



Public Facilities Committee Agenda

City of Newton In City Council

Wednesday, February 19, 2020

7 pm
Room 204

Items Scheduled for Discussion:

Public Hearing

#117-20 Acceptance of a sewer extension and easement on Farwell Street

HER HONOR THE MAYOR requesting the acceptance of 40 linear feet of sewer pipe as a public sewer and the acceptance of a 20' x 40' easement in property known as the Farwell Street Subdivision (Ward 3). The developer shall pay all costs associated with the construction of the sewer pipe and the direct connection to the MWRA trunk interceptor sewer line.

Chairs Note: *The Public Works Department will update the committee on projects in the Water, Sewer and Stormwater Divisions.*

#130-20 President's Reappointment of James Purdy to the Energy Commission

PRESIDENT ALBRIGHT reappointing James Purdy, 943 Chestnut Street, Newton Upper Falls to the Energy Commission for a term of office to expire December 31, 2023. (60 days: 04/18/20)

#131-20 President's Reappointment of Michael Gevelber to the Energy Commission

PRESIDENT ALBRIGHT reappointing Michael Gevelber, 166 Melrose Street, Auburndale to the Energy Commission for a term of office to expire December 31, 2023. (60 days: 04/18/20)

The location of this meeting is accessible and reasonable accommodations will be provided to persons with disabilities who require assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA Coordinator, Jini Fairley, at least two business days in advance of the meeting: jfairley@newtonma.gov or (617) 796-1253. The city's TTY/TDD direct line is: 617-796-1089. For the Telecommunications Relay Service (TRS), please dial 711.

#132-20

Mayor's Reappointment of Halina Brown to the Energy Commission

HER HONOR THE MAYOR reappointing Halina Brown, 56 Cloverdale Road, Newton Highlands to the Energy Commission for a term of office to expire April 15, 2023. (60 days: 04/18/20)

Respectfully submitted,

Alison M. Leary, Chair



Ruthanne Fuller
Mayor

City of Newton, Massachusetts
Office of the Mayor

117-20
Telephone
(617) 796-1100
Fax
(617) 796-1113
TDD/TTY
(617) 796-1089
Email
rfuller@newtonma.gov

January 28, 2020

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

RECEIVED
Newton City Clerk
2020 JAN 27 PM 3:03
David A. Olson, CMC
Newton, MA 02459

Honorable City Councilors:

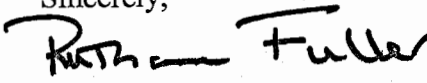
I respectfully submit a docket item to your Honorable Council requesting the acceptance of a sewer extension, connection and easement from the developer of an approved subdivision off Farwell Street, as allowed in City Ordinance 29-69. As outlined in the attached memo of January 27, 2020 from DPW Commissioner McGonagle, the developer of this six-home subdivision along the Charles River will pay for the construction of a 40' sewer pipe and a direct connection to the MWRA trunk interceptor sewer line. MWRA requires that the sewer connection is owned, operated and maintained by the City of Newton.

The subdivision was approved by Planning Board acting as a Board of Survey on July 19, 2018.

As requested by DPW, the Council is asked to vote:

- Approval of the sewer extension and connection
- Acceptance of the 40' sewer pipe and connection as a public sewer, to be owned and operated by the City of Newton
- Acceptable of the sewer easement, to be approximately 40' long by 20' wide, as shown in an easement plan
- The condition that all costs of installing the sewer, and the sewer connection, will be borne by the developer
- Approval of the name of newly created Private Way, name to be Farwell Circle.

Thank you for your consideration of this matter.

Sincerely,

Ruthanne Fuller, Mayor

Cc: James McGonagle, DPW Commissioner



DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE COMMISSIONER
1000 Commonwealth Avenue
Newton Centre, MA 02459-1449

Ruthanne Fuller
Mayor

January 27, 2020

To: Mayor Ruthanne Fuller
Jonathan Yeo, Chief Operating Officer
Maureen Lemieux, Chief Financial Officer

From: James McGonagle, Commissioner Public Works

Subject: Docket Request, Sewer Extension and Connection, and Acceptance of a Sewer Easement, Farwell Street Subdivision, City Ordinance Sec. 29-69 (Ref 373-19)

Discussion: Farwell Street Subdivision was approved by the Planning Board Acting as a Board of Survey on July 19, 2018. The subdivision consists of six (6) new single-family homes on a newly created road off Farwell Street. The proposed sewer system within Farwell Street, which serves the six houses, will be installed by the developer of the subdivision, at his cost, and will be operated and maintained by the homeowner's association.

Due to topography, the privately-owned sewer system is designed to directly discharge into the nearby MWRA trunk interceptor sewer (not the City of Newton sewer system), which flows from west to east along the bank of the Charles River, from Farwell Street toward California Street. The MWRA will allow the connection from the proposed Farwell Street sewer directly into the MWRA trunk interceptor sewer only if the sewer connection is owned, operated and maintained by the City of Newton, not the homeowner's association. The proposed Farwell Street sewer is designed so that approximately 40 linear feet of sewer pipe and the connection to the MWRA trunk interceptor sewer could be owned, operated and maintained by the City of Newton, should the Honorable City Council approve this as a sewer extension.

The proposed 40 linear feet of sewer pipe and connection to the MWRA sewer will be laid within a proposed 40 ft x 20 ft sewer easement, to be accepted by the City.

Please docket this sewer extension request, and acceptance of a sewer easement request, with the Honorable City Council for consideration. The docket item for consideration and vote includes:

- Approval of the sewer extension and connection (see plan),
- Acceptance of the 40 linear feet of sewer pipe and connection as a public sewer, to be owned and operated by the City of Newton (see plan),
- Acceptance of the sewer easement, to be approximately 40 feet long by 20 feet wide, as shown on the easement plan (see plan),
- The condition that all costs of installing the sewer, and the sewer connection, will be borne by the developer (see letter from developer),
- Approval of the name of the newly created Private Way, name to be Farwell Circle.

Sincerely,


James McGonagle

Attachments:

Utility Plan showing proposed sewer extension

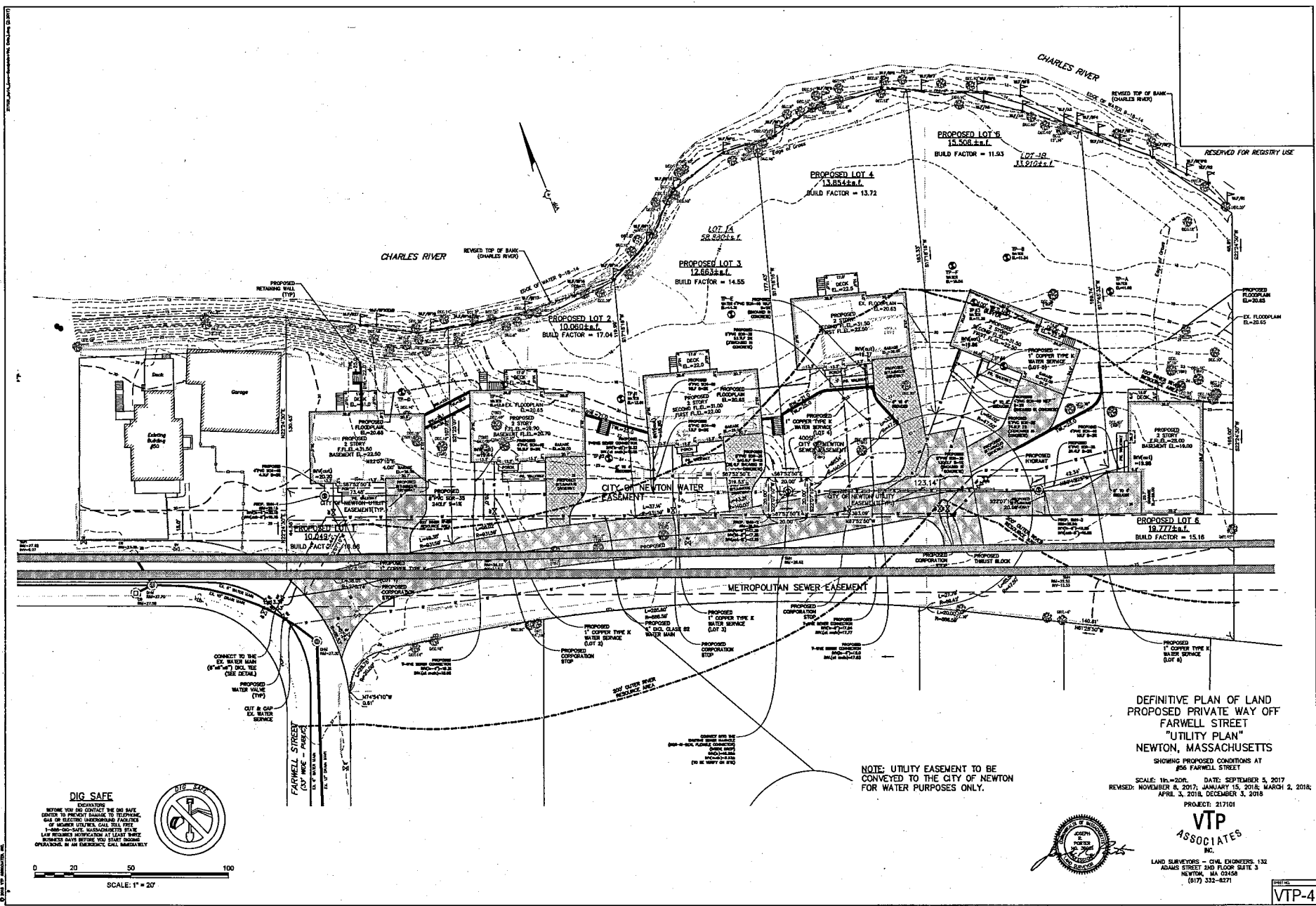
Utility Profile showing proposed sewer extension

Easement Plan showing proposed sewer easement

Easement Plan showing approved water easement (for reference)

Letter from developer agreeing to bear all costs associated with the sewer construction

Telephone: 617-796-1009 • Fax: 617-796-1050 • Jmcgonagle@newtonma.gov



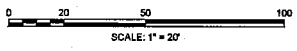
DEFINITIVE PLAN OF LAND
 PROPOSED PRIVATE WAY OFF
 FARWELL STREET
 "UTILITY PLAN"
 NEWTON, MASSACHUSETTS

SHOWING PROPOSED CONDITIONS AT
 126 FARWELL STREET
 SCALE: 1/4"=1'-0" DATE: SEPTEMBER 5, 2017
 REVISED: NOVEMBER 8, 2017; JANUARY 15, 2018; MARCH 2, 2018;
 APRIL 3, 2018; DECEMBER 3, 2018

NOTE: UTILITY EASEMENT TO BE
 CONVEYED TO THE CITY OF NEWTON
 FOR WATER PURPOSES ONLY.

DIG SAFE

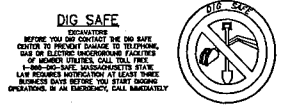
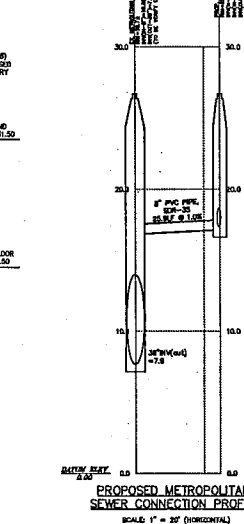
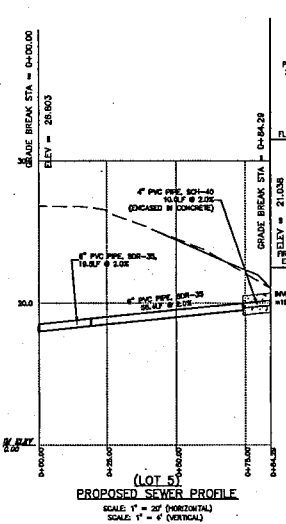
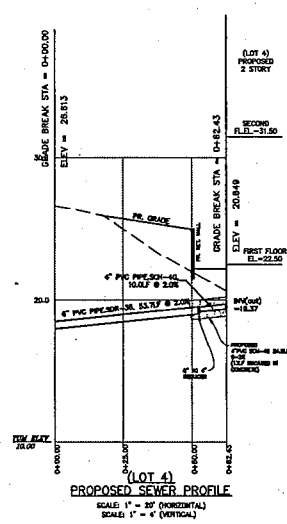
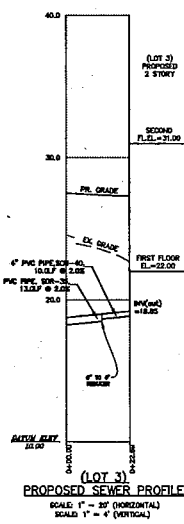
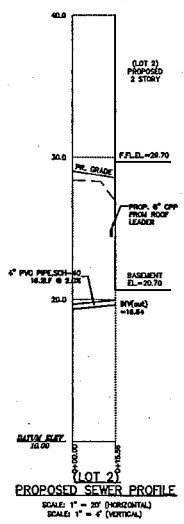
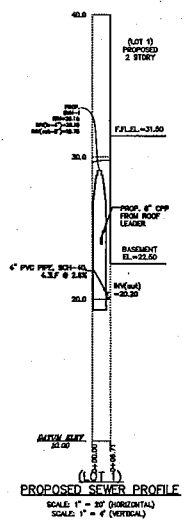
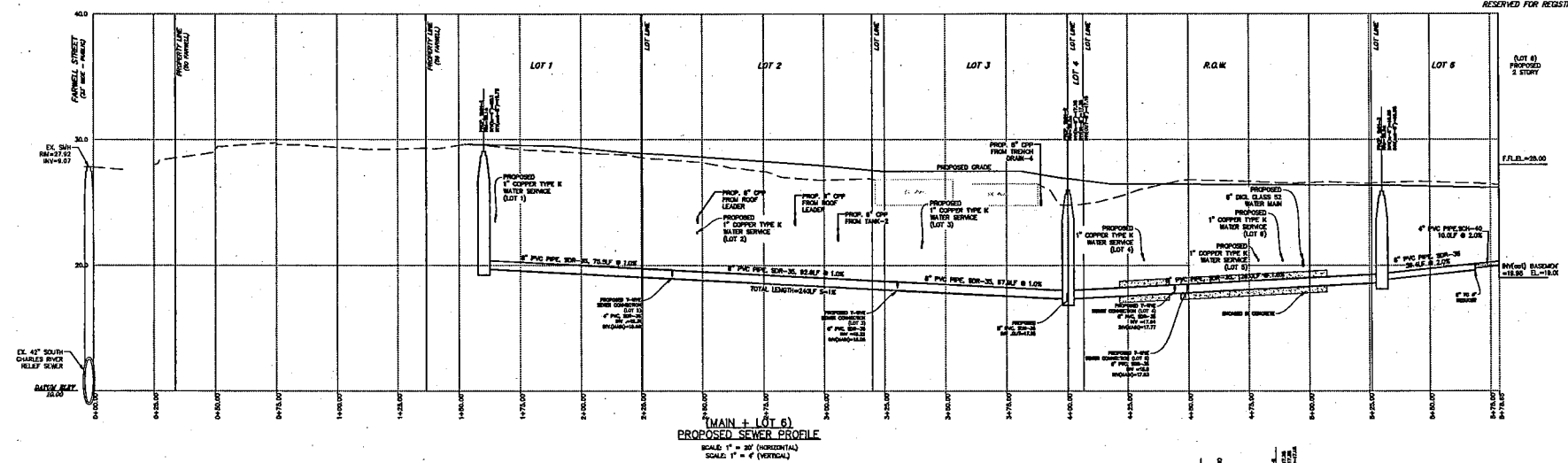
BEFORE YOU DIG CONTACT THE DIG SAFE
 CENTER TO PREVENT DAMAGE TO UTILITIES.
 USE OF DIGGING OPERATIONS FACILITY
 OF MASSACHUSETTS SHALL BE IN ACCORDANCE WITH
 MASS-90-CMR 24.000. THE STATE
 LAW ENFORCEMENT AGENCY SHALL BE NOTIFIED
 48 HOURS BEFORE YOU START ANY
 OPERATIONS IN AN EMERGENCY CALL IMMEDIATELY.



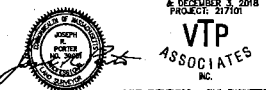
VTP
ASSOCIATES
 INC.

LAND SURVEYORS - CIVIL ENGINEERS 132
 ADAMS STREET AND FLOOR SUITE 3
 NEWTON, MA 02458
 (617) 332-8271

RESERVED FOR REGISTRY USE



DIG SAFE
DEFINITIVE PLAN OF LAND
PROPOSED PRIVATE WAY OFF
FARWELL STREET
"DETAIL-1"
NEWTON, MASSACHUSETTS
SHOWING PROPOSED CONDITIONS AT
855 FARWELL STREET
SCALE: AS-SHOWN DATE: SEPTEMBER 5, 2017
REVISED: NOVEMBER 8, 2017; MARCH 2, 2018; APRIL 3, 2017;
8, OCTOBER 3, 2018
PROJECT: 217101



VTP ASSOCIATES, INC.
LAND SURVEYORS - CIVIL ENGINEERS, 132
ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 332-0271

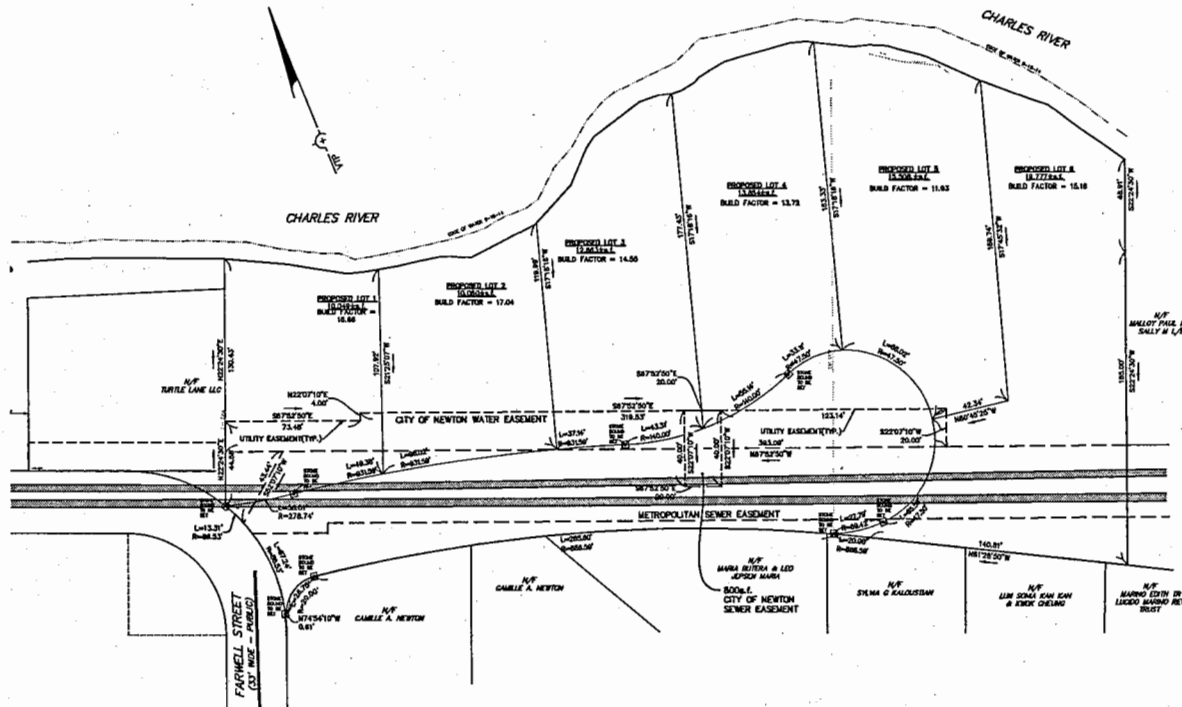
MIDDLESEX SOUTH REGISTRY OF DEEDS

DEED REFERENCE
BOOK 8751A PAGE 362

PLAN REFERENCE
BOOK 1581B PAGE 527

OWNER OF RECORD
TURTLE LANE, LLC

RESERVED FOR REGISTRY USE



LEGEND

- EX SEWER LINE
- EX DRAIN LINE
- EX GAS LINE
- EX WATER LINE
- EX BUILDING
- PROPERTY LINE
- WEARING DISTANCE
- BASEMENT LINE
- WEARING DISTANCE
- PR ELECTRIC/TELECOMMUNICATION
- PR SEWER LINE
- PR DRAIN LINE
- PR GAS LINE
- PR WATER LINE

- NOTE:
- CITY OF NEWTON WATER EASEMENT FOR FUTURE ACCESS AND MAINTENANCE OF THE WATER MAIN.
 - OWNER IS RESPONSIBLE FOR ALL INSTALLATION COSTS OF BOTH WATER MAIN AND SEWER BY ACCEPTED CITY DESIGN.
 - MWRA HAS NO RESPONSIBILITY FOR SEWER CONNECTION AND CITY OF NEWTON IS RESPONSIBLE FOR MAINTENANCE AND REPAIRS WITHIN MWRA EASEMENT. HOMEOWNERS ASSOCIATION WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY THE CITY OF NEWTON.

I CERTIFY THAT THE PROPERTY LINES SHOWN HEREON ARE THE LINES DIVIDING EXISTING OWNERSHIP, AND THE LINES OF STREETS OR WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND NO NEW LINES FOR THE DIVISION OF EXISTING OWNERSHIP OR FOR NEW WAYS ARE SHOWN, AND THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

JOSEPH R. PORTER PLS DATE



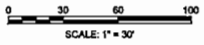
SEWER EASEMENT PLAN
NEWTON, MASSACHUSETTS
SHOWING PROPOSED CONDITIONS AT
#56 FARWELL STREET

SCALE: 1"=30' DATE: OCTOBER 11, 2018
REVISED: AUGUST 7, 2019; DECEMBER 16, 2020

PROJECT: 217101



LAND SURVEYORS - ONE ENGINEER, 132
ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 332-8271

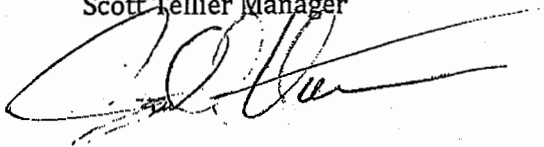


Turtle Lane LLC
77 Oldham Rd
Newton Mass 02465

Lou Taverna
City Engineer
City of Newton
Engineering Dept.
Board of survey
1000 Commonwealth Ave
Newton Mass.

Mr. Taverna, As requested. Turtle Lane LLC will be responsible for all construction and maintenance of the sewer main extension to 56 Farwell St for the new six lot subdivision approved by the board of Survey, City of Newton Engineering Dept, Newton Conservation, MWRA and the DEP. All Approvals have been recorded with the registry of Deeds.

Thank you
Scott Tellier Manager

A handwritten signature in black ink, appearing to read 'Scott Tellier', is written over the typed name. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

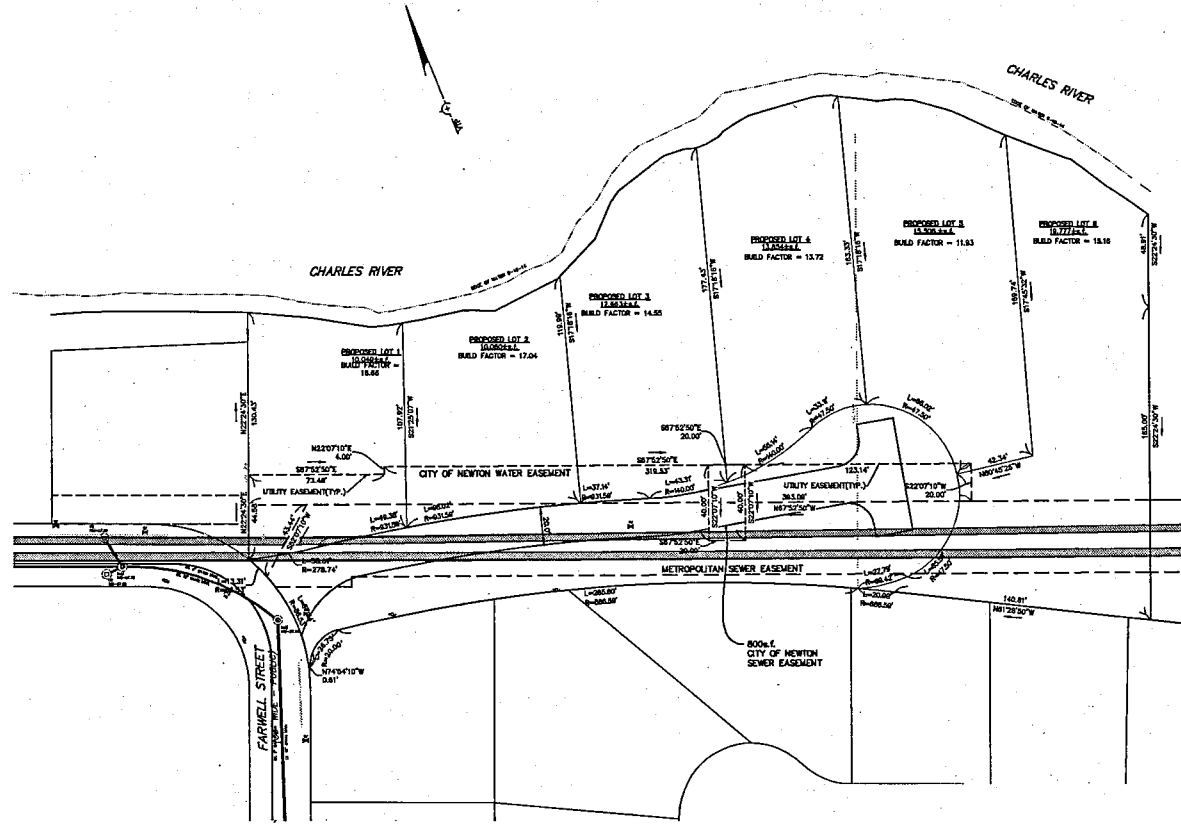
MIDDLESEX SOUTH REGISTRY OF DEEDS

DEED REFERENCE
BOOK 82258 PAGE 302

PLAN REFERENCE
BOOK 15813 PAGE 427

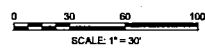
OWNER OF RECORD
TURTLE LAKE, LLC

RESERVED FOR REGISTRY USE



LEGEND

- EX SEWER LINE
- EX DRAIN LINE
- EX GAS LINE
- EX WATER LINE
- EX BUILDING
- PROPERTY LINE
W/BEARING DISTANCE
- EASEMENT LINE
W/BEARING DISTANCE
- PR ELECTRIC/TELECOMMUNICATION
- PR SEWER LINE
- PR DRAIN LINE
- PR GAS LINE
- PR WATER LINE



NOTE:

- CITY OF NEWTON WATER EASEMENT FOR FUTURE ACCESS AND MAINTENANCE OF THE WATER MAIN.
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- MWRA HAS NO RESPONSIBILITY FOR SEWER CONNECTION AND CITY OF NEWTON IS RESPONSIBLE FOR MAINTENANCE AND REPAIRS WITHIN MWRA EASEMENT. HOMEOWNERS ASSOCIATION WILL BE RESPONSIBLE FOR ALL COSTS INCURRED BY THE CITY OF NEWTON.

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JOSEPH R. PORTER PLS

DATE

WATER EASEMENT PLAN
NEWTON, MASSACHUSETTS

SHOWING PROPOSED CONDITIONS AT
656 FARNWELL STREET

SCALE: 1"=30' DATE: OCTOBER 11, 2018
REVISED: AUGUST 7, 2019;
SEPTEMBER 20, 2019;
JANUARY 16, 2020

PROJECT: 217101
VTP
ASSOCIATES
INC.



LAND SURVEYORS - CIVIL ENGINEERS, 132
ADAMS STREET 2ND FLOOR SUITE 3
NEWTON, MA 02458
(617) 552-0271

Application Form

RECEIVED

2020 FEB -3 PM 1:59

CITY CLERK
NEWTON, MA. 02459

Profile

Jim
First Name

C
Middle Initial

Purdy
Last Name

[Redacted]
Email Address

943 CHESTNUT ST
Home Address

Suite or Apt

Newton
City

MA
State

02464
Postal Code

What Ward do you live in?

Ward 5

[Redacted]
Primary Phone

[Redacted]
Alternate Phone

Green Newton
Employer

Job Title

Which Boards would you like to apply for?

Citizens Commission on Energy: Submitted

Interests & Experiences

Please tell us about yourself and why you want to serve.

Why are you interested in serving on a board or commission?

Have been a commission member for two terms (I think) and attended meetings for years before that. I occupy a City Council slot on the commission. Marc Laredo interviews me for previous appointment. Note - My resume failed to upload; you may already have a copy, or I can provide a hard copy.

Upload a Resume

Jim Purdy, AICP

Director, Planning Group

Introduction

Jim is a land use and environmental planner with over 30 years of experience. He has managed transportation, open space, and pedestrian/bicycle plans and environmental documentation, worked through public participation to resolve controversies, and prepared numerous master plans and open space plans.

Before coming to the Collaborative in 2007, Jim was a Principal Planner at the Louis Berger Group and a Managing Principal at Wallace Floyd Design Group.

Project Experience

Massachusetts DOT – I-93/I-95 Interchange Environmental Permitting and Preliminary Design

Jim is the Collaborative's Project Manager for the team effort to advance improvements for this critical system interchange north of Boston. Building upon his successful role as Project Manager for the previous 93/95 Interchange Study, which achieved consensus on a design concept for this highly contentious reconfiguration of a major system interchange, Jim will oversee public outreach and communications during the environmental permitting phase of the project.

Acton, MA and Adjacent Towns – Community Challenge Grant for Shared Transportation

As part of team, Jim is providing support to the Towns of Acton, Boxborough, Littleton, Maynard, Stow and Clock Tower Office Park in Maynard, MA in analyzing, recommending and implementing a transportation network. The goal of the project is to transform the current disparate, uncoordinated and incomplete transportation services in the region into a new cooperative and coordinated transportation system.

Town of Acton, MA – Comprehensive Community Plan

As Project Manager for the Acton 2020 Plan, Jim led the effort to address the needs of all aspects of the community, from housing to transportation, town services and facilities, and fiscal well being. During Phase 1 of the work, Jim participated in an extensive Public Outreach and Visioning process, meeting with the Town's Outreach Steering Committee and assisting in the planning and conduct of well-attended public visioning workshops. For Phase II, Jim oversaw the preparation of the plan report and worked extensively with the town on its overwhelming adoption at the April 2012 town meeting.

Massachusetts DOT – Statewide Bicycle Transportation Plan

Jim provided technical support on this important project including the development of the GIS-based comprehensive inventory of on- and off-road bicycle facilities already in place, in

development, or planned. Jim also assisted with stakeholder outreach and report writing and editing.

Massachusetts DOT – State Freight and Rail Plan

Working with a team, Jim helped to prepare a land use policy analysis that addresses the preservation of sites suitable for freight-intensive use. This included the evaluation of several Massachusetts regulatory mechanisms available to address site preservation and development.

Massachusetts DOT – youMove Massachusetts Strategic Outreach

Jim supported the outreach workshops for this important civic engagement project. He facilitated group discussions at five of the YMM public workshops and prepared the Interim Report on civic engagement for the plan. As an additional task for the project, Jim helped to assemble projects to be included in the Governor's economic stimulus package.

Massachusetts DOT - Route 28x Enhancements Project

Jim Participated in the public involvement process for the Route 28X Enhancements project for the Massachusetts Department of Transportation (MassDOT). This project represented a fast-track effort to program funds from the American Reinvestment and Recovery Act (ARRA) to improve transit services in on one Boston's highest ridership bus routes. The project's effort included newsletters, development of collateral materials in three languages, door-to-door outreach, distribution of meeting flyers on buses, and media relations.

Massachusetts DOT – Transportation Enhancements (TE) Program Redesign

Jim served as Project Manager and oversaw the work of the subconsultants to identify best practices in TE programs throughout the United States. Jim also oversaw the analysis of prior and ongoing applications for TE funds that led to recommendations for system improvements.

Federal Transit Administration – ADA Compliance Reviews for New, Key, and Renovated Rail Stations

Jim is the Collaborative's Project Manager for the ongoing ADA Rail Stations contract and has performed ADA rail station compliance reviews for FTA's Office of Civil Rights since 2007. This has included assessments of rail stations at 12 transit systems throughout the United States.

He was the principal author of the FTA Advisory Circular on Rail Station Accessibility.

Federal Transit Administration – ADA Compliance Reviews for ADA Complementary Paratransit, Stop Announcements and Route Identification, and Bus Accessibility Equipment

Since 2007, Jim has participated in or led more than 17 ADA compliance reviews for FTA's Office of Civil Rights. On several of these reviews, he has served as FTA's representative during on-site visits to transit systems.

Other Project Experience

- Vermont Agency of Transportation - Accelerated Environment Impact Statement for the Circ-Williston Connector
- Town of Bedford, NH and the Nashua Regional Planning Commission – New Hampshire Route 101 Corridor Study

*Several projects cited here have been completed with prior firm affiliations

Change for Good®

- New Hampshire Department of Transportation – New Hampshire Route 16 Public Involvement Plan
- New York Metropolitan Transit Authority – Fulton Street Transit Center
- Massachusetts Highway Department – Massachusetts Pedestrian Plan
- Boston Redevelopment Authority – Dorchester Avenue Streetscape and Transportation Action Plan
- Boston Transportation Department – East Boston Transportation Action Plan
- Town of Peterborough, NH – West Peterborough Improvement Plan
- Town of Middletown, RI – Development Impact Fee Study
- Town of Winchester, MA – Strategic Plan Update
- Private Client – Environmental Documentation for Transit-Oriented Development
- Various cities in Massachusetts – Open Space and Recovery Action Plans
- Town of Reading, MA – Planned Unit Development Bylaw
- Boston Redevelopment Authority – South Bay Development Study
- Massachusetts Highway Department and Massachusetts Turnpike Authority – Supplemental Environmental Impact Statement/Environmental Impact Report volume on the I-93 Central Artery/Tunnel Charles River Crossing
- Massachusetts Highway Department – Bridge Design Review Committee Report
- Massachusetts Institute of Technology – Northeast Sector Campus Plan
- Massachusetts Highway Department – Environmental Permitting Highway Projects, including Route 1/Walnut Street bridge reconstruction in Saugus and the Route 2 Crosby's Corner reconstruction
- The New England Transportation Initiative
- Federal Aviation Administration – Part 150 Airport Noise Compatibility Planning Study of Pease International Tradeport
- Logan International Airport – Logan Ground Access Study Environmental Impact Report
- Massachusetts Department of Public Works and the Massachusetts Highway Department – Central Artery/Third Harbor Tunnel EIS/R
- Massachusetts Port Authority Development Department – Commonwealth Flats Development
- City of Cambridge, MA – Fresh Pond Parkway Reconstruction
- Massachusetts Department of Environmental Management – Boston Harbor Islands Master Plan

Professional Activities

- Certified, American Institute of Certified Planners
- Member, American Planning Association
- Member, Massachusetts Association of Planning Consultants

*Several projects cited here have been completed with prior firm affiliations

Change for Good®

Jim Purdy
Page 4 of 4

Education

- Master of City Planning, Massachusetts Institute of Technology, 1978
- Bachelor of Science in Physics, University of Michigan, 1969

*Several projects cited here have been completed with prior firm affiliations

Application Form

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2020 FEB -3 PH 1:59

CITY CLERK
NEWTON, MA. 02459

Profile

Michael

First Name

Middle Initial

Gevelber

Last Name

[Redacted]

Email Address

166 Melrose ST

Home Address

Suite or Apt

Newton

City

MA

State

02466

Postal Code

What Ward do you live in?

Ward 4

[Redacted]

Primary Phone

[Redacted]

Alternate Phone

Boston University

Employer

Associate Professor

Job Title

Which Boards would you like to apply for?

Citizens Commission on Energy: Submitted

Interests & Experiences

Please tell us about yourself and why you want to serve.

Why are you interested in serving on a board or commission?

I've been a member of the energy commission since 2012, and I'm interested in continuing to make contributions to the cities efforts to meet sustainability objectives.

Upload a Resume

MICHAEL A. GEVELBER

Boston University, Manufacturing Engineering

Education

MASSACHUSETTS INSTITUTE OF TECHNOLOGY Cambridge, MA

Ph.D in Mechanical Engineering, August 1988. Specialties: Controls, dynamics, heat transfer, and thermodynamics. Thesis: "Dynamics and Control of the Czochralski Process", G. Stephanopoulos, Dept. of Chemical Engineering, advisor.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY Cambridge, MA

S.M. degree in Mechanical Engineering, February 1984. Thesis: "Control System Analysis and Dynamic Simulation of an OTEC Power Plant", D.N. Wormley, advisor.

BROWN UNIVERSITY Providence, RI

Sc.B. in Physics, June 1978. Thesis: "Nuclear Magnetic Resonance Study of Motional Narrowing in Glass and Crystalline Cadmium Lithium Nitrate"
Honors in Physics, 1978, Sigma Xi, 1978

Experience

Department of Mechanical Engineering, Boston University Boston, MA
Assistant (1988) and Associate Professor (1996). Research interests in advanced control design for enhanced materials processing including control and system design, modeling, instrumentation, and development of control analysis techniques. Co-chair of the Universities Energy Working Group and member of the Universities Sustainability Committee.

Cyber Materials LLC Newton, MA
Founder (2004) and Manager. Development and commercialization of advanced control and sensor solutions to improve industrial material processing capabilities.

Consultant Cambridge, MA
August 1983 to January 1985. Simulation and control analysis for industrial process.

U.S. Department of Energy Washington, DC
Sept. 1979 to Feb. 1981. Analyst in Office of Plans and Technology Assessment, Fossil Energy.

Energy and Environmental Analysis Inc. Washington, DC
November 1978 to September 1979. Analyst. Equipment modeling and cost estimation.

Professional Activities

- Editorial Board, "Robotics and Computer Integrated Manufacturing, An International journal of manufacturing and product and process development", IFAC, the International Federation of Automatic Control, 2003-2009.
- Founder (2005-2010) and co-director of Burr Elementary School Science and Engineering Discovery Week, a program that brings scientists and engineers into the classroom to give students a feeling of what real scientists and engineers do and why its exciting.
- Thermal Spray Society Program Committee, ASM International, 2003-2010
- International Thermal Spray Conference Program Committee, 2003-2010.
- Session Chair, International Symposium on Flexible Automation, July 2006, Osaka Japan.
- Program Committee for Thermal Spray Society Workshop: Consistency & Reliability of Thermal Spray Coatings: Issues and Practical Solutions: Sensors and Controls, Fall 2004.
- INEEL Summer Faculty Fellowship (1998, 1999)
- Program Committee for 3rd International Workshop on Modeling and Crystal Growth, 2000
- Program Committee for Japan-USA Symposium on Flexible Automation, 1994, 1996
- Journal Reviewer:
 - Automatica
 - Polymer
 - International Journal of Modelling and Simulation
 - IIE Transactions on Design and Manufacturing
 - IEEE Transactions on Control Systems Technology
 - Journal of Crystal Growth
 - Journal of Heat and Fluid Flow
 - Journal of Dynamic Systems, Measurement, and Control
 - Journal of Engineering for Industry.
- * Reviewer, International Federation of Automatic Control (IFAC) conference proceedings
- Proposal reviewer for NSF SBIR program 1997-2002, research proposal reviewer NSF 1998-2003, 2009 for the Division of Design Manufacture and Industrial Innovation, Nanotechnology Program
- Organizer of Emerging Technology and Best Industry Practices Seminar series, Boston University, Manufacturing Engineering Department, 1992-2002.

New Course Development:

- **MN 500/GE 520 Course on Analysis of Energy Conservation/Supply Alternatives: BU Case Study**, offered in conjunction with the Center for Energy and Environmental Studies. Multi-

disciplinary evaluation of technical, economic, and organizational issues of conservation options for the Charles River Campus of Boston University.

- **EK 546: Assessment of Sustainable Energy Technologies:** This course provides students with the background needed to assess the potential for energy efficiency and effectiveness of different technologies, the related economics, identify the key technical risks in emerging technologies, evaluating the life cycle implications of emerging technologies, manufacturing issues, as well as estimating performance.. Examples are drawn from a variety of emerging technologies.

Patents

- 1) "Control System for the Czochralski Process", M.A. Gevelber and G. Stephanopoulos, U.S. Patent no. 4,857,278, 8/89
- 2) "Interface Angle Estimation System", M.A. Gevelber and A.T. Patera, U.S. Patent no. 4,943,160, 7/90.
- 3) "Method for Closed-Loop Control of CVD Process", M.A. Gevelber and M. Toledo-Quinones, U.S. Patent no. 6,162,488, 12/2000.
- 4) "Feedback Enhanced Plasma Spray Tool", M.A. Gevelber, D. Wroblewski, Fincke, W. D. Swank, R.L. Bewley, D.C. Haggard, U.S. Patent 6,967,304, 11/22/2005.
- 4) "Feedback Enhanced Plasma Spray Tool", M.A. Gevelber, D. Wroblewski, U.S. Patent divisional application, molten plasma flux control, application, 9/2007, 20060198944, granted 4/11.
- 5) "Ebeam Vision System for Monitoring and Control", Michael Gevelber, Brian Vattiat, and Adam Brewster, U.S. Patent no. 7,479,632, 1/20/2009.
- 6) Michael Gevelber and Xuri Yan, Provisional Patent Application, 10/09/2007, "Control System for Electrospinning of Nano-Fibers" (60/998,214), BU case 07-79.
- 7) Vattiat, B., Wroblewski, D., Gevelber, M., "Plasma State and Flux Sensor", patent application (serial no. 12/008787), joint Boston University/Cyber Materials application January, 2008.

Referred Publications: Journal, Conference Proceedings, and Book Chapters,

1. J. Winkler, M. Neubert, J. Rudolph, N. Duanmu, and M. Gevelber, Chapter 3, "Czochralski Process Dynamics and Control Design", in "*Crystal Growth Processes Based on Capillarity: Czochralski, Floating zone, shaping and crucible techniques*", edited by Thierry Duffar, April 2010.
2. D. Wroblewski, G. Reimann, M. Tuttle, D. Radgowski, M. Cannamela, S. Basu, M. Gevelber, "Sensor Issues and Requirements for Developing Real-Time Control for Plasma Spray Deposition", *Journal of Thermal Spray Technology*, Vol. 19(4), June 2010, pp. 723—735.

3. X. Yan, M. Gevelber, "Investigation of Electrospun Fiber Diameter Distribution and Process Dynamics", published in the Proceedings of the Electrostatics Joint Conference, Boston University, June 16-18, 2009 and in the *Journal of Electrostatics*, 68 (October 2010), pp. 458-264.
4. E. Speyerer, M. Gevelber, D. Radgowski, "Development of an Adaptive System ID Method for Enabling Advanced E-Beam Sweep Pattern Design", pp 1-8 TuAT6.1, in the 2010 ASME Dynamic Systems and Control Conference Proceedings, ed P. Meckl, Cambridge MA, September 2010.
5. M. Gevelber, D. Wroblewski, M. Cannamela, S. Basu, D. Radgowski, and M. Tuttle, "Sensor and Control Design Issues for Developing Real-Time Deposition Rate Control for Plasma Spray", pp 1-8, TuAT6.6, in the 2010 ASME Dynamic Systems and Control Conference Proceedings, ed P. Meckl, Cambridge MA, September 2010.
6. X. Y and and M. Gevelber, "Process Dynamics and Control Analysis for Electrospinning Nanofibers", pp1-8, WeBT4.1, in the 2010 ASME Dynamic Systems and Control Conference Proceedings, ed P. Meckl, Cambridge MA, September 2010.
7. X. Yan, and M. Gevelber, "Electrospinning of Nanofibers: Analysis of Diameter Distribution and Process Dynamics for Control", In the "2010 International symposium on Flexible Automation" Conference Proceedings, ed. N. Sugimura and J. Cao, July 2010, Tokyo Japan
8. M. Gevelber, D. Wroblewski, M. Canemella, S. Basu, "Sensor Design Issues for Implementation of Real-Time Deposition Rate Control for Plasma Spray", In the "2010 International symposium on Flexible Automation" Conference Proceedings, ed. N. Sugimura and J. Cao July 2010, Tokyo Japan
9. M. Gevelber, D. Wroblewski, B. Vattiat, O. Ghosh, M. VanHout, and S.N. Basu, "Issues and Requirements for Developing a Plasma Spray Deposition Rate Sensor for Real-time control", *International Thermal Spray Conference*, Maastricht, The Netherlands, June 2-4, 2008, Conference Proceedings: ed. E. Lugscheider, 2008, pp 912-916.
10. D. Wroblewski, O. Ghosh, A. Lum, M. VanHout, S.N. Basu, M. Gevelber, and D. Willoughby, "Analysis of Plasma Spray Particle State Distribution for Deposition Rate Control", *International Thermal Spray Conference*, Maastricht, The Netherlands, June 2-4, 2008, Conference Proceedings: ed. E. Lugscheider, 2008, pp 838-843
11. Gevelber, D. Wroblewski, M. VanHout, O. Ghosh, D. Willoughby, S. Basu, "Sensor and Control Design Issues for Implementation of Real-Time Deposition Rate Control for Plasma

- Spray”, ASME International Mechanical Engineering Congress , Oct 31-Nov. 6, 2008, Boston, IMECE2008-68958, pp 10.
12. D. Wroblewski, O. Ghosh, A. Lum, D. Willoughby, M. VanHout, K. Hogstrom, S. Basu, M. Gevelber “Modeling and Parametric Analysis of Plasma Spray Particle State Distribution for Deposition Rate Control”, IMECE2008-68752, *ASME International Mechanical Engineering Congress*, Oct 31-Nov. 6, 2008, Boston.
 13. X. Yan, M. Gevelber, “Analysis of Electrospinning Nanofibers: Diameter Distribution, Process Dynamics, and Control”, *ASME International Mechanical Engineering Congress* , Oct 31-Nov. 6, 2008, Boston, IMECE2008-68299, pp8
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 19. Michael Gevelber, Xuri Yan, Jian H. Yu, Gregory C. Rutledge, “Electrospinning Process Dynamics and Fiber Diameter Distributions for Development of Real-Time Control”, presented at and published in proceedings of Symposium B. Processing of Nanofibers, MRS Fall 2006, MRS Proceedings, Vol. 948E, “Structure, Processing and Properties of Polymer Nanofibers for Emerging Technologies”, editors K.Kiick and T. Long, paper 0948-B07-02
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21. Reimann, G., Vattiat, B., Brewster, A., Gevelber, M., "Development of a Robust and Optimized Automatic Tuning System For Control of Evaporation Processes", Paper 0238, Proceedings of the 2006 International Symposium on Flexible Automation, Osaka, pp. 663-670, July 2006.
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33. M. Gevelber, C.Cui, B. Vattiat, D. Wroblewski, "Real-Time Control for Plasma Spray: Production Issues and Engineering Coating Structures", published in the Proceedings of the 2004 Japan-USA Symposium on Flexible Automation; July 19-21 2004; Denver, Colorado, Paper UL 67.
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Conference Presentations

1. M. A. Gevelber, "Process Dynamics and Measurement Considerations for Developing Electrospinning Control: needle and free surface system", presented at "Nanofibers for the 3rd Millennium", NC State, The Nonwovens Institute, August 2010.
2. M.A. Gevelber, M. Cannemela, D. Wroblewski, S. Basu, "Alternative Real-Time Control Strategies and Sensing Requirements for Improving Thermal Spray Performance", presented at paper given at the International Thermal Spray Conference, Las Vegas, May 2009.
3. D. Wroblewski, M. Cannamela, M. Gevelber, O. Ghosh, M. VanHout, A. Lum, K. Hogstrom, S. Basu, "Plasma Spray Process Modeling for Control: Effect of Torch Inputs on Particle State Distributions", paper given at the International Thermal Spray Conference, Las Vegas, May 2009.
4. M. A Gevelber, "Alternative Control Strategies and Requirements for Improving Thermal Spray Performance", presented at the "Symposium on Improving Reliability and Consistency

in Thermal Spray, Dec 2-3 , 2008, Montreal Quebec, organized by the ASM Thermal Spray Society.

5. X. Yan, M. Gevelber, "Investigation of Electrospinning Parameters that Determine Fiber Diameter Distribution" The Fiber Society 2008 Technical Conference, Oct 1-3, 2008, Boucherville Canada, Abdellah Ajji, Chair
6. M. Gevelber and X. Yan, "Analysis of Electrospinning Process Dynamics and Resulting Nanofiber Diameter Distributions" The Fiber Society 2007 Technical Conference, Oct 9-11, 2007, University of California at Davis, CA, , You-Lo Hsieh, Chair
7. Gevelber, M., Ghosh, O., Cui, C., Wang, H., Basu, S., Wroblewski, D., "Alternative Strategies for Plasma Sprayed Coating Thickness Control", paper given at the International Thermal Spray Conference, Seattle, May 2006.
8. Reimann, G., Vattiat, B., Brewster, A., Gevelber, M. A., Hildebrand, J., Hildebrand. C., "Robust System Identification and Optimized Tuning for Control of Evaporation Processes: benchmark study results of manufacturing performance", paper given at AVS, Boston November 2005.
9. Gevelber, M., "Manufacturing Performance Evaluation of Alternative Control Strategies for IGT Thermal Barrier Coatings", Combustion Turbine Coatings Symposium, Houston Texas, October 26, 2005, invited.
10. Michael Gevelber, Brian Vattiat, Chenhuan Cui, Boston University, Manufacturing Engineering, Larry Pollard, William Barker, Progressive Technologies, David Harter, Siemens Westinghouse Power Corporation-Stationary Fuel Cells, Performance Comparison of Various Sensor Systems and Plasma Spray Torches", poster given at the International Thermal Spray Conference, Basel, May 2005.
11. M. Gevelber, C. Cui, B. Vattiat, D. Wroblewski, S. Basu, "Real-Time Control for Plasma Spray: Production requirements, sensor issues, control design problems and solutions", paper given at the Sensors and Controls 2004 Workshop, International Thermal Spray Society, October 2004
12. Gevelber, M., B. Xu, D. Smith, "Improved Rate Control for E-beam Evaporation and Evaluation of Optical Performance Improvements", presented at the Optical Interference Coating Conference of the OSA, Tuscon, June 2004.
13. Basu, S.N., Ye, G., Cui, C., Gevelber, M., Wroblewski, D., Fincke J.R., and Swank, W.D., Engineering Plasma Sprayed Coating Microstructure by Advanced Control, presented at the Fall MRS Meeting, Dec. 2-6, 2002, Boston, MA.

14. Ye, G., Basu, S., Wroblewski, D., Gevelber, M., Fincke, J., Swank, W, "Characterization of the Plasma Spray Process for the Development of Closed Loop Control", presented at the ASM Materials Solutions Conference, Cincinnati, November 1999.
15. Khare, R., Wroblewski, D., Gevelber, M.A., "2-D Thermal Modeling of Splat Cooling on Rough Substrates", presented at ASM Materials Solutions Conference, Cincinnati, November 1999.
16. Y. Chen, Z. Ren, P. Nair, and M. Gevelber, "Model Based Control Analysis of the Czochralski Process", Presented at the 13th International Conference on Crystal Growth, Jerusalem Israel, July 1998.
17. Y. Chen, J. Jiang and M. Gevelber, "Process Modelling Analysis for Enhanced Control of INP Synthesis", Presented at the 13th International Conference on Crystal Growth, Jerusalem Israel, July 1998.

Invited Seminars, presented by M. Gevelber

1. "Process Control for Improving Materials Processing Capabilities and Sustainability Initiatives at Boston University, presented at the ASM Boston Chapter meeting, November 2010.
2. "Process Dynamics and Measurement Considerations for Developing Electrospinning Control: needle and free surface systems", presented at the Elmarco and University of North Carolina Nonwoven Institute conference: "NANOFIBERS FOR THE 3RD MILLENNIUM 2010", August 2010, Raleigh, North Carolina.
3. "Boston University's Plasma Spray Research", presented to China Academy Institute of Machinery (CAM), Zhejiang Branch and Hangzhou Turbine Power Corp, Hangzhou, China, July 2010.
4. "Electrospinning Process Dynamics and Fiber Diameter Distributions for Development of Real-Time Control Donaldson, Minneapolis, MN, March 2007.
5. Real-time Control for Improving Materials Processing Capabilities: examples from e-beam deposition of precision optical coatings and plasma spray of TBC and fuel cells", M.I.T., Laboratory for Manufacturing, October, 2006.
6. "Advanced Control for Improved Electron Beam Deposition for Precision
 - a. Optical Coatings", Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Jiading, Shanghai, July 2006.
7. "Advanced Control for Improved Electron Beam Deposition for Precision", Shincron LTD, Tokyo, July 2006.
8. "Advanced Control for Improving Materials Processing Capabilities: examples from e-beam deposition for optical coatings and plasma spray of TBC and fuel cells", Department of Mechanical Engineering, UCLA May 2006.

9. "Advanced Control for Improving Materials Processing Capabilities: examples from e-beam deposition for optical coatings and plasma spray of TBC and fuel cells", Department of Mechanical Engineering, UCSB May 2006
10. Gevelber, M., "Analysis of Electrospinning Dynamics for Development of Real Time Control", Department of Polymer Chemistry, University of Akron, February 2006
11. Gevelber, M., "Development of Real-Time Control for Plasma Spray: sensing and nonlinear issues, University der Bundeswehr, Munich, Department of Electrical Engineering, November 2005.
12. Gevelber, M., "Development of Real-Time Control for Electron Beam Coatings for Precision Optics", Leybold, Aseneu Germany, November 2005.
13. "Advanced Real-time Control for Enhanced Processing Capabilities for E-beam Deposited Optical Coatings", Laboratory for Laser Energetics, University of Rochester, August 2003.
14. "Advanced Control for Engineering Plasma Sprayed Coating Structure: system characterization and implementation results", Mechanical Engineering Department, University of Toronto, Center for Advanced Coating Technology, August 2003.
15. "Advanced Control for Engineering Plasma Sprayed Coating Structure: system characterization, sensor issues, and implementation results", Institute of Materials Science, University of Connecticut, June, 2003.
16. "Real-Time Control for Improving Materials Processing Capabilities: examples from e-beam deposition of optical coatings and plasma spray of TBC and fuel cells", Mechanical Engineering Department, University of California, Berkeley, May 2003.
17. "Real-Time Control for Plasma Spray: production issues and distribution implications" SUNY Stony Brook, Center for Thermal Spray, Feb. 2003.
18. "Real-Time Control for Plasma Spray: production issues and distribution implications" NIST, Ceramics Division, Washington DC, Dec. 2002.
19. "Real-Time Control for Plasma Spray: performance evaluation and production/implementation issues", SURFTEC annual meeting, Industrial Materials Institute, National Research Council Canada, Montreal, November 2002.
20. "Advanced Control for Engineering Plasma Sprayed Coating Structure: system characterization, sensor issues, and implementation results", September 2001, presented at the University of Connecticut, Department of Mechanical Engineering.
21. "Real-Time Control for Plasma Deposition: system characterization, sensor issues, and implementation results", Tufts University, Thermal Manufacturing Workshop, School of Engineering, M. Gevelber, June 2001,

22. "Dynamic Modeling Analysis for Control of CVD" , University of California, Santa Barbara, Mechanical Engineering Seminar, May 1998
23. "Process Control for Enhanced Processing of Engineered Materials", June 16-20, 1997 at M.I.T., part of the New Developments in Manufacturing Process Technology Seminar at the Laboratory for Manufacturing and Productivity.
24. "Advanced Control for Enhanced Processing of Engineered Materials", IEEE Control and Systems Society, Boston, January 15, 1997,
25. "Real-Time Control of CVD", February 1998, Kennametal.
26. "Real-Time Control of CVD", October 1997, Northeastern University.
27. "Dynamic Modelling of CVD for Real-time Control of Microstructure", NASA Lewis, Systems Dynamics Branch, June 16, 1995.
28. "Dynamic Modelling of CVD for Real-time Control of Microstructure", RPI Mechanical Engineering Seminar, March 23, 1995.
29. "Dynamic Modelling of CVD for Real-time Control of Microstructure", University of Minnesota, Mechanical Engineer Seminar Program, March 8, 1995.
30. "Modelling of Induction Plasma Deposition for Control Design", University of Minnesota, Guest Lecturer, Plasma Processing Graduate Seminar, March 8, 1995.
31. "Dynamic Modeling of CVD for Real-Time Control of Coating Microstructure", Brown University, Joint Materials Science/Solid Mechanics Seminar, Sept. 28, 1994.
32. "Control of Materials Processing", Kao Corp, Recording and Imaging Science Lab, Tochigi Japan, July 18, 1994.
33. "Dynamic Modelling of CVD for Real-Time Control of Microstructure", Berkeley, Mechanical Engineering Department, April 1994,
34. "Dynamic Modelling of CVD for Real-Time Control of Microstructure", Stanford University, Electrical Engineering Department, April 1994.
35. "Dynamic Modelling of CVD for Real-Time Control of Microstructure"., University of Michigan, March 1994.
36. "Modelling for Control of Induction Plasma Deposition", Universite de Limoges, Laboratoire de Materiaux Ceramiques et Traitements de Surface, P. Fauchais, November 1993.
37. "Control of Materials Processing", MIT, Sematech Center of Excellence meeting, March 5, 1993.
38. "Modelling and Control of Induction Plasma Deposition", University of Wisconsin, Plasma-Aided Manufacturing Research Center, March 6, 1992.

39. "Modelling and Control of Induction Plasma Deposition", GE Engineering Materials Technology Laboratories, Lynn MA, October 9, 1991.
40. "Dynamics and Control of Czochralski Crystal Growth", University of Rochester, December 13, 1988.
41. "Dynamics and Control of Czochralski Crystal Growth", Harshaw/Fitrol Comp., , December, 1988.
42. "Materials Processing: Design and Control", Boston University Minuteman Seminar: Frontiers in Manufacturing,
43. October 1988.
44. "Control Design Consideration for the Czochralski Process", General Electric Corporate Research & Development, Control Division Schenectady. September 1987.
45. "Dynamics and Control Design for the Czochralski Process", New England Section of the American Association for Crystal Growth, Boston. May 1987.

Research Grants

1. "Analysis for Development of Electrospinning Control Concepts", to U.S. Army Natick Soldier RD&E Center, 5/1/11-4/30/12, \$85,430.
2. "Real-Time Control for Engineering Electrospun Nanofiber Diameter Distributions for Advanced Applications", Gevelber, PI, NSF, 9/2008-8/2011, \$224,100
3. "STTR Phase II: Development of Advanced E-Beam Sweep Patterns and Control Systems", Cyber Materials LLC / NSF, \$151,217.00, 4/1/06 - 3/31/08, co PI
4. "GOALI: Engineering Coating Microstructure Through Advanced Plasma Spray Processing: Fuel Cell and Thermal Barrier Applications ", National Science Foundation, \$398,954.00, 5/1/03 - 4/30/07, PI
5. "GOALI: Engineering Coating Microstructure Through Advanced Plasma Spray Processing: Fuel Cell and Thermal Barrier Applications (REU Supplement)",
6. National Science Foundation, \$12,000.00, 5/1/05 - 4/30/07, PI
7. STTR Phase 1 Proposal: Advanced Control of Electron-Beam Deposition for High Precision Optical Coatings, NSF SBIR, BU subcontract: \$58,240, 1 year, PI: Douglas Smith, Vacuum Process Technology, Michael Gevelber, co-PI
8. Proposal to Develop Advanced Control Capabilities for E-beam Deposition, Sandia, via VPT \$34,656 for 8 months, Gevelber (PI), 8 months,

9. "Control Development and Modelling for Enhanced Crystal Growth: Application to Novel New Technologies and Extension of Conventional Capabilities", PI, National Science Foundation, \$270,000.00, 9/1/01 - 8/31/05
10. "Control Development and Modelling for Enhanced Crystal Growth: Application to Novel New Technologies and Extension of Conventional Capabilities (REU)", PI, National Science Foundation, \$30,000.00, 9/15/01 - 8/31/05
11. Development of Advanced Instrumentation for Student Research and Education on Plasma Coating Crack Formation Fundamentals, equipment grant, \$88,900, NSF/DMR, Gevelber (PI), Wroblewski, and Basu.
12. Supplemental Research Experience for Undergraduates, NSF, Gevelber (PI) \$12,000.
13. Integrated Plasma Deposition Processing for Advanced Control of Coating Structure", \$334,000 for 3 years, NSF, Gevelber (PI), Wroblewski, and Basu.
14. DURIP Equipment Proposal: Real Time Control for Advanced Materials Processing", \$120,000 from AFOSR, Gevelber (PI), Wroblewski, Basu
15. Intelligent Process Control for Czochralski Crystal Growth, ARPA/AFOSR through SUNY Stony Brook, Gevelber, co-PI, 2 year for \$149,594.
16. Research Gift from Intelcore, related to work in analysis of control performance for Fiber Preform Manufacture and Fiber Draw: \$34,000. Summer 2001.
17. "Supplemental Research Experience for Undergraduates," NSF, from 1998-2003, \$32,000
18. Intelligent Process Control for Czochralski Crystal Growth, ARPA/AFOSR through SUNY Stony Brook, Gevelber, co-PI, 3 year for \$224,391.
19. Integrated Plasma and Chemical Vapor Deposition Processing for Advanced Control of Coating Structure", \$12,000, 1 year grant from United Technologies University Program, Gevelber, Wroblewski and Basu.
20. Real-Time Control of Engineered Coating Microstructure, Gevelber (PI) and Sarin, NSF, \$179,706, 3 years.
21. Modelling and Control of Plasma Deposition for Enhanced Materials Production, Gevelber, NSF, \$204,155, 3 years
22. Insitu Intelligent Materials Processing Equipment Grant, Gevelber and Sarin, NSF, \$47,066.

23. System and Control Analysis of Low Pressure Plasma Deposition", Gevelber, NSF, \$70,000 (Research Initiation Award).

Related Research Grants through Cyber Materials with significant Boston University Involvement

1. Air Force SBIR, Phase 1, "Control of Plasma Sprayed Coating Structure", \$100,000 [with S, Basu]
2. NSF SBIR, Phase II grant, "Plasma Spray Sensor Development", \$500,000 [with Donald Wroblewski].
3. NSF SBIR, Phase I grant, "Plasma Spray Sensor Development", \$100,000 [with Donald Wroblewski]

Ph.D Thesis Supervision (advisor and first reader).

1. Xuri Yan, "Electrospinning of Nanofibers: analysis of diameter distribution and process dynamics for control", Ph.D. in Mechanical Engineering, Oct. 2010.
2. Chenhuan Cui, " Experimental and modeling analysis of plasma spray nonlinearities for advanced process control design", Ph.D. in Manufacturing Engineering, 2007.
3. Bing Xu, "Experimental and modeling analysis for developing improved electron beam processing capabilities for precision optical coatings", Ph.D. in Manufacturing Engineering, 2007.
4. Ning Duanmu, "Modeling, dynamics, and control of the Czochralski crystal growth process", Ph.D. in Manufacturing Engineering, 2006.
5. Manuel Toledo-Quinones, "Dynamic Modelling of Chemical Vapor Deposition for Real-Time Control", May 1995, Ph.D. in Electrical Engineering,

M.S Thesis advisor and first reader:

1. Onomitra Ghosh, "Modeling and sensing strategies of plasma spray particle distributions for deposition rate control", 2007, M.S. in Manufacturing Engineering.
2. Brian Vattiat, "Analysis of the Sensor and Measurement Requirements for Feedback Control of Plasma Spray Processes", January 2004, MS, Mechanical Engineering,
3. D. Wilson, "Modelling of Czochralski Crystal Growth for Advanced Control Design", May 2002, M.S. in Electrical Engineering,

4. R. Liu, "Modelling and Dynamic Analysis of TiN Deposition for Control of CVD", May 1998, M.S. in Manufacturing Engineering,
5. M. Sikka, "Modeling for Control of Plasma Deposition: Plasma-Particle Interactions and Solidification Process", May 1997, M.S. in Manufacturing Engineering,
6. E. Sumitra, "Modeling and Analysis of CVD for Closed Loop Control: Deposition Physics, Dynamic Characterization and Experimental Verification", May 1997, M.S. in Manufacturing Engineering,
7. C. Smith, "Low Order Modelling and Control Analysis of Induction Plasma Deposition", May 1995, MS in Manufacturing Engineering, First Reader. Publications: [12, 17
8. M. Bufano, "Dynamic Modelling of Heat and Mass Transport for Control Of Chemical Vapor Deposition", January 1995, MS in Mechanical Engineering,
9. M. Sharma, "Control Structure Analysis and Design for Poorly Conditioned Multivariable Systems", May 1993, MS in Manufacturing Engineering,
10. K.S. Narendra, "Modelling and Control of Induction Plasma Deposition", January 1992, MS in Manufacturing Engineering.



Ruthanne Fuller
Mayor

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Office of the Mayor

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February 7, 2020

Honorable City Council
Newton City Hall
1000 Commonwealth Avenue
Newton, MA 02459

To the Honorable City Councilors:

I am pleased to reappoint Halina Brown of 56 Cloverdale Road, Newton Highlands as a member of the Citizens Commission on Energy. Her term of office shall expire on April 15, 2023 and her appointment is subject to your confirmation.

Thank you for your attention to this matter.

Warmly,

Ruthanne Fuller
Mayor

RECEIVED
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NEWTON, MA. 02459

Application Form

Profile

Halina _____ Brown _____
 First Name Middle Initial Last Name

 Email Address

56 Cloverdale Rd. _____
 Home Address Suite or Apt

Newton Highlands _____ MA _____ 02461 _____
 City State Postal Code

What Ward do you live in?

Ward 6

 Primary Phone

 Alternate Phone

 Employer

retired professor _____
 Job Title

Which Boards would you like to apply for?

Citizens Commission on Energy: Submitted

Interests & Experiences

Please tell us about yourself and why you want to serve.

Why are you interested in serving on a board or commission?

I have served on the Commission for over 15 years and find the work very gratifying. For the past year I have been chairing the Commission. During that time we produced the Newton Citizens Climate Action Plan and contributed to the development of the official Newton Climate Action Plan by the City. I am currently engaged with the implementation process. I would like to continue with a reappointment

Most_Recent-CV-Brown-
April_2016.doc
 Upload a Resume

April 2016

HALINA SZEJNWALD BROWN

Environmental Science and Policy Program
 IDCE Department (International Development,
 Community and Environment)
 Clark University
 950 Main Street
 Worcester, MA 01610-1477

Phone: ([REDACTED]
 Fax: [REDACTED]

Present Position. Since 1994

Professor of Environmental Science and Policy, Clark University
 Senior Scholar: George Perkins Marsh Institute, Clark University

Education

B.A., Chemistry, Washington University of St. Louis
 Ph.D., Chemistry, New York University

Current Research Areas

Socio-technical system innovation in sustainability transition; Sustainable production and consumption; Grassroots socio-technical innovations in energy efficiency and generation; Environmental policy; Corporate social responsibility; Comparative international policy; Sustainability reporting systems; Environmental public health policy; Environmental toxicology and risk assessment.

Current Professional Positions

Co-founder and Member of Executive Board: *Sustainable Consumption Research and Action Initiative* (www.Scorai.org)
 Member of Editorial Board: *New Solutions*

Current Teaching

Environmental Pollution Policy: the US Perspective (*Advanced*)
 Sustainable Consumption and Production (*Advanced*)
 Environmental Toxicology (*Advanced*)
 Research Seminar on Energy and Sustainability (*Advanced*)

Previous Positions

- 2010 April-May: EU Erasmus Mundus Visiting Professor, Department of Environmental Management, Central European University, Budapest, Hungary
- 2008-9 Director, Department of International Development, Community and Environment, Clark University
- 2006 January-May: Visiting Professor, Department of Innovation Studies, University of Utrecht, the Netherlands

- 2002 January-June: Visiting Professor, Environment, Technology and Policy Department (TBM), Technical University of Delft, the Netherlands
- 1990- 1998 Chair, Department of Environmental Science and Policy, Clark University
- 1994- 1998 Director and founder, Environmental School, Clark University
- 1985-1994 Associate Professor of Environmental Health and Policy, Clark University
- 1980-1985 Director, Office of Research and Standards, Massachusetts Department of Environmental Protection.
Directed and represented the state environmental agency's activities in the areas of risk assessment, public health policy, and environmental research.
- 1978-1980 Research Fellow, Massachusetts Institute of Technology. Department of Applied Biological Sciences. Molecular toxicology.
- 1976-1978 Research Fellow, Columbia University Cancer Research Institute. Division of Environmental Sciences. Mechanisms of carcinogenesis.

Awards and Honors

Elected Fellow of the International Society for Risk Analysis

Elected Fellow of the American Association for the Advancement of Science

Publications

Books

Brown, H. S.; Derr, P.; Renn, O.; White, A. L. *Corporate Environmentalism in a Global Economy; Societal Values in International Technology Transfer*, Quorum Books, 1993.

Brown, H.S.; Angel, D.; Derr, P. *Effective Environmental Regulation: Lessons from Poland's Experience*. Praeger 2000.

Cohen, M., Brown, H.S. and Vergragt, P (eds.) *Innovations in Sustainable Consumption* Edward Elgar, 2013.

Peer Reviewed and Invited Articles, and Book Chapters

1. Brown, H.S; Shapiro, R. Preparation of Enzymatic Hydrolysis of Dinucleoside Monophosphates and DNA Modified with Aromatic Residues, *Biochim .Biophys. Acta* 1977, 475, 241-253.
2. Brown, H.S.; Shapiro, R. Conformation of Aromatic Substituted Dinucleoside Phosphates: An Extension of the Base Displacement Theory of Carcinogenesis. *Biochemistry* 1977, 16, 1229-1235.
3. Brown, H.S. Jeffrey, A.M.; Weinstein, I.B. Formation of DNA Adducts in 10T1/2 Mouse Embryo Fibroblasts Incubated with Benzo(a)pyrene or Dihydrodiol Oxide Derivatives, *Cancer Research* 1979, 39, 1673-1677.