MINUTES OF BOSTON RETIREMENT BOARD

Administrative Session

November 18, 2020 Boston Retirement Board, Room 716 Boston, Massachusetts 02201

TRUSTEES IN ATTENDANCE: Daniel J. Greene, Mayoral Appointed Member (Chairman); Maureen A. Joyce, Ex Officio Member; Thomas V.J. Jackson, Fifth Member; Michael W. McLaughlin, Elected Member; Michael D. O'Reilly, Elected Member (All Board Members remotely present).

STAFF IN ATTENDANCE: Timothy J. Smyth, Executive Officer; Padraic P. Lydon, General Counsel; John F. Kelly, Investment Analyst; Ellen M. McCarthy, Comptroller; Christine M. Weir, Operations Officer, Gregory Molina, Board Secretary (All Staff remotely present).

ALSO IN ATTENDANCE: Michael Manning, Kiley Fischer, Haley Tran of NEPC; (All presenters remotely present).

Administrative Session Convene

The Board voted unanimously via roll call (5-0) to enter into Administrative Session at approximately 10:02 a.m.

Previous Minutes

Chairman Greene announced the tabling of the Administrative Session Minutes of the October 21, 2020 Board meeting to December Board meeting.

Outstanding/Ongoing Administrative Issues: Timothy J. Smyth, Executive Officer

Meeting Dates and Standard Agenda for CY21

Mr. Smyth pointed out that the standard Boston Retirement System (BRS) Board meeting dates had been filed with City Clerk and the dates can be put in the calendar for the next year.

Certificate of Receipt of Open Meeting Law Materials

Mr. Smyth also stated that the BRS has filed a Certificate of Receipt of Open Meeting Law Materials with the City Clerk as well.

Mr. Smyth went on to mention that Assistant General Counsel, Natasha Thomas was named one of the top women of the law in 2020. This is a huge accomplishment and staff are quite proud of her. Chairman Greene went on to congratulate Ms. Thomas on behalf of the Board.

Outstanding/Ongoing Investment Issues: John Kelly, Investment Analyst **NEPC**

Mr. Manning opened by telling the Board that at the October meeting, NEPC provided a list of respondents to the Emerging Markets Equity search, categorized into four style groups: Core, Growth, Value and Small Cap. NEPC assisted the Board in developing shortlists of the Core and Growth candidates for further analysis which will be presented at today's meeting. The Value and Small Cap lists will be reviewed at a future meeting. The objective of this discussion is to select two candidates from each list (Core/Growth) to interview as finalists.

Mr. Manning stated that an item that came up previously was that there is a difference from the NEPC rating system and the rating system that has to be used for The BRS searches per PERAC. The Board will notice as we review some of the candidates that they are rated one, two or three. Those who are rated four, five or six by NEPC scale, are generally going to be a four for PERAC which means they are excluded. If they are a one, they will be a one for NEPC's BRS search. The two's and threes could each move up a grade in the BRS search categorization. There are some managers that you will see that have a NEPC rating three that are going to be a two rating or would be eligible for a higher rating for the BRS per the PERAC guidelines. Anything that is a one or two are candidates that are available to be hired.

Mr. Manning went on to state that the ABS investment strategy is on the NEPC discovery platform. NEPC discovery platform is built for managers that are newer, have a niche strategy, may not have a substantial track record and goes through an advanced due diligence process before it can get a full rating. On the BRS scale that would be a one not a three because of the discovery platform.

As the Board sees in the slide Martin Currie Investment is rated a three at NEPC, they would still be a two for purposes of this search. As would BlackRock Investments and Wellington Management Company. Anything that NEPC would bring forward would be at least a two on the PERAC scale.

Member Jackson asked how frequently is the NEPC rating system evaluated. Ms. Tran went on to address the question. Ms. Tran stated that NEPC does affirm ratings at least once a year. They also have touch points throughout the year such as performance measures and quarterly updates.

Emerging Market Equity Search

The Emerging Markets search respondents have been categorized by style type: Core, Growth, Value and Small Cap. NEPC will focus on the Core and Growth candidates first. An evaluation of the value and small cap respondents will follow this portion of the search. NEPC has included an analysis on the Core and Growth respondent shortlists that were developed at the October meeting. A subset of pages from the Core and Growth analyses are included and full search books have been provided as a supplemental document.

Core search

Mr. Manning referred to State Street Global Advisors SSGA product as not a viable candidate going forward due to poor performance. ABS Investment Management is hiring very focused managers that are focusing on many different countries around the globe in the Emerging Market space. They have also proposed a fee discount for NEPC clients.

Ms. Tran continued by stating that ABS attacks their Emerging Markets mandate in a little different way than the rest of the managers. They hire country specialist to match to the country index. If the country has 10% to 20% index that would be the part that they carve out and hire a country expert. They are fund to fund and that is why they are a part of the discovery platform and not one or two rated with NEPC yet. Their track record is short, in investment they show a longer track record. As part of being fund to fund the BRS would pay two layers of fees, both fees to ABS and fees to the underlying managers.

The rest of the managers on the list are straight forward fundamental stock pickers and you pay fees to the manager only. The biggest differentiation between these managers is the level of tracking error. Some are more bench mark heavy like Schroder and BlackRock.

BlackRock has had a lot of changes to their platform over the years but they have started to stabilize. As for Fidelity and Schroder, these are the two managers NEPC thinks of more for bench mark hugging. They keep the tracking error pretty low and NEPC thinks of Emerging Markets as a potential area for alfa and for active manager to achieve that alfa they do need to ramp up the tracking error and take risks to get the returns.

NEPC prefers active managers that are willing to take risks and have a little bit of a higher tracking error, but too much.

For Schroder, when we interviewed the Schroder manager they seemed to be very focused on raising assets. Which is not necessarily a good thing for an active manager. NEPC is a little concerned on that front and will start to review their rating soon.

In Martin Currie's case, their performance numbers look quite good. NEPC is a little concerned of buying high and selling low because they have had a really good run recently.

Neuberger Berman has a high rating by NEPC. They are a Core/slightly Growth tilted firm. The PM has been running the strategy for a long time. The 10-year track record is completely his and that team is completely stable. It's a global team with headquarters in New York.

Wellington and Westwood are two managers that have the highest tracking errors on the list. The reason Wellington's platform has not been rated is that very similar to BlackRock, there has been many changes to their platform. There used to be one old school Emerging Markets team that were really successful about a decade ago and then they hit a very rough patch that went from a closed strategy over \$10B down to \$2B. Westwood is very concentrated with their benchmarks. Both firms' have very high tracking error numbers.

Ms. Tran then called attention to the tracking error page of presentation. Mr. Manning interjected that tracking error is a measure of how different a manager will be from the benchmark. If the BRS thinks of the current managers that are in the BRS portfolio Zevenbergen Capital is going to have the widest tracking error of all the managers bye a pretty far margin. They tend to be pretty wide. Their performance in any month, quarter or year can be really different from the benchmark.

Ms. Tran continued by stating that when she talks about the lower tracking error managers like Fidelity and Schroder, they are running in the 2% range. Which is pretty tight. Then the really high tracking error firms, they performance pattern may not look anything like the benchmark year in and year out. It could be great but it also could be a wild ride.

In the middle range are ABS and Neuberger. They have performed very well and have taken sufficient risks to achieve the alfa.

As we look at excess returns, ABS and Neuberger have had solid performances. The Board and NEPC discussed the merits of the candidates, the performance of current manager SSgA, the importance of this space and potential replacement, two or three candidates instead of incumbent, NEPC recommendations' and fees. The Board decided to have ABS, Wellington and Westwood come in and present their investment strategies and funds.

Mr. Manning went on to indicate that there were fewer managers in this search. There is no need to replace the incumbent manager Vontobel Asset Management, Inc. Vontobel has managed the BRS account for 15 years. Their long-term track record indicates that they have beaten the benchmark and have been ahead of the benchmark for three years. They have had a hard stretch recently. They had a senior level departure in 2014. During the long term they have done an ok job beating the bench mark 2% over 10 years net of fees. Many of the managers on the list are worth consideration.

Ms. Tran gave her comparisons of the firms' strengths' and weaknesses. The first two firms Axiom International Investors LLC and Columbia Management Investment Advisers, LLC are interesting due to recent developments.

Columbia had a recent departure of a senior PM for medical reasons. It started with medical leave that became permanent. She is the firms China PM that runs the firms China Emerging Market but she also runs her own China fund that is a big part of their platform. They hired a new person for that role. This was a more serious consideration for NEPC in terms of due diligence ratings that we referred to earlier. Columbia has a little higher fee.

Within the last three months, Axiom announced that their lead PM on their Emerging Market strategy had gone on medical leave as well. What struck NEPC is that Axiom conducts a Co-PM structure at the firm. There are three Co-PM's and it's the lead PM that is out on Medical. The CIO and founder of the firm, Andrew Jacobson was the architect of the strategy. This had happened before and he stepped in and took lead of the strategy and it went very well. NEPC feels very comfortable with the firm.

For Invesco, Ltd, this used to be the OFI platform. Its one of the biggest in the Emerging Markets. The one thing against this platform is its size. They are one of the biggest and as assets grew over time it took a performance headwind. Especially with is merger with Invesco they are quite aggressive in terms as asset gathering. Which is something you tend to look down on as an asset manager. From the business standpoint once it's a bigger platform they need bigger numbers to actually make sense for them to run as a business.

RBC Global Asset Management Inc is a bit of a different animal. They start out their process very dramatically. They look across the globe looking for investment themes then they narrow it down into subsectors then look at the whole supply chain then focus on the fattest parts. As they call it. To see where the most profits can be generated. They look at companies then conduct a deep dive bottom up research and identify companies and stocks to invest in. Which differentiates them from the other credit quality growth managers.

Wasatch Advisors Inc. has a unique edge by their lead PM is from Inia and he also runs the Inia fund. Because China has been such a big part of the bench mark and growing. Much of time a lot of managers are investing in the resources in China. Their strategy is, look we are really good in China that's why we are really good at Emerging Markets. This firm is different they have been focusing in India and are really good in India running an Indian fund for a long time and are a top-rated fund. This is an edge that they have compared to the other firms.

William Blair Investment Management is high growth. They are quite aggressive growth manager. NEPC likes them a lot. They are a good EM growth both on the small and large cap sides. Back to the buy high sell low, she would be hesitant to be looking to a manager like Blair because they are aggressive growth.

Mr. Manning then wanted to highlight that the tracking error is really high for Wasatch and William Blair is also high. It doesn't mean anything negative, it just means that one should be ready for a wilder ride.

Three of the managers Wasatch, Vontobel and William Blair. Wastach to a greater extreme. Show periods where they are plus or minus off the benchmark by 2% - 3% in a month. There is real differentiation between them and the benchmark. There tends to be two trends with this group. One, a little more volatility against the benchmark. Where in the Core space you see that managers

are more closely aligned with the benchmark, generally. Two, they have been Growth bias and Growth has been a big winner through September 30th. It's actually shifted around a little this quarter. They have benefitted from the Growth fund where Vontobel has not to the same extent.

Chairman Greene asked what was NEPC's opinion on the performance of incumbent manager Vontobel. Mr. Manning stated that if you look out over the long term, 10 years, 4.7% versus 2.4% in terms of difference versus the benchmark. They have done a really good job for the BRS over time. It hasn't been quite as strong recently. If you look over the last five years they lagged under the benchmark. That being said NEPC feels that there are other managers that can be looked at. Ms. Tran added that NEPC thinks that quality Growth space has done really well based on what the market and index has been. The managers that NEPC has rated one and two have done exceptionally well. Vontobel has not done as well as the other candidates NEPC has rated but Ms. Tran believes Vontobel is a fair manager.

The Board and NEPC discussed the merits of the candidates, NEPC recommendations' and fees. The Board decided to have Columbia, Axiom and Vontobel come in and present their investment strategies and funds at the January BRS Board meeting.

Private Markets Planning

Mr. Manning continued by presenting on the Private Market program plan. As part of the Private Markets investment program, BRS needs to commit to new funds each year. BRS must maintain vintage year diversification and maintain investment level as older funds wind down.

NEPC recommends committing \$180 million to Private Markets for vintage year 2021. \$140 million to Private Equity, \$80M to Hamilton Lane, \$60M to other PE funds, and \$40 million to Private Debt.

Consistent with past practice, NEPC recommends a Real Estate search that encompasses targeted commitments for 2021 & 2022. BRS should target managers across the style/risk spectrum. Investments of \$45 million in 2021 and \$55 million in 2022.

In January, NEPC will present a more formal pacing plan with more recent numbers. These recommendations are based on historical numbers. There are no formal decisions that need to be made.

October 2020 Flash Report

Mr. Manning reported that the BRS investment portfolio for the quarter. BRS had a great quarter. Ranked in the top third. The good trends that have been seen are the mangers outperformance. The total fund performed at 7.3% for the year. The allocation index was 6.4%. That means the BRS managers added 90 basis points during that time period.

For the month of October 2020, the portfolio return was slightly down -1.0%, however, November 2020 has been back up pretty strongly. Still adding value, positive year to date (YTD) adding 40 basis points up. Whish is pretty amazing when you think of all that 2020 has brought. The most amazing thing continues to be the run that Zevenbergen Capital has been on. 100% versus 29% for the benchmark over the last 12 months through October. This is going to reverse a little as Value is coming into play in November. Westfield is showing a strong performance versus the benchmark. Bernzott, despite being more Value oriented. They have done a good job, they lost money but they loss much less than the benchmark. YTD down -3.0% versus down -18.0%, which is really strong.

As for Segall Bryant Hamill strategy, NEPC is talking to them on a 25% fee reduction, for the next 12 months. They have to work through some issues and think this product can come back. As stated before they have the shortest leash of all the managers in the portfolio. In terms of disappointing performance.

On the Fixed Income side, we have a continuation of the theme we had before. Which is, YTD as interest rates continue to come down, Wells and IR&M have done better in Fixed Income. The BlackRock SIO product, which doesn't benefit from the interest rates going down. At a YTD basis, they have not been as strong. They have protected more when interest rates have gone up. Adding value +1% when the benchmark was down -1%.

Mr. Manning mentioned that DDL was a strong out performer. Earlier in the year their performance suffered more than the other managers in this space. NEPC would expect them to come back stronger and they have certainly done that.

On the Hedge Fund side, Grosvenor continues to be the strongest manager in that group. Since the BRS hired them in 2013 they have been 50 basis points ahead of the benchmark at +6.5%.

Work Plan for 2020

Mr. Manning asked the Board about the Private Equity search. Did the Board want to look into diverse managers? NEPC can do the search and look into the managers and then decide. Chairman Greene asked, how wide of a search would it be? Mr. Manning answered that in the fund to fund space there are less than five that have a dedicated program.

The Board NEPC and staff discussed and agreed that a search was beneficial and instructed NEPC to conduct a search for diverse manager in the Private Equity space.

Due Diligence Update re Siguler Guff & Company

Siguler Guff & Company has announced that Jim Corl, Managing Director & Head of Real Estate, has resigned. Hamid Tabib, a Principal on the real estate team, has also resigned. John Scheurer has been hired as a Managing Director to oversee the existing real estate investments and team. NEPC believes that this is a meaningful change; however, no client action is required.

Due Diligence Update re Benzott Capital Advisors

Bernzott Capital Advisors announced that three key members of the firm have left. Departing members include Thomas Derse, President & PM, Scott Larson, CIO & PM, and Ryan Ross, PM. Given the seniority of these team members and their strong involvement in the investment process, NEPC has changed Bernzott's status to "client review".

The Board, NEPC and staff discussed the impact on BRS investments with Bernzott due to the departure of three key members of their staff. The Board instructed NEPC to invite Kevin Bernzott to the December 2020 meeting for investment update and status of the firm.

Outstanding/Ongoing Financial Issues: Ellen M. McCarthy, Comptroller

October 2020 Financial Snapshot

Ms. McCarthy reported Pension payroll contributors: \$56,192,979 Total Contributory Payees: 15,224 Total Payees; Payrol1 (non-contributors): \$294,918; Total Contributory payees: 42; New Regular Retirees: 105; Survivor/Beneficiary Boston Retirement Board Administrative Session Minutes of Nov. 18, 2020 Page

Retirees: 2; Disability Retirees: 6; Refunds and transfers: 81 for \$1,805,559; Members Refunds: 66 for \$1,115,984 Members Transfers: 12 for \$622,518; Option B Refunds: 3 for \$67,057; Operational Warrants: \$461,112.

Ms. McCarthy also noted that the CY21 draft budget has been completed and it will be available shortly for the Board to review at December 2020 meeting.

Additionally, staff has been in discussion with Ernest & Young (E&Y) for the 2020 audit. Staff has already submitted documentation to E&Y to start the process.

Outstanding/Ongoing Operations Issues: Christine M. Weir, Operations Officer

October 2020 payroll update

Ms. Weir provided an update on the payroll number for the month of October. There were 117 possible new retirements (113 Superannuation, 1 Death of Active, 3 disabilities). Of the 117 possible cases, 100 made payroll. Of the 17 cases that did not make payroll, Ms. Weir noted the following explanations: 1 rescinded his retirement; 1 Member ended up on September payroll; 1 Member final papers were not sent due to a legal issue; and, 14 Members failed to timely return final papers.

Outstanding/Ongoing Legal Issues: Padraic P. Lydon, General Counsel

Mr. Lydon informed the Board that late yesterday the final details were worked out with the Vitech contract. In CSI Board members will see the escrow agreement, invoice, SOW implementation, conflict agreement, LSSA, MSSA, service agreement and TPA.

Mr. Smyth added that staff had engaged Ice Miller for assistance with the contract. Mr. Lydon noted that Attorney Thomas Walsh did the yeomen's work in reviewing the contract. Attorney Walsh has vast experience across the country and experienced in dealing with Vitech.

Member Joyce inquired as to the length of the Vitech contract. Mr. Lydon answered, seven years with a monetary commitment of approximately \$10.5 million.

Member McLaughlin inquired about insurance for the BRS in the event Vitech loses vital information in the upgrade or the viability of Vitech in the future. Mr. Lydon stated that there was verbiage in the agreement and the escrow in the event any of those issue occur. Member McLaughlin also inquired if the PERAC Memo 32-2020 GL c 32 s 91A was pertinent to both ADR and IDR retirees? Mr. Lydon answered, just for ADR retirees.

Also offered are PERAC memoranda for educational purposes only.

- PERAC Memo 32-2020 re Allowable Earnings Determination pursuant to GL c 32 s 91A; and,
- PERAC Memo 33-2020 re PROSPER Benefit Calculation Submission.

Documents presented

Vitech contract, escrow agreement, invoice, SOW implementation, conflict agreement, LSSA, MSSA, service agreement and TPA.

Motion made, and seconded, to go into Executive Session at approximately 11:51 p.m. Roll call vote; Member Joyce; Aye, Member Mclaughlin; Aye, Member O'Reilly; Aye, Member Jackson; Aye, Chairman Greene; Aye.

Motion accepted (5-0)

Respectfully submitted,

BOSTON RETIREMENT BOARD

Daniel J. Greene, Esquire

Mayoral Appointed Member, Chairman

Michael W. McLaughli

Elected Member

Maureen A. Joyce

Ex Officio Member

Michael D. O'Reilly

Elected Member

The voor

Thomas V.J. Jackson