researched, verified, analyzed, and reported on the prior sales of the comparable sales for a minimum of one year prior to the date of sale of the comparable sale, unless otherwise indicated in this report.
7. I selected and used comparable sales that are locationally, physically, and functionally the most similar to the subject property.
8. I have not used comparable sales that were the result of combining a land sale with the contract purchase price of a home that has been built or will be built on the land.
9. I have reported adjustments to the comparable sales that reflect the market's reaction to the differences between the subject property and the comparable sales.
10. I verified, from a disinterested source, all information in this report that was provided by parties who have a financial interest in the sale or financing of the subject property.
11. I have knowledge and experience in appraising this type of property in this market area.
12. I am aware of, and have access to, the necessary and appropriate public and private data sources, such as multiple listing services, tax assessment records, public land records and other such data sources for the area in which the property is located.
13. I obtained the information, estimates, and opinions furnished by other parties and expressed in this appraisal report from reliable sources that I believe to be true and correct.
14. I have taken into consideration the factors that have an impact on value with respect to the subject neighborhood, subject property, and the proximity of the subject property to adverse influences in the development of my opinion of market value. I have noted in this appraisal report any adverse conditions (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) observed during the inspection of the subject property or that I became aware of during the research involved in performing this appraisal. I have considered these adverse conditions in my analysis of the property value, and have reported on the effect of the conditions on the value and marketability of the subject property.
15. I have not knowingly withheld any significant information from this appraisal report and, to the best of my knowledge, all statements and information in this appraisal report are true and correct.
16. I stated in this appraisal report my own personal, unbiased, and professional analysis, opinions, and conclusions, which are subject only to the assumptions and limiting conditions in this appraisal report.
17. I have no present or prospective interest in the property that is the subject of this report, and I have no present or prospective personal interest or bias with respect to the participants in the transaction. I did not base, either partially or completely, my analysis and/or opinion of market value in this appraisal report on the race, color, religion, sex, age, marital status, handicap, familial status, or national origin of either the prospective owners or occupants of the subject property or of the present owners or occupants of the properties in the vicinity of the subject property or on any other basis prohibited by law.
18. My employment and/or compensation for performing this appraisal or any future or anticipated appraisals was not conditioned on any agreement or understanding, written or otherwise, that I would report (or present analysis supporting) a predetermined specific value, a predetermined minimum value, a range or direction in value, a value that favors the cause of any party, or the attainment of a specific result or occurrence of a specific subsequent event (such as approval of a pending mortgage loan application).
19. I personally prepared all conclusions and opinions about the real estate that were set forth in this appraisal report. If I relied on significant real property appraisal assistance from any individual or individuals in the performance of this appraisal or the preparation of this appraisal report, I have named such individual(s) and disclosed the specific tasks performed in this appraisal report. I certify that any individual so named is qualified to perform the tasks. I have not authorized anyone to make a change to any item in this appraisal report; therefore, any change made to this appraisal is unauthorized and I will take no responsibility for it.
20. I identified the lender/client in this appraisal report who is the individual, organization, or agent for the organization that ordered and will receive this appraisal report.

Uniform Residential Appraisal Report

File # R1458

21. The lender/client may disclose or distribute this appraisal report to: the borrower; another lender at the request of the borrower; the mortgagee or its successors and assigns; mortgage insurers; government sponsored enterprises; other secondary market participants; data collection or reporting services; professional appraisal organizations; any department, agency, or instrumentality of the United States; and any state, the District of Columbia, or other jurisdictions; without having to obtain the appraiser's or supervisory appraiser's (if applicable) consent. Such consent must be obtained before this appraisal report may be disclosed or distributed to any other party (including, but not limited to, the public through advertising, public relations, news, sales, or other media).

22. I am aware that any disclosure or distribution of this appraisal report by me or the lender/client may be subject to certain laws and regulations. Further, I am also subject to the provisions of the Uniform Standards of Professional Appraisal Practice that pertain to disclosure or distribution by me.

23. The borrower, another lender at the request of the borrower, the mortgagee or its successors and assigns, mortgage insurers, government sponsored enterprises, and other secondary market participants may rely on this appraisal report as part of any mortgage finance transaction that involves any one or more of these parties.

24. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.

25. Any intentional or negligent misrepresentation(s) contained in this appraisal report may result in civil liability and/or criminal penalties including, but not limited to, fine or imprisonment or both under the provisions of Title 18, United States Code, Section 1001, et seq., or similar state laws.

SUPERVISORY APPRAISER'S CERTIFICATION: The Supervisory Appraiser certifies and agrees that:

1. I directly supervised the appraiser for this appraisal assignment, have read the appraisal report, and agree with the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
2. I accept full responsibility for the contents of this appraisal report including, but not limited to, the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
3. The appraiser identified in this appraisal report is either a sub-contractor or an employee of the supervisory appraiser (or the appraisal firm), is qualified to perform this appraisal, and is acceptable to perform this appraisal under the applicable state law.
4. This appraisal report complies with the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
5. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.

APPRAISER Brandon D Churchey
 Signature *BD Churchey*
 Name Brandon D Churchey
 Company Name Churchey Appraisal, Inc
 Company Address 15 Mooring Circle
Plymouth, MA 02360
 Telephone Number 508-224-9478
 Email Address Brandon@Churcheyappraisal.com
 Date of Signature and Report 05/10/2016
 Effective Date of Appraisal 05/06/2016
 State Certification # Gen. Crt. 75434
 or State License # _____
 or Other (describe) _____ State # _____
 State MA
 Expiration Date of Certification or License 01/28/2017

SUPERVISORY APPRAISER (ONLY IF REQUIRED)
 Signature _____
 Name _____
 Company Name _____
 Company Address _____
 Telephone Number _____
 Email Address _____
 Date of Signature _____
 State Certification # _____
 or State License # _____
 State _____
 Expiration Date of Certification or License _____

ADDRESS OF PROPERTY APPRAISED
15 Hedge Rd
Plymouth, MA 02360
APPRAISED VALUE OF SUBJECT PROPERTY \$ 335,000

SUBJECT PROPERTY
 Did not inspect subject property
 Did inspect exterior of subject property from street
 Date of Inspection _____
 Did inspect interior and exterior of subject property
 Date of Inspection _____

LENDER/CLIENT
 Name No AMC
 Company Name Jessica Casey - Town of Plymouth
 Company Address 11 Lincoln Street, Plymouth, MA 02360
 Email Address _____

COMPARABLE SALES
 Did not inspect exterior of comparable sales from street
 Did inspect exterior of comparable sales from street
 Date of Inspection _____

Photograph Addendum

Borrower	Town of Plymouth						
Property Address	15 Hedge Rd						
City	Plymouth	County	Plymouth	State	MA	Zip Code	02360
Lender/Client	Jessica Casey - Town of Plymouth						



Front - Northwest Elevation



Side - Southwest Elevation



Rear - Southeast Elevation



Side - Northeast Elevation



Street View - Southwest on Hedge Road



Street View - Northeast on Hedge Road

Photograph Addendum

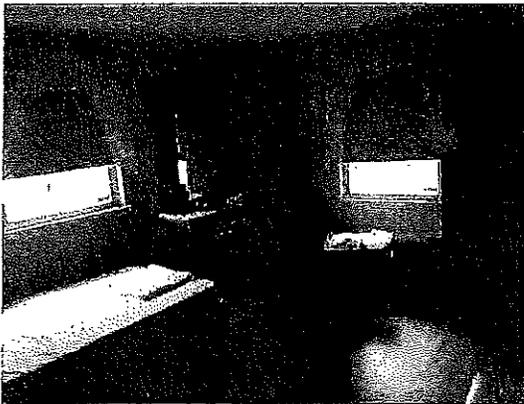
Borrower	Town of Plymouth				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA Zip Code 02360
Lender/Client	Jessica Casey - Town of Plymouth				



Kitchen



Living Room



Bedroom # 1



Bedroom # 2



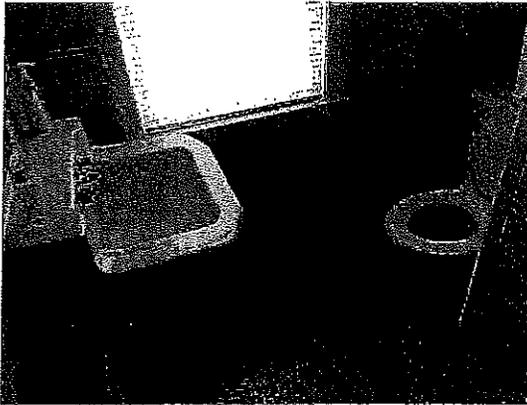
Bedroom # 3



Full Bathroom

Photograph Addendum

Borrower	Town of Plymouth				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA Zip Code 02360
Lender/Client	Jessica Casey - Town of Plymouth				



Half Bathroom



Laundry Room - First Floor



Basement/Mechanicals



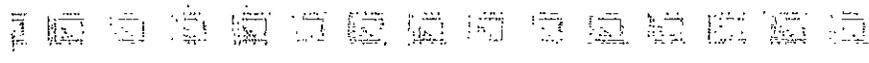
Rear Yard



Rear Yard/Gazebo

55987

Received & Recorded
PLYMOUTH COUNTY
RECORDING DEPARTMENT
1000 PLUMLEY, JR.
BOSTON, MA 02118
617-552-1566



QUITCLAIM DEED

I, **PAUL J. SCARZI**, individually, of 15 Hedge Road, Plymouth, Massachusetts 02560, for consideration paid the sum of One and 00/100 dollar (\$1.00), grant to **PAUL J. SCARZI**, as Trustee of the **PAUL J. SCARZI REVOCABLE TRUST OF 2008** under declaration of Trust Dated April 2, 2008, a certificate of which is to be recorded herewith, of 15 Hedge Road, Plymouth, Massachusetts 02560, with **QUITCLAIM COVENANTS**.

A certain parcel of land with the buildings thereon on the southerly side of Hedge Road in Plymouth, Plymouth County, Massachusetts, bounded and described as follows:

Beginning at a stone bound with a drill hole at the southerly side of Hedge Road at the northeasterly corner of the premises hereby conveyed, and thence running

SOUTH 37° 18' 20" EAST by land now or formerly of Eight States Trust a distance of Eighty-nine and 10/100 (89.10) feet; then turning and running

NORTH 44° 10' 32" EAST a distance of Twenty (20.0) feet to a stone bound; then turning and running

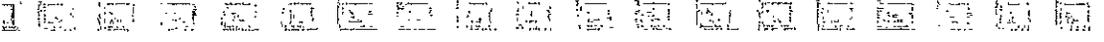
NORTH 64° 39' 40" EAST a distance of One hundred sixty-two and 00/100 (162.00) feet to a stone bound with a drill hole; then turning and running

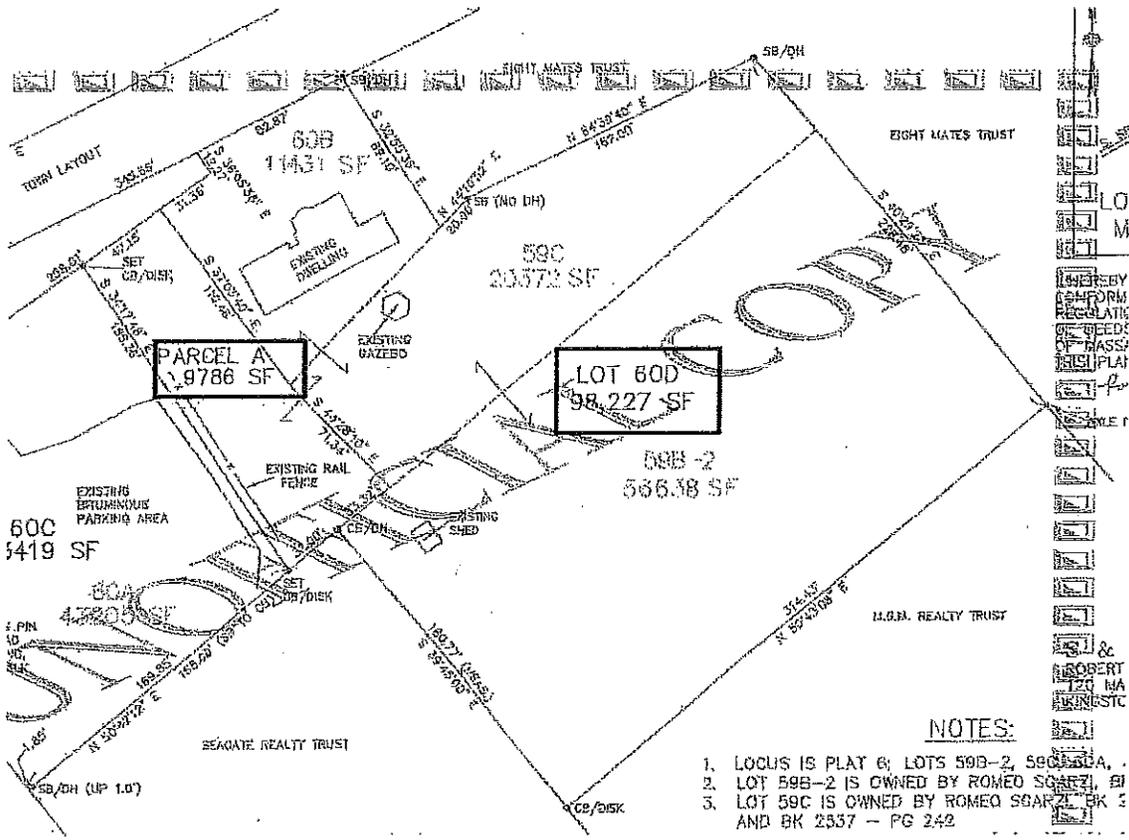
SOUTH 46° 29' 23" EAST a distance of Two hundred twenty-eight and 48/100 (228.48) feet to an oak rod; the last three courses all by land of said Eight States Trust; then turning and running

SOUTH 50° 42' 08" WEST by land now or formerly of M.L.M. Realty Trust a distance of Three hundred fourteen and 43/100 (314.43) feet to a concrete bound with bronze seal; then turning and running

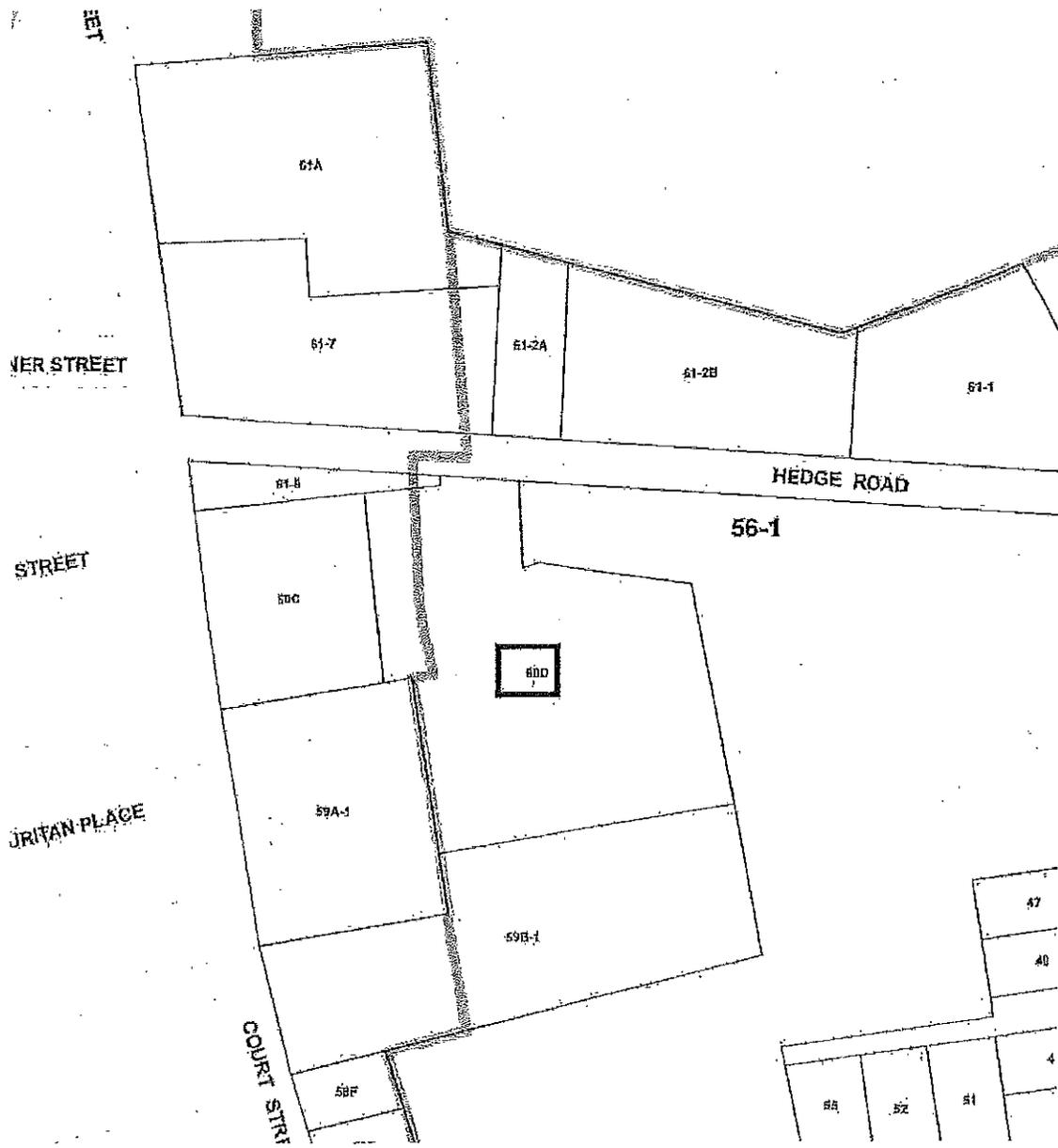
NORTH 39° 45' 00" WEST by land now or formerly of KEAGATE Realty Trust a distance of One hundred eighty and 77/100 (180.77) feet to a concrete bound with a drill hole; then turning and running

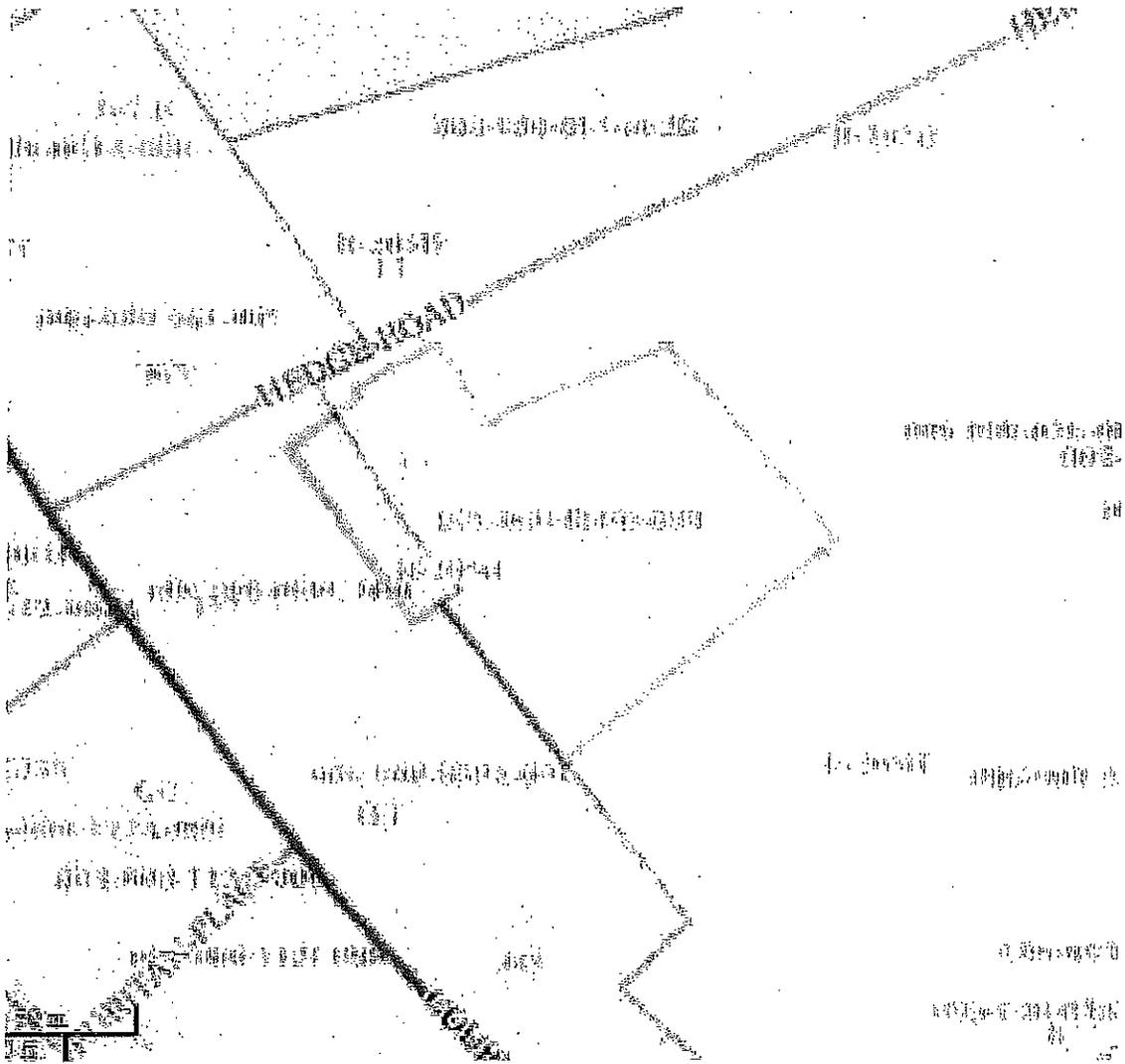
PROPERTY ADDRESS: 15 Hedge Road, Plymouth, MA 02560





- NOTES:**
1. LOCUS IS PLAY & LOTS 59B-2, 59C, 60A, .
 2. LOT 59B-2 IS OWNED BY ROMEO SCARZI, BK 1
 3. LOT 59C IS OWNED BY ROMEO SCARZI, BK 1 AND BK 2337 - PG 242

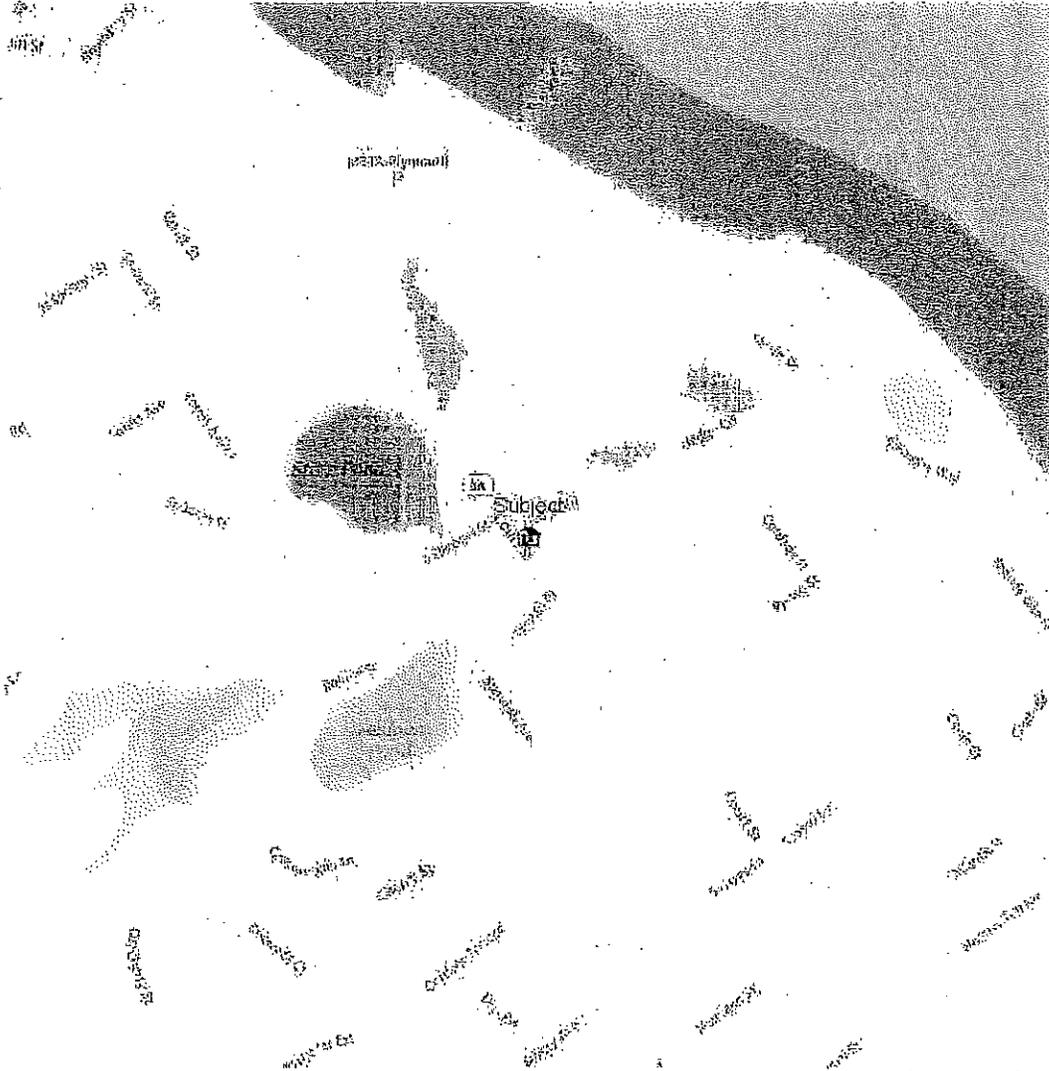




STDB

You are currently logged in as: (CUSTID: 24138) on 10-May-2018

1-21 Hedge Road, Plymouth, MA
1 HEDGE RD # 21, PLYMOUTH, MA



MAP DATA

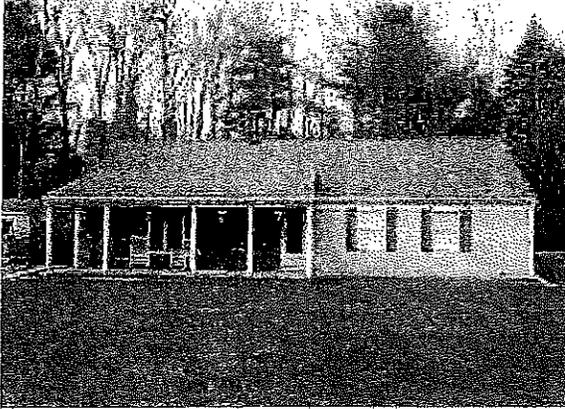
Map Number : 25023C0356J
Panel Date : July 17, 2012
RIPS Code : 25023

Census Tract : 5302.00
Geo Result : S5 (Most Accurate) -
single close match, point located at
the street address position

Flood	
<input type="checkbox"/>	Xa/C Zone
<input type="checkbox"/>	Xa/C/B Zone
<input type="checkbox"/>	A Zone
<input type="checkbox"/>	V Zone
<input type="checkbox"/>	D Zone
<input type="checkbox"/>	Area Not Mapped

Comparable Photo Page

Borrower	Town of Plymouth				
Property Address	16 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA
Zip Code	02360				
Lender/Client	Jessica Casey - Town of Plymouth				



Comparable 1

15 Duck Plain Rd
 Prox. to Subject 1.09 miles S
 Sale Price 315,000
 Gross Living Area 1,810
 Total Rooms 6
 Total Bedrooms 3
 Total Bathrooms 1.1
 Location N;Res;
 View N;Res;
 Site 1.0 ac
 Quality Q3
 Age 38



Comparable 2

50 Braunecker Rd
 Prox. to Subject 0.86 miles S
 Sale Price 364,900
 Gross Living Area 1,470
 Total Rooms 6
 Total Bedrooms 3
 Total Bathrooms 2.0
 Location N;Res;
 View N;Res;
 Site 23522 sf
 Quality Q3
 Age 18

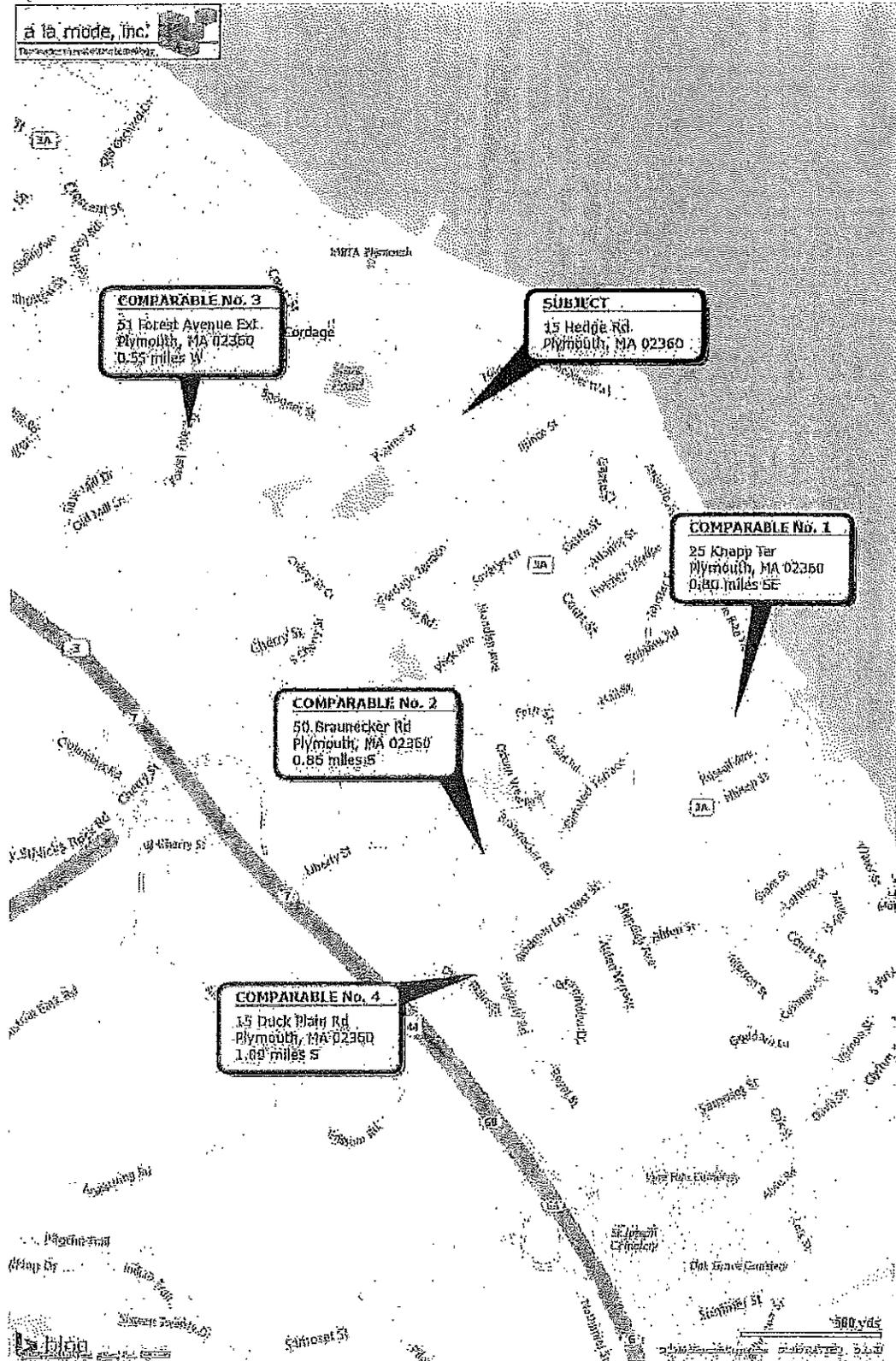


Comparable 3

51 Forest Avenue Ext
 Prox. to Subject 0.55 miles W
 Sale Price 259,900
 Gross Living Area 1,228
 Total Rooms 5
 Total Bedrooms 3
 Total Bathrooms 1.0
 Location N;Res;
 View N;Res;
 Site 19602 sf
 Quality Q3
 Age 60

Location Map

Borrower	Town of Plymouth		
Property Address	15 Hedge Rd		
City	Plymouth	County	Plymouth
		State	MA
		Zip Code	02360
Lender/Client	Jessica Casey - Town of Plymouth		



Supplemental Addendum

File No. R1468

Borrower	Town of Plymouth				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA Zip Code 02360
Lender/Client	Jessica Casey - Town of Plymouth				

Owner of Public Record

Paul J. Sgarzi Revocable Trust of 2008

Special Assessment

The subject is subject to a Community Preservation Act Tax of 1.5%, or \$64.

Neighborhood Description

The subject property is located in the neighborhood of North Plymouth which extends south from Plymouth Center to north to the Town of Kingston. Uses are mixed including residential, multifamily and commercial. Commercial influences are located along Court Street (Route #3A) including storefront retail/offices. The subject property is located about 50 yards northeast of Court Street. The subject's site, towards the rear, abuts an automobile dealership.

Exposure Time is estimated at 3 months

Marketing Time is estimated at 3 months

We have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within a three-year period immediately preceding acceptance of this assignment.

Site

Site description has been taken from the accompanying plan entitled, "Plan of Land in Plymouth, MA" dated March 1, 1995, owned by Sgarzi Court Street Properties, Inc. and Romeo Sgarzi, filed within the Plymouth County Registry of Deeds in 1995 as Plan No. 306. The subject site is shown as LOT 60D, totaling 98,227 SF (2.25 Acres). Per deed, the SF estimation "includes the parcel shown as Parcel A" on said plan. For the purpose of this appraisal we have utilized a total land area of 98,227 SF.

Sales Comparison Approach

The subject property consists of a Ranch style dwelling totaling 1,745 SF including 3 Bedrooms and 1.1 Bathrooms. For the purpose of this analysis we have focused on Ranch style dwellings located in the North Plymouth neighborhood. The appraiser included the three (3) best comparable. However, the subject site size of 2.25 acres was unable to be bracketed.

Time - Based on the Warren Group Town Statistics and the current market environment, no time adjustment has been made to the sales. The appraiser feels that pricing has been relatively stable over the past few years. As of the date of this appraisal, the market has entered a slight period of increase as there is limited inventory of single family residences and high demand.

Location - The subject is located along Hedge Road, about 50 yards northeast of Court Street (Route #3A). To the rear of the site, the subject abuts an automobile dealership. Given that all sales are basically located in North Plymouth, no location adjustment was made. The fact that the subject abuts an automobile dealership will be taken into consideration in the site adjustment.

Site - The subject features 2.25 acres of land. The rear of the site abuts an automobile dealership. Per parties with knowledge of this property, the original owner of this property was the former owner of this automobile dealership (Sgarzi), who segregated the lot from the dealership. After a review of the market, the site size was unable to be bracketed. This site is one of the larger residential lot sin the neighborhood in general.

Supplemental Addendum

File No. R1458

Borrower	Town of Plymouth				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA Zip Code 02360
Lender/Client	Jessica Casey - Town of Plymouth				

Adjustments are made based on the subjects overall site size, taken into consideration the rear of the site abuts an automobile dealership. As such, Sale # 1 totaling 1 acre is rates similar, Sales # 2 and 3 feature smaller site sizes of about 23,500 SF and 20,000 SF and both are adjusted up 5%.

Quality of Construction - The subject has an actual age of 59 years. The exterior of the building is in average quality of construction. The interior is somewhat dated. The kitchen and bathrooms are not modern. Based on interior/exterior MLS photos, and a personal walkthrough of Sale # 3, Sale # 1 is similar; Sale # 2 is superior and adjusted down 5%; and, Sale # 3 is inferior, adjusted up 5%.

Condition - the subject is rated to be in average overall condition. It has been well maintained over the past years (10+), however, it is somewhat dated. Adjustments are made to the sales based on their interior MLS photos which suggest that Sale # 1 and 2 are superior, adjusted down 5% and Sale # 3 is inferior, adjusted up 5%.

Other Adjustments include:

Half bathrooms adjusted at \$3,000

GLA at \$40/PSF for differences over 100 SF

Functional Utility adjustment to Sale # 1 as areas of the GLA are located in a second floor "finished attic", which is inferior to the subject and sales # 2 and 3 which GLA's are of first floor living areas only. Sale # 1 is adjusted up 5%.

Central Air adjusted at \$4,000

Garages at \$4,000/Bay

Sale # 3 has inferior site improvements (porch/deck/patio) and is adjusted up \$2,500.

Fireplace adjusted at \$2,000.

Sales Comparison Approach Reconciliation

After making adjustments for physical conditions, the sales have a narrower sale price range of about \$320,000 to \$350,000. All sales are basically located in the North Plymouth neighborhood. The sale which requires the least amount of adjusting is Sale # 1, which has an adjusted sale price of \$319,000. However, demand for single family residences in this price range in Plymouth is currently very good. In the final reconciliation we have considered all sales equally. Therefore, based on the data presented within this report and as of the date of this appraisal, the Sales Comparison Approach can be fairly represented at: \$335,000 (Three Hundred Thirty Five Thousand Dollars)

Final Reconciliation

All weight in the final reconciliation is attributed to the Sales Comparison Approach. Therefore the subject property can be fairly represented at \$335,000 (Three Hundred Thirty Five Thousand Dollars).

APPRAISAL OF REAL PROPERTY



LOCATED AT

15 Hedge Rd
Plymouth, MA 02360
Plymouth County Registry of Deeds in Book 35880 page 257

FOR

Anthony F. Provenzano Jr.
Suite 124, One Village Green North
Plymouth, MA 02360

AS OF

02/26/2016

BY

Paul Falconer
Falconer Appraisal Services, Inc.
Falconer Appraisal Services, Inc., 23 Pinewood Road
Plymouth, MA 02360
(508) 747-6101
FalconerAppraisal@Verizon.net

365,000

Falconer Appraisal Services, Inc.
Falconer Appraisal Services, Inc., 23 Pinewood Road
Plymouth, MA 02360
(508) 747-6101

03/03/2016

Anthony Provenzano
Anthony F. Provenzano Jr.
Suite 124, One Village Green North
Plymouth, MA 02360

Re: Property: 15 Hedge Rd
Plymouth, MA 02360
Borrower: Paul J. Sgarzi Revocable Trust
File No.: 02262016-Sgarzi

Opinion of Value: \$ 365,000
Effective Date: 02/26/2016

In accordance with your request, we have appraised the above referenced property. The report of that appraisal is attached.

The purpose of the appraisal is to develop an opinion of market value for the property described in this appraisal report, as improved, in unencumbered fee simple title of ownership.

This report is based on a physical analysis of the site and improvements, a locational analysis of the neighborhood and city, and an economic analysis of the market for properties such as the subject. The appraisal was developed and the report was prepared in accordance with the Uniform Standards of Professional Appraisal Practice.

The opinion of value reported above is as of the stated effective date and is contingent upon the certification and limiting conditions attached.

It has been a pleasure to assist you. Please do not hesitate to contact me or any of my staff if we can be of additional service to you.

Sincerely,



Paul Falconer
MCGREA #530
License or Certification #: MCGREA 530
State: MA Expires: 01/11/2018
FalconerAppraisal@Verizon.net

RESTRICTED APPRAISAL REPORT

001-Provenzano-SRT

File No.: 02262016-Sgarzi

Property Address: 15 Hedge Rd City: Plymouth State: MA Zip Code: 02360
 County: Plymouth Legal Description: Plymouth County Registry of Deeds in Book 35880 page 257
 Assessor's Parcel #: Map 6 Block 00 Lot 60D
 Tax Year: 2015 R.E. Taxes: \$ 4,093.24 Special Assessments: \$ 0 Borrower (if applicable): Paul J. Sgarzi Revocable Trust
 Current Owner of Record: Paul J. Sgarzi Revocable Trust Occupant: Owner Tenant Vacant Manufactured Housing
 Property Type: SFR 2-4 Family # of Units: 1 Ownership Restriction: None PUD Condo Coop
 Market Area Name: North Plymouth Map Reference: 14454 Census Tract: 5302.00 Flood Hazard
 The purpose of this appraisal is to develop an opinion of: Market Value (as defined), or other type of value (describe)
 This report reflects the following value (if not Current, see comments): Current (the Inspection Date is the Effective Date) Retrospective Prospective
 Approaches developed for this appraisal: Sales Comparison Approach Cost Approach Income Approach Other:
 Property Rights Appraised: Fee Simple Leasehold Leased Fee Other (describe)
 Intended Use: asset valuation
 Under USPAP Standards Rule 2-2(b), this is a Restricted Appraisal Report, and is intended only for the sole use of the named client. There are no other intended users. The client must clearly understand that the appraiser's opinions and conclusions may not be understood properly without additional information in the appraiser's work file.
 Client: Anthony F. Provenzano Jr. Address: Suite 124, One Village Green North, Plymouth, MA 02360
 Appraiser: Paul Falconer Address: Falconer Appraisal Services, Inc., 23 Pinewood Road, Plymouth, MA 02360

FEATURE	SUBJECT	COMPARABLE SALE # 1		COMPARABLE SALE # 2		COMPARABLE SALE # 3	
Address	15 Hedge Rd Plymouth, MA 02360	50 Braunecker Rd Plymouth, MA 02360		30 Grandview Dr Plymouth, MA 02360		32 Jaye St Plymouth, MA 02360	
Proximity to Subject		0.86 miles S		1.14 miles S		3.01 miles SW	
Sale Price	\$ asset valuation	\$ 364,900		\$ 384,900		\$ 342,000	
Sale Price/GLA	\$ /sq.ft.	\$ 248.23/sq.ft.		\$ 281.36/sq.ft.		\$ 309.78/sq.ft.	
Data Source(s)	Inspection	MLS#71740438		MLS#71856225		MLS#71904335	
Verification Source(s)	Public Record	Public Record		Public Record		Public Record	
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+(-) \$ Adjust.	DESCRIPTION	+(-) \$ Adjust.	DESCRIPTION	+(-) \$ Adjust.
Sales or Financing	None	Conv. Fixed		Conv. Fixed		Conv. Fixed	
Concessions	Noted	DOM 237		DOM 13		DOM 16	
Date of Sale/Time	02/26/2016	05/04/2015		08/10/2015		10/30/2015	
Rights Appraised	Fee Simple	Fee Simple		Fee Simple		Fee Simple	
Location	Average	Average		Average		Average	
Site	97,973	23,478		15,682		23,921	
View	Mixed res&comm N	Residential NBHD		NBHD&Dwater	-15,000	Residential NBHD	
Design (Style)	Ranch	Ranch		Ranch		Raised Ranch	
Quality of Construction	Average	Average		Average		Average	
Age	59	18	-4,000	55		43	
Condition	Good	Good		Good		Good	
Above Grade	Total Bdrms Baths	Total Bdrms Baths		Total Bdrms Baths		Total Bdrms Baths	
Room Count	6 3 1.5	6 3 2	-3,000	6 3 1.5		6 3 2	-3,000
Gross Living Area	1,533 sq.ft.	1,470 sq.ft.	+2,205	1,368 sq.ft.	+5,775	1,104 sq.ft.	+15,015
Basement & Finished	Full	Full		Full		Full	
Rooms Below Grade	Unfinished	Unfinished		Finished	-2,000	Finished	-2,000
Functional Utility	Average	Average		Average		Average	
Heating/Cooling	FHW/central	FHW/central		FHW/Wind.AC	+500	FHA/1wndAC	+500
Energy Efficient Items	Fireplace	Fireplace		Fireplace		Fireplace	
Garage/Carport	1 car attached	1 Attached		2Attached	-1,500	None	+1,500
Porch/Patio/Deck	Patio	open porch		patio, deck	-1,000	patio, deck	-1,000
Other	Generator/Gazebo	None	+2,000	Generator/Cabana		Porch	+1,500
Other	Shed	none	+1,000	Ingrd pool/Hottub	-3,000	Shed	
Net Adjustment (Total)		<input type="checkbox"/> + <input checked="" type="checkbox"/> -	\$ -1,795	<input type="checkbox"/> + <input checked="" type="checkbox"/> -	\$ -16,225	<input checked="" type="checkbox"/> + <input type="checkbox"/> -	\$ 12,515
Adjusted Sale Price of Comparables			\$ 363,105		\$ 368,675		\$ 354,515

Summary of Sales Comparison Approach Sales used were market competitive properties in the Plymouth marketplace. Sale 1 adjusted for age. Adjustment derived from matched pairs adjustment between sale 1 and sales 2. Gross living area difference were calculated at \$35.00 and applied to all sales. Basement adjustment was determined from analysis between sale 1 and 2. Outbuildings and exterior amenities adjustment is reflected between sale 2 and sale 1.

RESTRICTED APPRAISAL REPORT

001-Provenzano-SRT

File No.: 02262016-Sgarzi

research did did not reveal any prior sales or transfers of the subject property for the three years prior to the effective date of this appraisal.

Source(s): Public record

1st Prior Subject Sale/Transfer Analysis of sale/transfer history and/or any current agreement of sale/listing: Transfer was an in family transfer of convenience.

Date: 04/23/2008

Price: \$1.00

Source(s): Deed

2nd Prior Subject Sale/Transfer

Date:

Price:

Source(s):

Subject Market Area and Marketability: See attached addenda.

Area: 97,973 Site View: Mixed res&comm NB Topography: Sloping to level Drainage: Appears adequate

Planning Classification: R20SL Description: Single Family

Zoning Compliance: Legal Legal nonconforming (grandfathered) Illegal No zoning

Highest & Best Use: Present use, or Other use (explain)

Actual Use as of Effective Date: Single family Use as appraised in this report: Single family

Definition of Highest & Best Use: Single family

FEMA Spec'l Flood Hazard Area Yes No FEMA Flood Zone X FEMA Map # 25023C0356J FEMA Map Date 7/17/2012

Comments: Existing legal conforming use as single family dwelling lot. Property is served by public water and public sewer. The lot is triangular in shape. This is not adverse to marketability.

Improvements Comments: Dwelling is a wood frame structure built in 1957 on a concrete foundation and is a Ranch style property. Access to garage is via overhead doorways on the ground level. There is central heat and air conditioning in the living space. Property is considered maintained structure. The grade of the materials and equipment are of average in quality.

Indicated Value by: Sales Comparison Approach \$ 365,000

Indicated Value by: Cost Approach (if developed) \$ not developed Indicated Value by: Income Approach (if developed) \$ not developed

Reconciliation All approaches to value were considered. Most weight has been applied to the market approach. Due to the age of the structure the cost approach is considered speculative and not developed. The income approach is not developed, single family dwelling are typically purchased for their income potential in this marketplace.

Appraisal is made "as is", subject to completion per plans and specifications on the basis of a Hypothetical Condition that the improvements have been completed, subject to the following repairs or alterations on the basis of a Hypothetical Condition that the repairs or alterations have been completed, subject to following required inspection based on the Extraordinary Assumption that the condition or deficiency does not require alteration or repair:

This report is also subject to other Hypothetical Conditions and/or Extraordinary Assumptions as specified in the attached addenda.

Based on the degree of inspection of the subject property, as indicated below, defined Scope of Work, Statement of Assumptions and Limiting Conditions, Appraiser's Certifications, my (our) Opinion of the Market Value (or other specified value type), as defined herein, of the real property that is the subject of this report is: \$ 365,000, as of: 02/26/2016, which is the effective date of this appraisal. Indicated above, this Opinion of Value is subject to Hypothetical Conditions and/or Extraordinary Assumptions included in this report. See attached addenda.

The entire and complete copy of this report contains 18 pages, including exhibits which are considered an integral part of the report. This appraisal report may not be properly understood without reference to the information contained in the complete report.

- Attached Exhibits:
- Scope of Work
 - Limiting Cond./Certifications
 - Narrative Addendum
 - Photograph Addenda
 - Sketch Addendum
 - Map Addenda
 - Additional Sales
 - Cost Addendum
 - Flood Addendum
 - Manuf. House Addendum
 - Hypothetical Conditions
 - Extraordinary Assumptions
 -
 -

Contact: Anthony Provenzano Client Name: Anthony F. Provenzano Jr.
Email: afp@provenzanolaw.com Address: Suite 124, One Village Green North, Plymouth, MA 02360

Appraiser Name: 

Company: Falconer Appraisal Services, Inc.
 Phone: (508) 747-6101 Fax: (508) 747-6102
 Email: FalconerAppraisal@Verizon.net

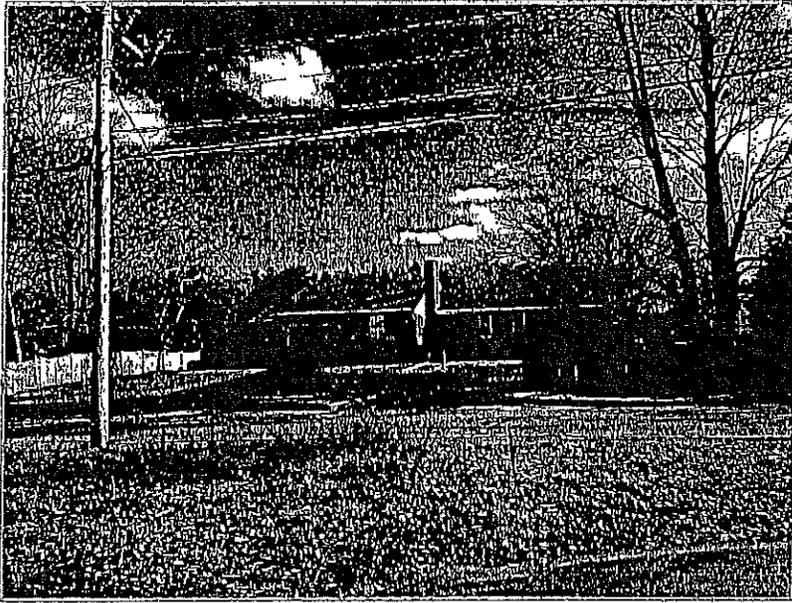
Date of Report (Signature): 03/03/2016
 License or Certification #: MCGREA 530 State: MA
 Designation: MCGREA #530
 Expiration Date of License or Certification: 01/11/2018
 Inspection of Subject: Interior & Exterior Exterior Only None
 Date of Inspection: 02/26/2016

SUPERVISORY APPRAISER (if required)
 or CO-APPRAISER (if applicable)

Supervisory or Co-Appraiser Name: _____
 Company: _____
 Phone: _____ Fax: _____
 E-Mail: _____
 Date of Report (Signature): _____
 License or Certification #: _____ State: _____
 Designation: _____
 Expiration Date of License or Certification: _____
 Inspection of Subject: Interior & Exterior Exterior Only None
 Date of Inspection: _____

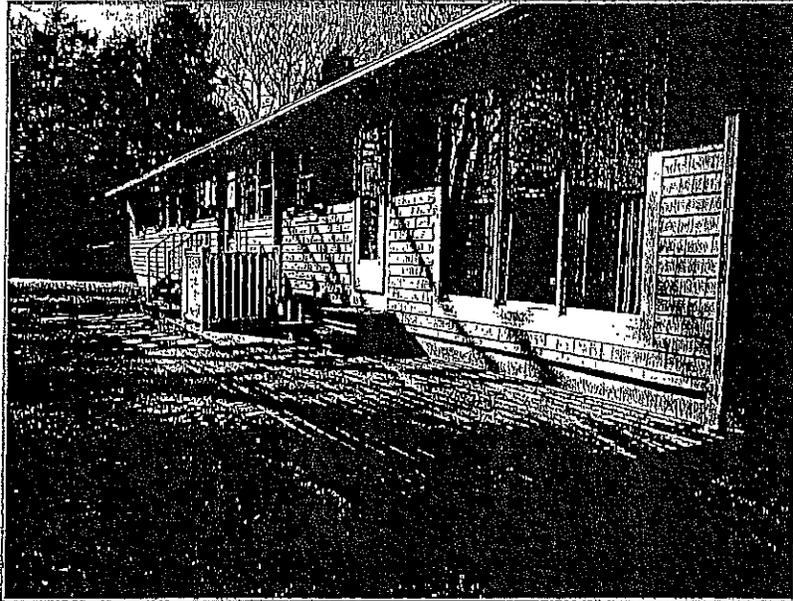
Subject Photo Page

Borrower	Paul J. Sgarzi Revocable Trust				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA
Lender/Client	Anthony F. Provenzano Jr.				
				Zip Code	02360



Subject Front

15 Hedge Rd
Sales Price asset valuation
G.L.A. 1,533
Tot. Rooms 6
Tot. Bedrms. 3
Tot. Bathrms. 1.5
Location Average
View Mixed res&comm NE
Site 97,973
Quality Average
Age 59



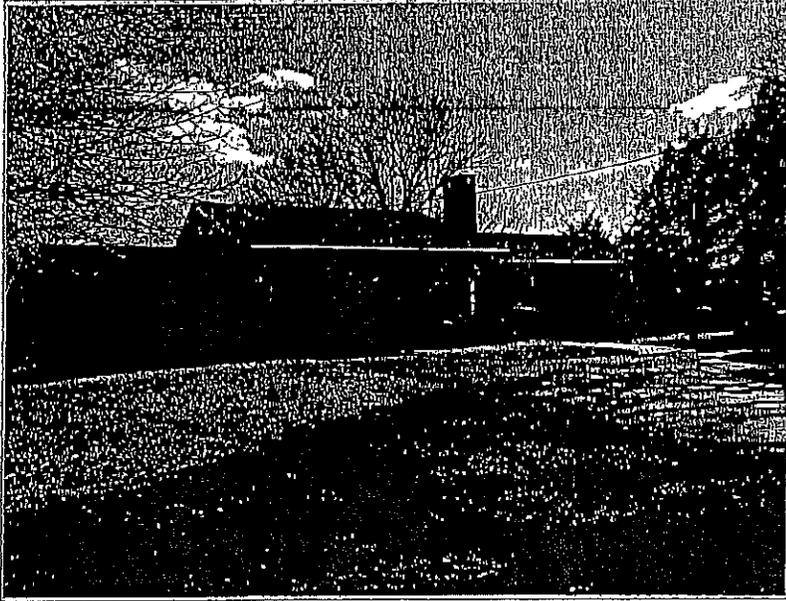
Subject Rear



Subject Street

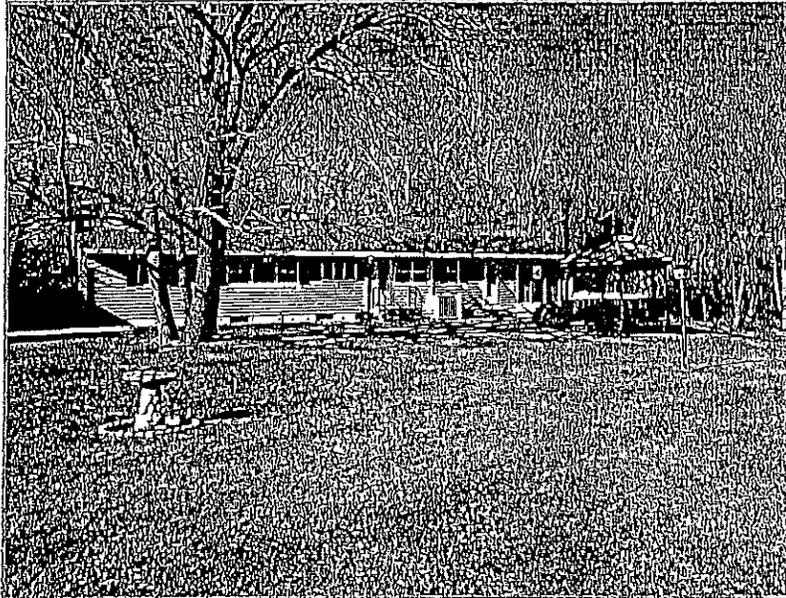
Subject Photo Page

Borrower	Paul J. Sgarzi Revocable Trust				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA Zip Code 02360
Lender/Client	Anthony F. Provenzano Jr.				



Subject Front

15 Hedge Rd
Sales Price asset valuation
G.L.A. 1,533
Tot. Rooms 6
Tot. Bedrms. 3
Tot. Bathrms. 1.5
Location Average
View Mixed res&comm NE
Site 97,973
Quality Average
Age 59



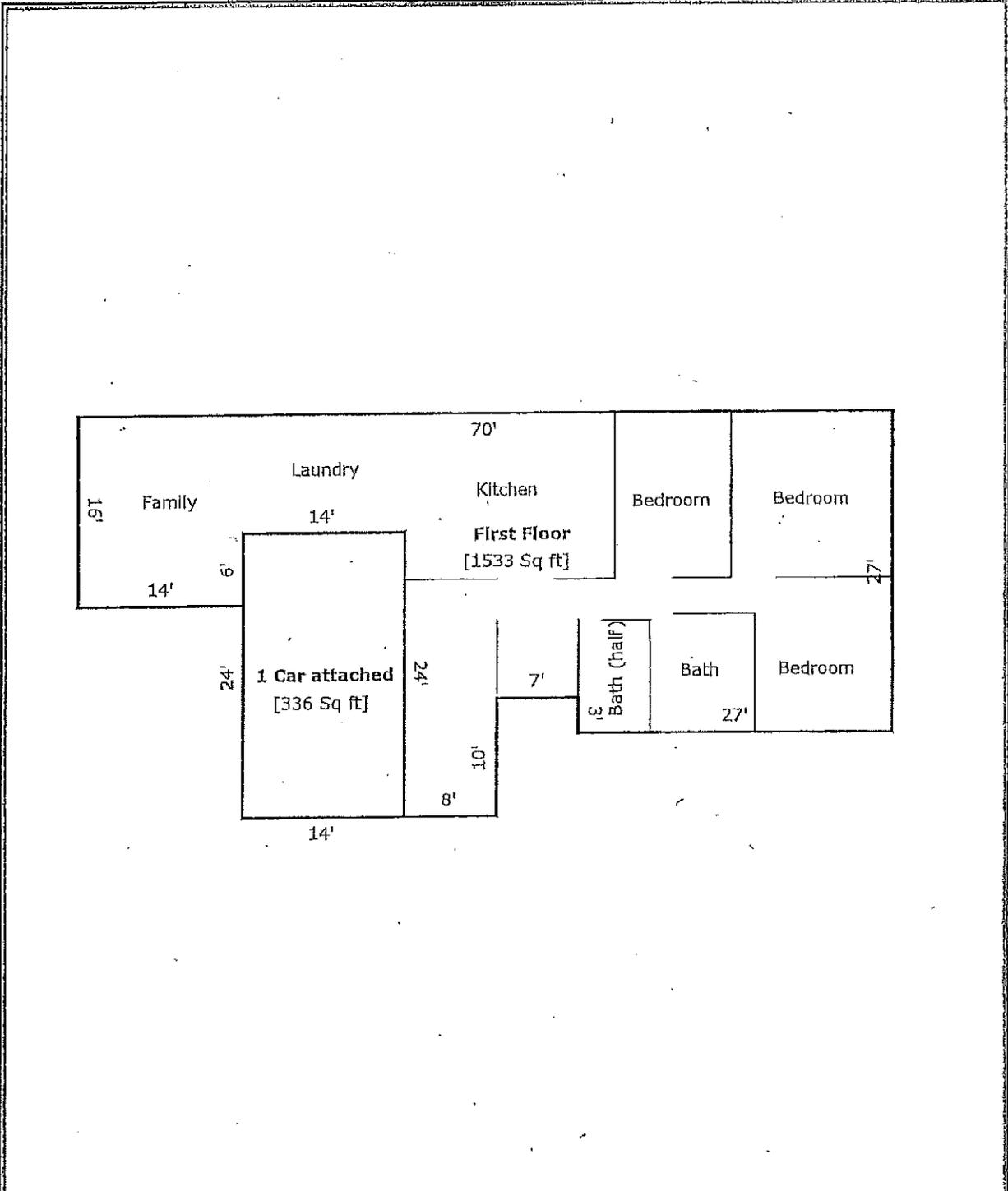
Subject Rear



Subject

Building Sketch

Borrower	Paul J. Sgarzi Revocable Trust		
Property Address	15 Hedge Rd		
City	Plymouth	County Plymouth	State MA Zip Code 02360
Lender/Client	Anthony F. Provenzano Jr.		



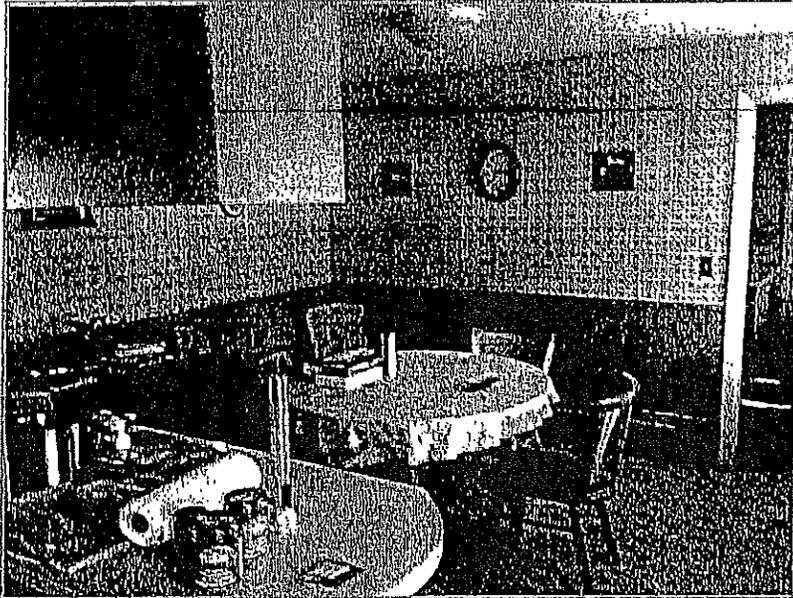
TOTAL Sketch by a la mode, Inc.

Area Calculations Summary

	Area Calculations Summary	Calculation Details
Living Area		
First Floor	1533 Sq ft	$27 \times 27 = 729$ $16 \times 14 = 224$ $8 \times 10 = 80$ $15 \times 14 = 210$ $10 \times 29 = 290$
Total Living Area (Rounded):	1533 Sq ft	
Non-living Area		
1 Car attached	336 Sq ft	$24 \times 14 = 336$

Subject Interior Photo Page

Borrower	Paul J. Sgarzi Revocable Trust				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA Zip Code 02360
Lender/Client	Anthony F. Provenzano Jr.				

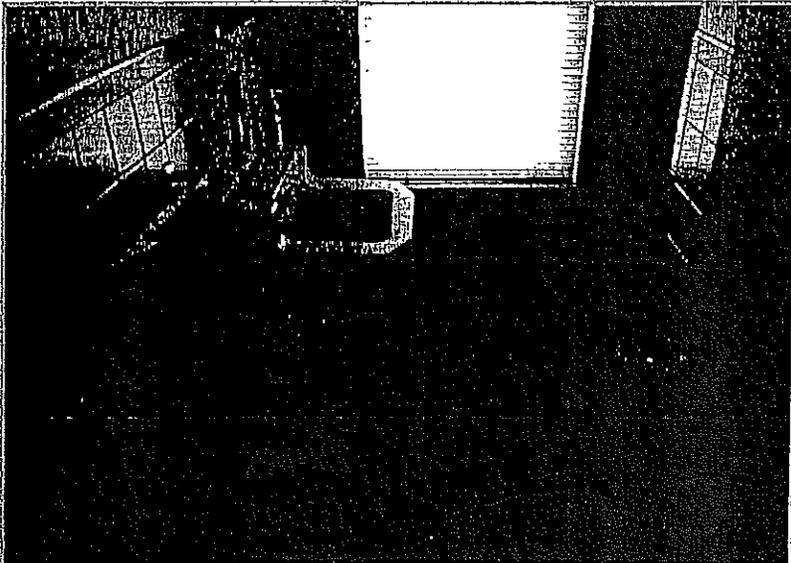


Subject Interior

15 Hedge Rd
Sales Price asset valuation
G.L.A. 1,533
Tot. Rooms 6
Tot. Bedrms. 3
Tot. Bathrms. 1.5
Location Average
View Mixed res&comm NE
Site 97,973
Quality Average
Age 59



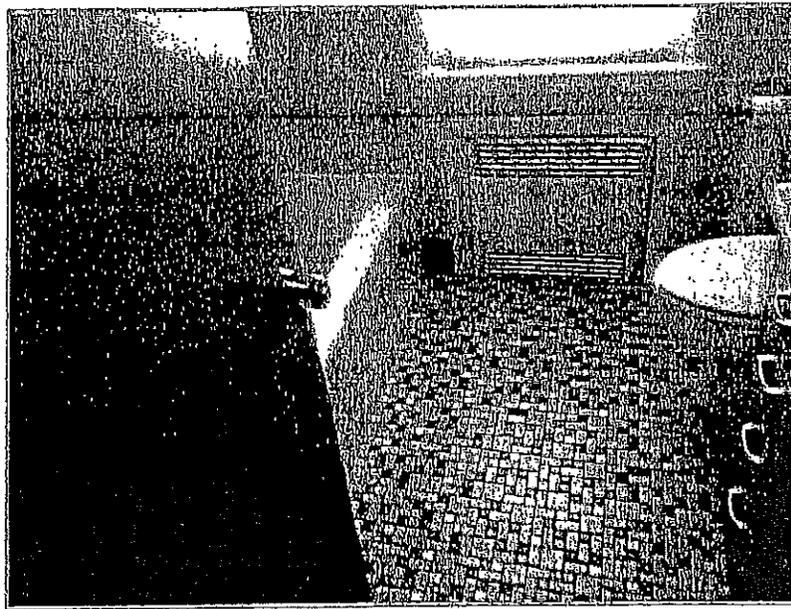
Subject Interior



Subject Interior

Subject Interior Photo Page

Borrower	Paul J. Sgarzi Revocable Trust		
Property Address	15 Hedge Rd		
City	Plymouth	County	Plymouth
		State	MA
		Zip Code	02360
Lender/Client	Anthony F. Provenzano Jr.		



Subject Interior

15 Hedge Rd
Sales Price asset valuation
G.L.A. 1,533
Tot. Rooms 6
Tot. Bedrms. 3
Tot. Bathrms. 1.5
Location Average
View Mixed res&comm NE
Site 97,973
Quality Average
Age 59



Subject Interior



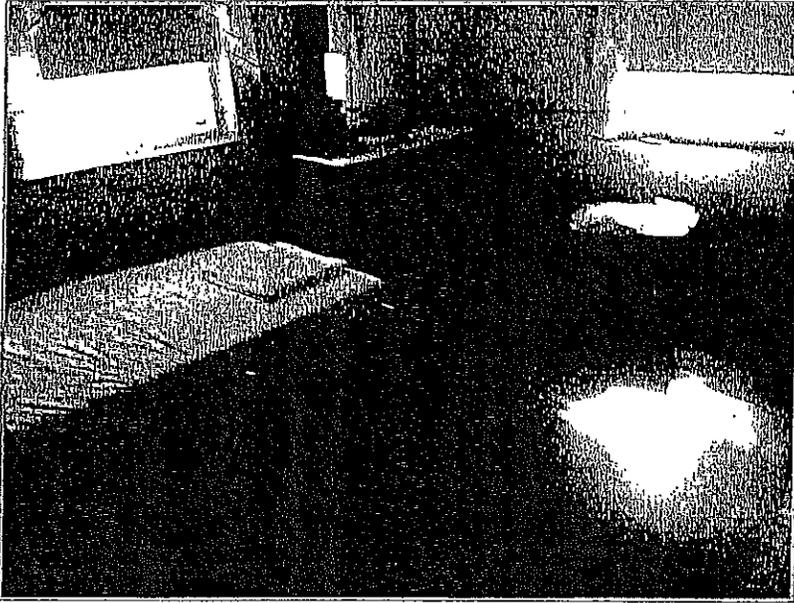
Subject Interior

Subject Interior Photo Page

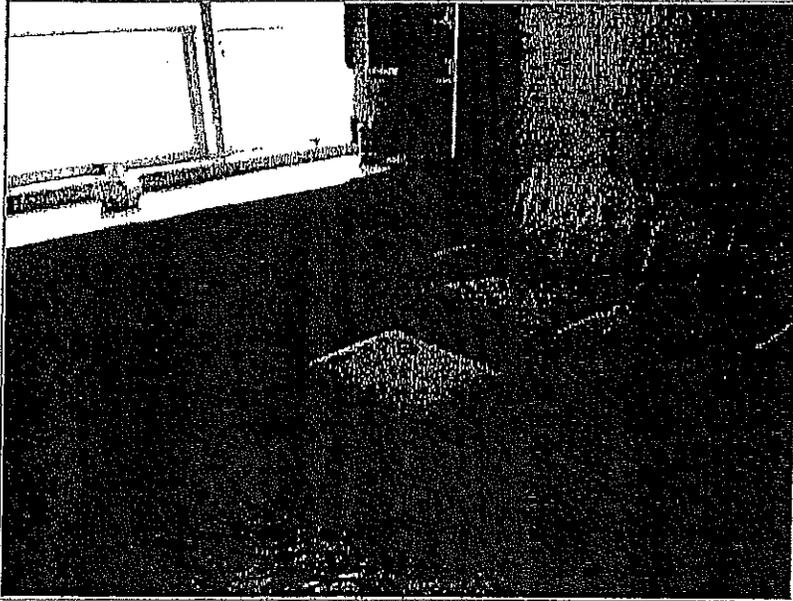
Borrower	Paul J. Sgarzi Revocable Trust				
Property Address	15 Hedge Rd				
City	Plymouth	County	Plymouth	State	MA Zip Code 02360
Lender/Client	Anthony F. Provenzano Jr.				

Subject Interior

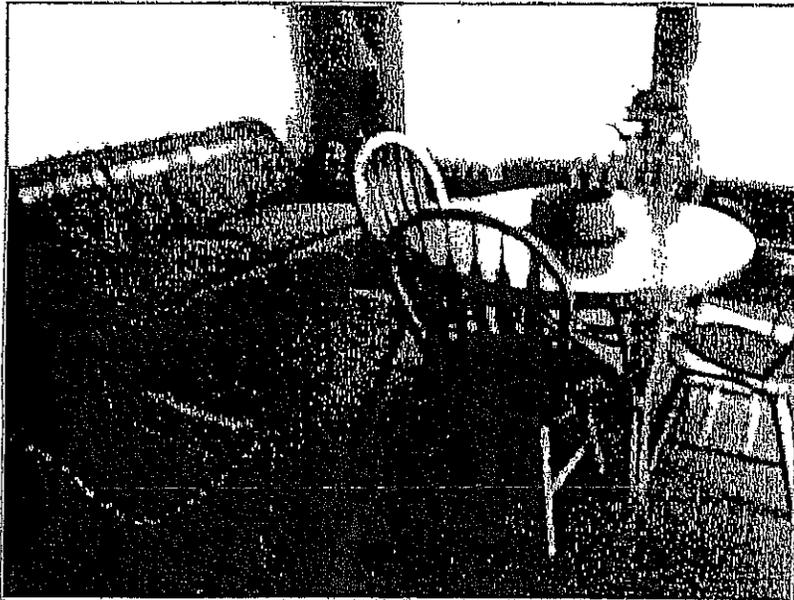
15 Hedge Rd
Sales Price asset valuation
G.L.A. 1,533
Tot. Rooms 6
Tot. Bedrms. 3
Tot. Bathrms. 1.5
Location Average
View Mixed res&comm NE
Site 97,973
Quality Average
Age 59



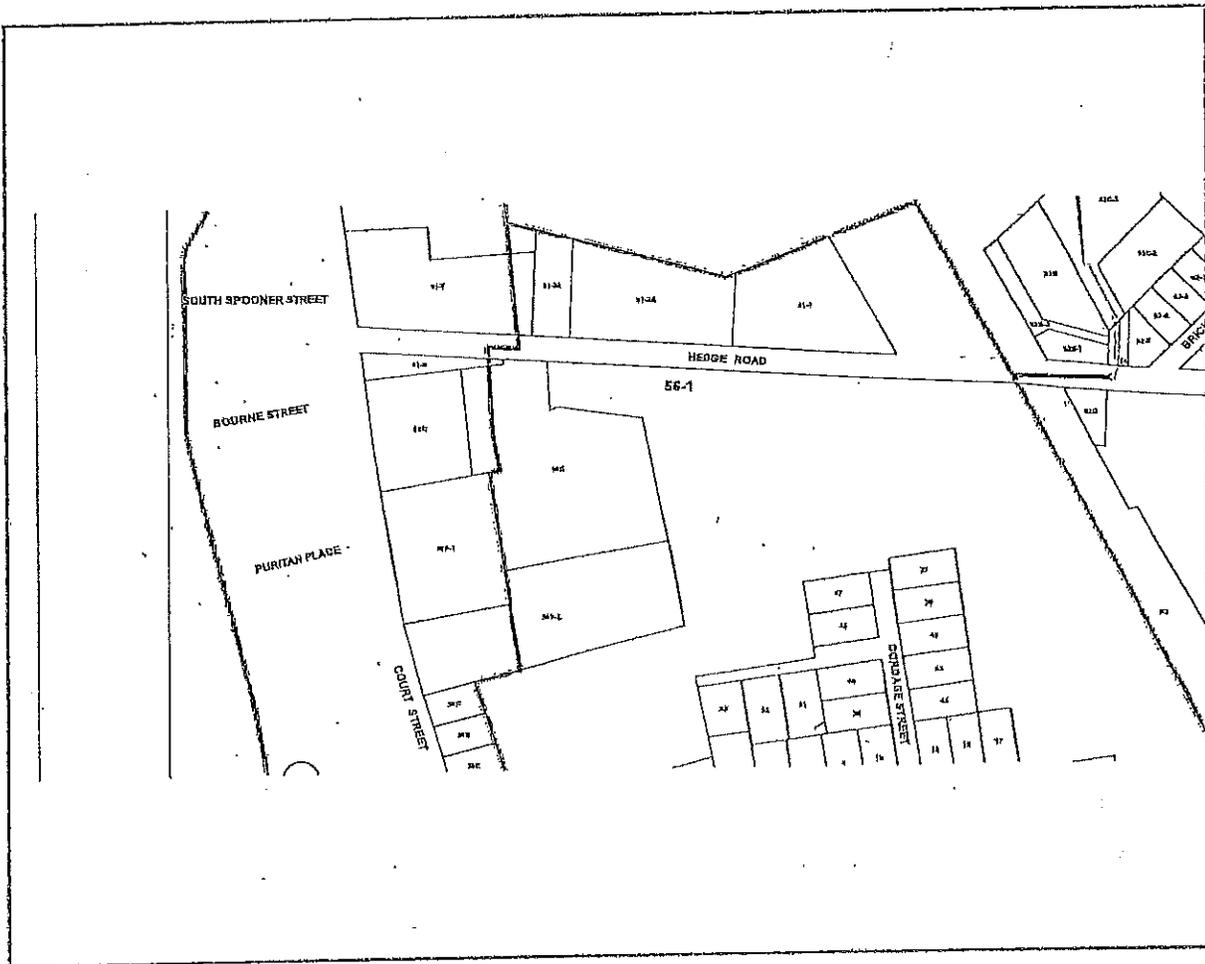
Subject Interior



Subject Interior



assessors map



FLOOD MAP

Paul J. Sgarzi Revocable Trust			
Address	15 Hedge Rd	County Plymouth	State MA Zip Code 02360
Plymouth			
Agent	Anthony F. Provenzano Jr.		

Prepared for Falconer Appraisal Services Inc
 15 Hedge Rd
 Plymouth, MA 02360

InterFlood by a la mode



MAP DATA
 FEMA Special Flood Hazard Area; No
 Map Number: 25023C0356J
 Zone: X
 Map Date: July 17, 2012
 FIPS: 25023

MAP LEGEND

Areas Inundated by 500-year flooding	Protected Areas
Areas Inundated by 100-year flooding	Floodway
Velocity Hazard	Subject Area

Powered by [PrintLogics](#)

Paul J. Sgarzi Revocable Trust

Address 15 Hedge Rd

Plymouth

County Plymouth

State MA

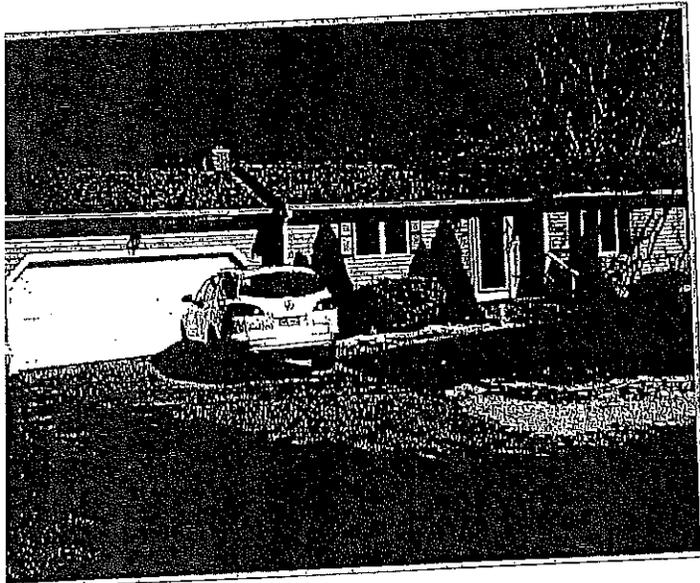
Zip Code 02360

Client Anthony F. Provenzano Jr.



Comparable 1

50 Braunecker Rd
Prox. to Subject 0.86 miles S
Sales Price 364,900
Gross Living Area 1,470
Total Rooms 6
Total Bedrooms 3
Total Bathrooms 2
Location Average
View Residential NBHD
Site 23,478
Quality Average
Age 18



Comparable 2

30 Grandview Dr
Prox. to Subject 1.14 miles S
Sales Price 384,900
Gross Living Area 1,368
Total Rooms 6
Total Bedrooms 3
Total Bathrooms 1.5
Location Average
View NBHD&Dwater
Site 15,682
Quality Average
Age 55



Comparable 3

32 Jaye St
Prox. to Subject 3.01 miles SW
Sales Price 342,000
Gross Living Area 1,104
Total Rooms 6
Total Bedrooms 3
Total Bathrooms 2
Location Average
View Residential NBHD
Site 23,921
Quality Average
Age 43

LOCATION map

Paul J. Sgarzi Revocable Trust

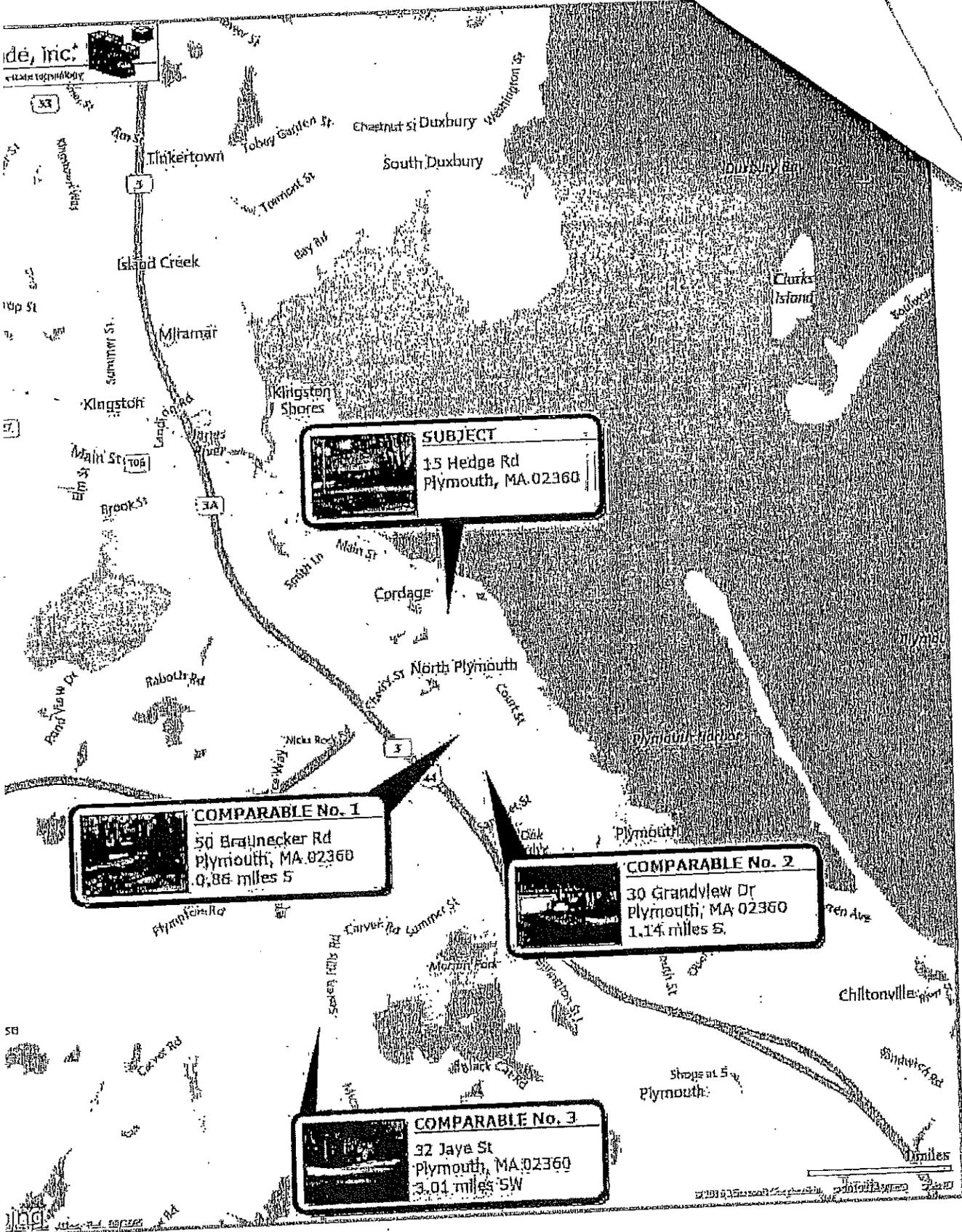
15 Hedge Rd

Plymouth

Anthony F. Provenzano Jr.

County Plymouth

State



SUBJECT

 15 Hedge Rd
 Plymouth, MA 02360

COMPARABLE No. 1

 50 Braunecker Rd
 Plymouth, MA 02360
 0.86 miles S

COMPARABLE No. 2

 30 Grandview Dr
 Plymouth, MA 02360
 1.14 miles S

COMPARABLE No. 3

 32 Jaye St
 Plymouth, MA 02360
 3.01 miles SW

1 mile

Supplemental Addendum

File No. 02262016-Sgarzi

Borrower	Paul J. Sgarzi Revocable Trust				
Property Address	15 Hedge Rd				
City	County	State	Zip Code		
Plymouth	Plymouth	MA	02360		
Lender/Client	Anthony F. Provenzano Jr.				

• GP Restricted : Market - Subject Market Area and Marketability

The market value in the area is stable, with supply remaining relatively the same, and values remaining stable. Interest rates are low and points typically range from 0-3 points. At this time, there is very little sales concessions or special financing. Days on the market have remained relatively low. This neighborhood is composed of similar housing with respect to design and quality of workmanship and materials. The subject's market area is considered typical in terms of income levels, demographics, marketability, and appeal for this area.

Assumptions & Limiting Conditions

File No.: 02262016-Sgarzi

Property Address: 15 Hedge Rd

City: Plymouth

State: MA

Zip Code: 02360

Client: Anthony F. Provenzano Jr.

Address: Suite 124, One Village Green North, Plymouth, MA 02360

Appraiser: Paul Falconer

Address: Falconer Appraisal Services, Inc., 23 Pinewood Road, Plymouth, MA 02360

STATEMENT OF ASSUMPTIONS & LIMITING CONDITIONS

The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it. The appraiser assumes that the title is good and marketable and, therefore, will not render any opinions about the title. The property is appraised on the basis of it being under responsible ownership.

The appraiser may have provided a sketch in the appraisal report to show approximate dimensions of the improvements, and any such sketch is included only to assist the reader of the report in visualizing the property and understanding the appraiser's determination of its size. Unless otherwise indicated, a Land Survey was not performed.

If so indicated, the appraiser has examined the available flood maps that are provided by the Federal Emergency Management Agency (or other available sources) and has noted in the appraisal report whether the subject site is located in an Identified Special Flood Hazard Area. Because the appraiser is not a surveyor, he or she makes no guarantees, express or implied, regarding this determination.

The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand.

If the cost approach is included in this appraisal, the appraiser has estimated the value of the land in the cost approach at its highest and best use, and the improvements at their contributory value. These separate valuations of the land and improvements must not be used in conjunction with any other appraisal and are invalid if they are so used. Unless otherwise specifically indicated, the cost approach value is not an insurance value, and should not be used as such.

The appraiser has noted in the appraisal report any adverse conditions (including, but not limited to, needed repairs, depreciation, the presence of hazardous wastes, toxic substances, etc.) observed during the inspection of the subject property, or that he or she became aware of during the normal research involved in performing the appraisal. Unless otherwise stated in the appraisal report, the appraiser has no knowledge of any hidden or unapparent conditions of the property, or adverse environmental conditions (including, but not limited to, the presence of hazardous wastes, toxic substances, etc.) that would make the property more or less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied, regarding the condition of the property. The appraiser will not be responsible for any hidden conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because the appraiser is not an expert in the field of environmental hazards, the appraisal report must not be considered as an environmental assessment of the property.

The appraiser obtained the information, estimates, and opinions that were expressed in the appraisal report from sources that he or she considers to be reliable and believes them to be true and correct. The appraiser does not assume responsibility for the accuracy of such items that were furnished by other parties.

The appraiser will not disclose the contents of the appraisal report except as provided for in the Uniform Standards of Professional Appraisal Practice, and any applicable federal, state or local laws.

If this appraisal is indicated as subject to satisfactory completion, repairs, or alterations, the appraiser has based his or her appraisal report and valuation conclusion on the assumption that completion of the improvements will be performed in a workmanlike manner.

An appraiser's client is the party (or parties) who engage an appraiser in a specific assignment. Any other party acquiring this report from the client does not become a party to the appraiser-client relationship. Any persons receiving this appraisal report because of disclosure requirements applicable to the appraiser's client do not become intended users of this report unless specifically identified by the client at the time of the assignment.

The appraiser's written consent and approval must be obtained before this appraisal report can be conveyed by anyone to the public, through advertising, public relations, news, sales, or by means of any other media, or by its inclusion in a private or public database.

An appraisal of real property is not a 'home inspection' and should not be construed as such. As part of the valuation process, the appraiser performs a non-invasive visual inventory that is not intended to reveal defects or detrimental conditions that are not readily apparent. The presence of such conditions or defects could adversely affect the appraiser's opinion of value. Clients with concerns about such potential negative factors are encouraged to engage the appropriate type of expert to investigate.

Definitions & Scope of Work

Property Address: 15 Hedge Rd	City: Plymouth	State: MA	Zip Code: 02360
Client: Anthony F. Provenzano Jr.	Address: Suite 124, One Village Green North, Plymouth, MA 02360		
Appraiser: Paul Falconer	Address: Falconer Appraisal Services, Inc., 23 Pinewood Road, Plymouth, MA 02360		

DEFINITION OF MARKET VALUE *:

Market value means the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- 1. Buyer and seller are typically motivated;
- 2. Both parties are well informed or well advised and acting in what they consider their own best interests;
- 3. A reasonable time is allowed for exposure in the open market;
- 4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- 5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

* This definition is from regulations published by federal regulatory agencies pursuant to Title XI of the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989 between July 5, 1990, and August 24, 1990, by the Federal Reserve System (FRS), National Credit Union Administration (NCUA), Federal Deposit Insurance Corporation (FDIC), the Office of Thrift Supervision (OTS), and the Office of Comptroller of the Currency (OCC). This definition is also referenced in regulations jointly published by the OCC, OTS, FRB, and FDIC on June 7, 1994, and in the Interagency Appraisal and Evaluation Guidelines, dated October 27, 1994.

The Scope of Work is the type and extent of research and analyses performed in an appraisal assignment that is required to produce credible assignment results, given the nature of the appraisal problem, the specific requirements of the intended user(s) and the intended use of the appraisal report. Reliance upon this report, regardless of how acquired, by any party or for any use, other than those specified in this report by the Appraiser, is prohibited. The Opinion of Value that is the conclusion of this report is credible only within the context of the Scope of Work, Effective Date, the Date of Report, the Intended User(s), the Intended Use, the stated Assumptions and Limiting Conditions, any Hypothetical Conditions and/or Extraordinary Assumptions, and the Type of Value, as defined herein. The appraiser, appraisal firm, and related parties assume no obligation, liability, or accountability, and will not be responsible for any unauthorized use of this report or its conclusions.

Under USPAP Standards Rule 2-2(b), this is a Restricted Appraisal Report, and is intended only for the sole use of the named client. There are no other intended users. The client must clearly understand that the appraiser's opinions and conclusions may not be understood properly without additional information in the appraiser's work file.

In developing this appraisal, the appraiser has incorporated only the Sales Comparison Approach. The appraiser has excluded the Cost and Income approaches to Value, due to being inapplicable given the limited scope of the appraisal. The appraiser has determined that this appraisal process is not so limited that the results of the assignment are no longer credible, and the client agrees that the limited scope of analysis is appropriate given the intended use.

Additional Comments (Scope of Work, Extraordinary Assumptions, Hypothetical Conditions, etc.):

Certifications

001-Provenzano-SRT

File No.: 02262016-Sgarzi

Property Address: 15 Hedge Rd City: Plymouth State: MA Zip Code: 02360
 Client: Anthony F. Provenzano Jr. Address: Suite 124, One Village Green North, Plymouth, MA 02360
 Appraiser: Paul Falconer Address: Falconer Appraisal Services, Inc., 23 Pinewood Road, Plymouth, MA 02360

APPRAISER'S CERTIFICATION

I certify that, to the best of my knowledge and belief:

The statements of fact contained in this report are true and correct.

The credibility of this report, for the stated use by the stated user(s), of the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.

I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.

Unless otherwise indicated, I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.

I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.

My engagement in this assignment was not contingent upon developing or reporting predetermined results.

My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction of value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice that were in effect at the time this report was prepared.

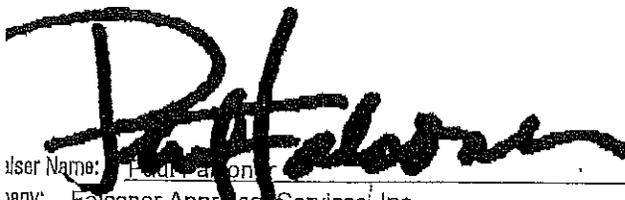
I did not base, either partially or completely, my analysis and/or the opinion of value in the appraisal report on the race, color, religion, sex, handicap, familial status, or national origin of either the prospective owners or occupants of the subject property, or of the present owners or occupants of the properties in the vicinity of the subject property.

Unless otherwise indicated, I have made a personal inspection of the property that is the subject of this report.

Unless otherwise indicated, no one provided significant real property appraisal assistance to the person(s) signing this certification.

Additional Certifications:

Contact: Anthony Provenzano Client Name: Anthony F. Provenzano Jr.
 Email: afp@provenzanolaw.com Address: Suite 124, One Village Green North, Plymouth, MA 02360

APRAISER

 Appraiser Name: Paul Falconer
 Company: Falconer Appraisal Services, Inc.
 Phone: (508) 747-6101 Fax: (508) 747-6102
 Email: FalconerAppraisal@Verizon.net
 Report Signed: 03/03/2016
 License or Certification #: MCGREA 530 State: MA
 Expiration Date of License or Certification: 01/11/2018
 Inspection of Subject: Interior & Exterior Exterior Only None
 Date of Inspection: 02/26/2016

SUPERVISORY APPRAISER (If required)
 or CO-APPRAISER (If applicable)
 Supervisory or Co-Appraiser Name: _____
 Company: _____
 Phone: _____ Fax: _____
 E-Mail: _____
 Date Report Signed: _____
 License or Certification #: _____ State: _____
 Designation: _____
 Expiration Date of License or Certification: _____
 Inspection of Subject: Interior & Exterior Exterior Only None
 Date of Inspection: _____

Town of Plymouth
Finance Department

TO: Board of Selectmen and Advisory & Finance Committee
 FROM: Lynne A. Barrett, Director of Finance
 RE: **2016 Fall Town Meeting - Article 13 - Solar PILOTS**
 DATE: September 9, 2016

Article 13 of the Spring 2013 Special Town Meeting authorized the Board of Selectmen to negotiate one or more agreements for payments-in-lieu-of-taxes (PILOT) pursuant to the provisions of M.G.L. Chapter 59, Section 38H(b), and Chapter 164, Section 1 for property relating to renewable energy generation facilities. The town has since entered into several PILOT agreements. Because of the state statute, communities are allowed to tax these facilities through a negotiated PILOT agreement.

A PILOT agreement can be beneficial to both the developer and the Town; some of the advantages are but not limited to:

Developer	Town
1. Set stream of payments known at the beginning of the project for cost evaluation or financing.	1. Set stream of payments for tax billing purposes based on an initial evaluation of cost for appraisal versus on an annual basis. Lowers our transaction cost by avoiding a 3 year certification / valuation appraisal.
	2. Because the facility is considered personal property the town could not perfect a lien like we can with real estate if it went unpaid. We would seek remedy under a violation of the contract terms.
	3. Removes the risk of disagreement of the value and potential for requests for abatement.
	4. Negotiated PILOTS with solar developers prompt development of renewable energy in the Town of Plymouth.

The following projects have submitted their required documentation to the Director of Assessing for review. The income approach was used to value the rates for the PILOTS. The terms of the agreements will be for 20 years and will include an annual escalator of 2.5%.

LLC (or its affiliates, successors, or assignees)	Type & Size (more or less)	Location	Fee
A Renewable Energy Development Partners	Ground 1.0	Map 97 Lot 10-2 Adjacent to airport	\$13,500 per MWAC
B Renewable Energy Development Partners	Ground 0.5	Map 99 Lot 1-C Off Federal Furnace Road	\$13,500 per MWAC
C <i>Withdrawn</i>			
D 46 Shops Plymouth Solar	Roof 1.11	Map 83 Lot 3C-3 46 Shops at 5 Way	\$12,500 per MWDC
E 978 Solar Development	Ground 1.338	Map 114 Lot 5 9 River Run Way	\$12,500 per MWDC
F 978 Solar Development	Ground 1.338	Map 114 Lots 7-2 & 7-8 5 River Run Way	\$12,500 per MWDC
G 978 Solar Development	Ground 2.77	Map 115 Lot A-1 3 River Run Way	\$12,500 per MWDC
H 978 Solar Development	Ground 1.32	Map 90 Lot 17-5 57 Black Cat Road	\$12,500 per MWDC

A vote of Town Meeting is required to adopt the PILOT agreements. Your consideration and endorsement of this PILOT is appreciated. Thank you for your attention.

(A)

(B)

Renewable Energy Development Partners

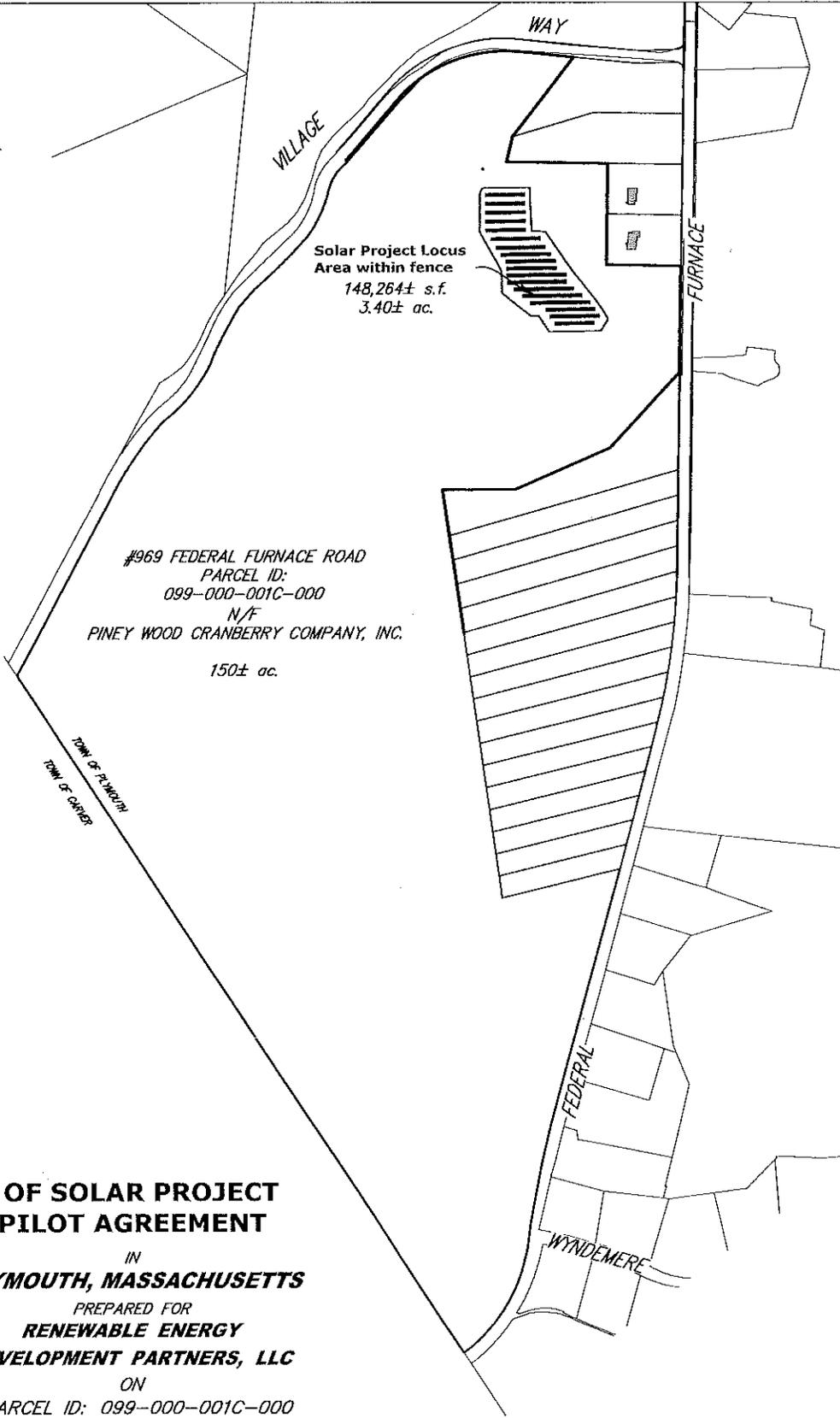
Map 97 Lot 10-2
Adjacent to airport

PROPOSED PILOT	
MW AC	1.0
\$/MW	\$13,500
2.5% escalator	
PILOT	
Year 1	13,500
Year 2	13,838
Year 3	14,183
Year 4	14,538
Year 5	14,901
Year 6	15,274
Year 7	15,656
Year 8	16,047
Year 9	16,448
Year 10	16,860
Year 11	17,281
Year 12	17,713
Year 13	18,156
Year 14	18,610
Year 15	19,075
Year 16	19,552
Year 17	20,041
Year 18	20,542
Year 19	21,055
Year 20	21,582
Total	344,853

Map 99 Lot 1C
Off Federal Furnace Road

PROPOSED PILOT	
MW AC	0.5
\$/MW	\$13,500
2.5% escalator	
PILOT	
Year 1	6,750
Year 2	6,919
Year 3	7,092
Year 4	7,269
Year 5	7,451
Year 6	7,637
Year 7	7,828
Year 8	8,024
Year 9	8,224
Year 10	8,430
Year 11	8,641
Year 12	8,857
Year 13	9,078
Year 14	9,305
Year 15	9,538
Year 16	9,776
Year 17	10,020
Year 18	10,271
Year 19	10,528
Year 20	10,791
Total	172,426

(B)



Solar Project Locus
Area within fence
148,264± s.f.
3.40± ac.

#969 FEDERAL FURNACE ROAD
PARCEL ID:
099-000-001C-000
N/F
PINEY WOOD CRANBERRY COMPANY, INC.
150± ac.

TOWN OF PLUMHOOD
TOWN OF GAYLOR

**PLAN OF SOLAR PROJECT
FOR PILOT AGREEMENT**

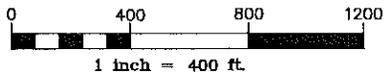
**IN
PLYMOUTH, MASSACHUSETTS**

PREPARED FOR
**RENEWABLE ENERGY
DEVELOPMENT PARTNERS, LLC**

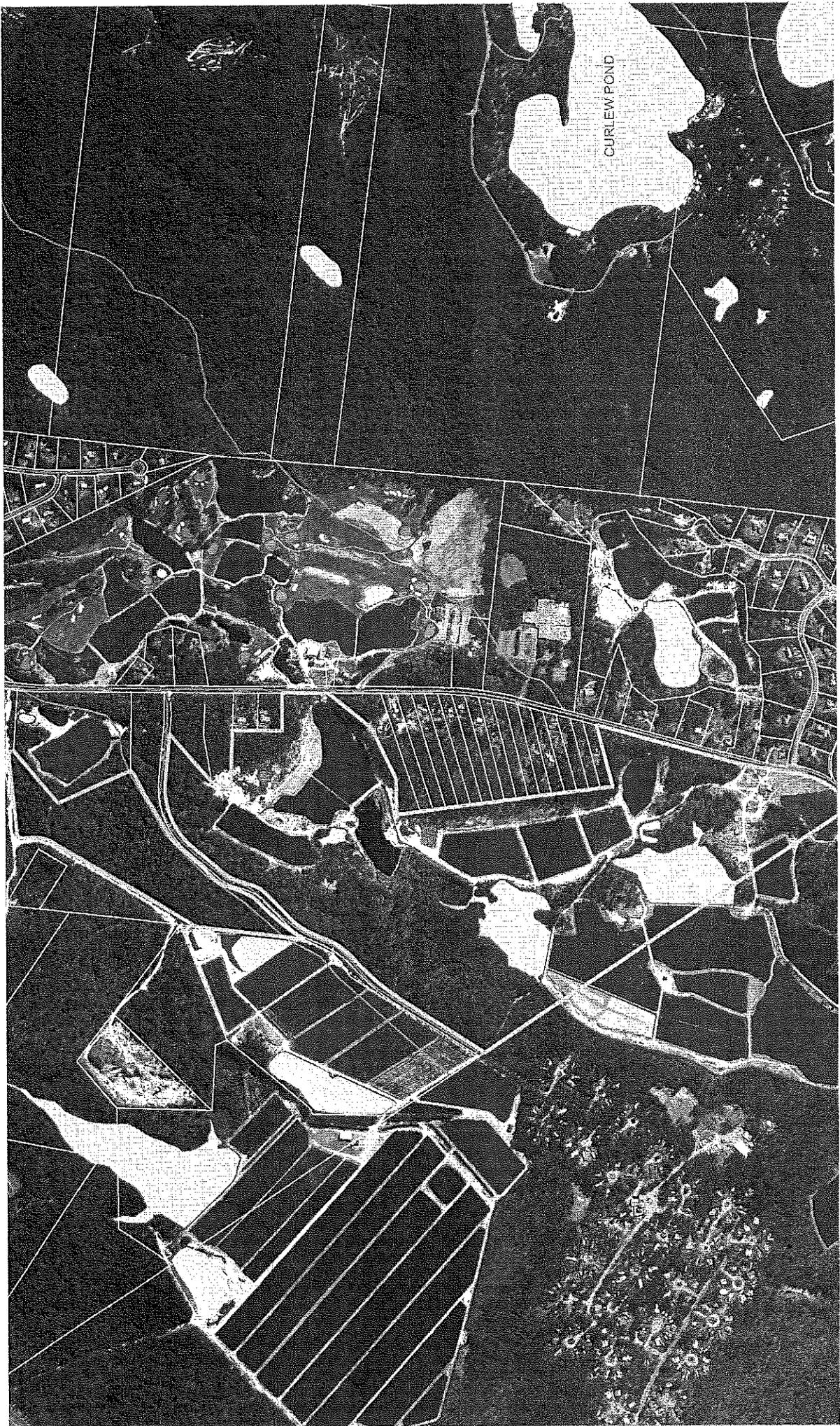
ON
PARCEL ID: 099-000-001C-000
PINEY WOOD CRANBERRY COMPANY, INC.
OFF FEDERAL FURNACE ROAD

SCALE: 1"=400' AUGUST 5, 2016
FLAHERTY & STEFANI, INC.

67 SAMOSET STREET
PLYMOUTH, MASSACHUSETTS



A+B



②
Withdrawn

①

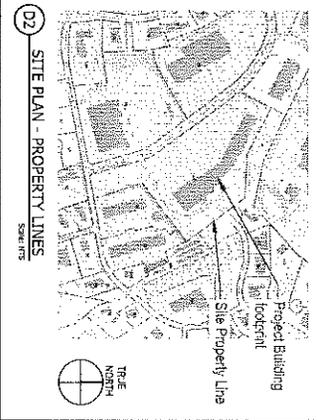
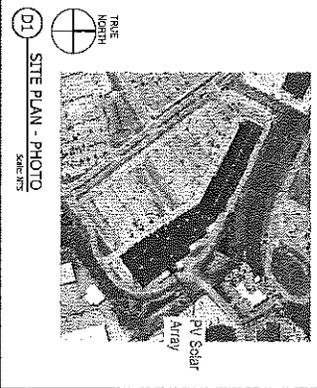
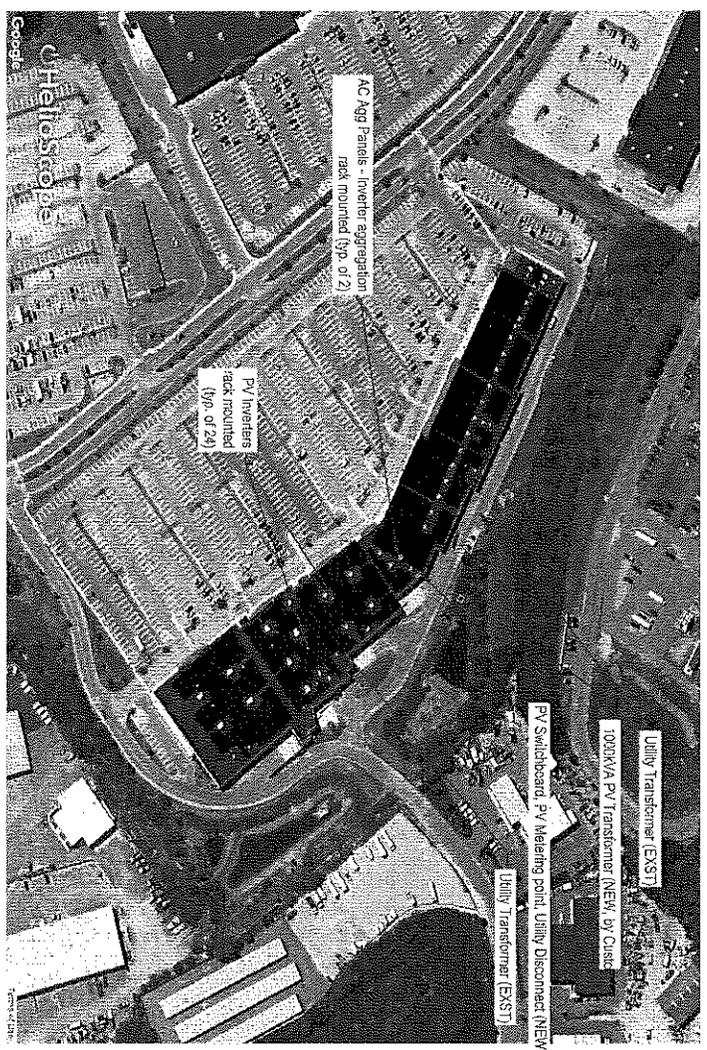
Shops at 5 Way
.48 Shops Plymouth Solar, LLC
083-000-003C-003

PROPOSED PILOT	
MW DC	1.11
\$/MW	\$12,500
2.5% escalator	
PILOT	
Year 1	13,875
Year 2	14,222
Year 3	14,577
Year 4	14,942
Year 5	15,315
Year 6	15,698
Year 7	16,091
Year 8	16,493
Year 9	16,905
Year 10	17,328
Year 11	17,761
Year 12	18,205
Year 13	18,660
Year 14	19,127
Year 15	19,605
Year 16	20,095
Year 17	20,598
Year 18	21,112
Year 19	21,640
Year 20	22,181
Total	354,432

D

A1 SITE PLAN
Scale: 1/8" = 1'-0"

1 2 3 4 5 6



PV SOLAR SYSTEM SUMMARY

TOTAL MODULE COUNT (MODULE TYPE, # MODULE NUMBER / SITE DC RATING)	186,504 / 18.5 MW
TOTAL STRINGS OF MODULES PER STRING	186 strings of 19
PV ARRAY RACKING STYLE (MANUFACTURER AND MODEL)	Ballasted Steel Mount / TBD
TOTAL SITE DC SYSTEM SIZE	11,131 kW DC / 440 kW AC / 1,285:1
TOTAL INVERTER COUNT (INVERTER MAKE AND MODEL)	93 Inverters / PV 80TL
INVERTER DC EFFICIENCY	98.5%
SITE LATITUDE	41° 51' 14.77" N
ARRAY AZIMUTH / MODULE TILT	287° / 28.5° / 23.23° / 19.21°
APPROXIMATE DESIGN TEMPERATURE EXTREME MIN / 2% HIGH	-18°C / 7°C
INTERCONNECTION VOLTAGE	480 VAC 3Ø
INTERCONNECTION CABLE TYPE	2500 (100% Ruled)
INTERCONNECTION TYPE	Non-Swaps

For Interconnection
Not For Construction

- GENERAL SHEET NOTES**
1. ALL DIMENSIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED.
 2. ROOF MOUNTED SOLAR EQUIPMENT (INVERTERS AND DISCONNECTS) WILL BE ACCESSIBLE BY THE EXISTING BUILDING'S ROOF HATCHES OR BY LADDER.
 3. CONDUIT ON THE ROOF WILL BE SUPPORTED BY A SUPPORT RAIL OR ASSSEMBLY IN A SLOTTED BLOCK OR EQUIVALENT. ADDITIONAL BRACING MAY BE REQUIRED TO SUPPORT CABLE TRAYS AND VERTICAL CONDUITS.
 4. ALL CONDUIT SHALL BE MOUNTED AT A MINIMUM DISTANCE OF 3/4" OFF THE ROOF SURFACE. ANY STRAIGHT CONDUIT RUN GREATER THAN 27 FEET SHALL HAVE A ROOF EXPANSION JOINT. ALL EXPANSION JOINTS IN THE CONDUIT RUN SHALL BE INSTALLED AT BUILDING EXPANSION JOINTS.
 5. PULL BOXES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING NEC ARTICLES: 442.28 FOR IBC, 344.28 FOR NEC, 342.28 FOR IFC, 342.28 FOR HFC, AND 342.28 FOR EFC CONDUIT.

SHEET KEYNOTES

D

CLIENT:	CLEAN FOOTPRINT
PROJECT:	46 SHOPS AT 5 WAY - EAST SOLAR PROJECT 1113.21 KW DC SIC RATING
PROJECT ADDRESS:	46 SHOPS AT 5 WAY PLYMOUTH, MA 02360
PROJECT NUMBER:	W1101
DATE:	12/17/15
SCALE:	1/8" = 1'-0"
DRAWN BY:	JW
CHECKED BY:	JW
DATE:	12/17/15

CLEAN FOOTPRINT
46 SHOPS AT 5 WAY - EAST SOLAR PROJECT
1113.21 KW DC SIC RATING
46 SHOPS AT 5 WAY
PLYMOUTH, MA 02360

CLEAN FOOTPRINT
Clean Footprint
405 Atlantic Rd Suite 5115
Cape Cod, MA 02532
Tel: 508.325.4147
www.clean-footprint.com

A B C D E

(E)

Redbrook Solar Array 1 - 9 River Run Way
978 Solar Dev LLC
114-000-005-000

PROPOSED PILOT	
MW DC	1,338
\$/MW	\$12,500
2.5% escalator	
	PILOT
Year 1	16,725
Year 2	17,143
Year 3	17,572
Year 4	18,011
Year 5	18,461
Year 6	18,923
Year 7	19,396
Year 8	19,881
Year 9	20,378
Year 10	20,887
Year 11	21,409
Year 12	21,945
Year 13	22,493
Year 14	23,056
Year 15	23,632
Year 16	24,223
Year 17	24,828
Year 18	25,449
Year 19	26,085
Year 20	26,737
Total	427,234

(F)

Redbrook Solar Array 2 - 5 River Run Way
978 Solar Development LLC
Map 114 Lots 7 + 8

PROPOSED PILOT	
MW AC	1,338
\$/MW	\$12,500
2.5% escalator	
	PILOT
Year 1	16,725
Year 2	17,143
Year 3	17,572
Year 4	18,011
Year 5	18,461
Year 6	18,923
Year 7	19,396
Year 8	19,881
Year 9	20,378
Year 10	20,887
Year 11	21,409
Year 12	21,945
Year 13	22,493
Year 14	23,056
Year 15	23,632
Year 16	24,223
Year 17	24,828
Year 18	25,449
Year 19	26,085
Year 20	26,737
Total	427,234

④

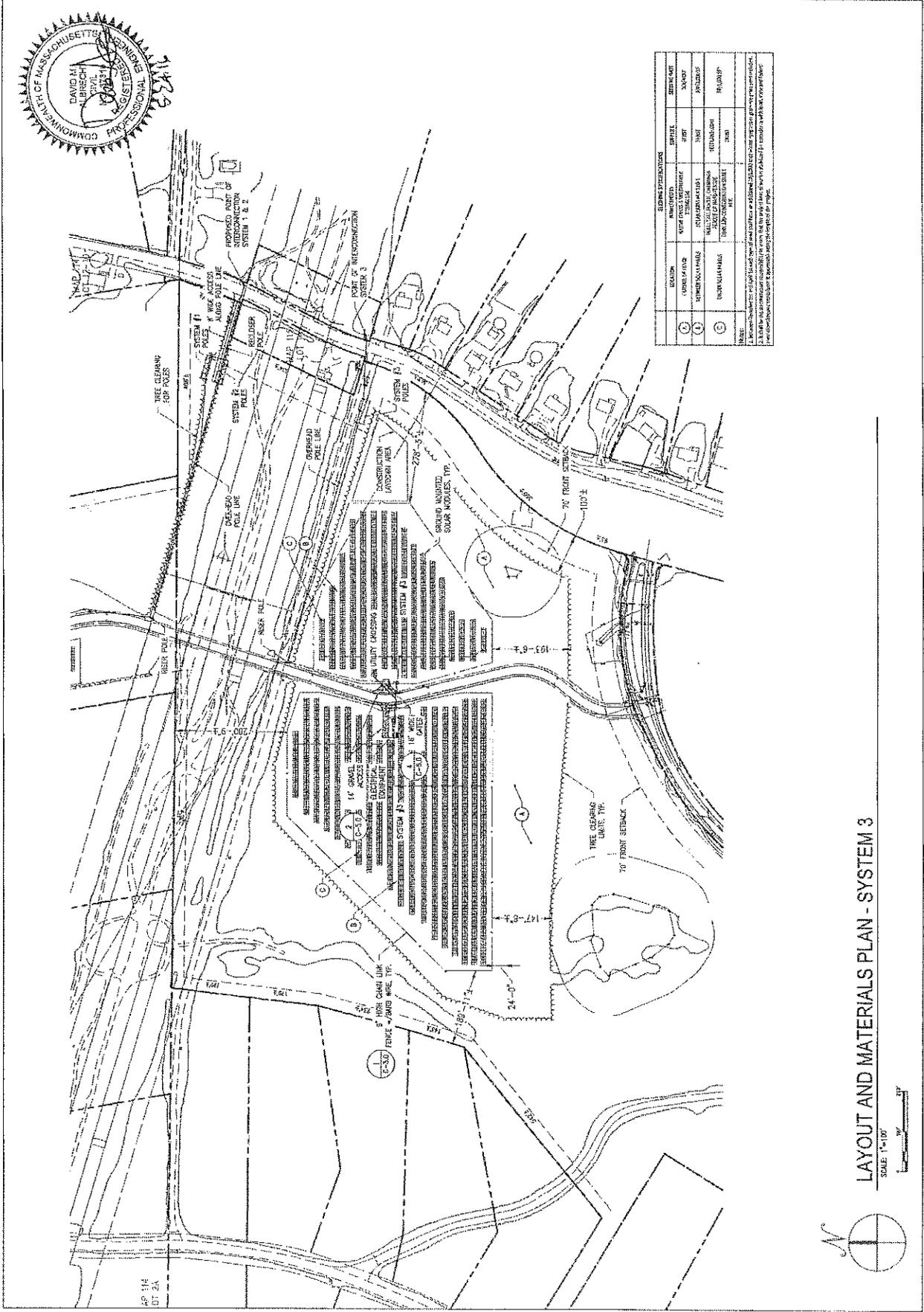
Redbrook Solar Array 3 - 3 River Run Way
978 Solar Dev LLC
115-000-000A-001
ADM

PROPOSED PILOT	
MW DC	2.77
\$/MW	\$12,500
2.5% escalator	
	PILOT
Year 1	34,625
Year 2	35,491
Year 3	36,378
Year 4	37,287
Year 5	38,220
Year 6	39,175
Year 7	40,154
Year 8	41,158
Year 9	42,187
Year 10	43,242
Year 11	44,323
Year 12	45,431
Year 13	46,567
Year 14	47,731
Year 15	48,924
Year 16	50,147
Year 17	51,401
Year 18	52,686
Year 19	54,003
Year 20	55,353
Total	884,484

④

57 Black Cat Road
Borrego Solar
978 Solar Development LLC
Map 90 lot 17-5

PROPOSED PILOT	
MW DC	1.32
\$/MW	\$12,500
2.5% escalator	
	PILOT
Year 1	16,250
Year 2	16,656
Year 3	17,073
Year 4	17,499
Year 5	17,937
Year 6	18,385
Year 7	18,845
Year 8	19,316
Year 9	19,799
Year 10	20,294
Year 11	20,801
Year 12	21,321
Year 13	21,854
Year 14	22,401
Year 15	22,961
Year 16	23,535
Year 17	24,123
Year 18	24,726
Year 19	25,344
Year 20	25,978
Total	415,101



6

6

WAREHAM ROAD

System 1

114-000-005-000



114-000-007-002

System 2



System 2

114-000-008-000

BOURNE ROAD

System 3



115-000-000A-001

RIVER RUN WAY

LEEWARD WAY

HALYARD F

SUNNAKER DRIVE

MOORING CIRCLE

E-6



Valuation pages attached.

Bureau of Local Assessment
Informational Guideline Release (IGR) No. 98-403
September 1998

VALUATION AND TAXATION OF ELECTRIC GENERATING PROPERTY

**Chapter 164 of the Acts of 1997
(Amending G.L. Ch. 59 §5(16)(3) and Adding G.L. Ch. 59 §38H)**

This Informational Guideline Release (IGR) provides assessors and other local officials with information about the valuation and taxation of electric generating property as a result of the 1997 Electric Utility Restructuring Act.

Questions should be addressed to the Bureau of Local Assessment.

Topical Index Key :

Assessment Administration
Personal Property
Valuation

Distribution :

Assessors
Mayors/Selectmen
City/Town Councils

V. VALUATION

A. Data Collection

As of the assessment date, the assessors should collect the following data and information for each generating plant.

1. Physical Plant

Information about the physical plant may be obtained from the Form of List submitted by the owner. The list should include all property including property donated or given to the owner (Contribution in Aid of Construction), Construction Work in Progress (CWIP) and other unallocated plant. Descriptions and plans should be requested and obtained if the information on the list is insufficient to develop a detailed physical inventory of major plant components.

2. Plant Investment

Information about the dollars invested in the physical plant may be obtained by requesting the original and net book costs of the plant by year invested. This should include all direct and indirect costs associated with the plant. For plants existing before restructuring, the historical original cost, accumulated depreciation and net book cost will be found in the utility company FERC and DTE records. The new book cost of existing plants acquired in a deregulated market, as well as the original cost of new plants, may be obtained by requesting a return under G.L. Ch. 59 §§38D and 38F.

3. Plant Income and Expenses

Information about historic, current and future projected plant income and expenses should also be obtained by requesting a return under G.L. Ch. 59 §§38D and 38F. This information includes, but is not limited to:

- Annual net generation exclusive of plant use
- Annual availability including planned and unplanned outages (separately stated)
- Annual fuel, operating and maintenance costs
- Annual administrative and general costs
- Annual taxes
- Annual net additions to plant in service
- Annual working capital reserves
- Dedicated transmission expenses associated with the plant
- Avoided cost rates
- Fuel purchase and handling contracts
- Contracts or solicitations for purchase of capacity from plant.

In addition, information should be requested about the existence of any factors that will impair the operation or cost competitiveness of the plant and any planned capital improvements.

B. Valuation Approaches

Generating plants must now be valued using the same accepted appraisal methods: cost, market and income, that are used for other commercial and industrial properties subject to market forces.

Land at generating plant sites should be treated as industrial land and valued in the same manner as other such land.

1. Cost Approach

a. New Book Cost

For existing plants acquired by a generation company, the new book cost allocated by the company to the sale and acquisition may be an indicator of value and present cost to acquire the plant in a deregulated environment.

b. Original Cost

The original cost of the plant may be used where the plant is relatively new and any depreciation has not exceeded the appreciation of costs in the geographical area.

c. Reproduction Cost New Less Depreciation

The cost to reproduce the plant may be determined from various engineering cost estimating disciplines based on plans and specifications obtained from the facilities. Alternatively, the original costs of the plant may be trended to the present with generally accepted manuals or indexes such as the Handy-Whitman Index of Public Utility Construction Costs.

All forms of depreciation must be considered and allowances made not only for physical depreciation, but also technological and market changes that affect existing plants.

d. Replacement Cost New Less Depreciation

Replacement costs developed for an existing facility should consider the plant's intended use of duty cycle, fuel availability, transmission capacity and environmental limitations. The cost analysis will also require the engineering judgment of how new technology affects the existing property. The analysis should recognize that new technology or construction techniques may be more or less expensive than the existing facilities due to the impact of various factors.

All forms of depreciation must be considered and appropriate allowances made for physical depreciation and technological and market changes.

2. Market Approach

A comparable sales approach may be used. Generating plant sales should be analyzed on a price per unit of capacity or generation basis. Historical, annual plant generation and capacity factors are indicators of the plant's cost competitiveness and should be analyzed to determine the plant's ranking within the marketplace. When comparing sales to the subject plant, any non-cash considerations that impact value should be identified and appropriate adjustments made. Additional adjustments may be required to take into consideration the variability of generating sources and fuel types.

3. Income Approach

Indicators of value may be developed either by direct capitalization (*i.e.*, using a single year's income) or yield capitalization (*i.e.*, using income over a period of time including reversion proceeds).

The gross income developed for the facility from the current wholesale market should consider the price of capacity, installed capacity, operable capability, 10 minute spinning reserve, 10-minute non-spinning reserve, 30-minute reserve and automatic generation control. Prices for each may vary, depending on the type of generating unit and time of day and year. When analyzing expenses, consideration should be given to the historic cost of operating the facility and future fuel prices.

Business income should be isolated from the gross income to determine the income attributable to the property. Property related expenses to be considered include, but are not limited to, site staff operations, site management, current and future fuel type, routine annual maintenance, operational costs such as chemicals, insurance, various regulatory and license fees, allowance for property taxes (as an expense or in the capitalization rate) and capital reserves and replacements for adequate project life.

FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
64,226.00	65,831.00	67,477.00	69,164.00	70,893.00	72,666.00	74,482.00	76,344.00	78,253.00	80,209.00	82,214.00	84,270.00	86,377.00
58,152.09	59,605.90	61,096.04	62,623.44	64,189.03	65,793.76	67,438.60	69,124.57	70,852.68	72,624.00	74,439.60	76,300.59	78,208.10
114,800.00	117,670.00	120,612.00	123,627.00	126,718.00	129,886.00	133,133.00	136,461.00	139,873.00	143,369.00	146,954.00	150,628.00	154,393.00
6,406.00	6,566.00	6,731.00	6,899.00	7,071.00	7,248.00	7,429.00	7,615.00	7,805.00	8,001.00	8,201.00	8,406.00	8,616.00
6,500.00	6,663.00	6,829.00	7,000.00	7,175.00	7,354.00	7,538.00	7,726.00	7,920.00	8,118.00	8,321.00	8,529.00	8,742.00
13,000.00	13,325.00	13,658.00	14,000.00	14,350.00	14,708.00	15,076.00	15,453.00	15,839.00	16,235.00	16,641.00	17,057.00	17,484.00
13,000.00	13,325.00	13,658.00	14,000.00	14,350.00	14,708.00	15,076.00	15,453.00	15,839.00	16,235.00	16,641.00	17,057.00	17,484.00
13,500.00	13,838.00	14,183.00	14,538.00	14,901.00	15,274.00	15,656.00	16,047.00	16,448.00	16,860.00	17,281.00	17,713.00	18,156.00
6,750.00	6,919.00	7,092.00	7,269.00	7,451.00	7,637.00	7,828.00	8,024.00	8,224.00	8,430.00	8,641.00	8,857.00	9,078.00
13,875.00	14,222.00	14,577.00	14,942.00	15,315.00	15,698.00	16,091.00	16,493.00	16,905.00	17,328.00	17,761.00	18,205.00	18,660.00
16,725.00	17,143.00	17,572.00	18,011.00	18,461.00	18,923.00	19,396.00	19,881.00	20,378.00	20,887.00	21,409.00	21,945.00	22,493.00
16,725.00	17,143.00	17,572.00	18,011.00	18,461.00	18,923.00	19,396.00	19,881.00	20,378.00	20,887.00	21,409.00	21,945.00	22,493.00
34,625.00	35,491.00	36,378.00	37,287.00	38,220.00	39,175.00	40,154.00	41,158.00	42,187.00	43,242.00	44,323.00	45,431.00	46,567.00
16,250.00	16,656.00	17,073.00	17,499.00	17,937.00	18,385.00	18,845.00	19,316.00	19,799.00	20,294.00	20,801.00	21,321.00	21,854.00
394,534.09	404,397.90	414,508.04	424,870.44	435,492.03	446,378.76	457,538.60	468,976.57	480,700.68	492,719.00	505,036.60	517,664.59	530,605.10
197,267.05	202,198.95	207,254.02	212,435.22	217,746.02	223,189.38	228,769.30	234,488.29	240,350.34	246,359.50	252,518.30	258,832.30	265,302.55
197,267.05	399,466.00	606,720.02	819,155.24	1,036,901.25	1,260,090.63	1,488,859.93	1,723,348.22	1,963,698.56	2,210,058.06	2,462,576.36	2,721,408.65	2,986,711.20

FY 2031	FY 2031	FY 2033	FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	Combined Total
88,536.00	90,749.00	93,018.00	95,343.00						1,523,482.00
80,163.30	82,167.39	84,221.57	86,327.11	88,485.29	90,697.42	92,964.86	95,288.98	97,671.20	1,844,519.27
158,253.00	162,209.00	166,265.00	170,421.00	174,682.00	179,049.00				2,861,003.00
8,831.00	9,052.00	9,278.00	9,510.00	9,748.00	9,992.00				159,655.00
8,960.00	9,184.00	9,414.00	9,649.00	9,891.00	10,138.00	10,391.00			166,042.00
17,921.00	18,369.00	18,828.00	19,299.00	19,781.00	20,276.00	20,782.00			332,082.00
17,921.00	18,369.00	18,828.00	19,299.00	19,781.00	20,276.00	20,782.00			332,082.00
18,610.00	19,075.00	19,552.00	20,041.00	20,542.00	21,055.00	21,582.00			344,852.00
9,305.00	9,538.00	9,776.00	10,020.00	10,271.00	10,528.00	10,791.00			172,429.00
									-
19,127.00	19,605.00	20,095.00	20,598.00	21,112.00	21,640.00	22,181.00			354,430.00
23,056.00	23,632.00	24,223.00	24,828.00	25,449.00	26,085.00	26,737.00			427,234.00
23,056.00	23,632.00	24,223.00	24,828.00	25,449.00	26,085.00	26,737.00			427,234.00
47,731.00	48,924.00	50,147.00	51,401.00	52,686.00	54,003.00	55,353.00			884,483.00
22,401.00	22,961.00	23,535.00	24,123.00	24,726.00	25,344.00	25,978.00			415,098.00
543,871.30	557,466.39	571,403.57	585,687.11	502,603.29	515,168.42	334,278.86	95,288.98	97,671.20	10,244,625.27
271,935.65	278,733.20	285,701.79	292,843.56	251,301.65	257,584.21	167,139.43	47,644.49	48,835.60	4,888,430.76
3,258,646.85	3,537,380.05	3,823,081.83	4,115,925.39	4,367,227.03	4,624,811.24	4,791,950.67	4,839,595.16	4,888,430.76	

FALL ANNUAL TOWN MEETING WARRANT
October 15, 2016

ARTICLE 10:

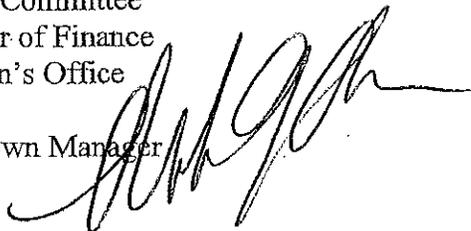
To see if the Town will vote to transfer the care, custody, management and control of the land and building located on 22 ½ Whiting Street, Plymouth, commonly known as the Mount Pleasant Street School, shown as Lot 73 on Plymouth Assessors' Map 22, parcel no. 022-000-073-000 on file with the Town Clerk, from the School Committee for school purposes to the Board of Selectmen for the purposes of sale or lease or transfer, and to authorize the Board of Selectmen to sell or lease or transfer such land and building for a sum and upon conditions to be determined by the Board of Selectmen and pursuant to the requirements of G. L. c. 30B, or take any other action relative thereto.

BOARD OF SELECTMEN

TOWN OF PLYMOUTH
11 Lincoln Street
Plymouth, MA 02360
(508) 747-1620

OFFICE OF TOWN MANAGER
MEMORANDUM

To: Board of Selectmen
Advisory and Finance Committee
Lynne Barrett, Director of Finance
Chris Badot, Selectmen's Office

From: Melissa G. Arrighi, Town Manager 

Date: August 18, 2016

Re: Fall Town Meeting, Article 10 – Mount Pleasant School

ARTICLE 10: *(condensed article language) To see if the Town will vote to transfer the land and building located on 22 ½ Whiting Street,commonly known as the Mount Pleasant Street School, ... to the Board of Selectmen for the purposes of sale or lease or transfer or gift ... pursuant to the requirements of G. L. c. 30B...*

The School Department has made the decision to relocate all of its developmental preschool classes to available space at Plymouth Community Intermediate School, 117 Long Pond Road, Plymouth. With no further need of the Mount Pleasant School building for education purposes, the School Committee voted in support of officially turning the building back to the care and oversight of the Board of Selectmen.

The sale or long term lease or gift/transfer of Town Property requires a vote of Town Meeting. This article requests permission for the Selectmen to sell or lease or gift or transfer the building and land. Past policy direction has been to identify Town owned properties not being utilized and either put them back into production through sale, lease, or lease with purchase option :

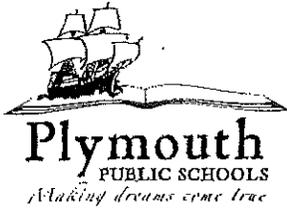
1. CURA building [now a church]
2. Old Council on Aging building on Court Street [sold and subsequently demolished]
3. Old pactv building on Court Street [current Chamber of Commerce Building]
4. Howland Street Building [now art studios]
5. South Street Fire Station [now a residence]
6. Old Cedarville Fire Station [now a veterinary office]

It is critical that we ensure that building does not sit empty for very long. Not only is it very costly to insure a vacant building, it is at greater risk for vandalism. Town meeting, through their legislative authority, votes the ability for the Selectmen to sell/transfer public property; the Selectmen, in their executive role, are the custodians of public property and they determine its' future use.

At this time, the Selectmen have not made the decision regarding what should happen to the building and grounds, although they will do so through an open and public process. The Town has received interest from private developers who would like to establish residential housing at the site. The Selectmen have also received interest from the Plymouth Housing Authority to explore options for affordable housing. I anticipate there will be other possibilities to debate as well.

Finally, I assure you that dispensation of the property will require that the Town go through the bidding process as outlined in Chapter 30B of Massachusetts General Law, unless it is some type of transfer to another public authority.

I would respectfully ask for your support in passing Article 10.



11/10/11 PLUMBLWT JCA 1001
Plymouth Public Schools

Administration Offices
253 South Meadow Road
Plymouth, MA 02360

Telephone: 508-830-4300

Fax: 508-746-1873

Web: www.plymouth.k12.ma.us

GARY E. MAESTAS, Ed.D.
Superintendent of Schools

CHRISTOPHER S. CAMPBELL, Ed.D.
Assistant Superintendent
Administration and Instruction

PATRICIA C. FRY
Assistant Superintendent
Human Resources

GARY L. COSTIN, R.S.B.A.
School Business Administrator

August 9, 2016

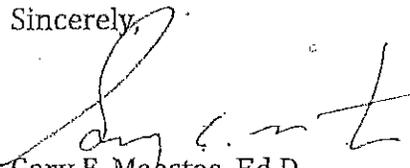
Mrs. Melissa G. Arrighi
Town Manager
Town of Plymouth
11 Lincoln Street
Plymouth, Massachusetts 02360

Dear Ms. Arrighi:

The School Department has made the decision to relocate all of its developmental preschool classes to available space at Plymouth Community Intermediate School, 117 Long Pond Road, Plymouth, Massachusetts, beginning with the September, 2016 start of the school year. With no further need of the Mount Pleasant School building at 22½ Whiting Street, Plymouth, Massachusetts, the Plymouth School Committee has voted in support of officially turning the building back to the care and oversight of the Board of Selectmen.

Please feel free to contact us with any questions.

Sincerely,



Gary E. Maestas, Ed.D.
Superintendent of Schools

C: Mr. Kenneth Tavares, Chairman
Board of Selectmen

Mr. Dennis Begley, Chair
Plymouth School Committee

FALL ANNUAL TOWN MEETING WARRANT
October 15, 2016

ARTICLE 8:

To see if the Town will vote to authorize the Board of Selectmen to acquire by purchase, gift, or otherwise, and to accept the deed to the parcel of land containing 4.37 acres, more or less, located off LONG RIDGE ROAD in the Town of Plymouth shown as Assessor's Parcel Number 078B-000-000A-266, on such terms and conditions as the Board of Selectmen deems appropriate, for the purposes of open space and conservation, said land or interest to be managed by the Board of Selectmen, and to authorize appropriate Town officials to enter into all agreements and execute any and all instruments as may be necessary on behalf of the Town to effect said purchase; or take any other action relative thereto.

BOARD OF SELECTMEN