**CITY COUNCIL QUESTIONS/COMMENTS AS OF JULY 8, 2013 AT 9:47 AM**
**JULY 8, 2013 CITY COUNCIL AGENDA**
**STAFF RESPONSES**

**GENERAL COMMENTS:**

**Alderman:** Rob Fazzini
**Comment:** "To improve the attractiveness of our community for visitors and our own citizens, should we discuss the combination of the following potential improvements to our Downtown? A Downtown hotel and convention center near the Coliseum. A Visitor's Center located in the McLean County History Museum to help attract some of the 50,000 who travel from Chicago to St. Louis annually on Route 66 tourists. A Mural Grant program to increase the attractiveness of the Downtown. A solution to the current distasteful bar scene of week-ends in Downtown.

**WORKSESSION:**

**Alderman:** Rob Fazzini
**Goal 1:** Financially Sound City Providing Quality Basic Services: Item 3: "Metro Zone Agreement: Review Metro Zone Audit, Review and consider potential changes in the Bloomington/Normal Metro Zone Agreement"
**Question/Comment:** "Does Bloomington receive any of the Town of Normal sales tax revenue?"
**Staff Response:** The City does share revenue from businesses located within the Town of Normal, but those location are within the corporate limits of the Town of Normal. The revenue within the Town of Normal Metro Zone portion is composed of the following types of revenue; utility tax, interest income, permits & fees, road & bridge tax, crossroad center sales tax and property tax revenue.

**Alderman:** Rob Fazzini
**Goal 5:** Prosperous Downtown Bloomington: Item 17: "Downtown Streetscape Master Plan: Staff to prepare plan for completing streetscape improvements (i.e. decorative street lights downtown, trees, sidewalk repair, etc.), Council to approve Master Plan"
**Question/Comment:** "Should the City of Bloomington consider a $50,000 Mural Grant Program similar to the Façade Grant Program?"
**Staff Response:** Downtown "Draft" Streetscape Master Plan does not address downtown murals and or dollars for any streetscape (murals) in the current FY14 budget. The City Council would need to address and approve the $50,000.

**Alderman:** Rob Fazzini
**Goal 5:** Prosperous Downtown: Item 18: "Downtown Master Plan"
**Question/Comment:** "What is the current status of the review by Paul Russell?"
**Staff Response:** Staff reviewed and discussed Paul Russell's comments. Staff is now working on revising the draft recommendation report for City Council's review.

**Alderman:** Rob Fazzini
**Goal 15:** "$10 Million Street Resurfacing Bond"
**Question/Comments:** "Upon review of the revised schedule for the Work Session, I would like to provide the information below regarding the $10 million bond to be used for street (and possibly sewer) repair within the next year. This is in addition to the information provided in item #15 of the Work Session package.

My only question is how much money has the City of Bloomington spend on streets in each of the past 10 years? This will support what caused our current street deterioration situation which will continue to worsen unless significant dollars are spent to take the corrective action necessary to reverse the trend. Below is my reasoning for recommending that the City of Bloomington consider issuing a tax exempt municipal bond for $10 million dedicated solely for street work. The City of Bloomington has a unique opportunity to take advantage of the current low interest rate environment. The reasons this opportunity exists are:

1. The City of Bloomington streets are in below average condition as demonstrated by the fact that we find it necessary to have a pothole hot line. We know of no other community that have streets in such condition that a pothole hot line is necessary.
2. The City of Bloomington bond rating of AA+ merits favorable bond rates.
3. The City of Bloomington cash position allows for absorbing annual debt service for a $10 million bond of approximately $780,000 annually for 15 years at a current interest rate of 2.07%
4. Following are the purely financial reasons to do a $10 million bond for use solely for streets
    a. The current historically low interest rate environment
    b. The City of Bloomington financial capacity to make the annual bond debt payments of approximately $780.000
    c. The annual debt payments will be made with cheaper dollars because the inflation rate will likely be higher than the interest rate.
5. Following are the job related reasons to do a $10 million bond for use solely for streets
    a. Construction materials will be less expensive now than in later years
    b. Bigger jobs will allow for better negotiations leading to more discounts
    c. Spending $10 million from the bond issuance added to the $4 million already allocated in the budget for streets will likely reverse the trend in recent years of having our total street quality continue to deteriorate. Without this large catch up on street work, the City of Bloomington will inevitably need to spend this $10 million and more out of the natural annual budgets without the satisfaction of any reversal of the trend of deterioration.
    d. This will give the City of Bloomington the opportunity to outsource a small portion (likely under 2 million) of the work without having any layoffs with our current work force. This is a model of the kind of outsourcing of work that we should be considering.

Finally, I would think that the morale of the Public Works Department would be significantly improved. Instead of always being behind and falling further behind every year even with 4 million from the natural budget process, our people would be able to catch up and actually start to make improvement in the overall quality of our streets when the one year of the $10 million of work is completed. In addition, the reputation of our leadership will be greatly enhanced when our citizens see the immense and

immediate improvement in the City of Bloomington streets. Therefore, the question should be can we afford not to issue a 10 million bond for streets as soon as possible. It is with support of all of the above information that I propose the issuance of a 10 million tax exempt bond payable over 15 years.
**Staff Response:** Attached please find a "historical expense" report regarding street resurfacing from. .

**Alderman:** Jim Fruin
**Goal 15:** "$10 million Street Resurfacing Bond"
**Question/Comment:** "My questions remain as to (1) how does this one need stack up against the other multimillion dollar needs, (2) what have we done to pro-actively encourage Biding Competition, and (3) will this be the only new "cost/obligation/tax" we add to the "books", or will we be asking for other monies via increased garbage, water, sewer fees, etc.?
**Staff Response:** Staff will carry out the City Council policy/direction regarding these questions

**Alderman:** Scott Black
**Goal 15:** "10 million Street Resurfacing Bond:
**Question/Comment:** "I want to echo Alderman Fazzini's comments as we discussed this topic at length at the Administration and Finance Committee

**CONSENT AGENDA:**
**Alderman:** Rob Fazzini
**Comment:** "I have no questions on the Consent Agenda"

**Alderwoman:** Karen Schmidt
**Comment:** "I have no questions on the Consent Agenda"

**Alderwoman:** Judy Stearns
**Item 7C:** "Rescind Bid Award for White and Yellow High Durability Latex Traffic Line Paint and Glass Beads for Pavement Marking Material to Sherwin Williams and Award the Bid to Diamond Vogel, Lowest Responsible Bidder"
**Question/Comment:** "Was Sherwin Williams required in their bid to specify how the paint would be delivered? Why did Ennis even bid if their delivery system would not work for the city? When and how was Sherwin Williams informed that their delivery system would not work? Was there a process for any renegotiating with a company who did not meet our delivery requirements? Which of these companies are both owned and managed locally, if any?
**Staff Response:** The current Public Works garage does not have the necessary storage for larger paint deliveries. Future facilities would take this kind of need into account. Because of the limited space, the City has to take smaller delivery amounts. The City has never bid the paint materials in the past, so this is Staff's first contract for street paint. This is being done in an effort to increase competition in all areas. Additional requirements will be put in next year's bid packet. This would most likely reduce the number of bidders. With the lack of current material storage options, there are no other ways for Staff to accommodate larger deliveries. The recommended vendor, Diamond Vogel, has a store locally, currently meeting all specifications of paint, and stores the paint and beads for the City. We have to

give them 24 hour notification for delivery of one (1) 55 gallon drum of paint and/or 2000 pound bag of beads at a time.

**Alderwoman:** Judy Stearns
**Item 7D:** "Intergovernmental Agreement with McLean County Regional Planning Commission (MCRPC)"
**Question/Comment:** "What is the role of the MCRPC in any aspect of the decision on the East Side Bypass? What have they done so far and what will they be doing in the future?"
**Staff Response:** The Eastside Highway study is headed up by McLean County. McLean County Regional Planning and other local agencies are participants in the coordinated federal and state review process.

**Alderwoman:** Judy Stearns
**Item 7L:** "Petition submitted by Andy Streenz, Lawrence Wheat, John P. Wheat, Vincente Adame, and Chad Seeman Requesting Approval of the Vacation of the East West Alley Bounded by Lee Street on the West and Roosevelt Street on the East"
**Question/Comment:** "Have we considered that when we vacate an alley, the money saved could be used for other alleys that the residents really do want? I would like to revisit the subject of alley paving, realizing that only those wards that have alleys can understand the impact alleys have on neighborhoods."
**Staff Response:** Staff can schedule a time for City Council to discuss, if the City Council would like for us to do.

**REGULAR AGENDA:**
**Alderwoman:** Karen Schmidt
**Item 8A:** "Analysis of Bids for Repair Market St. Parking Garage"
**Question/Comment:** "I continue to have concerns about the dollars we are putting into the Market Street Garage, although I know it is necessary for the short term. I look forward to our discussions on this and the other items on our Regular Agenda."
**Staff Response:** The amount of money being spent can be attributed to regular maintenance and catch-up on deferred maintenance. While the amount can seem high, it would cost in the neighborhood of 8-10 million dollars to replace the facility.

**Alderman:** Kevin Lower
**Item 8A:** "Analysis of Bids for Repair Market St. Parking Garage"
**Questions/Comment:**

1. "Is this parking deck an item on the city inventory list to be evaluated by the outside vendor-just hired to evaluate all city properties? Staff Response: The parking garages were not on the list of facilities to be evaluated by the outside vendor. The parking garages were evaluated in FY2008 by a local engineering firm. From that evaluation the repairs were divided into three phases in FY2010. Phase one was completed in FY2011. Phase two was bid in FY2013, but the bids came in too high and the project was pushed to FY2014. The current bid includes phases two and three. The engineering firm that developed the plans and specifications for phase one

and two evaluated the parking garage. The results of their evaluation in the current bid documents.

2. What metrics were used by City Staff to estimate the additional life expectancy of the parking deck? What type of sampling data/test were used? **Staff Response:** The estimated life of the Market St. Parking Garage was made by Walker Restoration Consultants. Their estimate was based on their experience in this area and with the assumption that the garage would have regular maintenance. They also used sounding to detect concrete that has delaminated. Sounding is the process of dragging a chain across the concrete precast tees to detect a hollow sound. The hollow sound is a sign of concrete delamination.
3. Does the Contractor guarantee this estimated life expectancy beyond the five year warrantee period for which we are proposed to pay additional funding? **Staff Response:** The contractor will only guarantee work they complete under the terms of the contract for a period of five years if alternate one is approved.
4. What products/cost will the City Staff use to extend the life of this facility? What types of products will be used for ice and snow removal/prevention and how will this adversely affect the life span of the facility? **Staff Response:** City Council approved $25,000 in the FY2014 budget for corrective Maintenance at the Market Street Garage and the Pepsi Ice Rink Garage. Staff can complete some small repairs, less than $5,000. When a contractor is needed the City's procurement process is used and the contractor uses materials specifically designed for parking garage repairs. The City uses a product for ice and snow removal that is not as harmful to concrete as products that are sodium chloride based. The bottom edge of the snow plow has a plastic shield to project concrete.
5. What would be the long term impact of delaying all or parts of these repairs for a period of 3-5 years until more pressing financial demands upon the City are addressed and additional time is allowed for local economic recovery? **Staff Response:** Delaying this project any more is not recommended. There are areas where concrete is falling from the ceilings and stairs that are in need of repair. Also there are caulking joints that if not repaired will cause the pre-case tees to fall. Any more delays can cause major structural damage, increase repair cost and may result in taking parking out of service to project the safety of the users. Attached is the Market Street Parking Structure Condition Assessment report.

**Alderman:** Mboka Mwilambwe
**Item 8A:** "Analysis of Bids for Repair Market St. Parking Garage"
**Question/Comment:** "What has been the total cost of ownership for this parking garage? What is our average cost per space and how does it compare to industry standards?"
**Staff Response:** Data is not available at this time. Staff can provide additional information in the next several days.

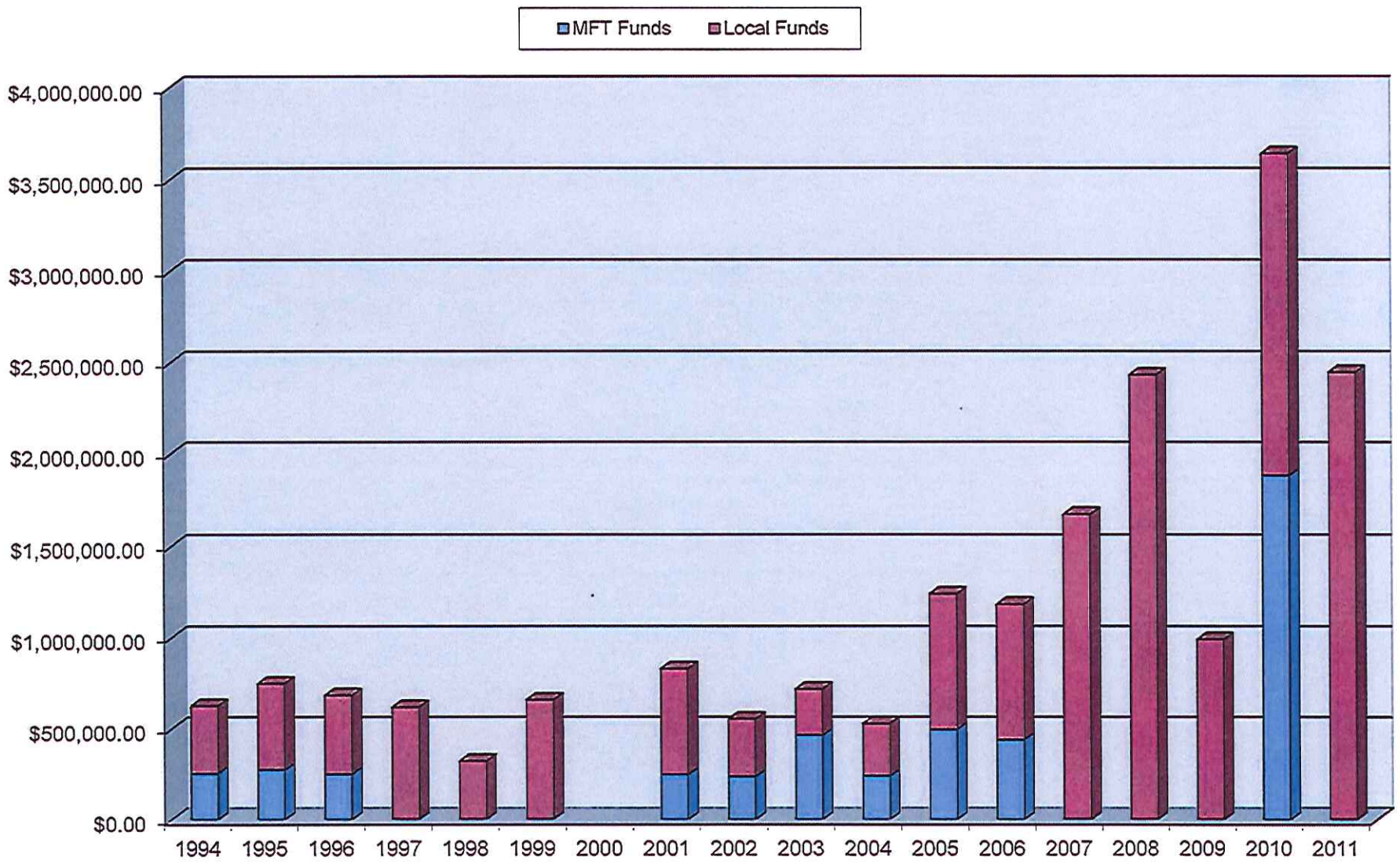
**Alderman:** Jim Fruin
**Item 8A:** "Analysis of Bids for Repair Market St. Parking Garage"
**Question/Comment:** "I would like a bit more information on the future of the branch Post Office. Do we have a Lease with the Post Office? With their consolidations, do they want to remain in their present

location? How do their future needs and capabilities blend in with our overall/bigger picture of the future of the Garage? Additional information would be appreciated."
**Staff Response:** On May 23, 2011, the City Council approved a renewed the City's lease with the United States Postal Service (USPS) that will expire on May 31, 2016. At this time, Staff does not know if the downtown location is a part of their consolidation plan. When the Towanda Avenue location was being reviewed, the downtown was not brought up during those public meetings. It is our understanding from our negotiations with the (USPS) in 2011, that the downtown branch is one of their high volume substations that provide services for many of the Downtown businesses and area residents and offers a convenient alternative to the other post offices located in the City. Staff has not discussed the future of the parking garage with the USPS.

**Alderman:** Kevin Lower
**Item 8D:** "Central Illinois Regional Broadband Network, LLCD (CIRBN) Membership"
**Question/Comment:** "What is the anticipated fiscal responsibility/annual expense required of the City as a member?"
**Staff Response:** Staff anticipates no ongoing cost related to CIRBN LLC membership. Revenue from customer use of the CIRBN network is meant to take care of the ongoing operational cost of the network. The City's first year cost of using the network as a customer if $30,772.26. This price will significantly improve connection speeds between a number of facilities and the City's connection to the Internet.

| Historical Expenses | | | | | | | |
|---|---|---|---|---|---|---|---|
| Construct Year | Resurfacing Funds | | | Pavement Preservation | Annual Cost | MFT Cost per ton | Local Cost per ton |
| | Federal | MFT / State | Local | | | | |
| | | | | | | | |
| 1993 | | | | | $0.00 | | |
| 1994 | | $253,811.75 | $373,267.90 | | $627,079.65 | $32.75 | $32.75 |
| 1995 | | $273,691.47 | $477,157.04 | | $750,848.51 | $35.42 | $36.70 |
| 1996 | | $249,940.85 | $435,500.00 | | $685,440.85 | $39.60 | $39.35 |
| 1997 | | | $619,000.00 | | $619,000.00 | | $39.87 |
| 1998 | | | $322,901.60 | | $322,901.60 | | $36.50 |
| 1999 | | | $660,480.09 | | $660,480.09 | | $43.00 |
| 2000 | | | | | $0.00 | | |
| 2001 | | $247,329.06 | $585,305.23 | | $832,634.29 | $47.80 | $45.00 |
| 2002 | | $235,893.16 | $318,091.16 | | $553,984.32 | $52.75 | $52.75 |
| 2003 | | $464,502.57 | $255,902.26 | | $720,404.83 | $53.50 | $54.75 |
| 2004 | | $239,990.16 | $289,558.03 | | $529,548.19 | $56.50 | $78.00 |
| 2005 | | $496,278.15 | $747,116.16 | | $1,243,394.31 | $57.25 | $65.00 |
| 2006 | | $440,146.90 | $745,640.66 | | $1,185,787.56 | $80.00 | $78.00 |
| 2007 | | | $1,674,056.12 | | $1,674,056.12 | | $73.00 |
| 2008 | | | $2,435,117.50 | | $2,435,117.50 | | $78.00 |
| 2009 | | | $991,681.31 | | $991,681.31 | | $109.18 |
| 2010 | $551,824.81 | $1,882,550.52 | $1,761,465.17 | | $4,195,840.50 | $116.74 | $113.32 |
| 2011 | | | $2,434,344.89 | $53,766.00 | $2,488,110.89 | | $97.24 |
| 2012 | | | $3,350,000.00 | $147,451.00 | $3,497,451.00 | | |
| 2013 | | | $3,600,000.00 | $200,000.00 | $3,800,000.00 | | |
| | | | | | | | |

## Resurfacing Dollars Spent per Year



December 10, 2007

Mr. Robert Floyd, Facilities Manager
PACE Department
City of Bloomington-Government Center
115 E. Washington Street
Bloomington, IL 61702

RE: **City of Bloomington Market Street Parking Structure Walk-Through Condition Assessment**
**FGI Project No. 0070120.00**

Dear Mr. Floyd:

The purpose of this assessment is to identify deficiencies in the Market Street Parking Structure and to offer recommendations for repair of those deficiencies along with prioritizing the repairs and providing an opinion of probable construction cost. Deterioration of the deck slabs and their supporting structural elements is the primary focus of this assessment. The deficiencies described below were observed during walk-through visual inspections performed on October 4 and November 12, 2007 by Steve Bishop, SE and Paige Hefner, PE, Engineers with Farnsworth Group (FGI). The November 12, 2007 walk through was performed during rain showers to identify areas of water ponding and leaking. Locations of the deficiencies noted in this assessment are shown on the attached schematic drawings. S1.1 through S1.4 show deficiencies at each floor level, and S2.1 indicates deterioration visible on the parking structure elevations.

<u>Exterior:</u>

This section addresses deficiencies that are visible on the exterior face of the structure, particularly the exterior face of the spandrel panels and columns.

1. There are many locations where the concrete on the corners of the spandrel panels has cracked and spalled. Some of these locations have been previously repaired, but show evidence of repair failure.

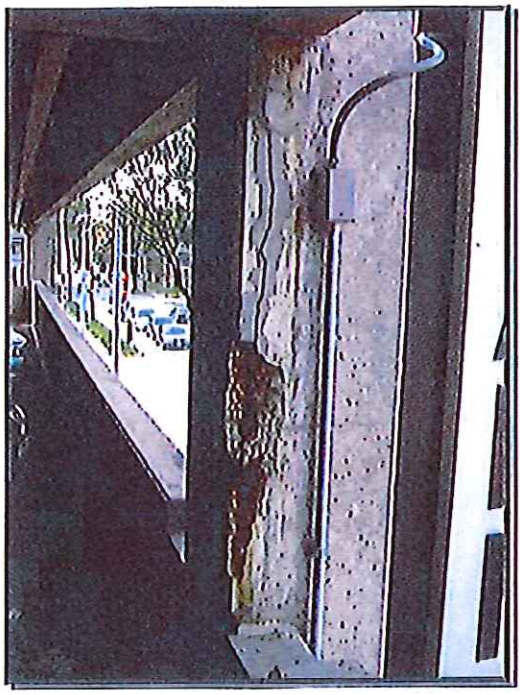
   **Recommendations:** Remove the spalled concrete and/or failed previous repair. Clean all rebar and connection plates in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material.

2. There are a few locations where the exterior face of the spandrel panels have spalled.

   **Recommendations:** Remove the spalled concrete and/or failed previous repair. Clean all rebar in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material.

3. There are several locations where the exterior concrete columns have cracked and spalled. Some of these locations have been previously repaired, but show evidence of repair failure.

   **Recommendations:** Remove the spalled concrete and/or failed previous repair from the column. Clean all rebar in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material. Rout and seal all remaining cracks.

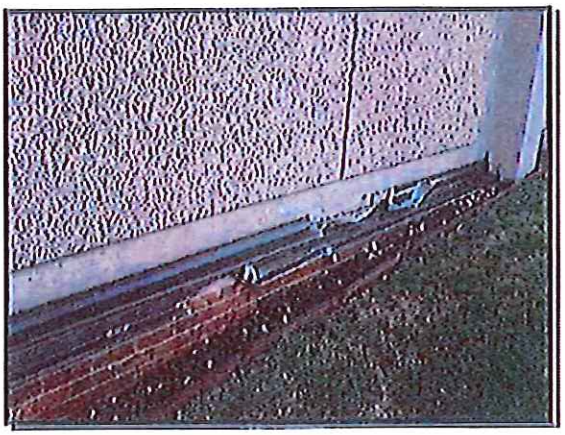


4. On the west face of the parking deck, north of the stair tower, there are cracks in the mortar joints in the brick veneer.

   **Recommendations:** Tuckpoint the cracked mortar joints and replace any damaged bricks.

5. On the west face of the parking deck, between column lines F and G, the flashing at the base of the wall panel is damaged.

   **Recommendations:** Remove and replace the flashing in this location.



6. At the joints between the stair tower brick walls and the precast concrete, the joint sealant has failed.

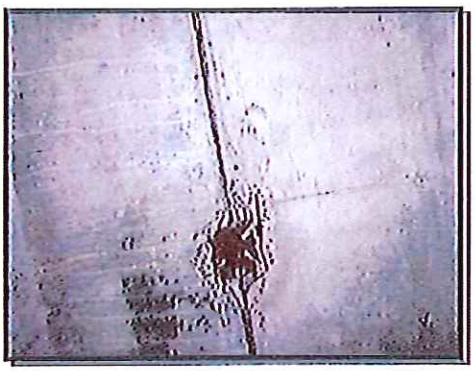
   **Recommendations:** Remove and replace the joint sealant between the stair tower walls and the precast concrete.

**Typical Interior:**

This section addresses deficiencies that are typical to All Levels of the structure.

1. There are many locations throughout the parking deck where the concrete has spalled on the underside of the precast floor panels. These spalls occur along the joints, between precast floor panels and adjacent to the exterior edges of the deck. Some of these locations have been previously repaired, but show evidence repair failure. Most of the spalling appears to coincide with panel weld plate locations.

   **Recommendations:** Remove the spalled concrete and/or failed previous repair. Clean all rebar and weld plates in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material. In areas where weld plates have deteriorated to the point where they cannot be salvaged, install a galvanized angle on the bottom of the panels, spanning across the joint, similar to those in the previous repairs.



2. Several of the steel connections between the precast beams and columns have begun to rust. Some of these connections have grout covers over the steel that are cracked and spalled.

   **Recommendations:** Remove the cracked/spalled grout covers, where occur. Clean all corroded steel connections, apply a corrosion inhibitor, and coat with a zinc rich paint. Connections shall remain ungrouted.

3. The bottom of the spandrel beams have begun to spall at several locations around the perimeter of the deck. In some locations, there appears to have been inadequate concrete cover on the rebar.

   **Recommendations:** Remove the spalled concrete. Clean all rebar in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material.

4. The floor drains are leaking in some locations. Also, drain cover plates are damaged or missing in a few locations.

   **Recommendations:** Replace damaged or leaking drains, fittings, and/or cover plates.

5. Piping throughout the deck has developed some surface rust. In a couple locations, the piping has corroded to the point that the majority of the pipe wall thickness has been compromised. This typically occurs in locations where the floor drain or fittings are leaking.

**Recommendations:** Clean surface rust off of pipes and repaint. Remove and replace heavily corroded pipes and fittings that are leaking or have leak potential.

6. There are some hairline cracks in the precast concrete beams and columns.

   **Recommendations:** The cracks shall be routed and sealed.

7. Water appears to be penetrating the joint sealant in the topping slab and working its way through the joints between the double tee panels.

   **Recommendations:** Remove and replace all joint sealant in the topping slab. Apply a concrete sealer to the top level slab and ramp slab between the third and top levels.

8. There are several locations throughout the deck where the concrete stems of the precast double tees that are bearing along the exterior edge of the deck have spalled and delaminated.

   **Recommendations:** Remove the spalled concrete. Clean all rebar in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material. Panels may require shoring during construction in locations where a significant amount of the concrete at the tee bearing must be removed to perform the repair.

9. Column H2 has concrete haunches below the typical beam to column connection location. The concrete on the haunches has spalled and the rusted rebar, steel studs, and plates are visible. It appears that the original connection plates on the column were fabricated too low and the column was retrofitted with plates in the correct location. In this scenario the concrete haunches act as cover for the retrofitted steel connection.

   **Recommendations:** The assumption that the concrete on the haunch is only a cover for the steel connection within cannot be confirmed without documentation from the original construction or observing the configuration of the steel connection after the concrete has been removed; therefore, shoring the beams connected to the columns prior to removing the spalled concrete from the haunches is recommended. A qualified Structural Engineer should observe the configuration of the steel within the haunch prior to proceeding. Clean

the rust from the rebar, studs and connection plates and replace the reinforcing as required by the Structural Engineer. Treat the steel with a corrosion inhibitor and patch the haunch with a structural repair mortar.

**First Floor Level:**

This section addresses deficiencies that occur on the First Level of the structure.

1. The wall at the south end of the First floor has cracked and water is leaking through the wall adjacent to the columns on lines J2 and J3. The concrete around the cracks has begun to spall.

   **Recommendations:** Remove the spalled concrete. Clean all rebar in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material. Rout and seal all remaining cracks.

**Third Floor Level:**

This section addresses deficiencies that occur on the Third Level of the structure.

1. During a steady rainfall the large volume of water traveling down the ramp from the Fourth to Third floor levels is too great for the drains at the bottom of the ramp to handle. The water rushes between the drains to the north end of the deck. The only floor drains at the north end are located at the East and West corners of the deck; therefore, a large amount of water ponds at the North end of the deck. The topping slab in this area has scaled. It appears that the water accumulating in this area is working its way to the levels below. This has caused the concrete spalling at panel joints, beams, and columns on the first and second levels at the north of the structure to be worse than other areas.

   **Recommendations:** Remove and replace the scaled topping slab. Joints in the topping slab shall correspond to the panel joints below and be sealed. Repair the spalled concrete at the lower floor levels as previously recommended above. To help avoid repeated deterioration of the slab and concrete framing in this area, we recommend installing two new

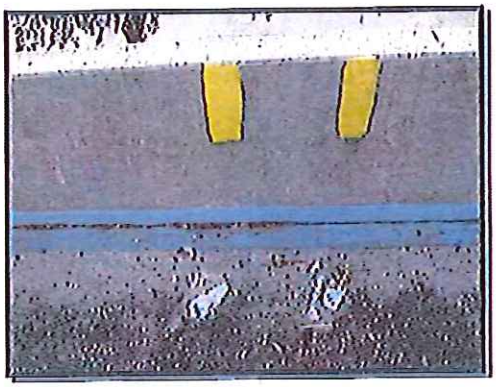
floor drains at the north end of the deck between columns A2 and A3. When the topping slab is replaced in these areas, slope the slab towards the new drains. Installing a traffic bearing membrane at the north end of the Third level will provide an additional level of protection against the water that accumulates while it is moving towards the new drains.

**Fourth Floor Level:**

This section addresses deficiencies that occur on the Fourth Level of the structure.

1. The joint between the south/middle spandrel and the floor panel has opened to a distance greater than the sealant could handle. The movement in this joint is possibly due to torsion in the long spandrel beam. It appears that adjacent spandrel beams have steel angles attaching the beam to the parallel floor panels, but the middle does not have these angles

   **Recommendations:** The movement in the spandrel panels does not cause structural concern, but the joint must have a seal that allows movement while preventing water intrusion. We recommend installing an expansion joint between the middle spandrel beam and the parallel floor panel.



2. The topping slab on the Fourth Level is beginning to show signs of scaling.

   **Recommendations:** The current scaling does not require repair, but should be monitored. To prevent the scaling from progressing, apply a concrete sealer to the entire Fourth Level and the ramp from the Fourth to the Third Levels.

**Stairwells:**

This section addresses deficiencies that occur in the stairwells.

1. The brick veneer at the doorways leading into the stairwells has cracked at the corners below the door lintel. The brick in these areas is mortared tight to the bottom of the precast concrete structure. As the structure deflects due to live loads, it is pushing on the veneer.

   **Recommendations:** Rebuild the cracked areas. Remove and rebuild the top course of brick adjacent to the precast concrete. Stop the top of the brick a minimum of ½" from the bottom of the precast concrete structure. Fill the joint with flexible sealant in lieu of mortar.

2. Several of the stair landings have cracks on the underside of the slabs. Some of these cracks run parallel to the exterior wall and are located approximately 6" from the exterior wall. Other cracks are adjacent and parallel to the first step off the landing. There are also a few random cracks in other locations.

   **Recommendations:** All cracks shall be routed and sealed.

3. Spalling has occurred in some locations on the precast concrete stairs. One significant spall location is in the northeast stairwell along the inside bottom corner of the stair from the 3rd to 4th levels.

   **Recommendations:** Remove the spalled concrete. Clean all rebar in the exposed areas and treat the steel with a corrosion inhibitor. Patch the area with a structural concrete repair material.

4. The railings in the stairwells are showing some surface rust, particularly at the post bases.

   **Recommendations:** Clean rust from the railings and repaint as needed.

5. A few of the steps are missing the metal nosings.

   **Recommendations:** Replace all missing metal stair nosings.

6. While it is raining, water runs down the exterior corner of the stairwell wall at the Fourth Level on both the Northeast and Southwest stairwells. This water is penetrating the brick walls and is visible from the inside of the stairwell. The mortar on the exterior face of the wall in these areas is cracked or missing in some locations. The water appears to be coming from behind the metal coping at the roof of the stairwells. It could not be determined during the walk-through, how the water is getting behind the coping.

   **Recommendations:** Determine the source of the water leakage and make the necessary repairs. Then tuckpoint the brick.

7. The concrete framing and brick wall outside the Northeast stairwell doorway on the First through Third Levels was wet with rainwater. The exact location of the water infiltration could not be determined, but the following issues were noted: rainwater is leaking under the door into the Fourth Level of the Northeast stairwell, and the sealant at the flashing around the Fourth Level door and walls appears to be cracked and brittle, in some locations.

   **Recommendations:** Grind a shallow swale in the topping slab to divert water towards the nearest floor drain. Remove and replace the sealant at the Fourth Level door and wall flashing. If the area continues to leak, further investigation should be performed to determine the source of the leak.

**Priorities and Probable Cost:**

The opinion of probable construction cost described below includes the cost at current market rates of labor and material for the recommended repairs plus a reasonable allowance for the contractor's overhead and profit. The estimate does not include compensation for engineering and preparation of documents for bidding. Since the repairs recommended in this report are based on a walk-through inspection, quantities for repair were estimated. FGI has no control over the cost of labor, materials or equipment, or over a contractor's method of determining prices, or over competitive bidding or market conditions. As a result, the opinion of probable construction cost contained in this report is based solely upon our own experience with construction. FGI cannot and does not guarantee that the actual construction cost will not vary from the opinion of construction cost contained herein.

The probable cost to repair all of the deficiencies noted in this report is $1,150,000.

The following items should be addressed as soon as possible to prevent further significant deterioration of the parking structure:

Replace Joint Sealant at all Horizontal Surfaces
Repair Overhead Panel Joint Spalling and Weld Plates
Repair Spandrel Panel Corners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Repair the Corbels at Column H2
Repair any Remaining Spalling of Precast Floor Panels, Beams, and Columns

The probable cost to address these priority issues is $590,000.

The remaining items should be addressed within the next three years. Although the probable cost to repair the remaining deficiencies is $560,000 in today's market, continued deterioration along with the inflation of construction prices will affect the cost of future repairs.

The recommendations and conclusions above are the result of a limited visual and tactile investigation only. We are not responsible for any latent damage that could not be identified through this type of inspection.

Thank you for utilizing our services in this matter and feel free to contact us at your convenience if you have any questions regarding this report.

Sincerely,

FARNSWORTH GROUP, INC.

Steven E. Bishop, AIA, PE, SE
Structural Engineering Manager

Paige M. Hefner, P.E.
Professional Engineer

Enclosures