

**A RESOLUTION OF THE TOWNSHIP COUNCIL OF NORTH BRUNSWICK
AUTHORIZING A CHANGE IN SCOPE TO
THE 2022 PROFESSIONAL SERVICE AGREEMENT WITH
USA ARCHITECTS, PLANNERS AND INTERIOR DESIGNERS LTD.
TO PROVIDE ARCHITECTURAL AND STRUCTURAL ENGINEERING SERVICES
ASSOCIATED WITH DESIGN MITIGATION AND REMEDIATION WORK
FOR THE EXTERIOR OF THE MUNICIPAL COMPLEX BUILDING**

WHEREAS, the 30-year-old Municipal Complex was constructed in accordance with codes and standards of the time; and

WHEREAS, as a matter of routine maintenance, the Division of Buildings and Grounds engaged contractors over the years to address any minor repairs necessary to address any water issue that occurred; and

WHEREAS, in September of 2021, a significant amount of water penetrated the Municipal Complex from Hurricane Ida, causing major damage to the structure, including the interior currently undergoing restoration; and

WHEREAS, without addressing the disaster-related damage to the exterior walls breached during Hurricane Ida, the building will experience leaks and moisture intrusion, causing future damage to the interior of the building; and

WHEREAS, in November of 2021, the Director of Public Works met Peter Campisano with USA Architects to walk the site and survey the condition of the building; and

WHEREAS, in December of 2021, the contract with USA Architects, was amended to include professional services associated with review of the exterior of the Municipal Complex, in amount not-to-exceed \$10,000.00; and

WHEREAS, in January of 2022, Peter Campisano with USA Architects met with elected and municipal officials to report on the preliminary findings and discuss repairs necessary to restore the exterior and bringing, inclusive of bringing the building to current construction code standards, which will provide future resiliency against weather related events; and

WHEREAS, in the beginning of February 2022, Peter Campisano with USA Architects met with municipal officials and representatives from Federal Emergency Management Agency (“FEMA”) to review options for making application under FEMA programs for project assistance; and

WHEREAS, at the request of the Township, Peter Campisano with USA Architects has provided a proposal for services associated with the next phase in remediation and restoration efforts at the Municipal Complex including Due Diligence/Schematic design (Phase 10); and

WHEREAS, in January of 2022, pursuant to Resolution 10-1.22, USA Architects, Planners and Interior Designers, Ltd. (20 N. Doughty Avenue Somerville, NJ 08876) was authorized to provide Architectural Services for calendar year 2022, as awarded under a fair and open contract process, pursuant to the provisions of N.J.S.A. 19:44A-20.1 et seq.; and

WHEREAS, USA Architects current agreement includes the following:

- General services in an amount not-to-exceed \$10,000.00, and
- Services associated with the Dawn Way facility restoration, in the amount of \$20,000.00, for a revised contract authorization amount of \$30,000.00

WHEREAS, compensation for said services shall be based upon the February 2, 2022 proposal submitted by USA Architects, to be paid upon submission of monthly invoices, in an amount not-to-exceed \$150,000.00.

NOW, THEREFORE, BE IT RESOLVED on this 22nd day of February 2022, that the Township Council of the Township of North Brunswick does hereby authorize the Mayor to execute and the Township Clerk to witness an amendment to the current agreement with USA Architects, to include professional services associated with design mitigation and remediation work for the exterior of the Municipal Complex building, in an amount not-to-exceed \$150,000.00, for a revised contract authorization amount of \$180,000.00.

BE IT FURTHER RESOLVED notice of this action shall be published in the Home News & Tribune as required by law within 10 (ten) days after its passage

CERTIFICATION

I, Cavel Gallimore, Chief Financial Officer of the Township of North Brunswick, hereby certify that funds in the following account totaling \$20,000.00 are available under Contract PRO22038:

\$150,000.00 are available in Capital Ordinance 20-17 Account C-04-55-C20-210-905

Cavel Gallimore
Chief Financial Officer

Eric Chaszar
Director of Public Works

Justine Progebin
Business Administrator

Ronald Gordon, Esq.
Township Attorney
Approved as to legal form

Resolution # _____

RECORDED VOTE:

COUNCIL MEMBER	YES	NO	ABSTAIN	NOTES
MEHTA				
LOPEZ				
GUADAGNINO				
ANDREWS				
SOCIO				
DAVIS				
MAYOR WOMACK				

I hereby certify that the above Resolution was duly adopted by the Township Council of the Township of North Brunswick, County of Middlesex, at its meeting held on February 22, 2022.

Lisa Russo
Township Clerk



20 N. Doughty Avenue
Somerville, NJ 08876
t 908.722.2300
usaarchitects.com

February 2, 2022

Ms. Justine Progebin, Business Administrator
North Brunswick Township
710 Hermann Road
North Brunswick, New Jersey 08902

Re: Proposal for Architectural and Engineering Services
Proposed Building Envelope Repairs at the North Brunswick Township Municipal Building
For North Brunswick Township

Dear Ms. Progebin:

As you are aware, USA Architects was recently called upon by the Township to observe conditions related to both ongoing moisture intrusion problems and flooding caused by Hurricane Ida within the existing building envelope and roofing systems at the North Brunswick Township Municipal Building. Pursuant to our recent meeting together with Mayor Womack and Councilman Ralph Andrews, we present our initial findings of obvious deficiencies, as well as a preliminary plan of action to correct the moisture intrusion problems. Please let the following serve as USA Architects' outline of initial investigation findings and proposal to provide professional architectural / engineering services to execute corrective actions for the above referenced project.

We intend to utilize additional consultant experts to assist with the due diligence and schematic design phase of the project. We will use John Harry Restoration Services related to developing the work descriptions of the masonry cavity wall construction, as well as SR Products related to detailed condition assessments of the roofing & gutter systems.

Additionally, we will engage the services of MPP Engineers for structural engineering needed to reinforce any existing elements of the building façade or roofing systems.

Project Understanding:

USA Architects has been on-site at the 30-year-old municipal building complex to conduct observations and analysis of the water intrusion issues that have been an ongoing problem for a long period of time. We were on-site several occasions within the last few months and observed significant evidence of interior water intrusion damage throughout the entire facility, as well as exterior building envelope failures throughout both the masonry façade and metal roofing systems.

We understand that the complex is currently undergoing restoration due to recent flood damage incurred during the extreme weather caused by the remnants of Hurricane Ida in September 2021. Our observations note that Ida inflicted additional damage throughout the complex and not just at the flooded areas on the first floor. USA to assist Township with all FEMA application related work.



We also understand that the township is currently remediating water damaged portions on the upper floors of the building that resulted in the growth of mold after Ida. Furthermore, we understand that mold remediation has occurred multiple times before in the same locations due to ongoing leaks. Any work related to hazardous material will continue to be by Owner.

In this project, the USA team will finalize all investigative efforts, quantify the primary issues, and design corrective solutions to enhance the waterproofing of the entire building envelope and make it more resilient to severe weather events so that the health and life safety of the building occupants and visitors remains intact. Opinions of probable construction costs will also be provided.

Initial Findings and Noted Deficiencies:

As part of our preliminary study, we interviewed township staff, investigated the interior & exterior of the building, investigated the roof of the building, and reviewed the original architectural plans.

The following outline summary lists our initial findings of systemic issues related to failures, deficiencies, and water intrusion points through the existing building envelope systems. It should be noted that leaks have been reported to occur during most rainstorm events, however, Hurricane Ida and similar extreme weather events grossly exacerbate the existing weaknesses of the building envelope systems and cause damage to the interior of the building. For additional graphical information, see photo exhibit attached herein.

1. Roofing:

- a. Existing steel roofing itself is in reasonably good condition
 - i. signs of aging (30 years old) are appearing – rusting at edges, etc.
- b. Significant problems with the built-in gutters and rain leaders
 - i. sectional gutters are directly over the exterior wall
 - ii. any leaks go into the wall rather than dripping free of building
 - iii. overflow water goes down the face of wall or back into the top of the wall
 - iv. inadequate size in relation to the pitch and total area of roof
 - v. gutters installed flat level, not pitched to outlets
 - vi. downspouts attached directly against building
 - vii. inadequate number of downspouts vs. size
- c. Flashing at rising walls
 - i. poorly-design step flashing – openings at sides of flashing
 - ii. secured through face with fasteners which are rusting, non-gasketed
 - iii. inadequate or no provisions for drainage from interior of masonry wall
 - iv. multiple layers of counter flashing at base of walls and face fastened
- d. Result is major water intrusion into the top of the masonry walls
- e. Roof is not insulated (neither is attic floor)

2. Masonry:

- a. Single wythe brick wall – very prone to leaks through brickwork into wall system
- b. Inadequate provisions for drainage



- i. only gypsum board with paper surface as exterior sheathing – deteriorates in water, promotes mold growth
 - ii. no sealant provision over joints in sheathing
 - iii. mortar droppings can block cavity – no attention paid during construction to providing weep drainage
 - iv. weeps are inadequate, poorly located, and little evidence of any effective drainage
- c. Steel lintels and shelf angles
 - i. inadequate locations
 - ii. rusting of plate steel – in some areas there is sufficient oxide jacking to lift and crack the masonry
 - iii. rusting is occurring both at window openings and at structural steel plates over wall transitions and larger openings, especially severe at curved masonry element at front entrance
 - iv. inadequate fabric flashing
 - 1. fabric may be deteriorating or at the end of its useful life
 - 2. flashing does not extend to exterior with a drip edge, water can get under flashing and back into wall cavity
 - v. no end dams to prevent water from running off ends of lintels and into the wall cavity
- d. Exterior sheathing on steel studs
 - i. paper facing detaches when wet
 - ii. inadequate protection at joints between sheets to prevent water from penetrating to insulation and interior finishes
- e. Ties to hold masonry in place on stud walls are corrugated galvanized ties
 - i. may not restrain horizontal movement, may allow bulging and cracking of brickwork, use of such ties is no longer allowed by code
- f. Mold in walls
 - i. on upper floor we found evidence of mold in cavity walls and insulation beyond what the town is currently remediating
- g. Expansion joints
 - i. inadequate spacing of joints –continuous runs of masonry are too long
 - ii. existing joints are too narrow to absorb all the movement – noted bulging sealant being squeezed out of joints.

3. Windows:

- a. Rubber glazing gaskets between glass and frame
 - i. shrinking over time is leaving large gaps
 - ii. no provision for controlling moisture that penetrates single sealant joint at exterior between window frame and masonry
- b. Original color coating on frames is aging and fading
- c. Rebuilding exterior facade requires removal & replacement of entire window system.



Scope of Services:

This project will be provided in accordance with our Basic Services, of our Architect of Record Agreement and as required to complete the professional services.

Basic Services included in this proposal:

1. Phase 10 – Due Diligence/Schematic Design Services: Services provided in accordance with our existing Architect of Record Agreement.
2. Phase 30 – Construction Documents/Permitting Services: Services provided in accordance with our existing Architect of Record Agreement.
3. Phase 40 – Bidding/Quoting Assistance Services: Services provided in accordance with our existing Architect of Record Agreement.
4. Phase 50 – Construction Contract Administration Services: Services provided in accordance with our existing Architect of Record Agreement.

USA Architects, Planners + Interior Designers, Ltd. shall provide full and normal Architectural and Engineering Services necessary for the completion of the above noted project. All services shall be provided in accordance with our basic Architect of Record Agreement.

The presence of hazardous materials is not anticipated, however, should any such materials be encountered then it will be the responsibility of the Owner to notify the architect and to remove or remediate the material as required by the local authorities having jurisdiction.

The following page includes our Matrix of Professional Services Responsibility.

Any services not checked within the matrix are Scope of Work items to be defined and are not included within the Contract. The Matrix of Professional Services Responsibility outlines those services included as USA's basic services within the Contract, those services to be provided by the Owner, or Owner's consultants, or services not defined by the time of execution of the Contract. Services necessary or requested by the Owner or local Authority Having Jurisdiction later during the project may be considered additional services.

See Matrix of Professional Services Responsibility on next page.



Matrix of Professional Services Responsibility							
	Services	USA Architects	USA' s Consult.	Owner	Owner's Consult.	N/A at this time	Remarks
1	Architectural Basic Services	X					Building Envelope/Roofing Replacement
2	Structural Basic Services		X				System reinforcement as needed.
3	Mechanical Basic Services					X	
4	Electrical Basic Services					X	
5	Plumbing Basic Services					X	
6	Fire Protection Basic Services/Sprinklers					X	
7	Programming					X	
8	Project Development Schedule					X	
9	Economic Feasibility Studies					X	
10	Long Term Facility Plan					X	
11	Pre-referendum Services					X	
12	Project Budgeting	X		X			Confirm budget based on Ph. 10 docs.
13	Detail Construction Cost Estimates					X	
14	Existing Facility Survey/Documentation	X	X				
15	Bldg. Hazmat Investigation/Report				X		Hazardous materials not anticipated, TBD
16	Bldg. Hazmat Abatement Specifications				X		Hazardous materials not anticipated, TBD
17	Civil/Site Engineering					X	
18	Site Lighting					X	
19	Zoning/Site Agencies Applications					X	
20	Landscape Architecture					X	
21	Geotechnical Services					X	
22	Boundary/Topographic Survey					X	
23	Site Environmental Studies/Delineation					X	
24	Environmental Monitoring					X	
25	Site Analysis & Selection					X	
26	Zoning /Site Agency Approvals					X	
27	State Building Agency Submissions					X	
28	Interior Design					X	
29	Telecommunications					X	
30	Security Services					X	
31	Food Services					X	
32	Value Engineering					X	
33	Sustainable Design					X	
34	LEED® Certification					X	
35	Commissioning					X	
36	Building Life Cycle/Cost Analysis					X	
37	Energy Studies, E-Rate, Smart Start, etc.					X	
38	Record Construction Drawings			X	X		By Contractor(s)
39	Post Construction Evaluation	X	X	X			Punch list and project closeout.
40	Artistic Renderings					X	
41	3-D Walk-through					X	
42	Architectural Model					X	
43	Signage Design					X	
44	Graphic Design					X	
45	Marketing Studies					X	
46	Project Promotion/Public Relations					X	
47	Brochures					X	
48	Grant Research					X	
49	FEMA Assistance	X	X				
50	--						



Renovations/Repairs/Rehabilitation:

In as much as evaluations of systems, or the renovations/repairs/rehabilitation of existing buildings, requires that certain assumptions be made regarding existing conditions and because some assumptions cannot be verified without expending great sums of additional money or destroying otherwise adequate or serviceable portions of the existing building, the owner agrees that, except for negligence by the Architect, they will hold harmless and indemnify the Architect against all claims, and/or costs arising out of the professional services associated with those assumptions.

Project Schedule:

The anticipated schedule will be developed in conjunction with the Township's timeline. USA Architects, and their consultants, has the required staff and resources available to begin work immediately.

Project Budget:

As of the writing of this proposal, the detailed systemic costs of the work are unknown, however, based on our initial findings/analysis we are able to establish an approximate construction budget cost of \$8 - \$10 million. A more detailed budget estimate will be provided later after a final determination of the Scope of Work. Our engineering costs will be based on the final scope of work. Construction cost estimates (prepared by USA) are based on the best judgments of USA and our consultants as design professionals familiar with the construction industry. It shall be recognized and understood that neither USA nor the Owner has control over competitive bidding and market conditions.

Fee Proposal:

Based on our recent discussions, USA's initial findings/analysis, and the above noted Scope of Work, USA Architects respectfully submits our professional services fee to quantify the scope of work, design mitigation & remediation enhancements for removing & replacing the existing exterior façade & roofing, and provide construction documents and construction contract administration as follows:

In an effort to minimize costs, USA will provide Hourly services as needed to perform due diligence/invasive investigation/schematic design to define the scope of work. After the scope has been defined and quantified, we will convert our hourly services into a Fixed Fee acceptable to the township. The Fixed Fee services will be for construction/permit documents, assisting the Township in obtaining bids/quotes, and construction contract administration of the project.

Hourly Services:

Phase 10: Due Diligence/Schematic Design Hourly, Not to Exceed \$150,000
(Note: costs for USA to hire contractor(s) for invasive investigation work not included)

Fixed Fee Services:

Phase 30:	Construction Documents	Agreed upon after final scope of work
Phase 40:	Bidding, Negotiations	Agreed upon after final scope of work
Phase 50:	Construction Administration	Agreed upon after final scope of work



Normal reimbursable expenses will be billed in addition to the professional services indicated above and include:

- a. Expense of reproductions, including computer-aided drawing plots, computer disks, specifications, and other media required.
- b. Expense of postage and handling or Overnight and Messenger Service.
- c. Permits and other approvals that may be required for the project.
- d. Transportation, or mileage reimbursement at approved federal guidelines.
- e. Costs related to contractor(s) assistance with invasive investigation.

Invoicing:

Invoices will be submitted monthly, and billing will be based on the percentage of completion of the phases or hourly services rendered. Invoices are payable within thirty (30) days of the date of the invoice. If USA does not receive payment within sixty (60) days of the date invoices were submitted, all work will be suspended due to nonpayment of services.

USA will not be responsible for any damages or time delays that may result from nonpayment.

Additional Services:

All services beyond the Scope of Services described above, shall be considered an Additional Service. Owner authorized Additional Services will be invoiced as a mutually agreeable Lump Sum, or on a Time and Material basis in accordance with the enclosed Rate Schedule. Additional Services include but are not limited to:

- a. Services required of engineering and specialized consultants not specifically named above.
- b. Changes to the design and/or a repetition of steps, or A/E tasks, warranted by a change in Client / Owner initiated directives or approvals.
- c. An interruption in the delivery of sequential phases of the project due to factors beyond the Architect's control.

Exclusions:

The preceding fee specifically excludes these services:

- 1. Identification and abatement of asbestos or any other hazardous materials. Owner to notify USA if hazardous material is expected to be encountered or may be encountered.
- 2. Costs related to contractor(s) assistance with invasive investigation into existing building envelope systems.
- 3. Civil Engineering, Geotechnical, Applications for Environmental waivers, or approvals.
- 4. Permits, applications or filing fees.

Rate Schedule:

All Owner authorized Services shall be invoiced according to our Architect of Record rate schedule.



This proposal agreement is **governed by the laws** of the State of New Jersey as principal place of business of USA Architects, Planners and Interior Designers, Ltd.

If this proposal meets with the Township's approval, then please endorse one (1) copy, and forward to USA Architects, Planners and Interior Designers, Ltd, 20 North Doughty Avenue, Somerville, New Jersey 08876, or by email as provided below. The receipt of this signed document will constitute a binding Contract and USA shall commence with the work immediately.

USA Architects, Planners + Interior Designers, Ltd

Respectfully submitted,

02.02.2022

Michael J. Bryson, CDT

Date

Associate | Senior Project Manager

Accepted for Owner:

Date

Print: _____

Should you have any questions or require additional information then please feel free to contact me directly at 551-206-5483; or email me at mbryson@usaarchitects.com.

cc: Mr. Peter Campisano, AIA, USA Architects
USA file

BUILDING ENVELOPE STUDY for the NORTH BRUNSWICK TOWNSHIP MUNICIPAL COMPLEX



Location: North Brunswick, New Jersey

Date Constructed: 1992



Project Team

USA Architects, Planners + Interior Designers

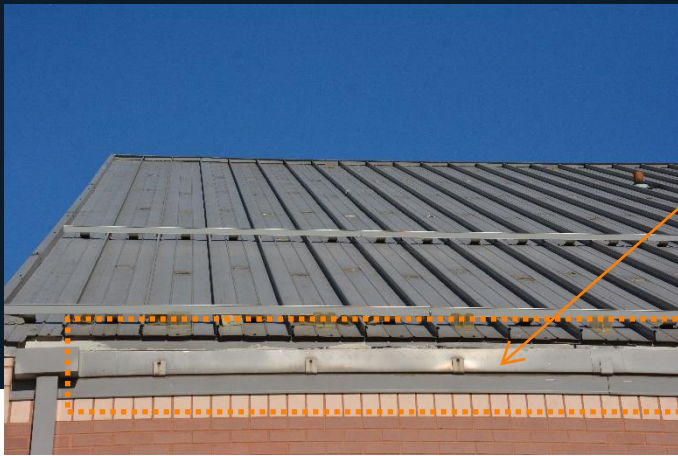
- Peter Campisano
- Michael Bryson

John E. Harry, Restoration Services

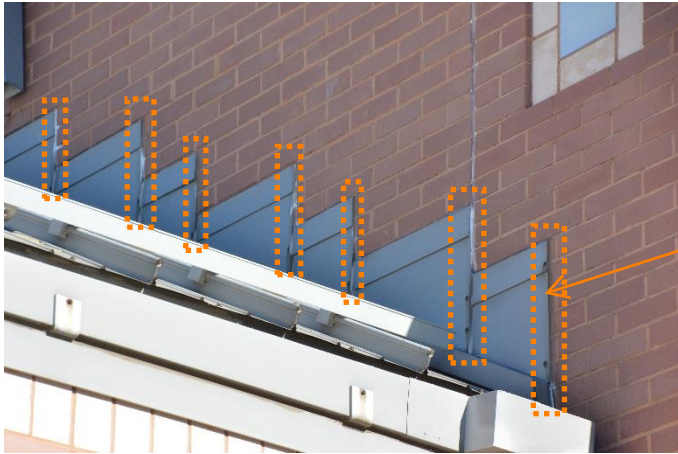
- John Harry

SR Products

- Tony Perez



Example of undersized gutter system directly on top of exterior wall instead of outboard.



Example of deteriorating vent pipe penetration.

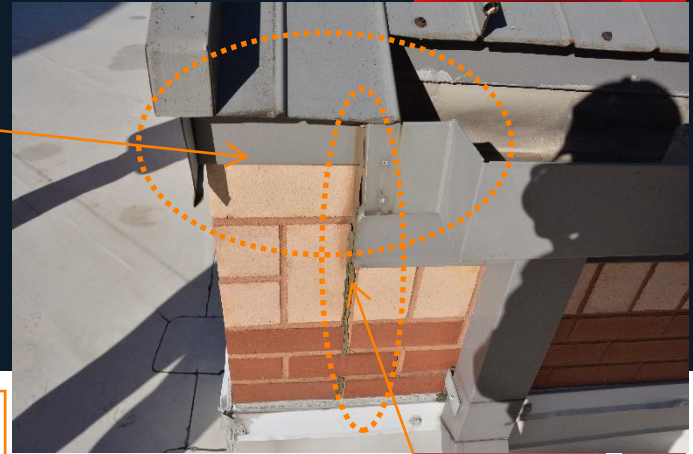
Example of stepped flashing with open sides.





Example of gutter stopping short of the edge of the roof.

Example of gutter system directly on top of exterior wall instead of outboard.

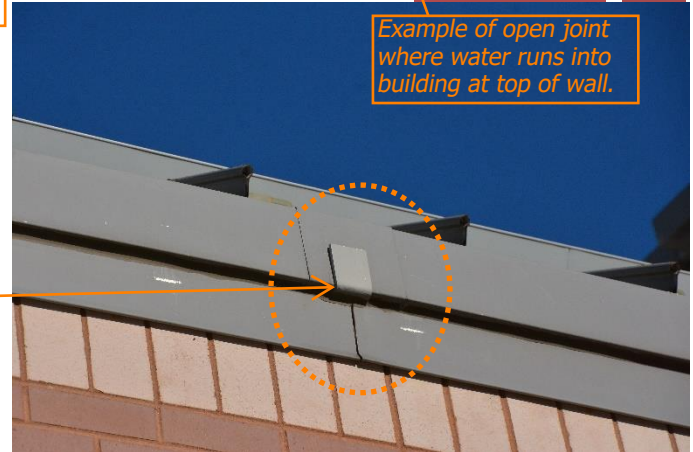


Example of open joint where water runs into building at top of wall.



Example of water sitting in dead level gutter, no pitch to downspout outlets.

Example of typical seam in gutter system.

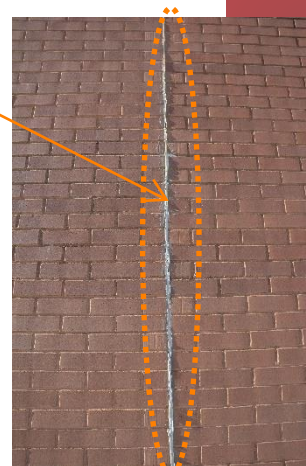




*Example of
improperly
fastened
counterflashings*



*Examples of failing brick mortar
and sealant joints.*

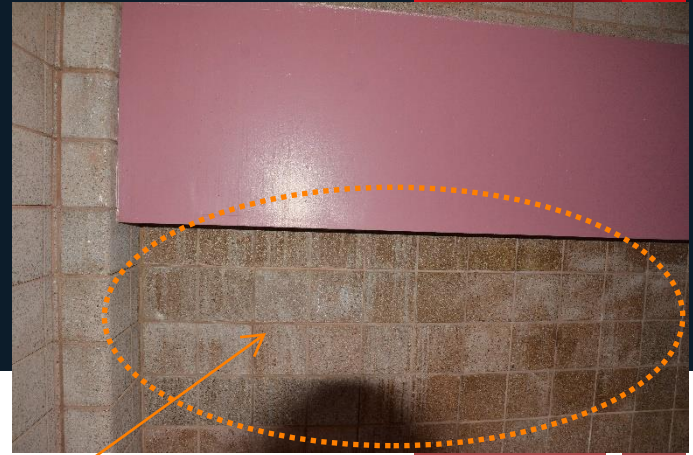




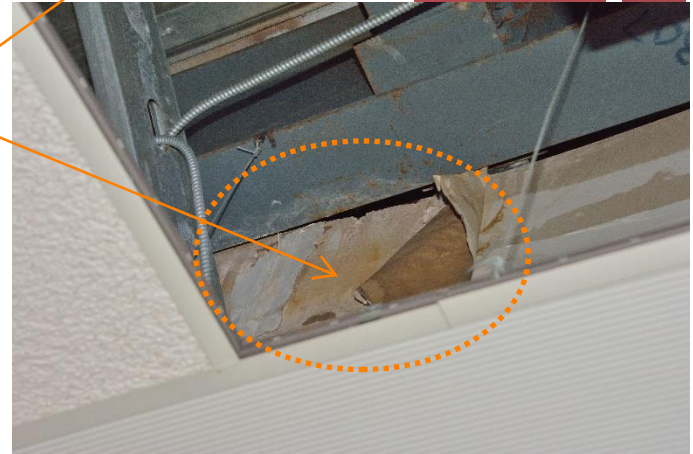
Example of mold growth on interior paper face of gypsum sheathing and ongoing deterioration at unsealed joints.

Example of mold growth between back face of brick and exterior paper face of gypsum sheathing; mold present on batt insulation.





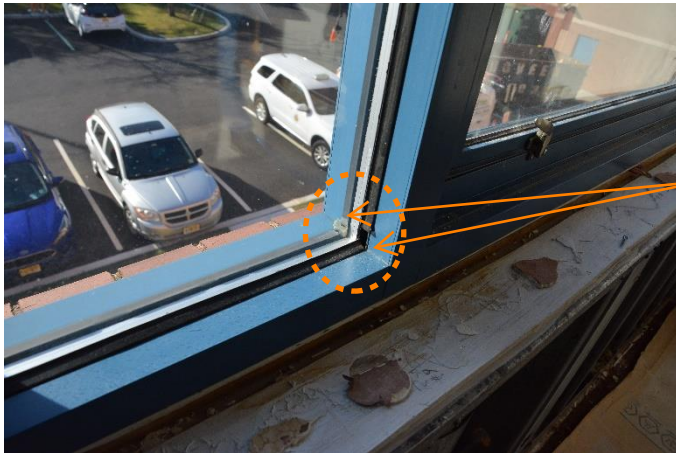
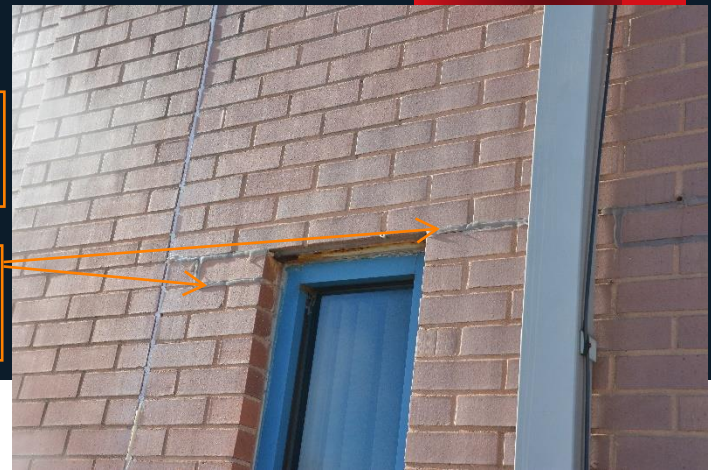
Examples of interior damage
due to water intrusion.



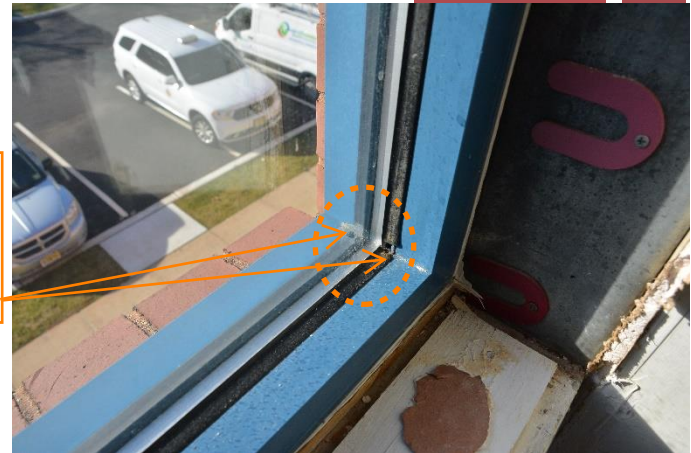


Example of open gaps between window frame and wall opening.

Example of failing brick mortar and sealant joints at window head.

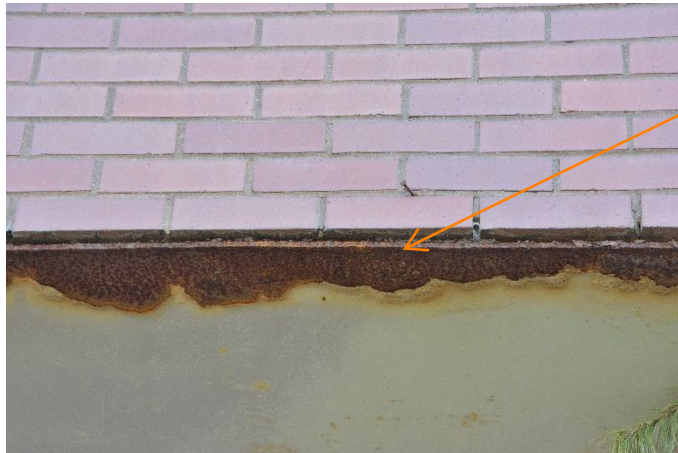


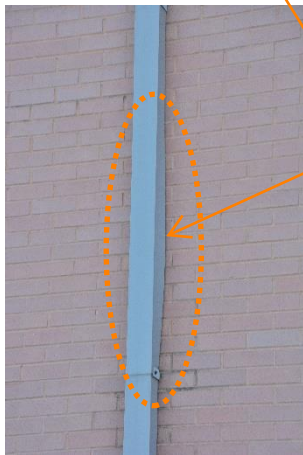
Example of failing window gaskets allowing water intrusion into window system and interior of building.





Example of existing
steel lintels and
steel plates rusting
and beginning to
'jack-lift' brick





*Example of undersized
downspout with bulging
deformation due to ice build-up
and seam failure.*