

MAGNETIC BEARINGS:

The basis of Grid Magnetic Angle (difference between Magnetic north and Grid north) for this plan was a magnetic compass observation at the initial field visit, being the local practice in the vast majority of surveys. The magnetic meridian is inferior to the celestial true north in that one surveyor can easily observe different bearings on an initial line of survey than another surveyor in the same location. This, as well as the constantly moving magnetic north pole throughout history, is the primary reason different bearings can be shown by two different surveyors for the same property line.

This however should not lead one to believe a survey is inaccurate or imprecise compared with another. After the initial magnetic compass observation, a surveyor uses a very accurate and precise modern total station (transit) to "turn" (measure) the interior angles of the locus property. These legal interior angles of the boundary geometry of any particular property will usually agree with other surveyors, all things being equal.

Historical declination from 1792, the year of the DeGregoire conveyances, was obtained from software provided by the Solid Earth Geophysical Division of the National Geophysical Data Center of the National Environmental Satellite, Data, & Information Service of the National Oceanic & Atmospheric Administration of the U.S. Commerce Department. This software outputs a magnetic north difference to True North (Declination) based on location latitude/longitude and desired year back to 1750. In this case the G.P.S. observed Grid North - convergence angle (in this region of the zone 12 minutes east of True North) and the software's 1792 declination, resulted in a 1792 magnetic bearing that checked well with Cardinal North in the DeGregoire deeds.

ELIZABETH D. HODDER

1 BRIDGE STREET
BOOK 1 608-PAGE 426
TAX MAP 104 LOT 1
"ALPHA"

BARTHOLOMEY & MARIE THERESA de la Motte Cadillac
DEGREGOIRE
WARRANT TO
ISRAEL HIGGINS
BOOK 9 PAGE 309
MARCH 28, 1792

SURVEYOR'S REPORT:

Bridge Street was apparently laid out in 1871 as evidenced by a Certificate of Survey referred to by the minutes of a Town Meeting in 1871 (Eden Volume 3 Page 223). The Certificate is printed on John Savage, Civil Engineer & Surveyor letterhead with a pre-printed date for the decade of the 1890's. It is improbable that this letterhead sheet was present at the 1871 proceedings and is confirmed since the same sheet has an 1874 layout of West Street written as well. This sheet is a hand written copy of two road surveys most likely performed by E. M. Hamor, whose surveys have proven to be difficult to retrace at best (see the four Highbrook Road, Cleftstone Road, & Woodbury Road layouts).

The Bridge Street layout has a gross error on the magnetic bearing of the first course from high water. This error places the record centerline, from 1871, behind the houses lying on the west side of Bridge Street. The right-of-way description was not written to overcome any surveying or scrivener's errors in the measurements of the angles and/or distances. If the first course had been written "along the line of Alley & Rodick S 20° W 26 Rods" the true and correct bearing of the line of Alley & Rodick would override the erroneous bearing of S 20° W.

The recommended corrective 2 rod wide right-of-way as shown would be proposed for acceptance by the Inhabitants to resolve the 1871 layout and acceptance. This location is supported by physical evidence of the remains of a Page's looped wire fence and the southwesterly edge of the concrete sidewalk running along the southwesterly side of Bridge Street from West to Cottage Streets. The back edge of sidewalks has been successfully used to re-construct several other town right-of-ways such as Ledgelawn Avenue, Glen Mary Road, & Newton Way. Amendments (circa 1900-1920) to each of these streets original layouts specifically call for the sidewalks to be 5' wide and Bridge Street appears to fit this pattern.

In addition to the physical there is documentary locative evidence in the form of two deeds and the aforementioned 1874 West Street layout. This layout begins at the northwesterly corner of Tobias L. Roberts property at the top of the bank near the pier (Roberts apparently owned the Rockaway Hotel in what is now Agamont Park). The layout provides a reasonably good distance to the intersection of West & Bridge as now traveled, any indicated error by the West Street layout does not carry Bridge Street behind the westerly houses as the 1871 layout does. The deed in Book 168-Page 136 from Irene & Frederick Alley to Sylvanus Jordan gives an 1879 bearing of S 5 1/2 W over most of Bridge Street from the shore to the apparent northerly line of what is now Joan C. Allen. This straight line bearing further indicates the first 1871 bearing is in error. The deed bearing from the DeGregoire to Higgins of North (1792) agrees well with the proposed centerline of Bridge Street as well as apparently in agreement with the southwesterly parent line of the Strawberry Hill subdivision which historically abutted Higgins 200 acres to the northeast, however the latter was not confirmed.

In conflict with this proposed corrective 2 rod wide right-of-way, are a recent survey by Plisga & Day for Bar Harbor Tennis Club and the distance on last leg of the 1871 Bridge Street layout. The Plisga & Day survey line running between the two rebar capped "P.L.S. 231.9", on the northeasterly side of Bridge Street between the shore and West Street may not reflect a determination of the right-of-way of Bridge Street. It is not uncommon in uncertain right-of-way situations for surveyors to set pins in a reasonable location based on outlying occupation in particular those easements over the underlying fee simple interest of the abutting land owners. It is also possible that other historical deed dimensions of their subject property indicate the easement line as monumented. The difference is less than two feet at both locations. The abutting owners are presumed to own in fee to the centerline of Bridge Street, however it was not determined if the current owners were conveyed this from their historical grantors. Regardless, each sideline extends to the centerline of Bridge Street and are not shown for clarity.

The 1871 Bridge Street layout apparently ends with an easterly course on what is now Cottage Street. The terminus of this course is the "highway near Charles Higgins house". At that time the only highways were owned by the county in this section of town, that being Main Street. The distance of 61 rods, from the current intersection of Bridge and Cottage, falls about 328' short of the intersection of Cottage and Main. It is not clear how this course came to be in this layout since Cottage was laid out in the previous year of 1870. It may have been a surveying reference dimension to "tie-in" to Main Street to aid in proper placement during construction of the Bridge Street roadway, but this cannot be proven.

The water meter that lies on Hodder westerly of the proposed r-o-w may have existed as a private easement to the private corporation Bar Harbor Water Company prior to the Inhabitants acquisition of said Company. Historically, the meter would have been installed without regard to the street r-o-w and should not be considered as a conflict to this proposal.

It is recommended that the Inhabitants or their representatives discuss each of these points with the town's real estate attorney.

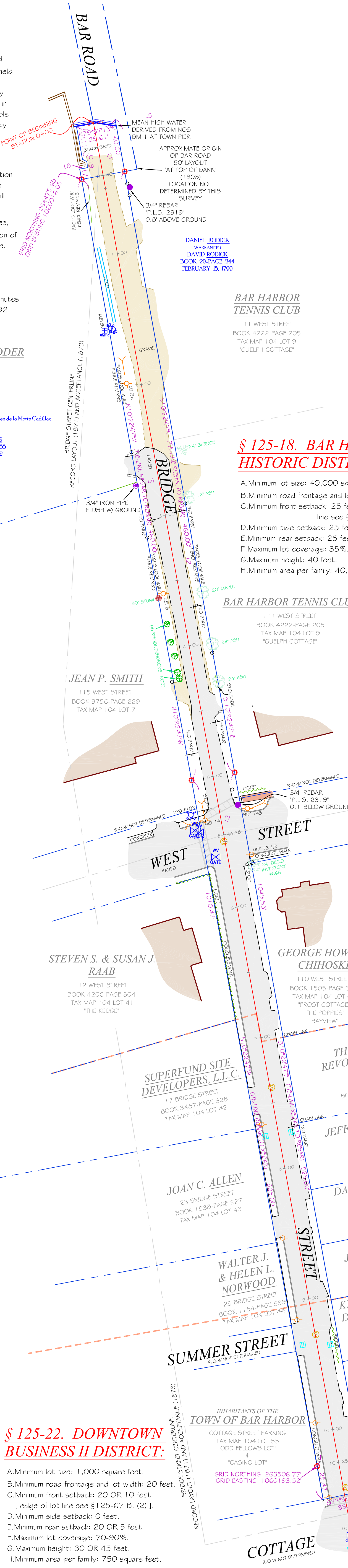
Monumentation rebar are proposed to be set as shown at points on line left and right of Stations 0+40.00, 5+00.00, & 10+25.00 so as not to confuse any future determination of the right-of-ways of West, Cottage, or Bar Road. All rebar to be set at or below ground will be 5/8" rebar, marked with an orange plastic surveyor's cap embossed "Patriot Land Surveys Maine P.L.S. 2329 Boundary".

All directions are Grid North Maine State Plane Coordinate System, East Zone (North American Datum 1983), derived from survey grade Global Positioning System observations on April 1st in the year 2005. All distances are on the state plane.

CERTIFICATION:

To the best of my knowledge, information, and belief, and in my professional opinion, this survey conforms to the Standards of Practice Promulgated by the Maine Board of Licensure for Professional Land Surveyors.

Joseph B. P. Coffey



§ 125-22. DOWNTOWN BUSINESS II DISTRICT:

- A. Minimum lot size: 1,000 square feet.
- B. Minimum road frontage and lot width: 20 feet.
- C. Minimum front setback: 20 OR 10 feet [edge of lot line see § 125-67 B. (2)].
- D. Minimum side setback: 0 feet.
- E. Minimum rear setback: 20 OR 5 feet.
- F. Maximum lot coverage: 70-90%.
- G. Maximum height: 30 OR 45 feet.
- H. Minimum area per family: 750 square feet.

REVISIONS:

- 1. Added proposed r-o-w monumentation (revised notes are underlined), approximate zoning lines & major zone dimension restrictions (March 11, 2008).
- 2. Altered proposed r-o-w to exclude the Hodder retaining wall (June 3, 2008).



LOCUS MAP
BAR HARBOR SHEET
USGS QUAD SHEET
SCALE 1"=2000'

§ 125-18. BAR HARBOR HISTORIC DISTRICT:

- A. Minimum lot size: 40,000 square feet.
- B. Minimum road frontage and lot width: 100 feet.
- C. Minimum front setback: 25 feet [edge of lot line see § 125-67 B. (2)].
- D. Minimum side setback: 25 feet.
- E. Minimum rear setback: 25 feet.
- F. Maximum lot coverage: 35%.
- G. Maximum height: 40 feet.
- H. Minimum area per family: 40,000 square feet.

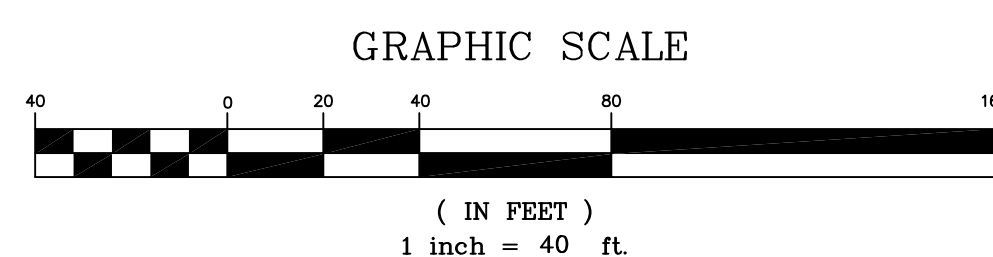
LEGEND

- IRON ROD FOUND
- IRON PIPE FOUND
- 5/8" REBAR PROPOSED
- UTILITY POLE
- GUY ANCHOR
- OVERHEAD UTILITY LINE
- HYDRANT
- WATER VALVE
- SIGN
- SURVEYED LINE
- - - APPROXIMATE ABUTTER'S LINE
- - - HISTORICAL PARCEL LINE
- SAM ADAMS HISTORICAL OPERATIVE DEED CALL
- CATCH BASIN
- SANITARY MANHOLE
- CONIFEROUS TREE
- DECIDUOUS TREE
- CEDAR FENCE POST REMAINS

LINE	BEARING	LENGTH	DESCRIPTION
L1	N29°36'13"W	55.43	PLS 231.9 REBAR TO STA 0+00
L2	S09°59'22"E	472.20	PLS 231.9 REBAR TO REBAR
L3	N25°00'17"E	24.63	PLS 231.9 REBAR TO STA 5+44.78
L4	N79°37'13"E	17.73	3/4" PIPE TO STA 2+74.26
L5	S86°00'45"W	1644.03	PIER BM 1 DISK TO STA 0+00
L6	S67°43'10"W	1597.85	BM 3320 DISK TO STA 10+50.00
L7	N1°02'24"W	7.86	
L8	N72°37'13"E	5.95	
L9	N09°10'12"W	4.53	LINE SEGMENTS AROUND HODDER RETAINING WALL
L10	N61°53'35"W	3.79	
L11	N1°02'24"W	25.26	

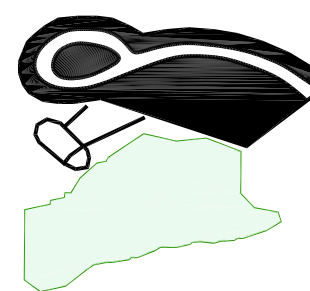
§ 125-22. DOWNTOWN RESIDENTIAL DISTRICT:

- A. Minimum lot size: 5,000 square feet.
- B. Minimum road frontage and lot width: 50 feet.
- C. Minimum front setback: 15 feet [edge of lot line see § 125-67 B. (2)].
- F. Minimum side setback: 5 feet.
- G. Minimum rear setback: 15 feet.
- H. Maximum lot coverage: 75%.
- I. Maximum height: 40 feet.
- J. Minimum area per family: 1,250 square feet.



ROW

PROJECT NUMBER 2007-021



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CLIENT/PROJECT:

INHABITANTS OF THE TOWN OF BAR HARBOR

SHEET TITLE:

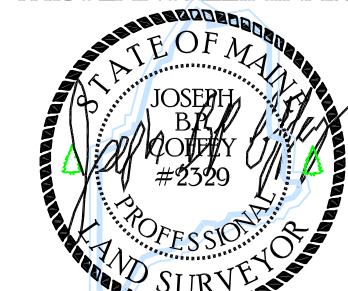
RIGHT-OF-WAY SURVEY PLAN

LOCATION: **BRIDGE STREET**

SCALE: **1 inch = 40 feet**

TOWN: **BAR HARBOR** COUNTY: **HANCOCK** STATE: **MAINE** DATE: **MAY 22, 2007 REV 2** DRAWN BY: **JBPC**

THIS PLAN PRELIMINARY



WITHOUT SIGNATURE