

ECONOMIC DEVELOPMENT PROJECT

TOWN OF VASSALBORO, MAINE

An Application for a Municipal Development and Tax Increment Financing District

**NATURAL GAS PIPELINE MUNICIPAL DEVELOPMENT
AND TAX INCREMENT FINANCING DISTRICT**

DEVELOPMENT PROGRAM

Presented to:

**The Town of Vassalboro Town Meeting
June 2, 2014**

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Development Program

I. Introduction

A. Why a TIF for Vassalboro?

The Town of Vassalboro (“the Town”) is in the process of realizing a projected natural gas utility investment that presents the opportunity to fund public and private investments to serve the Town’s economic development needs.

Summit Natural Gas (“Summit”) is constructing and installing natural gas transmission pipelines across the Kennebec Valley, including through a portion of the Town along Route 201, which has already resulted in approximately \$6 million or more in new investment in the Town.¹ The new taxes generated there can be used to support business growth and public improvements through this tax increment financing district. Therefore, the Town of Vassalboro seeks to establish a TIF district to support its economic goals and objectives.

B. How Much Funding will be Available?

Summit is expected to invest approximately \$460 million in natural gas pipeline infrastructure in the Kennebec Valley, some of which has already occurred in the Town. The investment made in the Town is expected to generate approximately \$67,000 in additional annual property tax revenue (mil rate of 11.2/\$1,000 of value) in the first year, which will likely decrease over time due to depreciation. The Town intends to capture 100% of the increased assessed value as captured assessed value.

C. The TIF District and Its Goals

The proposed TIF District will include the area that encompasses the Summit natural gas transmission pipeline corridor which follows Route 201 from the City of Augusta town line to the Winslow town line as well as a corridor along which the Vassalboro Sanitary District is considering a sewer expansion and upgrade project which is expected to follow Main Street to the Winslow town line, for a grand total of 9.5 acres. The District will also contain an alternative potential route for this sewer project on the Oak Grove Road. This will be the primary area of focus for investment of TIF revenues by the Town.

In designating the proposed District and adopting the Development Program, the Town can accomplish the following goals:

- Maximize the increased assessed value resulting from the Summit investment;
- Enhance the visibility and competitiveness and improve the general economy of the Town, the central Maine region and the State of Maine; and
- Fund eligible municipal economic development activities.

¹ This is a projected increased assessed value. The assessment process has not been concluded yet.

In addition, by creating a TIF district, the Town will “shelter” the increase in municipal valuation generated by the District. The tax shelter provided by the District will mitigate the adverse effect that the District’s increased assessed property value would have on the Town’s share of state aid to education, municipal revenue sharing, county tax assessment and local school district contributions. An estimate of the tax shelter benefit is shown as **Exhibit C-2** attached hereto.

II. Development Program Narrative

A. The Projects

Please see Table 1 of this Development Program for a detailed list of approved project costs. The projects include funding a commercial business development loan/grant fund to support local businesses, the potential funding of a cleanup project for China Lake, the potential funding of a sewer extension/renovation project and other items more fully described in Table 1 hereof.

B. Strategic Growth and Development

By creating and designating the District, the Town is maximizing the economic development benefit of the Summit investments. The Town's designation of a TIF district and pursuit of this Development Program constitute a good and valid public purpose described in the TIF statute in Chapter 206 of Title 30-A because they represent a substantial contribution to the economic well-being of both the Town and the Central Maine Region by providing jobs, contributing to property taxes and diversifying the region's economic base.

C. The Development District

The District will encompass approximately 9.5 acres of real property. The District is shown in **Exhibit A-1** and **Exhibit A-8** attached hereto.

D. The Development Program

The Town’s designation of the District and adoption of this Development Program create a single municipal TIF District in order to capture the value of the taxable real and personal property improvements made within the District and to permit tax increment financing for various municipal economic development projects.² The Development Program will begin with the Town’s 2014-15 fiscal year (starting July 1, 2014) and will continue for a total of thirty (30) years.

Under this Development Program, the Town will capture 100% of the increased assessed value (taxable real and personal property) over the original assessed value of the District and retain the tax revenues generated by the captured assessed value for designated economic development purposes. In the Assessor’s Certificate attached as Exhibit B hereto, the Town’s Assessor has certified the original assessed value of the District. The town intends to

² While it is unlikely that any captured assessed value will be created in the District that is personal property, the Town cannot predict exactly what changes may be made in the property assessment practices and laws during the District term. Thus, the Town is choosing to include personal property in the District, if any comes to exist.

create a loan/grant fund in order to fund the projects listed below in Table 1. The Board of Selectmen will be authorized to determine to what extent and on what basis funds will be made available from this fund, all of which must be aimed at the projects described below in Table 1. No further approval by the Town Meeting shall be required for the Board of Selectmen to appropriate TIF revenues for the purposes outlined below. The Board of Selectmen shall, however, hold a public hearing prior to the award of any loan or grant from the fund. The calculation of TIF revenues is more specifically described below in Section IV – Financial Plan.

Approval of this Development Program and the designation of the District will have a neutral impact on the existing tax base; only the increased assessed value over the original assessed value within the District will be captured. In addition, at the end of the 30-year term of this District and Development Program, the Town expects to emerge with a substantial amount of new taxable real and personal property value to add to its municipal tax base.

This Development Program is structured and proposed pursuant to Chapter 206 of Title 30-A of the Maine Revised Statutes, as amended (the “TIF Statute”). Subsequent to a town meeting vote designating the District and adopting this Development Program, evidenced by Exhibit F hereto, the designation of the District and adoption of this Development Program are effective upon approval by the DECD.

E. Improvements to the Public Infrastructure

See Table 1 for descriptions.

F. Operational Components

1. Description of Public Facilities, Improvements of Programs

As required by Title 30-A M.R.S.A. §5224(2)(B), please see Table 1 for descriptions of public projects.

2. Commercial Improvements Financed Through Development Program

None, except that loan or grants may be awarded out of the revolving loan and grant fund created from the District by the Board of Selectmen to individual business enterprises following a public hearing.

3. Relocation of Displaced Persons

Not applicable.

4. Transportation Improvements

The changes and improvements made under the proposed Development Program will meet or exceed all federal and state transportation regulations and will comply with all applicable use requirements for the Town of Vassalboro.

5. Environmental Controls

The improvements made under the proposed Development Program will meet or exceed all federal and state environmental regulations and will comply with all applicable land use requirements for the Town of Vassalboro.

6. Duration of the Program

The TIF will remain in operation for thirty (30) years.

7. Plan of Operation

Individual businesses will own and manage their own enterprises. During the 30-year term of the District, the Vassalboro Town Manager and Town administrative staff will be responsible for administrative matters within the purview of the Town concerning the implementation and operation of the District and carrying out of the approved projects.

III. Physical Description

(1) Total acreage of the Town of Vassalboro:	30,720
(2) Total acreage of the District: Tax Map 1: 1.21 acres Tax Map 2: 1.81 acres Tax Map 3: 1.95 acres Tax Map 4: 2.47 acres Tax Map 8: 1.54 acres Tax Map 11: .13 acres Tax Map 12: .39 acres	9.5 acres
(3) Percentage of total acreage of the District to the total acreage of the Town of Vassalboro (cannot exceed 2%):	.03%
(4) Total acreage of <u>all</u> tax increment financing districts within the Town of Vassalboro including all proposed districts:	Existing: 0 acres Proposed: 9.5 acres Total: 9.5 acres
(5) Percentage of total acreage of all existing and proposed development districts within the Town of Vassalboro to the total acreage of the Town of Vassalboro (cannot exceed 5%):	.03%

(6)	At least twenty-five percent (25%), by area, of the real property within the District is:	All together, 100%
	(a) Blighted:	0%
	(b) In Need of Rehabilitation, Redevelopment, or Conservation Work:	42% sewer rehabilitation project
	(c) Suitable for Commercial Uses:	58% natural gas pipeline

(7) Municipal documents relating to the District’s physical description attached as Exhibits:

- (a) Town of Vassalboro property map showing the District relative to Town boundaries. **Exhibit A-1**
- (b) Town of Vassalboro property maps showing the District property. **Exhibits A-2 – A-8**
- (c) Certification by the Town of Vassalboro Assessor of the original assessed value of the District. **Exhibit B.**

IV. Financial Plan

The District will encompass approximately 9.5 acres of property. The original assessed value of the property in the District was \$0 as of March 31, 2014 (assessment date April 1, 2013). Development of the Summit natural gas transmission line is anticipated to generate approximately \$6 million of increased assessed value, to be depreciated over time.

Upon each payment of property taxes by property owners inside the District, the Town will deposit into a Development Program Fund the entirety of the property tax payments constituting TIF revenues (the “Development Program Fund”). TIF revenues will consist of property taxes paid on 100% of the increased assessed value in the District. The Development Program Fund is pledged to and charged with the payment of the project costs in the manner provided in 30-A M.R.S.A. § 5227(3). The Development Program Fund will consist of one account, a project cost account (the “Project Cost Account”). The Town will deposit any TIF revenues into the Project Cost Account to be used for approved municipal projects outlined in this Development Program. The Town does not anticipate issuing municipal bonds to pay for any of the public projects, but if it did, it would comply with the statutory requirement to set up a segregated Sinking Fund Account for such purpose.

Estimates of the increased assessed value of the District, the anticipated TIF revenues generated by the District and the estimated tax shifts are shown in **Exhibit C-1** and **Exhibit C-2**, respectively.

A. Costs and Sources of Revenues

A company/developer, including any future owners of properties located within the District, will pay for and/or finance all private improvements located in the District through private sources, unless otherwise agreed to in credit enhancement agreements.

B. Municipal Indebtedness

Though it is not anticipated at this time, the Town reserves the right to issue municipal bonds in order to pay for capital improvements described in Table 1. Any municipal bond issued for such project would require town meeting approval.

TABLE 1
Projected Development Costs

Note: A warrant article will be proposed annually at Town Meeting approving the appropriation of all TIF revenues for the District to the District's Development Program Fund. The Board of Selectmen will have the sole discretion to expend the revenues placed in the Development Program Fund to the extent monies are available, to the extent the Board of Selectmen decides the projects listed below should be undertaken and not necessarily in the particular order listed below. Any projects not listed below cannot be undertaken with TIF revenues from the Development Program Fund without a formal amendment pursuant to Title 30-A M.R.S.A. §5221 et. seq. (the "TIF Statute").

Project	Cost Estimate	Statutory Cite
<p>1. <u>Traditional Commercial Business Development Loan/Grant Fund</u>. This Business Development Loan/Grant fund will be the source of revenue for loans or grants to individual businesses located within the Town of Vassalboro. Loans or grants shall be awarded by the Board of Selectmen based on program parameters to be crafted and approved by the Board of Selectmen. For this Business Development Loan/Grant Fund, no loans or grants shall be made to nonprofits or governmental entities.</p>	<p>\$5,000 annually</p>	<p>30-A M.R.S.A. §5225(1)(C)(3)</p>
<p>2. <u>China Lake Cleanup Project</u>. The Town of Vassalboro in cooperation with the Town of China, the Kennebec Soil and Water Conservation District, the Kennebec Water District, the State of Maine Department of Marine Resources and the China Region Lakes Alliance has been working to address the high phosphorus levels in China Lake for many years. In addition to the problems the phosphorus levels create for fishing and tourism in Vassalboro, China Lake is a water source for the Kennebec Water District. The Kennebec Water District serves the commercial Main Street section of Vassalboro as well as many other customers.</p> <p>It is likely that the Town of Vassalboro will eventually financially contribute to a marine resources and environmental improvement project that will address the high levels of phosphorus. This contribution may be made to one of the organizations mentioned above, but such funds if contributed from the Development Program Fund would only be used on aspects of such project located within the Town of Vassalboro. Such project may include costs associated with introducing alewives into China Lake. Please see a further description of this potential project in the narrative below.</p>	<p>\$1.25 million (Note that this is the total project cost estimate and the Town is expecting to pay for only a portion of the total project cost, if any.)</p>	<p>30-A M.R.S.A. §5225(1)(C)(8), (C)(2)</p>

Project	Cost Estimate	Statutory Cite
<p>3. <u>Sewer Extension/Renovation Project</u>. This project will involve an expansion and/or upgrade of sewer services along the existing commercial corridor of the Town, enabling future additional development and increasing the attractiveness of locating a business in Vassalboro. Currently, the sewer system serving a portion of the commercial area in the North Village of Vassalboro is aging and its treatment capabilities are inadequate not only for future development but also for the existing development. This project is expected to expand the service and the treatment capabilities for the North and East Villages of Vassalboro. The treatment will be improved by connecting the system to a treatment facility in Waterville. An alternative potential route for the expansion project is also included in the District, running along Oak Grove Road.</p> <p>The project specifics have not been finalized and are the subject of an ongoing engineering study undertaken by the Vassalboro Sanitary District. An important aspect of the contemplated project is to create a way for the Vassalboro sewage to be treated at the Kennebec Sanitary Treatment District in the City of Waterville. The project itself would be undertaken by the Vassalboro Sanitary District rather than the Town; thus TIF revenues would be contributed to this other entity for the purpose of paying for only the portions of the project located within the Town of Vassalboro. Such costs may be applied to financing costs associated with the project and professional service costs relating to the project. As is the case with each of the projects on the list, the Board of Selectmen will determine if and to what extent the Town will contribute to this project from the Development Program Fund.</p>	<p>\$5.4 million (Note that this is the total project cost estimate and the Town is expecting to pay for only a portion of the total project cost, if any.)</p>	<p>30-A M.R.S.A. §5225(1)(A)(1), (A)(2), (A)(4), (C)(2)</p>
<p>4. <u>Administrative and Professional Services Costs</u>. This project will allow the Town to use TIF revenues to pay for professional services costs relating to economic development, including licensing, engineering, planning and legal expenses. This project will also allow the Town to use TIF revenues to pay for administrative costs, including but not limited to prorated staff time/salaries associated with implementing the District.</p>	<p>\$20,000</p>	<p>30-A M.R.S.A. §5225(1)(A)(4), (A)(5)</p>

Project	Cost Estimate	Statutory Cite
5. <u>Economic Development Program Costs.</u> This project includes the costs of funding economic development programs and prorated portions of staff time and municipal salaries devoted to economic development initiatives aimed at marketing the Town as business location.	\$5,000 annually	30-A M.R.S.A. §5225(1)(C)(1)
6. <u>Public Safety Costs.</u> Due to the fact that the natural gas pipeline creates new public safety concerns for the Town of Vassalboro, the Town may provide additional specific training programs for fire and other public safety personnel specifically addressing pipeline safety issues. Such additional costs would be directly related to or made necessary by the natural gas pipeline infrastructure located within the District.	\$5,000 annually	30-A M.R.S.A. §5225(1)(B), (C)(4)
7. <u>Training/Scholarships.</u> This project includes the costs of services and equipment to provide skills development and training, including scholarships to in-state educational institutions or to online learning entities when in-state options are not available, for jobs created or retained in the Town of Vassalboro.	\$5,000 annually	30-A M.R.S.A. §5225(1)(C)(4)

C. Additional Explanation of China Lake Cleanup Project

As described briefly in Table 1, Item 2 above, the Town of Vassalboro may utilize a portion of TIF revenues to contribute to a phosphorus cleanup project for China Lake. This project would be aimed at preserving economic development in the Town’s downtown and allowing for the development of tourism in the Town. In fact, just this spring, *Bassmaster Magazine* named China Lake the 23rd best bass fishing lake in the United States. It is also quite clearly a fisheries and marine resources project. One of the likely ways in which China Lake could be cleaned up is by introducing alewife fish to the lake. This would require dismantling several dams in the Town because such fish would need to travel between China Lake and the ocean.

The alewife is an anadromous fish, that is, born in freshwater, spends most of its life at sea and returns to freshwater to spawn. Alewives are often harvested and sold on the seashore because they act as bait for lobster. In addition, and most importantly to China Lake, recent studies have shown that alewives are net exporters of phosphorus out of lakes (the fish are born in the freshwater and then travel out to sea taking with them large quantities of phosphorus). This relatively new information has created an opportunity in Maine to solve the high phosphorus levels in lakes while creating a fishing industry. Webber Pond is another water body in the Town of Vassalboro, which, like China Lake, has had phosphorus problems. In cooperation with the Maine Department of Marine Resources, alewives were introduced to Webber Pond and have been improving the water quality of Webber Pond while creating a

source of lobster bait for Maine's lobsterman at the same time. Many hope that the same possibility can become reality for China Lake.

This effort is gaining support not only because it helps improve water quality for our freshwater lakes and ponds, but also because alewives can be their own vibrant industry. A *Natural History Magazine* article stated "The result of reestablishing alewives and the commercial ground fisheries of the Gulf of Maine will be the revitalization of currently impoverished coastal communities and the recovery of a way of life deeply rooted in history." See the rest of this article attached as **Exhibit H** hereto.

V. Financial Data

- | | | |
|-----|---|---|
| (1) | Total value of taxable property in Vassalboro as of April 1, 2013 | \$334,382,380 |
| (2) | Original assessed value of taxable property in all existing and proposed tax increment financing districts in Vassalboro as of March 31, 2014 (assessment date April 1, 2013). | Existing: \$0
Proposed: \$0
Total: \$0 |
| (3) | Percentage of total value of taxable property represented by aggregate value of all taxable property in all existing and proposed tax increment financing districts (i.e., item (2) divided by item (1) expressed as a percentage | 0% |

VI. Tax Shifts

In accordance with Maine statutes governing the establishment of a tax increment financing district, the table set forth in **Exhibit C-2** identifies the tax shifts that are expected to result during the term of the District from the establishment of the District.

VII. Municipal Approvals

A. Notice of Public Hearing

Attached as **Exhibit D** is a certified copy of the Notice of Public Hearing held on June 2, 2014, in accordance with the requirements of 30-A M.R.S.A. § 5226(1). The notice was published in the *Town Line*, a newspaper of general circulation in Vassalboro on or before May 23, 2014, a date at least ten (10) days prior to the public hearing.

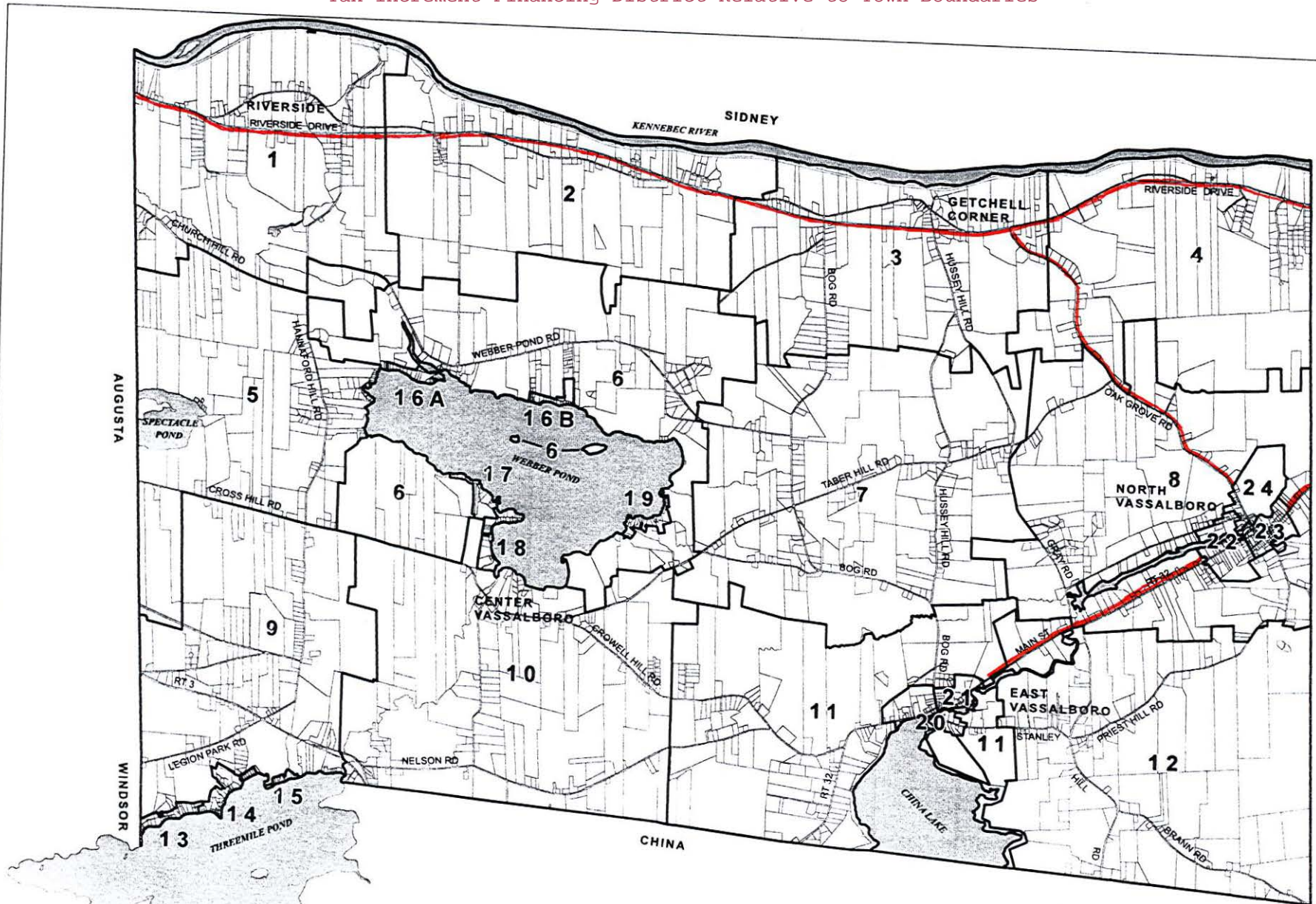
B. Minutes of Public Hearing

Attached as **Exhibit E** is a certified copy of the minutes of the public hearing and Town Meeting held on June 2, 2014, at which time the proposed District was discussed by the public.

C. Voting Results

Attached as **Exhibit F** is copy of the Town Meeting Warrant with associated documents as well as the voting results of a town meeting duly called and held on June 2, 2014. Such vote designated the District, adopted the Development Program and authorized the Board of Selectmen to administer the revolving loan and grant fund. Awards from such revolving loan or grant fund shall be made by the Board of Selectmen following a public hearing.

Exhibit A-1 - Town of Vassalboro Property Map Showing Natural Gas Pipeline
Tax Increment Financing District Relative to Town Boundaries



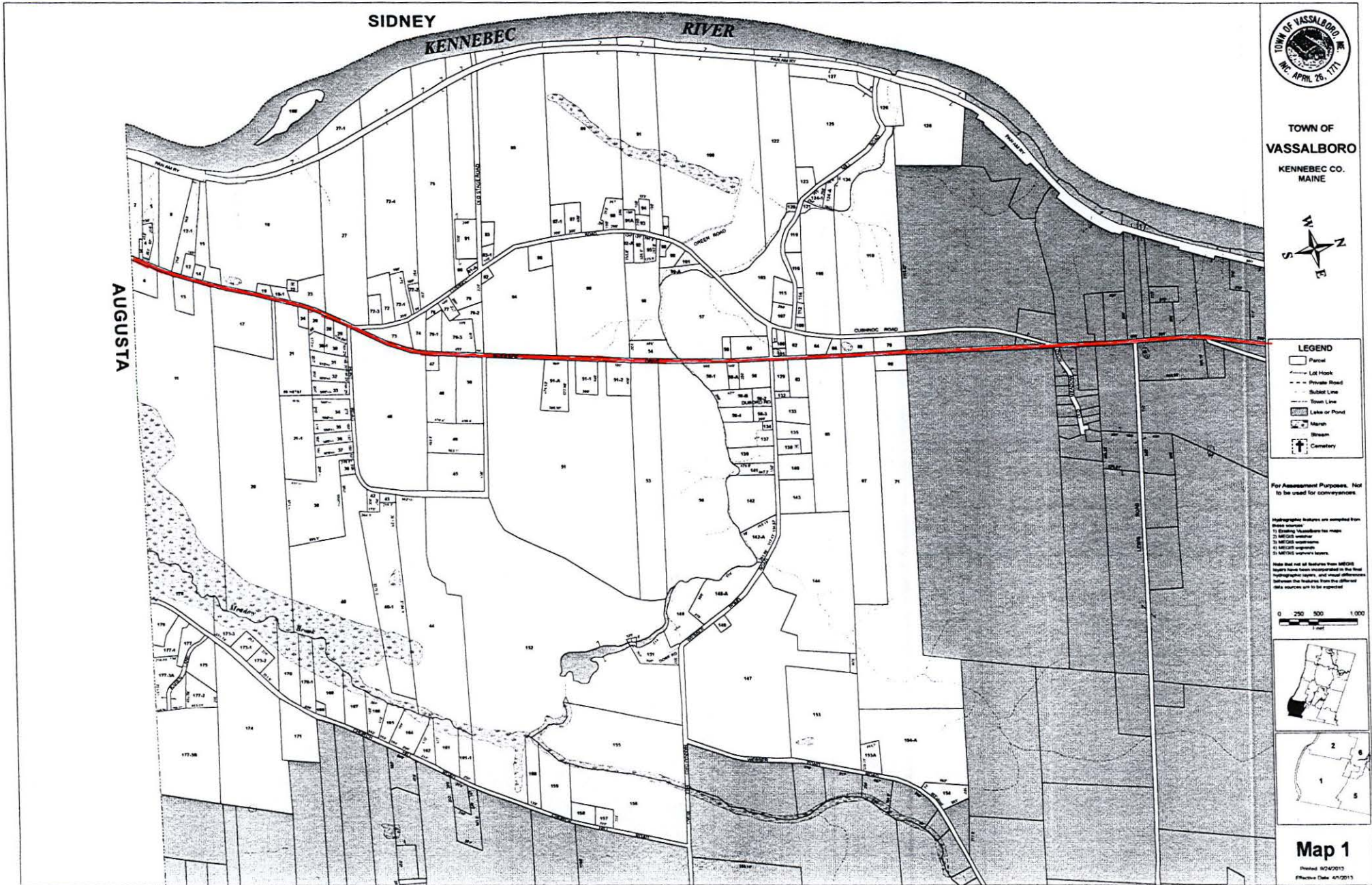
Areas in red show the TIF district.
Total acreage: 9.5 acres



TOWN OF
VASSALBORO
KENNEBEC CO.
MAINE

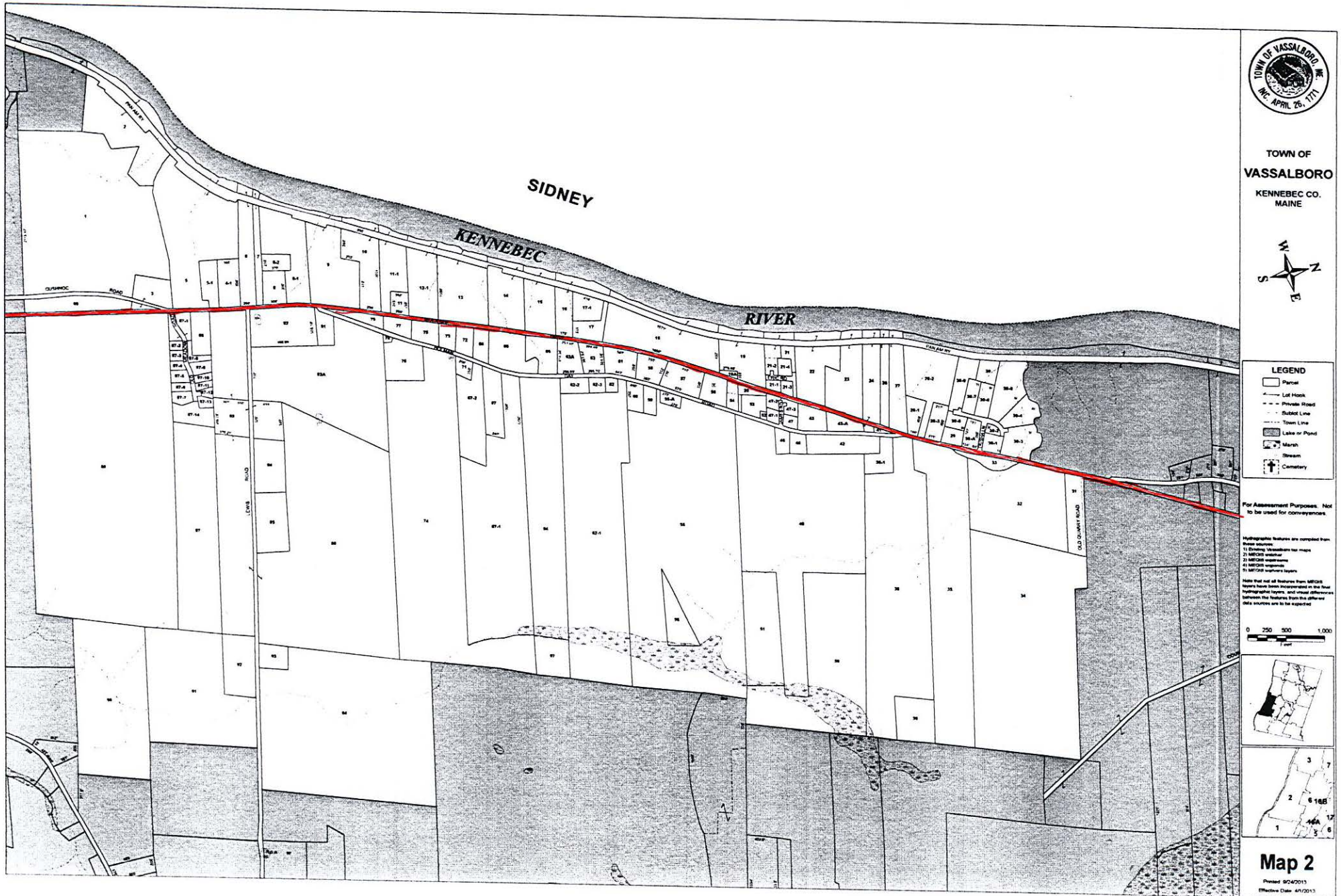


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Revised 10/24/2013
Effective Date 4/1/2013



Areas in red show the TIF district.
Total acreage Tax Map 1: 1.21 acres

Exhibit A-3 - Town of Vassalboro Property Map Showing District Property - (Tax Map 2)



TOWN OF
VASSALBORO
KENNEBEC CO.
MAINE

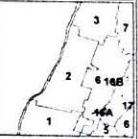


LEGEND

- Parcel
- Lot Hook
- Private Road
- Sublot Line
- Town Line
- Lake or Pond
- Marsh
- Stream
- Cemetery

For Assessment Purposes, Not to be used for conveyances.

Hydrographic features are compiled from:
 1) Existing Vassalboro tax maps
 2) MFCOS aerial
 3) MFCOS topographic
 4) MFCOS imagery
 5) MFCOS bathymetry layers
 Note that not all features from MFCOS layers have been incorporated in the final hydrographic layer and small differences between the features from the different data sources are to be expected.

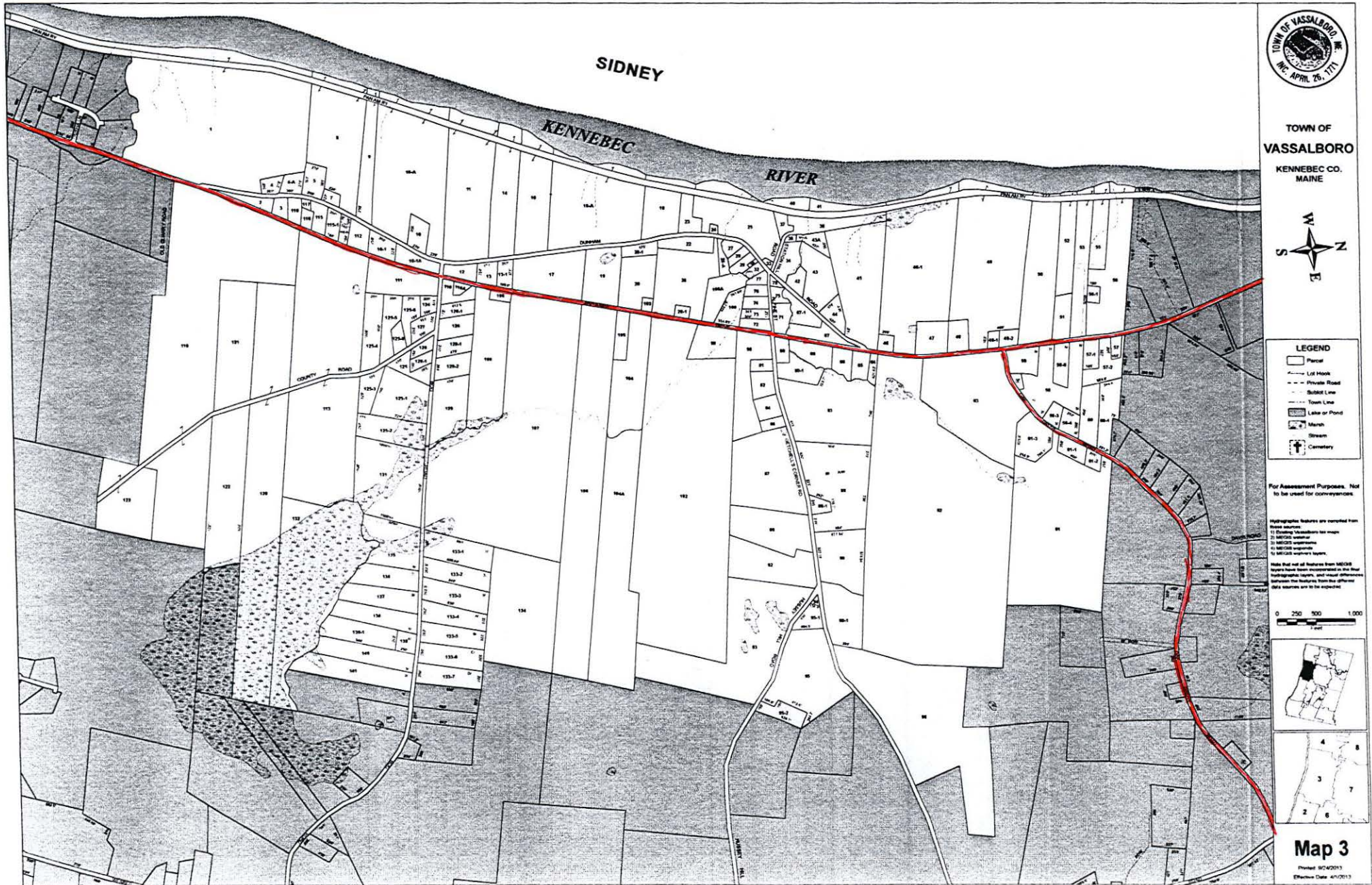


Map 2

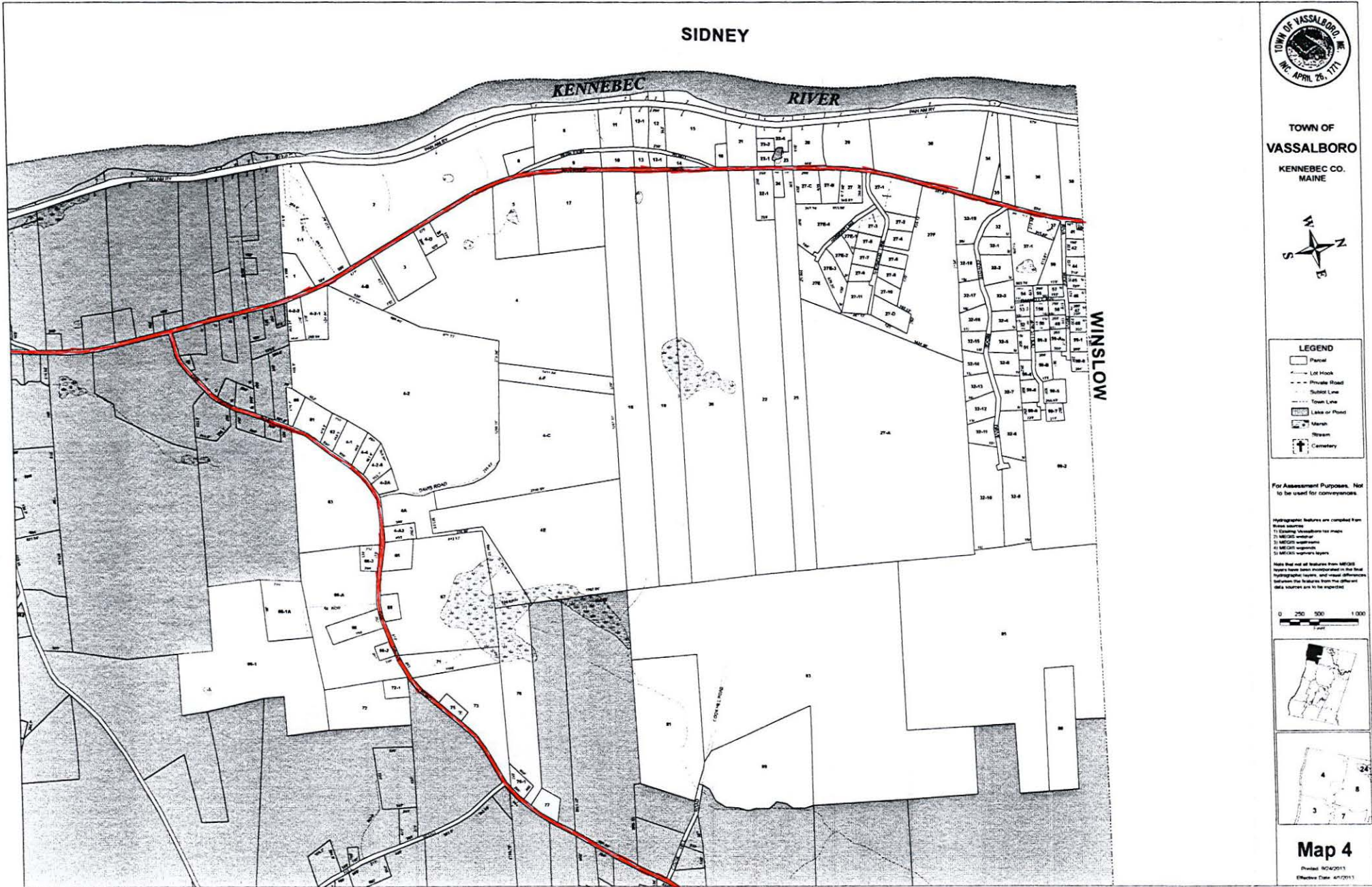
Printed 02/2013
 Effective Date: 01/01/13

Areas in red show the TIF district.
 Total acreage Tax Map 2: 1.81 acres

Exhibit A-4 - Town of Vassalboro Property Map Showing District Property - (Tax Map 3)

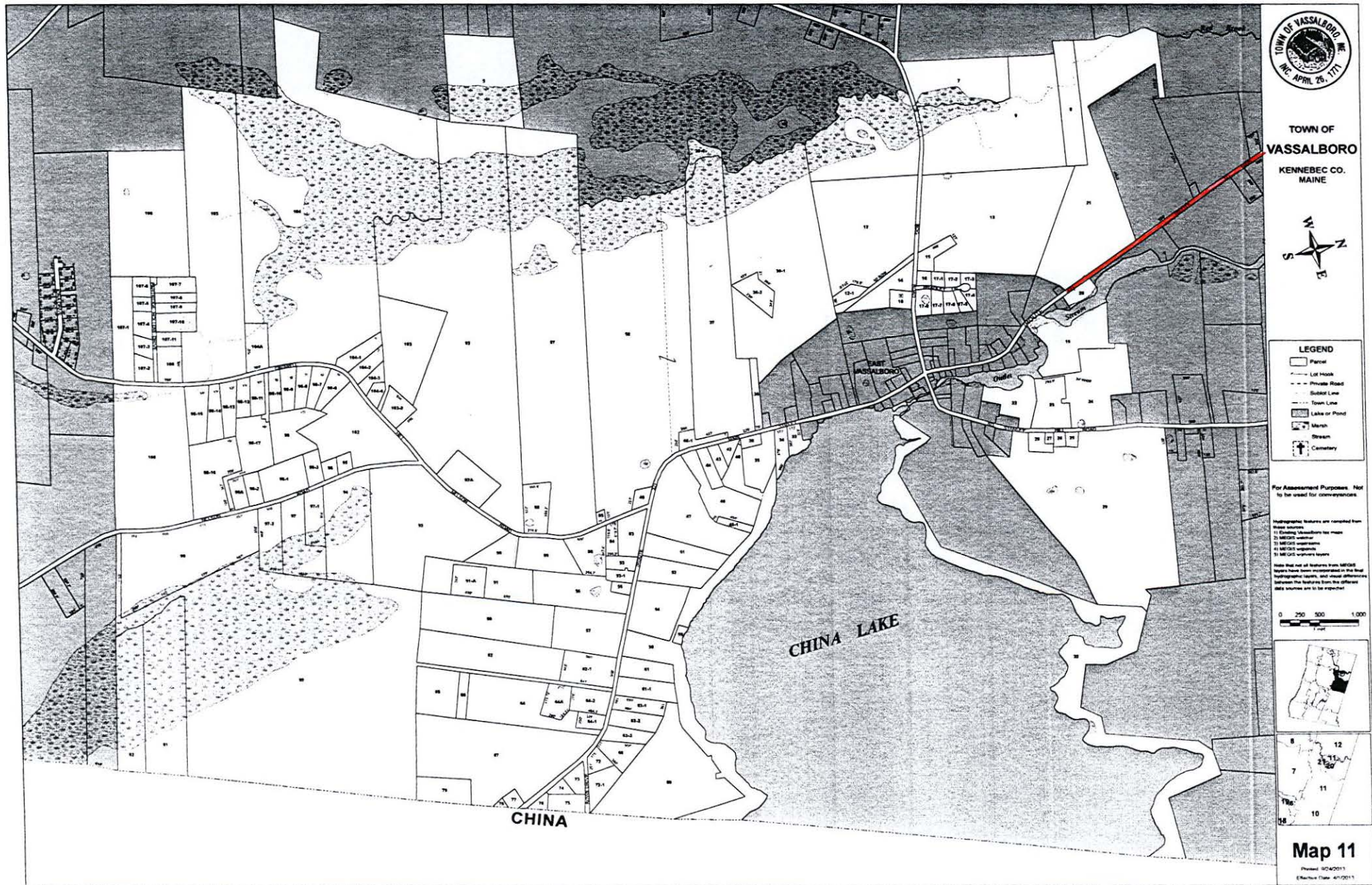


Areas in red show the TIF district.
Total acreage Tax Map 3: 1.95 acres



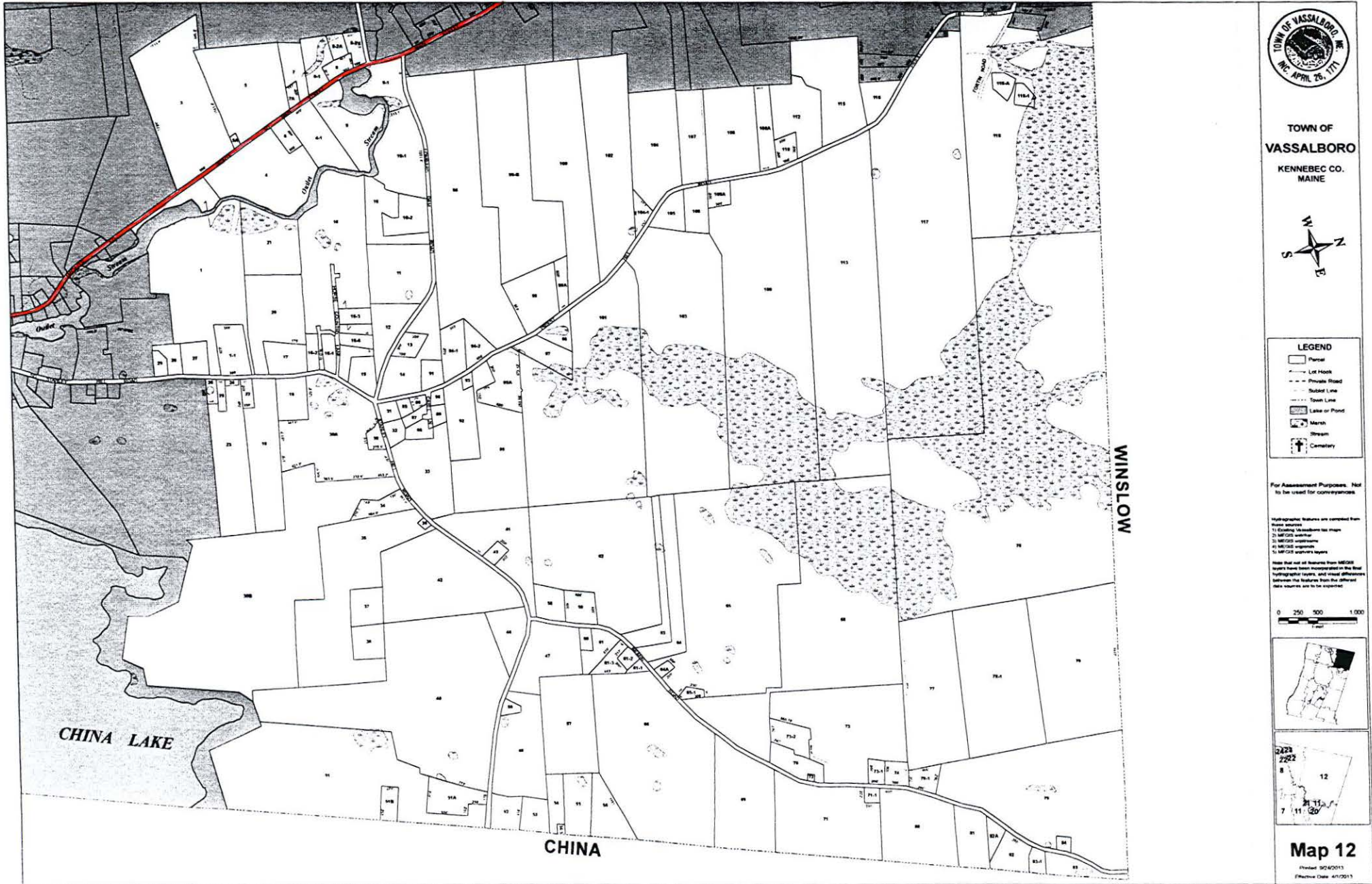
Areas in red show the TIF district.
Total acreage Tax Map 4: 2.47 acres

Exhibit A-6 - Town of Vassalboro Property Map Showing District Property - (Tax Map 11)



Areas in red show the TIF district.
Total acreage Tax Map 11: .13 acres

Exhibit A-7 - Town of Vassalboro Property Map Showing District Property - (Tax Map 12)



Areas in red show the TIF district.
Total acreage Tax Map 12: .39 acres

Exhibit A-8 - Town of Vassalboro Property Map Showing District Property - (Tax Map 8)



Areas in red show the TIF district.
 Total acreage Tax Map 8: 1.54 acres

Exhibit B

Assessor's Certificate – Town of Vassalboro, Maine

**TOWN OF VASSALBORO
MUNICIPAL DEVELOPMENT AND TAX INCREMENT FINANCING DISTRICT**

ASSESSOR'S CERTIFICATE

The undersigned Assessor for the Town of Vassalboro, Maine, does hereby certify pursuant to the provisions of 30-A M.R.S.A. §5227(2) that the assessed value for all taxable real and personal property within Municipal Development and Tax Increment Financing District, as delineated on maps included in the Development Program, to which this Certificate is attached, was \$0 as of March 31, 2014 (assessment date April 1, 2013).

IN WITNESS WHEREOF, This Certificate has been executed as of this _____ day of _____, 2014.

ASSESSOR

By: _____

Printed name: Ellery Bane

Exhibit C-1 - TIF Revenue Projections
Town of Vassalboro - Possible TIF District

TIF Year	Original Assessed Value	Projected Cumulative Increased Assessed Value real property	Projected Cumulative Increased Assessed Value personal property	Projected Cumulative Total Increased Assessed Value	Percent of Value Captured in TIF	TIF District Projected Captured Assessed Value	Projected Mil Rate FY2013	Total TIF Revenue	Town TIF Revenue	Town General Fund Revenue
1	\$0	\$6,000,000	\$0	\$6,000,000	100%	\$6,000,000	11.20	\$67,200	\$67,200	\$0
2	\$0	\$5,851,000	\$0	\$5,851,000	100%	\$5,851,000	11.20	\$65,531	\$65,531	\$0
3	\$0	\$5,702,000	\$0	\$5,702,000	100%	\$5,702,000	11.20	\$63,862	\$63,862	\$0
4	\$0	\$5,553,000	\$0	\$5,553,000	100%	\$5,553,000	11.20	\$62,194	\$62,194	\$0
5	\$0	\$5,404,000	\$0	\$5,404,000	100%	\$5,404,000	11.20	\$60,525	\$60,525	\$0
6	\$0	\$5,255,000	\$0	\$5,255,000	100%	\$5,255,000	11.20	\$58,856	\$58,856	\$0
7	\$0	\$5,106,000	\$0	\$5,106,000	100%	\$5,106,000	11.20	\$57,187	\$57,187	\$0
8	\$0	\$4,957,000	\$0	\$4,957,000	100%	\$4,957,000	11.20	\$55,518	\$55,518	\$0
9	\$0	\$4,808,000	\$0	\$4,808,000	100%	\$4,808,000	11.20	\$53,850	\$53,850	\$0
10	\$0	\$4,659,000	\$0	\$4,659,000	100%	\$4,659,000	11.20	\$52,181	\$52,181	\$0
11	\$0	\$4,510,000	\$0	\$4,510,000	100%	\$4,510,000	11.20	\$50,512	\$50,512	\$0
12	\$0	\$4,361,000	\$0	\$4,361,000	100%	\$4,361,000	11.20	\$48,843	\$48,843	\$0
13	\$0	\$4,212,000	\$0	\$4,212,000	100%	\$4,212,000	11.20	\$47,174	\$47,174	\$0
14	\$0	\$4,063,000	\$0	\$4,063,000	100%	\$4,063,000	11.20	\$45,506	\$45,506	\$0
15	\$0	\$3,914,000	\$0	\$3,914,000	100%	\$3,914,000	11.20	\$43,837	\$43,837	\$0
16	\$0	\$3,765,000	\$0	\$3,765,000	100%	\$3,765,000	11.20	\$42,168	\$42,168	\$0
17	\$0	\$3,616,000	\$0	\$3,616,000	100%	\$3,616,000	11.20	\$40,499	\$40,499	\$0
18	\$0	\$3,467,000	\$0	\$3,467,000	100%	\$3,467,000	11.20	\$38,830	\$38,830	\$0
19	\$0	\$3,318,000	\$0	\$3,318,000	100%	\$3,318,000	11.20	\$37,162	\$37,162	\$0
20	\$0	\$3,169,000	\$0	\$3,169,000	100%	\$3,169,000	11.20	\$35,493	\$35,493	\$0
21	\$0	\$3,020,000	\$0	\$3,020,000	100%	\$3,020,000	11.20	\$33,824	\$33,824	\$0
22	\$0	\$2,871,000	\$0	\$2,871,000	100%	\$2,871,000	11.20	\$32,155	\$32,155	\$0
23	\$0	\$2,722,000	\$0	\$2,722,000	100%	\$2,722,000	11.20	\$30,486	\$30,486	\$0
24	\$0	\$2,573,000	\$0	\$2,573,000	100%	\$2,573,000	11.20	\$28,818	\$28,818	\$0
25	\$0	\$2,424,000	\$0	\$2,424,000	100%	\$2,424,000	11.20	\$27,149	\$27,149	\$0
26	\$0	\$2,275,000	\$0	\$2,275,000	100%	\$2,275,000	11.20	\$25,480	\$25,480	\$0
27	\$0	\$2,126,000	\$0	\$2,126,000	100%	\$2,126,000	11.20	\$23,811	\$23,811	\$0
28	\$0	\$1,977,000	\$0	\$1,977,000	100%	\$1,977,000	11.20	\$22,142	\$22,142	\$0
29	\$0	\$1,828,000	\$0	\$1,828,000	100%	\$1,828,000	11.20	\$20,474	\$20,474	\$0
30	\$0	\$1,679,000	\$0	\$1,679,000	100%	\$1,679,000	11.20	\$18,805	\$18,805	\$0
Totals:								\$1,290,072	\$1,290,072	\$0
Averages:								\$43,002	\$43,002	\$0

Assumptions:

- Projections show future estimated anticipated increased assessed values, captured assessed values and TIF revenues.
- Projections are based on the estimates of the Town Assessor without the benefit of any official submissions from the natural gas company. Projections assume a 42-year depreciation schedule.
- Assumes that the current mil rate remains flat over time.
- Assumes that 100% of the increased assessed value is captured in the District and available for municipal project costs.
- Projections are much less likely to be accurate farther into the future.

Exhibit C-2 - Projected Tax Shift Benefits

Town of Vassalboro - Possible TIF District

TIF Year	State Aid to Education Benefit	County Tax Benefit	State Revenue Sharing Benefit	Additional Local Education Contribution	Total Tax Shift Benefits
1	-	-	-		-
2	-	-	-		-
3	-	\$5,346	\$4,003	\$2,471	\$11,820
4	\$46,800	\$5,214	\$3,905	\$2,410	\$58,329
5	\$45,638	\$5,081	\$3,808	\$2,349	\$56,875
6	\$44,476	\$4,948	\$3,710	\$2,287	\$55,421
7	\$43,313	\$4,815	\$3,612	\$2,226	\$53,967
8	\$42,151	\$4,683	\$3,514	\$2,165	\$52,513
9	\$40,989	\$4,550	\$3,416	\$2,104	\$51,059
10	\$39,827	\$4,417	\$3,318	\$2,043	\$49,604
11	\$38,665	\$4,285	\$3,219	\$1,981	\$48,150
12	\$37,502	\$4,152	\$3,121	\$1,920	\$46,696
13	\$36,340	\$4,019	\$3,023	\$1,859	\$45,241
14	\$35,178	\$3,886	\$2,924	\$1,798	\$43,786
15	\$34,016	\$3,754	\$2,826	\$1,736	\$42,331
16	\$32,854	\$3,621	\$2,727	\$1,675	\$40,876
17	\$31,691	\$3,488	\$2,628	\$1,614	\$39,421
18	\$30,529	\$3,355	\$2,529	\$1,553	\$37,966
19	\$29,367	\$3,223	\$2,430	\$1,491	\$36,511
20	\$28,205	\$3,090	\$2,331	\$1,430	\$35,056
21	\$27,043	\$2,957	\$2,232	\$1,369	\$33,600
22	\$25,880	\$2,824	\$2,133	\$1,307	\$32,145
23	\$24,718	\$2,692	\$2,033	\$1,246	\$30,689
24	\$23,556	\$2,559	\$1,934	\$1,184	\$29,233
25	\$22,394	\$2,426	\$1,834	\$1,123	\$27,777
26	\$21,232	\$2,293	\$1,735	\$1,062	\$26,321
27	\$20,069	\$2,161	\$1,635	\$1,000	\$24,865
28	\$18,907	\$2,028	\$1,535	\$939	\$23,409
29	\$17,745	\$1,895	\$1,435	\$877	\$21,953
30	\$16,583	\$1,762	\$1,335	\$816	\$20,497
31	\$15,421	\$1,629	\$1,235	\$755	\$19,040
32	\$14,258	\$1,497	\$1,135	\$693	\$17,583
33	\$13,096	\$0	\$0	\$0	\$13,096
34	\$0	\$0	\$0	\$0	\$0
35	\$0	\$0	\$0	\$0	\$0
Totals	\$898,443	\$102,651	\$77,256	\$47,483	\$1,125,833
Averages	\$28,076	\$3,111	\$2,341	\$1,439	\$34,116

Assumptions:

1. If the new value from the improvements in the District were to arrive in the Town without the shelter effect of a tax increment financing district, the increased valuation would lead to eventual decreases in State Aid for Education, Revenue Sharing Subsidy, and eventual increases in County Taxes and contributions to the school district owed. Based on these projections, the Town of Vassalboro loses approximately 87 cents out of every new tax dollar to subsidy losses and increased obligations.
2. Data sources include the Town's official website which reported a 11.2 mil rate for the 2013-2014 year, the State Treasurer's Office Municipal Revenue Sharing projections for FY2015 published 04-07-14, the Maine Department of Education 2012-2013 ED 279 form for Vassalboro, Kennebec County's FY2013 adopted Budget municipal tax breakdown and the 2014-2015 approved budget for AOS92 applying 50% cost sharing based on state valuation.
3. Tax shift impacts are lagged by a couple of years because the formulas calculating these figures utilize older State Valuations.
4. These projections assume that the formulas and general inputs for State Subsidies and County Taxes do not change over time and they assume that all other values in other communities are static relative to one another except for the new value captured in the TIF District. The projections are less likely to be accurate farther into the future.

Exhibit D

DRAFT Notice of Public Hearing

PUBLIC HEARING NOTICE

Notice is hereby given that the Board of Selectmen of the Town of Vassalboro will hold a public hearing on June 2, 2014 at 6:30 P.M. at the Elementary School on Webber Pond Rd., Vassalboro, Maine, to hear public comments on the designation of the Natural Gas Pipeline Municipal Development Tax Increment Financing District (the “District”) and the adoption of a Development Program for the District, pursuant to the provisions of Chapter 206 of Title 30-A of the Maine Revised Statutes as amended.

The District would consist of the natural gas pipeline property running along the entire length of Route 201 located in Vassalboro as well as portions of Route 32 and Oak Grove Road where a potential future sewer project may run.

A copy of the proposed Development Program for the District will be on file with the Vassalboro Town Clerk at the Town Office, 682 Main Street, Vassalboro, Maine, prior to the public hearing and may be reviewed at that office during normal business hours. All persons interested are invited to attend the public hearing and will be given an opportunity to be heard at that time.

Exhibit E

Minutes of Public Hearing

Exhibit F

Town Meeting Warrant and Voting Results

TOWN MEETING WARRANT ARTICLE

ARTICLE ____

Shall the Town of Vassalboro designate the *Natural Gas Pipeline Municipal Development and Tax Increment Financing District* and adopt the Development Program for the District, subject to the Findings and the Development Program attached to the original Town Meeting Warrant as Appendix A, copies of which are available at the office of the Town Clerk?

Board of Selectmen recommends adoption.

Budget Committee recommends adoption.

FINDINGS

Relating to the Town of Vassalboro Natural Gas Pipeline Municipal Development and Tax Increment Financing District and Development Program

WHEREAS, the Town of Vassalboro (the “Town”) is authorized pursuant to Chapter 206 of Title 30-A of the Maine Revised Statutes, as amended, to designate specified areas within the Town as the Vassalboro Natural Gas Pipeline Municipal Development and Tax Increment Financing District (the “District”) and to adopt a Development Program for the District (the “Development Program”); and

WHEREAS, designation of the District and implementation of the Development Program will serve a public purpose; and

WHEREAS, the Town has held a public hearing on the question of establishing the District in accordance with the requirements of 30-A M.R.S.A. Section 5226, upon at least ten (10) days prior notice published in a newspaper of general circulation within the Town; and

WHEREAS, the Town shall vote whether to designate the District and to adopt the Development Program; and

WHEREAS, it is expected that approval will be sought and obtained from the State of Maine Department of Economic and Community Development, approving the designation of the District and the adoption of the Development Program;

NOW, THEREFORE:

Section 1. The Town hereby finds and determines the following, demonstrating the District’s compliance with State statute:

- a. At least twenty-five percent (25%), by area, of the real property within the District, as hereinafter designated, is suitable for commercial uses; and
- b. The total area of the District does not exceed two percent (2%) of the total acreage of the Town, and the total area of all existing and proposed development districts within the Town (including the District) does not exceed five percent (5%) of the total acreage of the Town; and
- c. The original assessed value of all existing and proposed tax increment financing districts (including the District) does not exceed five percent (5%) of the total value of equalized taxable property within the Town as of the April first preceding the date of the Commissioner’s approval of the District; and
- d. The designation of the District and pursuit of the Development Program will generate substantial economic benefits for the Town and its residents, including employment opportunities, broadened and improved tax base and economic stimulus, and therefore constitute a good and valid public purpose. The Town has considered all evidence, if any, presented to it at the required public hearing with regard to any adverse economic

effect on or detriment to any existing business and has found and determined that such adverse economic effect on or detriment to any existing business, if any, is outweighed by the contribution expected to be made through the District and the Development Program.

Section 2. Pursuant to Chapter 206 of Title 30-A of the Maine Revised Statutes, as amended, the Town hereby designates the District designated and described more particularly set forth in the “Natural Gas Pipeline Municipal Development and Tax Increment Financing District Development Program” presented to Town Meeting in the form attached hereto and such Development Program is hereby incorporated by reference into this set of Findings as the Development Program for the District.

Section 3. Pursuant to the provisions of 30-A M.R.S.A. Section 5227, the percentage of captured assessed value to be retained in accordance with the Development Program is to be established as set forth in the Development Program.

Section 4. The Board of Selectmen or its representative, be and hereby is authorized, empowered and directed to submit the proposed designation of the District and the proposed Development Program for the District to the State of Maine Department of Economic and Community Development for review and approval pursuant to the requirements of 30-A M.R.S.A. Section 5226.

Section 5. The Board of Selectmen or its representative, be and hereby is authorized and empowered to make such revisions to the Development Program for the District as the Board of Selectmen, or its duly appointed representative, deems reasonably necessary or convenient in order to facilitate the process for review and approval of the District by the State of Maine Department of Economic and Community Development, or for any other reason, so long as such revisions are not inconsistent with these articles or the basic structure and intent of the Development Program.

Section 6. The foregoing designation of the District and the adoption of the Development Program for the District shall automatically become final and shall take full force and effect upon receipt by the Town of approval of the designation of the District and adoption of the Development Program by the State of Maine Department of Economic and Community Development, without requirement of further action by the Town, the Board of Selectmen or any other party.

STATUTORY REQUIREMENTS & THRESHOLDS – EXHIBIT G

Town of Vassalboro Natural Gas Pipeline TIF District

A. ACRE LIMITATION		
1. Total Acreage of Municipality		30,720
2. Total Acreage of Proposed Municipal TIF District		9.5
3. Total Downtown acres contained in the Proposed Municipal TIF District		0
4. Total Transit acres contained in the Proposed Municipal TIF District		0
5. Total acreage of Proposed Municipal TIF District counted towards 2% cap (A2-A3-A4)		9.5
6. Percentage of total acreage in proposed municipal TIF District (cannot exceed 2%) Divide A5 by A1		.03%
7. Total acreage of all existing and proposed municipal TIF districts in the municipality. Add A2 to sum of all existing TIF district acreage.		9.5
8. Total acreage of an existing or Proposed Downtown TIF District in the municipality.		0
9. Total acreage of all <u>existing</u> Pine Tree Development Zone TIF Districts in the municipality.		0
10. Total acreage of all existing or Proposed Transit TIF Districts in the municipality.		0
11. Total acreage of all existing and Proposed Municipal TIF Districts in the municipality counted toward 5% cap. Subtract A8+A9+A10 from A7.		9.5
12. Percentage of total acreage in all existing and proposed Municipal TIF Districts (cannot exceed 5%) Divide A11 by A1.		.03%
13. Total Acreage of all real property in the Proposed Municipal TIF District that is:		
(Note: a, b, or c must be at least 25%)	Acres	%
a. Blighted (Divide acres by A2)	0	0%
b. In need of rehabilitation/conservation (Divide acres by A2)	4	42%
c. Suitable for industrial/commercial site (Divide acres by A2)	5.5	58%
TOTAL		
B. VALUATION LIMITATION		
1. Total Aggregate Value of Municipality (TAV) <i>Use most recent April 1st</i>		\$334,382,380
2. Original Assessed Value (OAV) of Proposed Municipal TIF District. <i>Use March 31st of tax year preceding date of municipal designation</i>		\$0
3. Total OAV of all existing and Proposed Municipal TIF Districts in the municipality. <i>Add b2 to sum of all existing TIF district OAVs</i>		\$0
4. OAV of an existing or proposed Downtown TIF District in the municipality.		-
5. OAV of all <u>existing</u> Pine Tree Development Zone TIF Districts in the municipality.		-
6. OAV of all existing or Proposed Transit TIF Districts in the municipality.		-
7. Total OAV of all existing and Proposed Municipal TIF Districts in the municipality counted toward 5% cap <i>Subtract B4+B5+B6 from B3</i>		\$0

8. Percentage of total OAV to TAV in all existing and Proposed Municipal TIF Districts (cannot exceed 5%) <i>Divide B7 by B1</i>	0%
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Updated 01/20/2011

Restoration of the Alewife

Before 1492, there was probably not a waterway in eastern North America that did not support great runs of alewives, a species of herring that is anadromous, that is, is born in freshwater, spends most of its life in the sea, and returns to freshwater to spawn. Aboriginal people feasted on them, as shown by fish bones found in ancient fire pits and middens dating as far back as 4,000 years. In historical times alewives have ranged from South Carolina to Labrador (in Canada they are known as *gaspereaux*). The species (*Alosa pseudoharengus*) is one of the most important members of the herring clan, part of a large family of fish, collectively known as Clupeidae, that are widely distributed in both fresh and salt water. Other members of the East Coast “river herring” division include the closely related blueback herring (*A. aestivalis*)—even experts find it difficult to tell the species apart—as well as the larger American shad (*A. sapidissima*), made famous by John McPhee as “The Founding Fish.” [media:node/2283 caption vertical medium left]

Feeding primarily on the tiny invertebrate organisms known as zooplankton, alewives seldom grow more than twelve inches long at maturity, which males generally reach at age four and females at age five. What they lack in size they make up in numbers. Adults and juveniles are eaten by almost every living creature that shares their environment. In the sea, they are an important part of the prey base for resident groundfish (fish that live on, in, or near the bottom) such as cod and haddock, as well as for transient migrants such as striped bass, bluefish, and tuna. They are pursued by marine mammals, including seals, dolphins, porpoises, and whales. In their spring migrations into rivers to spawn, the mature adults are eaten by gulls, ospreys, and eagles. The juveniles migrating out to the ocean in the summer and fall are consumed by resident fish, birds, and mammals.

River herring enter rivers to spawn on a time gradient from March in the southern part of the range to June in Canada. Alewives typically are the first to arrive, followed by blueback herring and American shad. From the earliest colonial times, alewives have been economically important. With their high fat content, their arrival when other food stocks were low made them valuable as a food source, eaten fresh or salted and smoked. In New England, many coastal communities provided free alewives to their poor or elderly citizens. There was a flourishing trade in smoked salted alewives sent to the West Indies to feed the slave populations of the “sugar islands” of the Caribbean. In Maine, alewives are widely used as lobster bait, particularly in the spring when other bait supplies are low.

But from Colonial times to the present day, the biological riches of the Atlantic seaboard have been under assault through overfishing on marine and anadromous stocks, the erection of dams without fish passage, and pollution from the discharge of municipal and industrial wastes. None of those problems went unnoticed. There are numerous records documenting the loss of anadromous fisheries, dating back almost 300 years. Hundreds of petitions were made to governing authorities setting forth the dismay and outrage of citizens at the wanton destruction of resources upon which they were dependent for a livelihood.

Yet by and large, preventing the losses received only lip service. The frontier mentality that a resource lost in one location might yet be found just over the horizon pervaded the eighteenth, nineteenth, and early twentieth centuries. Foresighted people failed to stem the tide because of lack of public support and a mindset that considered resource destruction in the name of “progress” to be inevitable and acceptable. By the middle of the twentieth century, most anadromous fish runs in the rivers flowing to the Atlantic Ocean had been wiped out. Many groundfish stocks, such as cod and haddock, were reduced from overfishing and from the loss of the forage base furnished by juvenile anadromous fish.

After the end of World War II in 1945, things began to change. The United States had become the world’s greatest industrial power. An era of prosperity set in. At the same time, it was increasingly clear

that the price of prosperity in terms of harm to water, air, wildlife, and human health was high and growing higher. In the decades between 1950 and 1980, great strides were made toward understanding the collateral consequences of industrialization and establishing a framework to address them. At the federal level, the National Marine Fisheries Service (NMFS), part of the National Oceanic and Atmospheric Administration in the Department of Commerce, was charged with management of the nation's coastal and offshore waters and the species that inhabit them. It was given the legal tools and funding to start restoration of lost or depleted marine and anadromous fishery resources. The federal restoration of anadromous fisheries was specifically mandated by the Anadromous Fish Conservation Act of 1965.

States were encouraged to develop the political structure to deal with fishery issues, in the belief that operating within the overall framework of federal legislation, each state could best identify its own needs and could best develop the processes appropriate for dealing with its own fish stocks. Significant federal funds were made available to that end. Each state has an agency responsible for setting and enforcing the regulations necessary to manage fisheries in its coastal waters. The Atlantic States Marine Fisheries Council plays a coordinating role between the federal agencies and the states.

Fishery managers have learned to think in terms of ecosystem management rather than single species management, because, as John Muir pointed out more than a century ago, "When we try to pick out anything by itself, we find it hitched to everything else in the Universe." For one thing, restoration of depleted groundfish and migratory fish populations is dependent upon an adequate forage base for the species, available either year round or seasonally. Alewives are a major part of the underpinning for marine and freshwater ecosystems.

Another critical role for alewives is as a buffer for other species against predation. As an example, it is no coincidence that juvenile Atlantic salmon (known as smolts) migrate downriver to the sea at the same time that adult alewives migrate upriver to spawn. Since there are many more alewives than smolts, any given Atlantic salmon smolt has a better chance of avoiding being eaten by a hungry osprey, cormorant, or seal than it would have if migrating in isolation. So those people who are in charge of restoring Atlantic salmon are also busily restoring alewives.

Unfortunately, despite more than forty years of effort, alewife populations from southern New England to the Carolinas remain severely depleted. In Canada, the federal agency Fisheries and Oceans Canada (DFO) has documented similar declines of alewives in the Maritime Provinces. Many states from Massachusetts to North Carolina have imposed moratoriums on the harvest of alewives. The NMFS listed alewives as a "Species of Concern" in 2006. And last year, a petition was filed by the Natural Resources Defense Council seeking listing of alewives as a threatened species under the federal Endangered Species Act. [media:node/2282 vertical large left]

The Maine Department of Marine Resources (DMR) has been working at restoring alewife populations for more than forty years. Even so, the restoration program has had its share of controversy. Although alewives are a native species, they are seen in some quarters as undesirable intruders. There is no better example of this conflict than the St. Croix River, which forms the boundary between the United States and Canada. That river has the potential to host the return migration of up to 25 million spawning alewives. In 1985, as the result of DMR efforts, 2.5 million fish were entering the system. Then a raging controversy arose because certain local angling guides who favor nonnative smallmouth bass thought that alewives were responsible for a population crash of bass. In fact, a series of dry years and massive drawdowns (for hydroelectric power generation) of impounded lake waters along the St. Croix destroyed shallow-water bass spawning beds. But it was easier to accuse alewives than to take on a major economic force in the region.

Alewives were called evil predators, even likened to piranhas, in testimony and debate within the Maine legislature, despite the fact that they are plankton eaters. In 1995—over the opposition of state and federal fishery managers, the Canadian federal government, and the New Brunswick provincial government—the Maine legislature enacted a statute barring alewives from access to the fish passage facilities at the two lowest dams on the St. Croix River. In 2007, Maine Rivers, an independent advocacy organization, issued

a study of the interaction between alewives and smallmouth bass that showed definitively that plankton-eating alewives are not detrimental to piscivorous smallmouth bass at any life stage, and in fact all life stages of smallmouth bass thrive on a diet of alewives. The following year the statute was amended to allow access through the lower of the two dams, but the small area to which alewives were granted access is low-quality habitat and amounts to only about 2 percent of their historic range in the St. Croix system.

The result has been a population crash; in some years fewer than 1,000 fish returned. Meanwhile, from 2001 to 2007, the Canadian DFO resorted to trapping alewives below the dams and trucking them upriver. That is probably the reason that there are any alewives in the system at all.

The battle to restore alewives to the St. Croix has raged in the Maine legislature and before the International Joint Commission created by the 1909 Boundary Waters Treaty between the United States and Canada, and it continues in the courts. A recent filing by the Conservation Law Foundation in the United States District Court for the District of Maine asserts that the exclusion of native alewives from their natural habitat is a violation of the Federal Clean Water Act. In latebreaking news, on July 10, in a landmark letter to the Attorney General of Maine, the Environmental Protection Agency's Office of Ecosystem Protection agreed, finding that the artificial exclusion of alewives, a native species, has indeed "caused the habitat to be degraded." Since there is no known "sound scientific rationale" for such exclusion, the EPA instructed Maine authorities to "take appropriate action to authorize passage of river herring" farther up the St. Croix. The next move is Maine's.

In other areas, the state of Maine has already experienced the benefits of alewife restoration, overcoming the irrational prejudice against the river herring. Many Maine lakes suffer from summertime algal blooms, making them unattractive to cottage owners. The real cause of these blooms is lack of proper sewage disposal systems and the fertilizing of lawns too close to the water, resulting in too much phosphorus in the lakes, and consequent eutrophication. Because adult alewives bring in a certain amount of "marine-derived nutrients" to the lakes, many lake associations have accused alewives of being the cause of algal blooms, and many water districts using lakes as their water source have opposed alewife restoration for the same reason.

Fortunately, recent studies have shown that in fact juvenile alewives are net exporters of phosphorus out of the lakes. At Sebasticook Lake in the Kennebec River drainage, a lake long notorious for algae, blooms have sharply diminished in recent years following alewife introductions. The Kennebec Water District, which draws drinking water from China Lake, has recently reversed its position and is actively supporting alewife restoration in that lake. Nevertheless, old habits die hard, and there are still those to whom alewife restoration is anathema.

There have been successes in Maine rivers as well. The removal of the Edwards Dam from the Kennebec River in 1999, followed a decade later by removal of the Fort Halifax Dam at the mouth of the Sebasticook River, a major tributary, has led to the rejuvenation of the anadromous fisheries of that system, including alewives and shad. The Kennebec River currently has the largest run of alewives on the eastern seaboard, estimated at more than 3 million fish in 2012, with the potential to triple that number when alewives gain access to all the lakes that constituted their historic habitat.[media:node/2281 caption center large]

At the Penobscot River, the restoration of eleven species of anadromous fish, including Atlantic salmon, shad, alewives, and sturgeon, is the goal of removal of two dams in the lower river. This unique \$60 million project is supported by the Penobscot River Restoration Trust, a consortium comprising American Rivers, the Atlantic Salmon Federation, Maine Audubon, the Natural Resources Council of Maine, The Nature Conservancy, Trout Unlimited, and the Penobscot Indian Nation, as well as DMR, NMFS, and the U.S. Fish and Wildlife Service and other partners. It will open up more than 1,000 miles of river habitat. It is thought that several million alewives will return to spawn when the project reaches its full potential. The Great Works Dam, one of two dams being dismantled, was breached on June 23, 2012.

In addition, there are dozens of smaller Maine coastal river systems that have existing alewife runs or the potential for future runs. Many Maine communities have retained the right, dating back to colonial times, to

license the harvesting of alewives in the rivers that pass through them. The thousands of dollars the licenses bring in annually go to support the municipal governments. Other river communities are looking at the potential for licensing fees when alewife runs increase to the point where local harvest is environmentally and economically sound. Every dollar raised from licensing alewife harvest is a dollar that does not need to be raised by taxation.

Once Maine's river systems achieve their full potential for alewife production, spawning runs are expected to be in the range of 50 million fish annually. It has been estimated that each spawning female can produce as many as 1,000 juvenile alewives that survive to migrate to the sea (and surviving adults may return to spawn for several years). That translates into 50 billion fish added to the marine forage base. Only two in 1,000 need to survive to spawn in order to maintain a self-sustaining run. The other 998 are available to be eaten by groundfish and migratory fish species, birds, marine mammals, and other predators. It is this extreme fecundity that makes the alewife such an important component of the forage base for all the creatures that depend upon it for their own continued existence.

The result of reestablishing alewives and the commercial ground fisheries of the Gulf of Maine will be the revitalization of currently impoverished coastal communities and the recovery of a way of life deeply rooted in history. Today only a shrunken population of commercial fishermen eke out a difficult living while facing a mind-numbing set of rules that limit their number of days at sea, types of gear, and the timing and location of their efforts. That could change with the restoration of a viable commercial groundfish industry. In that regard, the tiny alewife can play not only an important biological role, but a sociological and economic one as well.[media:node/2287 caption horizontal center large]

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