City of Louisville
COLORADO • SINCE 1878

Department of Planning and Building Safety

749 Main Street • Louisville CO 80027 • 303.335.4592 • www.louisvilleco.gov

ELECTRONIC HISTORIC PRESERVATION HEARING REQUEST CASE NO:_____

PROPERTY INFORMATION

Address: 809 MAIN STREET

Year of Construction: 1902

Legal Description: NO 1/2 LOT 12 BLK 5 LOUISVILLE OT LESS SLY 313 SQ FT SPLIT PER DEED 1734236 BCR SEE ID 19806

Landmark Name and Resolution (if applicable):

TYPE(S) OF APPLICATION

- ☐ Probable Cause/Historic Structure Assessment
- ☒ Landmark Designation
- ☒ Historic Preservation Fund Grant
- ☐ Historic Preservation Fund Loan
- ☒ Landmark Alteration Certificate
- ☐ Demolition Review
- ☐ Other:

APPLICANT INFORMATION

Name: ANDY JOHNSON

Company: DAJ DESIGN

Address: 922A MAIN STREET, LOUISVILLE 80027

Telephone: 303-527-1100

Email: ANDY@DAJDESIGN.COM

I hereby request the public hearing(s) on this application be scheduled to be conducted by Electronic Participation in accordance with the attached Resolution No. 30, Series 2020, as adopted by the City Council on April 7, 2020, if such hearing(s) can be scheduled during a time period when in-person meetings are not being held due to a health epidemic or pandemic. I acknowledge that holding a quasi-judicial hearing by Electronic Participation may present certain legal risks and involves an area of legal uncertainty, and that having this application heard at a meeting held by Electronic Participation is optional and undertaken at my own risk. I also understand that in-person meetings are preferred for quasi-judicial hearings, and that even if electronic hearing(s) are scheduled, this application will be heard at an in-person meeting if in-person meetings have resumed by the scheduled hearing date(s).

OWNER INFORMATION

Name: DANA BUSA, DIRECTOR OF OPERATIONS

Company: TEBO PROPERTIES LLLP

Address: 3111 28TH STREET, BOULDER, CO 80301

P.O. BOX T1966, BOULDER, CO 80306

Telephone: 303-447-8326

Email: DBUSA@TEBOPROPERTIES.COM

SIGNATURES AND DATES

ANDY JOHNSON, PRINCIPAL

Applicant Name

12/2/2020

Applicant Signature Date

DANA BUSA, DIRECTOR OF OPERATIONS

Owner Name

12/2/2020

Owner Signature Date

City of Louisville
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Historic Preservation Application

The following information must be provided to ensure adequate review of your proposal. Please type or print answers to each question. Please keep your responses brief but thorough. If you have any questions about the application or application process, please reach out to the Historic Preservation Planner.

TYPE(S) OF APPLICATION

- ☐ Probable Cause Hearing/Historic Structure Assessment
- ☑ Landmark Designation
- ☑ Historic Preservation Fund Grant
- ☐ Historic Preservation Fund Loan
- ☑ Landmark Alteration Certificate
- ☐ Demolition Review
- ☐ Other: _____

1. OWNER/APPLICANT INFORMATION

Owner or Organization

Name(s): TEBO PROPERTIES LLLP

Mailing Address: P.O. BOX T1966, BOULDER, CO 80306

Telephone: 303-447-8326

Email: DBUSA@TEBOPROPERTIES.COM

Applicant/Contact Person (if different than owner)

Name: ANDY JOHNSON

Company: DAJ DESIGN

Mailing Address: 922A MAIN STREET, LOUISVILLE 80027

Telephone: 303-527-1100

Email: ANDY@DAJDESIGN.COM

2. PROPERTY INFORMATION

Address: 809 MAIN STREET

Legal Description: NO 1/2 LOT 12 BLK 5 LOUISVILLE OT

Parcel Number: 157508416006 Year of construction (if known): Circa 1902

Landmark Name and Resolution (if applicable): NA

Primary Use of Property: COMMERCIAL

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3. REQUEST SUMMARY

REQUEST FOR LANDMARK DESIGNATION, GRANT FUNDING, AND ALTERATION CERTIFICATE.

4. PROJECT DESCRIPTION (Please do not exceed space provided below.)

a. Provide a brief description of the proposed scope of work.

1. Requesting Landmark designation.
2. Requesting Historic Preservation Grant Funding (see detailed breakdown).
3. Alteration certificate for historic preservation of the front facade and first 25' of the building to be brought back to its original historic character; and, new 2-story building addition from the 25' preservation line back to the rear property line.

b. Describe how the work will be carried out and by whom. Include a description of elements to be rehabilitated or replaced and describe preservation work techniques that will be used.

The historic preservation work with be carried out by a general contractor, and will include historic elements such as: existing foundation stabilization, repair/replacing existing floor joists, stabilization of existing wall & roof framing, restoration of existing siding, restoration of existing ornamentation, trim, fascia, cornice, soffit, recreating original windows & doors.

c. Explain why the project needs historic preservation funds. Include a description of community support and/or community benefits, if any.

The overall cost to conduct historic preservation efforts is substantially greater than installing new construction items. Utilizing historic preservation funds allows the project to be financially feasible, and simply allows the preservation work to occur. Due to the significant nature of the new construction additional grant funding is being requested beyond the typical maximum new construction grant of $75,000. No additional community support is being provided outside the scope of the general contractor's work. The overall community benefit is the preservation of an important building along Main Street and within the Historic Downtown urban fabric, as well as the preservation of Louisville's overall historic architectural heritage.

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5. DESCRIPTION OF REHABILITATION *(Attach additional pages as necessary.)*

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
All structural work is described in attached narrative provided by the project's structural engineer.	

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
Front Facade: windows and doors have been replaced with contemporary units, existing siding is covered by a wood fiber sheet siding product, portions are clad in a brick veneer, and ornamentation is missing in some areas.	All historic elements will be rehabilitated, restored, or replace including original clapboard siding, trim and ornamentation, windows, and door. Door will be lowered to meet building code and ADA guidelines for accessibility.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
Roofing: currently asphalt roofing shingles are installed over much of the existing building.	Asphalt shingles are to be replaced with a wood sawn shingle roofing product to match the original character of the building. The wood shingles would treated with a fire retardant to meet current building codes.

Name of Architectural Feature:

Describe feature and its condition:	Describe proposed work on feature:
Existing non-historic brick veneer currently blocks entry to the small gaps between buildings on the south and north sides. Storm sewer inlets are currently installed on either side of the building at the western edge of the sidewalk along Main Street. The storm sewer inlets capture all of the water that runs off the building and the property.	Remove brick veneer and replace with a decorative metal panel to block entry from Main Street into space between buildings. Re-construct, as necessary, the storm sewer drainage inlets at the sides of the building.

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6. COST ESTIMATE OF PROPOSED WORK

*Please provide a budget that includes accurate estimated costs of your project. Include an **itemized breakdown** of work to be funded by the incentives and the work to be funded by the applicant. Include only eligible work elements. Use additional sheets as necessary.*

Type of Incentive: ■ GRANT ☐ LOAN ☐ BOTH

Feature	Proposed Work to be Funded	Fund Request	Match (M)	Total
A.	Historic Preservation of first 25' of existing building	$ 350,000	$ 384,166	$ 734,166
B.	New Construction	$ 125,000	$ 1,405,450	$ 1,530,450
C.	(see attached budget break down for both scopes of work)	$	$	$
D.		$	$	$
E.		$	$	$
F.		$	$	$
G.		$	$	$
H.		$	$	$
I.		$	$	$
J.		$	$	$
K.		$	$	$
	Total Proposed Work	$ 475,000	$ 1,789,616	$ 2,264,616

For loan requests, indicate total loan request here:	$

If partial incentive funding were awarded, would you complete your project? ☐ YES ■ NO

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7. ADDITIONAL MATERIALS REQUIRED

The following items must be submitted along with this application:

- ☐ One set of photographs for each feature as described in Item 4 "Description of Rehabilitation". Digital is preferred.
- ☐ A construction bid if one has been completed for your project (recommended).
- ☐ Working or scaled drawings, spec sheets, or materials of the proposed work, if applicable to your project.

8. ASSURANCES

The Applicant hereby agrees and acknowledges that:

A. Funds received as a result of this application will be expended solely on described projects, and must be completed within established timelines.

B. Awards from the Historic Preservation Fund may differ in type and amount from those requested on an application.

C. Recipients must submit their project for any required design review by the Historic Preservation Commission and acquire any required building permits before work has started.

D. All work approved for grant funding must be completed even if only partially funded through this incentives program.

E. Unless the conditions of approval otherwise provide, disbursement of grant or rebate funds will occur after completion of the project.

F. The incentive funds may be considered taxable income and Applicant should consult a tax professional if he or she has questions.

G. If this has not already occurred, Applicant will submit an application to landmark the property to the Historic Preservation Commission. If landmarking is not possible for whatever reason, Applicant will enter into a preservation easement agreement with the City of Louisville. Any destruction or obscuring of the visibility of projects funded by this grant program may result in the City seeking reimbursement.

H. The Historic Preservation Fund was approved by the voters and City Council of Louisville for the purpose of retaining the city's historic character, so all work completed with these funds should remain visible to the public.

Signature of Applicant/Owner	Date
Signature of Applicant/Owner	Date 12/02/2020

PGArnold CONSTRUCTION

Status: Active
Contact:
Date: 11/25/2020

Estimate: 20119 809 Main Street - Louisville

Estimate Unit Totals

Description	Quantity	Unit Price	Total Price
01 Site			
Building Demolition	2,726.00 SF	21.18	57,729.25
Selective Building Demolition - Historic Renovation	356.00 SF	48.71	17,341.97
Abatement	1.00 LS	11,355.11	11,355.11
Cast-In-Place Concrete - Sidewalk remove/replace	176.00 SF	14.76	2,598.05
Excavation	1,544.00 CY	73.81	113,959.85
Shoring And Underpinning - Historic Building	296.00 SF	39.74	11,763.89
Utility - Storm Water Line	80.00 LF	172.60	13,807.81
Totals			**$228,555.92**
02 Structure			
Cast-In-Place Concrete - Foundation	27.50 CY	667.68	18,361.21
Structural Steel/Misc Metals	7,484.00 LS	8.86	66,285.66
Steel Framing - Moment Frame	1.00 LS	7,380.82	7,380.82
Wood Framing - Floor system - Historic Renovation	544.00 SF	35.20	19,149.25
Wood Framing - Wall Re-framing - Historic Renovation	1,108.00 SF	16.86	18,683.46
Wood Framing - Truss Re-framing/Support - Historic Renovation	744.00 SF	25.55	19,008.45
Drilled Micropiles	10.00 EA	4,470.51	44,705.05
Totals			**$193,573.90**
03 Building Envelope			
Caulking/Waterproofing - Historic Building	1,405.00 SF	7.38	10,370.05
Wood Shake Roofing Shingles (Class B)	661.00 SF	22.71	15,011.45
Wood Clapboard Siding - Historic Renovation	1,207.00 SF	37.19	44,885.88
Front Façade - Historic Renovation	1.00 EA	20,677.65	20,677.65
Totals			**$90,945.03**
04 Historic Details			
Historic Ornamentation/Trim Details	1.00 EA	9,651.84	9,651.84
Exterior Painting	1,207.00 SF	1.99	2,398.48
Totals			**$12,050.32**
05 Interior FInishes			
Millwork - Bead Board Ceiling	661.00 SF	10.22	6,755.15
Millwork - Wood Wainscot	284.00 SF	10.22	2,902.37
Drywall - Level 5	1,305.00 SF	9.72	12,684.56
Wood Flooring	522.00 SF	15.33	8,001.94
Totals			**$30,344.02**
06 Building Systems			
Plumbing Budget - Historic Building	522.00 SF	18.78	9,803.86
HVAC Budget - Historic Building	522.00 SF	21.95	11,457.60
Electrical Budget - Historic Building	522.00 SF	20.18	10,532.93
Totals			**$31,794.39**
07 Project Managment			

Description	Quantity	Unit Price	Total Price
Project Management And Coordination	1.00 LS	90,127.75	90,127.75
Totals			**$90,127.75**
08 Project Contingency			
Contingency - Historic Renovation	1.00 LS	56,775.53	56,775.53
Totals			**$56,775.53**
Total Estimate			**$734,166.87**

PGArnold CONSTRUCTION

Status: Active
Contact:
Date: 11/25/2020

Estimate: 20119 809 Main Street - Louisville

Estimate Unit Totals

Description	Quantity	Unit Price	Total Price
01 Site			
Planters	89.00 SF	43.15	3,840.30
Utilities - Sanitary Line	80.00 LF	153.29	12,263.51
Utilities - Water Line	80.00 LF	96.52	7,721.47
Totals			**$23,825.28**
02 Structure			
Cast-In-Place Concrete - Foundation - Building Expansion	81.00 CY	667.68	54,082.10
Cast-In-Place Concrete - Slab on Grade	2,288.00 SF	8.52	19,485.36
Gypcrete - 1-1/2"	4,483.00 SF	4.83	21,634.60
Concrete Unit Masonry - South Wall and Foundations - Building Expansion	5,560.00 SF	28.39	157,835.98
Wood Framing - Floor/Roof System Framing - Building Expansion	6,517.00 SF	17.20	112,111.86
Wood Framing - Walls - Building Expansion	7,852.00 SF	11.20	87,912.05
Wood Framing - Stairs - Building Expansion	69.00 EA	73.64	5,081.01
Totals			**$458,142.96**
03 Building Envelope			
Damp Proofing - Below Grade Spray-On	3,751.00 SF	3.97	14,907.55
Fluid-Applied Waterproofing - Building Expansion	3,584.00 SF	7.52	26,941.22
Premium Grade Cement Siding	5,064.00 SF	14.14	71,590.31
EPDM Roofing Membrane	2,310.00 SF	20.44	47,214.53
Roof Decking Pavers	676.00 SF	31.79	21,492.95
Hollow Metal Doors	3.00 EA	2,328.93	6,986.80
Storefronts Door	1.00 EA	3,974.29	3,974.29
Glass Glazing	232.00 SF	96.52	22,392.27
Operable Glass Wall	18.00 LF	1,135.51	20,439.19
Exterior Painting	5,064.00 SF	2.55	12,938.01
HVAC Rooftop Screen	173.00 LF	97.65	16,894.13
Totals			**$265,771.24**
05 Interior FInishes			
Floor FInishes - Not Included	0.00 SF		0.00
Drywall	22,892.00 SF	5.11	116,973.49
Ceramic Tiling	278.00 SF	20.44	5,682.10
Wall Finishes - Not Included	0.00 SF		0.00
Bath Accessories	2.00 EA	1,703.27	3,406.53
Totals			**$126,062.12**
06 Building Systems			
Fire-Suppression Sprinkler Systems	6,962.00 SF	4.26	29,645.34
Plumbing Budget - New Building	7,484.00 LS	18.78	140,559.59
HVAC Budget - New Building	6,962.00 LS	21.95	152,811.86
Electrical Budget - New Building	6,962.00 LS	12.46	86,722.51

PGArnold CONSTRUCTION

Status: Active
Contact:
Date: 11/25/2020

Description	Quantity	Unit Price	Total Price
Electrical Budget - Fixtures - New Building	6,962.00 LS	2.84	19,763.56
Totals			**$429,502.87**
07 Project Managment			
Project Management And Coordination	1.00 LS	113,595.35	113,595.35
Totals			**$113,595.35**
08 Project Contingency			
Contingency - Design	1.00 LS	113,551.06	113,551.06
Totals			**$113,551.06**
Total Estimate			**$1,530,450.88**

ASCENT group
STRUCTURAL ENGINEERING

Boulder
Carbondale
Winter Park

August 20, 2020

Andy Johnson
DAJ Design
922A Main Street
Louisville, CO 80027

Reference: 809 Main Historic Remodel and Addition
Louisville, CO
Project # 2020-0248

Dear Mr. Johnson,

At your request, our firm has developed the following narrative for the re-development and preservation of the structure at the address referenced above.

The project consists of an existing narrow single story commercial building of turn-of-the-century vintage. The proposed work on the project includes re-habilitation of the eastern 25' of the street-facing facade and a portion of the roof at the front of the building in order to preserve the Historic structure and character to passersby on the street. In the back portion of the building a new 2 story addition is proposed.

Existing Building to be Preserved

Structural observation of the existing structure revealed the floor and bases of the wall framing to be in poor condition due to moisture exposure. The front façade has been modified throughout the life of the structure. The roof framing is typical of a structure of this vintage but does not meet current building codes. The foundation consists of a conglomeration of stone brick and concrete haphazardly placed together over the life of the structure. Our firm recommends the structural framing be fully exposed and methodically de-constructed and re-built in order to match the original historic architectural profile. The foundation shall be re-built to conform to design criteria established by a site specific soils report and be integrated into the foundation supporting the new construction toward the back of the site. The existing roof framing may be reinforced in place to conform to current code prescribed loading conditions. A steel moment frame will likely be required to resist current code-prescribed lateral loads. This frame may be located just inside the preserved storefront or set back some distance from the storefront.

If necessary, the original structural wall and floor members could remain in place but we anticipate they will become obsolete after all rotted portions are removed and the remaining members are reinforced to resist modern loading conditions. The first floor framing may be lowered in order to make the floor level flush with the sidewalk for accessibility.

New Building to be Constructed

The new construction at the back of the property will be framed with wood or steel joists spanning in the north/south direction that will support the upper floors and roof. These joists will bear on new walls and foundations near the property line. Roof decks and mechanical screening walls are anticipated. Additionally, the 2nd floor may extend over surface parking spaces to the rear lot line which will require a ceiling structure that will need to resist wind up-lift conditions. The depth of the foundation can allow for a basement space but the

economic feasibility of that will depend on the foundations of the adjacent buildings. Should the new foundation along the property lines be deeper than those of the existing building, shoring will be required to protect the adjacent properties. Otherwise a basement space can be designed so as to limit the excavation next to adjacent properties in order to reduce or eliminate the amount of shoring required.

Lateral load resisting systems will need to be installed to resist wind and seismic loads. Adjacent to the front facade a steel moment frame should be anticipated. Toward the center and rear portions of the building, our firm will design the lateral system to confirm to the architectural layout. This may include shear walls or braced frames at walls that will be a permanent part of the structure such as stairs or bathrooms. At the rear of the structure, wood shear walls may be anticipated.

At your request, we have developed the following narrative describing the anticipated structural systems for the project.

For the purposes of this narrative, our firm used the current building codes for the City of Louisville and the approximate span of the width of the building. Additionally below is an example of the structural assemblies used in our preliminary calculations. The actual assembly assembled in the architectural drawings will be used in the design:

Structural Assemblies

- Roof Assembly –
  - Membrane Roof
  - Tapered Rigid insulation (Only with non-sloping roof options)
  - Fiberglass Batt insulation
  - ½" Plywood or OSB Roof Sheathing
  - Trusses / Joists
  - Metal Resilient Channels
  - Appropriately Rated Gypsum Board Ceiling
  - Allowance for Mechanical, Electric, and plumbing
  - Mechanical Zones will include large units and concrete pads

- Upper Floor Assembly –
  - 1-1/2" Gypcrete (May include ¼" sound board)
  - ¾" Plywood or OSB Floor Sheathing
  - Trusses / Joists
  - Metal Resilient Channels
  - Appropriately Rated Gypsum Board Ceiling
  - Allowance for Mechanical, Electric, and plumbing

- Main Floor Assembly (Interior) –
  - 1-1/2" Gypcrete (May include ¼" sound board)
  - ¾" Plywood or OSB Floor Sheathing
  - Trusses / Joists
  - Allowance for Mechanical, Electric, and plumbing

- Main Floor Assembly (Exterior Roof Deck) –
  - Concrete or Stone pavers on Pedestal system
  - Membrane Roof
  - Tapered Rigid insulation (Only with non-sloping roof options)
  - Fiberglass Batt insulation
  - ½" Plywood or OSB Roof Sheathing
  - Trusses / Joists
  - Metal Resilient Channels

- Appropriately Rated Gypsum Board Ceiling
- Allowance for Mechanical, Electric, and plumbing

PRELIMINARY BUILDING SYSTEMS

Structural Systems

- Roof Structure Options (New Construction, spanning 23' +/- width of building)–
  - Pre-Engineered Roof Trusses (With built in taper for slope) made of wood or light gauge steel spaced at 24" centers and a minimum depth of 1'-4" (16"). NOTE: At mechanical zones, special trusses or framing will be designed to support the mechanical units and a concrete pad.
  - Red-Built Red-L Trusses spaced at 24" centers and a depth of 14". Slopes will be achieved with tapered insulation. NOTE: At mechanical zones, special trusses or framing will be designed to support the mechanical units and a concrete pad.
  - TJI Framing option – 16" TJI 360 roof joists spaced at 24" Centers. Slopes will be achieved with tapered insulation.
  - Beams and posts – Wood beams will be utilized at headers and transfer beams. Steel will be avoided if possible. Any steel below the ceiling will be sized to allow for a fire rated wrap. NOTE: At mechanical zones with TJI Options, Framing will be designed to support the mechanical units and a concrete pad. This will likely be steel beams.
  - Rooftop Mechanical unit screens – Steel 4" pipes spaced at 6' centers extending into the roof and connected to the top and bottom chords of the roof trusses with steel brackets. (Trusses supporting roof screen posts will require special attention)

- Roof Structure Options (Historic)–
  - Re-frame existing roof framing with new wood rafters, collar-ties and ceiling joist to field assemble a truss spanning from exterior wall to exterior wall. Existing skip-sheathing may need to have a new layer of OSB over the top. Connections will be custom designed and detailed.

- Floor Structure Options (Upper floors supporting office space and roof deck spanning 23' +/- width of building)–
  - Pre-Engineered Floor Trusses spaced at 16" centers, 22" deep.
  - Alternate 1 - Red-Built Red-L Trusses spaced at 16" centers and a depth of 18".
  - Alternate 2 - TJI Framing – 18" TJI 560 floor joists spaced at 16" Centers. NOTE that a direct applied fire rated Gyp-Board ceiling (Resilient Channels are OK) will be required.

- Floor Structure (Main Level, new construction spanning 12' +/-) –
  - Floor will have a steel center support beam, and/or bear on a crawl-space wall
  - Pre-Engineered Floor Trusses spaced at 16" centers, 12" deep.
  - Alternate 1 - Red-Built Red-L Trusses spaced at 16" centers and a depth of 14".
  - Alternate 2 - TJI Framing – 11 7/8" TJI 210 floor joists spaced at 16" Centers.
  -
- Floor Structure (HIstoric) –
  - Existing joists are likely un-salvageable. New floor joists anticipated to bear on new sistered foundation wall.
  - A steel center beam over the front crawl-space.

- Wall Structures, Columns and Stairs –
  - Framed Walls (Historic section – front 25 feet) – 2x6 Hem Fir Stud Grade studs spaced at 16" centers with 7/16" OSB sheathing on exterior walls if possible. Exterior OSB sheathed walls may require panels inset behind original siding.

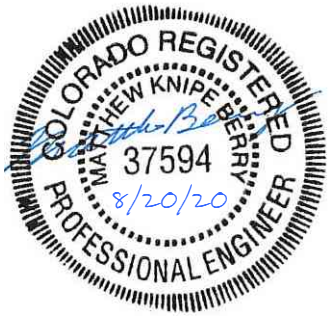
  - Concrete Masonry Unit Walls (CMU) – 8" CMU walls may be used at the new 2-story side walls to the back of the building. Walls will be reinforced with #5 rebar and have grouted cells and horizontal bond beams at all floor levels and top of parapet. (Pre-cast Concrete may also be used) . These will also be used to resist lateral loads.
  - Steel Posts and Columns – Square and rectangular tube steel posts and columns are expected in the 1st floor and under any large beams in the upper levels (These will be likely near any larger open spaces). These steel posts will be sized to have a fire-rated wrap (Such as Gypsum board)
  - Stairs – Stairs are anticipated to be wood stair stringers either Engineered lumber (LVL) or wood stairs designed and manufactured by others. Landings will be framed with LVL ledgers fastened into grouted CMU with appropriate fasteners and 2x12 framing spaced at 16" centers.

- Foundation –
  - It is anticipated the area adjacent to the building on the north will have a crawl-space so as to not interfere with the neighboring foundation and limit shoring.
  - At the historic front of the building, a new reinforced concrete foundation will be sistered to the existing foundation or replace sections of the existing foundation.
  - The foundation system is assumed to be supported on reinforced concrete footings with perimeter foundation walls extending to the basement lever, crawl-space level or the 36" frost depth, whichever is greater. (Footings will be subject to approval by the soils engineer) Interior bearing walls and steel column base plates will be supported by reinforced grade beams and spread footings.
  - Retaining walls (At parking) - These will be supported by spread footings and will likely have counterforts on the uphill side spaced at approximately 15' intervals.
  - Basement floor is anticipated to consist of 4" concrete slab on grade.

- Lateral Systems – Lateral forces will be resisted by steel moment frames (Isolated locations), Steel braced frames (Isolated locations), gypsum board, wood and concrete shear walls. Embed plates and hold-downs cast into the foundation and main level floor will be utilized to resist overturning forces.

We hope this information is helpful in developing your pro-forma for this project. Our firm is very excited to join your team and contribute to the success of this important project.

Sincerely,



Matthew K. Berry, PE
Principal