



**CHAMPAIGN COUNTY BOARD
FACILITIES COMMITTEE**
County of Champaign, Urbana, Illinois
Tuesday, February 3, 2015 6:30 pm

Lyle Shields Meeting Room
Brookens Administrative Center
1776 E. Washington St., Urbana

Committee Members:

Gary Maxwell - Chair

Jeff Kibler

Giraldo Rosales – Vice-Chair

James Quisenberry

Jack Anderson

Rachel Schwartz

Josh Hartke

Facility Tour: Satellite Jail, 502 S. Lierman, Urbana - 5:15 pm – Meet at the Brookens Administrative Center Parking Lot. We will car pool to the Satellite Jail. Tour will start at approximately 5:30 pm.

AGENDA

- I. Call to Order
- II. Roll Call
- III. Approval of Minutes
 - A. Facilities Committee Meeting – January 6, 2015
- IV. Approval of Agenda
- V. Public Participation
- VI. Communications
- VII. Sheriff's Operations Master Planning: Gorski Reifsteck Architects and Kimme & Associates, Inc. Presentation of the Master Plan
- VIII. Direct County Administrative Staff to Proceed with the Concrete Panel Investigation at the Satellite Jail
- IX. Update on the US DOJ ADA Compliance Audit for Champaign County
- X. Approval of Courthouse LED Lighting Replacement from Courts Construction Fund
- XI. Approval to Bid Courthouse Window Replacement Project
- XII. Facilities Director's Report
 - A. Update on the IT Services Back-up Generator Project at Brookens
 - B. Update on Brookens Mechanical Controls Project
- XIII. Other Business
- XIV. Chair's Report
 - A. Future Meeting – Tuesday, March 3, 2015 at 6:30 pm
 - B. Tour of the Emergency Management Agency, 1905 E. Main Street, Urbana at 5:15 pm prior to the Tuesday, March 3, 2015 Facility Committee Meeting

- C. Discussion of a strategic plan for facilities
- D. Sheriff's Operations Master Plan Review Schedule
 - February 24, 2015 – County Board Study Session
 - March 3, 2015 – Facilities Committee Review and Recommendation to the County Board
 - March 19, 2015 County Board Approval of Recommendation for Master Plan
- XV. Designation of Items to be Placed on the Consent Agenda
- XVI. Adjournment

Committee Meetings and County Board Meetings are broadcast on Comcast Public Access and at <http://www.ustream.tv/channel/champco1776>

Champaign County strives to provide an environment welcoming to all persons regardless of disabilities, race, gender, or religion. Please call 217-384-3776 to request special accommodations at least 2 business days in advance.



Champaign County Board Facilities Committee
County of Champaign, Urbana, Illinois

6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40

MINUTES – SUBJECT TO REVIEW AND APPROVAL

DATE: Tuesday, January 6, 2015
TIME: 6:30 p.m.
PLACE: Lyle Shields Meeting Room
Brookens Administrative Center
1776 E. Washington, Urbana, IL 61802

Committee Members

Present	Absent
Gary Maxwell (Chair)	
Giraldo Rosales (Vice Chair)	
Jack Anderson	
Josh Hartke	
	Jeff Kibler
James Quisenberry	
	Rachel Schwartz

County Staff: Dana Brenner (Facilities Director); Deb Busey (County Administrator); Van Anderson (Deputy County Administrator of Finance); Linda Lane (Administrative Assistant)

Others Present: Pattsy Petrie (Champaign County Board); Mary Tiefenbrunn and Kathleen Holden (Champaign County Humane Society); member of the public

MINUTES

I. Call to Order

Committee Chair Maxwell called the meeting to order at 6:31 p.m.

II. Roll Call

A verbal roll call was taken and a quorum was declared present.

III. Approval of Agenda

MOTION by Mr. Rosales to approve the agenda; seconded by Mr. Hartke. Upon vote, the **MOTION CARRIED.**

IV. Approval of Minutes

A. November 6, 2014

MOTION by Mr. Hartke to approve the minutes of the November 6, 2014 meeting; seconded by Mr. Rosales. Mr. Anderson abstained. Upon vote, the **MOTION CARRIED.**

Mr. Quisenberry entered at 6:34

V. Public Participation

Ms. Dorothy Vura-Weiss expressed concerns regarding the jail facility and the consultation contract. She said she hopes the report will include an option for lower jail population as well as projection and planning that is 20-30% lower. She noted that previous reports included measures that would lower the number of people in jail, which in turn lowers costs and leaves more money for prevention programs.

41 **VI. Communications**

42 None

43 **VII. Presentation by Mary Tiefenbrunn, Executive Director of the Humane Society**

44 Ms. Tiefenbrunn stated that the Humane Society sits on County land that they lease from the County, but
45 they own their buildings and are responsible for grounds and improvements. She said they are an
46 independent, not-for-profit agency and are not a government agency in any way. Ms. Tiefenbrunn said
47 they would like to open negotiations for a longer term land lease. She said they are at a point where they
48 need to make substantial investments in the building and would like to make sure they will be in the
49 building long enough to see the return on those investments. Ms. Tiefenbrunn gave a brief background
50 history then summarized the changes they want to make. She stated the improvements would promote
51 animal health and promote adoption. She showed an example of the current building layout and
52 discussed the difficulties with it, especially with regards to housing cats. Ms. Tiefenbrunn next showed an
53 example of an approximate 1,200 square foot expansion on the east end of the building. She commented
54 that the dog kennel is not in the addition but still needs a facelift and is a major investment for them. Ms.
55 Tiefenbrunn said the expansion and improvements would make the animals happier and more
56 adoptable.

57 Mr. Hartke asked how many years they were asking for in the new lease. Ms. Tiefenbrunn replied ideally
58 25 years. Mr. Maxwell said he is very supportive but would like to see a specific plan or agreement. Ms.
59 Busey stated that she had talked to the State's Attorney about the County Board's capacity for entering
60 into longer term leases and explained the options. Ms. Busey said that if all the criterion are met and it is
61 approved by a three-fourths vote by the County Board, they can enter into a longer term lease, but the
62 greatest length the State's Attorney thinks is reasonable is 10 years. She said the statues were much
63 different when the 25 year lease was entered into.

64 Mr. Rosales asked how the monthly charge is assessed. Ms. Tiefenbrunn replied that in 2011 they had an
65 independent appraisal and then negotiated with Ms. Busey and the chair of this committee to come up
66 with an amount. Mr. Quisenberry asked Ms. Busey if they are limited to a 10 year lease situation, are
67 they able as a Board to sell property if that was of interest. Ms. Busey said yes.

68 Mr. Maxwell asked that Ms. Tiefenbrunn submit their request to the Administrator. He said if there are
69 other options that might become available that they might want to study, they would be happy to do
70 that.

71 **VIII. Facilities Director's Report**

72 *A. Update on ITB 2014-008 Installation of Boilers, Air Handlers, and Digital Controls at Brookens*
73 *Administrative Center*

74 Mr. Brenner reported that at the last County Board meeting a resolution was passed to dismiss ITB
75 2014-008. He said three bids were opened on December 5, 2014 with the lowest being \$651,000,
76 noting that these bids were significantly higher than the \$430,000-\$480,000 they anticipated. He
77 stated that the contractors have been asked what caused their bids to come in so high. Mr. Brenner
78 said he was told that the definition of several aspects of the drawings provided weren't defined
79 enough so they increased their amounts regarding conduit and gas piping runs, insulation and
80 ventilation piping from the boilers and water heaters. He also said that because of the short
81 installation time frame, the contractors were forced to increase the wages 20-30% to cover overtime
82 costs. Mr. Brenner also stated that the testing and balancing needed to be further defined. He said
83 the information will be pulled together and they will talk to the digital controls contractor as well as
84 Ms. Busey and Mr. Anderson, but will wait for the Gorski Reifsteck report relative to the integrity of
85 the building. He commented that he would like to have the pre-cast information before going back to
86 this Brookens project. He said the project may have to be split due to costs.

87 *B. Update on the Brookens Administrative Center Mechanical Controls Project*

88 Mr. Brenner said this project is currently ongoing. He noted they estimate to save up to 29% on
89 electric and 27% on natural gas, with costs annually providing an estimated project payback of 36

90 months. He noted they had been approved for a DCEO grant up to 75%, but also have a coupon for
91 15% they received when attending a trade rally. Mr. Brenner said this project is 99% complete and
92 the maintenance staff is going through training. He stated there would be a walk-through Monday, a
93 punch-list will be written up, and the project will be completed by the end of January.

94 C. *Update on the IT Services Back-up Generator Project at Brookens*

95 Mr. Brenner reported that this project is 90% complete with project costs of \$90,030. He said they
96 are currently waiting on items that have a long lead time. He stated that a plumber is coming
97 Thursday to hook up the natural gas, weather dependent. Mr. Brenner said they hope to do the initial
98 startup next week. He said once that is done they will finalize a punch list and the project should be
99 finalized by the end of January.

100 Mr. Quisenberry asked if there would be a regular testing schedule once completed. Mr. Brenner
101 answered that they have a schedule they follow with all the buildings that have generators, testing
102 them every month. He said they plan on running this one for at least an hour once a month, and two
103 or three times a year it will be tested under a full load.

104 D. *Final Update on Courthouse Clock Tower LED Lighting Project*

105 Mr. Brenner provided a handout showing project costs of \$16,308.04. He said the only cost to the
106 County will be for the 150' lift rental. He said the cost of the lights and installation is to be reimbursed
107 by the Clock and Bell Tower Committee. Mr. Brenner said that all the comments he has received from
108 the Clock and Bell Tower Committee on the lighting have been positive.

109 E. *Update on Illinois Green Business Association Project*

110 Mr. Brenner said they have had numerous meetings in the last three months. He noted that they
111 have a few more things to verify before receiving certification and hopes to have those completed by
112 the end of the month.

113 F. *Update on Gorski Reifsteck Presentation at the Tuesday, February 3, 2015 Facilities Committee*
114 *Meeting*

115 Mr. Brenner reminded everyone that Gorski Reifsteck will be giving a presentation at the February 3
116 meeting. He also said that there will be a tour of the Satellite Jail before the meeting.

117 Mr. Quisenberry wanted to recognize the generosity of Mrs. Elva Greeson for the donation of money
118 used by the Clock and Bell Tower Committee.

119 **IX. Other Business**

120 Mr. Quisenberry asked if there was going to be any assessment after the Illinois Green Business
121 Association project is done about what they think we will get back based on their advice. Mr. Brenner
122 said they will have meetings to discuss that, as well as how to get it out to the public to positively use in
123 the community. Mr. Quisenberry said he would like to be able to see that the changes made paid for the
124 study.

125 Mr. Rosales asked if there were any grant opportunities for green certifications or updates. Mr. Brenner
126 replied there was DCEO, Illinois Act Now and one other agency that IGB is more than willing to help with.

127 **X. Chair's Report**

128 Mr. Maxwell thanked the committee members for agreeing to serve for the next two years. He said that
129 county facilities are an important part of doing the people's business and noted that maintaining,
130 upgrading and replacing obsolete facilities, when necessary, is a work in progress. He summarized the
131 charges of the committee. Mr. Maxwell suggested the committee has several objectives and duties for
132 the next two years. He said they need to oversee and provide for routine and unforeseen maintenance of
133 the facilities. He said they would like to ask the facilities director to complete and assessment of needs for
134 each building with an estimate of costs. Mr. Maxwell indicated he would like to see this done this year. He
135 said that he would like to see them develop a strategic plan and prioritize a list of facility improvements
136 for the next three to five years. He suggested the plan be part of the general strategic plan the County is
137 working on. He acknowledged that funding is going to be a significant problem and felt it's important for

138 this committee to work with other committees, within the County Board, to try to find sufficient revenues
139 for the most pressing needs and to implement priorities and portions of the strategic plan. Mr. Maxwell
140 also said they need to keep the citizens informed of the progress and problems as they proceed. He asks
141 for support, advice, and ideas, no matter how wild they seem, as this brings about innovation and change.

142 A. Future Meeting – Tuesday, February 3, 2015 at 6:30 pm

143 B. Tour of the Satellite Jail at 5:15 pm Prior to the February 3 Facilities Committee Meeting

144 C. Development of a Strategic Plan for Facilities

145 Mr. Maxwell said in the coming months, and as the Board proceeds with its strategic plan of the
146 overall County operation, he thinks they will have the topic of a strategic plan as part of the agenda.

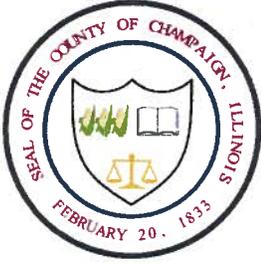
147 He noted that in the next two or three months they will get more involved in what their plan will look
148 like.

149 **XI. Designation of Items to be Placed on the Consent Agenda**

150 Mr. Maxwell stated that there are no items to be placed on the consent agenda.

151 **XII. Adjournment**

152 There being no further business, Mr. Maxwell adjourned the meeting at 7:21 p.m.



CHAMPAIGN COUNTY ADMINISTRATIVE SERVICES

1776 East Washington Street, Urbana, Illinois 61802-4581

*ADMINISTRATIVE, BUDGETING, PURCHASING, & HUMAN RESOURCE
MANAGEMENT SERVICES*

Debra Busey, County Administrator

To: Chair Gary Maxwell and the Members of the County Facilities Committee
From: Van A. Anderson, Deputy County Administrator of Finance
Subject: Satellite Jail Concrete Wall Panel Cracking Investigation
Date: January 29, 2015

Background

During the August 5, 2014, County Facilities Committee meeting, the Committee briefly toured the exterior of the Satellite Jail to view the condition of the prestressed concrete panels. Upon reconvening in the Lyle Shields Meeting Room, the Committee reviewed and discussed a professional services contract for a concrete wall panel cracking investigation (panel investigation). The investigation was proposed by Engineering Resource Associates Inc. (ERA) of Champaign after they were contacted by Facilities Director Dana Brenner. Mr. Brenner, as part of his comprehensive facilities review, had noted a large number of cracks in the wall panels and sought assistance from ERA due to ERA's structural engineering experience, especially with precast, prestressed, concrete panels and planks. This contract was sent to the County Board without recommendation due to questions and concerns voiced by County Facilities Committee members.

To address the questions posed and concerns raised, the administration took the following actions prior to the August 2014 County Board meeting:

- Provided additional information concerning the Sheriff's Operation Master Planning project to describe the activities being provided under that contract and to distinguish those activities from the proposed panel investigation;
- Arranged for the principals of the Sheriff's Operations Master Planning project, Chuck Reifsteck and Dennis Kimme, to attend the County Board Meeting to answer questions related to the scope of services for the master plan;
- Arranged for John Fraenhoffer, PE, SE, who serves as ERA's Director of Structural Engineering Services to attend the County Board Meeting to answer questions about his findings and the proposed panel investigation; and
- Engaged the services of Wiss, Janney, Elstner Associates Inc.'s Howard Hill, PhD (Structural Engineering), PE (IN, WI), SE (IL, CA), to provide a second opinion on the wall panel cracks and actions that need to be taken.

V.A.A.

Dr. Hill's report was received on August 20, 2014. Due to the differences in opinion expressed by Dr. Hill and Mr. Fraunhoffer, the County Board, at its meeting on August 21, 2014, deferred the matter back to the County Facilities Committee.

The matter was discussed at the September 2, 2014, County Facilities Committee meeting. The Committee was informed that the Gorski Reifsteck's Professional Services Team that was conducting the Sheriff's Operations Master Planning was provided ERA's proposed professional services contract for the panel investigation and the Wiss, Janney, Elstner Associates Inc.'s report.

Master Planning Findings

The following is excerpted from the Master Planning report:

The consultant team has been made aware of recent investigations and opinions of structural engineers (Wiss Janney, Elstner (WJE) Associates Inc. & Engineering Resource Associates (ERA)) regarding exterior cracking evident in the structural precast wall panels. Gorski Reifsteck recommends further forensic investigation as suggested by ERA in their 30JUL14 proposal to the County. We recommend this study commence immediately so the County is fully aware of the scope of repair required.

Revised Panel Investigation Workplan

Facilities Director Dana Brenner has developed a revised panel investigation workplan that should decrease the costs to the County. The scope of services will entail:

1. ERA will provide the necessary engineering services to determine the condition of the wall panel footing connection, the condition of the roof plank connection to the wall panel, the feasibility, if needed, of a prototype repair to be performed from the outside of the structure, and the condition of the prestressing strands to determine the degree of corrosion (proposal attached);
2. County Highway will provide an operator and backhoe for the necessary soil excavation at three locations along the south wall and the east wall of the exterior of the building that will expose the bottom of the wall panel and the footing and then backfill those areas at the conclusion of the investigation;
3. County Facilities will provide laborers for the soil excavation and backfilling;
4. A concrete company will be employed to core a 12-inch-diameter hole at the bottom of the exposed panels to the back of the embedded plates, pneumatically hammer the core out of the panel, and hammer the bottom of the opening, then grout the voids closed when the investigation is completed; and

U.a.a.

5. TSI Advanced Roofing will perform the roofing and roof insulation cuts necessary to determine the condition of the connection between the precast prestressed concrete roof planks and then replace the insulation and seal the roof subsequent to the investigation.

Recommended Action

The County Facilities Committee approves and directs the County Administrative staff to proceed with the panel investigation through the contracts with ERA, a concrete contractor, and TSI Advanced Roofing to augment the services provided by County Highway and County Facilities.

If you have any questions in regard to this recommendation or need further information please contact me.



Attachment



January 2015

Concrete Wall Panel Cracking Investigation Champaign County Satellite Jail John Fraenhoffer, PE, SE

Purpose

The Champaign County Facilities Director identified a suspicious cracking pattern in the precast prestressed concrete wall panels. The origin of the cracks aligns with the steel connection securing the bottom of the wall panels to the footing and at the level of the roof. These wall panels are loadbearing and form the lateral load resisting system of the building.

Drawings

The Architect's drawings depict a wall panel to foundation connection detail labeled Section 2 on Sheet S0401. A steel plate was shown to be embedded in a grout pocket at the bottom of the panel, connecting to an embedded plate in the cast-in-place concrete footing. After the connection was completed, the embedded plates were to be encased in grout. The alkalinity of the grout would react with the steel creating a passivation layer, protecting the below grade connection from corrosion.

The precaster's shop drawings show a connection substitution. The precaster proposed to embed a steel plate on the inside face of the wall panel at the bottom of the panel. An embedded steel plate was to be cast into the footing, located inside of the wall panel. A steel angle was then intended to be welded to the two plates, completing the connection. The connection was then backfilled without being encased in concrete leaving the connection potentially subject to corrosion during high groundwater and/or high subgrade moisture conditions.

Structural Integrity

The cracking pattern in the wall panels aligns with the wall panel connection at the footing. If these connections are corroding and if they become structurally compromised, collapse is possible. Also, corrosion of the prestressing strands has been questioned. I am recommending a structural investigation to determine the following:

1. The condition of the wall panel to footing connection.
2. The condition of the roof plank connection to the wall panel.
3. The condition of the prestressing strands to determine the degree of corrosion.
4. The feasibility of a prototype repair to be performed from the outside of the structure.

Scope of Services

In order to accomplish the investigation, the following Scope of Services is required:

1. Excavate three locations along the south wall and the east wall on the exterior of the building, exposing the bottom of the wall panel and the footing.
2. Install a temporary structural connection between the panel and the footing.
3. To preserve the panel, core a 12 inch diameter hole at the bottom of the panel to the back of the embedded plate. Pneumatically hammer the core out of the panel and hammer the bottom of the opening.
4. Cut out the connection to inspect the condition of the steel components.
5. Grout the void closed.
6. Perform roofing and roof insulation cuts to determine the condition of the connection between the precast prestressed concrete roof planks and the wall panels. Replace the insulation and seal the roof subsequent to inspection.

The proposed Scope of Services will reveal the condition of the buried steel connection and will determine the feasibility of a potential rehabilitation method.

Fee Calculation

A Fee Calculation is presented to reflect the effort required to complete the Scope of Services:

Structural Engineer	90 Hours @ \$230 =	\$20,700
Engineer Intern	50 Hours @ \$80 =	<u>\$ 4,000</u>
Not to Exceed Fee Calculation		\$24,700

Not included in the Fee Calculation is attendance at meetings, presentations at County Board or County Board Committee meetings, conferences with County legal counsel, forensic engineering opinions development, depositions, or court testimony. The County will provide or retain a roofer, an excavator, a concrete corer, and laborers directly.

