

CPT Replacement Facility - Pass / Fail Evaluation Demolition and New Development

Selection Committee Evaluation

The Selection Committee will evaluate the following minimum requirements of the RFP for compliance with the RFP on a pass/fail basis. Any item not reasonably indicated in the Proposal Submission shall be evaluated as fail. This evaluation listing does not modify the minimum requirements of the RFP for Demolition or New Development design even if a specific requirement is not listed for evaluation. Any proposal that receives a fail grading for one or more of the listed evaluation requirements shall be deemed non-responsive and receive a Selection Committee score of 0. All proposals that receive a pass grade for ALL listed evaluation requirements receive a Selection Committee score of 450.

Pass Fail Evaluation Criteria Description

General Proposal Requirements

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Proposal contains corporate background and relevant experience, including references. Experience is at least two structures of at a minimum of 80% size of the Project. |
| <input type="checkbox"/> | <input type="checkbox"/> | Proposal contains includes relevant experience of a firm that has accomplished significant demolition projects in an urban setting that involved a tall tower structure, including references. Experience is at least two demolition projects of at a minimum of 80% size of the Project. |
| <input type="checkbox"/> | <input type="checkbox"/> | Required Drawings and written discriptive Information are provided in the Proposal as required by the Minimun Building Standards section entitled "Required Proposal Design and Concept Documents". |
| <input type="checkbox"/> | <input type="checkbox"/> | Critical Path Method Project Schedule, indicating the initial proposed schedule of each critical component of demolition and new construction and this CPM schedule indicates Substantial Completion shall be no later than March 13, 2020. Substantial Completion and Final Completion dates are March 13, 2020 and April 12, 2020, respectively. |
| <input type="checkbox"/> | <input type="checkbox"/> | Offeror has indicated that they have included an allowance of \$80,000.00 for traffic modifications and may be required by a future traffic study. The Offeror has indicated a Traffic Study specialist that will perform the required future traffic study. |

Demolition Requirements

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Critical Path Method Project Schedule, indicates each element of the demolition requirements in the sequence required by the RFP, and no element is shown as starting prior to the date indicated in the RFP for the intial commencement of each demolition sequence as defined in the RFP Minimum Building Standards. |
| <input type="checkbox"/> | <input type="checkbox"/> | The Demolition plans indicate the complete scope of demolition to be accomplished as indicated in the RFP Minimum Building Standards. |

Site Design

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Access to the Project site from public vehicular ways include as a minimum, Mero Street and |
|--------------------------|--------------------------|---|

Wilkinson Blvd. Access to the New Parking Structure is from Mero Street, Wilkinson Blvd and the KYDOT Parking Structure (as a minimum)

- 25% of the surface vehicular pavements on the Office Building Site are constructed of a permeable pavement. This permeable pavement is shown on the site design plan and the design narrative describes the type of pavement, its construction, and a calculation to indicates the 25% requirement has been met is indicated..
- Provide the number of parking spaces required by the RFP: Minimum caculation is (3 per 1000 gsf) and. IN ADDITION to this requirement, the RFP requires ADA accessible parking spaces by the following formula (20, plus 1 for each 100 spaces, or fraction thereof over 1,000 spaces). IN ADDITION to this requirement the RFP requires Vistor Parking spaces equal to the number of ADA spaces required. IN ADDITION, the RFP Requires specific surface parking spaces in addition to those indicated above. Provide areas for piling of snow in multiple locations adjacent to but not a part of the parking area.
- Site Plan indicates all RFP required new development necessary due to the demolition and new development of the site that is required by the RFP.
- The Site plan indicates the drive, guest drop-off and ADA parking spaces required to be installed near the Capital Plaza Hotel, this area is of the size and parking space count required by the RFP

Building Design

- The Offeror has provided an aesthetic design of the new Parking Structure and new Office Building that is consistent with the intent of the "Aesthetic Design Challenge" requirements of the RFP and has provided a written narrative describing how the aesthetic design of both structures addresses the requirements of the Challenge.
- The main entrance to the building are distinctly visible and identifiable as the main entrance from each major approach point to the building. Other entrances are distinctly visible and identifiable as an auxiliary entrance to the building from the approach points related to that secondary entrance.
- The building to be constructed shall be a free-standing office building to accommodate minimum 1,500 employees and shall be a minimum of 385,000 gross square feet, and that is designed such that subdividing and/or adding space can be easily accomplished in the future. Infrastructure must accommodate employees at a rate of 257 Sq.Ft/per person.
- The requirements for the new parking garage(s) has been identified and met as requirement by the RFP.
- Provide for communication rooms strategically located and of the sizes indicated in the RFP. All requirements for Mechanical and Electrical services indicated in the RFP for these communications rooms have been provided. The required main communications closet has been provided as required.
- Building Envelope Minimum Standards outlined in the RFP are met. Note: When field applied or constructed materials (i.e. brick masonry, synthetic stone, metal building panels or site-cast-tilt-up concrete panels) are proposed for the building exterior, the design narrative shall explicitly describe the quality control techniques and methods that will be used to insure

proper placement, construction, and installation.

- The space planning indicated in the RFP for Offices and cubicle areas has been shown in the proposal drawings, in the correct quantities and groupings.
- The space planning indicated in the RFP for Entrances, Vestibules and Lobbies has been met: Including, the division of major lobbies into secure/non-secure areas with provisions for card controlled access, for employee entrance and security controlled access for visitors; the proposal indicates built-in security casework (for two guards and files) at main lobby.
- The space planning indicated in the RFP for specialized spaces and services have been provided for the first floor in their entirety. Spaces meet the size requirements of the RFP. Adjacencies indicated in the RFP for specialized spaces has been accomplished.
- The space planning indicated in the RFP Loading Docks/Loading/ Mailroom Areas has been met: including that the access to the Loading Dock is able to accommodate a tractor trailer truck (53') and shall have adequate turning and maneuvering radiuses in the site design; Provide the Loading Dock with one overhead door 12' wide by 10' high (minimum); a Receiving Area; Receiving Office. Provide a separate area for trash compactor and recycling area.
- The finishes for all areas as defined in the Finish Schedule of the RFP has been met or exceeded. The use of concrete masonry walls in areas other than Loading Dock/ Loading Areas. Elevator shafts and machine rooms, and Mechanical rooms is strictly prohibited. This compliance is indicated in the Proposal as drawings or as Design Narrative Description.
- Roofs shall be sloped (a minimum of ¼" per foot). Do not use tapered insulation to achieve this slope, but utilize a slope in the roof structure. Provide either a membrane roof system or a metal roofing system (or a combination of the two) as outlined in the RFP.
- A minimum number of traction passenger elevators is provided as required for the building. A freight elevator has been provided as required. As a minimum freight elevators shall be Class A, traction operated, with a minimum of 4,500 pound load capacity. Provide Cab speed of 200-350 feet per minute. Minimum clear cab size shall be 5 feet 4 inches by 7 feet. Ceiling height shall a minimum of 10 feet.
- The correct square footage and configuration of structurally designed areas for High-Density files has been provided on each floor.
- Sound Masking system has been provided that meets or exceeds the requirements of the RFP.
- Work required to be accomplished as new work for the YNCA garagel has been indicated and provided as required by the RFP.
- Work required to be accomplished as new work for the Capital Plaza Hotel has been indicated and provided as required by the RFP.

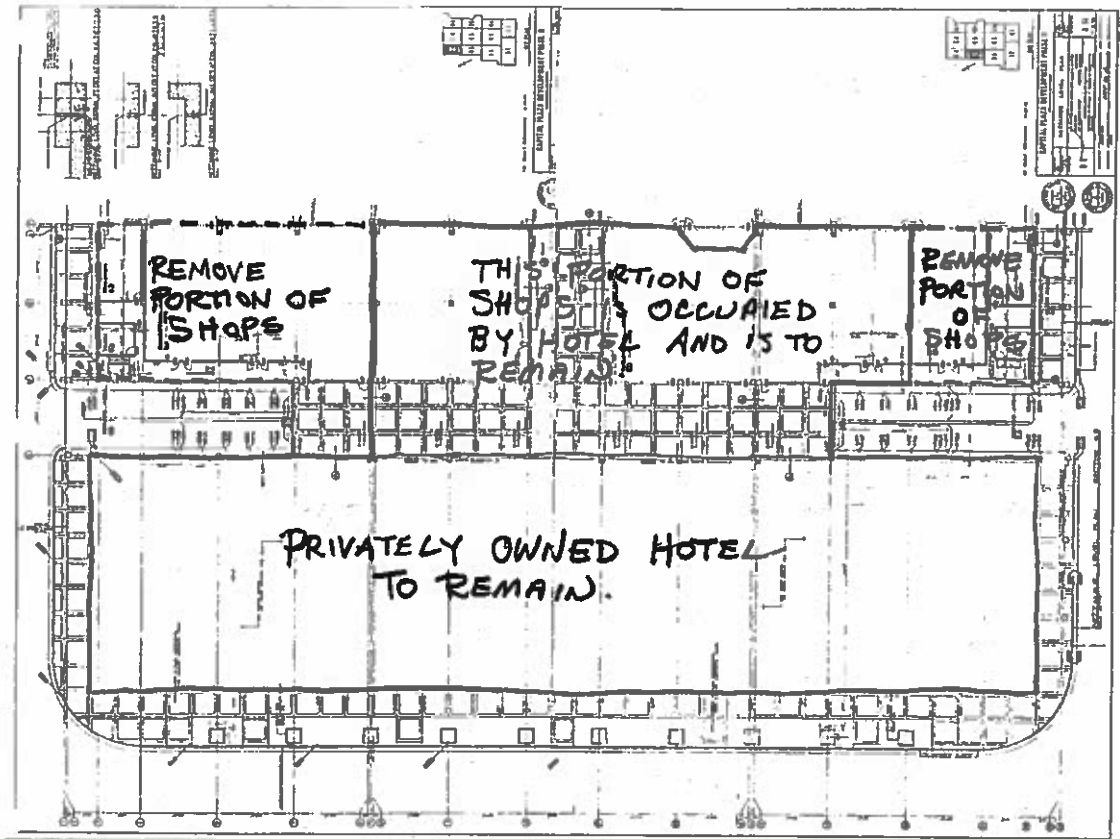
Energy and Emergency Power Design

- A minimum of "LEED Silver" is required to be utilized for this building. The Design Narrative

should include descriptive proof of the Offeror's history and ability to accomplish LEED Certified Design in previously constructed buildings as well as describe the methodologies and goals to be set forth for this specific building.

The emergency generator system shall be of compacity to allow for full winter heating, all season ventilation and full lighting, communications closets are on emergency power, and power loading to be provided for the HVAC, Electrical, and Security Systems.

END OF EVALUATION LISTING OF MIMIMUM REQUIREMENTS



CAPITAL PLAZA TOWER

Structure and Building Envelope



This Section describes field observed deficiencies, which are related to the structure and building envelope.

The tower was constructed in 1967 and since that time, various repairs and preventative maintenance has been done on a limited basis as follows:

- Exterior Concrete Repair Drawings, dated November 15, 1981, incorporated repairs to the tower's exterior concrete surfaces. Repair work included removal of the mortar joints between precast concrete panels and replacement with non-shrinking grout and sealant; removing and patching the concrete at honeycombs, spalls, defective aggregate, and defective patches; filling "air holes" in the concrete; and removing and replacing defective sealant.
- Column Repair Drawings, dated April 23, 2004, incorporated repairs to the tower's exterior concrete surfaces. Repair drawings provided for restoration of the exterior concrete including removal and patching of concrete at spalls and rust stains, repairing concrete cracks with epoxy injection adhesive, cleaning concrete at heavy stains, and cleaning the Plaza Lobby and 24th Floor with high pressure water and applying an elastomeric anti-carbonation coating.
- The concrete repair details specified removal of loose vertical concrete to sound concrete with 15 lb. chipping hammers with square cut perimeter edges at patch areas; sawcutting or grinding the edges was not permitted. Removal of concrete was required $\frac{3}{4}$ inch minimum beyond reinforcement. Sandblasting of concrete and exposed reinforcement was done, along with coating of the embedded reinforcing steel. Where no reinforcement existed in the patch location, a webbing of stainless steel wire and pins was to be provided. In addition to the typical concrete repair details, column repair details specified removal of loose concrete at only 1 column corner at a time on a single column. The column corner repair detail included the installation of a galvanic anode corrosion protection.

CAPITAL PLAZA TOWER

Structure and Building Envelope



Spalls at Post-Tensioning Anchors



Shallow Concrete Cover.



Corrosion Induced Spalls

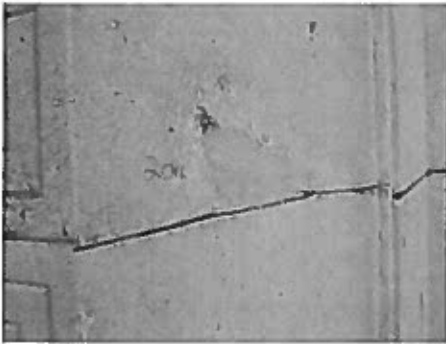
- Carl-Walker, Inc. performed a review of the building exterior façade and roof parapet of the Kentucky Capital Plaza Tower to identify restoration needs. Two scaffolding drops were conducted; the first from suspended scaffolding on the west elevation, south corner, and second at the south elevation, east corner of the building.

The tower exhibits areas of structural deficiencies, including the following:

- Cast-In-Place Concrete Walls; Spalls at Post-Tensioning Anchors: The typical floor structure for the tower is a combination of cast-in-place concrete and precast concrete panels that are post-tensioned integrally with interior floor beams. The post-tensioning anchors are typically located within the spandrel beams and are protected by the columns and vertical precast concrete mullions that span continuously adjacent to the beams. At building corners, however, the anchors are exposed directly to the elements within the cast-in-place concrete walls. Delaminations and spalls in the original concrete, as well as in historic patch sites, were observed frequently throughout the tower at the corner walls around the post-tensioning anchors. Corrosion of the post-tensioning is apparent in the stains observed on the face of the concrete walls at the anchorage points. Further evaluation of this observed condition is needed before complete conclusive recommendations can be made.
- Cast-In-Place Concrete Walls; Shallow Concrete Cover. Delaminations and spalls were frequently observed within the cast-in-place concrete walls, typically where the steel reinforcement was corroded. The concrete cover over the reinforcement was observed to be minimal where spalls have occurred, less than $\frac{1}{4}$ inch thick in some areas.
- Cast-In-Place Concrete Walls; Corrosion Induced Spalls. Cast-in-place concrete contains steel accessories such as ties for the formwork or chairs for the reinforcement, in addition to the steel reinforcing. Delaminations and spalls were observed within the exterior walls where the embedded reinforcement and steel accessories have corroded. The

CAPITAL PLAZA TOWER

Structure and Building Envelope



Poor Concrete Consolidation



Spalls of Poor Concrete Consolidation.



Existing Concrete Patches



Concrete Staining

delaminations and spalls provide a direct path for further water infiltration into the concrete and further corrosion of the embedded steel.

- Cast-In-Place Concrete Walls; Poor Concrete Consolidation. The cast-in-place concrete within the tower was poured 1 level at a time; construction joints are observed at each floor level. Typically, honeycombing of the concrete is observed at each floor line of the tower due to poor consolidation of the concrete. Concrete patches were typically observed where the concrete was poorly consolidated. The patches appear to have been "battered" over the surface; the edges are feathered.
- Cast-In-Place Concrete Walls; Spalls at Poor Concrete Consolidation. Delaminations and spalls were observed within the poorly consolidated concrete. The reduced presence of cement surrounding the aggregate due to poor consolidation of the concrete can be observed within the spalls. A number of the spalls are actually a manifestation of severe freeze-thaw damage where water that is absorbed in the concrete freezes, breaks down the bond of the material, and then thaws, leaving voids within the material.
- Cast-In-Place Concrete Walls; Existing Concrete Patches. A number of existing concrete patches were observed where previous repair attempts were performed at delaminations and spalls within the cast-in-place walls. The patches did not contain square cut edges and typically observed to be "battered" over the surface with feathered edges. A number of the patches were observed to have delaminated and failed.
- Cast-In-Place Concrete Walls; Concrete Staining. The cast-in-place concrete was observed to contain aggregate containing iron ore. Corrosion of the iron ore within the aggregate has led to staining on the surface of the concrete walls. Previous repairs to remove these piece of aggregate and patch, performed in 2004, were observed throughout the cast-in-place concrete in numerous small patches. Additional staining has occurred at additional isolated locations

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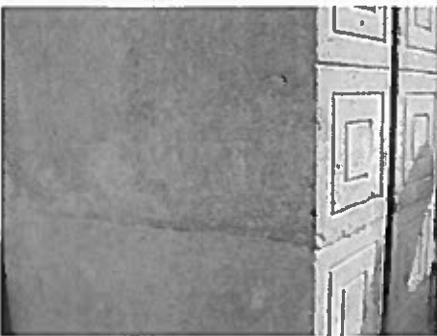
Structure and Building Envelope



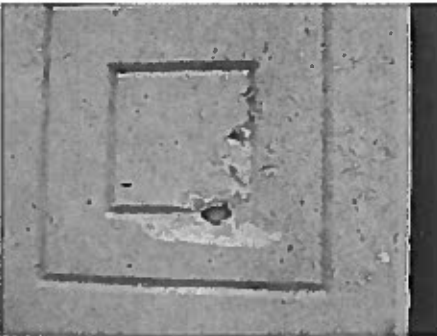
Shallow Concrete Cover



Corrosion Induced Spalls



Poor Concrete Consolidation



Spalls at Poor Concrete Consolidation

since the 2004 repairs due to the aggregate containing iron ore.

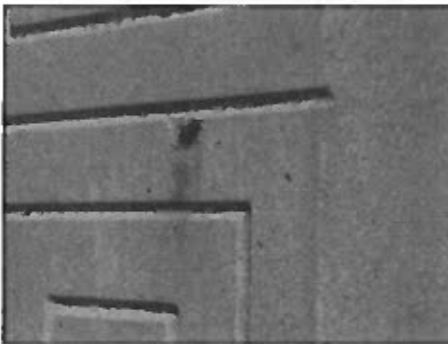
- **Cast-In-Place Concrete Columns; Shallow Concrete Cover.** The columns, located around the building perimeter, and rising the full height of the building, are constructed of cast-in-place concrete. Spalls were observed within the cast-in-place concrete columns at a number of locations, typically where the steel reinforcement was corroded. The concrete cover over the reinforcement was observed to be minimal on the sides of the columns, as shallow as $\frac{1}{4}$ inch thick in some areas. The face of the column, which contains decorative relief, is thicker and likely provides more cover over the reinforcement.
- **Cast-In-Place Concrete Columns; Corrosion Induced Spalls.** Corrosion of the steel reinforcement within the concrete columns has resulted in a number of delaminations and spalls along the sides of the columns. Most of these are surface spalls and are cosmetic, and do not constitute a structural concern. These relate primarily to carbonation effects near the surface of the concrete. (Refer to narrative regarding Materials Testing at the end of this section.)
- **Cast-In-Place Concrete Columns; Poor Concrete Consolidation.** As seen within the corner walls, poor consolidation of the concrete columns is readily apparent at each floor line. Honeycombing is observed on the face and both sides of the columns and, concrete patches were typically observed at each location. The patches appear to have been "buttered" over the surface; the edges are feathered.
- **Cast-In-Place Concrete Columns; Spalls at Poor Concrete Consolidation.** Delaminations and spalls were observed within the poorly consolidated concrete within both the decorative relief on the face of the columns and the sides of the columns. The spalls are the result of freeze-thaw damage, as shown in the adjacent picture, or corrosion of the embedded steel within the concrete.

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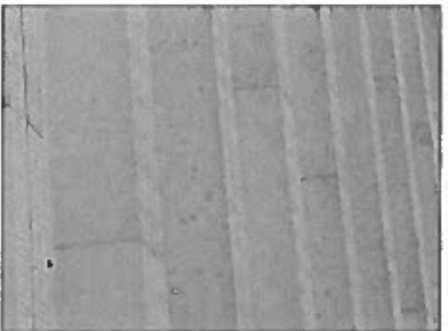
Structure and Building Envelope



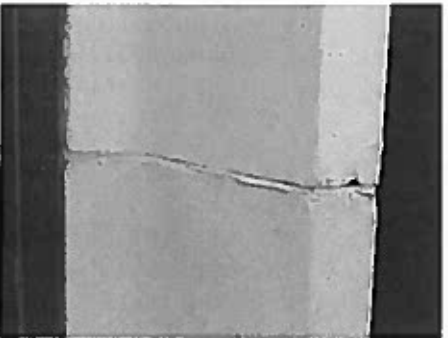
Existing Concrete Patches



Staining



Small Isolated Concrete Patches

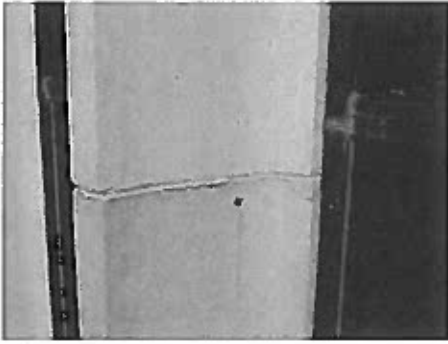


Open Panel Joints

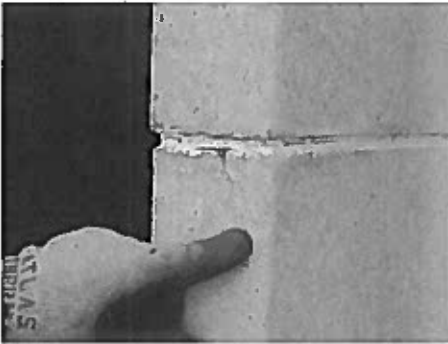
- Cast-In-Place Concrete Columns; Existing Concrete Patches. A number of existing concrete patches were observed where previous repair attempts were performed at delaminations and spalls within the cast-in-place walls. Hammer sounding indicates that many patches have delaminated and failed, including those beneath the elastomeric membrane at the 24th Floor Level, shown in the adjacent picture. Hammer sounding of the patch indicated that it has become delaminated.
- Cast-In-Place Concrete Columns; Staining. Corrosion of the iron ore (hematite) within the aggregate has also led to staining on the exterior surfaces of the concrete columns.
- Cast-In-Place Concrete Columns; Small Isolated Concrete Patches: Previous repairs to remove and patch the aggregates that have caused corrosion staining of the columns, which was performed in 2004, were observed throughout the cast-in-place concrete in numerous small patches throughout the columns. The patches did not contain square cut edges and "battered" over the surface with feathered edges. A number of the patches were observed to have delaminated and failed.
- Precast Concrete Mullions; Open Panel Joints: Precast concrete panels, which span from the 1st Floor level up to the cast-in-place concrete parapet, are installed around the building perimeter midway between each column. The precast panels, typically 2 stories in height each, are solid units with embedded steel WTs that are anchored to clip angles that are bolted to the cast-in-place concrete slab and spandrel beams at the top and bottom of each panel. The joints between adjacent precast panel units were typically filled with sealant that has failed. The open joint provides a direct path for water intrusion into the wall system.
- Precast Concrete Mullions; Spalls within Precast Units. Delaminations and spalls were observed within the precast concrete panels, typically at the top and bottom of the units. The delaminations and spalls are likely the result of induced stresses from panel bearing or freeze-thaw damage.

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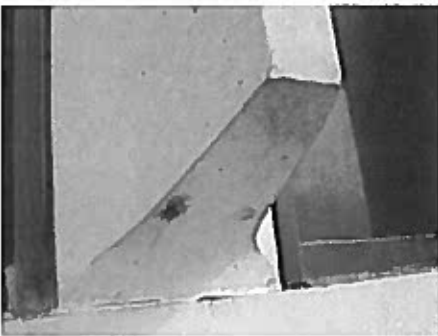
Structure and Building Envelope



Existing Concrete Patches



Cracks Within Precast Units



Corrosion Induced Spalls



Spalls Within Adjacent Spandrel Beam

- **Precast Concrete Mullions; Existing Concrete Patches.** A number of existing concrete patches were observed where previous repair attempts were performed at delaminations and spalls within the precast concrete panels. The patches did not contain square cut edges and were "battered" over the surface with feathered edges. A number of the patches have delaminated and failed.
- **Precast Concrete Mullions; Cracks within Precast Units.** Cracks were observed within the precast concrete panels, typically at the top and bottom of the units. The cracks are likely the result of induced stresses from panel bearing.
- **Precast Concrete Mullions; Corrosion Induced Spalls.** Corrosion of the steel reinforcement within the precast concrete panels has resulted in delaminations and spalls at the bottom of a number of precast panels at the 1st Floor Level. It appears that the concrete cover at the bottom of the precast concrete panel is shallow.
- **Precast Concrete Mullions; Spalls within Adjacent Spandrel Beam.** The interior surface of the exterior walls, at the columns and precast concrete mullions, is constructed of insulated metal panels that reportedly clip in place at the window jambs. A track, for a movable wall system is suspended from the underside of the concrete floor system. Spalling of the concrete at the underside of the perimeter spandrel beam was observed at a number of locations between the 19th and 24th Floor Levels above the metal wall panel located at the precast concrete panels. Spalling of the spandrel beam soffit was typically not observed at the columns. The track for the wall system has separated from the underside of the spandrel beam; the fasteners for the metal track were observed within the spalls. Spalling of the spandrel beam soffit was not observed in the 18th Floor Level and below.
- **Precast Concrete Mullions; Precast Panel Connections.** Removal of the panels from the HVAC units, which run continuously around the perimeter of the building, allowed review of the precast concrete panel connection at the top of the

CAPITAL PLAZA TOWER

Structure and Building Envelope



Precast Panel Connections

floor slab. The connection at a number of locations on each elevation of the building was reviewed. Slight surface corrosion of the painted steel clip angle and embedded steel WT within the precast panel was observed to be typical.

- **Precast Concrete Mullions; Upward Displacements and Shortening.** The precast concrete panels, which vertically only carry the load imposed by their self-weight, do not experience the elastic shortening experienced by the structural columns. It is believed that as the structural columns have shortened, the cast-in-place spandrel beam and floor slabs have been displacing downward. This displacement increases with each floor up the building, explaining why the lower floors have not yet experienced the spalling. The precast concrete panels, located at the midspan of the spandrel beam and floor slabs are not shortening resulting in an upward force and deflection imposed on the spandrel beam and floor slab at the precast panel connections. The spalls are located at the underside of the spandrel beam at the location of the connection at the top of the precast concrete panels.

It is probable that all significant structural frame shortening has occurred. The repair of this item can be accomplished by refitting the existing connections for the precast concrete mullions and providing a nominal shock absorbing (or cushioning) assembly that accepts any further frame movement and eliminates future spalling and related distress. It is also possible that adjustments to other frame connections on floors below the 19th Floor level may be required.

Further study of this item is recommended prior to rendering final repair recommendations.

The tower exhibits areas of envelope deficiencies, including the following:

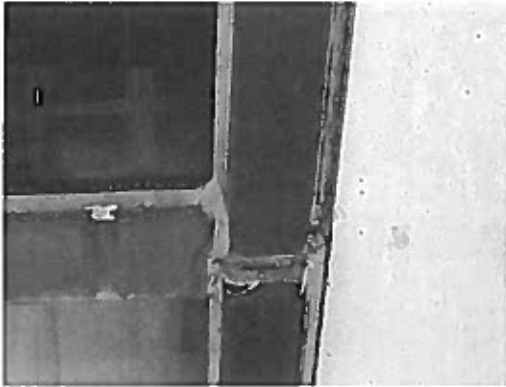
- **Curtainwall; Failed Sealant Joints at Balcony Flashing.** The aluminum framed curtainwall system consists of vertical bands of ribbon windows, consisting of a single pane of vision glass as well as tempered glass over insulated metal



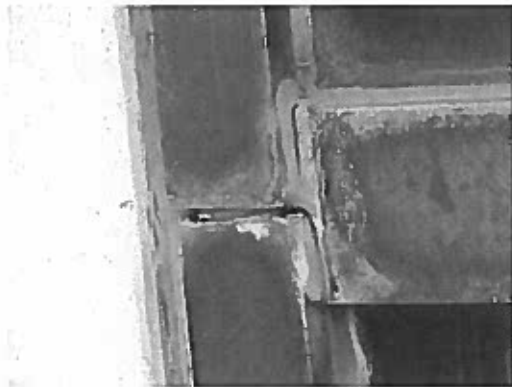
Failed Sealant Joints At Balcony Flashing

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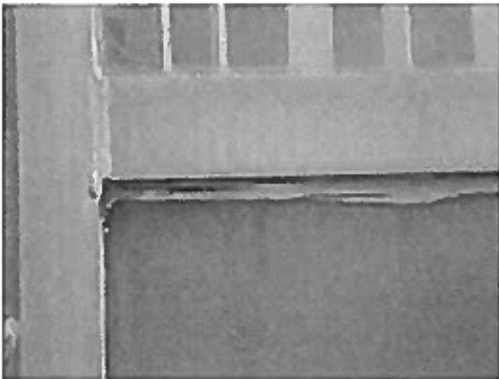
Structure and Building Envelope



Failed Window Perimeter Joints



Failed Wet Sealant at Window Joinery



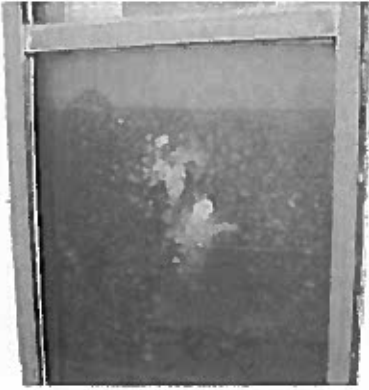
Failed Wet Sealant (Glass-Metal)

panels at spandrels, between the cast-in-place concrete columns and precast concrete mullions. The vertical bands of windows terminate at the 24th Floor Level at a balcony. The sealant joint between the balcony flashing and the adjacent concrete elements was observed to have typically failed. The open sealant joints provide a direct path for water infiltration into the exterior walls.

- Curtainwall; Failed Window Perimeter Joints: The window perimeter sealant joint, which is installed in a butt-joint profile, was observed to have typically failed. The sealant has experienced both adhesive failures (loss of bond between the sealant and either the metal or concrete substrate) and cohesive failures (cracking and tearing of the sealant itself). The sealant installed within the metal-to-concrete joint was observed to be open the full floor height at the lower floors of the building. The open sealant joints provide a direct path for water infiltration into the exterior walls.
- Curtainwall; Failed Wet Sealant at Window Joinery. The original construction drawings indicate a drainage system for the window system. Wet sealant joints (glass-to-metal sealant joints at the perimeter of the glazing and metal-to-metal sealant joints at mullion joinery) were observed at the tower. It appears that the wet sealant was previously installed to change the window system to a barrier system (to resist the penetration of water). The metal-to-metal wet sealant joints at mullion joinery were observed to have typically failed. The open sealant joints provide a direct path for water infiltration into the window system and potentially the exterior walls.
- Curtainwall; Failed Wet Sealant (Glass-to-Metal). The glass-to-metal wet sealant joints were observed to have experienced both adhesive and cohesive failures. The open sealant joints provide a direct path for water infiltration into the window system and potentially the exterior walls.
- Curtainwall; Staining on Interior Surface of Spandrel Glass. A deposit, or staining, was observed on the interior face of the tempered glass located at the spandrels in a number

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Staining on Interior Surface of Spandrel Glass



Replacement Windows at Revolving Doors

of locations. The deposit, or staining, is an indication of water infiltration within the window system.

- Curtainwall and Storefront; Replacement Windows at Revolving Doors. The revolving doors that were located at the lobby level of the building have been removed and replaced with windows. The replacement windows appear to not be anchored to the floor slab. The sealant joint between the sill mullion and the floor has failed. We anticipate that air infiltration occurs through this joint. Reportedly water infiltration has not occurred, likely due to the overhang outside of the building. The snap cover for the sill mullion on a west elevation replacement window was disengaged.

Material Testing was also performed by Carl-Walker, Inc. with the following commentary:

- Corrosion of embedded metals within concrete is primarily either chloride induced or carbonation induced. Corrosion is caused by the depassivation of the steel by an active ion or carbonation. (A protective passive oxide layer on the surface of steel remains stable in a highly alkaline environment.) The common active ion causing corrosion in concrete is the chloride ion. The chloride threshold limits for the corrosion process to occur is about 280 to 400 parts per million (ppm) of concrete. Sources of chloride ions are deicing salts, chloride bearing admixtures, contaminated aggregates, and salt spray. Oxygen in the concrete acts as a corrosion promoter, once the depassivation of the steel occurs.
- Carbonation is a natural reaction with carbon dioxide in the atmosphere that lowers the pH level of concrete. The normally high alkalinity of concrete protects the embedded reinforcing steel from corrosion. If carbonation reaches the depth of the reinforcing steel it will be susceptible to corrosion. Low concrete cover and surface defects in the concrete such as cracks, bugholes (voids in the concrete caused by air entrapment when the concrete was placed), and honeycombing provide a direct path for the carbon-

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ation to the reinforcing steel. Corrosion of the embedded steel will ultimately result in cracking and spalling of the concrete from the induced stresses from the expansive forces of the corrosion around the embedded steel, which exceed the tensile strength of normal concrete.

- Testing samples were taken at 3 locations on the building from the cast-in-place concrete to determine the pH of the concrete to test for the depth of carbonation and determine the water-soluble chloride content of the concrete. Samples were removed from well-consolidated areas free of apparent deterioration. Refer to Volume II, Supporting Documents, Material Testing Table in Carl-Walker's Tower Review Chapter V. Material Testing for the empirical results.
- Based on test results, it appears that carbonation of the concrete has not yet lowered the pH level of the concrete; embedded steel, if adequately covered by the concrete, is protected by the existing alkaline concrete. The level of water-soluble chloride in the concrete samples was found to be typically below the threshold limit. It is anticipated that the higher chloride level found at the 1st Floor Level is due to salting of the plaza during the winter months.