

Hill International, Inc. 75 Second Avenue, Suite 300 Needham, MA 02494 Tel: 617-778-0900 www.hillintl.com

December 12, 2022

Ms. Kerry Lafleur Town Manager Town of Concord 22 Monument Square Concord, MA 01742

Re: Concord Middle School Project

Recommendation for Structural Engineering Peer Review

Dear Ms. Lafleur,

On November 16, 2022, Hill issued a Request for Services (RFS) for a structural engineering peer review using sound business practices consistent with Massachusetts public procurement laws.

We received the attached proposals on or before December 1, 2022 from the following firms (1) Goldstein-Milano, (2) EDG, (3) DM Berg Consultants, (4) Foley and Buhl, and (5) Souza True and Partners. We have worked with all of these firms in the past and have had positive experiences.

On behalf of the Town, Hill has reviewed and evaluated these proposals and we have summarized results in the attached proposal comparison form. We found that all five proposals were responsive to the RFS and included confirmation of scope, qualifications, and the associated cost of services. Given our history with their firm, coupled with their proposal which exhibited a great understanding of the scope of services, Hill recommends award to Souza True and Partners in the amount of \$8,500.00.

Upon your concurrence with our recommendation, we will prepare a contract amendment for Hill International to include these structural engineering peer review services.

Should you have any questions, please reach out to me directly at 917.562.7028.

Sincerely,

Ian Parks
Project Director



Concord Middle School Project - Structural Peer Review

Proposal Comparisons

Firms:	Souza True and Partners	Goldstein-Milano	EDG	DM Berg Consultants	Foley Buhl Roberts & Associates
Fee:	Lump Sum - \$8,500	Stipulated Sum - \$8,500	Lump Sum - \$9,500	Lump Sum - \$4,400	Fixed Fee - \$8,000
	Souza True and			DM Berg	Foley Buhl Roberts
Schedule:	Partners	Goldstein-Milano	EDG	Consultants	& Associates
Comments incorporated in 90% CD package	Х	Х	Х	х	Х
Comments incorporated in 100% CD package	X	Х	Х	х	Х
	Souza True and			DM Berg	Foley Buhl Roberts
Services Acknowledged:	Partners	Goldstein-Milano	EDG	Consultants	& Associates
Review of the structural design loads	Х	Х	Х	х	Х
Review of the structural design criteria for the structure and foundations	X	Х	Х	х	Х
Review of the structural load paths for the gravity and lateral loads;	X	Х	Х	х	Х
Review of the geotechnical report to confirm recommendations for foundation design and seismic coefficient	x	х	X	x	x
Verification that the structure is conceptually correct;	х	х	х	х	х
Independent calculations to confirm the adequacy of a representative number of structural systems, members, and details	х	х	х	Did not specifically identify	х
Review of major structural details	Х	x	Х	х	Х
Review of the structural specification sections for the primary structure;	х	х	х	х	х
Contact with the Structural Engineer of Record to discuss the design approach and any issues which may arise during the review	х	х	х	х	х
Preparation of a letter stating whether or not the structural design shown on the drawings and specifications conform to the structural and foundation requirements of 780 CMR, Commonwealth of Massachusetts State Building Code - Ninth Edition	x	х	х	х	x

Hill Comments:	Souza True and Partners	Goldstein-Milano	EDG	DM Berg Consultants	Foley Buhl Roberts & Associates
	requirements, will issue	state building code, 780 CMR and compliance with Section 105.9 of 780 CMR, and AIA C-401 as basis for structural peer review. Incorrectly cited the size/structure of building identified on RFS, did not recognize available drawings. Attached relative	CMR and compliance	second opinion on services offering. Attending meetings not	Identified the individuals conducting the Peer Review, one of whom is one of the Partners of the firm. Identified scope detailed in RFS and cited MA state building code, 780 CMR and compliance with Section 105.9 of 780 CMR. Not expenses are included in proposed fee.



email: JohnCutler@hillintl.com

November 16, 2022

John Cutler Assistant Project Manager Hill International 75 Second Ave., Suite 300 Needham, MA 02494

Concord Middle School, Concord, MA A Independent Structural Peer Review

Dear John,

Goldstein – Milano LLC is pleased to submit this proposal agreement for Structural Engineering Services for the Independent Structural Peer Review of the Allston Green residential project in Boston, MA.

We understand the project to consist of 142,537 sq ft three story structure of unknown construction. Includes a two story wing for large spaces of unknown size and construction. No drawings are available at this time.

The scope of Basic Services for this project shall include the following Structural Services in accordance with the latest edition of American Institute of Architects (AIA) Document C-401:

Structural peer review of the building in accordance with the 9th edition of the State Building Code of the Commonwealth of Massachusetts, 780 CMR 105.9.

We have substantial experience in this type of work. You will find our peer review experience attached to this proposal.

The fee for these Basic Services is the stipulated sum of \$8,500.00 We would have comments to the SER within 2 weeks of receiving the drawing package.

Reimbursable expenses directly associated with the project shall be invoiced at a rate of 1.0 times cost and shall include such items as reproduction and printing charges.

We will proceed with these Basic Services upon receipt of your electronic execution of this proposal. We appreciate the opportunity to work with you on this project.

AGREED:	Very truly yours,
By:	Goldstein – Milano LLC
Title:	Ву:
Date:	Brent R. Goldstein P.E. Principal
Attachment: Peer Review Experience To be completed by Client: E-billing Address:	
Hill Project Manager:	
Hill Project Number:	



STRUCTURAL PEER REVIEW EXPERIENCE

ARCO Lunenburg Central Lunenburg, MA

ARCO Leicester Leicester, MA

Union Square Station Somerville, MA

Chestnut Place Quincy, MA

700 Brookline Avenue Brookline, MA

Two Drydock Avenue Boston, MA

Fenway Center Phase I Boston, MA

Nelson Place Elementary School Worcester, MA

Devotion School Brookline, MA

WRTA Vehicle Maintenance & Operations Facility Worcester, MA

1350 Boylston Street Boston, MA

Harvard Kennedy School Cambridge, MA

Serenity Apartments Boston, MA

Boston Medical Center

Menino Building/In Patient Addition Boston, MA

Boston Medical Center - Moakley Addition Boston, MA

Northeastern University- Science Building Boston, MA

Bridges at University Station Westwood, MA

The Groton School- Schoolhouse Addition Groton, MA

275 Albany Street Boston, MA

The Icon, 75 Brainerd Road Allston, MA

Harvard Business School- Interim Dining Boston, MA

Residences at Acorn Park Belmont, MA

22 Water Street Cambridge, MA



STRUCTURAL PEER REVIEW EXPERIENCE pg 2

PROJECT:	LOCATION
Needham Senior Center	Needham, MA
The Edge, 60-66 Brainerd Road	Allston, M
311 Summer Street Renovation	Boston, MA
5 Wall Street Parking Garage	Burlington, MA
East Boston Neighborhood Health Center	Boston, MA
College of the Holy Cross New Residence Hall	Worcester, MA
MIT Chiller 9&10 and Cooling Tower 10 Project	Cambridge, MA
The Shops at Quonset Point	No. Kingstown, RI
Oracle Building #2	Burlington, MA
Station Landing Parking Structure	Medford, MA
Wheelock College Campus Center and Student Residence	Boston, MA
311 Summer St.	Boston, MA
Trinitarian Congregational Church New Addition and Renovation	Wayland, MA
University of Massachusetts Recreation Building	Amherst, MA
St. Elizabeth Medical Center Emergency Department Addition	Brighton, MA
Smith College Engineering & Molecular Sciences Building	Northampton, MA
British Petroleum, Project Rodeo	Houston, Texas
College of the Holy Cross -Haberlin Hall	Worcester, MA
New England Center for Children Natatorium and Conference Center	Southborough, MA
Cape Cod Hospital Cancer Center	Hyannis, MA



STRUCTURAL PEER REVIEW EXPERIENCE pg 3

PROJECT: LOCATION

One Davis Square Somerville, MA

JRC Woodbridge Addition Peabody, MA

Wonderland Garage Revere, MA

Old Colony Redevelopment (5 buildings total)

Boston, MA

Newman Middle School Renovation Needham, MA

65 Brainerd Road Allston, MA

Revere Transit Facility and Streetscape Revere, MA

Northeastern University Pedestrian Crossing Boston, MA

Harvard Business School –Tata Hall Boston, MA

730-750 Main Street Cambridge, MA

LaGrange Tower Boston, MA

Boston Wharf Tower Project Boston, MA

5 Branch Street Methuen, MA

90 Arboretum Drive Newington, NH

Russia Wharf Development Boston, MA

Colony Village Plymouth, MA

Mt. Auburn Hospital/West Bldg. & Parking Garage Cambridge, MA

252 Huntington Avenue Boston, MA

Northeastern University/EXP Project Boston, MA

Fenway Center - Parcel 7 Boston, MA

AC Hotel Glastonbury, CT



Engineers Design Group Inc.

389 Main Street, Suite 401 Malden, MA 02148

Phone: 781-396-9007 www.edginc.com

November 17, 2022

Via email only to johncutler@hillintl.com
Mr. John Cutler
Assistant Project Manager
Hill International
75 Second Ave., Suite 300
Needham, MA 02494

Re: Concord Middle School

Concord, MA

Independent Structural Engineering Review

Dear John:

Thank you for considering Engineers Design Group, Inc. for this project. This proposal is to consist of an engineering review of the Concord Middle School project described in your email and 60% Construction Documents shared by your office.

Our review will be based on the 90% Construction Documents that will be released December 19,2022. As part of this review we may have to meet and/or correspond with the Structural Engineer of Record (SER) to discuss our findings and the design intent and methodology used in designing the project. We have found it beneficial to the project to communicate or meet if necessary with the engineer and to discuss and review the comments in conducting the peer review.

We understand that the structural peer review will be conducted on the 90% Construction Documents followed with the 100% construction Documents that will be released February 27, 2023 and, we will also conduct a final review of the 100% construction documents after all our review comments have been incorporated in the documents. We will provide our review comments from the review of the 90% Construction Documents by beginning of January and final review comments from review of the 100% Construction Documents if any prior to any addenda for the Bid Documents.

We propose that our structural review will be in accordance with the Commonwealth of Massachusetts State Building Code, Ninth Edition, 780 CMR and in compliance with Section 105.9 of 780 CMR for the "Independent Structural Engineering Review".

We further propose that our fee for this work will be billed on a lump sum basis in the amount of NINE THOUSAND FIVE HUNDRED DOLLARS (\$ 9,500.00).

Invoice for services will be issued upon completion of review. Payment of invoice is due 30 days from receipt.

After receipt of this signed proposal and the copy of the project documents, we will complete our structural review within the requested time period when that is finally determined.

Thank you for considering our firm as your Structural Peer Review Consultant on this project. We look forward to hearing from you regarding this proposal.

Very truly yours,

ENGINEERS DESIGN GROUP, INC.	Accepted	
Pa 1-1		
Alhal Dha.		
Mehul V. Dhruv, P. E.		
Principal	Date	



CONSULTING ENGINEERS 100 Crescent Road, Suite 1A Needham, MA 02494-1457 p 781.444.5156 f 781.444.5157 www.dmberg.com

STATUS:

AN AGREEMENT FOR THE PERFORMANCE OF PROFESSIONAL SERVICES INDEPENDENT STRUCTURAL ENGINEERING REVIEW

CLIENT: Hill International DATE: Nobember 28, 2022

75 Second Ave., Suite 300 Needham, MA 02494 Attn: John Cutler

PROJECT NAME/LOCATION: Concord Middle School Concord, Massachusetts

SCOPE/INTENT AND EXTENT OF SERVICES: Independent Structural Engineering Review performed in accordance with the Massachusetts State Building Code, Ninth Edition, Section 105.9. Peer review of new three-story building with an approximate area of 143,000 sq. ft.in two phases: On 90% CD estimate set for incorporation into 90% set, and a final check on 90% CD set for incorporation into 100% set.

FEE ARRANGEMENT: For Basic Services included in Exhibit A: Lump Sum Fee of \$4,400.00.

RETAINER AMOUNT: Zero

SPECIAL CONDITIONS: At no time shall it be construed that DM Berg Consultants, P.C. is supplanting, or joining with, the Structural Engineer of record in his or her professional responsibility for the design of the Primary Structural System.

	, ,	,
PREPARED BY:	The Terms and Conditions on the nex are a part of this Agreement.	t page
Ali R. Borojerdi, P.E., LEED AP/Vice President		
(printed name/title)	A COLDED DV	
OFFERED BY:	ACCEPTED BY:	
Alli Borofirdi		
(signature)	(signature)	(date)
Ali R. Borojerdi, P.E., LEED AP/Vice President (printed name/title) DM BERG CONSULTANTS, P.C.	(printed name/title)	
(Engineer)	(Client)	

m:\proposals\2022 proposals\55-iser-concord middle school.docx

DM BERG CONSULTANTS, P.C. - TERMS AND CONDITIONS

SCOPE OF SERVICES: Engineer, as representative of Client, shall perform the Basic Services described in the attached Proposal. Engineer makes no warranty, either expressed or implied, as to Engineer's findings, recommendations, plans, specifications, or professional advice. Engineer will perform the services pursuant to generally accepted standards of practice in effect at the time of performance. Services provided by Engineer under this Agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

If Engineer's Proposal includes the performance of On-Site Observation services, then: Engineer shall visit the project at appropriate intervals during construction to become generally familiar with the progress and quality of Contractors' work and to determine if the work is proceeding in general accordance with the structural drawings and specifications prepared by Engineer. Client has not retained Engineer to make detailed inspections or to provide exhaustive or continuous project review and observation services. Engineer shall not, during such visits or as a result of any observations of construction, supervise, direct or have control over Contractors' work nor shall Engineer have authority over or responsibility for the equipment, means, methods, techniques, sequences, or procedures of construction selected by Contractors or health and safety precautions and programs incident to the work of Contractors or any failure of Contractors to comply with laws, rules, regulations, ordinances, codes, or orders applicable to Contractors furnishing and performing their work. Engineer does not guarantee the performance of the construction contract by Contractors and does not assume responsibility for Contractors' failure to furnish and perform their work in accordance with the drawings and specifications.

If Engineer's Proposal includes the Review of Contractors' Submittals, then: Engineer shall review shop drawings, samples, and other data which Contractors are required to submit, but only for the limited purpose of checking for conformance with the structural design concept of the Project and compliance with the information given in the structural drawings and specifications. Such review or other actions shall not extend to accuracy or completeness of details, erection aids, quantities, dimensions, weights or gauges, fabrication processes, coordination with other trades, equipment, means, methods, techniques, sequences or procedures of manufacture (including the design of manufactured products) of construction, or to health and safety precautions and programs incident thereto. Engineer's review or other actions, as described above, shall not constitute approval of an assembly or product of which an item is a component, nor shall it relieve Contractors of (a) their obligations regarding review and approval of any such submittals; and (b) their exclusive responsibility for the equipment, means, methods, sequences, techniques and procedures of construction, including safety of construction. Engineer's review shall be conducted with reasonable promptness while allowing sufficient time in Engineer's judgment to permit adequate review. Engineer shall not be responsible for any deviations from the Contract Documents not highlighted in writing to Engineer from Contractor. Engineer shall not be required to review partial submissions, incomplete submissions, submittals that are grossly incorrect or non-responsive, submittals for which submissions of correlating items have not been received, or submittals not reviewed and approved by Contractor. If a submittal is not duly acceptable after its second submission, the client shall be responsible for all increased costs including, without limitation, for increased professional fees based on rates per our fee schedule.

HAZARDOUS MATERIALS: It is acknowledged by both parties that Engineer's scope of services does not include any services related to asbestos or hazardous or toxic materials. In the event Engineer or any other party encounters asbestos or hazardous or toxic materials at the jobsite, or should it become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of Engineer's services, Engineer may, at his option and without liability for consequential or any other damages, suspend performance of services on the project until Client retains appropriate specialist consultant(s) or contractor(s) to identify, abate and/or remove the asbestos or hazardous or toxic materials, and warrant that the jobsite is in full compliance with applicable laws and regulations.

<u>OWNERSHIP OF DOCUMENTS:</u> All documents produced by Engineer under this Agreement shall remain the property of Engineer and may not be used by this Client for any other purpose without the written consent of Engineer.

<u>DISPUTE RESOLUTION:</u> Any claims or disputes made during design, construction, or post-construction between Client and Engineer shall be submitted to non-binding mediation.

<u>FEE:</u> Where the fee arrangement is to be on an hourly basis, the rates shall be those that prevail at the time services are rendered. 2022 rates are as follows:

Principal; \$240 per hour Senior Associate; \$210 per hour Associate; \$190 per hour Production Manager; \$160 per hour Project Engineer; \$160 per hour Staff Engineer; \$140 per hour Draftsperson; \$130 per hour Non-Technical; \$50 per hour

<u>REIMBURSABLE EXPENSES:</u> Reimbursable expenses shall be billed at one-point-two (1.2) times Engineer's actual expense. Reimbursable expenses include but are not limited to: reproduction; shipping; photographs; parking; tolls; mileage; hotel; travel; and meals.

<u>CHANGES OR DELAYS:</u> Unless the accompanying Proposal provides otherwise, the proposed fees constitute Engineer's estimate to perform the services required to complete the Project. Required services often are not fully definable in the initial planning; accordingly, developments may dictate a change in the scope of services to be performed. Where this occurs, changes in the Agreement shall be negotiated and an equitable adjustment shall be made. An Additional Services Contract will be submitted to Client. No additional services will be performed by Engineer without written authorization from Client.

Costs and schedule commitments shall be subject to renegotiation for unreasonable delays caused by Client's failure to provide specified facilities, direction, or information, or if Engineer's failure to perform is due to any act of God, labor trouble, fire, inclement weather, act of governmental authority, failure of transportation, accident, power failure, or interruption or any other cause beyond the reasonable control of Engineer. Temporary work stoppage caused by any of the above may result in additional cost beyond that outline in the accompanying Proposal.

BILLINGS/PAYMENTS: Invoices for Engineer's services shall be submitted at Engineer's option, either upon completion of such services or on a periodic basis. Invoices are due upon receipt. If the invoice is not paid within thirty (30) days, Engineer may, without waiving any claim or right against Client, and without liability whatsoever to Client, terminate the performance of the service and/or withhold the structural construction control affidavit and/or the final construction control affidavit until the full invoiced payments to date are received. In the event any portion or all of an account remains unpaid 90 days after billing, Client shall pay all costs of collection, including reasonable attorney's fees.

<u>LATE PAYMENTS:</u> Accounts unpaid thirty (30) days after the invoice date may be subject to a monthly service charge of 1.5 percent on the then unpaid balance (18.0 percent true annual rate), at the sole election of Engineer. In the event any portion or all of an account remains unpaid ninety (90) days after billing, Client shall pay all costs of collection, including all reasonable attorney fees.

MUTUAL INDEMNIFICATION: Engineer agrees, to the fullest extent permitted by law, to indemnify and hold harmless Client, its officers, directors, and employees (collectively, Client) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs to the extent caused by Engineer's negligent performance of professional services under this Agreement and that of its subconsultants or anyone for whom Engineer is legally liable.

Client agrees, to the fullest extent permitted by law, to indemnity and hold harmless Engineer, its officers, directors, employees, and subconsultants (collectively, Engineer) against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by Client's negligent acts in connection with the Project and the acts of its contractors, subcontractors, or consultants or anyone for whom Client is legally liable.

Neither Client nor Engineer shall be obligated to indemnify the other party in any manner whatsoever for the other party's negligence.

<u>CERTIFICATIONS:</u> Engineer shall not be required to execute any document that would result in its certifying, guaranteeing, or warranting the existence of conditions whose existence Engineer cannot ascertain.

TERMINATION OF SERVICES: Either Client or Engineer may terminate this Agreement at any time with or without cause upon giving the other party seven (7) calendar days prior written notice. Client shall within thirty (30) calendar days of termination pay Engineer for all services rendered and all costs incurred up to the date of termination, in accordance with the compensation provisions of this Agreement.

<u>APPLICABLE LAWS:</u> This Agreement shall be governed and construed in accordance with the laws of the Commonwealth of Massachusetts. Any litigation arising in any way from this Agreement shall be brought in the courts of that State.

<u>LIMITATION OF LIABILITY:</u> To the fullest extent permitted by law, and not withstanding any other provision of this Agreement, the total liability, in the aggregate, of Engineer and Engineer's officers, directors, partners, employees, agents and subconsultants, and any of them, to Client and anyone claiming by, through or under Client, for any and all claims, losses, costs, or damages of any nature whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability, breach of contract or warranty, express or implied, of Engineer or Engineer's officers, directors, employees, agents or subconsultants, or any of them, shall not exceed the total compensation received by Engineer under this Agreement, the total amount of \$50,000 (whichever is greater), or another amount agreed upon when added under Special Conditions.

This is an exhibit attached to and made part of the Agreement dated November 28, 2022 between DM Berg Consultants, P.C. (Project Peer Reviewer) and Hill International (Client) for the project known as Concord Middle School, Concord, Massachusetts.

The services of the Project Peer Reviewer (PPR) for this proposal include those indicated below. See Agreement for further details.

Basi	c Services	Included	Not Included	Remarks
I.	DESIGN DEVELOPMENT			
	Review design concept as shown on preliminary foundation and framing layout		x	
	drawings.			
II.	DESIGN LOAD CRITERIA			
	Review and confirm that the loads used conform with the applicable Code requirem	nents.		
	A. Gravity Loads:			
	1. Live Loads	x		
	2. Dead Loads	x		
	3. Special Loads		x	
	a. Elevators		x	
	b. Cranes		x	
	c. Mechanical Equipment		x	
	d. Other		x	
	B. Lateral Loads:			
	1. Wind Loads	x		
	2. Seismic Loads	х		
	3. Special Loads		x	
	a. Elevators		x	
	b. Cranes		x	
	c. Mechanical Equipment		x	
	d. Other		x	
III.	LATERAL LOAD RESISTING SYSTEM			
	Identify and categorize type of lateral load resisting systems.	x		
IV.	LOAD PATHS			
	Review load paths for gravity and lateral loads from origins to foundations.	x		
٧.	STRUCTURAL MEMBERS AND ASSEMBLIES			
	Review a representative number of structural elements (columns, beams, bracing,	x		10% to 20%
	etc.)			
VI.	REVIEW OF CONNECTIONS			Only those shown
Review a representative number of connections (moment connections, framed conne		ctions, bracing connection	ons, etc.)	by the SER.
				10% to 20%
	A. Review type of connection for compatibility with design intent (slip critical			
	connections, connections with slotted holes, Type 1 "rigid frame"	x		
	construction, Type 2 "simple framing" constructions, etc.)			
	B. Review a representative number of connections for structural members and	x		
	assemblies.			

Basic Services		Included	Not Included	Remarks
VII.	REVIEW OF FOUNDATION ELEMENTS			
	A. Review geotechnical report for confirmation of type of proposed foundation elements.	x		Only when a Geotechnical Report was prepared.
	B. Review a representative number of foundation elements for load capacity.	x		10% to 20%
VIII.	REVIEW OF SPECIAL REQUIREMENTS Review documents or architectural and other engineering disciplines for potential special load or framing requirements.		x	
IX.	REVIEW SPECIFICATIONS Review specifications for implementation of design materials.	х		
X.	IDENTIFY POTENTIAL PROBLEMS Review plans and specifications and try to identify any precautions which should be taken during construction to guard against any temporary instabilities. Responsibility under this item shall be to attempt to identify potential problems; not to present solutions. Examples of the intent include, but are not limited to: bracing of masonry wall construction, underpinning sequences, erection sequences, etc.		х	
XI.	REPORT	_		
	A. Provide written report of findings to Owner. In order to limit the extent of the written report, the PPR might have fairly frequent contact with the Structural Engineer of Record (SER) to exchange points of view and suggest nominal changes.	х		
	B. Meet with the Building Department Official once to review findings.	_	х	

INFORMATION REQUIRED BY PPR:

- 1. Geotechnical Report.
- 2. Contract Drawings and Specifications appropriate for services included.
- 3. SER calculations if needed.



T 617·527·9600 **F** 617·527·9606

offices in: Newton MA Manchester NH Atlanta GA

www.fbra.com

December 1, 2022

John Cutler, Assistant Project Manager Hill International 75 Second Ave., Suite 300 Needham, MA 02494

Re: Concord Middle School
Concord, MA
Independent Structural Engineering (Peer) Review
Structural Engineering Services Proposal

Dear John:

With reference to your e-mail of November 16, 2022 (with the 11/16/22 RFP attached), we are pleased to submit this proposal to provide an independent structural engineering (peer) review for the proposed, new Concord Middle School in Concord, MA. The proposed new building is steel framed with a total (gross) floor area of approximately 142,537 square feet. The Engineer of Record (EOR) is SMMA.

Schedule:

FBRA will conduct a limited, high-level/conceptual review of the 90% Construction Documents Estimate set (available on December 19, 2022) and notify Hill and SMMA if any potentially significant conceptual issues are discovered. Our detailed review will be conducted on the 90% Construction Documents package, which will be issued on January 6, 2023. We anticipate that our detailed review will take approximately two (2) weeks to complete; another week after that will be needed to review and discuss our written comments with the EOR.

Scope of Services:

The peer review will be conducted in accordance with the requirements of the Massachusetts State Building Code (780 CMR - 9th Edition), which incorporates by reference the 2015 International Building Code (IBC). Included in the scope of FBRA's work is the following: a) review of the structural design loads; b) review of the structural design criteria for the structure and foundations; c) review of the structural load paths for the gravity and lateral loads; d) review of the geotechnical engineering report to confirm that the recommendations for foundation design and seismic parameters have been incorporated into the structural design; e) verification that the structure is conceptually correct; f) independent calculations to confirm the adequacy of a representative number of structural systems, members, and details; g) review of major structural details; h) review of the structural specification sections for the primary structure; i) contact the EOR to discuss the design approach and any questions/issues encountered during the review; j) written communication concerning any apparent issues uncovered during the review (if any); and k) submit a final letter to Hill International, stating whether or not the structural design shown on the drawings and in the specifications conforms to the structural and foundation requirements of the Massachusetts State Building Code.

We have retrieved PDF files of the of 60% CD drawings which, along with the aforementioned RFP served as the basis of this proposal. To conduct our review, we will need PDF files of the 90% CD Estimate Drawings and Specifications, the 90% CD Drawings and Specifications, and the final Geotechnical Engineering Report. Although we will not require copies of structural calculations at the outset of the review, we may request specific project information to confirm structural data and criteria used in the design (i.e., Basis of Design), as well as a review meeting (web-based), if deemed necessary to expedite our review.

John Cutler, Assistant Project Manager **Concord Middle School** Concord, MA Independent Structural Engineering (Peer) Review Structural Engineering Services Proposal

December 1, 2022 Page 2 of 2

Proposed Fee:

We propose to provide the independent structural engineering peer review services noted above, for a fixed fee of Eight-Thousand Dollars (\$8,000). Expenses are included in the proposed fee.

Qualifications:

The peer review of the Concord Middle School will be conducted by Jonathan D. Buhl, P.E. and Geoffrey S. Conway, P. E. Mr. Buhl and Mr. Conway have a combined experience of 88 years in the structural design of buildings. FBRA has been the Structural Engineer for over 185 public school projects since the firm opened in 1985.

Please let me know if you have any questions or comments. We would be pleased to have the

opportunity to be of service to you and the Town of Concord on this project.		
Very truly yours,	Accepted for Hill International	
Jonathan D. Buhl, P.E.	Ву:	
Cc: Geoffrey S. Conway - FBRA Dennis C. Duffy - FBRA Sandra Barletta - FBRA Colleen E. Kohl - FBRA	Date:	



SOUZA, TRUE AND PARTNERS, INC.

STRUCTURAL ENGINEERS

265 Winter Street, Third Floor Waltham, Massachusetts 02451 Telephone: (617) 926-6100 Email: souzatrue@souzatrue.com

> TERRY A. LOUDERBACK, PE JEROME A. YURKOSKI, PE LISA A. BOHLIN, PE TODD P. BLAKE, PE, SE

November 23, 2022

Hill International 75 Second Avenue, Suite 300 Needham. MA 02494

Attention: Mr. John Cutler

Reference: Independent Structural Peer Review

Concord Middle School

Concord, MA

Dear Mr. Cutler:

In response to your request for a fee proposal, we would be pleased to offer our services as your structural engineering consultant to perform a structural peer review of the structural design of the new Concord Middle School. The structural peer review will be performed per the requirements of the 9th Edition of the Commonwealth of Massachusetts State Building Code. We understand that the proposed project will consist of the following:

- New middle school located in Concord, MA adjacent to the Sanborn Middle School.
- The new school will include a two story area that will include the gymnasium, auditorium, and media center.
- The new school will also have a three story academic wing.
- The total square footage of the building will be approximately 142,537 sf.
- The foundation is a soil supported slab on grade. Foundations are soil supported shallow concrete footings.
- Lateral resisting system consists of steel braced frames and/or moment frames.
- This review will be conducted in two phases. The first phase will be high level review only on the 90% Construction Documents available on December 19, 2022. No calculations are expected to be completed on this initial review and a stamped peer review letter is not required to be submitted. A second review will be the official peer review on revised 90% set set to be issued in January of 2023. This review will include the final stamped letter.
- The first review is required to be completed so that any high level comments has an opportunity to be incorporated into a final 90% CD set to be issued to the owner on January 6, 2023. The second review must completed so that comments can be incorporated in a 100% CD set to be issued February 27, 2023.

Our structural review would follow the requirements in accordance with the guidance document found at www.mass.gov/dps with excerpts indicated below:

Mr. John Cutler Concord Middle School – Structural Peer Review Proposal November 23, 2022 Page 2

INDEPENDENT STRUCTURAL ENGINEERING REVIEW GUIDANCE

The purpose of this file is to provide guidance to those performing an independent structural engineering review in accordance with the building code (Code), specifically Section 780 CMR 105.9.

Primary Structure: For the purposes of the independent structural engineering review required in 780 CMR 105.9, the primary structure shall be defined as the structural frame, the load supporting parts of floors, roofs, and walls, and the foundations. Cladding, cladding framing, stairs, equipment supports, ceiling supports, non-load bearing partitions, and railings are excluded from this definition of primary structure.

Reviewing Engineer Qualifications: The reviewing engineer shall be engaged by the owner and shall be a Massachusetts registered professional engineer with structural design training and experience on structures similar to that covered by the building permit application. The engineer shall be impartial, and independent of the architect of record, structural engineer of record, and contractors and suppliers involved with the structure.

Review Criteria: The reviewing engineer shall review the plans and specifications submitted with the building permit application for compliance with the structural and foundation design provisions of the Code including the following tasks:

- 1. Check to assure that design loads conform to the Code;
- 2. Check that other design criteria and assumptions conform to the Code and with accepted engineering practice;
- 3. Confirm that the structural design incorporates pertinent results and recommendations of geotechnical and other engineering investigations.
- 4. Check that the organization of the structure is conceptually correct: and
- 5. Make independent calculations for a representative fraction of systems, members, and details to check their adequacy. The number of representative systems, members, and details shall be sufficient to form a basis for the reviewer's conclusions.

Review of Structural Calculations: The structural calculations prepared by the structural engineer of record shall be submitted to the reviewing engineer, upon request, for reference only. The reviewing engineer is not obligated to review or check these calculations. The structural engineer shall also provide a statement with the design criteria and design assumptions if they are not shown on the drawings or in the calculations.

Structural Responsibility: The structural engineer of record shall retain sole responsibility for the structural design. The activities and reports of the reviewing engineer shall not relieve the structural engineer of record of this responsibility.

Review Report and follow-up:

1. The reviewing engineer shall prepare a report to the building official stating whether or not the structural design shown on the drawings and in the specifications conforms with the structural and foundation requirements of the Code, based on the review as

Mr. John Cutler Concord Middle School – Structural Peer Review Proposal November 23, 2022

November 23, 2022

Page 3

prescribed in this guidance document, and shall include a summary of all deficiencies, if any, which cannot be resolved with the structural engineer of record.

- 2. The structural engineer of record shall review the report of the reviewing engineer and notify the building official in writing of agreement or of dispute with the conclusions and recommendations of the reviewing engineer.
- 3. Unresolved disputes between the structural engineer of record and the reviewing engineer shall be submitted by the building official, the owner, the structural engineer of record or the reviewing engineer to the Board of Building Regulations and Standards for resolution
- 4. Any changes to the structural design subsequent to the original submission of the plans and specifications shall be shown on revised drawings and specifications, submitted with an amendment to the application for permit. The reviewing engineer shall review the changes on the revised drawings and specifications, and, if the original reviewing engineer report does not account for the changes in said drawings and specifications, a supplementary report relating to the changes and prepared by the reviewing engineer shall be made to the building official.

We propose to provide a single structural peer review in accordance with the requirements stipulated in the guidance document of the Massachusetts State Building Code, Ninth Edition, based on the following schedule of services:

Initial High Level Review (No calcs, No stamped letter): \$1,500.00

Peer Review of the Revised 90% CD Package: \$7,000.00

Total Fee: \$8,500.00

In addition to the structural drawings, we will require a copy (PDF's) of the geotechnical engineering report for the proposed work, structural specifications, and the architectural design documents for our review and coordination. It is not necessary for the structural engineer-of-record to submit structural calculations. Calculations will only be required if information presented on the Contract Documents requires justification or additional explanation.

Please understand that while we request copies of the geotechnical report and architectural design documents, these documents will only be used for reference. We will not perform a peer review on any portion of the geotechnical recommendations nor any portion of the architectural scope.

For a project of this size, we generally require approximately two weeks to complete our review once we receive notice to proceed and we receive all required information.

Any additional structural engineering services, if any, (beyond the general scope of this proposal), which is highly unlikely, will be billed separately on an hourly rate basis in accordance with our following current billing rates:

Senior Principals \$ 225.00 per hour Principals \$ 190.00 per hour Associates \$ 160.00 per hour Engineers \$ 145.00 per hour

Mr. John Cutler Concord Middle School – Structural Peer Review Proposal November 23, 2022 Page 4

CAD Operators

\$ 95.00 per hour

Please note that additional services, if necessary, will only be executed following written authorization from you.

We thank you for considering and requesting a proposal from Souza, True and Partners, Inc. for this peer review project. Kindly countersign and return the enclosed copy of this letter, if this proposal is acceptable to you.

Please contact me if you have any questions or if you require additional information.

Sincerely,

SOUZA, TRUE AND PARTNERS, INC.

Tool P. Blok

Hill International

Todd P. Blake, P.E.

Authorized Signature

Principal

D:\My Documents\Proposals\221123_Concord Middle School PR Proposal.doc